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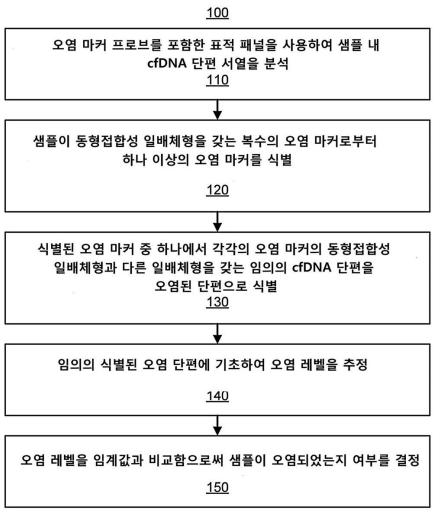
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(54) 발명의 명칭 **암 분류를 위한 오염된 단편의 샘플 오염 검출**

(57) 요 약

암 분류를 위해 생물학적 샘플 내 오염된 단편을 검출하는 방법 및 시스템이 개시된다. 시스템은 다수의 SNP 부위 오염 마커와 인델 부위 오염 마커를 식별한다. 다수의 SNP 부위 오염 마커는 임계 빈도 범위 내의 모집단 일배체형 빈도를 갖고, 구아닌-아데닌 다형성 및/또는 시토신-티민 다형성을 제외하고, 하디-바인베르크 평형을 보장하고, 또는 위의 파라미터의 임의의 조합인, 임계 거리 내의 적어도 2개의 SNP 부위를 포함한다. 인델 부위 오염 마커는 임계 길이 내에 있고, 복잡성이 높으며, 임계값 빈도 범위 내의 모집단 일배체형 빈도를 갖고, 하디-바인베르크 평형을 보장하고, 또는 위의 파라미터의 임의의 조합인 인델 서열을 포함한다. 시스템은 샘플이 동형접합성인 오염 마커를 식별한다. 시스템은 각각의 오염 마커 부위의 동형접합성 일배체형과 다른 일배체형을 갖는 단편을 식별함으로써 샘플의 오염 레벨을 추정한다.

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명 세 서

청구범위

청구항 1

테스트 샘플 내 암의 존재를 예측하기 위한 방법으로서,

테스트 샘플 내 무세포 DNA(cfDNA) 단편에 대한 복수의 서열 판독을 포함하는 테스트 샘플을 얻는 단계;

상기 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계;

상기 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계;

임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 그리고

상기 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고

상기 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 상기 테스트 샘플 내 cfDNA 단편들의 서열 판독에 대한 암 분류를 수행하여 암 예측을 생성하는 단계를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 2

제1항에 있어서, 상기 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 3

제2항에 있어서, 상기 다수의 SNP 부위는 10 염기쌍(bps) 내에 있는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 4

제2항 또는 제3항에 있어서, 상기 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 5

제2항 내지 제4항 중 어느 한 항에 있어서, 상기 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 6

제2항 내지 제5항 중 어느 한 항에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형(Hardy-Weinberg equilibrium)에 있는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 7

제2항 내지 제6항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 8

제2항 내지 제7항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 9

제1항 내지 제8항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 삽입-결실(인델) 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 10

제9항에 있어서, 상기 인델 부위는 5 bps 내지 10 bps인, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 11

제9항 또는 제10항에 있어서, 상기 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 12

제9항 내지 제11항 중 어느 한 항에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 13

제9항 내지 제12항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 14

제9항 내지 제13항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 3의 인델 부위를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 15

제1항 내지 제14항 중 어느 한 항에 있어서, 각각의 오염 마커는 상기 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 16

제1항 내지 제15항 중 어느 한 항에 있어서, 상기 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 17

제1항 내지 제16항 중 어느 한 항에 있어서, 상기 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여 암 분류를 중단하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 18

제1항 내지 제17항 중 어느 한 항에 있어서, 상기 암 예측은 암과 비-암 사이의 이진법 예측을 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 19

제1항 내지 제18항 중 어느 한 항에 있어서, 상기 암 예측은 복수의 암 유형 사이의 멀티클래스 암 예측을 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 20

제1항 내지 제19항 중 어느 한 항에 있어서, 상기 암 분류를 수행하는 단계는

테스트 샘플 내 cfDNA 단편의 서열 판독에 기초하여 테스트 특징 벡터를 생성하는 단계; 그리고

상기 테스트 특징 벡터를 분류 모델에 입력하여 상기 테스트 샘플에 대한 암 예측을 생성하는 단계를 포함하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 21

제20항에 있어서, 상기 암 분류를 수행하는 단계는

p-값 필터링으로 상기 테스트 샘플의 cfDNA 단편의 초기 세트를 필터링하여 변칙적 단편 세트를 생성하는 단계로서, 다른 단편에 대한 임계 p-값 미만인 단편을 초기 세트에서 제거하여 변칙적 단편 세트를 생성하는 단계를 포함하는 단계를 더 포함하고,

상기 테스트 특징 벡터는 상기 변칙적 단편 세트의 서열 판독에 기초하는, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 22

제20항 또는 제21항에 있어서, 상기 분류 모델은 기계 학습 모델인, 테스트 샘플 내 암의 존재를 예측하기 위한 방법.

청구항 23

컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제1항 내지 제22항 중 어느 한 항의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체.

청구항 24

시스템으로서,

컴퓨터 프로세서; 및

제23항의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템.

청구항 25

테스트 샘플 내 질병의 존재를 예측하기 위한 방법으로서,

테스트 샘플 내 무세포 DNA(cfDNA) 단편에 대한 복수의 서열 판독을 포함하는 테스트 샘플을 얻는 단계;

상기 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계;

상기 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계;

임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 그리고

오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고

상기 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 상기 테스트 샘플 내 cfDNA 단편들의 서열 판독에 대한 질병 분류를 수행하여 질병 예측을 생성하는 단계를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 26

제25항에 있어서, 상기 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 27

제26항에 있어서, 상기 다수의 SNP 부위는 10 염기쌍(bps) 내에 있는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 28

제26항 또는 제27항에 있어서, 상기 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 29

제26항 내지 제28항 중 어느 한 항에 있어서, 상기 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 30

제26항 내지 제29항 중 어느 한 항에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 31

제26항 내지 제30항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 32

제26항 내지 제31항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 33

제25항 내지 제32항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 삽입-결실(인델) 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 34

제33항에 있어서, 상기 인델 부위는 5 bps 내지 10 bps인, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 35

제33항 또는 제34항에 있어서, 상기 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 36

제33항 내지 제35항 중 어느 한 항에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 37

제33항 내지 제36항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 38

제33항 내지 제37항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 3의 인델 부위를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 39

제25항 내지 제38항 중 어느 한 항에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 40

제25항 내지 제39항 중 어느 한 항에 있어서, 상기 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 41

제25항 내지 제40항 중 어느 한 항에 있어서, 상기 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여 질병 분류를 중단하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 42

제25항 내지 제41항 중 어느 한 항에 있어서, 상기 질병 예측은 질병과 비-질병 사이의 이진법 예측을 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 43

제25항 내지 제42항 중 어느 한 항에 있어서, 상기 질병 예측은 복수의 질병 사이의 멀티클래스 암 예측을 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 44

제25항 내지 제43항 중 어느 한 항에 있어서, 상기 질병 분류를 수행하는 단계는

상기 테스트 샘플 내 cfDNA 단편들의 서열 판독에 기초하여 테스트 특징 벡터를 생성하는 단계; 및

상기 테스트 특징 벡터를 분류 모델에 입력하여 상기 테스트 샘플에 대한 질병 예측을 생성하는 단계를 포함하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 45

제44항에 있어서, 상기 질병 분류를 수행하는 단계는

p-값 필터링으로 상기 테스트 샘플의 cfDNA 단편의 초기 세트를 필터링하여 변칙적 단편 세트를 생성하는 단계로서, 다른 단편에 대한 임계 p-값 미만인 단편을 초기 세트에서 제거하여 변칙적 단편 세트를 생성하는 단계를 포함하는 단계를 더 포함하고,

상기 테스트 특징 벡터는 상기 변칙적 단편 세트의 서열 판독에 기초하는, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 46

제44항 또는 제45항에 있어서, 상기 분류 모델은 기계 학습 모델인, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법.

청구항 47

컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제26항 내지 제46항 중 어느 한 항의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체.

청구항 48

시스템으로서,

컴퓨터 프로세서; 및

제47항의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템.

청구항 49

테스트 샘플 내 오염의 존재를 예측하기 위한 방법으로서,

테스트 샘플 내 복수의 무세포 DNA(cfDNA) 단편으로부터 도출되는 서열 판독을 얻는 단계;

상기 서열 판독에 기초하여, 상기 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계;

상기 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트

샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계;

임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 그리고

상기 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고

상기 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 상기 테스트 샘플이 오염되어 있음을 나타내는 통지를 생성하는 단계를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 50

제49항에 있어서, 상기 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 51

제49항에 있어서, 상기 다수의 SNP 부위는 10 염기쌍(bps) 내에 있는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 52

제50항 또는 제51항에 있어서, 상기 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 53

제50항 내지 제52항 중 어느 한 항에 있어서, 상기 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 54

제50항 내지 제53항 중 어느 한 항에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 55

제50항 내지 제54항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 56

제50항 내지 제55항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 57

제49항 내지 제56항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 삽입-결실(인델) 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 58

제57항에 있어서, 상기 인델 부위는 5 bps 내지 10 bps인, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 59

제57항 또는 제58항에 있어서, 상기 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 60

제57항 내지 제59항 중 어느 한 항에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있는, 테

스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 61

제57항 내지 제60항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 62

제57항 내지 제61항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 3의 인델 부위를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 63

제49항 내지 제62항 중 어느 한 항에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 64

제49항 내지 제63항 중 어느 한 항에 있어서, 상기 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초하는, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법.

청구항 65

컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제49항 내지 제64항 중 어느 한 항의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체.

청구항 66

시스템으로서,

컴퓨터 프로세서; 및

제65항의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템.

청구항 67

암 분류 모델을 훈련하기 위한 방법으로서,

제1 훈련 샘플을 포함하는 복수의 훈련 샘플을 얻는 단계로서, 각각의 훈련 샘플은 복수의 무세포 DNA(cfDNA) 단편을 포함하는 단계;

각각의 훈련 샘플에 대해, 상기 훈련 샘플 내 cfDNA 단편들로부터 도출된 서열 판독을 얻는 단계;

상기 제1 훈련 샘플에 대해:

상기 제1 훈련 샘플의 서열 판독에 기초하여, 상기 제1 훈련 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하고,

식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 제1 훈련 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하고,

임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하고,

상기 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고

상기 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여, 상기 복수의 훈련 샘플에서 제1 훈련 샘플을 제거하는 단계로서, 상기 제1 훈련 샘플을 제외한 복수의 훈련 샘플은 암 분류 모델을 훈련하는 데 사용되어 테스트 샘플에 대한 암 예측을 생성-하는 단계를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 68

제67항에 있어서, 상기 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함하는, 암 분류 모

델을 훈련하기 위한 방법.

청구항 69

제68항에 있어서, 상기 다수의 SNP 부위는 10 염기쌍(bps) 내에 있는, 암 분류 모델을 훈련하기 위한 방법.

청구항 70

제68항 또는 제69항에 있어서, 상기 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 암 분류 모델을 훈련하기 위한 방법.

청구항 71

제68항 내지 제70항 중 어느 한 항에 있어서, 상기 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 72

제68항 내지 제71항 중 어느 한 항에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있는, 암 분류 모델을 훈련하기 위한 방법.

청구항 73

제68항 내지 제72항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 74

제68항 내지 제73항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 75

제67항 내지 제74항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 삽입-결실(인델) 부위를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 76

제75항에 있어서, 상기 인델 부위는 5 bps 내지 10 bps인, 암 분류 모델을 훈련하기 위한 방법.

청구항 77

제75항 또는 제76항에 있어서, 상기 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 암 분류 모델을 훈련하기 위한 방법.

청구항 78

제75항 내지 제77항 중 어느 한 항에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있는, 암 분류 모델을 훈련하기 위한 방법.

청구항 79

제75항 내지 제78항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 80

제75항 내지 제79항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 3의 인델 부위를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 81

제67항 내지 제80항 중 어느 한 항에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 82

제67항 내지 제81항 중 어느 한 항에 있어서, 상기 오염 레벨을 추정하는 단계는 제1 훈련 샘플 내 식별된 오염 cfDNA 단편의 수, 제1 훈련 샘플의 시퀀싱 깊이, 제1 훈련 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초하는, 암 분류 모델을 훈련하기 위한 방법.

청구항 83

제67항 내지 제82항 중 어느 한 항에 있어서, 상기 복수의 훈련 샘플은 비-암 샘플의 제1 코호트(cohort) 및 암 샘플의 제2 코호트를 포함하고, 상기 암 분류 모델은 암의 존재 가능성을 결정하도록 훈련되는, 암 분류 모델을 훈련하기 위한 방법.

청구항 84

제83항에 있어서, 상기 암 샘플의 제2 코호트는 제1 암 유형을 갖는 하나 이상의 샘플 및 제2 암 유형을 갖는 하나 이상의 추가 샘플을 포함하고, 상기 암 분류 모델은 제1 암 유형의 제1 존재 가능성 및 제2 암 유형의 제2 존재 가능성을 결정하도록 훈련되는, 암 분류 모델을 훈련하기 위한 방법.

청구항 85

제67항 내지 제84항 중 어느 한 항에 있어서, 상기 암 분류 모델은 기계 학습 모델인, 암 분류 모델을 훈련하기 위한 방법.

청구항 86

제85항에 있어서, 상기 암 분류 모델은 결정 트리, 신경망, 다층 퍼셉트론, 및 지원 벡터 머신 중 적어도 하나인, 암 분류 모델을 훈련하기 위한 방법.

청구항 87

컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제67항 내지 제86항 중 어느 한 항의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체.

청구항 88

시스템으로서,

컴퓨터 프로세서; 및

제87항의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템.

청구항 89

컴퓨터 프로그램 제품으로서,

훈련된 암 분류 모델을 저장하는 비일시적 컴퓨터 판독 가능 저장 매체를 포함하고, 상기 컴퓨터 프로그램 제품은 제67항 내지 제86항 중 어느 한 항의 방법에 의해 제조되는, 컴퓨터 프로그램 제품.

청구항 90

치료 키트로서,

개인으로부터의 유전 물질을 포함하는 생물학적 샘플을 저장하기 위한 하나 이상의 수집 용기; 및

복수의 오염 마커를 표적화하는 복수의 프로브를 포함하고, 상기 복수의 프로브는 표 2 및 표 4 중 적어도 하나를 포함하는, 치료 키트.

청구항 91

제90항에 있어서, 상기 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함하는, 치료 키트.

청구항 92

제91항에 있어서, 상기 다수의 SNP 부위는 10 염기쌍(bps) 내에 있는, 치료 키트.

청구항 93

제91항 또는 제92항에 있어서, 상기 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 치료 키트.

청구항 94

제91항 내지 제93항 중 어느 한 항에 있어서, 상기 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외하는, 치료 키트.

청구항 95

제91항 내지 제94항 중 어느 한 항에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있는, 치료 키트.

청구항 96

제91항 내지 제95항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함하는, 치료 키트.

청구항 97

제91항 내지 제96항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함하는, 치료 키트.

청구항 98

제91항 내지 제97항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 삽입-결실(인델) 부위를 포함하는, 치료 키트.

청구항 99

제98항에 있어서, 상기 인델 부위는 5 bps 내지 10 bps인, 치료 키트.

청구항 100

제98항 또는 제99항에 있어서, 상기 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는, 치료 키트.

청구항 101

제98항 내지 제100항 중 어느 한 항에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있는, 치료 키트.

청구항 102

제98항 내지 제101항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 적어도 500개 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함하는, 치료 키트.

청구항 103

제98항 내지 제102항 중 어느 한 항에 있어서, 상기 복수의 오염 마커는 표 3의 인델 부위를 포함하는, 치료 키트.

청구항 104

제90항 내지 제103항 중 어느 한 항에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함하는, 치료 키트.

청구항 105

제90항 내지 제104항 중 어느 한 항에 있어서,

생물학적 샘플 내 핵산 단편을 분리하기 위한 하나 이상의 시약을 더 포함하는 치료 키트.

청구항 106

제90항 내지 제105항 중 어느 한 항에 있어서,

제1 컴퓨터 프로그램 제품을 더 포함하고, 상기 제1 컴퓨터 프로그램 제품은

제23항의 비일시적 컴퓨터 판독 가능 저장 매체,

제47항의 비일시적 컴퓨터 판독 가능 저장 매체,

제65항의 비일시적 컴퓨터 판독 가능 저장 매체, 및

제87항의 비일시적 컴퓨터 판독 가능 저장 매체 중 하나 이상을 포함하는, 치료 키트.

청구항 107

제90항 내지 제106항 중 어느 한 항에 있어서,

제89항의 컴퓨터 프로그램 제품을 더 포함하는 치료 키트.

발명의 설명

기 술 분 야

[0001] 관련 출원의 교차 참조

[0002] 본 출원은 2021년 11월 23일에 출원된 미국 임시 출원 제63/282,509호의 이익과 우선권을 주장하며, 이는 그 전체 내용이 본원에 인용되어 포함된다.

[0003] 기술분야

[0004] 디옥시리보핵산(DNA: deoxyribonucleic acid) 메틸화는 유전자 발현 조절에 중요한 역할을 한다. 비정상인 DNA 메틸화는 암을 포함한 많은 질병 과정과 관련되어 있다. 메틸화 시퀀싱(예를 들어, 전체 게놈 중아황산염 시퀀싱(WGBS: whole genome bisulfite sequencing))을 사용한 DNA 메틸화 프로파일링은 암의 검출, 진단 및/또는 모니터링을 위한 귀중한 진단 도구로 점점 더 인식되고 있다. 예를 들어, 차별적으로 메틸화된 영역의 특정 패턴 및/또는 대립유전자 특이적 메틸화 패턴은 순환 무세포(cf: cell-free) DNA를 사용하는 비침습적 진단을 위한 분자 마커로서 유용할 수 있다. 그러나, 당업계에서는 샘플의 개체로부터 유래되지 않은 cfDNA 단편의 오염 검출을 위한 개선된 방법이 여전히 필요하다.

[0005] 본 개시내용은 위에서 언급된 과제를 해결하는 것에 관한 것이다. 본원에 제공된 배경 설명은 개시내용의 맥락을 일반적으로 제시하기 위한 것이다. 본원에 달리 명시하지 않는 한, 이 섹션에 설명된 자료는 본 출원의 청구범위에 대한 선행기술이 아니며, 이 섹션에 포함된다고 해서 선행기술 또는 선행기술의 제안인 것으로 인정되지 않는다.

발명의 내용

[0006] 피험자의 질병 상태(예를 들어, 암)를 조기에 발견하는 것은 조기 치료가 가능하여 생존 가능성이 더 높기 때문에 중요하다. 무세포(cf) DNA 샘플 내 DNA 단편의 시퀀싱을 사용하여 질병 분류에 사용할 수 있는 특징을 식별할 수 있다. 예를 들어, 암 평가에서, 혈액 샘플로부터의 무세포 DNA 기반 특징(예를 들어, 체세포 변이의 존재 여부, 메틸화 상태 또는 기타 유전적 이상)은 피험자가 암에 걸렸는지 여부에 대한 통찰 및 피험자가 어떤 유형의 암에 걸렸는지에 대한 추가적인 통찰을 제공할 수 있다. 이를 위해, 이 설명은 피험자의 질병 발병 가능성을 결정하기 위해 무세포 DNA(cfDNA) 시퀀싱 데이터를 분석하는 시스템 및 방법을 포함한다.

[0007] 본 개시내용은 암 분류를 위해 오염된 단편의 샘플 오염 검출을 위한 개선된 시스템 및 방법을 제공함으로써 위에서 확인된 문제를 해결한다. 시스템은 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별한다. 시스템은 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별한다. 시스템은 임의의 오염된 cfDNA 단편에 기초하여 샘플의 오염 레벨을 추정한다. 시스템은 암 분류기를 훈련하는 데 사용된 훈련 샘플 모두에 대해 이러한 오염 검출을 구현할 수 있으며 암 분류기를 배치할 때 테스트 샘플에 대한 이러한 오염 검출을 구현할 수도 있다. 오염 마커는 다수의 단일 염기 다형성(SNP: single nucleotide polymorphism) 부위 오염 마커 및/또는 인델(indel: insertion-deletion) 부위 오염 마커를 포함한다. 일부 실시예에서, 다수의 SNP 부위 오염 마커는, 임계 빈도 범위 내의 모집단 일배체형 빈도를 갖고, 구아닌-아데닌 다형성 및/또는 시토신-티민 다형성을 제외하고, 하디-바인베르크 평형(Hardy-Weinberg equilibrium)을 보장하고, 또는 위의 파라미터의 임의의 조합인, 임계 거리 내의 적어도 2개의 SNP 부위를 포함한다. 일부 실시예에서, 인델 부위 오염 마커는, 임계 길이 내에 있고, 복잡성이 높으며, 임계값 빈도 범위 내의 모집단 일배체형 빈도를 갖고, 하디-바인베르크 평형을 보장하고, 또는 위의 파라미터의 임의의 조합인, 인델 서열을 포함한다.

[0008] 제1 양태에 따르면, 테스트 샘플 내 암의 존재를 예측하기 위한 방법이 개시되며, 이 방법은 테스트 샘플 내 무세포 DNA(cfDNA) 단편에 대한 복수의 서열 판독(read)을 포함하는 테스트 샘플을 얻는 단계; 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계; 테스트 샘플이 동형접합성 일배체형을 갖는 식별된 하나 이상의 오염 마커 각각에 대해, 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계; 임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 테스트 샘플 내 cfDNA 단편의 서열 판독에 대한 암 분류를 수행하여 암 예측을 생성하는 단계를 포함한다.

[0009] 제1 양태에 있어서, 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함한다.

[0010] 제1 양태에 있어서, 다수의 SNP 부위는 10 염기쌍(bps) 내에 있다.

[0011] 제1 양태에 있어서, 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0012] 제1 양태에 있어서, 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외한다.

[0013] 제1 양태에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0014] 제1 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함한다.

[0015] 제1 양태에 있어서, 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함한다.

[0016] 제1 양태에 있어서, 복수의 오염 마커는 삽입-결실(인델) 부위를 포함한다.

[0017] 제1 양태에 있어서, 인델 부위는 5 bps 내지 10 bps이다.

[0018] 제1 양태에 있어서, 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0019] 제1 양태에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0020] 제1 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함한다.

[0021] 제1 양태에 있어서, 복수의 오염 마커는 표 3의 인델 부위를 포함한다.

[0022] 제1 양태에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함한다.

[0023] 제1 양태에 있어서, 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초한다.

[0024] 제1 양태에 있어서, 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여, 암 분류를 중단한다.

[0025] 제1 양태에 있어서, 암 예측은 암과 비-암 사이의 이진법 예측을 포함한다.

[0026] 제1 양태에 있어서, 암 예측은 복수의 암 유형 사이의 멀티클래스 암 예측을 포함한다.

[0027] 제1 양태에 있어서, 암 분류를 수행하는 단계는 p-값 필터링으로 테스트 샘플의 cfDNA 단편의 초기 세트를 필터링하여 변칙적 단편 세트를 생성하는 단계로서, 다른 단편에 대한 임계 p-값 미만인 단편을 초기 세트에서 제거하여 변칙적 단편 세트를 생성하는 단계를 포함하는 단계를 더 포함한다.

[0028] 제1 양태에 있어서, 분류 모델은 기계 학습 모델이다.

[0029] 제2 양태에 따르면, 컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제1 양태의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체가 개시된다.

[0030] 제3 양태에 따르면, 컴퓨터 프로세서; 및 제2 양태의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템이 개시된다.

[0031] 제4 양태에 따르면, 테스트 샘플 내 질병의 존재를 예측하기 위한 방법이 개시되며, 이 방법은 테스트 샘플 내 무세포 DNA(cfDNA) 단편에 대한 복수의 서열 판독을 포함하는 테스트 샘플을 얻는 단계; 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계; 테스트 샘플이 동형접합성 일배체형을 갖는 식별된 하나 이상의 오염 마커 각각에 대해, 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계; 임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 테스트 샘플 내 cfDNA 단편의 서열 판독에 대한 질병 분류를 수행하여 질병 예측을 생성하는 단계를 포함한다.

[0032] 제4 양태에 있어서, 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함한다.

[0033] 제4 양태에 있어서, 다수의 SNP 부위는 10 염기쌍(bps) 내에 있다.

[0034] 제4 양태에 있어서, 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0035] 제4 양태에 있어서, 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외한다.

[0036] 제4 양태에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0037] 제4 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함한다.

[0038] 제4 양태에 있어서, 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함한다.

[0039] 제4 양태에 있어서, 복수의 오염 마커는 삽입-결실(인델) 부위를 포함한다.

[0040] 제4 양태에 있어서, 인델 부위는 5 bps 내지 10 bps이다.

[0041] 제4 양태에 있어서, 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0042] 제4 양태에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0043] 제4 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함한다.

[0044] 제4 양태에 있어서, 복수의 오염 마커는 표 3의 인델 부위를 포함한다.

[0045] 제4 양태에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함한다.

[0046] 제4 양태에 있어서, 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초한다.

[0047] 제4 양태에 있어서, 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여, 질병 분류를 중단한다.

[0048] 제4 양태에 있어서, 질병 예측은 암과 비-질병 사이의 이진법 예측을 포함한다.

[0049] 제4 양태에 있어서, 질병 예측은 복수의 질병 유형 사이의 멀티클래스 암 예측을 포함한다.

[0050] 제4 양태에 있어서, 질병 분류를 수행하는 단계는 테스트 샘플 내 cfDNA 단편의 서열 판독에 기초하여 테스트 특징 벡터를 생성하는 단계; 및 테스트 특징 벡터를 분류 모델에 입력하여 테스트 샘플에 대한 질병 예측을 생

성하는 단계를 포함한다.

[0051] 제4 양태에 있어서, 질병 분류를 수행하는 단계는 p-값 필터링으로 테스트 샘플의 cfDNA 단편의 초기 세트를 필터링하여 변칙적 단편 세트를 생성하는 단계로서, 다른 단편들에 대한 임계 p-값 미만인 단편을 초기 세트에서 제거하여 변칙적 단편 세트를 생성하는 단계를 포함하는 단계를 더 포함하고,

[0052] 상기 테스트 특징 벡터는 변칙적 단편 세트의 서열 판독에 기초한다.

[0053] 제4 양태에 있어서, 분류 모델은 기계 학습 모델이다.

[0054] 제5 양태에 따르면, 컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제4 양태의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체가 개시된다.

[0055] 제6 양태에 따르면, 컴퓨터 프로세서; 및 제5 양태의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템이 개시된다.

[0056] 제7 양태에 따르면, 테스트 샘플 내 오염의 존재를 예측하기 위한 방법이 개시되며, 이 방법은 테스트 샘플 내 복수의 무세포 DNA(cfDNA) 단편으로부터 도출되는 서열 판독을 얻는 단계; 서열 판독에 기초하여, 테스트 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하는 단계; 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 테스트 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하는 단계; 임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하는 단계; 그리고 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고 오염 레벨이 임계 레벨 미만인 결정에 응답하여, 테스트 샘플이 오염되어 있음을 나타내는 통지를 생성하는 단계를 포함한다.

[0057] 제7 양태에 있어서, 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함한다.

[0058] 제7 양태에 있어서, 다수의 SNP 부위는 10 염기쌍(bps) 내에 있다.

[0059] 제7 양태에 있어서, 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0060] 제7 양태에 있어서, 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외한다.

[0061] 제7 양태에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0062] 제7 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함한다.

[0063] 제7 양태에 있어서, 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함한다.

[0064] 제7 양태에 있어서, 복수의 오염 마커는 삽입-결실(인델) 부위를 포함한다.

[0065] 제7 양태에 있어서, 인델 부위는 5 bps 내지 10 bps이다.

[0066] 제7 양태에 있어서, 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0067] 제7 양태에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0068] 제7 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함한다.

[0069] 제7 양태에 있어서, 복수의 오염 마커는 표 3의 인델 부위를 포함한다.

[0070] 제7 양태에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함한다.

[0071] 제7 양태에 있어서, 오염 레벨을 추정하는 단계는 식별된 오염 cfDNA 단편의 수, 테스트 샘플의 시퀀싱 깊이, 테스트 샘플 내 cfDNA 단편의 수, 및 오염 마커의 수 중 하나 이상에 추가로 기초한다.

[0072] 제8 양태에 따르면, 컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제7 양태의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체가 개시된다.

[0073] 제9 양태에 따르면, 컴퓨터 프로세서; 및 제8 양태의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템이 개시된다.

[0074] 제10 양태에 따르면, 암 분류 모델을 훈련하기 위한 방법이 개시되며, 이 방법은 제1 훈련 샘플을 포함하는 복

수의 훈련 샘플을 얻는 단계로서, 각각의 훈련 샘플은 복수의 무세포 DNA(cfDNA) 단편을 포함하는 단계; 각각의 훈련 샘플에 대해, 훈련 샘플 내 cfDNA 단편으로부터 유래된 서열 판독을 얻는 단계; 제1 훈련 샘플에 대해, 제1 훈련 샘플의 서열 판독에 기초하여, 제1 훈련 샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별하고, 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 제1 훈련 샘플 내 임의의 cfDNA 단편을 오염된 cfDNA 단편으로서 식별하고, 임의의 식별된 오염 cfDNA 단편에 기초하여 오염 레벨을 추정하고, 오염 레벨이 임계 레벨 미만인지 여부를 결정하는 단계; 그리고 오염 레벨이 임계 레벨을 초과한다는 결정에 응답하여, 복수의 훈련 샘플에서 제1 훈련 샘플을 제거하는 단계로서, 제1 훈련 샘플을 제외한 복수의 훈련 샘플은 암 분류 모델을 훈련하는 데 사용되어 테스트 샘플에 대한 암 예측을 생성하는 단계를 포함한다.

[0075] 제10 양태에 있어서, 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함한다.

[0076] 제10 양태에 있어서, 다수의 SNP 부위는 10 염기쌍(bps) 내에 있다.

[0077] 제10 양태에 있어서, 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0078] 제10 양태에 있어서, 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외한다.

[0079] 제10 양태에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0080] 제10 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함한다.

[0081] 제10 양태에 있어서, 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함한다.

[0082] 제10 양태에 있어서, 복수의 오염 마커는 삽입-결실(인델) 부위를 포함한다.

[0083] 제10 양태에 있어서, 인델 부위는 5 bps 내지 10 bps이다.

[0084] 제10 양태에 있어서, 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0085] 제10 양태에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0086] 제10 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함한다.

[0087] 제10 양태에 있어서, 복수의 오염 마커는 표 3의 인델 부위를 포함한다.

[0088] 제10 양태에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함한다.

[0089] 제10 양태에 있어서, 복수의 훈련 샘플은 비-암 샘플의 제1 코호트(cohort) 및 암 샘플의 제2 코호트를 포함하고, 암 분류 모델은 암의 존재 가능성을 결정하도록 훈련된다.

[0090] 제10 양태에 있어서, 암 샘플의 제2 코호트는 제1 암 유형을 갖는 하나 이상의 샘플 및 제2 암 유형을 갖는 하나 이상의 추가 샘플을 포함하고, 암 분류 모델은 제1 암 유형의 제1 존재 가능성 및 제2 암 유형의 제2 존재 가능성을 결정하도록 훈련된다.

[0091] 제10 양태에 있어서, 암 분류 모델은 기계 학습된 모델이다.

[0092] 제10 양태에 있어서, 암 분류 모델은 결정 트리, 신경망, 다층 퍼셉트론, 및 지원 벡터 머신 중 적어도 하나이다.

[0093] 제11 양태에 따르면, 컴퓨터 프로세서에 의해 실행될 때 컴퓨터 프로세서로 하여금 제10 양태의 방법을 수행하게 하는 명령어를 저장하는 비일시적 컴퓨터 판독 가능 저장 매체가 개시된다.

[0094] 제12 양태에 따르면, 컴퓨터 프로세서; 및 제11 양태의 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 시스템이 개시된다.

[0095] 제13 양태에 따르면, 훈련된 암 분류 모델을 저장하는 비일시적 컴퓨터 판독 가능 저장 매체를 포함하는 컴퓨터 프로그램 제품이 개시되며, 상기 컴퓨터 프로그램 제품은 제11 양태의 방법에 의해 제조된다.

[0096] 제14 양태에 따르면, 개인으로부터의 유전 물질을 포함하는 생물학적 샘플을 저장하기 위한 하나 이상의 수집 용기; 및 복수의 오염 마커를 표적화하는 복수의 프로브를 포함하는 치료 키트가 개시되며, 상기 복수의 프로브

는 표 2 및 표 4 중 적어도 하나를 포함한다.

[0097] 제14 양태에 있어서, 복수의 오염 마커는 다수의 단일 염기 다형성(다수의 SNP) 부위를 포함한다.

[0098] 제14 양태에 있어서, 다수의 SNP 부위는 10 염기쌍(bps) 내에 있다.

[0099] 제14 양태에 있어서, 다수의 SNP 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0100] 제14 양태에 있어서, 다수의 SNP 부위는 구아닌-아데닌 다형성 및 시토신-티민 다형성을 제외한다.

[0101] 제14 양태에 있어서, 각각의 다수의 SNP 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0102] 제14 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 다수의 SNP 부위를 포함한다.

[0103] 제14 양태에 있어서, 복수의 오염 마커는 표 1의 다수의 SNP 부위를 포함한다.

[0104] 제14 양태에 있어서, 복수의 오염 마커는 삽입-결실(인델) 부위를 포함한다.

[0105] 제14 양태에 있어서, 인델 부위는 5 bps 내지 10 bps이다.

[0106] 제14 양태에 있어서, 인델 부위는 45% 내지 55% 범위 내의 모집단 일배체형 빈도를 갖는다.

[0107] 제14 양태에 있어서, 각각의 인델 부위의 일배체형은 하디-바인베르크 평형에 있다.

[0108] 제14 양태에 있어서, 복수의 오염 마커는 적어도 500개, 적어도 1,000개, 적어도 1,500개, 또는 적어도 2,000개의 인델 부위를 포함한다.

[0109] 제14 양태에 있어서, 복수의 오염 마커는 표 3의 인델 부위를 포함한다.

[0110] 제14 양태에 있어서, 각각의 오염 마커는 오염 마커의 각각의 일배체형을 표적화하도록 설계된 프로브를 포함한다.

[0111] 제14 양태에 있어서, 생물학적 샘플 내 핵산 단편을 분리하기 위한 하나 이상의 시약을 더 포함한다.

[0112] 제14 양태에 있어서, 제2 양태의 비일시적 컴퓨터 판독 가능 저장 매체, 제5 양태의 비일시적 컴퓨터 판독 가능 저장 매체, 제8 양태의 비일시적 컴퓨터 판독 가능 저장 매체, 및 제11 양태의 비일시적 컴퓨터 판독 가능 저장 매체 중 하나 이상을 포함하는 제1 컴퓨터 프로그램 제품을 더 포함한다.

[0113] 제14 양태에 있어서, 제13 양태의 컴퓨터 프로그램 제품을 더 포함한다.

도면의 간단한 설명

[0114] 도 1은 하나 이상의 실시형태에 따른, 샘플 내 오염 검출 프로세스를 설명하는 예시적인 흐름도이다.

도 2a는 하나 이상의 실시형태에 따른, 오염 검출에서 오염 마커로서 사용하기 위한 다수의 SNP 부위를 식별하는 프로세스를 설명하는 예시적인 흐름도이다.

도 2b는 하나 이상의 실시형태에 따른, 오염 검출에서 오염 마커로서 사용하기 위한 인델 부위를 식별하는 프로세스를 설명하는 예시적인 흐름도이다.

도 3a는 하나 이상의 실시형태에 따른, 무세포(cf) DNA의 단편을 시퀀싱하여 메틸화 상태 벡터를 얻는 프로세스를 설명하는 예시적인 흐름도이다.

도 3b는 하나 이상의 실시형태에 따른, 무세포(cf) DNA의 단편을 시퀀싱하여 메틸화 상태 벡터를 얻는 도 3a의 프로세스의 예시적인 예시이다.

도 4a는 하나 이상의 실시형태에 따른, 건강한 대조군에 대한 데이터 구조를 생성하는 프로세스를 설명하는 흐름도이다.

도 4b는 하나 이상의 실시형태에 따른, 샘플로부터 변칙적 메틸화 단편을 식별하는 프로세스를 설명하는 예시적인 흐름도를 예시한다.

도 5a는 하나 이상의 실시형태에 따른, 암 분류기를 훈련하는 프로세스를 설명하는 예시적인 흐름도이다.

도 5b는 하나 이상의 실시형태에 따른, 암 분류기를 훈련하는 데 사용되는 특징 벡터의 예시적인 생성을 예시한

다.

도 6a는 하나 이상의 실시형태에 따른, 핵산 샘플을 시퀀싱하기 위한 디바이스의 예시적인 흐름도를 예시한다.

도 6b는 하나 이상의 실시형태에 따른 분석 시스템의 예시적인 블록도이다.

도 7은 예시적인 결과의 제1 그룹에 따른, 주어진 샘플에 대해 동형접합성으로 불리는 각각의 오염 마커에 대해 기준 또는 대체로 불리는 단편의 총 수에 대한 오염으로 분류된 단편의 수의 분율 분포를 예시한다.

도 8은 예시적인 결과의 제1 그룹에 따른, 오염 마커의 대립유전자 빈도의 산점도를 예시한다.

도 9는 예시적인 결과의 제1 그룹에 따른, 오염 마커의 유전자형 및 접합성을 보여주는 2개의 그래프를 예시한다.

도 10은 예시적인 결과의 제1 그룹에 따른, 동형접합성이고 해당 샘플에 대한 오염을 추정하는 데 유용한 것으로 간주되는 주어진 샘플에 대해 오염 마커와 중첩되는 충분한 단편을 갖는 오염 마커의 분율을 보여주는 그래프를 예시한다.

도 11a는 예시적인 결과의 제1 그룹에 따른, 샘플의 서로 다른 배치(batch)에 대한 추정된 오염 레벨의 그래프를 예시한다.

도 11b는 예시적인 결과의 제1 그룹에 따른, 샘플의 서로 다른 배치에 대한 추정된 오염 레벨의 추가 그래프를 예시한다.

도 12는 예시적인 결과의 제2 그룹에 따른, 표 2 및 표 4에 나열된 오염 마커당 획득된 고유 cfDNA 단편의 수의 분포를 예시한다.

도 13은 예시적인 결과의 제2 그룹에 따른, 품질 검사 프로세스에 대한 결과를 예시한다.

도 14는 예시적인 결과의 제2 그룹에 따른 대립유전자 빈도의 산점도를 예시한다.

도 15는 예시적인 결과의 제2 그룹에 따른, 마커가 이형접합성으로 불리는 빈도의 산점도를 예시한다.

도 16은 예시적인 결과의 제2 그룹에 따른, 하디-바인베르크(Hardy-Weinberg) 항 값의 산점도를 예시한다.

도 17은 예시적인 결과의 제2 그룹에 따른, 주어진 샘플에 대해 동형접합성으로 불리는 각각의 오염 마커에 대해 기준 또는 대체로 불리는 단편의 총 수에 대한 오염으로 분류된 단편의 수의 분율 분포를 예시한다.

도 18은 예시적인 결과의 제2 그룹에 따른, 가상의 파편 세트에 대한 오염 분율을 추정하기 위한 공식의 적용을 예시한다.

도 19는 예시적인 결과의 제2 그룹에 따른, 시뮬레이션 데이터에 오염 분율 모델을 적용한 결과를 예시한다.

도 20은 예시적인 결과의 제2 그룹에 따른, 각각이 다양한 적정 레벨을 갖는 cfDNA 샘플의 4개의 적정 쌍에 오염 분율 모델을 적용한 결과를 예시한다.

도 21은 예시적인 결과의 제2 그룹에 따른, 실험에서의 84개 cfDNA 샘플에 대한 추정된 오염 분율의 분포를 예시한다.

도 22는 예시적인 결과의 제2 그룹에 따른, 다수의 SNP 마커와 인델 마커를 별도로 고려할 때 실험에서의 84개 샘플에 대해 얻은 추정치가 높은 상관 관계를 가지며 어떠한 유의미한 체계적 편향도 나타내지 않음을 예시한다.

도 23은 하나 이상의 실시형태에 따른, 다수의 SNP 오염 마커를 포함하는 표 1을 예시한다.

도 24는 하나 이상의 실시형태에 따른, 다수의 SNP 오염 마커에 대한 프로브 서열 목록을 포함하는 표 2를 예시한다.

도 25는 하나 이상의 실시형태에 따른, 인델 오염 마커를 포함하는 표 3을 예시한다.

도 26은 하나 이상의 실시형태에 따른, 인델 오염 마커에 대한 프로브 서열 목록들을 포함하는 표 4를 예시한다.

도면은 단지 예시의 목적으로 다양한 실시형태를 묘사한다. 당업자는 본원에 예시된 구조 및 방법의 대안적인 실시형태가 본원에 설명된 원리로부터 벗어나지 않고 사용될 수 있다는 것을 다음의 논의로부터 쉽게 인식할 것

이다.

발명을 실시하기 위한 구체적인 내용

[0115] I. 개요

[0116] I.A. 메틸화 개요

[0117] 본 설명에 따르면, 예를 들어 메틸화되지 않은 시토신을 우라실로 전환함으로써 개인의 cfDNA 단편을 처리하고, 시퀀싱한 후, 참조 게놈과 비교하여 서열을 판독하여 DNA 단편 내의 특정 CpG 부위의 메틸화 상태를 식별한다. 각각의 CpG 부위는 메틸화되거나 메틸화되지 않을 수 있다. 건강한 개인과 비교하여 변칙적 메틸화 단편을 식별하면 피험자의 암 상태에 대한 통찰력을 얻을 수 있다. 당업계에 잘 알려진 바와 같이, DNA 메틸화 변칙(건강한 대조군과 비교하여)은 암에 기여할 수 있는 다양한 효과를 유발할 수 있다. 변칙적으로 메틸화된 cfDNA 단편을 식별하는 데는 다양한 문제가 발생한다. 첫째, DNA 단편이 변칙적으로 메틸화되었다고 결정하는 것은 대조군 개체 그룹과 비교하여 가중치를 가질 수 있으므로, 대조군의 수가 적으면 더 작은 크기의 대조군 내에서 통계적 변동성으로 인해 결정이 신뢰도를 잃게 된다. 또한, 대조군 개인 그룹 사이에서, 메틸화 상태가 다양할 수 있으며, 이는 피험자의 DNA 단편이 변칙적으로 메틸화되었는지 결정할 때 설명하기 어려울 수 있다. 다른 참고로, CpG 부위에서의 시토신의 메틸화는 후속 CpG 부위에서의 메틸화에 인과적으로 영향을 미칠 수 있다. 이 종속성을 요약하는 것은 그 자체로 다른 도전이 될 수 있다.

[0118] 일반적으로 메틸화는 시토신 염기의 피리미딘 고리에 있는 수소 원자가 메틸기로 전환되어 5-메틸시토신을 형성할 때 디옥시리보핵산(DNA)에서 발생할 수 있다. 특히, 메틸화는 본원에서 "CpG 부위"로 지칭되는 시토신 및 구아닌의 디뉴클레오티드에서 발생할 수 있다. 다른 경우에서, 메틸화는 CpG 부위의 일부가 아닌 시토신이나 시토신이 아닌 다른 뉴클레오티드에서 발생할 수 있지만, 이들은 더 드물게 발생한다. 본 개시내용에서, 메틸화는 명확성을 위해 CpG 부위를 참조하여 논의된다. 변칙적 DNA 메틸화는 과메틸화 또는 저메틸화로 식별될 수 있으며, 둘 모두는 암 상태를 나타낼 수 있다. 본 개시내용 전반에 걸쳐, DNA 단편이 임계 수 이상의 CpG 부위를 포함하고 임계 백분율 이상의 CpG 부위가 메틸화되거나 비메틸화되는 경우, DNA 단편에 대해 과메틸화 및 저메틸화를 특징으로 할 수 있다.

[0119] 본원에 설명된 원리는 비-시토신 메틸화를 포함하여 비-CpG 맥락에서 메틸화 검출에 동일하게 적용될 수 있다. 이러한 실시형태에서, 메틸화를 검출하는 데 사용되는 습식 실험실 분석은 본원에 기술된 것과 다를 수 있다. 또한, 본원에서 논의된 메틸화 상태 벡터는 일반적으로 메틸화가 발생했거나 발생하지 않은 부위(비록 해당 부위가 구체적으로 CpG 부위가 아니더라도)인 요소를 포함할 수 있다. 그러한 치환으로, 본원에 설명된 프로세스의 나머지는 동일할 수 있고, 결과적으로 본원에 설명된 본 발명의 개념은 그의 다른 형태의 메틸화에 적용될 수 있다.

[0120] I.B. 정의

[0121] 용어 "무세포 핵산" 또는 "cfNA"는 개인 신체(예를 들어, 혈액)에서 순환하고 하나 이상의 건강한 세포 및/또는 하나 이상의 건강에 해로운 세포(예를 들어, 암세포)로부터 유래하는 핵산 단편을 나타낸다. 용어 "무세포 DNA" 또는 "cfDNA"는 개인 신체(예를 들어, 혈액)에서 순환하는 데옥시리보핵산 단편을 나타낸다. 또한 개인 신체 내 cfNA 또는 cfDNA는 다른 비-인간 소스로부터 나올 수 있다.

[0122] 용어 "게놈 핵산", "게놈 DNA" 또는 "gDNA"는 하나 이상의 세포로부터 얻은 핵산 분자 또는 데옥시리보핵산 분자를 나타낸다. 다양한 실시형태에서, gDNA는 건강한 세포(예를 들어, 비종양 세포) 또는 종양 세포(예를 들어, 생검 샘플)로부터 추출될 수 있다. 일부 실시형태에서, gDNA는 백혈구와 같은 혈액 세포 계통으로부터 유래된 세포로부터 추출될 수 있다.

[0123] 용어 "순환 종양 DNA" 또는 "ctDNA"는 종양 세포 또는 다른 유형의 암 세포로부터 유래하고 세포 사멸이나 죽어가는 세포의 괴사와 같은 생물학적 프로세스의 결과로서 개인의 체액(예를 들어, 혈액, 땀, 소변 또는 타액)으로 방출될 수 있거나 생존 가능한 종양 세포에 의해 활발하게 방출될 수 있는 핵산 단편을 나타낸다.

[0124] 용어 "DNA 단편", "단편" 또는 "DNA 분자"는 일반적으로 임의의 데옥시리보핵산 단편, 즉 cfDNA, gDNA, ctDNA 등을 나타낼 수 있다.

[0125] 용어 "변칙적 단편", "변칙적으로 메틸화된 단편" 또는 "변칙적 메틸화 패턴을 갖는 단편"은 CpG 부위의 변칙적 메틸화를 갖는 단편을 나타낸다. 단편의 변칙적 메틸화는 확률 모델을 사용하여 대조군 내에서의 단편의 메틸화

패턴 관찰의 예상치 못한 가능성을 확인하기 위해 결정될 수 있다.

[0126] 용어 "극한 메틸화가 있는 특이한 단편" 즉 "UFXM(unusual fragment with extreme methylation)"은 저메틸화된 단편 또는 과메틸화된 단편을 나타낸다. 저메틸화된 단편 및 과메틸화된 단편은 각각 어느 정도의 임계 백분율(예를 들어, 90%)이 넘는 메틸화 또는 비메틸화를 갖는 적어도 일정 수(예를 들어, 5)의 CpG 부위를 갖는 단편을 나타낸다.

[0127] 용어 "변칙 점수"는 해당 CpG 부위와 겹치는 샘플의 변칙적 단편(또는 일부 실시형태에서는 UFXM)의 수에 기초한 CpG 부위에 대한 점수를 나타낸다. 변칙 점수는 분류를 위한 샘플 특징화의 맥락에서 사용된다.

[0128] 본원에서 사용된 바와 같이, 용어 "약" 또는 "대략"은 당업자에 의해 결정된 바와 같이 특정 값에 대해 허용 가능한 오차 범위 이내임을 의미할 수 있고, 이는 값이 측정되거나 결정되는 방법에 따라, 측정 시스템의 한계에 따라 부분적으로 달라질 수 있다. 예를 들어, "약"은 당업계의 실시에 따라 1 또는 1 초과의 표준 편차 이내를 의미할 수 있다. "약"은 주어진 값의 ±20%, ±10%, ±5% 또는 ±1% 범위를 의미할 수 있다. 용어 "약" 또는 "대략"은 어느 정도의 크기 이내, 값의 5배 이내, 또는 2배 이내를 의미할 수 있다. 특정 값이 출원서 및 청구범위에 기술되어 있는 경우, 달리 명시하지 않는 한 용어 "약"은 특정 값에 대해 허용 가능한 오류 범위 내에 있음을 의미하는 것으로 가정되어야 한다. 용어 "약"은 당업자가 일반적으로 이해하는 의미를 가질 수 있다. 용어 "약"은 ±10%를 나타낼 수 있다. 용어 "약"은 ±5%를 나타낼 수 있다.

[0129] 본원에서 사용된 바와 같이, 용어 "생물학적 샘플", "환자 샘플" 또는 "샘플"은 피험자와 관련된 생물학적 상태를 반영할 수 있는 피험자로부터 채취한 임의의 샘플을 나타내고, 이는 무세포 DNA를 포함한다. 생물학적 샘플의 예는 피험자의 혈액, 전혈, 혈장, 혈청, 소변, 뇌척수액, 대변, 타액, 땀, 눈물, 흉막액, 심낭액 또는 복막액이 포함되지만 이들에 제한되지는 않는다. 생물학적 샘플은 살아 있거나 죽은 피험자로부터 추출된 조직이나 물질을 포함할 수 있다. 생물학적 샘플은 무세포 샘플일 수 있다. 생물학적 샘플은 핵산(예를 들어, DNA 또는 RNA) 또는 이의 단편을 포함할 수 있다. 용어 "핵산"은 데옥시리보핵산(DNA), 리보핵산(RNA) 또는 이들의 임의의 하이브리드 또는 단편을 나타낼 수 있다. 샘플 내 핵산은 무세포 핵산일 수 있다. 샘플은 액체 샘플 또는 고체 샘플(예를 들어, 세포 샘플 또는 조직 샘플)일 수 있다. 생물학적 샘플은 혈액, 혈장, 혈청, 소변, 질액, 수두(예를 들어, 고환)의 체액, 질 홍조액, 흉막액, 복수액, 뇌척수액, 타액, 땀, 눈물, 가래, 기관지폐포 세척액, 유두 분비액, 신체 여러 부위(예를 들어, 갑상선, 유방)의 흡인액 등과 같은 체액일 수 있다. 생물학적 샘플은 대변 샘플일 수 있다. 다양한 실시형태에서, 무세포 DNA가 농축된 생물학적 샘플(예를 들어, 원심분리 프로토콜을 통해 얻은 혈장 샘플) 내 DNA의 대부분은 무세포일 수 있다(예를 들어, DNA의 50%, 60%, 70%, 80%, 90%, 95% 또는 99% 초과는 무세포일 수 있다). 생물학적 샘플을 처리하여 조직 또는 세포 구조를 물리적으로 파괴(예를 들어, 원심분리 및/또는 세포 용해)하여, 세포내 성분을 분석용 샘플을 준비하는 데 사용될 수 있는 효소, 완충액, 염, 세제 등을 추가로 포함할 수 있는 용액으로 방출할 수 있다.

[0130] 본원에서 사용된 바와 같이, 용어 "대조군", "대조군 샘플", "참조", "참조 샘플", "정상" 및 "정상 샘플"은 특정 질환을 갖지 않거나 달리 건강한 피험자의 샘플을 기술한다. 일 예로, 본원에 공개된 방법은 종양이 있는 피험자에 대해 수행될 수 있으며, 여기서 참조 샘플은 피험자의 건강한 조직으로부터 채취한 샘플이다. 참조 샘플은 피험자 또는 데이터베이스에서 얻을 수 있다. 참조는 예를 들어 피험자의 샘플을 시퀀싱하여 얻은 핵산 단편 서열을 매핑하는 데 사용되는 참조 게놈일 수 있다. 참조 게놈은 생물학적 샘플과 구성 샘플의 핵산 단편 서열을 정렬하고 비교될 수 있는 반수체 또는 이배체 게놈을 나타낼 수 있다. 구성 샘플의 예로는 피험자로부터 얻은 백혈구의 DNA가 있다. 반수체 게놈의 경우, 각각의 유전자좌에는 단 하나의 뉴클레오티드만 있을 수 있다. 이배체 게놈의 경우, 이형접합성 유전자좌를 식별할 수 있으며, 각각의 이형접합성 유전자좌는 2개의 대립유전자를 가질 수 있고, 여기서 2개의 대립유전자 중 하나는 유전자좌에 대한 정렬 일치를 가능하게 할 수 있다.

[0131] 본원에서 사용된 바와 같이, 용어 "암" 또는 "종양"은 종괴의 성장이 정상 조직의 성장을 능가하고 조화되지 않는 비정상인 조직 덩어리를 나타낸다.

[0132] 본원에서 사용된 바와 같이, 문구 "건강한"은 건강이 양호한 피험자를 나타낸다. 건강한 피험자는 악성 또는 비악성 질환이 없음을 입증할 수 있다. "건강한 개인"은 분석되는 질환과 관련 없이 일반적으로 "건강한" 것으로 간주될 수 없는 다른 질병이나 질환을 가질 수 있다.

[0133] 본원에서 사용된 바와 같이, 용어 "메틸화"는 시토신 염기의 피리미딘 고리에 있는 수소 원자가 메틸기로 전환되어 5-메틸시토신을 형성하는 데옥시리보핵산(DNA)의 변형을 나타낸다. 특히, 메틸화는 본원에서 "CpG 부위"로 지칭되는 시토신 및 구아닌의 디뉴클레오티드에서 발생하는 경향이 있다. 다른 경우에서, 메틸화는 CpG 부위의

일부가 아닌 시토신이나 시토신이 아닌 다른 뉴클레오티드에서 발생할 수 있지만, 이들은 더 드물게 발생한다. 변칙적 cfDNA 메틸화는 과메틸화 또는 저메틸화로 식별될 수 있으며, 둘 모두는 암 상태를 나타낼 수 있다. DNA 메틸화 변칙(건강한 대조군과 비교하여)은 암에 기여할 수 있는 다양한 효과를 유발할 수 있다. 본원에 설명된 원리는 비-시토신 메틸화를 포함하여 CpG 맥락 및 비-CpG 맥락에서의 메틸화 검출에 동일하게 적용 가능하다. 또한, 메틸화 상태 벡터는 일반적으로 메틸화가 발생했거나 발생하지 않은 부위(해당 부위가 구체적으로 CpG 부위가 아니더라도)의 벡터인 요소를 포함할 수 있다.

[0134] 본원에서 상호교환적으로 사용된 바와 같이, 용어 "메틸화 단편" 또는 "핵산 메틸화 단편"은 핵산(예를 들어, 핵산 분자 및/또는 핵산 단편)의 메틸화 시퀀싱에 의해 결정되는, 복수의 CpG 부위 중 각각의 CpG 부위에 대한 메틸화 상태의 서열을 나타낸다. 메틸화 단편에서, 핵산 단편의 각각의 CpG 부위에 대한 위치 및 메틸화 상태는 참조 게놈에 대한 서열 판독(예를 들어, 핵산 시퀀싱으로부터 획득됨)의 정렬에 기초하여 결정된다. 핵산 메틸화 단편은 참조 게놈에서의 핵산 단편의 위치(예를 들어, CpG 지수 또는 다른 유사한 측정 기준을 사용하여 핵산 단편에서의 제1 CpG 부위의 위치로 지정됨) 및 핵산 단편에서의 CpG 부위의 수를 지정하는, 복수의 CpG 부위 중 각 CpG 부위의 메틸화 상태(예를 들어, 메틸화 상태 벡터)를 포함한다. 핵산 분자의 메틸화 시퀀싱에 기초한 참조 게놈에 대한 서열 판독의 정렬은 CpG 지수를 사용하여 수행될 수 있다. 본원에서 사용된 바와 같이, 용어 "CpG 지수"는 전자 형식일 수 있는, 인간 참조 게놈 등의 참조 게놈 내 복수의 CpG 부위(예를 들어, CpG 1, CpG 2, CpG 3 등) 중 각각의 CpG 부위의 리스트를 나타낸다. CpG 지수는 CpG 지수의 각각의 CpG 부위에 대해 대응하는 참조 게놈 내 대응하는 게놈 위치를 추가로 포함한다. 따라서 각각의 개별 핵산 메틸화 단편의 각각의 CpG 부위는 CpG 지수를 사용하여 결정될 수 있는 각각의 참조 게놈에서의 특정 위치로 지수화된다.

[0135] 본원에서 사용된 바와 같이, 용어 "진양성"(TP: true-positive)은 질환을 갖고 있는 피험자를 나타낸다. "진양성"은 종양, 암, 전암 질환(예를 들어, 전암 병변), 국소 암 또는 전이된 암, 또는 비악성 질병을 갖고 있는 피험자를 나타낼 수 있다. "진양성"은 질환을 갖고 있는 피험자를 지칭할 수 있으며, 본 개시내용의 검정 또는 방법에 의해 질환을 갖고 있는 것으로 식별된다. 본원에서 사용된 바와 같이, 용어 "진음성"(TN: true-negative)은 질환이 없거나 검출 가능한 질환이 없는 피험자를 나타낸다. 진음성은 종양, 암, 전암 상태(예를 들어, 전암 병변), 국소 암 또는 전이된 암, 비악성 질환과 같은 질병이나 검출 가능한 질병이 없는 피험자 또는 그 외에는 건강한 피험자를 나타낼 수 있다. 진음성은 질환이 없거나, 검출 가능한 질환이 없거나, 본 개시내용의 검정 또는 방법에 의해 질환이 없는 것으로 식별된 피험자를 나타낼 수 있다.

[0136] 본원에서 사용된 바와 같이, 용어 "참조 게놈"은 피험자의 식별된 서열을 참조하는 데 사용될 수 있는 임의의 유기체 또는 바이러스의 일부 또는 전체의 임의의 특정 알려진, 시퀀싱된 또는 특성화된 게놈을 나타낸다. 인간 피험자뿐만 아니라 다른 많은 유기체에 대해 사용되는 예시적인 참조 게놈은 국립 생명공학 정보 센터("NCBI") 또는 캘리포니아 대학교 산타 크루즈(UCSC)가 호스팅하는 온라인 게놈 브라우저에서 제공된다. "게놈"은 핵산 서열으로 표현되는 유기체 또는 바이러스의 완전한 유전 정보를 나타낸다. 본원에 사용된 바와 같이, 참조 서열 또는 참조 게놈은 종종 개인 또는 다수의 개인의 조립된 또는 부분적으로 조립된 게놈 서열이다. 일부 실시형태에서, 참조 게놈은 하나 이상의 인간 개인의 조립된 또는 부분적으로 조립된 게놈 서열이다. 참조 게놈은 종의 유전자 집합을 대표하는 예로 볼 수 있다. 일부 실시형태에서, 참조 게놈은 염색체에 할당된 서열을 포함한다. 예시적인 인간 참조 게놈은 NCBI 빌드 34(UCSC 등가: hg16), NCBI 빌드 35(UCSC 등가: hg17), NCBI 빌드 36.1(UCSC 등가: hg18), GRCh37(UCSC 등가: hg19) 및 GRCh38(UCSC 등가: hg38)을 포함하지만 이에 제한되지는 않는다.

[0137] 본원에 사용된 바와 같이, 용어 "서열 판독" 또는 "판독"은 본원에 기술되어 있거나 당업계에 공지된 임의의 시퀀싱 프로세스에 의해 생성된 뉴클레오티드 서열을 나타낸다. 판독은 핵산 단편의 한쪽 말단에서 생성될 수 있으며("단일 말단 판독") 때로는 핵산의 양쪽 말단에서 생성된다(예를 들어, 쌍의 말단 판독, 이중 말단 판독). 일부 실시형태에서, 서열 판독(예를 들어, 단일 말단 판독 또는 쌍의 말단 판독)는 표적화된 핵산 단편의 가닥 중 하나 또는 둘 모두로부터 생성될 수 있다. 서열 판독의 길이는 종종 특정 시퀀싱 기술과 연관되어 있다. 예를 들어 높은 처리량 방법은 수십 내지 수백 염기쌍(bp)까지 크기가 다양할 수 있는 서열 판독을 제공한다. 일부 실시형태에서, 서열 판독은 약 15 bp 내지 900 bp 길이(예를 들어, 약 20 bp, 약 25 bp, 약 30 bp, 약 35 bp, 약 40 bp, 약 45 bp, 약 50 bp, 약 55 bp, 약 60 bp, 약 65 bp, 약 70 bp, 약 75 bp, 약 80 bp, 약 85 bp, 약 90 bp, 약 95 bp, 약 100 bp, 약 110 bp, 약 120 bp, 약 130 bp, 약 140 bp, 약 150 bp, 약 200 bp, 약 450 bp, 약 300 bp, 약 350 bp, 약 400 bp, 약 450 bp, 또는 약 500 bp)의 중간 길이, 중앙 길이 또는 평균 길이를 갖는다. 일부 실시형태들에서, 서열 판독은 약 1000 bp, 2000 bp, 5000 bp, 10,000 bp 또는 50,000 bp 이상의 중간 길이, 중앙 길이 또는 평균 길이를 갖는다. 예를 들어, 나노포어 시퀀싱은 수십 염기쌍에서 수백,

수천 개의 염기쌍까지 크기가 다양할 수 있는 서열 판독을 제공할 수 있다. 일루미나(Illumina) 병렬 시퀀싱은 크게 변하지 않는 서열 판독을 제공할 수 있으며, 예를 들어 대부분의 서열 판독은 200 bp보다 작을 수 있다. 서열 판독(또는 시퀀싱 판독)은 핵산 분자(예를 들어, 뉴클레오티드 문자열)에 대응하는 서열 정보를 나타낼 수 있다. 예를 들어, 서열 판독은 핵산 단편의 일부로부터의 뉴클레오티드 문자열(예를 들어, 약 20 내지 약 150)에 대응할 수 있거나, 핵산 단편의 한쪽 말단 또는 양쪽 말단에 있는 뉴클레오티드 문자열에 대응할 수 있거나, 또는 전체 핵산 단편의 뉴클레오티드에 대응할 수 있다. 서열 판독은 다양한 방식으로, 예를 들어 시퀀싱 기술을 사용하거나 프로브, 예를 들어, 혼성화 어레이 또는 포획 프로브를 사용하거나, 중합효소 연쇄 반응(PCR) 또는 단일 프라이머를 사용한 선형 증폭 또는 등온 증폭과 같은 증폭 기술을 사용하여 얻을 수 있다.

[0138] 본원에서 사용된 바와 같이, 용어 "시퀀싱" 등은 일반적으로 핵산 또는 단백질과 같은 생물학적 거대분자의 순서를 결정하는 데 사용될 수 있는 모든 생화학적 프로세스를 나타낸다. 예를 들어, 시퀀싱 데이터에는 DNA 단편과 같은 핵산 분자의 뉴클레오티드 염기의 전부 또는 일부가 포함될 수 있다.

[0139] 본원에서 사용된 바와 같이, 용어 "시퀀싱 깊이"는 용어 "커버리지"와 상호교환적으로 사용되며, 유전자좌에 정렬된 고유 핵산 표적 분자에 대응하는 공통 서열 판독에 의해 유전자좌가 커버되는 횟수를 지칭하며; 예를 들어 시퀀싱 깊이는 유전자좌를 커버하고 있는 고유 핵산 표적 분자의 수와 동일하다. 유전자좌는 뉴클레오티드만큼 작을 수도 있고, 염색체 팔만큼 클 수도 있고, 전체 게놈만큼 클 수도 있다. 시퀀싱 깊이는 "Yx", 예를 들어 50x, 100x 등으로 표현될 수 있으며. 여기서 "Y"는 유전자좌가 핵산 표적에 대응하는 서열로 커버되는 횟수를 의미하며; 예를 들어, 특정 유전자좌를 커버하는 독립적인 서열 정보가 획득되는 횟수이다. 일부 실시형태에서, 시퀀싱 깊이는 시퀀싱된 게놈의 수에 대응한다. 시퀀싱 깊이는 다수의 유전자좌 또는 전체 게놈에도 적용될 수 있으며, 이 경우 Y는 각각 유전자좌, 반수체 게놈 또는 전체 게놈이 시퀀싱되는 중간 횟수 또는 평균 횟수를 나타낼 수 있다. 중간 깊이가 인용되면, 데이터 세트에 포함된 다양한 유전자좌의 실제 깊이는 값의 범위에 걸쳐 있을 수 있다. 매우 깊은 시퀀싱은 유전자좌의 시퀀싱 깊이의 최소 100배임을 나타낼 수 있다.

[0140] 본원에서 사용된 바와 같이, 용어 "민감도" 또는 "진양성률"(TPR: true-positive rate)은 진양성 수를 진양성 수와 위음성 수의 합으로 나눈 것을 나타낸다. 민감도는 실제로 질환을 갖고 있는 모집단의 비율을 정확하게 식별하는 분석 또는 방법의 능력을 특성화할 수 있다. 예를 들어, 민감도는 암에 걸린 모집단 내에서의 피험자의 수를 정확하게 식별하는 방법의 능력을 특성화할 수 있다. 다른 예로, 민감도는 암을 나타내는 하나 이상의 마커를 정확하게 식별하는 방법의 능력을 특성화할 수 있다.

[0141] 본원에서 사용된 바와 같이, 용어 "특이성" 또는 "진음성률"(TNR: true-negative rate)은 진음성의 수를 진음성의 수와 위양성의 수의 합으로 나눈 것을 나타낸다. 특이성은 실제로 질환이 없는 모집단의 비율을 정확하게 식별하는 분석 또는 방법의 능력을 특성화할 수 있다. 예를 들어, 특이성은 암에 걸리지 않은 모집단 내 피험자의 수를 정확하게 식별하는 방법의 능력을 특성화할 수 있다. 다른 예로, 특이성은 암을 나타내는 하나 이상의 마커를 정확하게 식별하는 방법의 능력을 특성화한다.

[0142] 본원에서 사용된 바와 같이, 용어 "피험자"는 인간(예를 들어, 남성 인간, 여성 인간, 태아, 임신한 여성, 어린이 등), 비-인간 동물, 식물, 박테리아, 곰팡이 또는 원생생물을 포함하지만 이들에 제한되지 않는 임의의 살아 있는 또는 무생물 유기체를 나타낸다. 포유류, 파충류, 조류, 양서류, 어류, 유제류, 반추동물, 소(예를 들어, 소), 말(예를 들어, 말), 염소 및 양(예를 들어, 양, 염소), 돼지(예를 들어, 돼지), 낙타(예를 들어, 낙타, 라마, 알파카), 원숭이, 유인원(예를 들어, 고릴라, 침팬지), 우르시드(예를 들어, 곰), 가금류, 개, 고양이, 쥐, 쥐, 물고기, 돌고래, 고래 및 상어를 포함하지만 이들에 제한되지 않는 인간 또는 비인간 동물이 피험자가 될 수 있다. 일부 실시형태에서, 피험자는 임의 단계의 남성 또는 여성(예를 들어, 남자, 여자 또는 어린이)이다. 샘플을 채취하거나 본원에서 설명된 방법 또는 조성물로 치료를 받는 피험자는 임의의 연령일 수 있고 성인, 유아 또는 어린이일 수 있다.

[0143] 본원에서 사용된 바와 같이, 용어 "조직"은 기능적 단위로서 함께 그룹화되는 세포 그룹에 해당할 수 있다. 단일 조직에서 1개 유형 이상의 세포가 발견될 수 있다. 다양한 유형의 조직은 다양한 유형의 세포(예를 들어, 간 세포, 폐포 세포 또는 혈액 세포)로 구성될 수 있지만, 다양한 유기체(모체 대 태아)의 조직 또는 건강한 세포 대 종양 세포에 해당할 수도 있다. 용어 "조직"은 일반적으로 인체에서 발견되는 모든 세포 그룹(예를 들어, 심장 조직, 폐 조직, 신장 조직, 비인두 조직, 구인두 조직)을 나타낼 수 있다. 일부 양태들에서, 용어 "조직" 또는 "조직 유형"은 무세포 핵산이 유래하는 조직을 지칭하는 데 사용될 수 있다. 일 예에서, 바이러스 핵산 단편은 혈액 조직에서 추출될 수 있다. 다른 예에서, 바이러스 핵산 단편은 종양 조직에서 추출될 수 있다.

[0144] 본원에서 사용된 바와 같이, 용어 "게놈"은 유기체 게놈의 특성을 나타낸다. 게놈 특성의 예로는 게놈 전체 또

는 일부의 1차 핵산 서열과 관련된 것(예를 들어, 뉴클레오티드 다형성의 존재 또는 부재, 인델, 서열 재배열, 돌연변이 빈도 등) 게놈 내의 하나 이상의 특정 뉴클레오티드 서열의 카피 수(예를 들어, 카피 수, 대립유전자 빈도 분율, 단일 염색체 또는 전체 게놈 배수성 등), 게놈 전체 또는 일부의 후성유전적 상태(예를 들어, 메틸화, 히스톤 변형, 뉴클레오솜 위치 지정 등과 같은 공유 핵산 변형), 유기체 게놈의 발현 프로파일(예를 들어, 유전자 발현 레벨, 이소타입 발현 레벨, 유전자 발현 비율 등)을 포함하지만 이들에 제한되지 않는다.

[0145] 본원에서 사용된 용어는 단지 특정한 경우를 설명하기 위해 사용된 것이며 한정하려는 의도가 아니다. 본원에서 사용된 바와 같이, 단수형 "a", "an" 및 "the"는 문맥상 명백하게 달리 나타내지 않는 한 복수형도 포함하도록 의도된다. 또한, "포함하는", "포함한다", "갖는", "갖는다", "함께" 또는 이들의 변형이 상세한 설명 및/또는 청구범위에 사용되는 한, 그러한 용어는 용어 "구성하는"과 유사한 방식으로 포함되는 것으로 의도된다.

[0146] I.C. 암 분류 개요

[0147] 일반적으로, 암 분류에서는 생물학적 샘플 내의 유전 물질의 서열 판독으로부터 암을 예측하도록 생물학적 샘플을 시퀀싱하고 분석한다. 워크플로우에는 예를 들어, 의료 제공자, 시퀀싱 장치, 분석 시스템 등을 포함하는 하나 이상의 엔티티에 의한 작업들이 포함될 수 있다. 워크플로우의 목표에는 개인의 암을 검출 및/또는 모니터링하는 것이 포함된다. 의료 관점에서 볼 때, 워크플로우는 기존의 다른 암 진단 도구를 보완하는 역할을 할 수 있다. 워크플로우는 암 진단을 받은 개인에게 치료 계획을 더 잘 알리기 위해 조기 암 검출 및/또는 정기적인 암 모니터링을 제공하는 역할을 할 수 있다. 대안적으로 일반적인 워크플로우는 질병 분류에 보다 일반적으로 적용될 수 있다.

[0148] 의료 제공자는 샘플 수집을 수행한다. 암 분류를 받는 개인은 의료 제공자를 방문한다. 의료 제공자는 암 분류를 수행하기 위한 샘플을 수집한다. 생물학적 샘플의 예에는 피험자의 조직 생검, 혈액, 전혈, 혈장, 혈청, 소변, 뇌척수액, 대변, 타액, 땀, 눈물, 흉막액, 심낭액 또는 복막액이 포함되지만 이들에 제한되지는 않는다. 샘플은 암 분류를 위해 추출 및 시퀀싱될 수 있는, 개인에 속하는 유전 물질을 포함한다. 샘플이 수집되면, 샘플은 시퀀싱 장치에 제공된다. 의료 제공자는 샘플과 함께, 개인과 관련된 다른 정보, 예를 들어, 생물학적 성별, 연령, 민족, 흡연 상태, 이전 진단 등을 수집할 수 있다. 하나 이상의 실시형태에서, 의료 제공자는 치료 키트를 활용할 수 있다. 치료 키트는 하나 이상의 샘플 수집 용기를 포함할 수 있다. 치료 키트는 샘플 처리 및 분석에 사용하기 위한 시약, 프로브, 컴퓨터 프로그램 제품, 지침 등을 추가로 포함할 수 있다.

[0149] 시퀀싱 장치는 샘플에 대해 샘플 시퀀싱을 수행한다. 검사실 임상의는 시퀀싱 준비 시에 샘플에 대해 하나 이상의 처리 단계를 수행할 수 있다. 검사실 임상의는 시약, 프로브 등을 포함한 치료 키트를 활용할 수도 있다. 준비가 완료되면 임상의는 시퀀싱 장치에 샘플을 로드한다. 시퀀싱에 활용되는 장치의 예는 도 6a 및 도 6b와 결부시켜 추가로 설명된다. 시퀀싱 장치는 일반적으로 단편에 대응하는 핵염기의 서열을 결정하기 위해 시퀀싱된 핵산 단편을 추출하고 분리한다. 시퀀싱에는 핵산 물질의 증폭도 포함될 수 있다. 다양한 시퀀싱 프로세스에는 생거(Sanger) 시퀀싱, 단편 분석 및 차세대 시퀀싱이 포함된다. 시퀀싱은 전체 게놈 시퀀싱일 수 있거나 표적 패널을 사용한 표적 시퀀싱일 수 있다. DNA 메틸화와 관련하여, 중아황산염 시퀀싱(예를 들어, 도 3a 및 도 3b에 추가로 설명됨)은 CpG 부위에서 메틸화되지 않은 시토신의 중아황산염 전환을 통해 메틸화 상태를 결정할 수 있다. 샘플 시퀀싱은 샘플 내 복수의 핵산 단편에 대한 서열을 생성한다. 하나 이상의 실시형태에서, 서열은 메틸화 상태 벡터를 포함할 수 있고, 여기서 각각의 메틸화 상태 벡터는 단편 상의 CpG 부위에 대한 메틸화 상태를 기술한다.

[0150] 그러면 분석 시스템은 서열 판독을 처리하여 암 예측을 생성한다.

[0151] 분석 시스템은 사전 분석 처리를 수행할 수 있다. 사전 분석 처리에는 서열 판독의 중복 제거, 커버리지와 관련된 측정 기준 결정, 샘플 오염 여부 결정, 오염된 단편 제거, 시퀀싱 오류 호출 등이 포함될 수 있지만 이들에 제한되지는 않는다. 오염된 것으로 결정된 샘플은 추가 분석에서 보류될 수 있다. 다시 말하면, 분석 시스템은 오염된 검출에 대한 추가 분석(예를 들어, 질병 분류 또는 암 분류) 수행을 보류할 수 있다. 일부 실시형태에서, 오염된 샘플은 물리적으로 폐기될 수 있다.

[0152] 분석 시스템은 하나 이상의 분석을 수행한다. 분석은 샘플이 추출된 개인의 적어도 암 상태를 예측하기 위한 통계 분석 또는 하나 이상의 훈련된 모델의 적용이다. CpG 부위의 메틸화, 단일 염기 다형성(SNP), 삽입 또는 결실(인델), 기타 유형의 유전적 돌연변이 등과 같은 다양한 유전적 특징을 평가하고 고려할 수 있다. 메틸화와 관련하여, 분석에는 변칙적 메틸화 식별(예를 들어, 도 4a 및 도 4b에 추가로 설명됨), 특징 추출(예를 들어, 도 5a 및 도 5b에 추가로 설명됨), 암 예측을 결정하기 위한 암 분류기 적용(예를 들어, 도 5a 및 도 5b에 추가

로 설명됨)이 포함될 수 있다. 암 분류기는 추출된 특징을 입력하여 암 예측을 결정한다. 암 예측은 라벨 또는 값일 수 있다. 라벨은 특정 암 상태를 나타낼 수 있으며, 예를 들어 이진법 라벨은 암의 존재 또는 부재를 나타낼 수 있고, 멀티클래스 라벨은 스크리닝되는 복수의 암 유형 중 하나 이상의 암 유형을 나타낼 수 있다. 값은 특정 암 상태의 가능성, 예를 들어 암의 가능성 및/또는 특정 암 유형의 가능성을 나타낼 수 있다. 예측은 기원 신호의 하나 이상의 특정 조직의 정량화를 포함할 수 있는, 암 신호의 정량화를 나타낼 수 있다.

[0153] 분석 시스템은 예측을 의료 제공자에게 반환한다. 의료 제공자는 암 예측에 기초하여 치료 계획을 수립하거나 조정할 수 있다. 치료 최적화는 섹션 VI.C 치료에 자세히 설명되어 있다.

[0154] II. 샘플 처리

[0155] II.A. 오염 검출

[0156] 도 1은 하나 이상의 실시형태에 따른, 샘플 내 오염 검출 프로세스(100)를 설명하는 예시적인 흐름도이다. 일반적으로, 샘플은 건강한 개인, 암에 걸렸거나 암에 걸린 것으로 의심되는 개인, 또는 사전 정보가 알려지지 않은 개인으로부터 채취될 수 있다. 샘플은 혈액, 혈장, 혈청, 소변, 대변 및 타액 샘플로 구성된 그룹에서 선택될 수 있다. 대안적으로, 샘플은 전혈, 혈액 분획(예를 들어, 백혈구(WBC)), 조직 생검, 흉막액, 심낭액, 뇌척수액 및 복막액으로 구성된 그룹에서 선택될 수 있다. 샘플을 이용한 암 분류 또는 기타 분류/분석에 앞서, 오염 검출 프로세스(100)는 샘플의 오염 레벨을 결정한다. 예를 들어, 프로세스(100)는 규칙(예를 들어, 임계 오염 레벨 또는 간격)과 비교할 때 샘플이 오염되었는지 여부를 결정할 오염 추정치 및/또는 신뢰 간격을 출력할 수 있다. 오염 검출은 개인의 동형접합성 대립유전자와 다른 대립유전자를 가진 단편을 식별하기 위해 유전자 서열 세트를 오염 마커로서 활용한다. 프로세스(100)는 분석 시스템(그 예가 도 6a 및 도 6b 및 대응하는 설명에 제공됨)에 의해 수행되는 것으로 본 명세서에 설명되어 있지만, 단계 중 일부 또는 전부는 다른 비교 가능하게 설명된 시퀀싱 장치 및/또는 컴퓨터 프로세서에 의해 수행될 수 있다.

[0157] 분석 시스템(110)은 오염 마커 프로브를 포함하는 표적 패널을 사용하여 샘플 내 cfDNA 단편을 시퀀싱한다. 오염 마커는 인간 게놈의 유전적 서열이며 삽입-결실(인델) 부위와 다수의 단일 염기 다형성(SNP) 부위를 포함할 수 있다. 일부 실시형태에서, 오염 마커는 표 1에 나열된 다수의 SNP 부위와 표 3에 나열된 인델 부위의 임의의 조합을 포함한다. 예를 들어, 오염 마커는 표 1에 나열된 다수의 SNP 부위 중 적어도 100, 200, 300, 400, 500, 600, 700, 800, 900 또는 1,000개 및 표 3에 나열된 인델 부위 중 적어도 100, 200, 300, 400, 500, 600, 700, 800, 900 또는 1,000개를 포함한다. 오염 마커 프로브는 DNA의 단일 가닥 또는 DNA의 두 가닥 모두에 있는 오염 마커 서열을 표적화하도록 설계될 수 있다. 메틸화 중아황산 시퀀싱과 관련하여, 프로브는 과메틸화된 단편, 저메틸화된 단편, 또는 둘 모두를 표적화하도록 설계될 수 있다. 프로브는 또한 오염 마커 서열의 하나, 일부 또는 모든 일배체형을 표적화하도록 설계될 수 있고, 예를 들어, 2개의 SNP 부위를 포함하는 다수의 SNP 부위(최대 4개의 잠재적인 일배체형)에 대해, 프로브는 일배체형 중 하나, 일부 또는 전부를 표적으로 할 수 있다. 오염 마커의 잠재적인 일배체형을 모두 표적화하는 프로브를 설계하면 하나의 특정 일배체형에 대한 참조 편향을 피할 수 있다. 일부 실시형태에서, 오염 마커를 위해 설계된 프로브는 표 2에 나열된 다수의 SNP 부위에 대한 프로브와 표 4에 나열된 인델 부위에 대한 프로브의 임의의 조합을 포함한다. 오염 마커 선택 및 후속 프로브 설계는 아래의 도 2a 및 도 2b에서 논의된다. 시퀀싱 결과로서, 분석 시스템은 샘플 내 cfDNA 단편의 서열 판독을 갖는다.

[0158] 분석 시스템은 샘플이 동형접합성 일배체형을 갖는 복수의 것 중에서 하나 이상의 오염 마커를 식별한다(120). 각각의 오염 마커에서 샘플의 일배체형을 결정하기 위해, 분석 시스템은 해당 오염 마커에서 cfDNA 단편에 대한 모든 서열 판독의 일배체형을 평가한다. 서열 판독의 일배체형은 오염 마커 부위에 대해 설계된 모든 프로브에 대한 판독을 재정렬함으로써 더 정확하게 결정될 수 있으며, 대립유전자를 최상의 정렬을 가진 프로브에 대응하는 대립유전자로서 식별할 수 있으며. 여기서 다른 정렬은 다양한 서열 정렬 기준에 따라 순위가 매겨질 수 있다. 분석 시스템이 충분한 수, 예를 들어, 최소한 10, 20, 30, 40, 50의 판독, 그리고 매우 높은 백분율, 예를 들어, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 또는 99%의 하나의 일배체형을 갖는 서열 판독을 관측하면, 분석 시스템은 샘플이 해당 일배체형에 대해 동형접합성(즉, 샘플 내 오염 마커의 두 카피 모두가 동일한 일배체형임)이라고 결정한다. 높은 백분율을 초과하지 않는 오염 마커는 동형접합성이 아닌 것으로 결정되고, 오히려 이형접합성인 것(즉, 샘플 내 오염 마커의 두 카피 모두는 서로 다른 일배체형인 것)으로 결정될 수 있다.

[0159] 분석 시스템은 식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 임의의 cfDNA 단편을 오염된 단편으로 식별한다(130). 각각의 식별된 오염 마커에 대해, 분석 시스템은 cfDNA

단편이 식별된 오염 마커에서 샘플의 동형접합성 일배체형과 다른 일배체형을 갖는 경우 cfDNA 단편을 오염("오염된 단편(들)"이라고도 함)으로 표시하거나 식별한다. 활용된 복수의 오염 마커 중, 임의의 주어진 샘플은 초기 복수의 것의 서브세트에 대해 동형접합성 일배체형을 가질 가능성이 높다.

[0160] 분석 시스템은 임의의 식별된 오염 단편에 기초하여 오염 레벨을 추정한다(140). 예를 들어, 식별된 오염 단편이 없으면 오염 레벨은 0 또는 0%가 될 수 있다. 분석 시스템은 샘플의 시퀀싱 깊이, 샘플 내 cfDNA 단편의 총 수, 구현된 오염 마커의 수, 식별된 오염 단편의 총 수, 또는 이들의 일부 조합에 기초하여 오염 레벨을 추가로 추정할 수 있다. 일부 실시예에서, 분석 시스템은 특정 신뢰 구간 내에서 오염을 추정하기 위해 다른 일배체형을 갖는 cfDNA 단편을 계산한다.

[0161] 분석 시스템은 오염 레벨을 임계값과 비교함으로써 샘플이 오염되었는지 여부를 결정한다(150). 일부 실시예에서, 분석 시스템은 추정된 오염 레벨을 임계 오염 레벨, 한계 또는 간격과 비교한다. 임계 오염 레벨 또는 간격은 애플리케이션에 따라 조정되거나 달라질 수 있다. 예를 들어, 민감한 애플리케이션에서는 매우 낮은 오염 임계값이 필요할 수 있다. 단지 예로서, 임계 오염 레벨은 0.1 내지 1.0% 또는 0.01 내지 1.0% 사이의 값 또는 간격일 수 있다. 일부 실시예에서, 임계 오염 한계는 0.1%이다. 일부 실시예에서, 임계 오염 한계는 0.01%이다. 일부 경우, 샘플의 추정된 오염 레벨이 임계 오염 한계를 초과하는 경우, 분석 시스템은 암 분류 결과 생성을 거부하고(예를 들어, 샘플을 암 또는 비-암으로 분류하는 것을 거부하고), 분류기(예를 들어, 암/비-암 또는 암 기원의 다양한 조직을 호출하기 위한 이진법 또는 멀티클래스 분류기)를 훈련하기 위한 훈련 세트에서 샘플을 포함시키는 것을 거부하고, 그리고/또는 오염된 샘플에 기초한 질병 또는 질병 없음 분류 결과를 차단할 수 있다. 추가적으로 및/또는 대안적으로, 분석 시스템은 비교를 사용하여 샘플이 오염되었는지 여부를 결정한다. 예를 들어, 샘플이 임계값 미만인 경우, 분석 시스템은 샘플이 오염되지 않은 것으로 결정할 수 있다. 반대로, 샘플이 임계값 이상인 경우, 분석 시스템은 샘플이 오염된 것으로 결정할 수 있다.

[0162] 도 2a는 하나 이상의 실시형태에 따른, 오염 검출에서 오염 마커로서 사용하기 위한 다수의 SNP 부위를 식별하는 프로세스(200)를 설명하는 예시적인 흐름도이다. 프로세스(200)는 분석 시스템에 의해 수행되는 것으로 본원에 설명되어 있지만, 단계 중 일부 또는 전부는 비교 가능하게 설명된 다른 시퀀싱 장치 및/또는 컴퓨터 프로세서에 의해 수행될 수 있다.

[0163] 분석 시스템은 임계 거리 내에서 다수의 SNP 부위를 식별한다(205). 다수의 SNP 부위는 적어도 2개의 SNP 부위를 포함하는 유전자 서열이다. 하나 이상의 실시형태에서, 다수의 SNP 부위는 2개, 3개, 4개, 또는 5개의 SNP 부위를 포함한다. 분석 시스템은 임계 거리, 예를 들어, 5 염기쌍(bp), 10 bp, 15 bp, 20 bp 또는 25 bp를 설정한다. 서로 더 가까운 SNP 부위는 단일 단편 상에 존재할 가능성이 더 높지만, 임계 거리가 작을수록 생존 가능한 다수의 SNP 부위의 수가 제한된다. 분석 시스템은 위의 고려사항 및/또는 표적 분석 패널에 포함될 수 있는 오염 마커 프로브의 예산을 고려하여 임계 거리를 조정할 수 있다.

[0164] 분석 시스템은 임계값 범위 내에서 모집단 일배체형 빈도를 갖는 일배체형을 갖는 다수의 SNP 부위를 포함한다(210). 2-SNP 부위에는 각각 2개의 변이 대립유전자를 갖는 2개의 SNP가 있다. 따라서, 발생할 수 있는 4개의 별개의 가능한 일배체형: 두 SNP 부위 모두에 치환이 없는 [0, 0]의 제1 일배체형, 두 SNP 부위 모두에 치환이 있는 [1, 1]의 제2 일배체형, 제2 SNP 부위에만 치환이 있는 [0, 1]의 제3 일배체형, 및 제1 SNP에만 치환이 있는 [1, 0]의 제4 일배체형이 있다. 분석 시스템은 단계 210에 포함된 다수의 SNP 부위로부터, 모집단 일배체형 빈도가 약 50% 임계 범위 내에 있는 2개의 일배체형(2-SNP 부위의 4개의 잠재적인 일배체형 중)을 갖는 것들을 식별한다. 집단 일배체형 빈도는 게놈 데이터베이스에서 얻거나 모집단을 대표하는 샘플 세트를 사용하여 결정될 수 있다. 임계 범위는 50%의 ±1%, ±2%, ±3%, ±4%, ±5%, ±6%, ±7%, ±8%, ±9% 또는 ±10%일 수 있다. 예를 들어, 분석 시스템은, 일배체형 [0, 0] 및 [1, 1]은 임계 범위 내에서 상당한 모집단 일배체형 빈도를 갖고 있는 반면 일배체형 [1, 0] 및 [0, 1]은 작은 모집단 일배체형 빈도를 갖는 2-SNP 부위를 포함한다. 다른 예로, 분석 시스템은 일배체형 [1, 0] 및 [0, 1]이 임계 범위 내에서 상당한 모집단 일배체형 빈도를 갖는 반면 일배체형 [0, 0] 및 [1, 1]은 작은 모집단 일배체형 빈도를 갖는 2-SNP 부위를 포함한다.

[0165] 분석 시스템은 구아닌-아데닌 다형성 및 시토신-티민 다형성을 갖는 다수의 SNP 부위를 제외한다(215). 분석 시스템은 예를 들어 메틸화 시퀀싱에 대해 중아황산염 시퀀싱의 문제를 피하기 위해 이러한 다수의 SNP 부위를 제외한다. 다른 유형의 시퀀싱에 의존하는 실시형태에서, 분석 시스템은 단계 215를 건너뛸 수 있다.

[0166] 분석 시스템은 각각의 다수의 SNP 부위에서 일배체형이 하디-바인베르크 평형 상태에 있게 한다(220). 다수의 SNP 부위의 SNP 부위 각각에 대해, 분석 시스템은 SNP 부위의 각각의 대립유전자에 대한 대립유전자 빈도를 계산한다. 대립유전자 빈도는 유전자 데이터베이스에서 얻은 데이터를 사용하거나 모집단을 대표하는 샘플 세트를

사용하여 계산할 수 있다. 그런 다음 분석 시스템은 각각의 SNP 부위의 대립유전자 빈도가 하디-바인베르크 평형 상태에 있는지를 확인한다.

[0167] $$p^2 + 2pq + q^2 = 1$$

[0168] 여기서 p는 SNP 부위의 제1 대립유전자에 대한 대립유전자 빈도이고 q는 SNP 부위의 제2 대립유전자에 대한 대립유전자 빈도이다. 다수의 SNP 부위의 각각의 SNP 부위가 하디-바인베르크 평형 상태에 있는지 확인하면, SNP 부위에서 진화 또는 돌연변이하는, 즉 평형 상태가 아닌 아티팩트를 방지할 수 있다. 분석 시스템은 하디-바인베르크 평형 계산에 일부 허용 오차를 포함할 수 있다.

[0169] 분석 시스템은 단계 205, 단계 210, 단계 215 및 단계 220 중 하나 이상을 생략할 수 있다. 앞서 설명한 바와 같이, 중아황산염 시퀀싱이 없는 실시형태에서는 단계 215가 생략될 수 있다. 다른 실시형태에서, 단계 210 및/또는 단계 220은 생략될 수 있다.

[0170] 이 시점에서, 분석 시스템은 단계 205, 단계 210, 단계 215 및 단계 220 중 하나, 일부 또는 전부 이후에 다수의 SNP 부위를 오염 마커로 사용할 수 있는 것으로 식별했다. 분석 시스템은 시퀀싱 패널에서 구현될 수 있는 오염 마커의 예산에 기초하여 생존 가능한 다수의 SNP 부위의 수를 추가로 줄일 수 있다. 분석 시스템은 게놈 전반에 걸쳐 다수의 SNP 부위 오염 마커의 분포를 최적화할 수 있다. 분석 시스템은 또한 단계 205, 단계 210, 단계 215 및 단계 220에서 다양한 파라미터를 조정하여 얼마나 많은 다수의 SNP 부위가 오염 마커로서 선택되는지 최적화할 수 있다. 예를 들어, 분석 시스템은 단계 210, 단계 215 및 단계 220에서 고려될 수 있는 다수의 SNP 부위의 수를 증가시키기 위해 단계 205에서 임계 거리를 증가시킬 수 있다. 다른 예로서, 분석 시스템은 단계 215 및 단계 220에서 고려될 수 있는 다수의 SNP 부위의 수를 줄이기 위해 단계 210에서 임계 범위를 감소시킬 수 있다. 표 1은 예시적인 구현예에 따른, 오염 마커로서 사용하기 위해 선택된 다수의 SNP 부위의 리스트를 포함한다. 하나 이상의 실시형태에서, 다수의 SNP 부위는 기준 리스트에 따라 순위가 매겨질 수 있다. 기준은 (1) SNP 위치 주변 서열의 복잡성(k-mer 엔트로피), (2) 게놈의 다른 영역에 대한 설계된 프로브의 유사성, (3) 모집단 일배체형 빈도의 이상적인 값인 0.5와의 편차, (4) 실제 시퀀싱 샘플에서 관찰된 부위에서의 판독 복제율 등을 포함할 수 있다.

[0171] 분석 시스템은 다수의 SNP 부위 오염 마커의 각각의 일배체형을 표적화하는 오염 마커 프로브를 설계한다(225). 각각의 다수의 SNP 부위 오염 마커에 대해 단계 210에서 어떤 2개의 일배체형이 고려되는지에 따라, 분석 시스템은 2개의 일배체형 각각을 표적화하는 프로브를 설계한다. 분석 시스템은 각각의 일배체형의 두 DNA 가닥 모두를 표적화하는 프로브를 설계할 수도 있다. 오염 마커의 각각의 일배체형을 표적화하는 프로브를 설계하면 시퀀싱 시에 참조 또는 대체 편향이 방지된다. 다른 실시형태에서, 분석 시스템은 각각의 다수의 SNP 부위 오염 마커의 참조 서열을 표적화하는 단일 프로브를 설계한다. 표 2는 예시적인 구현예에 따른, 표 1의 다수의 SNP 부위 오염 마커에 대해 설계된 프로브 리스트를 포함한다.

[0172] 도 2b는 하나 이상의 실시형태에 따른, 오염 검출에서 오염 마커로서 사용하기 위한 인델 부위를 식별하는 프로세스(230)를 설명하는 예시적인 흐름도이다. 프로세스(230)는 분석 시스템에 의해 수행되는 것으로 본원에 설명되어 있지만, 단계 중 일부 또는 전부는 비교 가능하게 설명된 다른 시퀀싱 장치 및/또는 컴퓨터 프로세서에 의해 수행될 수 있다.

[0173] 분석 시스템은 다양한 길이 내에서 인델 부위를 식별한다(235). 인델 부위는 개인의 게놈에 삽입되거나 결실되는 유전자 서열이다. 길이의 범위는 예를 들어 5 bp 내지 10 bp, 5 bp 내지 15 bp, 5 bp 내지 20 bp, 5 bp 내지 25 bp, 5 bp 내지 50 bp, 5 bp 내지 100 bp, 10 bp 내지 15 bp, 10 bp 내지 20 bp, 10 bp 내지 25 bp, 10 bp 내지 50 bp, 10 bp 내지 100 bp, 15 bp 내지 20 bp, 15 bp 내지 25 bp, 15 bp 내지 50 bp 또는 15 bp 내지 100 bp일 수 있다.

[0174] 분석 시스템은 복잡성이 높은 인델 부위를 포함한다(240). 복잡성이 낮은 인델 부위는 동종 중합체와 단순 탠덤 반복을 포함한다. 동종 중합체는 하나의 반복된 뉴클레오티드의 문자열이며. 예를 들어 ACGTTTTTTTTTTTTTTACG는 15개의 티민으로 구성된 동종 중합체를 포함한다. 동종 중합체의 경우, 낮은 복잡성으로 간주되는 임계 반복 횟수가 있을 수 있으며. 예를 들어 5회 이상의 반복은 낮은 복잡성으로 간주될 수 있다. 단순 탠덤 반복은 반복된 뉴클레오티드 탠덤의 문자열이며. 예를 들어 ACGTCATCATCATCATCATCATCATACGT는 뉴클레오티드 탠덤 CAT의 7개 반복 인스턴스를 포함한다. 단순 탠덤 반복의 경우, 낮은 복잡성으로 간주되는 임계 횟수의 반복, 예를 들어 낮은 복잡성으로 간주되는 3회 이상의 반복이 있을 수 있다. 복잡도가 높은 서열은 동종 중합체나 단순 탠덤 반복이 없는 더 높은 길이의 서열을 포함할 수 있다. 예를 들어, 복잡도가 높은 서열 컨텍스트는 특히 긴 인델 또는

특히 특정된 긴 삽입, 예를 들어, "ACCGGGTTTT"가 삽입된 서열인 ACGT**ACCGGGTTTT**CA를 포함할 수 있다. 복잡도가 높은 인델 서열은 중합효소 연쇄 반응(PCR: polymerase chain reaction) 또는 시퀀싱과 같은 샘플 처리를 통해 발생하는 오류와는 반대로 오염된 단편에 대한 스크리닝을 가능하게 한다.

[0175] 분석 시스템은 임계 범위 내의 모집단 대립유전자 빈도를 갖는 인델 부위를 포함한다(245). 모집단 대립유전자 빈도는 게놈 데이터베이스에서 얻거나 모집단을 대표하는 샘플 세트를 사용하여 결정될 수 있다. 임계 범위는 50%의 ±1%, ±2%, ±3%, ±4%, ±5%, ±6%, ±7%, ±8%, ±9% 또는 ±10%일 수 있다. 삽입 서열의 경우, 제1 대립유전자는 삽입된 서열이 없지만 제2 대립유전자는 삽입된 서열을 포함한다. 결실의 경우, 제1 대립유전자는 결실된 서열을 포함하지만 제2 대립유전자는 결실된 서열이 없다.

[0176] 분석 시스템은 각각의 인델 부위의 대립유전자가 하디-바인베르크 평형에 있게 한다 (250). 각각의 인델 부위에 대해, 분석 시스템은 인델 부위의 각각의 대립유전자에 대한 대립유전자 빈도를 계산한다. 대립유전자 빈도는 유전자 데이터베이스에서 얻은 데이터를 사용하거나 모집단을 대표하는 샘플 세트를 사용하여 계산할 수 있다. 그런 다음 분석 시스템은 각각의 인델 부위의 대립유전자 빈도가 하디-바인베르크 평형 상태에 있는지를 확인한다:

[0177] $$p^2 + 2pq + q^2 = 1$$

[0178] 여기서 p는 인델 부위의 제1 대립유전자에 대한 대립유전자 빈도이고, q는 인델 부위의 제2 대립유전자에 대한 대립유전자 빈도이다. 각각의 인델 부위가 하디-바인베르크 평형 상태에 있는지 확인하면, 인델 부위에서 진화 또는 돌연변이하는, 즉 평형 상태가 아닌 아티팩트를 방지할 수 있다. 분석 시스템은 하디-바인베르크 평형 계산에 일부 허용 오차를 포함할 수 있다.

[0179] 분석 시스템은 단계 235, 단계 240, 단계 245 및 단계 250 중 하나 이상을 생략할 수 있다.

[0180] 이 시점에서, 분석 시스템은 단계 235, 단계 240, 단계 245 및 단계 250 중 하나, 일부 또는 전부 이후에 인델 부위를 오염 마커로 사용할 수 있는 것으로 식별했다. 분석 시스템은 시퀀싱 패널에서 구현될 수 있는 오염 마커의 예산에 기초하여 생존 가능한 인델 부위의 수를 추가로 줄일 수 있다. 분석 시스템은 게놈 전반에 걸쳐 인델 부위 오염 마커의 분포를 최적화할 수 있다. 분석 시스템은 또한 단계 235, 단계 240, 단계 245 및 단계 250에서 다양한 파라미터를 조정하여 얼마나 많은 인델 부위가 오염 마커로서 선택되는지 최적화할 수 있다. 예를 들어, 분석 시스템은 단계 235에서 길이 범위를 넓혀서 단계 240, 단계 245 및 단계 250에서 고려될 수 있는 인델 부위의 수를 증가시킬 수 있다. 표 3은 예시적인 구현예에 따른, 오염 마커로서 사용하기 위해 선택된 인델 부위의 리스트를 포함한다. 하나 이상의 실시형태에서, 인델 부위는 하나 이상의 기준에 따라 순위가 매겨질 수 있다. 기준은 (1) 게놈의 다른 영역에 대한 설계된 프로브의 유사성, (2) 모집단 일배체형 빈도의 이상적인 값인 0.5와의 편차, (3) 실제 시퀀싱된 샘플에서 관찰된 부위에서의 판독 복제율, 기타 기준 또는 이들의 조합을 포함할 수 있다. 인델 부위는 순위와 인델 부위에 대한 일부 예산에 따라 선택될 수 있다.

[0181] 분석 시스템은 인델 부위 오염 마커의 각각의 대립유전자를 표적화하는 오염 마커 프로브를 설계한다(255). 분석 시스템은 2개의 대립유전자 각각을 표적화하는 프로브를 설계한다. 분석 시스템은 각각의 대립유전자의 두 DNA 가닥 모두를 표적화하는 프로브를 설계할 수도 있다. 오염 마커의 각각의 대립유전자를 표적화하는 프로브를 설계하면 시퀀싱 시에 참조 또는 대체 편향이 방지된다. 다른 실시형태에서, 분석 시스템은 각각의 인델 부위 오염 마커의 참조 서열을 표적화하는 단일 프로브를 설계한다. 표 4는 예시적인 구현예에 따른, 표 3의 인델 부위 오염 마커에 대해 설계된 프로브 리스트를 포함한다.

[0182] II.B. DNA 단편에 대한 메틸화 상태 벡터 생성

[0183] 도 3a는 하나 이상의 실시형태에 따른, cfDNA의 단편을 시퀀싱하여 메틸화 상태 벡터를 얻는 프로세스(300)를 설명하는 예시적인 흐름도이다. DNA 메틸화를 분석하기 위해, 분석 시스템은 복수의 cfDNA 분자를 포함하는 개인으로부터 샘플을 먼저 획득한다(310). 추가적인 실시형태에서, 프로세스(300)는 다른 유형의 DNA 분자를 시퀀싱하는 데 적용될 수 있다.

[0184] 분석 시스템은 샘플로부터 각각의 cfDNA 분자를 분리할 수 있다. cfDNA 분자는 메틸화되지 않은 시토신을 우라실로 전환하도록 처리될 수 있다. 일 실시형태에서, 방법은 메틸화된 시토신을 전환시키지 않고 메틸화되지 않은 시토신을 우라실로 전환시키는 DNA의 중아황산염 처리를 사용한다. 예를 들어, EZ DNA Methylation™ - Gold, EZ DNA Methylation™ - Direct 또는 EZ DNA Methylation™ - Lightning kit(Zymo Research Corp(미국 캘

리포니아주 어바인 소재)에서 구입 가능)와 같은 상용 키트가 중아황산염 전환에 사용된다. 다른 실시형태에서, 메틸화되지 않은 시토신의 우라실로의 전환은 효소 반응을 사용하여 달성된다. 예를 들어, 전환은 APOBEC-Seq(NEBiolabs, 매사추세츠주 입스위치 소재)와 같은, 비메틸화 시토신을 우라실로 전환하기 위해 시판되는 키트를 사용할 수 있다.

[0185] 변환된 cfDNA 분자로부터 시퀀싱 라이브러리가 준비될 수 있다(330). 라이브러리 준비 중에, 어댑터 결찰을 통해 고유 분자 식별자(UMI)를 핵산 분자(예를 들어, DNA 분자)에 추가할 수 있다. UMI는 어댑터 결찰 동안 DNA 단편(예를 들어, 물리적 전단, 효소 소화 및/또는 화학적 단편화에 의해 단편화된 DNA 분자)의 말단에 추가되는 짧은 핵산 서열(예를 들어, 4 내지 10 염기쌍)일 수 있다. UMI는 특정 DNA 단편에서 유래한 서열 판독을 식별하는 데 사용될 수 있는 고유한 태그 역할을 하는 퇴화 염기쌍일 수 있다. 어댑터 결찰 후 PCR 증폭 중에, UMI는 부착된 DNA 단편과 함께 복제될 수 있다. 이는 다운스트림 분석에서 동일한 오리지널 단편에서 나온 서열 판독을 식별하는 방법을 제공할 수 있다.

[0186] 선택적으로, 시퀀싱 라이브러리는 복수의 혼성화 프로브를 사용하여, 암 상태에 대한 정보를 제공하는 cfDNA 분자 또는 게놈 영역에 대해 농축될 수 있다(135). 혼성화 프로브는 특히 특정된 cfDNA 분자 또는 표적 영역에 혼성화하거나, 후속 시퀀싱 및 분석 연구를 위해 해당 단편 또는 영역에 대해 농축될 수 있는 짧은 올리고뉴클레오티드이다. 혼성화 프로브는 연구자가 관심을 갖고 있는 특정 CpG 부위 세트에 대한 표적화된 심층 분석을 수행하는 데 사용될 수 있다. 혼성화 프로브는 1X, 2X, 3X, 4X, 5X, 6X, 7X, 8X, 9X, 10X 또는 10X 이상의 커버리지 범위에서 하나 이상의 표적 서열에 걸쳐 타일링될 수 있다. 예를 들어, 2X의 커버리지 범위로 타일링된 혼성화 프로브는 표적 서열의 각각의 부분이 2개의 독립적인 프로브에 혼성화되도록 중첩 프로브를 포함한다. 혼성화 프로브는 1X 미만의 커버리지 범위에서 하나 이상의 표적 서열에 걸쳐 타일링될 수 있다.

[0187] 일 실시형태에서, 혼성화 프로브는 메틸화되지 않은 시토신을 우라실로 전환시키기 위해 처리된(예를 들어, 중아황산염을 사용하여) DNA 분자를 농축하게 하도록 설계된다. 농축하는 동안, 혼성화 프로브(본원에서는 "프로브"라고도 함)를 사용하여 암(또는 질병)의 존재 또는 부재, 암 상태 또는 암 분류(예를 들어, 암 종류 또는 기원 조직)에 대한 정보를 제공하는 핵산 단편을 표적화하고 풀다운할 수 있다. 프로브는 DNA의 표적(상보적) 가닥에 어닐링(또는 혼성화)하도록 설계될 수 있다. 표적 가닥은 "양성" 가닥(예를 들어, mRNA로 전사되고 이어서 단백질로 번역되는 가닥) 또는 상보적인 "음성" 가닥일 수 있다. 프로브의 길이는 10s, 100s 또는 1000s의 염기쌍일 수 있다. 프로브는 메틸화 부위 패널에 기초하여 설계될 수 있다. 프로브는 특정 암 또는 기타 유형의 질병에 해당하는 것으로 의심되는 게놈(예를 들어, 인간 또는 다른 유기체)의 특정 돌연변이 또는 표적 영역을 분석하기 위해 표적 유전자 패널에 기초하여 설계될 수 있다. 또한, 프로브는 표적 영역의 중첩 부분을 커버할 수 있다.

[0188] 일단 준비되면, 시퀀싱 라이브러리 또는 이의 일부를 시퀀싱하여 다수의 서열 판독을 얻을 수 있다. 서열 판독은 컴퓨터 소프트웨어에 의한 처리 및 해석을 위해 컴퓨터 판독 가능한 디지털 형식일 수 있다. 서열 판독은 참조 게놈에 정렬되어 정렬 위치 정보를 결정할 수 있다. 정렬 위치 정보는 주어진 서열 판독의 시작 뉴클레오티드 염기 및 종료 뉴클레오티드 염기에 해당하는 참조 게놈 내 영역의 시작 위치 및 종료 위치를 나타낼 수 있다. 정렬 위치 정보는 시작 위치와 종료 위치에서 결정될 수 있는 서열 판독 길이도 포함할 수 있다. 참조 게놈의 영역은 유전자 또는 유전자의 세그먼트와 연관될 수 있다. 서열 판독은 R_1 및 R_2로서 표시된 판독 쌍으로 구성될 수 있다. 예를 들어, 제1 판독 R_1는 핵산 단편의 제1 말단에서 시퀀싱될 수 있는 반면, 제2 판독 R_2는 핵산 단편의 제2 말단에서 시퀀싱될 수 있다. 따라서, 제1 판독 R_1와 제2 판독 R_2의 뉴클레오티드 염기쌍은 참조 게놈의 뉴클레오티드 염기와 일관되게(예를 들어, 반대 방향으로) 정렬될 수 있다. 판독 쌍 R_1 및 R_2으로부터 도출된 정렬 위치 정보는 제1 판독(예를 들어, R_1)의 말단에 대응하는 참조 게놈의 시작 위치와 제2 판독(예를 들어, R_2)의 말단에 대응하는 참조 게놈의 종료 위치를 포함할 수 있다. 즉, 참조 게놈의 시작 위치와 종료 위치는 핵산 단편이 해당하는 참조 게놈 내의 가능한 위치를 나타낼 수 있다. SAM(서열 정렬 맵) 형식 또는 BAM(이진법) 형식을 갖는 출력 파일이 생성되어 메틸화 상태 결정과 같은 추가 분석을 위해 출력될 수 있다.

[0189] 서열 판독으로부터, 분석 시스템은 참조 게놈에 대한 정렬에 기초하여 각각의 CpG 부위에 대한 위치 및 메틸화 상태를 결정한다(350). 분석 시스템은 참조 게놈 내 단편의 위치(예를 들어, 각각의 단편 내 제1 CpG 부위의 위치 또는 다른 유사한 측정 항목에 의해 지정된 대로), 단편 내 CpG 부위의 수, 메틸화되었는지(예를 들어, M으로 표시됨), 메틸화되지 않았는지(예를 들어, U로 표시됨) 또는 불확정(예를 들어, I로 표시됨)인지에 따라 단편 내 각각의 CpG 부위의 메틸화 상태를 지정하는 각각의 단편에 대한 메틸화 상태 벡터를 생성한다(360). 관찰

된 상태는 메틸화된 상태와 메틸화되지 않은 상태일 수 있는 반면, 관찰되지 않은 상태는 불확정이다. 불확정 메틸화 상태는 시퀀싱 오류 및/또는 DNA 단편의 상보 가닥의 메틸화 상태 간의 불일치로 인해 발생할 수 있다. 메틸화 상태 벡터는 나중에 사용하고 처리하기 위해 임시 또는 영구 컴퓨터 메모리에 저장될 수 있다. 또한, 분석 시스템은 단일 샘플에서 중복 판독 또는 중복 메틸화 상태 벡터를 제거할 수 있다. 분석 시스템은 하나 이상의 CpG 부위가 있는 특정 단편이 임계 수 또는 백분율을 초과하는 불확정 메틸화 상태를 가지고 있음을 결정할 수 있으며, 그러한 단편을 제외하거나 그러한 단편을 선택적으로 포함할 수 있지만 그러한 불확정 메틸화 상태를 설명하는 모델을 구축할 수 있으며, 그러한 모델 중 하나가 도 4와 관련하여 아래에서 설명될 것이다.

[0190] 도 3b는 하나 이상의 실시형태에 따른, 메틸화 상태 벡터를 얻기 위해 cfDNA 분자를 시퀀싱하는 도 3a의 프로세스(300)의 예시적인 예시이다. 일 예로, 분석 시스템은 이 예에서 3개의 CpG 부위를 포함하는 cfDNA 분자(312)를 수신한다. 도시된 바와 같이, cfDNA 분자(312)의 제1 CpG 부위와 제3 CpG 부위는 메틸화되어 있다(314). 처리 단계 320 동안, cfDNA 분자(312)는 변환되어 변환된 cfDNA 분자(322)를 생성한다. 처리 320 동안, 메틸화되지 않은 제2 CpG 부위는 우라실로 전환된 시토신을 갖고 있다. 그러나, 제1 CpG 부위와 제3 CpG 부위는 전환되지 않았다.

[0191] 전환 후, 시퀀싱 라이브러리(330)가 준비되고 시퀀싱(340)되어 서열 판독(342)을 생성한다. 분석 시스템은 서열 판독(342)을 참조 게놈(344)에 정렬한다(350). 참조 게놈(344)은 단편 cfDNA가 인간 게놈 내 어떤 위치에서 유래하는지에 대한 맥락을 제공한다. 이러한 단순화된 예에서, 분석 시스템은 3개의 CpG 부위가 CpG 부위(23, 24 및 25)(설명의 편의를 위해 사용된 임의의 참조 식별자)와 상관되도록 서열 판독(342)을 정렬한다(350). 따라서 분석 시스템은 cfDNA 분자(312) 상의 모든 CpG 부위의 메틸화 상태와 CpG 부위가 매핑되는 인간 게놈에서의 위치 모두에 대한 정보를 생성할 수 있다. 도시된 바와 같이, 메틸화되어 있는 서열 판독(342) 상의 CpG 부위는 시토신으로서 판독된다. 이 예에서, 시토신은 오리지널 cfDNA 분자의 제1 CpG 부위와 제3 CpG 부위가 메틸화되었음을 추론할 수 있게 하는, 제1 CpG 부위와 제3 CpG 부위 내 서열 판독(342)에만 나타난다. 반면, 제2 CpG 부위는 티민으로 판독될 수 있으며(U는 시퀀싱 프로세스에서 T로 변환됨), 따라서 제2 CpG 부위가 오리지널 cfDNA 분자에서 메틸화되지 않은 것으로 추론할 수 있다. 메틸화 상태와 위치라는 두 가지 정보를 사용하여, 분석 시스템은 단편 cfDNA(312)에 대한 메틸화 상태 벡터(352)를 생성한다(360). 이 예에서, 생성된 메틸화 상태 벡터(352)는 $<M_{23}, U_{24}, M_{25}>$이며, 여기서 M은 메틸화된 CpG 부위에 해당하고, U는 비메틸화된 CpG 부위에 해당하며, 아래 첨자 숫자는 참조 게놈 내에서의 각각의 CpG 부위의 위치에 해당한다.

[0192] 생물학적 샘플 내 핵산으로부터 서열 판독을 얻기 위해 하나 이상의 대체 시퀀싱 방법이 사용될 수 있다. 하나 이상의 시퀀싱 방법은 핵산(예를 들어, 무세포 핵산)으로부터 측정된 다수의 서열 판독을 얻기 위해 사용할 수 있는 임의 형태의 시퀀싱을 포함할 수 있으며, Roche 454 플랫폼, Applied Biosystems SOLID 플랫폼, Helicos True Single Molecule DNA 시퀀싱 기술, Affymetrix Inc.의 하이브리드화에 의한 시퀀싱 플랫폼, Pacific Biosciences의 단일 분자 실시간(SMRT) 기술, 454 Life Sciences, Illumina/Solexa 및 Helicos Biosciences의 합성에 의한 시퀀싱 플랫폼, Applied Biosystems의 결찰에 의한 시퀀 플랫폼과 같은 고처리량 시퀀싱 시스템을 포함하지만 이들에 제한되지 않다. Nanopore sequencing 및 Life Technologies의 ION TORRENT 기술을 사용하여 생물학적 샘플의 핵산(예를 들어, 무세포 핵산)에서 서열 판독을 얻을 수도 있다. 유전형 데이터 세트를 형성하기 위해, 합성에 의한 시퀀싱 및 가역적 터미네이터 기반 시퀀싱(예를 들어, Illumina의 Genome analyzer; Genome analyzer II; HISEQ 2000; HISEQ 4500(Illumina, 캘리포니아주 샌디에이고 소재))을 사용하여 훈련 피험자의 생물학적 샘플에서 획득한 무세포 핵산에서 서열 판독을 얻을 수 있다. 수백만 개의 무세포 핵산(예를 들어, DNA) 단편이 병렬로 시퀀싱될 수 있다. 이러한 유형의 시퀀싱 기술의 일 예에서, 표면에 올리고뉴클레오티드 앵커(예를 들어, 어댑터 프라이머)가 결합된 8개의 개별 레인이 있는 광학적으로 투명한 슬라이드를 포함하는 플로우 셀이 사용된다. 무세포 핵산 샘플은 검출을 용이하게 하는 신호 또는 태그를 포함할 수 있다. 생물학적 샘플로부터 획득한 무세포 핵산으로부터의 서열 판독의 획득은 예를 들어 유세포 분석, 정량적 중합효소 연쇄 반응(qPCR), 겔 전기영동, 유전자 칩 분석, 마이크로어레이, 질량 분석법, 세포 형광 측정 분석, 형광 현미경 검사, 공초점 레이저 스캐닝 현미경, 레이저 스캐닝 세포 계산법, 친화성 크로마토그래피, 수동 배치 모드 분리, 전기장 현탁, 시퀀싱 및 이들의 조합과 같은 다양한 기술을 통해 신호 또는 태그의 정량화 정보를 획득하는 것을 포함할 수 있다.

[0193] 하나 이상의 시퀀싱 방법은 전체 게놈 시퀀싱 검정을 포함할 수 있다. 전체 게놈 시퀀싱 검정은 카피 수 변이 또는 카피 수 비정상과 같은 큰 변이를 결정하는 데 사용할 수 있는 전체 게놈 또는 전체 게놈의 상당 부분에 대한 서열 판독을 생성하는 물리적 검정을 포함할 수 있다. 이러한 물리적 검정은 전체 게놈 시퀀싱 기술 또는 전체 엑솜 시퀀싱 기술을 사용할 수 있다. 전체 게놈 시퀀싱 검정은 테스트 피험자의 게놈 전체에 걸쳐 적어도

1x, 2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x, 적어도 20x, 적어도 30x 또는 적어도 40x의 평균 시퀀싱 깊이를 가질 수 있다. 일부 실시형태에서, 시퀀싱 깊이는 약 30,000x이다. 하나 이상의 시퀀싱 방법은 표적화된 패널 시퀀싱 검정을 포함할 수 있다. 표적화된 패널 시퀀싱 분석은 표적화된 유전자 패널에 대해 적어도 50,000x, 적어도 55,000x, 적어도 60,000x 또는 적어도 70,000x의 평균 시퀀싱 깊이를 가질 수 있다. 표적화된 유전자 패널은 450개 내지 500개의 유전자로 구성될 수 있다. 표적화된 유전자 패널은 500±5 범위의 유전자, 500±10 범위의 유전자, 또는 500±25 범위의 유전자를 포함할 수 있다.

[0194] 하나 이상의 시퀀싱 방법은 페어드 엔드 시퀀싱을 포함할 수 있다. 하나 이상의 시퀀싱 방법은 복수의 서열 판독을 생성할 수 있다. 복수의 서열 판독은 10 내지 700, 50 내지 400, 또는 100 내지 300 범위의 평균 길이를 가질 수 있다. 하나 이상의 시퀀싱 방법은 메틸화 시퀀싱 검정을 포함할 수 있다. 메틸화 시퀀싱은 i) 전체 게놈 메틸화 시퀀싱 또는 ii) 복수의 핵산 프로브를 사용한 표적화된 DNA 메틸화 시퀀싱일 수 있다. 예를 들어, 메틸화 시퀀싱은 전체 게놈 중아황산염 시퀀싱(예를 들어, WGBS)이다. 메틸화 시퀀싱은 메틸롬의 가장 많은 정보 영역을 표적화하는 복수의 핵산 프로브, 고유의 메틸화 데이터베이스 및 이전의 프로토타입 전체 게놈 및 표적화된 시퀀싱 검정을 사용하는 표적화된 DNA 메틸화 시퀀싱일 수 있다.

[0195] 메틸화 시퀀싱은 각각의 핵산 메틸화 단편에서 하나 이상의 5-메틸시토신(5mC) 및/또는 5-히드록시메틸시토신(5hmC)을 검출할 수 있다. 메틸화 시퀀싱은 각각의 핵산 메틸화 단편 내 하나 이상의 메틸화되지 않은 시토신 또는 하나 이상의 메틸화된 시토신을 대응하는 하나 이상의 우라실로 전환시키는 것을 포함할 수 있다. 하나 이상의 우라실은 메틸화 시퀀싱 동안 하나 이상의 대응하는 티민으로서 검출될 수 있다. 하나 이상의 메틸화되지 않은 시토신 또는 하나 이상의 메틸화된 시토신의 전환은 화학적 전환, 효소적 전환, 또는 이들의 조합을 포함할 수 있다.

[0196] 예를 들어, 중아황산염 전환은 메틸화된 시토신(예를 들어, 5-메틸시토신 또는 5-mC)은 그대로 유지하면서 시토신을 우라실로 전환하는 것을 포함한다. 일부 DNA에서, 시토신의 약 95%는 DNA에서 메틸화되지 않을 수 있으며, 생성된 DNA 단편은 티민으로 대표되는 많은 우라실을 포함할 수 있다. 효소 전환 프로세스는 시퀀싱 전에 핵산을 처리하는 데 사용될 수 있으며, 이는 다양한 방식으로 수행될 수 있다. 중아황산염이 없는 전환의 일 예는 변형되지 않은 시토신에 영향을 주지 않고 5-메틸시토신과 5-히드록시메틸시토신을 비-파괴적으로 직접 검출하기 위한 중아황산염이 없는 염기 분해 시퀀싱 방법인 TET 보조 피리딘 보란 시퀀싱(TAPS)을 포함한다. 각각의 핵산 메틸화 단편 내 대응하는 복수의 CpG 부위에 있는 CpG 부위의 메틸화 상태는 CpG 부위가 메틸화 시퀀싱에 의해 메틸화될 것으로 결정되는 경우 메틸화될 수 있고, CpG 부위가 메틸화 시퀀싱에 의해 메틸화되지 않을 것으로 결정되는 경우 메틸화되지 않을 수 있다.

[0197] 메틸화 시퀀싱 분석(예를 들어, WGBS 및/또는 표적화된 메틸화 시퀀싱)은 최대 약 1,000x, 2,000x, 3,000x, 5,000x, 10,000x, 15,000x, 20,000x, 또는 30,000x를 포함하지만 이들에 제한되지 않는 평균 시퀀싱 깊이를 가질 수 있다. 메틸화 시퀀싱은 30,000x 초과, 예를 들어 적어도 40,000x 또는 50,000x의 시퀀싱 깊이를 가질 수 있다. 전체 게놈 중아황산염 시퀀싱 방법은 20x 내지 50x 사이의 평균 시퀀싱 깊이를 가질 수 있고, 표적화된 메틸화 시퀀싱 방법은 100x 내지 1000x 사이의 평균 유효 깊이를 가질 수 있으며, 여기서 유효 깊이는 표적화된 메틸화 시퀀싱에 의해 얻은 동일한 수의 서열 판독을 얻기 위한 등가의 전체 게놈 중아황산염 시퀀싱 커버리지일 수 있다.

[0198] 메틸화 시퀀싱(예를 들어, WGBS 및/또는 표적화된 메틸화 시퀀싱)에 관한 추가 세부 사항에 대해서는, 예를 들어 2018년 3월 13일에 출원된 "메틸화 단편 변칙적 검출(Methylation Fragment Anomaly Protection)"이라는 명칭의 미국 특허 출원 제62/642,480호 및 2019년 12월 18일에 출원된 "메틸화 정보를 사용한 세포 소스 분율을 추정하기 위한 시스템 및 방법(Systems and Methods for Estimating Cell Source Fractions Using Methylation Information)"이라는 명칭의 미국 특허 출원 제16/719,902호를 참조하며, 이들 각각은 본원에 인용되어 포함된다. 본원에 개시된 방법 및/또는 이들의 임의의 변형, 치환 또는 조합을 포함하는 메틸화 시퀀싱을 위한 다른 방법이 단편 메틸화 패턴을 얻는 데 사용될 수 있다. 예를 들어, 2019년 3월 13일에 출원된 "변칙적 단편 검출 및 분류(Anomalous Fragment Detection and Classification)"이라는 명칭의 미국 특허 출원 제16/352,602호에 설명된 바와 같이, 2020년 5월 13일에 출원된 "모델 기반 특성화 및 분류(Model-Based Featurization and Classification)"이라는 명칭의 미국 특허 출원 제15/931,022호에 개시된 기술 중 하나에 따라, 메틸화 시퀀싱은 하나 이상의 메틸화 상태 벡터를 식별하는 데 사용될 수 있으며, 이들 각각은 본원에 인용되어 포함된다.

[0199] 핵산의 메틸화 시퀀싱 및 생성된 하나 이상의 메틸화 상태 벡터는 복수의 핵산 메틸화 단편을 얻는 데 사용될 수 있다. 각각의 대응하는 복수의 핵산 메틸화 단편(예를 들어, 각각의 개별 유전자형 데이터세트에 대해)은

100개 초과의 핵산 메틸화 단편을 포함할 수 있다. 각각의 대응하는 복수의 핵산 메틸화 단편에 걸친 핵산 메틸화 단편의 평균 수는 1000개 이상의 핵산 메틸화 단편, 5000개 이상의 핵산 메틸화 단편, 10,000개 이상의 핵산 메틸화 단편, 20,000개 이상의 핵산 메틸화 단편, 또는 30,000개 이상의 핵산 메틸화 단편을 포함할 수 있다. 각각의 대응하는 복수의 핵산 메틸화 단편에 걸친 핵산 메틸화 단편의 평균 수는 10,000개의 핵산 메틸화 단편 내지 50,000개의 핵산 메틸화 단편일 수 있다. 대응하는 복수의 핵산 메틸화 단편은 1,000개 이상, 1만개 이상, 10만개 이상, 100만개 이상, 1000만개 이상, 1억개 이상, 5억개 이상, 10억개 이상, 20억 이상, 30억 이상, 40억 이상, 50억 이상, 60억 이상, 70억 이상, 80억 이상, 90억 이상 또는 100억 이상의 핵산 메틸화 단편을 포함할 수 있다. 대응하는 복수의 핵산 메틸화 단편의 평균 길이는 140개 내지 480개 뉴클레오티드일 수 있다.

[0200] 핵산 시퀀싱 방법 및 메틸화 시퀀싱 데이터에 관한 추가 세부 사항은 2020년 3월 4일 출원된 "자동인코더를 사용한 암 상태 결정을 위한 시스템 및 방법(Systems and Methods for Cancer Condition Determination Using Autoencoders)"이라는 명칭의 미국 임시 출원 제62/985,258호에 개시되어 있으며, 이는 그 전체 내용이 본원에 인용되어 포함된다.

[0201] II.C. 변칙적 단편 식별

[0202] 분석 시스템은 샘플의 메틸화 상태 벡터를 사용하여 샘플의 변칙적 단편을 결정할 수 있다. 샘플의 각각의 단편에 대해, 분석 시스템은 단편에 대응하는 메틸화 상태 벡터를 사용하여 단편이 변칙적 단편인지 여부를 결정할 수 있다. 일부 실시형태에서, 분석 시스템은 건강한 대조군에서 훨씬 확률이 낮은 다른 메틸화 상태 벡터 또는 메틸화 상태 벡터를 관찰할 확률을 기술하는 각각의 메틸화 상태 벡터에 대한 p-값 점수를 계산한다. p-값 점수를 계산하는 프로세스는 아래 섹션 II.C.i *P-값 필터링*에서 자세히 설명된다. 분석 시스템은 임계 p-값 점수 미만을 갖는 메틸화 상태 벡터를 갖는 단편을 변칙적 단편으로 결정할 수 있다. 일부 실시형태에서, 분석 시스템은 일정 백분율을 넘는 메틸화 또는 비메틸화를 갖는 적어도 일부 수의 CpG 부위를 갖는 단편을 각각 과메틸화된 단편 및 저메틸화된 단편으로서 추가로 라벨링한다. 과메틸화된 단편 또는 저메틸화된 단편은 극한 메틸화가 있는 특이한 단편(UFXM)으로도 지칭될 수 있다. 다른 실시형태에서, 분석 시스템은 변칙적 단편을 결정하기 위한 다양한 다른 확률 모델을 구현할 수 있다. 다른 확률 모델의 예로는 혼합 모델, 심층 확률 모델 등이 있다. 일부 실시형태에서, 분석 시스템은 변칙적 단편을 식별하기 위해 아래에 설명된 프로세스의 임의 조합을 사용할 수 있다. 식별된 변칙적 단편을 사용하여, 분석 시스템은 다른 프로세스에서 사용하기 위해, 예를 들어 암 분류기 훈련 및 배포에 사용하기 위해 샘플에 대한 메틸화 상태 벡터 세트를 필터링할 수 있다.

[0203] II.C.i. P-값 필터링

[0204] 일부 실시형태에서, 분석 시스템은 건강한 대조군의 단편으로부터의 메틸화 상태 벡터와 비교하여 각각의 메틸화 상태 벡터에 대한 p-값 점수를 계산한다. p-값 점수는 건강한 대조군에서 훨씬 확률이 낮은 다른 메틸화 상태 벡터 또는 메틸화 상태 벡터 와 일치하는 메틸화 상태를 관찰할 확률을 설명할 수 있다. DNA 단편을 변칙적으로 메틸화되었다고 결정하기 위해, 분석 시스템은 정상적으로 메틸화된 단편의 대부분을 포함하는 건강한 대조군을 사용할 수 있다. 변칙적 단편을 결정하기 위해 이러한 확률론적 분석을 수행할 때, 그 결정은 건강한 대조군을 구성하는 대조군 피험자 그룹과 비교하여 가중치를 가질 수 있다. 건강한 대조군의 견고성을 보장하기 위해, 분석 시스템은 DNA 단편을 포함하는 소스 샘플에 대해 일부 임계 수의 건강한 개인을 선택할 수 있다. 아래의 도 4a는 분석 시스템이 p-값 점수를 계산할 수 있는 건강한 대조군에 대한 데이터 구조를 생성하는 방법을 설명한다. 도 4b는 생성된 데이터 구조를 이용하여 p-값 점수를 계산하는 방법을 설명한다.

[0205] 도 4a는 일 실시형태에 따른, 건강한 대조군에 대한 데이터 구조를 생성하는 프로세스(400)를 설명하는 흐름도이다. 건강한 대조군 데이터 구조를 생성하기 위해, 분석 시스템은 다수의 건강한 개인으로부터 다수의 DNA 단편(예를 들어, cfDNA)을 수신할 수 있다. 메틸화 상태 벡터는 예를 들어 프로세스(300)를 통해 각 단편에 대해 식별될 수 있다.

[0206] 각각의 단편의 메틸화 상태 벡터를 사용하여, 분석 시스템은 메틸화 상태 벡터를 CpG 부위의 문자열로 세분화할 수 있다(405). 일부 실시형태에서, 분석 시스템은 생성된 문자열이 모두 주어진 길이보다 작도록 메틸화 상태 벡터를 세분화한다(405). 예를 들어, 길이가 11인 메틸화 상태 벡터는 길이가 3 이하인 문자열로 세분되어, 결과적으로 길이가 3인 9개의 문자열, 길이가 2인 10개의 문자열 및 길이가 1인 11개의 문자열이 될 수 있다. 다른 예에서, 길이가 7인 메틸화 상태 벡터는 길이가 4 이하인 문자열로 세분되어, 결과적으로 길이가 4인 4개의 문자열, 길이가 3인 5개의 문자열, 길이가 2인 6개의 문자열, 및 길이가 1인 7개의 문자열이 될 수 있다. 메틸화 상태 벡터가 지정된 문자열 길이보다 짧거나 동일한 경우, 메틸화 상태 벡터는 벡터의 모든 CpG 부위를 포함하는 단일 문자열로 변환될 수 있다.

[0207] 분석 시스템은 가능한 각각의 CpG 부위 및 벡터의 메틸화 상태 가능성에 대해, 지정된 CpG 부위를 문자열 내 제1 CpG 부위로서 갖고 메틸화 상태 가능성을 갖는 대조군에 존재하는 문자열의 수를 계산하여 문자열을 집계한다(410). 예를 들어 임의의 주어진 CpG 부위에서 문자열 길이가 3이라고 가정하면, 2^3 또는 8개의 가능한 문자열 구성이 있다. 주어진 CpG 부위에서 8개의 가능한 문자열 구성 각각에 대해, 분석 시스템은 각각의 메틸화 상태 벡터 가능성의 발생 횟수가 대조군에 얼마나 많이 나타나는지 집계한다(410). 이 예를 계속하면, 참조 게놈 내 각각의 시작 CpG 부위에 대해 다음의 수량: $< M_x, M_{x+1}, M_{x+2} >$, $< M_x, M_{x+1}, U_{x+2} >$, . . ., $< U_x, U_{x+1}, U_{x+2} >$을 집계하는 것을 포함할 수 있다. 분석 시스템은 각각의 시작 CpG 부위에 대한 집계된 수와 문자열 가능성을 저장하는 데이터 구조를 생성한다(415).

[0208] 문자열 길이의 상한을 설정하면 여러 이점이 있다. 첫째, 문자열의 최대 길이에 따라, 분석 시스템에 의해 생성되는 데이터 구조의 크기가 급격하게 증가할 수 있다. 예를 들어, 최대 문자열 길이가 4라는 것은 모든 CpG 부위에서 길이가 4인 문자열을 집계할 수 있는 숫자가 최소한 2^4개 있다는 의미이다. 최대 문자열 길이를 5로 늘리는 것은 모든 CpG 부위가 집계할 숫자가 2^4개 또는 16개 추가되어 이전 문자열 길이에 비해 집계할 숫자(및 필요한 컴퓨터 메모리)가 2배가 된다는 것을 의미한다. 문자열 크기를 줄이면 계산 및 저장 측면에서 데이터 구조 생성 및 수행(예를 들어, 아래 설명된 대로 나중에 액세스하기 위한 사용)을 합리적으로 유지하는 데 도움이 될 수 있다. 둘째, 최대 문자열 길이를 제한하기 위한 통계적 고려 사항은 문자열 개수를 사용하는 다운스트림 모델의 과적합을 방지하는 것이다. CpG 부위의 긴 문자열이 생물학적으로 결과(예를 들어, 암의 존재를 예측하는 변칙적 예측)에 큰 영향을 미치지 않는 경우, CpG 부위의 큰 문자열에 기초하여 확률을 계산하는 것은 사용할 수 없는 데이터의 양이 많아 문제가 될 수 있고, 따라서 모델이 적절하게 수행하기에는 너무 희박할 수 있다. 예를 들어, 이전 100개의 CpG 부위를 조건으로 한 변칙/암의 확률을 계산하면 길이가 100인 데이터 구조의 문자열 개수를 사용할 수 있으며, 이상적으로 일부는 이전의 100개 메틸화 상태와 정확히 일치한다. 길이가 100인 문자열의 희박한 개수만 사용할 수 있는 경우, 테스트 샘플 내의 주어진 길이 100의 문자열이 변칙인지 여부를 결정하기에는 데이터가 부족할 수 있다.

[0209] 도 4b는 하나 이상의 실시형태에 따른, 샘플로부터 변칙적 메틸화 단편을 식별하기 위한 프로세스(420)를 설명하는 흐름도이다. 프로세스(420)에서, 분석 시스템은 피험자의 cfDNA 단편으로부터 메틸화 상태 벡터를 생성한다(300). 분석 시스템은 각각의 메틸화 상태 벡터를 다음과 같이 처리할 수 있다.

[0210] 주어진 메틸화 상태 벡터에 대해, 분석 시스템은 메틸화 상태 벡터에서 동일한 시작 CpG 부위 및 동일한 길이(즉, CpG 부위 세트)를 갖는 메틸화 상태 벡터의 모든 가능성을 열거한다(430). 각각의 메틸화 상태는 일반적으로 메틸화되거나 메틸화되지 않으므로 각각의 CpG 부위에는 효과적으로 2개의 가능한 상태가 있을 수 있으며, 따라서 메틸화 상태 벡터의 고유한 가능성 개수는 길이 n의 메틸화 상태 벡터가 메틸화 상태 벡터의 2^n개 가능성과 연관되도록 2의 거듭제곱에 따라 달라질 수 있다. 하나 이상의 CpG 부위에 대한 불확정 상태를 포함하는 메틸화 상태 벡터를 사용하여, 분석 시스템은 상태를 관찰한 CpG 부위만을 고려하여 메틸화 상태 벡터의 가능성을 열거할 수 있다(430).

[0211] 분석 시스템은 건강한 대조군 데이터 구조에 액세스함으로써 식별된 시작 CpG 부위 및 메틸화 상태 벡터 길이에 대한 메틸화 상태 벡터의 각각의 가능성을 관찰할 확률을 계산한다(440). 일부 실시형태에서, 주어진 가능성을 관찰할 확률을 계산하는 것은 결합 확률 계산을 모델링하기 위해 마르코프 체인 확률을 사용한다. 마르코프 모델은 적어도 부분적으로, 대응하는 복수의 CpG 부위를 갖는 건강한 비-암 코호트 데이터세트 내의 핵산 메틸화 단편 전체에 걸쳐 각각의 단편(예를 들어, 핵산 메틸화 단편)의 대응하는 복수의 CpG 부위 내의 각각의 CpG 부위의 메틸화 상태의 평가에 기초하여 훈련될 수 있다. 예를 들어, 마르코프 모델(예를 들어, 은닉 마르코프 모델 또는 HMM)은, 서열의 각각의 상태에 대해 서열에서의 다음 상태를 관찰할 가능성을 결정하는 확률 세트가 주어지면, 메틸화 상태(예를 들어 "M" 또는 "U"를 포함함)의 서열이 복수의 핵산 메틸화 단편 내의 핵산 메틸화 단편에 대해 관찰될 수 있는 확률을 결정하는 데 사용된다. 확률 세트는 HMM을 훈련하여 얻을 수 있다. 이러한 훈련은 관찰된 메틸화 상태 서열(예를 들어, 메틸화 패턴)의 초기 훈련 데이터 세트가 주어지면, 통계적 파라미터(예를 들어, 제1 상태가 제2 상태로 전환될 수 있는 확률(전환 확률) 및/또는 주어진 메틸화 상태가 각각의 CpG 부위에 대해 관찰될 수 있는 확률(방출 확률))을 계산하는 것을 포함할 수 있다. HMM은 감독 훈련(예를 들어, 기본 서열과 관찰된 상태가 알려진 샘플을 사용함) 및/또는 비감독 훈련(예를 들어, 비터비(Viterbi) 학습, 최대 우도 추정, 기대 최대화 훈련 및/또는 바움-웰치(Baum-Welch) 훈련)을 사용하여 훈련될 수 있다. 다른 실시형태에서, 마르코프 연쇄 확률 이외의 계산 방법을 사용하여 메틸화 상태 벡터의 각각의 가능성을 관찰할 확

률을 결정한다. 예를 들어, 이러한 계산 방법은 학습된 표현을 포함할 수 있다. p-값 임계값은 0.01과 0.10 사이 또는 0.03과 0.06 사이일 수 있다. p-값 임계값은 0.05일 수 있다. p-값 임계값은 0.01 미만, 0.001 미만 또는 0.0001 미만일 수 있다.

[0212] 분석 시스템은 각각의 가능성에 대해 계산된 확률을 사용하여 메틸화 상태 벡터에 대한 p-값 점수를 계산한다(450). 일부 실시형태에서, 이는 문제의 메틸화 상태 벡터와 일치하는 가능성에 대응하는 계산된 확률을 식별하는 것을 포함한다. 구체적으로, 이는 동일한 CpG 부위 세트를 갖거나 유사하게 메틸화 상태 벡터와 동일한 시작 CpG 부위 및 동일한 길이를 가질 가능성이 있을 수 있다. 분석 시스템은 p-값 점수를 생성하기 위해 식별된 확률 이하의 확률을 갖는 모든 가능성의 계산된 확률을 합산할 수 있다.

[0213] 이 p-값은 건강한 대조군에서 훨씬 확률이 낮은 다른 메틸화 상태 벡터 또는 단편의 메틸화 상태 벡터를 관찰할 확률을 나타낼 수 있다. 따라서 낮은 p-값 점수는 일반적으로 건강한 개인에서는 드물고 건강한 대조군에 비해 단편이 변칙적으로 메틸화되도록 표시되는 메틸화 상태 벡터에 대응할 수 있다. 높은 p-값 점수는 일반적으로 건강한 개인에게 상대적인 의미로 존재할 것으로 예상되는 메틸화 상태 벡터와 관련될 수 있다. 예를 들어, 건강한 대조군이 비-암 그룹인 경우, 낮은 p-값은 단편이 비-암 그룹에 비해 변칙적으로 메틸화되었음을 나타낼 수 있으며, 따라서 테스트 피험자에게 암이 존재함을 나타낼 가능성이 있다.

[0214] 위와 같이, 분석 시스템은 각각 테스트 샘플 내 cfDNA 단편을 나타내는 복수의 메틸화 상태 벡터 각각에 대한 p-값 점수를 계산할 수 있다. 어느 단편이 변칙으로 메틸화되었는지 식별하기 위해, 분석 시스템은 p-값 점수에 기초하여 메틸화 상태 벡터 세트를 필터링할 수 있다(460). 일부 실시형태에서, 필터링은 p-값 점수를 임계값과 비교하고 그 임계값 아래의 단편만을 유지함으로써 수행된다. 이 임계 p-값 점수는 0.1, 0.01, 0.001, 0.0001 또는 이와 유사한 정도일 수 있다.

[0215] 프로세스(400)의 예시적인 결과에 따르면, 분석 시스템은 훈련 중인 암이 없는 참가자에 대해 변칙적 메틸화 패턴을 갖는 2,800(1,500개 내지 12,000)의 단편의 중앙값(범위)과 훈련 중인 암이 있는 참가자에 대해 변칙적 메틸화 패턴을 갖는 3,000(1,200 내지 420,000)의 단편의 중앙값(범위)을 생성할 수 있다. 변칙적 메틸화 패턴을 갖는 이들 필터링된 단편 세트는 아래 섹션 III에 설명된 대로 다운스트림 분석에 사용될 수 있다.

[0216] 일부 실시형태에서, 분석 시스템은 슬라이딩 윈도우를 사용하여(455) 메틸화 상태 벡터의 가능성을 결정하고 p-값을 계산한다. 전체 메틸화 상태 벡터에 대해 가능성을 열거하고 p-값을 계산하는 대신, 분석 시스템은 순차 CpG 부위의 윈도우에 대해서만 가능성을 열거하고 p-값을 계산할 수 있으며, 여기서 윈도우는 적어도 일부 단편에 비해 (CpG 부위의) 길이에서 짧다(그렇지 않으면 윈도우는 아무 쓸모도 없게 된다). 윈도우 길이는 정적이거나 사용자가 결정하거나 동적이거나 달리 선택될 수 있다.

[0217] 윈도우보다 큰 메틸화 상태 벡터에 대한 p-값을 계산할 때, 윈도우는 벡터의 제1 CpG 부위부터 시작하여 윈도우 내 벡터로부터 CpG 부위의 순차적 세트를 식별할 수 있다. 분석 시스템은 제1 CpG 부위를 포함하는 윈도우에 대한 p-값 점수를 계산할 수 있다. 그런 다음 분석 시스템은 윈도우를 벡터의 제2 CpG 부위로 "슬라이드"하고 제2 윈도우에 대한 다른 p-값 점수를 계산할 수 있다. 따라서, 윈도우 크기 l 및 메틸화 벡터 길이 m의 경우. 각각의 메틸화 상태 벡터는 $m-l+1$ p-값 점수를 생성할 수 있다. 벡터의 각각의 부분에 대한 p-값 계산을 완료한 후, 모든 슬라이딩 윈도우에서 가장 낮은 p-값 점수를 메틸화 상태 벡터에 대한 전체 p-값 점수로서 사용할 수 있다. 다른 실시형태에서, 분석 시스템은 메틸화 상태 벡터에 대한 p-값 점수를 집계하여 전체 p-값 점수를 생성한다.

[0218] 슬라이딩 윈도우를 사용하면, 메틸화 상태 벡터의 열거된 가능성 수와 그렇지 않으면 수행해야 하는 그들의 대응하는 확률 계산을 줄이는 데 도움이 될 수 있다. 현실적인 예를 들면, 단편이 54개 이상의 CpG 부위를 가질 수 있다. 단일 p-점수를 생성하기 위해 2^{54}(~1.8×10^{16}) 가능성에 대한 확률을 계산하는 대신, 분석 시스템은 해당 단편에 대한 메틸화 상태 벡터의 50개 윈도우 각각에 대해 50개의 p-값 계산을 수행하는 크기 5(예를 들어)의 윈도우를 사용할 수 있다. 50개의 계산 각각은 메틸화 상태 벡터의 2^5(32) 가능성을 열거할 수 있고, 이는 총 50×2^5(1.6×10^3) 확률 계산이다. 이로 인해 수행할 계산이 크게 줄어들 수 있으며 변칙적 단편을 정확하게 식별하는 데 아무런 영향이 없다.

[0219] 불확정 상태를 갖는 실시형태에서, 분석 시스템은 단편의 메틸화 상태 벡터에서 불확정 상태를 갖는 CpG 부위를 합산하는 p-값 점수를 계산할 수 있다. 분석 시스템은 불확정 상태를 제외한 메틸화 상태 벡터의 모든 메틸화 상태와 일치하는 모든 가능성을 식별할 수 있다. 분석 시스템은 식별된 가능성의 확률의 합으로서 메틸화 상태

벡터에 확률을 할당할 수 있다. 예를 들어, 분석 시스템은 CpG 부위 1과 CpG 부위 3에 대한 메틸화 상태가 관찰되고 CpG 부위 1과 CpG 부위 3에서 단편의 메틸화 상태와 일치하기 때문에, < M_1, M_2, U_3 > 및 < M_1, U_2, U_3 >의 메틸화 상태 벡터 가능성에 대한 확률들의 합으로 < M_1, I_2, U_3 >의 메틸화 상태 벡터 확률을 계산할 수 있다.

불확정 상태를 갖는 CpG 부위를 합산하는 이 방법은 최대 2^i의 가능성 확률 계산을 사용할 수 있으며, 여기서 i는 메틸화 상태 벡터의 불확정 상태 수를 나타낸다. 추가 실시형태에서, 하나 이상의 불확정 상태를 갖는 메틸화 상태 벡터의 확률을 계산하기 위해 동적 프로그래밍 알고리즘이 구현될 수 있다. 바람직하게는, 동적 프로그래밍 알고리즘은 선형 계산 시간에 동작한다.

[0220] 일부 실시형태에서, 확률 및/또는 p-값 점수를 계산하는 계산 부담은 적어도 일부 계산을 캐싱함으로써 추가로 감소될 수 있다. 예를 들어, 분석 시스템은 메틸화 상태 벡터(또는 그의 윈도우)의 가능성에 대한 확률 계산을 일시적 메모리 또는 지속적 메모리에 캐싱할 수 있다. 다른 단편이 동일한 CpG 부위를 갖는 경우, 가능성 확률을 캐싱하면 기본 가능성 확률을 다시 계산할 필요 없이 p-점수 값을 효율적으로 계산할 수 있다. 동등하게, 분석 시스템은 벡터(또는 이의 윈도우)로부터 CpG 부위 세트와 연관된 메틸화 상태 벡터의 가능성 각각에 대한 p-값 점수를 계산할 수 있다. 분석 시스템은 동일한 CpG 부위들을 포함하는 다른 단편의 p-값 점수를 결정하는 데 사용하기 위해 p-값 점수를 캐싱할 수 있다. 일반적으로, 동일한 CpG 부위를 갖는 메틸화 상태 벡터의 가능성에 대한 p-값 점수는 동일한 CpG 부위 세트의 가능성 중 다른 가능성의 p-값 점수를 결정하는 데 사용될 수 있다.

[0221] 하나 이상의 핵산 메틸화 단편은 영역 모델 또는 암 분류기 훈련 이전에 필터링될 수 있다. 핵산 메틸화 단편을 필터링하는 것은 대응하는 복수의 핵산 메틸화 단편으로부터 하나 이상의 선택 기준(예를 들어, 하나의 선택 기준 미만 또는 초과)을 충족하지 못하는 각각의 핵산 메틸화 단편을 제거하는 것을 포함할 수 있다. 하나 이상의 선택 기준은 p-값 임계값을 포함할 수 있다. 각각의 핵산 메틸화 단편의 출력 p-값은, 각각의 핵산 메틸화 단편의 대응하는 복수의 CpG 부위를 갖는 건강한 비-암 코호트 데이터세트에서의 이들 핵산 메틸화 단편의 대응하는 메틸화 패턴 분포에 대한 각각의 핵산 메틸화 단편의 대응하는 메틸화 패턴의 비교에 기초하여 적어도 부분적으로 결정될 수 있다.

[0222] 복수의 핵산 메틸화 단편을 필터링하는 것은 p-값 임계값을 충족하지 못하는 각각의 핵산 메틸화 단편을 제거하는 것을 포함할 수 있다. 필터는 복수의 제1 핵산 메틸화 단편에 걸쳐 관찰된 메틸화 패턴을 사용하여 각각의 개별 핵산 메틸화 단편의 메틸화 패턴에 적용될 수 있다. 각각의 개별 핵산 메틸화 단편(예를 들어, 단편 1, …, 단편 N)의 각각의 개별 메틸화 패턴은 메틸화 부위 식별자로 식별된 대응하는 하나 이상의 메틸화 부위(예를 들어, CpG 부위들) 및 1과 0의 서열로서 나타낸 대응하는 메틸화 패턴을 포함할 수 있으며, 여기서 각각의 "1"은 하나 이상의 CpG 부위의 메틸화된 CpG 부위를 나타내고, 각각의 "0"은 하나 이상의 CpG 부위의 메틸화되지 않은 CpG 부위를 나타낸다. 복수의 제1 핵산 메틸화 단편에 걸쳐 관찰된 메틸화 패턴은 복수의 제1 핵산 메틸화 단편(예를 들어, CpG 부위 A, CpG 부위 B, …, CpG 부위 ZZZ)에 의해 집합적으로 표현되는 CpG 부위 상태에 대한 메틸화 상태 분포를 구축하는 데 사용될 수 있다. 핵산 메틸화 단편의 처리에 관한 추가 세부 사항은 2020년 3월 4일에 출원된 "자동인코더를 사용한 암 상태 결정을 위한 시스템 및 방법(Systems and Methods for Cancer Condition Determination Using Autoencoders)"이라는 명칭의 미국 임시 출원 제62/985,258호에 개시되어 있으며, 이는 그 전체 내용이 본원에 인용되어 포함된다.

[0223] 각각의 핵산 메틸화 단편이 변칙적 메틸화 점수 임계값보다 작은 변칙적 메틸화 점수를 가질 때, 각각의 핵산 메틸화 단편은 하나 이상의 선택 기준에서 선택 기준을 충족하지 못할 수 있다. 이 상황에서, 변칙적 메틸화 점수는 혼합 모델에 의해 결정될 수 있다. 예를 들어, 혼합 모델은 동일한 길이와 동일한 해당 게놈 위치에 있는 가능한 메틸화 상태 벡터의 수에 기초하여 각각의 핵산 메틸화 단편에 대한 메틸화 상태 벡터(예를 들어, 메틸화 패턴)의 가능성을 결정함으로써 핵산 메틸화 단편에서 변칙적 메틸화 패턴을 검출할 수 있다. 이는 참조 게놈 내 각각의 게놈 위치에서 지정된 길이의 벡터에 대한 복수의 가능한 메틸화 상태를 생성함으로써 실행될 수 있다. 복수의 가능한 메틸화 상태를 사용하여, 가능한 총 메틸화 상태의 수 및 후속적으로 게놈 위치에서의 각각의 예측된 메틸화 상태의 확률이 결정될 수 있다. 그런 다음 참조 게놈 내 게놈 위치에 대응하는 샘플 핵산 메틸화 단편의 가능성은 샘플 핵산 메틸화 단편을 예측된(예를 들어 가능한) 메틸화 상태에 일치시키고 또한 예측된 메틸화 상태의 계산된 확률을 검색함으로써 결정될 수 있다. 그런 다음 샘플 핵산 메틸화 단편의 확률에 기초하여 변칙적 메틸화 점수가 계산될 수 있다.

[0224] 각각의 핵산 메틸화 단편이 임계 수 미만의 잔기를 가질 때 각각의 핵산 메틸화 단편은 하나 이상의 선택 기준에서 선택 기준을 충족하지 못할 수 있다. 잔기의 임계 수는 10과 50 사이, 50과 100 사이, 100과 150 사이, 또는 150 초과일 수 있다. 잔기의 임계 수는 20과 90 사이의 고정 값일 수 있다. 각각의 핵산 메틸화 단편이 임계

수 미만의 CpG 부위를 가질 때 각각의 핵산 메틸화 단편은 하나 이상의 선택 기준에서 선택 기준을 충족하지 못할 수 있다. CpG 부위의 임계 수는 4, 5, 6, 7, 8, 9 또는 10일 수 있다. 각각의 핵산 메틸화 단편의 게놈 시작 위치 및 게놈 종료 위치가 각각의 핵산 메틸화 단편이 인간 게놈 참조 서열 내 뉴클레오티드의 임계 수 미만을 나타냄을 나타낼 때, 각각의 핵산 메틸화 단편은 하나 이상의 선택 기준에서 선택 기준을 충족하지 못할 수 있다.

[0225] 필터링은 대응하는 복수의 핵산 메틸화 단편 내의 다른 핵산 메틸화 단편과 동일한 대응하는 메틸화 패턴, 동일한 대응하는 게놈 시작 위치 및 게놈 종료 위치를 갖는 대응하는 복수의 핵산 메틸화 단편에서 핵산 메틸화 단편을 제거할 수 있다. 이 필터링 단계는 경우에 따라 PCR 중복을 포함하여 정확한 중복인 중복 단편을 제거할 수 있다. 필터링은 대응하는 복수의 핵산 메틸화 단편 내의 다른 핵산 메틸화 단편과 동일한 대응하는 게놈 시작 위치 및 게놈 종료 위치를 갖고 임계 수 미만의 상이한 메틸화 상태를 갖는 핵산 메틸화 단편을 제거할 수 있다. 핵산 메틸화 단편의 유지에 사용되는 다양한 메틸화 상태의 임계 수는 1, 2, 3, 4, 5 또는 5 초과일 수 있다. 예를 들어, 제2 핵산 메틸화 단편과 동일한 대응하는 게놈 시작 위치 및 게놈 종료 위치를 갖지만 각각의 CpG 부위(예를 들어, 참조 게놈에 정렬됨)에서 적어도 1개, 적어도 2개, 적어도 3개, 적어도 4개, 또는 적어도 5개의 상이한 메틸화 상태를 갖는 제1 핵산 메틸화 단편이 유지된다. 다른 예로서, 제2 핵산 메틸화 단편과 동일한 메틸화 상태 벡터(예를 들어, 메틸화 패턴)를 갖지만 상이한 대응하는 게놈 시작 위치 및 게놈 종료 위치를 갖는 제1 핵산 메틸화 단편도 유지된다.

[0226] 필터링은 복수의 핵산 메틸화 단편 내 검정 아티팩트를 제거할 수 있다. 검정 아티팩트의 제거는 시퀀싱된 혼성화 프로브로부터 얻은 서열 판독 및/또는 중아황산염 전환 동안 전환을 겪지 못한 서열로부터 얻은 서열 판독을 제거하는 것을 포함할 수 있다. 필터링은 (예를 들어, 시퀀싱, 핵산 분리 및/또는 샘플 준비로 인한) 오염물을 제거할 수 있다.

[0227] 필터링은 복수의 훈련 피험자에 걸친 암 상태에 대한 각각의 메틸화 단편의 상호 정보 필터링에 기초하여 복수의 메틸화 단편으로부터 메틸화 단편의 서브세트를 제거할 수 있다. 예를 들어, 상호 정보는 동시에 샘플화된 2개의 관심 조건 간의 상호 의존성에 대한 척도를 제공할 수 있다. 상호 정보는 하나 이상의 데이터 세트로부터 독립적인 CpG 부위 세트(예를 들어, 핵산 메틸화 단편의 전부 또는 일부 내)를 선택하고, 2개의 샘플 그룹(예를 들어, 유전형 데이터 세트, 생물학적 샘플 및/또는 피험자의 서브세트 및/또는 그룹) 간의 CpG 부위 세트에 대한 메틸화 상태 확률을 비교함으로써 결정될 수 있다. 상호 정보 점수는 슬라이딩 윈도우의 각각의 프레임 내 각각의 영역에서 제1 조건 대 제2 조건에 대한 메틸화 패턴의 확률을 나타낼 수 있으므로 각각의 영역의 판별력을 나타낼 수 있다. 상호 정보 점수는 선택된 CpG 부위 세트 및/또는 선택된 게놈 영역에 걸쳐 진행됨에 따라 상호 정보 점수는 슬라이딩 윈도우의 각각의 프레임 내 각각의 영역에 대해 유사하게 계산될 수 있다. 상호 정보 필터링에 관한 추가 세부 사항은 2020년 12월 11일에 출원된 "패치 컨볼루셔널 신경망을 사용한 암 분류(Cancer Classification using Patch Convolutional Neural Networks)"라는 명칭의 미국 특허 출원 제17/119,606호에 개시되어 있으며, 이는 그의 전체 내용이 본원에 인용되어 포함된다.

[0228] II.C.ii. 과메틸화된 단편 및 저메틸화된 단편

[0229] 일부 실시형태에서, 분석 시스템은 변칙적 단편을 CpG 부위의 임계 수를 초과하고 메틸화된 CpG 부위의 임계 백분율을 초과하거나 메틸화되지 않은 CpG 부위의 임계 백분율을 초과하는 단편으로서 결정하고; 분석 시스템은 이러한 단편을 과메틸화된 단편 또는 저메틸화된 단편으로서 식별한다. 단편(또는 CpG 부위)의 길이에 대한 예시적인 임계값은 3, 4, 5, 6, 7, 8, 9, 10 초과 등을 포함한다. 메틸화 또는 비메틸화의 예시적인 백분율 임계값은 80%, 85%, 90% 또는 95% 초과, 또는 50% 내지 100% 범위 내의 기타 백분율을 포함한다.

[0230] II.D. 예시적인 분석 시스템

[0231] 도 6a는 하나 이상의 실시형태에 따른 핵산 샘플의 시퀀싱을 위한 장치의 예시적인 흐름도이다. 이 예시적인 흐름도는 서열 분석기(620) 및 분석 시스템(600)과 같은 장치를 포함한다. 서열 분석기(620) 및 분석 시스템(600)은 도 3a의 프로세스(300), 도 4a의 프로세스(400). 도 4b의 프로세스(420). 및 본원에 기술된 다른 프로세스 내 하나 이상의 단계를 수행하기 위해 함께 작동할 수 있다.

[0232] 다양한 실시형태에서, 서열 분석기(620)는 농축된 핵산 샘플(610)를 수신한다. 도 6a에 도시된 바와 같이, 서열 분석기(620)는 농축된 단편 샘플을 포함하는 시퀀싱 카트리지를 로딩하기 위한 그리고/또는 시퀀싱 검정을 수행하는 데 필요한 버퍼를 로딩하기 위한 하나 이상의 로딩 스테이션(630)뿐만 아니라 특정 작업(예를 들어, 시퀀싱 시작 또는 시퀀싱 종료)과의 사용자 상호 작용을 가능하게 하는 그래픽 사용자 인터페이스(625)를 포함할 수

있다. 따라서, 서열 분석기(620)의 사용자가 서열 분석기(620)의 로딩 스테이션(630)에 필요한 시약 및 시퀀싱 카트리지를 제공하면, 사용자는 서열 분석기(620)의 그래픽 사용자 인터페이스(625)와 상호 작용하여 시퀀싱을 시작할 수 있다. 일단 시작되면, 서열 분석기(620)는 시퀀싱을 수행하고 핵산 샘플(610)로부터 농축된 단편의 서열 판독을 출력한다.

[0233] 일부 실시형태에서, 서열 분석기(620)는 분석 시스템(600)과 통신 가능하게 결합된다. 분석 시스템(600)은 하나 이상의 CpG 부위에서의 메틸화 상태 평가, 변이체 호출 또는 품질 관리와 같은 다양한 애플리케이션에 대한 서열 판독을 처리하는 데 사용되는 일부 컴퓨팅 장치를 포함한다. 서열 분석기(620)는 분석 시스템(600)에 BAM 파일 형식의 서열 판독을 제공할 수 있다. 분석 시스템(600)은 무선, 유선, 또는 무선과 유선 통신 기술의 조합을 통해 서열 분석기(620)에 통신 가능하게 결합될 수 있다. 일반적으로, 분석 시스템(600)은 프로세서에 의해 실행될 때 프로세서가 서열 판독을 처리하게 하거나 본원에 개시된 어느 방법 또는 프로세스의 하나 이상의 단계를 수행하게 하는 컴퓨터 명령어를 저장하는 프로세서 및 비일시적 컴퓨터 판독 가능 저장 매체로 구성된다.

[0234] 일부 실시형태에서, 서열 판독은 예를 들어 도 3a의 프로세스(300)의 단계 340을 통해 정렬 위치 정보를 결정하기 위해 당업계에 공지된 방법을 사용하여 참조 게놈에 정렬될 수 있다. 정렬 위치는 일반적으로 주어진 서열 판독의 시작 뉴클레오티드 염기 및 종료 뉴클레오티드 염기에 대응하는 참조 게놈 내 영역의 시작 위치와 종료 위치를 설명할 수 있다. 메틸화 시퀀싱에 대응하여, 정렬 위치 정보는 참조 게놈에 대한 정렬에 따라 서열 판독에 포함된 제1 CpG 부위 및 마지막 CpG 부위를 나타내도록 일반화될 수 있다. 정렬 위치 정보는 주어진 서열 판독에서 모든 CpG 부위의 메틸화 상태 및 위치를 추가로 나타낼 수 있다. 참조 게놈 내 영역은 유전자 또는 유전자의 세그먼트와 연관될 수 있으며; 따라서, 분석 시스템(600)은 서열 판독에 정렬되는 하나 이상의 유전자로 서열 판독을 라벨링할 수 있다. 일 실시형태에서, 단편 길이(또는 크기)는 시작 위치와 종료 위치로부터 결정된다.

[0235] 다양한 실시형태에서, 예를 들어 페어드 엔드 시퀀싱 프로세스가 사용되는 경우, 서열 판독은 R_1 및 R_2로 표시된 판독 쌍으로 구성된다. 예를 들어, 제1 판독(R_1)는 이중 가닥 DNA(dsDNA) 분자의 제1 말단으로부터 시퀀싱될 수 있는 반면, 제2 판독(R_2)는 이중 가닥 DNA(dsDNA) 분자의 제2 말단으로부터 시퀀싱될 수 있다. 따라서, 제1 판독(R_1) 및 제2 판독(R_2)의 뉴클레오티드 염기쌍은 참조 게놈의 뉴클레오티드 염기와 일관되게 (예를 들어, 반대 방향으로) 정렬될 수 있다. 판독 쌍(R_1 및 R_2)으로부터 도출된 정렬 위치 정보는 제1 판독(예를 들어, R_1)의 말단에 대응하는 참조 게놈 내 시작 위치와 제2 판독(예를 들어, R_2)의 말단에 대응하는 참조 게놈 내 종료 위치를 포함할 수 있다. 즉, 참조 게놈의 시작 위치와 종료 위치는 핵산 단편이 해당하는 참조 게놈 내의 가능한 위치를 나타낼 수 있다. SAM(서열 정렬 맵) 형식 또는 BAM(이진법) 형식을 갖는 출력 파일이 생성되어 추가 분석을 위해 출력될 수 있다.

[0236] 이제 도 6b를 참조하면, 도 6b는 일 실시형태에 따른 DNA 샘플을 처리하기 위한 분석 시스템(600)의 블록도이다. 분석 시스템은 DNA 샘플 분석에 사용하기 위해 하나 이상의 컴퓨팅 장치를 구현한다. 분석 시스템(600)은 시퀀싱 프로세서(640), 서열 데이터베이스(645), 모델 데이터베이스(655), 모델(650), 파라미터 데이터베이스(665) 및 점수 엔진(660)을 포함한다. 일부 실시형태에서, 분석 시스템(600)은 도 3a의 프로세스(300)와 도 4a의 프로세스(400) 중 일부 또는 전부를 수행한다.

[0237] 서열 프로세서(640)는 샘플로부터 단편에 대한 메틸화 상태 벡터를 생성한다. 단편 상의 각각의 CpG 부위에서, 서열 프로세서(640)는 도 3a의 프로세스(300)를 통해 메틸화되었는지, 비메틸화되었는지, 또는 불확정인지여부의 참조 게놈 내 단편 위치, 단편 내 CpG 부위 수, 및 단편 내 각각의 CpG 부위의 메틸화 상태를 지정하는 각각의 단편에 대한 메틸화 상태 벡터를 생성한다. 서열 프로세서(640)는 서열 데이터베이스(645)에 단편에 대한 메틸화 상태 벡터를 저장할 수 있다. 서열 데이터베이스(645) 내 데이터는 샘플로부터의 메틸화 상태 벡터가 서로 연관되도록 구성될 수 있다.

[0238] 또한, 다수의 상이한 모델(650)이 모델 데이터베이스(655)에 저장되거나 테스트 샘플과 함께 사용하기 위해 검색될 수 있다. 일 예에서, 모델은 변칙적 단편으로부터 도출된 특징 벡터를 사용하여 테스트 샘플에 대한 암 예측을 결정하기 위한 훈련된 암 분류기이다. 암 분류기의 훈련 및 사용은 섹션 III. *암 결정을 위한 암 분류기*와 함께 추가로 논의될 수 있다. 분석 시스템(600)은 하나 이상의 모델(650)을 훈련하고 다양한 훈련된 파라미터를 파라미터 데이터베이스(665)에 저장할 수 있다. 분석 시스템(600)은 모델 데이터베이스(655)에 함수와 함께 모델(650)을 저장한다.

[0239] 추론 동안, 점수 엔진(660)은 하나 이상의 모델(650)을 사용하여 출력을 반환한다. 점수 엔진(660)은 파라미터 데이터베이스(665)로부터의 훈련된 파라미터와 함께 모델 데이터베이스(655)의 모델(650)에 액세스한다. 각각의

모델에 따라, 점수 엔진은 모델에 대한 적절한 입력을 수신하고, 수신된 입력, 파라미터 및 입력과 출력에 관련된 각각의 모델의 함수에 기초하여 출력을 계산한다. 일부 사용 사례에서, 점수 엔진(660)은 모델로부터의 계산된 출력의 신뢰도와 상관되는 측정 항목을 추가로 계산한다. 다른 사용 사례에서, 점수 엔진(660)은 모델에서 사용하기 위한 다른 중간 값을 계산한다.

[0240] III. 암 결정을 위한 암 분류기

[0241] III.A. 개요

[0242] 암 분류기는 테스트 샘플에 대한 특징 벡터를 수신하고 테스트 샘플이 암에 걸린 테스트 피험자로부터 나온 것인지, 더 구체적으로는 특정 암 유형에서 나온 것인지 결정하도록 훈련될 수 있다. 암 분류기는 복수의 분류 파라미터와, 분류 파라미터를 사용하여 입력 특징 벡터에 작용하는 함수에 의해 결정된, 입력으로서의 특징 벡터와 출력으로서의 암 예측 사이의 관계를 나타내는 함수를 포함할 수 있다. 일부 실시형태에서, 암 분류기에 입력되는 특징 벡터는 테스트 샘플로부터 결정된 변칙적 단편 세트에 기초한다. 변칙적 단편은 도 4b의 프로세스(420)를 통해 결정될 수 있거나, 더 구체적으로, 과메틸화된 단편 또는 저메틸화된 단편은 프로세스(420)의 단계 470을 통해 결정될 수 있거나, 변칙적 단편은 일부 다른 프로세스에 따라 결정될 수 있다. 암 분류기를 배포하기 전에, 분석 시스템은 암 분류기를 훈련할 수 있다.

[0243] III.B. 암 분류기 훈련

[0244] 도 5a는 일 실시형태에 따른, 암 분류기를 훈련하는 프로세스(500)를 설명하는 흐름도이다. 분석 시스템은 각각이 변칙적 단편 세트와 암 유형 라벨을 갖는 복수의 훈련 샘플을 획득한다(510). 복수의 훈련 샘플은 "비-암"이라는 일반 라벨을 갖는 건강한 개인으로부터의 샘플, "암"이라는 일반 라벨 또는 특정 라벨(예를 들어, "유방암", "폐암" 등)을 갖는 피험자로부터의 샘플의 임의의 조합을 포함할 수 있다. 하나의 암 유형에 대한 피험자의 훈련 샘플을 해당 암 유형에 대한 코호트 또는 암 유형 코호트로 명명할 수 있다. 분석 시스템은 암 분류기 훈련에 사용된 훈련 샘플이 오염되지 않게 할 수 있다. 훈련 샘플이 오염되었는지 여부를 결정하기 위해, 분석 시스템은 도 1의 프로세스(100)를 수행할 수 있다.

[0245] 분석 시스템은 각각의 훈련 샘플에 대해 훈련 샘플의 변칙적 단편 세트에 기초하여 특징 벡터를 결정한다(520). 분석 시스템은 초기 CpG 부위 세트에서 각각의 CpG 부위에 대한 변칙 점수를 계산할 수 있다. CpG 부위의 초기 세트는 인간 게놈의 모든 CpG 부위 또는 그 일부일 수 있으며 이는 10^4, 10^5, 10^6, 10^7, 10^8 정도 등일 수 있다. 일 실시형태에서, 분석 시스템은 CpG 부위를 포함하는 변칙적 단편 세트에 변칙적 단편이 있는지 여부에 기초한 이진법 점수화로 특징 벡터에 대한 변칙 점수를 정의한다. 다른 실시형태에서, 분석 시스템은 CpG 부위와 겹치는 변칙적 단편의 개수에 기초하여 변칙 점수를 정의한다. 일 예로, 분석 시스템은 변칙적 단편의 존재 없음에 대한 제1 점수, 소수의 변칙적 단편의 존재에 대한 제2 점수, 소수 초과의 변칙적 단편의 존재에 대한 제3 점수를 할당하는 3진 점수화를 사용할 수 있다. 예를 들어, 분석 시스템은 CpG 부위와 겹치는 샘플 내 5개의 변칙 단편을 계산하고 5개를 기준으로 변칙 점수를 계산한다.

[0246] 훈련 샘플에 대한 모든 변칙 점수가 결정되면, 분석 시스템은 각각의 요소에 대해 초기 세트의 CpG 부위 중 하나와 관련된 변칙 점수 중 하나를 포함하는 요소 벡터로서 특징 벡터를 결정할 수 있다. 분석 시스템은 샘플의 커버리지에 기초하여 특징 벡터의 변칙 점수를 정규화할 수 있다. 여기서, 커버리지는 분류기에 사용된 CpG 부위의 초기 세트에 포함되거나 주어진 훈련 샘플에 대한 변칙적 단편 세트를 기반으로 하는 모든 CpG 부위에 대한 중앙값 또는 평균 시퀀싱 깊이를 나타낼 수 있다.

[0247] 예로서, 훈련 특징 벡터(522)의 행렬을 예시하는 도 5b를 이제 참조한다. 이 예에서, 분석 시스템은 암 분류기에 대한 특징 벡터 생성 시에 고려할 CpG 부위 [K] 526을 식별했다. 분석 시스템은 훈련 샘플 [N] 524를 선택한다. 분석 시스템은 훈련 샘플 [n1]에 대한 특징 벡터에 사용될 임의의 제1 CpG 부위 [k1]에 대한 제1 변칙 점수(528)를 결정한다. 분석 시스템은 변칙적 단편 세트 내 각각의 변칙적 단편을 확인한다. 분석 시스템이 제1 CpG 부위를 포함하는 적어도 하나의 변칙적 단편을 식별하면, 분석 시스템은 도 5b에 예시된 바와 같이 제1 CpG 부위에 대한 제1 변칙 점수(528)를 1로 결정한다. 임의의 제2 CpG 부위 [k2]를 고려하면, 분석 시스템은 제2 CpG 부위 [k2]를 포함하는 적어도 하나의 변칙적 단편 세트를 유사하게 확인한다. 분석 시스템이 제2 CpG 부위를 포함하는 이러한 변칙적 단편을 발견하지 못한 경우, 분석 시스템은 도 5b에 예시된 바와 같이 제2 CpG 부위 [k2]에 대한 제2 변칙 점수(529)를 0으로 결정한다. 분석 시스템이 CpG 부위의 초기 세트에 대한 모든 변칙 점수를 결정하면, 분석 시스템은 제1 CpG 부위 [k1]에 대해 1의 제1 변칙 점수(528)를 포함하고 제1 CpG 부위 [k2]에 대해 0의 제2 변칙 점수(529)를 포함하고 후속 변칙 점수를 포함하여, 특징 벡터 [1, 0, …]를 형성하는 특

징 벡터와 함께 변칙 점수를 포함하는 제1 훈련 샘플 [n1]에 대한 특징 벡터를 결정한다.

[0248] 샘플의 특징화에 대한 추가적인 접근법은 "모델 기반 특징화 및 분류(Model-Based Featurization and Classification)"이라는 명칭의 미국 출원 제15/931,022호; "표적 시퀀싱을 위한 혼합 모델(Mixture Model for Targeted Sequencing)"이라는 명칭의 미국 출원 제16/579,805호; "변칙적 단편 검출 및 분류(Anomalous Fragment Detection and Classification)"라는 명칭의 미국 출원 제16/352,602호; 및 "무세포 DNA 샘플의 메틸화 단편에 기초한 기원 디콘볼루션의 출처(Source of Origin Deconvolution Based on Methylation Fragments in Cell-Free DNA Samples)"라는 명칭의 미국 출원 제16/723,716호에서 찾을 수 있으며; 이들 모두는 그의 전체 내용이 본원에 인용되어 포함된다.

[0249] 분석 시스템은 암 분류에 사용하도록 고려되는 CpG 부위를 추가로 제한할 수 있다. 분석 시스템은 초기 CpG 부위 세트의 각각의 CpG 부위에 대해 훈련 샘플의 특징 벡터에 기초하여 정보 이득을 계산한다(530). 단계 520으로부터, 각각의 훈련 샘플은 인간 게놈의 모든 CpG 부위까지 포함할 수 있는 초기 CpG 부위 세트 내 모든 CpG 부위의 변칙 점수를 포함할 수 있는 특징 벡터를 갖는다. 그러나, CpG 부위의 초기 세트 내 일부 CpG 부위는 암 유형을 구별하는 데 다른 부위만큼 유익하지 않거나 다른 CpG 부위와 중복될 수 있다.

[0250] 일 실시형태에서, 분석 시스템은 분류기에 해당 CpG 부위를 포함할지 여부를 결정하기 위해 초기 세트 내 각각의 암 유형 및 각각의 CpG 부위에 대한 정보 이득을 계산한다(530). 정보 이득은 다른 모든 샘플과 비교하여 특정 암 유형의 훈련 샘플에 대해 계산된다. 예를 들어, 2개의 랜덤 변수 '변칙적 단편'(AF: anomalous fragment)과 '암 유형'(CT: cancer type)이 사용된다. 일 실시형태에서, AF는 위의 변칙 점수/특징 벡터에 대해 결정된 바와 같이 주어진 샘플 내의 주어진 CpG 부위와 겹치는 변칙적 단편이 있는지 여부를 나타내는 이진법 변수이다. CT는 암이 특정 유형인지 여부를 나타내는 랜덤 변수이다. 분석 시스템은 AF가 주어진 CT에 대한 상호 정보를 계산한다. 즉, 특정 CpG 부위와 겹치는 변칙적 단편이 있는지 여부를 알면 암 유형에 대한 정보 비트를 얼마나 얻을 수 있는가 하는 것이다. 실제로, 제1 암 유형에 대해, 분석 시스템은 서로의 암 유형에 대한 쌍별 상호 정보 이득을 계산하고 다른 모든 암 유형에 대한 상호 정보 이득을 합산한다.

[0251] 주어진 암 유형에 대해, 분석 시스템은 이 정보를 사용하여 암의 특정 정도에 기초하여 CpG 부위의 순위를 매길 수 있다. 이 절차는 고려 중인 모든 암 유형에 대해 반복될 수 있다. 특정 영역이 특정 암의 훈련 샘플에서는 일반적으로 변칙적으로 메틸화되지만 다른 암 유형의 훈련 샘플이나 건강한 훈련 샘플에서는 변칙적으로 메틸화되지 않은 경우, 이러한 변칙적 단편과 겹치는 CpG 부위는 해당 암 유형에 대해 높은 정보 이득을 가질 수 있다. 각각의 암 유형에 대해 순위가 매겨진 CpG 부위는 암 분류기에서 사용하기 위해 그들의 순위에 기초하여 CpG 부위의 선택된 세트에 욕심 내어 추가(선택)될 수 있다(540).

[0252] 추가적인 실시형태에서, 분석 시스템은 암 분류기에 사용될 정보 CpG 부위를 선택하기 위한 다른 선택 기준을 고려할 수 있다. 하나의 선택 기준은 선택된 CpG 부위가 다른 선택된 CpG 부위로부터 분리된 임계값 이상이라는 것일 수 있다. 예를 들어, 선택된 CpG 부위는 임의의 다른 선택된 CpG 부위(예를 들어, 100개 염기쌍)로부터 분리된 염기쌍의 임계 수를 초과해야 하며, 따라서 임계값 분리 내에 있는 CpG 부위는 암 분류기에서 고려 대상으로 선택되지 않는다.

[0253] 일 실시형태에서, 초기 세트로부터의 선택된 CpG 부위 세트에 따라, 분석 시스템은 필요에 따라 훈련 샘플의 특징 벡터를 수정할 수 있다(550). 예를 들어, 분석 시스템은 선택된 CpG 부위 세트에 속하지 않는 CpG 부위에 대응하는 변칙 점수를 제거하기 위해 특징 벡터를 잘라낼 수 있다.

[0254] 훈련 샘플의 특징 벡터를 사용하여, 분석 시스템은 다양한 방법으로 암 분류기를 훈련할 수 있다. 특징 벡터는 단계 520의 초기 CpG 부위 세트 또는 단계 550의 선택된 CpG 부위 세트에 대응할 수 있다. 일 실시형태에서, 분석 시스템은 훈련 샘플의 특징 벡터에 기초하여 암과 비-암을 구별하기 위해 이진법 암 분류기를 훈련한다(560). 이러한 방식으로, 분석 시스템은 건강한 개인의 비-암 샘플과 피험자의 암 샘플을 모두 포함하는 훈련 샘플을 사용한다. 각각의 훈련 샘플은 "암" 또는 "비-암"이라는 2개의 라벨 중 하나를 가질 수 있다. 이 실시형태에서, 분류기는 암의 존재 또는 부재의 가능성을 나타내는 암 예측을 출력한다.

[0255] 다른 실시형태에서, 분석 시스템은 많은 암 유형(기원 조직(TOO: tissue of origin) 라벨이라고도 함)을 구별하기 위해 멀티클래스 암 분류기를 훈련한다(570). 암 유형은 하나 이상의 암을 포함할 수 있으며 비-암 유형도 포함될 수 있다(추가적인 기타 질병이나 유전 질환 등도 포함될 수 있다). 이를 위해, 분석 시스템은 암 유형 코호트를 사용할 수 있으며, 또한 비-암 유형 코호트를 포함하거나 포함하지 않을 수도 있다. 이러한 다중 암 실시형태에서, 암 분류기는 분류되는 암 유형 각각에 대한 예측 값을 포함하는 암 예측(또는 더 구체적으로 TOO

예측)을 결정하도록 훈련된다. 예측 값은 주어진 훈련 샘플(그리고 추론 중에, 테스트 샘플)이 각각의 암 유형을 가질 가능성에 대응할 수 있다. 일 구현예에서, 예측 값은 0과 100 사이에서 점수화되며, 여기서 예측 값의 누적은 100과 같다. 예를 들어, 암 분류기는 유방암, 폐암, 비-암에 대한 예측 값을 포함하는 암 예측을 반환한다. 예를 들어, 분류기는 테스트 샘플이 유방암에 걸릴 가능성이 65%, 폐암에 걸릴 가능성이 25%, 비-암에 걸릴 가능성이 10%라는 암 예측을 반환할 수 있다. 분석 시스템은 샘플 내 하나 이상의 암의 존재에 대한 예측을 생성하기 위해 예측 값을 추가로 평가할 수 있으며, 하나 이상의 TOO 라벨, 예를 들어 가장 높은 값을 갖는 제1 TOO 라벨, 두 번째로 높은 예측 값을 가진 제2 TOO 라벨 등을 나타내는 TOO 예측으로도 지칭될 수도 있다. 위의 예를 계속 사용하고 백분율이 주어지면, 이 예에서 시스템은 유방암이 가장 높은 가능성을 갖고 있다는 점을 고려하여 샘플이 유방암이라고 결정할 수 있다.

[0256] 두 실시형태 모두에서, 분석 시스템은 분류기의 함수가 훈련 특징 벡터를 그들의 대응 라벨에 정확하게 연관시키도록, 그들의 특징 벡터가 포함된 훈련 샘플 세트를 암 분류기에 입력하고 분류 파라미터를 조정함으로써 암 분류기를 훈련한다. 분석 시스템은 암 분류기의 반복적인 배치 훈련을 위해 훈련 샘플을 하나 이상의 훈련 샘플 세트로 그룹화할 수 있다. 그들의 훈련 특징 벡터를 포함한 모든 훈련 샘플 세트를 입력하고 분류 파라미터를 조정한 후, 암 분류기는 약간의 오류 한계 내에서 그들의 특징 벡터에 따라 테스트 샘플에 라벨을 지정하도록 충분히 훈련될 수 있다. 분석 시스템은 다양한 방법 중 하나에 따라 암 분류기를 훈련할 수 있다. 예를 들어, 이진법 암 분류기는 로그 손실 함수를 사용하여 훈련되는 L2 정규화된 로지스틱 회귀 분류기일 수 있다. 다른 예로, 다중 암 분류기는 다항 로지스틱 회귀일 수 있다. 실제로 두 가지 유형의 암 분류기는 다른 기술을 사용하여 훈련될 수 있다. 이들 기술은 커널 방법, 랜덤 포레스트 분류기, 혼합 모델, 자동 인코더 모델, 다층 신경망과 같은 기계 학습 알고리즘 등의 잠재적 사용을 포함하여 다양하다.

[0257] 분류기는 로지스틱 회귀 알고리즘, 신경망 알고리즘, 서포트 벡터 머신 알고리즘, 나이브 베이즈(Naive Bayes) 알고리즘, 최근접 이웃 알고리즘, 부스팅 트리 알고리즘, 랜덤 포레스트 알고리즘, 의사결정 트리 알고리즘, 다항 로지스틱 회귀 알고리즘, 선형 모델 또는 선형 회귀 알고리즘을 포함할 수 있다.

[0258] III.C. 암 분류기 배포(Deployment)

[0259] 암 분류기를 사용하는 동안, 분석 시스템은 알려지지 않은 암 유형의 피험자로부터 테스트 샘플을 얻을 수 있다. 분석 시스템은 변칙적 단편 세트를 달성하기 위해, 프로세스(300), 프로세스(400), 및 프로세스(420)의 임의의 조합으로 DNA 분자로 구성된 테스트 샘플을 처리할 수 있다. 분석 시스템은 프로세스(500)에서 논의된 유사한 원리에 따라 암 분류기에 의해 사용하기 위한 테스트 특징 벡터를 결정할 수 있다. 분석 시스템은 암 분류기에 의해 사용되는 복수의 CpG 부위 중 각각의 CpG 부위에 대한 변칙 점수를 계산할 수 있다. 예를 들어, 암 분류기는 1,000개의 선택된 CpG 부위에 대한 변칙 점수를 포함하는 입력 특징 벡터를 수신한다. 따라서 분석 시스템은 변칙적 단편 세트에 기초하여 1,000개의 선택된 CpG 부위에 대한 변칙 점수를 포함하는 테스트 특징 벡터를 결정할 수 있다. 분석 시스템은 훈련 샘플과 동일한 방식으로 변칙 점수를 계산할 수 있다. 일부 실시형태에서, 분석 시스템은 CpG 부위를 포함하는 변칙적 단편 세트에 과메틸화된 단편 또는 저메틸화된 단편이 있는지 여부에 기초하여 변칙 점수를 이진법 점수로 정의한다.

[0260] 그런 다음 분석 시스템은 테스트 특징 벡터를 암 분류기에 입력할 수 있다. 그런 다음 암 분류기의 함수는 프로세스(500)에서 훈련된 분류 파라미터와 테스트 특징 벡터에 기초하여 암 예측을 생성할 수 있다. 제1 방식에서는, 암 예측은 이진법일 수 있으며 "암" 또는 "비-암"으로 구성된 그룹에서 선택될 수 있고, 제2 방식에서는, 암 예측은 많은 암 유형과 "비-암"의 그룹에서 선택된다. 추가 실시형태에서, 암 예측은 많은 암 유형 각각에 대한 예측 값을 갖는다. 더욱이, 분석 시스템은 테스트 샘플이 암 유형 중 하나일 가능성이 가장 높다고 결정할 수 있다. 테스트 샘플에 대한 암 예측을 유방암 가능성 65%, 폐암 가능성 25%, 비-암 가능성 10%인 위의 예에 따르면, 분석 시스템은 테스트 샘플이 유방암에 걸릴 가능성이 가장 높다고 결정할 수 있다. 암 예측이 암이 아닐 가능성이 60%이고 암이 발생할 가능성이 40%라는 이진법인 다른 예에서, 분석 시스템은 테스트 샘플에 암이 없을 가능성이 가장 높다고 결정한다. 추가 실시형태에서, 가장 가능성이 높은 암 예측은 테스트 피험자가 해당 암 유형을 갖는 것으로 묘사하기 위해 여전히 임계값(예를 들어, 40%, 50%, 60%, 70%)와 비교될 수 있다. 가능성이 가장 높은 암 예측이 해당 임계값을 초과하지 않는 경우, 분석 시스템은 결론이 나지 않은 결과를 반환할 수 있다.

[0261] 추가 실시형태에서, 분석 시스템은 프로세스(500)의 단계 560에서 훈련된 암 분류기를 프로세스(500)의 단계 570에서 훈련된 다른 암 분류기와 연결한다. 분석 시스템은 프로세스(500)의 단계 560에서 이진법 분류기로서 훈련된 암 분류기에 테스트 특징 벡터를 입력할 수 있다. 분석 시스템은 암 예측 결과를 수신할 수 있다. 암 예

측은 테스트 피험자가 암에 걸렸을 가능성이 있는지 또는 없을 가능성이 있는지에 관한 이진법일 수 있다. 다른 구현예에서, 암 예측은 암 가능성 및 비-암 가능성을 설명하는 예측 값을 포함한다. 예를 들어, 암 예측은 85%의 암 예측 값과 15%의 비-암 예측 값을 갖는다. 분석 시스템은 테스트 피험자가 암에 걸릴 가능성이 있다고 결정할 수 있다. 분석 시스템이 테스트 피험자가 암에 걸릴 가능성이 있다고 결정하면, 분석 시스템은 다양한 암 유형을 구별하도록 훈련된 멀티클래스 암 분류기에 테스트 특징 벡터를 입력할 수 있다. 멀티클래스 암 분류기는 테스트 특징 벡터를 수신하여 복수의 암 유형 중 암 유형에 대한 암 예측을 반환할 수 있다. 예를 들어, 멀티클래스 암 분류기는 테스트 피험자가 난소암에 걸릴 가능성이 가장 높다는 것을 지정하는 암 예측을 제공한다. 다른 구현예에서, 멀티클래스 암 분류기는 복수의 암 유형 중 각각의 암 유형에 대한 예측 값을 제공한다. 예를 들어, 암 예측은 40%의 유방암 유형 예측값, 15%의 대장암 유형 예측값, 45%의 간암 예측값을 포함할 수 있다.

[0262] 이진법 암 분류의 일반화된 실시형태에 따르면, 분석 시스템은 테스트 샘플의 시퀀싱 데이터(예를 들어, 메틸화 시퀀싱 데이터, SNP 시퀀싱 데이터, 기타 DNA 시퀀싱 데이터, RNA 시퀀싱 데이터 등)에 기초하여 테스트 샘플의 암 점수를 결정할 수 있다. 분석 시스템은 테스트 샘플이 암을 갖고 있을 가능성이 있는지 예측하기 위해 테스트 샘플의 암 점수를 이진법 임계값 컷오프와 비교할 수 있다. 이진법 임계값 컷오프는 하나 이상의 TOO 하위 유형 클래스에 기초하는 TOO 임계값을 사용하여 조정될 수 있다. 분석 시스템은 하나 이상의 가능성 있는 암 유형을 나타내는 암 예측을 결정하기 위해 멀티클래스 암 분류기에서 사용하기 위한 테스트 샘플에 대한 특징 벡터를 추가로 생성할 수 있다.

[0263] 분류기는 테스트 피험자, 예를 들어 질병 상태가 알려지지 않은 피험자의 질병 상태를 결정하는 데 사용될 수 있다. 이 방법은 테스트 피험자로부터 얻은 생물학적 샘플 내 대응하는 복수의 핵산 단편의 복수의 게놈 특징 중 각각의 게놈 특징에 대한 값을 포함하는 테스트 게놈 데이터 구성(예를 들어, 단일 시점 테스트 데이터)을 전자 형식으로 얻는 단계를 포함할 수 있다. 그 다음, 방법은 테스트 게놈 데이터 구성을 테스트 분류기에 적용하여 테스트 피험자의 질병 상태를 결정하는 단계를 포함할 수 있다. 테스트 피험자는 이전에 질병 상태로 진단되지 않았을 수 있다.

[0264] 분류기는 적어도 (i) 제1 시점에 테스트 피험자로부터 획득한 제1 생물학적 샘플로부터 생성된 제1 테스트 게놈 데이터 구성, 및 (ii) 제2 시점에 테스트 피험자로부터 획득한 제2 생물학적 샘플로부터 생성된 제2 테스트 게놈 데이터 구성을 사용하는 일시적 분류기일 수 있다.

[0265] 훈련된 분류기는 테스트 피험자, 예를 들어 질병 상태가 알려지지 않은 피험자의 질병 상태를 결정하는 데 사용될 수 있다. 이 경우, 방법은 테스트 피험자에 대한 테스트 시계열 데이터 세트를 전자 형태로 획득하는 단계를 포함할 수 있으며, 여기서 테스트 시계열 데이터 세트는 복수의 시점 중 각각의 시점에 대해, 각각의 시점에 테스트 피험자로부터 얻은 대응하는 생물학적 샘플 내 대응하는 복수의 핵산 단편의 복수의 유전형 특징에 대한 값을 포함하는 대응하는 테스트 유전형 데이터 구성, 및 복수의 시점 중 각각의 연속 시점 쌍에 대해, 각각의 연속 시점 쌍 사이의 시간 길이의 표시를 포함한다. 그 다음, 방법은 테스트 분류기에 테스트 유전자형 데이터 구성을 적용하여 테스트 피험자의 질병 상태를 결정하는 단계를 포함할 수 있다. 테스트 피험자는 이전에 질병 상태로 진단되지 않았을 수 있다.

[0266] IV. 응용(APPLICATIONS)

[0267] 일부 실시형태에서, 본 발명의 방법, 분석 시스템 및/또는 분류기는 암의 존재 검출, 암 진행 또는 재발 모니터링, 치료 반응 또는 유효성 모니터링, 존재 결정 또는 최소 잔존 질환(MRD) 모니터링, 또는 이들의 조합을 수행하는 데 사용될 수 있다. 예를 들어, 본원에 설명된 바와 같이, 분류기는 테스트 특징 벡터가 암에 걸린 피험자로부터 유래할 가능성을 설명하는 확률 점수(예를 들어, 0 내지 100)를 생성하는 데 사용될 수 있다. 일부 실시형태에서, 확률 점수는 피험자가 암에 걸렸는지 여부를 결정하기 위해 임계 확률과 비교된다. 다른 실시형태에서, 가능성 또는 확률 점수는 질병 진행을 모니터링하거나 치료 효과(예를 들어, 치료 효능)를 모니터링하기 위해 다수의 상이한 시점(예를 들어, 치료 전 또는 치료 후)에서 평가될 수 있다. 또 다른 실시형태에서, 가능성 또는 확률 점수는 임상적 결정(예를 들어, 암 진단, 치료 선택, 치료 유효성 평가 등)을 내리거나 이에 영향을 미치기 위해 사용될 수 있다. 예를 들어, 일실시형태에서 확률 점수가 임계값을 초과하는 경우, 의사는 적절한 치료를 처방할 수 있다.

[0268] IV.A. 암의 조기 발견

[0269] 일부 실시형태에서, 본 발명의 방법 및/또는 분류기는 암에 걸린 것으로 의심되는 피험자의 암의 존재 또는 부

재를 검출하는 데 사용된다. 예를 들어, 분류기(예를 들어, 섹션 III에서 위에서 설명하고 섹션 V에서 예시한 바와 같은)는 테스트 특징 벡터가 암에 걸린 피험자로부터 나올 가능성을 설명하는 암 예측을 결정하는 데 사용될 수 있다.

[0270] 일 실시형태에서, 암 예측은 테스트 샘플이 암을 가지고 있는지 여부에 대한 가능성(예를 들어, 0과 100 사이의 점수)(즉, 이진법 분류)이다. 따라서, 분석 시스템은 테스트 피험자가 암에 걸렸는지 여부를 결정하기 위한 임계값을 결정할 수 있다. 예를 들어, 60 이상의 암 예측은 피험자가 암에 걸렸다는 것을 나타낼 수 있다. 또 다른 실시형태에서, 65 이상, 70 이상, 75 이상, 80 이상, 85 이상, 90 이상, 또는 95 이상의 암 예측은 피험자가 암에 걸렸다는 것을 나타낸다. 다른 실시형태에서, 암 예측은 질병의 중증도를 나타낼 수 있다. 예를 들어, 80의 암 예측은 80 미만의 암 예측(예를 들어, 70의 확률 점수)과 비교하여 암의 더 심각한 형태 또는 후기 단계를 나타낼 수 있다. 유사하게, 시간 경과에 따른 암 예측의 증가(예를 들어, 2개 이상의 시점에서 채취한 동일 피험자의 다수의 샘플로부터 테스트 특징 벡터를 분류하여 결정됨)는 질병 진행을 나타낼 수 있거나 시간 경과에 따른 암 예측의 감소는 성공적인 치료를 나타낼 수 있다.

[0271] 다른 실시형태에서, 암 예측은 많은 예측 값을 포함하며, 여기서 분류(즉, 멀티클래스 분류)되는 복수의 암 유형 각각은 예측 값(예를 들어, 0과 100 사이의 점수)을 갖는다. 예측 값은 주어진 훈련 샘플(그리고 추론 동안 훈련 샘플)이 각각의 암 유형을 가질 가능성에 대응할 수 있다. 분석 시스템은 최고 예측 값을 갖는 암 유형을 식별하고 테스트 피험자가 해당 암 유형을 가질 가능성이 있음을 나타낼 수 있다. 다른 실시형태에서, 분석 시스템은 최고 예측 값을 임계 값(예를 들어, 50, 55, 60, 65, 70, 75, 80, 85 등)과 추가로 비교하여 테스트 피험자가 해당 암 유형을 가질 가능성이 있는지 결정한다. 다른 실시형태에서, 예측 값은 또한 질병의 중증도를 나타낼 수 있다. 예를 들어, 80 초과의 예측 값은 60의 예측 값에 비해 암의 더 심각한 형태 또는 후기 단계를 나타낼 수 있다. 유사하게, 시간 경과에 따른 예측 값의 증가(예를 들어, 2개 이상의 시점에서 채취한 동일 피험자의 다수의 샘플로부터 테스트 특징 벡터를 분류하여 결정됨)는 질병 진행을 나타낼 수 있거나 시간 경과에 따른 예측 값의 감소는 성공적인 치료를 나타낼 수 있다.

[0272] 본 발명의 양태에 따르면, 본 발명의 방법 및 시스템은 다수의 암 징후를 검출하거나 분류하도록 훈련될 수 있다. 예를 들어, 본 발명의 방법, 시스템 및 분류기는 1개 이상, 2개 이상, 3개 이상, 5개 이상, 10개 이상, 15개 이상, 또는 20개 이상의 서로 다른 암 유형의 존재를 검출하는 데 사용될 수 있다.

[0273] 본 발명의 방법, 시스템 및 분류기를 사용하여 검출될 수 있는 암의 예에는 암종, 림프종, 모세포종, 육종 및 백혈병 또는 림프성 악성 종양이 포함된다. 이러한 암의 보다 특정한 예는 편평 세포암(예를 들어, 상피 편평 세포암), 피부 암종, 흑색종, 소세포 폐암을 포함한 폐암, 비소세포 폐암("NSCLC"), 폐 선암종 및 폐 편평상피 암종, 복막암, 위장암을 포함한 위암 또는 위암, 췌장암(예를 들어, 췌관 선암종), 자궁경부암, 난소암(예를 들어, 고급 장액성 난소암종), 간암(예를 들어, 간세포암종(HCC)), 간종양, 간암종, 방광암(예를 들어, 요로상피 방광암), 고환(생식세포종)암, 유방암(예: HER2 양성, HER2 음성 및 삼중 음성 유방암), 뇌암(예를 들어, 성상세포종, 신경교종(예를 들어, 교모세포종)), 결장암, 직장암, 결장직장암, 자궁내막암 또는 자궁암종, 침샘암종, 신장 또는 신장암(예를 들어, 신장세포암종, 신모세포종 또는 윌름스 종양), 전립선암, 외음부암, 갑상선암, 항문암종, 음경암종, 두경부암, 식도암종 및 비인두암종(NPC)을 포함하지만 이들로 제한되지 않는다. 암의 추가적인 예는 망막모세포종, 협막세포종, 남성배세포종, 비호지킨 림프종(NHL)을 포함하나 이에 제한되지 않는 혈액 악성종양, 다발성 골수종 및 급성 혈액 악성종양, 자궁내막증, 섬유육종, 융모막암종, 후두암종, 카포시 육종, 신경초종, 희돌기교종, 신경아세포종, 횡문근육종, 골성육종, 평활근육종, 및 요로암종을 포함하지만 이들로 제한되지 않는다.

[0274] 일부 실시형태에서, 암은 항문직장암, 방광암, 유방암, 자궁경부암, 결장직장암, 식도암, 위암, 두경부암, 간담도암, 백혈병, 폐암, 림프종, 흑색종, 다발성 골수종, 난소암, 췌장암, 전립선암, 신장암, 갑상선암, 자궁암, 또는 이들의 임의의 조합 중 하나 이상이다.

[0275] 일부 실시형태에서, 하나 이상의 암은 "고신호" 암(5년 암 특이적 사망률이 50% 초과인 암으로 정의됨), 예를 들어 항문직장암, 결장직장암, 식도암, 두경부암, 간담도암, 폐암, 난소암, 췌장암, 림프종, 다발성 골수종 등일 수 있다. 고신호 암은 더 공격적인 경향이 있으며, 일반적으로 환자로부터 얻은 테스트 샘플에서 평균보다 높은 무세포 핵산 농도를 갖는다.

[0276] IV.B. 암 및 치료 모니터링

[0277] 일부 실시형태에서, 암 예측은 질병 진행을 모니터링하거나 치료 효과(예를 들어, 치료 효능)를 모니터링하기

위해 다수의 상이한 시점(예를 들어, 치료 전 또는 치료 후)에 평가될 수 있다. 예를 들어, 본 발명은 제1 시점에 암 환자로부터 제1 샘플(예를 들어, 제1 혈장 cfDNA 샘플)을 획득하는 단계, 그로부터 제1 암 예측을 결정하는 단계(본원에 설명된 바와 같음), 제2 시점에 암 환자로부터 제2 테스트 샘플(예를 들어, 제2 혈장 cfDNA 샘플)을 획득하는 단계, 및 그로부터 제2 암 예측을 결정하는 단계(본원에 설명된 바와 같음)를 포함하는 방법을 포함한다.

[0278] 특정 실시형태에서, 제1 시점은 암 치료 전(예를 들어, 절제 수술 또는 치료적 개입 전)이고, 제2 시점은 암 치료 후(예를 들어, 절제 수술 또는 치료적 개입 후)이고, 분류기는 치료 효과를 모니터링하는 데 사용된다. 예를 들어, 제2 암 예측이 제1 암 예측에 비해 감소하면, 치료를 성공한 것으로 간주된다. 그러나, 제2 암 예측이 제1 암 예측에 비해 증가하면, 치료가 성공적이지 않은 것으로 간주된다. 다른 실시형태에서, 제1 시점과 제2 시점 둘 모두는 암 치료 전(예를 들어, 절제 수술 또는 치료적 개입 전)이다. 또 다른 실시형태에서, 제1 시점과 제2 시점 둘 모두는 암 치료 후(예를 들어, 절제 수술 또는 치료적 개입 후)이다. 또 다른 실시형태에서, 예를 들어 암 진행을 모니터링하고, 암이 완화되었는지 확인하고(예를 들어, 치료 후), 잔여 질병 또는 질병의 재발을 모니터링 또는 감지하거나 치료(예를 들어, 치료적) 효능을 모니터링하기 위해, 제1 시점과 제2 시점에 암 환자로부터 cfDNA 샘플을 얻어 분석할 수 있다.

[0279] 당업자는 환자의 암 상태를 모니터링하기 위해 본 발명의 방법에 따라 임의의 원하는 시점 세트에 걸쳐 암 환자로부터 시험 샘플을 얻을 수 있고 분석할 수 있다는 것을 쉽게 이해할 것이다. 일부 실시형태에서, 제1 시점과 제2 시점은 약 15분 내지 최대 30년의 시간 범위만큼, 예를 들어 약 30분, 예를 들어 약 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 또는 약 24시간, 예를 들어 약 1, 2, 3, 4, 5, 10, 15, 20, 25 또는 약 50일, 또는 약 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 또는 12개월, 또는 약 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15, 15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20, 20.5, 21, 21.5, 22, 22.5, 23, 23.5, 24, 24.5, 25, 25.5, 26, 26.5, 27, 27.5, 28, 28.5, 29, 29.5 또는 약 30년만큼 분리된다. 다른 실시형태에서, 테스트 샘플은 적어도 5개월에 한 번, 적어도 6개월에 한 번, 적어도 1년에 한 번, 적어도 2년에 한 번, 적어도 3년에 한 번, 적어도 1년에 한 번, 적어도 4년에 한 번 또는 적어도 5년에 한 번 환자로부터 얻을 수 있다.

[0280] IV.C. 치료

[0281] 또 다른 실시형태에서, 암 예측은 임상적 결정(예를 들어, 암 진단, 치료 선택, 치료 유효성 평가 등)을 내리거나 이에 영향을 주기 위해 사용될 수 있다. 예를 들어, 일 실시형태에서, 암 예측(예를 들어, 암 또는 특정 암 유형에 대한)이 임계값을 초과하는 경우, 의사는 적절한 치료(예를 들어, 절제 수술, 방사선 요법, 화학요법 및/또는 면역요법)를 처방할 수 있다.

[0282] (본원에 설명된) 분류기는 샘플 특징 벡터가 암에 걸린 피험자로부터 나온 것이라는 암 예측을 결정하는 데 사용될 수 있다. 일 실시형태에서, 암 예측이 임계값을 초과하는 경우 적절한 치료(예를 들어 절제 수술 또는 치료)가 처방된다. 예를 들어, 일 실시형태에서, 암 예측이 60 이상이면, 하나 이상의 적절한 치료법이 처방된다. 다른 실시형태에서, 암 예측이 65 이상, 70 이상, 75 이상, 80 이상, 85 이상, 90 이상, 또는 95 이상인 경우, 하나 이상의 적절한 치료법이 처방된다. 다른 실시형태에서, 암 예측은 질병의 중증도를 나타낼 수 있다. 이후 질병의 중증도에 맞는 적절한 치료법이 처방될 수 있다.

[0283] 일부 실시형태에서, 치료제는 화학요법제, 표적화된 암 치료제, 분화 요법제, 호르몬 요법제 및 면역요법제로 이루어진 그룹으로부터 선택되는 하나 이상의 암 치료제이다. 예를 들어, 치료제는 알킬화제, 항대사물질, 안트라사이클린, 항종양 항생제, 세포골격 교란물질(탁산), 토포이소머라제 억제제, 유사분열 억제제, 코르티코스테로이드, 키나제 억제제, 뉴클레오티드 유사체, 백금 기반제 및 이들의 조합으로 이루어진 그룹으로부터 선택되는 하나 이상의 화학요법제이다. 일부 실시형태에서, 치료제는 신호 전달 억제제(예를 들어 티로신 키나제 및 성장 인자 수용체 억제제), 히스톤 데아세틸라제(HDAC) 억제제, 레티노산 수용체 작용제, 프로테오솜 억제제, 혈관신생 억제제 및 단클론 항체 접합체로 이루어진 그룹으로부터 선택되는 하나 이상의 표적화된 암 치료제이다. 일부 실시형태에서, 치료제는 트레티노인, 알리트레티노인 및 벡사로텐과 같은 레티노이드를 포함하는 하나 이상의 분화 요법제이다. 일부 실시형태에서, 치료제는 항에스트로겐, 아로마타제 억제제, 프로게스틴, 에스트로겐, 항안드로겐 및 GnRH 효능제 또는 유사체로 이루어진 그룹으로부터 선택되는 하나 이상의 호르몬 요법제이다. 일 실시형태에서, 치료제는 리툭시맙(RITUXAN) 및 알렘투주맙(CAMPATH)과 같은 단클론 항체 요법, BCG, 인터루킨-2(IL-2)와 같은 비특이적 면역요법 및 보조제, 및 탈리도마이드 및 레날리도마이드(REVLIMID)와 같은 인

터페론-알파, 면역조절제를 포함하는 그룹으로부터 선택되는 하나 이상의 면역 요법제이다. 종양의 유형, 암 단계, 암 치료 또는 치료제에 대한 이전 노출, 및 암의 다른 특성과 같은 특성에 기초하여 적절한 암 치료제를 선택하는 것은 숙련된 의사 또는 종양학자의 능력 내에 있다.

[0284] V. 키트 구현

[0285] 암 분류기에 관한 방법을 포함하여 위에서 설명된 방법을 수행하기 위한 키트가 본원에 또한 개시되어 있다. 키트는 유전 물질을 포함하는 개인으로부터의 샘플을 수집하기 위한 하나 이상의 수집 용기를 포함할 수 있다. 샘플은 혈액, 혈장, 혈청, 소변, 대변, 타액, 기타 유형의 체액 또는 이들의 조합을 포함할 수 있다. 이러한 키트는 샘플에서 핵산을 분리하기 위한 시약을 포함할 수 있다. 시약은 완충액 및 검출제를 포함하여 핵산 서열을 분석하기 위한 시약을 추가로 포함할 수 있다. 하나 이상의 실시형태에서, 키트는 특정 게놈 영역, 특정 돌연변이, 특정 유전적 변이체, 또는 이들의 일부 조합을 표적화하기 위한 프로브를 포함하는 하나 이상의 시퀀싱 패널을 포함할 수 있다. 하나 이상의 실시형태에서, 키트는 예를 들어 표 2, 표 4 또는 이들의 일부 조합으로부터의 오염 표적화 프로브를 포함하는 적어도 하나의 패널을 포함한다. 다른 실시형태에서, 키트를 통해 수집된 샘플은 샘플 내 핵산의 서열을 분석하기 위해 시퀀싱 패널을 사용할 수 있는 시퀀싱 실험실에 제공된다.

[0286] 키트는 키트에 포함된 시약의 사용 지침을 추가로 포함할 수 있다. 예를 들어, 키트는 샘플 수집, 테스트 샘플 내 핵산 추출에 대한 지침을 포함할 수 있다. 지침의 예에는 시약을 추가하는 순서, 테스트 샘플 내 핵산을 분리하는 데 사용할 원심 분리 속도, 핵산 증폭 방법, 핵산 시퀀싱 방법 또는 이들의 조합이 포함될 수 있다. 지침은 설명된 임의의 방법의 단계를 수행하기 위해 분석 시스템(200)으로서 컴퓨팅 장치를 작동하는 방법을 추가로 밝힐 수 있다.

[0287] 위의 구성요소에 더하여, 키트는 본 개시내용 전반에 걸쳐 설명된 다양한 방법을 수행하기 위한 컴퓨터 소프트웨어를 저장하는 컴퓨터 판독 가능 저장 매체를 포함할 수 있다. 이들 지침이 존재할 수 있는 한 가지 형태는 적절한 매체 또는 기재(예를 들어, 정보가 인쇄된 종이 또는 키트 포장, 패키지 삽입물)에 인쇄된 정보이다. 또 다른 수단은 명령어가 컴퓨터 코드 형태로 저장되어 있는 컴퓨터 판독 가능 매체(예를 들어, 디스켓, CD, 하드 드라이브, 네트워크 데이터 저장소)일 수 있다. 존재할 수 있는 또 다른 수단은 제거된 부위의 정보에 액세스하기 위해 인터넷을 통해 사용할 수 있는 웹사이트 주소이다.

[0288] VI. 예시적인 결과

[0289] VI.A. 샘플 수집 및 처리

[0290] 연구 설계 및 샘플: CCGA(NCT02889978)는 종단적 추적 조사를 포함한 전향적, 다기관, 사례 관리, 관찰 연구이다. 식별되지 않은 생체 표본은 342개 부위의 약 15,000명의 참가자로부터 수집되었다. 샘플은 훈련(1,785) 세트와 테스트(1,015) 세트로 나누어졌으며, 각각의 코호트의 부위 전체에 걸쳐 암 유형과 비-암의 사전 지정된 분포를 보장하기 위해 샘플을 선택했으며, 암 샘플 및 비-암 샘플은 성별에 따라 빈도 연령을 일치시켰다.

[0291] 전체 게놈 중아황산염 시퀀싱: cfDNA를 혈장에서 분리하고 cfDNA 분석을 위해 전체 게놈 중아황산염 시퀀싱(WGBS; 30x 깊이)을 사용했다. cfDNA는 변형된 QIAamp 순환 핵산 키트(Qiagen, Germantown, MD)를 사용하여 환자당 2개의 혈장 튜브(최대 합산 부피 10 ml)에서 추출되었다. 최대 75 ng의 혈장 cfDNA를 EZ-96 DNA 메틸화 키트(Zymo Research, D5003)를 사용하여 중아황산염 변환에 적용했다. 변환된 cfDNA는 Accel-NGS Methyl-Seq DNA 라이브러리 준비 키트(Swift BioSciences, Ann Arbor, MI)를 사용하여 이중 인덱싱된 시퀀싱 라이브러리를 준비하는 데 사용되었으며, 구성된 라이브러리는 Illumina 플랫폼용 KAPA 라이브러리 정량 키트(Kapa Biosystems, Wilmington, MA)를 사용하여 정량화되었다. 10% PhiX v3 라이브러리(Illumina, FC-110-3001)와 함께 4개의 라이브러리를 풀링하여 Illumina NovaSeq 7000 S2 플로우 셀에 클러스터링한 후 150bp 페어드 엔드 시퀀싱(30x)을 수행했다.

[0292] 각각의 샘플에 대해, WGBS 단편 세트는 변칙적 메틸화 패턴을 갖는 단편의 작은 서브세트로 축소되었다. 추가적으로, 과메틸화된 cfDNA 단편 또는 저메틸화된 cfDNA 단편이 선택되었다. 변칙적 메틸화 패턴을 갖고 과메틸화되거나 과메틸화되는 cfDNA 단편, 즉 UFXM이 선택되었다. 암이 없는 개인에게서 높은 빈도로 발생하는 단편이나 불안정한 메틸화가 있는 단편은 암 상태 분류를 위한 매우 차별적인 특징을 생성할 가능성이 없다. 따라서 본 연구자는 CCGA 연구로부터 암이 없는 108명의 비흡연 참가자(연령: 58±14세, 79[73%] 여성)의 독립적인 참조 세트(즉, 참조 게놈)를 사용하여 전형적인 단편의 통계 모델과 데이터 구조를 생성했다. 이들 샘플은 위의 섹션 II.C에서 설명된 대로 단편 내 CpG 메틸화 상태의 주어진 서열의 가능성을 추정하는 마르코프 사슬 모델(3차)을 훈련하는 데 사용되었다. 이 모델은 정상 단편 범위(p-값>0.001) 내에서 보정되는 것으로 입증되었으며 마르코

프 모델의 p-값이 >=0.001인 단편을 충분히 특이하지 않은 것으로 거부하는 데 사용되었다.

[0293] 위에서 설명한 대로, 추가 데이터 감소 단계에서는 5개 이상의 CpG가 포함되고 평균 메틸화가 >0.9(과메틸화) 또는 <0.1(저메틸화)인 단편만 선택했다. 이 과정을 통해 훈련 중 암이 없는 참가자의 경우 중앙값(범위) 2,800(1,500 내지 12,000) UFXM 단편이 생성되었고, 훈련 중 암이 있는 참가자의 경우 중앙값(범위) 3,000(1,200 내지 420,000) UFXM 단편이 생성되었다. 이 데이터 축소 과정은 참조 세트 데이터만 사용했기 때문에 이 단계는 각각의 샘플에 한 번만 적용하면 되었다.

[0294] VI.B. 오염 검출 결과

[0295] 예시적인 결과의 제1 그룹으로서, 표 2 및 표 4의 오염 마커 프로브의 성능을 조사하기 위해, 의도적인 오염 유무에 관계없이 다양한 내부 연구에서 얻은 혈장 cfDNA 샘플 및 gDNA 샘플의 다수의 배치를 코드베이스 개발에 추가 노력을 기울이기 전에 예비 분석에 사용했다.

[0296] 도 7은 예시적인 결과의 제1 그룹에 따라, 주어진 샘플에 대해 동형접합성으로 불리는 각각의 오염 마커에 대해 참조 또는 대체로 불리는 전체 단편 수에 대한 오염으로 분류된 단편 수의 분율 분포를 예시한다. 분석 시스템은 표 2와 표 4의 오염 마커 프로브를 활용하여 샘플의 오염 단편을 식별했다. 오염 단편의 분율은 오염 마커 프로브와 겹치는 각각의 샘플의 총 단편 수에 대한 식별된 오염 단편의 비율로 계산되었다. 그래프(700)에 표시된 대로, 각각의 샘플의 오염 단편 분율이 표시되었으며, y축은 오염 단편 분율을 나타낸다. 0.001 초과의 값을 갖는 표본이 여러 개 있었지만, 압도적 다수는 0.001 미만의 값을 나타냈다. 그래프(700)의 박스 플롯은 모두 약 0.0005보다 훨씬 아래인 하위 사분위수, 중앙값 및 상위 사분위수를 보여준다. 그래프(710)은 x축에 오염 단편의 분율이 표시되고 y축에 샘플 수가 표시되는 동일 결과를 보여준다. 예시적인 결과의 제2 그룹에 대해 대응하는 도면에 대해 도 17을 참조한다.

[0297] 도 8은 예시적인 결과의 제1 그룹에 따른 오염 마커의 대립유전자 빈도의 산점도를 예시한다. 분석 시스템은 CCGA 연구 및 후속 연구의 샘플을 사용하여 오염 마커의 대립유전자 분율을 계산했다. 분석 시스템은 또한 게놈 데이터베이스인 1000 Genomes Project 및 gnomAD로부터 모집단 대립유전자 분율을 얻었다. 각각의 오염 마커는 모집단 대립유전자 분율을 나타내는 x축과 샘플로부터 계산된 대립유전자 분율을 나타내는 y축으로 표시된다. 예시적인 결과의 제2 그룹에 대한 대응하는 도면에 대해 도 14를 참조한다.

[0298] 도 9는 예시적인 결과의 제1 그룹에 따른, SNP 오염 마커(900) 및 인델 오염 마커(910)의 유전자형 및 접합성을 나타내는 2개의 그래프를 예시한다. 다수의 SNP 오염 마커에 대한 그래프(900)에서, 왼쪽에 있는 3개의 박스 그림은 샘플의 제1 세트(참조 동형접합, 대체 동형접합성 및 이형접합성)의 접합성의 비례 분석을 나타내고, 오른쪽의 3개의 박스 그림은 샘플의 제2 세트(참조 동형접합, 대체 동형접합성 및 이형접합성)의 접합성의 비례 분석을 나타낸다. 마찬가지로, 인델 오염 마커에 대한 그래프(910)는 또한 샘플의 두 세트 사이에서 분할된 인델 오염 생성자의 접합성의 비례적 분석을 나타낸다. 예시적인 결과의 제2 그룹에 대한 해당 그림은 도 15 및 도 16을 참조한다.

[0299] 도 10은 예시적인 결과의 제1 그룹에 따라, 동형접합성이고 해당 샘플에 대한 오염을 추정하는 데 유용한 것으로 간주되는 주어진 샘플에 대해 오염 마커와 중첩되는 충분한 단편을 갖는 오염 마커의 분율을 보여주는 그래프를 예시한다. 분석 시스템은 각각의 샘플에 대한 오염 마커의 접합성을 결정했다. 그런 다음 분석 시스템은 샘플에서 동형접합성인 것으로 발견된 오염 마커의 백분율을 계산했다. 샘플에서 동형접합인 것으로 발견된 오염 마커의 수가 많을수록 오염 검출 능력이 향상된다. 또한, 이들 동형접합성 부위는 샘플의 오염을 추정하는 데 유용한 것으로 간주될 만큼 충분한 샘플 단편이 겹치는 등 다양한 품질 검사 기준을 거쳐 주어진 샘플에 유용한 부위의 최종 백분율을 산출한다. 해당 백분율은 다수의 SNP 부위 오염 마커에 대해, 인델 부위 오염 마커에 대해, 다수의 SNP 부위 오염 마커와 인델 부위 오염 마커 둘 모두에 대해 구체적으로 표시되었다. 제1 박스 플롯(1000)에서, 중앙값 백분율은 약 0.525였다. 다수의 SNP 부위 오염 마커에 대한 제2 박스 플롯(1010)에서, 중앙값 백분율은 약 0.575였다. 제3 박스 플롯(1020)은 인델 부위 오염 마커에 대한 것이다. 중앙값은 약 0.475였다. 예시적인 결과의 제2 그룹에 대한 대응하는 도면에 대해 도 15 및 도 13를 참조한다.

[0300] 도 11a 및 도 11b는 예시적인 결과의 제1 그룹에 따라 샘플의 서로 다른 배치에 대한 추정된 오염 레벨 검출 그래프를 예시한다. 그래프(1100)는 샘플의 "디리스킹(Derisking)" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1110)는 샘플의 "doppler_prelim_test" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1120)는 샘플의 "Hyb1_SOP_12plex" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1130)는 샘플의 "MRD" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1140)는 샘플의

"cfDNA 적정" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1150)는 샘플의 "gDNA 적정" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1160)는 샘플의 "다운샘플링된 gDNA 적정(v1.0 화학)" 배치로부터 추정된 샘플 오염 레벨의 분포를 보여준다. 그래프(1170)는 샘플의 "다운샘플링된 gDNA 적정(v1.5 화학)" 배치로부터 추정된 샘플 오염 레벨의 분포를 또한 보여준다. 예시적인 결과의 제2 그룹에 대한 대응하는 그림에 대해 도 20 및 도 21를 참조한다.

[0301] 예시적인 결과의 제2 그룹으로서, 표 2 및 표 4의 오염 마커 프로브의 성능을 조사하기 위해, 의도적인 오염이 없는 84명의 고유한 개인의 혈장 cfDNA 샘플 코호트를 수정되고 성숙한 코드베이스로 최종 분석에 사용했다.

[0302] 도 12는 실험에서 84개 샘플에 대해 집계된, 표 2 및 표 4에 나열된 오염 마커당 획득된 고유 cfDNA 단편 수의 분포를 예시한다. x축은 전체 84개의 샘플에 걸쳐 집계되는, 오염 마커를 표적화하도록 설계된 프로브와 겹치는 고유한 cfDNA 단편 분자의 수를 나타내며, y축은 x축으로 표시된 빈(bin)에 속하는 오염 마커의 분율을 나타낸다.

[0303] 표 2와 표 4에 나열된 오염 마커는 분석 시스템의 단계 220와 단계 250 없이 선택되었다. 하디-바인베르크 평형이 아닌 모든 마커는 참조 및 대체 일배체형에 대한 모집단 데이터베이스 빈도에 기초하여 필터링되었다. 이 경우에, 하디-바인베르크 항(p2 + 2pq + q2)의 값은 [0.9, 1.5] 범위에 있었다(모집단의 비 무작위 교배 조건에서는 1보다 높은 값에 대한 편향이 예상된다). 표 2 및 표 4의 1000개 마커 중 이 조건은 4개의 마커에 실패했다.

[0304] 각각의 오염 마커는 해당 마커에 대한 프로브와 겹쳤던 cfDNA 단편에 대한 각각의 개별 샘플에 대해 추가 품질 검사(QC)를 거쳤다. 특정 샘플에 대한 품질 검사 조건을 통과하지 못한 마커는 나중에 오염 분율 추정을 포함하여 특정 마커에 대한 게놈 변이 호출에 의존하는 모든 분석을 위해 해당 샘플에 대해 나중에 폐기되었다.

[0305] 실험의 84개 샘플에서 하나의 샘플과 오염 마커의 각각의 쌍에 대해, 모든 cfDNA 단편의 특정 분율(예를 들어, 다수의 SNP 마커의 경우 0.7, 인델 마커의 경우 0.5) 이상에 대한 참조 또는 대체로서, 다수의 SNP 마커 및 인델 마커에 대한 일배체형 및 대립유전자를 신뢰성 있게 호출하는 데 사용될 수 있는 게놈 변이체의 위치 범위와 겹치는 고유한 cfDNA 단편 분자의 최소 수, 이 경우 20개가 있었다. 후자의 조건은 마커와 샘플 쌍에 대해 예상되는 이론적 이항 확률 분포(이형접합성이라고 하는 마커의 경우 평균 0.5, 동형접합성이라고 하는 샘플의 모든 마커에 대한 집계 오염 비율에 따른 평균)에 따라, 대체 일배체형으로 묘사된 cfDNA 단편 수에 대한 참조 일배체형으로 묘사된 cfDNA 단편 수의 비율이 매우 가능성이 없어야 함(예를 들어, p-값 < 10 내지 5)을 확인하기 위해 확장된다.

[0306] 도 13은 이러한 품질 검사 프로세스의 결과를 예시한다. 언급된 기준에 기초하여, 84개 샘플 모두에 대해 851개의 마커가 통과되었고, 83개 샘플에 대해 68개의 마커가 통과되었으며, 82개 샘플에 대해 20개의 마커가 통과되었다. 84개 샘플 모두에 대해 7개(하디-바인베르크 평형 수용 조건을 충족하지 못한 4개 포함)의 마커가 실패했다. 나머지 마커는 이러한 극단 사이에서 다양한 실패율을 보였다.

[0307] 도 14 내지 도 16은 84개 샘플 중 적어도 82개에 대한 품질 확인 기준을 통과한 오염 마커에 대해 표 2 및 표 4의 오염 마커의 기반이 되는 게놈 변이체의 특성을 예시한다. 도 14는 이러한 오염 마커를 선택하기 위한 대립유전자 빈도 범위인 [0.3, 0.7] 범위에 있는 대립유전자 빈도의 산점도를 예시한다. 도 15는 마커가 이형접합성으로 불리는 빈도의 산점도를 예시한다. 도 16은 하디-바인베르크 항 값의 산점도를 예시한다. 이들 그래프 각각의 x축은 모집단 데이터베이스인 1000 Genomes(다수의 SNP 마커의 경우) 또는 gnomAD(인델 마커의 경우)에서 사용 가능한 데이터로부터 얻거나 계산한 값을 나타내고, y축은 우리의 실험에서는 84개의 cfDNA 샘플로부터 계산된 값을 나타낸다. 모든 점은 y = x 선(그래프에서 점선으로 표시됨) 주위에 약간의 노이즈가 있을 것으로 예상되었다.

[0308] cfDNA 단편 세트의 오염 부분을 추정하기 위해, 먼저, 오염 소스로부터 나온 cfDNA 단편을 식별했다. 마커를 요구하는 동형접합성 변이체와 반대되는 변이체로 명명된 모든 cfDNA 단편은 오염 단편으로 분류되었다. 단편이 오염 마커 부위와 겹치지 않거나 이형접합성으로 유전자형이 지정된 오염 마커 부위와 겹치는 단편의 서브세트는 오염 단편을 분류하고 오염 분율을 추정하기 위해 무시되었다. 오염 분율을 추정하는 능력은 적어도 하나의 오염 단편을 찾는 조건으로 설정되었다. 오염 단편은 분율일 수 없으므로, 검출될 수 있고 고려 중인 총 단편 수에 반비례하는 오염 분율에 대한 하한이 있다.

[0309] 도 17은 전체 84개 샘플에 걸쳐 각각의 마커에 대해 집계된, 주어진 샘플에 대해 동형접합성으로 불리는 각각의 오염 마커에 대해 참조 또는 대체로 불리는 전체 단편 수에 대한 오염으로 분류된 단편 수의 분율 분포를 예시한다. 그래프(1710)는 분포의 극단 및 사분위수를 나타내는 이들 값에 대한 지터링된 산점도 및 박스 플롯을 보

여준다. 이 값의 산술 평균은 $2x10^{-4}$이다. 검출 하한보다 낮은 값은 0으로 고정되어 0에서 작은 범프가 발생한다. 그래프(1720)는 동일 데이터(실선)에 대한 평활화된 밀도 선을 보여주며 또한 특정 오염 마커에 대한 cfDNA 단편의 총 개수인 샘플 크기 및 이항 파라미터 $p = 2x10^{-4}$를 갖는 데이터(점선)에 맞는 이항 분포를 사용하여 얻은 시뮬레이션 값에 대한 평활화된 밀도 선을 보여준다. 전반적으로, 0과 모드 근처에서 약간의 편차가 있는 좋은 적합성이 있으며, 원하는 경우 향후 조사 피험자가 될 수 있다.

[0310] 오염 단편의 개념을 발전시켜, 외부 소스로부터의 cfDNA 오염의 기본 프로세스를 모델링함으로써 주어진 cfDNA 샘플의 오염 분율을 추정했다. 샘플에 대해 동형접합성이라고 불리는 마커만 고려하면, 오염 분율이 cf이고 샘플에 요구되는 동형접합성 변이체와 반대되는 변이체의 모집단 대립유전자 빈도가 af_i인 경우, 마커에 대한 오염 단편을 관찰할 확률은 cf x af_i이다. 이 마커의 총 단편 수가 n_i인 경우, 해당 마커의 예상되는 오염 단편 수는 cf x af_i x n_i이다. 확률 이론의 기대 선형성 속성을 사용하면, 모든 마커에 대한 예상 숫자를 합산하여 모든 마커에 걸쳐 예상되는 총 오염 단편 수에 대한 공식, $nc = \sum_i (cf \times af_i \times n_i)$을 얻을 수 있다. 알려진 모든 변수를 한쪽으로 가져오도록 재정렬하면, 오염 분율의 추정치는 $cf = nc / (\sum_i (af_i \times n_i))$가 된다.

[0311] 도 18은 가상의 단편 세트에 대한 오염 분율을 추정하기 위한 공식의 적용을 예시한다. 이 예에서, 4개의 다수의 SNP와 2개의 인델 오염 마커가 있으며, 그 중 3개의 다수의 SNP와 1개의 인델 마커만 동형접합성이라고 한다. 3개의 오염 단편 식별, 각각의 마커에 대한 전체 단편 수, 및 반대 일배체형에 대한 각각의 마커의 대립유전자 빈도를 고려하여, 전체 샘플에 대한 오염 분율 추정치를 얻는다.

[0312] 도 19는 시뮬레이션 데이터에 오염 분율 모델을 적용한 결과를 나타낸다. 각각의 점에 대해, 모집단 빈도에 기초하여 표 2 및 표 4의 각각의 오염 마커에 대해 배경 게놈과 오염 소스 게놈 둘 모두에 대한 변형 호출(동형접합성 참조, 동형접합성 대체 또는 이형접합성)을 샘플링하여 데이터가 생성되었다. 그런 다음, 참조 일배체형 단편과 대체 일배체형 단편의 수는, 실험의 84개 샘플에서 이 마커에 대해 관찰된 cfDNA 단편의 평균 수의 크기 및 2개의 변이체 호출의 함수로서의 확률과 시뮬레이션 파라미터로서의 오염 분율 입력을 갖는 이항 분포로부터 샘플링되었다. 추정치의 변동성을 포착하기 위해 각각의 시뮬레이션을 100회 반복했다. 그래프의 x축은 시뮬레이션의 파라미터로 사용된 오염도를 나타내고, y축은 모델에 의해 추정된 오염도 값을 나타낸다. 점선은 y = x 선을 나타낸다. 각각의 박스 플롯은 주어진 오염 분율 파라미터에서 수행된 100번의 시뮬레이션에 대한 추정된 오염 분율의 범위를 보여준다. 범위는 중앙값이 예상 값에 매우 가깝고 오염 레벨이 증가함에 따라 사분위수 범위가 더 작아진다는 것을 나타낸다. 이러한 결과는 오염 분율을 추정하기 위해 본원에 설명된 모델을 검증한다.

[0313] 도 20은 각각이 다양한 적정 레벨을 갖는 cfDNA 샘플의 4개 적정 쌍에 오염 분율 모델을 적용한 결과를 예시한다. 적정 쌍의 기증자 샘플은 오염으로 처리될 수 있고 적정 레벨은 오염 분율로 처리될 수 있다. 오염 분율 추정치가 안정적으로 얻어졌는지 확인하기 위해, 각각의 쌍의 각각의 적정 레벨도 입력 재료 가용성에 따라 여러 번 반복되었다. x축은 적정 레벨을 나타내고 y축은 해당 레벨에서 적정된 각각의 쌍의 반복에 대한 예상 오염 분율을 나타낸다. 실선은 모든 관측치에 대한 선형 모델 피팅을 나타내고 점선은 y = x 선을 나타낸다. 그래프는 선형 모델 피팅이 y = x 선과 거의 동일한 기울기를 가지지만, 두 선의 절편이 다르다는 것을 보여주며, 이는 모든 샘플이 약 2.5×10^{-4} 값으로 일정하고 의도하지 않은 배경 오염이 있음을 나타낸다. 이러한 샘플 내의 오염 단편을 면밀히 조사한 결과, 이러한 일정한 잔류 오염은 실제이며 변이체 호출이나 기타 다른 기술적인 노이즈(여기에는 설명되지 않음)로 인한 것이 아니라는 사실이 밝혀졌다. 이들 결과는 오염 분율을 추정하기 위해 본원에 설명된 모델을 추가로 검증한다.

[0314] 도 21은 실험에서 84개의 cfDNA 샘플에 대한 추정된 오염 분율의 분포를 예시한다. 그래프는 추정된 오염 분율 값에 대한 박스 플롯과 함께 지터링된 산점도를 보여준다. 중앙값은 1.8×10^{-4}이고 평균값은 3.2×10^{-4}이다. 이 평균 값은 동일한 샘플 세트(2×10^{-4})에 대해 얻은 오염 단편 분율의 평균 값과 다르고 더 높으며, 이는 오염 분율 모델이 마커가 게놈 둘 모두에 대해 동일한 일배체형을 가질 때 식별될 수 없는 오염 단편도 설명하기 때문에 예상된다.

[0315] 도 22는 다수의 SNP 마커와 인델 마커를 개별적으로 고려할 때 실험에서 84개 샘플에 대해 얻은 추정치가 높은 상관 관계가 있으며 유의미한 체계적 편향을 나타내지 않음을 보여준다. 이는 오염 마커의 유형 둘 모두가 그들의 성능이 동일하다는 것을 확인한다.

[0316] VII. 추가 고려 사항

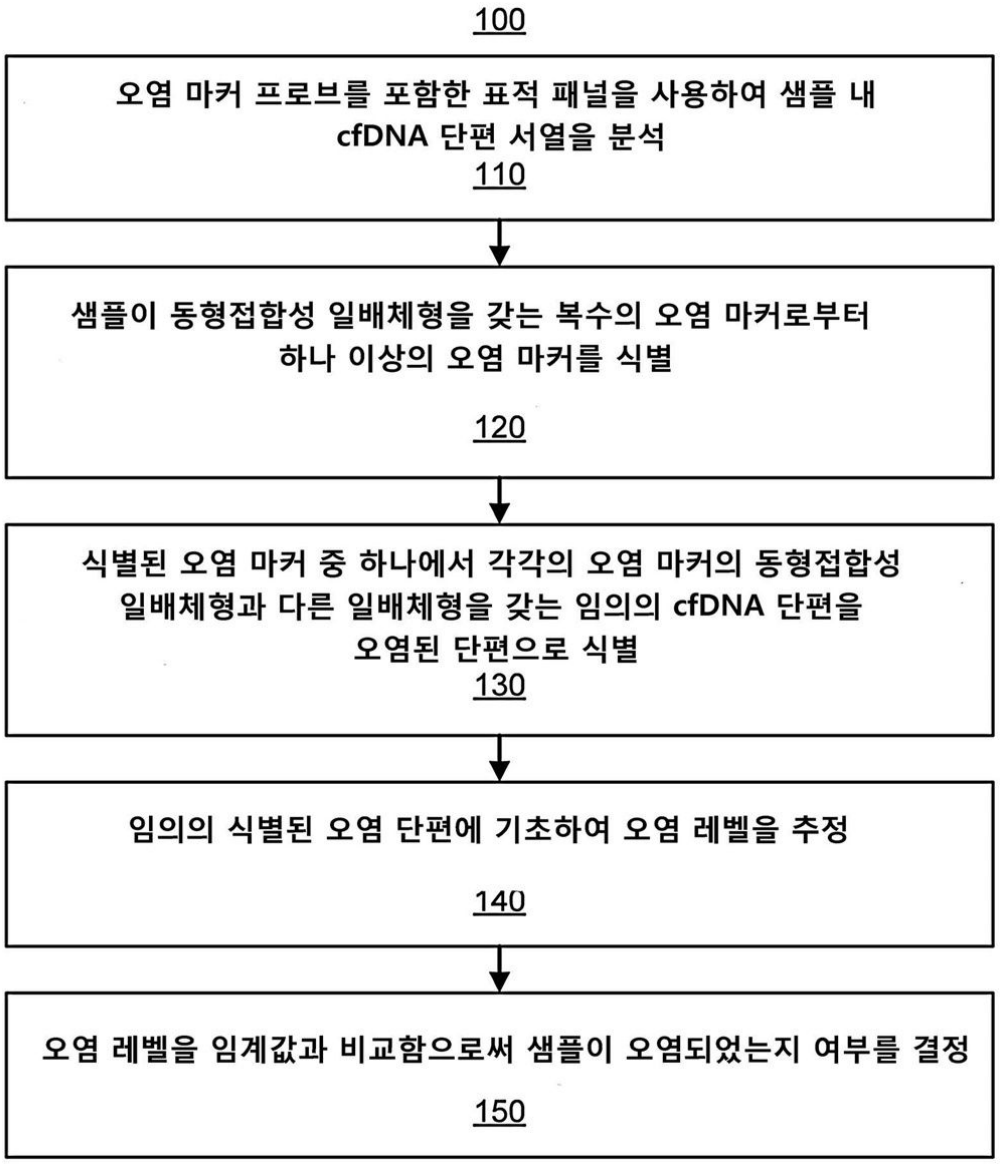
[0317] 실시형태에 대한 전술한 상세한 설명은 본 개시내용의 특정 실시형태를 예시하는 첨부 도면을 참조한다. 다른 구조와 동작을 갖는 다른 실시형태도 본 개시내용의 범위를 벗어나지 않는다. 용어 "발명" 등은 본 명세서에 기술된 출원인의 발명의 많은 대안적인 양태 또는 실시형태의 특정한 실시예를 참조하여 사용되며, 그 사용이나 부재 모두는 출원인의 발명의 범위 또는 청구범위를 제한하려는 의도는 아니다.

[0318] 본 발명의 실시형태는 본원의 동작을 수행하기 위한 장치에 관한 것일 수도 있다. 이 장치는 필요한 목적을 위해 특별히 구성될 수 있으며, 그리고/또는 컴퓨터에 저장된 컴퓨터 프로그램에 의해 선택적으로 활성화되거나 재구성되는 범용 컴퓨팅 장치를 포함할 수 있다. 이러한 컴퓨터 프로그램은 비일시적, 유형의 컴퓨터 판독 가능 저장 매체, 또는 컴퓨터 시스템 버스에 연결될 수 있는 전자 명령어를 저장하는 데 적합한 임의 유형의 매체에 저장될 수 있다. 더욱이, 본 명세서에서 언급된 임의의 컴퓨팅 시스템은 단일 프로세서를 포함할 수 있거나 증가된 컴퓨팅 능력을 위해 다수의 프로세서 설계를 채용하는 아키텍처일 수 있다.

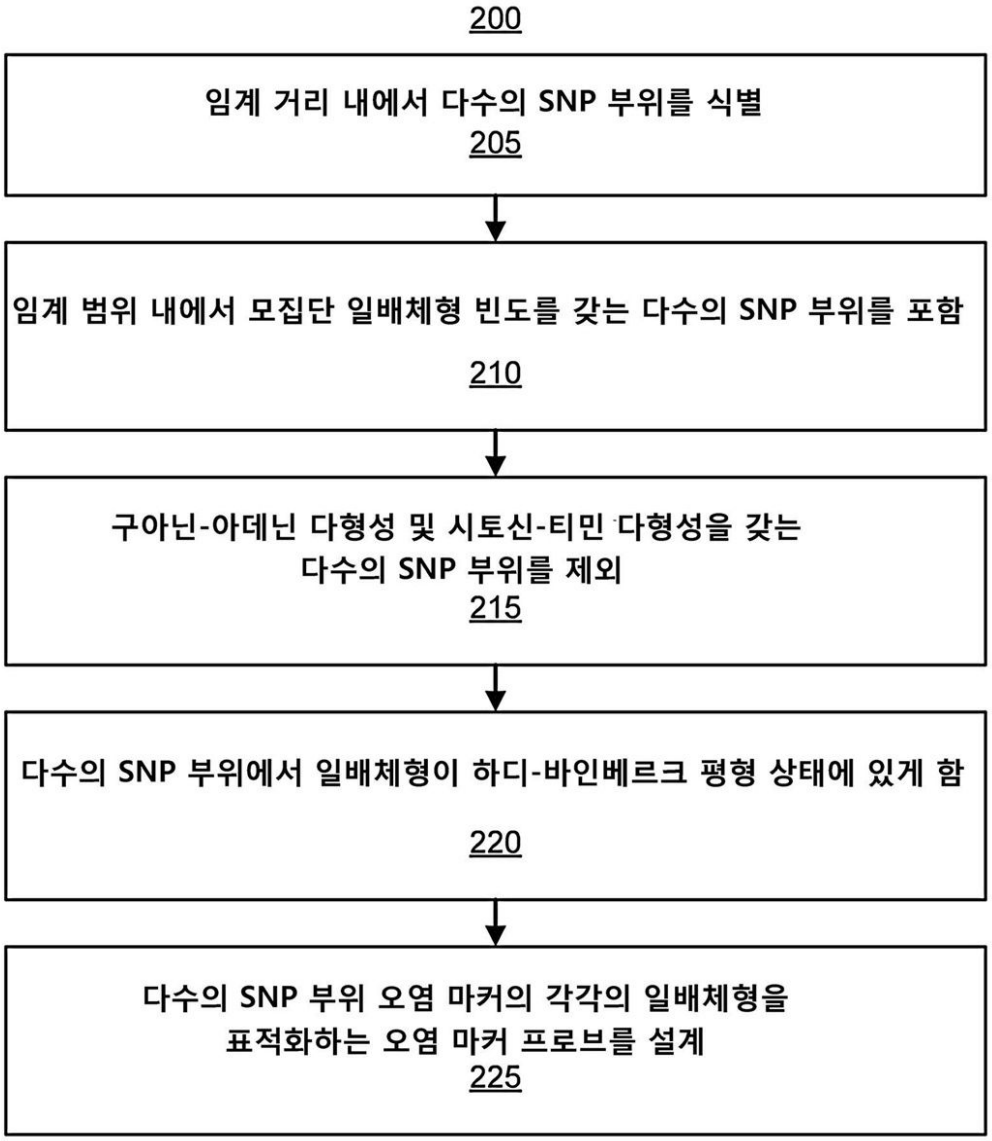
[0319] 분석 시스템에 의해 수행되는 것으로 본원에 설명된 임의의 단계, 동작 또는 프로세스는 장치의 하나 이상의 하드웨어 또는 소프트웨어 모듈을 단독으로 또는 다른 컴퓨팅 장치와 결합하여 수행되거나 구현될 수 있다. 일 실시형태에서, 소프트웨어 모듈은 설명된 단계, 동작 또는 프로세스 중 일부 또는 모두를 수행하기 위해 컴퓨터 프로세서에 의해 실행될 수 있는 컴퓨터 프로그램 코드를 포함하는 컴퓨터 판독 가능 매체를 포함하는 컴퓨터 프로그램 제품으로 구현된다.

도면

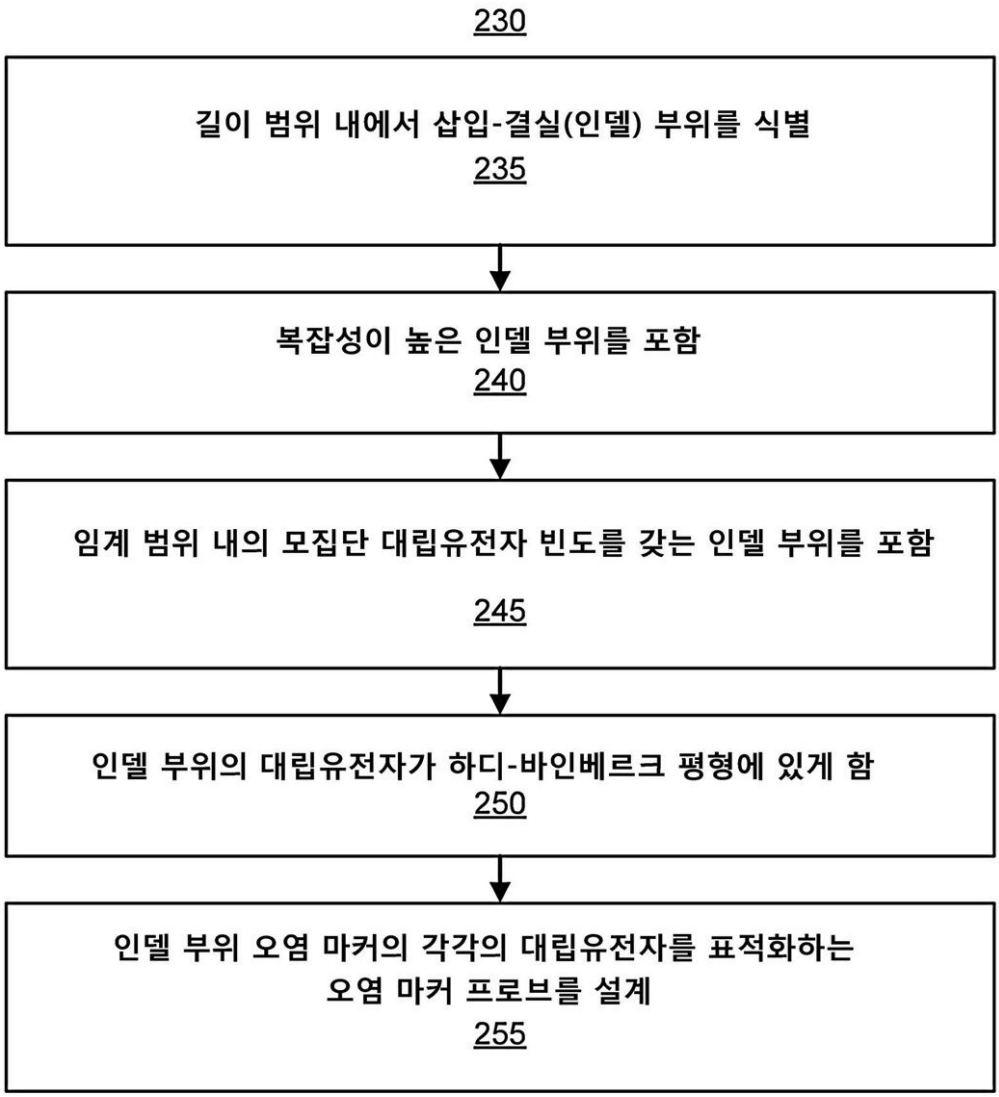
도면1


100
오염 마커 프로브를 포함한 표적 패널을 사용하여 샘플 내 cfDNA 단편 서열을 분석
110
샘플이 동형접합성 일배체형을 갖는 복수의 오염 마커로부터 하나 이상의 오염 마커를 식별
120
식별된 오염 마커 중 하나에서 각각의 오염 마커의 동형접합성 일배체형과 다른 일배체형을 갖는 임의의 cfDNA 단편을 오염된 단편으로 식별
130
임의의 식별된 오염 단편에 기초하여 오염 레벨을 추정
140
오염 레벨을 임계값과 비교함으로써 샘플이 오염되었는지 여부를 결정
150

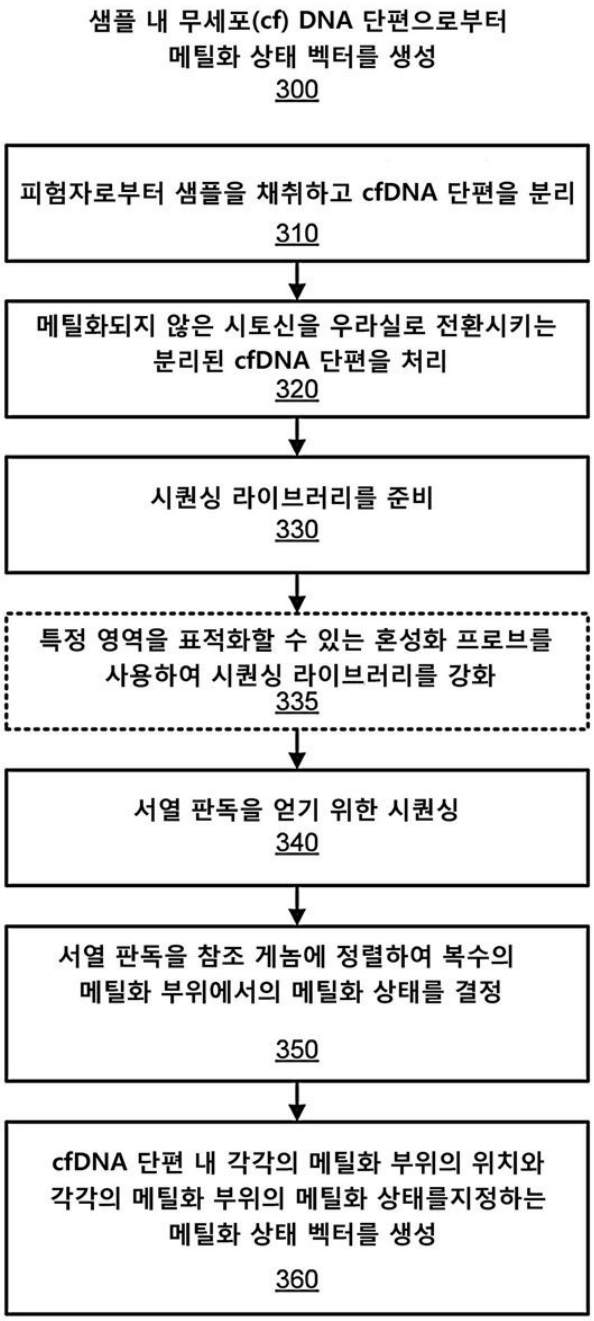
도면2a


200
임계 거리 내에서 다수의 SNP 부위를 식별
205
임계 범위 내에서 모집단 일배체형 빈도를 갖는 다수의 SNP 부위를 포함
210
구아닌-아데닌 다형성 및 시토신-티민 다형성을 갖는
다수의 SNP 부위를 제외
215
다수의 SNP 부위에서 일배체형이 하디-바인베르크 평형 상태에 있게 함
220
다수의 SNP 부위 오염 마커의 각각의 일배체형을
표적화하는 오염 마커 프로브를 설계
225

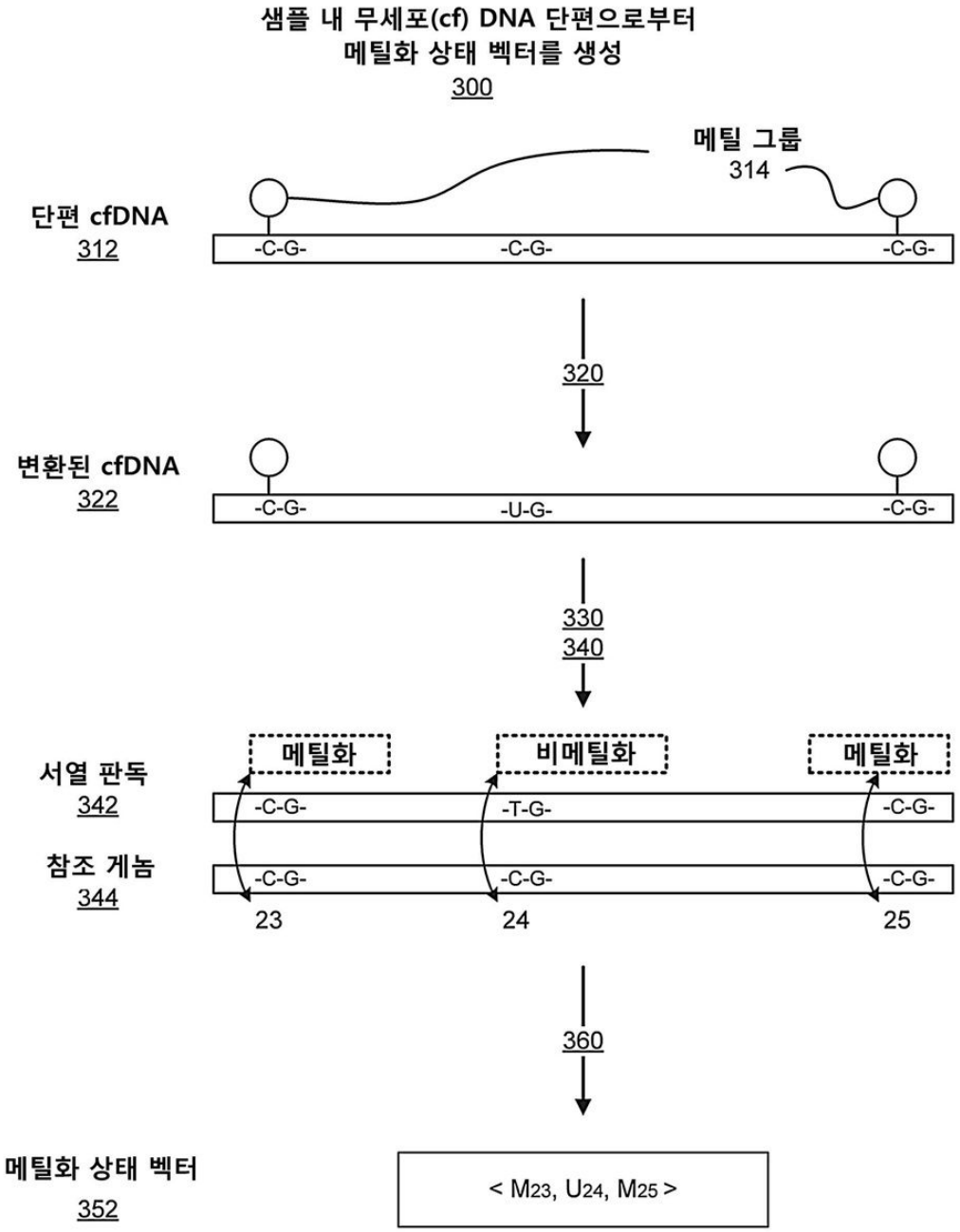
도면2b


230
길이 범위 내에서 삽입-결실(인델) 부위를 식별
235
복잡성이 높은 인델 부위를 포함
240
임계 범위 내의 모집단 대립유전자 빈도를 갖는 인델 부위를 포함
245
인델 부위의 대립유전자가 하디-바인베르크 평형에 있게 함
250
인델 부위 오염 마커의 각각의 대립유전자를 표적화하는
오염 마커 프로브를 설계
255

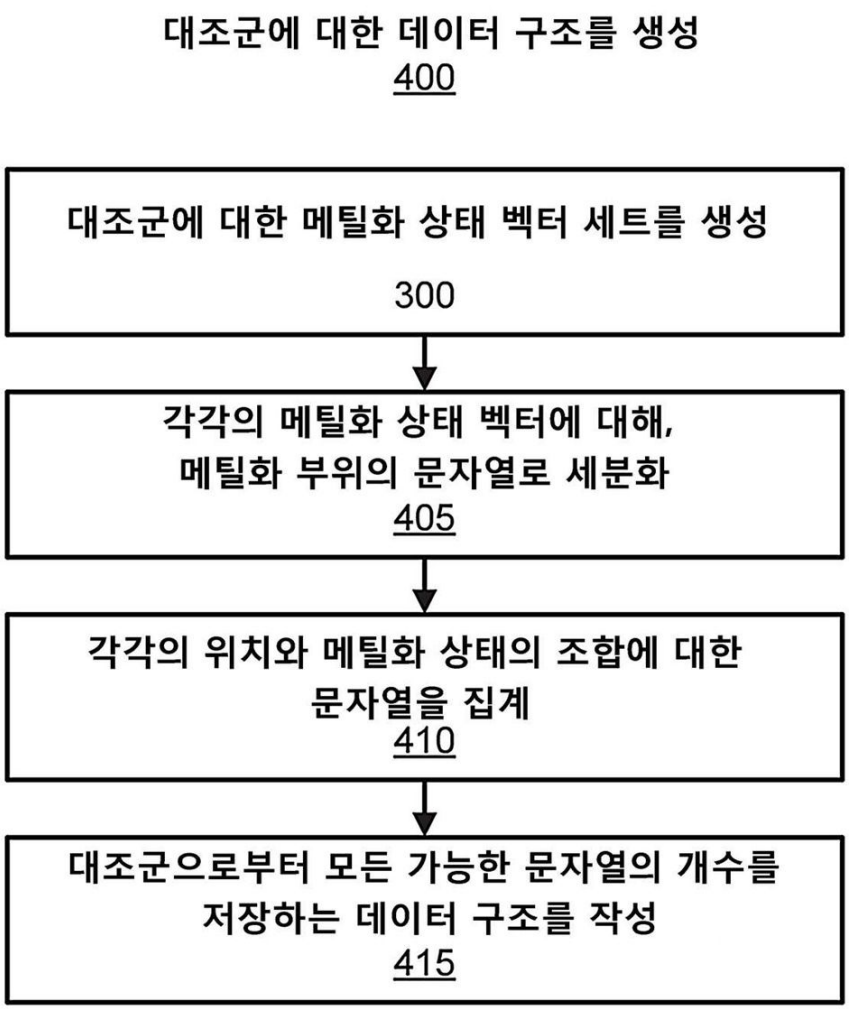
도면3a


샘플 내 무세포(cf) DNA 단편으로부터
메틸화 상태 벡터를 생성
300
피험자로부터 샘플을 채취하고 cfDNA 단편을 분리
310
메틸화되지 않은 시토신을 우라실로 전환시키는
분리된 cfDNA 단편을 처리
320
시퀀싱 라이브러리를 준비
330
특정 영역을 표적화할 수 있는 혼성화 프로브를
사용하여 시퀀싱 라이브러리를 강화
335
서열 판독을 얻기 위한 시퀀싱
340
서열 판독을 참조 게놈에 정렬하여 복수의
메틸화 부위에서의 메틸화 상태를 결정
350
cfDNA 단편 내 각각의 메틸화 부위의 위치와
각각의 메틸화 부위의 메틸화 상태를지정하는
메틸화 상태 벡터를 생성
360

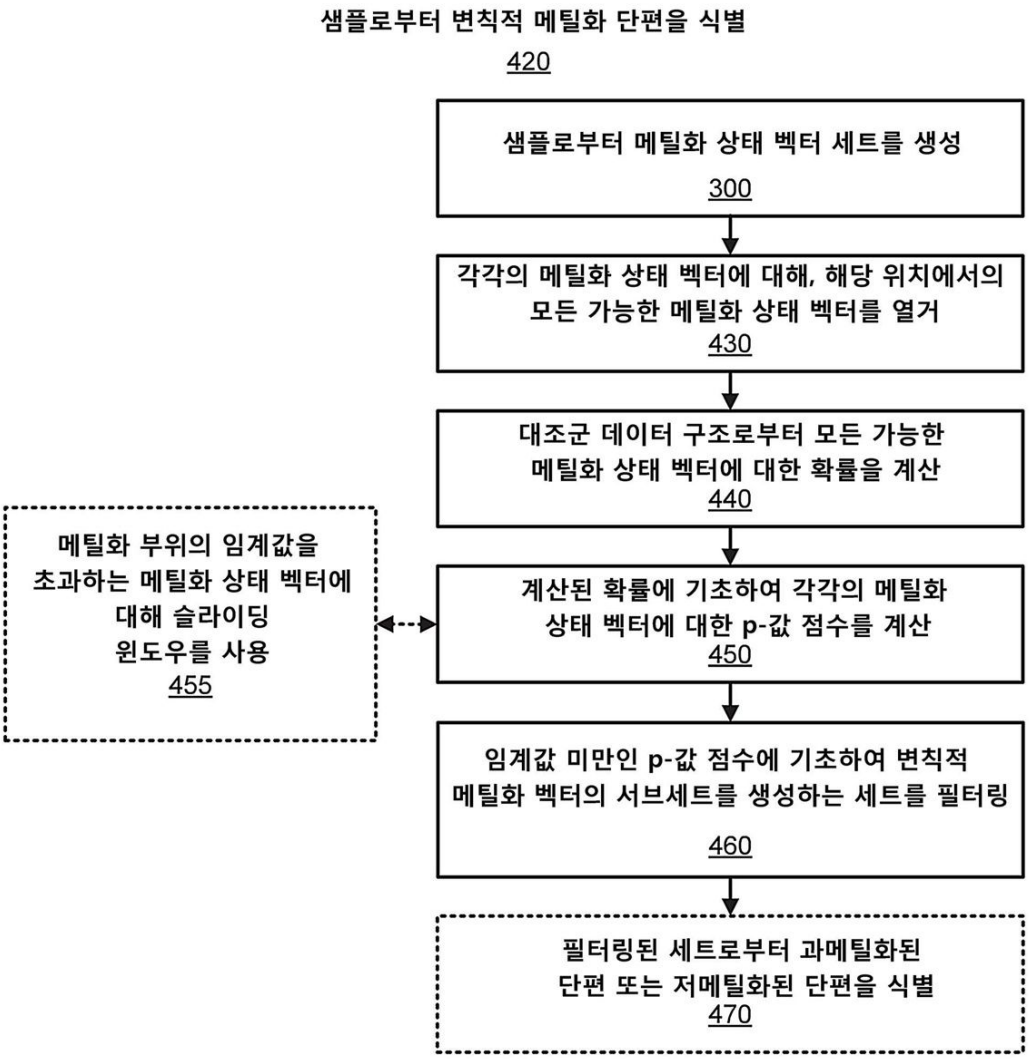
도면3b


샘플 내 무세포(cf) DNA 단편으로부터
메틸화 상태 벡터를 생성
300
메틸 그룹
314
단편 cfDNA
312
-C-G-
-C-G-
-C-G-
320
변환된 cfDNA
322
-C-G-
-U-G-
-C-G-
330
340
서열 판독
342
메틸화
비메틸화
메틸화
-C-G-
-T-G-
-C-G-
참조 게놈
344
-C-G-
-C-G-
-C-G-
23
24
25
360
메틸화 상태 벡터
352
< M23, U24, M25 >

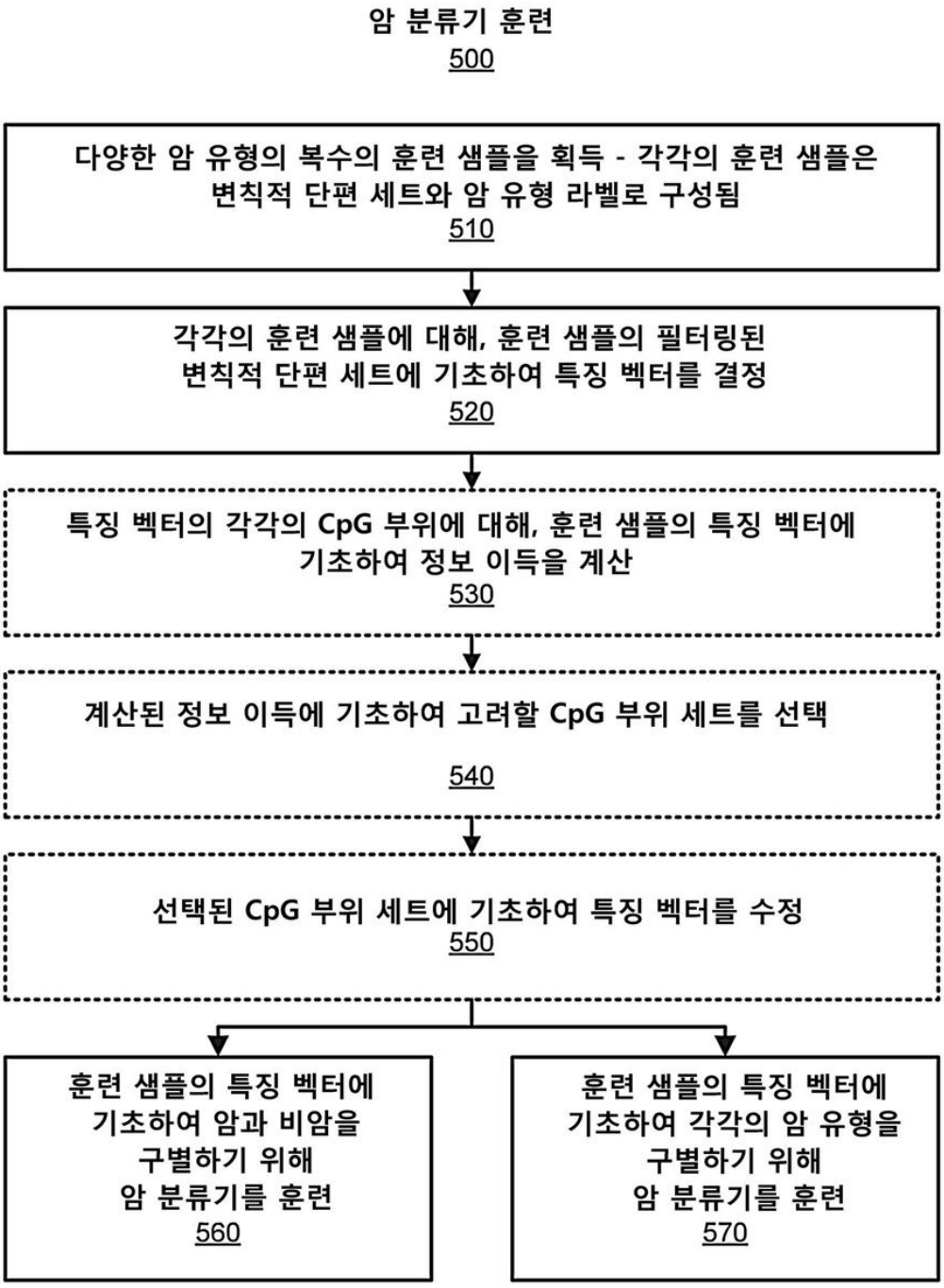
도면4a


대조군에 대한 데이터 구조를 생성
400
대조군에 대한 메틸화 상태 벡터 세트를 생성
300
각각의 메틸화 상태 벡터에 대해,
메틸화 부위의 문자열로 세분화
405
각각의 위치와 메틸화 상태의 조합에 대한
문자열을 집계
410
대조군으로부터 모든 가능한 문자열의 개수를
저장하는 데이터 구조를 작성
415

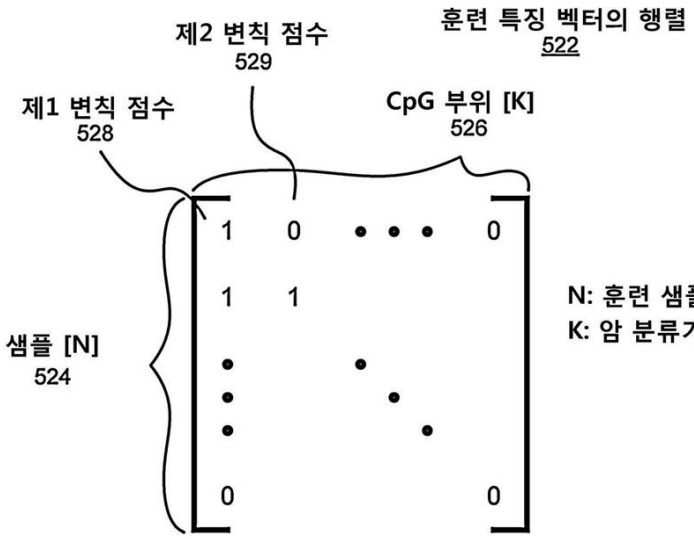
도면4b


샘플로부터 변칙적 메틸화 단편을 식별
420
샘플로부터 메틸화 상태 벡터 세트를 생성
300
각각의 메틸화 상태 벡터에 대해, 해당 위치에서의 모든 가능한 메틸화 상태 벡터를 열거
430
대조군 데이터 구조로부터 모든 가능한 메틸화 상태 벡터에 대한 확률을 계산
440
메틸화 부위의 임계값을 초과하는 메틸화 상태 벡터에 대해 슬라이딩 윈도우를 사용
455
계산된 확률에 기초하여 각각의 메틸화 상태 벡터에 대한 p-값 점수를 계산
450
임계값 미만인 p-값 점수에 기초하여 변칙적 메틸화 벡터의 서브세트를 생성하는 세트를 필터링
460
필터링된 세트로부터 과메틸화된 단편 또는 저메틸화된 단편을 식별
470

도면5a


암 분류기 훈련
500
다양한 암 유형의 복수의 훈련 샘플을 획득 - 각각의 훈련 샘플은 변칙적 단편 세트와 암 유형 라벨로 구성됨
510
각각의 훈련 샘플에 대해, 훈련 샘플의 필터링된 변칙적 단편 세트에 기초하여 특징 벡터를 결정
520
특징 벡터의 각각의 CpG 부위에 대해, 훈련 샘플의 특징 벡터에 기초하여 정보 이득을 계산
530
계산된 정보 이득에 기초하여 고려할 CpG 부위 세트를 선택
540
선택된 CpG 부위 세트에 기초하여 특징 벡터를 수정
550
훈련 샘플의 특징 벡터에 기초하여 암과 비암을 구별하기 위해 암 분류기를 훈련
560
훈련 샘플의 특징 벡터에 기초하여 각각의 암 유형을 구별하기 위해 암 분류기를 훈련
570

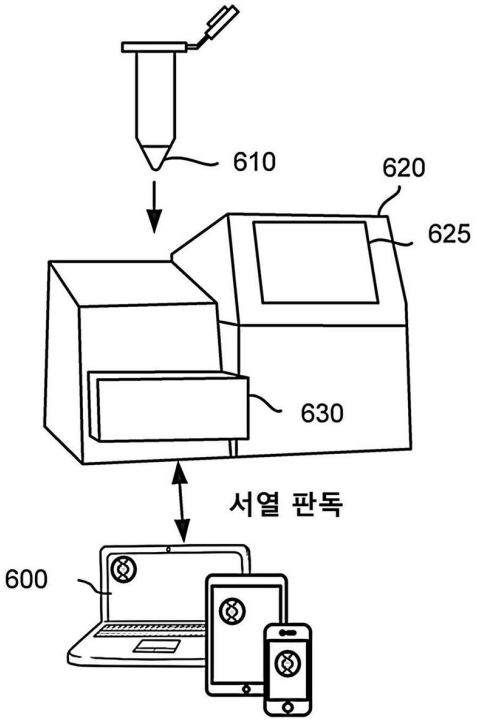
도면5b



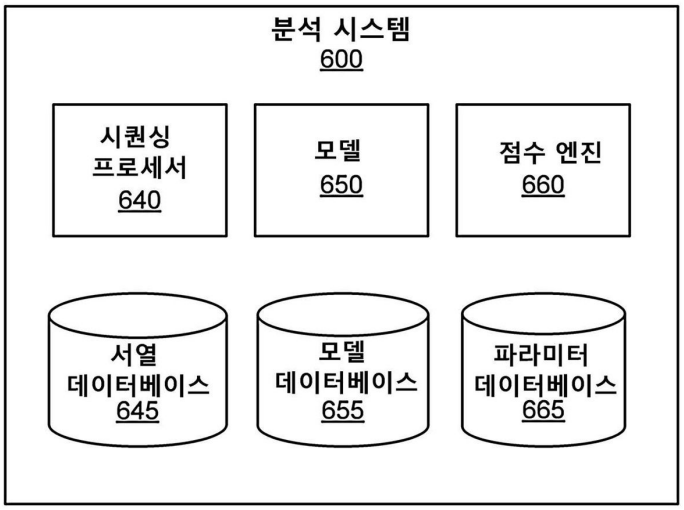
변칙 점수 계산

0: 해당 샘플 [n]이 해당 CpG 부위 [k]를 커버하는 변칙적 단편이 없음
1: 해당 샘플 [n]이 해당 CpG 부위 [k]를 커버하는 적어도 하나의 변칙적 단편

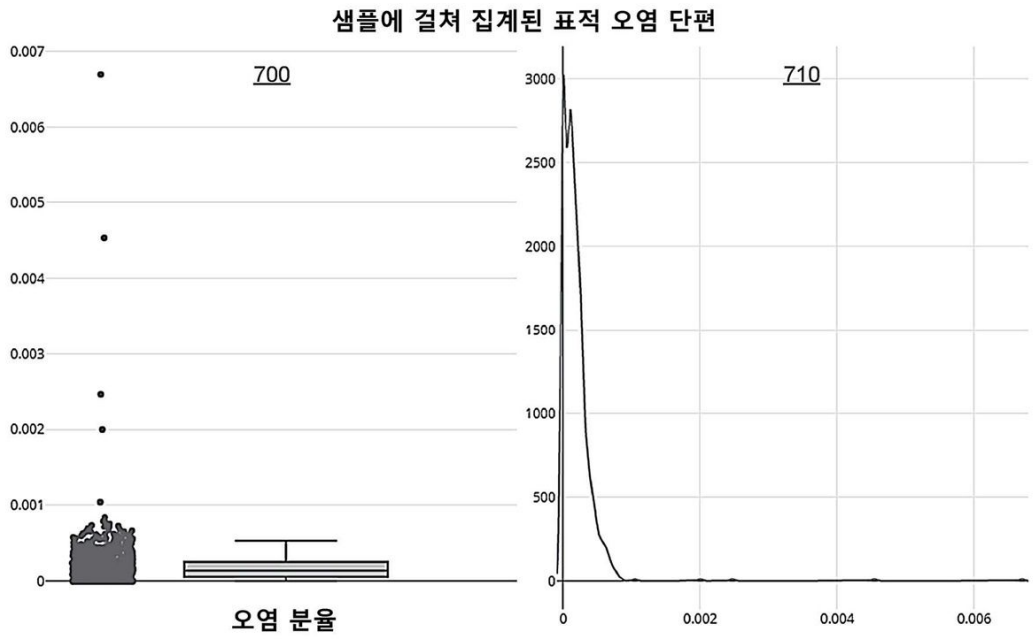
도면6a



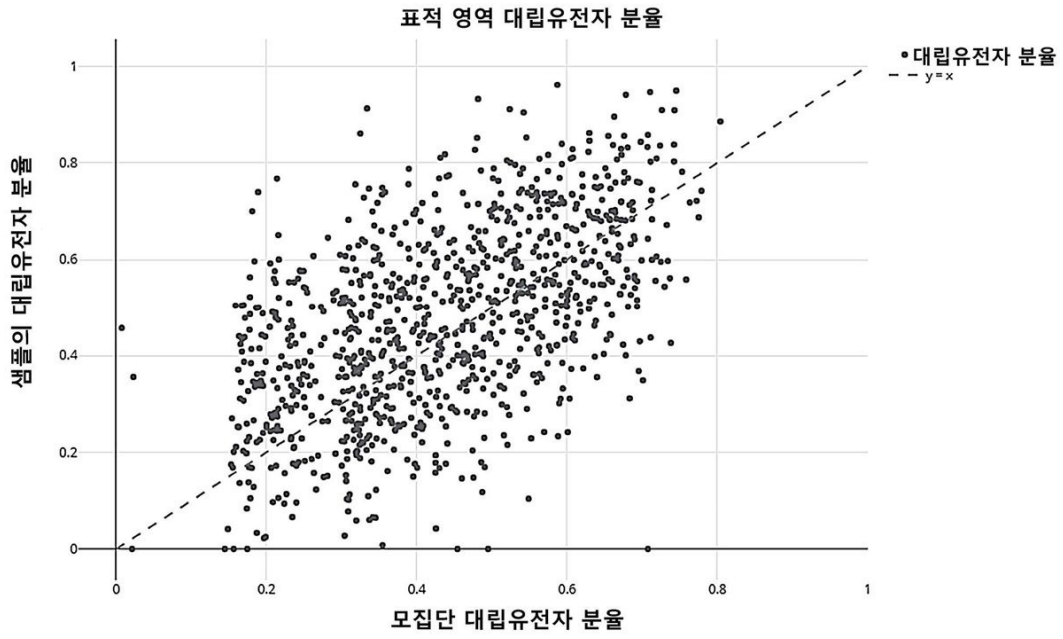
도면6b


분석 시스템
600
시퀀싱 프로세서
640
모델
650
점수 엔진
660
서열 데이터베이스
645
모델 데이터베이스
655
파라미터 데이터베이스
665

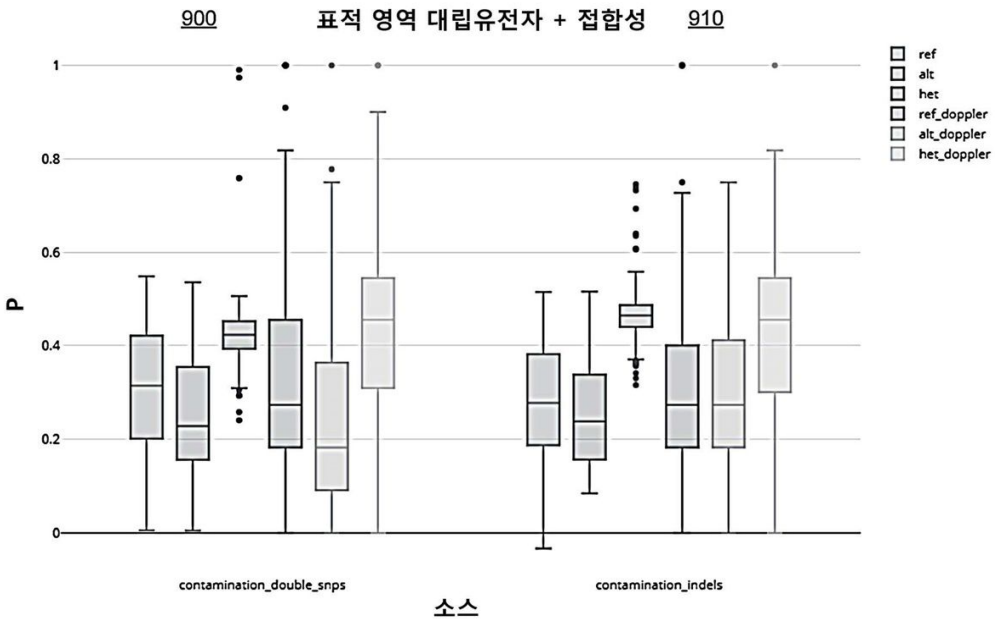
도면7


샘플에 걸쳐 집계된 표적 오염 단편
700
710
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
3000
2500
2000
1500
1000
500
0
0.002
0.004
0.006
오염 분율

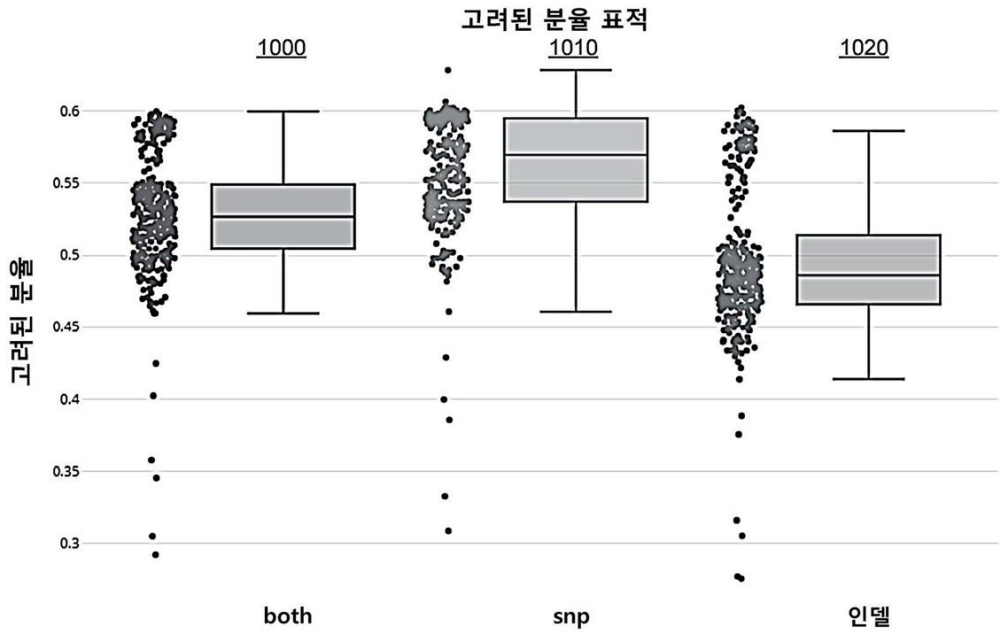
도면8


표적 영역 대립유전자 분율
•대립유전자 분율
y=x
샘플의 대립유전자 분율
모집단 대립유전자 분율
0
0.2
0.4
0.6
0.8
1

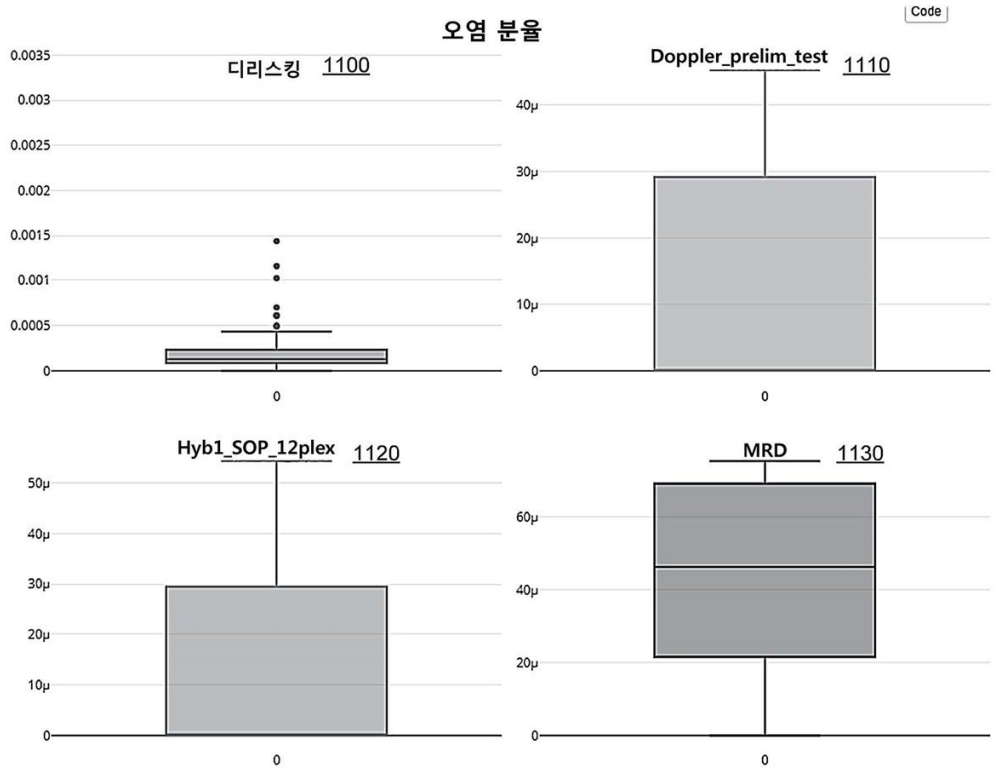
도면9


900
표적 영역 대립유전자 + 접합성
910
ref
alt
het
ref_doppler
alt_doppler
het_doppler
P
contamination_double_snps
contamination_indels
소스

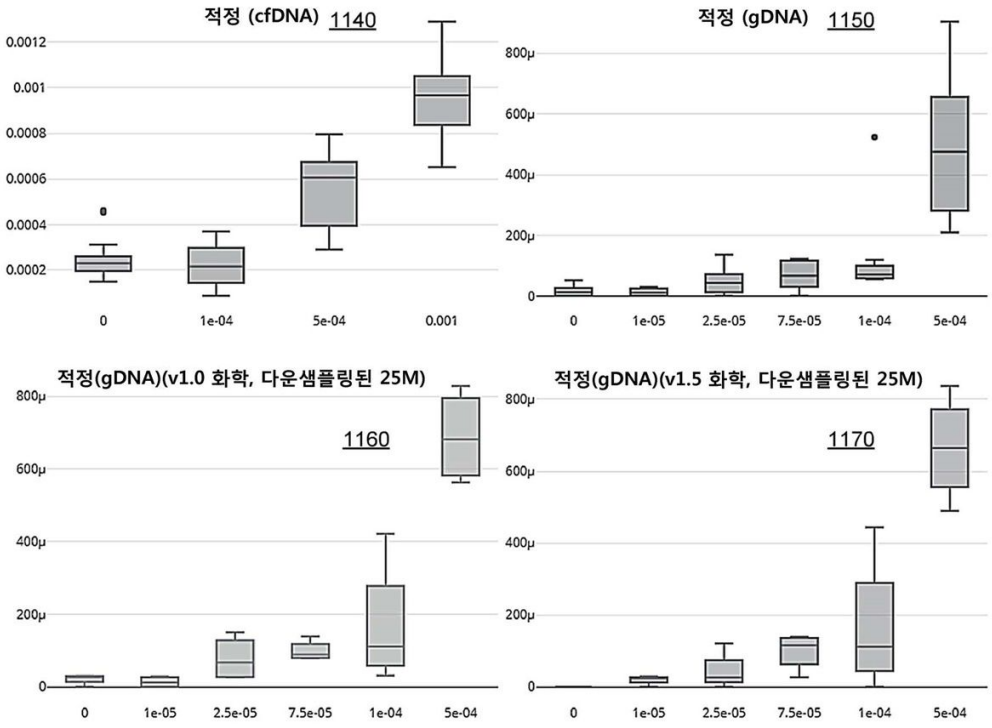
도면10


고려된 분율 표적
1000
1010
1020
0.6
0.55
0.5
0.45
0.4
0.35
0.3
고려된 분율
both
snp
인델

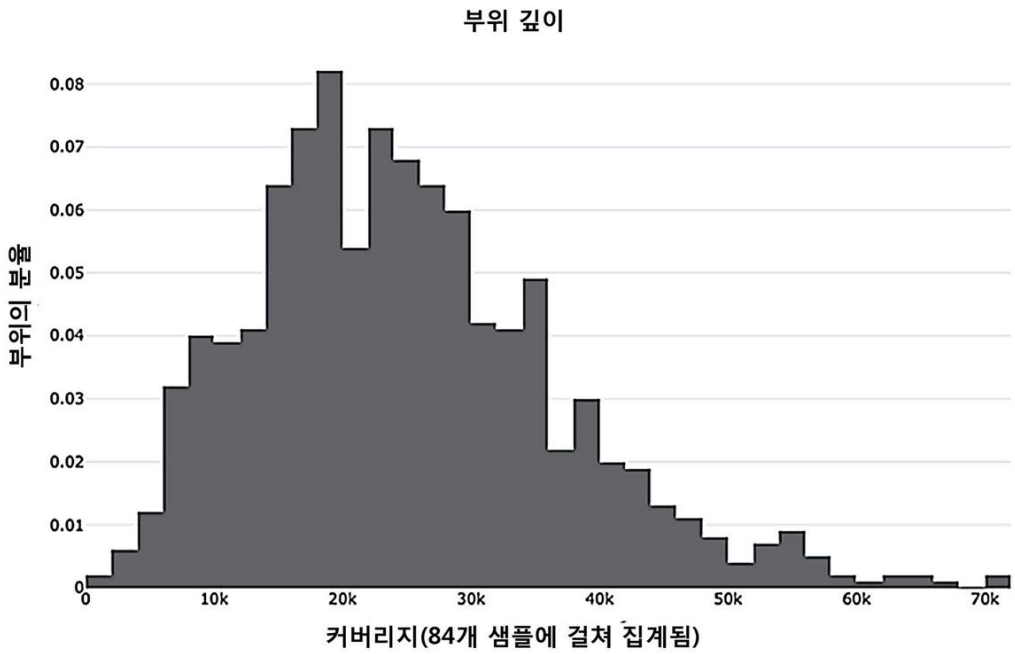
도면11a


오염 분율
Code
디리스킹 1100
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
0
Doppler_prelim_test 1110
40µ
30µ
20µ
10µ
0
0
Hyb1_SOP_12plex 1120
50µ
40µ
30µ
20µ
10µ
0
0
MRD 1130
60µ
40µ
20µ
0
0

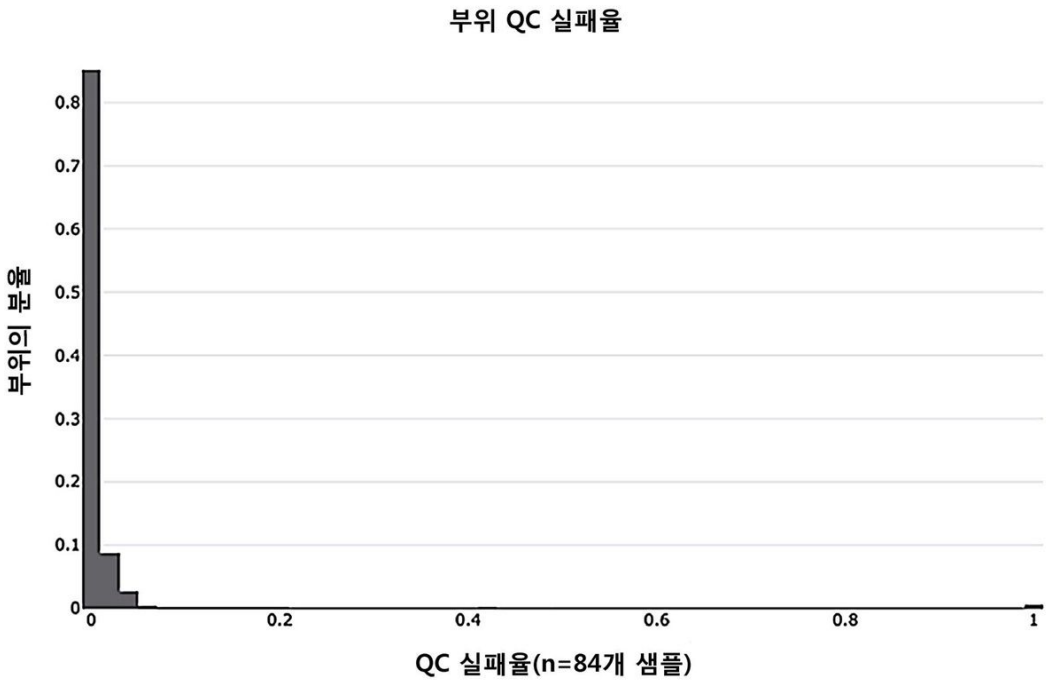
도면11b


적정 (cfDNA) 1140
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
1e-04
5e-04
0.001
적정 (gDNA) 1150
800μ
600μ
400μ
200μ
0
1e-05
2.5e-05
7.5e-05
1e-04
5e-04
적정(gDNA)(v1.0 화학, 다운샘플링된 25M)
1160
적정(gDNA)(v1.5 화학, 다운샘플링된 25M)
1170

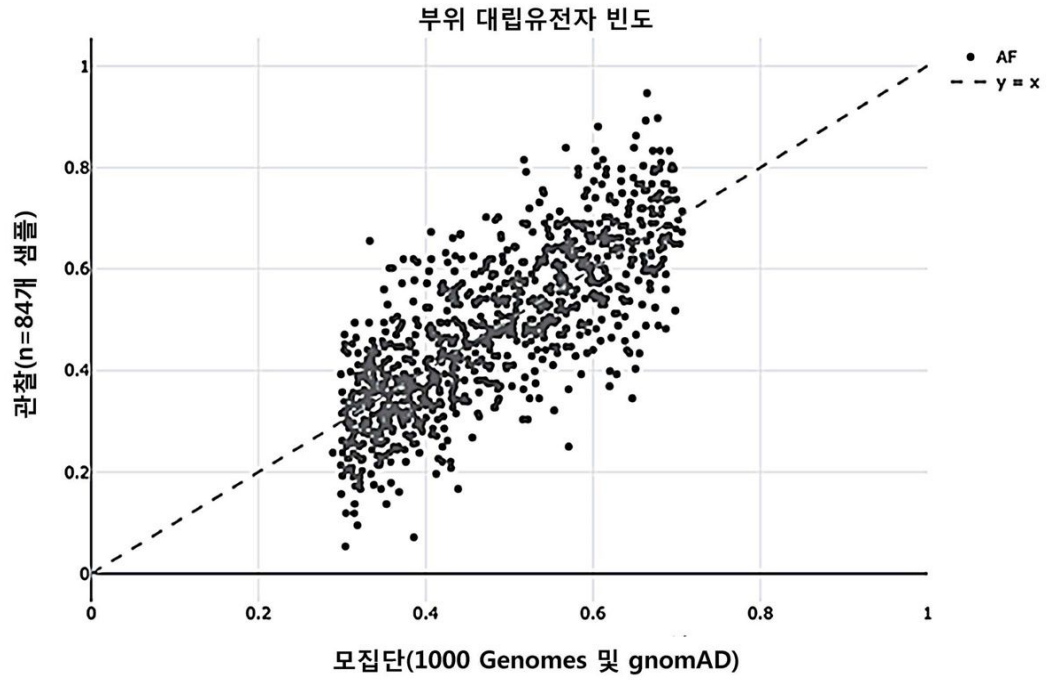
도면12


부위 깊이
부위의 밀도
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
10k
20k
30k
40k
50k
60k
70k
커버리지(84개 샘플에 걸쳐 집계됨)

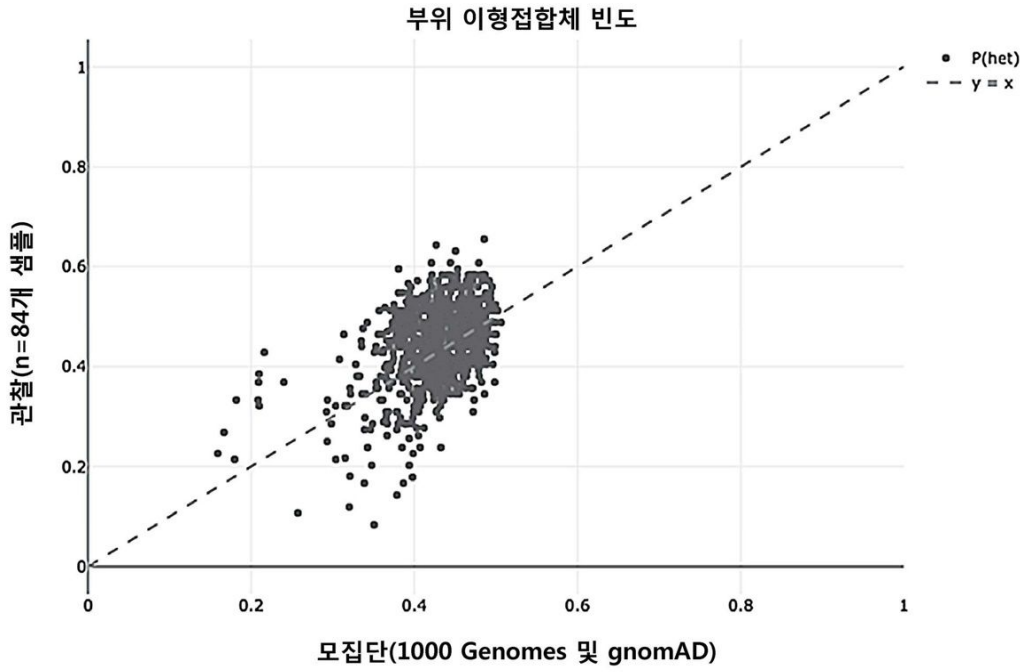
도면13


부위 QC 실패율
부위의 분율
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.2
0.4
0.6
0.8
1
QC 실패율(n=84개 샘플)

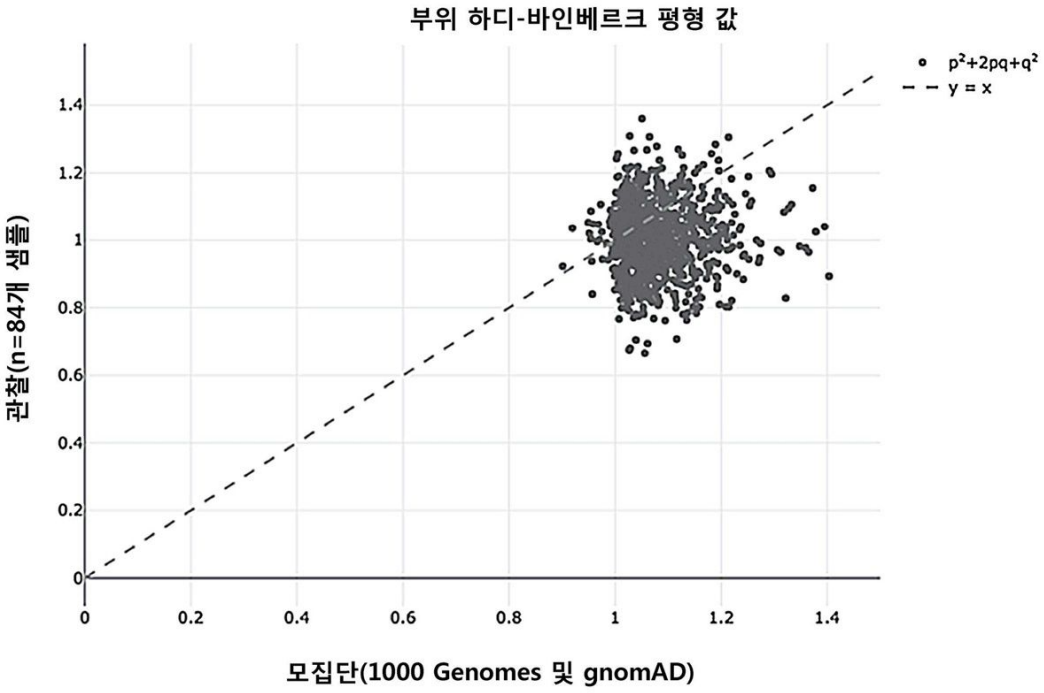
도면14


부위 대립유전자 빈도
AF
y = x
관찰(n=84개 샘플)
1
0.8
0.6
0.4
0.2
0
0
0.2
0.4
0.6
0.8
1
모집단(1000 Genomes 및 gnomAD)

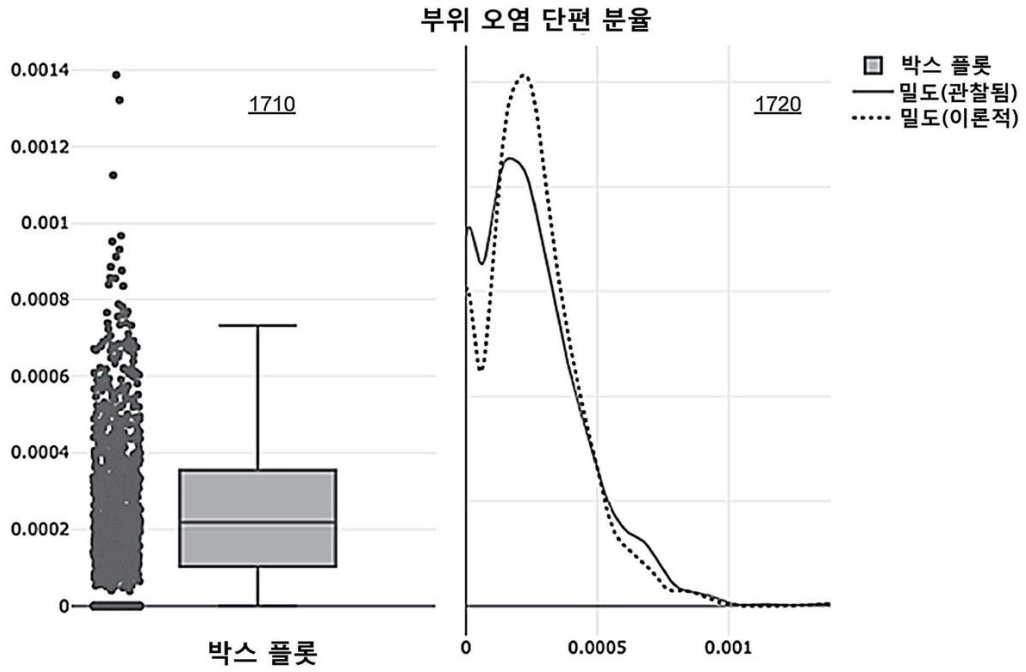
도면15


부위 이형접합체 빈도
P(het)
y = x
관찰(n=84개 샘플)
모집단(1000 Genomes 및 gnomAD)
0
0.2
0.4
0.6
0.8
1

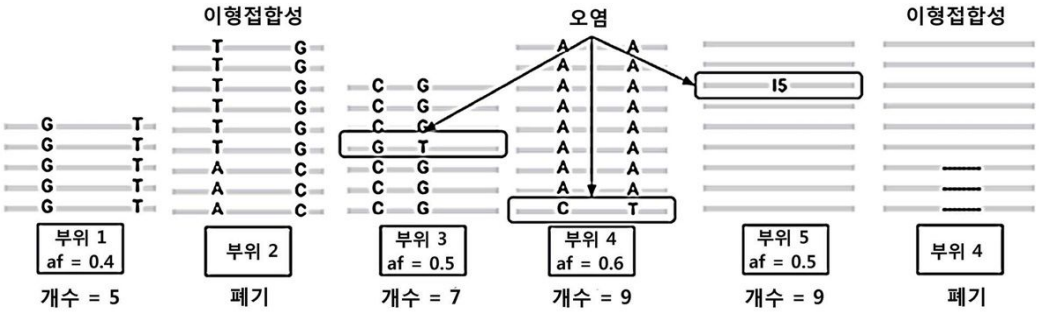
도면16


부위 하디-바인베르크 평형 값
p²+2pq+q²
y = x
관찰(n=84개 샘플)
모집단(1000 Genomes 및 gnomAD)
0
0.2
0.4
0.6
0.8
1
1.2
1.4

도면17



도면18

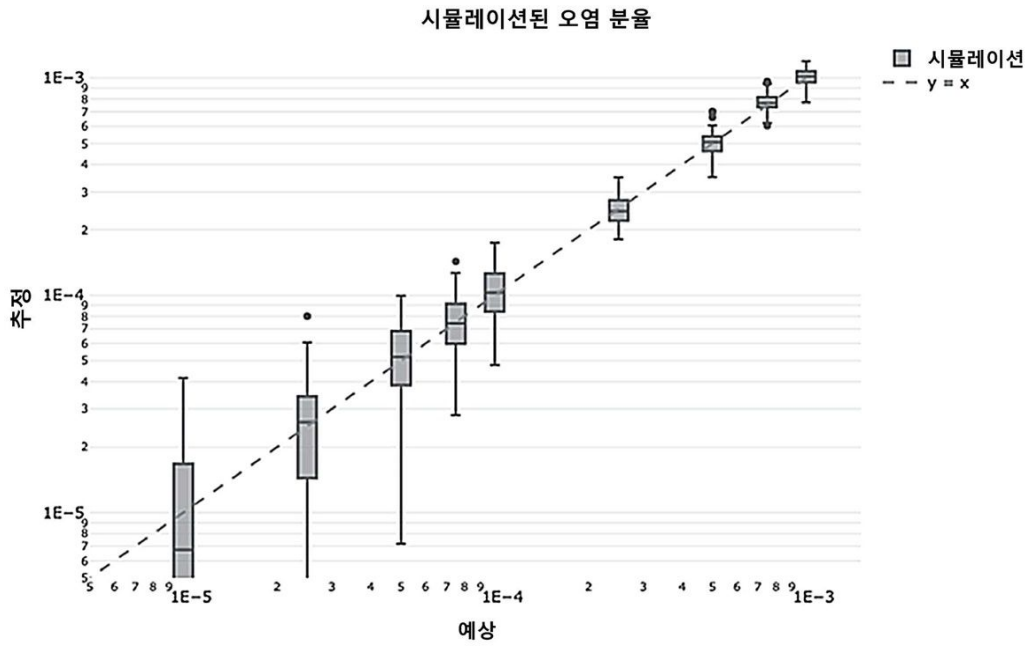


af = 반대 일배체형에 대한 모집단 대립유전자 빈도

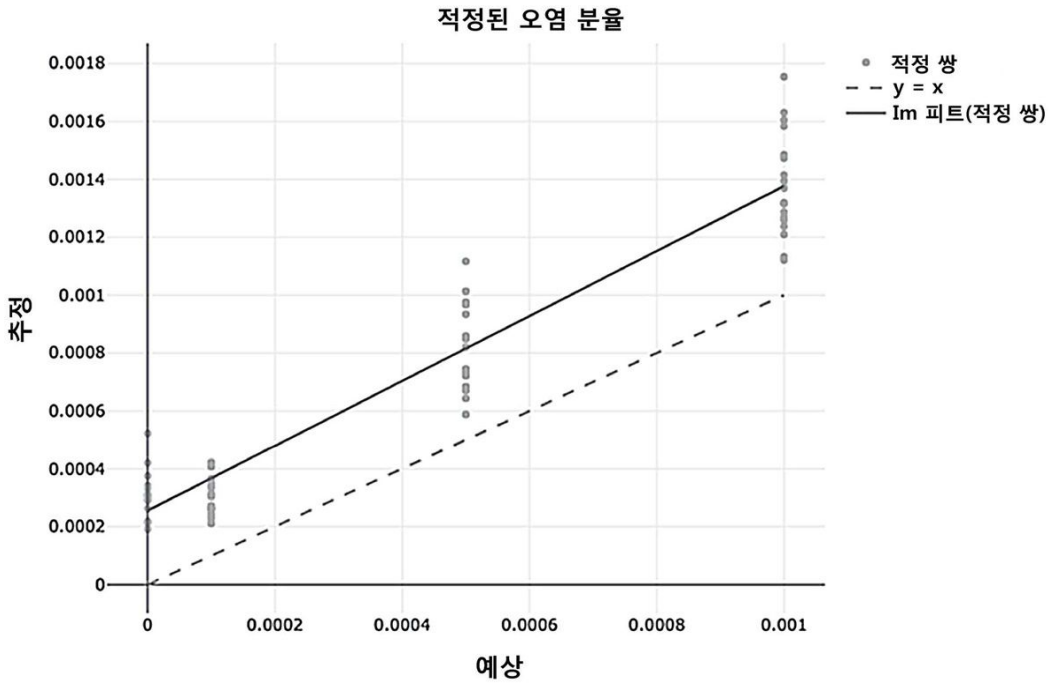
오염 단편 수 =3

오염 추정 = 3 / (5*0.4 + 7*0.5 + 9*0.6 + 9*0.5)

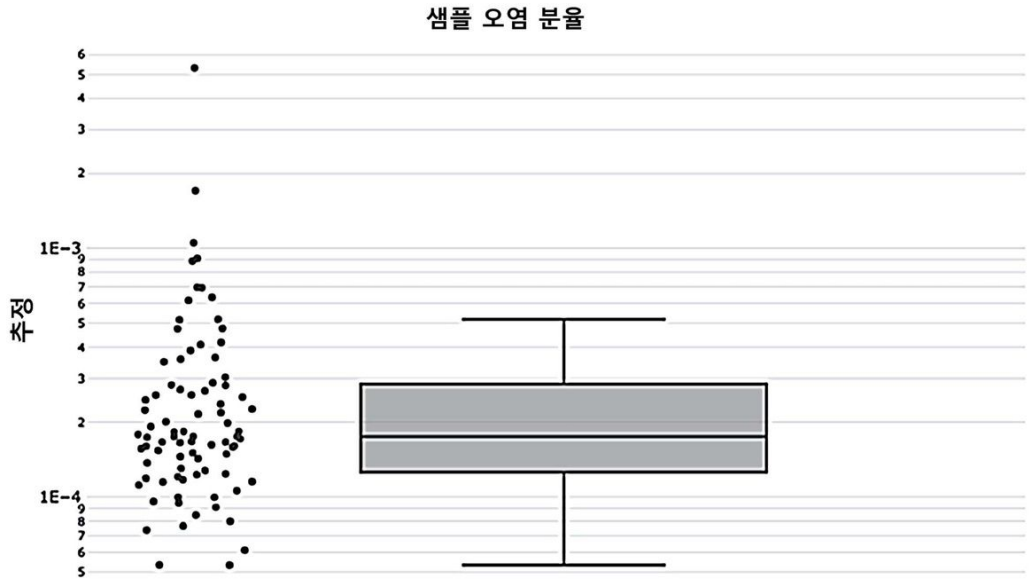
도면19


시뮬레이션된 오염 분율
시뮬레이션
y = x
추정
예상
1E-3
1E-4
1E-5

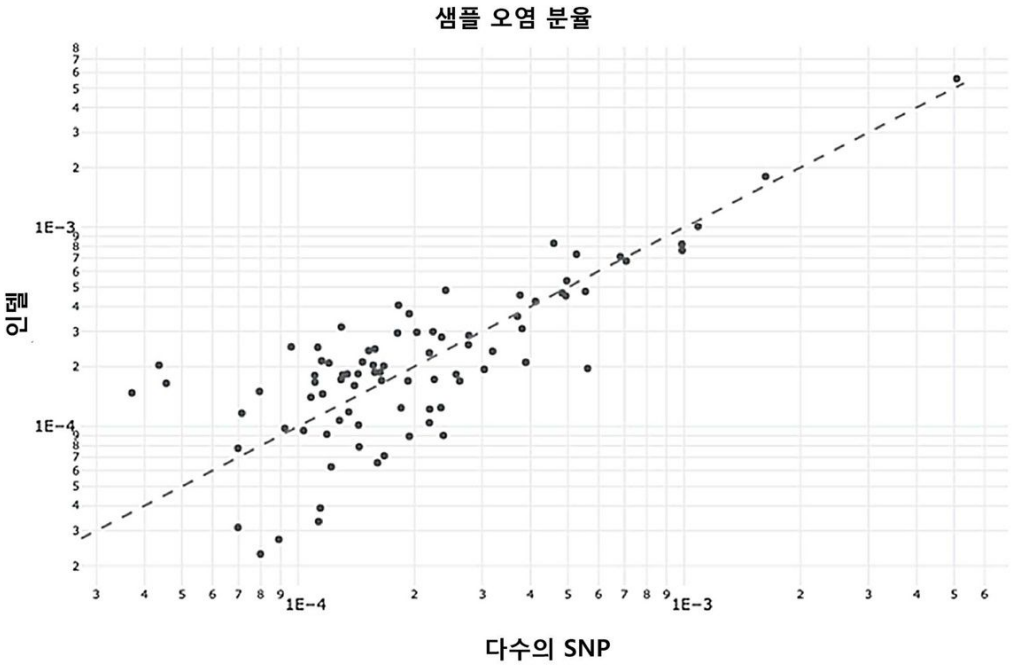
도면20


적정된 오염 분율
적정 쌍
y = x
lm 피트(적정 쌍)
추정
예상
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
0.0002
0.0004
0.0006
0.0008
0.001

도면21



도면22



도면23a

표 1

참조	시작	종료	메틸화	점수	임계값	Pos_count	Neg_count	소스	설명
chr2	108676624	108676632	hypo (저)	3.912114	0	0	0	contamination_double_snps	chr2:108676624:A>T,chr2:108676631:C>G
chr2	108676624	108676632	hyper (과)	3.912114	0	0	0	contamination_double_snps	chr2:108676624:A>T,chr2:108676631:C>G
chr7	15433290	15433299	Hypo	3.869331	0	0	0	contamination_double_snps	chr7:15433290:C>G,chr7:15433298:G>C
chr7	15433290	15433299	Hyper	3.869331	0	0	0	contamination_double_snps	chr7:15433290:C>G,chr7:15433298:G>C
chr20	248925	248935	Hypo	3.857307	0	0	0	contamination_double_snps	chr20:248925:C>A,chr20:248934:A>T
chr20	248925	248935	Hyper	3.857307	0	0	0	contamination_double_snps	chr20:248925:C>A,chr20:248934:A>T
chr10	108512079	108512086	Hypo	3.854286	0	0	0	contamination_double_snps	chr10:108512079:C>G,chr10:108512085:C>A
chr10	108512079	108512086	Hyper	3.854286	0	0	0	contamination_double_snps	chr10:108512079:C>G,chr10:108512085:C>A
chr4	16736064	16736067	Hypo	3.823068	0	0	0	contamination_double_snps	chr4:16736064:T>G,chr4:16736066:G>T
chr4	16736064	16736067	Hyper	3.823068	0	0	0	contamination_double_snps	chr4:16736064:T>G,chr4:16736066:G>T
chr4	72575890	72575901	Hypo	3.815061	0	0	0	contamination_double_snps	chr4:72575890:C>A,chr4:72575900:C>A
chr4	72575890	72575901	Hyper	3.815061	0	0	0	contamination_double_snps	chr4:72575890:C>A,chr4:72575900:C>A
chr6	158434980	158434991	Hypo	3.806239	0	0	0	contamination_double_snps	chr6:158434980:G>C,chr6:158434990:G>C
chr6	158434980	158434991	Hyper	3.806239	0	0	0	contamination_double_snps	chr6:158434980:G>C,chr6:158434990:G>C
chr13	20880885	20880889	Hypo	3.795089	0	0	0	contamination_double_snps	chr13:20880885:A>T,chr13:20880888:A>T
chr13	20880885	20880889	Hyper	3.795089	0	0	0	contamination_double_snps	chr13:20880885:A>T,chr13:20880888:A>T
chr6	21618915	21618925	Hypo	3.767993	0	0	0	contamination_double_snps	chr6:21618915:T>G,chr6:21618924:G>C
chr6	21618915	21618925	Hyper	3.767993	0	0	0	contamination_double_snps	chr6:21618915:T>G,chr6:21618924:G>C
chr5	8827279	8827283	Hypo	3.762267	0	0	0	contamination_double_snps	chr5:8827279:G>C,chr5:8827282:A>T
chr5	8827279	8827283	Hyper	3.762267	0	0	0	contamination_double_snps	chr5:8827279:G>C,chr5:8827282:A>T
chr5	103457798	103457806	Hypo	3.754163	0	0	0	contamination_double_snps	chr5:103457798:C>A,chr5:103457805:G>C
chr5	103457798	103457806	Hyper	3.754163	0	0	0	contamination_double_snps	chr5:103457798:C>A,chr5:103457805:G>C
chr13	91794575	91794584	Hypo	3.753434	0	0	0	contamination_double_snps	chr13:91794575:C>G,chr13:91794583:C>G
chr13	91794575	91794584	Hyper	3.753434	0	0	0	contamination_double_snps	chr13:91794575:C>G,chr13:91794583:C>G
chr8	20493721	20493728	Hypo	3.748329	0	0	0	contamination_double_snps	chr8:20493721:C>A,chr8:20493727:C>A
chr8	20493721	20493728	Hyper	3.748329	0	0	0	contamination_double_snps	chr8:20493721:C>A,chr8:20493727:C>A
chr5	109750753	109750763	Hypo	3.745406	0	0	0	contamination_double_snps	chr5:109750753:T>G,chr5:109750762:C>A
chr5	109750753	109750763	Hyper	3.745406	0	0	0	contamination_double_snps	chr5:109750753:T>G,chr5:109750762:C>A
chr21	41585518	41585523	Hypo	3.740602	0	0	0	contamination_double_snps	chr21:41585518:C>G,chr21:41585522:G>T
chr21	41585518	41585523	Hyper	3.740602	0	0	0	contamination_double_snps	chr21:41585518:C>G,chr21:41585522:G>T
chr22	27741446	27741454	Hypo	3.736007	0	0	0	contamination_double_snps	chr22:27741446:G>T,chr22:27741453:T>G
chr22	27741446	27741454	Hyper	3.736007	0	0	0	contamination_double_snps	chr22:27741446:G>T,chr22:27741453:T>G
chr1	242404448	242404456	Hypo	3.736007	0	0	0	contamination_double_snps	chr1:242404448:G>C,chr1:242404455:A>C
chr1	242404448	242404456	Hyper	3.736007	0	0	0	contamination_double_snps	chr1:242404448:G>C,chr1:242404455:A>C
chr17	61565130	61565133	Hypo	3.732159	0	0	0	contamination_double_snps	chr17:61565130:T>A,chr17:61565132:G>T
chr17	61565130	61565133	Hyper	3.732159	0	0	0	contamination_double_snps	chr17:61565130:T>A,chr17:61565132:G>T
chr14	75482826	75482828	Hypo	3.725651	0	0	0	contamination_double_snps	chr14:75482826:C>A,chr14:75482827:G>T
chr14	75482826	75482828	Hyper	3.725651	0	0	0	contamination_double_snps	chr14:75482826:C>A,chr14:75482827:G>T
chr10	36939305	36939307	Hypo	3.725651	0	0	0	contamination_double_snps	chr10:36939305:A>T,chr10:36939306:A>C
chr10	36939305	36939307	Hyper	3.725651	0	0	0	contamination_double_snps	chr10:36939305:A>T,chr10:36939306:A>C
chr13	88734744	88734755	Hypo	3.723231	0	0	0	contamination_double_snps	chr13:88734744:T>A,chr13:88734754:G>C

도면23b

chr13	88734744	88734755	Hyper	3.723231	0	0	0	contamination_double_snps	chr13:88734744:T>A,chr13:88734754:G>C
chr2	239488791	239488802	Hypo	3.723231	0	0	0	contamination_double_snps	chr2:239488791:C>G,chr2:239488801:C>A
chr2	239488791	239488802	Hyper	3.723231	0	0	0	contamination_double_snps	chr2:239488791:C>G,chr2:239488801:C>A
chr14	100279482	100279492	Hypo	3.719376	0	0	0	contamination_double_snps	chr14:100279482:G>C,chr14:100279491:G>C
chr14	100279482	100279492	Hyper	3.719376	0	0	0	contamination_double_snps	chr14:100279482:G>C,chr14:100279491:G>C
chr14	99262737	99262744	Hypo	3.719295	0	0	0	contamination_double_snps	chr14:99262737:A>T,chr14:99262743:G>T
chr14	99262737	99262744	Hyper	3.719295	0	0	0	contamination_double_snps	chr14:99262737:A>T,chr14:99262743:G>T
chr20	37923956	37923967	Hypo	3.714409	0	0	0	contamination_double_snps	chr20:37923956:C>A,chr20:37923966:G>T
chr20	37923956	37923967	Hyper	3.714409	0	0	0	contamination_double_snps	chr20:37923956:C>A,chr20:37923966:G>T
chr2	45464078	45464089	Hypo	3.71108	0	0	0	contamination_double_snps	chr2:45464078:A>C,chr2:45464088:C>A
chr2	45464078	45464089	Hyper	3.71108	0	0	0	contamination_double_snps	chr2:45464078:A>C,chr2:45464088:C>A
chr4	117904895	117904903	Hypo	3.708048	0	0	0	contamination_double_snps	chr4:117904895:G>C,chr4:117904902:A>C
chr4	117904895	117904903	Hyper	3.708048	0	0	0	contamination_double_snps	chr4:117904895:G>C,chr4:117904902:A>C
chr20	126922	126930	Hypo	3.708048	0	0	0	contamination_double_snps	chr20:126922:C>A,chr20:126929:A>T
chr20	126922	126930	Hyper	3.708048	0	0	0	contamination_double_snps	chr20:126922:C>A,chr20:126929:A>T
chr17	72487747	72487750	Hypo	3.697846	0	0	0	contamination_double_snps	chr17:72487747:T>G,chr17:72487749:A>T
chr17	72487747	72487750	Hyper	3.697846	0	0	0	contamination_double_snps	chr17:72487747:T>G,chr17:72487749:A>T
chr6	11499886	11499889	Hypo	3.697846	0	0	0	contamination_double_snps	chr6:11499886:A>T,chr6:11499888:A>T
chr6	11499886	11499889	Hyper	3.697846	0	0	0	contamination_double_snps	chr6:11499886:A>T,chr6:11499888:A>T
chr3	12599188	12599196	Hypo	3.689892	0	0	0	contamination_double_snps	chr3:12599188:G>C,chr3:12599195:G>C
chr3	12599188	12599196	Hyper	3.689892	0	0	0	contamination_double_snps	chr3:12599188:G>C,chr3:12599195:G>C
chr6	7018489	7018491	Hypo	3.689704	0	0	0	contamination_double_snps	chr6:7018489:G>T,chr6:7018490:A>C
chr6	7018489	7018491	Hyper	3.689704	0	0	0	contamination_double_snps	chr6:7018489:G>T,chr6:7018490:A>C
chr2	165174445	165174447	Hypo	3.689704	0	0	0	contamination_double_snps	chr2:165174445:T>G,chr2:165174446:T>A
chr2	165174445	165174447	Hyper	3.689704	0	0	0	contamination_double_snps	chr2:165174445:T>G,chr2:165174446:T>A
chr5	14982926	14982928	Hypo	3.689704	0	0	0	contamination_double_snps	chr5:14982926:T>A,chr5:14982927:T>G
chr5	14982926	14982928	Hyper	3.689704	0	0	0	contamination_double_snps	chr5:14982926:T>A,chr5:14982927:T>G
chr21	26693258	26693260	Hypo	3.689704	0	0	0	contamination_double_snps	chr21:26693258:G>C,chr21:26693259:G>C
chr21	26693258	26693260	Hyper	3.689704	0	0	0	contamination_double_snps	chr21:26693258:G>C,chr21:26693259:G>C
chr20	5897776	5897778	Hypo	3.689704	0	0	0	contamination_double_snps	chr20:5897776:A>C,chr20:5897777:G>C
chr20	5897776	5897778	Hyper	3.689704	0	0	0	contamination_double_snps	chr20:5897776:A>C,chr20:5897777:G>C
chr7	22310848	22310850	Hypo	3.689704	0	0	0	contamination_double_snps	chr7:22310848:T>G,chr7:22310849:T>A
chr7	22310848	22310850	Hyper	3.689704	0	0	0	contamination_double_snps	chr7:22310848:T>G,chr7:22310849:T>A
chr14	59907091	59907093	Hypo	3.689704	0	0	0	contamination_double_snps	chr14:59907091:A>T,chr14:59907092:T>G
chr14	59907091	59907093	Hyper	3.689704	0	0	0	contamination_double_snps	chr14:59907091:A>T,chr14:59907092:T>G
chr2	31210084	31210086	Hypo	3.689704	0	0	0	contamination_double_snps	chr2:31210084:G>T,chr2:31210085:A>T
chr2	31210084	31210086	Hyper	3.689704	0	0	0	contamination_double_snps	chr2:31210084:G>T,chr2:31210085:A>T
chr18	19489088	19489093	Hypo	3.688722	0	0	0	contamination_double_snps	chr18:19489088:G>T,chr18:19489092:T>G
chr18	19489088	19489093	Hyper	3.688722	0	0	0	contamination_double_snps	chr18:19489088:G>T,chr18:19489092:T>G
chr1	193429848	193429853	Hypo	3.688722	0	0	0	contamination_double_snps	chr1:193429848:A>C,chr1:193429852:T>A
chr1	193429848	193429853	Hyper	3.688722	0	0	0	contamination_double_snps	chr1:193429848:A>C,chr1:193429852:T>A
chr3	161980902	161980908	Hypo	3.683856	0	0	0	contamination_double_snps	chr3:161980902:C>A,chr3:161980907:C>G

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chr3	161980902	161980908	Hyper	3.683856	0	0	0	contamination_double_snps	chr3:161980902:C>A,chr3:161980907:C>G
chr12	116230638	116230647	Hypo	3.682006	0	0	0	contamination_double_snps	chr12:116230638:T>G,chr12:116230646:C>A
chr12	116230638	116230647	Hyper	3.682006	0	0	0	contamination_double_snps	chr12:116230638:T>G,chr12:116230646:C>A
chr10	90602407	90602417	Hypo	3.676441	0	0	0	contamination_double_snps	chr10:90602407:A>C,chr10:90602416:A>C
chr10	90602407	90602417	Hyper	3.676441	0	0	0	contamination_double_snps	chr10:90602407:A>C,chr10:90602416:A>C
chr21	42806163	42806167	Hypo	3.675311	0	0	0	contamination_double_snps	chr21:42806163:T>A,chr21:42806166:A>C
chr21	42806163	42806167	Hyper	3.675311	0	0	0	contamination_double_snps	chr21:42806163:T>A,chr21:42806166:A>C
chr1	158173394	158173400	Hypo	3.67327	0	0	0	contamination_double_snps	chr1:158173394:A>T,chr1:158173399:C>G
chr1	158173394	158173400	Hyper	3.67327	0	0	0	contamination_double_snps	chr1:158173394:A>T,chr1:158173399:C>G
chr2	119563496	119563502	Hypo	3.67327	0	0	0	contamination_double_snps	chr2:119563496:C>G,chr2:119563501:A>T
chr2	119563496	119563502	Hyper	3.67327	0	0	0	contamination_double_snps	chr2:119563496:C>G,chr2:119563501:A>T
chr2	29223423	29223429	Hypo	3.67327	0	0	0	contamination_double_snps	chr2:29223423:G>C,chr2:29223428:C>G
chr2	29223423	29223429	Hyper	3.67327	0	0	0	contamination_double_snps	chr2:29223423:G>C,chr2:29223428:C>G
chr14	58048443	58048453	Hypo	3.672997	0	0	0	contamination_double_snps	chr14:58048443:C>G,chr14:58048452:C>A
chr14	58048443	58048453	Hyper	3.672997	0	0	0	contamination_double_snps	chr14:58048443:C>G,chr14:58048452:C>A
chr12	66409704	66409715	Hypo	3.672906	0	0	0	contamination_double_snps	chr12:66409704:C>G,chr12:66409714:A>C
chr12	66409704	66409715	Hyper	3.672906	0	0	0	contamination_double_snps	chr12:66409704:C>G,chr12:66409714:A>C
chr8	116302932	116302943	Hypo	3.672906	0	0	0	contamination_double_snps	chr8:116302932:C>G,chr8:116302942:G>T
chr8	116302932	116302943	Hyper	3.672906	0	0	0	contamination_double_snps	chr8:116302932:C>G,chr8:116302942:G>T
chr9	73294481	73294487	Hypo	3.669275	0	0	0	contamination_double_snps	chr9:73294481:G>T,chr9:73294486:T>G
chr9	73294481	73294487	Hyper	3.669275	0	0	0	contamination_double_snps	chr9:73294481:G>T,chr9:73294486:T>G
chr12	103565452	103565455	Hypo	3.663533	0	0	0	contamination_double_snps	chr12:103565452:G>C,chr12:103565454:A>T
chr12	103565452	103565455	Hyper	3.663533	0	0	0	contamination_double_snps	chr12:103565452:G>C,chr12:103565454:A>T
chr3	173228907	173228910	Hypo	3.663533	0	0	0	contamination_double_snps	chr3:173228907:G>T,chr3:173228909:C>A
chr3	173228907	173228910	Hyper	3.663533	0	0	0	contamination_double_snps	chr3:173228907:G>T,chr3:173228909:C>A
chr2	22037574	22037577	Hypo	3.663533	0	0	0	contamination_double_snps	chr2:22037574:A>T,chr2:22037576:A>T
chr2	22037574	22037577	Hyper	3.663533	0	0	0	contamination_double_snps	chr2:22037574:A>T,chr2:22037576:A>T
chr4	189476179	189476182	Hypo	3.663533	0	0	0	contamination_double_snps	chr4:189476179:T>G,chr4:189476181:C>G
chr4	189476179	189476182	Hyper	3.663533	0	0	0	contamination_double_snps	chr4:189476179:T>G,chr4:189476181:C>G
chr8	12909682	12909689	Hypo	3.661226	0	0	0	contamination_double_snps	chr8:12909682:T>G,chr8:12909688:T>A
chr8	12909682	12909689	Hyper	3.661226	0	0	0	contamination_double_snps	chr8:12909682:T>G,chr8:12909688:T>A
chr3	132871829	132871832	Hypo	3.658993	0	0	0	contamination_double_snps	chr3:132871829:A>T,chr3:132871831:G>C
chr3	132871829	132871832	Hyper	3.658993	0	0	0	contamination_double_snps	chr3:132871829:A>T,chr3:132871831:G>C
chr6	68101418	68101423	Hypo	3.657268	0	0	0	contamination_double_snps	chr6:68101418:C>G,chr6:68101422:C>A
chr6	68101418	68101423	Hyper	3.657268	0	0	0	contamination_double_snps	chr6:68101418:C>G,chr6:68101422:C>A
chr9	7602715	7602720	Hypo	3.657268	0	0	0	contamination_double_snps	chr9:7602715:A>T,chr9:7602719:G>T
chr9	7602715	7602720	Hyper	3.657268	0	0	0	contamination_double_snps	chr9:7602715:A>T,chr9:7602719:G>T
chr3	16561448	16561457	Hypo	3.655046	0	0	0	contamination_double_snps	chr3:16561448:A>T,chr3:16561456:C>G
chr3	16561448	16561457	Hyper	3.655046	0	0	0	contamination_double_snps	chr3:16561448:A>T,chr3:16561456:C>G
chr13	27309092	27309101	Hypo	3.655046	0	0	0	contamination_double_snps	chr13:27309092:T>G,chr13:27309100:T>A
chr13	27309092	27309101	Hyper	3.655046	0	0	0	contamination_double_snps	chr13:27309092:T>G,chr13:27309100:T>A
chr15	86925782	86925791	Hypo	3.655046	0	0	0	contamination_double_snps	chr15:86925782:C>A,chr15:86925790:C>A

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chr15	86925782	86925791	Hyper	3.655046	0	0	0	contamination_double_snps	chr15:86925782:C>A,chr15:86925790:C>A
chr5	7210794	7210803	Hypo	3.655046	0	0	0	contamination_double_snps	chr5:7210794:G>T,chr5:7210802:A>C
chr5	7210794	7210803	Hyper	3.655046	0	0	0	contamination_double_snps	chr5:7210794:G>T,chr5:7210802:A>C
chr5	125184016	125184025	Hypo	3.655046	0	0	0	contamination_double_snps	chr5:125184016:C>A,chr5:125184024:C>A
chr5	125184016	125184025	Hyper	3.655046	0	0	0	contamination_double_snps	chr5:125184016:C>A,chr5:125184024:C>A
chr17	41065530	41065538	Hypo	3.652131	0	0	0	contamination_double_snps	chr17:41065530:A>T,chr17:41065537:T>A
chr17	41065530	41065538	Hyper	3.652131	0	0	0	contamination_double_snps	chr17:41065530:A>T,chr17:41065537:T>A
chr18	65627717	65627726	Hypo	3.651479	0	0	0	contamination_double_snps	chr18:65627717:C>G,chr18:65627725:C>G
chr18	65627717	65627726	Hyper	3.651479	0	0	0	contamination_double_snps	chr18:65627717:C>G,chr18:65627725:C>G
chr14	95933431	95933437	Hypo	3.643074	0	0	0	contamination_double_snps	chr14:95933431:G>T,chr14:95933436:A>C
chr14	95933431	95933437	Hyper	3.643074	0	0	0	contamination_double_snps	chr14:95933431:G>T,chr14:95933436:A>C
chr13	72369155	72369159	Hypo	3.64249	0	0	0	contamination_double_snps	chr13:72369155:A>C,chr13:72369158:G>T
chr13	72369155	72369159	Hyper	3.64249	0	0	0	contamination_double_snps	chr13:72369155:A>C,chr13:72369158:G>T
chr1	74682252	74682259	Hypo	3.642371	0	0	0	contamination_double_snps	chr1:74682252:A>T,chr1:74682258:C>A
chr1	74682252	74682259	Hyper	3.642371	0	0	0	contamination_double_snps	chr1:74682252:A>T,chr1:74682258:C>A
chr12	82080537	82080544	Hypo	3.642371	0	0	0	contamination_double_snps	chr12:82080537:G>C,chr12:82080543:T>A
chr12	82080537	82080544	Hyper	3.642371	0	0	0	contamination_double_snps	chr12:82080537:G>C,chr12:82080543:T>A
chr11	28670116	28670122	Hypo	3.63908	0	0	0	contamination_double_snps	chr11:28670116:G>T,chr11:28670121:T>A
chr11	28670116	28670122	Hyper	3.63908	0	0	0	contamination_double_snps	chr11:28670116:G>T,chr11:28670121:T>A
chr11	108429199	108429204	Hypo	3.636842	0	0	0	contamination_double_snps	chr11:108429199:A>C,chr11:108429203:T>G
chr11	108429199	108429204	Hyper	3.636842	0	0	0	contamination_double_snps	chr11:108429199:A>C,chr11:108429203:T>G
chr14	56694584	56694589	Hypo	3.636842	0	0	0	contamination_double_snps	chr14:56694584:C>G,chr14:56694588:T>G
chr14	56694584	56694589	Hyper	3.636842	0	0	0	contamination_double_snps	chr14:56694584:C>G,chr14:56694588:T>G
chr5	106611440	106611447	Hypo	3.632192	0	0	0	contamination_double_snps	chr5:106611440:C>A,chr5:106611446:G>C
chr5	106611440	106611447	Hyper	3.632192	0	0	0	contamination_double_snps	chr5:106611440:C>A,chr5:106611446:G>C
chr13	109403614	109403625	Hypo	3.631402	0	0	0	contamination_double_snps	chr13:109403614:A>T,chr13:109403624:T>A
chr13	109403614	109403625	Hyper	3.631402	0	0	0	contamination_double_snps	chr13:109403614:A>T,chr13:109403624:T>A
chr10	129764438	129764440	Hypo	3.630413	0	0	0	contamination_double_snps	chr10:129764438:C>A,chr10:129764439:T>G
chr10	129764438	129764440	Hyper	3.630413	0	0	0	contamination_double_snps	chr10:129764438:C>A,chr10:129764439:T>G
chr8	41193964	41193966	Hypo	3.630413	0	0	0	contamination_double_snps	chr8:41193964:T>G,chr8:41193965:T>G
chr8	41193964	41193966	Hyper	3.630413	0	0	0	contamination_double_snps	chr8:41193964:T>G,chr8:41193965:T>G
chr6	138820723	138820725	Hypo	3.630413	0	0	0	contamination_double_snps	chr6:138820723:T>A,chr6:138820724:T>A
chr6	138820723	138820725	Hyper	3.630413	0	0	0	contamination_double_snps	chr6:138820723:T>A,chr6:138820724:T>A
chr1	119078310	119078312	Hypo	3.630413	0	0	0	contamination_double_snps	chr1:119078310:G>C,chr1:119078311:G>T
chr1	119078310	119078312	Hyper	3.630413	0	0	0	contamination_double_snps	chr1:119078310:G>C,chr1:119078311:G>T
chr2	223005124	223005126	Hypo	3.630413	0	0	0	contamination_double_snps	chr2:223005124:T>G,chr2:223005125:G>T
chr2	223005124	223005126	Hyper	3.630413	0	0	0	contamination_double_snps	chr2:223005124:T>G,chr2:223005125:G>T
chr3	183542725	183542727	Hypo	3.630413	0	0	0	contamination_double_snps	chr3:183542725:A>T,chr3:183542726:G>T
chr3	183542725	183542727	Hyper	3.630413	0	0	0	contamination_double_snps	chr3:183542725:A>T,chr3:183542726:G>T
chr15	79481082	79481090	Hypo	3.630275	0	0	0	contamination_double_snps	chr15:79481082:A>C,chr15:79481089:G>C
chr15	79481082	79481090	Hyper	3.630275	0	0	0	contamination_double_snps	chr15:79481082:A>C,chr15:79481089:G>C
chr3	21866735	21866744	Hyp	3.624519	0	0	0	contamination_double_snps	chr3:21866735:C>A,chr3:21866743:A>C

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chr3	21866735	21866744	Hyper	3.624519	0	0	0	contamination_double_snps	chr3:21866735:C>A,chr3:21866743:A>C
chr3	172122239	172122245	Hypo	3.623465	0	0	0	contamination_double_snps	chr3:172122239:G>C,chr3:172122244:T>G
chr3	172122239	172122245	Hyper	3.623465	0	0	0	contamination_double_snps	chr3:172122239:G>C,chr3:172122244:T>G
chr16	79781589	79781595	Hypo	3.623465	0	0	0	contamination_double_snps	chr16:79781589:T>G,chr16:79781594:T>A
chr16	79781589	79781595	Hyper	3.623465	0	0	0	contamination_double_snps	chr16:79781589:T>G,chr16:79781594:T>A
chr18	50927103	50927107	Hypo	3.621176	0	0	0	contamination_double_snps	chr18:50927103:T>G,chr18:50927106:G>C
chr18	50927103	50927107	Hyper	3.621176	0	0	0	contamination_double_snps	chr18:50927103:T>G,chr18:50927106:G>C
chr14	51839978	51839982	Hypo	3.621176	0	0	0	contamination_double_snps	chr14:51839978:A>T,chr14:51839981:C>G
chr14	51839978	51839982	Hyper	3.621176	0	0	0	contamination_double_snps	chr14:51839978:A>T,chr14:51839981:C>G
chr14	72730027	72730038	Hypo	3.619251	0	0	0	contamination_double_snps	chr14:72730027:G>C,chr14:72730037:T>G
chr14	72730027	72730038	Hyper	3.619251	0	0	0	contamination_double_snps	chr14:72730027:G>C,chr14:72730037:T>G
chr16	28073431	28073439	Hypo	3.615818	0	0	0	contamination_double_snps	chr16:28073431:C>G,chr16:28073438:G>C
chr16	28073431	28073439	Hyper	3.615818	0	0	0	contamination_double_snps	chr16:28073431:C>G,chr16:28073438:G>C
chr1	152442406	152442415	Hypo	3.610577	0	0	0	contamination_double_snps	chr1:152442406:A>C,chr1:152442414:A>C
chr1	152442406	152442415	Hyper	3.610577	0	0	0	contamination_double_snps	chr1:152442406:A>C,chr1:152442414:A>C
chr7	14791571	14791581	Hypo	3.607475	0	0	0	contamination_double_snps	chr7:14791571:G>C,chr7:14791580:T>G
chr7	14791571	14791581	Hyper	3.607475	0	0	0	contamination_double_snps	chr7:14791571:G>C,chr7:14791580:T>G
chr7	156880917	156880920	Hypo	3.606937	0	0	0	contamination_double_snps	chr7:156880917:G>T,chr7:156880919:G>C
chr7	156880917	156880920	Hyper	3.606937	0	0	0	contamination_double_snps	chr7:156880917:G>T,chr7:156880919:G>C
chr1	9402517	9402520	Hypo	3.606937	0	0	0	contamination_double_snps	chr1:9402517:T>G,chr1:9402519:T>G
chr1	9402517	9402520	Hyper	3.606937	0	0	0	contamination_double_snps	chr1:9402517:T>G,chr1:9402519:T>G
chr10	8074010	8074021	Hypo	3.606239	0	0	0	contamination_double_snps	chr10:8074010:T>G,chr10:8074020:A>C
chr10	8074010	8074021	Hyper	3.606239	0	0	0	contamination_double_snps	chr10:8074010:T>G,chr10:8074020:A>C
chr5	1938372	1938380	Hypo	3.606015	0	0	0	contamination_double_snps	chr5:1938372:G>C,chr5:1938379:C>G
chr5	1938372	1938380	Hyper	3.606015	0	0	0	contamination_double_snps	chr5:1938372:G>C,chr5:1938379:C>G
chr4	136942434	136942444	Hypo	3.604032	0	0	0	contamination_double_snps	chr4:136942434:C>G,chr4:136942443:T>G
chr4	136942434	136942444	Hyper	3.604032	0	0	0	contamination_double_snps	chr4:136942434:C>G,chr4:136942443:T>G
chr18	60649125	60649131	Hypo	3.603856	0	0	0	contamination_double_snps	chr18:60649125:C>G,chr18:60649130:C>A
chr18	60649125	60649131	Hyper	3.603856	0	0	0	contamination_double_snps	chr18:60649125:C>G,chr18:60649130:C>A
chr8	13516830	13516838	Hypo	3.602317	0	0	0	contamination_double_snps	chr8:13516830:G>C,chr8:13516837:T>G
chr8	13516830	13516838	Hyper	3.602317	0	0	0	contamination_double_snps	chr8:13516830:G>C,chr8:13516837:T>G
chr5	129519146	129519156	Hypo	3.594905	0	0	0	contamination_double_snps	chr5:129519146:C>G,chr5:129519155:C>A
chr5	129519146	129519156	Hyper	3.594905	0	0	0	contamination_double_snps	chr5:129519146:C>G,chr5:129519155:C>A
chr6	14373430	14373432	Hypo	3.594466	0	0	0	contamination_double_snps	chr6:14373430:T>G,chr6:14373431:G>C
chr6	14373430	14373432	Hyper	3.594466	0	0	0	contamination_double_snps	chr6:14373430:T>G,chr6:14373431:G>C
chr1	181425312	181425314	Hypo	3.594466	0	0	0	contamination_double_snps	chr1:181425312:A>C,chr1:181425313:T>A
chr1	181425312	181425314	Hyper	3.594466	0	0	0	contamination_double_snps	chr1:181425312:A>C,chr1:181425313:T>A
chr13	96135830	96135832	Hypo	3.594466	0	0	0	contamination_double_snps	chr13:96135830:C>G,chr13:96135831:G>C
chr13	96135830	96135832	Hyper	3.594466	0	0	0	contamination_double_snps	chr13:96135830:C>G,chr13:96135831:G>C
chr2	205138871	205138873	Hypo	3.594466	0	0	0	contamination_double_snps	chr2:205138871:G>C,chr2:205138872:G>C
chr2	205138871	205138873	Hyper	3.594466	0	0	0	contamination_double_snps	chr2:205138871:G>C,chr2:205138872:G>C
chr13	36370309	36370311	Hypo	3.594466	0	0	0	contamination_double_snps	chr13:36370309:A>C,chr13:36370310:A>C

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chr13	36370309	36370311	Hyper	3.594466	0	0	0	contamination_double_snps	chr13:36370309:A>C,chr13:36370310:A>C
chr12	67481176	67481178	Hypo	3.594466	0	0	0	contamination_double_snps	chr12:67481176:A>T,chr12:67481177:C>G
chr12	67481176	67481178	Hyper	3.594466	0	0	0	contamination_double_snps	chr12:67481176:A>T,chr12:67481177:C>G
chr2	34437929	34437931	Hypo	3.594466	0	0	0	contamination_double_snps	chr2:34437929:A>T,chr2:34437930:A>T
chr2	34437929	34437931	Hyper	3.594466	0	0	0	contamination_double_snps	chr2:34437929:A>T,chr2:34437930:A>T
chr16	48704867	48704869	Hypo	3.594466	0	0	0	contamination_double_snps	chr16:48704867:T>A,chr16:48704868:C>A
chr16	48704867	48704869	Hyper	3.594466	0	0	0	contamination_double_snps	chr16:48704867:T>A,chr16:48704868:C>A
chr1	77110658	77110660	Hypo	3.594466	0	0	0	contamination_double_snps	chr1:77110658:C>G,chr1:77110659:T>A
chr1	77110658	77110660	Hyper	3.594466	0	0	0	contamination_double_snps	chr1:77110658:C>G,chr1:77110659:T>A
chr8	60109227	60109229	Hypo	3.594466	0	0	0	contamination_double_snps	chr8:60109227:G>T,chr8:60109228:T>G
chr8	60109227	60109229	Hyper	3.594466	0	0	0	contamination_double_snps	chr8:60109227:G>T,chr8:60109228:T>G
chr18	66252180	66252182	Hypo	3.594466	0	0	0	contamination_double_snps	chr18:66252180:A>T,chr18:66252181:C>A
chr18	66252180	66252182	Hyper	3.594466	0	0	0	contamination_double_snps	chr18:66252180:A>T,chr18:66252181:C>A
chr9	107477914	107477916	Hypo	3.594466	0	0	0	contamination_double_snps	chr9:107477914:T>G,chr9:107477915:T>A
chr9	107477914	107477916	Hyper	3.594466	0	0	0	contamination_double_snps	chr9:107477914:T>G,chr9:107477915:T>A
chr12	107086239	107086245	Hypo	3.59327	0	0	0	contamination_double_snps	chr12:107086239:G>T,chr12:107086244:G>T
chr12	107086239	107086245	Hyper	3.59327	0	0	0	contamination_double_snps	chr12:107086239:G>T,chr12:107086244:G>T
chr11	107121965	107121971	Hypo	3.59327	0	0	0	contamination_double_snps	chr11:107121965:G>T,chr11:107121970:C>G
chr11	107121965	107121971	Hyper	3.59327	0	0	0	contamination_double_snps	chr11:107121965:G>T,chr11:107121970:C>G
chr17	51655065	51655071	Hypo	3.59327	0	0	0	contamination_double_snps	chr17:51655065:T>A,chr17:51655070:C>A
chr17	51655065	51655071	Hyper	3.59327	0	0	0	contamination_double_snps	chr17:51655065:T>A,chr17:51655070:C>A
chr3	30124939	30124950	Hypo	3.589898	0	0	0	contamination_double_snps	chr3:30124939:A>C,chr3:30124949:C>G
chr3	30124939	30124950	Hyper	3.589898	0	0	0	contamination_double_snps	chr3:30124939:A>C,chr3:30124949:C>G
chr7	50878597	50878601	Hypo	3.588354	0	0	0	contamination_double_snps	chr7:50878597:G>C,chr7:50878600:G>C
chr7	50878597	50878601	Hyper	3.588354	0	0	0	contamination_double_snps	chr7:50878597:G>C,chr7:50878600:G>C
chr2	124366185	124366189	Hypo	3.588354	0	0	0	contamination_double_snps	chr2:124366185:A>C,chr2:124366188:T>A
chr2	124366185	124366189	Hyper	3.588354	0	0	0	contamination_double_snps	chr2:124366185:A>C,chr2:124366188:T>A
chr16	58296039	58296047	Hypo	3.587859	0	0	0	contamination_double_snps	chr16:58296039:G>C,chr16:58296046:C>G
chr16	58296039	58296047	Hyper	3.587859	0	0	0	contamination_double_snps	chr16:58296039:G>C,chr16:58296046:C>G
chr1	217912904	217912908	Hypo	3.584012	0	0	0	contamination_double_snps	chr1:217912904:G>T,chr1:217912907:A>C
chr1	217912904	217912908	Hyper	3.584012	0	0	0	contamination_double_snps	chr1:217912904:G>T,chr1:217912907:A>C
chr21	39695308	39695317	Hypo	3.583617	0	0	0	contamination_double_snps	chr21:39695308:A>T,chr21:39695316:T>G
chr21	39695308	39695317	Hyper	3.583617	0	0	0	contamination_double_snps	chr21:39695308:A>T,chr21:39695316:T>G
chr2	202597628	202597637	Hypo	3.583617	0	0	0	contamination_double_snps	chr2:202597628:G>T,chr2:202597636:C>A
chr2	202597628	202597637	Hyper	3.583617	0	0	0	contamination_double_snps	chr2:202597628:G>T,chr2:202597636:C>A
chr2	208495050	208495059	Hypo	3.583617	0	0	0	contamination_double_snps	chr2:208495050:A>T,chr2:208495058:C>A
chr2	208495050	208495059	Hyper	3.583617	0	0	0	contamination_double_snps	chr2:208495050:A>T,chr2:208495058:C>A
chr2	137967024	137967034	Hypo	3.581445	0	0	0	contamination_double_snps	chr2:137967024:G>T,chr2:137967033:T>G
chr2	137967024	137967034	Hyper	3.581445	0	0	0	contamination_double_snps	chr2:137967024:G>T,chr2:137967033:T>G
chr8	76306256	76306266	Hypo	3.581445	0	0	0	contamination_double_snps	chr8:76306256:G>T,chr8:76306265:T>A
chr8	76306256	76306266	Hyper	3.581445	0	0	0	contamination_double_snps	chr8:76306256:G>T,chr8:76306265:T>A
chr3	182670985	182670993	Hypo	3.578056	0	0	0	contamination_double_snps	chr3:182670985:A>T,chr3:182670992:A>T

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chr3	182670985	182670993	Hyper	3.578056	0	0	0	contamination_double_snps	chr3:182670985:A>T,chr3:182670992:A>T
chr8	37221556	37221564	Hypo	3.578056	0	0	0	contamination_double_snps	chr8:37221556:C>G,chr8:37221563:G>C
chr8	37221556	37221564	Hyper	3.578056	0	0	0	contamination_double_snps	chr8:37221556:C>G,chr8:37221563:G>C
chr10	14832299	14832309	Hypo	3.578001	0	0	0	contamination_double_snps	chr10:14832299:T>A,chr10:14832308:C>G
chr10	14832299	14832309	Hyper	3.578001	0	0	0	contamination_double_snps	chr10:14832299:T>A,chr10:14832308:C>G
chr5	133558682	133558692	Hypo	3.578001	0	0	0	contamination_double_snps	chr5:133558682:T>A,chr5:133558691:T>A
chr5	133558682	133558692	Hyper	3.578001	0	0	0	contamination_double_snps	chr5:133558682:T>A,chr5:133558691:T>A
chr16	83343537	83343542	Hypo	3.573935	0	0	0	contamination_double_snps	chr16:83343537:C>G,chr16:83343541:G>C
chr16	83343537	83343542	Hyper	3.573935	0	0	0	contamination_double_snps	chr16:83343537:C>G,chr16:83343541:G>C
chr11	3193472	3193475	Hypo	3.572624	0	0	0	contamination_double_snps	chr11:3193472:T>A,chr11:3193474:A>C
chr11	3193472	3193475	Hyper	3.572624	0	0	0	contamination_double_snps	chr11:3193472:T>A,chr11:3193474:A>C
chr11	123362757	123362760	Hypo	3.572624	0	0	0	contamination_double_snps	chr11:123362757:C>G,chr11:123362759:C>G
chr11	123362757	123362760	Hyper	3.572624	0	0	0	contamination_double_snps	chr11:123362757:C>G,chr11:123362759:C>G
chr12	52727255	52727258	Hypo	3.572624	0	0	0	contamination_double_snps	chr12:52727255:G>T,chr12:52727257:T>G
chr12	52727255	52727258	Hyper	3.572624	0	0	0	contamination_double_snps	chr12:52727255:G>T,chr12:52727257:T>G
chr17	80807467	80807470	Hypo	3.572624	0	0	0	contamination_double_snps	chr17:80807467:G>T,chr17:80807469:G>C
chr17	80807467	80807470	Hyper	3.572624	0	0	0	contamination_double_snps	chr17:80807467:G>T,chr17:80807469:G>C
chr13	24234368	24234375	Hypo	3.565448	0	0	0	contamination_double_snps	chr13:24234368:G>T,chr13:24234374:A>T
chr13	24234368	24234375	Hyper	3.565448	0	0	0	contamination_double_snps	chr13:24234368:G>T,chr13:24234374:A>T
chr3	72211115	72211126	Hypo	3.564735	0	0	0	contamination_double_snps	chr3:72211115:G>T,chr3:72211125:T>G
chr3	72211115	72211126	Hyper	3.564735	0	0	0	contamination_double_snps	chr3:72211115:G>T,chr3:72211125:T>G
chr4	20238978	20238988	Hypo	3.56454	0	0	0	contamination_double_snps	chr4:20238978:G>T,chr4:20238987:A>T
chr4	20238978	20238988	Hyper	3.56454	0	0	0	contamination_double_snps	chr4:20238978:G>T,chr4:20238987:A>T
chr6	48504480	48504491	Hypo	3.561406	0	0	0	contamination_double_snps	chr6:48504480:A>C,chr6:48504490:A>C
chr6	48504480	48504491	Hyper	3.561406	0	0	0	contamination_double_snps	chr6:48504480:A>C,chr6:48504490:A>C
chr5	84177956	84177964	Hypo	3.5599	0	0	0	contamination_double_snps	chr5:84177956:G>T,chr5:84177963:C>A
chr5	84177956	84177964	Hyper	3.5599	0	0	0	contamination_double_snps	chr5:84177956:G>T,chr5:84177963:C>A
chr2	45209306	45209314	Hypo	3.5599	0	0	0	contamination_double_snps	chr2:45209306:T>G,chr2:45209313:G>C
chr2	45209306	45209314	Hyper	3.5599	0	0	0	contamination_double_snps	chr2:45209306:T>G,chr2:45209313:G>C
chr17	48048713	48048721	Hypo	3.5599	0	0	0	contamination_double_snps	chr17:48048713:C>G,chr17:48048720:T>A
chr17	48048713	48048721	Hyper	3.5599	0	0	0	contamination_double_snps	chr17:48048713:C>G,chr17:48048720:T>A
chr1	177321385	177321393	Hypo	3.5599	0	0	0	contamination_double_snps	chr1:177321385:T>A,chr1:177321392:C>G
chr1	177321385	177321393	Hyper	3.5599	0	0	0	contamination_double_snps	chr1:177321385:T>A,chr1:177321392:C>G
chr20	22014859	22014861	Hypo	3.558519	0	0	0	contamination_double_snps	chr20:22014859:T>A,chr20:22014860:T>A
chr20	22014859	22014861	Hyper	3.558519	0	0	0	contamination_double_snps	chr20:22014859:T>A,chr20:22014860:T>A
chr10	104244321	104244323	Hypo	3.558519	0	0	0	contamination_double_snps	chr10:104244321:T>G,chr10:104244322:T>A
chr10	104244321	104244323	Hyper	3.558519	0	0	0	contamination_double_snps	chr10:104244321:T>G,chr10:104244322:T>A
chr6	45563734	45563736	Hypo	3.558519	0	0	0	contamination_double_snps	chr6:45563734:C>A,chr6:45563735:G>C
chr6	45563734	45563736	Hyper	3.558519	0	0	0	contamination_double_snps	chr6:45563734:C>A,chr6:45563735:G>C
chr1	219925001	219925003	Hypo	3.558519	0	0	0	contamination_double_snps	chr1:219925001:A>C,chr1:219925002:G>C
chr1	219925001	219925003	Hyper	3.558519	0	0	0	contamination_double_snps	chr1:219925001:A>C,chr1:219925002:G>C
chr10	103048085	103048087	Hypo	3.558519	0	0	0	contamination_double_snps	chr10:103048085:G>C,chr10:103048086:G>T

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chr10	103048085	103048087	Hyper	3.558519	0	0	0	contamination_double_snps	chr10:103048085:G>C,chr10:103048086:G>T
chr4	98803265	98803267	Hypo	3.558519	0	0	0	contamination_double_snps	chr4:98803265:G>T,chr4:98803266:T>A
chr4	98803265	98803267	Hyper	3.558519	0	0	0	contamination_double_snps	chr4:98803265:G>T,chr4:98803266:T>A
chr1	207124929	207124931	Hypo	3.558519	0	0	0	contamination_double_snps	chr1:207124929:G>T,chr1:207124930:G>C
chr1	207124929	207124931	Hyper	3.558519	0	0	0	contamination_double_snps	chr1:207124929:G>T,chr1:207124930:G>C
chr15	71538443	71538445	Hypo	3.558519	0	0	0	contamination_double_snps	chr15:71538443:C>A,chr15:71538444:T>A
chr15	71538443	71538445	Hyper	3.558519	0	0	0	contamination_double_snps	chr15:71538443:C>A,chr15:71538444:T>A
chr10	29016273	29016275	Hypo	3.558519	0	0	0	contamination_double_snps	chr10:29016273:T>A,chr10:29016274:A>C
chr10	29016273	29016275	Hyper	3.558519	0	0	0	contamination_double_snps	chr10:29016273:T>A,chr10:29016274:A>C
chr2	185609754	185609756	Hypo	3.558519	0	0	0	contamination_double_snps	chr2:185609754:T>G,chr2:185609755:T>A
chr2	185609754	185609756	Hyper	3.558519	0	0	0	contamination_double_snps	chr2:185609754:T>G,chr2:185609755:T>A
chr6	145953337	145953339	Hypo	3.558519	0	0	0	contamination_double_snps	chr6:145953337:T>A,chr6:145953338:A>C
chr6	145953337	145953339	Hyper	3.558519	0	0	0	contamination_double_snps	chr6:145953337:T>A,chr6:145953338:A>C
chr1	246161252	246161254	Hypo	3.558519	0	0	0	contamination_double_snps	chr1:246161252:T>G,chr1:246161253:G>C
chr1	246161252	246161254	Hyper	3.558519	0	0	0	contamination_double_snps	chr1:246161252:T>G,chr1:246161253:G>C
chr13	53644106	53644108	Hypo	3.558519	0	0	0	contamination_double_snps	chr13:53644106:A>C,chr13:53644107:C>A
chr13	53644106	53644108	Hyper	3.558519	0	0	0	contamination_double_snps	chr13:53644106:A>C,chr13:53644107:C>A
chr10	78908653	78908655	Hypo	3.558519	0	0	0	contamination_double_snps	chr10:78908653:A>C,chr10:78908654:G>C
chr10	78908653	78908655	Hyper	3.558519	0	0	0	contamination_double_snps	chr10:78908653:A>C,chr10:78908654:G>C
chr7	82954614	82954616	Hypo	3.558519	0	0	0	contamination_double_snps	chr7:82954614:C>A,chr7:82954615:G>C
chr7	82954614	82954616	Hyper	3.558519	0	0	0	contamination_double_snps	chr7:82954614:C>A,chr7:82954615:G>C
chr17	71157069	71157071	Hypo	3.558519	0	0	0	contamination_double_snps	chr17:71157069:A>C,chr17:71157070:G>C
chr17	71157069	71157071	Hyper	3.558519	0	0	0	contamination_double_snps	chr17:71157069:A>C,chr17:71157070:G>C
chr4	91296993	91296995	Hypo	3.558519	0	0	0	contamination_double_snps	chr4:91296993:A>T,chr4:91296994:A>C
chr4	91296993	91296995	Hyper	3.558519	0	0	0	contamination_double_snps	chr4:91296993:A>T,chr4:91296994:A>C
chr7	104017222	104017224	Hypo	3.558519	0	0	0	contamination_double_snps	chr7:104017222:G>T,chr7:104017223:A>T
chr7	104017222	104017224	Hyper	3.558519	0	0	0	contamination_double_snps	chr7:104017222:G>T,chr7:104017223:A>T
chr9	28628805	28628807	Hypo	3.558519	0	0	0	contamination_double_snps	chr9:28628805:T>A,chr9:28628806:C>G
chr9	28628805	28628807	Hyper	3.558519	0	0	0	contamination_double_snps	chr9:28628805:T>A,chr9:28628806:C>G
chr2	6156880	6156882	Hypo	3.558519	0	0	0	contamination_double_snps	chr2:6156880:T>A,chr2:6156881:A>T
chr2	6156880	6156882	Hyper	3.558519	0	0	0	contamination_double_snps	chr2:6156880:T>A,chr2:6156881:A>T
chr14	55905230	55905232	Hypo	3.558519	0	0	0	contamination_double_snps	chr14:55905230:C>G,chr14:55905231:C>G
chr14	55905230	55905232	Hyper	3.558519	0	0	0	contamination_double_snps	chr14:55905230:C>G,chr14:55905231:C>G
chr20	55131786	55131788	Hypo	3.558519	0	0	0	contamination_double_snps	chr20:55131786:T>G,chr20:55131787:T>G
chr20	55131786	55131788	Hyper	3.558519	0	0	0	contamination_double_snps	chr20:55131786:T>G,chr20:55131787:T>G
chr4	36055521	36055523	Hypo	3.558519	0	0	0	contamination_double_snps	chr4:36055521:G>T,chr4:36055522:C>G
chr4	36055521	36055523	Hyper	3.558519	0	0	0	contamination_double_snps	chr4:36055521:G>T,chr4:36055522:C>G
chr16	79212606	79212615	Hypo	3.556657	0	0	0	contamination_double_snps	chr16:79212606:G>C,chr16:79212614:C>A
chr16	79212606	79212615	Hyper	3.556657	0	0	0	contamination_double_snps	chr16:79212606:G>C,chr16:79212614:C>A
chr3	126088329	126088338	Hypo	3.556657	0	0	0	contamination_double_snps	chr3:126088329:G>C,chr3:126088337:C>A
chr3	126088329	126088338	Hyper	3.556657	0	0	0	contamination_double_snps	chr3:126088329:G>C,chr3:126088337:C>A
chr7	147970415	147970424	Hypo	3.556657	0	0	0	contamination_double_snps	chr7:147970415:G>C,chr7:147970423:T>A

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chr7	147970415	147970424	Hyper	3.556657	0	0	0	contamination_double_snps	chr7:147970415:G>C,chr7:147970423:T>A
chr2	101341843	101341847	Hypo	3.555533	0	0	0	contamination_double_snps	chr2:101341843:G>T,chr2:101341846:C>A
chr2	101341843	101341847	Hyper	3.555533	0	0	0	contamination_double_snps	chr2:101341843:G>T,chr2:101341846:C>A
chr8	6092094	6092101	Hypo	3.555269	0	0	0	contamination_double_snps	chr8:6092094:G>C,chr8:6092100:C>G
chr8	6092094	6092101	Hyper	3.555269	0	0	0	contamination_double_snps	chr8:6092094:G>C,chr8:6092100:C>G
chr14	21495348	21495355	Hypo	3.555269	0	0	0	contamination_double_snps	chr14:21495348:G>C,chr14:21495354:C>A
chr14	21495348	21495355	Hyper	3.555269	0	0	0	contamination_double_snps	chr14:21495348:G>C,chr14:21495354:C>A
chr17	60831836	60831847	Hypo	3.552584	0	0	0	contamination_double_snps	chr17:60831836:T>G,chr17:60831846:C>A
chr17	60831836	60831847	Hyper	3.552584	0	0	0	contamination_double_snps	chr17:60831836:T>G,chr17:60831846:C>A
chr3	68585765	68585775	Hypo	3.551971	0	0	0	contamination_double_snps	chr3:68585765:T>G,chr3:68585774:A>T
chr3	68585765	68585775	Hyper	3.551971	0	0	0	contamination_double_snps	chr3:68585765:T>G,chr3:68585774:A>T
chr2	109881551	109881557	Hypo	3.543465	0	0	0	contamination_double_snps	chr2:109881551:T>A,chr2:109881556:A>C
chr2	109881551	109881557	Hyper	3.543465	0	0	0	contamination_double_snps	chr2:109881551:T>A,chr2:109881556:A>C
chr4	44908412	44908423	Hypo	3.539572	0	0	0	contamination_double_snps	chr4:44908412:G>T,chr4:44908422:G>T
chr4	44908412	44908423	Hyper	3.539572	0	0	0	contamination_double_snps	chr4:44908412:G>T,chr4:44908422:G>T
chr9	33146392	33146401	Hypo	3.539149	0	0	0	contamination_double_snps	chr9:33146392:C>A,chr9:33146400:T>A
chr9	33146392	33146401	Hyper	3.539149	0	0	0	contamination_double_snps	chr9:33146392:C>A,chr9:33146400:T>A
chr5	67412587	67412596	Hypo	3.539149	0	0	0	contamination_double_snps	chr5:67412587:G>C,chr5:67412595:T>G
chr5	67412587	67412596	Hyper	3.539149	0	0	0	contamination_double_snps	chr5:67412587:G>C,chr5:67412595:T>G
chr1	98918433	98918443	Hypo	3.53851	0	0	0	contamination_double_snps	chr1:98918433:T>G,chr1:98918442:A>C
chr1	98918433	98918443	Hyper	3.53851	0	0	0	contamination_double_snps	chr1:98918433:T>G,chr1:98918442:A>C
chr1	30656037	30656047	Hypo	3.53851	0	0	0	contamination_double_snps	chr1:30656037:C>G,chr1:30656046:C>G
chr1	30656037	30656047	Hyper	3.53851	0	0	0	contamination_double_snps	chr1:30656037:C>G,chr1:30656046:C>G
chr4	44707938	44707941	Hypo	3.538311	0	0	0	contamination_double_snps	chr4:44707938:G>T,chr4:44707940:C>A
chr4	44707938	44707941	Hyper	3.538311	0	0	0	contamination_double_snps	chr4:44707938:G>T,chr4:44707940:C>A
chr7	14032649	14032656	Hypo	3.536414	0	0	0	contamination_double_snps	chr7:14032649:A>C,chr7:14032655:T>A
chr7	14032649	14032656	Hyper	3.536414	0	0	0	contamination_double_snps	chr7:14032649:A>C,chr7:14032655:T>A
chr2	133440226	133440237	Hypo	3.536243	0	0	0	contamination_double_snps	chr2:133440226:A>C,chr2:133440236:A>T
chr2	133440226	133440237	Hyper	3.536243	0	0	0	contamination_double_snps	chr2:133440226:A>C,chr2:133440236:A>T
chr1	214619100	214619102	Hypo	3.535175	0	0	0	contamination_double_snps	chr1:214619100:C>A,chr1:214619101:C>A
chr1	214619100	214619102	Hyper	3.535175	0	0	0	contamination_double_snps	chr1:214619100:C>A,chr1:214619101:C>A
chr12	7297418	7297420	Hypo	3.535175	0	0	0	contamination_double_snps	chr12:7297418:G>T,chr12:7297419:A>T
chr12	7297418	7297420	Hyper	3.535175	0	0	0	contamination_double_snps	chr12:7297418:G>T,chr12:7297419:A>T
chr7	16157196	16157198	Hypo	3.535175	0	0	0	contamination_double_snps	chr7:16157196:C>A,chr7:16157197:G>C
chr7	16157196	16157198	Hyper	3.535175	0	0	0	contamination_double_snps	chr7:16157196:C>A,chr7:16157197:G>C
chr13	64668442	64668444	Hypo	3.535175	0	0	0	contamination_double_snps	chr13:64668442:T>G,chr13:64668443:A>T
chr13	64668442	64668444	Hyper	3.535175	0	0	0	contamination_double_snps	chr13:64668442:T>G,chr13:64668443:A>T
chr7	81789565	81789567	Hypo	3.535175	0	0	0	contamination_double_snps	chr7:81789565:A>C,chr7:81789566:G>C
chr7	81789565	81789567	Hyper	3.535175	0	0	0	contamination_double_snps	chr7:81789565:A>C,chr7:81789566:G>C
chr2	209949181	209949183	Hypo	3.535175	0	0	0	contamination_double_snps	chr2:209949181:C>G,chr2:209949182:A>T
chr2	209949181	209949183	Hyper	3.535175	0	0	0	contamination_double_snps	chr2:209949181:C>G,chr2:209949182:A>T
chr18	20452098	20452100	Hypo	3.535175	0	0	0	contamination_double_snps	chr18:20452098:A>T,chr18:20452099:G>C

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chr18	20452098	20452100	Hyper	3.535175	0	0	0	contamination_double_snps	chr18:20452098:A>T,chr18:20452099:G>C
chr9	9152924	9152926	Hypo	3.535175	0	0	0	contamination_double_snps	chr9:9152924:T>G,chr9:9152925:T>G
chr9	9152924	9152926	Hyper	3.535175	0	0	0	contamination_double_snps	chr9:9152924:T>G,chr9:9152925:T>G
chr5	130438646	130438648	Hypo	3.535175	0	0	0	contamination_double_snps	chr5:130438646:C>G,chr5:130438647:T>G
chr5	130438646	130438648	Hyper	3.535175	0	0	0	contamination_double_snps	chr5:130438646:C>G,chr5:130438647:T>G
chr3	133067848	133067850	Hypo	3.535175	0	0	0	contamination_double_snps	chr3:133067848:T>G,chr3:133067849:C>A
chr3	133067848	133067850	Hyper	3.535175	0	0	0	contamination_double_snps	chr3:133067848:T>G,chr3:133067849:C>A
chr13	31932632	31932634	Hypo	3.535175	0	0	0	contamination_double_snps	chr13:31932632:C>A,chr13:31932633:G>T
chr13	31932632	31932634	Hyper	3.535175	0	0	0	contamination_double_snps	chr13:31932632:C>A,chr13:31932633:G>T
chr1	54735222	54735224	Hypo	3.535175	0	0	0	contamination_double_snps	chr1:54735222:T>G,chr1:54735223:C>A
chr1	54735222	54735224	Hyper	3.535175	0	0	0	contamination_double_snps	chr1:54735222:T>G,chr1:54735223:C>A
chr11	129429827	129429829	Hypo	3.535175	0	0	0	contamination_double_snps	chr11:129429827:C>G,chr11:129429828:T>A
chr11	129429827	129429829	Hyper	3.535175	0	0	0	contamination_double_snps	chr11:129429827:C>G,chr11:129429828:T>A
chr1	31248431	31248435	Hypo	3.534219	0	0	0	contamination_double_snps	chr1:31248431:A>C,chr1:31248434:G>T
chr1	31248431	31248435	Hyper	3.534219	0	0	0	contamination_double_snps	chr1:31248431:A>C,chr1:31248434:G>T
chr14	67984369	67984373	Hypo	3.534219	0	0	0	contamination_double_snps	chr14:67984369:T>A,chr14:67984372:C>G
chr14	67984369	67984373	Hyper	3.534219	0	0	0	contamination_double_snps	chr14:67984369:T>A,chr14:67984372:C>G
chr3	184455238	184455246	Hypo	3.531941	0	0	0	contamination_double_snps	chr3:184455238:A>T,chr3:184455245:T>A
chr3	184455238	184455246	Hyper	3.531941	0	0	0	contamination_double_snps	chr3:184455238:A>T,chr3:184455245:T>A
chr8	87821591	87821599	Hypo	3.531941	0	0	0	contamination_double_snps	chr8:87821591:C>A,chr8:87821598:T>G
chr8	87821591	87821599	Hyper	3.531941	0	0	0	contamination_double_snps	chr8:87821591:C>A,chr8:87821598:T>G
chr20	41669260	41669268	Hypo	3.531941	0	0	0	contamination_double_snps	chr20:41669260:G>C,chr20:41669267:A>C
chr20	41669260	41669268	Hyper	3.531941	0	0	0	contamination_double_snps	chr20:41669260:G>C,chr20:41669267:A>C
chr14	52738015	52738023	Hypo	3.531941	0	0	0	contamination_double_snps	chr14:52738015:G>T,chr14:52738022:G>T
chr14	52738015	52738023	Hyper	3.531941	0	0	0	contamination_double_snps	chr14:52738015:G>T,chr14:52738022:G>T
chr14	34307255	34307263	Hypo	3.531941	0	0	0	contamination_double_snps	chr14:34307255:C>G,chr14:34307262:G>T
chr14	34307255	34307263	Hyper	3.531941	0	0	0	contamination_double_snps	chr14:34307255:C>G,chr14:34307262:G>T
chr3	29390978	29390987	Hypo	3.529696	0	0	0	contamination_double_snps	chr3:29390978:C>G,chr3:29390986:T>G
chr3	29390978	29390987	Hyper	3.529696	0	0	0	contamination_double_snps	chr3:29390978:C>G,chr3:29390986:T>G
chr5	177733688	177733699	Hypo	3.523231	0	0	0	contamination_double_snps	chr5:177733688:C>G,chr5:177733698:G>C
chr5	177733688	177733699	Hyper	3.523231	0	0	0	contamination_double_snps	chr5:177733688:C>G,chr5:177733698:G>C
chr6	20582142	20582144	Hypo	3.522572	0	0	0	contamination_double_snps	chr6:20582142:A>C,chr6:20582143:G>T
chr6	20582142	20582144	Hyper	3.522572	0	0	0	contamination_double_snps	chr6:20582142:A>C,chr6:20582143:G>T
chr4	108383511	108383513	Hypo	3.522572	0	0	0	contamination_double_snps	chr4:108383511:C>A,chr4:108383512:C>G
chr4	108383511	108383513	Hyper	3.522572	0	0	0	contamination_double_snps	chr4:108383511:C>A,chr4:108383512:C>G
chr12	108723038	108723040	Hypo	3.522572	0	0	0	contamination_double_snps	chr12:108723038:G>T,chr12:108723039:A>T
chr12	108723038	108723040	Hyper	3.522572	0	0	0	contamination_double_snps	chr12:108723038:G>T,chr12:108723039:A>T
chr6	101623344	101623346	Hypo	3.522572	0	0	0	contamination_double_snps	chr6:101623344:G>T,chr6:101623345:A>T
chr6	101623344	101623346	Hyper	3.522572	0	0	0	contamination_double_snps	chr6:101623344:G>T,chr6:101623345:A>T
chr7	118253528	118253533	Hypo	3.522055	0	0	0	contamination_double_snps	chr7:118253528:T>G,chr7:118253532:A>T
chr7	118253528	118253533	Hyper	3.522055	0	0	0	contamination_double_snps	chr7:118253528:T>G,chr7:118253532:A>T
chr1	202149131	202149136	Hypo	3.522055	0	0	0	contamination_double_snps	chr1:202149131:C>G,chr1:202149135:A>T

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chr1	202149131	202149136	Hyper	3.522055	0	0	0	contamination_double_snps	chr1:202149131:C>G,chr1:202149135:A>T
chr11	31982589	31982594	Hypo	3.522055	0	0	0	contamination_double_snps	chr11:31982589:T>A,chr11:31982593:A>T
chr11	31982589	31982594	Hyper	3.522055	0	0	0	contamination_double_snps	chr11:31982589:T>A,chr11:31982593:A>T
chr16	74999616	74999625	Hypo	3.521641	0	0	0	contamination_double_snps	chr16:74999616:A>C,chr16:74999624:A>T
chr16	74999616	74999625	Hyper	3.521641	0	0	0	contamination_double_snps	chr16:74999616:A>C,chr16:74999624:A>T
chr9	4206008	4206015	Hypo	3.517559	0	0	0	contamination_double_snps	chr9:4206008:C>G,chr9:4206014:T>A
chr9	4206008	4206015	Hyper	3.517559	0	0	0	contamination_double_snps	chr9:4206008:C>G,chr9:4206014:T>A
chr10	7629410	7629417	Hypo	3.517559	0	0	0	contamination_double_snps	chr10:7629410:T>G,chr10:7629416:A>C
chr10	7629410	7629417	Hyper	3.517559	0	0	0	contamination_double_snps	chr10:7629410:T>G,chr10:7629416:A>C
chr4	55687788	55687791	Hypo	3.516028	0	0	0	contamination_double_snps	chr4:55687788:G>T,chr4:55687790:G>C
chr4	55687788	55687791	Hyper	3.516028	0	0	0	contamination_double_snps	chr4:55687788:G>T,chr4:55687790:G>C
chr9	73737702	73737705	Hypo	3.516028	0	0	0	contamination_double_snps	chr9:73737702:T>A,chr9:73737704:C>A
chr9	73737702	73737705	Hyper	3.516028	0	0	0	contamination_double_snps	chr9:73737702:T>A,chr9:73737704:C>A
chr1	111075965	111075968	Hypo	3.516028	0	0	0	contamination_double_snps	chr1:111075965:C>G,chr1:111075967:T>A
chr1	111075965	111075968	Hyper	3.516028	0	0	0	contamination_double_snps	chr1:111075965:C>G,chr1:111075967:T>A
chr16	59395459	59395467	Hypo	3.513785	0	0	0	contamination_double_snps	chr16:59395459:T>G,chr16:59395466:A>C
chr16	59395459	59395467	Hyper	3.513785	0	0	0	contamination_double_snps	chr16:59395459:T>G,chr16:59395466:A>C
chr2	30118823	30118829	Hypo	3.51327	0	0	0	contamination_double_snps	chr2:30118823:C>A,chr2:30118828:A>C
chr2	30118823	30118829	Hyper	3.51327	0	0	0	contamination_double_snps	chr2:30118823:C>A,chr2:30118828:A>C
chr21	38580809	38580815	Hypo	3.51327	0	0	0	contamination_double_snps	chr21:38580809:C>G,chr21:38580814:G>T
chr21	38580809	38580815	Hyper	3.51327	0	0	0	contamination_double_snps	chr21:38580809:C>G,chr21:38580814:G>T
chr6	21479190	21479200	Hypo	3.512479	0	0	0	contamination_double_snps	chr6:21479190:G>C,chr6:21479199:C>G
chr6	21479190	21479200	Hyper	3.512479	0	0	0	contamination_double_snps	chr6:21479190:G>C,chr6:21479199:C>G
chr3	66099236	66099245	Hypo	3.512188	0	0	0	contamination_double_snps	chr3:66099236:G>T,chr3:66099244:A>C
chr3	66099236	66099245	Hyper	3.512188	0	0	0	contamination_double_snps	chr3:66099236:G>T,chr3:66099244:A>C
chr17	17441358	17441369	Hypo	3.51108	0	0	0	contamination_double_snps	chr17:17441358:C>A,chr17:17441368:C>G
chr17	17441358	17441369	Hyper	3.51108	0	0	0	contamination_double_snps	chr17:17441358:C>A,chr17:17441368:C>G
chr1	158444919	158444925	Hypo	3.509275	0	0	0	contamination_double_snps	chr1:158444919:A>T,chr1:158444924:T>G
chr1	158444919	158444925	Hyper	3.509275	0	0	0	contamination_double_snps	chr1:158444919:A>T,chr1:158444924:T>G
chr2	179239678	179239688	Hypo	3.509036	0	0	0	contamination_double_snps	chr2:179239678:A>T,chr2:179239687:C>G
chr2	179239678	179239688	Hyper	3.509036	0	0	0	contamination_double_snps	chr2:179239678:A>T,chr2:179239687:C>G
chr2	238463398	238463408	Hypo	3.509036	0	0	0	contamination_double_snps	chr2:238463398:T>G,chr2:238463407:C>G
chr2	238463398	238463408	Hyper	3.509036	0	0	0	contamination_double_snps	chr2:238463398:T>G,chr2:238463407:C>G
chr3	170042801	170042811	Hypo	3.509036	0	0	0	contamination_double_snps	chr3:170042801:G>T,chr3:170042810:C>G
chr3	170042801	170042811	Hyper	3.509036	0	0	0	contamination_double_snps	chr3:170042801:G>T,chr3:170042810:C>G
chr21	46678701	46678711	Hypo	3.509036	0	0	0	contamination_double_snps	chr21:46678701:C>G,chr21:46678710:A>C
chr21	46678701	46678711	Hyper	3.509036	0	0	0	contamination_double_snps	chr21:46678701:C>G,chr21:46678710:A>C
chr20	1893979	1893986	Hypo	3.50738	0	0	0	contamination_double_snps	chr20:1893979:G>C,chr20:1893985:C>G
chr20	1893979	1893986	Hyper	3.50738	0	0	0	contamination_double_snps	chr20:1893979:G>C,chr20:1893985:C>G
chr3	45317400	45317408	Hypo	3.503982	0	0	0	contamination_double_snps	chr3:45317400:T>G,chr3:45317407:C>G
chr3	45317400	45317408	Hyper	3.503982	0	0	0	contamination_double_snps	chr3:45317400:T>G,chr3:45317407:C>G
chr8	105833767	105833774	Hypo	3.503539	0	0	0	contamination_double_snps	chr8:105833767:T>A,chr8:105833773:C>A

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chr8	105833767	105833774	Hyper	3.503539	0	0	0	contamination_double_snps	chr8:105833767:T>A,chr8:105833773:C>A
chr15	58553170	58553175	Hypo	3.501629	0	0	0	contamination_double_snps	chr15:58553170:A>T,chr15:58553174:T>G
chr15	58553170	58553175	Hyper	3.501629	0	0	0	contamination_double_snps	chr15:58553170:A>T,chr15:58553174:T>G
chr12	4953588	4953592	Hypo	3.501398	0	0	0	contamination_double_snps	chr12:4953588:G>T,chr12:4953591:A>T
chr12	4953588	4953592	Hyper	3.501398	0	0	0	contamination_double_snps	chr12:4953588:G>T,chr12:4953591:A>T
chr11	41952067	41952071	Hypo	3.501398	0	0	0	contamination_double_snps	chr11:41952067:C>A,chr11:41952070:G>T
chr11	41952067	41952071	Hyper	3.501398	0	0	0	contamination_double_snps	chr11:41952067:C>A,chr11:41952070:G>T
chr9	111028358	111028362	Hypo	3.501398	0	0	0	contamination_double_snps	chr9:111028358:C>G,chr9:111028361:T>G
chr9	111028358	111028362	Hyper	3.501398	0	0	0	contamination_double_snps	chr9:111028358:C>G,chr9:111028361:T>G
chr5	38129970	38129972	Hypo	3.499228	0	0	0	contamination_double_snps	chr5:38129970:C>A,chr5:38129971:C>G
chr5	38129970	38129972	Hyper	3.499228	0	0	0	contamination_double_snps	chr5:38129970:C>A,chr5:38129971:C>G
chr1	154475329	154475331	Hypo	3.499228	0	0	0	contamination_double_snps	chr1:154475329:T>A,chr1:154475330:C>A
chr1	154475329	154475331	Hyper	3.499228	0	0	0	contamination_double_snps	chr1:154475329:T>A,chr1:154475330:C>A
chr12	48264775	48264777	Hypo	3.499228	0	0	0	contamination_double_snps	chr12:48264775:T>A,chr12:48264776:A>T
chr12	48264775	48264777	Hyper	3.499228	0	0	0	contamination_double_snps	chr12:48264775:T>A,chr12:48264776:A>T
chr12	119220794	119220796	Hypo	3.499228	0	0	0	contamination_double_snps	chr12:119220794:G>T,chr12:119220795:G>T
chr12	119220794	119220796	Hyper	3.499228	0	0	0	contamination_double_snps	chr12:119220794:G>T,chr12:119220795:G>T
chr5	123746647	123746649	Hypo	3.499228	0	0	0	contamination_double_snps	chr5:123746647:G>C,chr5:123746648:C>A
chr5	123746647	123746649	Hyper	3.499228	0	0	0	contamination_double_snps	chr5:123746647:G>C,chr5:123746648:C>A
chr7	126051445	126051447	Hypo	3.499228	0	0	0	contamination_double_snps	chr7:126051445:T>A,chr7:126051446:T>A
chr7	126051445	126051447	Hyper	3.499228	0	0	0	contamination_double_snps	chr7:126051445:T>A,chr7:126051446:T>A
chr6	7743025	7743027	Hypo	3.499228	0	0	0	contamination_double_snps	chr6:7743025:A>T,chr6:7743026:C>A
chr6	7743025	7743027	Hyper	3.499228	0	0	0	contamination_double_snps	chr6:7743025:A>T,chr6:7743026:C>A
chr13	111135249	111135251	Hypo	3.499228	0	0	0	contamination_double_snps	chr13:111135249:G>T,chr13:111135250:G>C
chr13	111135249	111135251	Hyper	3.499228	0	0	0	contamination_double_snps	chr13:111135249:G>T,chr13:111135250:G>C
chr20	16857151	16857153	Hypo	3.499228	0	0	0	contamination_double_snps	chr20:16857151:C>A,chr20:16857152:T>A
chr20	16857151	16857153	Hyper	3.499228	0	0	0	contamination_double_snps	chr20:16857151:C>A,chr20:16857152:T>A
chr13	32778947	32778949	Hypo	3.499228	0	0	0	contamination_double_snps	chr13:32778947:T>A,chr13:32778948:T>G
chr13	32778947	32778949	Hyper	3.499228	0	0	0	contamination_double_snps	chr13:32778947:T>A,chr13:32778948:T>G
chr7	139431349	139431351	Hypo	3.499228	0	0	0	contamination_double_snps	chr7:139431349:A>T,chr7:139431350:A>C
chr7	139431349	139431351	Hyper	3.499228	0	0	0	contamination_double_snps	chr7:139431349:A>T,chr7:139431350:A>C
chr18	43472145	43472156	Hypo	3.498069	0	0	0	contamination_double_snps	chr18:43472145:G>C,chr18:43472155:C>A
chr18	43472145	43472156	Hyper	3.498069	0	0	0	contamination_double_snps	chr18:43472145:G>C,chr18:43472155:C>A
chr15	89181414	89181422	Hypo	3.495628	0	0	0	contamination_double_snps	chr15:89181414:G>C,chr15:89181421:T>G
chr15	89181414	89181422	Hyper	3.495628	0	0	0	contamination_double_snps	chr15:89181414:G>C,chr15:89181421:T>G
chr10	19321153	19321162	Hypo	3.49468	0	0	0	contamination_double_snps	chr10:19321153:T>G,chr10:19321161:G>T
chr10	19321153	19321162	Hyper	3.49468	0	0	0	contamination_double_snps	chr10:19321153:T>G,chr10:19321161:G>T
chr3	86698391	86698397	Hypo	3.493661	0	0	0	contamination_double_snps	chr3:86698391:T>A,chr3:86698396:G>T
chr3	86698391	86698397	Hyper	3.493661	0	0	0	contamination_double_snps	chr3:86698391:T>A,chr3:86698396:G>T
chr2	9234749	9234754	Hypo	3.490602	0	0	0	contamination_double_snps	chr2:9234749:C>A,chr2:9234753:C>A
chr2	9234749	9234754	Hyper	3.490602	0	0	0	contamination_double_snps	chr2:9234749:C>A,chr2:9234753:C>A
chr10	119035473	119035475	Hypo	3.486625	0	0	0	contamination_double_snps	chr10:119035473:C>A,chr10:119035474:T>G

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chr10	119035473	119035475	Hyper	3.486625	0	0	0	contamination_double_snps	chr10:119035473:C>A,chr10:119035474:T>G
chr1	241801396	241801401	Hypo	3.486441	0	0	0	contamination_double_snps	chr1:241801396:A>C,chr1:241801400:C>G
chr1	241801396	241801401	Hyper	3.486441	0	0	0	contamination_double_snps	chr1:241801396:A>C,chr1:241801400:C>G
chr4	129163879	129163888	Hypo	3.485228	0	0	0	contamination_double_snps	chr4:129163879:T>G,chr4:129163887:T>G
chr4	129163879	129163888	Hyper	3.485228	0	0	0	contamination_double_snps	chr4:129163879:T>G,chr4:129163887:T>G
chr12	71588585	71588592	Hypo	3.484684	0	0	0	contamination_double_snps	chr12:71588585:T>G,chr12:71588591:T>G
chr12	71588585	71588592	Hyper	3.484684	0	0	0	contamination_double_snps	chr12:71588585:T>G,chr12:71588591:T>G
chr6	93732799	93732805	Hypo	3.483074	0	0	0	contamination_double_snps	chr6:93732799:T>G,chr6:93732804:T>A
chr6	93732799	93732805	Hyper	3.483074	0	0	0	contamination_double_snps	chr6:93732799:T>G,chr6:93732804:T>A
chr1	101863213	101863223	Hypo	3.483005	0	0	0	contamination_double_snps	chr1:101863213:C>A,chr1:101863222:C>A
chr1	101863213	101863223	Hyper	3.483005	0	0	0	contamination_double_snps	chr1:101863213:C>A,chr1:101863222:C>A
chr2	175599266	175599276	Hypo	3.483005	0	0	0	contamination_double_snps	chr2:175599266:C>A,chr2:175599275:G>C
chr2	175599266	175599276	Hyper	3.483005	0	0	0	contamination_double_snps	chr2:175599266:C>A,chr2:175599275:G>C
chr5	42184472	42184475	Hypo	3.481715	0	0	0	contamination_double_snps	chr5:42184472:A>T,chr5:42184474:A>T
chr5	42184472	42184475	Hyper	3.481715	0	0	0	contamination_double_snps	chr5:42184472:A>T,chr5:42184474:A>T
chr4	28230947	28230950	Hypo	3.481715	0	0	0	contamination_double_snps	chr4:28230947:A>C,chr4:28230949:T>G
chr4	28230947	28230950	Hyper	3.481715	0	0	0	contamination_double_snps	chr4:28230947:A>C,chr4:28230949:T>G
chr6	16571319	16571322	Hypo	3.481715	0	0	0	contamination_double_snps	chr6:16571319:T>A,chr6:16571321:C>A
chr6	16571319	16571322	Hyper	3.481715	0	0	0	contamination_double_snps	chr6:16571319:T>A,chr6:16571321:C>A
chr5	29357114	29357124	Hypo	3.479561	0	0	0	contamination_double_snps	chr5:29357114:A>T,chr5:29357123:C>G
chr5	29357114	29357124	Hyper	3.479561	0	0	0	contamination_double_snps	chr5:29357114:A>T,chr5:29357123:C>G
chr10	66756036	66756042	Hypo	3.47908	0	0	0	contamination_double_snps	chr10:66756036:C>A,chr10:66756041:C>G
chr10	66756036	66756042	Hyper	3.47908	0	0	0	contamination_double_snps	chr10:66756036:C>A,chr10:66756041:C>G
chr6	164812096	164812102	Hypo	3.47908	0	0	0	contamination_double_snps	chr6:164812096:A>T,chr6:164812101:C>G
chr6	164812096	164812102	Hyper	3.47908	0	0	0	contamination_double_snps	chr6:164812096:A>T,chr6:164812101:C>G
chr2	5646666	5646669	Hypo	3.477175	0	0	0	contamination_double_snps	chr2:5646666:C>A,chr2:5646668:A>C
chr2	5646666	5646669	Hyper	3.477175	0	0	0	contamination_double_snps	chr2:5646666:C>A,chr2:5646668:A>C
chr3	138932959	138932962	Hypo	3.477175	0	0	0	contamination_double_snps	chr3:138932959:G>C,chr3:138932961:C>G
chr3	138932959	138932962	Hyper	3.477175	0	0	0	contamination_double_snps	chr3:138932959:G>C,chr3:138932961:C>G
chr10	69453066	69453075	Hypo	3.472209	0	0	0	contamination_double_snps	chr10:69453066:T>A,chr10:69453074:C>G
chr10	69453066	69453075	Hyper	3.472209	0	0	0	contamination_double_snps	chr10:69453066:T>A,chr10:69453074:C>G
chr21	18011944	18011949	Hypo	3.470176	0	0	0	contamination_double_snps	chr21:18011944:C>G,chr21:18011948:A>T
chr21	18011944	18011949	Hyper	3.470176	0	0	0	contamination_double_snps	chr21:18011944:C>G,chr21:18011948:A>T
chr3	156976868	156976873	Hypo	3.470176	0	0	0	contamination_double_snps	chr3:156976868:G>C,chr3:156976872:A>T
chr3	156976868	156976873	Hyper	3.470176	0	0	0	contamination_double_snps	chr3:156976868:G>C,chr3:156976872:A>T
chr11	20866191	20866196	Hypo	3.470176	0	0	0	contamination_double_snps	chr11:20866191:G>C,chr11:20866195:C>A
chr11	20866191	20866196	Hyper	3.470176	0	0	0	contamination_double_snps	chr11:20866191:G>C,chr11:20866195:C>A
chr2	29100641	29100646	Hypo	3.470176	0	0	0	contamination_double_snps	chr2:29100641:A>C,chr2:29100645:C>A
chr2	29100641	29100646	Hyper	3.470176	0	0	0	contamination_double_snps	chr2:29100641:A>C,chr2:29100645:C>A
chr7	105821251	105821255	Hypo	3.468577	0	0	0	contamination_double_snps	chr7:105821251:T>A,chr7:105821254:C>A
chr7	105821251	105821255	Hyper	3.468577	0	0	0	contamination_double_snps	chr7:105821251:T>A,chr7:105821254:C>A
chr5	35202732	35202736	Hypo	3.468577	0	0	0	contamination_double_snps	chr5:35202732:C>G,chr5:35202735:A>C

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chr5	35202732	35202736	Hyper	3.468577	0	0	0	contamination_double_snps	chr5:35202732:C>G,chr5:35202735:A>C
chr18	25798867	25798871	Hypo	3.468577	0	0	0	contamination_double_snps	chr18:25798867:T>A,chr18:25798870:C>G
chr18	25798867	25798871	Hyper	3.468577	0	0	0	contamination_double_snps	chr18:25798867:T>A,chr18:25798870:C>G
chr17	11459511	11459515	Hypo	3.468577	0	0	0	contamination_double_snps	chr17:11459511:G>C,chr17:11459514:A>C
chr17	11459511	11459515	Hyper	3.468577	0	0	0	contamination_double_snps	chr17:11459511:G>C,chr17:11459514:A>C
chr8	1143608	1143618	Hypo	3.466101	0	0	0	contamination_double_snps	chr8:1143608:T>A,chr8:1143617:G>C
chr8	1143608	1143618	Hyper	3.466101	0	0	0	contamination_double_snps	chr8:1143608:T>A,chr8:1143617:G>C
chr15	54968550	54968560	Hypo	3.466101	0	0	0	contamination_double_snps	chr15:54968550:C>G,chr15:54968559:T>G
chr15	54968550	54968560	Hyper	3.466101	0	0	0	contamination_double_snps	chr15:54968550:C>G,chr15:54968559:T>G
chr3	157510902	157510906	Hypo	3.464235	0	0	0	contamination_double_snps	chr3:157510902:T>A,chr3:157510905:A>T
chr3	157510902	157510906	Hyper	3.464235	0	0	0	contamination_double_snps	chr3:157510902:T>A,chr3:157510905:A>T
chr8	3480589	3480595	Hypo	3.463465	0	0	0	contamination_double_snps	chr8:3480589:T>G,chr8:3480594:C>A
chr8	3480589	3480595	Hyper	3.463465	0	0	0	contamination_double_snps	chr8:3480589:T>G,chr8:3480594:C>A
chr11	115157419	115157425	Hypo	3.463465	0	0	0	contamination_double_snps	chr11:115157419:C>G,chr11:115157424:G>T
chr11	115157419	115157425	Hyper	3.463465	0	0	0	contamination_double_snps	chr11:115157419:C>G,chr11:115157424:G>T
chr1	31341478	31341480	Hypo	3.463281	0	0	0	contamination_double_snps	chr1:31341478:C>A,chr1:31341479:A>C
chr1	31341478	31341480	Hyper	3.463281	0	0	0	contamination_double_snps	chr1:31341478:C>A,chr1:31341479:A>C
chr11	19872094	19872096	Hypo	3.463281	0	0	0	contamination_double_snps	chr11:19872094:G>C,chr11:19872095:C>A
chr11	19872094	19872096	Hyper	3.463281	0	0	0	contamination_double_snps	chr11:19872094:G>C,chr11:19872095:C>A
chr1	34415036	34415038	Hypo	3.463281	0	0	0	contamination_double_snps	chr1:34415036:G>T,chr1:34415037:C>A
chr1	34415036	34415038	Hyper	3.463281	0	0	0	contamination_double_snps	chr1:34415036:G>T,chr1:34415037:C>A
chr9	100655778	100655780	Hypo	3.463281	0	0	0	contamination_double_snps	chr9:100655778:G>C,chr9:100655779:A>C
chr9	100655778	100655780	Hyper	3.463281	0	0	0	contamination_double_snps	chr9:100655778:G>C,chr9:100655779:A>C
chr2	170278947	170278949	Hypo	3.463281	0	0	0	contamination_double_snps	chr2:170278947:T>G,chr2:170278948:A>T
chr2	170278947	170278949	Hyper	3.463281	0	0	0	contamination_double_snps	chr2:170278947:T>G,chr2:170278948:A>T
chr2	13636199	13636201	Hypo	3.463281	0	0	0	contamination_double_snps	chr2:13636199:G>C,chr2:13636200:G>T
chr2	13636199	13636201	Hyper	3.463281	0	0	0	contamination_double_snps	chr2:13636199:G>C,chr2:13636200:G>T
chr5	83447250	83447252	Hypo	3.463281	0	0	0	contamination_double_snps	chr5:83447250:A>C,chr5:83447251:G>C
chr5	83447250	83447252	Hyper	3.463281	0	0	0	contamination_double_snps	chr5:83447250:A>C,chr5:83447251:G>C
chr3	132659960	132659962	Hypo	3.463281	0	0	0	contamination_double_snps	chr3:132659960:G>C,chr3:132659961:C>A
chr3	132659960	132659962	Hyper	3.463281	0	0	0	contamination_double_snps	chr3:132659960:G>C,chr3:132659961:C>A
chr7	12823180	12823182	Hypo	3.463281	0	0	0	contamination_double_snps	chr7:12823180:A>T,chr7:12823181:T>A
chr7	12823180	12823182	Hyper	3.463281	0	0	0	contamination_double_snps	chr7:12823180:A>T,chr7:12823181:T>A
chr7	20918566	20918568	Hypo	3.463281	0	0	0	contamination_double_snps	chr7:20918566:C>A,chr7:20918567:C>G
chr7	20918566	20918568	Hyper	3.463281	0	0	0	contamination_double_snps	chr7:20918566:C>A,chr7:20918567:C>G
chr4	158824171	158824173	Hypo	3.463281	0	0	0	contamination_double_snps	chr4:158824171:T>A,chr4:158824172:G>T
chr4	158824171	158824173	Hyper	3.463281	0	0	0	contamination_double_snps	chr4:158824171:T>A,chr4:158824172:G>T
chr11	116899247	116899249	Hypo	3.463281	0	0	0	contamination_double_snps	chr11:116899247:A>T,chr11:116899248:A>C
chr11	116899247	116899249	Hyper	3.463281	0	0	0	contamination_double_snps	chr11:116899247:A>T,chr11:116899248:A>C
chr11	126779013	126779015	Hypo	3.463281	0	0	0	contamination_double_snps	chr11:126779013:G>C,chr11:126779014:C>A
chr11	126779013	126779015	Hyper	3.463281	0	0	0	contamination_double_snps	chr11:126779013:G>C,chr11:126779014:C>A
chr20	53467740	53467742	Hypo	3.463281	0	0	0	contamination_double_snps	chr20:53467740:G>T,chr20:53467741:C>A

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chr20	53467740	53467742	Hyper	3.463281	0	0	0	contamination_double_snps	chr20:53467740:G>T,chr20:53467741:C>A
chr15	74573729	74573731	Hypo	3.463281	0	0	0	contamination_double_snps	chr15:74573729:G>T,chr15:74573730:C>G
chr15	74573729	74573731	Hyper	3.463281	0	0	0	contamination_double_snps	chr15:74573729:G>T,chr15:74573730:C>G
chr9	72523192	72523194	Hypo	3.463281	0	0	0	contamination_double_snps	chr9:72523192:G>T,chr9:72523193:A>T
chr9	72523192	72523194	Hyper	3.463281	0	0	0	contamination_double_snps	chr9:72523192:G>T,chr9:72523193:A>T
chr7	49036921	49036928	Hypo	3.459491	0	0	0	contamination_double_snps	chr7:49036921:T>A,chr7:49036927:T>A
chr7	49036921	49036928	Hyper	3.459491	0	0	0	contamination_double_snps	chr7:49036921:T>A,chr7:49036927:T>A
chr19	10019998	10020001	Hypo	3.459432	0	0	0	contamination_double_snps	chr19:10019998:T>G,chr19:10020000:C>G
chr19	10019998	10020001	Hyper	3.459432	0	0	0	contamination_double_snps	chr19:10019998:T>G,chr19:10020000:C>G
chr22	35047694	35047696	Hypo	3.458525	0	0	0	contamination_double_snps	chr22:35047694:G>C,chr22:35047695:G>C
chr22	35047694	35047696	Hyper	3.458525	0	0	0	contamination_double_snps	chr22:35047694:G>C,chr22:35047695:G>C
chr5	38152360	38152362	Hypo	3.458525	0	0	0	contamination_double_snps	chr5:38152360:A>T,chr5:38152361:G>T
chr5	38152360	38152362	Hyper	3.458525	0	0	0	contamination_double_snps	chr5:38152360:A>T,chr5:38152361:G>T
chr10	34890637	34890639	Hypo	3.458525	0	0	0	contamination_double_snps	chr10:34890637:C>A,chr10:34890638:G>C
chr10	34890637	34890639	Hyper	3.458525	0	0	0	contamination_double_snps	chr10:34890637:C>A,chr10:34890638:G>C
chr4	67075104	67075106	Hypo	3.458525	0	0	0	contamination_double_snps	chr4:67075104:A>T,chr4:67075105:T>A
chr4	67075104	67075106	Hyper	3.458525	0	0	0	contamination_double_snps	chr4:67075104:A>T,chr4:67075105:T>A
chr10	130928098	130928107	Hypo	3.458268	0	0	0	contamination_double_snps	chr10:130928098:G>C,chr10:130928106:A>C
chr10	130928098	130928107	Hyper	3.458268	0	0	0	contamination_double_snps	chr10:130928098:G>C,chr10:130928106:A>C
chr7	78726770	78726778	Hypo	3.457867	0	0	0	contamination_double_snps	chr7:78726770:C>G,chr7:78726777:C>A
chr7	78726770	78726778	Hyper	3.457867	0	0	0	contamination_double_snps	chr7:78726770:C>G,chr7:78726777:C>A
chr10	49717298	49717305	Hypo	3.45565	0	0	0	contamination_double_snps	chr10:49717298:T>G,chr10:49717304:A>T
chr10	49717298	49717305	Hyper	3.45565	0	0	0	contamination_double_snps	chr10:49717298:T>G,chr10:49717304:A>T
chr11	10801524	10801535	Hypo	3.447743	0	0	0	contamination_double_snps	chr11:10801524:C>A,chr11:10801534:T>G
chr11	10801524	10801535	Hyper	3.447743	0	0	0	contamination_double_snps	chr11:10801524:C>A,chr11:10801534:T>G
chr11	118134064	118134067	Hypo	3.447402	0	0	0	contamination_double_snps	chr11:118134064:T>G,chr11:118134066:A>T
chr11	118134064	118134067	Hyper	3.447402	0	0	0	contamination_double_snps	chr11:118134064:T>G,chr11:118134066:A>T
chr12	45002474	45002477	Hypo	3.447402	0	0	0	contamination_double_snps	chr12:45002474:T>G,chr12:45002476:T>A
chr12	45002474	45002477	Hyper	3.447402	0	0	0	contamination_double_snps	chr12:45002474:T>G,chr12:45002476:T>A
chr6	139941190	139941193	Hypo	3.447402	0	0	0	contamination_double_snps	chr6:139941190:A>C,chr6:139941192:C>A
chr6	139941190	139941193	Hyper	3.447402	0	0	0	contamination_double_snps	chr6:139941190:A>C,chr6:139941192:C>A
chr6	151912351	151912354	Hypo	3.447402	0	0	0	contamination_double_snps	chr6:151912351:T>A,chr6:151912353:A>T
chr6	151912351	151912354	Hyper	3.447402	0	0	0	contamination_double_snps	chr6:151912351:T>A,chr6:151912353:A>T
chr13	113528498	113528501	Hypo	3.447402	0	0	0	contamination_double_snps	chr13:113528498:A>C,chr13:113528500:C>G
chr13	113528498	113528501	Hyper	3.447402	0	0	0	contamination_double_snps	chr13:113528498:A>C,chr13:113528500:C>G
chr12	60864722	60864726	Hypo	3.447262	0	0	0	contamination_double_snps	chr12:60864722:T>G,chr12:60864725:T>A
chr12	60864722	60864726	Hyper	3.447262	0	0	0	contamination_double_snps	chr12:60864722:T>G,chr12:60864725:T>A
chr11	16386269	16386273	Hypo	3.447262	0	0	0	contamination_double_snps	chr11:16386269:T>G,chr11:16386272:G>C
chr11	16386269	16386273	Hyper	3.447262	0	0	0	contamination_double_snps	chr11:16386269:T>G,chr11:16386272:G>C
chr2	56816357	56816368	Hypo	3.444414	0	0	0	contamination_double_snps	chr2:56816357:T>A,chr2:56816367:A>T
chr2	56816357	56816368	Hyper	3.444414	0	0	0	contamination_double_snps	chr2:56816357:T>A,chr2:56816367:A>T
chr13	20905775	20905785	Hypo	3.443514	0	0	0	contamination_double_snps	chr13:20905775:A>C,chr13:20905784:G>C

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chr13	20905775	20905785	Hyper	3.443514	0	0	0	contamination_double_snps	chr13:20905775:A>C,chr13:20905784:G>C
chr1	42101842	42101845	Hypo	3.442862	0	0	0	contamination_double_snps	chr1:42101842:C>A,chr1:42101844:A>T
chr1	42101842	42101845	Hyper	3.442862	0	0	0	contamination_double_snps	chr1:42101842:C>A,chr1:42101844:A>T
chr15	61058579	61058582	Hypo	3.442862	0	0	0	contamination_double_snps	chr15:61058579:C>G,chr15:61058581:T>A
chr15	61058579	61058582	Hyper	3.442862	0	0	0	contamination_double_snps	chr15:61058579:C>G,chr15:61058581:T>A
chr2	180245818	180245821	Hypo	3.442862	0	0	0	contamination_double_snps	chr2:180245818:T>A,chr2:180245820:A>T
chr2	180245818	180245821	Hyper	3.442862	0	0	0	contamination_double_snps	chr2:180245818:T>A,chr2:180245820:A>T
chr10	242829	242838	Hypo	3.44076	0	0	0	contamination_double_snps	chr10:242829:C>A,chr10:242837:C>A
chr10	242829	242838	Hyper	3.44076	0	0	0	contamination_double_snps	chr10:242829:C>A,chr10:242837:C>A
chr13	86704058	86704067	Hypo	3.44076	0	0	0	contamination_double_snps	chr13:86704058:G>T,chr13:86704066:A>C
chr13	86704058	86704067	Hyper	3.44076	0	0	0	contamination_double_snps	chr13:86704058:G>T,chr13:86704066:A>C
chr13	83950161	83950171	Hypo	3.44007	0	0	0	contamination_double_snps	chr13:83950161:G>T,chr13:83950170:G>C
chr13	83950161	83950171	Hyper	3.44007	0	0	0	contamination_double_snps	chr13:83950161:G>T,chr13:83950170:G>C
chr6	57293939	57293941	Hypo	3.439936	0	0	0	contamination_double_snps	chr6:57293939:G>T,chr6:57293940:C>A
chr6	57293939	57293941	Hyper	3.439936	0	0	0	contamination_double_snps	chr6:57293939:G>T,chr6:57293940:C>A
chr3	123109370	123109372	Hypo	3.439936	0	0	0	contamination_double_snps	chr3:123109370:A>C,chr3:123109371:C>A
chr3	123109370	123109372	Hyper	3.439936	0	0	0	contamination_double_snps	chr3:123109370:A>C,chr3:123109371:C>A
chr3	128241279	128241281	Hypo	3.439936	0	0	0	contamination_double_snps	chr3:128241279:A>T,chr3:128241280:A>C
chr3	128241279	128241281	Hyper	3.439936	0	0	0	contamination_double_snps	chr3:128241279:A>T,chr3:128241280:A>C
chr14	86768363	86768365	Hypo	3.439936	0	0	0	contamination_double_snps	chr14:86768363:A>C,chr14:86768364:G>T
chr14	86768363	86768365	Hyper	3.439936	0	0	0	contamination_double_snps	chr14:86768363:A>C,chr14:86768364:G>T
chr11	75940021	75940023	Hypo	3.439936	0	0	0	contamination_double_snps	chr11:75940021:A>C,chr11:75940022:A>C
chr11	75940021	75940023	Hyper	3.439936	0	0	0	contamination_double_snps	chr11:75940021:A>C,chr11:75940022:A>C
chr3	16097739	16097741	Hypo	3.439936	0	0	0	contamination_double_snps	chr3:16097739:G>T,chr3:16097740:G>T
chr3	16097739	16097741	Hyper	3.439936	0	0	0	contamination_double_snps	chr3:16097739:G>T,chr3:16097740:G>T
chr8	5996173	5996181	Hypo	3.439711	0	0	0	contamination_double_snps	chr8:5996173:C>A,chr8:5996180:T>G
chr8	5996173	5996181	Hyper	3.439711	0	0	0	contamination_double_snps	chr8:5996173:C>A,chr8:5996180:T>G
chr12	91207137	91207142	Hypo	3.438722	0	0	0	contamination_double_snps	chr12:91207137:A>T,chr12:91207141:A>C
chr12	91207137	91207142	Hyper	3.438722	0	0	0	contamination_double_snps	chr12:91207137:A>T,chr12:91207141:A>C
chr14	56195993	56195998	Hypo	3.438722	0	0	0	contamination_double_snps	chr14:56195993:A>T,chr14:56195997:T>G
chr14	56195993	56195998	Hyper	3.438722	0	0	0	contamination_double_snps	chr14:56195993:A>T,chr14:56195997:T>G
chr2	56814975	56814980	Hypo	3.438722	0	0	0	contamination_double_snps	chr2:56814975:T>G,chr2:56814979:G>T
chr2	56814975	56814980	Hyper	3.438722	0	0	0	contamination_double_snps	chr2:56814975:T>G,chr2:56814979:G>T
chr11	103305285	103305290	Hypo	3.438722	0	0	0	contamination_double_snps	chr11:103305285:T>A,chr11:103305289:A>C
chr11	103305285	103305290	Hyper	3.438722	0	0	0	contamination_double_snps	chr11:103305285:T>A,chr11:103305289:A>C
chr6	41021505	41021509	Hypo	3.435755	0	0	0	contamination_double_snps	chr6:41021505:G>C,chr6:41021508:A>C
chr6	41021505	41021509	Hyper	3.435755	0	0	0	contamination_double_snps	chr6:41021505:G>C,chr6:41021508:A>C
chr2	155357103	155357109	Hypo	3.43327	0	0	0	contamination_double_snps	chr2:155357103:G>T,chr2:155357108:C>A
chr2	155357103	155357109	Hyper	3.43327	0	0	0	contamination_double_snps	chr2:155357103:G>T,chr2:155357108:C>A
chr1	95136070	95136076	Hypo	3.43327	0	0	0	contamination_double_snps	chr1:95136070:C>A,chr1:95136075:G>C
chr1	95136070	95136076	Hyper	3.43327	0	0	0	contamination_double_snps	chr1:95136070:C>A,chr1:95136075:G>C
chr1	110815951	110815957	Hypo	3.43327	0	0	0	contamination_double_snps	chr1:110815951:T>A,chr1:110815956:G>T

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chr1	110815951	110815957	Hyper	3.43327	0	0	0	contamination_double_snps	chr1:110815951:T>A,chr1:110815956:G>T
chr18	3936054	3936062	Hypo	3.429908	0	0	0	contamination_double_snps	chr18:3936054:G>T,chr18:3936061:C>G
chr18	3936054	3936062	Hyper	3.429908	0	0	0	contamination_double_snps	chr18:3936054:G>T,chr18:3936061:C>G
chr1	107494772	107494774	Hypo	3.427333	0	0	0	contamination_double_snps	chr1:107494772:T>A,chr1:107494773:A>T
chr1	107494772	107494774	Hyper	3.427333	0	0	0	contamination_double_snps	chr1:107494772:T>A,chr1:107494773:A>T
chr3	192995013	192995015	Hypo	3.427333	0	0	0	contamination_double_snps	chr3:192995013:C>G,chr3:192995014:T>G
chr3	192995013	192995015	Hyper	3.427333	0	0	0	contamination_double_snps	chr3:192995013:C>G,chr3:192995014:T>G
chr19	44551865	44551867	Hypo	3.427333	0	0	0	contamination_double_snps	chr19:44551865:G>T,chr19:44551866:A>T
chr19	44551865	44551867	Hyper	3.427333	0	0	0	contamination_double_snps	chr19:44551865:G>T,chr19:44551866:A>T
chr1	248514107	248514109	Hypo	3.427333	0	0	0	contamination_double_snps	chr1:248514107:C>G,chr1:248514108:G>C
chr1	248514107	248514109	Hyper	3.427333	0	0	0	contamination_double_snps	chr1:248514107:C>G,chr1:248514108:G>C
chr9	83643524	83643526	Hypo	3.427333	0	0	0	contamination_double_snps	chr9:83643524:G>T,chr9:83643525:T>A
chr9	83643524	83643526	Hyper	3.427333	0	0	0	contamination_double_snps	chr9:83643524:G>T,chr9:83643525:T>A
chr1	172221717	172221719	Hypo	3.427333	0	0	0	contamination_double_snps	chr1:172221717:G>T,chr1:172221718:G>C
chr1	172221717	172221719	Hyper	3.427333	0	0	0	contamination_double_snps	chr1:172221717:G>T,chr1:172221718:G>C
chr12	12813645	12813647	Hypo	3.427333	0	0	0	contamination_double_snps	chr12:12813645:A>T,chr12:12813646:C>A
chr12	12813645	12813647	Hyper	3.427333	0	0	0	contamination_double_snps	chr12:12813645:A>T,chr12:12813646:C>A
chr2	160243182	160243184	Hypo	3.427333	0	0	0	contamination_double_snps	chr2:160243182:T>A,chr2:160243183:A>T
chr2	160243182	160243184	Hyper	3.427333	0	0	0	contamination_double_snps	chr2:160243182:T>A,chr2:160243183:A>T
chr10	6221715	6221717	Hypo	3.427333	0	0	0	contamination_double_snps	chr10:6221715:T>G,chr10:6221716:G>C
chr10	6221715	6221717	Hyper	3.427333	0	0	0	contamination_double_snps	chr10:6221715:T>G,chr10:6221716:G>C
chr14	80067978	80067980	Hypo	3.427333	0	0	0	contamination_double_snps	chr14:80067978:G>T,chr14:80067979:G>T
chr14	80067978	80067980	Hyper	3.427333	0	0	0	contamination_double_snps	chr14:80067978:G>T,chr14:80067979:G>T
chr9	34305074	34305076	Hypo	3.427333	0	0	0	contamination_double_snps	chr9:34305074:G>T,chr9:34305075:A>T
chr9	34305074	34305076	Hyper	3.427333	0	0	0	contamination_double_snps	chr9:34305074:G>T,chr9:34305075:A>T
chr2	43336762	43336764	Hypo	3.427333	0	0	0	contamination_double_snps	chr2:43336762:C>A,chr2:43336763:C>A
chr2	43336762	43336764	Hyper	3.427333	0	0	0	contamination_double_snps	chr2:43336762:C>A,chr2:43336763:C>A
chr3	708703	708705	Hypo	3.427333	0	0	0	contamination_double_snps	chr3:708703:G>T,chr3:708704:A>T
chr3	708703	708705	Hyper	3.427333	0	0	0	contamination_double_snps	chr3:708703:G>T,chr3:708704:A>T
chr10	4014679	4014690	Hypo	3.426678	0	0	0	contamination_double_snps	chr10:4014679:G>T,chr10:4014689:G>T
chr10	4014679	4014690	Hyper	3.426678	0	0	0	contamination_double_snps	chr10:4014679:G>T,chr10:4014689:G>T
chr8	110150670	110150677	Hyper	3.426616	0	0	0	contamination_double_snps	chr8:110150670:G>T,chr8:110150676:G>T
chr8	110150670	110150677	Hyper	3.426616	0	0	0	contamination_double_snps	chr8:110150670:G>T,chr8:110150676:G>T
chr22	37314178	37314185	Hyper	3.426616	0	0	0	contamination_double_snps	chr22:37314178:A>T,chr22:37314184:A>C
chr22	37314178	37314185	Hyper	3.426616	0	0	0	contamination_double_snps	chr22:37314178:A>T,chr22:37314184:A>C
chr2	130042238	130042245	Hypo	3.426616	0	0	0	contamination_double_snps	chr2:130042238:G>C,chr2:130042244:G>T
chr2	130042238	130042245	Hyper	3.426616	0	0	0	contamination_double_snps	chr2:130042238:G>C,chr2:130042244:G>T
chr18	11483972	11483979	Hypo	3.426616	0	0	0	contamination_double_snps	chr18:11483972:T>G,chr18:11483978:A>C
chr18	11483972	11483979	Hyper	3.426616	0	0	0	contamination_double_snps	chr18:11483972:T>G,chr18:11483978:A>C
chr7	25821600	25821610	Hypo	3.426609	0	0	0	contamination_double_snps	chr7:25821600:T>A,chr7:25821609:A>T
chr7	25821600	25821610	Hyper	3.426609	0	0	0	contamination_double_snps	chr7:25821600:T>A,chr7:25821609:A>T
chr5	76757331	76757339	Hypo	3.42621	0	0	0	contamination_double_snps	chr5:76757331:G>C,chr5:76757338:C>A

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chr5	76757331	76757339	Hyper	3.42621	0	0	0	contamination_double_snps	chr5:76757331:G>C,chr5:76757338:C>A
chr12	81226664	81226672	Hypo	3.42621	0	0	0	contamination_double_snps	chr12:81226664:A>C,chr12:81226671:T>G
chr12	81226664	81226672	Hyper	3.42621	0	0	0	contamination_double_snps	chr12:81226664:A>C,chr12:81226671:T>G
chr12	16539316	16539319	Hypo	3.425119	0	0	0	contamination_double_snps	chr12:16539316:C>A,chr12:16539318:C>G
chr12	16539316	16539319	Hyper	3.425119	0	0	0	contamination_double_snps	chr12:16539316:C>A,chr12:16539318:C>G
chr6	4947232	4947235	Hypo	3.425119	0	0	0	contamination_double_snps	chr6:4947232:A>T,chr6:4947234:C>G
chr6	4947232	4947235	Hyper	3.425119	0	0	0	contamination_double_snps	chr6:4947232:A>T,chr6:4947234:C>G
chr2	219155906	219155909	Hypo	3.425119	0	0	0	contamination_double_snps	chr2:219155906:A>T,chr2:219155908:G>T
chr2	219155906	219155909	Hyper	3.425119	0	0	0	contamination_double_snps	chr2:219155906:A>T,chr2:219155908:G>T
chr1	230359651	230359657	Hypo	3.422683	0	0	0	contamination_double_snps	chr1:230359651:G>T,chr1:230359656:C>A
chr1	230359651	230359657	Hyper	3.422683	0	0	0	contamination_double_snps	chr1:230359651:G>T,chr1:230359656:C>A
chr2	200035504	200035506	Hypo	3.422578	0	0	0	contamination_double_snps	chr2:200035504:G>C,chr2:200035505:A>C
chr2	200035504	200035506	Hyper	3.422578	0	0	0	contamination_double_snps	chr2:200035504:G>C,chr2:200035505:A>C
chr17	71569236	71569247	Hypo	3.415061	0	0	0	contamination_double_snps	chr17:71569236:C>G,chr17:71569246:A>T
chr17	71569236	71569247	Hyper	3.415061	0	0	0	contamination_double_snps	chr17:71569236:C>G,chr17:71569246:A>T
chr9	1744906	1744910	Hyper	3.414441	0	0	0	contamination_double_snps	chr9:1744906:G>C,chr9:1744909:A>T
chr9	1744906	1744910	Hyper	3.414441	0	0	0	contamination_double_snps	chr9:1744906:G>C,chr9:1744909:A>T
chr14	61145874	61145878	Hypo	3.414441	0	0	0	contamination_double_snps	chr14:61145874:C>G,chr14:61145877:C>G
chr14	61145874	61145878	Hyper	3.414441	0	0	0	contamination_double_snps	chr14:61145874:C>G,chr14:61145877:C>G
chr5	1299858	1299862	Hypo	3.414441	0	0	0	contamination_double_snps	chr5:1299858:G>C,chr5:1299861:G>C
chr5	1299858	1299862	Hyper	3.414441	0	0	0	contamination_double_snps	chr5:1299858:G>C,chr5:1299861:G>C
chr2	6918397	6918407	Hypo	3.41404	0	0	0	contamination_double_snps	chr2:6918397:G>T,chr2:6918406:C>A
chr2	6918397	6918407	Hyper	3.41404	0	0	0	contamination_double_snps	chr2:6918397:G>T,chr2:6918406:C>A
chr11	86785634	86785643	Hypo	3.4138	0	0	0	contamination_double_snps	chr11:86785634:C>A,chr11:86785642:A>C
chr11	86785634	86785643	Hyper	3.4138	0	0	0	contamination_double_snps	chr11:86785634:C>A,chr11:86785642:A>C
chr7	81411400	81411406	Hyper	3.413661	0	0	0	contamination_double_snps	chr7:81411400:C>G,chr7:81411405:A>C
chr7	81411400	81411406	Hyper	3.413661	0	0	0	contamination_double_snps	chr7:81411400:C>G,chr7:81411405:A>C
chr3	81034948	81034954	Hyper	3.413661	0	0	0	contamination_double_snps	chr3:81034948:T>G,chr3:81034953:G>T
chr3	81034948	81034954	Hyper	3.413661	0	0	0	contamination_double_snps	chr3:81034948:T>G,chr3:81034953:G>T
chr5	73482028	73482034	Hyper	3.413661	0	0	0	contamination_double_snps	chr5:73482028:T>A,chr5:73482033:T>A
chr5	73482028	73482034	Hyper	3.413661	0	0	0	contamination_double_snps	chr5:73482028:T>A,chr5:73482033:T>A
chr13	82481053	82481056	Hyper	3.413088	0	0	0	contamination_double_snps	chr13:82481053:C>G,chr13:82481055:A>T
chr13	82481053	82481056	Hyper	3.413088	0	0	0	contamination_double_snps	chr13:82481053:C>G,chr13:82481055:A>T
chr19	23003518	23003526	Hypo	3.411752	0	0	0	contamination_double_snps	chr19:23003518:T>G,chr19:23003525:A>C
chr19	23003518	23003526	Hyper	3.411752	0	0	0	contamination_double_snps	chr19:23003518:T>G,chr19:23003525:A>C
chr4	181054353	181054360	Hypo	3.411602	0	0	0	contamination_double_snps	chr4:181054353:G>C,chr4:181054359:A>T
chr4	181054353	181054360	Hyper	3.411602	0	0	0	contamination_double_snps	chr4:181054353:G>C,chr4:181054359:A>T
chr14	60450171	60450178	Hypo	3.411602	0	0	0	contamination_double_snps	chr14:60450171:C>G,chr14:60450177:T>G
chr14	60450171	60450178	Hyper	3.411602	0	0	0	contamination_double_snps	chr14:60450171:C>G,chr14:60450177:T>G
chr14	40111062	40111070	Hypo	3.408053	0	0	0	contamination_double_snps	chr14:40111062:G>C,chr14:40111069:A>C
chr14	40111062	40111070	Hyper	3.408053	0	0	0	contamination_double_snps	chr14:40111062:G>C,chr14:40111069:A>C
chr22	51025594	51025599	Hypo	3.407268	0	0	0	contamination_double_snps	chr22:51025594:C>G,chr22:51025598:C>A

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chr22	51025594	51025599	Hyper	3.407268	0	0	0	contamination_double_snps	chr22:51025594:C>G,chr22:51025598:C>A
chr11	95309369	95309374	Hypo	3.407268	0	0	0	contamination_double_snps	chr11:95309369:T>A,chr11:95309373:T>G
chr11	95309369	95309374	Hyper	3.407268	0	0	0	contamination_double_snps	chr11:95309369:T>A,chr11:95309373:T>G
chr14	34595933	34595938	Hypo	3.407268	0	0	0	contamination_double_snps	chr14:34595933:A>C,chr14:34595937:C>A
chr14	34595933	34595938	Hyper	3.407268	0	0	0	contamination_double_snps	chr14:34595933:A>C,chr14:34595937:C>A
chr9	118124371	118124382	Hypo	3.406239	0	0	0	contamination_double_snps	chr9:118124371:G>T,chr9:118124381:G>C
chr9	118124371	118124382	Hyper	3.406239	0	0	0	contamination_double_snps	chr9:118124371:G>T,chr9:118124381:G>C
chr13	34082794	34082805	Hypo	3.406239	0	0	0	contamination_double_snps	chr13:34082794:G>C,chr13:34082804:T>A
chr13	34082794	34082805	Hyper	3.406239	0	0	0	contamination_double_snps	chr13:34082794:G>C,chr13:34082804:T>A
chr17	13063404	13063406	Hypo	3.403989	0	0	0	contamination_double_snps	chr17:13063404:T>A,chr17:13063405:C>A
chr17	13063404	13063406	Hyper	3.403989	0	0	0	contamination_double_snps	chr17:13063404:T>A,chr17:13063405:C>A
chr13	105311483	105311485	Hypo	3.403989	0	0	0	contamination_double_snps	chr13:105311483:C>A,chr13:105311484:T>A
chr13	105311483	105311485	Hyper	3.403989	0	0	0	contamination_double_snps	chr13:105311483:C>A,chr13:105311484:T>A
chr15	67707831	67707833	Hypo	3.403989	0	0	0	contamination_double_snps	chr15:67707831:G>C,chr15:67707832:G>C
chr15	67707831	67707833	Hyper	3.403989	0	0	0	contamination_double_snps	chr15:67707831:G>C,chr15:67707832:G>C
chr10	97208025	97208027	Hypo	3.403989	0	0	0	contamination_double_snps	chr10:97208025:A>T,chr10:97208026:C>G
chr10	97208025	97208027	Hyper	3.403989	0	0	0	contamination_double_snps	chr10:97208025:A>T,chr10:97208026:C>G
chr2	71750075	71750077	Hypo	3.403989	0	0	0	contamination_double_snps	chr2:71750075:A>C,chr2:71750076:G>C
chr2	71750075	71750077	Hyper	3.403989	0	0	0	contamination_double_snps	chr2:71750075:A>C,chr2:71750076:G>C
chr16	53127845	53127847	Hypo	3.403989	0	0	0	contamination_double_snps	chr16:53127845:G>T,chr16:53127846:T>A
chr16	53127845	53127847	Hyper	3.403989	0	0	0	contamination_double_snps	chr16:53127845:G>T,chr16:53127846:T>A
chr4	121184388	121184390	Hypo	3.403989	0	0	0	contamination_double_snps	chr4:121184388:A>T,chr4:121184389:G>C
chr4	121184388	121184390	Hyper	3.403989	0	0	0	contamination_double_snps	chr4:121184388:A>T,chr4:121184389:G>C
chr6	85802565	85802567	Hypo	3.403989	0	0	0	contamination_double_snps	chr6:85802565:T>G,chr6:85802566:T>A
chr6	85802565	85802567	Hyper	3.403989	0	0	0	contamination_double_snps	chr6:85802565:T>G,chr6:85802566:T>A
chr11	118076952	118076954	Hypo	3.403989	0	0	0	contamination_double_snps	chr11:118076952:T>A,chr11:118076953:C>G
chr11	118076952	118076954	Hyper	3.403989	0	0	0	contamination_double_snps	chr11:118076952:T>A,chr11:118076953:C>G
chr4	112205777	112205779	Hypo	3.403989	0	0	0	contamination_double_snps	chr4:112205777:T>G,chr4:112205778:T>G
chr4	112205777	112205779	Hyper	3.403989	0	0	0	contamination_double_snps	chr4:112205777:T>G,chr4:112205778:T>G
chr13	114251447	114251449	Hypo	3.403989	0	0	0	contamination_double_snps	chr13:114251447:T>G,chr13:114251448:G>T
chr13	114251447	114251449	Hyper	3.403989	0	0	0	contamination_double_snps	chr13:114251447:T>G,chr13:114251448:G>T
chr12	93915613	93915615	Hypo	3.403989	0	0	0	contamination_double_snps	chr12:93915613:T>A,chr12:93915614:A>C
chr12	93915613	93915615	Hyper	3.403989	0	0	0	contamination_double_snps	chr12:93915613:T>A,chr12:93915614:A>C
chr18	70122649	70122651	Hypo	3.403989	0	0	0	contamination_double_snps	chr18:70122649:T>A,chr18:70122650:C>A
chr18	70122649	70122651	Hyper	3.403989	0	0	0	contamination_double_snps	chr18:70122649:T>A,chr18:70122650:C>A
chr4	44968116	44968118	Hypo	3.403989	0	0	0	contamination_double_snps	chr4:44968116:C>G,chr4:44968117:G>C
chr4	44968116	44968118	Hyper	3.403989	0	0	0	contamination_double_snps	chr4:44968116:C>G,chr4:44968117:G>C
chr20	58611299	58611301	Hypo	3.403989	0	0	0	contamination_double_snps	chr20:58611299:C>G,chr20:58611300:T>G
chr20	58611299	58611301	Hyper	3.403989	0	0	0	contamination_double_snps	chr20:58611299:C>G,chr20:58611300:T>G
chr22	21111688	21111690	Hypo	3.403989	0	0	0	contamination_double_snps	chr22:21111688:C>G,chr22:21111689:C>G
chr22	21111688	21111690	Hyper	3.403989	0	0	0	contamination_double_snps	chr22:21111688:C>G,chr22:21111689:C>G
chr6	166528063	166528065	Hypo	3.403989	0	0	0	contamination_double_snps	chr6:166528063:G>T,chr6:166528064:C>G

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chr6	166528063	166528065	Hyper	3.403989	0	0	0	contamination_double_snps	chr6:166528063:G>T,chr6:166528064:C>G
chr14	101406214	101406216	Hypo	3.403989	0	0	0	contamination_double_snps	chr14:101406214:A>T,chr14:101406215:T>A
chr14	101406214	101406216	Hyper	3.403989	0	0	0	contamination_double_snps	chr14:101406214:A>T,chr14:101406215:T>A
chr2	156098934	156098936	Hypo	3.403989	0	0	0	contamination_double_snps	chr2:156098934:A>C,chr2:156098935:A>C
chr2	156098934	156098936	Hyper	3.403989	0	0	0	contamination_double_snps	chr2:156098934:A>C,chr2:156098935:A>C
chr11	14465067	14465069	Hypo	3.403989	0	0	0	contamination_double_snps	chr11:14465067:C>A,chr11:14465068:C>A
chr11	14465067	14465069	Hyper	3.403989	0	0	0	contamination_double_snps	chr11:14465067:C>A,chr11:14465068:C>A
chr4	29359023	29359028	Hypo	3.403107	0	0	0	contamination_double_snps	chr4:29359023:T>A,chr4:29359027:T>G
chr4	29359023	29359028	Hyper	3.403107	0	0	0	contamination_double_snps	chr4:29359023:T>A,chr4:29359027:T>G
chr6	116590801	116590807	Hypo	3.403074	0	0	0	contamination_double_snps	chr6:116590801:T>A,chr6:116590806:T>G
chr6	116590801	116590807	Hyper	3.403074	0	0	0	contamination_double_snps	chr6:116590801:T>A,chr6:116590806:T>G
chr4	115381411	115381417	Hypo	3.403074	0	0	0	contamination_double_snps	chr4:115381411:T>G,chr4:115381416:T>A
chr4	115381411	115381417	Hyper	3.403074	0	0	0	contamination_double_snps	chr4:115381411:T>G,chr4:115381416:T>A
chr2	150628454	150628461	Hypo	3.401423	0	0	0	contamination_double_snps	chr2:150628454:A>C,chr2:150628460:T>A
chr2	150628454	150628461	Hyper	3.401423	0	0	0	contamination_double_snps	chr2:150628454:A>C,chr2:150628460:T>A
chr2	145638597	145638604	Hypo	3.401423	0	0	0	contamination_double_snps	chr2:145638597:G>T,chr2:145638603:C>A
chr2	145638597	145638604	Hyper	3.401423	0	0	0	contamination_double_snps	chr2:145638597:G>T,chr2:145638603:C>A
chr8	9588106	9588112	Hypo	3.39908	0	0	0	contamination_double_snps	chr8:9588106:C>G,chr8:9588111:T>G
chr8	9588106	9588112	Hyper	3.39908	0	0	0	contamination_double_snps	chr8:9588106:C>G,chr8:9588111:T>G
chr7	78085919	78085927	Hypo	3.398251	0	0	0	contamination_double_snps	chr7:78085919:T>A,chr7:78085926:C>A
chr7	78085919	78085927	Hyper	3.398251	0	0	0	contamination_double_snps	chr7:78085919:T>A,chr7:78085926:C>A
chr3	73379010	73379017	Hypo	3.397582	0	0	0	contamination_double_snps	chr3:73379010:G>C,chr3:73379016:G>C
chr3	73379010	73379017	Hyper	3.397582	0	0	0	contamination_double_snps	chr3:73379010:G>C,chr3:73379016:G>C
chr5	96512864	96512871	Hypo	3.397582	0	0	0	contamination_double_snps	chr5:96512864:T>A,chr5:96512870:T>A
chr5	96512864	96512871	Hyper	3.397582	0	0	0	contamination_double_snps	chr5:96512864:T>A,chr5:96512870:T>A
chr7	132134847	132134851	Hypo	3.393127	0	0	0	contamination_double_snps	chr7:132134847:T>A,chr7:132134850:T>G
chr7	132134847	132134851	Hyper	3.393127	0	0	0	contamination_double_snps	chr7:132134847:T>A,chr7:132134850:T>G
chr10	114893952	114893956	Hypo	3.393127	0	0	0	contamination_double_snps	chr10:114893952:A>C,chr10:114893955:C>G
chr10	114893952	114893956	Hyper	3.393127	0	0	0	contamination_double_snps	chr10:114893952:A>C,chr10:114893955:C>G
chr18	70334375	70334379	Hypo	3.393127	0	0	0	contamination_double_snps	chr18:70334375:T>A,chr18:70334378:A>T
chr18	70334375	70334379	Hyper	3.393127	0	0	0	contamination_double_snps	chr18:70334375:T>A,chr18:70334378:A>T
chr18	22345412	22345414	Hypo	3.391386	0	0	0	contamination_double_snps	chr18:22345412:T>G,chr18:22345413:T>G
chr18	22345412	22345414	Hyper	3.391386	0	0	0	contamination_double_snps	chr18:22345412:T>G,chr18:22345413:T>G
chr5	142301122	142301124	Hypo	3.391386	0	0	0	contamination_double_snps	chr5:142301122:G>T,chr5:142301123:G>T
chr5	142301122	142301124	Hyper	3.391386	0	0	0	contamination_double_snps	chr5:142301122:G>T,chr5:142301123:G>T
chr11	907696	907699	Hypo	3.390805	0	0	0	contamination_double_snps	chr11:907696:T>A,chr11:907698:C>A
chr11	907696	907699	Hyper	3.390805	0	0	0	contamination_double_snps	chr11:907696:T>A,chr11:907698:C>A
chr1	193250801	193250804	Hypo	3.390805	0	0	0	contamination_double_snps	chr1:193250801:A>C,chr1:193250803:C>A
chr1	193250801	193250804	Hyper	3.390805	0	0	0	contamination_double_snps	chr1:193250801:A>C,chr1:193250803:C>A
chr9	102554035	102554038	Hypo	3.390805	0	0	0	contamination_double_snps	chr9:102554035:G>T,chr9:102554037:T>A
chr9	102554035	102554038	Hyper	3.390805	0	0	0	contamination_double_snps	chr9:102554035:G>T,chr9:102554037:T>A
chr10	28309968	28309971	Hypo	3.390805	0	0	0	contamination_double_snps	chr10:28309968:G>T,chr10:28309970:A>T

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chr10	28309968	28309971	Hyper	3.390805	0	0	0	contamination_double_snps	chr10:28309968:G>T,chr10:28309970:A>T
chr6	145076045	145076048	Hypo	3.390805	0	0	0	contamination_double_snps	chr6:145076045:C>G,chr6:145076047:T>A
chr6	145076045	145076048	Hyper	3.390805	0	0	0	contamination_double_snps	chr6:145076045:C>G,chr6:145076047:T>A
chr9	99814840	99814851	Hypo	3.389898	0	0	0	contamination_double_snps	chr9:99814840:T>G,chr9:99814850:C>G
chr9	99814840	99814851	Hyper	3.389898	0	0	0	contamination_double_snps	chr9:99814840:T>G,chr9:99814850:C>G
chr13	38354253	38354258	Hypo	3.386842	0	0	0	contamination_double_snps	chr13:38354253:C>G,chr13:38354257:T>A
chr13	38354253	38354258	Hyper	3.386842	0	0	0	contamination_double_snps	chr13:38354253:C>G,chr13:38354257:T>A
chr2	221358105	221358110	Hypo	3.386842	0	0	0	contamination_double_snps	chr2:221358105:T>G,chr2:221358109:G>C
chr2	221358105	221358110	Hyper	3.386842	0	0	0	contamination_double_snps	chr2:221358105:T>G,chr2:221358109:G>C
chr11	86321566	86321576	Hypo	3.386566	0	0	0	contamination_double_snps	chr11:86321566:G>T,chr11:86321575:C>A
chr11	86321566	86321576	Hyper	3.386566	0	0	0	contamination_double_snps	chr11:86321566:G>T,chr11:86321575:C>A
chr19	30786739	30786747	Hypo	3.383793	0	0	0	contamination_double_snps	chr19:30786739:G>C,chr19:30786746:G>C
chr19	30786739	30786747	Hyper	3.383793	0	0	0	contamination_double_snps	chr19:30786739:G>C,chr19:30786746:G>C
chr12	131613092	131613098	Hypo	3.383465	0	0	0	contamination_double_snps	chr12:131613092:A>T,chr12:131613097:A>T
chr12	131613092	131613098	Hyper	3.383465	0	0	0	contamination_double_snps	chr12:131613092:A>T,chr12:131613097:A>T
chr20	495738	495744	Hypo	3.383465	0	0	0	contamination_double_snps	chr20:495738:T>A,chr20:495743:G>C
chr20	495738	495744	Hyper	3.383465	0	0	0	contamination_double_snps	chr20:495738:T>A,chr20:495743:G>C
chr2	3028588	3028597	Hypo	3.383273	0	0	0	contamination_double_snps	chr2:3028588:A>C,chr2:3028596:A>T
chr2	3028588	3028597	Hyper	3.383273	0	0	0	contamination_double_snps	chr2:3028588:A>C,chr2:3028596:A>T
chr8	10009948	10009952	Hypo	3.38162	0	0	0	contamination_double_snps	chr8:10009948:C>G,chr8:10009951:G>T
chr8	10009948	10009952	Hyper	3.38162	0	0	0	contamination_double_snps	chr8:10009948:C>G,chr8:10009951:G>T
chr12	99874242	99874250	Hypo	3.380094	0	0	0	contamination_double_snps	chr12:99874242:T>A,chr12:99874249:G>T
chr12	99874242	99874250	Hyper	3.380094	0	0	0	contamination_double_snps	chr12:99874242:T>A,chr12:99874249:G>T
chr13	71040245	71040254	Hypo	3.378783	0	0	0	contamination_double_snps	chr13:71040245:C>G,chr13:71040253:T>A
chr13	71040245	71040254	Hyper	3.378783	0	0	0	contamination_double_snps	chr13:71040245:C>G,chr13:71040253:T>A
chr17	81069828	81069836	Hypo	3.378545	0	0	0	contamination_double_snps	chr17:81069828:C>G,chr17:81069835:G>C
chr17	81069828	81069836	Hyper	3.378545	0	0	0	contamination_double_snps	chr17:81069828:C>G,chr17:81069835:G>C
chr6	787250	787255	Hypo	3.371654	0	0	0	contamination_double_snps	chr6:787250:G>C,chr6:787254:A>T
chr6	787250	787255	Hyper	3.371654	0	0	0	contamination_double_snps	chr6:787250:G>C,chr6:787254:A>T
chr4	98033133	98033138	Hypo	3.371654	0	0	0	contamination_double_snps	chr4:98033133:A>T,chr4:98033137:C>A
chr4	98033133	98033138	Hyper	3.371654	0	0	0	contamination_double_snps	chr4:98033133:A>T,chr4:98033137:C>A
chr2	159678751	159678761	Hypo	3.369662	0	0	0	contamination_double_snps	chr2:159678751:A>C,chr2:159678760:T>A
chr2	159678751	159678761	Hyper	3.369662	0	0	0	contamination_double_snps	chr2:159678751:A>C,chr2:159678760:T>A
chr21	31305668	31305675	Hypo	3.368548	0	0	0	contamination_double_snps	chr21:31305668:G>T,chr21:31305674:A>C
chr21	31305668	31305675	Hyper	3.368548	0	0	0	contamination_double_snps	chr21:31305668:G>T,chr21:31305674:A>C
chr21	37319767	37319770	Hypo	3.368523	0	0	0	contamination_double_snps	chr21:37319767:G>T,chr21:37319769:C>A
chr21	37319767	37319770	Hyper	3.368523	0	0	0	contamination_double_snps	chr21:37319767:G>T,chr21:37319769:C>A
chr2	192338717	192338719	Hypo	3.368042	0	0	0	contamination_double_snps	chr2:192338717:C>A,chr2:192338718:A>C
chr2	192338717	192338719	Hyper	3.368042	0	0	0	contamination_double_snps	chr2:192338717:C>A,chr2:192338718:A>C
chr10	71278803	71278805	Hypo	3.368042	0	0	0	contamination_double_snps	chr10:71278803:T>A,chr10:71278804:A>C
chr10	71278803	71278805	Hyper	3.368042	0	0	0	contamination_double_snps	chr10:71278803:T>A,chr10:71278804:A>C
chr9	126692598	126692600	Hypo	3.368042	0	0	0	contamination_double_snps	chr9:126692598:G>T,chr9:126692599:T>G

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chr9	126692598	126692600	Hyper	3.368042	0	0	0	contamination_double_snps	chr9:126692598:G>T,chr9:126692599:T>G
chr5	31904271	31904273	Hypo	3.368042	0	0	0	contamination_double_snps	chr5:31904271:T>A,chr5:31904272:T>G
chr5	31904271	31904273	Hyper	3.368042	0	0	0	contamination_double_snps	chr5:31904271:T>A,chr5:31904272:T>G
chr2	146696864	146696866	Hypo	3.368042	0	0	0	contamination_double_snps	chr2:146696864:G>T,chr2:146696865:A>T
chr2	146696864	146696866	Hyper	3.368042	0	0	0	contamination_double_snps	chr2:146696864:G>T,chr2:146696865:A>T
chr13	89865734	89865736	Hypo	3.368042	0	0	0	contamination_double_snps	chr13:89865734:G>T,chr13:89865735:G>T
chr13	89865734	89865736	Hyper	3.368042	0	0	0	contamination_double_snps	chr13:89865734:G>T,chr13:89865735:G>T
chr10	54832963	54832965	Hypo	3.368042	0	0	0	contamination_double_snps	chr10:54832963:A>T,chr10:54832964:C>A
chr10	54832963	54832965	Hyper	3.368042	0	0	0	contamination_double_snps	chr10:54832963:A>T,chr10:54832964:C>A
chr7	3399421	3399423	Hypo	3.368042	0	0	0	contamination_double_snps	chr7:3399421:A>T,chr7:3399422:T>A
chr7	3399421	3399423	Hyper	3.368042	0	0	0	contamination_double_snps	chr7:3399421:A>T,chr7:3399422:T>A
chr20	13718643	13718645	Hypo	3.368042	0	0	0	contamination_double_snps	chr20:13718643:G>T,chr20:13718644:C>A
chr20	13718643	13718645	Hyper	3.368042	0	0	0	contamination_double_snps	chr20:13718643:G>T,chr20:13718644:C>A
chr2	56494904	56494906	Hypo	3.368042	0	0	0	contamination_double_snps	chr2:56494904:A>C,chr2:56494905:A>C
chr2	56494904	56494906	Hyper	3.368042	0	0	0	contamination_double_snps	chr2:56494904:A>C,chr2:56494905:A>C
chr9	18126677	18126679	Hypo	3.368042	0	0	0	contamination_double_snps	chr9:18126677:T>A,chr9:18126678:C>A
chr9	18126677	18126679	Hyper	3.368042	0	0	0	contamination_double_snps	chr9:18126677:T>A,chr9:18126678:C>A
chr2	129986245	129986247	Hypo	3.368042	0	0	0	contamination_double_snps	chr2:129986245:G>T,chr2:129986246:G>T
chr2	129986245	129986247	Hyper	3.368042	0	0	0	contamination_double_snps	chr2:129986245:G>T,chr2:129986246:G>T
chr1	220569965	220569967	Hypo	3.368042	0	0	0	contamination_double_snps	chr1:220569965:C>A,chr1:220569966:C>A
chr1	220569965	220569967	Hyper	3.368042	0	0	0	contamination_double_snps	chr1:220569965:C>A,chr1:220569966:C>A
chr8	71472653	71472655	Hypo	3.368042	0	0	0	contamination_double_snps	chr8:71472653:A>T,chr8:71472654:A>T
chr8	71472653	71472655	Hyper	3.368042	0	0	0	contamination_double_snps	chr8:71472653:A>T,chr8:71472654:A>T
chr6	86033749	86033751	Hypo	3.368042	0	0	0	contamination_double_snps	chr6:86033749:G>T,chr6:86033750:T>A
chr6	86033749	86033751	Hyper	3.368042	0	0	0	contamination_double_snps	chr6:86033749:G>T,chr6:86033750:T>A
chr4	167605219	167605221	Hypo	3.368042	0	0	0	contamination_double_snps	chr4:167605219:A>T,chr4:167605220:T>A
chr4	167605219	167605221	Hyper	3.368042	0	0	0	contamination_double_snps	chr4:167605219:A>T,chr4:167605220:T>A
chr1	170178518	170178520	Hypo	3.368042	0	0	0	contamination_double_snps	chr1:170178518:G>C,chr1:170178519:G>T
chr1	170178518	170178520	Hyper	3.368042	0	0	0	contamination_double_snps	chr1:170178518:G>C,chr1:170178519:G>T
chr11	87166482	87166484	Hypo	3.368042	0	0	0	contamination_double_snps	chr11:87166482:T>G,chr11:87166483:T>A
chr11	87166482	87166484	Hyper	3.368042	0	0	0	contamination_double_snps	chr11:87166482:T>G,chr11:87166483:T>A
chr21	34561818	34561820	Hypo	3.368042	0	0	0	contamination_double_snps	chr21:34561818:G>C,chr21:34561819:C>G
chr21	34561818	34561820	Hyper	3.368042	0	0	0	contamination_double_snps	chr21:34561818:G>C,chr21:34561819:C>G
chr2	18539428	18539430	Hypo	3.368042	0	0	0	contamination_double_snps	chr2:18539428:G>C,chr2:18539429:A>T
chr2	18539428	18539430	Hyper	3.368042	0	0	0	contamination_double_snps	chr2:18539428:G>C,chr2:18539429:A>T
chr20	58937170	58937172	Hypo	3.368042	0	0	0	contamination_double_snps	chr20:58937170:A>T,chr20:58937171:A>C
chr20	58937170	58937172	Hyper	3.368042	0	0	0	contamination_double_snps	chr20:58937170:A>T,chr20:58937171:A>C
chr4	32515062	32515064	Hypo	3.368042	0	0	0	contamination_double_snps	chr4:32515062:T>A,chr4:32515063:G>T
chr4	32515062	32515064	Hyper	3.368042	0	0	0	contamination_double_snps	chr4:32515062:T>A,chr4:32515063:G>T
chr10	98899299	98899306	Hypo	3.363713	0	0	0	contamination_double_snps	chr10:98899299:C>A,chr10:98899305:C>A
chr10	98899299	98899306	Hyper	3.363713	0	0	0	contamination_double_snps	chr10:98899299:C>A,chr10:98899305:C>A
chr17	1446655	1446662	Hypo	3.363713	0	0	0	contamination_double_snps	chr17:1446655:G>T,chr17:1446661:C>G

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chr17	1446655	1446662	Hyper	3.363713	0	0	0	contamination_double_snps	chr17:1446655:G>T,chr17:1446661:C>G
chr7	46119237	46119239	Hypo	3.363287	0	0	0	contamination_double_snps	chr7:46119237:G>C,chr7:46119238:G>T
chr7	46119237	46119239	Hyper	3.363287	0	0	0	contamination_double_snps	chr7:46119237:G>C,chr7:46119238:G>T
chr18	63590882	63590890	Hypo	3.361938	0	0	0	contamination_double_snps	chr18:63590882:T>G,chr18:63590889:A>C
chr18	63590882	63590890	Hyper	3.361938	0	0	0	contamination_double_snps	chr18:63590882:T>G,chr18:63590889:A>C
chr9	74695440	74695444	Hypo	3.360306	0	0	0	contamination_double_snps	chr9:74695440:T>G,chr9:74695443:A>C
chr9	74695440	74695444	Hyper	3.360306	0	0	0	contamination_double_snps	chr9:74695440:T>G,chr9:74695443:A>C
chr16	80072013	80072023	Hypo	3.357644	0	0	0	contamination_double_snps	chr16:80072013:T>A,chr16:80072022:T>A
chr16	80072013	80072023	Hyper	3.357644	0	0	0	contamination_double_snps	chr16:80072013:T>A,chr16:80072022:T>A
chr2	139094374	139094377	Hypo	3.356492	0	0	0	contamination_double_snps	chr2:139094374:T>G,chr2:139094376:A>C
chr2	139094374	139094377	Hyper	3.356492	0	0	0	contamination_double_snps	chr2:139094374:T>G,chr2:139094376:A>C
chr1	80066489	80066492	Hypo	3.356492	0	0	0	contamination_double_snps	chr1:80066489:T>G,chr1:80066491:T>A
chr1	80066489	80066492	Hyper	3.356492	0	0	0	contamination_double_snps	chr1:80066489:T>G,chr1:80066491:T>A
chr5	80538019	80538022	Hypo	3.356492	0	0	0	contamination_double_snps	chr5:80538019:A>T,chr5:80538021:T>A
chr5	80538019	80538022	Hyper	3.356492	0	0	0	contamination_double_snps	chr5:80538019:A>T,chr5:80538021:T>A
chr3	184674198	184674207	Hypo	3.356312	0	0	0	contamination_double_snps	chr3:184674198:C>G,chr3:184674206:C>G
chr3	184674198	184674207	Hyper	3.356312	0	0	0	contamination_double_snps	chr3:184674198:C>G,chr3:184674206:C>G
chr12	101884384	101884389	Hypo	3.355389	0	0	0	contamination_double_snps	chr12:101884384:G>C,chr12:101884388:A>C
chr12	101884384	101884389	Hyper	3.355389	0	0	0	contamination_double_snps	chr12:101884384:G>C,chr12:101884388:A>C
chr1	152223332	152223335	Hypo	3.351953	0	0	0	contamination_double_snps	chr1:152223332:T>G,chr1:152223334:T>A
chr1	152223332	152223335	Hyper	3.351953	0	0	0	contamination_double_snps	chr1:152223332:T>G,chr1:152223334:T>A
chr3	95254478	95254481	Hypo	3.351953	0	0	0	contamination_double_snps	chr3:95254478:C>A,chr3:95254480:A>T
chr3	95254478	95254481	Hyper	3.351953	0	0	0	contamination_double_snps	chr3:95254478:C>A,chr3:95254480:A>T
chr20	55007956	55007959	Hypo	3.351953	0	0	0	contamination_double_snps	chr20:55007956:C>G,chr20:55007958:T>G
chr20	55007956	55007959	Hyper	3.351953	0	0	0	contamination_double_snps	chr20:55007956:C>G,chr20:55007958:T>G
chr9	104695764	104695771	Hypo	3.349693	0	0	0	contamination_double_snps	chr9:104695764:A>C,chr9:104695770:A>C
chr9	104695764	104695771	Hyper	3.349693	0	0	0	contamination_double_snps	chr9:104695764:A>C,chr9:104695770:A>C
chr10	94857382	94857393	Hypo	3.347861	0	0	0	contamination_double_snps	chr10:94857382:C>G,chr10:94857392:C>G
chr10	94857382	94857393	Hyper	3.347861	0	0	0	contamination_double_snps	chr10:94857382:C>G,chr10:94857392:C>G
chr4	11496627	11496629	Hypo	3.344698	0	0	0	contamination_double_snps	chr4:11496627:T>A,chr4:11496628:C>A
chr4	11496627	11496629	Hyper	3.344698	0	0	0	contamination_double_snps	chr4:11496627:T>A,chr4:11496628:C>A
chr10	64221289	64221291	Hypo	3.344698	0	0	0	contamination_double_snps	chr10:64221289:G>T,chr10:64221290:A>T
chr10	64221289	64221291	Hyper	3.344698	0	0	0	contamination_double_snps	chr10:64221289:G>T,chr10:64221290:A>T
chr1	69850834	69850836	Hypo	3.344698	0	0	0	contamination_double_snps	chr1:69850834:G>T,chr1:69850835:G>C
chr1	69850834	69850836	Hyper	3.344698	0	0	0	contamination_double_snps	chr1:69850834:G>T,chr1:69850835:G>C
chr9	12926562	12926571	Hypo	3.342371	0	0	0	contamination_double_snps	chr9:12926562:T>G,chr9:12926570:G>T
chr9	12926562	12926571	Hyper	3.342371	0	0	0	contamination_double_snps	chr9:12926562:T>G,chr9:12926570:G>T
chr17	11715978	11715987	Hypo	3.338804	0	0	0	contamination_double_snps	chr17:11715978:C>G,chr17:11715986:C>G
chr17	11715978	11715987	Hyper	3.338804	0	0	0	contamination_double_snps	chr17:11715978:C>G,chr17:11715986:C>G
chr2	213328451	213328459	Hypo	3.337678	0	0	0	contamination_double_snps	chr2:213328451:G>C,chr2:213328458:A>T
chr2	213328451	213328459	Hyper	3.337678	0	0	0	contamination_double_snps	chr2:213328451:G>C,chr2:213328458:A>T
chr5	8823680	8823689	Hypo	3.33731	0	0	0	contamination_double_snps	chr5:8823680:C>A,chr5:8823688:C>A

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chr5	8823680	8823689	Hyper	3.33731	0	0	0	contamination_double_snps	chr5:8823680:C>A,chr5:8823688:C>A
chr18	27366970	27366981	Hypo	3.336243	0	0	0	contamination_double_snps	chr18:27366970:T>G,chr18:27366980:C>A
chr18	27366970	27366981	Hyper	3.336243	0	0	0	contamination_double_snps	chr18:27366970:T>G,chr18:27366980:C>A
chr5	52074895	52074902	Hypo	3.334679	0	0	0	contamination_double_snps	chr5:52074895:A>C,chr5:52074901:T>A
chr5	52074895	52074902	Hyper	3.334679	0	0	0	contamination_double_snps	chr5:52074895:A>C,chr5:52074901:T>A
chr11	37652912	37652919	Hypo	3.334679	0	0	0	contamination_double_snps	chr11:37652912:T>A,chr11:37652918:G>C
chr11	37652912	37652919	Hyper	3.334679	0	0	0	contamination_double_snps	chr11:37652912:T>A,chr11:37652918:G>C
chr7	124032071	124032074	Hypo	3.334209	0	0	0	contamination_double_snps	chr7:124032071:G>T,chr7:124032073:C>A
chr7	124032071	124032074	Hyper	3.334209	0	0	0	contamination_double_snps	chr7:124032071:G>T,chr7:124032073:C>A
chr13	94458333	94458336	Hypo	3.334209	0	0	0	contamination_double_snps	chr13:94458333:A>T,chr13:94458335:T>G
chr13	94458333	94458336	Hyper	3.334209	0	0	0	contamination_double_snps	chr13:94458333:A>T,chr13:94458335:T>G
chr1	14573379	14573382	Hypo	3.334209	0	0	0	contamination_double_snps	chr1:14573379:A>C,chr1:14573381:A>C
chr1	14573379	14573382	Hyper	3.334209	0	0	0	contamination_double_snps	chr1:14573379:A>C,chr1:14573381:A>C
chr6	3435111	3435114	Hypo	3.334209	0	0	0	contamination_double_snps	chr6:3435111:A>C,chr6:3435113:T>A
chr6	3435111	3435114	Hyper	3.334209	0	0	0	contamination_double_snps	chr6:3435111:A>C,chr6:3435113:T>A
chr1	166737966	166737969	Hypo	3.334209	0	0	0	contamination_double_snps	chr1:166737966:T>G,chr1:166737968:T>A
chr1	166737966	166737969	Hyper	3.334209	0	0	0	contamination_double_snps	chr1:166737966:T>G,chr1:166737968:T>A
chr3	190569710	190569721	Hypo	3.332915	0	0	0	contamination_double_snps	chr3:190569710:T>G,chr3:190569720:A>T
chr3	190569710	190569721	Hyper	3.332915	0	0	0	contamination_double_snps	chr3:190569710:T>G,chr3:190569720:A>T
chr4	135277619	135277621	Hypo	3.332095	0	0	0	contamination_double_snps	chr4:135277619:A>T,chr4:135277620:T>A
chr4	135277619	135277621	Hyper	3.332095	0	0	0	contamination_double_snps	chr4:135277619:A>T,chr4:135277620:T>A
chr12	72364168	72364170	Hypo	3.332095	0	0	0	contamination_double_snps	chr12:72364168:A>T,chr12:72364169:A>C
chr12	72364168	72364170	Hyper	3.332095	0	0	0	contamination_double_snps	chr12:72364168:A>T,chr12:72364169:A>C
chr7	44173957	44173959	Hypo	3.332095	0	0	0	contamination_double_snps	chr7:44173957:T>G,chr7:44173958:C>A
chr7	44173957	44173959	Hyper	3.332095	0	0	0	contamination_double_snps	chr7:44173957:T>G,chr7:44173958:C>A
chr1	201990325	201990327	Hypo	3.332095	0	0	0	contamination_double_snps	chr1:201990325:C>G,chr1:201990326:T>G
chr1	201990325	201990327	Hyper	3.332095	0	0	0	contamination_double_snps	chr1:201990325:C>G,chr1:201990326:T>G
chr12	679364	679366	Hypo	3.332095	0	0	0	contamination_double_snps	chr12:679364:A>C,chr12:679365:G>C
chr12	679364	679366	Hyper	3.332095	0	0	0	contamination_double_snps	chr12:679364:A>C,chr12:679365:G>C
chr2	235571902	235571904	Hypo	3.332095	0	0	0	contamination_double_snps	chr2:235571902:C>A,chr2:235571903:A>T
chr2	235571902	235571904	Hyper	3.332095	0	0	0	contamination_double_snps	chr2:235571902:C>A,chr2:235571903:A>T
chr2	170154661	170154663	Hypo	3.332095	0	0	0	contamination_double_snps	chr2:170154661:C>A,chr2:170154662:C>A
chr2	170154661	170154663	Hyper	3.332095	0	0	0	contamination_double_snps	chr2:170154661:C>A,chr2:170154662:C>A
chr16	49684799	49684801	Hypo	3.332095	0	0	0	contamination_double_snps	chr16:49684799:T>A,chr16:49684800:C>A
chr16	49684799	49684801	Hyper	3.332095	0	0	0	contamination_double_snps	chr16:49684799:T>A,chr16:49684800:C>A

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표 2

참조	시작	종료	메틸화	점수	가닥	서열
chr2	108676567	108676687	Hypo	1	-	TACTTACCAATAAAAAAATACTATTTTCCCCATCATCCCATCATTAATTATCTAAACAAAACCTCAATAAATACCCCTTTATATAATACAACTACCATTCAATTCATCAAACCAAACCCT
chr2	108676567	108676687	Hypo	1	+	TGTTTATTAGTAAGAAAATATTATTTTTTTTTATTATTTTATTATTAATTATTTAAATAGAGTTTTGGTGAATGTTTTTTTGTATAGTGTAGTTGTTATTTAGTTTATTAGGTTAAGTTTT
chr2	108676567	108676687	Hypo	1	-	TACTTACCAATAAAAAAATACTATTTTCCCCATCATCCCATCATTAATTATCTAAACTAAACCTAAATAAATACCCCTTTATATAATACAACTACCATTCAATTCATCAAACCAAACCCT
chr2	108676567	108676687	Hypo	1	+	TGTTTATTAGTAAGAAAATATTATTTTTTTTTATTATTTTATTATTAATTATTTAAATTGAGTTTGGGTGAATGTTTTTTTGTATAGTGTAGTTGTTATTTAGTTTATTAGGTTAAGTTTT
chr2	108676567	108676687	Hyper	1	-	TACTTACCAATAAAAAAATACTATTTTCCCCATCATCCCATCATTAATTATCTAAACAAAACCTCGATAAATACCCCTTTATATAATACAACTACCATTCAATTCATCAAACCAAACCCT
chr2	108676567	108676687	Hyper	1	+	TGTTTATTAGTAAGAAAATATTATTTTTTTTTATTATTTTATTATTAATTATTTAAATAGAGTTTCGGTGAATGTTTTTTTGTATAGTGTAGTTGTTATTTAGTTTATTAGGTTAAGTTTT
chr2	108676567	108676687	Hyper	1	-	TACTTACCAATAAAAAAATACTATTTTCCCCATCATCCCATCATTAATTATCTAAACTAAACCTAAATAAATACCCCTTTATATAATACAACTACCATTCAATTCATCAAACCAAACCCT
chr2	108676567	108676687	Hyper	1	+	TGTTTATTAGTAAGAAAATATTATTTTTTTTTATTATTTTATTATTAATTATTTAAATTGAGTTTGGGTGAATGTTTTTTTGTATAGTGTAGTTGTTATTTAGTTTATTAGGTTAAGTTTT
chr7	15433234	15433354	Hypo	1	-	CTTATCACTTAAAATTTTCTCATCAAAAAAAACACAACTTATACTAAAATTATTCAACACCTTAAACAAAAAAAATAAAATATTATTTATTAAACTCTCCTTAAATCAAAACAATTTTCAAA
chr7	15433234	15433354	Hypo	1	+	TTTGTTATTTGGGATTTTTTTGTTAGGGAAATGTAGTTTATATTGAGATTGTTTAATGTTTTAGGTAGGAAGGTGAAGTGTTGTTTATTGGGTTTTTTTTAAATTAAAATAGTTTTTAAG
chr7	15433234	15433354	Hypo	1	-	CTTATCACTTAAAATTTTCTCATCAAAAAAAACACAACTTATACTAAAATTATTCAAAACCTTAACCAAAAAAAATAAAATATTATTTATTAAACTCTCCTTAAATCAAAACAATTTTCAAA
chr7	15433234	15433354	Hypo	1	+	TTTGTTATTTGGGATTTTTTTGTTAGGGAAATGTAGTTTATATTGAGATTGTTTAAGGTTTTAGTTAGGAAGGTGAAGTGTTGTTTATTGGGTTTTTTTTAAATTAAAATAGTTTTTAAG
chr7	15433234	15433354	Hyper	1	-	CTTATCACTTAAAATTTTCTCGTCAAAAAAAACGCAACTTATACTAAAATTATTCAACGCCTTAAACAAAAAAAATAAAATATTATTTATTAAACTCTCCTTAAATCAAAACAATTTTCAAA
chr7	15433234	15433354	Hyper	1	+	TTTGTTATTTGGGATTTTTTCGTTAGGGAAACGTAGTTTATATTGAGATTGTTTAACGTTTTAGGTAGGAAGGTGAAGTGTTGTTTATTGGGTTTTTTTTAAATTAAAATAGTTTTTAAG
chr7	15433234	15433354	Hyper	1	-	CTTATCACTTAAAATTTTCTCGTCAAAAAAAACGCAACTTATACTAAAATTATTCAAAACCTTAACCAAAAAAAATAAAATATTATTTATTAAACTCTCCTTAAATCAAAACAATTTTCAAA
chr7	15433234	15433354	Hyper	1	+	TTTGTTATTTGGGATTTTTTCGTTAGGGAAACGTAGTTTATATTGAGATTGTTTAAGGTTTTAGTTAGGAAGGTGAAGTGTTGTTTATTGGGTTTTTTTTAAATTAAAATAGTTTTTAAG
chr20	248869	248989	Hypo	1	-	CAAAATCACTCTCTAACACATTCAAAAACATAAAAACTACATACAATACAAAAAAACCTATATCCAAACTTCCTTTCTTAATTTTCCTCCTCTAAACTCATACATCCCTTCACAAACAAT
chr20	248869	248989	Hypo	1	+	TGGGGTTATTTTTTGGTGTATTTGGAGGTATGAGGGTTATGTGTAATGTGAGGGAATTTATGTTTAGGTTTTTTTTTTTGGTTTTTTTTTTTTGAATTTATGTATTTTTTTATAAATAGT
chr20	248869	248989	Hypo	1	-	CAAAATCACTCTCTAACACATTCAAAAACATAAAAACTACATACAATACAAAAAAAACTATATCCTAACTTCCTTTCTTAATTTTCCTCCTCTAAACTCATACATCCCTTCACAAACAAT
chr20	248869	248989	Hypo	1	+	TGGGGTTATTTTTTGGTGTATTTGGAGGTATGAGGGTTATGTGTAATGTGAGGGAAATTATGTTTTGGTTTTTTTTTTTGGTTTTTTTTTTTTGAATTTATGTATTTTTTTATAAATAGT
chr20	248869	248989	Hyper	1	-	CGAAATCACTCTCTAACGCATTCGAAAACATAAAAACTACGTACAATACGAAAAAACCTATATCCAAACTTCCTTTCTTAATTTTCCTCCTCTAAACTCATACATCCCTTCACAAACAAT
chr20	248869	248989	Hyper	1	+	CGGGGTTATTTTTTGGCGTATTCGGAGGTATGAGGGTTACGTGTAATGCGAGGGAATTTATGTTTAGGTTTTTTTTTTTGGTTTTTTTTTTTTGAATTTATGTATTTTTTTATAAATAGT
chr20	248869	248989	Hyper	1	-	CGAAATCACTCTCTAACGCATTCGAAAACATAAAAACTACGTACAATACGAAAAAAACTATATCCTAACTTCCTTTCTTAATTTTCCTCCTCTAAACTCATACATCCCTTCACAAACAAT
chr20	248869	248989	Hyper	1	+	CGGGGTTATTTTTTGGCGTATTCGGAGGTATGAGGGTTACGTGTAATGCGAGGGAAATTATGTTTTGGTTTTTTTTTTTGGTTTTTTTTTTTTGAATTTATGTATTTTTTTATAAATAGT
chr10	108512022	108512142	Hypo	1	-	CTTTTATCCCCAAAAACAAAAAAAAACTAAAAAAAAACTCCATAACACAAATAAACTTTCATATACAACCAAAAAAAATCCACTATAATCCTAATAAATAACAAAAATCCTCACACAACATCT
chr10	108512022	108512142	Hypo	1	+	TTTTTGTTTTTAAAAGTAGGAAGAATTAAAGAAGGTTTTATGGTATAGGTGGGTTTTTGTATATGGTTAGAAAGATTTATTGTGATTTTAATAAATGATAAAAATTTTTATATAGTATTT
chr10	108512022	108512142	Hypo	1	-	CTTTTATCCCCAAAAACAAAAAAAAACTAAAAAAAAACTCCATAACACAAATAAACTTTAATATAAAACCAAAAAAAATCCACTATAATCCTAATAAATAACAAAAATCCTCACACAACATCT
chr10	108512022	108512142	Hypo	1	+	TTTTTGTTTTTAAAAGTAGGAAGAATTAAAGAAGGTTTTATGGTATAGGTGGGTTTTGGTATAAGGTTAGAAAGATTTATTGTGATTTTAATAAATGATAAAAATTTTTATATAGTATTT
chr10	108512022	108512142	Hyper	1	-	CTTTTATCCCCAAAAACAAAAAAAAACTAAAAAAAAACTCCATAACACAAATAAACTTTCGTATACGACCAAAAAAAATCCACTATAATCCTAATAAATAACAAAAATCCTCACACAACATCT
chr10	108512022	108512142	Hyper	1	+	TTTTTGTTTTTAAAAGTAGGAAGAATTAAAGAAGGTTTTATGGTATAGGTGGGTTTTCGTATACGGTTAGAAAGATTTATTGTGATTTTAATAAATGATAAAAATTTTTATATAGTATTT
chr10	108512022	108512142	Hyper	1	-	CTTTTATCCCCAAAAACAAAAAAAAACTAAAAAAAAACTCCATAACACAAATAAACTTTAATATAAAACCAAAAAAAATCCACTATAATCCTAATAAATAACAAAAATCCTCACACAACATCT
chr10	108512022	108512142	Hyper	1	+	TTTTTGTTTTTAAAAGTAGGAAGAATTAAAGAAGGTTTTATGGTATAGGTGGGTTTTGGTATAAGGTTAGAAAGATTTATTGTGATTTTAATAAATGATAAAAATTTTTATATAGTATTT
chr4	16736005	16736125	Hypo	1	-	AACTTTACTAATCACTAAAAATTTCAAAAATAAAATCTCTATTCCCTAAAACAATACCTTAAACTCAAAATTTATTATCATAAATAAAATAAAACTTCATTAAAACAAAAAAAAAATTCTC
chr4	16736005	16736125	Hypo	1	+	AATTTTATTAATTATTAGGAATTTTAGAAGTGGAATTTTTTGTTTTTTGGAATGGTGTTTTGGATTTAGAATTTGTTGTTATGAATGAAATGAGATTTTATTAAAATAAAAAAAGGTTTTT
chr4	16736005	16736125	Hypo	1	-	AACTTTACTAATCACTAAAAATTTCAAAAATAAAATCTCTATTCCCTAAAACAATACCTAATACTCAAAATTTATTATCATAAATAAAATAAAACTTCATTAAAACAAAAAAAAAATTCTC
chr4	16736005	16736125	Hypo	1	+	AATTTTATTAATTATTAGGAATTTTAGAAGTGGAATTTTTTGTTTTTTGGAATGGTGTTTGGTATTTAGAATTTGTTGTTATGAATGAAATGAGATTTTATTAAAATAAAAAAAGGTTTTT
chr4	16736005	16736125	Hyper	1	-	AACTTTACTAATCACTAAAAATTTCAAAAATAAAATCTCTATTCCCTAAAACGATACCTTAAACTCAAAATTTATTATCATAAATAAAATAAAACTTCATTAAAACAAAAAAAAAATTCTC
chr4	16736005	16736125	Hyper	1	+	AATTTTATTAATTATTAGGAATTTTAGAAGTGGAATTTTTTGTTTTTTGGAACGGTGTTTTGGATTTAGAATTTGTTGTTATGAATGAAATGAGATTTTATTAAAATAAAAAAAGGTTTTT
chr4	16736005	16736125	Hyper	1	-	AACTTTACTAATCACTAAAAATTTCAAAAATAAAATCTCTATTCCCTAAAACGATACCTAATACTCAAAATTTATTATCATAAATAAAATAAAACTTCATTAAAACAAAAAAAAAATTCTC
chr4	16736005	16736125	Hyper	1	+	AATTTTATTAATTATTAGGAATTTTAGAAGTGGAATTTTTTGTTTTTTGGAACGGTGTTTGGTATTTAGAATTTGTTGTTATGAATGAAATGAGATTTTATTAAAATAAAAAAAGGTTTTT
chr4	72575835	72575955	Hypo	1	-	AAAAAACAATAAAACTCACCCCACCCTCTTAAATTTTAAAATCTAAACTCCCCCACATAAAAAAACAATTTCTAATTCCTCAAAATTTTAAATACTTACAACATCCCCTACCAAATAACC
chr4	72575835	72575955	Hypo	1	+	AGAAAATAATGGGGTTTATTTTATTTTTTTAGGTTTTGGGATTTGAGTTTTTTTATGTGGAGAGATAGTTTTTAATTTTTTAGAATTTTAGATATTTGTAGTATTTTTTGTTAAGTGATT
chr4	72575835	72575955	Hypo	1	-	AAAAAACAATAAAACTCACCCCACCCTCTTAAATTTTAAAATCTAAACTCCCCCAAATAAAAAAAAAATTTCTAATTCCTCAAAATTTTAAATACTTACAACATCCCCTACCAAATAACC
chr4	72575835	72575955	Hypo	1	+	AGAAAATAATGGGGTTTATTTTATTTTTTTAGGTTTTGGGATTTGAGTTTTTTTAAGTGGAGAGAAAGTTTTTAATTTTTTAGAATTTTAGATATTTGTAGTATTTTTTGTTAAGTGATT
chr4	72575835	72575955	Hyper	1	-	AAAAAACAATAAAACTCACCCCACCCTCTTAAATTTTAAAATCTAAACTCCCCCACGTAAAAAAACAATTTCTAATTCCTCAAAATTTTAAATACTTACAACATCCCCTACCAAATAACC
chr4	72575835	72575955	Hyper	1	+	AGAAAATAATGGGGTTTATTTTATTTTTTTAGGTTTTGGGATTTGAGTTTTTTTACGTGGAGAGATAGTTTTTAATTTTTTAGAATTTTAGATATTTGTAGTATTTTTTGTTAAGTGATT
chr4	72575835	72575955	Hyper	1	-	AAAAAACAATAAAACTCACCCCACCCTCTTAAATTTTAAAATCTAAACTCCCCCAAATAAAAAAAAAATTTCTAATTCCTCAAAATTTTAAATACTTACAACATCCCCTACCAAATAACC
chr4	72575835	72575955	Hyper	1	+	AGAAAATAATGGGGTTTATTTTATTTTTTTAGGTTTTGGGATTTGAGTTTTTTTAAGTGGAGAGAAAGTTTTTAATTTTTTAGAATTTTAGATATTTGTAGTATTTTTTGTTAAGTGATT
chr6	158434925	158435045	Hypo	1	-	AAAATATATATATATTTAATAAACTATATTCAAATTTATATTCTAATACCACTAATTAAATATTAACAAATCAACACTATACAAATAATTCCTAACTTACAATAATTCCTTCCAATATAATT
chr6	158434925	158435045	Hypo	1	+	AAAATATGTGTGTTTGATAAATTGTATTTAGGTTTGTGTTTTAGTGTTATTGGTTGAGTGTTAATGAATTAATATTGTATAGATGATTTTTGATTTATGATGGTTTTTTTTAGTATGATT
chr6	158434925	158435045	Hypo	1	-	AAAATATATATATATTTAATAAACTATATTCAAATTTATATTCTAATACCACTAATTCAATATTAACCAATCAACACTATACAAATAATTCCTAACTTACAATAATTCCTTCCAATATAATT
chr6	158434925	158435045	Hypo	1	+	AAAATATGTGTGTTTGATAAATTGTATTTAGGTTTGTGTTTTAGTGTTATTGGTTTAGTGTTAATTAATTAATATTGTATAGATGATTTTTGATTTATGATGGTTTTTTTTAGTATGATT

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chr6	158434925	158435045	Hyper	1	-	AAAATATATATATATTTAATAAACTATATTCAAATTTATATTCTAATACCACTAATTAAATATTAACGAATCAACACTATACAAATAATTCCTAACTTACGATAATTCCTTCCAATATAATT
chr6	158434925	158435045	Hyper	1	+	AAAATATGTGTGTTTGATAAATTGTATTTAGGTTTGTGTTTTAGTGTTATTGGTTGAGTGTTAACGAATTAATATTGTATAGATGATTTTTGATTTACGATGGTTTTTTTTAGTATGATT
chr6	158434925	158435045	Hyper	1	-	AAAATATATATATATTTAATAAACTATATTCAAATTTATATTCTAATACCACTAATTCAATATTAACCAATCAACACTATACAAATAATTCCTAACTTACGATAATTCCTTCCAATATAATT
chr6	158434925	158435045	Hyper	1	+	AAAATATGTGTGTTTGATAAATTGTATTTAGGTTTGTGTTTTAGTGTTATTGGTTTAGTGTTAATTAATTAATATTGTATAGATGATTTTTGATTTACGATGGTTTTTTTTAGTATGATT
chr13	20880826	20880946	Hypo	1	-	CTATAAATTCAAAAAAACATAAAAAACTTATTAACAAATCACAAAACAAAAACCTTATAAAAACCTCATTCAAATAAATAAAAAATTAAAAATTATAACACAATTAAAAAAATATAAACA
chr13	20880826	20880946	Hypo	1	+	TTATAGATTTAAAGAGATATGAGAGGTTTATTAGTAAATTATAGGATAGGGGTTTTATAAGAATTTTGTTTAAATAAATAAAGGGTTAAAAATTATAGTATAATTAGGGAAATGTGAATA
chr13	20880826	20880946	Hypo	1	-	CTATAAATTCAAAAAAACATAAAAAACTTATTAACAAATCACAAAACAAAAACCTTATATAATCCTCATTCAAATAAATAAAAAATTAAAAATTATAACACAATTAAAAAAATATAAACA
chr13	20880826	20880946	Hypo	1	+	TTATAGATTTAAAGAGATATGAGAGGTTTATTAGTAAATTATAGGATAGGGGTTTTATATGATTTTTGTTTAAATAAATAAAGGGTTAAAAATTATAGTATAATTAGGGAAATGTGAATA
chr13	20880826	20880946	Hyper	1	-	CTATAAATTCAAAAAAACATAAAAAACTTATTAACAAATCACAAAACAAAAACCTTATAAAAACCTCGTTCAAATAAATAAAAAATTAAAAATTATAACACAATTAAAAAAATATAAACA
chr13	20880826	20880946	Hyper	1	+	TTATAGATTTAAAGAGATATGAGAGGTTTATTAGTAAATTATAGGATAGGGGTTTTATAAGAATTTCGTTTAAATAAATAAAGGGTTAAAAATTATAGTATAATTAGGGAAATGTGAATA
chr13	20880826	20880946	Hyper	1	-	CTATAAATTCAAAAAAACATAAAAAACTTATTAACAAATCACAAAACAAAAACCTTATATAATCCTCGTTCAAATAAATAAAAAATTAAAAATTATAACACAATTAAAAAAATATAAACA
chr13	20880826	20880946	Hyper	1	+	TTATAGATTTAAAGAGATATGAGAGGTTTATTAGTAAATTATAGGATAGGGGTTTTATATGATTTTCGTTTAAATAAATAAAGGGTTAAAAATTATAGTATAATTAGGGAAATGTGAATA
chr6	21618859	21618979	Hypo	1	-	CCCAAAAATAATACTTCCATCATCTCTAAATCTTTCTACTAACTAAAATATATTCCTTAAAAACCAAAAAACTCAAACTTAAAAAAACACTAAAATTAAACTCTCACTCACTACCCCTCA
chr6	21618859	21618979	Hypo	1	+	TTTAGGGGTAATATTTTTGTTATTTTTGGGTTTTTTTGTTGGTTGGGATGTATTTTTTGGGAATTGAGAGATTTAAATTTGGGGAGATATTGGAATTGAGTTTTTATTTATTATTTTTTA
chr6	21618859	21618979	Hypo	1	-	CCCAAAAATAATACTTCCATCATCTCTAAATCTTTCTACTAACTAAAATATATTCCATAAAAACCCAAAAACTCAAACTTAAAAAAACACTAAAATTAAACTCTCACTCACTACCCCTCA
chr6	21618859	21618979	Hypo	1	+	TTTAGGGGTAATATTTTTGTTATTTTTGGGTTTTTTTGTTGGTTGGGATGTATTTTGTGGGAATTTAGAGATTTAAATTTGGGGAGATATTGGAATTGAGTTTTTATTTATTATTTTTTA
chr6	21618859	21618979	Hyper	1	-	CCCAAAAATAATACTTCCGTCATCTCTAAATCTTTCTACTAACTAAAATATATTCCTTAAAAACCGAAAAACTCAAACTTAAAAAAACACTAAAATTAAACTCTCACTCACTACCCCTCA
chr6	21618859	21618979	Hyper	1	+	TTTAGGGGTAATATTTTCGTTATTTTTGGGTTTTTTTGTTGGTTGGGATGTATTTTTTGGGAATCGAGAGATTTAAATTTGGGGAGATATTGGAATTGAGTTTTTATTTATTATTTTTTA
chr6	21618859	21618979	Hyper	1	-	CCCAAAAATAATACTTCCGTCATCTCTAAATCTTTCTACTAACTAAAATATATTCCGTAAAAACCCAAAAACTCAAACTTAAAAAAACACTAAAATTAAACTCTCACTCACTACCCCTCA
chr6	21618859	21618979	Hyper	1	+	TTTAGGGGTAATATTTTCGTTATTTTTGGGTTTTTTTGTTGGTTGGGATGTATTTCGTGGGAATTTAGAGATTTAAATTTGGGGAGATATTGGAATTGAGTTTTTATTTATTATTTTTTA
chr5	8827220	8827340	Hypo	1	-	TCTATACCTTCATTATCTTACCTATCTACCCCTCCAAACAACAAAACTACTAATACATAAAAACTAAATCCTTAATCTCCATCTCCCTAACACCAAACATTAATCCTATAACATAACAAA
chr5	8827220	8827340	Hypo	1	+	TTTGTGTTTTTATTGTTTTGTTTGTTTGTTTTTTTGAGTAGTAAAATTGTTGGTGTATAGGAATTGAGTTTTTAATTTTTGTTTTTTTGGTATTAAGTATTAGTTTTGTGGTATAATAAG
chr5	8827220	8827340	Hypo	1	-	TCTATACCTTCATTATCTTACCTATCTACCCCTCCAAACAACAAAACTACTAATACATACAATCTAAATCCTTAATCTCCATCTCCCTAACACCAAACATTAATCCTATAACATAACAAA
chr5	8827220	8827340	Hypo	1	+	TTTGTGTTTTTATTGTTTTGTTTGTTTGTTTTTTTGAGTAGTAAAATTGTTGGTGTATATGATTTGAGTTTTTAATTTTTGTTTTTTTGGTATTAAGTATTAGTTTTGTGGTATAATAAG
chr5	8827220	8827340	Hyper	1	-	TCTATACCTTCATTATCTTACCTATCTACCCCTCCGAACAACAAAACTACTAATACATAAAAACTAAATCCTTAATCTCCGTCTCCCTAACACCAAACATTAATCCTATAACATAACAAA
chr5	8827220	8827340	Hyper	1	+	TTTGTGTTTTTATTGTTTTGTTTGTTTGTTTTTTCGAGTAGTAAAATTGTTGGTGTATAGGAATTGAGTTTTTAATTTTCGTTTTTTTGGTATTAAGTATTAGTTTTGTGGTATAATAAG
chr5	8827220	8827340	Hyper	1	-	TCTATACCTTCATTATCTTACCTATCTACCCCTCCGAACAACAAAACTACTAATACATACGATCTAAATCCTTAATCTCCGTCTCCCTAACACCAAACATTAATCCTATAACATAACAAA
chr5	8827220	8827340	Hyper	1	+	TTTGTGTTTTTATTGTTTTGTTTGTTTGTTTTTTCGAGTAGTAAAATTGTTGGTGTATACGATTTGAGTTTTTAATTTTCGTTTTTTTGGTATTAAGTATTAGTTTTGTGGTATAATAAG
chr5	103457741	103457861	Hypo	1	-	TTCAAAAACTATAACTTACTTAAACACCAATATAACCAACCATAATAATTCATAACACAATCTAAAATCAATAACTATCTATTAATCAAATCTTCATATATAATTACATAACAATAAATA
chr5	103457741	103457861	Hypo	1	+	TTTAAAAATTATGATTTGTTTAGGTATTAGTATAATTAGTTATAGTAGTTTATAGTATAATTTGGGATTGGTAATTATTTATTAATTAAGTTTTTATATATAGTTATATAATAGTAGATG
chr5	103457741	103457861	Hypo	1	-	TTCAAAAACTATAACTTACTTAAACACCAATATAACCAACCATAATAATTCATAACAAAATCTACAATCAATAACTATCTATTAATCAAATCTTCATATATAATTACATAACAATAAATA
chr5	103457741	103457861	Hypo	1	+	TTTAAAAATTATGATTTGTTTAGGTATTAGTATAATTAGTTATAGTAGTTTATAGTAAAATTTGTGATTGGTAATTATTTATTAATTAAGTTTTTATATATAGTTATATAATAGTAGATG
chr5	103457741	103457861	Hyper	1	-	TTCAAAAACTATAACTTACTTAAACACCAATATAACCAACCATAATAATTCATAACACAATCTAAAATCGATAACTATCTATTAATCAAATCTTCATATATAATTACATAACAATAAATA
chr5	103457741	103457861	Hyper	1	+	TTTAAAAATTATGATTTGTTTAGGTATTAGTATAATTAGTTATAGTAGTTTATAGTATAATTTGGGATCGGTAATTATTTATTAATTAAGTTTTTATATATAGTTATATAATAGTAGATG
chr5	103457741	103457861	Hyper	1	-	TTCAAAAACTATAACTTACTTAAACACCAATATAACCAACCATAATAATTCATAACAAAATCTACGATCGATAACTATCTATTAATCAAATCTTCATATATAATTACATAACAATAAATA
chr5	103457741	103457861	Hyper	1	+	TTTAAAAATTATGATTTGTTTAGGTATTAGTATAATTAGTTATAGTAGTTTATAGTAAAATTTGCGATCGGTAATTATTTATTAATTAAGTTTTTATATATAGTTATATAATAGTAGATG
chr13	91794519	91794639	Hypo	1	-	TCCTTACAACAACAAAAAATTCAAATACTTATATCTTCCTAAAAATAAATACACCTCAAAAATCCAAAAACAATTTATTCAAATATTTCAAAATTTCCTTTACCACTTACTTACCTAATT
chr13	91794519	91794639	Hypo	1	+	TTTTTATAGTAATAAAGAATTTAAATATTTGTATTTTTTTGAGAATAGGTGTATTTTGGAGATTTAAGAGTAATTTGTTTAGATATTTTAAAATTTTTTTTATTATTTGTTTATTTAATT
chr13	91794519	91794639	Hypo	1	-	TCCTTACAACAACAAAAAATTCAAATACTTATATCTTCCTAAAAATAAATACACCTAAAAAATCAAAAAACAATTTATTCAAATATTTCAAAATTTCCTTTACCACTTACTTACCTAATT
chr13	91794519	91794639	Hypo	1	+	TTTTTATAGTAATAAAGAATTTAAATATTTGTATTTTTTTGAGAATAGGTGTATTTGGGAGATTGAAGAGTAATTTGTTTAGATATTTTAAAATTTTTTTTATTATTTGTTTATTTAATT
chr13	91794519	91794639	Hyper	1	-	TCCTTACAACAACAAAAAATTCAAATACTTATATCTTCCTAAAAATAAATACACCTCGAAAATCCAAAAACAATTTATTCAAATATTTCAAAATTTCCTTTACCACTTACTTACCTAATT
chr13	91794519	91794639	Hyper	1	+	TTTTTATAGTAATAAAGAATTTAAATATTTGTATTTTTTTGAGAATAGGTGTATTTCGGAGATTTAAGAGTAATTTGTTTAGATATTTTAAAATTTTTTTTATTATTTGTTTATTTAATT
chr13	91794519	91794639	Hyper	1	-	TCCTTACAACAACAAAAAATTCAAATACTTATATCTTCCTAAAAATAAATACACCTAAAAAATCGAAAAACAATTTATTCAAATATTTCAAAATTTCCTTTACCACTTACTTACCTAATT
chr13	91794519	91794639	Hyper	1	+	TTTTTATAGTAATAAAGAATTTAAATATTTGTATTTTTTTGAGAATAGGTGTATTTGGGAGATCGAAGAGTAATTTGTTTAGATATTTTAAAATTTTTTTTATTATTTGTTTATTTAATT
chr8	20493664	20493784	Hypo	1	-	ATAACTTATTCAAAATAATCACTAATAAAAATAATAACAACATTTACTAAATACTTACAACATCACAAACATCCATCAAAATACATCACAAATATTAAATAACTTAATACATTCAACCCC
chr8	20493664	20493784	Hypo	1	+	GTGATTTGTTTAAGGTAGTTATTAGTGAAAGTAATGGTAATGTTTATTGAGTATTTGTAATATTGTAGATATTTATTAGAGTATATTGTAGGTATTAGGTGGTTTAATGTATTTAGTTTT
chr8	20493664	20493784	Hypo	1	-	ATAACTTATTCAAAATAATCACTAATAAAAATAATAACAACATTTACTAAATACTTAAAACATAACAAACATCCATCAAAATACATCACAAATATTAAATAACTTAATACATTCAACCCC
chr8	20493664	20493784	Hypo	1	+	GTGATTTGTTTAAGGTAGTTATTAGTGAAAGTAATGGTAATGTTTATTGAGTATTTGAAATATAGTAGATATTTATTAGAGTATATTGTAGGTATTAGGTGGTTTAATGTATTTAGTTTT
chr8	20493664	20493784	Hyper	1	-	ATAACTTATTCAAAATAATCACTAATAAAAATAATAACAACGTTTACTAAATACTTACAACATCGCAAACATCCATCAAAATACATCGCAAATATTAAATAACTTAATACATTCAACCCC
chr8	20493664	20493784	Hyper	1	+	GTGATTTGTTTAAGGTAGTTATTAGTGAAAGTAATGGTAACGTTTATTGAGTATTTGTAATATCGTAGATATTTATTAGAGTATATCGTAGGTATTAGGTGGTTTAATGTATTTAGTTTT
chr8	20493664	20493784	Hyper	1	-	ATAACTTATTCAAAATAATCACTAATAAAAATAATAACAACGTTTACTAAATACTTAAAACATAACAAACATCCATCAAAATACATCGCAAATATTAAATAACTTAATACATTCAACCCC
chr8	20493664	20493784	Hyper	1	+	GTGATTTGTTTAAGGTAGTTATTAGTGAAAGTAATGGTAACGTTTATTGAGTATTTGAAATATAGTAGATATTTATTAGAGTATATCGTAGGTATTAGGTGGTTTAATGTATTTAGTTTT
chr5	109750697	109750817	Hypo	1	-	CATATATCATTAAAAATATTTACATACAATATCCCTCCTAATAACTTAACAATTCCTCAATCCTACAAAAACTAATACTACTAACCTATCAAACTCAAACTCCTTATCTATTTACATATT

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chr5	109750697	109750817	Hypo	1 +	TATGTGTTATTGAAAATGTTTGTATATAATATTTTTTTTAGTGATTTAATAGTTTTTTAGTTTTGTAGGAGTTAATGTTATTAATTTGTTAGATTTAGGTTTTTTATTTATTTATATGTT
chr5	109750697	109750817	Hypo	1 -	CATATATCATTAAAAATATTTACATACAATATCCCTCCTAATAACTTAACAATTCCACAATCCTAAAAAAACTAATACTACTAACCTATCAAACTCAAACTCCTTATCTATTTACATATT
chr5	109750697	109750817	Hypo	1 +	TATGTGTTATTGAAAATGTTTGTATATAATATTTTTTTTAGTGATTTAATAGTTTTGTAGTTTTGAAGGAGTTAATGTTATTAATTTGTTAGATTTAGGTTTTTTATTTATTTATATGTT
chr5	109750697	109750817	Hyper	1 -	CATATATCATTAAAAATATTTACATACAATATCCCTCCTAATAACTTAACAATTCCTCAATCCTACAAAAACTAATACTACTAACCTATCAAACTCAAACTCCTTATCTATTTACATATT
chr5	109750697	109750817	Hyper	1 +	TATGTGTTATTGAAAATGTTTGTATATAATATTTTTTTTAGTGATTTAATAGTTTTTTAGTTTTGTAGGAGTTAATGTTATTAATTTGTTAGATTTAGGTTTTTTATTTATTTATATGTT
chr5	109750697	109750817	Hyper	1 -	CATATATCATTAAAAATATTTACATACAATATCCCTCCTAATAACTTAACAATTCCGCAATCCTAAAAAAACTAATACTACTAACCTATCAAACTCAAACTCCTTATCTATTTACATATT
chr5	109750697	109750817	Hyper	1 +	TATGTGTTATTGAAAATGTTTGTATATAATATTTTTTTTAGTGATTTAATAGTTTCGTAGTTTTGAAGGAGTTAATGTTATTAATTTGTTAGATTTAGGTTTTTTATTTATTTATATGTT
chr21	41585460	41585580	Hypo	1 -	TAAACAACACATAATTATAAAAAAATTCTAATTTAAATTATTACATTTTTATTTAAATTCCACACAAAAAACATCTTAAACAACCACTACAAATTATTTCTAAAAACAAAAAAAAAACCTAA
chr21	41585460	41585580	Hypo	1 +	TGAGTAATATATGATTGTAGAAAATTTTAATTTAAATTATTATATTTTTATTTGGGTTTTATGTAGAAAATATTTTAGGTAGTTATTGTAGATTATTTTTAGAAGTGAAGGGAAATTTGG
chr21	41585460	41585580	Hypo	1 -	TAAACAACACATAATTATAAAAAAATTCTAATTTAAATTATTACATTTTTATTTAAATTACACTCAAAAAACATCTTAAACAACCACTACAAATTATTTCTAAAAACAAAAAAAAAACCTAA
chr21	41585460	41585580	Hypo	1 +	TGAGTAATATATGATTGTAGAAAATTTTAATTTAAATTATTATATTTTTATTTGGGTTGTATTTAGAAAATATTTTAGGTAGTTATTGTAGATTATTTTTAGAAGTGAAGGGAAATTTGG
chr21	41585460	41585580	Hyper	1 -	TAAACAACACATAATTATAAAAAAATTCTAATTTAAATTATTACATTTTTATTTAAATTCCACGCAAAAAACATCTTAAACAACCACTACAAATTATTTCTAAAAACGAAAAAAAAACCTAA
chr21	41585460	41585580	Hyper	1 +	TGAGTAATATATGATTGTAGAAAATTTTAATTTAAATTATTATATTTTTATTTGGGTTTTACGTAGAAAATATTTTAGGTAGTTATTGTAGATTATTTTTAGAAGCGAAGGGAAATTTGG
chr21	41585460	41585580	Hyper	1 -	TAAACAACACATAATTATAAAAAAATTCTAATTTAAATTATTACATTTTTATTTAAATTACACTCAAAAAACATCTTAAACAACCACTACAAATTATTTCTAAAAACGAAAAAAAAACCTAA
chr21	41585460	41585580	Hyper	1 +	TGAGTAATATATGATTGTAGAAAATTTTAATTTAAATTATTATATTTTTATTTGGGTTGTATTTAGAAAATATTTTAGGTAGTTATTGTAGATTATTTTTAGAAGCGAAGGGAAATTTGG
chr22	27741389	27741509	Hypo	1 -	TAAATAAATAAAATAATAAAAAAAAATAAATAAACACATACATCAATATTTAACATAACTACAATTCCTCTCATTTCTCACAAATAATAAAAATATCAACACTAAAAAAAAACATCTATA
chr22	27741389	27741509	Hypo	1 +	TGAATGAATGGAGTGGTAGGAAGAAGTGAGTAAATATATGTATTAATGTTTAATATAGTTGTGGTTTTTTTTATTTTTTATAAATAATAAAAATGTTAGTATTGGAAGGGAATATTTGTA
chr22	27741389	27741509	Hypo	1 -	TAAATAAATAAAATAATAAAAAAAAATAAATAAACACATACATCAATATTTAACATATCTACAAATCCTCTCATTTCTCACAAATAATAAAAATATCAACACTAAAAAAAAACATCTATA
chr22	27741389	27741509	Hypo	1 +	TGAATGAATGGAGTGGTAGGAAGAAGTGAGTAAATATATGTATTAATGTTTAATATATTTGTGGGTTTTTTTATTTTTTATAAATAATAAAAATGTTAGTATTGGAAGGGAATATTTGTA
chr22	27741389	27741509	Hyper	1 -	TAAATAAATAAAATAATAAAAAAAAATAAATAAACACATACATCAATATTTAACATAACTACGATTCCTCTCATTTCTCACAAATAATAAAAATATCAACACTAAAAAAAAACATCTATA
chr22	27741389	27741509	Hyper	1 +	TGAATGAATGGAGTGGTAGGAAGAAGTGAGTAAATATATGTATTAATGTTTAATATAGTTGCGGTTTTTTTTATTTTTTATAAATAATAAAAATGTTAGTATTGGAAGGGAATATTTGTA
chr22	27741389	27741509	Hyper	1 -	TAAATAAATAAAATAATAAAAAAAAATAAATAAACACATACATCAATATTTAACATATCTACGAATCCTCTCATTTCTCACAAATAATAAAAATATCAACACTAAAAAAAAACATCTATA
chr22	27741389	27741509	Hyper	1 +	TGAATGAATGGAGTGGTAGGAAGAAGTGAGTAAATATATGTATTAATGTTTAATATATTTGCGGGTTTTTTTATTTTTTATAAATAATAAAAATGTTAGTATTGGAAGGGAATATTTGTA
chr1	242404391	242404511	Hypo	1 -	AACCAAAAATCAAAAAAAAAACTCACAAAATATAAAATTATACTAAACCATTCTACAAAAAAATATAAATTTTCTTCTAAAATTATTAATCAAACCCACAAACACTACCTATAATACTAA
chr1	242404391	242404511	Hypo	1 +	AGTTAAGAATTAGAGAGGAGATTTATAAAATGTAAAATTGTATTAAATTGTTTTATAGAAAGGTATGGGTTTTTTTTTGAAGTTGTTGGTTAGATTTATAAGTATTGTTTGTAGTATTGA
chr1	242404391	242404511	Hypo	1 -	AACCAAAAATCAAAAAAAAAACTCACAAAATATAAAATTATACTAAACCATTCTACACAAAAATCTAAATTTTCTTCTAAAATTATTAATCAAACCCACAAACACTACCTATAATACTAA
chr1	242404391	242404511	Hypo	1 +	AGTTAAGAATTAGAGAGGAGATTTATAAAATGTAAAATTGTATTAAATTGTTTTATATAAAGGTTTGGGTTTTTTTTTGAAGTTGTTGGTTAGATTTATAAGTATTGTTTGTAGTATTGA
chr1	242404391	242404511	Hyper	1 -	AACCAAAAATCAAAAAAAAAACTCACAAAATATAAAATTATACTAAACCGTTCTACAAAAAAATATAAATTTTCTTCTAAAATTATTAATCAAACCCACAAACACTACCTATAATACTAA
chr1	242404391	242404511	Hyper	1 +	AGTTAAGAATTAGAGAGGAGATTTATAAAATGTAAAATTGTATTAAATCGTTTTATAGAAAGGTATGGGTTTTTTTTTGAAGTTGTTGGTTAGATTTATAAGTATTGTTTGTAGTATTGA
chr1	242404391	242404511	Hyper	1 -	AACCAAAAATCAAAAAAAAAACTCACAAAATATAAAATTATACTAAACCGTTCTACACAAAAATCTAAATTTTCTTCTAAAATTATTAATCAAACCCACAAACACTACCTATAATACTAA
chr1	242404391	242404511	Hyper	1 +	AGTTAAGAATTAGAGAGGAGATTTATAAAATGTAAAATTGTATTAAATCGTTTTATATAAAGGTTTGGGTTTTTTTTTGAAGTTGTTGGTTAGATTTATAAGTATTGTTTGTAGTATTGA
chr17	61565071	61565191	Hypo	1 -	TACCTCCCAACTCCCTCTCAACCCACCCTTTCCAAAATTAAAAAACTTAAAACATAAACTTACTTCCATAAAAAATCTCCACCCAAAAATAAATCTTTCTAACCCCCAACCCAACTCCCA
chr17	61565071	61565191	Hypo	1 +	TATTTTTTAGTTTTTTTTTAATTTATTTTTTTTAGGGTTGGAGAATTTGAGGTATAAATTTGTTTTTATGAGGAATTTTTATTTAGAAATGGGTTTTTTTGGTTTTTAGTTTAGTTTTTA
chr17	61565071	61565191	Hypo	1 -	TACCTCCCAACTCCCTCTCAACCCACCCTTTCCAAAATTAAAAAACTTAAAACATAAACATTCTTCCATAAAAAATCTCCACCCAAAAATAAATCTTTCTAACCCCCAACCCAACTCCCA
chr17	61565071	61565191	Hypo	1 +	TATTTTTTAGTTTTTTTTTAATTTATTTTTTTTAGGGTTGGAGAATTTGAGGTATAAATATTTTTTTATGAGGAATTTTTATTTAGAAATGGGTTTTTTTGGTTTTTAGTTTAGTTTTTA
chr17	61565071	61565191	Hyper	1 -	TACCTCCCAACTCCCTCTCAACCCACCCTTTCCAAAATTAAAAAACTTAAAACATAAACTTACTTCCATAAAAAATCTCCACCCAAAAATAAATCTTTCTAACCCCCAACCCAACTCCCA
chr17	61565071	61565191	Hyper	1 +	TATTTTTTAGTTTTTTTTTAATTTATTTTTTTTAGGGTTGGAGAATTTGAGGTATAAATTTGTTTTTATGAGGAATTTTTATTTAGAAATGGGTTTTTTTGGTTTTTAGTTTAGTTTTTA
chr17	61565071	61565191	Hyper	1 -	TACCTCCCAACTCCCTCTCAACCCACCCTTTCCAAAATTAAAAAACTTAAAACATAAACATTCTTCCATAAAAAATCTCCACCCAAAAATAAATCTTTCTAACCCCCAACCCAACTCCCA
chr17	61565071	61565191	Hyper	1 +	TATTTTTTAGTTTTTTTTTAATTTATTTTTTTTAGGGTTGGAGAATTTGAGGTATAAATATTTTTTTATGAGGAATTTTTATTTAGAAATGGGTTTTTTTGGTTTTTAGTTTAGTTTTTA
chr14	75482766	75482886	Hypo	1 -	AATCATATAAAAAAATACAAAAAAAAATAAATTAAAAATAACATAACAAACATTTACAAAACAATCAATCCTAATCCCAAATAATATTATAAAAACAATAAATAAACATAATATATAATAACA
chr14	75482766	75482886	Hypo	1 +	AATTATGTGAAAAGGTGTGGGAAAAATAGATTGAGAATGGTATAATAAGTATTTGTAGAATGATTAGTTTTGGTTTTAAGTGATATTATAAGGGTAATAGATAGGTATAATGTAATAATA
chr14	75482766	75482886	Hypo	1 -	AATCATATAAAAAAATACAAAAAAAAATAAATTAAAAATAACATAACAAACATTTACAAAAAATATCAATCCTAATCCCAAATAATATTATAAAAACAATAAATAAACATAATATATAATAACA
chr14	75482766	75482886	Hypo	1 +	AATTATGTGAAAAGGTGTGGGAAAAATAGATTGAGAATGGTATAATAAGTATTTGTAGAAATATTAGTTTTGGTTTTAAGTGATATTATAAGGGTAATAGATAGGTATAATGTAATAATA
chr14	75482766	75482886	Hyper	1 -	AATCATATAAAAAAATACGAAAAAAAATAAATTAAAAATAACATAACAAACATTTACAAAACGATCAATCCTAATCCCAAATAATATTATAAAAACAATAAATAAACATAATATATAATAACA
chr14	75482766	75482886	Hyper	1 +	AATTATGTGAAAAGGTGCGGGAAAAATAGATTGAGAATGGTATAATAAGTATTTGTAGAACGATTAGTTTTGGTTTTAAGTGATATTATAAGGGTAATAGATAGGTATAATGTAATAATA
chr14	75482766	75482886	Hyper	1 -	AATCATATAAAAAAATACGAAAAAAAATAAATTAAAAATAACATAACAAACATTTACAAAAAATATCAATCCTAATCCCAAATAATATTATAAAAACAATAAATAAACATAATATATAATAACA
chr14	75482766	75482886	Hyper	1 +	AATTATGTGAAAAGGTGCGGGAAAAATAGATTGAGAATGGTATAATAAGTATTTGTAGAAATATTAGTTTTGGTTTTAAGTGATATTATAAGGGTAATAGATAGGTATAATGTAATAATA
chr10	36939245	36939365	Hypo	1 -	TTAACTTCTCCTTCACAAACAAAATAAAATCAAAAAATAACCTTTAAATACTTTCTAAACAACCCAAAAATAAAAAAACACTCTAAACCTAAACTCTTTAAACTACCCAAAAATAAAAAT
chr10	36939245	36939365	Hypo	1 +	TTAATTTTTTTTTTGTAGATAAGATGAAGTTAAAAAGTGGTTTTTGAGTATTTTTTAAGTAATTTGGGAGTAGAAGAATGTTTTAAATTTGGATTTTTTGAGTTGTTTAAAAGTAAAGGT
chr10	36939245	36939365	Hypo	1 -	TTAACTTCTCCTTCACAAACAAAATAAAATCAAAAAATAACCTTTAAATACTTTCTAAACTCCCCAAAAATAAAAAAACACTCTAAACCTAAACTCTTTAAACTACCCAAAAATAAAAAT
chr10	36939245	36939365	Hypo	1 +	TTAATTTTTTTTTTGTAGATAAGATGAAGTTAAAAAGTGGTTTTTGAGTATTTTTTAAGTTTTTTGGGAGTAGAAGAATGTTTTAAATTTGGATTTTTTGAGTTGTTTAAAAGTAAAGGT
chr10	36939245	36939365	Hyper	1 -	TTAACTTCTCCTTCGCAAACAAAATAAAATCAAAAAATAACCTTTAAATACTTTCTAAACAACCCGAAAATAAAAAAACGCTCTAAACCTAAACTCTTTAAACTACCCAAAAATAAAAAT
chr10	36939245	36939365	Hyper	1 +	TTAATTTTTTTTTCGTAGATAAGATGAAGTTAAAAAGTGGTTTTTGAGTATTTTTTAAGTAATTCGGGAGTAGAAGAACGTTTTAAATTTGGATTTTTTGAGTTGTTTAAAAGTAAAGGT

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chr10	36939245	36939365	Hyper	1 -	TTAACTTCTCCTTCGCAAACAAAATAAAATCAAAAAATAACCTTTAAATACTTTCTAAACTCCCCGAAAATAAAAAAACGCTCTAAACCTAAACTCTTTAAACTACCCAAAAATAAAAAT
chr10	36939245	36939365	Hyper	1 +	TTAATTTTTTTTTCGTAGATAAGATGAAGTTAAAAAGTGGTTTTTGAGTATTTTTTAAGTTTTTCGGGAGTAGAAGAACGTTTTAAATTTGGATTTTTTGAGTTGTTTAAAAGTAAAGGT
chr13	88734689	88734809	Hypo	1 -	AAATCTCTTCTAAAAATATATCTCCTTTACCAATTTACCTTCCAAAAACATAACATCCTTTAAACACTTTATATAAAACAATCATCAACTTTAAAAAAAATTTACACTAAATCATATCAA
chr13	88734689	88734809	Hypo	1 +	GAATTTTTTTTGGAAGTATATTTTTTTTATTAGTTTGTTTTTTAAGGATGTGGTATTTTTTGGATGTTTTGTGTAGAATAATTATTAATTTTAGAAAAAATTTGTATTAGGTTATGTTAA
chr13	88734689	88734809	Hypo	1 -	AAATCTCTTCTAAAAATATATCTCCTTTACCAATTTACCTTCCAAAAACATAACAACCTTTAAACCCTTTATATAAAACAATCATCAACTTTAAAAAAAATTTACACTAAATCATATCAA
chr13	88734689	88734809	Hypo	1 +	GAATTTTTTTTGGAAGTATATTTTTTTTATTAGTTTGTTTTTTAAGGATGTGGTAATTTTTGGATTTTTTGTGTAGAATAATTATTAATTTTAGAAAAAATTTGTATTAGGTTATGTTAA
chr13	88734689	88734809	Hyper	1 -	AAATCTCTTCTAAAAATATATCTCCTTTACCAATTTACCTTCCAAAAACGTAACATCCTTTAAACGCTTTATATAAAACAATCATCAACTTTAAAAAAAATTTACACTAAATCATATCAA
chr13	88734689	88734809	Hyper	1 +	GAATTTTTTTTGGAAGTATATTTTTTTTATTAGTTTGTTTTTTAAGGACGTGGTATTTTTTGGACGTTTTGTGTAGAATAATTATTAATTTTAGAAAAAATTTGTATTAGGTTATGTTAA
chr13	88734689	88734809	Hyper	1 -	AAATCTCTTCTAAAAATATATCTCCTTTACCAATTTACCTTCCAAAAACGTAACAACCTTTAAACCCTTTATATAAAACAATCATCAACTTTAAAAAAAATTTACACTAAATCATATCAA
chr13	88734689	88734809	Hyper	1 +	GAATTTTTTTTGGAAGTATATTTTTTTTATTAGTTTGTTTTTTAAGGACGTGGTAATTTTTGGATTTTTTGTGTAGAATAATTATTAATTTTAGAAAAAATTTGTATTAGGTTATGTTAA
chr2	239488736	239488856	Hypo	1 -	ATTCACACAATAAACAACAATTTTAAAAAAATACAAAATAAATATAAAACAATTTCTCCACCTTACAACTTAATACACACTCCACAAACTAAAAAAAAAAAAAAAAATTCAAAACAAAAAC
chr2	239488736	239488856	Hypo	1 +	ATTTATATAATAAATAATAGTTTTGGAAGAATGTAGGATGAATGTGAGGTAGTTTTTTTATTTTATAATTTGATATATATTTTATAGGTTGGGGAGAGAGAGAAGATTTAGAGTAAAAGT
chr2	239488736	239488856	Hypo	1 -	ATTCACACAATAAACAACAATTTTAAAAAAATACAAAATAAATATAAAACAATTTATCCACCTTAAAACTTAATACACACTCCACAAACTAAAAAAAAAAAAAAAAATTCAAAACAAAAAC
chr2	239488736	239488856	Hypo	1 +	ATTTATATAATAAATAATAGTTTTGGAAGAATGTAGGATGAATGTGAGGTAGTTTGTTTATTTTAAAATTTGATATATATTTTATAGGTTGGGGAGAGAGAGAAGATTTAGAGTAAAAGT
chr2	239488736	239488856	Hyper	1 -	ATTCACACAATAAACAACAATTTTAAAAAAATACAAAATAAATATAAAACAATTTCTCCACCTTACAACTTAATACACACTCCACAAACTAAAAAAAAAAAAAAAAATTCAAAACAAAAAC
chr2	239488736	239488856	Hyper	1 +	ATTTATATAATAAATAATAGTTTTGGAAGAATGTAGGATGAATGTGAGGTAGTTTTTTTATTTTATAATTTGATATATATTTTATAGGTTGGGGAGAGAGAGAAGATTTAGAGTAAAAGT
chr2	239488736	239488856	Hyper	1 -	ATTCACACAATAAACAACAATTTTAAAAAAATACAAAATAAATATAAAACAATTTATCCACCTTAAAACTTAATACACACTCCACAAACTAAAAAAAAAAAAAAAAATTCAAAACAAAAAC
chr2	239488736	239488856	Hyper	1 +	ATTTATATAATAAATAATAGTTTTGGAAGAATGTAGGATGAATGTGAGGTAGTTTGTTTATTTTAAAATTTGATATATATTTTATAGGTTGGGGAGAGAGAGAAGATTTAGAGTAAAAGT
chr14	100279426	100279546	Hypo	1 -	TTTCTTAAAAAAAAACTAATTAATCTTATTTTACCAAACAAAAAAATTATAAATATAACTAAACCAATTTTATACACTTTAAAATATCAACCCTATCAATTTTATATTTCTCAATAAAAAA
chr14	100279426	100279546	Hypo	1 +	TTTTTTGAGGAAAGTTGATTAATTTTGTTTTGTTAAGTAGAAGGATTATGGGTATGGTTGAATTAGTTTTGTATGTTTTGAAATATTAGTTTTGTTAATTTTGTGTTTTTTAGTGAGGGA
chr14	100279426	100279546	Hypo	1 -	TTTCTTAAAAAAAAACTAATTAATCTTATTTTACCAAACAAAAAAATTATAAATATACCTAAACCACTTTTATACACTTTAAAATATCAACCCTATCAATTTTATATTTCTCAATAAAAAA
chr14	100279426	100279546	Hypo	1 +	TTTTTTGAGGAAAGTTGATTAATTTTGTTTTGTTAAGTAGAAGGATTATGGGTATGTTTGAATTATTTTTGTATGTTTTGAAATATTAGTTTTGTTAATTTTGTGTTTTTTAGTGAGGGA
chr14	100279426	100279546	Hyper	1 -	TTTCTTAAAAAAAAACTAATTAATCTTATTTTACCAAACAAAAAAATTATAAATATAACTAAACCAATTTTATACGCTTTAAAATATCAACCCTATCAATTTTATATTTCTCAATAAAAAA
chr14	100279426	100279546	Hyper	1 +	TTTTTTGAGGAAAGTTGATTAATTTTGTTTTGTTAAGTAGAAGGATTATGGGTATGGTTGAATTAGTTTTGTACGTTTTGAAATATTAGTTTTGTTAATTTTGTGTTTTTTAGTGAGGGA
chr14	100279426	100279546	Hyper	1 -	TTTCTTAAAAAAAAACTAATTAATCTTATTTTACCAAACAAAAAAATTATAAATATACCTAAACCACTTTTATACGCTTTAAAATATCAACCCTATCAATTTTATATTTCTCAATAAAAAA
chr14	100279426	100279546	Hyper	1 +	TTTTTTGAGGAAAGTTGATTAATTTTGTTTTGTTAAGTAGAAGGATTATGGGTATGTTTGAATTATTTTTGTACGTTTTGAAATATTAGTTTTGTTAATTTTGTGTTTTTTAGTGAGGGA
chr14	99262680	99262800	Hypo	1 -	TAATACCTAATTACCTATTCCATCCCACCCTTAAAAATTTTAAATCCTTCTTAACACACATTAATACCTAAAATCATCTCATTCATTAATCCCTTTACTTATTTATTATATCTTCCCTCC
chr14	99262680	99262800	Hypo	1 +	TAATGTTTGATTATTTATTTTATTTTATTTTTGAAAGTTTTAGGTTTTTTTTAGTATATATTAGTGTTTGAAATTATTTTATTTATTGATTTTTTTATTTGTTTATTGTATTTTTTTTTT
chr14	99262680	99262800	Hypo	1 -	TAATACCTAATTACCTATTCCATCCCACCCTTAAAAATTTTAAATCCTTCTTAACACTCATTATTACCTAAAATCATCTCATTCATTAATCCCTTTACTTATTTATTATATCTTCCCTCC
chr14	99262680	99262800	Hypo	1 +	TAATGTTTGATTATTTATTTTATTTTATTTTTGAAAGTTTTAGGTTTTTTTTAGTATTTATTATTGTTTGAAATTATTTTATTTATTGATTTTTTTATTTGTTTATTGTATTTTTTTTTT
chr14	99262680	99262800	Hyper	1 -	TAATACCTAATTACCTATTCCATCCCACCCTTAAAAATTTTAAATCCTTCTTAACACACATTAATACCTAAAATCATCTCATTCATTAATCCCTTTACTTATTTATTATATCTTCCCTCC
chr14	99262680	99262800	Hyper	1 +	TAATGTTTGATTATTTATTTTATTTTATTTTTGAAAGTTTTAGGTTTTTTTTAGTATATATTAGTGTTTGAAATTATTTTATTTATTGATTTTTTTATTTGTTTATTGTATTTTTTTTTT
chr14	99262680	99262800	Hyper	1 -	TAATACCTAATTACCTATTCCATCCCACCCTTAAAAATTTTAAATCCTTCTTAACACTCATTATTACCTAAAATCATCTCATTCATTAATCCCTTTACTTATTTATTATATCTTCCCTCC
chr14	99262680	99262800	Hyper	1 +	TAATGTTTGATTATTTATTTTATTTTATTTTTGAAAGTTTTAGGTTTTTTTTAGTATTTATTATTGTTTGAAATTATTTTATTTATTGATTTTTTTATTTGTTTATTGTATTTTTTTTTT
chr20	37923901	37924021	Hypo	1 -	ATAATTAAACTAAAAAAAAATTACTAACACCTCCCAAATTAACCTAATAATAAAAACAAAAACACAACAATACTTAAAAATACAACCCTAAAAAATTAATACCACACTCTAACATATAAAT
chr20	37923901	37924021	Hypo	1 +	GTAATTAGGTTGAAAAAAAATTGTTGGTATTTTTTTAAATTGATTTGGTGATAAGGATGAAAGTATGGTAGTATTTGGGAGTATAGTTTTGAAAGGTTAATGTTATATTTTGATATGTGGAT
chr20	37923901	37924021	Hypo	1 -	ATAATTAAACTAAAAAAAAATTACTAACACCTCCCAAATTAACCTAATAATAAAAAAAAAAAAACACATCAATACTTAAAAATACAACCCTAAAAAATTAATACCACACTCTAACATATAAAT
chr20	37923901	37924021	Hypo	1 +	GTAATTAGGTTGAAAAAAAATTGTTGGTATTTTTTTAAATTGATTTGGTGATAAGGAAGAAAGTATGTTAGTATTTGGGAGTATAGTTTTGAAAGGTTAATGTTATATTTTGATATGTGGAT
chr20	37923901	37924021	Hyper	1 -	ATAATTAAACTAAAAAAAAATTACTAACACCTCCCAAATTAACCTAATAATAAAAACGAAAACACGACAATACTTAAAAATACAACCCTAAAAAATTAATACCACACTCTAACATATAAAT
chr20	37923901	37924021	Hyper	1 +	GTAATTAGGTTGAAAAAAAATTGTTGGTATTTTTTTAAATTGATTTGGTGATAAGGACGAAAGTACGGTAGTATTTGGGAGTATAGTTTTGAAAGGTTAATGTTATATTTTGATATGTGGAT
chr20	37923901	37924021	Hyper	1 -	ATAATTAAACTAAAAAAAAATTACTAACACCTCCCAAATTAACCTAATAATAAAAAAAAAAAAACACGTCAATACTTAAAAATACAACCCTAAAAAATTAATACCACACTCTAACATATAAAT
chr20	37923901	37924021	Hyper	1 +	GTAATTAGGTTGAAAAAAAATTGTTGGTATTTTTTTAAATTGATTTGGTGATAAGGAAGAAAGTACGTTAGTATTTGGGAGTATAGTTTTGAAAGGTTAATGTTATATTTTGATATGTGGAT
chr2	45464023	45464143	Hypo	1 -	TTAAAACTAACTACAACAAAAAAAAAACCACTTATATAAATAACAAAACCATCATAAAAAAAAACAACATCTTAAAAAAAAAACAATCCATAAAAAACACCTAAAAAAAAAAAAAATATTTAAA
chr2	45464023	45464143	Hypo	1 +	TTAGGATTAGTTGTAATAGAAGAGAATTATTTATATAAATAGTAAGGTTATTATAAAGAAAGTAATGTTTTAGGGAAGAGTAATTTATGAAGGATGTTTGGAGGAAAAGAGATATTTAAA
chr2	45464023	45464143	Hypo	1 -	TTAAAACTAACTACAACAAAAAAAAAACCACTTATATAAATAACAAAACCATCATACAAAAAACAAAATCTTAAAAAAAAAACAATCCATAAAAAACACCTAAAAAAAAAAAAAATATTTAAA
chr2	45464023	45464143	Hypo	1 +	TTAGGATTAGTTGTAATAGAAGAGAATTATTTATATAAATAGTAAGGTTATTATATAGAAAGTAAAGTTTTAGGGAAGAGTAATTTATGAAGGATGTTTGGAGGAAAAGAGATATTTAAA
chr2	45464023	45464143	Hyper	1 -	TTAAAACTAACTACAACAAAAAAAAAACCACTTATATAAATAACAAAACCATCATAAAAAAAAACAACGTCTTAAAAAAAAAACAATCCATAAAAAACGCCTAAAAAAAAAAAAAATATTTAAA
chr2	45464023	45464143	Hyper	1 +	TTAGGATTAGTTGTAATAGAAGAGAATTATTTATATAAATAGTAAGGTTATTATAAAGAAAGTAACGTTTTAGGGAAGAGTAATTTATGAAGGACGTTTGGAGGAAAAGAGATATTTAAA
chr2	45464023	45464143	Hyper	1 -	TTAAAACTAACTACAACAAAAAAAAAACCACTTATATAAATAACAAAACCATCATACAAAAAACAAAATCTTAAAAAAAAAACAATCCATAAAAAACGCCTAAAAAAAAAAAAAATATTTAAA
chr2	45464023	45464143	Hyper	1 +	TTAGGATTAGTTGTAATAGAAGAGAATTATTTATATAAATAGTAAGGTTATTATATAGAAAGTAAAGTTTTAGGGAAGAGTAATTTATGAAGGACGTTTGGAGGAAAAGAGATATTTAAA
chr4	117904838	117904958	Hypo	1 -	AACACTCCTAAACTAATCCTTAAACAAATAAAACCTTTTTTTTCTAAACTCACACCCAAAAAACAAACTTAATACTAATAATTAATCAATACATAAATACAAAAACCTAACCTCTCTCTC
chr4	117904838	117904958	Hypo	1 +	AATATTTTTGGATTGGTTTTTGGATAAATAGAATTTTTTTTTTTTAAATTTATATTTGGAGAGTAAGTTTGATATTAATGATTGATTAATGTATGAGTATAAAAAATTTGGTTTTTTTTTT
chr4	117904838	117904958	Hypo	1 -	AACACTCCTAAACTAATCCTTAAACAAATAAAACCTTTTTTTTCTAAACTCACACCCCAAAAACCAACTTAATACTAATAATTAATCAATACATAAATACAAAAACCTAACCTCTCTCTC

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chr4	117904838	117904958	Hypo	1	+
chr4	117904838	117904958	Hyper	1	-
chr4	117904838	117904958	Hyper	1	+
chr4	117904838	117904958	Hyper	1	-
chr4	117904838	117904958	Hyper	1	+
chr20	126865	126985	Hypo	1	-
chr20	126865	126985	Hypo	1	+
chr20	126865	126985	Hypo	1	-
chr20	126865	126985	Hypo	1	+
chr20	126865	126985	Hyper	1	-
chr20	126865	126985	Hyper	1	+
chr20	126865	126985	Hyper	1	-
chr20	126865	126985	Hyper	1	+
chr17	72487688	72487808	Hypo	1	-
chr17	72487688	72487808	Hypo	1	+
chr17	72487688	72487808	Hypo	1	-
chr17	72487688	72487808	Hypo	1	+
chr17	72487688	72487808	Hyper	1	-
chr17	72487688	72487808	Hyper	1	+
chr17	72487688	72487808	Hyper	1	-
chr17	72487688	72487808	Hyper	1	+
chr6	11499827	11499947	Hypo	1	-
chr6	11499827	11499947	Hypo	1	+
chr6	11499827	11499947	Hypo	1	-
chr6	11499827	11499947	Hypo	1	+
chr6	11499827	11499947	Hyper	1	-
chr6	11499827	11499947	Hyper	1	+
chr6	11499827	11499947	Hyper	1	-
chr6	11499827	11499947	Hyper	1	+
chr3	12599131	12599251	Hypo	1	-
chr3	12599131	12599251	Hypo	1	+
chr3	12599131	12599251	Hyper	1	-
chr3	12599131	12599251	Hyper	1	+
chr6	7018429	7018549	Hypo	1	-
chr6	7018429	7018549	Hypo	1	+
chr6	7018429	7018549	Hyper	1	-
chr6	7018429	7018549	Hyper	1	+
chr2	165174385	165174505	Hypo	1	-
chr2	165174385	165174505	Hypo	1	+
chr2	165174385	165174505	Hyper	1	-
chr2	165174385	165174505	Hyper	1	+
chr2	165174385	165174505	Hyper	1	-
chr2	165174385	165174505	Hyper	1	+

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chr5	14982866	14982986	Hypo	1	-
chr5	14982866	14982986	Hypo	1	+
chr5	14982866	14982986	Hyper	1	-
chr5	14982866	14982986	Hyper	1	+
chr5	14982866	14982986	Hyper	1	-
chr5	14982866	14982986	Hyper	1	+
chr5	14982866	14982986	Hyper	1	-
chr5	14982866	14982986	Hyper	1	+
chr21	26693198	26693318	Hypo	1	-
chr21	26693198	26693318	Hypo	1	+
chr21	26693198	26693318	Hyper	1	-
chr21	26693198	26693318	Hyper	1	+
chr21	26693198	26693318	Hyper	1	-
chr21	26693198	26693318	Hyper	1	+
chr21	26693198	26693318	Hyper	1	-
chr21	26693198	26693318	Hyper	1	+
chr20	5897716	5897836	Hypo	1	-
chr20	5897716	5897836	Hypo	1	+
chr20	5897716	5897836	Hyper	1	-
chr20	5897716	5897836	Hyper	1	+
chr20	5897716	5897836	Hyper	1	-
chr20	5897716	5897836	Hyper	1	+
chr20	5897716	5897836	Hyper	1	-
chr20	5897716	5897836	Hyper	1	+
chr7	22310788	22310908	Hypo	1	-
chr7	22310788	22310908	Hypo	1	+
chr7	22310788	22310908	Hyper	1	-
chr7	22310788	22310908	Hyper	1	+
chr7	22310788	22310908	Hyper	1	-
chr7	22310788	22310908	Hyper	1	+
chr7	22310788	22310908	Hyper	1	-
chr7	22310788	22310908	Hyper	1	+
chr14	59907031	59907151	Hypo	1	-
chr14	59907031	59907151	Hypo	1	+
chr14	59907031	59907151	Hyper	1	-
chr14	59907031	59907151	Hyper	1	+
chr14	59907031	59907151	Hyper	1	-
chr14	59907031	59907151	Hyper	1	+
chr14	59907031	59907151	Hyper	1	-
chr14	59907031	59907151	Hyper	1	+
chr2	31210024	31210144	Hypo	1	-
chr2	31210024	31210144	Hypo	1	+
chr2	31210024	31210144	Hyper	1	-
chr2	31210024	31210144	Hyper	1	+
chr2	31210024	31210144	Hyper	1	-
chr2	31210024	31210144	Hyper	1	+
chr2	31210024	31210144	Hyper	1	-
chr2	31210024	31210144	Hyper	1	+
chr18	19489030	19489150	Hypo	1	-
chr18	19489030	19489150	Hypo	1	+
chr18	19489030	19489150	Hyper	1	-
chr18	19489030	19489150	Hyper	1	+
chr18	19489030	19489150	Hyper	1	-

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chr18	19489030	19489150	Hyper	1 +	GGAAGTTATATATTTTGTATTTTAAGATAAAAATTTTTTTTTTTTGGATGAATGTGCGTTTTTAGTAATATATTTAGGTTATAGAGGACGTGTGAATTATATATAAAAATAAAATTAATT
chr18	19489030	19489150	Hyper	1 -	AAAAACCATACATTTTATACTTTAAAATAAAAATCTCCCCTTTTTTAAATAAAATATACTCTTACAATAATACATCCAAACTACAAAAAACGTATAAACTACACATAAAATAAAACCAATT
chr18	19489030	19489150	Hyper	1 +	GGAAGTTATATATTTTGTATTTTAAGATAAAAATTTTTTTTTTTTGGATGAATGTGTTTTTGTAGTAATATATTTAGGTTATAGAGGACGTGTGAATTATATATAAAAATAAAATTAATT
chr1	193429790	193429910	Hypo	1 -	ACAAACCTAAATACTAAAACTACATATAACTCTAAAATAAAAATATCTAAAATACCACATAATTCTTACTAAAACAAATACTTAACAATATATTCCTAAAAACTAACATTAAAAAAATAC
chr1	193429790	193429910	Hypo	1 +	ATAAATTTAGATATTAAAATTGTATGTGATTTTAAAGTGAAAATATTTGAGATGTTATATGGTTTTTATTGAGATAAATATTTGATAGTATATTTTTGGGGATTAATGTTAAAGAGATGT
chr1	193429790	193429910	Hypo	1 -	ACAAACCTAAATACTAAAACTACATATAACTCTAAAATAAAAATATCTAAAATACCACATAATTCTTACTAAAACAAATACTTAACAATATATTCCTAAAAACTAACATTAAAAAAATAC
chr1	193429790	193429910	Hypo	1 +	ATAAATTTAGATATTAAAATTGTATGTGATTTTAAAGTGAAAATATTTGAGATGTTATATGGTTTTTATTGAGATAAATATTTGATAGTATATTTTTGGGGATTAATGTTAAAGAGATGT
chr1	193429790	193429910	Hypo	1 -	ACAAACCTAAATACTAAAACTACATATAACTCTAAAATAAAAATATCTAAAATACCACATAATTCTTACTAAAACAAATACTTAACAATATATTCCTAAAAACTAACGTTAAAAAAATAC
chr1	193429790	193429910	Hypo	1 +	ATAAATTTAGATATTAAAATTGTATGTGATTTTAAAGTGAAAATATTTGAGATGTTATATGGTTTTTATTGAGATAAATATTTGATAGTATATTTTTGGGGATTAATGTTAAAGAGATGT
chr1	193429790	193429910	Hypo	1 -	ACAAACCTAAATACTAAAACTACATATAACTCTAAAATAAAAATATCTAAAATACCACATAATTCTTACTAAAACAAATACTTAACAATATATTCCTAAAAACTAACGTTAAAAAAATAC
chr1	193429790	193429910	Hypo	1 +	ATAAATTTAGATATTAAAATTGTATGTGATTTTAAAGTGAAAATATTTGAGATGTTATATGGTTTTTATTGAGATAAATATTTGATAGTATATTTTTGGGGATTAATGTTAAAGAGATGT
chr1	193429790	193429910	Hypo	1 -	ACAAACCTAAATACTAAAACTACATATAACTCTAAAATAAAAATATCTAAAATACCACATAATTCTTACTAAAACAAATACTTAACAATATATTCCTAAAAACTAACGTTAAAAAAATAC
chr1	193429790	193429910	Hypo	1 +	ATAAATTTAGATATTAAAATTGTATGTGATTTTAAAGTGAAAATATTTGAGATGTTATATGGTTTTTATTGAGATAAATATTTGATAGTATATTTTTGGGGATTAATGTTAAAGAGATGT
chr3	161980844	161980964	Hypo	1 -	AACCCTAATAATATTAATACCAATAATAAAACTAACAAAAAACCTTATAATCAACTTACTACCCACTCTATAAACATTAAAATAAACCAAACAAAACCCAAAAAACACAACTCTCCTTT
chr3	161980844	161980964	Hypo	1 +	AGTTTTGGTAGTATTGATGTTAATAGTAGAGTTAGTAGAAAGTTTTGTAATTAGTTTGATATCGATTTTGTAGATATTGAGGTGAATTAAGTAGAGTTTAGAGGGTATAGTTTTTTTTTT
chr3	161980844	161980964	Hypo	1 -	AACCCTAATAATATTAATACCAATAATAAAACTAACAAAAAACCTTATAATCAACTTACTACCCACTCTATAAACATTAAAATAAACCAAACAAAACCCAAAAAACACAACTCTCCTTT
chr3	161980844	161980964	Hypo	1 +	AGTTTTGGTAGTATTGATGTTAATAGTAGAGTTAGTAGAAAGTTTTGTAATTAGTTTGATATCGATTTTGTAGATATTGAGGTGAATTAAGTAGAGTTTAGAGGGTATAGTTTTTTTTT
chr3	161980844	161980964	Hypo	1 -	AACCCTAATAATATTAATACCAATAATAAAACTAACAAAAAACCTTATAATCAACTTACTACCCACTCTATAAACATTAAAATAAACCAAACAAAACCCAAAAAACACAACTCTCCTTT
chr3	161980844	161980964	Hypo	1 +	AGTTTTGGTAGTATTGATGTTAATAGTAGAGTTAGTAGAAAGTTTTGTAATTAGTTTGATATTGATTTTGTAGATATTGAGGTGAATTAAGTAGAGTTTAGAGGGTATAGTTTTTTTTT
chr3	161980844	161980964	Hypo	1 -	AACCCTAATAATATTAATACCAATAATAAAACTAACAAAAAACCTTATAATCAACTTACTACCCACTCTATAAACATTAAAATAAACCAAACAAAACCCAAAAAACACAACTCTCCTTT
chr3	161980844	161980964	Hypo	1 +	AGTTTTGGTAGTATTGATGTTAATAGTAGAGTTAGTAGAAAGTTTTGTAATTAGTTTGATATTGATTTTGTAGATATTGAGGTGAATTAAGTAGAGTTTAGAGGGTATAGTTTTTTTTT
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACAAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr12	116230582	116230702	Hypo	1 +	GGGATGGATTATATAGATTGATGTGATTTAGTTTTATGTTTAGTTTTGTATTTAATTGGAGGTTTGTTTTTAATTTTAAGTTATTGATTTGAGAGTAGAAAGAGGTGGTTTTTTAGTGAA
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACAAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr12	116230582	116230702	Hypo	1 +	GGGATGGATTATATAGATTGATGTGATTTAGTTTTATGTTTAGTTTTGATTTAATGGGAGGTTAGTTTTTAATTTTAAGTTATTGATTTGAGAGTAGAAAGAGGTGGTTTTTTAGTGAA
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACAAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr12	116230582	116230702	Hypo	1 +	GGGATGGATTATATAGATTGATGTGATTTAGTTTTATGTTTAGTTTTGATTTAATGGGAGGTTAGTTTTTAATTTTAAGTTATTGATTTGAGAGTAGAAAGAGGTGGTTTTTTAGTGAA
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACAAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr12	116230582	116230702	Hypo	1 +	GGGATGGATTATATAGATTGATGTGATTTAGTTTTATGTTTAGTTTTGATTTAATGGGAGGTTAGTTTTTAATTTTAAGTTATTGATTTGAGAGTAGAAAGAGGTGGTTTTTTAGTGAA
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACAAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr12	116230582	116230702	Hypo	1 +	GGGATGGATTATATAGATTGATGTGATTTAGTTTTATGTTTAGTTTTGATTTAATTGGAGGTTCGTTTTTAATTTTAAGTTATTGATTTGAGAGTAGAAAGAGGTGGTTTTTTAGTGAA
chr12	116230582	116230702	Hypo	1 -	AAAATAAATTACACAAACTAATATAACCCAACCTCATACCCAACTCTACATCTAACGAAAAATCAACCCCCAACCCCAAACCATTAACTTAAAAATAAAAAAAAAATAATCTTCCAATAAA
chr10	90602351	90602471	Hypo	1 -	TACTCACAAAAAATACATAATAACATTCATCACATTCTATATCATATTATACACAACACCTTCCCAAACATCTACAAAATTAACAAAATTACTAAAATCCCCTTAAATTCAATTAAAAAA
chr10	90602351	90602471	Hypo	1 +	TATTTATAAGAGGTATATAATAGTATTTATTATATTTTGTATTATGTTATATGATAAATTTTTTTAAGTATTTGTAGAGTTAATAAAATTATTAAAATTTTTTAAATTTAGTTAAAGAA
chr10	90602351	90602471	Hypo	1 -	TACTCACAAAAAATACATAATAACATTCATCACATTCTATATCATATTATACAACACACCTTCCCCAACATCTACAAAATTAACAAAATTACTAAAATCCCCTTAAATTCAATTAAAAAA
chr10	90602351	90602471	Hypo	1 +	TATTTATAAGAGGTATATAATAGTATTTATTATATTTTGTATTATGTTATATGATAAATTTTTTTAAGTATTTGTAGAGTTAATAAAATTATTAAAATTTTTTAAATTTAGTTAAAGAA
chr10	90602351	90602471	Hypo	1 -	TACTCACAAAAAATACATAATAACATTCATCACATTCTATATCATATTATACGACAAACCTTCCCAAACATCTACAAAATTAACAAAATTACTAAAATCCCCTTAAATTCAATTAAAAAA
chr10	90602351	90602471	Hypo	1 +	TATTTATAAGAGGTATATAATAGTATTTATTATATTTTGTATTATGTTATACGATAAATTTTTTTAAGTATTTGTAGAGTTAATAAAATTATTAAAATTTTTTAAATTTAGTTAAAGAA
chr10	90602351	90602471	Hypo	1 -	TACTCACAAAAAATACATAATAACATTCATCACATTCTATATCATATTATACGACACACCTTCCCCAACATCTACAAAATTAACAAAATTACTAAAATCCCCTTAAATTCAATTAAAAAA
chr10	90602351	90602471	Hypo	1 +	TATTTATAAGAGGTATATAATAGTATTTATTATATTTTGTATTATGTTATACGATAAATTTTTTTAAGTATTTGTAGAGTTAATAAAATTATTAAAATTTTTTAAATTTAGTTAAAGAA
chr21	42806104	42806224	Hypo	1 -	AAAAAATAAAAAACAAAATAATTTCTCATATTTTCTTCCTAAACCTCAATCAACCCACTTTAAAAAAATTACACCCAACTACTAATAAATAAACAAAACCAAATATAAAATCTACTACT
chr21	42806104	42806224	Hypo	1 +	AAGAGGTAAAGATAAAATGATTTTTTATATTTTTTTTTTGAATTTTAATTAGTTTATTTTAGGAAAATTGTATTTAGTTGTTGGTAGGTAGGTAGGATCGAGTGTGAAGTTTGTTGTT
chr21	42806104	42806224	Hypo	1 -	AAAAAATAAAAACAAAATAATTTCTCATATTTTCTTCCTAAACCTCAATCAACCCACTTTAAAAAAATTACACCCAACTACTAATAAATAAACAAAACCAAATATAAAATCTACTACT
chr21	42806104	42806224	Hypo	1 +	AAGAGGTAAAGATAAAATGATTTTTTATATTTTTTTTTTGAATTTTAATTAGTTTATTTTAGGAAAATTGTATTTAGTTGTTGGTAGGTAGGTAGGATCGAGTGTGAAGTTTGTTGTT
chr21	42806104	42806224	Hypo	1 -	AAAAAATAAAAACAAAATAATTTCTCATATTTTCTTCCTAAACCTCAATCAACCCACATTCGAAAAAATTACACCCAACTACTAATAAATAAACAAAACCGAATATAAAATCTACTACT
chr21	42806104	42806224	Hypo	1 +	AAGAGGTAAAGATAAAATGATTTTTTATATTTTTTTTTTGAATTTTAATTAGTTTATATTCGGAAAATTGTATTTAGTTGTTGGTAGGTAGGTAGGATCGAGTGTGAAGTTTGTTGTT
chr21	42806104	42806224	Hypo	1 -	AAAAAATAAAAACAAAATAATTTCTCATATTTTCTTCCTAAACCTCAATCAACCCACATTCGAAAAAATTACACCCAACTACTAATAAATAAACAAAACCGAATATAAAATCTACTACT
chr21	42806104	42806224	Hypo	1 +	AAGAGGTAAAGATAAAATGATTTTTTATATTTTTTTTTTGAATTTTAATTAGTTTATATTCGGAAAATTGTATTTAGTTGTTGGTAGGTAGGTAGGATCGAGTGTGAAGTTTGTTGTT
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAAATATTGATTTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAATAGTGATTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAAATATTGATTTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAAATATTGATTTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAAATATTGATTTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr1	158173336	158173456	Hypo	1 -	AATAATTAACTTAACTTAATAAAATTCATTTAATATACTTTAATTTAAAAATTTAAATAACACTAACTCCAAAAAACTAAAAAATTAAAATTTTTAAATTACAAATACAATATAAAAA
chr1	158173336	158173456	Hypo	1 +	AATAATTAATTTGGTTTAATGGAATTTATTTGGTATATTTTAATTTGGAGATTTAAGTAAATATTGATTTTAGGAGGTTAGAGAAATTAGGATTTTTAGATTATAGATGTAATATGGAGA
chr2	119563438	119563558	Hypo	1 -	TATTAAAATTATAAAAAGGGATTTTTTATTGTTAATATAAAAGTAATAATGGTTTTATTAGGATTAAGTTTAATAGTAGTAAGAGGTTATTTTTAGTAGGTATTTTTTGGTTGATATG
chr2	119563438	119563558	Hypo	1 +	TATTAAAATTATAAAAAGGGATTTTTTATTGTTAATATAAAAGTAATAATGGTTTTATTAGGATTAAGTTTAATAGTAGTAAGAGGTTATTTTTAGTAGGTATTTTTTGGTTGATATG

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chr2	119563438	119563558	Hypo	1 -	TATTAAAACTATAAAAAAAAACTTTTCATCTACTAATATAAAAATAACAATAATCTTAATAAATCTAAATCCAATAATAATAAAAAATTACTCTCAATAAATACTTCCCTAACTAACATA
chr2	119563438	119563558	Hypo	1 +	TATTAAAATTATAAAAAGGGATTTTTTATTGTTAATATAAAAGTAATAATGGTTTTAGTAGGTTTAAGTTTAATAGTAGTAAGAGGTTATTTTTAGTAGGTATTTTTTGGTTGATATG
chr2	119563438	119563558	Hypo	1 -	TATTAAACTATAAAAAAAAACTTTTCATCTACTAATATAAAAATAACAATAATCTTAATAAATCTAAATCCAATAATAATAAAAAATTACTCTCAATAAATACTTCCCTAACTAACATA
chr2	119563438	119563558	Hypo	1 +	TATTAAAATTATAAAAAGGGATTTTTTATTGTTAATATAAAAGTAATAATGGTTTTATTAGGATTAAGTTTAATAGTAGTAAGAGGTTATTTTTAGTAGGTATTTTTTGGTTGATATG
chr2	119563438	119563558	Hypo	1 -	TATTAAACTATAAAAAAAAACTTTTCATCTACTAATATAAAAATAACAATAATCTTAATAAATCTAAATCCAATAATAATAAAAAATTACTCTCAATAAATACTTCCCTAACTAACATA
chr2	119563438	119563558	Hypo	1 +	TATTAAAATTATAAAAAGGGATTTTTTATTGTTAATATAAAAGTAATAATGGTTTTATTAGGATTAAGTTTAATAGTAGTAAGAGGTTATTTTTAGTAGGTATTTTTTGGTTGATATG
chr2	29223365	29223485	Hypo	1 -	AAACTTAATACATTATTACTATTTTCCTTCCTTCTCCTCTTCTAAATAAATCATACAAACTCTTTTCAACAAAATAAACTCTTAAATAACAAAAACAATAAAAAATCTTAAAATCTTA
chr2	29223365	29223485	Hypo	1 +	GAATTTAATATATTGTTATTATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
chr2	29223365	29223485	Hypo	1 -	AAACTTAATACATTATTACTATTTTCCTTCCTTCTCCTCTTCTAAATAAATCATACCAACTATTTTCAACAAAATAAACTCTTAAATAACAAAAACAATAAAAAATCTTAAAATCTTA
chr2	29223365	29223485	Hypo	1 +	GAATTTAATATATTGTTATTATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
chr2	29223365	29223485	Hypo	1 -	AAACTTAATACATTATTACTATTTTCCTTCCTTCTCCTCTTCTAAATAAATCATACGAACTCTTTTCAACGAAATAAACTCTTAAATAACAAAAACAATAAAAAATCTTAAAATCTTA
chr2	29223365	29223485	Hypo	1 +	GAATTTAATATATTGTTATTATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
chr2	29223365	29223485	Hypo	1 -	AAACTTAATACATTATTACTATTTTCCTTCCTTCTCCTCTTCTAAATAAATCATACCGACTATTTTCAACGAAATAAACTCTTAAATAACAAAAACAATAAAAAATCTTAAAATCTTA
chr2	29223365	29223485	Hypo	1 +	GAATTTAATATATTGTTATTATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
chr14	58048387	58048507	Hypo	1 -	CTAAAAATTACCTAAAAAACCATTCTATCATTTTTAAACATTCTCAAAAAAACCTACAAAAATACCAAAATTAATAATTACTAAAATCACTAACTATTAAAAAAAAATAAACAAACAAAA
chr14	58048387	58048507	Hypo	1 +	TTGGAGGTTGTTTGAAAAGTTATTTTGTTGTTTTGAGTATTTTAGAAGAGTTTGTAGAAATATTGAAATTGGTAGTTGTTGAAATTATTAGTTATTGGAAGAGGGTGGGTAAATGAGA
chr14	58048387	58048507	Hypo	1 -	CTAAAAATTACCTAAAAAACCATTCTATCATTTTTAAACATTCTCAAAAAAACCTAAAAAATACCAAAATTAATAATTACTAAAATCACTAACTATTAAAAAAAAATAAACAAACAAAA
chr14	58048387	58048507	Hypo	1 +	TTGGAGGTTGTTTGAAAAGTTATTTTGTTGTTTTGAGTATTTTAGAAGAGTTTGTAGAAATATGAAATTGGTAGTTGTTGAAATTATTAGTTATTGGAAGAGGGTGGGTAAATGAGA
chr14	58048387	58048507	Hypo	1 -	CTAAAAATTACCTAAAAAACCATTCTATCATTTTTAAACATTCTCAAAAAAACCTACAAAAATACCAAAATTAATAATTACTAAAATCACTAACTATTAAAAAAAAATAAACAAACGAAA
chr14	58048387	58048507	Hypo	1 +	TTGGAGGTTGTTTGAAAAGTTATTTTGTTGTTTTGAGTATTTTAGAAGAGTTTGTAGAAATATCGAAATTGGTAGTTGTTGAAATTATTAGTTATTGGAAGAGGGTGGGTAAACGAGA
chr14	58048387	58048507	Hypo	1 -	CTAAAAATTACCTAAAAAACCATTCTATCGTTTTTAAACATTCTCAAAAAAACCTAAAAAATACAAAAATTAATAATTACTAAAATCACTAACTATTAAAAAAAAATAAACAAACGAAA
chr14	58048387	58048507	Hypo	1 +	TTGGAGGTTGTTTGAAAAGTTATTTTGTCGTTTTGAGTATTTTAGAAGAGTTTGTAGAAATATCGAAATTGGTAGTTGTTGAAATTATTAGTTATTGGAAGAGGGTGGGTAAACGAGA
chr12	66409649	66409769	Hypo	1 -	ACAAATATAAACAAAATCAAATAAATTTCTTATCCCTCTATTCCTAACAACCATTCATTTCTAAAATTCTCTAAATTTCTACCAAAAATAAACTTTTCCAAACTCACAAAAAATTAATAT
chr12	66409649	66409769	Hypo	1 +	GTAAATATGAATAAAATTAGGTGAATTTTTTATTTTTTTGTTTTTAATAGTTATTTATTTTTAGGATTTTTTGAGTTTTTGTTAAGGGTGGATTTTTTTAAGTTTATAAAGGATTAATGT
chr12	66409649	66409769	Hypo	1 -	ACAAATATAAACAAAATCAAATAAATTTCTTATCCCTCTATTCCTAACAACCATTCATTTCTAAAATTCTCTAAATTTCTACCAAAAATAAACTTTTCCAAACTCACAAAAAATTAATAT
chr12	66409649	66409769	Hypo	1 +	GTAAATATGAATAAAATTAGGTGAATTTTTTATTTTTTGTTTTTAATAGTTATTTATTTTTAGGATTTTTTGAGTTTTTGTTAAGGGTGGATTTTTTTAAGTTTATAAAGGATTAATGT
chr12	66409649	66409769	Hypo	1 -	ACAAATATAAACAAAATCAAATAAATTTCTTATCCCTCTATTCCTAACAACCATTAATTTCTAAACTTCTCTAAATTTCTACCAAAAATAAACTTTTCCAAACTCACAAAAAATTAATAT
chr12	66409649	66409769	Hypo	1 +	GTAAATATGAATAAAATTAGGTGAATTTTTTATTTTTTGTTTTTAATAGTTATTGATTTTAGGTTTTTTGAGTTTTTGTTAAGGGTGGATTTTTTTAAGTTTATAAAGGATTAATGT
chr8	116302877	116302997	Hypo	1 -	AAAAATCCAAAATAATTTAATAATTTTTTACAAAAACATATTAAATACATATTAACTATCAAAAAAACAATCTAAAAATAACAATAATAACAAAAATATACATTTAAATAACCAAATAAA
chr8	116302877	116302997	Hypo	1 +	GAAAGTTAAAATGGTTTAATAATTTTTATAAAAATATGTTAAATGTATGTTGGTTATTGAAAAGATAATTTAAAAGTGATAATAGTAGTAAAGATGTATTTAAGTGATTAAATGAG
chr8	116302877	116302997	Hypo	1 -	AAAAATCCAAAATAATTTAATAATTTTTTACAAAAACATATTAAATACATATTAAATATCAAAAATACAATCTAAAAATAACAATAATAACAAAAATATACATTTAAATAACCAAATAAA
chr8	116302877	116302997	Hypo	1 +	GAAAGTTAAAATGGTTTAATAATTTTTATAAAAATATGTTAAATGTATGTTGGGTATTGAAAAGATAATTTAAAAGTGATAATAGTAGTAAAGATGTATTTAAGTGATTAAATGAG
chr8	116302877	116302997	Hypo	1 -	AAAAATCCAAAATAATTTAATAATTTTTTACAAAAACATATTAAATACATATTAAATATCAAAAATACAATCTAAAAATAACAATAATAACAAAAATATACATTTAAATAACCAAATAAA
chr8	116302877	116302997	Hypo	1 +	GAAAGTTAAAATGGTTTAATAATTTTTATAAAAATATGTTAAATGTATGTTGGGTATTGAAAAGATAATTTAAAAGTGATAATAGTAGTAAAGATGTATTTAAGTGATTAAATGAG
chr8	116302877	116302997	Hypo	1 -	AAAAATCCAAAATAATTTAATAATTTTTTACAAAAACATATTAAATACATATTAAATATCAAAAATACAATCTAAAAATAACAATAATAACAAAAATATACATTTAAATAACCAAATAAA
chr8	116302877	116302997	Hypo	1 +	GAAAGTTAAAATGGTTTAATAATTTTTATAAAAATATGTTAAATGTATGTTGGGTATTGAAAAGATAATTTAAAAGTGATAATAGTAGTAAAGATGTATTTAAGTGATTAAATGAG
chr9	73294423	73294543	Hypo	1 -	AATTTTATTCAAAATTATAAATATAATACTTCATTTCTTATCAATAAAAAAAAAAATACATTTTTTATCTCCATACATAAATAAAAACTATAAAATCAAACTATCTTCACCATTTAATAAT
chr9	73294423	73294543	Hypo	1 +	AGTTTTGTTTAGGGTTGTAAATGTGGTGTTTTATTTTTTATTAGTGGGAAAGGGATGTGTTTTTTGTATTTTTATATATAAGTGAGGGTTATGGGGTTAGATTGTTTTTATTATTTAATGGT
chr9	73294423	73294543	Hypo	1 -	AATTTATTCAAAATTATAAATATAATACTTCATTTCTTATCAATAAAAAAAAAATACATTTTTTATCTCCATACATAAATAAAAACTATAAAATCAAACTATCTTCACCATTTAATAAT
chr9	73294423	73294543	Hypo	1 +	AGTTTTGTTTAGGGTTGTAAATGTGGTGTTTTATTTTTTATTAGTGGGAAAGGGATGTGTTTTTTGTATTTTTATATATAAGTGAGGGTTATGGGGTTAGATTGTTTTTATTATTTAATGGT
chr9	73294423	73294543	Hypo	1 -	AATTTATTCAAAATTATAAATATAATACTTCATTTCTTATCAATAAAAAAAAAATACATTTTTTATATCTCCATACATAAATAAAAACTATAAAATCAAACTATCTTCACCATTTAATAAT
chr9	73294423	73294543	Hypo	1 +	AGTTTTGTTTAGGGTTGTAAATGTGGTGTTTTATTTTTTATTAGTGGGAAAGGGATGCGTTTTTTTATTTTTATATATAAGTGAGGGTTATGGGGTTAGATTGTTTTTATTATTTAATGGT
chr9	73294423	73294543	Hypo	1 -	AATTTATTCAAAATTATAAATATAATACTTCATTTCTTATCAATAAAAAAAAAATACTTTTTATATCTCCATACATAAATAAAAACTATAAAATCAAACTATCTCACCATTTAATAAT
chr9	73294423	73294543	Hypo	1 +	AGTTTTGTTTAGGGTTGTAAATGTGGTGTTTTATTTTTTATTAGTGGGAAAGGGATGTGTTTTTTGTATTTTTATATATAAGTGAGGGTTATGGGGTTAGATTGTTTTTATTATTTAATGGT
chr12	103565393	103565513	Hypo	1 -	AAATATAAATAAATATTAAAAAAAAAAATTAAAACATTAAAAAAACAATAATATTAAACTTTAAAACTCCATAAAATTTCAAACTAAAAAAACGAAACAAAAAAACAATAAAATCAAA
chr12	103565393	103565513	Hypo	1 +	AAATATAAGTAAGTGTTAGAGAAGGAAATTAAAGGTATTAGAGAGATAGTGGTATTGAAGTATGGGATTTTATAAAGATTTTAGATTAGGGGAATGAAATAGGAGAATAATGAAGATTAAA
chr12	103565393	103565513	Hypo	1 -	AAATATAAATAAATATTAAAAAAAAAAATTAAAACATTAAAAAAACAATAATATTAAACTTTAAAACTCCATAAAATTTCAAACTAAAAAAACGAAACAAAAAAACAATAAAATCAAA
chr12	103565393	103565513	Hypo	1 +	AAATATAAGTAAGTGTTAGAGAAGGAAATTAAAGGTATTAGAGAGATAGTGGTATTGAAGTATGGGATTTTATAAAGATTTTAGATTAGGGGAATGAAATAGGAGAATAATGAAGATTAAA
chr12	103565393	103565513	Hypo	1 -	AAATATAAATAAATATTAAAAAAAAAAATTAAAACATTAAAAAAACAATAATATTAAACTTTAAAACTCCATAAAATTTCAAACTAAAAAAACGAAACAAAAAAACAATAAAATCAAA
chr12	103565393	103565513	Hypo	1 +	AAATATAAGTAAGTGTTAGAGAAGGAAATTAAAGGTATTAGAGAGATAGTGGTATTGAAGTATGGGATTTTATAAAGATTTTAGATTAGGGGAACGAAATAGGAGAATAATGAAGATTAAA
chr12	103565393	103565513	Hypo	1 -	AAATATAAATAAATATTAAAAAAAAAAATTAAAACATTAAAAAAACAATAATATTAAACTTTAAAACTCCATAAAATTTCAAACTAAAAAAACGAAACAAAAAAACAATAAAATCAAA

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chr12	103565393	103565513	Hyper	1 +	AAATATAAGTAAGTGTTAGAGAAGGAAATTAAAGGTATTAGAGAGATAGTGGTATTGAATTTTGGGATTTTATAAGATTTTAGATTAGGGGAACGAAATAGGAGAATAATGAAGATTAAA
chr3	173228848	173228968	Hypo	1 -	TTTTATAATTATTCTATAAATTTATAACAAAAATTTATAAAAACATTTAATATAAAAACATCTCATTTAATATTAAAAAAAAAAAACCCAACTATTCCTTTAAACCAATATTTCTACTAA
chr3	173228848	173228968	Hypo	1 +	TTTTATGGTTATTTTATGAGTTTATGATAGGGATTTATGGAAGTATTTGATATGAAGGTGTTTTATTTAGTATTGAAGAGAAAAAGTTTAGTTATTTTTTTAGATTAGTGTTTTTGTTAA
chr3	173228848	173228968	Hypo	1 -	TTTTATAATTATTCTATAAATTTATAACAAAAATTTATAAAAACATTTAATATAAAAACTTATCATTTAATATTAAAAAAAAAAAACCCAACTATTCCTTTAAACCAATATTTCTACTAA
chr3	173228848	173228968	Hypo	1 +	TTTTATGGTTATTTTATGAGTTTATGATAGGGATTTATGGAAGTATTTGATATGAAGGTTTATTATTTAGTATTGAAGAGAAAAAGTTTAGTTATTTTTTTAGATTAGTGTTTTTGTTAA
chr3	173228848	173228968	Hyper	1 -	TTTTATAATTATTCTATAAATTTATAACAAAAATTTATAAAAACATTTAATATAAAAACGTCTCATTTAATATTAAAAAAAAAAAACCCAACTATTCCTTTAAACCAATATTTCTACTAA
chr3	173228848	173228968	Hyper	1 +	TTTTATGGTTATTTTATGAGTTTATGATAGGGATTTATGGAAGTATTTGATATGAAGGCGTTTTATTTAGTATTGAAGAGAAAAAGTTTAGTTATTTTTTTAGATTAGTGTTTTTGTTAA
chr3	173228848	173228968	Hyper	1 -	TTTTATAATTATTCTATAAATTTATAACAAAAATTTATAAAAACATTTAATATAAAAACTTATCATTTAATATTAAAAAAAAAAAACCCAACTATTCCTTTAAACCAATATTTCTACTAA
chr3	173228848	173228968	Hyper	1 +	TTTTATGGTTATTTTATGAGTTTATGATAGGGATTTATGGAAGTATTTGATATGAAGGTTTATTATTTAGTATTGAAGAGAAAAAGTTTAGTTATTTTTTTAGATTAGTGTTTTTGTTAA
chr2	22037515	22037635	Hypo	1 -	ATTAATTAACATACATTTCCATATCTAATCTACCTAATTTTACTTTAAAATAAACAAATAAAACCTTTAAAACTAATTACAATTCTTATAATAAAATAATAAAAAAAAATTTTCCATATCA
chr2	22037515	22037635	Hypo	1 +	ATTGATTGATATATATATTTTTATGTTTGATTTATTTGATTTTGTTTTAAAATGAGTGAGTAAAATTTTTGGGATTAATTATGATTTTTATAGTAAAGTAATGAGAGAGATTTTTTATGTTG
chr2	22037515	22037635	Hypo	1 -	ATTAATTAACATACATTTCCATATCTAATCTACCTAATTTTACTTTAAAATAAACAAATTATACCTTTAAAACTAATTACAATTCTTATAATAAAATAATAAAAAAAAATTTTCCATATCA
chr2	22037515	22037635	Hypo	1 +	ATTGATTGATATATATATTTTTATGTTTGATTTATTTGATTTTGTTTTAAAATGAGTGAGTTATATTTTTGGGATTAATTATGATTTTTATAGTAAAGTAATGAGAGAGATTTTTTATGTTG
chr2	22037515	22037635	Hyper	1 -	ATTAATTAACATACATTTCCATATCTAATCTACCTAATTTTACTTTAAAATAAACGAATAAAACCTTTAAAACTAATTACGATTCTTATAATAAAATAATAAAAAAAAATTTTCCATATCG
chr2	22037515	22037635	Hyper	1 +	ATTGATTGATATATATATTTTTATGTTTGATTTATTTGATTTTGTTTTAAAATGAGCGAGTAAAATTTTTGGGATTAATTACGATTTTTATAGTAAAGTAATGAGAGAGATTTTTTATGTCG
chr2	22037515	22037635	Hyper	1 -	ATTAATTAACATACATTTCCATATCTAATCTACCTAATTTTACTTTAAAATAAACGAATTATACCTTTAAAACTAATTACGATTCTTATAATAAAATAATAAAAAAAAATTTTCCATATCG
chr2	22037515	22037635	Hyper	1 +	ATTGATTGATATATATATTTTTATGTTTGATTTATTTGATTTTGTTTTAAAATGAGCGAGTTATATTTTTGGGATTAATTACGATTTTTATAGTAAAGTAATGAGAGAGATTTTTTATGTCG
chr4	189476120	189476240	Hypo	1 -	TTAATTTTAAATAAATTAAATTTAAAATACCTTTAAAACATTCAAAAAAACTAACCCATTACATTTAAAATAACATCCAAAAACCTTACTAACCTAACCCTAAAAACCCACTACTACTAC
chr4	189476120	189476240	Hypo	1 +	TTGGTTTTGGATAGATTGAATTTGAAGTGTTTTTGGGGTATTTAGAAGGATTAGTTTATTGTGTTTAGAATAATATTTAGAAGTTTTATTAGTTTGGTTTTGAAAGTTTATTGTTGTTGT
chr4	189476120	189476240	Hypo	1 -	TTAATTTTAAATAAATTAAATTTAAAATACCTTTAAAACATTCAAAAAAACTAACCCATAAAATTTAAAATAACATCCAAAAACCTTACTAACCTAACCCTAAAAACCCACTACTACTAC
chr4	189476120	189476240	Hypo	1 +	TTGGTTTTGGATAGATTGAATTTGAAGTGTTTTTGGGGTATTTAGAAGGATTAGTTTATGGGGTTTAGAATAATATTTAGAAGTTTTATTAGTTTGGTTTTGAAAGTTTATTGTTGTTGT
chr4	189476120	189476240	Hyper	1 -	TTAATTTTAAATAAATTAAATTTAAAATACCTTTAAAACATTCAAAAAAACTAACCCATTACGTTTAAAATAACATCCAAAAACCTTACTAACCTAACCCTAAAAACCCACTACTACTAC
chr4	189476120	189476240	Hyper	1 +	TTGGTTTTGGATAGATTGAATTTGAAGTGTTTTTGGGGTATTTAGAAGGATTAGTTTATTGCGTTTAGAATAATATTTAGAAGTTTTATTAGTTTGGTTTTGAAAGTTTATTGTTGTTGT
chr4	189476120	189476240	Hyper	1 -	TTAATTTTAAATAAATTAAATTTAAAATACCTTTAAAACATTCAAAAAAACTAACCCATAAAATTTAAAATAACATCCAAAAACCTTACTAACCTAACCCTAAAAACCCACTACTACTAC
chr4	189476120	189476240	Hyper	1 +	TTGGTTTTGGATAGATTGAATTTGAAGTGTTTTTGGGGTATTTAGAAGGATTAGTTTATGGGGTTTAGAATAATATTTAGAAGTTTTATTAGTTTGGTTTTGAAAGTTTATTGTTGTTGT
chr8	12909625	12909745	Hypo	1 -	AATCTAATAAATAAACATTAAACCCATCAAAAAACCTAAAAACCAAATCTAAATCACTTATACTTCCCACATAACCCTTTCTACAATAATTAATAAAACCTCCCCACATAAAAAAAACTA
chr8	12909625	12909745	Hypo	1 +	AGTTTGGTAAGTGGATGTTGAATTTGTTAAAAGGTTTGAAGGTTAGGTTTGAATTATTTGTATTTTTTATGTGGTTTTTTTTATGGTGATTAGTGAAGTTTTTTTATATAAAGAGAGTTA
chr8	12909625	12909745	Hypo	1 -	AATCTAATAAATAAACATTAAACCCATCAAAAAACCTAAAAACCAAATCTAAATCACATATACATCCCACATAACCCTTTCTACAATAATTAATAAAACCTCCCCACATAAAAAAAACTA
chr8	12909625	12909745	Hypo	1 +	AGTTTGGTAAGTGGATGTTGAATTTGTTAAAAGGTTTGAAGGTTAGGTTTGAATTATGTGTATATTTTATGTGGTTTTTTTTATGGTGATTAGTGAAGTTTTTTTATATAAAGAGAGTTA
chr8	12909625	12909745	Hyper	1 -	AATCTAATAAATAAACGTTAAACCCGTCAAAAAACCTAAAAACCAAATCTAAATCACTTATACTTCCCACGTAACCCTTTCTACGATAATTAATAAAACCTCCCCACATAAAAAAAACTA
chr8	12909625	12909745	Hyper	1 +	AGTTTGGTAAGTGGACGTTGAATTCGTTAAAAGGTTTGAAGGTTAGGTTTGAATTATTTGTATTTTTTACGTGGTTTTTTTTACGGTGATTAGTGAAGTTTTTTTATATAAAGAGAGTTA
chr8	12909625	12909745	Hyper	1 -	AATCTAATAAATAAACGTTAAACCCGTCAAAAAACCTAAAAACCAAATCTAAATCACGTATACATCCCACGTAACCCTTTCTACGATAATTAATAAAACCTCCCCACATAAAAAAAACTA
chr8	12909625	12909745	Hyper	1 +	AGTTTGGTAAGTGGACGTTGAATTCGTTAAAAGGTTTGAAGGTTAGGTTTGAATTACGTGTATATTTTACGTGGTTTTTTTTACGGTGATTAGTGAAGTTTTTTTATATAAAGAGAGTTA
chr3	132871770	132871890	Hypo	1 -	CTACCTCTAAACTACAAAAAACTTTAATTCAATATTTAAACCTATTTCATTTTATACTCAAACCAAAATTTAACAATCATAAAAATTAATTATATTCTCTATACTTAAATAAATAAATTT
chr3	132871770	132871890	Hypo	1 +	TTATTTTTAGGTTGTAAAGAGTTTTGATTTAATGTTTGGGTTTGTTTTATTTTGTATTTAGGTTAAGATTTAATAGTTATGAGGGTTGGTTGTGTTTTTTGTGTTTAAATAGATGGATTT
chr3	132871770	132871890	Hypo	1 -	CTACCTCTAAACTACAAAAAACTTTAATTCAATATTTAAACCTATTTCATTTTATACTCTACCCAAAATTTAACAATCATAAAAATTAATTATATTCTCTATACTTAAATAAATAAATTT
chr3	132871770	132871890	Hypo	1 +	TTATTTTTAGGTTGTAAAGAGTTTTGATTTAATGTTTGGGTTTGTTTTATTTTGTATTTTGTTTAAGATTTAATAGTTATGAGGGTTGGTTGTGTTTTTTGTGTTTAAATAGATGGATTT
chr3	132871770	132871890	Hyper	1 -	CTACCTCTAAACTACAAAAAACTTTAATTCAATATTTAAACCTATTTCATTTTATACTCAAACCAAAATTTAACAATCATAAAAATTAATTATATTCTCTATACTTAAATAAATAAATTT
chr3	132871770	132871890	Hyper	1 +	TTATTTTTAGGTTGTAAAGAGTTTTGATTTAATGTTTGGGTTTGTTTTATTTTGTATTTAGGTTAAGATTTAATAGTTATGAGGGTTGGTTGTGTTTTTTGTGTTTAAATAGATGGATTT
chr3	132871770	132871890	Hyper	1 -	CTACCTCTAAACTACAAAAAACTTTAATTCAATATTTAAACCTATTTCATTTTATACTCTACCCAAAATTTAACAATCATAAAAATTAATTATATTCTCTATACTTAAATAAATAAATTT
chr3	132871770	132871890	Hyper	1 +	TTATTTTTAGGTTGTAAAGAGTTTTGATTTAATGTTTGGGTTTGTTTTATTTTGTATTTTGTTTAAGATTTAATAGTTATGAGGGTTGGTTGTGTTTTTTGTGTTTAAATAGATGGATTT
chr6	68101360	68101480	Hypo	1 -	ACATTTTAACTACAATAATTTTAATACATATTCTTCATTTATAACCTATAACACCTAACAATCCTTCCTAAATAAACACCTAAACACTAAAAAAAACCTTCTATCCTCTACAAACCTCTAC
chr6	68101360	68101480	Hypo	1 +	ATATTTTGGTTATAGTGATTTTAATATATATATTTTTTATTTATGATTTATGATATTTAATAGTTTTTTTTGGATAAATGTTTAGGTATTGGAAGGGTTTTTTGTTTTTTGTAGGTTTTTGT
chr6	68101360	68101480	Hypo	1 -	ACATTTTAACTACAATAATTTTAATACATATTCTTCATTTATAACCTATAACACCTAAAAATACTTCCTAAATAAACACCTAAACACTAAAAAAAACCTTCTATCCTCTACAAACCTCTAC
chr6	68101360	68101480	Hypo	1 +	ATATTTTGGTTATAGTGATTTTAATATATATATTTTTTATTTATGATTTATGATATTTAAGAGTATTTTTTGGATAAATGTTTAGGTATTGGAAGGGTTTTTTGTTTTTTGTAGGTTTTTGT
chr6	68101360	68101480	Hyper	1 -	ACATTTTAACTACAATAATTTTAATACATATTCTTCATTTATAACCTATAACACCTAACAATCCTTCCTAAATAAACGCCTAAACACTAAAAAAAACCTTCTATCCTCTACAAACCTCTAC
chr6	68101360	68101480	Hyper	1 +	ATATTTTGGTTATAGTGATTTTAATATATATATTTTTTATTTATGATTTATGATATTTAATAGTTTTTTTTGGATAAACGTTTAGGTATTGGAAGGGTTTTTTGTTTTTTGTAGGTTTTTGT
chr6	68101360	68101480	Hyper	1 -	ACATTTTAACTACAATAATTTTAATACATATTCTTCATTTATAACCTATAACACCTAAAAATACTTCCTAAATAAACGCCTAAACACTAAAAAAAACCTTCTATCCTCTACAAACCTCTAC
chr6	68101360	68101480	Hyper	1 +	ATATTTTGGTTATAGTGATTTTAATATATATATTTTTTATTTATGATTTATGATATTTAAGAGTATTTTTTGGATAAACGTTTAGGTATTGGAAGGGTTTTTTGTTTTTTGTAGGTTTTTGT
chr9	7602657	7602777	Hypo	1 -	TTCTAACCAAAAAATTATTAAACCAAAATAATATATATCACATTTAAACCTAAAACTTAATTATTAATACAAAAATCTCCAATATTATCTTCTTACACTATTTACAACTAAAAAAATAAC
chr9	7602657	7602777	Hypo	1 +	TTTTGATTAAGGGGTTGTTAAGTTGAAGTGATGTGTGTTATATTTGGATTTAGGATTTAATTGTTAGTGTAAGAATTTTTAGTGTTGTTTTTTTGTATTGTTTATAATTGAAGAGATGGT
chr9	7602657	7602777	Hypo	1 -	TTCTAACCAAAAAATTATTAAACCAAAATAATATATATCACATTTAAACCTAAAACTTTATTTTTAATACAAAAATCTCCAATATTATCTTCTTACACTATTTACAACTAAAAAAATAAC
chr9	7602657	7602777	Hypo	1 +	TTTTGATTAAGGGGTTGTTAAGTTGAAGTGATGTGTGTTATATTTGGATTTAGGATTTTATTTTTAGTGTAAGAATTTTTAGTGTTGTTTTTTTGTATTGTTTATAATTGAAGAGATGGT

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chr9	7602657	7602777	Hyper	1 -	TTCTAACCAAAAAATTATTAAACCGAAATAATATATATCACATTTAAACCTAAAACTTAATTATTAATACAAAAATCTCCAATATTATCTTCTTACACTATTTACAACTAAAAAAATAAC
chr9	7602657	7602777	Hyper	1 +	TTTTGATTAAGGGGTTGTTAAGTCGAAGTGATGTGTGTTATATTTGGATTTAGGATTTAATTGTTAGTGTAAGAATTTTTAGTGTTGTTTTTTTGTATTGTTTATAATTGAAGAGATGGT
chr9	7602657	7602777	Hyper	1 -	TTCTAACCAAAAAATTATTAAACCGAAATAATATATATCACATTTAAACCTAAAACTTTATTTTTAATACAAAAATCTCCAATATTATCTTCTTACACTATTTACAACTAAAAAAATAAC
chr9	7602657	7602777	Hyper	1 +	TTTTGATTAAGGGGTTGTTAAGTCGAAGTGATGTGTGTTATATTTGGATTTAGGATTTTATTTTTAGTGTAAGAATTTTTAGTGTTGTTTTTTTGTATTGTTTATAATTGAAGAGATGGT
chr3	16561392	16561512	Hypo	1 -	ACTATATAACATCCATATCTCAAAACATAATTATTTCAACAAAAAAATCTTTAAAAACTCAAATCCTTAAATATTTAAATTACAAATATCCAAAAAACTCAAAATTTAAAAAAAAAAATC
chr3	16561392	16561512	Hypo	1 +	ATTATATGGTATTTATATTTTAGGGTATGGTTGTTTTAGTAGAAAAGTTTTTAAGGATTTAAATTTTTGGATGTTTGAGTTGTAAATGTTTAAGGGATTTAGAATTTAGAAGAAAAAATT
chr3	16561392	16561512	Hypo	1 -	ACTATATAACATCCATATCTCAAAACATAATTATTTCAACAAAAAAATCTTTAAAATCTCAAATACTTAAATATTTAAATTACAAATATCCAAAAAACTCAAAATTTAAAAAAAAAAATC
chr3	16561392	16561512	Hypo	1 +	ATTATATGGTATTTATATTTTAGGGTATGGTTGTTTTAGTAGAAAAGTTTTTAAGGTTTTAAATGTTTGGATGTTTGAGTTGTAAATGTTTAAGGGATTTAGAATTTAGAAGAAAAAATT
chr3	16561392	16561512	Hyper	1 -	ACTATATAACATCCATATCTCAAAACATAATTATTTCAACAAAAAAATCTTTAAAAACTCAAATCCTTAAATATTTAAATTACAAATATCCAAAAAACTCAAAATTTAAAAAAAAAAATC
chr3	16561392	16561512	Hyper	1 +	ATTATATGGTATTTATATTTTAGGGTATGGTTGTTTTAGTAGAAAAGTTTTTAAGGATTTAAATTTTTGGATGTTTGAGTTGTAAATGTTTAAGGGATTTAGAATTTAGAAGAAAAAATT
chr3	16561392	16561512	Hyper	1 -	ACTATATAACATCCATATCTCAAAACATAATTATTTCAACAAAAAAATCTTTAAAATCTCAAATACTTAAATATTTAAATTACAAATATCCAAAAAACTCAAAATTTAAAAAAAAAAATC
chr3	16561392	16561512	Hyper	1 +	ATTATATGGTATTTATATTTTAGGGTATGGTTGTTTTAGTAGAAAAGTTTTTAAGGTTTTAAATGTTTGGATGTTTGAGTTGTAAATGTTTAAGGGATTTAGAATTTAGAAGAAAAAATT
chr13	27309036	27309156	Hypo	1 -	ATCTATTCAACATCACCTCATAAATATTAACTATAACCACAACCTAAATTCAAAACTCACATTTTAAACAACTCAATAAATACAAACCATAATCAATATACCAAAAACAATAATAAATTT
chr13	27309036	27309156	Hypo	1 +	GTTTGTTTAATATTATTTTTATAGGTGTTAGTTGTAGTTATAGTTTGGATTTAGGATTTATGTTTTAAGTAGTTTGATGGATGTAGATTATGGTTAATGTGTTAAAAGTAGTAGTGAATTT
chr13	27309036	27309156	Hypo	1 -	ATCTATTCAACATCACCTCATAAATATTAACTATAACCACAACCTAAATTCAAAACACACATTTTAAACAACTCAATAAATACAAACCATAATCAATATACCAAAAACAATAATAAATTT
chr13	27309036	27309156	Hypo	1 +	GTTTGTTTAATATTATTTTTATAGGTGTTAGTTGTAGTTATAGTTTGGATTTAGGATGTATGTTTAAAGTAGTTTGATGGATGTAGATTATGGTTAATGTGTTAAAAGTAGTAGTGAATTT
chr13	27309036	27309156	Hyper	1 -	ATCTATTCAACATCACCTCATAAATATTAACTATAACCACAACCTAAATTCAAAACTCACGTTTTAAACAACTCGATAAATACAAACCATAATCAATATACCAAAAACAATAATAAATTT
chr13	27309036	27309156	Hyper	1 +	GTTTGTTTAATATTATTTTTATAGGTGTTAGTTGTAGTTATAGTTTGGATTTAGGATTTACGTTTTAAGTAGTTCGATGGATGTAGATTATGGTTAATGTGTTAAAAGTAGTAGTGAATTT
chr13	27309036	27309156	Hyper	1 -	ATCTATTCAACATCACCTCATAAATATTAACTATAACCACAACCTAAATTCAAAACGCACGTTTAAAACAACTCGATAAATACAAACCATAATCAATATACCAAAAACAATAATAAATTT
chr13	27309036	27309156	Hyper	1 +	GTTTGTTTAATATTATTTTTATAGGTGTTAGTTGTAGTTATAGTTTGGATTTAGGACGTACGTTTAAAGTAGTTCGATGGATGTAGATTATGGTTAATGTGTTAAAAGTAGTAGTGAATTT
chr15	86925726	86925846	Hypo	1 -	ATAAATATACCTAATTCTAAAAATAAATACATTTAAACAACTTAAACATAAAAAACCAATTACCCAACAACTAAAAATCTAAAATACCCTTATCAAACTATATAAATAAAAAACTAACAA
chr15	86925726	86925846	Hypo	1 +	GTAAATATATTTAATTTTAAAGGTGAATATATTTAAATGGTTTAAATGTAAAAGGTTGGTTGTTTAGTAATTGGAAATTTGAAATATTTTTGTTAGGTTATGTAAGTGGAGAATTGGTAG
chr15	86925726	86925846	Hypo	1 -	ATAAATATACCTAATTCTAAAAATAAATACATTTAAACAACTTAAACATAAAAAACAAATTACCAAACAACTAAAAATCTAAAATACCCTTATCAAACTATATAAATAAAAAACTAACAA
chr15	86925726	86925846	Hypo	1 +	GTAAATATATTTAATTTTAAAGGTGAATATATTTAAATGGTTTAAATGTAAAAGGTAGGTTGTTAAGTAATTGGAAATTTGAAATATTTTTGTTAGGTTATGTAAGTGGAGAATTGGTAG
chr15	86925726	86925846	Hyper	1 -	ATAAATATACCTAATTCTAAAAATAAATACATTTAAACGACTTAAACGTAAAAAACCGATTACCCAACAACTAAAAATCTAAAATACCCTTATCAAACTATATAAATAAAAAACTAACAA
chr15	86925726	86925846	Hyper	1 +	GTAAATATATTTAATTTTAAAGGTGAATATATTTAAACGGTTTAAACGTAAAAGGTCGGTTGTTTAGTAATTGGAAATTTGAAATATTTTTGTTAGGTTATGTAAGTGGAGAATTGGTAG
chr15	86925726	86925846	Hyper	1 -	ATAAATATACCTAATTCTAAAAATAAATACATTTAAACGACTTAAACGTAAAAAACAAATTACCAAACAACTAAAAATCTAAAATACCCTTATCAAACTATATAAATAAAAAACTAACAA
chr15	86925726	86925846	Hyper	1 +	GTAAATATATTTAATTTTAAAGGTGAATATATTTAAACGGTTTAAACGTAAAAGGTAGGTTGTTAAGTAATTGGAAATTTGAAATATTTTTGTTAGGTTATGTAAGTGGAGAATTGGTAG
chr5	7210738	7210858	Hypo	1 -	CTTATAAAAAATAAAAACTCAAACTACCTTCAAATTATCCCTCTACAACTTCCACTATCCAAAAAAACTAACTTCATATTAACCACCTACTACCTTAAAAACACACATATATCCATAACC
chr5	7210738	7210858	Hypo	1 +	TTTGTGGAGAATGGGGGTTTAGGTTGTTTTTAGGTTGTTTTTTTGTAATTTTTATTGTTTAGGGAAATTAGTTTTATATTGGTTATTTGTTGTTTTGAAAATATATATGTGTTTGTGATT
chr5	7210738	7210858	Hypo	1 -	CTTATAAAAAATAAAAACTCAAACTACCTTCAAATTATCCCTCTACAACTTCCACTTTCCAAAACAACTAACTTCATATTAACCACCTACTACCTTAAAAACACACATATATCCATAACC
chr5	7210738	7210858	Hypo	1 +	TTTGTGGAGAATGGGGGTTTAGGTTGTTTTTAGGTTGTTTTTTTGTAATTTTTATTTTTTAGGGTAATTAGTTTTATATTGGTTATTTGTTGTTTTGAAAATATATATGTGTTTGTGATT
chr5	7210738	7210858	Hyper	1 -	CTTATAAAAAATAAAAACTCAAACTACCTTCAAATTATCCCTCTACAACTTCCACTATCCAAAAAAACTAACTTCATATTAACCACCTACTACCTTAAAAACACACATATATCCGTAACC
chr5	7210738	7210858	Hyper	1 +	TTTGTGGAGAATGGGGGTTTAGGTTGTTTTTAGGTTGTTTTTTTGTAATTTTTATTGTTTAGGGAAATTAGTTTTATATTGGTTATTTGTTGTTTTGAAAATATATATGTGTTCGTGATT
chr5	7210738	7210858	Hyper	1 -	CTTATAAAAAATAAAAACTCAAACTACCTTCAAATTATCCCTCTACAACTTCCACTTTCCAAAACAACTAACTTCATATTAACCACCTACTACCTTAAAAACACACATATATCCGTAACC
chr5	7210738	7210858	Hyper	1 +	TTTGTGGAGAATGGGGGTTTAGGTTGTTTTTAGGTTGTTTTTTTGTAATTTTTATTTTTTAGGGTAATTAGTTTTATATTGGTTATTTGTTGTTTTGAAAATATATATGTGTTCGTGATT
chr5	125183960	125184080	Hypo	1 -	TAAAAATAAAACTTAATATCAATAATTAAAATTTATCCATATAAAAACATAAAAATCATTTTCCCTACCCATAAAAAAAAAAAAATAACTCTAAATAACCCTAAATAATCAACAACCTAA
chr5	125183960	125184080	Hypo	1 +	TAGAAATAAGATTTGATGTTAGTGATTGGGATTTATTTATATAAAGATATGAGGGTTATTTTTTTTATTTATAAAAGAGAGGGAGTGATTTTGGGTAGTTTTGGGTGATTAGTAGTTTAG
chr5	125183960	125184080	Hypo	1 -	TAAAAATAAAACTTAATATCAATAATTAAAATTTATCCATATAAAAACATAAAAATAATTTTCCATACCCATAAAAAAAAAAAAATAACTCTAAATAACCCTAAATAATCAACAACCTAA
chr5	125183960	125184080	Hypo	1 +	TAGAAATAAGATTTGATGTTAGTGATTGGGATTTATTTATATAAAGATATGAGGGTAATTTTTTATATTTATAAAAGAGAGGGAGTGATTTTGGGTAGTTTTGGGTGATTAGTAGTTTAG
chr5	125183960	125184080	Hyper	1 -	TAAAAATAAAACTTAATATCAATAATTAAAATTTATCCATATAAAAACATAAAAATCATTTTCCCTACCCATAAAAAAAAAAAAATAACTCTAAATAACCCTAAATAATCAACAACCTAA
chr5	125183960	125184080	Hyper	1 +	TAGAAATAAGATTTGATGTTAGTGATTGGGATTTATTTATATAAAGATATGAGGGTTATTTTTTTTATTTATAAAAGAGAGGGAGTGATTTTGGGTAGTTTTGGGTGATTAGTAGTTTAG
chr5	125183960	125184080	Hyper	1 -	TAAAAATAAAACTTAATATCAATAATTAAAATTTATCCATATAAAAACATAAAAATAATTTTCCATACCCATAAAAAAAAAAAAATAACTCTAAATAACCCTAAATAATCAACAACCTAA
chr5	125183960	125184080	Hyper	1 +	TAGAAATAAGATTTGATGTTAGTGATTGGGATTTATTTATATAAAGATATGAGGGTAATTTTTTATATTTATAAAAGAGAGGGAGTGATTTTGGGTAGTTTTGGGTGATTAGTAGTTTAG
chr17	41065473	41065593	Hypo	1 -	TAAAAAAAAAAAATACTCTCTCTTAAATTAACCAAAAATCCCATTAAAAATAAAAAAACTTAAATACATCCACAAAAACACAAACAAAATTAAACACATAAACAAAAACCCAAAATCAAC
chr17	41065473	41065593	Hypo	1 +	TGGAGAAGAAAAGTGTTTTTTTTTGAGTTGATTGAGAGTTTTATTAGGGATAGGGAGATTTAAATGTATTTATAGGGGTATAGGTAGAGTTGAGTATATAAATGGAGGTTTAAAATTAGT
chr17	41065473	41065593	Hypo	1 -	TAAAAAAAAAAAATACTCTCTCTTAAATTAACCAAAAATCCCATTAAAAATAAAAAATCTTAAAAACATCCACAAAAACACAAACAAAATTAAACACATAAACAAAAACCCAAAATCAAC
chr17	41065473	41065593	Hypo	1 +	TGGAGAAGAAAAGTGTTTTTTTTTGAGTTGATTGAGAGTTTTATTAGGGATAGGGAGTTTTAAAAGTATTTATAGGGGTATAGGTAGAGTTGAGTATATAAATGGAGGTTTAAAATTAGT
chr17	41065473	41065593	Hyper	1 -	TAAAAAAAAAAAATACTCTCTCTTAAATTAACCGAAAATCCCATTAAAAATAAAAAAACTTAAATACATCCACAAAAACACAAACAAAATTAAACACATAAACGAAAACCCAAAATCAAC
chr17	41065473	41065593	Hyper	1 +	TGGAGAAGAAAAGTGTTTTTTTTTGAGTTGATCGAGAGTTTTATTAGGGATAGGGAGATTTAAATGTATTTATAGGGGTATAGGTAGAGTTGAGTATATAAACGGAGGTTTAAAATTAGT
chr17	41065473	41065593	Hyper	1 -	TAAAAAAAAAAAATACTCTCTCTTAAATTAACCGAAAATCCCATTAAAAATAAAAAATCTTAAAAACATCCACAAAAACACAAACAAAATTAAACACATAAACGAAAACCCAAAATCAAC
chr17	41065473	41065593	Hyper	1 +	TGGAGAAGAAAAGTGTTTTTTTTTGAGTTGATCGAGAGTTTTATTAGGGATAGGGAGTTTTAAAAGTATTTATAGGGGTATAGGTAGAGTTGAGTATATAAACGGAGGTTTAAAATTAGT
chr18	65627661	65627781	Hypo	1 -	TACAAAATTAAACATCTAACTCTTTTTAAAACCAATACTAAACCCCAAATTTATATCATCTAAACAACTTTATTCCTATTTTTTTAAATAAAAAAAAATTAATTTATATTTAAAAAACA

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chr18	65627661	65627781	Hypo	1 +	TGTAAAGTTAAATATTTAGTTTTTTTTGAAATTAATGTTGAATTTTAGATTTGTATTATTTAAATGGATTTTGTTTTTATTTTTTTAAGTAGAAAGAAATTAGTTTATATTTAAGAAATA
chr18	65627661	65627781	Hypo	1 -	TACAAAATTAAACATCTAACTCTTTTTAAAACCAATACTAAACCCCAAATTTATATAATCTAAAAAAACTTTATTCCTATTTTTTTAAATAAAAAAAAATTAATTTATATTTAAAAAACA
chr18	65627661	65627781	Hypo	1 +	TGTAAAGTTAAATATTTAGTTTTTTTTGAAATTAATGTTGAATTTTAGATTTGTATTATTTAAACGGATTTTGTTTTTATTTTTTTAAGTAGAAAGAAATTAGTTTATATTTAAGAAATA
chr18	65627661	65627781	Hyper	1 -	TACAAAATTAAACATCTAACTCTTTTTAAAACCAATACTAAACCCCAAATTTATATAATCATCTAAACGAACTTTATTCCTATTTTTTTAAATAAAAAAAAATTAATTTATATTTAAAAAACA
chr18	65627661	65627781	Hyper	1 +	TGTAAAGTTAAATATTTAGTTTTTTTTGAAATTAATGTTGAATTTTAGATTTGTATTATTTAAACGGATTTTGTTTTTATTTTTTTAAGTAGAAAGAAATTAGTTTATATTTAAGAAATA
chr18	65627661	65627781	Hyper	1 -	TACAAAATTAAACATCTAACTCTTTTTAAAACCAATACTAAACCCCAAATTTATATAATCTAAAAAAACTTTATTCCTATTTTTTTAAATAAAAAAAAATTAATTTATATTTAAAAAACA
chr18	65627661	65627781	Hyper	1 +	TGTAAAGTTAAATATTTAGTTTTTTTTGAAATTAATGTTGAATTTTAGATTTGTATTATTTAAACGGATTTTGTTTTTATTTTTTTAAGTAGAAAGAAATTAGTTTATATTTAAGAAATA
chr14	95933373	95933493	Hypo	1 -	AATTTCTCCATCTCTAACATAAAAATAACTCTATCTCCCCCAACCAACATCAAATCACTATATTAAAAATTTCCAACACAAAAATTTAAAAACAAAAAACACTATACAAAATCATTCCCA
chr14	95933373	95933493	Hypo	1 +	AGTTTTTTATTTTTAATATGGAGGTGGTTTATTTTTTTAGTTAATATTAAGTTATTTGTTCGGAATTTTAGCGTAAGGATTTAGAAAGTAGGAAGTATTGTGTAAAGTTATTTTTA
chr14	95933373	95933493	Hypo	1 -	AATTTCTCCATCTCTAACATAAAAATAACTCTATCTCCCCCAACCAACATCAAATCACTTTATTAAAAATTTCCAACACAAAAATTTAAAAACAAAAAACACTATACAAAATCATTCCCA
chr14	95933373	95933493	Hypo	1 +	AGTTTTTTATTTTTAATATGGAGGTGGTTTATTTTTTTAGTTAATATTAAGTTATTTGTTCGGAATTTTAGCGTAAGGATTTAGAAAGTAGGAAGTATTGTGTAAAGTTATTTTTA
chr14	95933373	95933493	Hyper	1 -	AATTTCTCCATCTCTAACATAAAAATAACTCTATCTCCCCCAACCAACATCAAATCACTTTATTCGAAATTTCCAACGCAAAAATTTAAAAACAAAAAACACTATACAAAATCATTCCCA
chr14	95933373	95933493	Hyper	1 +	AGTTTTTTATTTTTAATATGGAGGTGGTTTATTTTTTTAGTTAATATTAAGTTATTTGTTGGAATTTTAGCGTAAGGATTTAGAAAGTAGGAAGTATTGTGTAAAGTTATTTTTA
chr14	95933373	95933493	Hyper	1 -	AATTTCTCCATCTCTAACATAAAAATAACTCTATCTCCCCCAACCAACATCAAATCACTTTATTCGAAATTTCCAACGCAAAAATTTAAAAACAAAAAACACTATACAAAATCATTCCCA
chr14	95933373	95933493	Hyper	1 +	AGTTTTTTATTTTTAATATGGAGGTGGTTTATTTTTTTAGTTAATATTAAGTTATTTGTTCGGAATTTTAGCGTAAGGATTTAGAAAGTAGGAAGTATTGTGTAAAGTTATTTTTA
chr14	95933373	95933493	Hyper	1 -	AATTTCTCCATCTCTAACATAAAAATAACTCTATCTCCCCCAACCAACATCAAATCACTTTATTCGAAATTTCCAACGCAAAAATTTAAAAACAAAAAACACTATACAAAATCATTCCCA
chr14	95933373	95933493	Hyper	1 +	AGTTTTTTATTTTTAATATGGAGGTGGTTTATTTTTTTAGTTAATATTAAGTTATTTGTTCGGAATTTTAGCGTAAGGATTTAGAAAGTAGGAAGTATTGTGTAAAGTTATTTTTA
chr13	72369096	72369216	Hypo	1 -	ATATAATATACTCAAACCATAACCAAAAAAATAATAAAAAAAAATTTCAATAAACCATTATTAAAAATCCTAATTAATTTTTTATATTACTAAATACATAAATAAAAATATAAAATAAA
chr13	72369096	72369216	Hypo	1 +	ATATAGTATATTTAAATTATAGTTAAAGAATGGTTAAAAGAAAATTTTAATAAATTATTATTGGAAGTTTTAGTTAATTTTTTATGTTATTGAGTAATATAAATAAGAGTATAAAATGAG
chr13	72369096	72369216	Hypo	1 -	ATATAATATACTCAAACCATAACCAAAAAAATAATAAAAAAAAATTTCAATAAACCATTCTTAAAATCCTAATTAATTTTTTATATTACTAAATACATAAATAAAAATATAAAATAAA
chr13	72369096	72369216	Hypo	1 +	ATATAGTATATTTAAATTATAGTTAAAGAATGGTTAAAAGAAAATTTTAATAAATTATTATTGGAAGTTTTAGTTAATTTTTTATGTTATTGAGTAATATAAATAAGAGTATAAAATGAG
chr13	72369096	72369216	Hypo	1 -	ATATAATATACTCAAACCATAACCAAAAAAATAATAAAAAAAAATTTCAATAAACCATTCTTAAAATCCTAATTAATTTTTTATATTACTAAATACATAAATAAAAATATAAAATAAA
chr13	72369096	72369216	Hypo	1 +	ATATAGTATATTTAAATTATAGTTAAAGAATGGTTAAAAGAAAATTTTAATAAATTATTATTGGAAGTTTTAGTTAATTTTTTATGTTATTGAGTAATATAAATAAGAGTATAAAATGAG
chr13	72369096	72369216	Hypo	1 -	ATATAATATACTCAAACCATAACCAAAAAAATAATAAAAAAAAATTTCAATAAACCATTCTTAAAATCCTAATTAATTTTTTATATTACTAAATACATAAATAAAAATATAAAATAAA
chr13	72369096	72369216	Hypo	1 +	ATATAGTATATTTAAATTATAGTTAAAGAATGGTTAAAAGAAAATTTTAATAAATTATTATTGGAAGTTTTAGTTAATTTTTTATGTTATTGAGTAATATAAATAAGAGTATAAAATGAG
chr1	74682195	74682315	Hypo	1 -	ACTACTTAACAATTCTTTAATTTAAAATAAAAAAAAACATATTTACTTCTAACTAATTCTATTACAAAAACATATTTTTAAAAACTTTAAATTATTAAAATATCAAAAACACCCTCTAA
chr1	74682195	74682315	Hypo	1 +	GTTGTTTGATAATTTTTTGGTTTGGGATAAAGGAGGATATATTTATTTTTAGTTGATATTTATTTAAAGGTATATTTTTGGGAGGTTTAGATTATTAGGGTGTTAAAGATATTTTTTAA
chr1	74682195	74682315	Hypo	1 -	ACTACTTAACAATTCTTTAATTTAAAATAAAAAAAACATATTTACTTCTAACTAATTCTATTACAAAAACATATTTTTAAAAACTTTAAATTATTAAAATATCAAAAACACCCTCTAA
chr1	74682195	74682315	Hypo	1 +	GTTGTTTGATAATTTTTTGGTTTGGGATAAAGGAGGATATATTTATTTTTAGTTGATTTTATTTAAAGGTATATTTTTGGGAGGTTTAGATTATTAGGGTGTTAAAGATATTTTTTAA
chr1	74682195	74682315	Hypo	1 -	ACTACTTAACAATTCTTTAATTTAAAATAAAAAAAAACATATTTACTTCTAACTAATTCTATTACAAAAACATATTTTTAAAAACTTTAAATTATTAAAATATCAAAAACACCCTCTAA
chr1	74682195	74682315	Hypo	1 +	GTTGTTTGATAATTTTTTGGTTTGGGATAAAGGAGGATATATTTATTTTTAGTTGATTTTATTTAAAGGTATATTTTTGGGAGGTTTAGATTATTAGGGTGTTAAAGATATTTTTTAA
chr12	82080480	82080600	Hypo	1 -	ATTAATTATCCAATCTAAATTTATAAATATTAATAAAATTTTCCCTTACTCTAATATACATATTCCAATCCAATCTAATTTTCCTTATAAATATCTACTTAATTAATTACCTTCTTTCAT
chr12	82080480	82080600	Hypo	1 +	GTTAGTTATTTAGTTTAGGTTTATGGATGTTAATAGAGTTTTTTTTTATTTTGGTATGTATATTTTAATTTAGTTTAGTTTTTTTGTAAAATATTGTTTAGTTGATTGTTTTTTTTAT
chr12	82080480	82080600	Hypo	1 -	ATTAATTATCCAATCTAAATTTATAAATATTAATAAAATTTTCCCTTACTCTAATATACATATTCCAATCCAATCTAATTTTCCTTATAAATATCTACTTAATTAATTACCTTCTTTCAT
chr12	82080480	82080600	Hypo	1 +	GTTAGTTATTTAGTTTAGGTTTATGGATGTTAATAGAGTTTTTTTTTATTTTGGTATTTATATATTAATTTAGTTTAGTTTTTTTGTAAAATATTGTTTAGTTGATTGTTTTTTTTAT
chr12	82080480	82080600	Hyper	1 -	ATTAATTATCCAATCTAAATTTATAAATATTAATAAAATTTTCCCTTACTCTAATATACATATTCCAATCCAATCTAATTTTCCTTATAAATATCTACTTAATTAATTACCTTCTTTCAT
chr12	82080480	82080600	Hyper	1 +	GTTAGTTATTTAGTTTAGGTTTATGGATGTTAATAGAGTTTTTTTTTATTTTGGTATTTATATATTAATTTAGTTTAGTTTTTTTGTAAAATATTGTTTAGTTGATTGTTTTTTTTAT
chr12	82080480	82080600	Hyper	1 -	ATTAATTATCCAATCTAAATTTATAAATATTAATAAAATTTTCCCTTACTCTAATATACATATTCCAATCCAATCTAATTTTCCTTATAAATATCTACTTAATTAATTACCTTCTTTCAT
chr12	82080480	82080600	Hyper	1 +	GTTAGTTATTTAGTTTAGGTTTATGGATGTTAATAGAGTTTTTTTTTATTTTGGTATTTATATATTAATTTAGTTTAGTTTTTTTGTAAAATATTGTTTAGTTGATTGTTTTTTTTAT
chr11	28670058	28670178	Hypo	1 -	AAAAACTTTTATATTTTTTAAACAAAAACATAACACCATCACTATTTTATATCAAAACACCTATTATTCATATCATATATAAATACAATATTTTAATATTTATAAAATTTTTTTCAAATA
chr11	28670058	28670178	Hypo	1 +	GAAGGTTTTTATGTTTTTTGAATAAGGATATAATATTGTTATTGTTTTATGTTAGGATGTTTATTATTTATATTATATATAGATATAATATTTTAGTGTTTATAAAGTTTTTTTTAAATA
chr11	28670058	28670178	Hypo	1 -	AAAAACTTTTATATTTTTTAAACAAAAACATAACACCATCACTATTTTATATCAAAACTCCTAATATTCATATCATATATAAATACAATATTTTAATATTTATAAAATTTTTTTCAAATA
chr11	28670058	28670178	Hypo	1 +	GAAGGTTTTTATGTTTTTTGAATAAGGATATAATATTGTTATTGTTTTATGTTAGGATGTTTATTATTTATATTATATATAGATATAATATTTTAGTGTTTATAAAGTTTTTTTTAAATA
chr11	28670058	28670178	Hyper	1 -	AAAAACTTTTATATTTTTTAAACAAAAACATAACACCGTCACTATTTTATATCAAAACTCCTAATATTCATATCATATATAAATACAATATTTTAATATTTATAAAATTTTTTTCAAATA
chr11	28670058	28670178	Hyper	1 +	GAAGGTTTTTATGTTTTTTGAATAAGGATATAATATTGTTATTGTTTTATGTTAGGAGCGTTTATTATTTATATTATATATAGATATAATATTTTAGTGTTTATAAAGTTTTTTTTAAATA
chr11	28670058	28670178	Hyper	1 -	AAAAACTTTTATATTTTTTAAACAAAAACATAACACCGTCACTATTTTATATCAAAACTCCTAATATTCATATCATATATAAATACAATATTTTAATATTTATAAAATTTTTTTCAAATA
chr11	28670058	28670178	Hyper	1 +	GAAGGTTTTTATGTTTTTTGAATAAGGATATAATATCGTTATTGTTTTATGTTAGGAGCGTTTATTATTTATATTATATATAGATATAATATTTTAGTGTTTATAAAGTTTTTTTTAAATA
chr11	108429141	108429261	Hyper	1 -	CTTTTACTAAAATTACAAAAAATATACCCCACTATTTAAAAATATAATCAACAAATCCCTATATAACTCAAATCTCATAATTTCTAACTCTATCTCCCTTAAACCTCTATATTTCAACCT
chr11	108429141	108429261	Hyper	1 +	TTTTTGTAAGGTTGTAAAGGGTATGTTTTATTATTTAAGAATGTGGTTAATAAGTTTTTGTGTAGTTTAGATTTTATGGTTTTAATTTTGTTTTTTTTGGGTTTTTGTATTTTAGTTT
chr11	108429141	108429261	Hyper	1 -	CTTTTACTAAAATTACAAAAAATATACCCCACTATTTAAAAATATAATCAACAAATCCCTATATAACTCAAATCTCATAATTTCTAACTCTATCTCCCTTAAACCTCTATATTTCAACCT
chr11	108429141	108429261	Hyper	1 +	TTTTGTAAGGTTGTAAAGGGTATGTTTTATTATTTAAGAATGTGGTTAATAAGTTTATGTTAGTTTAGATTTTATGGTTTTAATTTTGTTTTTTTTGGGTTTTTGTATTTTAGTTT
chr11	108429141	108429261	Hyper	1 -	CTTTTACTAAAATTACAAAAAATATACCCCACTATTTAAAAATATAATCAACAAATCCCTATATAACTCAAATCTCATAATTTCTAACTCTATCTCCCTTAAACCTCTATATTTCAACCT
chr11	108429141	108429261	Hyper	1 +	TTTTGTTAAGGTTGTAAAGGGTATGTTTTATTATTTAAGAATGTGGTTAATAAGTTTATGTTTAGTTTAGATTTTATGGTTTTAATTTTGTTTTTTTTGGGTTTTTGTATTTTAGTTT

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chr11	108429141	108429261	Hyper	1 -	CTTTTACTAAAATTACAAAAAATATACCCCACTATTTAAAAATATAATCAACAAATCCCTATATAACTCAAATCTCATAATTTCTAACTCTATCTCCCTTAAACCTCTATATTTCAACCT
chr11	108429141	108429261	Hyper	1 +	TTTTTGTAAGGTTGTAAAGGGTATGTTTTATTATTTAAGAATGTGGTTAATAAGTTTTTGTGTAGTTTAGATTTTATGGTTTTAATTTTGTTTTTTTTGGGTTTTTGTATTTTAGTTT
chr14	56694526	56694646	Hypo	1 -	ACCAAAAAATAAAAAAATACTCAAAAATTACAAAAAACTTTCAAAAAAACTCATAAACCAAATTAAAAAAATTCCACCAACAAATCTAAACAATATAAACACCAAAATAAAATTTAAAAT
chr14	56694526	56694646	Hypo	1 +	GTTAAAAGTAGAAGAAGTGTTAAAAATTATAGAGGGTTTTTAGAAGGGTTATAAGTGAGAGTGAAGGAGTTTATTAGTAAATTGGATAGTATAAGTATCGAAGTAATTTTAAAGT
chr14	56694526	56694646	Hyper	1 -	ACCAAAAAATAAAAAAATACTCAAAAATTACAAAAAACTTTCAAAAAACTCATAAACCAAATTAAAAAAATTCCACCAACAAATCTAAACAATATAAACACCAAAATAAAATTTAAAAT
chr14	56694526	56694646	Hyper	1 +	GTTAAAAGTAGAAGAAGTGTTAAAAATTATAGAGGGTTTTTAGAAGGGTTATAAGTGAGAGTGAAGGAGTTTATTAGTAAATTGGATAGTATAAGTATCGAAGTAATTTTAAAGT
chr14	56694526	56694646	Hyper	1 -	ACCAAAAAATAAAAAAATACTCAAAAATTACAAAAAACTTTCAAAAAACTCATAAACCAAATTAAAAAAATTCCACCAACAAATCTAAACAATATAAACACCGAAATAAAATTTAAAAT
chr14	56694526	56694646	Hyper	1 +	GTTAAAAGTAGAAGAGTGTTAAAAATTATAGAGGGTTTTTAGAAGGGTTTATAAGTGAAGGAGTTTATTAGTAAATTGGATAGTATAAGTATCGAAGTAAATTTTAAAGT
chr14	56694526	56694646	Hyper	1 -	ACCAAAAAATAAAAAAATACTCAAAAATTACAAAAAACTTTCAAAAAACTCATAAACCAAATTAAAAAAATTCCACCAACAAATCTAAACAATATAAACACCGAAATAAAATTTAAAAT
chr14	56694526	56694646	Hyper	1 +	GTTAAAAGTAGAAGAGTGTTAAAAATTATAGAGGGTTTTTAGAAGGGTTTATAAGTGAAGGAGTTTATTAGTAAATTGGATAGTATAAGTATCGAAGTAAATTTTAAAGT
chr5	106611383	106611503	Hypo	1 -	AATTAAAATCCTATTAAATATCCTAAACATAAATAAATCTATCTTCCCACCCTAAAAACCAAAACCATATCAAAAACAAACACAACTAATATCTAATACTAAAAACTCTCCTAAATACCTT
chr5	106611383	106611503	Hypo	1 +	AGTTAAAATTTATTGGTATTTTGAATATAAGTGGGTTTGTTTTTTATTTTAAGAAATAAGGTTATGTTAGGAGTAGATATAATTGATAATTTAGTGTTAAAAGTTTTTTTAAGTATTTT
chr5	106611383	106611503	Hypo	1 -	AATTAAAATCCTATTAAATATCCTAAACATAAATAAATCTATCTTCCCACCCTAAAAACCAAAACCATATCAAAAACAAACACAACTAATATCTAATACTAAAAACTCTCCTAAATACCTT
chr5	106611383	106611503	Hypo	1 +	AGTTAAAATTTATTGGTATTTTGAATATAAGTGGGTTTGTTTTTTATTTTAAGAAATAAGGTTATGTTAGGAGTAGATATAATTGATAATTTAGTGTTAAAAGTTTTTTTAAGTATTTT
chr5	106611383	106611503	Hyper	1 -	AATTAAAATCCTATTAAATATCCTAAACATAAATAAATCTATCTTCCCACCCTAAAAACCAAAACCATATCAAAAACAAACACAACTAATATCTAATACTAAAAACTCTCCTAAATACCTT
chr5	106611383	106611503	Hyper	1 +	AGTTAAAATTTATTGGTATTTTGAATATAAGTGGGTTTGTTTTTTATTTTAAGAAATAAGGTTATGTTAGGAGTAGATATAATTGATATTTAGTGTTAAAAGTTTTTTTAAGTATTTT
chr13	109403559	109403679	Hypo	1 -	AACAAAAATTTTAAAAAAACAACTAAATCTAAATCTTACATAAAATTTACAAAAAAAACCTACATCAACTTATAATACTTAAAACTTAAAAAATAATTTTTTTTTAAAAAATACATCAA
chr13	109403559	109403679	Hypo	1 +	AATAGGGATTTTTGGAGAAATGATTGAATTTAGGTTTTGTATGAAATTTATAAGAAAAGTTTGTATTAGTTTGTAGTGTTTGAAATTTGGGAGGTGATTTTTTTTTAAGGAGTATATTAA
chr13	109403559	109403679	Hypo	1 -	AACAAAAATTTTAAAAAACAACTAAATCTAAATCTTACATAAAATTTACAAAATAAACCTACACAACACTTATAATACTTAAACTTAAAAATAATTTTTTTTTAAAAAATACATCAA
chr13	109403559	109403679	Hypo	1 +	AATAGGGATTTTTGGAGAAATGATTGAATTTAGGTTTTGTATGAAATTTATAAGAAAAGTTTGTAATAGTTTGTAGTGTTTGAAATTTGGGAGGTGATTTTTTTTTAAGGAGTATATTAA
chr13	109403559	109403679	Hyper	1 -	AACAAAAATTTTAAAAAACAACTAAATCTAAATCTTACATAAAATTTACAAAATAAACCTACACAACACTTATAATACTTAAACTTAAAAATAATTTTTTTTTAAAAAATACATCAA
chr13	109403559	109403679	Hyper	1 +	AATAGGGATTTTTGGAGAAACGATTGAATTTAGGTTTTGTATGAAATTTATAAGAAAAGTTTGTAATAGTTTGTAGTGTTTGAAATTTGGGAGGTGATTTTTTTTTAAGGAGTATATTAA
chr13	109403559	109403679	Hyper	1 -	AACAAAAATTTTAAAAAACGACTAAATCTAAATCTTACATAAAATTTACAAAATAAACCTACACAACACTTATAATACTTAAACTTAAAAATAATTTTTTTTTAAAAAATACATCAA
chr13	109403559	109403679	Hyper	1 +	AATAGGGATTTTTGGAGAAACGATTGAATTTAGGTTTTGTATGAAATTTATAAGAAAAGTTTGTAATAGTTTGTAGTGTTTGAAATTTGGGAGGTGATTTTTTTTTAAGGAGTATATTAA
chr10	129764378	129764498	Hypo	1 -	AAAAAAACAAACATATTTATCCTCATTTCATCCATAAAAAATAAAAACTCAAAAAATCCTATACTACATCTAAAATCAATATAATTTTCTACCTCTAAAACCCCCTACCCCTAAAACC
chr10	129764378	129764498	Hypo	1 +	GAGAGGATAGGTATGTTTATTTTATTTTATTTATGAGGAAGTGGAAGTTTAAAGAGGTTTATGTTGTATTTGGGGTTAGTGTGGTTTTTTGTTTTTGGGATTTTTATTTTTGAGGTT
chr10	129764378	129764498	Hyper	1 -	AAAAAAACAAACATATTTATCCTCATTTCATCCATAAAAAATAAAAACTCAAAAAATCCTATACTACATCTAAAATCAATATAATTTTCTACCTCTAAAACCCCCTACCCCTAAAACC
chr10	129764378	129764498	Hyper	1 +	GAGAGGATAGGTATGTTTATTTTATTTTATTTATGAGGAAGTGGAAGTTTAAAGAGGTTTATGTTGTATTTGGGGTTAGTGTGGTTTTTTGTTTTTGGGATTTTTATTTTTGAGGTT
chr10	129764378	129764498	Hyper	1 -	AAAAAAACAAACATATTTATCCTCATTTCATCCATAAAAAATAAAAACTCAAAAAATCCTATACTACATCTAAAATCAATATAATTTTCTACCTCTAAAACCCCCTACCCCTAAAACC
chr10	129764378	129764498	Hyper	1 +	GAGAGGATAGGTATGTTTATTTTATTTTATTTATGAGGAAGTGGAAGTTTAAAGAGGTTTATGTTGTATTTGGGGTTAGTGTGGTTTTTTGTTTTTGGGATTTTTATTTTTGAGGTT
chr8	41193904	41194024	Hypo	1 -	AACTTCCCTAATCTATTATCCTACCAACCTCTCATAACAAAATCCAACTTCCTAAATAAATTCAAACAACTCAATCACCTAACTCAAAACTCCATACTTCAAAAAACAAATAACTAATAC
chr8	41193904	41194024	Hypo	1 +	AATTTTTTTGATTTGTTATTTTGTTAGTTTTTTATGATAAAGTTTAGTTTTTTGAGTAAAGTTAATTTAGTTATTTAATTTAGAAATTTATATTTTAGGGAGTAAATGGTTGATGT
chr8	41193904	41194024	Hypo	1 -	AACTTCCCTAATCTATTATCCTACCAACCTCTCATAACAAAATCCAACTTCCTAAATAAAATCAAACAACTCAATCACCTAACTCAAAACTCCATACTTCAAAAAACAAATAACTAATAC
chr8	41193904	41194024	Hypo	1 +	AATTTTTTGATTTGTTATTTTGTTAGTTTTTTATGATAAAGTTTAGTTTTTTGAGTAAAGTTAATTTAGTTATTTAATTTAGAAATTTATATTTTAGGGAGTAAATGGTTGATGT
chr8	41193904	41194024	Hypo	1 -	AACTTCCCTAATCTATTATCCTACCAACCTCTCATAACAAAATCCAACTTCCTAAATAAATTCGAACAACTCAATCACCTAACTCAAAACTCCATACTTCAAAAAACAAATAACTAATAC
chr8	41193904	41194024	Hypo	1 +	AATTTTTTGATTTGTTATTTTGTTAGTTTTTTATGATAAAGTTTAGTTTTTTGAGTAAAGGCGAATAATTTAGTTATTTAATTTAGAAATTTATATTTTAGGGAGTAAATGGTTGATGT
chr6	138820663	138820783	Hypo	1 -	CTAAAAACAACCAATAACATCATACACTAAAAAAAAAAAAAAAACCAATCACAATTCTTATTACATAACAACCACATCAAACTTTCTACCTCAATACCCATTCATTCAATTTTCTCTCCA
chr6	138820663	138820783	Hypo	1 +	TTGAGAGTAGTTAGTGATATTGTGTGTTGAAAGAAAGAGAAAGTTAATTATGGTTTTTATTGTATGATAGTTATATTAGGTTTTTTGTTTTAGTGTTTATTTATTTAGTTTTTTTTTTA
chr6	138820663	138820783	Hypo	1 -	CTAAAAACAACCAATAACATCGTACGCTAAAAAAAAAAAAAAAACCAATCACGATTCTTATTACATAACAACCACATCAAACTTTCTACCTCAATACCCATTCATTCAATTTTCTCTCCA
chr6	138820663	138820783	Hyper	1 +	TTGAGAGTAGTTAGTGATATCGTGCGTTGAAAGAAAGAGAAAGTTAATTACGGTTTTTATTTGTATGATAGTTATATTAGGTTTTTTGTTTTAGTGTTTATTTATTTAGTTTTTTTTTTA
chr6	138820663	138820783	Hyper	1 -	CTAAAAACAACCAATAACATCGTACGCTAAAAAAAAAAAAAAAACCAATCACGATTCTTATTACATAACAACCACATCAAACTTTCTACCTCAATACCCATTCATTCAATTTTCTCTCCA
chr6	138820663	138820783	Hyper	1 +	TTGAGAGTAGTTAGTGATATCGTGCGTTGAAAGAAAGAGAAAGTTAATTACGGTTTTTATTTGTATGATAGTTATATTAGGTTTTTTGTTTTAGTGTTTATTTATTTAGTTTTTTTTTTA
chr1	119078250	119078370	Hypo	1 -	ACAAAAAAACACCTTTACTAACTCCATCACATACTACTAATAATAAAAAACAAAAATCCTCTAATACCTTTCTTTAAACCTCATCCCTCTTCATAACTTCCCAAAAAAAACTATCAATAA
chr1	119078250	119078370	Hypo	1 +	ATAGAGGAATATTTTGTTGATTTTATTATATGTTGTTGATGGTGAAGGGTGAAGGTTTGGAATGTTTTTTTTGAGTTTATTTTTTTTTATGATTTTTTAGAGAGAATTGTTAGTGA
chr1	119078250	119078370	Hyper	1 -	ACAAAAAAACACCTTTACTAACTCCATCACATACTACTAATAATAAAAAACAAAAATCCTCTAATACCTTTCTTTAAACCTCATCCCTCTTCATAACTTCCCAAAAAAAACTATCAATAA

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chr1	119078250	119078370	Hypo	1 +	ATAGAGGAATATTTTTGTTGATTTATTATATGTTGTTGATGGTGAAGGGTGAAGGTTTTTTAATGTTTTTTTTGAGTTTTATTTTTTTTTATGATTTTTTAGAGAGAATTGTTAGTGA
chr1	119078250	119078370	Hyper	1 -	ACAAAAAAACACCTTTACTAACTCCATCACATACTACTAATAATAAAAAACGAAAATCCTAAAATACCTTTCTTTAAACCTCATCCCTCTTCATAACTTCCCCAAAAAAAACTATCAATAA
chr1	119078250	119078370	Hypo	1 +	ATAGAGGAATATTTTTGTTGATTTATTATATGTTGTTGATGGTGAAGGGCGAAGGTTTTGGAATGTTTTTTTTGAGTTTTATTTTTTTTTATGATTTTTTAGAGAGAATTGTTAGTGA
chr1	119078250	119078370	Hypo	1 -	ACAAAAAAACACCTTTACTAACTCCATCACATACTACTAATAATAAAAAACGAAAATCCTCTAATACCTTTCTTTAAACCTCATCCCTCTTCATAACTTCCCAAAAAAAACTATCAATAA
chr1	119078250	119078370	Hypo	1 +	ATAGAGGAATATTTTTGTTGATTTATTATATGTTGTTGATGGTGAAGGGCGAAGGTTTTTTAATGTTTTTTTTGAGTTTTATTTTTTTTTATGATTTTTTAGAGAGAATTGTTAGTGA
chr2	223005064	223005184	Hypo	1 -	TATAAACCTATATTTTATTTTATTAAAACATTAACCAAACTACCAAAAATCATAACATAAAAAAACTTAAAAACCTCTCATTCAATCACATTCACCTTCTACTTAAATTTTAATAAA
chr2	223005064	223005184	Hypo	1 +	TATAAGTTTGTGTTTTGTTTTATTAGAAATGTTAGTTAGATTATTAAAGGGTTTATGGTATGAAAAAGTTTAAGGATTTTTATTAGTTATATTTATTTTTGTTTGAATTTTGGTGAA
chr2	223005064	223005184	Hypo	1 -	TATAAACCTATATTTTATTTTATTAAAACATTAACCAAACTACCAAAAATCCATAACAATAAAAAACTTAAAAACCTCTCATTCAATCACATTCACCTTCTACTTAAATTTTAATAAA
chr2	223005064	223005184	Hypo	1 +	TATAAGTTTGTGTTTTGTTTTATTAGAAATGTTAGTTAGATTATTAAAGGGTTTATGGTAGTAAAAAGTTTAAGGATTTTTATTAGTTATATTTATTTTTGTTTGAATTTTGGTGAA
chr2	223005064	223005184	Hypo	1 -	TATAAACCTATATTTTATTTTATTAAAACGTTAACCAAACTACCAAAAATCCATAACATAAAAAAACTTAAAAACCTCTCATTCAATCACATTCACCTTCTACTTAAATTTTAATAAA
chr2	223005064	223005184	Hypo	1 +	TATAAGTTTGTGTTTTGTTTTATTAGAAATGTTAGTTAGATTATTAAAGGGTTTATGGTAGTAAAAAGTTTAAGGATTTTTATTAGTTATATTTATTTTTGTTTGAATTTTGGTGAA
chr2	223005064	223005184	Hypo	1 -	TATAAACCTATATTTTATTTTATTAAAACGTTAACCAAACTACCAAAAATCCATAACATAAAAAACTTAAAAACCTCTCATTCAATCACATTCACCTTCTACTTAAATTTTAATAAA
chr2	223005064	223005184	Hypo	1 +	TATAAGTTTGTGTTTTGTTTTATTAGAAATGTTAGTTAGATTATTAAAGGGTTTATGGTAGTAAAAAGTTTAAGGATTTTTATTAGTTATATTTATTTTTGTTTGAATTTTGGTGAA
chr3	183542665	183542785	Hypo	1 -	CCCAAAAAAACAACTACAAAACAACAATACACTCCCAACACAAAAATACTCAAACACTAAATCCAAACATAAAACACAAAAACACCACCTACAATACCCACAAACCAAACAAAAATAA
chr3	183542665	183542785	Hypo	1 +	TTTAGGAGGGTGGTTGTGAGGGTAGTGGTGTGTTTTTGGTATGGGGGTGTTGAGTATTGAGTTTGGGTATGGAGTAGTGAAGGTGTTGTTTGTAGTGTTTATGGATTAAATGGGGGTGA
chr3	183542665	183542785	Hypo	1 -	CCCAAAAAAACAACTACAAAACAACAATACACTCCCAACACAAAAATACTCAAACACTATTTCCAAACATAAAACACAAAAACACCACCTACAATACCCACAAACCAAACAAAAATAA
chr3	183542665	183542785	Hypo	1 +	TTTAGGAGGGTGGTTGTGAGGGTAGTGGTGTGTTTTTGGTATGGGGGTGTTGAGTATTGAGTTTGGGTATGGAGTAGTGAAGGTGTTGTTTGTAGTGTTTATGGATTAAATGGGGGTGA
chr3	183542665	183542785	Hypo	1 -	CCCAAAAAAACGACTACGAAAACAACGATACGCTCCCGACACGAAAATACTCGAACACTATTTCCGAACATAAAACAACGAAAACGCCGCCTACAATACCCACGAACCAAACGAAAATAA
chr3	183542665	183542785	Hypo	1 +	TTTAGGAGGGCGGTTGCGAGGGTAGCGGTGCGTTTTCGGTACGGGGGTGTTCGAGTATTGAGTTCGGGTATGGAGTAGCGAAGGCGTCGTTTGTAGTGTTTACGGATTAAACGGGGGTGA
chr3	183542665	183542785	Hypo	1 -	CCCAAAAAAACGACTACGAAAACAACGATACGCTCCCGACACGAAAATACTCGAACACTATTTCCGAACATAAAACAACGAAAACGCCGCCTACAATACCCACGAACCAAACGAAAATAA
chr3	183542665	183542785	Hypo	1 +	TTTAGGAGGGCGGTTGCGAGGGTAGCGGTGCGTTTTCGGTACGGGGGTGTTCGAGTATTGTTTCGGGTATGGAGTAGCGAAGGCGTCGTTTGTAGTGTTTACGGATTAAACGGGGGTGA
chr15	79481025	79481145	Hypo	1 -	TAATTTAATAAAAAAAAAACTCAATTAAATATTAAAACTAATACTCACAACCTAAATAATTTACAAAACATAACTAACTAATAAATACTAAAACTAAAATCCAATCCTAAACAAATTCAA
chr15	79481025	79481145	Hypo	1 +	TGGTTTAATGAGGGAGAGGTTTAGTTGAGTGTTGGAATTAATATTTATAGTTTAAGTAATTTGTGAAATATAATTAGTTAGTAAGTGTTGGAGTTGGGATTTGATTTTGGGTAGATTTAG
chr15	79481025	79481145	Hypo	1 -	TAATTTAATAAAAAAAAAACTCAATTAAATATTAAAACTAATACTCACAACCTAAATCATTTACCAAACATAACTAACTAATAAATACTAAAACTAAAATCCAATCCTAAACAAATTCAA
chr15	79481025	79481145	Hypo	1 +	TGGTTTAATGAGGGAGAGGTTTAGTTGAGTGTTGGAATTAATATTTATAGTTTAAGTAATTTGTGAAATATAATTAGTTAGTAAGTGTTGGAGTTGGGATTTGATTTTGGGTAGATTTAG
chr15	79481025	79481145	Hypo	1 -	TAATTTAATAAAAAAAAAACTCAATTAAATATTAAAACTAATACTCACAACCTAAATAATTTACGAAACATAACTAACTAATAAATACTAAAACTAAAATCCGATCCTAAACAAATTCAA
chr15	79481025	79481145	Hypo	1 +	TGGTTTAATGAGGGAGAGGTTTAGTTGAGTGTTGGAATTAATATTTATAGTTTAAGTAATTTGCGAAATATAATTAGTTAGTAAGTGTTGGAGTTGGGATTCGATTTTGGGTAGATTTAG
chr15	79481025	79481145	Hypo	1 -	TAATTTAATAAAAAAAAAACTCAATTAAATATTAAAACTAATACTCACAACCTAAATAATTTACGAAACATAACTAACTAATAAATACTAAAACTAAAATCCGATCCTAAACAAATTCAA
chr15	79481025	79481145	Hypo	1 +	TGGTTTAATGAGGGAGAGGTTTAGTTGAGTGTTGGAATTAATATTTATAGTTTAAGTAATTTGCGAAATATAATTAGTTAGTAAGTGTTGGAGTTGGGATTCGATTTTGGGTAGATTTAG
chr3	21866679	21866799	Hypo	1 -	TTATTTTTTCACCAAACAATATTCTAAAATAACAAACACCAAAAAAACTTAAAATCCAAATAAAACCCCCTTAACTCATAAAACTTACATCTAACTCATATATCACTTATTTTCTTACC
chr3	21866679	21866799	Hypo	1 +	TTATTTTTTATTAAATAGTGTTTTAAAATGATAAGTATTAAAGGGATTTGAGATTTAGGTGAAATTTTTTTGGTTTTATGAAGTTTGTATTTAATTTATGTATTATTTGTTTTTTATT
chr3	21866679	21866799	Hypo	1 -	TTATTTTTTCACCAAACAATATTCTAAAATAACAAACACCAAAAAAACTTAAAATCAAAATAAACCCCCCTTAACTCTATAAAACTTACATCTAACTCATATATCACTTATTTTCTTACC
chr3	21866679	21866799	Hypo	1 +	TTATTTTTTATTAAATAGTGTTTTAAAATGATAAGTATTAAAGGGATTTGAGATTTAGGTGAAATTTTTTTGGTTTTATGAAGTTTGTATTTAATTTATGTATTATTTGTTTTTTATT
chr3	21866679	21866799	Hypo	1 -	TTATTTTTTCACCAAACAATATTCTAAAATAACAAACACCAAAAAAACTTAAAATCAAAATAAACCCCCTTAACTCTATAAAACTTACATCTAACTCATATATCACTTATTTTCTTACC
chr3	21866679	21866799	Hypo	1 +	TTATTTTTTATTAAATAGTGTTTTAAAATGATAAGTATTAAAGGGATTTGAGATTTAGGTGAAATTTTTTTGGTTTTATGAAGTTTGTATTTAATTTATGTATTATTTGTTTTTTATT
chr3	21866679	21866799	Hypo	1 -	TTATTTTTTCACCAAACAATATTCTAAAATAACAAACACCAAAAAAACTTAAAATCAAAATAAACCCCCTTAACTCTATAAAACTTACATCTAACTCATATATCACTTATTTTCTTACC
chr3	21866679	21866799	Hypo	1 +	TTATTTTTTATTAAATAGTGTTTTAAAATGATAAGTATTAAAGGGATTTGAGATTTAGGTGAAATTTTTTTGGTTTTATGAAGTTTGTATTTAATTTATGTATTATTTGTTTTTTATT
chr3	172122181	172122301	Hypo	1 -	ATACTCAATTTAAAACTCCTCAAAACATCTCCTCCCCAAAACATTATCACTATTTATCATACCTCACAACTACCTAAAAAAAATACCATTTATAAAATATTATTTAAACTAACTAACAAC
chr3	172122181	172122301	Hypo	1 +	ATATTTAGTTTGGAGTTTTTTAAAATGTTTTTTTTTTAGAGTATTGTTATTGTTTATTTTATTGTATAGTTGTTTGGAAAAGGTGTTATTTGTAGGGTGTTATTTAAATTGATTGGTAGT
chr3	172122181	172122301	Hypo	1 -	ATACTCAATTTAAAACTCCTCAAAACATCTCCTCCCCAAAACATTATCACTATTTATCCTACCACACAACTACCTAAAAAAAATACCATTTATAAAATATTATTTAAACTAACTAACAAC
chr3	172122181	172122301	Hypo	1 +	ATATTTAGTTTGGAGTTTTTTAAAATGTTTTTTTTTTAGAGTATTGTTATTGTTTATTTTATTGTATAGTTGTTTGGAAAAGGTGTTATTTGTAGGGTGTTATTTAAATTGATTGGTAGT
chr3	172122181	172122301	Hypo	1 -	ATACTCAATTTAAAACTCCTCAAAACGTCTCCTCCCCAAAACATTATCACTATTTATCCTACCGCACAACTACCTAAAAAAAATACCATTTATAAAATATTATTTAAACTAACTAACAAC
chr3	172122181	172122301	Hypo	1 +	ATATTTAGTTTGGAGTTTTTTAAAACGTTTTTTTTTTAGAGTATTGTTATTGTTTATTTTATTGTATAGTTGTTTGGAAAAGGTGTTATTTGTAGGGTGTTATTTAAATTGATTGGTAGT
chr3	172122181	172122301	Hypo	1 -	ATACTCAATTTAAAACTCCTCAAAACGTCTCCTCCCCAAAACATTATCACTATTTATCCTACCGCACAACTACCTAAAAAAAATACCATTTATAAAATATTATTTAAACTAACTAACAAC
chr3	172122181	172122301	Hypo	1 +	ATATTTAGTTTGGAGTTTTTTAAAACGTTTTTTTTTTAGAGTATTGTTATTGTTTATTTTATTGTATAGTTGTTTGGAAAAGGTGTTATTTGTAGGGTGTTATTTAAATTGATTGGTAGT
chr16	79781531	79781651	Hypo	1 -	TAATAATATTTACTCCTAACTTAAAAATAAAATTTTATATTTACTTTTAAAATACTATAAAAATAAACATCACCCCTTTTACCACATTATTCTATATCCTTCCCCCTCTTCAATATCAAT
chr16	79781531	79781651	Hypo	1 +	TGATAGTATTTATTTTTTGATTTGGGGATAGAGTTTTGTGTTTGTTTTTAAAGTGTTGTGGAGTAGATGTTATTTTTTTTGTTATGTTGTTTTGTATTTTTTTTTTTTTTAGTGTTAGT
chr16	79781531	79781651	Hypo	1 -	TAATAATATTTACTCCTAACTTAAAAATAAAATTTTATATTTACTTTTAAAATACTAAAAAAAAACATCACCCCTTTTACCACATTATTCTATATCCTTCCCCCTCTTCAATATCAAT
chr16	79781531	79781651	Hypo	1 +	TGATAGTATTTATTTTTTGATTTGGGGATAGAGTTTTGTGTTTGTTTTTAAAGTGTTGGGGAGAAGATGTTATTTTTTTTGTTATGTTGTTTTGTATTTTTTTTTTTTTTAGTGTTAGT
chr16	79781531	79781651	Hypo	1 -	TAATAATATTTACTCCTAACTTAAAAATAAAATTTTATATTTACTTTTAAAATACTATAAAAATAAACATCACCCCTTTTACCACGTTATTCTATATCCTTCCCCCTCTTCAATATCAAT
chr16	79781531	79781651	Hypo	1 +	TGATAGTATTTATTTTTTGATTTGGGGATAGAGTTTTGTGTTTGTTTTTAAAGTGTTGGGGAGAAGATGTTATTTTTTTTGTTATGTTGTTTTGTATTTTTTTTTTTTTTAGTGTTAGT
chr16	79781531	79781651	Hypo	1 -	TAATAATATTTACTCCTAACTTAAAAATAAAATTTTATATTTACTTTTAAAATACTATAAAAATAAACATCACCCCTTTTACCACGTTATTCTATATCCTTCCCCCTCTTCAATATCAAT
chr16	79781531	79781651	Hypo	1 +	TGATAGTATTTATTTTTTGATTTGGGGATAGAGTTTTGTGTTTGTTTTTAAAGTGTTGGGGAGAAGACGTTATTTTTTTTGTTACGTTGTTTTGTATTTTTTTTTTTTTTAGTGTTAGT

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chr18	50927044	50927164	Hypo	1 -	TTTTATTCACCAATATTCACATAACTTAAAAAAAAATAAAAACTTACACAACACCTAAATTAAATTAATTATTAAATTTTTTTAAATTAAATAACTAATTCTTCATTATATTATATTAAT
chr18	50927044	50927164	Hypo	1 +	TTTTATTTATTAATATTTATATGATTTGAGGAAAAATAAGAGTTTGTATAGTATTTGAATTAGATTGGTTGTTAGATTTTTTTAAATTAAATAATTAATTTTTTATTGTATTATATTGAT
chr18	50927044	50927164	Hypo	1 -	TTTTATTCACCAATATTCACATAACTTAAAAAAAAATAAAAACTTACACAACACCTAAATTAATTATTAAATTTTTTTAAATTAAATAACTAATTCTTCATTATATTATATTAAT
chr18	50927044	50927164	Hypo	1 +	TTTTATTTATTAATATTTATATGATTTGAGGAAAAATAAGAGTTTGTATAGTATTTGAAGTATATTGGTTGTTAGATTTTTTTAAATTAAATAATTAATTTTTTATTGTATTATATTGAT
chr18	50927044	50927164	Hyper	1 -	TTTTATTCACCAATATTCACATAACTTAAAAAAAAATAAAAACTTACACAACACCTAAATTAATTATTAAATTTTTTTAAATTAAATAACTAATTCTTCATTATATTATATTAAT
chr18	50927044	50927164	Hyper	1 +	TTTTATTTATTAATATTTATATGATTTGAGGAAAAATAAGAGTTTGTATAGTATTTGAATTAGATTGGTTGTTAGATTTTTTTAAATTAAATAATTAATTTTTTATTGTATTATATTGAT
chr14	51839919	51840039	Hyper	1 -	ATAATTTACCAAAAAAAAAATAATCTAATTATCACATCCACCCTAAATAACATACTACCAAACCTAAAATACATTAATTATTAAAATTTTTTCTAATACACATCTTCTAAACA
chr14	51839919	51840039	Hyper	1 +	ATAATTTGTTAAGAGGAGGTAATTTAATTATATGTTTATTTTGAATAGTATATTGTTAAGTTTAGGAATTGTGTTGGTGAATATTTAAAAATATTTTTTTAATGTATATTTTTTAAATA
chr14	51839919	51840039	Hyper	1 -	ATAATTTACCAAAAAAAAAATAATCTAATTATCACATCCACCCTAAATAACATACTACCATACATAAAAACTATACTAATAAACATTTAAAAATATTTTCTAATACACATCTTCTAAACA
chr14	51839919	51840039	Hyper	1 +	ATAATTTGTTAAGAGGAGGTAATTTAATTATATGTTTATTTTGAATAGTATATTGTTATGTGTAGGAATTGTGTTGGTGAATATTTAAAAATATTTTTTTAATGTATATTTTTTAAATA
chr14	51839919	51840039	Hyper	1 -	ATAATTTACCAAAAAAAAAATAATCTAATTATCACGTCCACCCTAAATAACATACTACCAAACCTAAAAACTATACTAATAAACATTTAAAAATATTTTCTAATACACATCTTCTAAACA
chr14	51839919	51840039	Hyper	1 +	ATAATTTGTTAAGAGGAGGTAATTTAATTATACGTTTATTTTGAATAGTATATTGTTAAGTTTAGGAATTGTGTTGGTGAATATTTAAAAATATTTTTTTAATGTATATTTTTTAAATA
chr14	51839919	51840039	Hyper	1 -	ATAATTTACCAAAAAAAAAATAATCTAATTATCACGTCCACCCTAAATAACATACTACCATACGTAAAAACTATACTAATAAACATTTAAAAATATTTTCTAATACACATCTTCTAAACA
chr14	51839919	51840039	Hyper	1 +	ATAATTTGTTAAGAGGAGGTAATTTAATTATACGTTTATTTTGAATAGTATATTGTTAAGTTTAGGAATTGTGTTGGTGAATATTTAAAAATATTTTTTTAATGTATATTTTTTAAATA
chr14	72729972	72730092	Hyper	1 -	TATATATATAAAAAATTCTATCTAAAAATCATCAAAACCTTTTTAAAAATCAACTAATATCATATTAACCTTTACTAATATTTCTCTACAAACTCTCCAAACAACCCAACCTTATCACCA
chr14	72729972	72730092	Hyper	1 +	TATATGTGTAAGAGATTTTATTTAAAGGTTATTAGAATTTTTTTGAAAGTTAATTTATGTTATGTGGGTTTTTGTTGGTGTTTTTTTGTAGATTTTTGGATGATTTAGTTTTGTTATTA
chr14	72729972	72730092	Hyper	1 -	TATATATATAAAAAATTCTATCTAAAATCATCAAAACCTTTTTAAAATCAACTATATCATATTAACCTTTACTAATATTTCTCTACAAACTCTCCAAACAACCCAACCTTATCACCA
chr14	72729972	72730092	Hyper	1 +	TATATGTGTAAGAGATTTTATTTAAAGGTTATTAGAATTTTTTTGAAAGTTAATTTATGTTATGTGGGTTTTTGTTGGTGTTTTTTTGTAGATTTTTGGATGATTTAGTTTTGTTATTA
chr14	72729972	72730092	Hyper	1 -	TATATATATAAAAAATTCTATCTAAAATCATCAAAACCTTTTTAAAATCAACTATATCATATTAACCTTTACTAATATTTCTCTACAAACTCTCCGAACGACCCAACCTTATCACCA
chr14	72729972	72730092	Hyper	1 +	TATATGTGTAAGAGATTTTATTTAAAGGTTATTAGAATTTTTTTGAAAGTTAATTTATGTTATGTGGGTTTTTGTTGGTGTTTTTTTGTAGATTTTTGGACGATTTAGTTTTGTTATTA
chr14	72729972	72730092	Hyper	1 -	TATATATATAAAAAATTCTATCTAAAATCATCAAAACCTTTTTAAAATCAACTATATCATATTAACCTTTACTAATATTTCTCTACAAACTCTCCGAACGACCCAACCTTATCACCA
chr14	72729972	72730092	Hyper	1 +	TATATGTGTAAGAGATTTTATTTAAAGGTTATTAGAATTTTTTTGAAAGTTAATTTATGTTATGTGGGTTTTTGTTGGTGTTTTTTTGTAGATTTTTGGACGATTTAGTTTTGTTATTA
chr16	28073374	28073494	Hyper	1 -	TAAAAAACTAAACATACAAAAAAAAAATTTAACCTTAAAAAAAAAAATCAATTCACTCAAAAAAATATCCATACCTAAACACCCACTCAAAAATACCACATCTTTCAAACCAACTCTACC
chr16	28073374	28073494	Hyper	1 +	TGAGGAGTTAGGTATGTAGGGAGGAGTTTTAATTTGGAGAAAGAGGTTAATTTATTTAGGAGGGTGTTTATGTTTGGATATTTGTTTAGAGATATTATGTTTTTTGGGTTAGTTTTATT
chr16	28073374	28073494	Hypo	1 -	TAAAAACTAAACATACAAAAAAAAATTTAACCTTAAAAAAAAAATCAATTCACTAAAAAAACTATCCATACCTAAACACCCACTCAAAAATACCACATCTTTCAAACCAACTCTACC
chr16	28073374	28073494	Hypo	1 +	TGAGGAGTTAGGTATGTAGGGAGGAGTTTAATTTGGAGAAAGAGGTTAATTTATTTAGGAGGGTGTTTATGTTTGGATATTTCGTTTAGAGATATTATGTTTTTTGGGTTAGTTTTATT
chr16	28073374	28073494	Hypo	1 -	TAAAAACTAAACATACAAAAAAAAATTTAACCTTAAAAAAAAAATCAATTCACTAAAAAAACTATCCATACCTAAACACCCGCTCAAAAATACCACATCTTTCGAACCAACTCTACC
chr16	28073374	28073494	Hypo	1 +	TGAGGAGTTAGGTATGTAGGGAGGAGTTTAATTTGGAGAAAGAGGTTAATTTATTTAGGAGGGTGTTTATGTTTGGATATTCGTTTAGAGATATTATGTTTTTTGGGTTAGTTTTATT
chr16	28073374	28073494	Hypo	1 -	TAAAAACTAAACATACAAAAAAAAATTTAACCTTAAAAAAAAAATCAATTCACTAAAAAAACTATCCATACCTAAACACCCACTCAAAAATACCACATCTTTCAAACCAACTCTACC
chr16	28073374	28073494	Hypo	1 +	TGAGGAGTTAGGTATGTAGGGAGGAGTTTAATTTGGAGAAAGAGGTTAATTTATTTAGGAGGGTGTTTATGTTTGGATATTCGTTTAGAGATATTACGTTTTTCGGGTTAGTTTTATT
chr1	152442350	152442470	Hypo	1 -	CAAAAAAAATATTTAAAATTAAAAAAAAAAAATAACAAATATATTAAATATTTCCACTACAAAATAAAAAAAAATCATTAACTTTAAACTAAAAAAAACCTTAACCCAACATTCCTAAA
chr1	152442350	152442470	Hypo	1 +	TAAAAGGAATATTTAAAATTAAAAAAAGGAATGATAGATGTGTTAGATATTTTTTATTGTAGAATTGGGAAAAGATTATTGATTTTAGGTTGAGGAAAGTTTTGATTTAGTATTTTAAA
chr1	152442350	152442470	Hyper	1 -	CAAAAAAAATATTTAAAATTAAAAAAAAAAAATAACAAATATATTAAATATTTCCCCTACAAACTAAAAAAAAATCATTAACTTTAAACTAAAAAAAACCTTAACCCAACATTCCTAAA
chr1	152442350	152442470	Hyper	1 +	TAAAAGGAATATTTAAAATTAAAAAAAGGAATGATAGATGTGTTAGATATTTTTTATTGTAGATTGGGAAAAGATTATTGATTTTAGGTTGAGGAAAGTTTTGATTTAGTATTTTAAA
chr7	14791515	14791635	Hypo	1 -	ATAAAATCACATTAATCATTAAAATATAACCACAACCACTATCTCTAAACATTAATAAAACACCTTTTATATACAAAACACAAAACTATTTATTATACATACATTTTAAAACCTAACCCT
chr7	14791515	14791635	Hypo	1 +	ATGAAATTATATTGGTTATTAAAGTATGATTATAGTTATTGTTTTTAAATATTAGTGGAATATTTTTATGTGTAAGATATAGAGTTATTTATTATATATATATTTTAGAATTTAATTTT
chr7	14791515	14791635	Hypo	1 -	ATAAAATCACATTAATCATTAAAATATAACCACAACCACTATCTCTAAACATTAATAAAACACCTTTTATATACAAAACACAAAACTATTTATTATACATACATTTTAAAACCTAACCCT
chr7	14791515	14791635	Hypo	1 +	ATGAAATTATATTGGTTATTAAAGTATGATTATAGTTATTGTTTTTAAATATTAGTGGAATATTTTTATGTGTAAGATATAGAGTTATTTATTATATATATATTTTAGAATTTAATTTT
chr7	14791515	14791635	Hypo	1 -	ATAAAATCACATTAATCATTAAAATATAACCACAACCACTATCTCTAAACATTAATCGAACACCTATTATATACAAAACACAAAACTATTTATTATACATACATTTTAAAACCTAACCCT
chr7	14791515	14791635	Hyper	1 +	ATGAAATTATATTGGTTATTAAAGTATGATTATAGTTATTGTTTTTAAATATTAGTCGAATATTTGTTATGTGTAAGATATAGAGTTATTTATTATATATATATTTTAGAATTTAATTTT
chr7	156880858	156880978	Hypo	1 -	AACATCTAACTTAAATATATTTCAAAACTAACATAAATAACTTCTAATCCTAAAATAACATACATTATCCCATTAATTTCATTCCATTCACTAAATCCCCAAAAAAACTA
chr7	156880858	156880978	Hyper	1 +	GATGTTTGATTTGAATGTGTTTTAAAGTTAATGTAAGTAATTTTTAGTTTTGGAGTGATGTGTATTGTTTTATGAATTTTATTTGATTTTATTTTATTTAATTGAATTTTTAGAAGGGTTG
chr7	156880858	156880978	Hyper	1 -	AACATCTAACTTAAATATATTTCAAAACTAACATAAATAACTTCTAATCCTAAAATAACTTCCATTATCCCATAAATTCCACCTAATTTCATTCCATTCACTAAATCCCCAAAAAAACTA
chr7	156880858	156880978	Hyper	1 +	GATGTTTGATTTGAATGTGTTTTAAAGTTAATGTAAGTAATTTTTAGTTTTGGAGTGATTTTATTGTTTTATGAATTTTATTTGATTTTATTTTATTTAATTGAATTTTTAGAAGGGTTG
chr7	156880858	156880978	Hyper	1 -	AACGTCTAACTTAAATATATTTCAAAACTAACGTAAATAACTTCTAATCCTAAAATAACGTACATTATCCCATAAATTCCACCTAATTTCATTCCATTCACTAAATCCCCAAAAAAACTA

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chr7	156880858	156880978	Hyper	1	+	GACGTTTGATTTGAATGTGTTTTAAAGTTAACGTAAGTAATTTTTAGTTTTGGAGTGACGTGTATTGTTTTATGAATTTTATTTGATTTTATTTTATTTATTGAATTTTTAGAAGGGTTG
chr7	156880858	156880978	Hyper	1	-	AACGTCTAACTTAAATATATTTCAAAACTAACGTAAATAACTTCTAATCCTAAAATAACTTCCATTATCCCATAAATTCCACCTAATTTCATTCCATTCACTAAATCCCCAAAAAAACTA
chr7	156880858	156880978	Hyper	1	+	GACGTTTGATTTGAATGTGTTTTAAAGTTAACGTAAGTAATTTTTAGTTTTGGAGTGATTTTTATTGTTTTATGAATTTTATTTGATTTTATTTTATTTATTGAATTTTTAGAAGGGTTG
chr1	9402458	9402578	Hypo	1	-	CATAATAACAATCAAACCCCAACATCAACCATAAAAAAACACAAAAAATCCCAATAACTTATCAATTCACTAATAACAAAAAATAAAACCTTTACCAATTTAAAACTACCTCAAAATATT
chr1	9402458	9402578	Hypo	1	+	TATAGTGGTAGTTAGGTTTTAGTGTTAATTGTGGGAGAGTATGGAGGATTTTAGTGGTTTGTTAATTTGTTGATAGTAGAAGGTAGGGTTTTTGTTAGTTTGGAGTTGTTTTAGGGTGTT
chr1	9402458	9402578	Hypo	1	-	CATAATAACAATCAAACCCCAACATCAACCATAAAAAAACACAAAAAATCCCAATAACTAAACAATTCACTAATAACAAAAAATAAAACCTTTACCAATTTAAAACTACCTCAAAATATT
chr1	9402458	9402578	Hypo	1	+	TATAGTGGTAGTTAGGTTTTAGTGTTAATTGTGGGAGAGTATGGAGGATTTTAGTGGTTGGGTAATTTGTTGATAGTAGAAGGTAGGGTTTTTGTTAGTTTGGAGTTGTTTTAGGGTGTT
chr1	9402458	9402578	Hyper	1	-	CATAATAACAATCAAACCCCAACGTCAACCGTAAAAAAACACGAAAAATCCCAATAACTTATCAATTCGCTAATAACAAAAAATAAAACCTTTACCAATTTAAAACTACCTCAAAATATT
chr1	9402458	9402578	Hyper	1	+	TATAGTGGTAGTTAGGTTTTAGCGTTAATCGTGGGAGAGTACGGAGGATTTTAGTGGTTTGTTAATTCGTTGATAGTAGAAGGTAGGGTTTTTGTTAGTTTGGAGTTGTTTTAGGGTGTT
chr1	9402458	9402578	Hyper	1	-	CATAATAACAATCAAACCCCAACGTCAACCGTAAAAAAACACGAAAAATCCCAATAACTAAACAATTCGCTAATAACAAAAAATAAAACCTTTACCAATTTAAAACTACCTCAAAATATT
chr1	9402458	9402578	Hyper	1	+	TATAGTGGTAGTTAGGTTTTAGCGTTAATCGTGGGAGAGTACGGAGGATTTTAGTGGTTGGGTAATTCGTTGATAGTAGAAGGTAGGGTTTTTGTTAGTTTGGAGTTGTTTTAGGGTGTT
chr10	8073955	8074075	Hypo	1	-	AACAAAAAACCTATTCAACACCATAATAAAAAAAAAAAAAAATCATAAATAAATATATACCAACAATCTTAAATCTACTCATATACCTAAATATACACTAAAATCTACTAAAAAAAAAAA
chr10	8073955	8074075	Hypo	1	+	GGTAGGGGGTTTATTTAATATTATGATGAAGGAAGGAAAGGATTATGGATGAATATATATTAGTGATTTTGAATTTATTTATATGTTTAGGTGTATATTGAGATTTGTTGGAAGGAAAGA
chr10	8073955	8074075	Hypo	1	-	AACAAAAAACCTATTCAACACCATAATAAAAAAAAAAAAAAATCATAAATAAATAAATACCAACACTCTTAAATCTACTCATATACCTAAATATACACTAAAATCTACTAAAAAAAAAAA
chr10	8073955	8074075	Hypo	1	+	GGTAGGGGGTTTATTTAATATTATGATGAAGGAAGGAAAGGATTATGGATGAATAGATATTAGTGTTTTTGAATTTATTTATATGTTTAGGTGTATATTGAGATTTGTTGGAAGGAAAGA
chr10	8073955	8074075	Hyper	1	-	AACAAAAAACCTATTCAACACCATAATAAAAAAAAAAAAAAATCATAAATAAATATATACCAACGATCTTAAATCTACTCATATACCTAAATATACACTAAAATCTACTAAAAAAAAAAA
chr10	8073955	8074075	Hyper	1	+	GGTAGGGGGTTTATTTAATATTATGATGAAGGAAGGAAAGGATTATGGATGAATATATATTAGCGATTTTGAATTTATTTATATGTTTAGGTGTATATTGAGATTTGTTGGAAGGAAAGA
chr10	8073955	8074075	Hyper	1	-	AACAAAAAACCTATTCAACACCATAATAAAAAAAAAAAAAAATCATAAATAAATAAATACCAACGCTCTTAAATCTACTCATATACCTAAATATACACTAAAATCTACTAAAAAAAAAAA
chr10	8073955	8074075	Hyper	1	+	GGTAGGGGGTTTATTTAATATTATGATGAAGGAAGGAAAGGATTATGGATGAATAGATATTAGCGTTTTTGAATTTATTTATATGTTTAGGTGTATATTGAGATTTGTTGGAAGGAAAGA
chr5	1938315	1938435	Hypo	1	-	AAACCAACCCCAACTAACACAAAAACCTCCCAAAACTTCAACCTAAAATTTAACAAAACAACCTCTACTATAAAATCACAAACATCAACCACATACAAACTCTAAAAAAAATATTATTAA
chr5	1938315	1938435	Hypo	1	+	GAGTTAGTTTTAATTAGTATAGGGATTTTTTAAAATTTTAGTTTAGGATTTAGTAGAGTAATTTTTGTTGTGAGATTATAAGTATTGGTTATATGTGAGTTTTGGGAAGAATGTTATTAA
chr5	1938315	1938435	Hypo	1	-	AAACCAACCCCAACTAACACAAAAACCTCCCAAAACTTCAACCTAAAATTTAACAAACCAACCTATACTATAAAATCACAAACATCAACCACATACAAACTCTAAAAAAAATATTATTAA
chr5	1938315	1938435	Hypo	1	+	GAGTTAGTTTTAATTAGTATAGGGATTTTTTAAAATTTTAGTTTAGGATTTAGTAGATTAATTTGTGTTGTGAGATTATAAGTATTGGTTATATGTGAGTTTTGGGAAGAATGTTATTAA
chr5	1938315	1938435	Hyper	1	-	AAACCAACCCCAACTAACACAAAAACCTCCCAAAACTTCAACCTAAAATTTAACAAAACAACCTCTACTATAAAATCACAAACATCGACCACATACGAACTCTAAAAAAAATATTATTAA
chr5	1938315	1938435	Hyper	1	+	GAGTTAGTTTTAATTAGTATAGGGATTTTTTAAAATTTTAGTTTAGGATTTAGTAGAGTAATTTTTGTTGTGAGATTATAAGTATCGGTTATATGCGAGTTTTGGGAAGAATGTTATTAA
chr5	1938315	1938435	Hyper	1	-	AAACCAACCCCAACTAACACAAAAACCTCCCAAAACTTCAACCTAAAATTTAACAAACCAACCTATACTATAAAATCACAAACATCGACCACATACGAACTCTAAAAAAAATATTATTAA
chr5	1938315	1938435	Hyper	1	+	GAGTTAGTTTTAATTAGTATAGGGATTTTTTAAAATTTTAGTTTAGGATTTAGTAGATTAATTTGTGTTGTGAGATTATAAGTATCGGTTATATGCGAGTTTTGGGAAGAATGTTATTAA
chr4	136942378	136942498	Hypo	1	-	ATTATCATTTTTAATAATTATACTAAAATTATATTCCCTTATATAACTATATATATCTAAACATTTAAACAACAAACCAAATAACCTACTTAATTCTCAAAATAAATAACAATTCATAAA
chr4	136942378	136942498	Hypo	1	+	ATTATTATTTTTAATAGTTATATTGAAATTATATTTTTTTATGTGATTGTATGTATTTAAGTATTTAAATGGTAAATTAAATGATTTATTTGGTTTTTAGAATAGATGATAGTTTATAGA
chr4	136942378	136942498	Hypo	1	-	ATTATCATTTTTAATAATTATACTAAAATTATATTCCCTTATATAACTATATATATATAAACATTAAAACAACAAACCAAATAACCTACTTAATTCTCAAAATAAATAACAATTCATAAA
chr4	136942378	136942498	Hypo	1	+	ATTATTATTTTTAATAGTTATATTGAAATTATATTTTTTTATGTGATTGTATGTATGTAAGTATTGAAATGGTAAATTAAATGATTTATTTGGTTTTTAGAATAGATGATAGTTTATAGA
chr4	136942378	136942498	Hyper	1	-	ATTATCATTTTTAATAATTATACTAAAATTATATTCCCTTATATAACTATATATATCTAAACATTTAAACGACAAACCAAATAACCTACTTAATTCTCAAAATAAATAACAATTCATAAA
chr4	136942378	136942498	Hyper	1	+	ATTATTATTTTTAATAGTTATATTGAAATTATATTTTTTTATGTGATTGTATGTATTTAAGTATTTAAACGGTAAATTAAATGATTTATTTGGTTTTTAGAATAGATGATAGTTTATAGA
chr4	136942378	136942498	Hyper	1	-	ATTATCATTTTTAATAATTATACTAAAATTATATTCCCTTATATAACTATATATATATAAACATTAAAACGACAAACCAAATAACCTACTTAATTCTCAAAATAAATAACAATTCATAAA
chr4	136942378	136942498	Hyper	1	+	ATTATTATTTTTAATAGTTATATTGAAATTATATTTTTTTATGTGATTGTATGTATGTAAGTATTGAAACGGTAAATTAAATGATTTATTTGGTTTTTAGAATAGATGATAGTTTATAGA
chr18	60649067	60649187	Hypo	1	-	CTTCCTCAATTCTTAAACCCCCTCTAAACAAAATTCACCTATCCCCAAAAATAAAACACACCCCAACCTTATATATAAATCTCTTCCACCACAACTCACTTCCAAAATAATCAAAACTAA
chr18	60649067	60649187	Hypo	1	+	TTTTTTTAGTTTTTAAATTTTTTTTGGGTAGGGTTTATTTGTTTTTGGGGGTGGAGTATATTTTGGTTTTGTATGTGGATTTTTTTTATTGTAGTTTATTTTTAGAGTGGTTAGAATTGG
chr18	60649067	60649187	Hypo	1	-	CTTCCTCAATTCTTAAACCCCCTCTAAACAAAATTCACCTATCCCCAAAAATAAAACAAACCCAAACCTTATATATAAATCTCTTCCACCACAACTCACTTCCAAAATAATCAAAACTAA
chr18	60649067	60649187	Hypo	1	+	TTTTTTTAGTTTTTAAATTTTTTTTGGGTAGGGTTTATTTGTTTTTGGGGGTGGAGTAGATTTAGGTTTTGTATGTGGATTTTTTTTATTGTAGTTTATTTTTAGAGTGGTTAGAATTGG
chr18	60649067	60649187	Hyper	1	-	CTTCCTCAATTCTTAAACCCCCTCTAAACAAAATTCACCTATCCCCGAAAATAAAACACACCCCGACCTTATATATAAATCTCTTCCACCGCAACTCACTTCCAAAATAATCAAAACTAA
chr18	60649067	60649187	Hyper	1	+	TTTTTTTAGTTTTTAAATTTTTTTTGGGTAGGGTTTATTTGTTTTCGGGGGTGGAGTATATTTCGGTTTTGTATGTGGATTTTTTTTATCGTAGTTTATTTTTAGAGTGGTTAGAATTGG
chr18	60649067	60649187	Hyper	1	-	CTTCCTCAATTCTTAAACCCCCTCTAAACAAAATTCACCTATCCCCGAAAATAAAACAAACCCAAACCTTATATATAAATCTCTTCCACCGCAACTCACTTCCAAAATAATCAAAACTAA
chr18	60649067	60649187	Hyper	1	+	TTTTTTTAGTTTTTAAATTTTTTTTGGGTAGGGTTTATTTGTTTTCGGGGGTGGAGTAGATTTAGGTTTTGTATGTGGATTTTTTTTATCGTAGTTTATTTTTAGAGTGGTTAGAATTGG
chr8	13516773	13516893	Hypo	1	-	ATAACATCATTATCATAAAACACATTTATTAAAACTTATAATACAATAACTACTTTAAATCACTTAAAATAAATCAACTAACCTCACAAAACACCAAACTAATACAATTATTAAAAATTA
chr8	13516773	13516893	Hypo	1	+	GTAGTATTATTGTTATGAAATGTATTTATTAAAATTTGTGGTATAATAATTGTTTTAGGTTATTTAAAATGAATTAATTAATTTTATAAAATATTAAGTTAATGTAATTATTGGAGATTA
chr8	13516773	13516893	Hypo	1	-	ATAACATCATTATCATAAAACACATTTATTAAAACTTATAATACAATAACTACTTTACATCACTAAAAATAAATCAACTAACCTCACAAAACACCAAACTAATACAATTATTAAAAATTA
chr8	13516773	13516893	Hypo	1	+	GTAGTATTATTGTTATGAAATGTATTTATTAAAATTTGTGGTATAATAATTGTTTTATGTTATTGAAAATGAATTAATTAATTTTATAAAATATTAAGTTAATGTAATTATTGGAGATTA
chr8	13516773	13516893	Hyper	1	-	ATAACATCATTATCATAAAACGCATTTATTAAAACTTATAATACAATAACTACTTTAAATCACTTAAAATAAATCAACTAACCTCACAAAACACCAAACTAATACAATTATTAAAAATTA
chr8	13516773	13516893	Hyper	1	+	GTAGTATTATTGTTATGAAACGTATTTATTAAAATTTGTGGTATAATAATTGTTTTAGGTTATTTAAAATGAATTAATTAATTTTATAAAATATTAAGTTAATGTAATTATTGGAGATTA
chr8	13516773	13516893	Hyper	1	-	ATAACATCATTATCATAAAACGCATTTATTAAAACTTATAATACAATAACTACTTTACGTCACTAAAAATAAATCAACTAACCTCACAAAACACCAAACTAATACAATTATTAAAAATTA
chr8	13516773	13516893	Hyper	1	+	GTAGTATTATTGTTATGAAACGTATTTATTAAAATTTGTGGTATAATAATTGTTTTACGTTATTGAAAATGAATTAATTAATTTTATAAAATATTAAGTTAATGTAATTATTGGAGATTA
chr5	129519090	129519210	Hypo	1	-	TACCAAAAACTTACTCAATAAAAATAATATATCAAAATACTAAATAAAATTTACAACTCCCCTAACAAATAACTTCTTATTACCATTCCAAACAACAAATCATTAATTTTCCTCCTTAAA
chr5	129519090	129519210	Hypo	1	+	TATTAAGAATTTATTTGGTAAAAATAGTATATTAGGATGTTAAATGAAATTTATGATTTTTTTGGTAAATAATTTTTTATTGTTATTTTAAATAATAGGTTATTGGTTTTTTTTTTTAGG

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chr5	129519090	129519210	Hypo	1	-	TACCAAAAACTTACTCAATAAAAATAATATATCAAAATACTAAATAAAATTTACAAATCCCCTAAAAAATAACTTCTTATTACCATTCCAAACAACAAATCATTAATTTTCCTCCTTAAA
chr5	129519090	129519210	Hypo	1	+	TATTAAGAATTTATTTGGTAAAAATAGTATATTAGGATGTTAAATGAAATTTATGAGTTTTTTGGAAAATAATTTTTTATTGTTATTTTAAATAATAGGTTATTGGTTTTTTTTTTTAGG
chr5	129519090	129519210	Hyper	1	-	TACCAAAAACTTACTCGATAAAAATAATATATCAAAATACTAAATAAAATTTACGACTCCCCTAACAAATAACTTCTTATTACCATTCCAAACAACAAATCATTAATTTTCCTCCTTAAA
chr5	129519090	129519210	Hyper	1	+	TATTAAGAATTTATTCGGTAAAAATAGTATATTAGGATGTTAAATGAAATTTACGATTTTTTTGGTAAATAATTTTTTATTGTTATTTTAAATAATAGGTTATTGGTTTTTTTTTTTAGG
chr5	129519090	129519210	Hyper	1	-	TACCAAAAACTTACTCGATAAAAATAATATATCAAAATACTAAATAAAATTTACGAATCCCCTAAAAAATAACTTCTTATTACCATTCCAAACAACAAATCATTAATTTTCCTCCTTAAA
chr5	129519090	129519210	Hyper	1	+	TATTAAGAATTTATTCGGTAAAAATAGTATATTAGGATGTTAAATGAAATTTACGAGTTTTTTGGAAAATAATTTTTTATTGTTATTTTAAATAATAGGTTATTGGTTTTTTTTTTTAGG
chr6	14373370	14373490	Hypo	1	-	TTATCTACACATTAACCAAATCATAAAAAATAAAAAAAACTATAAAAATTTTCTCAATATTAAAAACCACCAAACAATCACTAACAATAAAATTATAAATTCAACAATTCCATACTATAT
chr6	14373370	14373490	Hypo	1	+	TTATTTGTATATTAATTAAGTTATGGAAAATGGAAGAAGTTGTGAAGATTTTTTTAATATTGAGAGTTATTAGATAATTGTTGATAATAAAATTGTGAATTTAGTAATTTTATGTTGTGT
chr6	14373370	14373490	Hypo	1	-	TTATCTACACATTAACCAAATCATAAAAAATAAAAAAAACTATAAAAATTTTCTCAATATACAAAACCACCAAACAATCACTAACAATAAAATTATAAATTCAACAATTCCATACTATAT
chr6	14373370	14373490	Hypo	1	+	TTATTTGTATATTAATTAAGTTATGGAAAATGGAAGAAGTTGTGAAGATTTTTTTAATATGTAGAGTTATTAGATAATTGTTGATAATAAAATTGTGAATTTAGTAATTTTATGTTGTGT
chr6	14373370	14373490	Hyper	1	-	TTATCTACACATTAACCAAATCATAAAAAATAAAAAAAACTATAAAAATTTTCTCAATATTAAAAACCACCAAACAATCGCTAACAATAAAATTATAAATTCAACAATTCCATACTATAT
chr6	14373370	14373490	Hyper	1	+	TTATTTGTATATTAATTAAGTTATGGAAAATGGAAGAAGTTGTGAAGATTTTTTTAATATTGAGAGTTATTAGATAATCGTTGATAATAAAATTGTGAATTTAGTAATTTTATGTTGTGT
chr6	14373370	14373490	Hyper	1	-	TTATCTACACATTAACCAAATCATAAAAAATAAAAAAAACTATAAAAATTTTCTCAATATACAAAACCACCAAACAATCGCTAACAATAAAATTATAAATTCAACAATTCCATACTATAT
chr6	14373370	14373490	Hyper	1	+	TTATTTGTATATTAATTAAGTTATGGAAAATGGAAGAAGTTGTGAAGATTTTTTTAATATGTAGAGTTATTAGATAATCGTTGATAATAAAATTGTGAATTTAGTAATTTTATGTTGTGT
chr1	181425252	181425372	Hypo	1	-	AAACCAAATCCATTTAAAATCATAATCAAAATCTTCTAAAAAAAAAACTACATCATTACTAATAATACCAATAAATAAAAAAAAAAACTAAAAAAAAATTCAACCTCACAAAAAAAACTAAAAA
chr1	181425252	181425372	Hypo	1	+	GGATTAGGTTTATTTGGAGTTATGGTTAAGGTTTTTTGGAGAGAGATTGTATTATTGTTGATGGTATTAGTGAGTGAGGAGGAAATTGAAAAGAGTTTAGTTTTATAGGAAGGTTGGAAA
chr1	181425252	181425372	Hypo	1	-	AAACCAAATCCATTTAAAATCATAATCAAAATCTTCTAAAAAAAAAACTACATCATTACTACAAATACCAATAAATAAAAAAAAAAACTAAAAAAAAATTCAACCTCACAAAAAAAACTAAAAA
chr1	181425252	181425372	Hypo	1	+	GGATTAGGTTTATTTGGAGTTATGGTTAAGGTTTTTTGGAGAGAGATTGTATTATTGTTGTAGGTATTAGTGAGTGAGGAGGAAATTGAAAAGAGTTTAGTTTTATAGGAAGGTTGGAAA
chr1	181425252	181425372	Hyper	1	-	AAACCAAATCCATTTAAAATCATAATCAAAATCTTCTAAAAAAAAAACTACATCATTACTAATAATACCAATAAATAAAAAAAAAAACTAAAAAAAAATTCAACCTCACAAAAAAAACTAAAAA
chr1	181425252	181425372	Hyper	1	+	GGATTAGGTTTATTTGGAGTTATGGTTAAGGTTTTTTGGAGAGAGATTGTATTATTGTTGATGGTATTAGTGAGTGAGGAGGAAATTGAAAAGAGTTTAGTTTTATAGGAAGGTTGGAAA
chr1	181425252	181425372	Hyper	1	-	AAACCAAATCCATTTAAAATCATAATCAAAATCTTCTAAAAAAAAAACTACATCATTACTACAAATACCAATAAATAAAAAAAAAAACTAAAAAAAAATTCAACCTCACAAAAAAAACTAAAAA
chr1	181425252	181425372	Hyper	1	+	GGATTAGGTTTATTTGGAGTTATGGTTAAGGTTTTTTGGAGAGAGATTGTATTATTGTTGTAGGTATTAGTGAGTGAGGAGGAAATTGAAAAGAGTTTAGTTTTATAGGAAGGTTGGAAA
chr13	96135770	96135890	Hypo	1	-	TTTTAAACATCACAAATTATATCCCCAAAAACCAAACTCTAAAAAAACATTTCATAAAAACATACCTATAAAAAAAACCACACCTATAAAAAATAAAAAACAAAAACAAAAATAAACAAA
chr13	96135770	96135890	Hypo	1	+	TTTTAAGTATTATAGGTTGTATTTTTAGAAATTAGATTTTAAAGAGGTATTTTATGAAGGTGTGTTTGTGGGAGGGATTATATTTGTGGAAGGTAGGGGATAGAAGTAGGAGTGGGTAGA
chr13	96135770	96135890	Hypo	1	-	TTTTAAACATCACAAATTATATCCCCAAAAACCAAACTCTAAAAAAACATTTCATAAAAAACTACCTATAAAAAAAACCACACCTATAAAAAATAAAAAACAAAAACAAAAATAAACAAA
chr13	96135770	96135890	Hypo	1	+	TTTTAAGTATTATAGGTTGTATTTTTAGAAATTAGATTTTAAAGAGGTATTTTATGAAGGGTTGTTTGTGGGAGGGATTATATTTGTGGAAGGTAGGGGATAGAAGTAGGAGTGGGTAGA
chr13	96135770	96135890	Hyper	1	-	TTTTAAACATCACAAATTATATCCCCAAAAACCAAACTCTAAAAAAACATTTCATAAAAACGTACCTATAAAAAAAACCACACCTATAAAAAATAAAAAACAAAAACAAAAATAAACAAA
chr13	96135770	96135890	Hyper	1	+	TTTTAAGTATTATAGGTTGTATTTTTAGAAATTAGATTTTAAAGAGGTATTTTATGAAGGCGTGTTTGTGGGAGGGATTATATTTGTGGAAGGTAGGGGATAGAAGTAGGAGTGGGTAGA
chr13	96135770	96135890	Hyper	1	-	TTTTAAACATCACAAATTATATCCCCAAAAACCAAACTCTAAAAAAACATTTCATAAAAAACTACCTATAAAAAAAACCACACCTATAAAAAATAAAAAACAAAAACAAAAATAAACAAA
chr13	96135770	96135890	Hyper	1	+	TTTTAAGTATTATAGGTTGTATTTTTAGAAATTAGATTTTAAAGAGGTATTTTATGAAGGGTTGTTTGTGGGAGGGATTATATTTGTGGAAGGTAGGGGATAGAAGTAGGAGTGGGTAGA
chr2	205138811	205138931	Hypo	1	-	AAAAAAATTAAATCAAACAAATCCAATTAAAAAACACTTTAATAAACTTTAACTTCCTTAAATAAAAAATATAAAAAAAAAACCTATCTAAATCATAAACTATATCTATAAATTCCCACAA
chr2	205138811	205138931	Hypo	1	+	GGGAGGATTAGGTTAAATAAGTTTAATTAAAAGATATTTTAATAAGTTTTAGTTTTTTTAGGTAAGGAATGTAAGAAGGAGTTTGTTTGGATTATAGATTATGTTTATGAATTTTTATAG
chr2	205138811	205138931	Hypo	1	-	AAAAAAATTAAATCAAACAAATCCAATTAAAAAACACTTTAATAAACTTTAACTTCCTTACCTAAAAAATATAAAAAAAAAACCTATCTAAATCATAAACTATATCTATAAATTCCCACAA
chr2	205138811	205138931	Hypo	1	+	GGGAGGATTAGGTTAAATAAGTTTAATTAAAAGATATTTTAATAAGTTTTAGTTTTTTTATTTAAGGAATGTAAGAAGGAGTTTGTTTGGATTATAGATTATGTTTATGAATTTTTATAG
chr2	205138811	205138931	Hyper	1	-	AAAAAAATTAAATCAAACAAATCCAATTAAAAAACACTTTAATAAACTTTAACTTCCTTAAATAAAAAATATAAAAAAAAAACCTATCTAAATCATAAACTATATCTATAAATTCCCACAA
chr2	205138811	205138931	Hyper	1	+	GGGAGGATTAGGTTAAATAAGTTTAATTAAAAGATATTTTAATAAGTTTTAGTTTTTTTAGGTAAGGAATGTAAGAAGGAGTTTGTTTGGATTATAGATTATGTTTATGAATTTTTATAG
chr2	205138811	205138931	Hyper	1	-	AAAAAAATTAAATCAAACAAATCCAATTAAAAAACACTTTAATAAACTTTAACTTCCTTACCTAAAAAATATAAAAAAAAAACCTATCTAAATCATAAACTATATCTATAAATTCCCACAA
chr2	205138811	205138931	Hyper	1	+	GGGAGGATTAGGTTAAATAAGTTTAATTAAAAGATATTTTAATAAGTTTTAGTTTTTTTATTTAAGGAATGTAAGAAGGAGTTTGTTTGGATTATAGATTATGTTTATGAATTTTTATAG
chr13	36370249	36370369	Hypo	1	-	CAAAATATCAAATTCTACCAAAATAAAAAAAACCACCTTAAATACTCTACTAACCTCACCAACAAAATTACACAAATACTTCTTACCATCTCTTTATAAAATTCCAAACTACCTCAAACA
chr13	36370249	36370369	Hypo	1	+	TAGAGTGTTGGGTTTTGTTAGAATGAAAGGGGTTATTTTGGGTGTTTTATTGGTTTTATTAATAAGATTATATAAGTATTTTTTATTATTTTTTTGTAGAGTTTTAGGTTATTTTGGGTA
chr13	36370249	36370369	Hypo	1	-	CAAAATATCAAATTCTACCAAAATAAAAAAAACCACCTTAAATACTCTACTAACCTCACCCCCAAAATTACACAAATACTTCTTACCATCTCTTTATAAAATTCCAAACTACCTCAAACA
chr13	36370249	36370369	Hypo	1	+	TAGAGTGTTGGGTTTTGTTAGAATGAAAGGGGTTATTTTGGGTGTTTTATTGGTTTTATTTTTAAGATTATATAAGTATTTTTTATTATTTTTTTGTAGAGTTTTAGGTTATTTTGGGTA
chr13	36370249	36370369	Hyper	1	-	CAAAATATCGAATTCTACCAAAATAAAAAAAACCACCTTAAATACTCTACTAACCTCACCAACAAAATTACACAAATACTTCTTACCATCTCTTTATAAAATTCCAAACTACCTCGAACA
chr13	36370249	36370369	Hyper	1	+	TAGAGTGTCGGGTTTTGTTAGAATGAAAGGGGTTATTTTGGGTGTTTTATTGGTTTTATTAATAAGATTATATAAGTATTTTTTATTATTTTTTTGTAGAGTTTTAGGTTATTTCGGGTA
chr13	36370249	36370369	Hyper	1	-	CAAAATATCGAATTCTACCAAAATAAAAAAAACCACCTTAAATACTCTACTAACCTCACCCCCAAAATTACACAAATACTTCTTACCATCTCTTTATAAAATTCCAAACTACCTCGAACA
chr13	36370249	36370369	Hyper	1	+	TAGAGTGTCGGGTTTTGTTAGAATGAAAGGGGTTATTTTGGGTGTTTTATTGGTTTTATTTTTAAGATTATATAAGTATTTTTTATTATTTTTTTGTAGAGTTTTAGGTTATTTCGGGTA
chr12	67481116	67481236	Hypo	1	-	CATAAATCACATATCTAAAAAAAAAACACTAATAAAAAATAAACTCCAACATCACACATAAACTTACCCTAAAATACTCAATCTTTCTAATAAAAATTACCTTAAAAAAATAAAAATACTT
chr12	67481116	67481236	Hypo	1	+	TATGGATTATATATTTAGAAAGAAATATTGGTGAGGAGTAAGTTTTAATATTATGTATGAATTTGTTTTAAAATATTTAGTTTTTTTGATGAAGATTATTTTAAGAAAGTGAAAATATTT
chr12	67481116	67481236	Hypo	1	-	CATAAATCACATATCTAAAAAAAAAACACTAATAAAAAATAAACTCCAACATCACACATAATATTACCCTAAAATACTCAATCTTTCTAATAAAAATTACCTTAAAAAAATAAAAATACTT
chr12	67481116	67481236	Hypo	1	+	TATGGATTATATATTTAGAAAGAAATATTGGTGAGGAGTAAGTTTTAATATTATGTATGATGTTGTTTTAAAATATTTAGTTTTTTTGATGAAGATTATTTTAAGAAAGTGAAAATATTT
chr12	67481116	67481236	Hyper	1	-	CATAAATCACATATCTAAAAAAAAAACACTAATAAAAAATAAACTCCAACATCACGCATAAACTTACCCTAAAATACTCAATCTTTCTAATAAAAATTACCTTAAAAAAATAAAAATACTT
chr12	67481116	67481236	Hyper	1	+	TATGGATTATATATTTAGAAAGAAATATTGGTGAGGAGTAAGTTTTAATATTACGTATGAATTTGTTTTAAAATATTTAGTTTTTTTGATGAAGATTATTTTAAGAAAGTGAAAATATTT
chr12	67481116	67481236	Hyper	1	-	CATAAATCACATATCTAAAAAAAAAACACTAATAAAAAATAAACTCCAACATCACGCATAATATTACCCTAAAATACTCAATCTTTCTAATAAAAATTACCTTAAAAAAATAAAAATACTT

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chr12	67481116	67481236	Hyper	1 +	TATGGATTATATATTTAGAAAGAAATATTGGTGAGGAGTAAGTTTTAATATTACGTATGATGTTGTTTTAAAATATTTAGTTTTTTTGATGAAGATTATTTTAAGAAAGTGAAAATATTT
chr2	34437869	34437989	Hypo	1 -	AAAAAAATAATCTACTCTCAATAACAAAATATCAATACATTATTTACTAATCAATTTAACAAAACCAATATAAAATCTACCTAAAAAAAATTATAAAATCTAATAACATTACACAATATT
chr2	34437869	34437989	Hypo	1 +	AGAGAAATAGTTTATTTTAGTAGTAAAATATTAATATATTATTTATTAATTAATTTAATTGATTGATGTAAGATTTGTTTGAAGGAAATTATAAAATTTAATGATATTATATAATATT
chr2	34437869	34437989	Hypo	1 -	AAAAAAATAATCTACTCTCAATAACAAAATATCAATACATTATTTACTAATCAATTTAACAAAACCGATATAAAATCTACCTAAAAAAAATTATAAAATCTAATAACATTACACAATATT
chr2	34437869	34437989	Hypo	1 +	AGAGAAATAGTTTATTTTAGTAGTAAAATATTAATATATTATTTATTAATTAATTTAATTGATTGATGTAAGATTTGTTTGAAGGAAATTATAAAATTTAATGATATTATATAATATT
chr2	34437869	34437989	Hypo	1 -	AAAAAAATAATCTACTCTCAATAACAAAATATCAATACATTATTTACTAATCAATTTAACTAACCGATATAAAATCTACCTAAAAAAAATTATAAAATCTAATAACATTACACAATATT
chr2	34437869	34437989	Hypo	1 +	AGAGAAATAGTTTATTTTAGTAGTAAAATATTAATATATTATTTATTAATTAATTTAATTGATTGATGTAAGATTTGTTTGAAGGAAATTATAAAATTTAATGATATTATATAATATT
chr2	34437869	34437989	Hypo	1 -	AAAAAAATAATCTACTCTCAATAACAAAATATCAATACATTATTTACTAATCAATTTAACTAACCGATATAAAATCTACCTAAAAAAAATTATAAAATCTAATAACATTACACAATATT
chr2	34437869	34437989	Hypo	1 +	AGAGAAATAGTTTATTTTAGTAGTAAAATATTAATATATTATTTATTAATTAATTTAATTGATTGATGTAAGATTTGTTTGAAGGAAATTATAAAATTTAATGATATTATATAATATT
chr16	48704807	48704927	Hypo	1 -	AACTTTTTCTCCACCATCCTAACATATAACTTCTATTCTCAAAATCTTCCCTACAAAATCAATATATTTCACCCACCCAAATCCACAAAAAAAATAATTAAAAAAATAAACAAATATTT
chr16	48704807	48704927	Hypo	1 +	AATTTTTTTTTTATTATTTTAATATATGATTTTTATTTTTAAAGTTTTTTTTTGTAGAATCGATGTGTTTTATTTATTTAGGTTTATAGAGAAATGGTTAGGAAAGTGGATAGGTATTT
chr16	48704807	48704927	Hypo	1 -	AACTTTTTCTCCACCATCCTAACATATAACTTCTATTCTCAAAATCTTCCCTACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
chr16	48704807	48704927	Hypo	1 +	AATTTTTTTTTTATTATTTTAATATATGATTTTTATTTTTAAAGTTTTTTTTTGTAGAAAAGATGTGTTTTATTTATTTAGGTTTATAGAGAAATGGTTAGGAAAGTGGATAGGTATTT
chr1	77110598	77110718	Hypo	1 -	CTCATCAATTAAAATTACATAATAATAAACCCTACAATTCTATAATTTTAACAATAATACTCTCCCTACAAAACCTCTAAACATTACCCTAATTAAAAACTCCTTATATCTACTTTACCCC
chr1	77110598	77110718	Hypo	1 +	TTTATTAGTTAGAGTTGTATGGTGGTGGTTTTATAGTTTTGTGGTTTTGGTAGTGGTGTTTTTTTTATAGAATTTTTGGGTATTGTTTTAGTTGGGGATTTTTTGTGTTTGTTTTGTTTT
chr1	77110598	77110718	Hypo	1 -	CTCATCAATTAAAATTACATAATAATAAACCCTACAATTCTATAATTTTAACAATAATACTCCCCTACAAAACCTCTAAACATTACCCTAATTAAAAACTCCTTATATCTACTTTACCCC
chr1	77110598	77110718	Hypo	1 +	TTTATTAGTTAGAGTTGTATGGTGGTGGTTTTATAGTTTTGTGGTTTTGGTAGTGGTGTTTGATTTTATAGAATTTTTGGGTATTGTTTTAGTTGGGGATTTTTTGTGTTTGTTTTGTTTT
chr1	77110598	77110718	Hypo	1 -	CTCATCAATTAAAATTACATAATAATAAACCCTACAATTCTATAATTTTAACAATAATACTCTCCCTACAAAACCTCTAAACATTACCCTAATTAAAAACTCCTTATATCTACTTTACCCC
chr1	77110598	77110718	Hypo	1 +	TTTATTAGTTAGAGTTGTATGGTGGTGGTTTTATAGTTTTGTGGTTTTGGTAGTGGTGTTTTTTTTATAGAATTTTTGGGTATTGTTTTAGTTGGGGATTTTTTGTGTTTGTTTTGTTTT
chr1	77110598	77110718	Hypo	1 -	CTCATCAATTAAAATTACATAATAATAAACCCTACAATTCTATAATTTTAACAATAATACTCTCCCTACAAAACCTCTAAACATTACCCTAATTAAAAACTCCTTATATCTACTTTACCCC
chr1	77110598	77110718	Hypo	1 +	TTTATTAGTTAGAGTTGTATGGTGGTGGTTTTATAGTTTTGTGGTTTTGGTAGTGGTGTTTTTTTTATAGAATTTTTGGGTATTGTTTTAGTTGGGGATTTTTTGTGTTTGTTTTGTTTT
chr8	60109167	60109287	Hypo	1 -	AATATCAAAATAATAATTAACAAACCAATCAAAAAATACATCAACATTAATAATAACCAAATTACACTAAAATAACTACTTATTATCAAACACTCTACTAAACACCTAAACATATTTAA
chr8	60109167	60109287	Hypo	1 +	AGTATTAGGATAATAATTGATAAGTTAATTAGAAAGTGTATTAGTATTGATAATGATTAATGTGTATTAGAGTAGTTATTTGTTATTAAGTATTTTATTAAGTATTTAGGTATATTTAA
chr8	60109167	60109287	Hypo	1 -	AATATCAAAATAATAATTAACAAACCAATCAAAAAATACATCAACATTAATAATAACCAAATTACACTAAAATAACTACTTATTATCAAACACTCTACTAAACACCTAAACATATTTAA
chr8	60109167	60109287	Hypo	1 +	AGTATTAGGATAATAATTGATAAGTTAATTAGAAAGTGTATTAGTATTGATAATGATTAAGTTGTATTAGAGTAGTTATTTGTTATTAAGTATTTTATTAAGTATTTAGGTATATTTAA
chr8	60109167	60109287	Hypo	1 -	AATATCAAAATAATAATTAACAAACCAATCAAAAAATACATCAACATTAATAATAACCAATATACACTAAAATAACTACTTATTATCAAACACTCTACTAAACACCTAAACATATTTAA
chr8	60109167	60109287	Hypo	1 +	AGTATTAGGATAATAATTGATAAGTTAATTAGAAAGTGTATTAGTATTGATAATGATTAGGTTGTATTAGAGTAGTTATTTGTTATTAAGTATTTTATTAAGTATTTAGGTATATTTAA
chr18	66252120	66252240	Hypo	1 -	ATACCTATTTAAAACCTTTTCCTCTTAAATCCAATAAAATTACTTAATTAAAATAACAAAACATTCCCTCTTCTAAATTTATTCATTTATTTATTTTTTCACTAAAAATTCTTCCCTAAC
chr18	66252120	66252240	Hypo	1 +	ATGTTTGTTTGAAGTTTTTTTTTTTGGGTTTAATGGAGTTATTTGGTTGAGGTAGTAAATATTTTTTTTTTTGGGTTTGTTCGTTTGTTTGTTTTTTTATTGAGAGTTTTTTTTTGAT
chr18	66252120	66252240	Hypo	1 -	ATACCTATTTAAAACCTTTTCCTCTTAAATCCAATAAAATTACTTAATTAAAATAACAAAACATTCCCTCTTCTAAATTTATTCATTTATTTATTTTTTCACTAAAAATTCTTCCCTAAC
chr18	66252120	66252240	Hypo	1 +	ATGTTTGTTTGAAGTTTTTTTTTTTGGGTTTAATGGAGTTATTTGGTTGAGGTAGTAAATATTTTTTTTTTTGGGTTTGTTCGTTTGTTTGTTTTTTTATTGAGAGTTTTTTTTTGAT
chr18	66252120	66252240	Hypo	1 -	ATACCTATTTAAAACCTTTTCCTCTTAAATCCAATAAAATTACTTAATTAAAATAACAAAACATTCCCTCTTCTAAATTTATTCATTTATTTATTTTTTCACTAAAAATTCTTCCCTAAC
chr18	66252120	66252240	Hypo	1 +	ATGTTTGTTTGAAGTTTTTTTTTTTGGGTTTAATGGAGTTATTTGGTTGAGGTAGTAAATATTTTTTTTTTTGGGTTTGTTCGTTTGTTTGTTTTTTTATTGAGAGTTTTTTTTTGAT
chr18	66252120	66252240	Hypo	1 -	ATACCTATTTAAAACCTTTTCCTCTTAAATCCAATAAAATTACTTAATTAAAATAACAAAATAATTCCCTCTTCTAAATTTATTCATTTATTTATTTTTTCACTAAAAATTCTTCCCTAAC
chr18	66252120	66252240	Hypo	1 +	ATGTTTGTTTGAAGTTTTTTTTTTTGGGTTTAATGGAGTTATTTGGTTGAGGTAGTAAATAATTTTTTTTTTTGGGTTTGTTCGTTTGTTTGTTTTTTTATTGAGAGTTTTTTTTTGAT
chr9	107477854	107477974	Hypo	1 -	AAAAAAAAAATAATTTCCTATATTTTCCCTTATAAAAAAATAAAAACACTACTATCTATTTCAAACAAAAAATAAACCCCTCATCCATATCTCAAACTCTTTAAATACAAAAAAACC
chr9	107477854	107477974	Hypo	1 +	GAAAAGGAAATAATTTTTTTGTATTTTTTTTTATAGGAAGATAGGAATGTTGTTGTTTATTTTTAGATAAGAAATAAGTTTTTTATTTATGTTTTTAAGTTTTTTGGATATAGAAAGGTT
chr9	107477854	107477974	Hypo	1 -	AAAAAAAAAATAATTTCCTATATTTTCCCTTATAAAAAAATAAAAACACTACTATCTATTTCAAACAAAAAATAAACCCCTCATCCATATCTCAAACTCTTTAAATACAAAAAAACC
chr9	107477854	107477974	Hypo	1 +	GAAAAGGAAATAATTTTTTTGTATTTTTTTTTATAGGAAGATAGGAATGTTGTTGTTTATTTTTAGATAAGAAATAAGTTTTTTATTTATGTTTTTAAGTTTTTTGGATATAGAAAGGTT
chr9	107477854	107477974	Hypo	1 -	AAAAAAAAAATAATTTCCTATATTTTCCCTTATAAAAAAATAAAAACGCTACTATCTATTTCAAACAAAAAATAAACCCCTCATCCATATCTCAAACTCTTTAAATACAAAAAAACC
chr9	107477854	107477974	Hypo	1 +	GAAAAGGAAATAATTTTTTTGTATTTTTTTTTATAGGAAGATAGGAACGTTGTTGTTTATTTTTAGATAAGAAATAAGTTTTTTATTTATGTTTTTAAGTTTTTTGGATATAGAAAGGTT
chr9	107477854	107477974	Hypo	1 -	AAAAAAAAAATAATTTCCTATATTTTCCCTTATAAAAAAATAAAAACGCTACTATCTATAATCAAACAAAAAATAAACCCCTCATCCATATCTCAAACTCTTTAAATACAAAAAAACC
chr9	107477854	107477974	Hypo	1 +	GAAAAGGAAATAATTTTTTTGTATTTTTTTTTATAGGAAGATAGGAACGTTGTTGTTTATGATTAGATAAGAAATAAGTTTTTTATTTATGTTTTTAAGTTTTTTGGATATAGAAAGGTT
chr12	107486181	107486301	Hypo	1 -	TTTATTCTAAAATATAATATTAAACATTTTTATAATTATTTTATTAAAAACCTTCCAAACCTAATACACTTAAAAACCCCAATTACAAATCATCACAAATATTTCCACAAAATACCAATA
chr12	107486181	107486301	Hypo	1 +	TTTGTTTTAGAATATGATGTTAGGTATTTTTGTAATTATTTTATTGAGAGTTTTTTAAGTTTGGTATATTTAGGGATTTTAATTGTAAGTTATTATAGGTGTTTTATAAGGTGTTAATG
chr12	107486181	107486301	Hypo	1 -	TTTATTCTAAAATATAATATTAAACATTTTTATAATTATTTTATTAAAAACCTTCCAATCCTATTACACTTAAAAACCCCAATTACAAATCATCACAAATATTTCCACAAAATACCAATA
chr12	107486181	107486301	Hypo	1 +	TTTGTTTTAGAATATGATGTTAGGTATTTTTGTAATTATTTTATTGAGAGTTTTTTAATTTTGTTATATTTAGGGATTTTAATTGTAAGTTATTATAGGTGTTTTATAAGGTGTTAATG
chr12	107486181	107486301	Hypo	1 -	TTTATTCTAAAATATAATATTAAACATTTTTATAATTATTTTATTAAAAACCTTCCAATCCTATTACACTTAAAAACCCCAATTACAAATCATCACAAATATTTCCACAAAATACCAATA
chr12	107486181	107486301	Hypo	1 +	TTTGTTTTAGAATATGATGTTAGGTATTTTTGTAATTATTTTATTGAGAGTTTTTTAATTTTGTTATATTTAGGGATTTTAATTGTAAGTTATTATAGGTGTTTTATAAGGTGTTAATG

도면24ar

chr12	107086181	107086301	Hyper	1 -	TTTATTCTAAAATATAATATTAAACATTTTTATAATTATTTTATTAAAAACCTTCCAAACCTAATACACTTAAAAACCCCAATTACAAATCATCACAAATATTTCCACAAAATACCAATA
chr12	107086181	107086301	Hyper	1 +	TTTGTTTTAGAATATGATGTTAGGTATTTTTGTAATTATTTTATTGAGAGTTTTTTAAGTTTGGTATATTTAGGGATTTTAATTGTAAGTTATTATAGGTGTTTTATAAGGTGTTAATG
chr12	107086181	107086301	Hyper	1 -	TTTATTCTAAAATATAATATTAAACATTTTTATAATTATTTTATTAAAAACCTTCCAATCCTATTACACTTAAAAACCCCAATTACAAATCATCACAAATATTTCCACAAAATACCAATA
chr12	107086181	107086301	Hyper	1 +	TTTGTTTTAGAATATGATGTTAGGTATTTTTGTAATTATTTTATTGAGAGTTTTTTAATTTTGTTATATTTAGGGATTTTAATTGTAAGTTATTATAGGTGTTTTATAAGGTGTTAATG
chr11	107121907	107122027	Hyper	1 -	TATATATAAATATCTCCTCCTCACATTCATCAAATAACATAATAAATCATTCCAATTAAATTACAAAACTCTAAACACTCTATCCCCATTAAAATACTTCTCTAACATC
chr11	107121907	107122027	Hyper	1 +	TGTATATGAGTATTTTTTTTTGTATTTATTAGGTAGTATGATAAGTTATTTAATTGTATTAGGGAATTTTGGGTATTTTGGGTATTGTTATTTTTATTAGGGTGTTTTTTGGTATT
chr11	107121907	107122027	Hyper	1 -	TATATATAAATATCTCCTCCTCACATTCATCAAATAACATAATAAATCATTCCAATTAAATTACAAAACTCTAAACACTCTATCCCCATTAAAATACTTCTCTAACATC
chr11	107121907	107122027	Hyper	1 +	TGTATATGAGTATTTTTTTTTGTATTTATTAGGTAGTATGATAAGTTATTTAATTGTATTAGGGAATTTTGGGTATTTTGGGTATTGTTATTTTTATTAGGGTGTTTTTTGGTATT
chr11	107121907	107122027	Hyper	1 -	TATATATAAATATCTCCTCCTCACATTCATCAAATAACATAATAAATCATTCCAATTAAATTACGAAACTCTAAACACTTCTAAACACTACTATCCCCATTAAAATACTTCTCTAACATC
chr11	107121907	107122027	Hyper	1 +	TGTATATGAGTATTTTTTTTTGTATTTATTAGGTAGTATGATAAGTTATTTAATTGTATTAGGGAATTTTGGGTATTTTGGGTATTGTTATTTTTATTAGGGTGTTTTTTGGTATT
chr11	107121907	107122027	Hyper	1 -	TATATATAAATATCTCCTCCTCACATTCATCAAATAACATAATAAATCATTCCAATTATATTAAAAACTCTAAACACTTCTAAACACTACTATCCCCATTAAAATACTTCTCTAACATC
chr11	107121907	107122027	Hyper	1 +	TGTATATGAGTATTTTTTTTTGTATTTATTAGGTAGTATGATAAGTTATTTAATTGTATTAGGGAATTTTGGGTATTTTGGGTATTGTTATTTTTATTAGGGTGTTTTTTGGTATT
chr17	51655007	51655127	Hypo	1 -	ATTTTCATCATAAAACAATAAAACTTCTTCCATTTTAAATATAAAATTAAACCCTATATAAAACAAAATCTTATTACATATTATAACTAACAAAAAATAAAAAAAATTATCAACCCTCCT
chr17	51655007	51655127	Hypo	1 +	ATTTTTATTATAAGATGGTAGAGTTTTTTTATTTTAAATGTGGAATTAGATTTTGTGTGAAATAGAATTTTATTATATATTATGATTAGTAGGAAATAAAGGAAATTATTAATTTTTTT
chr17	51655007	51655127	Hypo	1 -	ATTTTCATCATAAAACAATAAAACTTCTTCCATTTTAAATATAAAATTAAACCCTATATAAAAAAAAAAATCTTATTACATATTATAACTAACAAAAAATAAAAAAAATTATCAACCCTCCT
chr17	51655007	51655127	Hypo	1 +	ATTTTTATTATAAGATGGTAGAGTTTTTTTATTTTAAATGTGGAATTAGATTTTGTGTGAAAAAGAATTTTATTATATATTATGATTAGTAGGAAATAAAGGAAATTATTAATTTTTTT
chr17	51655007	51655127	Hypo	1 -	ATTTTCATCATAAAACAATAAAACTTCTTCCATTTTAAATATAAAATTAAACCCTATATAAAAAAAAAAATCTTATTACATATTATAACTAACAAAAAATAAAAAAAATTATCAACCCTCCT
chr17	51655007	51655127	Hypo	1 +	ATTTTTATTATAAGATGGTAGAGTTTTTTTATTTTAAATGTGGAATTAGATTTTGTGTGAAAAAGAATTTTATTATATATTATGATTAGTAGGAAATAAAGGAAATTATTAATTTTTTT
chr17	51655007	51655127	Hypo	1 -	ATTTTCATCATAAAACGATAAAACTTCTTCCATTTTAAATATAAAATTAAACCCTATATAAAACAAAATCTTATTACATATTATAACTAACAAAAAATAAAAAAAATTATCAACCCTCCT
chr17	51655007	51655127	Hypo	1 +	ATTTTTATTATAAGACGGTAGAGTTTTTTTATTTTAAATGTGGAATTAGATTTTGTGTGAAAAAGAATTTTATTATATATTATGATTAGTAGGAAATAAAGGAAATTATTAATTTTTTT
chr3	30124884	30125004	Hypo	1 -	AAATAACACACTATAAAACTACTCCATTAATAAATACCCTCCAAATAATAAATACAAAAAAAATACTATTCTTTTAAAAAAACAAAAAAACCTACAACAATATAACTATATTATACCATC
chr3	30124884	30125004	Hypo	1 +	AAATAGTATATTATAAAATTATTTTATTGGTGAGTGTTTTTTAAATGGTAGATGTAAAGGAGATGTTGTTTTTTTAAAGGGATAAGAGAGTTTGTGGTAATATGATTGTATTATGTTATT
chr3	30124884	30125004	Hypo	1 -	AAATAACACACTATAAAACTACTCCATTAATAAATACCCTCCAAATAATAAATACAAAAAAATACTATTCTTTTAAAAAAACAAAAAAACCTACAACAATATAACTATATTATACCATC
chr3	30124884	30125004	Hypo	1 +	AAATAGTATATTATAAAATTATTTTATTGGTGAGTGTTTTTTAAATGGTAGATGTAAAGGAGATGGTGTTTTTTTAAAGGGATAAGAGAGTTTGTGGTAATATGATTGTATTATGTTATT
chr3	30124884	30125004	Hypo	1 -	AAATAACACACTATAAAACTACTCCATTAATAAATACCCTCCAAATAATAAATACAAAAAAATACTATTCTTTTAAAAAAACAAAAAAACCTACAACAATATAACTATATTATACCATC
chr3	30124884	30125004	Hypo	1 +	AAATAGTATATTATAAAATTATTTTATTGGTGAGTGTTTTTTAAATGGTAGATGTAAAGGAGATGGTGTTTTTTTAAAGGGATAAGAGAGTTTGCGGTAATATGATTGTATTATGTTATT
chr3	30124884	30125004	Hypo	1 -	AAATAACACACTATAAAACTACTCCATTAATAAATACCCTCCAAATAATAAATACAAAAAAATACTATTCTTTTAAAAAAACAAAAAAACCTACAACAATATAACTATATTATACCATC
chr3	30124884	30125004	Hypo	1 +	AAATAGTATATTATAAAATTATTTTATTGGTGAGTGTTTTTTAAATGGTAGATGTAAAGGAGATGGTGTTTTTTTAAAGGGATAAGAGAGTTTGCGGTAATATGATTGTATTATGTTATT
chr7	50878538	50878658	Hypo	1 -	TCCAAACAACATCTCCCTACAACATTACTATCTCCTCAATACTCCAAATAAATTTCCTAATACAAATTCCATTAATTAAATTACATACAATTAATATTTACATAAACTACATTTTCACTCCT
chr7	50878538	50878658	Hypo	1 +	TTTAGGATAGTATTTTTTTGTAGTATTGTTATTTTTTAGTGTTTTAGGTAGATTTTTTGGTGTAGATTTTATTGGTTAAGATTGTATTTGATATTTATATAAATTATGTTTTTATTTTT
chr7	50878538	50878658	Hypo	1 -	TCCAAACAACATCTCCCTACAACATTACTATCTCCTCAATACTCCAAATAAATTTCCTCATCCAAATTCCATTAATTAAATTACATACAATTAATATTTACATAAACTACATTTTCACTCCT
chr7	50878538	50878658	Hypo	1 +	TTTAGGATAGTATTTTTTTGTAGTATTGTTATTTTTTAGTGTTTTAGGTAGATTTTTTGTTAGATTTTATTGGTTAAGATTGTATTTGATATTTATATAAATTATGTTTTTATTTTT
chr7	50878538	50878658	Hypo	1 -	TCCAAACAACATCTCCCTACAACATTACTATCTCCTCAATACTCCAAATAAATTTCCTAATACAAATTCCATTAATTAAATTACATACAATTAATATTTACATAAACTACATTTTCACTCCT
chr7	50878538	50878658	Hypo	1 +	TTTAGGATAGTATTTTTTTGTAGTATTGTTATTTTTTAGTGTTTTAGGTAGATTTTTTGGTTAGATTTTATTGGTTAAGATTGTATTTGATATTTATATAAATTATGTTTTTATTTTT
chr7	50878538	50878658	Hypo	1 -	TCCAAACAACATCTCCCTACACATTACTATCTCCTCAATACTCCAAATAAATTTCCTCGTCCAAATTCCATTAATTAAAACTACATTTAATATTTACATAAACTACATTTTCACTCCT
chr7	50878538	50878658	Hypo	1 +	TTTAGGATAGTATTTTTTTGTAGTATTGTTATTTTTTAGTGTTTTAGGTAGATTTTTTGGTGTAGATTTTATTGGTTAAGATTGTATTTGATATTTATATAAATTATGTTTTTATTTTT
chr2	124366126	124366246	Hypo	1 -	AACAATACAAATACAAATCATTTAACTTAAACTTAAATTAAAAATAAAAAAACATCTTAACCTAACCTTAAAAAATCTTACATTTTAAAATTTTAAATACATTATTCTATACAATAAATT
chr2	124366126	124366246	Hypo	1 +	GATAATGTAAGTGTAGGTTATTTAATTTGAGTTTGAATTAAAAATAAAGGGATATTTTAATTTAGTTTTAGAAGATTTTATATTTTGAAATTTTGAATATATTATTTTATATAATAAATT
chr2	124366126	124366246	Hypo	1 -	AACAATACAAATACAAATCATTTAACTTAAACTTAAATTAAAAATAAAAAAACATCTTAACCCAAACCTTAAAAAATCTTACATTTTAAAATTTTAAATACATTATTCTATACAATAAATT
chr2	124366126	124366246	Hypo	1 +	GATAATGTAAGTGTAGGTTATTTAATTTGAGTTTGAATTAAAAATAAAGGGATATTTTAATTTAGTTTTAGAAGATTTTATATTTTGAAATTTTGAATATATTATTTTATATAATAAATT
chr2	124366126	124366246	Hypo	1 -	AACAATACAAATACAAATCATTTAACTTAAACTTAAATTAAAAATAAAAAAACATCTTACCCAAACCTTAAAAAATCTTACATTTTAAAATTTTAAATACATTATTCTATACAATAAATT
chr2	124366126	124366246	Hypo	1 +	GATAATGTAAGTGTAGGTTATTTAATTTGAGTTTGAATTAAAAATAAAGGGATATTTTAATTTAGTTTTAGAAGATTTTATATTTTGAAATTTTGAATATATTATTTTATATAATAAATT
chr2	124366126	124366246	Hypo	1 -	AACAATACAAATACAAATCATTTAACTTAAACTTAAATTAAAAATAAAAAAACATCTTACCCAAACCTTAAAAAATCTTACATTTTAAAATTTTAAATACATTATTCTATACAATAAATT
chr2	124366126	124366246	Hypo	1 +	GATAATGTAAGTGTAGGTTATTTAATTTGAGTTTGAATTAAAAATAAAGGGATATTTTAATTTAGTTTTAGAAGATTTTATATTTTGAAATTTTGAATATATTATTTTATATAATAAATT
chr16	58295982	58296102	Hypo	1 -	CCTCTACCCCCACTCCCCCACATACCCCCCAAACAACACATCACACTCACACCACACTCATTAAATAACAACCTTATTAATAAAACCCTCATATACACTACCTAAACCAAAAAACATTATAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTTGAATAATATATTGTATTGTATTATATTGTTGAGTTAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr16	58295982	58296102	Hypo	1 -	CCTCTACCCCCACTCCCCCACATACCCCCCAAACAACACATCACACTCACACCACACTCTAAATAAATAACTTATTAATAAAACCCTCATATACACTACCTAAACCAAAAAACATTATAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTTGAATAATATATTGTATTGTATTATATTGTTGAGTGAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr16	58295982	58296102	Hypo	1 -	CCTCTACCCCCACTCCCCCACATACCCCCCGAACAACACATCGCACTCACACCACACTCTAAATCAATAACTTATTAATAAAACCCTCATATACACTACCTAAACCAAAAAACATTATAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTCGAATAATATATCGTATTGTATTATATTGTTGAGTTAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr16	58295982	58296102	Hypo	1 -	CCTCTACCCCCACTCCCCCACATACCCCCCGAACAACACATCGCACTCACACCACACTCTAAATCAATAACTTATTAATAAAACCCTCATATACACTACCTAAACCAAAAAACATTATAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTCGAATAATATATCGTATTGTATTATATTGTTGAGTTAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr16	58295982	58296102	Hypo	1 -	CCTCTACCCCCACTCCCCCACATACCCCCCGAACAACACATCGCACTCACACCACACTCTAAATCAATAACTTATTAATAAAACCCTCATATACACTACCTAAACCAAAAAACATTATAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTCGAATAATATATCGTATTGTATTATATTGTTGAGTTAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr16	58295982	58296102	Hypo	1 +	TTTTTGTTTTTATTTTTTTATATGTTTTTCGAATAATATATCGTATTGTATTATATTGTTGAGTTAATGGTTTGTTGGTAAATTTTTATATGTATTGTTTGGGGTTAGGGAATATTGTAT
chr1	217912845	217912965	Hypo	1 -	ACATCTAAAAATATAAAATCAAAAAAACAACCTATCTAAATATCTTAAAAATACTACAATTAAAAAATCTCCAAATTAAAAATATAAAATTTTATAATTTTATAAAAAAATCCTAATTA

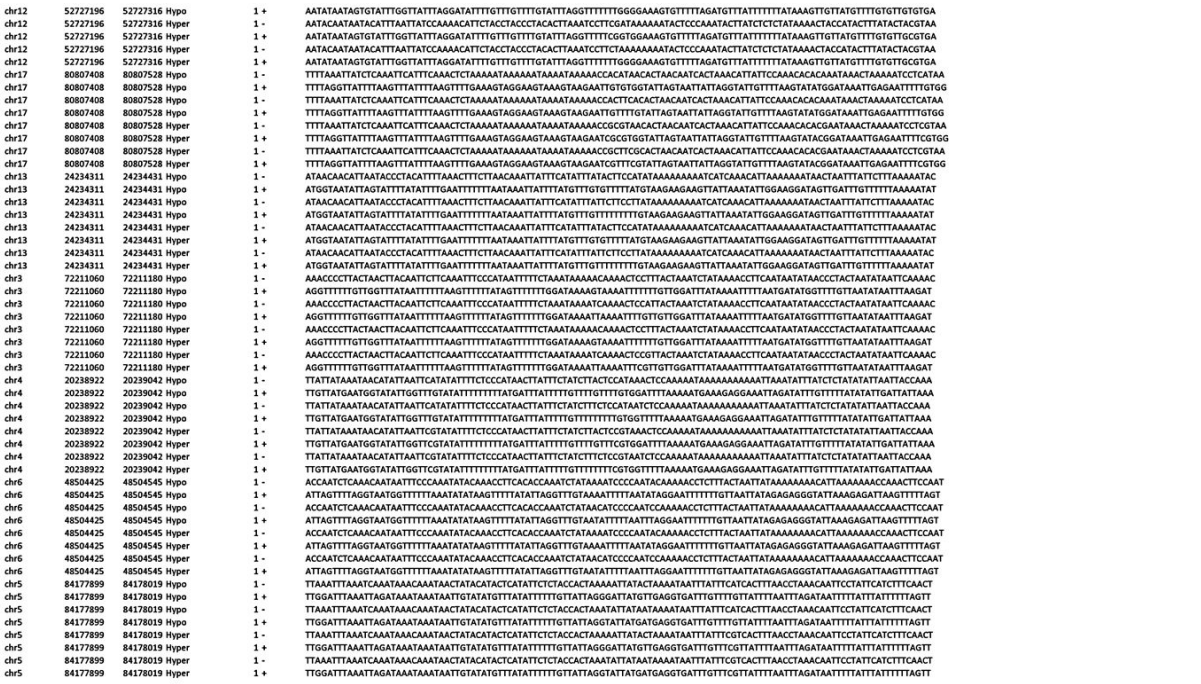
도면24as

chr1	217912845	217912965	Hypo	1	+
chr1	217912845	217912965	Hypo	1	-
chr1	217912845	217912965	Hyper	1	+
chr1	217912845	217912965	Hyper	1	-
chr1	217912845	217912965	Hyper	1	+
chr1	217912845	217912965	Hyper	1	-
chr1	217912845	217912965	Hyper	1	+
chr21	39695252	39695372	Hypo	1	-
chr21	39695252	39695372	Hypo	1	+
chr21	39695252	39695372	Hypo	1	-
chr21	39695252	39695372	Hypo	1	+
chr21	39695252	39695372	Hyper	1	-
chr21	39695252	39695372	Hyper	1	+
chr21	39695252	39695372	Hyper	1	-
chr21	39695252	39695372	Hyper	1	+
chr2	202597572	202597692	Hypo	1	-
chr2	202597572	202597692	Hypo	1	+
chr2	202597572	202597692	Hypo	1	-
chr2	202597572	202597692	Hyper	1	+
chr2	202597572	202597692	Hyper	1	-
chr2	202597572	202597692	Hyper	1	+
chr2	202597572	202597692	Hyper	1	-
chr2	208494994	208495114	Hypo	1	-
chr2	208494994	208495114	Hypo	1	+
chr2	208494994	208495114	Hypo	1	-
chr2	208494994	208495114	Hyper	1	+
chr2	208494994	208495114	Hyper	1	-
chr2	208494994	208495114	Hyper	1	+
chr2	208494994	208495114	Hyper	1	-
chr2	208494994	208495114	Hyper	1	+
chr2	137966968	137967088	Hypo	1	-
chr2	137966968	137967088	Hypo	1	+
chr2	137966968	137967088	Hypo	1	-
chr2	137966968	137967088	Hyper	1	+
chr2	137966968	137967088	Hyper	1	-
chr2	137966968	137967088	Hyper	1	+
chr2	137966968	137967088	Hyper	1	-
chr2	137966968	137967088	Hyper	1	+
chr8	76306200	76306320	Hypo	1	-
chr8	76306200	76306320	Hypo	1	+
chr8	76306200	76306320	Hypo	1	-
chr8	76306200	76306320	Hyper	1	+
chr8	76306200	76306320	Hyper	1	-
chr8	76306200	76306320	Hyper	1	+
chr8	76306200	76306320	Hyper	1	-
chr8	76306200	76306320	Hyper	1	+
chr8	182670928	182671048	Hypo	1	-
chr3	182670928	182671048	Hypo	1	+
chr3	182670928	182671048	Hypo	1	-
chr3	182670928	182671048	Hyper	1	+
chr3	182670928	182671048	Hyper	1	-
chr3	182670928	182671048	Hyper	1	+

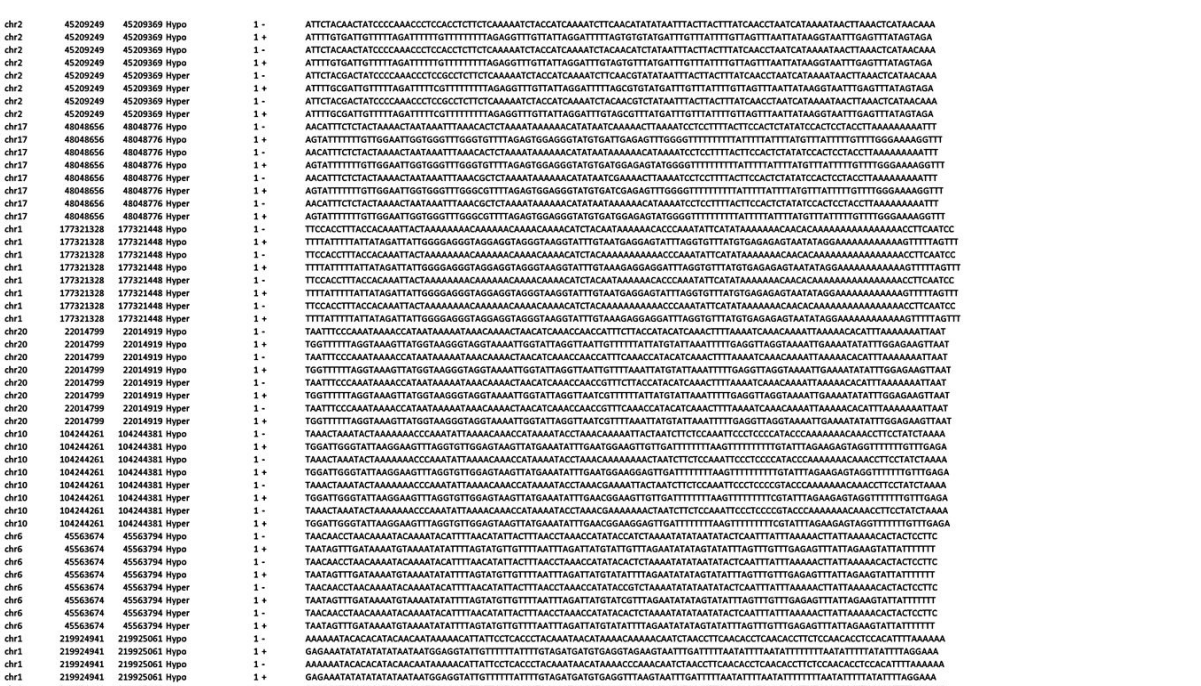
도면24at

chr3	182670928	182671048	Hyper	1	-
chr3	182670928	182671048	Hyper	1	+
chr8	37221499	37221619	Hypo	1	-
chr8	37221499	37221619	Hypo	1	+
chr8	37221499	37221619	Hypo	1	-
chr8	37221499	37221619	Hyper	1	+
chr8	37221499	37221619	Hyper	1	-
chr8	37221499	37221619	Hyper	1	+
chr8	37221499	37221619	Hyper	1	-
chr8	37221499	37221619	Hyper	1	+
chr10	14832243	14832363	Hypo	1	-
chr10	14832243	14832363	Hypo	1	+
chr10	14832243	14832363	Hypo	1	-
chr10	14832243	14832363	Hyper	1	+
chr10	14832243	14832363	Hyper	1	-
chr10	14832243	14832363	Hyper	1	+
chr10	14832243	14832363	Hyper	1	-
chr10	14832243	14832363	Hyper	1	+
chr5	133558626	133558746	Hypo	1	-
chr5	133558626	133558746	Hypo	1	+
chr5	133558626	133558746	Hypo	1	-
chr5	133558626	133558746	Hyper	1	+
chr5	133558626	133558746	Hyper	1	-
chr5	133558626	133558746	Hyper	1	+
chr5	133558626	133558746	Hyper	1	-
chr5	133558626	133558746	Hyper	1	+
chr16	83343479	83343599	Hypo	1	-
chr16	83343479	83343599	Hypo	1	+
chr16	83343479	83343599	Hypo	1	-
chr16	83343479	83343599	Hyper	1	+
chr16	83343479	83343599	Hyper	1	-
chr16	83343479	83343599	Hyper	1	+
chr16	83343479	83343599	Hyper	1	-
chr16	83343479	83343599	Hyper	1	+
chr11	3193413	3193533	Hypo	1	-
chr11	3193413	3193533	Hypo	1	+
chr11	3193413	3193533	Hypo	1	-
chr11	3193413	3193533	Hyper	1	+
chr11	3193413	3193533	Hyper	1	-
chr11	3193413	3193533	Hyper	1	+
chr11	3193413	3193533	Hyper	1	-
chr11	3193413	3193533	Hyper	1	+
chr11	123362698	123362818	Hypo	1	-
chr11	123362698	123362818	Hypo	1	+
chr11	123362698	123362818	Hypo	1	-
chr11	123362698	123362818	Hyper	1	+
chr11	123362698	123362818	Hyper	1	-
chr11	123362698	123362818	Hyper	1	+
chr11	123362698	123362818	Hyper	1	-
chr11	123362698	123362818	Hyper	1	+
chr12	52727196	52727316	Hypo	1	-
chr12	52727196	52727316	Hypo	1	+
chr12	52727196	52727316	Hyper	1	-

도면24au



도면24av



도면24aw

chr1	219924941	219925061	Hyper	1	+	GAGAAATATATATATATAATAATGGAGGTATTGTTTTTTATTTTGTAGATGACGTGAGGTAGAAGTAATTTGATTTTTAATATTTTAATATTTTTTTTAATATTTTTATATTTTAGGAAA
chr1	219924941	219925061	Hyper	1	-	AAAAAATACACACATACAACAATAAAAACATTATTCCTCACCCTACAAATAACGTAAAACCCAAACAATCTAACCTTCAACACCTCAACACCTTCTCCAACACCTCCACATTTTAAAAAA
chr1	219924941	219925061	Hyper	1	+	GAGAAATATATATATATAATAATGGAGGTATTGTTTTTTATTTTGTAGATGACGTGAGGTTTAAGTAATTTGATTTTTAATATTTTAATATTTTTTTTAATATTTTTATATTTTAGGAAA
chr10	103048025	103048145	Hypo	1	-	AAATCCATAATCAAAAACTAAAACCCCTAAAAACTTTCAATCCTACCACAACATAAAATTAACTCATATCAAAACCAACAAACCAACTAAAAAAAAAAAACATAAATCAAAACAAACCCA
chr10	103048025	103048145	Hypo	1	+	AAGTTTATAGTTAAGGGTTAAGATTTTTAGAGGTTTTTAGTTTTGTTATAGTATGAAGTTGGTTTATATTAGAGTTAGTGAGTTAGTTGGAAAGAAAGGATATGGGTTAAGGTAAGTTTA
chr10	103048025	103048145	Hypo	1	-	AAATCCATAATCAAAAACTAAAACCCCTAAAAACTTTCAATCCTACCACAACATAAAATTCTCTCATATCAAAACCAACAAACCAACTAAAAAAAAAAAACATAAATCAAAACAAACCCA
chr10	103048025	103048145	Hypo	1	+	AAGTTTATAGTTAAGGGTTAAGATTTTTAGAGGTTTTTAGTTTTGTTATAGTATGAAGTTTTTTTTATATTAGAGTTAGTGAGTTAGTTGGAAAGAAAGGATATGGGTTAAGGTAAGTTTA
chr10	103048025	103048145	Hyper	1	-	AAATCCATAATCAAAAACTAAAACCCCTAAAAACTTTCAATCCTACCACAACATAAAATTAACTCATATCAAAACCAACGAACCAACTAAAAAAAAAAAACATAAATCAAAACAAACCCA
chr10	103048025	103048145	Hyper	1	+	AAGTTTATAGTTAAGGGTTAAGATTTTTAGAGGTTTTTAGTTTTGTTATAGTATGAAGTTGGTTTATATTAGAGTTAGCGAGTTAGTTGGAAAGAAAGGATATGGGTTAAGGTAAGTTTA
chr10	103048025	103048145	Hyper	1	-	AAATCCATAATCAAAAACTAAAACCCCTAAAAACTTTCAATCCTACCACAACATAAAATTCTCTCATATCAAAACCAACGAACCAACTAAAAAAAAAAAACATAAATCAAAACAAACCCA
chr10	103048025	103048145	Hyper	1	+	AAGTTTATAGTTAAGGGTTAAGATTTTTAGAGGTTTTTAGTTTTGTTATAGTATGAAGTTTTTTTTATATTAGAGTTAGCGAGTTAGTTGGAAAGAAAGGATATGGGTTAAGGTAAGTTTA
chr4	98803205	98803325	Hypo	1	-	CAAACACCTATTTATCTAAAATACAATACAAAAAAATAATAAAAAACACCACATAAACTAATATAAAAAATTTTCAATAAATTACTTAAAATTAAATATAAACTAACTAATATAAAAATA
chr4	98803205	98803325	Hypo	1	+	TAAGTATTTGTTTATTTGGAGTGTAGTATAGGAGGATGATGAGAAATATTATATAAGTTGGTATGAGAAATTTTTAGTGGGTTGTTTAAGATTAAGTGTGGGTTAGTTAGTGTAAGAATA
chr4	98803205	98803325	Hypo	1	-	CAAACACCTATTTATCTAAAATACAATACAAAAAAATAATAAAAAACACCACATAAACTATAATAAAAAATTTTCAATAAATTACTTAAAATTAAATATAAACTAACTAATATAAAAATA
chr4	98803205	98803325	Hypo	1	+	TAAGTATTTGTTTATTTGGAGTGTAGTATAGGAGGATGATGAGAAATATTATATAAGTTGTAATGAGAAATTTTTAGTGGGTTGTTTAAGATTAAGTGTGGGTTAGTTAGTGTAAGAATA
chr4	98803205	98803325	Hyper	1	-	CAAACACCTATTTATCTAAAATACAATACAAAAAAATAATAAAAAACACCACATAAACTAATATAAAAAATTTTCAATAAATTACTTAAAATTAAATATAAACTAACTAATATAAAAATA
chr4	98803205	98803325	Hyper	1	+	TAAGTATTTGTTTATTTGGAGTGTAGTATAGGAGGATGATGAGAAATATTATATAAGTTGGTATGAGAAATTTTTAGTGGGTTGTTTAAGATTAAGTGTGGGTTAGTTAGTGTAAGAATA
chr4	98803205	98803325	Hyper	1	-	CAAACACCTATTTATCTAAAATACAATACAAAAAAATAATAAAAAACACCACATAAACTATAATAAAAAATTTTCAATAAATTACTTAAAATTAAATATAAACTAACTAATATAAAAATA
chr4	98803205	98803325	Hyper	1	+	TAAGTATTTGTTTATTTGGAGTGTAGTATAGGAGGATGATGAGAAATATTATATAAGTTGTAATGAGAAATTTTTAGTGGGTTGTTTAAGATTAAGTGTGGGTTAGTTAGTGTAAGAATA
chr1	207124869	207124989	Hypo	1	-	CTACCAACTCTCTACTCCTATATACAAATCTTCACCTAAATCAATATTTAACCCCTAACTAAAATCAATATTTAATCCCAAACCAACCAACCCTACAATCCAACATTCCTCATCTAACCT
chr1	207124869	207124989	Hypo	1	+	TTGTTAATTTTTTGTTTTTATGTATAGATTTTTATTTGAGTTAATGTTTAATTTTTGATTGGAGTTAATGTTTAATTTTAGGTTAGTTAGTTTTGTAATTTAGTATTTTTTATTTAGTTT
chr1	207124869	207124989	Hypo	1	-	CTACCAACTCTCTACTCCTATATACAAATCTTCACCTAAATCAATATTTAACCCCTAACTTCAATCAATATTTAATCCCAAACCAACCAACCCTACAATCCAACATTCCTCATCTAACCT
chr1	207124869	207124989	Hypo	1	+	TTGTTAATTTTTTGTTTTTATGTATAGATTTTTATTTGAGTTAATGTTTAATTTTTGATTTTAGTTAATGTTTAATTTTAGGTTAGTTAGTTTTGTAATTTAGTATTTTTTATTTAGTTT
chr1	207124869	207124989	Hyper	1	-	CTACCAACTCTCTACTCCTATATACAAATCTTCACCTAAATCAATATTTAACCCCTAACTAAAATCAATATTTAATCCCAAACCAACCAACCCTACAATCCAACATTCCTCATCTAACCT
chr1	207124869	207124989	Hyper	1	+	TTGTTAATTTTTTGTTTTTATGTATAGATTTTTATTTGAGTTAATGTTTAATTTTTGATTGGAGTTAATGTTTAATTTTAGGTTAGTTAGTTTTGTAATTTAGTATTTTTTATTTAGTTT
chr1	207124869	207124989	Hyper	1	-	CTACCAACTCTCTACTCCTATATACAAATCTTCACCTAAATCAATATTTAACCCCTAACTTCAATCAATATTTAATCCCAAACCAACCAACCCTACAATCCAACATTCCTCATCTAACCT
chr1	207124869	207124989	Hyper	1	+	TTGTTAATTTTTTGTTTTTATGTATAGATTTTTATTTGAGTTAATGTTTAATTTTTGATTTTAGTTAATGTTTAATTTTAGGTTAGTTAGTTTTGTAATTTAGTATTTTTTATTTAGTTT
chr15	71538383	71538503	Hypo	1	-	ATAAATATTCCTACTAAAAAAAAAAAAAAATATACAAATACCAAACTTTAACACAAAAAAACTAAATTTCCTTAAACAAATCACTTAACACCCTAAAAACCATCTATAAAATAAACTAATA
chr15	71538383	71538503	Hypo	1	+	GTAAGTATTTTTATTGAAAGAGGAAAAGGTATATAGATGTTGAGTTTTGATATGGAGGAATTGAGTTTTTTTGGGTAAGTTATTTAATATTTTGAGGATTATTTGTAAAGTGGGTTAATG
chr15	71538383	71538503	Hypo	1	-	ATAAATATTCCTACTAAAAAAAAAAAAAAATATACAAATACCAAACTTTAACACAAAAAAAAAAAAATTTCCTTAAACAAATCACTTAACACCCTAAAAACCATCTATAAAATAAACTAATA
chr15	71538383	71538503	Hypo	1	+	GTAAGTATTTTTATTGAAAGAGGAAAAGGTATATAGATGTTGAGTTTTGATATGGAGGAAAAGAGTTTTTTTGGGTAAGTTATTTAATATTTTGAGGATTATTTGTAAAGTGGGTTAATG
chr15	71538383	71538503	Hyper	1	-	ATAAATATTCCTACTAAAAAAAAAAAAAAATATACAAATACCGAACTTTAACACGAAAAAAACTAAATTTCCTTAAACAAATCACTTAACACCCTAAAAACCATCTATAAAATAAACTAATA
chr15	71538383	71538503	Hyper	1	+	GTAAGTATTTTTATTGAAAGAGGAAAAGGTATATAGATGTCGAGTTTTGATACGGAGGAATTGAGTTTTTTTGGGTAAGTTATTTAATATTTTGAGGATTATTTGTAAAGTGGGTTAATG
chr15	71538383	71538503	Hyper	1	-	ATAAATATTCCTACTAAAAAAAAAAAAAAATATACAAATACCGAACTTTAACACGAAAAAAAAAAAAATTTCCTTAAACAAATCACTTAACACCCTAAAAACCATCTATAAAATAAACTAATA
chr15	71538383	71538503	Hyper	1	+	GTAAGTATTTTTATTGAAAGAGGAAAAGGTATATAGATGTCGAGTTTTGATACGGAGGAAAAGAGTTTTTTTGGGTAAGTTATTTAATATTTTGAGGATTATTTGTAAAGTGGGTTAATG
chr10	29016213	29016333	Hypo	1	-	TCCACTTATCCTAAATAAAATTTACAAAACCTTCTCTCCACAACTACTTACCCTTACAACTATCTAATTATAAAAATAAAATAATAAACTTCAACTATCTATCCCCACCCAAATCTCATC
chr10	29016213	29016333	Hypo	1	+	TTTATTTGTTTTAAGTAGAATTTGTAAGGTTTTTTTTTTATAATTATTTATTTTTGTAATTATTTGATTGTAGAGATGGAGTGATGAGTTTTGATTGTTTGTTTTTATTTAAATTTTATT
chr10	29016213	29016333	Hypo	1	-	TCCACTTATCCTAAATAAAATTTACAAAACCTTCTCTCCACAACTACTTACCCTTACAACACTCTAATTATAAAAATAAAATAATAAACTTCAACTATCTATCCCCACCCAAATCTCATC
chr10	29016213	29016333	Hypo	1	+	TTTATTTGTTTTAAGTAGAATTTGTAAGGTTTTTTTTTTATAATTATTTATTTTTGTAATATTTTGATTGTAGAGATGGAGTGATGAGTTTTGATTGTTTGTTTTTATTTAAATTTTATT
chr10	29016213	29016333	Hyper	1	-	TCCACTTATCCTAAATAAAATTTACAAAACCTTCTCTCCACAACTACTTACCCTTACAACTATCTAATTATAAAAATAAAATAATAAACTTCGACTATCTATCCCCACCCAAATCTCATC
chr10	29016213	29016333	Hyper	1	+	TTTATTTGTTTTAAGTAGAATTTGTAAGGTTTTTTTTTTATAATTATTTATTTTTGTAATTATTTGATTGTAGAGATGGAGTGATGAGTTTCGATTGTTTGTTTTTATTTAAATTTTATT
chr10	29016213	29016333	Hyper	1	-	TCCACTTATCCTAAATAAAATTTACAAAACCTTCTCTCCACAACTACTTACCCTTACAACACTCTAATTATAAAAATAAAATAATAAACTTCGACTATCTATCCCCACCCAAATCTCATC
chr10	29016213	29016333	Hyper	1	+	TTTATTTGTTTTAAGTAGAATTTGTAAGGTTTTTTTTTTATAATTATTTATTTTTGTAATATTTTGATTGTAGAGATGGAGTGATGAGTTTCGATTGTTTGTTTTTATTTAAATTTTATT
chr2	185609694	185609814	Hypo	1	-	AATATATCTATTTTATTATTTTTTCACCATAAACAAATTATTCACATATCTATTCAATAATTAAAAATACCTTTTAAAAACACTATTACTCTAAAAATTAAATTATTATACTTTATATTA
chr2	185609694	185609814	Hypo	1	+	AATGTGTTTATTTTATTGTTTTTTTATTATAGGTAAGTTGTTTATATATTTATTTAGTGGTTAAAAGTGTTTTTTAAAAATATTGTTGTTTTAAGGATTGAGTTATTATATTTTATATTA
chr2	185609694	185609814	Hypo	1	-	AATATATCTATTTTATTATTTTTTCACCATAAACAAATTATTCACATATCTATTCAATAAAAAAAAAATACCTTTTAAAAACACTATTACTCTAAAAATTAAATTATTATACTTTATATTA
chr2	185609694	185609814	Hypo	1	+	AATGTGTTTATTTTATTGTTTTTTTATTATAGGTAAGTTGTTTATATATTTATTTAGTGGGAAAAAGTGTTTTTTAAAAATATTGTTGTTTTAAGGATTGAGTTATTATATTTTATATTA
chr2	185609694	185609814	Hyper	1	-	AATATATCTATTTTATTATTTTTTCACCATAAACAAATTATTCACATATCTATTCAATAATTAAAAATACCTTTTAAAAACACTATTACTCTAAAAATTAAATTATTATACTTTATATTA
chr2	185609694	185609814	Hyper	1	+	AATGTGTTTATTTTATTGTTTTTTTATTATAGGTAAGTTGTTTATATATTTATTTAGTGGTTAAAAGTGTTTTTTAAAAATATTGTTGTTTTAAGGATTGAGTTATTATATTTTATATTA
chr2	185609694	185609814	Hyper	1	-	AATATATCTATTTTATTATTTTTTCACCATAAACAAATTATTCACATATCTATTCAATAAAAAAAAAATACCTTTTAAAAACACTATTACTCTAAAAATTAAATTATTATACTTTATATTA
chr2	185609694	185609814	Hyper	1	+	AATGTGTTTATTTTATTGTTTTTTTATTATAGGTAAGTTGTTTATATATTTATTTAGTGGGAAAAAGTGTTTTTTAAAAATATTGTTGTTTTAAGGATTGAGTTATTATATTTTATATTA
chr6	145953277	145953397	Hypo	1	-	TTCTTAATACAAAAACTAACCTACCAATATCCTCCCAACTACCCAATAATAACAAAACTTTAACCCAATTATCTTAACTCCAAAATCAACATTTCCATACAATAAAAAAACCAAAATCAA
chr6	145953277	145953397	Hypo	1	+	TTTTTAATGTAGGAATTAGTTTGTTGATATTTTTTTAGTTATTTAGTGGTGATAAGGTTTTAGTTTAGTTGTTTTGGTTTTAAGGTTAGTATTTTTGTGTAATGGGAGAGTTGAAATTAG

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chr6	145953277	145953397	Hypo	1	-	TTCTTAATACAAAAACTAACCTACCAATATCCTCCCAACTACCCAATAATAACAAAACTTACACCCAATTATCTTAACTCCAAAATCAACATTTCCATACAATAAAAAAACCAAAATCAA
chr6	145953277	145953397	Hypo	1	+	TTTTTAATGTAGGAATTAGTTTGTTGATATTTTTTTAGTTATTTAGTGGTGATAAGGTTTATGTTTAGTTGTTTTGGTTTTAAGGTTAGTATTTTTGTGTAATGGGAGAGTTGAAATTAG
chr6	145953277	145953397	Hyper	1	-	TTCTTAATACAAAAACTAACCTACCGATATCCTCCCAACTACCCAATAATAACAAAACTTTAACCCAATTATCTTAACTCCAAAATCAACATTTCCGTACAATAAAAAAACCGAAATCAA
chr6	145953277	145953397	Hyper	1	+	TTTTTAATGTAGGAATTAGTTTGTCGATATTTTTTTAGTTATTTAGTGGTGATAAGGTTTTAGTTTAGTTGTTTTGGTTTTAAGGTTAGTATTTTCGTGTAATGGGAGAGTCGAAATTAG
chr6	145953277	145953397	Hyper	1	-	TTCTTAATACAAAAACTAACCTACCGATATCCTCCCAACTACCCAATAATAACAAAACTTACGCCCAATTATCTTAACTCCAAAATCAACATTTCCGTACAATAAAAAAACCGAAATCAA
chr6	145953277	145953397	Hyper	1	+	TTTTTAATGTAGGAATTAGTTTGTCGATATTTTTTTAGTTATTTAGTGGTGATAAGGTTTACGTTTAGTTGTTTTGGTTTTAAGGTTAGTATTTTCGTGTAATGGGAGAGTCGAAATTAG
chr1	246161192	246161312	Hypo	1	-	CACAACTTTCTCTAACAAATACTCAAACAAAAAATCACAAATAAACACTATTCTAACAATTACCAAACAAACCAACCTCTTTCTAATCCCACTAAAAAACTAAACAATAACACAATCTAT
chr1	246161192	246161312	Hypo	1	+	TATAGTTTTTTTTGGTAGATGTTTAGATAAGAGGTTATGGATAGGTATTGTTTTGGTAATTGTTAGATAAATTAATTTTTTTTTGATTTTATTGAGAGGTTGGATAATAATATAGTTTGT
chr1	246161192	246161312	Hypo	1	-	CACAACTTTCTCTAACAAATACTCAAACAAAAAATCACAAATAAACACTATTCTAACAATACCCAAACAAACCAACCTCTTTCTAATCCCACTAAAAAACTAAACAATAACACAATCTAT
chr1	246161192	246161312	Hypo	1	+	TATAGTTTTTTTTGGTAGATGTTTAGATAAGAGGTTATGGATAGGTATTGTTTTGGTAATGTTTAGATAAATTAATTTTTTTTTGATTTTATTGAGAGGTTGGATAATAATATAGTTTGT
chr1	246161192	246161312	Hyper	1	-	CACAACTTTCTCTAACAAATACTCAAACAAAAAATCACGAATAAACACTATTCTAACAATTACCAAACAAACCAACCTCTTTCTAATCCCACTAAAAAACTAAACAATAACACAATCTAT
chr1	246161192	246161312	Hyper	1	+	TATAGTTTTTTTTGGTAGATGTTTAGATAAGAGGTTACGGATAGGTATTGTTTTGGTAATTGTTAGATAAATTAATTTTTTTTTGATTTTATTGAGAGGTTGGATAATAATATAGTTTGT
chr1	246161192	246161312	Hyper	1	-	CACAACTTTCTCTAACAAATACTCAAACAAAAAATCACGAATAAACACTATTCTAACAATACCCAAACAAACCAACCTCTTTCTAATCCCACTAAAAAACTAAACAATAACACAATCTAT
chr1	246161192	246161312	Hyper	1	+	TATAGTTTTTTTTGGTAGATGTTTAGATAAGAGGTTACGGATAGGTATTGTTTTGGTAATGTTTAGATAAATTAATTTTTTTTTGATTTTATTGAGAGGTTGGATAATAATATAGTTTGT
chr13	53644046	53644166	Hypo	1	-	AAATTATACCTCTACTTAAAATCCTTCTCCTATAAAATAAAATAAAAACTCCTTAACCTAACATAAAAACTCCAAACTCTACCTATACAATCTCACCTATCACCTATACCTCTATATACT
chr13	53644046	53644166	Hypo	1	+	AAGTTATGTTTTTGTTTAAAATTTTTTTTTTATAGGATAAGATGGAAATTTTTTAGTTTGATATAAAAGTTTTAGGTTTTATTTGTGTAATTTTATTTGTTATTTATATTTTTGTATATT
chr13	53644046	53644166	Hypo	1	-	AAATTATACCTCTACTTAAAATCCTTCTCCTATAAAATAAAATAAAAACTCCTTAACCTACAATAAAAACTCCAAACTCTACCTATACAATCTCACCTATCACCTATACCTCTATATACT
chr13	53644046	53644166	Hypo	1	+	AAGTTATGTTTTTGTTTAAAATTTTTTTTTTATAGGATAAGATGGAAATTTTTTAGTTTGTAATAAAAGTTTTAGGTTTTATTTGTGTAATTTTATTTGTTATTTATATTTTTGTATATT
chr13	53644046	53644166	Hyper	1	-	AAATTATACCTCTACTTAAAATCCTTCTCCTATAAAATAAAATAAAAACTCCTTAACCTAACATAAAAACTCCAAACTCTACCTATACAATCTCACCTATCACCTATACCTCTATATACT
chr13	53644046	53644166	Hyper	1	+	AAGTTATGTTTTTGTTTAAAATTTTTTTTTTATAGGATAAGATGGAAATTTTTTAGTTTGATATAAAAGTTTTAGGTTTTATTTGTGTAATTTTATTTGTTATTTATATTTTTGTATATT
chr13	53644046	53644166	Hyper	1	-	AAATTATACCTCTACTTAAAATCCTTCTCCTATAAAATAAAATAAAAACTCCTTAACCTACAATAAAAACTCCAAACTCTACCTATACAATCTCACCTATCACCTATACCTCTATATACT
chr13	53644046	53644166	Hyper	1	+	AAGTTATGTTTTTGTTTAAAATTTTTTTTTTATAGGATAAGATGGAAATTTTTTAGTTTGTAATAAAAGTTTTAGGTTTTATTTGTGTAATTTTATTTGTTATTTATATTTTTGTATATT
chr10	78908593	78908713	Hypo	1	-	TAATCAACCTCTAATATAACTAACATCTTAAAATAAAAAAAAAAATATTTAATTTAAAAACAAATACTTCTACATTTCACAAAATAAAAATCTATAAATAACAACATTTAAAAATTCCTTC
chr10	78908593	78908713	Hypo	1	+	TGGTTAATTTTTGATGTAGTTGATATTTTGAAATGAGGAAGGAATGTTTAATTTGAGAATAGGTATTTTTATATTTTATAAGGTAGAAATTTGTAAATAATAATATTTGGAAGTTTTTTT
chr10	78908593	78908713	Hypo	1	-	TAATCAACCTCTAATATAACTAACATCTTAAAATAAAAAAAAAAATATTTAATTTAAAAACCCATACTTCTACATTTCACAAAATAAAAATCTATAAATAACAACATTTAAAAATTCCTTC
chr10	78908593	78908713	Hypo	1	+	TGGTTAATTTTTGATGTAGTTGATATTTTGAAATGAGGAAGGAATGTTTAATTTGAGAATTTGTATTTTTATATTTTATAAGGTAGAAATTTGTAAATAATAATATTTGGAAGTTTTTT
chr10	78908593	78908713	Hyper	1	-	TAATCAACCTCTAATATAACTAACATCTTAAAATAAAAAAAAAAATATTTAATTTAAAAACAAATACTTCTACATTTCACAAAATAAAAATCTATAAATAACAACATTTAAAAATTCCTTC
chr10	78908593	78908713	Hyper	1	+	TGGTTAATTTTTGATGTAGTTGATATTTTGAAATGAGGAAGGAATGTTTAATTTGAGAATAGGTATTTTTATATTTTATAAGGTAGAAATTTGTAAATAATAATATTTGGAAGTTTTTTT
chr10	78908593	78908713	Hyper	1	-	TAATCAACCTCTAATATAACTAACATCTTAAAATAAAAAAAAAAATATTTAATTTAAAAACCCGTACTTCTACATTTCACAAAATAAAAATCTATAAATAACAACATTTAAAAATTCCTTC
chr10	78908593	78908713	Hyper	1	+	TGGTTAATTTTTGATGTAGTTGATATTTTGAAATGAGGAAGGAATGTTTAATTTGAGAATTCGTATTTTTATATTTTATAAGGTAGAAATTTGTAAATAATAATATTTGGAAGTTTTTT
chr7	82954554	82954674	Hypo	1	-	ATATAAAATTCTACATACATCAAAAAAAATTCTTTAAATCCACCCAATAAACACAATTAACATACAACTAAACAAACTAAATACAATAAATCCACTTCATCAATCCTATTACCCTAAATA
chr7	82954554	82954674	Hypo	1	+	ATATGAAGTTTTATATGTGTTAAAGAGGGTTTTTTGAGTTTGTTTAGTGGATATGGTTAGTGTGTGGTTGAATAAGTTGAATGTAATGGATTTATTTTATTAGTTTTATTGTTTTAAATG
chr7	82954554	82954674	Hypo	1	-	ATATAAAATTCTACATACATCAAAAAAAATTCTTTAAATCCACCCAATAAACACAATTAAACTACAACTAAACAAACTAAATACAATAAATCCACTTCATCAATCCTATTACCCTAAATA
chr7	82954554	82954674	Hypo	1	+	ATATGAAGTTTTATATGTGTTAAAGAGGGTTTTTTGAGTTTGTTTAGTGGATATGGTTAGATTGTGGTTGAATAAGTTGAATGTAATGGATTTATTTTATTAGTTTTATTGTTTTAAATG
chr7	82954554	82954674	Hyper	1	-	ATATAAAATTCTACATACGTCAAAAAAAATTCTTTAAATCCGCCCAATAAACACGATTAACGTACGACTAAACAAACTAAATACAATAAATCCACTTCATCAATCCTATTACCCTAAATA
chr7	82954554	82954674	Hyper	1	+	ATATGAAGTTTTATATGCGTTAAAGAGGGTTTTTTGAGTTCGTTTAGTGGATACGGTTAGCGTGCGGTTGAATAAGTTGAATGTAATGGATTTATTTTATTAGTTTTATTGTTTTAAATG
chr7	82954554	82954674	Hyper	1	-	ATATAAAATTCTACATACGTCAAAAAAAATTCTTTAAATCCGCCCAATAAACACGATTAAACTACGACTAAACAAACTAAATACAATAAATCCACTTCATCAATCCTATTACCCTAAATA
chr7	82954554	82954674	Hyper	1	+	ATATGAAGTTTTATATGCGTTAAAGAGGGTTTTTTGAGTTCGTTTAGTGGATACGGTTAGATTGCGGTTGAATAAGTTGAATGTAATGGATTTATTTTATTAGTTTTATTGTTTTAAATG
chr17	71157009	71157129	Hypo	1	-	AAAATAACAAACCTCACCCTAACATTCCCATAAAAATAATAAAAACCACATTAAATACTCAAACTAATATCTAACACTCTCAAACACATCCAATCCTCCCCTCAAAACTCTCTTACTTTC
chr17	71157009	71157129	Hypo	1	+	GAAATGGTAGATTTTATTTTGGTATTTTTGTAAAGATGATAAAAATTATATTGGATGTTTAGATTGGTATTTAATATTTTTAAATATATTTAATTTTTTTTTTAGGGTTTTTTTGTTTTT
chr17	71157009	71157129	Hypo	1	-	AAAATAACAAACCTCACCCTAACATTCCCATAAAAATAATAAAAACCACATTAAATACTCCCACTAATATCTAACACTCTCAAACACATCCAATCCTCCCCTCAAAACTCTCTTACTTTC
chr17	71157009	71157129	Hypo	1	+	GAAATGGTAGATTTTATTTTGGTATTTTTGTAAAGATGATAAAAATTATATTGGATGTTTTTATTGGTATTTAATATTTTTAAATATATTTAATTTTTTTTTTAGGGTTTTTTTGTTTTT
chr17	71157009	71157129	Hyper	1	-	AAAATAACAAACCTCACCCTAACATTCCCGTAAAAATAATAAAAACCACATTAAATACTCAAACTAATATCTAACACTCTCAAACACATCCAATCCTCCCCTCAAAACTCTCTTACTTTC
chr17	71157009	71157129	Hyper	1	+	GAAATGGTAGATTTTATTTTGGTATTTTCGTAAAGATGATAAAAATTATATTGGATGTTTAGATTGGTATTTAATATTTTTAAATATATTTAATTTTTTTTTTAGGGTTTTTTTGTTTTT
chr17	71157009	71157129	Hyper	1	-	AAAATAACAAACCTCACCCTAACATTCCCGTAAAAATAATAAAAACCACATTAAATACTCCCACTAATATCTAACACTCTCAAACACATCCAATCCTCCCCTCAAAACTCTCTTACTTTC
chr17	71157009	71157129	Hyper	1	+	GAAATGGTAGATTTTATTTTGGTATTTTCGTAAAGATGATAAAAATTATATTGGATGTTTTTATTGGTATTTAATATTTTTAAATATATTTAATTTTTTTTTTAGGGTTTTTTTGTTTTT
chr4	91296933	91297053	Hypo	1	-	ATAAAACAAACACATACCATTTACTAACTAACATAAACATAAATACAAATTAAACTAATTAACCTAAAACAATCCCTCCAAAAACTAAAACTAAATTCAAATATTCAAATTTAACCAAAA
chr4	91296933	91297053	Hypo	1	+	GTAGAGTAGATATATATTATTTGTTGGTTGGTATGGATATAAATGTAAGTTGGATTGATTAATTTGAGGTAGTTTTTTTAAAAATTAGGATTAGATTTAAGTATTTAAATTTAATTGGAG
chr4	91296933	91297053	Hypo	1	-	ATAAAACAAACACATACCATTTACTAACTAACATAAACATAAATACAAATTAAACTAATTTCCCTAAAACAATCCCTCCAAAAACTAAAACTAAATTCAAATATTCAAATTTAACCAAAA
chr4	91296933	91297053	Hypo	1	+	GTAGAGTAGATATATATTATTTGTTGGTTGGTATGGATATAAATGTAAGTTGGATTGATTTTTTTGAGGTAGTTTTTTTAAAAATTAGGATTAGATTTAAGTATTTAAATTTAATTGGAG
chr4	91296933	91297053	Hyper	1	-	ATAAAACAAACACATACCATTTACTAACTAACATAAACATAAATACAAATTAAACTAATTAACCTAAAACAATCCCTCCAAAAACTAAAACTAAATTCAAATATTCAAATTTAACCGAAA
chr4	91296933	91297053	Hyper	1	+	GTAGAGTAGATATATATTATTTGTTGGTTGGTATGGATATAAATGTAAGTTGGATTGATTAATTTGAGGTAGTTTTTTTAAAAATTAGGATTAGATTTAAGTATTTAAATTTAATCGGAG
chr4	91296933	91297053	Hyper	1	-	ATAAAACAAACACATACCATTTACTAACTAACATAAACATAAATACAAATTAAACTAATTTCCCTAAAACAATCCCTCCAAAAACTAAAACTAAATTCAAATATTCAAATTTAACCGAAA

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chr4	91296933	91297053	Hyper	1 +	GTAGAGTAGATATATTATTTGTTGGTTGGTATGGATATAAATGTAAGTTGGATTGATTTTTTTGAGGTAGTTTTTTTAAAAATTAGGATTAGATTTAAGTATTTAAATTTAATCGGAG
chr7	104017162	104017282	Hypo	1 -	CAAACTCTATTACTCTAAACTAAAAACAAACCTTAACAACACTCCTCCTTACCCTTACCCATTAACAAAATATATTAATAAATCAAATTATAACAATCATTTTACCAATAATATTTACACCTCCCAA
chr7	104017162	104017282	Hypo	1 +	TAGGTTTTATTATTTTGGGTTGGGAGTAAGTTTTGGTGATATTTTTTTTTGTTTTTGTTAGAATATGTTGGTGAATTAAGTTATGATAGTTATTTTATTAATAATATTTATATTTTTTAA
chr7	104017162	104017282	Hypo	1 -	CAAACTCTATTACTCTAAACTAAAAACAAACCTTAACAACACTCCTCCTTACCCTTACCATTATATATTAATAAATCAAATTATAACAATCATTTTACCAATAATATTTACACCTCCCAA
chr7	104017162	104017282	Hypo	1 +	TAGGTTTTATTATTTTGGGTTGGGAGTAAGTTTTGGTGATATTTTTTTTTGTTTTTGTTAGAATATGTTGGTGAATTAAGTTATGATAGTTATTTTATTAATAATATTTATATTTTTTAA
chr7	104017162	104017282	Hypo	1 -	CAAACTCTATTACTCTAAACTAAAAACAAACCTTAACGACACTCCTCCTTACCCTTACCATTATATATTAATAAATCAAATTATAACAATCATTTTACCAATAATATTTACACCTCCCAA
chr7	104017162	104017282	Hypo	1 +	TAGGTTTTATTATTTGGGTTGGGAGTAAGTTTTGGCGATATTTTTTTTGTTTTTGTTAGAATATGTTGGTGAATTAAGTTATGATAGTTATTTTATTAATAATATTTATATTTTTTAA
chr7	104017162	104017282	Hypo	1 -	CAAACTCTATTACTCTAAACTAAAAACAAACCTTAACGACACTCCTCCTTACCCTTACCATTATATATTAATAAATCAAATTATAACAATCATTTTACCAATAATATTTACACCTCCCAA
chr7	104017162	104017282	Hypo	1 +	TAGGTTTTATTATTTGGGTTGGGAGTAAGTTTTGGCGATATTTTTTTTGTTTTTGTTAGAATATGTTGGTGAATTAAGTTATGATAGTTATTTTATTAATAATATTTATATTTTTTAA
chr9	28628745	28628865	Hypo	1 -	AATAAAATTTATCTCAATAAAATTATTTCCTTCAATTAACTTCCTCAACAATAATAAACCTCCAATAATATAATAATTTTATACTAATAACTAAAAATATATTATCAACTAATACCTCTT
chr9	28628745	28628865	Hypo	1 +	AATAAAGTTTGTTTTAATAAAATTATTTTTTTTAATTAGTTTTTTAGTAATGATGAGTTTTTGGTAATGTAATGATTTTGTATTAATAGTTGAAAGTGTGTTATTAGTTAATGTTTTTT
chr9	28628745	28628865	Hypo	1 -	AATAAAATTTATCTCAATAAAATTATTTCCTTCAATTAACTTCCTCAACAATAATAAACCAACAATAATATAATAATTTTATACTAATAACTAAAAATATATTATCAACTAATACCTCTT
chr9	28628745	28628865	Hypo	1 +	AATAAAGTTTGTTTTAATAAAATTATTTTTTTTAATTAGTTTTTTAGTAATGATGAGTTTTTGGTAATGTAATGATTTTGTATTAATAGTTGAAAGTGTGTTATTAGTTAATGTTTTTT
chr9	28628745	28628865	Hypo	1 -	AATAAAATTTATCTCAATAAAATTATTTCCTTCAATTAACTTCCTCAACAATAATAAACCTCCGATAATATAATAATTTTATACTAATAACTAAAAATATATTATCAACTAATACCTCTT
chr9	28628745	28628865	Hypo	1 +	AATAAAGTTTGTTTTAATAAAATTATTTTTTTTAATTAGTTTTTTAGTAATGATGAGTTTTCGGTAATGTAATGATTTTGTATTAATAGTTGAAAGTGTGTTATTAGTTAATGTTTTTT
chr9	28628745	28628865	Hypo	1 -	AATAAAATTTATCTCAATAAAATTATTTCCTTCAATTAACTTCCTCAACAATAATAAACCAACGATAATATAATAATTTTATACTAATAACTAAAAATATATTATCAACTAATACCTCTT
chr9	28628745	28628865	Hypo	1 +	AATAAAGTTTGTTTTAATAAAATTATTTTTTTTAATTAGTTTTTTAGTAATGATGAGTTTTCGGTAATGTAATGATTTTGTATTAATAGTTGAAAGTGTGTTATTAGTTAATGTTTTTT
chr2	6156820	6156940	Hypo	1 -	CTTCACTTAAACATAACATTAACATATCATTTTTTTCTCTCAATTCTACTATAACTATATCCCAAAAATATTTTATATTCTATTTCTATCTTCATTCATCTTAAAATACATCCTAA
chr2	6156820	6156940	Hypo	1 +	TTTTATTTTAAATATAGGTATTAATATGTATATTTTTTTTTTTTAGTTTTATTATAGTTGTATTTTAGAAGTGTTTTTATGTTTTGTTTTTGTTTTTATTTATTTTAAAGTGTATTTTAA
chr2	6156820	6156940	Hypo	1 -	CTTCACTTAAACATAACATTAACATATCATTTTTTTCTCTCAATTCTACTATAACTATATCCCAAAAATATTTTATATTCTATTTCTATCTTCATTCATCTTAAAATACATCCTAA
chr2	6156820	6156940	Hypo	1 +	TTTTATTTTAAATATAGGTATTAATATGTATATTTTTTTTTTTTAGTTTTATTATAGTTGATTTTAGAAGTGTTTTTATGTTTTGTTTTTGTTTTTATTTATTTTAAAGTGTATTTTAA
chr2	6156820	6156940	Hypo	1 -	CTTCACTTAAACATAACATTAACATATCATTTTTTTCTCTCAATTCTACTATAACTATATCCCAAAAATATTTTATATTCTATTTCTATCTTCATTCATCTTAAAATACATCCTAA
chr2	6156820	6156940	Hypo	1 +	TTTTATTTTAAATATAGGTATTAATATGTATATTTTTTTTTTTTAGTTTTATTATAGTTGATTTTAGAAGTGTTTTTATGTTTTGTTTTTGTTTTTATTTATTTTAAAGTGTATTTTAA
chr2	6156820	6156940	Hypo	1 -	CTTCACTTAAACATAACATTAACATATCATTTTTTTCTCTCAATTCTACTATAACTATATCCCAAAAATATTTTATATTCTATTTCTATCTTCATTCATCTTAAAATACATCCTAA
chr2	6156820	6156940	Hypo	1 +	TTTTATTTTAAATATAGGTATTAATATGTATATTTTTTTTTTTTAGTTTTATTATAGTTGATTTTAGAAGTGTTTTTATGTTTTGTTTTTGTTTTTATTTATTTTAAAGTGTATTTTAA
chr14	55905170	55905290	Hypo	1 -	CCCCAATTCCACTACAAAATTTCCTTAATCTCACCTATCCCAAATATAAAAATCTCCTCCCACAATTTACACTAAAACACCAAAACTACAACAATCAATATCTCCCTTCCCCTTCCCCT
chr14	55905170	55905290	Hypo	1 +	TTTTAATTTTATTGTAGGGTTTTTTGGTTTATTTGTTTTAGATGTAAAGGGTTTTTTTTGGGTAATTATGTTAAAGTATTAAAGTTGTAATAGTTAGTGTTTTTTTTTTTTTTTTTT
chr14	55905170	55905290	Hypo	1 -	CCCCAATTCCACTACAAAATTTCCTTAATCTCACCTATCCCAAATATAAAAATCTCCTCCCGCAATTTACGCTAAAACACCAAAACTACAACAATCAATATCTCCCTTCCCCTTCCCCT
chr14	55905170	55905290	Hypo	1 +	TTTTAATTTTATTGTAGGGTTTTTTGGTTTATTTGTTTTAGATGTAAAGGGTTTTTTTTCGTAATTTACGTTAAAGTATTAAAGTTGTAATAGTTAGTGTTTTTTTTTTTTTTTTTT
chr14	55905170	55905290	Hypo	1 -	CCCCAATTCCACTACAAAATTTCCTTAATCTCACCTATCCCAAATATAAAAATCTCCTCCGCAATTTACGCTAAAACACCAAAACTACAACAATCAATATCTCCCTTCCCCTTCCCCT
chr14	55905170	55905290	Hypo	1 +	TTTTAATTTTATTGTAGGGTTTTTTGGTTTATTTGTTTTAGATGTAAAGGGTTTTTTTTCGGAATTTACGTTAAAGTTTAAAGTTGTAATAGTTAGTGTTTTTTTTTTTTTTTTTT
chr20	55131726	55131846	Hypo	1 -	TTACCAACTATATTACCTTAAATAAATCCCTTAACCTCTCTAAATCTCATCACAAAATACTTTTCAAATAAAACAAAATCATTAAAAAAATTCAATAAAATATTTACTCTTAAAACCCTT
chr20	55131726	55131846	Hypo	1 +	TTATTAGTTGTGTTATTTTAAGTAGGTTTTTTAATTTTTTTGAATTTTATTGTAAAGTGTTTTTGAATAGAGTAGGATTATTGAGAGGATTTAGTGAAGTATTTATTTTTGAAATTTTT
chr20	55131726	55131846	Hypo	1 -	TTACCAACTATATTACCTTAAATAAATCCCTTAACCTCTCTAAATCTCATCGCAAAATACGATTCGAATAAAACAAAATCATTAAAAAAATTTACTCTTAAAACCCTT
chr20	55131726	55131846	Hypo	1 +	TTATTAGTTGTGTTATTTTAAGTAGGTTTTTTAATTTTTTTGAATTTTATTCGTAAAGTGTTTTTCGAATAGAGTAGGATTATTGAGAGGATTTAGTGAAGTATTTATTTTTGAAATTTTT
chr20	55131726	55131846	Hypo	1 -	TTACCAACTATATTACCTTAAATAAATCCCTTAACCTCTCTAAATCTCATCGCAAAATACGATTCGAATAAAACAAAATCATTAAAAAAATTTACTCTTAAAACCCTT
chr20	55131726	55131846	Hypo	1 +	TTATTAGTTGTGTTATTTTAAGTAGGTTTTTTAATTTTTTTGAATTTTATCGTAAAGTGCGGTTCGAATAGAGTAGGATTATTGAGAGGATTTAGTGAAGTATTTATTTTTGAAATTTTT
chr4	36055461	36055581	Hypo	1 -	TTATTCTTCAAATAATTAATTATCTTACAAATTTAAATCCACTTATAAAATTACTAAATAACTCAATACCAACCATATAATAAAACACAAATATTTTTAAATAAAATAAAAAAATA
chr4	36055461	36055581	Hypo	1 +	TTGTTTTTTAAGTAGTTGATTATTTTATAAATTTAGATTTATTTATGAAATTGTTAAGTAGTTTAATATTAGTTGTGTAGTAGATATATATAATAAATATTTTTAAATGGAATAAAAGAGTG
chr4	36055461	36055581	Hypo	1 -	TTATTCTTCAAATAATTAATTATCTTACAAATTTAAATCCACTTATAAAATTACTAAATAACTCAATACCAACCATATAATAAAACACAAATATTTTTAAATAAAATAAAAAAATA
chr4	36055461	36055581	Hypo	1 +	TTGTTTTTTAAGTAGTTGATTATTTTATAAATTTAGATTTATTTATGAAATTGTTAAGTAGTTTAATATTAGTTGTGTAGTAGATATATATAATAAATATTTTTAAATGGAATAAAAGAGTG
chr4	36055461	36055581	Hypo	1 -	TTATTCTTCAAATAATTAATTATCTTACAAATTTAAATCCACTTATAAAATTACTAAATAACTCAATACCAACCATATAATAAAACACAAATATTTTTAAATAAAATAAAAAAATA
chr4	36055461	36055581	Hypo	1 +	TTGTTTTTTAAGTAGTTGATTATTTTATAAATTTAGATTTATTTATGAAATTGTTAAGTAGTTTAATATTAGTCGTGTAGTAGATATATATAATAAATATTTTTAAATGGAATAAAAGAGTG
chr4	36055461	36055581	Hypo	1 -	TTATTCTTCAAATAATTAATTATCTTACAAATTTAAATCCACTTATAAAATTACTAAATAACTCAATACCAACCGTATAATAAAACACAAATATTTTTAAATAAAATAAAAAAATA
chr4	36055461	36055581	Hypo	1 +	TTGTTTTTTAAGTAGTTGATTATTTTATAAATTTAGATTTATTTATGAAATTGTTAAGTAGTTTAATATTAGTTGTGTAGTAGATATATATAATAAATATTTTTAAATGGAATAAAAGAGTG
chr16	79212550	79212670	Hypo	1 -	AATCTTCAAAAAATCCATAATCCATTTTTAAATAACTCTTATCTTCCAAAAATATACAATATACATACCTAATACTCTTCCTAAATAAAAAAATATTACCAAAAACATTTAATCAACTAA
chr16	79212550	79212670	Hypo	1 +	AATTTTTGAAGAATTTGTAGTTTATTTTTAAGTAGTTTTTGTTTTTAAAGGTATGGGATGTGTTTATTTAATGTTTTTTTTGGATGGGAGAATATTATTAAAAATGTTTGGTTGATTAA
chr16	79212550	79212670	Hypo	1 +	AATCTTCAAAAAATCCGTAATCCATTTTTAAATAACTCTTATCTTCCAAAAATATACAATATACATACCTAATACTTCCTAAATAAAAAAATATTACCAAAAACATTTAATCAACTAA
chr16	79212550	79212670	Hypo	1 +	AATTTTGAAGAATTTGTAGTTTATTTTTAAGTAGTTTTTGTTTTTAAAGGTATGTGATGTGTATATTTAATGTTTTTTTTGGATGGGAGAATATTATTAAAAATGTTTGGTTGATTAA
chr16	79212550	79212670	Hypo	1 +	AATCTTCAAAAAATCCATAATCCATTTTTAAATAACTCTTATCTTCCAAAAATATACAATATACATACCTAATACTCTTCCTAAATAAAAAAATATTACCAAAAACATTTAATCAACTAA
chr16	79212550	79212670	Hypo	1 +	AATTTTGAAGAATTTGTAGTTTATTTTTAAGTAGTTTTTGTTTTTAAAGGTATGTGATGTGTATATTTAATGTTTTTTTTGGATGGGAGAATATTATTAAAAATGTTTGGTTGATTAA

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chr16	79212550	79212670	Hyper	1 -	AATCTTCGAAAAATCCGTAATCCATTTTTAAATAACTCTTATCTTCCAAAAATATAAAATATACCTACCTAATACTCTTCCTAAATAAAAAAATATTACCAAAAACGTTTAATCGACTAA
chr16	79212550	79212670	Hyper	1 +	AATTTTCGAAGAATTCGTAGTTTATTTTTAAGTAGTTTTGTTTTTAAAGGTATGGGATGTGTTTATTTAATGTTTTTTTTGGATGGGAGAATATTATTAAAAACGTTTGGTCGATTAA
chr16	79212550	79212670	Hyper	1 -	AATCTTCGAAAAATCCGTAATCCATTTTTAAATAACTCTTATCTTCCAAAAATATACGATATACATACCTAATACTCTTCCTAAATAAAAAAATATTACCAAAAACGTTTAATCGACTAA
chr16	79212550	79212670	Hyper	1 +	AATTTTCGAAGAATTCGTAGTTTATTTTTAAGTAGTTTTGTTTTTAAAGGTATGCGATGTGTATATTTAATGTTTTTTTTGGATGGGAGAATATTATTAAAAACGTTTGGTCGATTAA
chr3	126088273	126088393	Hypo	1 -	TACTTAAAAAACATATATATTATTTCCAATTTCTTACTCTATATACAAAACTACACTAATTAAACTAAAACATATATCTTTATATATTAATCCTACTATCTCTTAAAAAAAATTTAAAA
chr3	126088273	126088393	Hypo	1 +	TGTTTGAAGAATATGTATATTATTTTTAATTTTTTATTTTATATGTAAAATTGTAGTAATTGGTTTAGGGTATATGTTTTTGTATATTGATTTTATTATTTTTTAAAGAGAATTTGAAA
chr3	126088273	126088393	Hypo	1 -	TACTTAAAAAACATATATATTATTTCCAATTTCTTACTCTATATACAAAACTACACTAATTAAACTAAAACATATATCTTTATATATTAATCCTACTATCTCTTAAAAAAAATTTAAAA
chr3	126088273	126088393	Hypo	1 +	TGTTTGAAGAATATGTATATTATTTTTAATTTTTTATTTTATATGTAAAATTGTAGTAATTGGTTTAGGGTATATGTTTTTGTATATTGATTTTATTATTTTTTAAAGAGAATTTGAAA
chr3	126088273	126088393	Hypo	1 -	TACTTAAAAAACATATATATTATTTCCAATTTCTTACTCTATATACAAAACTACACTAATTAAACTAAAACATATATCTTTATATATTAATCCTACTATCTCTTAAAAAAAATTTAAAA
chr3	126088273	126088393	Hypo	1 +	TGTTTGAAGAATATGTATATTATTTTTAATTTTTTATTTTATATGTAAAATTGTAGTAATTGGTTTAGGGTATATGTTTTTGTATATTGATTTTATTATTTTTTAAAGAGAATTTGAAA
chr3	126088273	126088393	Hypo	1 -	TACTTAAAAAACATATATATTATTTCCAATTTCTTACTCTATATACAAAACTACACTAATTAAACTAAAACATATATCTTTATATATTAATCCTACTATCTCTTAAAAAAAATTTAAAA
chr3	126088273	126088393	Hypo	1 +	TGTTTGAAGAATATGTATATTATTTTTAATTTTTTATTTTATATGTAAAATTGTAGTAATTGGTTTAGGGTATATGTTTTTGTATATTGATTTTATTATTTTTTAAAGAGAATTTGAAA
chr7	147970359	147970479	Hypo	1 -	AATAAAAATACAATATTATAATAAAACAAAATCTCCTATTCCATTAACAACTAAAAAAATAACATTTAAAATTCCTTAATATAAAACACTATTATAATACATAATAATAAATATAAAATT
chr7	147970359	147970479	Hypo	1 +	GGTGAAAATGTAATATTATAGTAGAGTAGGGTTTTTTGTTTTATTGGTAATTAGGGGGATAATATTTAGGGTTTTTTGATATAAAATATTGTTATGATGTATGATGATAGATATGAATTT
chr7	147970359	147970479	Hypo	1 -	AATAAAATACAATATTATAATAAACAAAATCTCCTATTCCATTAACAACTAAAAAAATAACATTTAAAATTCCTTAATATAAAACACTATTATAATACATAATAATAAATATAAAATT
chr7	147970359	147970479	Hypo	1 +	GGTGAAAATGTAATATTATAGTAGAGTAGGGTTTTTTGTTTTATTGGTAATTAGGGGGATAATATTTAGGGTTTTTTGATATAAAATATTGTTATGATGTATGATGATAGATATGAATTT
chr7	147970359	147970479	Hypo	1 -	AATAAAATACAATATTATAATAAACAAAATCTCCTATTCCATTAACAACTAAAAAAATAACATTTAAAATTCCTTAATATAAAACACTATTATAATACATAATAATAAATATAAAATT
chr7	147970359	147970479	Hypo	1 +	GGTGAAAATGTAATATTATAGTAGAGTAGGGTTTTTTGTTTTATTGGTAATTAGGGGGATAATATTTAGGGTTTTTTGATATAAAATATTGTTATGATGTATGATGATAGATATGAATTT
chr7	147970359	147970479	Hypo	1 -	AATAAAAATACAATATTATAATAAACAAAATCTCCTATTCCATTAACAACTAAAAAAATAACATTTAAAATTCCTTAATATAAAACACTATTATAATACATAATAATAAATATAAAATT
chr7	147970359	147970479	Hypo	1 +	GGTGAAAATGTAATATTATAGTAGAGTAGGGTTTTTTGTTTTATTGGTAATTAGGGGGATAATATTTAGGGTTTTTTGATATAAAATATTGTTATGATGTATGATGATAGATATGAATTT
chr2	101341784	101341904	Hypo	1 -	CAAAACTCAACTAACTTAAAACAATTCCATTTCCCATTACTCACAATCACAAATCAACCAAACAATCCTTCTAAACTCAATAAAACCTATACCACCAACTATAACACTACAAATAACTC
chr2	101341784	101341904	Hypo	1 +	TAAAGTTTAATTGTTTAAAATAATTTATTTTTATTGTTTATAGTTTGTAGATTAGTTGGGTAGTTTTTTTGGATTTAGTGGGGGTTTGTGTTATTAGTTGTGGTGTTGTAGGTGGTTT
chr2	101341784	101341904	Hypo	1 -	CAAAACTCAACTAACTTAAAACAATTCCATTTCCCATTACTCACAATCACAAATCAACCTAAAAATCCTTCTAAACTCAATAAAACCTATACCACCAACTATAACACTACAAATAACTC
chr2	101341784	101341904	Hypo	1 +	TAAAGTTTAATTGTTTAAAATAATTTATTTTTATTGTTTATAGTTTGTAGATTAGTTGGAAGTTTTTTTGGATTTAGTGGGGGTTTGTGTTATTAGTTGTGGTGTTGTAGGTGGTTT
chr2	101341784	101341904	Hypo	1 -	CAAAACTCAACTAACTTAAAACAATTCCATTTCCCATTACTCACAATCACAAATCAACCGAACAATCCTTCTAAACTCAATAAAACCTATACCACCAACTATAACACTACAAATAACTC
chr2	101341784	101341904	Hypo	1 +	TAAAGTTTAATTGTTTAAAATAATTTATTTTTATTGTTTATAGTTTGTAGATTAGTTGGCGGTAGTTTTTTTGGATTTAGTGGGGGTTTGTGTTATTAGTTGTGGCGTTGTAGGTGGTTT
chr2	101341784	101341904	Hypo	1 -	CAAAACTCAATTACTTAAAACAATTCCATTTCCCATTACTCACAATCACAAATCAACCGAACAATCCTTCTAACCTCAAATAAAACCTATACCACCAACTATAACACTACAAATAACTC
chr2	101341784	101341904	Hypo	1 +	TAAAGTTTAATTGTTTAAAATAATTTATTTTTATTGTTTATAGTTTGTAGATTAGTTGGAAGTTTTTTTGGATTTAGTGGGGGTTTGTGTTATTAGTTGTGGCGTTGTAGGTGGTTT
chr2	101341784	101341904	Hypo	1 +	CAAAACTCAATTACTTAAAACAATTCCATTTCCCATTACTCACAATCACAAATCAACCTAAAAATCCTTCTAACCTCAAATAAAACCTATACCACCAACTATAACACTACAAATAACTC
chr2	101341784	101341904	Hypo	1 +	TAAAGTTTAATTGTTTAAAATAATTTATTTTTATTGTTTATAGTTTGTAGATTAGTTGGGTAGTTTTTTTGGATTTAGTGGGGGTTTGTGTTATTAGTTGTGGTGTTGTAGGTGGTTT
chr8	6092037	6092157	Hypo	1 -	AAAATATAAATCTTTAAAAAAATTAAATAATTATCTTTTATATATTATCTCTTATAACACTATAAAAAAAATATATACCTAATTAATTCAAAACTTAATACTAATAAACAATAACTTAAT
chr8	6092037	6092157	Hypo	1 +	AGGATATAAGTTTTTGAGAAGATTGAATAGTTATTTTTTGTGTGTTATTTTTTGTGAGGTTATTAGAAAGATGTATATTTAATTGGTTTAAAGTTTGGTATTGATAAATAATAGTTTGAT
chr8	6092037	6092157	Hypo	1 -	AAAATATAAATCTTTAAAAAAATTAAATAATTATCTTTTATATATTATCTCTTATAACACTATAAAAAAAATATATACCTAATTAATTCAAAACTTAATACTAATAAACAATAACTTAAT
chr8	6092037	6092157	Hypo	1 +	AGGATATAAGTTTTTGAGAAGATTGAATAGTTATTTTTTGTGTGTTATTTTTTGTGATGTTATGAGAAAGATGTATATTTAATTGGTTTAAAGTTTGGTATTGATAAATAATAGTTTGAT
chr8	6092037	6092157	Hypo	1 -	AAAATATAAATCTTTAAAAAAATTAAATAATTATCTTTTATATATTATCTCTTATAAAACTATCAAAAAAATATATACCTAATTAATTCAAAACTTAATACTAATAAACAATAACTTAAT
chr8	6092037	6092157	Hypo	1 +	AGGATATAAGTTTTTGAGAAGATTGAATAGTTATTTTTTGTGTGTTATTTTTTGTGATGTTATGAGAAAGATGTATATTTAATTGGTTTAAAGTTTGGTATTGATAAATAATAGTTTGAT
chr8	6092037	6092157	Hypo	1 -	AAAATATAAATCTTTAAAAAAATTAAATAATTATCTTTTATATATTATCTCTTATAACGCTATAAAAAAAATATATACCTAATTAATTCCAAAACTTAATACTAATAAACAATAACTTAAT
chr8	6092037	6092157	Hypo	1 +	AGGATATAAGTTTTTGAGAAGATTGAATAGTTATTTTTTGTGTGTTATTTTTTGTGACGTTATGAGAAAGATGTATATTTAATTGGTTTAAAGTTTGGTATTGATAAATAATAGTTTGAT
chr14	21495291	21495411	Hypo	1 -	CATTAACTTCCTAAACCTAAAATCCCACCCAACCTACTACAAACAAAAATAAAACTAATTCTCCCCTAAAATATAATTCTTCCATATCAAAACAACTCCCAACCCAACCAAAATATAAA
chr14	21495291	21495411	Hypo	1 +	TATTGGTTTTTAGATTTTGGGGTTTATTTAGTTTGTTGTAGGTAGAAGTAAGGTTGGTTTTTTTTAAGATATGGTTTTTTATGTTAGGGTAGTTTTTAGTTTAATTAGGGTGTAAG
chr14	21495291	21495411	Hypo	1 -	CATTAACTTCCTAAACCTAAAATCCCACCCAACCTACTACAAACAAAAATAAAACTCATTCTACCCTAAAATATAATTCTTCCATATCAAAACAACTCCCAACCCAACCAAAATATAAA
chr14	21495291	21495411	Hypo	1 +	TATTGGTTTTTAGATTTTGGGGTTTATTTAGTTTGTTGTAGGTAGAAGTAAGGTTGGTTTTTTTTAAGATATGGTTTTTTATGTTAGGGTAGTTTTTAGTTTAATTAGGGTGTAAG
chr14	21495291	21495411	Hypo	1 -	CATTAACTTCCTAAACCTAAAATCCCACCCAACCTACTACAAACAAAAATAAAACTCATTCTACCCTAAAATATAATTCTTCCATATCAAAACAACTCCCAACCCAACCAAAATATAAA
chr14	21495291	21495411	Hypo	1 +	TATTGGTTTTTAGATTTTGGGGTTTATTTAGTTTGTTGTAGGTAGAAGTAAGGTTGGTTTTTTTTAAGATATGGTTTTTTATGTTAGGGTAGTTTTTAGTTTAATTAGGGTGTAAG
chr14	21495291	21495411	Hypo	1 -	CATTAACTTCCTAAACCTAAAATCCCACCCAACCTACTACAAACAAAAATAAAACTCGTTCTACCCTAAAATATAATTCTTCCATATCAAAACAACTCCCAACCCAACCAAAATATAAA
chr14	21495291	21495411	Hypo	1 +	TATTGGTTTTTAGATTTTGGGGTTTATTTAGTTTGTTGTAGGTAGAAGTAAGGTTCGTTTTATTTTAAGATATGGTTTTTTATGTTAGGGTAGTTTTTAGTTTAATTAGGGTGTAAG
chr17	60831781	60831901	Hypo	1 -	AATATTCTATAAAAACATTAACCCTAAAATAATTAACAATATTAAAAAAAAATCATAAACAACAAAAAACCTAAAAATTAACCTTTACCTAAAACCTAATCTACATCCAAAATTTCC
chr17	60831781	60831901	Hypo	1 +	AGTGTTTTTATGGAGATATTAGTTTTGGAGTAGTTGGTGGTGTTGGGAGGAGGGTTATAAGTAGTGGAAGGTTTGGGGATTAATTTTTGTTTAAAGTTTGGTTTATATTTAGGGTTTTT
chr17	60831781	60831901	Hypo	1 -	AATATTCTATAAAAACATTAACCCTAAAATAATTAACAATATTAAAAAAAAATACATAAACAAAAAAAACCTAAAAATTAACCTTTACCTAAAACCTAATCTACATCCAAAATTTCC
chr17	60831781	60831901	Hypo	1 +	AGTGTTTTTATGGAGATATTAGTTTTGGAGTAGTTGGTGGTGTTGGGAGGAGGGTGTATAAGTAGAGGAAGGTTTGGGGATTAATTTTTGTTTAAAGTTTGGTTTATATTTAGGGTTTTT
chr17	60831781	60831901	Hypo	1 -	AATATTCTATAAAAACATTAACCCTAAAATAATTAACGATATTAAAAAAAAATCATAAACAAAAAAAACCTAAAAATTAACCTTTACCTAAAACCTAATCTACATCCAAAATTTCC
chr17	60831781	60831901	Hypo	1 +	AGTGTTTTTATGGAGATATTAGTTTTGGAGTAGTTGGCGGTGTTGGGAGGAGGGTGTATAAGTAGAGGAAGGTTTGGGGATTAATTTTTGTTTAAAGTTTGGTTTATATTTAGGGTTTTT
chr17	60831781	60831901	Hypo	1 -	AATATTCTATAAAAACATTAACCCTAAAATAATTAACGATATTAAAAAAAAATACATAAACAAAAAAAACCTAAAAATTAACCTTTACCTAAAACCTAATCTACATCCAAAATTTCC
chr17	60831781	60831901	Hypo	1 +	AGTGTTTTTATGGAGATATTAGTTTTGGAGTAGTTGGCGGTGTTGGGAGGAGGGTGTATAAGTAGAGGAAGGTTTGGGGATTAATTTTTGTTTAAAGTTTGGTTTATATTTAGGGTTTTT
chr3	68585709	68585829	Hypo	1 -	ATACCCAAATAAATTTAAAAAAACTAACACAAAAAAAACTACAAAAAAAACTACAAAAATAACTAATACTTATATAAAAATCATTTTTCAATTAAAACATTAAAAAAAATATAAAATTTCTTAATTTACA

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chr3	68585709	68585829	Hypo	1 +	ATGTTTAGGTGGATTTGGGAAGAGTTAATATAGGGAGGAGTTATAGAAATGATTGGTGTTTGTGTAGAAATTATTTTTTAATTAAGGTATTAAGGGAAATATAGAGTTTTTTGATTTGTA
chr3	68585709	68585829	Hypo	1 -	ATACCCAAATAAATTTAAAAAAAACTAACACAAAAAAAAACTACAAAAATAACTAAAACTTATATTAAAATCATTTTTCAATTAAAACATTAAAAAAAATATAAAATTTCTAATTTACA
chr3	68585709	68585829	Hyper	1 +	ATGTTTAGGTGGATTTGGGAAGAGTTAATATAGGGAGGAGTTATAGAAATGATTGGGGTTTGTGTTGAAATTATTTTTTAATTAAGGTATTAAGGGAAATATAGAGTTTTTTGATTTGTA
chr3	68585709	68585829	Hyper	1 -	ATACCCAAATAAATTTAAAAAAAACTAACACAAAAAAAAACTACAAAAATAACTAATACTTATATAAAAATCATTTTTCAATTAAAACATTAAAAAAAATATAAAATTTCTAATTTACA
chr3	68585709	68585829	Hyper	1 +	ATGTTTAGGTGGATTTGGGAAGAGTTAATATAGGGAGGAGTTATAGAAATGATTGGTGTTTGTGTAGAAATTATTTTTTAATTAAGGTATTAAGGGAAATATAGAGTTTTTTGATTTGTA
chr3	68585709	68585829	Hyper	1 -	ATACCCAAATAAATTTAAAAAAAACTAACACAAAAAAAAACTACAAAAATAACTAAAACTTATATTAAAATCATTTTTCAATTAAAACATTAAAAAAAATATAAAATTTCTAATTTACA
chr3	68585709	68585829	Hyper	1 +	ATGTTTAGGTGGATTTGGGAAGAGTTAATATAGGGAGGAGTTATAGAAATGATTGGGGTTTGTGTTGAAATTATTTTTTAATTAAGGTATTAAGGGAAATATAGAGTTTTTTGATTTGTA
chr2	109881493	109881613	Hypo	1 -	TTATAAACCACAATCTAATTAACCTACTCCCTACAAAATAAATAAACTACTTAAACTTTACCCACTTAAAACATTACAAAATAAAATAATATATATTTTATTTTTTTTTCCTTATTATTT
chr2	109881493	109881613	Hypo	1 +	TTGTGGATTGTAGTTTAATTGGTTTGTTTTTTGTAGAGTGAGTGGGTTGTTTAGATTTTGTTTATTTGAGGGTGTTGTGAAATAGGATGGTGTGTGTTTTATTTTTTTTTTTGTTATTT
chr2	109881493	109881613	Hypo	1 -	TTATAAACCACAATCTAATTAACCTACTCCCTACAAAATAAATAAACTACTTAAACTTAACCCCCTTAAAACATTACAAAATAAAATAATATATATTTTATTTTTTTTTCCTTATTATTT
chr2	109881493	109881613	Hypo	1 +	TTGTGGATTGTAGTTTAATTGGTTTGTTTTTTGTAGAGTGAGTGGGTTGTTTAGATTTTAGTTTTTTGAGGGTTGTGAAATAGGATGGTGTGTGTTTTATTTTTTTTTTTGTTATTT
chr2	109881493	109881613	Hypo	1 -	TTATAAACCGCAATCTAATTAACCTACTCCCTACAAAATAAATAAACTACTTAAACTTTACCCACTTAAAACGTTACGAAATAAAATAATATATATTTTATTTTTTTTCCTTATTATTT
chr2	109881493	109881613	Hypo	1 +	TTGTGGATCGTAGTTTAATTGGTTTGTTTTTTGTAGAGTGAGTGGGTTGTTTAGATTTTAGTTTTTTGAGGCGTTGCGAAATAGGATGGTGTGTGTTTTATTTTTTTTTTTGTTATTT
chr2	109881493	109881613	Hypo	1 -	TTATAAACCGCAATCTAATTAACCTACTCCCTACAAAATAAATAAACTACTTAAACTTAACCCCCTTAAAACGTTACGAAATAAAATAATATATATTTTATTTTTTTTCCTTATTATTT
chr2	109881493	109881613	Hypo	1 +	TTGTGGATCGTAGTTTAATTGGTTTGTTTTTTGTAGAGTGAGTGGGTTGTTTAGATTTTAGTTTTTTGAGGCGTTGCGAAATAGGATGGTGTGTGTTTTATTTTTTTTTTTGTTATTT
chr4	44908357	44908477	Hypo	1 -	CTTTTTCAATATTAACACTTATAACTTTACCTTATTTTATCTACTACTACTCCTTATAAAAAATTAAAAATATCTTCATTTTAAAAACATTTTTTAAAATATTAATTCCATAAACATATAA
chr4	44908357	44908477	Hypo	1 +	TTTTTTTAATATTGATATTTGTAATTTTATTTTTATTTTATTGTTGTTTTTTTGTAGGAATTGAGAGTGTTTTTATTTAAAAATATTTTTTAAAGTATTAGTTTTATAAATATGTAG
chr4	44908357	44908477	Hypo	1 -	CTTTTTCAATATTAACACTTATAACTTTACCTTATTTTATCTACTACTACTCCTTATAAAAAATTAAAAATATCTTCATTTTAAAAACATTTTTTAAAATATTAATTCCATAAACATATAA
chr4	44908357	44908477	Hypo	1 +	TTTTTTTAATATTGATATTTGTAATTTTATTTTTATTTTATTGTTGTTTTTTTGTAAGGAATTGAGAGTGTTTTTATTTAAAAATATTTTTTAAAGTATTAGTTTTATAAATATGTAG
chr4	44908357	44908477	Hypo	1 -	CTTTTTCAATATTAACACTTATAACTTTACCTTATTTTATCTACTACTACTCCTTTAAAAAATTAAAAATATCTTCATTTAAAAACATTTTTTAAAATATTAATTCCATAAACATATAA
chr4	44908357	44908477	Hypo	1 +	TTTTTTTAATATTGATATTTGTAATTTTATTTTTATTTTATTGTTGTTTTTTTGTAAGGAATTGAGAGTGTTTTTATTTAAAAATATTTTTTAAAGTATTAGTTTTATAAATATGTAG
chr9	33146336	33146456	Hypo	1 -	TATATATCTATCCTTTTAAAACTAAAACACTTCCAAAAAAAATAATTTCAACTTCTCAAAAAAATTTAAAATAATCTAACACTCTAACATTTTATTTTAAAACTTTCACCTCCAAACTAA
chr9	33146336	33146456	Hypo	1 +	TGTATATTTGTTTTTTTAGAATTAGAGTGTTTTTAGAAGGGATGATTTTAGTTTTTAGAAAGGTTTAGAATGGTTTAGGTATTTGGTATTTATTTAAGATTTTATTTTTAGGTTGG
chr9	33146336	33146456	Hypo	1 -	TATATATCTATCCTTTTAAAACTAAAACGTTCCAAAAAAAATAATTTCAACTTCTAAAAAAAATTAAAATAATCTAACACTCTAACATTTTATTTTAAAACTTTCACCTCCAAACTAA
chr9	33146336	33146456	Hypo	1 +	TGTATATTTGTTTTTTTAGAATTAGAGCGTTTTTAGAAGGGATGATTTTAGTTTTTAAGAAAGGTTAGAATGGTTTAGGTATTTGGTATTTATTTAAGATTTTATTTTTAGGTTGG
chr9	33146336	33146456	Hypo	1 -	TATATATCTATCCTTTTAAAACTAAAACGTTCCAAAAAAAATAATTTCAACTTCTAAAAAAAATTAAAATAATCTAACACTCTAACATTTTATTTTAAAACTTTCACCTCCAAACTAA
chr9	33146336	33146456	Hypo	1 +	TGTATATTTGTTTTTTTAGAATTAGAGCGTTTTTAGAAGGGATGATTTTAGTTTTTAAGAAAGGTTAGAATGGTTTAGGTATTTGGTATTTATTTAAGATTTTATTTTTAGGTTGG
chr5	67412531	67412651	Hypo	1 -	TTCTCACCAAAATTAATAACTTATAAATAAAAAATTACTCAAATTATCATTACTAAAACAATAATTATAACCTTCAATCTTATTAAAACAAAAAAAAATATCTAAATTTATATATATAAT
chr5	67412531	67412651	Hypo	1 +	TTTTTATTAGGGTAGTAATTTATAAGTGAGAAGTTGTTAGATTATTATTATTAGGATAATAAGTATGATTTTTAGTTTTATTGGAGTAAGAAAAATGTTAGGTTTATATATGTAAT
chr5	67412531	67412651	Hypo	1 -	TTCTCACCAAAATTAATAACTTATAAATAAAAAATTACTCAAATTATCATTACTAACACAATAAATAACCTTCAATCTTATTAAAACAAAAAAAAATATCTAAATTTATATATATAAT
chr5	67412531	67412651	Hypo	1 +	TTTTTATTAGGGTAGTAATTTATAAGTGAGAAGTTGTTAGATTATTATTATTAGGATAATAAGTATGATTTTAGTTTTATTGGAGTAAGAAAAATGTTAGGTTTATATATGTAAT
chr5	67412531	67412651	Hypo	1 -	TTCTCACCAAAATTAATAACTTATAAATAAAAAATTACTCAAATTATCATTACTAACACAATAAATAACCTTCAATCTTATTAAAACAAAAAAAAATATCTAAATTTATATATATAAT
chr5	67412531	67412651	Hypo	1 +	TTTTTATTAGGGTAGTAATTTATAAGTGAGAAGTTGTTAGATTATTATTATTAGGATAATAAGTATGATTTTAGTTTTATTGGAGTAAGAAAAATGTTAGGTTTATATATGTAAT
chr5	67412531	67412651	Hypo	1 -	TTCTCACCAAAATTAATAACTTATAAATAAAAAATTACTCAAATTATCATTACTAAACACAATAAATAACCTTCAATCTTATTAAAACAAAAAAAAATATCTAAATTTATATATATAAT
chr5	67412531	67412651	Hyper	1 +	TTTTTATTAGGGTAGTAATTTATAAGTGAGAAGTTGTTAGATTATTATTATTAGGATAATAAGTATGATTTTAGTTTTATTGGAGTAAGAAAAATGTTAGGTTTATATATGTAAT
chr1	98918377	98918497	Hypo	1 -	CAATAAAAAAACTAAAATACATAACCATCTTTATCTTCTTTTCTCAAAATAAATAATTTAACAATAAACTTCTATCCATTTCTTTTAATTAACATTTTATAACTTCCAATAAAACTCT
chr1	98918377	98918497	Hypo	1 +	TAGTGAGGAGGGTTGAAATGTGTAGTTGTTTTGTTTTTTTTTTTTTAGAATGAGTTATTTGGTAATGAGTTTTTGTTTATTTTTTTTAATTGGTATTTTGTGATTTTTAGTAAGGTTTT
chr1	98918377	98918497	Hypo	1 -	CAATAAAAAAACTAAAATACATAACCATCTTTATCTTCTTTTCTCAAAATAAATAATTTAACAATAAACTTCTATCCATTTCTTTTAATTAACATTTTATAACTTCCAATAAAACTCT
chr1	98918377	98918497	Hypo	1 +	TAGTGAGGAGGGTTGAAATGTGTAGTTGTTTTGTTTTTTTTTTTTTAGAATGAGTGATTTGGTATTGAGTTTTTGTTTATTTTTTTTAATTGGTATTTTGTGATTTTTAGTAAGGTTTT
chr1	98918377	98918497	Hypo	1 -	CAATAAAAAAACTAAAATACATAACCATCTTTATCTTCTTTTCTCAAAATAAATAATTTAACAATAAACTTCTATCCATTTCTTTTAATTAACATTTTATAACTTCCAATAAAACTCT
chr1	98918377	98918497	Hypo	1 +	TAGTGAGGAGGGTTGAAATGTGTAGTTGTTTTGTTTTTTTTTTTTTAGAATGAGTGATTTGGTATTGAGTTTTTGTTTATTTTTTTTAATTGGTATTTTGTGATTTTTAGTAAGGTTTT
chr1	98918377	98918497	Hypo	1 -	CAATAAAAAAACTAAAATACATAACCATCTTTATCTTCTTTTCTCAAAATAAATAATTTAACAATAAACTTCTATCCATTTCTTTTAATTAACATTTTATAACTTCCAATAAAACTCT
chr1	98918377	98918497	Hyper	1 +	TAGTGAGGAGGGTTGAAATGTGTAGTTGTTTTGTTTTTTTTTTTTTAGAATGAGTGATTTGGTATTGAGTTTTTGTTTATTTTTTTTAATTGGTATTTTGTGATTTTTAGTAAGGTTTT
chr1	98918377	98918497	Hyper	1 -	CAATAAAAAAACTAAAATACATAACCATCTTTATCTTCTTTTCTCAAAATAAATAATTTAACAATAAACTTCTATCCATTTCTTTTAATTAACATTTTATAACTTCCAATAAAACTCT
chr1	30655981	30656101	Hypo	1 -	CAAACAATAAAAAAATAACAATAACAAAACAAAATTTTAATCTTAAACAAACTAAAACCACTTATTCAATCCACACAAATTTATAAAAACATCTCCTTAATACCCCCACTATCCTAAAATTT
chr1	30655981	30656101	Hypo	1 +	TAAGTAATGGGGGAATGATAGTGGTAGGATAGATTTTGATTTTGGATAGATTGAGGGTATTTATTTAGTTTATATAGTTTATGGGGGTATTTTTTTGGTGTTTTTATTGTTTTGGGATTT
chr1	30655981	30656101	Hypo	1 -	CAAACAATAAAAAAATAACAATAACAAAACAAATTTTAATCTTAAACAAACTAAAACCACTTATTCAATCCACACAAATTTATAAAAACATCTCCTTAATACCCCCACTATCCTAAAATTT
chr1	30655981	30656101	Hypo	1 +	TAAGTAATGGGGGAATGATAGTGGTAGGATAGATTTTGATTTTGGATAGATTGAGGGTATTTATTTAGTTTATATAGTTTATGGGGGTATTTTTTTGGTGTTTTTATTGTTTTGGGATTT
chr1	30655981	30656101	Hyper	1 -	CAAACAATAAAAAAATAACAATAACAAAACAAATTTTAATCTTAAACAAACTAAAACCACTTATTCAATCCACACAAATTTATAAAAACATCTCCTTAATACCCCCACTATCCTAAAATTT
chr1	30655981	30656101	Hyper	1 +	TAAGTAATGGGGGAATGATAGTGGTAGGATAGATTTTGATTTTGGATAGATTGAGGGTATTTATTTAGTTTATATAGTTTATGGGGGTATTTTTTTGGTGTTTTTATTGTTTTGGGATTT
chr1	30655981	30656101	Hyper	1 -	CAAACAATAAAAAAATAACAATAACAAAACAAATTTTAATCTTAAACAAACTAAAACCACTTATTCAATCCACACAAATTTATAAAAACATCTCCTTAATACCCCCACTATCCTAAAATTT
chr1	30655981	30656101	Hyper	1 +	TAAGTAATGGGGGAATGATAGTGGTAGGATAGATTTTGATTTTGGATAGATTGAGGGTATTTATTTAGTTTATATAGTTTATGGGGGTATTTTTTTGGTGTTTTTATTGTTTTGGGATTT

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chr1	30655981	30656101	Hyper	1 -	CAAACAATAAAAAAATAACAATAACAAAACAAATTTTAATCTTAAACAAACTAAAACCACTTATTAAATCCACACAAATTTATAAAAACATCTCCTTAATACCCCCACTATCCTAAAATTT
chr1	30655981	30656101	Hyper	1 +	TAAGTAATGGGGGAATGATAGTGGTAGGATAGATTTTGATTTTGGATAGATTGAGGGTATTTATTGAGTTTATATAGTTTATGGGGGTATTTTTTTGGTGTTTTTATTGTTTTGGGATTT
chr4	44707879	44707999	Hypo	1 -	TTCATAACATTTTATAATAAAATAAATCAATAAAATAAAATACATTTAAAATAATACCTAATCATAAAAATACTAACTATTATTAAATATCTTATTAAATATTCACCAAAATATAAAAATC
chr4	44707879	44707999	Hypo	1 +	TTTATAATATTTTTGTGATAAGTAAATTAATAAGTAAAATGTATTTAGAATAGTGTTTGGTTATAGAGATATTGGTTGTTATTAAATATTTATTAAATATTTATTAAGATATAAAAATT
chr4	44707879	44707999	Hypo	1 -	TTCATAACATTTTATAATAAAATAAATCAATAAAATAAAATACATTTAAAATAATACCTAATCATAAAAATACTAACTATTATTAAATATCTTATTAAATATTCACCAAAATATAAAAATC
chr4	44707879	44707999	Hypo	1 +	TTTATAATATTTTTGTGATAAGTAAATTAATAAGTAAAATGTATTTAGAATAGTGTTTGGTTATAGAGATATTGGTTGTTATTAAATATTTATTAAATATTTATTAAGATATAAAAATT
chr4	44707879	44707999	Hyper	1 -	TTCATAACATTTTATAATAAAATAAATCAATAAAATAAAATACATTTAAAATAATACCTAATCATAAAAATACTAACTATTATTAAATATCTTATTAAATATTCACCAAAATATAAAAATC
chr4	44707879	44707999	Hyper	1 +	TTTATAATATTTTTGTGATAAGTAAATTAATAAGTAAAATGTATTTAGAATAGTGTTTGGTTATAGAGATATTGGTTGTTATTAAATATTTATTAAATATTTATTAAGATATAAAAATT
chr4	44707879	44707999	Hyper	1 -	TTCATAACATTTTATAATAAAATAAATCAATAAAATAAAATACATTTAAAATAATACCTAATCATAAAAATACTAACTATTATTAAATATCTTATTAAATATTCACCAAAATATAAAAATC
chr4	44707879	44707999	Hyper	1 +	TTTATAATATTTTTGTGATAAGTAAATTAATAAGTAAAATGTATTTAGAATAGTGTTTGGTTATAGAGATATTGGTTGTTATTAAATATTTATTAAATATTTATTAAGATATAAAAATT
chr7	14032592	14032712	Hypo	1 -	AAAATAAAATAATATTCATTAATAACTTCTCTACAATTAACTTACTATAACATTATAAAAAAAATTACACATTATTAAAAAAAATAAATTTCTAAAAACAATTACAAAAAAACAACAAACT
chr7	14032592	14032712	Hypo	1 +	AAAGTAAAATAATATTTATTAGTGATTTTTTTATAGTTAATTTATTATGGTATTATGAAGAAATTGTACGTTGTTAAAGAAAGTGAATTTTTAAAAGTAGTTATAGAAAGGTAATAAGTT
chr7	14032592	14032712	Hypo	1 -	AAAATAAAATAATATTCATTAATAACTTCTCTACAATTAACTTACTATAACATTATAAAAAAAATACACATTATTAAAAAAAATAAATTTCTAAAAACAATTACAAAAAAACAACAAACT
chr7	14032592	14032712	Hypo	1 +	AAAGTAAAATAATATTTATTAGTGATTTTTTTATAGTTAATTTATTATGGTATTATGAAGAAATTGTACGTTGTTAAAGAAAGTGAATTTTTAAAAGTAGTTATAGAAAGGTAATAAGTT
chr7	14032592	14032712	Hypo	1 -	AAAATAAAATAATATTCATTAATAACTTCTCTACATAACTTACTATAACATTATAAAAAAATACACGTTATTAAAAAAAATAAATTTCTAAAAACAATTACAAAAAAACACAACACT
chr7	14032592	14032712	Hypo	1 +	AAAGTAAAATAATATTTATTAGTGATTTTTTTATAGTTAATTTATTATGGTATTATGTAGAAAATGTACGTTGTTAAAGAAAGTGAATTTTTAAAAGTAGTTATAGAAAGGTAATAAGTT
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr2	13344071	13344291	Hypo	1 -	AAAATCATCTACCCAATCTACTCTTTAATCTAATAATAACACCTAAAACACAAATATCCTATCAAATTCAAAATTATAAATATACCCACCCCAAAAATATTTTAAAATAACTCCCTAAA
chr2	13344071	13344291	Hypo	1 +	AGAATTATTTATTTAGTTTGTTTTTGGTTTAATAATGGTATTTAGAATATAAATATTTTGTTAAATTTAGAGTTATGGATGTGTTTATTTTAAAGGTATTTTTGGAATAATTTTTTGGA
chr1	214619040	214619160	Hypo	1 -	TTCCATACTAAAAAAAACTAAAAAAACCCCAAACCTAAACTAAAAACAATAATCTAACCAACAATTTTCTAACTTCCCCTTACTATTATTAAATATCCTTCTATTTAAATAAAAATT
chr1	214619040	214619160	Hypo	1 +	TTTTATGTTTGAGGAAGATTTGGAAAAATTTAGATTTAAATTAAAAGTAGTGATTTTGGTTAGTAATTTTTTGGTTTTTTTTGTTATTATTAAGTATTTTTTTGTTTGAGTAAGAATT
chr1	214619040	214619160	Hypo	1 -	TTCCATACTAAAAAAAACTAAAAAAACCCCAAACCTAAACTAAAAACAATAATCTAACCAACAATTTTCTAACTTCCCCTTACTATTATTAAATATCCTTCTATTTAAATAAAAATT
chr1	214619040	214619160	Hypo	1 +	TTTTATGTTTGAGGAAGATTTGGAAAAATTTAGATTTAAATTAAAAGTAGTGATTTTGGTTAGTAATTTTTTGGTTTTTTTTGTTATTATTAAGTATTTTTTTGTTTGAGTAAGAATT
chr1	214619040	214619160	Hypo	1 -	TTCCATACTAAAAAAAACTTAAAAAAACCCCAAACCTAAACTAAAAACAATAATCTTAAAAAACAATTTTCTAACTTCCCCTTACTATTATTAAATATCCTTCTATTTAAATAAAAATT
chr1	214619040	214619160	Hypo	1 +	TTTTATGTTTGAGGAAGATTTGGAAAAATTTAGATTTAAATTAAAAGTAGTGATTTTGGTTAGTAATTTTTTGGTTTTTTTTGTTATTATTAAGTATTTTTTTGTTTGAGTAAGAATT
chr12	7297358	7297478	Hypo	1 -	AAAAAAAAAAACTCTAAACCCTAAAAAATAACTAAACATAATTATCAAACCTCACAATTAAAACTATAAAAAACCCCAAACTATAACTTTTAAAAATTTACTAATTCAAAATATAAAACT
chr12	7297358	7297478	Hypo	1 +	AGGGGAGAGGGTTTGAGTTTTAGAGGGTGATTGGGTGTGATTATTAGGTTTTATAGTTATTGTTGTGGAAGGTTTCGGGTTGTGGTTTTTGGGAATTTGTTGGTTTAGGGTGTGGAGTT
chr12	7297358	7297478	Hypo	1 -	AAAAAAAAAAACTCTAAACCCTAAAAAATAACTAAACATAATTATCAAACCTCACAATTAATACCTATAAAAAACCCCAAACTATAACTTTTAAAAATTTACTAATTCAAAATATAAAACT
chr12	7297358	7297478	Hypo	1 +	AGGGGAGAGGGTTTGAGTTTTAGAGGGTGATTGGGTGTGATTATTAGGTTTTATAGTTATTGTTGTGGAAGGTTTCGGGTTGTGGTTTTTGGGAATTTGTTGGTTTAGGGTGTGGAGTT
chr12	7297358	7297478	Hypo	1 -	AAAAAAAAAAACTCTAAACCCTAAAAAATAACTAAACATAATTATCAAACCTCACAATTAATACCTATAAAAAACCCCAAACTATAACTTTTAAAAATTTACTAATTCAAAATATAAAACT
chr12	7297358	7297478	Hypo	1 +	AGGGGAGAGGGTTTGAGTTTTAGAGGGTGATTGGGCGTGATTATTAGGTTTTATAGTTATTGTTGTGGAAGGTTTCGGGTTGTGGTTTTTGGGAATTTGTTGGTTTAGGGTGTGGAGTT
chr12	7297358	7297478	Hypo	1 -	AAAAAAAAAAACTCTAAACCCTAAAAAATAACTAAACGTAATTATCAAACCTCACAATTAATACCTATAAAAAACCCGAACTATAACTTTTAAAAATTTACTAATTCAAAATATAAAACT
chr12	7297358	7297478	Hypo	1 +	AGGGGAGAGGGTTTGAGTTTTAGAGGGTGATTGGGCGTGATTATTAGGTTTTATAGTTATTGTTGTGGAAGGTTTCGGGTTGTGGTTTTTGGGAATTTGTTGGTTTAGGGTGTGGAGTT
chr12	7297358	7297478	Hypo	1 -	AAAAAAAAAAACTCTAAACCCTAAAAAATAACTAAACGTAATTATCAAACCTCACAATTAATACCTATAAAAAACCCGAACTATAACTTTTAAAAATTTACTAATTCAAAATATAAAACT
chr12	7297358	7297478	Hypo	1 +	AGGGGAGAGGGTTTGAGTTTTAGAGGGTGATTGGGCGTGATTATTAGGTTTTATAGTTATTGTTGTGGAAGGTTTCGGGTTGTGGTTTTTGGGAATTTGTTGGTTTAGGGTGTGGAGTT
chr7	16157136	16157256	Hypo	1 -	TCCCTCCAACAACCCTAACTAAAAACCTCTAAACTCTACTACAAAACTACACACACCTTACAAAAACTACATACACCCCAAAACACATACACCCCAAAAAACACATCCTTACCACTTAA
chr7	16157136	16157256	Hypo	1 +	TTTTTTTAGTAGTTTTGGTTGGAAATTTTTAGGTTTTGTTGTAAAATTGTATATATTTTGTGGGAGTTATGTGTATTTTAGTATATTATTAGAATTAGGGAGTATATTTTTGTTATTTGG
chr7	16157136	16157256	Hypo	1 -	TCCCTCCAACAACCCTAACTAAAAACCTCTAAACTCTACTACAAAACTACACACACCTTAACAAAACTACATACACCCCAAAAACACATACACCCCAAAAAACACATCCTTACCACTTAA
chr7	16157136	16157256	Hypo	1 +	TTTTTTTAGTAGTTTTGGTTGGAAATTTTTAGGTTTTGTTGTAAAATTGTATATATTTTGATGGAGTTATGTGTATTTTAGTATATTATTAGAATTAGGGAGTATATTTTTGTTATTTGG
chr7	16157136	16157256	Hypo	1 -	TCCCTCCAACAACCCTAACTAAAAACCTCTAAACTCTACTACAAAACTACACACACCTTACGAAAACTACGTACACCCCAATACATCACAAAACCAAAAAACACATCCTTACCACTTAA
chr7	16157136	16157256	Hypo	1 +	TTTTTTTAGTAGTTTTGGTTGGAAATTTTTAGGTTTTGTTGTAAAATTGTATATATTTTGACGGGAGTTACGTGTATTTTAGTATATTATTAGAATTAGGGAGTATATTTTTGTTATTTGG
chr7	16157136	16157256	Hyper	1 -	TCCCTCCAACAACCCTAACTAAAAACCTCTAAACTCTACTACAAAACTACACACACCTTAACGAAACTACGTACACCCCAATACATCACAAAACCAAAAAACACATCCTTACCACTTAA
chr7	16157136	16157256	Hyper	1 +	TTTTTTTAGTAGTTTTGGTTGGAAATTTTTAGGTTTTGTTGTAAAATTGTATATATTTTGACGGAGTTACGTGTATTTTAGTATATTATTAGAATTAGGGAGTATATTTTTGTTATTTGG
chr13	64668382	64668502	Hypo	1 -	TATAACTTTCTCTATACCTATTTCTATAAATATAAAAATCTCTAACATACCTCACTATTAATTTCCCAAAATCTATATATTATCAAATTAAATTAAAACATTAAAATTTCCCAAAACCCT
chr13	64668382	64668502	Hypo	1 +	TGTGATTTTTTTGTGATTTGTTTTGTGGGTGTGAAGATTTTAATATGTTTATTATTGTATTTTAGGGTTTATGTGTTATTAGATTAAATTGAAGTATTGGAGTTTTTTAAAGTTTT
chr13	64668382	64668502	Hypo	1 -	TATAACTTTCTCTATACCTATTTCTATAAATATAAAAATCTCTAACATACCTCACTATTAATTTCCCAAAATCTATATATTATCAAATTAAATTAAAACATTAAAATTTCCCAAAACCCT

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chr13	64668382	64668502	Hypo	1 +	TGTGATTTTTTTTGTATTTGTTTTTGTGGGTGTGAAGATTTTTAATATGTTTTATTATTGGTTTTTTAGGGTTTATGTGTTATTAGATTAAATTGAAGTATTGGAGTTTTTTAAAGTTTT
chr13	64668382	64668502	Hyper	1 -	TATAACTTTCTCTATACCTATTTCTATAAATATAAAAATCTCTAACATACCTCACTATTATATTCCCAAAATCTATATATTATCAAATTAAATTAAAACATTAAAATTTCCCAAAACCCT
chr13	64668382	64668502	Hyper	1 +	TGTGATTTTTTTTGTATTTGTTTTTGTGGGTGTGAAGATTTTTAATATGTTTTATTATTGGTATTTTTAGGGTTTATGTGTTATTAGATTAAATTGAAGTATTGGAGTTTTTTAAAGTTTT
chr13	64668382	64668502	Hyper	1 -	TATAACTTTCTCTATACCTATTTCTATAAATATAAAAATCTCTAACATACCTCACTATTAATTTCCCAAAATCTATATATTATCAAATTAAATTAAAACATTAAAATTTCCCAAAACCCT
chr13	64668382	64668502	Hyper	1 +	TGTGATTTTTTTTGTATTTGTTTTTGTGGGTGTGAAGATTTTTAATATGTTTTATTATTGGTTTTTTAGGGTTTATGTGTTATTAGATTAAATTGAAGTATTGGAGTTTTTTAAAGTTTT
chr7	81789505	81789625	Hypo	1 -	TTTTAAAAAAAATAATACATAATTAACCAAAACAACCTTCAAATCCAAAATAAAAAAACCCAATATTCTTAATCATACACAACAACTCAAATTAAAACATTCTACCACCTCCTTAATCAACA
chr7	81789505	81789625	Hypo	1 +	TTTTGAGGAAAAATAATATATAATTAGTTAGGGTAATTTTAAGTTTAAAATGAAAAGGTTAGATATTTTTAATTATATAATAATTTAGATTAGAGTATTTTATTATTTTTTTGGTTAATA
chr7	81789505	81789625	Hypo	1 -	TTTTAAAAAAAATAATACATAATTAACCAAAACAACCTTCAAATCCAAAATAAAAAAACCCCATATTCTTAATCATACACAACAACTCAAATTAAAACATTCTACCACCTCCTTAATCAACA
chr7	81789505	81789625	Hyper	1 +	TTTTGAGGAAAAATAATATATAATTAGTTAGGGTAATTTTAAGTTTAAAATGAAAAGGTTTATATTTTTAATTATATAATAATTTAGATTAGAGTATTTTATTATTTTTTTGGTTAATA
chr7	81789505	81789625	Hyper	1 -	TTTTAAAAAAAATAATACATAATTAACCAAAACAACCTTCAAATCCAAAATAAAAAAACCCCAATATTCTTAATCATACACAACAACTCAAATTAAAACATTCTACCACCTCCTTAATCAACA
chr7	81789505	81789625	Hyper	1 +	TTTTGAGGAAAAATAATATATAATTAGTTAGGGTAATTTTAAGTTTAAAATGAAAAGGTTAGATATTTTTAATTATATAATAATTTAGATTAGAGTATTTTATTATTTTTTTGGTTAATA
chr2	209949121	209949241	Hypo	1 -	AAATAAATAAAATAACACTAAATTCATTTTAACCTAAATTAATACAAATAAAATAAAATACATAACCTACTAATTATCTATAAAAAACAAACCTATAAAATATCAAATATTATCACTACT
chr2	209949121	209949241	Hypo	1 +	AAATAAGTGAAGTAATATTAGATTTATTTTAATTTGAATTAATATAAATAAGGTGAAATGTATGGTTTATTGATTGTTTATAAGGAGTAAATTTATAAAAATATTAAGTATTGTTATTGTT
chr2	209949121	209949241	Hypo	1 -	AAATAAATAAAATAACACTAAATTCATTTTAACCTAAATTAATACAAATAAAATAAAATACTACTAATTATCTATAAAAAACAAACCTATAAAATATCAAATATTATCACTACT
chr2	209949121	209949241	Hypo	1 +	AAATAAGTGAAGTAATATTAGATTTATTTTAATTTGAATTAATATAAATAAGGTGAAATGTATGGTTTATTGATTGTTTATAAGGAGTAAATTTATAAAAATATTAAGTATTGTTATTGTT
chr2	209949121	209949241	Hypo	1 -	AAATAAATAAAATAACACTAAATTCATTTTAACCTAAATTAATACAAATAAAATAAAATACTACTAATTATCTATAAAAAACAAACCTATAAAATATCAAATATTATCACTACT
chr2	209949121	209949241	Hypo	1 +	AAATAAGTGAAGTAATATTAGATTTATTTTAATTTGAATTAATATAAATAAGGTGAAATGTATGGTTTATTGATTGTTTATAAGGAGTAAATTTATAAAAATATTAAGTATTGTTATTGTT
chr2	209949121	209949241	Hypo	1 -	AAATAAATAAAATAACACTAAATTCATTTTAACCTAAATTAATACAAATAAAATAAAATACTACTAATTATCTATAAAAAACAAACCTATAAAATATCAAATATTATCACTACT
chr2	209949121	209949241	Hypo	1 +	AAATAAGTGAAGTAATATTAGATTTATTTTAATTTGAATTAATATAAATAAGGTGAAATGGTTGGTTTATTGATTGTTTATAAGGAGTAAATTTATAAAAATATTAAGTATTGTTATTGTT
chr18	20452038	20452158	Hypo	1 -	TAAAAACCACAAAAAAACTTAATTTTATAATCTAATAATTCTCAAAAATTAAAATACTTCAAAATCACTTAACCAAATTTCTAAAATCACAAATTCCTAAATCCCACCCCCAAAATTTATA
chr18	20452038	20452158	Hypo	1 +	TAGAGGTTATAAAGGAGTTTAATTTTGTAATTTAGTGATTTTTAAAGGTTAGAATGTTTTAGAATTATTTGGTTAGTTTGTTGAAGTATAGATTTTGGGTTTTATTTTTAGAGTTTATG
chr18	20452038	20452158	Hypo	1 -	TAAAAACCACAAAAAAACTTAATTTTATAATCTAATAATTCTCAAAAATTAAAATACTTCAAAATCACTTAACCAAATTTCTAAAATCACAAATTCCTAAATCCCACCCCCAAAATTTATA
chr18	20452038	20452158	Hypo	1 +	TAGAGGTTATAAAGGAGTTTAATTTGTAATTTAGTGATTTTTAAAGGTTAGAATGTTTTAATTATTTGGTTAGTTTGTTGAAGTATAGATTTTGGGTTTTATTTTTAGAGTTTATG
chr18	20452038	20452158	Hypo	1 -	TAAAAACCACAAAAAAACTTAATTTTATAATCTAATAATTCTCAAAAATTAAAATACTTCAAAATCACTTAACCAAATTTATCGAAACACAAATTCCTAAATCCCACCCCCAAAATTTATA
chr18	20452038	20452158	Hypo	1 +	TAGAGGTTATAAAGGAGTTTAATTTGTAATTTAGTGATTTTTAAAGGTTAGAATGTTTTAATTATTTGGTTAGTTTGTCGAAGTATAGATTTTGGGTTTTATTTTTAGAGTTTATG
chr9	9152864	9152984	Hypo	1 -	CCAAAACCAATAAAAAAAACACACATTTACTTATAAATTAAAAATCAAATATATCTTTCTTTAACCCAATACTAACACACATTTACATCCTCCCCACTATATATTATTCACTAATAACAA
chr9	9152864	9152984	Hypo	1 +	TTAGAATTGATGAGAGGGGTATATATTTATTTGTGAATTAAGAATTAAATGTATTTTTTTTGGTTTAGTATTGATATATATTTATATTTTTTTTATTGTGTGTTGTTTATTAGTAGTAA
chr9	9152864	9152984	Hypo	1 -	CCAAAACCAATAAAAAAAACACACATTTACTTATAAATTAAAAATCAAATATATCTTTCTTAAAACCCAATACTAACACACATTTACATCCTCCCCACTATATATTATTCACTAATAACAA
chr9	9152864	9152984	Hypo	1 +	TTAGAATTGATGAGAGGGGTATATATTTATTTGTGAATTAAGAATTAAATGTATTTTTTTTGGGTTTAGTATTGATATATATTTATATTTTTTTTATTGTGTGTTGTTTATTAGTAGTAA
chr9	9152864	9152984	Hypo	1 -	CCAAAACCGATAAAAAAAACACACATTTACTTATAAATTAAAAATCAAATATATCTTTCTTTAACCCAATACTAACACACATTTACATCCTCCCCACTATATATTATTCACTAATAACAA
chr9	9152864	9152984	Hypo	1 +	TTAGAATTGATGAGAGGGGTATATATTTATTTGTGAATTAAGAATTAAATGTATTTTTTTTGGGTTTAGTATTGATATATATTTATATTTTTTTTATTGTGTGTTGTTTATTAGTAGTAA
chr9	9152864	9152984	Hypo	1 -	CCAAAACCGATAAAAAAAACACACATTTACTTATAAATTAAAAATCAAATATATCTTTCTTAAACCCAATACTAACACACATTTACATCCTCCCCACTATATATTATTCACTAATAACAA
chr9	9152864	9152984	Hypo	1 +	TTAGAATTGATGAGAGGGGTATATATTTATTTGTGAATTAAGAATTAAATGTATTTTTTTTGGGTTTAGTATTGATATATATTTATATTTTTTTTATTGTGTGTTGTTTATTAGTAGTAA
chr5	130438586	130438706	Hypo	1 -	AAAAACCAAAAAAATATCAACCTAACCTCAAACTTTTTCTCCCATCCCCAAATAAATATTCTTCACACCCTACTAAAAACCAAAAAACCTAAAAACCCTATTTAATTAATCATACTACAA
chr5	130438586	130438706	Hypo	1 +	AGAAGTTAGGAGAATATTAGTTTAATTTTAAATTTTTTTTTTTTATTTTTAGATGGGTGTTTGGTTATATTTTATTGGAAGTTAGAGAGTTTAGGAATTTTGTTTAATTAATTATATTATAG
chr5	130438586	130438706	Hypo	1 -	AAAAACCAAAAAATATCAACCTAACCTCAAACTTTTTCTCCCATCCCCAAATAAATATTCTTCACACCCTACTAAAAACCAAAAAACCTAAAAACCCTATTTAATTAATCATACTACAA
chr5	130438586	130438706	Hypo	1 +	AGAAGTTAGGAGAATATTAGTTTAATTTTAAATTTTTTTTTTTATTTTTAGATGGGTGTTTGGTTATATTTTATTGGAAGTTAGAGAGTTTAGGAATTTTGTTTAATTAATTATATTATAG
chr5	130438586	130438706	Hypo	1 -	AAAAACCAAAAAATATCAACCTAACCTCAAACTTTTTCTCCCATCCCCAAATAAATATTCTTCACACCCTACTAAAAACCAAAAAACCTAAAAACCCTATTTAATTAATCATACTACAA
chr5	130438586	130438706	Hypo	1 +	AGAAGTTAGGAGAATATTAGTTTAATTTTAAATTTTTTTTTTTATTTTTAGATGGGTGTTTTTATATTTTATTGGAAGTTAGAGAGTTTAGGAATTTTGTTTAATTAATTATATTATAG
chr5	130438586	130438706	Hypo	1 -	AAAAACCAAAAAATATCAACCTAACCTCAAACTTTTTCTCCCATCCCCAAATAAATATTAATCACACCCTACTAAAAACCAAAAAACCTAAAAACCCTATTTAATTAATCATACTACAA
chr5	130438586	130438706	Hypo	1 +	AGAAGTTAGGAGAATATTAGTTTAATTTTAAATTTTTTTTTTTATTTTTAGATGGGTGTTTGGTTATATTTTATTGGAAGTTAGAGAGTTTAGGAATTTTGTTTAATTAATTATATTATAG
chr3	133067788	133067908	Hypo	1 -	TCAAAAACAAACAAACTATTAAAAAAAAATATTTTCAATAAACATAATTATTACCAAATTTAATAACCTTAACCTTAACATATTAAAAAATACTCACAATAAATTTTAAAAACTAATATTACAAAA
chr3	133067788	133067908	Hypo	1 +	TTAAAGGTAGATAAATTATTGGGGGAAAATATTTTTAGTAAATATGATTGTTATTAAGTTTTAGTTTTGATATATTAAAAAATATTTATAATAGATTTTAAAGATTAATATTATAGGA
chr3	133067788	133067908	Hypo	1 -	TCAAAAACAAACAAACTATTAAAAAAAAATATTTTCAATAAACATAATTATTACCAAATTAATAACCTTAACATATTAAAAAATACTCACAATAAATTTTAAAAACTAATATTACAAAA
chr3	133067788	133067908	Hypo	1 +	TTAAAGGTAGATAAATTATTGGGGGAAAATATTTTTAGTAAATATGATTGTTATTAAGTTTTAGTTTTGATATATTAAAAAATATTTATAATAGATTTTAAAGATTAATATTATAGGA
chr3	133067788	133067908	Hypo	1 -	TCAAAAACAAACAAACTATTAAAAAAAAATATTTTCAATAAACATAATTATTACCAAATTAATAACCTTAACATATTAAAAAATACTCACAATAAATTTTAAAAACTAATATTACAAAA
chr3	133067788	133067908	Hypo	1 +	TTAAAGGTAGATAAATTATTGGGGGAAAATATTTTTAGTAAATATGATTGTTATTAAGTTTTAGTTTTGATATATTAAAAAATATTTATAATAGATTTTAAAGATTAATATTATAGGA
chr3	133067788	133067908	Hypo	1 -	TCAAAAACAAACAAACTATTAAAAAAAAATATTTTCAATAAACATAATTATTACCAAATTAATAACCTTAACATATTAAAAAATACTCACAATAAATTTTAAAAACTAATATTACAAAA
chr3	133067788	133067908	Hypo	1 +	TTAAAGGTAGATAAATTATTGGGGGAAAATATTTTTAGTAAATATGATTGTTATTAAGTTTTAGTTTTGATATATTAAAAAATATTTATAATAGATTTTAAAGATTAATATTATAGGA

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chr13	31932572	31932692	Hypo	1 -	CACTAATACACCAACTTATAAAAATAACCCAAAACATACAACTAAACTTTTTAAATCTATCATTATCTCACCTAAACTAATATTCAAAATCTCCTTAACATTTTATTAACATCCAAAAAC
chr13	31932572	31932692	Hypo	1 +	TATTAATATATTGGTTTATAGGGATGATTTGAAATATATAAATTGAATTTTTTGAGTTTATTGTTATTTTATTTGGGTTGATGTTTAGAGTTTTTTTAGTATTTTATTGGTATTTAAAAAT
chr13	31932572	31932692	Hypo	1 -	CACTAATACACCAACTTATAAAAATAACCCAAAACATACAACTAAACTTTTTAAATCTATATTATCTCACCTAAACTAATATTCAAAATCTCCTTAACATTTTATTAACATCCAAAAAC
chr13	31932572	31932692	Hypo	1 +	TATTAATATATTGGTTTATAGGGATGATTTGAAATATATAAATTGAATTTTTTGAGTTTATTGTTATTTTATTTGGGTTGATGTTTAGAGTTTTTTTAGTATTTTATTGGTATTTAAAAAT
chr13	31932572	31932692	Hypo	1 -	CACTAATACACCGACTTATAAAAATAACCCGAAACATACAACTAAACTTTTTAAATCTATCGTTATCTCACCTAAACTAATATTCAAAATCTCCTTAACATTTTATTAACATCCAAAAAC
chr13	31932572	31932692	Hyper	1 +	TATTAATATATCGGTTTATAGGGATGATTCGAAATATATAAATTGAATTTTTTGAGTTTATCGTTATTTTATTTGGGTTGATGTTTAGAGTTTTTTTAGTATTTTATTGGTATTTAAAAAT
chr13	31932572	31932692	Hyper	1 -	CACTAATACACCGACTTATAAAAATAACCCGAAACATACAACTAAACTTTTTAAATCTATCGTTATCTCACCTAAACTAATATTCAAAATCTCCTTAACATTTTATTAACATCCAAAAAC
chr13	31932572	31932692	Hyper	1 +	TATTAATATATCGGTTTATAGGGATGATTCGAAATATATAAATTGAATTTTTTGAGTTTATCGTTATTTTATTTGGGTTGATGTTTAGAGTTTTTTTAGTATTTTATTGGTATTTAAAAAT
chr1	54735162	54735282	Hypo	1 -	CCTTTTCTACAACTCCAAAATAAATTCCTTAAAATTAACTATTACAATTAATCTAACAAATCAAAACTTAACTAAATACACATATTAAACATAACTTTTTTAACCTTAAACCAAAAAAAA
chr1	54735162	54735282	Hypo	1 +	TTTTTTTTATAGTTTTAGAGTAAGTTTTTTGGGATTGGTTATTATAATTAATTTAGTGAATTGGAATTTAGTTAGATATGTATGTTGGATATAATTTTTTTGATTTTGGGTTAAGGAAAG
chr1	54735162	54735282	Hypo	1 -	CCTTTTCTACAACTCCAAAATAAATTCCTTAAAATTAACTATTACAATTAATCTAACAAAAAAAAACTTAACTAAATACACATATTAAACATAACTTTTTTAACCTTAAACCAAAAAAAA
chr1	54735162	54735282	Hypo	1 +	TTTTTTTTATAGTTTTAGAGTAAGTTTTTTGGGATTGGTTATTATAATTAATTTAGTGAAGAGGAATTTAGTTAGATACGTATGTTGGATATAATTTTTTTGATTTTGGGTTAAGGAAAG
chr1	54735162	54735282	Hypo	1 -	CCTTTTCTACAACTCCAAAATAAATTCCTTAAAATTAACTATTACAATTAATCTAACGAATCAAACTTAACTAAATACACGTATTAAACATAACTTTTTTAACCTTAAACCAAAAAAAA
chr1	54735162	54735282	Hypo	1 +	TTTTTTTTATAGTTTTAGAGTAAGTTTTTTGGGATTGGTTATTATAATTAATTTAGCGAATCGGAATTTAGTTAGATACGTATGTTGGATATAATTTTTTTGATTTTGGGTTAAGGAAAG
chr1	54735162	54735282	Hypo	1 -	CCTTTTCTACAACTCCAAAATAAATTCCTTAAAATTAACTATTACAATTAATCTAACGAAAAAAAACTTAACTAAATACGCATATTAAACATAACTTTTTTAACCTTAAACCAAAAAAAA
chr1	54735162	54735282	Hypo	1 +	TTTTTTTTATAGTTTTAGAGTAAGTTTTTTGGGATTGGTTATTATAATTAATTTAGCGAAGAGGAATTTAGTTAGATACGTATGTTGGATATAATTTTTTTGATTTTGGGTTAAGGAAAG
chr11	129429767	129429887	Hypo	1 -	ACACAATTAAAACTACAAAACAATCAAATAACTACATCACAACAATATAACAATCACACACTAACAATATAAATCTAAAAATATAAATAACCTAAACACCCCACTTAAAAAACACAAAAT
chr11	129429767	129429887	Hypo	1 +	ATATAATTGAGATTATAAAGTAATTAGGTGATTGTATTATAATAGTATGATAATTGTATATTAGTAATGTGAATTTGGAAATATAAGTGGTTTAAATATTTTATTTAAAAGGTATAGAAT
chr11	129429767	129429887	Hypo	1 -	ACACAATTAAAACTACAAAACAATCAAATAACTACATCACAACAATATAACAATCACACAAAACAATATAAATCTAAAAATATAAATAACCTAAACACCCCACTTAAAAAACACAAAAT
chr11	129429767	129429887	Hypo	1 +	ATATAATTGAGATTATAAAGTAATTAGGTGATTGTATTATAATAGTATGATAATTGTATAGAAGTAATGTGAATTTGGAAATATAAGTGGTTTAAATATTTTATTTAAAAGGTATAGAAT
chr11	129429767	129429887	Hyper	1 -	ACACAATTAAAACTACAAAACAATCAAATAACTACATCACAACAATATAACAATCACACAAAACAATATAAATCTAAAAATATAAATAACCTAAACACCCCACTTAAAAAACACAAAAT
chr11	129429767	129429887	Hyper	1 +	ATATAATTGAGATTATAAAGTAATTAGGTGATTGTATTATAATAGTATGATAATTGTATAGAAGTAATGTGAATTTGGAAATATAAGTGGTTTAAATATTTTATTTAAAAGGTATAGAAT
chr11	129429767	129429887	Hyper	1 -	ACACAATTAAAACTACAAAACAATCAAATAACTACATCACAACAATATAACAATCACACAAAACAATATAAATCTAAAAATATAAATAACCTAAACACCCCACTTAAAAAACACAAAAT
chr11	129429767	129429887	Hyper	1 +	ATATAATTGAGATTATAAAGTAATTAGGTGATTGTATTATAATAGTATGATAATTGTATAGAAGTAATGTGAATTTGGAAATATAAGTGGTTTAAATATTTTATTTAAAAGGTATAGAAT
chr1	31248372	31248492	Hypo	1 -	CCCTTCAAAACACTAATACCAAAAAAAACCCATACCTACCAAACTAATCCTCATAAACATCAATCTCTAAACAAAAAATTAACCCAACTTTCACTTAACCCCCCAAAAAACACTTCTAAAA
chr1	31248372	31248492	Hypo	1 +	TTTTTTAGGATGTTGGTGTTAGAAGGGTTCGTGTTTGTTAGGTTGGTTTTGTGGATATAGGGTTTGGACGAAGGGGTTGGTTCGGTTTTATTTAGTTTTTTAGGAGACGTTTTTGGGA
chr1	31248372	31248492	Hypo	1 -	CCCTTCAAAACGCTAATACCAAAAAAACCCGTACCTACCAAACTAATCCTCGTAAACATCGATCTCTAAACGAAAAATTAACCCGACTTTCACTTAACCCCCCAAAAAACGCTTCTAAAA
chr1	31248372	31248492	Hyper	1 +	TTTTTTAGGACGTTGGTGTTAGAAGGGTTCGTGTTTGTTAGGTTGGTTTTCGTGGATATCGGTTTTTGGACGAAGGGGTTGGTTCGGTTTTATTTAGTTTTTTAGGAGACGTTTTTGGGA
chr1	31248372	31248492	Hyper	1 -	CCCTTCAAAACGCTAATACCAAAAAAACCCGTACCTACCAAACTAATCCTCGTAAACATCGATCTCTAAACGAAAAATTAACCCGACTTTCACTTAACCCCCCAAAAAACGCTTCTAAAA
chr1	31248372	31248492	Hyper	1 +	TTTTTTAGGACGTTGGTGTTAGAAGGGTTCGTGTTTGTTAGGTTGGTTTTCGTGGATATCGGTTTTTGGACGAAGGGGTTGGTTCGGTTTTATTTAGTTTTTTAGGAGACGTTTTTGGGA
chr14	67984310	67984430	Hypo	1 -	ACAAAACATAACATCATCCAACCTCTACTTTCTCCAACTCTCCAATAAACTTAACTCCATAACCTAAATTTTCCTCATTCCTTACATTAAAAATCATTTCTTCCCAAAAAAATTTAAATA
chr14	67984310	67984430	Hypo	1 +	GTAAGGTATGGTATTATTTAGTTTTTATTTTTTTTAGTTTTTAGTGAATTTAATTTTATGAGGTTGGGTTTTTTTATTTTTATATTAGGGATTATTTTTTTTTAAAAAAATTTAGATA
chr14	67984310	67984430	Hypo	1 -	ACAAAACATAACATCATCCAACCTCTACTTTCTCCAACTCTCCAATAAACTTAACTCCATAACCTAAATTTTCCTCATTCCTTACATTAAAAATCATTTCTTCCCAAAAAAATTTAAATA
chr14	67984310	67984430	Hypo	1 +	GTAAGGTATGGTATTATTTAGTTTTTATTTTTTTTAGTTTTTAGTGAATTTAATTTTATGAGGTTGGGTTTTTTTATTTTTATATTAGGGATTATTTTTTTTAAAAAAATTTAGATA
chr14	67984310	67984430	Hypo	1 -	ACAAAACATAACATCATCCAACCTCTACTTTCTCCAACTCTCCAATAAACTTAACTCCAAAACTAAATTTTCCTCATTCCTTACATTAAAAATCATTTCTTCCCAAAAAAATTTAAATA
chr14	67984310	67984430	Hyper	1 +	GTAAGGTATGGTATTATTTAGTTTTTATTTTTTTTAGTTTTTAGTGAATTTAATTTTATGAGGTTGGGTTTTTTTATTTTTATATTAGGGATTATTTTTTTTAAAAAAATTTAGATA
chr14	67984310	67984430	Hyper	1 -	ACAAAACATAACATCATCCAACCTCTACTTTCTCCAACTCTCCAATAAACTTAACTCCAAAACTAATTTTCCTCATTCCTTACATTAAAAATCATTTCTTCCCAAAAAAATTTAAATA
chr14	67984310	67984430	Hyper	1 +	GTAAGGTATGGTATTATTTAGTTTTTATTTTTTTTAGTTTTTAGTGAATTTAATTTTATGAGGTTGGGTTTTTTTATTTTTATATTAGGGATTATTTTTTTTAAAAAAATTTAGATA
chr3	18445518	18445503	Hypo	1 -	ACACCTTATAACAATTCTTAAAAAAAAAAAAACATCAAAAATTAAAAATAAAATACAATTACCTACCTCCTCCATTCTATTATATAATACAAAATATTAAAATCATATAACAC
chr3	18445518	18445503	Hypo	1 +	GTATTTATGGTAATTTTTGAGAGAGGGAGAGTGTTAGGGAATTGAGAATGGGGTGTTGTTGTATATTTTTGTTTTTATTTTGTTGTGTATAATAGGAATGTTAGGGTTATGTGATAT
chr3	18445518	18445301	Hypo	1 -	ACACCTTATAACAATTCTTAAAAAAAAAAAACATCAAAAATTAAAAATAAAATACAATTACCTACCTCCTCCATTCTATTATATAATACAAAATATTAAAATCATATAACAC
chr3	18445518	18445301	Hypo	1 +	GTATTTATGGTAATTTTTGAGAGAGGGAGAGTGTTAGGGAATTGAGAATGGGGTGTTGTTGTATATTTTTGTTTTTATTTTGTTGTGTATAATAGGAATGTTAGGGTTATGTGATAT
chr3	18445518	18445301	Hyper	1 -	ACACCTTATAACAATTCTTAAAAAAAAAAAACGTCAAAAATTAAAAATAAAATACAATTACCTACCTCCTCCATTCTATTATATAATACAAAATATTAAAATCATATAACAC
chr3	18445518	18445301	Hyper	1 +	GTATTTATGGTAATTTTTGAGAGAGGGAGAGCGTTAGGGAATTGAGAATGGGGTGTAGTTGTTTTATTTTTGTTTTTATTTTGTTGTGTATAATACGGAATGTTAGGGTTATGTGATAT
chr3	18445518	18445301	Hyper	1 -	ACACCTTATAACAATTCTTAAAAAAAAAAAACGTCAAAAATTAAAAATAAAATACAATTACCTACCTCCTCCATTCTATTATATAATACAAAATATTAAAATCATATAACAC
chr3	18445518	18445301	Hyper	1 +	GTATTTATGGTAATTTTTGAGAGAGGGAGAGCGTTAGGGAATTGAGAATGGGGTGTTGTTGTATATTTTTGTTTTTATTTTGTTGTGTATAATACGGAATGTTAGGGTTATGTGATAT
chr8	87821534	87821654	Hypo	1 -	ATCTTCATAAAAAATCATATATACATAAACTTTTAAAATTAAATACAAACATACTACCAAACTATTCACCAAATATATAAATCCTCTCCAAAAATTTCCATTAATTCATATAATTACTCA
chr8	87821534	87821654	Hypo	1 +	ATTTTTATAGGAAATTATATATGTATAAATTTTTAGAGTTGGATGTAGATATGTTATTAAGTTATTTATTAAATATGTAAGTTTTTTTTTAAAAGTTTTTATTAATTTATATGGTTGTTTA
chr8	87821534	87821654	Hyper	1 -	ATCTTCATAAAAAATCATATATACATAAACTTTTAAAATTAAATACAAACATACTACCAAACTATTCACCAAATATATAAATCCTCTCCAAAAATTTCCATTAATTCATATAATTACTCA
chr8	87821534	87821654	Hyper	1 +	ATTTTTATAGGAAATTATATATGTATAAATTTTTAGAGTTGGATGTAGATATGTTATTAAGTTATTTATTAAATATGTAAGTTTTTTTTAAAAGTTTTTATTAATTTATATGGTTGTTTA
chr8	87821534	87821654	Hyper	1 -	ATCTTCATAAAAAATCATATATACATAAACTTTTAAAATTAAATACAAACATACTACCAAACTATTCACCAAATATATAAATCCTCTCCAAAAATTTCCATTAATTCATATAATTACTCA

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chr8	87821534	87821654	Hyper	1 +	ATTTTTATAGGAAATTATATATGTATAAATTTTTAGAGTTGGATGTAGATATGTTATTAAGTTATTTATTAAATATGTAAGTTTTTTTAAAAGTTTTTATTAATTTATATGGTTGTTTA
chr8	87821534	87821654	Hyper	1 -	ATCTTCATAAAAAATCATATATACATAAACTTTTAAAATTAAATACAAACATACTACAAAACTAATCACCAAATATATAAATCCTCTCCAAAAATTTCCATTAATTCATATAATTACTCA
chr8	87821534	87821654	Hyper	1 +	ATTTTTATAGGAAATTATATATGTATAAATTTTTAGAGTTGGATGTAGATATGTTATAAAGTTAGTTATTAAATATGTAAGTTTTTTTAAAAGTTTTTATTAATTTATATGGTTGTTTA
chr20	41669203	41669323	Hypo	1 -	CCATTATTCTACTTTCCCCAAAATAACAAAACTCCCTCACTATCCTTAATCCTAAAAAATAAAAATACCTACTAACACTTCCTCCTCTTATCAAAAAAAAACCAAAAAAAAAACACCAAT
chr20	41669203	41669323	Hypo	1 +	TTATTGTTTTATTTTTTTTAGAATGATAGAGTTTTTTTGTTGTTTTTGGTTTTGAAAGATGGGAATATTTGTTAATATTTTTTTTTTTTTGTTAGAAGAGGATTAAAGAGGAAGTGTTGGT
chr20	41669203	41669323	Hypo	1 -	CCATTATTCTACTTTCCCCAAAATAACAAAACTCCCTCACTATCCTTAATCCTAAAACATAAAACTACCTACTAACACTTCCTCCTCTTATCAAAAAAAAACCAAAAAAAAAACACCAAT
chr20	41669203	41669323	Hypo	1 +	TTATTGTTTTATTTTTTTTAGAATGATAGAGTTTTTTTGTTGTTTTTGGTTTTGAAATATGGGATTATTTGTTAATATTTTTTTTTTTTTGTTAGAAGAGGATTAAAGAGGAAGTGTTGGT
chr20	41669203	41669323	Hyper	1 -	CCATTATTCTACTTTCCCCAAAATAACAAAACTCCCTCGCTATCCTTAATCCTAAAAAATAAAAATACCTACTAACACTTCCTCCTCTTATCAAAAAAAAACCAAAAAAAAAACGCCGAT
chr20	41669203	41669323	Hyper	1 +	TTATTGTTTTATTTTTTTTAGAATGATAGAGTTTTTCGTTGTTTTTGGTTTTGAAAGATGGGAATATTTGTTAATATTTTTTTTTTTTTGTTAGAAGAGGATTAAAGAGGAAGCGTCGGT
chr20	41669203	41669323	Hyper	1 -	CCATTATTCTACTTTCCCCAAAATAACAAAACTCCCTCGCTATCCTTAATCCTAAAACATAAAACTACCTACTAACACTTCCTCCTCTTATCAAAAAAAAACCAAAAAAAAAACGCCGAT
chr20	41669203	41669323	Hyper	1 +	TTATTGTTTTATTTTTTTTAGAATGATAGAGTTTTTCGTTGTTTTTGGTTTTGAAATATGGGATTATTTGTTAATATTTTTTTTTTTTTGTTAGAAGAGGATTAAAGAGGAAGCGTCGGT
chr14	52737958	52738078	Hypo	1 -	TATTTATAACTTCCATATATTATTATTACCTACTAAACATAAAAAAAAATCAAAAACAATTATCATCCCAAAAAATAATACTATATACTAAAACAATAACTCTAAAACTTTTTTTTAATC
chr14	52737958	52738078	Hypo	1 +	TATTTATAATTTTTATGTATTATTGTTGTTTGTTGGATATAAAAAAAAATTAAGAATGATTATTGTTTTAGGAGATAGTGTTATATATTAAGGTAGTGGTTTTGAAATTTTTTTTTGGTT
chr14	52737958	52738078	Hypo	1 -	TATTTATAACTTCCATATATTATTATTACCTACTAAACATAAAAAAAAATCAAAAACTATTATCTTCCCAAAAAATAATACTATATACTAAAACAATAACTCTAAAACTTTTTTTTAATC
chr14	52737958	52738078	Hypo	1 +	TATTTATAATTTTTATGTATTATTGTTGTTTGTTGGATATAAAAAAAAATTAAGAATTATTATTTTTTTAGGAGATAGTGTTATATATTAAGGTAGTGGTTTTGAAATTTTTTTTTGGTT
chr14	52737958	52738078	Hyper	1 -	TATTTATAACTTCCATATATTATTATTACCTACTAAACATAAAAAAAAATCAAAAACGATTATCGTCCCAAAAAATAATACTATATACTAAAACAATAACTCTAAAACTTTTTTTTAATC
chr14	52737958	52738078	Hyper	1 +	TATTTATAATTTTTATGTATTATTGTTGTTTGTTGGATATAAAAAAAAATTAAGAACGATTATCGTTTTAGGAGATAGTGTTATATATTAAGGTAGTGGTTTTGAAATTTTTTTTTGGTT
chr14	52737958	52738078	Hyper	1 -	TATTTATAACTTCCATATATTATTATTACCTACTAAACATAAAAAAAAATCAAAAACTATTATCTTCCCAAAAAATAATACTATATACTAAAACAATAACTCTAAAACTTTTTTTTAATC
chr14	52737958	52738078	Hyper	1 +	TATTTATAATTTTTATGTATTATTGTTGTTTGTTGGATATAAAAAAAAATTAAGAATTATTATTTTTTTAGGAGATAGTGTTATATATTAAGGTAGTGGTTTTGAAATTTTTTTTTGGTT
chr14	34307198	34307318	Hypo	1 -	TCTCCTAAATAATTTTTTTAAAAAATCAAATTCCATAAAAACATACTAACAACTCAACCTAAAAAAAAACCTAAACTTTTTTTCTACATTTATATAACTAATATCTAAAAAACATCAAAA
chr14	34307198	34307318	Hypo	1 +	TTTTTTAAGTAGTTTTTTTGGGGGATTAAATTTTATAGAAGTATATTGGTAATTTGATTTAGAGGAAAGTTTGGGTTTTTTTTTTTATATTTGTGTAATTGATGTTTGAAGAATGTTAGAA
chr14	34307198	34307318	Hypo	1 -	TCTCCTAAATAATTTTTTTAAAAAATCAAATTCCATAAAAACATACTAACAACTCAAACTAAAATAAAACCTAAACTTTTTTTCTACATTTATATAACTAATATCTAAAAAACATCAAAA
chr14	34307198	34307318	Hypo	1 +	TTTTTTAAGTAGTTTTTTTGGGGGATTAAATTTTATAGAAGTATATTGGTAATTTGAGTTAGAGTAAAGTTTGGGTTTTTTTTTTTATATTTGTGTAATTGATGTTTGAAGAATGTTAGAA
chr14	34307198	34307318	Hyper	1 -	TCTCCTAAATAATTTTTTTAAAAAATCAAATTCCATAAAAACATACTAACAACTCGACCTAAAAAAAAACCTAAACTTTTTTTCTACATTTATATAACTAATATCTAAAAAACGTCAAAA
chr14	34307198	34307318	Hyper	1 +	TTTTTTAAGTAGTTTTTTTGGGGGATTAAATTTTATAGAAGTATATTGGTAATTCGATTTAGAGGAAAGTTTGGGTTTTTTTTTTTATATTTGTGTAATTGATGTTTGAAGAACGTTAGAA
chr14	34307198	34307318	Hyper	1 -	TCTCCTAAATAATTTTTTTAAAAAATCAAATTCCATAAAAACATACTAACAACTCGAACTAAAATAAAACCTAAACTTTTTTTCTACATTTATATAACTAATATCTAAAAAACGTCAAAA
chr14	34307198	34307318	Hyper	1 +	TTTTTTAAGTAGTTTTTTTGGGGGATTAAATTTTATAGAAGTATATTGGTAATTCGAGTTAGAGTAAAGTTTGGGTTTTTTTTTTTATATTTGTGTAATTGATGTTTGAAGAACGTTAGAA
chr3	29390922	29391042	Hypo	1 -	TCTATATTTCCTATATAAAAACCAATCACAATTCACTTTACCATATTAACTCAAAACAACATATTAAACTCTTAAAAAATCCCTCTAAAACTCCTCTATCTTAACTTAAAAAACAAACAC
chr3	29390922	29391042	Hypo	1 +	TTTATGTTTTTTGTATAGGGATTAATTATAGTTTATTTTGTTGTATTAATTTAGAGTAATATATTAAGTTTTTGAGGGGTTTTTTTGAAGTTTTTTTGTTTTAATTTGAGAAGTAAGTAT
chr3	29390922	29391042	Hypo	1 -	TCTATATTTCCTATATAAAAACCAATCACAATTCACTTTACCATATTAACTCAAAAAAACATATAAAACTCTTAAAAAATCCCTCTAAAACTCCTCTATCTTAACTTAAAAAACAAACAC
chr3	29390922	29391042	Hypo	1 +	TTTATGTTTTTTGTATAGGGATTAATTATAGTTTATTTTGTTGTATTAATTTAGAGGAATATATGAAGTTTTTGAGGGGTTTTTTTGAAGTTTTTTTGTTTTAATTTGAGAAGTAAGTAT
chr3	29390922	29391042	Hyper	1 -	TCTATATTTCCTATATAAAAACCAATCACAATTCACTTTACCGTATTAACTCAAAACAACATATTAAACTCTTAAAAAATCCCTCTAAAACTCCTCTATCTTAACTTAAAAAACAAACAC
chr3	29390922	29391042	Hyper	1 +	TTTATGTTTTTTGTATAGGGATTAATTATAGTTTATTTTGTCGTATTAATTTAGAGTAATATATTAAGTTTTTGAGGGGTTTTTTTGAAGTTTTTTTGTTTTAATTTGAGAAGTAAGTAT
chr3	29390922	29391042	Hyper	1 -	TCTATATTTCCTATATAAAAACCAATCACAATTCACTTTACCGTATTAACTCAAAAAAACATATAAAACTCTTAAAAAATCCCTCTAAAACTCCTCTATCTTAACTTAAAAAACAAACAC
chr3	29390922	29391042	Hyper	1 +	TTTATGTTTTTTGTATAGGGATTAATTATAGTTTATTTTGTCGTATTAATTTAGAGGAATATATGAAGTTTTTGAGGGGTTTTTTTGAAGTTTTTTTGTTTTAATTTGAGAAGTAAGTAT
chr5	177733633	177733753	Hypo	1 -	AAAAATAACTAAAAACAAAAAAAACAATCCTAAAATTATAAATACCAAAAAACCCCAAAAAAACAATACTAAATACTACAACCTCAAAAAACAACAACTAAACTTAAAAAAAAAAAAAAAC
chr5	177733633	177733753	Hypo	1 +	GGGGATGATTGGGGGTAGAGGGGATAGTTTTGGAATTGTGAATGTTAAGAAGTTTTGGAAAGGTAGTATTGGGTGTTGTGGTTTTAGGAAATGGTAGTTGGATTTGGAAGGGGGAGGAGT
chr5	177733633	177733753	Hypo	1 -	AAAAATAACTAAAAACAAAAAAAACAATCCTAAAATTATAAATACCAAAAAACCCAAAAAAAACACTACTAAATACTACAACCTCAAAAAACAACAACTAAACTTAAAAAAAAAAAAAAAC
chr5	177733633	177733753	Hypo	1 +	GGGGATGATTGGGGGTAGAGGGGATAGTTTTGGAATTGTGAATGTTAAGAAGTTTGGGAAAGGTATTATTGGGTGTTGTGGTTTTAGGAAATGGTAGTTGGATTTGGAAGGGGGAGGAGT
chr5	177733633	177733753	Hyper	1 -	AAAAATAACTAAAAACAAAAAAAACAATCCTAAAATTATAAATACCAAAAAACCCCGAAAAAACAATACTAAATACTACGACCTCAAAAAACGACAACTAAACTTAAAAAAAAAAAAAAAC
chr5	177733633	177733753	Hyper	1 +	GGGGATGATTGGGGGTAGAGGGGATAGTTTTGGAATTGTGAATGTTAAGAAGTTTCGGAAAGGTAGTATTGGGTGTTGCGGTTTTAGGAAACGGTAGTTGGATTTGGAAGGGGGAGGAGT
chr5	177733633	177733753	Hyper	1 -	AAAAATAACTAAAAACAAAAAAAACAATCCTAAAATTATAAATACCAAAAAACCCGAAAAAAACACTACTAAATACTACGACCTCAAAAAACGACAACTAAACTTAAAAAAAAAAAAAAAC
chr5	177733633	177733753	Hyper	1 +	GGGGATGATTGGGGGTAGAGGGGATAGTTTTGGAATTGTGAATGTTAAGAAGTTCGGGAAAGGTATTATTGGGTGTTGCGGTTTTAGGAAACGGTAGTTGGATTTGGAAGGGGGAGGAGT
chr6	20582082	20582202	Hypo	1 -	TTCAAAATAATACCAAAAACTTACTTAACTTTTAATCTATACCAAACATTATTCTAAACAAAATACATACAATACTATCTTATAAACCCTAAATTTAAAAAACCCCCAATCCCTTTATAA
chr6	20582082	20582202	Hypo	1 +	TTTAGGATAATGTTAAAAATTTATTTAGTTTTTAGTTTGTGTTAGGTATTGTTTTGAATAAGGTATATATAATGTTGTTTTGTAGATTTTGGATTTGGAAAGTTTTTAATTTTTTTATAA
chr6	20582082	20582202	Hypo	1 -	TTCAAAATAATACCAAAAACTTACTTAACTTTTAATCTATACCAAACATTATTCTAAACACTATACATACAATACTATCTTATAAACCCTAAATTTAAAAAACCCCCAATCCCTTTATAA
chr6	20582082	20582202	Hypo	1 +	TTTAGGATAATGTTAAAAATTTATTTAGTTTTTAGTTTGTGTTAGGTATTGTTTTGAATATTGTATATATAATGTTGTTTTGTAGATTTTGGATTTGGAAAGTTTTTAATTTTTTTATAA
chr6	20582082	20582202	Hyper	1 -	TTCAAAATAATACCAAAAACTTACTTAACTTTTAATCTATACCAAACATTATTCTAAACAAAATACATACAATACTATCTTATAAACCCTAAATTTAAAAAACCCCCAATCCCTTTATAA
chr6	20582082	20582202	Hyper	1 +	TTTAGGATAATGTTAAAAATTTATTTAGTTTTTAGTTTGTGTTAGGTATTGTTTTGAATAAGGTATATATAATGTTGTTTTGTAGATTTTGGATTTGGAAAGTTTTTAATTTTTTTATAA
chr6	20582082	20582202	Hyper	1 -	TTCAAAATAATACCAAAAACTTACTTAACTTTTAATCTATACCAAACATTATTCTAAACACTATACATACAATACTATCTTATAAACCCTAAATTTAAAAAACCCCCAATCCCTTTATAA
chr6	20582082	20582202	Hyper	1 +	TTTAGGATAATGTTAAAAATTTATTTAGTTTTTAGTTTGTGTTAGGTATTGTTTTGAATATTGTATATATAATGTTGTTTTGTAGATTTTGGATTTGGAAAGTTTTTAATTTTTTTATAA
chr4	108383451	108383571	Hypo	1 -	AAAAAAAAAAAAAAAAATCCAATACAATATCCTTATTTTCTCATTCCCAACCAAAATTAAACCTCAAATAAAAAAATATAATTAAATTACCCAAACAAAATTAACAAAAACCAAAAATTAA
chr4	108383451	108383571	Hypo	1 +	AGAAAAGAAAAGAAAGTTTAATGTAGTGTTTTTGTTTTTTTATTTTTAGTTAGGGTTGAATTTTAGATGGAGAAGTGTGGTTGAGTTGTTTAAATAGAATTGGTGAAAGTTAGAGGTTAG

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chr4	108383451	108383571	Hypo	1 -	AAAAAAAAAAAAAAAAATCCAATACAATATCCTTATTTTCTCATTCCCAACCAAAATTAAAAATCAAATAAAAAAATATAATTAAATTACCCAAACAAAATTAACAAAAACCAAAAATTAA
chr4	108383451	108383571	Hypo	1 +	AGAAAAGAAAAGAAAGTTTAATGTAGTGTTTTTGTTTTTTTATTTTTAGTTAGGGTTGAAAGTTAGATGGAGAAGTGTGGTTGAGTTGTTTAAATAGAATTGGTGAAAGTTAGAGGTTAG
chr4	108383451	108383571	Hyper	1 -	AAAAAAAAAAAAAAAAATCCAATACAATATCCTTATTTTCTCATTCCCAACCAAAATTAAACCTCAAATAAAAAAATATAATTAAATTACCCAAACAAAATTAACGAAAACCAAAAATTAA
chr4	108383451	108383571	Hyper	1 +	AGAAAAGAAAAGAAAGTTTAATGTAGTGTTTTTGTTTTTTTATTTTTAGTTAGGGTTGAATTTTAGATGGAGAAGTGTGGTTGAGTTGTTTAAATAGAATTGGCGAAAGTTAGAGGTTAG
chr4	108383451	108383571	Hyper	1 -	AAAAAAAAAAAAAAAAATCCAATACAATATCCTTATTTTCTCATTCCCAACCAAAATTAAAAATCAAATAAAAAAATATAATTAAATTACCCAAACAAAATTAACGAAAACCAAAAATTAA
chr4	108383451	108383571	Hyper	1 +	AGAAAAGAAAAGAAAGTTTAATGTAGTGTTTTTGTTTTTTTATTTTTAGTTAGGGTTGAAAGTTAGATGGAGAAGTGTGGTTGAGTTGTTTAAATAGAATTGGCGAAAGTTAGAGGTTAG
chr12	108722978	108723098	Hypo	1 -	CCATAAAATAAAACACATTAAACCACCTAAAAAATTAAATAAAACCTTCAAAACCCTAAAAAACATTCCAACCTCCTCCTACCATCCCTACTTCCTACCCACCACACCAAACTCCCTACA
chr12	108722978	108723098	Hypo	1 +	TTATGAAATAAAGTATATTGGATTATTTGGAAAATTGGGTGGGGTTTTTAAGGTTTTGAGGAGTATTTTGATTTTTTTTTGTTATTTTTGTTTTTTGTTTATTATGTTAGATTTTTTGTA
chr12	108722978	108723098	Hypo	1 -	CCATAAAATAAAACACATTAAACCACCTAAAAAATTAAATAAAACCTTCAAAACCCTAAATTACATTCCAACCTCCTCCTACCATCCCTACTTCCTACCCACCACACCAAACTCCCTACA
chr12	108722978	108723098	Hypo	1 +	TTATGAAATAAAGTATATTGGATTATTTGGAAAATTGGGTGGGGTTTTTAAGGTTTTGAGTTGTATTTTGATTTTTTTTTGTTATTTTTGTTTTTTGTTTATTATGTTAGATTTTTTGTA
chr12	108722978	108723098	Hyper	1 -	CCATAAAATAAAACACATTAAACCACCTAAAAAATTAAATAAAACCTTCAAAACCCTAAAAAACATTCCGACCTCCTCCTACCATCCCTACTTCCTACCCACCACGCCAAACTCCCTACA
chr12	108722978	108723098	Hyper	1 +	TTATGAAATAAAGTATATTGGATTATTTGGAAAATTGGGTGGGGTTTTTAAGGTTTTGAGGAGTATTTCGATTTTTTTTTGTTATTTTTGTTTTTTGTTTATTACGTTAGATTTTTTGTA
chr12	108722978	108723098	Hyper	1 -	CCATAAAATAAAACACATTAAACCACCTAAAAAATTAAATAAAACCTTCAAAACCCTAAATTACATTCCGACCTCCTCCTACCATCCCTACTTCCTACCCACCACGCCAAACTCCCTACA
chr12	108722978	108723098	Hyper	1 +	TTATGAAATAAAGTATATTGGATTATTTGGAAAATTGGGTGGGGTTTTTAAGGTTTTGAGTTGTATTTCGATTTTTTTTTGTTATTTTTGTTTTTTGTTTATTACGTTAGATTTTTTGTA
chr6	101623284	101623404	Hypo	1 -	AAAAATAAAAAAAAAAAAAAAAAATAACCAAATATCCTAATAAAAACAAAATAACTCAAAAAACTAATAAAATATCTAAATTAAATATTAAAAAACATACAAAACCCCACAAACAACCAA
chr6	101623284	101623404	Hypo	1 +	AAGAGTGAAGGGAAAAGGAGAGGATAATTAGATATTTTAGTGAGGATAAGATAATTTAGAGAGTTGGTGGGATGTTTGGGTTGAATATTGAGAAGTATGTAGAGTTTTGTAGGTAGTTAA
chr6	101623284	101623404	Hypo	1 -	AAAAATAAAAAAAAAAAAAAAAAATAACCAAATATCCTAATAAAAACAAAATAACTCAAATTACTAATAAAATATCTAAATTAAATATTAAAAAACATACAAAACCCCACAAACAACCAA
chr6	101623284	101623404	Hypo	1 +	AAGAGTGAAGGGAAAAGGAGAGGATAATTAGATATTTTAGTGAGGATAAGATAATTTAGATTGTTGGTGGGATGTTTGGGTTGAATATTGAGAAGTATGTAGAGTTTTGTAGGTAGTTAA
chr6	101623284	101623404	Hyper	1 -	AAAAATAAAAAAAAAAAAAAAAAATAACCAAATATCCTAATAAAAACAAAATAACTCAAAAAACTAATAAAATATCTAAATTAAATATTAAAAAACATACAAAACCCCGCAAACAACCAA
chr6	101623284	101623404	Hyper	1 +	AAGAGTGAAGGGAAAAGGAGAGGATAATTAGATATTTTAGTGAGGATAAGATAATTTAGAGAGTTGGTGGGATGTTTGGGTTGAATATTGAGAAGTATGTAGAGTTTCGTAGGTAGTTAA
chr6	101623284	101623404	Hyper	1 -	AAAAATAAAAAAAAAAAAAAAAAATAACCAAATATCCTAATAAAAACAAAATAACTCAAATTACTAATAAAATATCTAAATTAAATATTAAAAAACATACAAAACCCCGCAAACAACCAA
chr6	101623284	101623404	Hyper	1 +	AAGAGTGAAGGGAAAAGGAGAGGATAATTAGATATTTTAGTGAGGATAAGATAATTTAGATTGTTGGTGGGATGTTTGGGTTGAATATTGAGAAGTATGTAGAGTTTCGTAGGTAGTTAA
chr7	118253470	118253590	Hypo	1 -	TACAATAACAATAAAAACAATTTTCCATCAACATAAACAAATTTTAATAATCTAACAATTACAATATAATTATATATACAATAACATAATAAATATATTTATATTTTATACATTATAAAA
chr7	118253470	118253590	Hypo	1 +	TGTAATAATAATAAGGATAATTTTTTATTAGTGTAAATAAATTTTAATGGTTTAGTAGTTATAATGTAATTATATGTGTAATGATATGATGAATGTGTTTATATTTTATATATTATAAAA
chr7	118253470	118253590	Hypo	1 -	TACAATAACAATAAAAACAATTTTCCATCAACATAAACAAATTTTAATAATCTAACAAATACTATATAATTATATATACAATAACATAATAAATATATTTATATTTTATACATTATAAAA
chr7	118253470	118253590	Hypo	1 +	TGTAATAATAATAAGGATAATTTTTTATTAGTGTAAATAAATTTTAATGGTTTAGTAGGTATTATGTAATTATATGTGTAATGATATGATGAATGTGTTTATATTTTATATATTATAAAA
chr7	118253470	118253590	Hyper	1 -	TACAATAACAATAAAAACAATTTTCCATCAACGTAAACAAATTTTAATAATCTAACAATTACAATATAATTATATATACAATAACATAATAAATATATTTATATTTTATACATTATAAAA
chr7	118253470	118253590	Hyper	1 +	TGTAATAATAATAAGGATAATTTTTTATTAGCGTAAATAAATTTTAATGGTTTAGTAGTTATAATGTAATTATATGTGTAATGATATGATGAATGTGTTTATATTTTATATATTATAAAA
chr7	118253470	118253590	Hyper	1 -	TACAATAACAATAAAAACAATTTTCCATCAACGTAAACAAATTTTAATAATCTAACAAATACTATATAATTATATATACAATAACATAATAAATATATTTATATTTTATACATTATAAAA
chr7	118253470	118253590	Hyper	1 +	TGTAATAATAATAAGGATAATTTTTTATTAGCGTAAATAAATTTTAATGGTTTAGTAGGTATTATGTAATTATATGTGTAATGATATGATGAATGTGTTTATATTTTATATATTATAAAA
chr1	202149073	202149193	Hypo	1 -	TAAACCACTATACCAAACTCAAATACCTATTTCTAAAACTTCCTCTTACTATCAAACACAAAAAATAAAACTTACTATAAAATAACAAATAACATAACACATAACCTCTACCAAACTTAC
chr1	202149073	202149193	Hypo	1 +	TGAGTTATTGTGTTAGGTTTAGGTATTTATTTTTAGAGTTTTTTTTTATTGTTAGGTATAGAAGATGGGGTTTGTTGTGAGATGGTAGATAGTATGATATGTAATTTTTGTTAAGTTTGT
chr1	202149073	202149193	Hypo	1 -	TAAACCACTATACCAAACTCAAATACCTATTTCTAAAACTTCCTCTTACTATCAAACAAAAATAATAAAACTTACTATAAAATAACAAATAACATAACACATAACCTCTACCAAACTTAC
chr1	202149073	202149193	Hypo	1 +	TGAGTTATTGTGTTAGGTTTAGGTATTTATTTTTAGAGTTTTTTTTTATTGTTAGGTAGAGATGATGGGGTTTGTTGTGAGATGGTAGATAGTATGATATGTAATTTTTGTTAAGTTTGT
chr1	202149073	202149193	Hyper	1 -	TAAACCACTATACCAAACTCAAATACCTATTTCTAAAACTTCCTCTTACTATCAAACACAAAAAATAAAACTTACTATAAAATAACAAATAACATAACACGTAACCTCTACCAAACTTAC
chr1	202149073	202149193	Hyper	1 +	TGAGTTATTGTGTTAGGTTTAGGTATTTATTTTTAGAGTTTTTTTTTATTGTTAGGTATAGAAGATGGGGTTTGTTGTGAGATGGTAGATAGTATGATACGTAATTTTTGTTAAGTTTGT
chr1	202149073	202149193	Hyper	1 -	TAAACCACTATACCAAACTCAAATACCTATTTCTAAAACTTCCTCTTACTATCAAACAAAAATAATAAAACTTACTATAAAATAACAAATAACATAACACGTAACCTCTACCAAACTTAC
chr1	202149073	202149193	Hyper	1 +	TGAGTTATTGTGTTAGGTTTAGGTATTTATTTTTAGAGTTTTTTTTTATTGTTAGGTAGAGATGATGGGGTTTGTTGTGAGATGGTAGATAGTATGATACGTAATTTTTGTTAAGTTTGT
chr11	31982531	31982651	Hypo	1 -	TCACACATAAATTTAATCATTATCAATAACAAATTATTTATAAATAACTTCATAACTATTATAAATCACAAATCCTCAAACACAAATAAATACCATACTTTTCTCCAAACTACATAAAAT
chr11	31982531	31982651	Hypo	1 +	TTATATATAGATTTAATTATTATTAGTAATAAATTATTTGTGAATGATTTTATAATTGTTGTAGATTATAAGTTTTTAAATGTAAATGGGTGTTATATTTTTTTTTAGGTTGTGTGAAAT
chr11	31982531	31982651	Hypo	1 -	TCACACATAAATTTAATCATTATCAATAACAAATTATTTATAAATAACTTCATAACTAATATTAATCACAAATCCTCAAACACAAATAAATACCATACTTTTCTCCAAACTACATAAAAT
chr11	31982531	31982651	Hypo	1 +	TTATATATAGATTTAATTATTATTAGTAATAAATTATTTGTGAATGATTTTATAATTGATGTTGATTATAAGTTTTTAAATGTAAATGGGTGTTATATTTTTTTTTAGGTTGTGTGAAAT
chr11	31982531	31982651	Hyper	1 -	TCACACATAAATTTAATCATTATCAATAACAAATTATTTATAAATAACTTCATAACTATTATAAATCACAAATCCTCAAACGCAAATAAATACCATACTTTTCTCCAAACTACGTAAAAT
chr11	31982531	31982651	Hyper	1 +	TTATATATAGATTTAATTATTATTAGTAATAAATTATTTGTGAATGATTTTATAATTGTTGTAGATTATAAGTTTTTAAACGTAAATGGGTGTTATATTTTTTTTTAGGTTGCGTGAAAT
chr11	31982531	31982651	Hyper	1 -	TCACACATAAATTTAATCATTATCAATAACAAATTATTTATAAATAACTTCATAACTAATATTAATCACAAATCCTCAAACGCAAATAAATACCATACTTTTCTCCAAACTACGTAAAAT
chr11	31982531	31982651	Hyper	1 +	TTATATATAGATTTAATTATTATTAGTAATAAATTATTTGTGAATGATTTTATAATTGATGTTGATTATAAGTTTTTAAACGTAAATGGGTGTTATATTTTTTTTTAGGTTGCGTGAAAT
chr16	74999560	74999680	Hypo	1 -	CCCTATAATCATAATCCATAAATATAAAAATAACTTCCAAATTCCCAAAAACCCCAATTTACAAATCATTTCCAAAAATCATAACAAACAAACTCAACAAACTTACTTACCCAAAAAACA
chr16	74999560	74999680	Hypo	1 +	TTTTATGATTATAATTTGTAAATATAAGAATAGTTTTTAAGTTTTTAGAAATTTTGATTTGTAAATTGTTTTTAGAAATTATGGTAGATAAATTTGGTAAGTTTATTTATTTAGAAAGTA
chr16	74999560	74999680	Hypo	1 -	CCCTATAATCATAATCCATAAATATAAAAATAACTTCCAAATTCCCAAAAACCCCACTTTACAATTCATTTCCAAAAATCATAACAAACAAACTCAACAAACTTACTTACCCAAAAAACA
chr16	74999560	74999680	Hypo	1 +	TTTTATGATTATAATTTGTAAATATAAGAATAGTTTTTAAGTTTTTAGAAATTTTGTTTTGTAATTTGTTTTTAGAAATTATGGTAGATAAATTTGGTAAGTTTATTTATTTAGAAAGTA
chr16	74999560	74999680	Hyper	1 -	CCCTATAATCATAATCCGTAAATATAAAAATAACTTCCAAATTCCCAAAAACCCCGATTTACAAATCGTTTCCAAAAATCATAACAAACAAACTCGACAAACTTACTTACCCAAAAAACA
chr16	74999560	74999680	Hyper	1 +	TTTTATGATTATAATTCGTAAATATAAGAATAGTTTTTAAGTTTTTAGAAATTTCGATTTGTAAATCGTTTTTAGAAATTATGGTAGATAAATTCGGTAAGTTTATTTATTTAGAAAGTA
chr16	74999560	74999680	Hyper	1 -	CCCTATAATCATAATCCGTAAATATAAAAATAACTTCCAAATTCCCAAAAACCCCGCTTTACAATTCGTTTCCAAAAATCATAACAAACAAACTCGACAAACTTACTTACCCAAAAAACA

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chr16	74999560	74999680	Hyper	1	+	TTTTATGATTATAATTCGTAAATATAAGAATAGTTTTTAAGTTTTTAGAAATTTCGTTTTGTAATTCGTTTTTAGAAATTATGGTAGATAAATTCGGTAAGTTTATTTATTTAGAAAGTA
chr9	4205951	4206071	Hypo	1	-	TAATTTATTTTTATTCATTATTTATTTATTTACTTACTTATTCCAAAATACAAAATACCTAAATCTAATTTAAAAACTAACAAAACTAATCTAAAAAAAAAAAAATTAAAAATATAAAAAA
chr9	4205951	4206071	Hypo	1	+	TAGTTTGTTTTTGTTTATTGTTTGTTTGTTTGTTTGTTTGTTTTAAGATGTAAGATATTTGAATTTGATTTAGAAGTTGATAGAATTGATTTAGAAGAGAAGAGTTGAAGGTATGGAAGG
chr9	4205951	4206071	Hypo	1	-	TAATTTATTTTTATTCATTATTTATTTATTTACTTACTTATTCCAAAATACAAAATAACTAAAACTAATTTAAAAACTAACAAAACTAATCTAAAAAAAAAAAAATTAAAAATATAAAAAA
chr9	4205951	4206071	Hypo	1	+	TAGTTTGTTTTTGTTTATTGTTTGTTTGTTTGTTTGTTTGTTTTAAGATGTAAGATAGTTGAAATTGATTTAGAAGTTGATAGAATTGATTTAGAAGAGAAGAGTTGAAGGTATGGAAGG
chr9	4205951	4206071	Hyper	1	-	TAATTTATTTTTATTCATTATTTATTTATTTACTTACTTATTCCAAAATACAAAATACCTAAATCTAATTTAAAAACTAACAAAACTAATCTAAAAAAAAAAAAATTAAAAATATAAAAAA
chr9	4205951	4206071	Hyper	1	+	TAGTTTGTTTTTGTTTATTGTTTGTTTGTTTGTTTGTTTGTTTTAAGATGTAAGATATTTGAATTTGATTTAGAAGTTGATAGAATTGATTTAGAAGAGAAGAGTTGAAGGTATGGAAGG
chr9	4205951	4206071	Hyper	1	-	TAATTTATTTTTATTCATTATTTATTTATTTACTTACTTATTCCAAAATACAAAATAACTAAAACTAATTTAAAAACTAACAAAACTAATCTAAAAAAAAAAAAATTAAAAATATAAAAAA
chr9	4205951	4206071	Hyper	1	+	TAGTTTGTTTTTGTTTATTGTTTGTTTGTTTGTTTGTTTGTTTTAAGATGTAAGATAGTTGAAATTGATTTAGAAGTTGATAGAATTGATTTAGAAGAGAAGAGTTGAAGGTATGGAAGG
chr10	7629353	7629473	Hypo	1	-	AATCAAAAACTTTCATTATATAATAACCATAAAAAAACATCCAACACCTTTACAAAATTAAAAAACACAAACTTCAAAACCAACTATCACCCTTAAAACTAAATTCATCCCCAACTCTCC
chr10	7629353	7629473	Hypo	1	+	GGTTAGGGATTTTTATTATATAATGATTATGAAAGGATATTTGGTATTTTTATGAAGTTGAAGAGTATAGGTTTTAGAGTTAGTTGTTATTTTTGAGGTTGGGTTTATTTTTGATTTTTT
chr10	7629353	7629473	Hypo	1	-	AATCAAAAACTTTCATTATATAATAACCATAAAAAAACATCCAACACCTTTACAAAAATAAAACACACAAACTTCAAAACCAACTATCACCCTTAAAACTAAATTCATCCCCAACTCTCC
chr10	7629353	7629473	Hypo	1	+	GGTTAGGGATTTTTATTATATAATGATTATGAAAGGATATTTGGTATTTTTATGAAGGTGAAGTGTATAGGTTTTAGAGTTAGTTGTTATTTTTGAGGTTGGGTTTATTTTTGATTTTTT
chr10	7629353	7629473	Hyper	1	-	AATCAAAAACTTTCATTATATAATAACCATAAAAAAACATCCGACACCTTTACGAAATTAAAAAACACAAACTTCAAAACCAACTATCACCCTTAAAACTAAATTCATCCCCGACTCTCC
chr10	7629353	7629473	Hyper	1	+	GGTTAGGGATTTTTATTATATAATGATTATGAAAGGATATTCGGTATTTTTACGAAGTTGAAGAGTATAGGTTTTAGAGTTAGTTGTTATTTTTGAGGTTGGGTTTATTTTCGATTTTTC
chr10	7629353	7629473	Hyper	1	-	AATCAAAAACTTTCATTATATAATAACCATAAAAAAACATCCGACACCTTTACGAAAATAAAACGCACAAACTTCAAAACCAACTATCACCCTTAAAACTAAATTCATCCCCGACTCTCC
chr10	7629353	7629473	Hyper	1	+	GGTTAGGGATTTTTATTATATAATGATTATGAAAGGATATTCGGTATTTTTACGAAGGTGAAGCGTATAGGTTTTAGAGTTAGTTGTTATTTTTGAGGTTGGGTTTATTTTCGATTTTTC
chr4	55687729	55687849	Hypo	1	-	TTCCTCTAAATAAACTACAAAACACTAACTAAATATAAAATACAAAATAAAACAAATTAAAAATACAAACTTCTAAACTACTTCTTACTAAACATAATCATAAACACATTTCTTCACCTC
chr4	55687729	55687849	Hypo	1	+	TTTTTTTGGGTGGGTTGTAGAGTATTGGTTGAGTGTGGGATGTAGGGTGAAGTAGATTGGGGGTATAAGTTTTTGGGTTGTTTTTTGTTAAGTATGATTATGGATATATTTTTTTATTTT
chr4	55687729	55687849	Hypo	1	-	TTCCTCTAAATAAACTACAAAACACTAACTAAATATAAAATACAAAATAAAACAAATTATACATACAAACTTCTAAACTACTTCTTACTAAACATAATCATAAACACATTTCTTCACCTC
chr4	55687729	55687849	Hypo	1	+	TTTTTTTGGGTGGGTTGTAGAGTATTGGTTGAGTGTGGGATGTAGGGTGAAGTAGATTGTGTGTATAAGTTTTTGGGTTGTTTTTTGTTAAGTATGATTATGGATATATTTTTTTATTTT
chr4	55687729	55687849	Hyper	1	-	TTCCTCTAAATAAACTACAAAACACTAACTAAATATAAAATACAAAATAAAACAAATTAAAAATACAAACTTCTAAACTACTTCTTACTAAACATAATCATAAACACATTTCTTCACCTC
chr4	55687729	55687849	Hyper	1	+	TTTTTTTGGGTGGGTTGTAGAGTATTGGTTGAGTGTGGGATGTAGGGTGAAGTAGATTGGGGGTATAAGTTTTTGGGTTGTTTTTTGTTAAGTATGATTATGGATATATTTTTTTATTTT
chr4	55687729	55687849	Hyper	1	-	TTCCTCTAAATAAACTACAAAACACTAACTAAATATAAAATACAAAATAAAACAAATTATACGTACAAACTTCTAAACTACTTCTTACTAAACATAATCATAAACACATTTCTTCACCTC
chr4	55687729	55687849	Hyper	1	+	TTTTTTTGGGTGGGTTGTAGAGTATTGGTTGAGTGTGGGATGTAGGGTGAAGTAGATTGTGCGTATAAGTTTTTGGGTTGTTTTTTGTTAAGTATGATTATGGATATATTTTTTTATTTT
chr9	73737643	73737763	Hypo	1	-	CCATTTCACTCACAATAATCTTATATCAAAAATTTAAAAAAAATATTACAAAAAACTAATCCACAAATAAAAAACAAACCATTAACCTACCTCATATAATAAAATTTATATCTCTAATTA
chr9	73737643	73737763	Hypo	1	+	TTATTTTATTTATAATGGTTTTGTGTTAAAAATTTAAGAAAGATATTGTAGAAAATTAGTTTATGGGTGGAAGGTAGATTATTGATTTATTTTGTATAGTAAAATTTATGTTTTTGATTA
chr9	73737643	73737763	Hypo	1	-	CCATTTCACTCACAATAATCTTATATCAAAAATTTAAAAAAAATATTACAAAAAACTAAACAACAAATAAAAAACAAACCATTAACCTACCTCATATAATAAAATTTATATCTCTAATTA
chr9	73737643	73737763	Hypo	1	+	TTATTTTATTTATAATGGTTTTGTGTTAAAAATTTAAGAAAGATATTGTAGAAAATTAGATAATGGGTGGAAGGTAGATTATTGATTTATTTTGTATAGTAAAATTTATGTTTTTGATTA
chr9	73737643	73737763	Hyper	1	-	CCATTTCACTCACAATAATCTTATATCAAAAATTTAAAAAAAATATTACAAAAAACTAATCCACGAATAAAAAACAAACCATTAACCTACCTCGTATAATAAAATTTATATCTCTAATTA
chr9	73737643	73737763	Hyper	1	+	TTATTTTATTTATAATGGTTTTGTGTTAAAAATTTAAGAAAGATATTGTAGAAAATTAGTTTACGGGTGGAAGGTAGATTATTGATTTATTTCGTATAGTAAAATTTATGTTTTTGATTA
chr9	73737643	73737763	Hyper	1	-	CCATTTCACTCACAATAATCTTATATCAAAAATTTAAAAAAAATATTACAAAAAACTAAACAACGAATAAAAAACAAACCATTAACCTACCTCGTATAATAAAATTTATATCTCTAATTA
chr9	73737643	73737763	Hyper	1	+	TTATTTTATTTATAATGGTTTTGTGTTAAAAATTTAAGAAAGATATTGTAGAAAATTAGATAACGGGTGGAAGGTAGATTATTGATTTATTTCGTATAGTAAAATTTATGTTTTTGATTA
chr1	111075906	111076026	Hypo	1	-	CAAACTACCATCCTAAAACATAACTATAACCAAAAAAAAAACCTTATCCAACTTCCTAACATCTAAAAAATTTATTTAAACCTAAAAAAAATATAAACACCTAACTCACACCTAACTCCA
chr1	111075906	111076026	Hypo	1	+	TAGGTTGTTATTTTGGAGTATAGTTGTGGTTAGAGAAAAGGTTTTGTTTAGTTTTTTGGTATTTAAGGGGTTTGTTTGGGTTTGGGAGAGATGTGAATATTTGGTTTATATTTGGTTTTA
chr1	111075906	111076026	Hypo	1	-	CAAACTACCATCCTAAAACATAACTATAACCAAAAAAAAAACCTTATCCAACTTCCTAAAAACTAAAAAATTTATTTAAACCTAAAAAAAATATAAACACCTAACTCACACCTAACTCCA
chr1	111075906	111076026	Hypo	1	+	TAGGTTGTTATTTTGGAGTATAGTTGTGGTTAGAGAAAAGGTTTTGTTTAGTTTTTTGGGAATTAAGGGGTTTGTTTGGGTTTGGGAGAGATGTGAATATTTGGTTTATATTTGGTTTTA
chr1	111075906	111076026	Hyper	1	-	CAAACTACCATCCTAAAACATAACTATAACCAAAAAAAAAACCTTATCCAACTTCCTAACATCTAAAAAATTTATTTAAACCTAAAAAAAATATAAACACCTAACTCACACCTAACTCCA
chr1	111075906	111076026	Hyper	1	+	TAGGTTGTTATTTTGGAGTATAGTTGTGGTTAGAGAAAAGGTTTTGTTTAGTTTTTTGGTATTTAAGGGGTTTGTTTGGGTTTGGGAGAGATGTGAATATTTGGTTTATATTTGGTTTTA
chr1	111075906	111076026	Hyper	1	-	CAAACTACCATCCTAAAACATAACTATAACCAAAAAAAAAACCTTATCCAACTTCCTAAAAACTAAAAAATTTATTTAAACCTAAAAAAAATATAAACACCTAACTCACACCTAACTCCA
chr1	111075906	111076026	Hyper	1	+	TAGGTTGTTATTTTGGAGTATAGTTGTGGTTAGAGAAAAGGTTTTGTTTAGTTTTTTGGGAATTAAGGGGTTTGTTTGGGTTTGGGAGAGATGTGAATATTTGGTTTATATTTGGTTTTA
chr16	59395402	59395522	Hypo	1	-	TAACTAAATTTAAAAACAAAAACTAATATCACAAAAAACAAATTCTATAAATACCTATTCTATAAAACAATATAACTTAACAATAAAAAATAAACAAACAACCTAATATTAAATCCTAAT
chr16	59395402	59395522	Hypo	1	+	TGGTTGGATTTAAGAGTAGGGGTTAATGTTATAGGGAGTAAATTTTATAGATGTTTGTTTTATGAGGTAGTATAGTTTAATGATAAGGAGTAGATAGATAATTTAATGTTAAATTTTAGT
chr16	59395402	59395522	Hypo	1	-	TAACTAAATTTAAAAACAAAAACTAATATCACAAAAAACAAATTCTATAAATACCTAATCTATACAACAATATAACTTAACAATAAAAAATAAACAAACAACCTAATATTAAATCCTAAT
chr16	59395402	59395522	Hypo	1	+	TGGTTGGATTTAAGAGTAGGGGTTAATGTTATAGGGAGTAAATTTTATAGATGTTTGGTTTATGTGGTAGTATAGTTTAATGATAAGGAGTAGATAGATAATTTAATGTTAAATTTTAGT
chr16	59395402	59395522	Hyper	1	-	TAACTAAATTTAAAAACAAAAACTAATATCACAAAAAACAAATTCTATAAATACCTATTCTATAAAACAATATAACTTAACGATAAAAAATAAACAAACAACCTAATATTAAATCCTAAT
chr16	59395402	59395522	Hyper	1	+	TGGTTGGATTTAAGAGTAGGGGTTAATGTTATAGGGAGTAAATTTTATAGATGTTTGTTTTATGAGGTAGTATAGTTTAACGATAAGGAGTAGATAGATAATTTAATGTTAAATTTTAGT
chr16	59395402	59395522	Hyper	1	-	TAACTAAATTTAAAAACAAAAACTAATATCACAAAAAACAAATTCTATAAATACCTAATCTATACGACAATATAACTTAACGATAAAAAATAAACAAACAACCTAATATTAAATCCTAAT
chr16	59395402	59395522	Hyper	1	+	TGGTTGGATTTAAGAGTAGGGGTTAATGTTATAGGGAGTAAATTTTATAGATGTTTGGTTTATGCGGTAGTATAGTTTAACGATAAGGAGTAGATAGATAATTTAATGTTAAATTTTAGT
chr2	30118765	30118885	Hypo	1	-	TTATAAATCTATATTTTTCCCTAATCTTCCCTACATTCCCCACAACCTATATTTAATACCAAAACATTCTAACACAACTCTCTCCATCCTAAAATAAAAAAAACTTACTAAATATATCCC
chr2	30118765	30118885	Hypo	1	+	TTATGGGTTTGTGTTTTTTTTTGGTTTTTTTTATATTTTTTATAATTTGTGTTTGATGTTAGAATATTTTGATATAGTTTTTTTTATTTTGAAGTAAGGGAAATTTATTGAATGTGTTTT
chr2	30118765	30118885	Hypo	1	-	TTATAAATCTATATTTTTCCCTAATCTTCCCTACATTCCCCACAACCTATATTTAATAACAAACCATTCTAACACAACTCTCTCCATCCTAAAATAAAAAAAACTTACTAAATATATCCC
chr2	30118765	30118885	Hypo	1	+	TTATGGGTTTGTGTTTTTTTTTGGTTTTTTTTATATTTTTTATAATTTGTGTTTGATGATAGATTATTTTGATATAGTTTTTTTTATTTTGAAGTAAGGGAAATTTATTGAATGTGTTTT

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chr2	30118765	30118885	Hyper	1	-	TTATAAATCTATATTTTTCCCTAATCTTCCCTACATTCCCCACAACCTATATTTAATACCAAAACATTCTAACACAACTCTCTCCATCCTAAAATAAAAAAAACTTACTAAATATATCCC
chr2	30118765	30118885	Hyper	1	+	TTATGGGTTTGTGTTTTTTTTTGGTTTTTTTTATATTTTTTATAATTTGTGTTTGATGTTAGAATATTTTGATATAGTTTTTTTTATTTTGAAGTAAGGGAAATTTATTGAATGTGTTTT
chr2	30118765	30118885	Hyper	1	-	TTATAAATCTATATTTTTCCCTAATCTTCCCTACATTCCCCACAACCTATATTTAATAACAAACCATTCTAACACAACTCTCTCCATCCTAAAATAAAAAAAACTTACTAAATATATCCC
chr2	30118765	30118885	Hyper	1	+	TTATGGGTTTGTGTTTTTTTTTGGTTTTTTTTATATTTTTTATAATTTGTGTTTGATGATAGATTATTTTGATATAGTTTTTTTTATTTTGAAGTAAGGGAAATTTATTGAATGTGTTTT
chr21	38580751	38580871	Hypo	1	-	CCTCTCCTAAAAAAAAAAATCTAATATCCTCAACTAACTCCTCTCCACCTTCACTTCTACCCAAAAACTCCAATACATCTAACTTTATCTCTAAAATAAACCATACAACCCTAATCATCTA
chr21	38580751	38580871	Hypo	1	+	TTTTTTTTAGGGGAGGGGTTTGGTGTTTTTAGTTGGTTTTTTTTTATTTTTGTTTTTATTTGGGGGTTTTAGTGTATTTGGTTTTATTTTTGGGGTGAGTTATGTGGTTTTGGTTATTTG
chr21	38580751	38580871	Hypo	1	-	CCTCTCCTAAAAAAAAAAATCTAATATCCTCAACTAACTCCTCTCCACCTTCACTTCTAACCAATAACTCCAATACATCTAACTTTATCTCTAAAATAAACCATACAACCCTAATCATCTA
chr21	38580751	38580871	Hypo	1	+	TTTTTTTTAGGGGAGGGGTTTGGTGTTTTTAGTTGGTTTTTTTTTATTTTTGTTTTTAGTTGGTGGTTTTAGTGTATTTGGTTTTATTTTTGGGGTGAGTTATGTGGTTTTGGTTATTTG
chr21	38580751	38580871	Hyper	1	-	CCTCTCCTAAAAAAAAAAATCTAATATCCTCAACTAACTCCTCTCCACCTTCGCTTCTACCCGAAAACTCCAATACATCTAACTTTATCTCTAAAATAAACCATACGACCCTAATCATCTA
chr21	38580751	38580871	Hyper	1	+	TTTTTTTTAGGGGAGGGGTTTGGTGTTTTTAGTTGGTTTTTTTTTATTTTCGTTTTTATTCGGGGGTTTTAGTGTATTTGGTTTTATTTTTGGGGTGAGTTATGCGGTTTTGGTTATTTG
chr21	38580751	38580871	Hyper	1	-	CCTCTCCTAAAAAAAAAAATCTAATATCCTCAACTAACTCCTCTCCACCTTCGCTTCTAACCGATAACTCCAATACATCTAACTTTATCTCTAAAATAAACCATACGACCCTAATCATCTA
chr21	38580751	38580871	Hyper	1	+	TTTTTTTTAGGGGAGGGGTTTGGTGTTTTTAGTTGGTTTTTTTTTATTTTCGTTTTTAGTCGGTGGTTTTAGTGTATTTGGTTTTATTTTTGGGGTGAGTTATGCGGTTTTGGTTATTTG
chr6	21479134	21479254	Hypo	1	-	ATTATCATACTAACCATCAACCCAAAAAACAAATTACAATAACTAATAACAAAAAAAAATAATCACAATATTTTTAAAAAATTACTTAAAAACAACTTTATCAACAAAAACCACTCAAAT
chr6	21479134	21479254	Hypo	1	+	ATTATTGTGTTGATTATTAGTTTAGAAAATAAATTATGGTAGTTAATGATAGGGAAGAGTAATTATAATGTTTTTAGAAAATTATTTGGAAATAATTTTGTTAATAGAGATTATTTAAAT
chr6	21479134	21479254	Hypo	1	-	ATTATCATACTAACCATCAACCCAAAAAACAAATTACAATAACTAATAACAAAAAACAATAATCAAAATATTTTTAAAAAATTACTTAAAAACAACTTTATCAACAAAAACCACTCAAAT
chr6	21479134	21479254	Hypo	1	+	ATTATTGTGTTGATTATTAGTTTAGAAAATAAATTATGGTAGTTAATGATAGGGAATAGTAATTAGAATGTTTTTAGAAAATTATTTGGAAATAATTTTGTTAATAGAGATTATTTAAAT
chr6	21479134	21479254	Hyper	1	-	ATTATCGTACTAACCATCAACCCAAAAAACAAATTACGATAACTAATAACAAAAAAAAATAATCACAATATTTTTAAAAAATTACTTAAAAACAACTTTATCAACAAAAACCACTCAAAT
chr6	21479134	21479254	Hyper	1	+	ATTATCGTGTTGATTATTAGTTTAGAAAATAAATTACGGTAGTTAATGATAGGGAAGAGTAATTATAATGTTTTTAGAAAATTATTTGGAAATAATTTTGTTAATAGAGATTATTTAAAT
chr6	21479134	21479254	Hyper	1	-	ATTATCGTACTAACCATCAACCCAAAAAACAAATTACGATAACTAATAACAAAAAACAATAATCAAAATATTTTTAAAAAATTACTTAAAAACAACTTTATCAACAAAAACCACTCAAAT
chr6	21479134	21479254	Hyper	1	+	ATTATCGTGTTGATTATTAGTTTAGAAAATAAATTACGGTAGTTAATGATAGGGAATAGTAATTAGAATGTTTTTAGAAAATTATTTGGAAATAATTTTGTTAATAGAGATTATTTAAAT
chr3	66099180	66099300	Hypo	1	-	TAATATTACTAATTACTAACAAACACATCAATCCATTTATTTACCTTACCCTAAAAAAATTTTAAAATTATCAATTCTATTTATTAATTTCTAATAAAAAACCAAAACTTATCCCATAAA
chr3	66099180	66099300	Hypo	1	+	TGGTATTGTTAATTGTTGGTAGATATATTAATTTATTTGTTTGTTTTATTTTAGAGGGATTTTAAAGTTATTAATTTTATTTGTTGGTTTTTAATAGAAAGTTAGGGTTTATTTTATAAA
chr3	66099180	66099300	Hypo	1	-	TAATATTACTAATTACTAACAAACACATCAATCCATTTATTTACCTTACCCTAAAATAATTTTACAATTATCAATTCTATTTATTAATTTCTAATAAAAAACCAAAACTTATCCCATAAA
chr3	66099180	66099300	Hypo	1	+	TGGTATTGTTAATTGTTGGTAGATATATTAATTTATTTGTTTGTTTTATTTTAGAGTGATTTTATAGTTATTAATTTTATTTGTTGGTTTTTAATAGAAAGTTAGGGTTTATTTTATAAA
chr3	66099180	66099300	Hyper	1	-	TAATATTACTAATTACTAACAAACACATCAATCCATTTATTTACCTTACCCTAAAAAAATTTTAAAATTATCAATTCTATTTATTAATTTCTAATAAAAAACCAAAACTTATCCCATAAA
chr3	66099180	66099300	Hyper	1	+	TGGTATTGTTAATTGTTGGTAGATATATTAATTTATTTGTTTGTTTTATTTTAGAGGGATTTTAAAGTTATTAATTTTATTTGTTGGTTTTTAATAGAAAGTTAGGGTTTATTTTATAAA
chr3	66099180	66099300	Hyper	1	-	TAATATTACTAATTACTAACAAACACATCAATCCATTTATTTACCTTACCCTAAAATAATTTTACAATTATCAATTCTATTTATTAATTTCTAATAAAAAACCAAAACTTATCCCATAAA
chr3	66099180	66099300	Hyper	1	+	TGGTATTGTTAATTGTTGGTAGATATATTAATTTATTTGTTTGTTTTATTTTAGAGTGATTTTATAGTTATTAATTTTATTTGTTGGTTTTTAATAGAAAGTTAGGGTTTATTTTATAAA
chr17	17441303	17441423	Hypo	1	-	AACTAACAAACACCCTCCTCAAAAAAAAAACAACTACTACCAAAACCCATAACATACCCATCCTTACTATCTAAAATAATCTCTCCAACACTACAACAAAAAACCAATCAAAAACCTAAAT
chr17	17441303	17441423	Hypo	1	+	AGTTGGTAAATGTTTTTTTTAGGAAGGGATAGTTGTTGTTGGGATTTATGGTATGTTTGTTTTTGTTGTTTGAGGTGGTTTTTTTAATGTTGTAATAGGGGGTTAGTTAGGGGTTTGGGT
chr17	17441303	17441423	Hypo	1	-	AACTAACAAACACCCTCCTCAAAAAAAAAACAACTACTACCAAAACCCATAACATAACCATCCTTAATATCTAAAATAATCTCTCCAACACTACAACAAAAAACCAATCAAAAACCTAAAT
chr17	17441303	17441423	Hypo	1	+	AGTTGGTAAATGTTTTTTTTAGGAAGGGATAGTTGTTGTTGGGATTTATGGTATGATTGTTTTTGGTGTTTGAGGTGGTTTTTTTAATGTTGTAATAGGGGGTTAGTTAGGGGTTTGGGT
chr17	17441303	17441423	Hyper	1	-	AACTAACAAACGCCCTCCTCAAAAAAAAAACAACTACTACCGAAACCCATAACATACCCGTCCTTACTATCTAAAATAATCTCTCCAACGCTACAACAAAAAACCAATCAAAAACCTAAAT
chr17	17441303	17441423	Hyper	1	+	AGTTGGTAAACGTTTTTTTTAGGAAGGGATAGTTGTTGTCGGGATTTATGGTATGTTCGTTTTTGTTGTTTGAGGTGGTTTTTTTAACGTTGTAATAGGGGGTTAGTTAGGGGTTTGGGT
chr17	17441303	17441423	Hyper	1	-	AACTAACAAACGCCCTCCTCAAAAAAAAAACAACTACTACCGAAACCCATAACATAACCGTCCTTAATATCTAAAATAATCTCTCCAACGCTACAACAAAAAACCAATCAAAAACCTAAAT
chr17	17441303	17441423	Hyper	1	+	AGTTGGTAAACGTTTTTTTTAGGAAGGGATAGTTGTTGTCGGGATTTATGGTATGATCGTTTTTGGTGTTTGAGGTGGTTTTTTTAACGTTGTAATAGGGGGTTAGTTAGGGGTTTGGGT
chr1	158444861	158444981	Hypo	1	-	AACTACAATATAACAAAATTAAATAAATTATCTAAAATTACAATCACCCAATAAAAAAACTAATACCCAAAACCAAATTACCTTCCTCTAAATTCCATACTATCATTCAATACACAATAA
chr1	158444861	158444981	Hypo	1	+	AATTATAATATAGTGAGGTTAAATAAATTGTTTAAGGTTATAGTTATTTAATGGAAGAATTGGTATTTAAAGTTAAGTTATTTTTTTTTAGATTTTATATTGTTATTTAATATATAATAA
chr1	158444861	158444981	Hypo	1	-	AACTACAATATAACAAAATTAAATAAATTATCTAAAATTACAATCACCCAATAAAAAATCTAAAACCCAAAACCAAATTACCTTCCTCTAAATTCCATACTATCATTCAATACACAATAA
chr1	158444861	158444981	Hypo	1	+	AATTATAATATAGTGAGGTTAAATAAATTGTTTAAGGTTATAGTTATTTAATGGAAGATTTGGGATTTAAAGTTAAGTTATTTTTTTTTAGATTTTATATTGTTATTTAATATATAATAA
chr1	158444861	158444981	Hyper	1	-	AACTACAATATAACGAAATTAAATAAATTATCTAAAATTACAATCACCCAATAAAAAAACTAATACCCAAAACCAAATTACCTTCCTCTAAATTCCATACTATCATTCAATACACAATAA
chr1	158444861	158444981	Hyper	1	+	AATTATAATATAGCGAGGTTAAATAAATTGTTTAAGGTTATAGTTATTTAATGGAAGAATTGGTATTTAAAGTTAAGTTATTTTTTTTTAGATTTTATATTGTTATTTAATATATAATAA
chr1	158444861	158444981	Hyper	1	-	AACTACAATATAACGAAATTAAATAAATTATCTAAAATTACAATCACCCAATAAAAAATCTAAAACCCAAAACCAAATTACCTTCCTCTAAATTCCATACTATCATTCAATACACAATAA
chr1	158444861	158444981	Hyper	1	+	AATTATAATATAGCGAGGTTAAATAAATTGTTTAAGGTTATAGTTATTTAATGGAAGATTTGGGATTTAAAGTTAAGTTATTTTTTTTTAGATTTTATATTGTTATTTAATATATAATAA
chr2	179239622	179239742	Hypo	1	-	ATACATATCATTTTTATAATAAAAAAAAAATAAAATAAAATTCTTATATCAAATACAAAATTTATCAACATACCAAAACATACACCTACCTATCAAATCCCAAAACATACATTAACAAAT
chr2	179239622	179239742	Hypo	1	+	ATATATATTATTTTTATAATGGGAGAAAAGTAAAATAGAATTTTTATATTAGATATAGAATTTGTTAGTATATTAAGGTATGTATTTGTTTGTTAGATTTTAAGGTATGTATTAATAGGT
chr2	179239622	179239742	Hypo	1	-	ATACATATCATTTTTATAATAAAAAAAAAATAAAATAAAATTCTTATATCAAATACTAAATTTATAAACATACCAAAACATACACCTACCTATCAAATCCCAAAACATACATTAACAAAT
chr2	179239622	179239742	Hypo	1	+	ATATATATTATTTTTATAATGGGAGAAAAGTAAAATAGAATTTTTATATTAGATATTGAATTTGTGAGTATATTAAGGTATGTATTTGTTTGTTAGATTTTAAGGTATGTATTAATAGGT
chr2	179239622	179239742	Hyper	1	-	ATACATATCATTTTTATAATAAAAAAAAAATAAAATAAAATTCTTATATCAAATACAAAATTTATCAACATACCAAAACATACACCTACCTATCAAATCCCAAAACATACATTAACAAAT
chr2	179239622	179239742	Hyper	1	+	ATATATATTATTTTTATAATGGGAGAAAAGTAAAATAGAATTTTTATATTAGATATAGAATTTGTTAGTATATTAAGGTATGTATTTGTTTGTTAGATTTTAAGGTATGTATTAATAGGT
chr2	179239622	179239742	Hyper	1	-	ATACATATCATTTTTATAATAAAAAAAAAATAAAATAAAATTCTTATATCAAATACTAAATTTATAAACATACCAAAACATACACCTACCTATCAAATCCCAAAACATACATTAACAAAT
chr2	179239622	179239742	Hyper	1	+	ATATATATTATTTTTATAATGGGAGAAAAGTAAAATAGAATTTTTATATTAGATATTGAATTTGTGAGTATATTAAGGTATGTATTTGTTTGTTAGATTTTAAGGTATGTATTAATAGGT
chr2	238463342	238463462	Hypo	1	-	TAAAAACAAAAATCAAACCTTATATCTTCAAACATTAACCAAATTAAATATTTCCTTCCCTCTCTCAATAAAACACTTCCAAAAACTTTCCAATCTCTCACTTAAAACTAAAATTTAAAT

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chr2	238463342	238463462	Hypo	1 +	TAGAGATAAGAGTTAAGTTTTGTGTTTTTAAGTATTGATTAAGTTAAGTGTTTTTTTTTTTTTTTAATAAGATATTTTTAGGAGTTTTTTAATTTTTTATTTAAAATTAAGGTTTGAAT
chr2	238463342	238463462	Hypo	1 -	TAAAAACAAAAATCAAACCTTATATCTTCAAACATTAACCAAATTAAATATTTCCTACCCTCTCTAAATAAAACACTTCCAAAAACTTTCCAATCTCTCACTTAAAACTAAAATTTAAAT
chr2	238463342	238463462	Hypo	1 +	TAGAGATAAGAGTTAAGTTTTGTGTTTTAAGTATTGATTAAGTTAAGTGTTTTTTGTTTTTTTGAATAAGATATTTTTAGGAGTTTTTAATTTTTTATTTAAAATTAAGGTTTGAAT
chr2	238463342	238463462	Hyper	1 -	TAAAAACAAAAATCAAACCTTATATCTTCAAACATTAACCAAATTAAATATTTCCTCCCTCTCTAAATAAAACACTTCCAAAAACTTTCCAATCTCTCACTTAAAACTAAAATTTAAAT
chr2	238463342	238463462	Hyper	1 +	TAGAGATAAGAGTTAAGTTTTGTGTTTTAAGTATTGATTAAGTTAAGTGTTTTTTTTTTTTTTAATAAGATATTTTTAGGAGTTTTTAATTTTTTATTTAAAATTAAGGTTTGAAT
chr2	238463342	238463462	Hyper	1 -	TAAAAACAAAAATCAAACCTTATATCTTCAAACATTAACCAAATTAAATATTTCCTACCCTCTCTAAATAAAACACTTCCAAAAACTTTCCAATCTCTCACTTAAAACTAAAATTTAAAT
chr2	238463342	238463462	Hyper	1 +	TAGAGATAAGAGTTAAGTTTTGTGTTTTAAGTATTGATTAAGTTAAGTGTTTTTTGTTTTTTTGAATAAGATATTTTTAGGAGTTTTTAATTTTTTATTTAAAATTAAGGTTTGAAT
chr3	170042745	170042865	Hypo	1 -	TACAAAATTTTATTTTAAAAATAAACAAATAAATAAAAAACCAAATAAAAAATAATAATTTCTAACAAAAAAACTTTTTTAAAATAAAACATAACATAAAATTAATTAAACATCTCTTAT
chr3	170042745	170042865	Hypo	1 +	TATAGAATTTTGTTTTGGGGATGGGTAAGTGGATGGATGAGGGGTTAAGTAAGAAGTAATGGTTTTTAGTAGGGAAGTTTTTTTAAAGTAGAATATGATATAAAATTGGTTAGATGTTTTTTGT
chr3	170042745	170042865	Hypo	1 -	TACAAAATTTTATTTTAAAAATAAACAAATAAATAAAAAACCAAATAAAAAATAATAATTTCTAAAAAAAAAACTTTTTTAAAATAAAACATAACATAAAATTAATTAAACATCTCTTAT
chr3	170042745	170042865	Hyper	1 +	TATAGAATTTTGTTTTGGGGATGGGTAAGTGGATGGATGAGGGGTTAAGTAAGAAGTAATGGTTTTTAGTAGGGAAGTTTTTTTAAAGTAGAATATGATATAAAATTGGTTAGACGTTTTTTGT
chr3	170042745	170042865	Hyper	1 -	TACAAAATTTTATTTTAAAAATAAACAAATAAATAAAAAACCAAATAAAAAATAATAATTTCTAACAAAAAAACTTTTTTAAAATAAAACATAACATAAAATTAATTAAACGTCTCTTAT
chr3	170042745	170042865	Hyper	1 +	TATAGAATTTTGTTTTGGGGATGGGTAAGTGGATGGATGAGGGGTTAAGTAAGAAGTAATGGTTTTTAGTAGGGAAGTTTTTTTAAAGTAGAATATGATATAAAATTGGTTAGACGTTTTTTGT
chr3	170042745	170042865	Hyper	1 -	TACAAAATTTTATTTTAAAAATAAACAAATAAATAAAAAACCAAATAAAAAATAATAATTTCTAAAAAAAAAACTTTTTTAAAATAAAACATAACATAAAATTAATTAAACGTCTCTTAT
chr3	170042745	170042865	Hyper	1 +	TATAGAATTTTGTTTTGGGGATGGGTAAGTGGATGGATGAGGGGTTAAGTAAGAAGTAATGGTTTTTAGTAGGGAAGTTTTTTTAAAGTAGAATATGATATAAAATTGGTTAGACGTTTTTTGT
chr21	46678645	46678765	Hypo	1 -	AAAAAAACTAAACTCACACCTACTAACAACCAATCCACAAAACCTACCCAAAAACTCAAACACACAACTAAAATCACATCCCACAAAAAACATCCTCACCAACTAACAATCAACACAAAT
chr21	46678645	46678765	Hypo	1 +	GGGGGGATTGGATTTATATTTGTTAATGGTTAGTTTATAGGATTGTTTGAAGGTTTGGATATATAGTTGAAGTTATATTTTATGGGGAGTATTTTTATTAATTGATAATTAGTATGGGT
chr21	46678645	46678765	Hypo	1 -	AAAAAAACTAAACTCACACCTACTAACAACCAATCCACAAAACCTACCCAAAAACTCAAACACACAACTAAAATCACATCCCACAAAAAACATCCTCACCAACTAACAATCAACACAAAT
chr21	46678645	46678765	Hypo	1 +	GGGGGGATTGGATTTATATTTGTTAATGGTTAGTTTATAGGATTGTTTGAAGGTTCGGATATATAGTTGAAGTTATATTTTATGGGGAGTATTTTTATTAATTGATAATTAGTATGGGT
chr21	46678645	46678765	Hyper	1 -	AAAAAAACTAAACTCACACCTACTAACGACCAATCCACAAAACCTACCCAAAAACTCGAACACACAACTAAAATCACATCCCACGAAAAACATCCTCACCAACTAACAATCAACACGAAT
chr21	46678645	46678765	Hyper	1 +	GGGGGGATTGGATTTATATTTGTTAACGGTTAGTTTATAGGATTTGTTTGAAGGTTCGGATATATAGTTGAAGTTATATTTTACGGGGAGTATTTTTATTAATTGATAATTAGTACGGGT
chr21	46678645	46678765	Hyper	1 -	AAAAAAACTAAACTCACACCTACTAACGACCAATCCACAAAACCTACCCAAAAACTAAAACACACCGCTAAAATCACATCCCACGAAAAACATCCTCACCAACTAACAATCAACACGAAT
chr21	46678645	46678765	Hyper	1 +	GGGGGGATTGGATTTATATTTGTTAACGGTTAGTTTATAGGATTTGTTTGAAGGTTGGGATATATCGTTGAAGTTATATTTTACGGGGAGTATTTTTATTAATTGATAATTAGTACGGGT
chr20	1893922	1894042	Hypo	1 -	AAAACTAAATAAAACTAAAAATAAAAAAAAAAAAAAAAAACAAAACAATAAACAAATACCCTCAACTTACTACAATAAAAACAAATAAAAATCTATAAACCTCTTTCCCTAACTACCCTACCCCT
chr20	1893922	1894042	Hypo	1 +	AAGATTGGGTGAGGTTGGGAATGGGAGAAAGAGGTAGGATAATGGGTAGATAGTTTTGGGTTTTTTGTAGTGAGGGTAGATAGGGGTTTGTGAGTTTTTTTTTTGGTTGTTTTGTTTTT
chr20	1893922	1894042	Hyper	1 -	AAAACTAAATAAAACTAAAAATAAAAAAAAAAAAAAAAACAAAACAATAAACAAATACCCTCGACTTACTACAATAAAAACAAATAAAAATCTATAAACCTCTTTCCCTAACTACCCTACCCCT
chr20	1893922	1894042	Hyper	1 +	AAGATTGGGTGAGGTTGGGAATGGGAGAAAAGAGGTAGGATAATGGGTAGATAGTTTTGGGTTTTTTGTAGTGAGGGTAGATAGGGGTTTGTGAGTTTTTTTTTTTGGTTGTTTTGTTTTT
chr20	1893922	1894042	Hyper	1 -	AAAACTAAATAAAACTAAAAATAAAAAAAAAAAAAAAAACAAAACAATAAACAAATACCCTCGACTTACTACAATAAAAACAAATAAAAATCTATAAACCTCTTTCCCTAACTACCCTACCCCT
chr20	1893922	1894042	Hyper	1 +	AAGATTGGGTGAGGTTGGGAATGGGAGAAAAGAGGTAGGATAATGGGTAGATAGTTTTGGGTTTTTTGTAGTGAGGGTAGATAGGGGTTTGTGAGTTTTTTTTTTTGGTTGTTTTGTTTTT
chr3	45317343	45317463	Hypo	1 -	TCCCCAAACTAATATATTTAACCTATAAAAAACCCAAAACCATACACTAATTTCTAATTCAAAACATAAACTCATTATATAAAATAACAACCCAACCTCACAAAACATTTTCTCTCAATA
chr3	45317343	45317463	Hypo	1 +	TTTTTAGATTGGTGTATTTGGTTTGTGGGAGATTTAGAGTTATATATTAGTTTTTAATTTAAAGTATGGGTTTATTGTATAGGATAGTAGTTTAATTTTATAAGATGTTTTTTTTTAGTG
chr3	45317343	45317463	Hypo	1 -	TCCCCAAACTAATATATTTAACCTATAAAAAACCCAAAACCATACACTAATTTCTAAATCAAAAAATAAACTCATTATATAAAATAACAACCCAACCTCACAAAACATTTTCTCTCAATA
chr3	45317343	45317463	Hypo	1 +	TTTTTAGATTGGTGTATTTGGTTTGTGGGAGATTTAGAGTTATATTAGTTTTTAAGTTAAAGGATGGGTTTATTGTATAGGATAGTAGTTTAATTTTATAAGATGTTTTTTTTTAGTG
chr3	45317343	45317463	Hyper	1 -	TCCCCAAACTAATATATTTAACCTATAAAAAACCCAAAACCATACACTAATTTCTAATCAAAACATAAACTCATTATATAAAATAACAACCCAACCTCACAAAACATTTTCTCTCAATA
chr3	45317343	45317463	Hyper	1 +	TTTTTAGATTGGTGTATTTGGTTTGTGGGAGATTTAGAGTTATATTAGTTTTTAATTTAAAGTATGGGTTTATTGTATAGGATAGTAGTTTAATTTTATAAGACGTTTTTTTTTAGTG
chr3	45317343	45317463	Hyper	1 -	TCCCCAAACTAATATATTTAACCTATAAAAAACCCAAAACCATACACTAATTTCTAATTCAAAACATAAACTCATTATATAAAATAACAACCCAACCTCACAAAACATTTTCTCTCAATA
chr3	45317343	45317463	Hyper	1 +	TTTTTAGATTGGTGTATTTGGTTTGTGGGAGATTTAGAGTTATATTAGTTTTTAATTTAAAGTATGGGTTTATTGTATAGGATAGTAGTTTAATTTTATAAGACGTTTTTTTTTAGTG
chr8	105833710	105833830	Hypo	1 -	AACATTCACTCTAACCCAAATAAAAATCAATAACTTCTAATAATCAAAACTCTAATAATTTAACCTAATATTTAAACCTAATATTTAAAAAAAACTCTAATTATAATAAATACAATAAAATTATAATTAAAAAA
chr8	105833710	105833830	Hypo	1 +	AGTATTTATTTTAATTTAAGTAAGGGTTAGTGATTTTTGGTGATTAGGGTTTAGTATTTTGGTTTAATTTGAAGGAGGGTTTTAATTGTAATAGATATAATGGAATTATAGTTGGGAAA
chr8	105833710	105833830	Hypo	1 -	AACATTCACTCTAACCCAAATAAAAATCAATAACTTCTAATAATCAAAACTCTAATAATTTAACCTAATATTTAAACCTAATATTTAAAAAAAACTCTAATTATAATAAATACAATAAAATTATAATTAAAAAA
chr8	105833710	105833830	Hypo	1 +	AGTATTTATTTTAATTTAAGTAAGGGTTAGTGATTTTTGGTGATTAGGGTTTAGTATTTTGGTTTAATTTGAAGGAGGGTTTTAATTGTAATAGATATAATGGAATTATAGTTGGGAAA
chr8	105833710	105833830	Hyper	1 -	AACATTCACTCTAACCCAAATAAAAATCAATAACTTCTAATAATCAAAACTCTAATAATTTAACCTAATATTTAAACCTAATATTTAAAAAAAACTCTAATTATAATAAATACAATAAAATTATAATTAAAAAA
chr8	105833710	105833830	Hyper	1 +	AGTATTTATTTTAATTTAAGTAAGGGTTAGTGATTTTTGGTGATTAGGGTTTAGTATTTTGGTTTAATTTGAAGGAGGGTTTTAATTGTAATAGATATAATGGAATTATAGTTGGGAAA
chr8	105833710	105833830	Hyper	1 -	AACATTCACTCTAACCCAAATAAAAATCAATAACTTCTAATAATCAAAACTCTAATAATTTAACCTAATATTTAAACCTAATATTTAAAAAAAACTCTAATTATAATAAATACAATAAAATTATAATTAAAAAA
chr8	105833710	105833830	Hyper	1 +	AGTATTTATTTTAATTTAAGTAAGGGTTAGTGATTTTTGGTGATTAGGGTTTAGTATTTTGGTTTAATTTGAAGGAGGGTTTTAATTGTAATAGATATAATGGAATTATAGTTGGGAAA
chr15	58553112	58553232	Hypo	1 -	CCTTATATAACCCTAAAAATAAACTACTTTAAAAATAAATCTCCAAAATACAACATATAAAAACACCAACTCTCAAATCATACAAAAACAAAATAAACACAAACAACATATCTCTT
chr15	58553112	58553232	Hypo	1 +	TTTTGTGTGATTTGAGGATGAGTGTTTGTTTAAGAATGAGTTTTTAGGGTGTAATATATAGTGAGGTATTAATTTTTAGGTTATGTAAAAGTAGGGTAGGTATAGATAGTGTGTTTTTT
chr15	58553112	58553232	Hypo	1 -	CCTTATATAACCCTAAAAATAAATACCTATTTAAAAATAAATCTCCAAAATACAACATATAAAAACACCAACTCTCAAATCATACAAAAACAAAATAAACACAAACAACATATCTCTT
chr15	58553112	58553232	Hypo	1 +	TTTTGTGTGATTTGAGGATGAGTGTTTGTTTAAGAATGAGTTTTTAGGGTGTAATATATAGTGAGGTATTAATTTTTAGGTTATGTAAAAGTAGGGTAGGTATAGATAGTGTGTTTTTT
chr15	58553112	58553232	Hyper	1 -	CCTTATATAACCCTAAAAATAAATACCTATTTAAAAATAAATCTCCAAAATACAACATATAAAAACACCAACTCTCAAATCATACAAAAACAAAATAAACACAAACAACATATCTCTT
chr15	58553112	58553232	Hyper	1 +	TTTTGTGTGATTTGAGGATGAGTGTTTGTTTAAGAATGAGTTTTTAGGGTGTAATATATAGTGAGGTATTAATTTTTAGGTTATGTAAAAGTAGGGTAGGTATAGATAGCGTGTTTTTT

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chr15	58553112	58553232	Hyper	1 -	CCTTATATAACCCTAAAAATAAATACCTATTTAAAAATAAATCTCCAAAATACAACATATAAAAACACCAACTCTCAAATCATACAAAAACAAAATAAACACAAACAACGTATCTCTT
chr15	58553112	58553232	Hyper	1 +	TTTTGTGTGATTTGAGGATGAGTGTTTGTTTAAGAATGAGTTTTTAGGGTGTAATATTTAGGGAGGTATTAATTTTTAGGTTATGTAAAAGTAGGGTAGGTATAGATAGCGTGTTTTTT
chr12	4953529	4953649	Hypo	1 -	ATAATATAAAAAATATCAAAAAAAAAATACAATATTAAATAACATAATAAAAAAAAACATTATCCTTACTAAAAAAATAACATCTAAACACAAAACCTAAAAATAAAAAACTAAACCT
chr12	4953529	4953649	Hypo	1 +	GTGATGTAGGGAATGTTAGGGAAGAAGTATAGTGTTAAATGATGTAGTGGGAGAAGGTGTTGTTTTTATTGAGAAGATGGTATTTGAGTATAGAGTTTGAAGGATGGGAGGATTGGATTT
chr12	4953529	4953649	Hyper	1 -	ATAATATAAAAAATATCAAAAAAAAAATACAATATTAAATAACATAATAAAAAAAAACATTATCCTTACTAAAAAAATAACATCTAAACACAAAACCTAAAAATAAAAAACTAAACCT
chr12	4953529	4953649	Hyper	1 +	GTGATGTAGGGAATGTTAGGGAAGAAGTATAGTGTTAATGACGTAGTGGGAGAAGGCGGTGATTTTATTGAGAAGATGGTATTTGAGTATAGAGTTTGAAGGATGGGAGGATTGGATTT
chr12	4953529	4953649	Hyper	1 -	ATAATATAAAAAATATCAAAAAAAAAATACAATATTAAATAACGTAATAAAAAAAAACGTTATCCTTACTAAAAAAATAACATCTAAACACAAAACCTAAAAATAAAAAACTAAACCT
chr12	4953529	4953649	Hyper	1 +	GTGATGTAGGGAATGTTAGGGAAGAAGTATAGTGTTAATGACGTAGTGGGAGAAGGCGGTGATTTTATTGAGAAGATGGTATTTGAGTATAGAGTTTGAAGGATGGGAGGATTGGATTT
chr11	41952008	41952128	Hypo	1 -	TCTTTTTCAATCCATCATAAATTAAAAAATACAAAATCATACATTTAAATAACTATAACAAATTTTTAAAAAATTTTTATATATTTAATTTTATTATTTACATTTATCTCAATATAAAC
chr11	41952008	41952128	Hypo	1 +	TTTTTTTTAATTTATTATGGATTGAAAAATATAAAGTTATGTATTTGGATGGTTATAATAGGTTTTAGAAAATTTTGTATATTTAATTTTATTGTTTGTATTTATTTGGTGTGAAT
chr11	41952008	41952128	Hyper	1 -	TCTTTTTCAATCCATCATAAATTAAAAAATACAAAATCATACATTTAAATAACTATAACAAATTTTTAAAAAATTTTTATATATTTAATTTTATTATTTACATTTATCTCAATATAAAC
chr11	41952008	41952128	Hyper	1 +	TTTTTTTTAATTTATTATGGATTGAAAAATATAAAGTTATGTATTTGGATGGTTATAAAAGTTTTTGTATATTTAATTTTATTGTTTGTATTTATTTGGTGTGAAT
chr11	41952008	41952128	Hyper	1 -	TCTTTTTCAATCCATCATAAATTAAAAAATACAAAATCATACATTTAAATAACTATAACAAATTTTTAAAAAATTTTTATATATTTAATTTTATTATTTACATTTATCTCGATATAAAC
chr11	41952008	41952128	Hyper	1 +	TTTTTTTTAATTTATTATGGATTGAAAAATATAAAGTTATGTATTTGGATGGTTATAATAGGTTTTAGAAAATTTTGTATATTTAATTTTATTGTTTGTATTTATTTGGTGTGAAT
chr11	41952008	41952128	Hyper	1 -	TCTTTTTCAATCCATCATAAATTAAAAAATACAAAATCATACATTTAAATAACTATAAAAAATTTTTAAAAAATTTTTATATATTTAATTTTATTATTTACATTTATCTCGATATAAAC
chr11	41952008	41952128	Hyper	1 +	TTTTTTTTAATTTATTATGGATTGAAAAATATAAAGTTATGTATTTGGATGGTTATAATAGGTTTTAGAAAATTTTGTATATTTAATTTTATTGTTTGTATTTATTTGGTGTGAAT
chr9	111028299	111028419	Hypo	1 -	ATCAAACAAAAAACTAAATAACAATATTATCAATAAAAAAAATAACATTAAAAAAAATAACATTAAAAACCTACATAAAACTCTACCCCTTTTCCTAAATTCTAAATCTTAAAACCCACA
chr9	111028299	111028419	Hypo	1 +	GTTAAATAGGAGATTGAATAATAGTATTATTAATGGAAAAATGGTATTAGGAAAAGTGATATTGGAGATTTATATGAATTTTATTTTTTTTTTTTTAAATTTTAGATTTTGGGATTTATA
chr9	111028299	111028419	Hyper	1 -	ATCAAACAAAAAACTAAATAACAATATTATCAATAAAAAAAATAACATTAAAAAAAATAAATAAAAAACCTACATAAACTTCTACCCCTTTTCCTAAATTCTAAATCTTAAAACCCACA
chr9	111028299	111028419	Hyper	1 +	GTTAAATAGGAGATTGAATAATAGTATTATTAATGGAAAAATGGTATTAGGAAAAGTGAGATGGGAGATTTATATGAATTTTATTTTTTTTTTTTTAAATTTTAGATTTTGGGATTTATA
chr9	111028299	111028419	Hyper	1 -	ATCAAACAAAAAACTAAATAACAATATTATCAATAAAAAAAATAACATTAAAAAAAATAAATAAAAAACCTACATAAACTTCTACCCCTTTTCCTAAATTCTAAATCTTAAAACCCACA
chr9	111028299	111028419	Hyper	1 +	GTTAAATAGGAGATTGAATAATAGTATTATTAATGGAAAAATGGTATTAGGAAAAGTGATATTGGAGATTTATATGAATTTTATTTTTTTTTTTTTAAATTTTAGATTTTGGGATTTATA
chr9	111028299	111028419	Hyper	1 -	ATCAAACAAAAAACTAAATAACAATATTATCAATAAAAAAAATAACATTAAAAAAAATAAATAAAAAACCTACATAAACTTCTACCCCTTTTCCTAAATTCTAAATCTTAAAACCCACA
chr9	111028299	111028419	Hyper	1 +	GTTAAATAGGAGATTGAATAATAGTATTATTAATGGAAAAATGGTATTAGGAAAAGTGAGATGGGAGATTTATATGAATTTTATTTTTTTTTTTTTAAATTTTAGATTTTGGGATTTATA
chr5	38129910	38130030	Hypo	1 -	ATAAACCCTATAATTACTCAAAACCATTATAAAAAAAACCTTCCTTCCAAAATATAATCCCCAACCATCTTAAAAACAATAATTAACATCAAAATCATTTAAAAAATTTCAAAACAAAT
chr5	38129910	38130030	Hypo	1 +	ATGGGTTTGTAGTTGTTTAAGATTATTATGAGAAAGGTTTTTTTTTTAAAGTATGATTTTGATTATTTTGAGAGATAATAGTTAATATTAGGATTATTTGGGAAATTTAGGATAAAT
chr5	38129910	38130030	Hyper	1 -	ATAAACCCTATAATTACTCAAAACCATTATAAAAAAAACCTTCCTTCCAAAATATAATCCCCAACCATCTTAAAAACAATAATTAACATCAAAATCATTTAAAAAATTTCAAAACAAAT
chr5	38129910	38130030	Hyper	1 +	ATGGGTTTGTAGTTGTTTAAGATTATTATGAGAAAGGTTTTTTTTTTAAAGTATGATTTTGATTATTTTGAGAGATAATAGTTAATATTAGGATTATTTGGGAAATTTAGGATAAAT
chr5	38129910	38130030	Hyper	1 -	ATAAACCCTATAATTACTCAAAACCATTATAAAAAAAACCTTCCTTCCAAAATATAATCCCCGACCATCTTAAAAACAATAATTAACATCAAAATCATTTAAAAAATTTCAAAACAAAT
chr5	38129910	38130030	Hyper	1 +	ATGGGTTTGTAGTTGTTTAAGATTATTATGAGAAAGGTTTTTTTTTTAAAGTATGATTTTGATTATTTTGAGAGATAATAGTTAATATTAGGATTATTTGGGAAATTTAGGATAAAT
chr5	38129910	38130030	Hyper	1 -	ATAAACCCTATAATTACTCAAAACCATTATAAAAAAAACCTTCCTTCCAAAATATAATCCCAAACCATCTTAAAAACAATAATTAACATCAAAATCATTTAAAAAATTTCAAACAAAT
chr5	38129910	38130030	Hyper	1 +	ATGGGTTTGTAGTTGTTTAAGATTATTATGAGAAAGGTTTTTTTTTTAAAGTATGATTTTGATTATTTTGAGAGATAATAGTTAATATTAGGATTATTTGGGAAATTTAGGATAAAT
chr1	154475269	154475389	Hypo	1 -	AACCCAAAATCCAAACACAAAAACACAATCACCAACTCCTACACATAATTCCATTACTCTTCAATAACACACAATCCTAAACAACACAAAACTCTTCCCACCATAACCACCAAAAATTAA
chr1	154475269	154475389	Hypo	1 +	GGTTTGAGGTTTGGGTGTAGGGATAATGGTTGTTAGTTTTTGCGTTAGTTTCGTTATTTTAAGGTGGTATACGGTTTTGGGTAGCGCGAGGTTTTTTTCGTCGTGGTCGTCGGGGATTGG
chr1	154475269	154475389	Hypo	1 -	AACCCAAATCCAAACACAAAAACACAATCACCAACTCCTACACATAATTCCATTACTCTTCAATAACACACAATCCTAAACAACACAAAACTCTTCCCACCATAACCACCAAAAATTAA
chr1	154475269	154475389	Hypo	1 +	GGTTTGAGGTTTGGGTGTAGGGATAACGGTCGTTAGTTTTTGCGTTAGTTTCGTTATTTTAAGGTGGTATACGGTTTTGGGTAGCGCGAGGTTTTTTTCGTCGTGGTCGTCGGGGATTGG
chr1	154475269	154475389	Hyper	1 -	AACCCAAATCCAAACACAAAAACACAATCACCAACTCCTACACATAATTCCATTACTCTTCAATAACACACAATCCTAAACAACACAAAACTCTTCCCACCATAACCACCAAAAATTAA
chr1	154475269	154475389	Hyper	1 +	GGTTCGAGGTTCGGGCGTAGGGATAACGGTCGTTAGTTTTTGCGTTAGTTTCGTTATTTTAAGGTGGTATACGGTTTTGGGTAGCGCGAGGTTTTTTTCGTCGTGGTCGTCGGGGATTGG
chr12	4826715	4826835	Hypo	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hypo	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	4826715	4826835	Hyper	1 -	TACCCCAACAAATCTAAAAAATAAAAAAACCTACATCAAATAATATAAAAACCTACATATATATAAAAAACAACATCAAAAAATTCTCCTCAAATAAATTTAAAAAAACATTAAAAAT
chr12	4826715	4826835	Hyper	1 +	TATTTTAGTAAATTTAAAGGAATAAAAAGATTTATATTAAATGATGTAGGGGTTTATATGATTGTGAGAGGTAGTATTAGGGGGTTTTTTTTAGGTGGGTTTAAAAAAATATTAAAGGAT
chr12	119220734	119220854	Hypo	1 -	ACAATCAAAAAAATTTATTACCTAAAATAATTAAAAAATCCAAAAATACATCAAAATACAACTTATTATATAACAACACAATAAATATCACCAAAAATTCAAATACTTTATTTCTT
chr12	119220734	119220854	Hypo	1 +	ATAATTAGGAGAATTTATTGTTTAGGGTAATTGAAAAGTTTAGAGGTGTATTAAGATGTAGGTTGGTTTTATTGTAGTAGTATAAGATTAGGTATTTTAAGAATTTAGGTATTTGTTTTTT
chr12	119220734	119220854	Hyper	1 -	ACAATCAAAAAAATTTATTACCTAAAATAATTAAAAAATCCAAAAATACATCAAAATACAACTTATTATATAACAACACAATAAATATCACCAAAAATTCAAATACTTTATTTCTT
chr12	119220734	119220854	Hyper	1 +	ATAATTAGGAGAATTTATTGTTTAGGGTAATTGAAAAGTTTAGAGGTGTATTAAGATGTAGGTTGGTTTTATTGTAGTAGTATAAGATTAGGTATTTTAAGAATTTAGGTATTTGTTTTTT

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chr12	119220734	119220854	Hypo	1 +	ATAATTAGGAGAATTTATTGTTTAGGGTAATTGAAAAGTTTAGAGGTGTATTAAGATGTATTTTGGTTTTATTGTAGTAGTATAATGGATGTTATTAAGAATTTAGGTATTTTGTTTTTT
chr12	119220734	119220854	Hyper	1 -	ACAATCAAAAAAATTTATTACCTAAAATAATTAAAAAATCCAAAAATACATCAAAATACAAACTAACTTTATTATAACAACACAATAAATATCCACCAAAAATTCAAATACTTTATTTCTT
chr12	119220734	119220854	Hyper	1 +	ATAATTAGGAGAATTTATTGTTTAGGGTAATTGAAAAGTTTAGAGGTGTATTAAGATGTAGGTTGGTTTTATTGTAGTAGTATAATGGATGTTATTAAGAATTTAGGTATTTTGTTTTTT
chr12	119220734	119220854	Hyper	1 -	ACAATCAAAAAAATTTATTACCTAAAATAATTAAAAAATCCAAAAATACATCAAAATACATTCTAACTTTATTATAACAACACAATAAAATATCACCAAAAATTCAAATACTTTATTTCTT
chr12	119220734	119220854	Hyper	1 +	ATAATTAGGAGAATTTATTGTTTAGGGTAATTGAAAAGTTTAGAGGTGTATTAAGATGTATTTTGGTTTTATTGTAGTAGTATAATGGATGTTATTAAGAATTTAGGTATTTTGTTTTTT
chr5	123746587	123746707	Hypo	1 -	AATTAAATATATAAAAAACATATTAAAAAAAAAAAAAAACTAAACACTATACCATAAAAAACTATAATCATAATCTAAACAAAAAAACAAAAATAAAAATTACAAAACAAACAACAAAA
chr5	123746587	123746707	Hypo	1 +	AATTGAATATATAGAGAATATATTAGAAGAGGGAAAGGTTAAATGTTGTATTGTGAGAAGGTTGTGGTTATGGTTTAGATAGGAGGAATAGAAGTAGGAATTATAGAGTAGATAGTGAGA
chr5	123746587	123746707	Hypo	1 -	AATTAAATATATAAAAAACATATTAAAAAAAAAAAAAACTAAACACTATACCATAAAAAACATATAATCATAATCTAAACAAAAAAACAAAAATAAAAATTACAAAACAAACAACAAAA
chr5	123746587	123746707	Hypo	1 +	AATTGAATATATAGAGAATATATTAGAAGAGGGAAAGGTTAAATGTTGTATTGTGAGAAGGTTGTGGTTATGGTTTAGATAGGAGGAATAGAAGTAGGAATTATAGAGTAGATAGTGAGA
chr5	123746587	123746707	Hypo	1 -	AATTAAATATATAAAAAACATATTAAAAAAAAAAAAAACTAAACGCTATACCGTAAAAAAACTATAATCATAATCTAAACAAAAAAACAAAAATAAAAATTACAAAACAAACAACGAAA
chr5	123746587	123746707	Hypo	1 +	AATTGAATATATAGAGAATATATTAGAAGAGGGAAAGGTTAAACGTTGTATCGTGAGAAGGTTGTGGTTATGGTTTAGATAGGAGGAATAGAAGTAGGAATTATAGAGTAGATAGCGAGA
chr5	123746587	123746707	Hypo	1 -	AATTAAATATATAAAAAACATATTAAAAAAAAAAAAAACTAAACGCTATACCGTAAAAAACATATAATCATAATCTAAACAAAAAAACAAAAATAAAAATTACAAAACAAACAACGAAA
chr5	123746587	123746707	Hypo	1 +	AATTGAATATATAGAGAATATATTAGAAGAGGGAAAGGTTAAACGTTGTATCGTGAGAAGGTTGTGGTTATGGTTTAGATAGGAGGAATAGAAGTAGGAATTATAGAGTAGATAGCGAGA
chr7	126051585	126051505	Hypo	1 -	CTAAAATACCTATTACCATATAAAAAAAAAATAATAAATATTCAACAACAATTAAAAATCTTTACCAAAACAACTATCATTTCAAATACAACAAAAACACAAAAATAAAAAATAAAAATA
chr7	126051585	126051505	Hypo	1 +	TTGAAGTGTTTGTTATTATATAAGAGGAGGATAATGAATATTTAATAATAATTAGAAGTTTATTATTAAATATAATAAAAATATAAAAGTAAAAAATGAAAATG
chr7	126051585	126051505	Hypo	1 -	CTAAAATACCTATTACCATATAAAAAAAAAATAATAAATATTCAACAACAATTAAAAATCAATACCAAAACAACTATCATTTCAAATACAACAAAAACACAAAAATAAAAAATAAAAATA
chr7	126051585	126051505	Hypo	1 +	TTGAAGTGTTTGTTATTATATAAGAGGAGGATAATGAATATTTAATAATAATTAGAAGTTTATTATTAAATATAATAAAAATATAAAAGTAAAAAATGAAAATG
chr7	126051585	126051505	Hypo	1 -	CTAAAATACCTATTACCATATAAAAAAAAAATAATAAATATTCAACAACAATTAAAAATCTTTACCAAAACAACTATCATTTCAAATACAACAAAAACACAAAAATAAAAAATAAAAATA
chr7	126051585	126051505	Hypo	1 +	TTGAAGTGTTTGTTATTATATAAGAGGAGGATAATGAATATTTAATAATAATTAGAAGTTTTTATTAGAGTAGTTATTATTTTAAATATAATAAAAATATAAAAGTAAAAAATGAAAATG
chr7	126051585	126051505	Hypo	1 -	CTAAAATACCTATTACCATATAAAAAAAAAATAATAAATATTCAACAACAATTAAAAATCAATACCAAAACAACTATCATTTCAAATACAACAAAAACACAAAAATAAAAAATAAAAATA
chr7	126051585	126051505	Hypo	1 +	TTGAAGTGTTTGTTATTATATAAGAGGAGGATAATGAATATTTAATAATAATTAGAAGTTTTTATTAGAGTAGTTATTATTTTAAATATAATAAAAATATAAAAGTAAAAAATGAAAATG
chr6	7742965	7743085	Hypo	1 -	TAAATAAACACAAATATATCCAAATAAATTAAAAAAATATCAATCAAAATAAACACATACAAAATATAAATATTCTCTTTTATAAACTACTATAAAAATTATTTAAAATTAAACAAC
chr6	7742965	7743085	Hypo	1 +	TAAGTGGGTATAAGTGTGTTTAAATAGGTTGGAAAAAATGTTAAATTAGAGTAGGTGTATATAAGATGTGATGTTTTTTTTTTTATAGATTGTTATAAAAGTTGTTTAAAATTAAATAAT
chr6	7742965	7743085	Hypo	1 -	TAAATAAACACAAATATATCCAAATAAATTAAAAAAATATCAATCAAAATAAACACATTAAAAATATAAATATTCTCTTTTATAAACTACTATAAAAATTATTTAAAATTAAACAAC
chr6	7742965	7743085	Hypo	1 +	TAAGTGGGTATAAGTGTGTTTAAATAGGTTGGAAAAAATGTTAAATTAGAGTAGGTGTATTAAAGATGTGATGTTTTTTTTTTTATAGATTGTTATAAAAGTTGTTTAAAATTAAATAAT
chr6	7742965	7743085	Hypo	1 -	TAAATAAACACAAATATATCCAAATAAATTAAAAAAATATCAATCAAAATAAACGCATACAAAATATAAATATTCTCTTTTATAAACTACTATAAAAATTATTTAAAATTAAACAAC
chr6	7742965	7743085	Hypo	1 +	TAAGTGGGTATAAGTGTGTTTAAATAGGTTGGAAAAAATGTTAAATTAGAGTAGGCGTATATAAGATGTGATGTTTTTTTTTTTATAGATTGTTATAAAAGTTGTTTAAAATTAAATAAT
chr6	7742965	7743085	Hypo	1 -	TAAATAAACACAAATATATCCAAATAAATTAAAAAAATATCAATCAAAATAAACGCATACAAAATATAAATATTCTCTTTTATAAACTACTATAAAAATTATTTAAAATTAAACAAC
chr6	7742965	7743085	Hypo	1 +	TAAGTGGGTATAAGTGTGTTTAAATAGGTTGGAAAAAATGTTAAATTAGAGTAGGCGTATATAAGATGTGATGTTTTTTTTTTTATAGATTGTTATAAAAGTTGTTTAAAATTAAATAAT
chr13	111135189	111135309	Hypo	1 -	ACTAACCATATAATAAAAAAATAATCCTAACCAAAAAAAACTCTTAAAAACCAAAATAATAACATCACTAAAAACCAAATATATCATAAAACATATTCCACCATAATTATACCATAATAA
chr13	111135189	111135309	Hypo	1 +	ATTGATTATGTGATAAGGGAATAATTTTAATTAAAGGAAATTTTGAGAATTAAAATGATGGTATTGTTAAGAATTAAATATGTTATGAAATATATTTTATTATGATTATATTGTGGTAA
chr13	111135189	111135309	Hypo	1 -	ACTAACCATATAATAAAAAAATAATCCTAACCAAAAAAAACTCTTAAAAACCAAAATAATCCATCACTAAAAACCAAATATATCATAAAACATATTCCACCATAATTATACCATAATAA
chr13	111135189	111135309	Hypo	1 +	ATTGATTATGTGATAAGGGAATAATTTTAATTAAAGGAAATTTTGAGAATTAAAATGATGTTATTGTTAAGAATTAAATATGTTATGAAATATATTTTATTATGATTATATTGTGGTAA
chr13	111135189	111135309	Hypo	1 -	ACTAACCATATAATAAAAAAATAATCCTAACCAAAAAAAACTCTTAAAAACCAAAATAATAACATCGCTAAAAACCAAATATATCATAAAACATATTCCACCATAATTATACCGTAATAA
chr13	111135189	111135309	Hypo	1 +	ATTGATTATGTGATAAGGGAATAATTTTAATTAAAGGAAATTTTGAGAATTAAAATGATGGTATCGTTAAGAATTAAATATGTTATGAAATATATTTTATTATGATTATATCGTGGTAA
chr13	111135189	111135309	Hypo	1 -	ACTAACCATATAATAAAAAAATAATCCTAACCAAAAAAAACTCTTAAAAACCAAAATAATCCATCGCTAAAAACCAAATATATCATAAAACATATTCCACCATAATTATACCGTAATAA
chr13	111135189	111135309	Hypo	1 +	ATTGATTATGTGATAAGGGAATAATTTTAATTAAAGGAAATTTTGAGAATTAAAATGATGGTATCGTTAAGAATTAAATATGTTATGAAATATATTTTATTATGATTATATCGTGGTAA
chr20	16857091	16857211	Hypo	1 -	ACTTCTAATAACCCAATTCTCTACACAACTAACTCACAAATTTACCTAAAAAACCAAATTCTTTACTAACTTTACAACTTTAAATATTCCAATAAAAAATATAAAATAATACTACAAATA
chr20	16857091	16857211	Hypo	1 +	ATTTTTGATAGTTTGATTTTTTATATAGTTAATTTATAAGTTTATTTGGGAAGTTAAGTTTATTTTATTGATTTTGTAGTTTTGAATATTTTAGTAAAAGATGTAGGGTAGTATTGTAAATA
chr20	16857091	16857211	Hypo	1 -	ACTTCTAATAACCCAATTCTCTACACAACTAACTCACAAATTTACCTAAAAAACCAAATTAATTACTAACTTTACAACTTTAAATATTCCAATAAAAAATATAAAATAATACTACAAATA
chr20	16857091	16857211	Hypo	1 +	ATTTTTGATAGTTTGATTTTTTATATAGTTAATTTATAAGTTTATTTGGGAAGTTAAGTTTATTTTATTGATTTTGTAGTTTTGAATATTTTAGTAAAAGATGTAGGGTAGTATTGTAAATA
chr20	16857091	16857211	Hypo	1 -	ACTTCTAATAACCCAATTCTCTACACAACTAACTCACAAATTTACCTAAAAAACCAAATTCTTTACTAACTTTACAACTTTAAATATTCCAATAAAAAATATAAAATAATACTACAAATA
chr20	16857091	16857211	Hypo	1 +	ATTTTTGATAGTTCGATTTTTTATATAGTTAATTTATAAGTTTATTTGGGAAGTTAAGTTTATTTTATTGATTTTGTAGTTTTGAATATTTTAGTAAAAGATGTAGGGTAGTATTGTAAATA
chr20	16857091	16857211	Hypo	1 -	ACTTCTAATAACCCGATTCTCTACACAACTAACTCACAAATTTACCTAAAAAACCAAATTAATTACTAACTTTACAACTTTAAATATTCCAATAAAAAATATAAAATAATACTACAAATA
chr20	16857091	16857211	Hypo	1 +	ATTTTTGATAGTTCGATTTTTTATATAGTTAATTTATAAGTTTATTTGGGAAGTTAAGTTTATTTTATTGATTTTGTAGTTTTGAATATTTTAGTAAAAGATGTAGGGTAGTATTGTAAATA
chr20	16857091	16857211	Hypo	1 -	ACTTCTAATAACCCGATTCTCTACACAACTAACTCACAAATTTACCTAAAAAACCAAATTAATTACTAACTTTACAACTTTAAATATTCCAATAAAAAATATAAAATAATACTACAAATA
chr20	16857091	16857211	Hypo	1 +	ATTTTTGATAGTTCGATTTTTTATATAGTTAATTTATAAGTTTATTTGGGAAGTTAAGTTTATTTTATTGATTTTGTAGTTTTGAATATTTTAGTAAAAGATGTAGGGTAGTATTGTAAATA
chr13	32778887	32779007	Hypo	1 -	TAAATTAATTCTCTTCATCAAAACTAAAATTTATTTTTATACACTTCACCCAAAATTTATTTACTACCTACATACTAAACACTATACTTAAATTTCAAAAATACAAAAAAAAAATAAAAA
chr13	32778887	32779007	Hypo	1 +	TAAATTAATTTTTTTTTTGTAAAATTAAAATTTATTTTTATGTATTTTATTTAAGATTTGTTTGTTGTTTATATGTTAGGTATTGTGTTTGGGTTTTAGAAATATAGAGGGAAATAAAAG
chr13	32778887	32779007	Hypo	1 -	TAAATTAATTCTCTTCATCAAAACTAAAATTTATTTTTATACACTTCACCCAAAATTTATTTACTACCTACATACTAAACACTATACTTAAATTTCAAAAATACAAAAAAAAATAAAAA
chr13	32778887	32779007	Hypo	1 +	TAAATTAATTTTTTTTTGTAAAATTAAAATTTATTTTTATGTATTTTATTTAAGATTTGTTTGTTGTTTATATGTTAGGTATTGTGTTTGGGTTTTAGAAATATAGAGGGAAATAAAAG
chr13	32778887	32779007	Hypo	1 -	TAAATTAATTCTCTTCATCAAAACTAAAATTTATTTTTATACACTTCACCCAAAATTTAATACTACCTACATACTAAACACTATACTTAAATTTCAAAAATACAAAAAAAAATAAAAA
chr13	32778887	32779007	Hypo	1 +	TAAATTAATTTTTTTTTGTAAAATTAAAATTTATTTTATGTATTTTATTTAAGATTTGAGTGTTGTTTATATGTTAGGTATTGTGTTTGGGTTTTAGAAATATAGAGGGAAATAAAAG

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chr7	139431289	139431409	Hypo	1 -	CTTTTCTAAACCTCAACTTCTTACTAAATTATACAAAAAAACCAAAACAAAAAACCACCAAATAAATTCTACACTCAATACAACACCTATTTACACACCCCTTATACTCATATTTATATA
chr7	139431289	139431409	Hypo	1 +	TTTTTTTAAATTTTAATTTTTTGTTGAGTTATATAAAGGAATTAGGATAAAGGGTTGTTAATGGGTTTTGTGTTTAGTGTAATATTTGTTTGTATATTTTTTGTATTTATGTTTATGTA
chr7	139431289	139431409	Hypo	1 -	CTTTTCTAAACCTCAACTTCTTACTAAATTATACAAAAAAACCAAAACAAAAAACCACCATCTAAATTCTACGCTCAATACAACACCTATTTACACACCCCTTATACTCATATTTATATA
chr7	139431289	139431409	Hypo	1 +	TTTTTTTAAATTTTAATTTTTTGTTGAGTTATATAAAGGAATTAGGATAAAGGGTTGTTAATGGGTTTTGTGTTTAGTGTAATATTTGTTTGTATATTTTTTGTATTTATGTTTATGTA
chr7	139431289	139431409	Hypo	1 -	CTTTTCTAAACCTCAACTTCTTACTAAATTATACAAAAAAACCAAAACAAAAAACCGCCAATAAATTCTACGCTCAATACAACACCTATTTACACACCCCTTATACTCATATTTATATA
chr7	139431289	139431409	Hypo	1 +	TTTTTTTAAATTTTAATTTTTTGTTGAGTTATATAAAGGAATTAGGATAAAGGGTCGTTAATGGGTTTTGTGTTTAGTGTAATATTTGTTTGTATATTTTTTGTATTTATGTTTATGTA
chr18	43472090	43472210	Hypo	1 -	ATCCAAACTTTACAACTACCATTCCATTATTATAAAAACTACTAAAATAAAACCAACTAATTTAAAAAAATTTAAACCCTCTCACAAAAAACATCCCCAAATTATTATTTTCTAATCT
chr18	43472090	43472210	Hypo	1 +	ATTTAAATTTTATAATTGTTATTTTATGTTGTAGAAAATTATTAAAATAAAATTAGGTGGTTTAGGTAAGTTTAGATTTTTTTATAAAAAATATTTTTAAATTATTATTATTTTTTAGTTT
chr18	43472090	43472210	Hypo	1 -	ATCCAAACTTTACAACTACCATTCCATTATTATAAAAACTACTAAAATAAAACCAACTAATTTAAAAAATTTAAACCCTCTCACAAAAAACATCCCCAAATTATTATTTTCTAATCT
chr18	43472090	43472210	Hypo	1 +	ATTTAAATTTTATAATTGTTATTTTATGTTGTAGAAAATTATTAAAATAAAATTAGGTGGTTTAGGTAAGTTTAGATTTTTTTATAAAAAATATTTTTAAATTATTATTATTTTTTAGTTT
chr18	43472090	43472210	Hypo	1 -	ATCCAAACTTTACAACTACCATTCCATTATTATAAAAACTACTAAAATAAAACCAACTAATTTAAAAAATTTAAACCCTCTCACAAAAAACATCCCCAAATTATTATTTTCTAATCT
chr18	43472090	43472210	Hypo	1 +	ATTTAAATTTTATAATTGTTATTTTATGTTGTAGAAAATTATTAAAATAAAATTAGGTGGTTTAGGTAAGTTTAGATTTTTTTATAAAAAATATTTTTAAATTATTATTATTTTTTAGTTT
chr18	43472090	43472210	Hypo	1 -	ATCCAAACTTTACAACTACCATTCCATTATTATAAAAACTACTAAAATAAAACCAACTAATTTAAAAAATTTAAACCCTCTCACAAAAAACATCCCCAAATTATTATTTTCTAATCT
chr18	43472090	43472210	Hypo	1 +	ATTTAAATTTTATAATTGTTATTTTATGTTGTAGAAAATTATTAAAATAAAATTAGGTGGTTTAGGTAAGTTTAGATTTTTTTATAAAAAATATTTTTAAATTATTATTATTTTTTAGTTT
chr15	89181357	89181477	Hypo	1 -	AACAATCAAATTAAAAAAATCAATATAAATTCTACACAAATCTAAAATAAAAAACAAACATAAATAACACTCAACTTATTATTAAATCTCACCACAATAAAAAACAAACACTTCCCTCAT
chr15	89181357	89181477	Hypo	1 +	GGTAGTTAGATTGGAGGGATTAGTGTGGATTTTGTATAGATTTGGGGTAGGAGGTAAGTGTGGGTAATGTTTAGTTTATTGTTGGATTTTATTATAGTGAAAGATAAGTATTTTTTTTAT
chr15	89181357	89181477	Hypo	1 -	AACAATCAAATTAAAAAAATCAATATAAATTCTACACAAATCTAAAATAAAAAACAACGTAAATAACGCTCAACTTATTATTAAATCTCACCACAATAAAAAACAAACACTTCCCTCAT
chr15	89181357	89181477	Hypo	1 +	GGTAGTTAGATTGGAGGGATTAGTGTGGATTTTGTATAGATTTGGGGTAGGAGGTAAGTGTGGGTAATGTTTAGTTTATTGTTGGATTTTATTATAGTGAAAGATAAGTATTTTTTTTAT
chr15	89181357	89181477	Hypo	1 -	AACAATCAAATTAAAAAAATCAATATAAATTCTACACAAATCTAAAATAAAAAACAACGTAAATAACGCTCAACTTATTATTAAATCTCACCACAATAAAAAACAAACACTTCCCTCAT
chr15	89181357	89181477	Hypo	1 +	GGTAGTTAGATTGGAGGGATTAGTGTGGATTTTGTATAGATTTGGGGTAGGAGGTAAGCGTGGGTAACGTTTAGTTTATTGTTGGATTTTATTATAGTGAAAGATAAGTATTTTTTTTAT
chr15	89181357	89181477	Hypo	1 -	AACAATCAAATTAAAAAAATCAATATAAATTCTACACAAATCTAAAATAAAAAACAACGGTAAAAAACGCTCAACTTATTATTAAATCTCACCACAATAAAAAACAAACACTTCCCTCAT
chr15	89181357	89181477	Hypo	1 +	GGTAGTTAGATTGGAGGGATTAGTGTGGATTTTGTATAGATTTGGGGTAGGAGGTAATCGTGGGGAACGTTTAGTTTATTGTTGGATTTTATTATAGTGAAAGATAAGTATTTTTTTTAT
chr10	19321097	19321217	Hypo	1 -	ATAATCTATAACTTTAATTTCAATATCTAAAATAAATATTAAAAATAACAATCTTATTCTCACCATCTACTTTATACACATTCTTAAAAACTTAATATCTAAAAATATACATTTTTTA
chr10	19321097	19321217	Hypo	1 +	GTAATTTGTGGTTTTGGTTTTAATATTTAGGATGGATGTTGAAGGTGATAATTTTGTTTTATTGTTTATTTATGTATATTTTGAAGAATTTAAATGTTTAAAAATGTGTATTTTTTG
chr10	19321097	19321217	Hypo	1 -	ATAATCTATAACTTTAATTTCAATATCTAAAATAAATATTAAAAATAACAATCTTATTCTCACCATCTACTTTATACACATTCTTAAAAACTTAATATCTAAAAATATACATTTTTTA
chr10	19321097	19321217	Hypo	1 +	GTAATTTGTGGTTTTGGTTTTAATATTTAGGATGGATGTTGAAGGTGATAATTTTGTTTTATTGTTTATTTATGTATATTTTGAAGAATTTAAATGTTTAAAAATGTGTATTTTTTG
chr3	86698333	86698453	Hypo	1 -	AAATTAATATATAATAAAATATACATAATAATATTCTTCACCTTACAAAAATTATATTCTAACAAAAAAATAATACTTAATTTTACTAACCAAATTAAATACATCACACTAATACCTTATA
chr3	86698333	86698453	Hypo	1 +	AAATTGATATATGATGAGTATGTATGGTAGTATTTTTATTTATAGAAATTATATTTTGATAGGAAAATAGTGTTTGGTTTTGTTAGTTAGATTAAGTGTATTATATTAATATTTTATA
chr3	86698333	86698453	Hypo	1 -	AAATTAATATATAATAAAATATACATAATAATATTCTTCACCTTACAAAAATTATATTCTAACAAAAAATAATACTTAATTTTACTAACCAAATTAAATACATCACACTAATACCTTATA
chr3	86698333	86698453	Hypo	1 +	AAATTGATATATGATGAGTATGTATGGTAGTATTTTTATTTATAGAAATTATATTTTGATAGGAAAATAGTGTTTGGTTTTGTTAGTTAGATTAAGTGTATTATATTAATATTTTATA
chr3	86698333	86698453	Hypo	1 -	AAATTAATATATAATAAAATATACATAATAATATTCTTCACCTTACAAAAATTATATTCTAACAAAAAATAATACTTAATTTTACTAACCAAATTAAATACATCACACTAATACCTTATA
chr3	86698333	86698453	Hypo	1 +	AAATTGATATATGATGAGTATGTATGGTAGTATTTTTATTTATAGAAATTATATTTTGATAGGAAAATAGTGTTTGGTTTTGTTAGTTAGATTAAGTGTATTATATTAATATTTTATA
chr2	9234691	9234811	Hypo	1 -	AACTAACACTTACTAAAAACAAACCTCCTCATAAAAAAATTCACACTCATACTCCAAACCTTCAACTATACATTAAAAACCAATAATACAAAATCCCCACAACACAACAAAAAAAAAAATAC
chr2	9234691	9234811	Hypo	1 +	AATTAATATTTGTTGAAAGTAGGTTTTTTTATGGGAGAATTTATATTTATGTTTTAAAATTTTAGGTATATATTGAAAATTAATGGTGTAGAGTTTTATAGTAGTAGGAGAAAAGGATGT
chr2	9234691	9234811	Hypo	1 -	AACTAACACTTACTAAAACAAACCTCCTCATAAAAAAATTCACACTCATACTCCAAACTTAACATACATTAAAAACCAATAATACAAAATCCCCACAACACAACAAAAAAAAAAATAC
chr2	9234691	9234811	Hypo	1 +	AATTAATATTTGTTGAAAGTAGGTTTTTTTATGGGAGAATTTATATTTATGTTTTAAAATTTTAGGTATATATTGAAAATTAATGGTGTAGAGTTTTATAGTAGTAGGAGAAAAGGATGT
chr2	9234691	9234811	Hypo	1 -	AACTAACACTTACTAAAACAAACCTCCTCATAAAAAAATTCACACTCATACTCCAAACTTAAACATACATTAAAAACCAATAATACAAAATCCCCACAACACAACAAAAAAAAAAATAC
chr2	9234691	9234811	Hypo	1 +	AATTAATATTTGTTGAAAGTAGGTTTTTTTATGGGAGAATTTATATTTATGTTTTAAAATTTTAGGTATATATTGAAAATTAATGGTGTAGAGTTTTATAGTAGTAGGAGAAAAGGATGT
chr10	119035413	119035533	Hypo	1 -	AAACAAACAATCAAAAAATCACATATATAAAAAAATAATAACTCTAACATATTTTACCTACTAAAAAATCTAAAAAACATAACAATATAATCTTAAAAAATTAAAAACCAAACATAATC
chr10	119035413	119035533	Hypo	1 +	GGATAGGTGGTTAGGAAATTATATGTGTGAAAAAATAATAGTTTTAGTATGTTTTGTTTATTAAGAAATTTAAGGGGTTATGATAATATGGTTTTAAAAGATTGGGGGTTAAGTATGGTT
chr10	119035413	119035533	Hypo	1 -	AAACAAACAATCAAAAAATCACATATATAAAAAAATAATAACTCTAACATATTTTACCTACTAAAAAATCTAAAAAACATAACAATATAATCTTAAAAAATTAAAAACCAAACATAATC

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chr10	119035413	119035533	Hyper	1 +	GGATAGGCGGTTAGGAAATTATATGTGTGAAAAAATAATAGTTTTAGTATGTTTTGTTTATTAAGAAATTTAAGGGGTTATGATAATATGGTTTTAAAAGATTGGGGGTTAAGTATGGTT
chr10	119035413	119035533	Hyper	1 -	AAACAAACGATCAAAAAATCACATATATAAAAAAATAATAACTCTAACATATTTTACCTAAAAAAAAAATCTAAAAAACCATAACAATATAATCTTAAAAAATTAAAAACCAAACATAATC
chr10	119035413	119035533	Hyper	1 +	GGATAGGCGGTTAGGAAATTATATGTGTGAAAAAATAATAGTTTTAGTATGTTTTGTTTAAGAAGAAATTTAAGGGGTTATGATAATATGGTTTTAAAAGATTGGGGGTTAAGTATGGTT
chr1	241801338	241801458	Hypo	1 -	TCATCTTCACTAAAAACTTTTTAAACTCTATAATAACTTCACTACTAACTTACCCCCCAAAACTTAAATCTCAAAATCTCTTATCTCAAAATTTCCACCTCTACATTAAAAACAAAAAAA
chr1	241801338	241801458	Hypo	1 +	TTATTTTTGTTAAAAATTTTTTAAATTTTATAGTAATTTTATTATTAATTTGTTTTTTAGGGTTTAAGTTTTGGAATTTTTTTATTTTAGGGTTTTTATTTTTATATTAAAAATAGGGAGA
chr1	241801338	241801458	Hypo	1 -	TCATCTTCACTAAAAACTTTTTAAACTCTATAATAACTTCACTACTAACTTACCCCCCCAAAATTAAATCTCAAAATCTCTTATCTCAAAATTTCCACCTCTACATTAAAAACAAAAAAA
chr1	241801338	241801458	Hypo	1 +	TTATTTTTGTTAAAAATTTTTTAAATTTTATAGTAATTTTATTATTAATTTGTTTTTTTGGGGTTAAGTTTTGGAATTTTTTTATTTTAGGGTTTTTATTTTTATATTAAAAATAGGGAGA
chr1	241801338	241801458	Hyper	1 -	TCATCTTCGCTAAAAACTTTTTAAACTCTATAATAACTTCACTACTAACTTACCCCCCAAAACTTAAATCTCGAAATCTCTTATCTCAAAATTTCCACCTCTACATTAAAAACAAAAAAA
chr1	241801338	241801458	Hyper	1 +	TTATTTTCGTTAAAAATTTTTTAAATTTTATAGTAATTTTATTATTAATTTGTTTTTTAGGGTTTAAGTTTCGGAATTTTTTTATTTTAGGGTTTTTATTTTTATATTAAAAATAGGGAGA
chr1	241801338	241801458	Hyper	1 -	TCATCTTCGCTAAAAACTTTTTAAACTCTATAATAACTTCACTACTAACTTACCCCCCCGAAATTAAATCTCGAAATCTCTTATCTCAAAATTTCCACCTCTACATTAAAAACAAAAAAA
chr1	241801338	241801458	Hyper	1 +	TTATTTTCGTTAAAAATTTTTTAAATTTTATAGTAATTTTATTATTAATTTGTTTTTTCGGGGTTAAGTTTCGGAATTTTTTTATTTTAGGGTTTTTATTTTTATATTAAAAATAGGGAGA
chr4	129163823	129163943	Hypo	1 -	AAAAAAATCCTTAAACTCAATCTTAAAAAAAAAAATTTAAAATTCACTAAACAAAAAATTAAAAAATTTCCTAAAAAAATAAAATAAAATATACAAAAATACAAAAACAAAAAAAAAACCTAAA
chr4	129163823	129163943	Hypo	1 +	AAAAGGATTTTTGGATTTAGTTTTGAAGAAAAAGTTTGGAATTTGTTAGGTAAAGGTTGAGAGATTTTTTAGAAGATGAGATGAGATGTGTAAAGGTGTAGAGGTAAGAGAGGGTTTAGG
chr4	129163823	129163943	Hypo	1 -	AAAAAAATCCTTAAACTCAATCTTAAAAAAAAAAATTTAAAATTCACTAAACAAAAAATAAAAAAAATTCCTAAAAAAATAAAATAAAATATACAAAAATACAAAAACAAAAAAAAAACCTAAA
chr4	129163823	129163943	Hypo	1 +	AAAAGGATTTTTGGATTTAGTTTTGAAGAAAAAGTTTGGAATTTGTTAGGTAAAGGGTGAGAGAGTTTTTAGAAGATGAGATGAGATGTGTAAAGGTGTAGAGGTAAGAGAGGGTTTAGG
chr4	129163823	129163943	Hyper	1 -	AAAAAAATCCTTAAACTCAATCTTAAAAAAAAAAATTTAAAATTCGCTAAACAAAAATTAAAAAATTTCCTAAAAAAATAAAATAAAATATACAAAAATACAAAAACAAAAAAAAAACCTAAA
chr4	129163823	129163943	Hyper	1 +	AAAAGGATTTTTGGATTTAGTTTTGAAGAAAAAGTTTGGAATTCGTTAGGTAAAGGTTGAGAGATTTTTTAGAAGATGAGATGAGATGTGTAAAGGTGTAGAGGTAAGAGAGGGTTTAGG
chr4	129163823	129163943	Hyper	1 -	AAAAAAATCCTTAAACTCAATCTTAAAAAAAAAAATTTAAAATTCGCTAAACAAAAAATAAAAAAAATTCCTAAAAAAATAAAATAAAATATACAAAAATACAAAAACAAAAAAAAAACCTAAA
chr4	129163823	129163943	Hyper	1 +	AAAAGGATTTTTGGATTTAGTTTTGAAGAAAAAGTTTGGAATTCGTTAGGTAAAGGGTGAGAGAGTTTTTAGAAGATGAGATGAGATGTGTAAAGGTGTAGAGGTAAGAGAGGGTTTAGG
chr12	71588528	71588648	Hypo	1 -	TATTTCCTTAAAATCACTAATAACACACAACCATTACTAAACAACATAAACAACTTATCAAAATCACAAACAAATATAAACCAAATTATCCAATATAAATATCTACTAATACAATTAATC
chr12	71588528	71588648	Hypo	1 +	TATTTTTTTAAGGTTATTGGTGATATATAATTATTATTAAGTAATATAGATAGTTTGTTAGGATTATAGGTAAATGTGAGTTAGATTGTTTAGTATGAATATTTATTGATGTAATTAATT
chr12	71588528	71588648	Hypo	1 -	TATTTCCTTAAAATCACTAATAACACACAACCATTACTAAACAACATAAACAACTTAACAAAAACACAAACAAATATAAACCAAATTATCCAATATAAATATCTACTAATACAATTAATC
chr12	71588528	71588648	Hypo	1 +	TATTTTTTTAAGGTTATTGGTGATATATAATTATTATTAAGTAATATAGATAGTTTGGTAGGAGTATAGGTAAATGTGAGTTAGATTGTTTAGTATGAATATTTATTGATGTAATTAATT
chr12	71588528	71588648	Hyper	1 -	TATTTCCTTAAAATCACTAATAACACACAACCATTACTAAACAACATAAACAACTTATCAAAATCACAAACAAATATAAACCAAATTATCCAATATAAATATCTACTAATACAATTAATC
chr12	71588528	71588648	Hyper	1 +	TATTTTTTTAAGGTTATTGGTGATATATAATTATTATTAAGTAATATAGATAGTTTGTTAGGATTATAGGTAAATGTGAGTTAGATTGTTTAGTATGAATATTTATTGATGTAATTAATT
chr12	71588528	71588648	Hyper	1 -	TATTTCCTTAAAATCACTAATAACACACAACCATTACTAAACAACATAAACAACTTAACAAAAACACAAACAAATATAAACCAAATTATCCAATATAAATATCTACTAATACAATTAATC
chr12	71588528	71588648	Hyper	1 +	TATTTTTTTAAGGTTATTGGTGATATATAATTATTATTAAGTAATATAGATAGTTTGGTAGGAGTATAGGTAAATGTGAGTTAGATTGTTTAGTATGAATATTTATTGATGTAATTAATT
chr6	93732741	93732861	Hypo	1 -	AATTATAATAATCATTAATATCCCTACATTATCCTAAATACTATATAAACAATACTCTTATAATATCAATTTATTTTTCTTTCCTCTAAATTATAAAAATAAACCTCACTCACACTTTTA
chr6	93732741	93732861	Hypo	1 +	AATTATAATAATTATTGATATTTTTATGTTGTTTTAAGTATTATGTGAGTAATATTTTTGTAATATTAGTTTGTTTTTTTTTTTTTTTAAATTATGAAGATAAGTTTTATTTATATTTTTG
chr6	93732741	93732861	Hypo	1 -	AATTATAATAATCATTAATATCCCTACATTATCCTAAATACTATATAAACAATACTCTAATAAAATCAATTTATTTTTCTTTCCTCTAAATTATAAAAATAAACCTCACTCACACTTTTA
chr6	93732741	93732861	Hypo	1 +	AATTATAATAATTATTGATATTTTTATGTTGTTTTAAGTATTATGTGAGTAATATTTTGGTAAAATTAGTTTGTTTTTTTTTTTTTTTAAATTATGAAGATAAGTTTTATTTATATTTTTG
chr6	93732741	93732861	Hyper	1 -	AATTATAATAATCATTAATATCCCTACGTTATCCTAAATACTATATAAACAATACTCTTATAATATCAATTTATTTTTCTTTCCTCTAAATTATAAAAATAAACCTCACTCACACTTTTA
chr6	93732741	93732861	Hyper	1 +	AATTATAATAATTATTGATATTTTTACGTTGTTTTAAGTATTATGTGAGTAATATTTTTGTAATATTAGTTTGTTTTTTTTTTTTTTTAAATTATGAAGATAAGTTTTATTTATATTTTTG
chr6	93732741	93732861	Hyper	1 -	AATTATAATAATCATTAATATCCCTACGTTATCCTAAATACTATATAAACAATACTCTAATAAAATCAATTTATTTTTCTTTCCTCTAAATTATAAAAATAAACCTCACTCACACTTTTA
chr6	93732741	93732861	Hyper	1 +	AATTATAATAATTATTGATATTTTTACGTTGTTTTAAGTATTATGTGAGTAATATTTTGGTAAAATTAGTTTGTTTTTTTTTTTTTTTAAATTATGAAGATAAGTTTTATTTATATTTTTG
chr1	101863157	101863277	Hypo	1 -	ATAAATAATCCTTACTTTCATTTTTACTATCCAAAAAATTAAACCATCTATAAAACCCTCTACAACCAAAACTCTCCTTTTTCCTATATCTATCACAAACACAAAATAAACTCTTAAAAA
chr1	101863157	101863277	Hypo	1 +	ATAGGTAGTTTTTGTTTTTATTTTTATTATTTAAAAAATTAAATTATTTATAAGGTTTTTTATGATTAAAGTTTTTTTTTTTTTTTGTGTTTATTATAAGTATAAGGTGGGTTTTTGGGGA
chr1	101863157	101863277	Hypo	1 -	ATAAATAATCCTTACTTTCATTTTTACTATCCAAAAAATTAAACCATCTATAAAACACTCTACAAACAAAACTCTCCTTTTTCCTATATCTATCACAAACACAAAATAAACTCTTAAAAA
chr1	101863157	101863277	Hypo	1 +	ATAGGTAGTTTTTGTTTTTATTTTTATTATTTAAAAAATTAAATTATTTATAAGGTATTTTATGAATAAAGTTTTTTTTTTTTTTTGTGTTTATTATAAGTATAAGGTGGGTTTTTGGGGA
chr1	101863157	101863277	Hyper	1 -	ATAAATAATCCTTACTTTCATTTTTACTATCCAAAAAATTAAACCATCTATAAAACCCTCTACGACCAAAACTCTCCTTTTTCCTATATCTATCACAAACACAAAATAAACTCTTAAAAA
chr1	101863157	101863277	Hyper	1 +	ATAGGTAGTTTTTGTTTTTATTTTTATTATTTAAAAAATTAAATTATTTATAAGGTTTTTTACGATTAAAGTTTTTTTTTTTTTTTGTGTTTATTATAAGTATAAGGTGGGTTTTTGGGGA
chr1	101863157	101863277	Hyper	1 -	ATAAATAATCCTTACTTTCATTTTTACTATCCAAAAAATTAAACCATCTATAAAACACTCTACGAACAAAACTCTCCTTTTTCCTATATCTATCACAAACACAAAATAAACTCTTAAAAA
chr1	101863157	101863277	Hyper	1 +	ATAGGTAGTTTTTGTTTTTATTTTTATTATTTAAAAAATTAAATTATTTATAAGGTATTTTACGAATAAAGTTTTTTTTTTTTTTTGTGTTTATTATAAGTATAAGGTGGGTTTTTGGGGA
chr2	175599210	175599330	Hypo	1 -	TTCAAACACAAAAACAAAAATTTATAAACCAAAAAAAAAAAAACTAAAACAAAAAAACCAACCACCATAACACCTTAACCTCACCTCAAACTTCCAACCTCCAAAACTATAAAACAACACA
chr2	175599210	175599330	Hypo	1 +	TTTGAATATAAAGATAGAGATTTATAAGTTAAAGAAAGAGGGTTGGAATAGAGGAATTAATTATTGTGATGTTTTGATTTTATTTTAGATTTTTAGTTTTTAGGGTTGTGAGATAATATA
chr2	175599210	175599330	Hypo	1 -	TTCAAACACAAAAACAAAAATTTATAAACCAAAAAAAAAAAAACTAAAACAAAAAAAACAACCACCCTAACACCTTAACCTCACCTCAAACTTCCAACCTCCAAAACTATAAAACAACACA
chr2	175599210	175599330	Hypo	1 +	TTTGAATATAAAGATAGAGATTTATAAGTTAAAGAAAGAGGGTTGGAATAGAGGAAATAATTATTTTGATGTTTTGATTTTATTTTAGATTTTTAGTTTTTAGGGTTGTGAGATAATATA
chr2	175599210	175599330	Hyper	1 -	TTCGAACACAAAAACAAAAATTTATAAACCAAAAAAAAAAAAACTAAAACAAAAAAACCAACCACCGTAACGCCTTAACCTCACCTCAAACTTCCAACCTCCAAAACTATAAAACAACACA
chr2	175599210	175599330	Hyper	1 +	TTCGAATATAAAGATAGAGATTTATAAGTTAAAGAAAGAGGGTTGGAATAGAGGAATTAATTATCGTGACGTTTTGATTTTATTTTAGATTTTTAGTTTTTAGGGTTGTGAGATAATATA
chr2	175599210	175599330	Hyper	1 -	TTCGAACACAAAAACAAAAATTTATAAACCAAAAAAAAAAAAACTAAAACAAAAAAAACAACCACCCTAACGCCTTAACCTCACCTCAAACTTCCAACCTCCAAAACTATAAAACAACACA
chr2	175599210	175599330	Hyper	1 +	TTCGAATATAAAGATAGAGATTTATAAGTTAAAGAAAGAGGGTTGGAATAGAGGAAATAATTATTTTGACGTTTTGATTTTATTTTAGATTTTTAGTTTTTAGGGTTGTGAGATAATATA
chr5	42184413	42184533	Hypo	1 -	TTCAAATTAATCAACTTATCAACAACCCTTATATTTTTACATAAAATCCAAATAATACCATACTCAACTACCCACAAATCTCTACTTATTTTCCATTATCCACAACTCAATCTCCAAACT
chr5	42184413	42184533	Hypo	1 +	TTTAAATTAATTAATTTATTAGTAGTTTTTGTATTTTTATATGAAATTTAGGTAGTGTTATATTTAGTTGTTTATAAATTTTTATTTATTTTTTATTGTTTATAGTTTAATTTTTAAATT

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chr5	42184413	42184533	Hypo	1 -	TTCAAATTAATCAACTTATCAACAACCCTTATATTTTTACATAAAATCCAAATAATACCTTTCTCAACTACCCACAAATCTCTACTTATTTTCCATTATCCACAACTCAATCTCCAAACT
chr5	42184413	42184533	Hypo	1 +	TTTAAATTAATTAATTTATTAGTAGTTTTTGTATTTTTATATGAAATTTAGGTAGTGTTTTTTTTAGTTGTTTATAAATTTTTATTTATTTTTTATTGTTTATAGTTTAATTTTTAAATT
chr5	42184413	42184533	Hyper	1 -	TTCAAATTAATCAACTTATCAACAACCCTTATATTTTTACATAAAATCCAAATAATACCATACTCAACTACCCACAAATCTCTACTTATTTTCCATTATCCACAACTCAATCTCCAAACT
chr5	42184413	42184533	Hyper	1 +	TTTAAATTAATTAATTTATTAGTAGTTTTTGTATTTTTATATGAAATTTAGGTAGTGTTATATTTAGTTGTTTATAAATTTTTATTTATTTTTTATTGTTTATAGTTTAATTTTTAAATT
chr5	42184413	42184533	Hyper	1 -	TTCAAATTAATCAACTTATCAACAACCCTTATATTTTTACATAAAATCCAAATAATACCTTTCTCAACTACCCACAAATCTCTACTTATTTTCCATTATCCACAACTCAATCTCCAAACT
chr5	42184413	42184533	Hyper	1 +	TTTAAATTAATTAATTTATTAGTAGTTTTTGTATTTTTATATGAAATTTAGGTAGTGTTTTTTTTAGTTGTTTATAAATTTTTATTTATTTTTTATTGTTTATAGTTTAATTTTTAAATT
chr4	28230888	28231008	Hypo	1 -	ATAAAATATCCATCTTACTCTACCCTCAAACTATAACTTAAATCTAATTTTCAAACCTTATTACTCAACATAAATTACACCATTAAAATTTTATAAATATCCAACTAACAATAATATACA
chr4	28230888	28231008	Hypo	1 +	ATGAGATATTTATTTTGTTTTATTTTTAGGTTGTGATTTAGATTTGGTTTTTAGGTTTTATTATTTAGTATGAATTATATTATTAAGGTTTTGTGGGTGTTTAGTTAGTAATGATGTGTA
chr4	28230888	28231008	Hypo	1 -	ATAAAATATCCATCTTACTCTACCCTCAAACTATAACTTAAATCTAATTTTCAAACCTTCTAACTCAACATAAATTACACCATTAAAATTTTATAAATATCCAACTAACAATAATATACA
chr4	28230888	28231008	Hypo	1 +	ATGAGATATTTATTTTGTTTTATTTTTAGGTTGTGATTTAGATTTGGTTTTTAGGTTTTTTGATTTAGTATGAATTATATTATTAAGGTTTTGTGGGTGTTTAGTTAGTAATGATGTGTA
chr4	28230888	28231008	Hyper	1 -	ATAAAATATCCATCTTACTCTACCCTCAAACTATAACTTAAATCTAATTTTCAAACCTTATTACTCAACATAAATTACACCATTAAAATTTTATAAATATCCAACTAACAATAATATACA
chr4	28230888	28231008	Hyper	1 +	ATGAGATATTTATTTTGTTTTATTTTTAGGTTGTGATTTAGATTTGGTTTTTAGGTTTTATTATTTAGTATGAATTATATTATTAAGGTTTTGTGGGTGTTTAGTTAGTAATGATGTGTA
chr4	28230888	28231008	Hyper	1 -	ATAAAATATCCATCTTACTCTACCCTCAAACTATAACTTAAATCTAATTTTCAAACCTTCTAACTCAACATAAATTACACCATTAAAATTTTATAAATATCCAACTAACAATAATATACA
chr4	28230888	28231008	Hyper	1 +	ATGAGATATTTATTTTGTTTTATTTTTAGGTTGTGATTTAGATTTGGTTTTTAGGTTTTTTGATTTAGTATGAATTATATTATTAAGGTTTTGTGGGTGTTTAGTTAGTAATGATGTGTA
chr6	16571260	16571380	Hypo	1 -	CTTATAAAACTCTATTAAAAATTACACAACAAAAATTCTACCTACCTTTACCTTACAATTACTATAAAAATAAATTCAAAATAATTCCCAAATTCAACATATAACTCCCACTTCTACTAC
chr6	16571260	16571380	Hypo	1 +	TTTATGGAGTTTTGTTGAGGGTTATATAGTAAGGATTTTGTTTGTTTTTATTTTGTAATTGTTATGAGAATAAATTTAAAATGGTTTTTGAGTTTAGTATGTGATTTTTATTTTTGTTGT
chr6	16571260	16571380	Hypo	1 -	CTTATAAAACTCTATTAAAAATTACACAACAAAAATTCTACCTACCTTTACCTTACAATAAATATAAAAATAAATTCAAAATAATTCCCAAATTCAACATATAACTCCCACTTCTACTAC
chr6	16571260	16571380	Hypo	1 +	TTTATGGAGTTTTGTTGAGGGTTATATAGTAAGGATTTTGTTTGTTTTTATTTTGTAATAGATATGAGAATAAATTTAAAATGGTTTTTGAGTTTAGTATGTGATTTTTATTTTTGTTGT
chr6	16571260	16571380	Hyper	1 -	CTTATAAAACTCTATTAAAAATTACACAACAAAAATTCTACCTACCTTTACCTTACAATTACTATAAAAATAAATTCAAAATAATTCCCGAATTCAACATATAACTCCCACTTCTACTAC
chr6	16571260	16571380	Hyper	1 +	TTTATGGAGTTTTGTTGAGGGTTATATAGTAAGGATTTTGTTTGTTTTTATTTTGTAATTGTTATGAGAATAAATTTAAAATGGTTTTCGAGTTTAGTATGTGATTTTTATTTTTGTTGT
chr6	16571260	16571380	Hyper	1 -	CTTATAAAACTCTATTAAAAATTACACAACAAAAATTCTACCTACCTTTACCTTACAATAAATATAAAAATAAATTCAAAATAATTCCCGAATTCAACATATAACTCCCACTTCTACTAC
chr6	16571260	16571380	Hyper	1 +	TTTATGGAGTTTTGTTGAGGGTTATATAGTAAGGATTTTGTTTGTTTTTATTTTGTAATAGATATGAGAATAAATTTAAAATGGTTTTCGAGTTTAGTATGTGATTTTTATTTTTGTTGT
chr5	29357058	29357178	Hypo	1 -	TTAAATCATACTATTTCAAAACTTAAATTATATACACTCATAACTCCAAAATTTACATCATAATACTTATCACCATTATTATAATATAAATATCTATACAATTATTTATTAAATATTTCT
chr5	29357058	29357178	Hypo	1 +	TTGAATTATATTGTTTTAGGATTTGAATTGTATATATTTATGATTTTAGAGTTTGTATTATGATATTTATTATTATTATTATGGTGTAGGTATTTGTATAGTTATTTGTTAAATGTTTTT
chr5	29357058	29357178	Hypo	1 -	TTAAATCATACTATTTCAAAACTTAAATTATATACACTCATAACTCCAAAATTTACTTCATAATAATTATCACCATTATTATAATATAAATATCTATACAATTATTTATTAAATATTTCT
chr5	29357058	29357178	Hypo	1 +	TTGAATTATATTGTTTTAGGATTTGAATTGTATATATTTATGATTTTAGAGTTTGTTTTATGATAGTTATTATTATTATTATGGTGTAGGTATTTGTATAGTTATTTGTTAAATGTTTTT
chr5	29357058	29357178	Hyper	1 -	TTAAATCATACTATTTCAAAACTTAAATTATATACACTCATAACTCCAAAATTTACATCATAATACTTATCACCATTATTATAATATAAATATCTATACAATTATTTATTAAATATTTCT
chr5	29357058	29357178	Hyper	1 +	TTGAATTATATTGTTTTAGGATTTGAATTGTATATATTTATGATTTTAGAGTTTGTATTATGATATTTATTATTATTATTATGGTGTAGGTATTTGTATAGTTATTTGTTAAATGTTTTT
chr5	29357058	29357178	Hyper	1 -	TTAAATCATACTATTTCAAAACTTAAATTATATACACTCATAACTCCAAAATTTACTTCATAATAATTATCACCATTATTATAATATAAATATCTATACAATTATTTATTAAATATTTCT
chr5	29357058	29357178	Hyper	1 +	TTGAATTATATTGTTTTAGGATTTGAATTGTATATATTTATGATTTTAGAGTTTGTTTTATGATAGTTATTATTATTATTATGGTGTAGGTATTTGTATAGTTATTTGTTAAATGTTTTT
chr10	66755978	66756098	Hypo	1 -	AATTAAACATACTTTTATTATTCTTTTTACAATCAATATTATATTTCTAAAAAATACTCATAACAAATACAACTACTATTCTTTCATTTTCACTACCATAAACCATTCAAATTAAAAAAT
chr10	66755978	66756098	Hypo	1 +	AATTAGGTATGTTTTTATTATTTTTTTTATAATTAATATTATGTTTTTAAGAGGTATTTATAGTAGATGTAGTTATTATTTTTTTTATTTTTATTGTTGTAAATTATTTGGGTTAGAGAAT
chr10	66755978	66756098	Hypo	1 -	AATTAAACATACTTTTATTATTCTTTTTACAATCAATATTATATTTCTAAAAAATACTAATAAAAAATACAACTACTATTCTTTCATTTTCACTACCATAAACCATTCAAATTAAAAAAT
chr10	66755978	66756098	Hypo	1 +	AATTAGGTATGTTTTTATTATTTTTTTTATAATTAATATTATGTTTTTAAGAGGTATTAATAGGAGATGTAGTTATTATTTTTTTTATTTTTATTGTTGTAAATTATTTGGGTTAGAGAAT
chr10	66755978	66756098	Hyper	1 -	AATTAAACATACTTTTATTATTCTTTTTACAATCAATATTATATTTCTAAAAAATACTCATAACAAATACAACTACTATTCTTTCATTTTCACTACCGTAAACCATTCGAATTAAAAAAT
chr10	66755978	66756098	Hyper	1 +	AATTAGGTATGTTTTTATTATTTTTTTTATAATTAATATTATGTTTTTAAGAGGTATTTATAGTAGATGTAGTTATTATTTTTTTTATTTTTATTGTCGTAAATTATTCGGGTTAGAGAAT
chr10	66755978	66756098	Hyper	1 -	AATTAAACATACTTTTATTATTCTTTTTACAATCAATATTATATTTCTAAAAAATACTAATAAAAAATACAACTACTATTCTTTCATTTTCACTACCGTAAACCATTCGAATTAAAAAAT
chr10	66755978	66756098	Hyper	1 +	AATTAGGTATGTTTTTATTATTTTTTTTATAATTAATATTATGTTTTTAAGAGGTATTAATAGGAGATGTAGTTATTATTTTTTTTATTTTTATTGTCGTAAATTATTCGGGTTAGAGAAT
chr6	164812038	164812158	Hypo	1 -	TATACCTTTATAAAATCAATCCCTTCTTACCACTAATAATCACTTCCAACATAAATATATTCTCCCCTTATAATTTTACCTTTTCCAATATCATATACATAAAAATCATATTTATATTTA
chr6	164812038	164812158	Hypo	1 +	TGTGTTTTTATGAAGTTAATTTTTTTTTATTATTAGTAGTTATTTTTAATATGGATGTATTTTTTTTTTATAATTTTGTTTTTTTTAATATTATATATATATAGAGATTATATTTATATTTA
chr6	164812038	164812158	Hypo	1 -	TATACCTTTATAAAATCAATCCCTTCTTACCACTAATAATCACTTCCAACATAAATATTTTCTACCCTTATAATTTTACCTTTTCCAATATCATATACATAAAAATCATATTTATATTTA
chr6	164812038	164812158	Hypo	1 +	TGTGTTTTTATGAAGTTAATTTTTTTTTATTATTAGTAGTTATTTTTAATATGGATGTTTTTTGTTTTTATAATTTTGTTTTTTTTAATATTATATATATATAGAGATTATATTTATATTTA
chr6	164812038	164812158	Hyper	1 -	TATACCTTTATAAAATCAATCCCTTCTTACCACTAATAATCACTTCCAACATAAATATATTCTCCCCTTATAATTTTACCTTTTCCAATATCATATACATAAAAATCATATTTATATTTA
chr6	164812038	164812158	Hyper	1 +	TGTGTTTTTATGAAGTTAATTTTTTTTTATTATTAGTAGTTATTTTTAATATGGATGTATTTTTTTTTTATAATTTTGTTTTTTTTAATATTATATATATATAGAGATTATATTTATATTTA
chr6	164812038	164812158	Hyper	1 -	TATACCTTTATAAAATCAATCCCTTCTTACCACTAATAATCACTTCCAACATAAATATTTTCTACCCTTATAATTTTACCTTTTCCAATATCATATACATAAAAATCATATTTATATTTA
chr6	164812038	164812158	Hyper	1 +	TGTGTTTTTATGAAGTTAATTTTTTTTTATTATTAGTAGTTATTTTTAATATGGATGTTTTTTGTTTTTATAATTTTGTTTTTTTTAATATTATATATATATAGAGATTATATTTATATTTA
chr2	5646607	5646727	Hypo	1 -	AACTTCATTATAATTCTAATAATAAAAACTTCCCTAAAAACAAAAATACAAATTTCTTTCCATAAAACCTTATATTATCAACCCTCATTCTTAATTCTAAATAATATTTTAAACTATAAA
chr2	5646607	5646727	Hypo	1 +	AGTTTTATTGTAATTTTGATGATAAAAGTTTTTTTGGAAATAAAAGTGTAGGTTTTTTTTTATGGAGTTTTATGTTATTAGTTTTTATTTTTAATTTTGAATGGTATTTTAAGTTGTAAG
chr2	5646607	5646727	Hypo	1 -	AACTTCATTATAATTCTAATAATAAAAACTTCCCTAAAAACAAAAATACAAATTTCTTTACCTAAAACCTTATATTATCAACCCTCATTCTTAATTCTAAATAATATTTTAAACTATAAA
chr2	5646607	5646727	Hypo	1 +	AGTTTTATTGTAATTTTGATGATAAAAGTTTTTTTGGAAATAAAAGTGTAGGTTTTTTTTATTTGGAGTTTTATGTTATTAGTTTTTATTTTTAATTTTGAATGGTATTTTAAGTTGTAAG
chr2	5646607	5646727	Hyper	1 -	AACTTCATTATAATTCTAATAATAAAAACTTCCCTAAAAACAAAAATACAAATTTCTTTCCATAAAACCTTATATTATCAACCCTCATTCTTAATTCTAAATAATATTTTAAACTATAAA
chr2	5646607	5646727	Hyper	1 +	AGTTTTATTGTAATTTTGATGATAAAAGTTTTTTTGGAAATAAAAGTGTAGGTTTTTTTTTATGGAGTTTTATGTTATTAGTTTTTATTTTTAATTTTGAATGGTATTTTAAGTTGTAAG
chr2	5646607	5646727	Hyper	1 -	AACTTCATTATAATTCTAATAATAAAAACTTCCCTAAAAACAAAAATACAAATTTCTTTACCTAAAACCTTATATTATCAACCCTCATTCTTAATTCTAAATAATATTTTAAACTATAAA

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chr2	5646607	5646727 Hyper	1 +	AGTTTTATTGTAATTTTGATGATAAAAGTTTTTTTGGAAATAAAAGTGTAGGTTTTTTTATTTGGAGTTTTATGTTATTAGTTTTTATTTTTAATTTTGAATGGTATTTTAAGTTGTAAG
chr3	138932900	138933020 Hypo	1 -	CACCCCCCCAATCCTCCCACCTACAAAAAAAAAAAATAAAAACCAAAAACCCTAAACACAACCAAAAAATCTTATCCTAACAACTTCCTCCTAAAACAATAAACTAACACTAAATAATCTA
chr3	138932900	138933020 Hypo	1 +	TATTTTTTTAATTTTTTTATTTATAAAGAGAAAAATAAGAATTAGAGGTTTTAGGTATGGTTGGGAGGTTTTGTTTTGATAGTTTTTTTTTGGAATAATGAGTTGATATTGGATAGTTTG
chr3	138932900	138933020 Hypo	1 -	CACCCCCCCAATCCTCCCACCTACAAAAAAAAAAAATAAAAACCAAAAACCCTAAACACACCAAAAAAATCTTATCCTAACAACTTCCTCCTAAAACAATAAACTAACACTAAATAATCTA
chr3	138932900	138933020 Hypo	1 +	TATTTTTTTAATTTTTTTATTTATAAAGAGAAAAATAAGAATTAGAGGTTTTAGGTATGTTGGGGAGGTTTTGTTTTGATAGTTTTTTTTTGGAATAATGAGTTGATATTGGATAGTTTG
chr3	138932900	138933020 Hyper	1 -	CACCCCCCCAATCCTCCCACCTACAAAAAAAAAAAATAAAAACCAAAAACCCTAAACACGACCGAAAAATCTTATCCTAACAACTTCCTCCTAAAACAATAAACTAACACTAAATAATCTA
chr3	138932900	138933020 Hyper	1 +	TATTTTTTTAATTTTTTTATTTATAAAGAGAAAAATAAGAATTAGAGGTTTTAGGTACGGTCGGGAGGTTTTGTTTTGATAGTTTTTTTTTGGAATAATGAGTTGATATTGGATAGTTTG
chr3	138932900	138933020 Hyper	1 -	CACCCCCCCAATCCTCCCACCTACAAAAAAAAAAAATAAAAACCAAAAACCCTAAACACGCCGAAAAAATCTTATCCTAACAACTTCCTCCTAAAACAATAAACTAACACTAAATAATCTA
chr3	138932900	138933020 Hyper	1 +	TATTTTTTTAATTTTTTTATTTATAAAGAGAAAAATAAGAATTAGAGGTTTTAGGTACGTCGGGGAGGTTTTGTTTTGATAGTTTTTTTTTGGAATAATGAGTTGATATTGGATAGTTTG
chr10	69453010	69453130 Hypo	1 -	ATCTATCACTTTCCATTAAATTTACAACTTTACTAAACTCCAAAATTCCACCCCACTATACCATCTCACTTAAAATCCAATATCCAAACAAAAATCAAAAAATCACACTTTTTAAATCTC
chr10	69453010	69453130 Hypo	1 +	ATTTGTTATTTTTTATTAGATTTGTAATTTTGTTAAATTTTGGAGTTTTATTTTGTTGTATTATTTTATTTAAAATTTAGTATTTAAATAAGAATTAGAAAATTATATTTTTTAAATTTT
chr10	69453010	69453130 Hypo	1 -	ATCTATCACTTTCCATTAAATTTACAACTTTACTAAACTCCAAAATTCCACCCCACAATACCATATCACTTAAAATCCAATATCCAAACAAAAATCAAAAAATCACACTTTTTAAATCTC
chr10	69453010	69453130 Hypo	1 +	ATTTGTTATTTTTTATTAGATTTGTAATTTTGTTAAATTTTGGAGTTTTATTTTGTAGTATTATGTTATTTAAAATTTAGTATTTAAATAAGAATTAGAAAATTATATTTTTTAAATTTT
chr10	69453010	69453130 Hyper	1 -	ATCTATCACTTTCCATTAAATTTACAACTTTACTAAACTCCGAAATTCCACCCCGCTATACCATCTCACTTAAAATCCAATATCCAAACAAAAATCAAAAAATCACACTTTTTAAATCTC
chr10	69453010	69453130 Hyper	1 +	ATTTGTTATTTTTTATTAGATTTGTAATTTTGTTAAATTTCGGAGTTTTATTTCGTTGTATTATTTTATTTAAAATTTAGTATTTAAATAAGAATTAGAAAATTATATTTTTTAAATTTT
chr10	69453010	69453130 Hyper	1 -	ATCTATCACTTTCCATTAAATTTACAACTTTACTAAACTCCGAAATTCCACCCCGCAATACCATATCACTTAAAATCCAATATCCAAACAAAAATCAAAAAATCACACTTTTTAAATCTC
chr10	69453010	69453130 Hyper	1 +	ATTTGTTATTTTTTATTAGATTTGTAATTTTGTTAAATTTCGGAGTTTTATTTCGTAGTATTATGTTATTTAAAATTTAGTATTTAAATAAGAATTAGAAAATTATATTTTTTAAATTTT
chr21	18011886	18012006 Hypo	1 -	ATAAAAATTAAAAAAATAAAATATTTAAAAACACTTTAATACATTTTTCTAAACAAAACAAAATTAAATTTTAAAAAAAAATATCTTAAATTAAAAATAATAATAAAAATAATAAATCATT
chr21	18011886	18012006 Hypo	1 +	GTGAGAATTAAAGGAATAGAATATTTGAAAATATTTTGGTATATTTTTTTAGGTAGAATAGAATTGAGTTTTGGGGAGGGTGTTTTGAGTTAAAGATGGTGATGAAAATAATGAGTTATT
chr21	18011886	18012006 Hypo	1 -	ATAAAAATTAAAAAAATAAAATATTTAAAAACACTTTAATACATTTTTCTAAACAAAAAAAAATTTAAATTTTAAAAAAAAATATCTTAAATTAAAAATAATAATAAAAATAATAAATCATT
chr21	18011886	18012006 Hypo	1 +	GTGAGAATTAAAGGAATAGAATATTTGAAAATATTTTGGTATATTTTTTTAGGTAGAAGAGATTTGAGTTTTGGGGAGGGTGTTTTGAGTTAAAGATGGTGATGAAAATAATGAGTTATT
chr21	18011886	18012006 Hyper	1 -	ATAAAAATTAAAAAAATAAAATATTTAAAAACACTTTAATACATTTTTCTAAACAAAACAAAATTAAATTTTAAAAAAAAATATCTTAAATTAAAAATAATAATAAAAATAATAAATCATT
chr21	18011886	18012006 Hyper	1 +	GTGAGAATTAAAGGAATAGAATATTTGAAAATATTTTGGTATATTTTTTTAGGTAGAATAGAATTGAGTTTTGGGGAGGGTGTTTTGAGTTAAAGATGGTGATGAAAATAATGAGTTATT
chr21	18011886	18012006 Hyper	1 -	ATAAAAATTAAAAAAATAAAATATTTAAAAACACTTTAATACATTTTTCTAAACAAAAAAAAATTTAAATTTTAAAAAAAAATATCTTAAATTAAAAATAATAATAAAAATAATAAATCATT
chr21	18011886	18012006 Hyper	1 +	GTGAGAATTAAAGGAATAGAATATTTGAAAATATTTTGGTATATTTTTTTAGGTAGAAGAGATTTGAGTTTTGGGGAGGGTGTTTTGAGTTAAAGATGGTGATGAAAATAATGAGTTATT
chr3	156976810	156976930 Hypo	1 -	TTAACCCCTTCATCATAACCCCATTTTATTAAAAAAATAATCCAATTATTACTTTAAAATCCAAACCTCCCATTAACACTTCAACCTACTAAAATTTAATATTTACTCCCTCACTCAAAT
chr3	156976810	156976930 Hypo	1 +	TTAGTTTTTTTATTGTAGTTTTATTTTGTTGAAAGAATAGTTTAATTATTGTTTTAAAGTTTAAATTTTTTATTGATATTTTAGTTTATTAAAATTTGATGTTTATTTTTTTTATTTAAAT
chr3	156976810	156976930 Hypo	1 -	TTAACCCCTTCATCATAACCCCATTTTATTAAAAAAATAATCCAATTATTACTTTAAACTCCTAACCTCCCATTAACACTTCAACCTACTAAAATTTAATATTTACTCCCTCACTCAAAT
chr3	156976810	156976930 Hypo	1 +	TTAGTTTTTTTATTGTAGTTTTATTTTGTTGAAAGAATAGTTTAATTATTGTTTTAAATTTTTAATTTTTTTATTGATATTTTAGTTTATTAAAATTTGATGTTTATTTTTTTTATTTAAAT
chr3	156976810	156976930 Hyper	1 -	TTAACCCCTTCATCGTAACCCCATTTTATTAAAAAAATAATCCAATTATTACTTTAAAATCCAAACCTCCCATTAACACTTCAACCTACTAAAATTTAATATTTACTCCCTCACTCAAAT
chr3	156976810	156976930 Hyper	1 +	TTAGTTTTTTTATCGTAGTTTTATTTTGTTGAAAGAATAGTTTAATTATTGTTTTAAAGTTTAAATTTTTTATTGATATTTTAGTTTATTAAAATTTGATGTTTATTTTTTTTATTTAAAT
chr3	156976810	156976930 Hyper	1 -	TTAACCCCTTCATCGTAACCCCATTTTATTAAAAAAATAATCCAATTATTACTTTAAACTCCTAACCTCCCATTAACACTTCAACCTACTAAAATTTAATATTTACTCCCTCACTCAAAT
chr3	156976810	156976930 Hyper	1 +	TTAGTTTTTTTATCGTAGTTTTATTTTGTTGAAAGAATAGTTTAATTATTGTTTTAAATTTTTAATTTTTTTATTGATATTTTAGTTTATTAAAATTTGATGTTTATTTTTTTTATTTAAAT
chr11	20866133	20866253 Hypo	1 -	TCACTTCCAATATCCTCCTTCTACCTAACAACACCACATAACTCCTATTCACTTACTCATAACATCAAACTTCTACTCCCTTCATCAAAACCAACTAACCAAAAAATAAAACAACACCTA
chr11	20866133	20866253 Hypo	1 +	TTATTTTTAGTGTTTTTTTTTTATTTGGTAGTGTTATGTGGTTTTTATTTATTTGTTTGTAGTGTTAGATTTTTGTTTTTTTTATTAAGATTAGTTGGTTAGGAAGTAAGGTAATATTTG
chr11	20866133	20866253 Hypo	1 -	TCACTTCCAATATCCTCCTTCTACCTAACAACACCACATAACTCCTATTCACTTACTCCTAAAATCAAACTTCTACTCCCTTCATCAAAACCAACTAACCAAAAAATAAAACAACACCTA
chr11	20866133	20866253 Hypo	1 +	TTATTTTTAGTGTTTTTTTTTTATTTGGTAGTGTTATGTGGTTTTTATTTATTTGTTTTTAGAGTTAGATTTTTGTTTTTTTTATTAAGATTAGTTGGTTAGGAAGTAAGGTAATATTTG
chr11	20866133	20866253 Hyper	1 -	TCACTTCCAATATCCTCCTTCTACCTAACAACGCCACGTAACTCCTATTCACTTACTCGTAACGTCAAACTTCTACTCCCTTCATCAAAACCAACTAACCAAAAAATAAAACAACACCTA
chr11	20866133	20866253 Hyper	1 +	TTATTTTTAGTGTTTTTTTTTTATTTGGTAGCGTTACGTGGTTTTTATTTATTTGTTCGTAGCGTTAGATTTTTGTTTTTTTTATTAAGATTAGTTGGTTAGGAAGTAAGGTAATATTTG
chr11	20866133	20866253 Hyper	1 -	TCACTTCCAATATCCTCCTTCTACCTAACAACGCCACGTAACTCCTATTCACTTACTCCTAAAATCAAACTTCTACTCCCTTCATCAAAACCAACTAACCAAAAAATAAAACAACACCTA
chr11	20866133	20866253 Hyper	1 +	TTATTTTTAGTGTTTTTTTTTTATTTGGTAGCGTTACGTGGTTTTTATTTATTTGTTTTTAGAGTTAGATTTTTGTTTTTTTTATTAAGATTAGTTGGTTAGGAAGTAAGGTAATATTTG
chr2	29100583	29100703 Hypo	1 -	CCTATAAATTTCCTTCTCAAATCCTCTATAAACACAATCATCTTCCTCATAAACTACAAAATCTAACTACCTTAAAACATATACTAAAAATCTCCTATATACTATACATTATACTAAACT
chr2	29100583	29100703 Hypo	1 +	TTTGTGGATTTTTTTTTTAGGTTTTTTGTAGGTATAATTATTTTTTTTATAGATTATAAAGTTTGATTATTTTGGAATATGTGTTGAGAATTTTTTGTGTATTATGTATTGTGTTAGGTT
chr2	29100583	29100703 Hypo	1 -	CCTATAAATTTCCTTCTCAAATCCTCTATAAACACAATCATCTTCCTCATAAACTACACAATATAACTACCTTAAAACATATACTAAAAATCTCCTATATACTATACATTATACTAAACT
chr2	29100583	29100703 Hypo	1 +	TTTGTGGATTTTTTTTTTAGGTTTTTTGTAGGTATAATTATTTTTTTTATAGATTATATAGTATGATTATTTTGGAATATGTGTTGAGAATTTTTTGTGTATTATGTATTGTGTTAGGTT
chr2	29100583	29100703 Hyper	1 -	CCTATAAATTTCCTTCTCAAATCCTCTATAAACACAATCATCTTCCTCATAAACTACAAAATCTAACTACCTTAAAACATATACTAAAAATCTCCTATATACTATACATTATACTAAACT
chr2	29100583	29100703 Hyper	1 +	TTTGTGGATTTTTTTTTTAGGTTTTTTGTAGGTATAATTATTTTTTTTATAGATTATAAAGTTTGATTATTTTGGAATATGTGTTGAGAATTTTTTGTGTATTATGTATTGTGTTAGGTT
chr2	29100583	29100703 Hyper	1 -	CCTATAAATTTCCTTCTCAAATCCTCTATAAACACAATCATCTTCCTCATAAACTACACAATATAACTACCTTAAAACATATACTAAAAATCTCCTATATACTATACATTATACTAAACT
chr2	29100583	29100703 Hyper	1 +	TTTGTGGATTTTTTTTTTAGGTTTTTTGTAGGTATAATTATTTTTTTTATAGATTATATAGTATGATTATTTTGGAATATGTGTTGAGAATTTTTTGTGTATTATGTATTGTGTTAGGTT
chr7	105821192	105821312 Hypo	1 -	ATACCACAACATCTATCAAACACATTCACCTAAAAAACAACAAAAAACAACTATAACTATTTCTTCAACCCATAACTATTTCTCTTATCATCTTCTAAATAAATATATCTAACAATAAAT
chr7	105821192	105821312 Hypo	1 +	GTATTATAATATTTGTTAGATATATTTATTTGGAAGATGATAAGAAATAGTTATGGTTGTTTTTTTAGTTTATGGTTGTTTTTTTTGTTATTTTTTAGGTGAGTGTATTTGGTAGTGGAT
chr7	105821192	105821312 Hypo	1 -	ATACCACAACATCTATCAAACACATTCACCTAAAAAACAACAAAAAACAACTATAACTAATTATTCAACCCATAACTATTTCTCTTATCATCTTCTAAATAAATATATCTAACAATAAAT
chr7	105821192	105821312 Hypo	1 +	GTATTATAATATTTGTTAGATATATTTATTTGGAAGATGATAAGAAATAGTTATGGTTGATTATTTAGTTTATGGTTGTTTTTTTTGTTATTTTTTAGGTGAGTGTATTTGGTAGTGGAT

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chr7	105821192	105821312 Hyper	1 -	ATACCACAACATCTATCAAACACATTCACCTAAAAAACGACAAAAAACAACTATAACTATTTCTTCAACCCATAACTATTTCTCTTATCATCTTCTAAATAAATATATCTAACAATAAAT
chr7	105821192	105821312 Hyper	1 +	GTATTATAATATTTGTTAGATATATTTATTTGGAAGACGATAAGAAATAGTTATGGTTGTTTTTTTAGTTTATGGTTGTTTTTTTTGTTATTTTTTAGGTGAGTGTATTTGGTAGTGGAT
chr7	105821192	105821312 Hyper	1 -	ATACCACAACATCTATCAAACACATTCACCTAAAAAACGACAAAAAACAACTATAACTAATTATTCAACCCATAACTATTTCTCTTATCATCTTCTAAATAAATATATCTAACAATAAAT
chr7	105821192	105821312 Hyper	1 +	GTATTATAATATTTGTTAGATATATTTATTTGGAAGACGATAAGAAATAGTTATGGTTGATTATTTAGTTTATGGTTGTTTTTTTTGTTATTTTTTAGGTGAGTGTATTTGGTAGTGGAT
chr5	35202673	35202793 Hypo	1 -	CTAAACTATACTTAAAAAAACCAAAAAATACTCACCTTTTCATATTAATACCTAATATACAAACTAACACATAATAAATAAACAACAACTATTTTTAAATAACTAAAAAATTAAATTAAT
chr5	35202673	35202793 Hypo	1 +	TTAGATTGTGTTTAGGGAGATTAGAGAATATTTATTTTTTTATATTGGTGTTTGGTATATAGATTGGTATATAGTGGGTGAGTAATAGTTATTTTTAAGTAATTAAAAGATTAAATTAGT
chr5	35202673	35202793 Hypo	1 -	CTAAACTATACTTAAAAAAACCAAAAAATACTCACCTTTTCATATTAATACCTAATATAAAACCTAACACATAATAAATAAACAACAACTATTTTTAAATAACTAAAAAATTAAATTAAT
chr5	35202673	35202793 Hypo	1 +	TTAGATTGTGTTTAGGGAGATTAGAGAATATTTATTTTTTTATATTGGTGTTTGGTATAGAGTTTGGTATATAGTGGGTGAGTAATAGTTATTTTTAAGTAATTAAAAGATTAAATTAGT
chr5	35202673	35202793 Hyper	1 -	CTAAACTATACTTAAAAAAACCAAAAAATACTCACCTTTTCATATTAATACCTAATATACAAACTAACACATAATAAATAAACAACAACTATTTTTAAATAACTAAAAAATTAAATTAAT
chr5	35202673	35202793 Hyper	1 +	TTAGATTGTGTTTAGGGAGATTAGAGAATATTTATTTTTTTATATTGGTGTTTGGTATATAGATTGGTATATAGTGGGTGAGTAATAGTTATTTTTAAGTAATTAAAAGATTAAATTAGT
chr5	35202673	35202793 Hyper	1 -	CTAAACTATACTTAAAAAAACCAAAAAATACTCACCTTTTCATATTAATACCTAATATAAAACCTAACACATAATAAATAAACAACAACTATTTTTAAATAACTAAAAAATTAAATTAAT
chr5	35202673	35202793 Hyper	1 +	TTAGATTGTGTTTAGGGAGATTAGAGAATATTTATTTTTTTATATTGGTGTTTGGTATAGAGTTTGGTATATAGTGGGTGAGTAATAGTTATTTTTAAGTAATTAAAAGATTAAATTAGT
chr18	25798808	25798928 Hypo	1 -	ACTATATATAATTTTAATAAAAATTAAATTACATAATATATATAAAAAATCTAAAACAATACCTAAAATATACTAAACTTTCCATAAATATTAACTATTAATAATTATTATTATTACCAT
chr18	25798808	25798928 Hypo	1 +	ATTGTATGTGGTTTTGGTGAAAATTAAATTATATAATGTATGTAAAAAATTTAGAATAATGTTTGAGATATATTAGATTTTTTATAAGTATTAATTATTGGTAATTATTATTGTTGTTAT
chr18	25798808	25798928 Hypo	1 -	ACTATATATAATTTTAATAAAAATTAAATTACATAATATATATAAAAAATCTAAAACAAAACATAAAATATACTAAACTTTCCATAAATATTAACTATTAATAATTATTATTATTACCAT
chr18	25798808	25798928 Hypo	1 +	ATTGTATGTGGTTTTGGTGAAAATTAAATTATATAATGTATGTAAAAAATTTAGAATAAAGTGTGAGATATATTAGATTTTTTATAAGTATTAATTATTGGTAATTATTATTGTTGTTAT
chr18	25798808	25798928 Hyper	1 -	ACTATATATAATTTTAATAAAAATTAAATTACATAATATATATAAAAAATCTAAAACAATACCTAAAATATACTAAACTTTCCATAAATATTAACTATTAATAATTATTATTATTACCAT
chr18	25798808	25798928 Hyper	1 +	ATTGTATGTGGTTTTGGTGAAAATTAAATTATATAATGTATGTAAAAAATTTAGAATAATGTTTGAGATATATTAGATTTTTTATAAGTATTAATTATTGGTAATTATTATTGTTGTTAT
chr18	25798808	25798928 Hyper	1 -	ACTATATATAATTTTAATAAAAATTAAATTACATAATATATATAAAAAATCTAAAACAAAACGTAAAATATACTAAACTTTCCATAAATATTAACTATTAATAATTATTATTATTACCAT
chr18	25798808	25798928 Hyper	1 +	ATTGTATGTGGTTTTGGTGAAAATTAAATTATATAATGTATGTAAAAAATTTAGAATAAAGCGTGAGATATATTAGATTTTTTATAAGTATTAATTATTGGTAATTATTATTGTTGTTAT
chr17	11459452	11459572 Hypo	1 -	AACCTTCCAATTCATACACCAATTTAACTACAAAAAAAAAACCTTCTCCCAATCCCACACACAACTACCTTCTTCAAACCATAAACCTTCCTTACTATATACCCTATACTAAATAAAAACT
chr17	11459452	11459572 Hypo	1 +	GGTTTTTTAATTTATGTATTAGTTTAATTGTGGGAGAAAGTTTTTTTTTAGTTTTGTATGTAATTGTTTTTTTTAAATTATGGGTTTTTTTTGTTGTATATTTTATATTGGATAGAGGTT
chr17	11459452	11459572 Hypo	1 -	AACCTTCCAATTCATACACCAATTTAACTACAAAAAAAAAACCTTCTCCCAATCCCACACCCACCTACCTTCTTCAAACCATAAACCTTCCTTACTATATACCCTATACTAAATAAAAACT
chr17	11459452	11459572 Hypo	1 +	GGTTTTTTAATTTATGTATTAGTTTAATTGTGGGAGAAAGTTTTTTTTTAGTTTTGTATTTATTTGTTTTTTTTAAATTATGGGTTTTTTTTGTTGTATATTTTATATTGGATAGAGGTT
chr17	11459452	11459572 Hyper	1 -	AACCTTCCAATTCATACACCAATTTAACTACGAAAAAAAAACCTTCTCCCAATCCCGCACGCAACTACCTTCTTCAAACCATAAACCTTCCTTACTATATACCCTATACTAAATAAAAACT
chr17	11459452	11459572 Hyper	1 +	GGTTTTTTAATTTATGTATTAGTTTAATTGCGGGAGAAAGTTTTTTTTTAGTTTCGTACGTAATTGTTTTTTTTAAATTATGGGTTTTTTTTGTTGTATATTTTATATTGGATAGAGGTT
chr17	11459452	11459572 Hyper	1 -	AACCTTCCAATTCATACACCAATTTAACTACGAAAAAAAAACCTTCTCCCAATCCCGCACCCACCTACCTTCTTCAAACCATAAACCTTCCTTACTATATACCCTATACTAAATAAAAACT
chr17	11459452	11459572 Hyper	1 +	GGTTTTTTAATTTATGTATTAGTTTAATTGCGGGAGAAAGTTTTTTTTTAGTTTCGTATTTATTTGTTTTTTTTAAATTATGGGTTTTTTTTGTTGTATATTTTATATTGGATAGAGGTT
chr8	1143552	1143672 Hypo	1 -	TACTTCTTATTTAAAACTAAATATACACTACTATATCCACACACCACCCCATTATCTATATATCCACTAATAAATACTTAAATTACTTCCCTAACACAACTATTTCTATAAACAATCCCA
chr8	1143552	1143672 Hypo	1 +	TGTTTTTTGTTTAAAGTTGGATATATGTTGTTGTGTTTATATATTATTTTATTATTTGTGTGTTTGTTGGTGGATATTTAGGTTGTTTTTTTGGTATGGTTGTTTTTGTGAATGATTTTA
chr8	1143552	1143672 Hypo	1 -	TACTTCTTATTTAAAACTAAATATACACTACTATATCCACACACCACCCCATTATCAATATATCCCCTAATAAATACTTAAATTACTTCCCTAACACAACTATTTCTATAAACAATCCCA
chr8	1143552	1143672 Hypo	1 +	TGTTTTTTGTTTAAAGTTGGATATATGTTGTTGTGTTTATATATTATTTTATTATTAGTGTGTTTTTTGGTGGATATTTAGGTTGTTTTTTTGGTATGGTTGTTTTTGTGAATGATTTTA
chr8	1143552	1143672 Hyper	1 -	TACTTCTTATTTAAAACTAAATATACGCTACTATATCCACACACCACCCCATTATCTATATATCCGCTAATAAATACTTAAATTACTTCCCTAACACGACTATTTCTATAAACGATCCCA
chr8	1143552	1143672 Hyper	1 +	TGTTTTTTGTTTAAAGTTGGATATACGTTGTTGTGTTTATATATTATTTTATTATTTGTGTGTTCGTTGGTGGATATTTAGGTTGTTTTTTTGGTACGGTTGTTTTTGTGAACGATTTTA
chr8	1143552	1143672 Hyper	1 -	TACTTCTTATTTAAAACTAAATATACGCTACTATATCCACACACCACCCCATTATCAATATATCCCCTAATAAATACTTAAATTACTTCCCTAACACGACTATTTCTATAAACGATCCCA
chr8	1143552	1143672 Hyper	1 +	TGTTTTTTGTTTAAAGTTGGATATACGTTGTTGTGTTTATATATTATTTTATTATTAGTGTGTTTTTTGGTGGATATTTAGGTTGTTTTTTTGGTACGGTTGTTTTTGTGAACGATTTTA
chr15	54968494	54968614 Hypo	1 -	TTAAATCTATTCAAAATTTAAATATATACATTTTTATAAATACAAAACTCCAAAAACATACACACTCAATAACAACAAAAACAAAAAAAAAAAAACTACAACAATAAAAAATATCAAAAAA
chr15	54968494	54968614 Hypo	1 +	TTAGGTTTGTTTAAGATTTGAATATATATATTTTTATAAATGTAAAATTTTAAGGGTATATGTATTTAGTAGTAGTGAGGATAGGGGAAAAAAATTGTAATAGTGGAAGATGTTAGAGAA
chr15	54968494	54968614 Hypo	1 -	TTAAATCTATTCAAAATTTAAATATATACATTTTTATAAATACAAAACTCCAAAAAAATACACACACAATAACAACAAAAACAAAAAAAAAAAAACTACAACAATAAAAAATATCAAAAAA
chr15	54968494	54968614 Hypo	1 +	TTAGGTTTGTTTAAGATTTGAATATATATATTTTTATAAATGTAAAATTTTAAGGGGATATGTATGTAGTAGTAGTGAGGATAGGGGAAAAAAATTGTAATAGTGGAAGATGTTAGAGAA
chr15	54968494	54968614 Hyper	1 -	TTAAATCTATTCAAAATTTAAATATATACATTTTTATAAATACAAAACTCCAAAAACATACGCACTCAATAACAACGAAAACAAAAAAAAAAAAACTACAACAATAAAAAATATCAAAAAA
chr15	54968494	54968614 Hyper	1 +	TTAGGTTTGTTTAAGATTTGAATATATATATTTTTATAAATGTAAAATTTTAAGGGTATACGTATTTAGTAGTAGCGAGGATAGGGGAAAAAAATTGTAATAGTGGAAGATGTTAGAGAA
chr15	54968494	54968614 Hyper	1 -	TTAAATCTATTCAAAATTTAAATATATACATTTTTATAAATACAAAACTCCAAAAAAATACGCACGCAATAACAACGAAAACAAAAAAAAAAAAACTACAACAATAAAAAATATCAAAAAA
chr15	54968494	54968614 Hyper	1 +	TTAGGTTTGTTTAAGATTTGAATATATATATTTTTATAAATGTAAAATTTTAAGGGGATACGTACGTAGTAGTAGCGAGGATAGGGGAAAAAAATTGTAATAGTGGAAGATGTTAGAGAA
chr3	157510843	157510963 Hypo	1 -	ACAACACCTTTAAAAATAACTAACATTTCAACTAACAAACACAAAAAATTAAACAAACATTCAAAATAAAAAAAAAAAACAAATACAAAAACCATCATACATTTTCAACAAATAAAATATA
chr3	157510843	157510963 Hypo	1 +	GTAGTATTTTTAAAAATAGTTAATATTTTAATTGGTAGGTATAAAAAGTTGAGTGAGTATTTAAAGTAGAGGGAAGAGTAGGTGTAAAGATTATTATGTATTTTTAGTAAATGAGGTATG
chr3	157510843	157510963 Hypo	1 -	ACAACACCTTTAAAAATAACTAACATTTCAACTAACAAACACAAAAAATTAAACAAACAATCTAAATAAAAAAAAAAAACAAATACAAAAACCATCATACATTTTCAACAAATAAAATATA
chr3	157510843	157510963 Hypo	1 +	GTAGTATTTTTAAAAATAGTTAATATTTTAATTGGTAGGTATAAAAAGTTGAGTGAGTAATTTAAGTAGAGGGAAGAGTAGGTGTAAAGATTATTATGTATTTTTAGTAAATGAGGTATG
chr3	157510843	157510963 Hyper	1 -	ACAACACCTTTAAAAATAACTAACATTTCAACTAACAAACACAAAAAATTAAACGAACATTCAAAATAAAAAAAAAAAACAAATACAAAAACCATCATACATTTTCAACAAATAAAATATA
chr3	157510843	157510963 Hyper	1 +	GTAGTATTTTTAAAAATAGTTAATATTTTAATTGGTAGGTATAAAAAGTTGAGCGAGTATTTAAAGTAGAGGGAAGAGTAGGTGTAAAGATTATTATGTATTTTTAGTAAATGAGGTATG
chr3	157510843	157510963 Hyper	1 -	ACAACACCTTTAAAAATAACTAACATTTCAACTAACAAACACAAAAAATTAAACGAACAATCTAAATAAAAAAAAAAAACAAATACAAAAACCATCATACATTTTCAACAAATAAAATATA
chr3	157510843	157510963 Hyper	1 +	GTAGTATTTTTAAAAATAGTTAATATTTTAATTGGTAGGTATAAAAAGTTGAGCGAGTAATTTAAGTAGAGGGAAGAGTAGGTGTAAAGATTATTATGTATTTTTAGTAAATGAGGTATG
chr8	3480531	3480651 Hypo	1 -	TATTAAATATAAATCAAAACCCTATAATTAAAAATCAAAACTAAAAATATCAATAAATTAATTCATTACACACCATTAATATTAAAAAAAAATATATAATTATACAAATAAATAATCAAA

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chr8	3480531	3480651	Hypo	1	+	TGTTAAATGTAAGTTAAAATTTTGTAGTTAAAAATTAAAATTGAAAATATTAATAGATTGGTTTATTATATATTATTAATATTAAAGAAAGATATGTAATTATGTAAGTGGATGATTAGA
chr8	3480531	3480651	Hypo	1	-	TATTAAATATAAATCAAAACCCTATAATTAAAAATCAAAACTAAAAATATCAATAAATAAATTAATTACACACCATTAATATTAAAAAAAAATATATAATTATACAAATAAATAATCAAA
chr8	3480531	3480651	Hypo	1	+	TGTTAAATGTAAGTTAAAATTTTGTAGTTAAAAATTAAAATTGAAAATATTAATAGATGGGTTAATTATATATTATTAATATTAAAGAAAGATATGTAATTATGTAAGTGGATGATTAGA
chr8	3480531	3480651	Hyper	1	-	TATTAAATATAAATCAAAACCCTATAATTAAAAATCAAAACTAAAAATATCAATAAATTAATTCATTACACACCATTAATATTAAAAAAAAATATATAATTATACAAATAAATAATCAAA
chr8	3480531	3480651	Hyper	1	+	TGTTAAATGTAAGTTAAAATTTTGTAGTTAAAAATTAAAATTGAAAATATTAATAGATTGGTTTATTATATATTATTAATATTAAAGAAAGATATGTAATTATGTAAGTGGATGATTAGA
chr8	3480531	3480651	Hyper	1	-	TATTAAATATAAATCAAAACCCTATAATTAAAAATCAAAACTAAAAATATCAATAAATAAATTAATTACACACCATTAATATTAAAAAAAAATATATAATTATACAAATAAATAATCAAA
chr8	3480531	3480651	Hyper	1	+	TGTTAAATGTAAGTTAAAATTTTGTAGTTAAAAATTAAAATTGAAAATATTAATAGATGGGTTAATTATATATTATTAATATTAAAGAAAGATATGTAATTATGTAAGTGGATGATTAGA
chr11	115157361	115157481	Hypo	1	-	AAACAAAACCCAACTAAAATAAAACATACATTCTAATAATTCAATTTATTATATTCTACATAAAACCTATCTTTACAAAACTACCTCTCCCCCCAATTAAAAAACAATTTTACCAATCAA
chr11	115157361	115157481	Hypo	1	+	AAATAGAATTTAATTGGGGTAAAATATATATTTTGGTAGTTTAATTTGTTATGTTTTGTATAGGGTTTGTTTTTATAGAATTATTTTTTTTTTTAGTTAAGGAATAATTTTGTTAATTAG
chr11	115157361	115157481	Hypo	1	-	AAACAAAACCCAACTAAAATAAAACATACATTCTAATAATTCAATTTATTATATTCTAAATAATACCTATCTTTACAAAACTACCTCTCCCCCCAATTAAAAAACAATTTTACCAATCAA
chr11	115157361	115157481	Hypo	1	+	AAATAGAATTTAATTGGGGTAAAATATATATTTTGGTAGTTTAATTTGTTATGTTTTGGATAGTGTTTGTTTTTATAGAATTATTTTTTTTTTTAGTTAAGGAATAATTTTGTTAATTAG
chr11	115157361	115157481	Hyper	1	-	AAACAAAACCCAACTAAAATAAAACATACATTCTAATAATTCAATTTATTATATTCTACATAAAACCTATCTTTACAAAACTACCTCTCCCCCCAATTAAAAAACAATTTTACCAATCAA
chr11	115157361	115157481	Hyper	1	+	AAATAGAATTTAATTGGGGTAAAATATATATTTTGGTAGTTTAATTTGTTATGTTTTGTATAGGGTTTGTTTTTATAGAATTATTTTTTTTTTTAGTTAAGGAATAATTTTGTTAATTAG
chr11	115157361	115157481	Hyper	1	-	AAACAAAACCCAACTAAAATAAAACATACATTCTAATAATTCAATTTATTATATTCTAAATAATACCTATCTTTACAAAACTACCTCTCCCCCCAATTAAAAAACAATTTTACCAATCAA
chr11	115157361	115157481	Hyper	1	+	AAATAGAATTTAATTGGGGTAAAATATATATTTTGGTAGTTTAATTTGTTATGTTTTGGATAGTGTTTGTTTTTATAGAATTATTTTTTTTTTTAGTTAAGGAATAATTTTGTTAATTAG
chr1	31341418	31341538	Hypo	1	-	CCTAAAAACTATCCCATTACAAAAAACAAAACAATCTCATATACCCCCAAAACATACAAACACTAAAAATAAACAACACTAAAAAAACAAATTTCAACTAAAATTAATAAATACTTCCAA
chr1	31341418	31341538	Hypo	1	+	TTTGGGGGTTGTTTTATTGTAAGGGGTAGAATAATTTTGTGTGTTTTTAGGGTGTATGAGTATTGGAGATGGGTAATATTGGAAAGATAGATTTTAGTTGAAATTAGTAAGTATTTTTAA
chr1	31341418	31341538	Hypo	1	-	CCTAAAAACTATCCCATTACAAAAAACAAAACAATCTCATATACCCCCAAAACATACAAAACCTAAAAATAAACAACACTAAAAAAACAAATTTCAACTAAAATTAATAAATACTTCCAA
chr1	31341418	31341538	Hypo	1	+	TTTGGGGGTTGTTTTATTGTAAGGGGTAGAATAATTTTGTGTGTTTTTAGGGTGTATGAGATTTGGAGATGGGTAATATTGGAAAGATAGATTTTAGTTGAAATTAGTAAGTATTTTTAA
chr1	31341418	31341538	Hyper	1	-	CCTAAAAACTATCCCATTACAAAAAACAAAACAATCTCGTATACCCCCAAAACGTACGAACACTAAAAATAAACAACACTAAAAAAACAAATTTCAACTAAAATTAATAAATACTTCCAA
chr1	31341418	31341538	Hyper	1	+	TTTGGGGGTTGTTTTATTGTAAGGGGTAGAATAATTTCGTGTGTTTTTAGGGCGTACGAGTATTGGAGATGGGTAATATTGGAAAGATAGATTTTAGTTGAAATTAGTAAGTATTTTTAA
chr1	31341418	31341538	Hyper	1	-	CCTAAAAACTATCCCATTACAAAAAACAAAACAATCTCGTATACCCCCAAAACGTACGAAACCTAAAAATAAACAACACTAAAAAAACAAATTTCAACTAAAATTAATAAATACTTCCAA
chr1	31341418	31341538	Hyper	1	+	TTTGGGGGTTGTTTTATTGTAAGGGGTAGAATAATTTCGTGTGTTTTTAGGGCGTACGAGATTTGGAGATGGGTAATATTGGAAAGATAGATTTTAGTTGAAATTAGTAAGTATTTTTAA
chr11	19872034	19872154	Hypo	1	-	TAAAAAATTCTAACATACCATTATTCTAATTTCATTATCTACAACTAAACAATACTTTAAACACTCAATATTAATTTAAAAATTCCTAATAAAATTTAAAAAATAAATATATAATACTAT
chr11	19872034	19872154	Hypo	1	+	TGGAGGATTTTAATATATTATTATTTTGATTTTATTATTTATAGTTGAGTAGTGTTTTGAGTATTTAGTATTAATTTGGAAGTTTTTAATAGGATTTAAGAAATAGATATGTAGTGTTGT
chr11	19872034	19872154	Hypo	1	-	TAAAAAATTCTAACATACCATTATTCTAATTTCATTATCTACAACTAAACAATACTTTAACAACTCAATATTAATTTAAAAATTCCTAATAAAATTTAAAAAATAAATATATAATACTAT
chr11	19872034	19872154	Hypo	1	+	TGGAGGATTTTAATATATTATTATTTTGATTTTATTATTTATAGTTGAGTAGTGTTTTGATAATTTAGTATTAATTTGGAAGTTTTTAATAGGATTTAAGAAATAGATATGTAGTGTTGT
chr11	19872034	19872154	Hyper	1	-	TAAAAAATTCTAACATACCATTATTCTAATTTCATTATCTACAACTAAACAATACTTTAAACACTCAATATTAATTTAAAAATTCCTAATAAAATTTAAAAAATAAATATATAATACTAT
chr11	19872034	19872154	Hyper	1	+	TGGAGGATTTTAATATATTATTATTTTGATTTTATTATTTATAGTTGAGTAGTGTTTTGAGTATTTAGTATTAATTTGGAAGTTTTTAATAGGATTTAAGAAATAGATATGTAGTGTTGT
chr11	19872034	19872154	Hyper	1	-	TAAAAAATTCTAACATACCATTATTCTAATTTCATTATCTACAACTAAACAATACTTTAACAACTCAATATTAATTTAAAAATTCCTAATAAAATTTAAAAAATAAATATATAATACTAT
chr11	19872034	19872154	Hyper	1	+	TGGAGGATTTTAATATATTATTATTTTGATTTTATTATTTATAGTTGAGTAGTGTTTTGATAATTTAGTATTAATTTGGAAGTTTTTAATAGGATTTAAGAAATAGATATGTAGTGTTGT
chr1	34414976	34415096	Hypo	1	-	AAATACACCCTAACTCTACCAAACAAACAACATCCCTTAAACCTACACTACTCTTATTAAACCAAAAAACAATCTATTACTTTAAATTCTAAAAACCTCCCATACAACCTAATAAAAATC
chr1	34414976	34415096	Hypo	1	+	GGATGTATTTTGGTTTTGTTAGGTAGGTGGTATTTTTTAGATTTATATTGTTTTTGTTGAGTTAGGGAGTGGTTTGTTGTTTTGAATTTTAAAGATTTTTTGTATAGTTTAATAAGAATT
chr1	34414976	34415096	Hypo	1	-	AAATACACCCTAACTCTACCAAACAAACAACATCCCTTAAACCTACACTACTCTTATTAATACAAAAAACAATCTATTACTTTAAATTCTAAAAACCTCCCATACAACCTAATAAAAATC
chr1	34414976	34415096	Hypo	1	+	GGATGTATTTTGGTTTTGTTAGGTAGGTGGTATTTTTTAGATTTATATTGTTTTTGTTGATATAGGGAGTGGTTTGTTGTTTTGAATTTTAAAGATTTTTTGTATAGTTTAATAAGAATT
chr1	34414976	34415096	Hyper	1	-	AAATACACCCTAACTCTACCAAACAAACGACATCCCTTAAACCTACACTACTCTTATTAAACCAAAAAACGATCTATTACTTTAAATTCTAAAAACCTCCCGTACAACCTAATAAAAATC
chr1	34414976	34415096	Hyper	1	+	GGATGTATTTTGGTTTTGTTAGGTAGGCGGTATTTTTTAGATTTATATTGTTTTTGTTGAGTTAGGGAGCGGTTTGTTGTTTTGAATTTTAAAGATTTTTCGTATAGTTTAATAAGAATT
chr1	34414976	34415096	Hyper	1	-	AAATACACCCTAACTCTACCAAACAAACGACATCCCTTAAACCTACACTACTCTTATTAATACAAAAAACGATCTATTACTTTAAATTCTAAAAACCTCCCGTACAACCTAATAAAAATC
chr1	34414976	34415096	Hyper	1	+	GGATGTATTTTGGTTTTGTTAGGTAGGCGGTATTTTTTAGATTTATATTGTTTTTGTTGATATAGGGAGCGGTTTGTTGTTTTGAATTTTAAAGATTTTTCGTATAGTTTAATAAGAATT
chr9	100655718	100655838	Hypo	1	-	CCCAAAAAAATATCCTAAAAACCAATAAACCAAAAAATATCCAAAAACTAAATAACCATCTAAATAATCAAAAACTCCAATAACAAAAAAATACCCCCCATCACCAACAATACTAATACCC
chr9	100655718	100655838	Hypo	1	+	TTTAGAAGATGTTTTGAAAGTTAGTGAGTTAGGAGATATTTAGAAGTTAAATGGTTATTTGAGTGGTTAAGGGTTTTAGTGATGAAGAAATGTTTTTTATTATTAATAGTGTTGGTGTTT
chr9	100655718	100655838	Hypo	1	-	CCCAAAAAAATATCCTAAAAACCAATAAACCAAAAAATATCCAAAAACTAAATAACCATCTCCATAATCAAAAACTCCAATAACAAAAAAATACCCCCCATCACCAACAATACTAATACCC
chr9	100655718	100655838	Hypo	1	+	TTTAGAAGATGTTTTGAAAGTTAGTGAGTTAGGAGATATTTAGAAGTTAAATGGTTATTTTTGTGGTTAAGGGTTTTAGTGATGAAGAAATGTTTTTTATTATTAATAGTGTTGGTGTTT
chr9	100655718	100655838	Hyper	1	-	CCCAAAAAAATATCCTAAAAACCAATAAACCAAAAAATATCCAAAAACTAAATAACCATCTAAATAATCAAAAACTCCAATAACGAAAAAATACCCCCCATCACCAACAATACTAATACCC
chr9	100655718	100655838	Hyper	1	+	TTTAGAAGATGTTTTGAAAGTTAGTGAGTTAGGAGATATTTAGAAGTTAAATGGTTATTTGAGTGGTTAAGGGTTTTAGTGACGAAGAAATGTTTTTTATTATTAATAGTGTTGGTGTTT
chr9	100655718	100655838	Hyper	1	-	CCCAAAAAAATATCCTAAAAACCAATAAACCAAAAAATATCCAAAAACTAAATAACCATCTCCGTAATCAAAAACTCCAATAACGAAAAAATACCCCCCATCACCAACAATACTAATACCC
chr9	100655718	100655838	Hyper	1	+	TTTAGAAGATGTTTTGAAAGTTAGTGAGTTAGGAGATATTTAGAAGTTAAATGGTTATTTTCGTGGTTAAGGGTTTTAGTGACGAAGAAATGTTTTTTATTATTAATAGTGTTGGTGTTT
chr2	170278887	170279007	Hypo	1	-	AAACCACAAAAAATATACTTATTTTAAAAAATTACTTTCAAATATAACTCATCTAAAAAATACCATTCCTTAATTACTATCTTTCTTTCCAATCAAAAAAACCCTAAAACCCCTTTTTAT
chr2	170278887	170279007	Hypo	1	+	AGATTATAAGAAGTATATTTATTTTGAGAAGTTGTTTTTAAGTATAGTTTATTTAAGGGATATTATTTTTTAGTTATTATTTTTTTTTTTGGTTAAGAAGGTTTTGGAGTTTTTTTTTAT
chr2	170278887	170279007	Hypo	1	-	AAACCACAAAAAATATACTTATTTTAAAAAATTACTTTCAAATATAACTCATCTAAAAAAATCCATTCCTTAATTACTATCTTTCTTTCCAATCAAAAAAACCCTAAAACCCCTTTTTAT
chr2	170278887	170279007	Hypo	1	+	AGATTATAAGAAGTATATTTATTTTGAGAAGTTGTTTTTAAGTATAGTTTATTTAAGGGAGTTTATTTTTTAGTTATTATTTTTTTTTTTGGTTAAGAAGGTTTTGGAGTTTTTTTTTAT
chr2	170278887	170279007	Hyper	1	-	AAACCACAAAAAATATACTTATTTTAAAAAATTACTTTCAAATATAACTCATCTAAAAAATACCATTCCTTAATTACTATCTTTCTTTCCGATCAAAAAAACCCTAAAACCCCTTTTTAT
chr2	170278887	170279007	Hyper	1	+	AGATTATAAGAAGTATATTTATTTTGAGAAGTTGTTTTTAAGTATAGTTTATTTAAGGGATATTATTTTTTAGTTATTATTTTTTTTTTTCGGTTAAGAAGGTTTTGGAGTTTTTTTTTAT

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chr2	170278887	170279007	Hyper	1	-	AAACCACAAAAAATATACTTATTTTAAAAAATTACTTTCAAATATAACTCATCTAAAAAAATCCATTCCTTAATTACTATCTTTCTTTCCGATCAAAAAAACCCTAAAACCCCTTTTTAT
chr2	170278887	170279007	Hyper	1	+	AGATTATAAGAAGTATATTTATTTTGAGAAGTTGTTTTTAAGTATAGTTTATTTAAGGGAGTTTATTTTTTAGTTATTATTTTTTTTTTTCGGTTAAGAAGGTTTTGGAGTTTTTTTTTAT
chr2	13636139	13636259	Hypo	1	-	AATTAAAATTAAAAAAAAATAAAATTAAATACTAATAAAAAAAATTAAATCAAAAATACTAAATACTATTTTCTATTAAATATATTTCCATTACCAACAAAAAAAATAAATCAATTTAAT
chr2	13636139	13636259	Hypo	1	+	AATTGAAGTTAAAAAAAAGTAAAGTTGAATATTGATGGGAAAAGTTAGATTAGGAATGTTGGATATTATTTTTTGTTGAGTATGTTTTTATTGTTAGTAGGGAGAATAAATTAGTTTAGT
chr2	13636139	13636259	Hypo	1	-	AATTAAAATTAAAAAAAAATAAAATTAAATACTAATAAAAAAAATTAAATCAAAAATACTCTATACTATTTTCTATTAAATATATTTCCATTACCAACAAAAAAAATAAATCAATTTAAT
chr2	13636139	13636259	Hypo	1	+	AATTGAAGTTAAAAAAAAGTAAAGTTGAATATTGATGGGAAAAGTTAGATTAGGAATGTTTTATATTATTTTTTGTTGAGTATGTTTTTATTGTTAGTAGGGAGAATAAATTAGTTTAGT
chr2	13636139	13636259	Hyper	1	-	AATTAAAATTAAAAAAAAATAAAATTAAATACTAATAAAAAAAATTAAATCAAAAATACTAAATACTATTTTCTATTAAATATATTTCCATTACCAACAAAAAAAATAAATCAATTTAAT
chr2	13636139	13636259	Hyper	1	+	AATTGAAGTTAAAAAAAAGTAAAGTTGAATATTGATGGGAAAAGTTAGATTAGGAATGTTGGATATTATTTTTTGTTGAGTATGTTTTTATTGTTAGTAGGGAGAATAAATTAGTTTAGT
chr2	13636139	13636259	Hyper	1	-	AATTAAAATTAAAAAAAAATAAAATTAAATACTAATAAAAAAAATTAAATCAAAAATACTCTATACTATTTTCTATTAAATATATTTCCATTACCAACAAAAAAAATAAATCAATTTAAT
chr2	13636139	13636259	Hyper	1	+	AATTGAAGTTAAAAAAAAGTAAAGTTGAATATTGATGGGAAAAGTTAGATTAGGAATGTTTTATATTATTTTTTGTTGAGTATGTTTTTATTGTTAGTAGGGAGAATAAATTAGTTTAGT
chr5	83447190	83447310	Hypo	1	-	TTTTTATACAATATACTTTTATTTCAATATAAAAACCATACAATCCAAATAAAAAAAAACAAATCTTATAAAAAAAACTAAATAATTTAATAAAACATAATAATAAAAAAAACTATATTC
chr5	83447190	83447310	Hypo	1	+	TTTTTGTATAATATATTTTTATTTTAATGTGAGAATTATGTAGTTTAAATGAAAAGAGGTAGGTTTTATGGGAGAGATTGAGTAGTTTAATAAAATATAGTAATAGGAGGAGTTGTATTT
chr5	83447190	83447310	Hypo	1	-	TTTTTATACAATATACTTTTATTTCAATATAAAAACCATACAATCCAAATAAAAAAAAACCCATCTTATAAAAAAAACTAAATAATTTAATAAAACATAATAATAAAAAAAACTATATTC
chr5	83447190	83447310	Hypo	1	+	TTTTTGTATAATATATTTTTATTTTAATGTGAGAATTATGTAGTTTAAATGAAAAGAGGTTTGTTTTATGGGAGAGATTGAGTAGTTTAATAAAATATAGTAATAGGAGGAGTTGTATTT
chr5	83447190	83447310	Hyper	1	-	TTTTTATACAATATACTTTTATTTCAATATAAAAACCATACAATCCAAATAAAAAAAAACAAATCTTATAAAAAAAACTAAATAATTTAATAAAACATAATAATAAAAAAAACTATATTC
chr5	83447190	83447310	Hyper	1	+	TTTTTGTATAATATATTTTTATTTTAATGTGAGAATTATGTAGTTTAAATGAAAAGAGGTAGGTTTTATGGGAGAGATTGAGTAGTTTAATAAAATATAGTAATAGGAGGAGTTGTATTT
chr5	83447190	83447310	Hyper	1	-	TTTTTATACAATATACTTTTATTTCAATATAAAAACCATACAATCCAAATAAAAAAAAACCCGTCTTATAAAAAAAACTAAATAATTTAATAAAACATAATAATAAAAAAAACTATATTC
chr5	83447190	83447310	Hyper	1	+	TTTTTGTATAATATATTTTTATTTTAATGTGAGAATTATGTAGTTTAAATGAAAAGAGGTTCGTTTTATGGGAGAGATTGAGTAGTTTAATAAAATATAGTAATAGGAGGAGTTGTATTT
chr3	132659900	132660020	Hypo	1	-	TTAATACAACCATAAAAAAAACACTATAATACAACATTAAAAATAAAAAATAATATAAAAACAAACTACCAAACCCATTCTAAAACAAAATAAAAAAAAATACAATTCCACCATTAAATA
chr3	132659900	132660020	Hypo	1	+	TTGGTGTGGTTATAAAAAAAATATTATAATATAGTATTGGAAATGGGAAATAATATAAGGGTAGATTGTTAAGTTTATTTTGAGGTGGGATGGAGAGGGATGTAATTTTATTGTTAGATA
chr3	132659900	132660020	Hypo	1	-	TTAATACAACCATAAAAAAAACACTATAATACAACATTAAAAATAAAAAATAATATAAAACAAAACTACCAAACCCATTCTAAAACAAAATAAAAAAAAATACAATTCCACCATTAAATA
chr3	132659900	132660020	Hypo	1	+	TTGGTGTGGTTATAAAAAAAATATTATAATATAGTATTGGAAATGGGAAATAATATAAGGTAAGATTGTTAAGTTTATTTTGAGGTGGGATGGAGAGGGATGTAATTTTATTGTTAGATA
chr3	132659900	132660020	Hyper	1	-	TTAATACGACCATAAAAAAAACACTATAATACAACATTAAAAATAAAAAATAATATAAAAACAAACTACCAAACCCATTCTAAAACGAAATAAAAAAAAATACAATTCCACCGTTAAATA
chr3	132659900	132660020	Hyper	1	+	TTGGTGCGGTTATAAAAAAAATATTATAATATAGTATTGGAAATGGGAAATAATATAAGGGTAGATTGTTAAGTTTATTTTGAGGCGGGATGGAGAGGGATGTAATTTTATCGTTAGATA
chr3	132659900	132660020	Hyper	1	-	TTAATACGACCATAAAAAAAACACTATAATACAACATTAAAAATAAAAAATAATATAAAACAAAACTACCAAACCCATTCTAAAACGAAATAAAAAAAAATACAATTCCACCGTTAAATA
chr3	132659900	132660020	Hyper	1	+	TTGGTGCGGTTATAAAAAAAATATTATAATATAGTATTGGAAATGGGAAATAATATAAGGTAAGATTGTTAAGTTTATTTTGAGGCGGGATGGAGAGGGATGTAATTTTATCGTTAGATA
chr7	12823120	12823240	Hypo	1	-	AACCTCTAATCTATAATAAAAAAAAATAATTCTATCTTACAAAAAATACAAAAAATTAAAATCAAATATACATAAAAAAATTTTTCTATATAATATTATAAATAATAAACATTTACCAAC
chr7	12823120	12823240	Hypo	1	+	AATTTTTAATTTGTAGTAAAAGGAAGTAATTTTATTTTGTAGGAGGTGTAAGGGATTGAAATTGAGTGTGTATAAGGGAATTTTTTTGTGTGATGTTGTGGGTGGTGGATATTTGTTAGT
chr7	12823120	12823240	Hypo	1	-	AACCTCTAATCTATAATAAAAAAAAATAATTCTATCTTACAAAAAATACAAAAAATTAAATACAAATATACATAAAAAAATTTTTCTATATAATATTATAAATAATAAACATTTACCAAC
chr7	12823120	12823240	Hypo	1	+	AATTTTTAATTTGTAGTAAAAGGAAGTAATTTTATTTTGTAGGAGGTGTAAGGGATTGAATATGAGTGTGTATAAGGGAATTTTTTTGTGTGATGTTGTGGGTGGTGGATATTTGTTAGT
chr7	12823120	12823240	Hyper	1	-	AACCTCTAATCTATAATAAAAAAAAATAATTCTATCTTACAAAAAATACAAAAAATTAAAATCGAATATACATAAAAAAATTTTTCTATATAATATTATAAATAATAAACATTTACCAAC
chr7	12823120	12823240	Hyper	1	+	AATTTTTAATTTGTAGTAAAAGGAAGTAATTTTATTTTGTAGGAGGTGTAAGGGATTGAAATCGAGTGTGTATAAGGGAATTTTTTTGTGTGATGTTGTGGGTGGTGGATATTTGTTAGT
chr7	12823120	12823240	Hyper	1	-	AACCTCTAATCTATAATAAAAAAAAATAATTCTATCTTACAAAAAATACAAAAAATTAAATACGAATATACATAAAAAAATTTTTCTATATAATATTATAAATAATAAACATTTACCAAC
chr7	12823120	12823240	Hyper	1	+	AATTTTTAATTTGTAGTAAAAGGAAGTAATTTTATTTTGTAGGAGGTGTAAGGGATTGAATACGAGTGTGTATAAGGGAATTTTTTTGTGTGATGTTGTGGGTGGTGGATATTTGTTAGT
chr7	20918506	20918626	Hypo	1	-	ATAACTAAATATTTCCTTACTAAATACATATATAAACATTAAACTAAAATACAAAATCTTCCCTACAAAAACAAAAAAAAAATTATAAATATTCATATAATCACACTTACTTTTCTTATTA
chr7	20918506	20918626	Hypo	1	+	GTAATTAAATATTTTTTTGTTGAATATATATATAAATATTGAATTGAAATATAGAGTTTTTTTTATAAGGATAAGGAAAAATTGTAAATATTTGTATAGTTATATTTATTTTTTTTGTTA
chr7	20918506	20918626	Hypo	1	-	ATAACTAAATATTTCCTTACTAAATACATATATAAACATTAAACTAAAATACAAAATCTTAACTACAAAAACAAAAAAAAAATTATAAATATTCATATAATCACACTTACTTTTCTTATTA
chr7	20918506	20918626	Hypo	1	+	GTAATTAAATATTTTTTTGTTGAATATATATATAAATATTGAATTGAAATATAGAGTTTTAGTTATAAGGATAAGGAAAAATTGTAAATATTTGTATAGTTATATTTATTTTTTTTGTTA
chr7	20918506	20918626	Hyper	1	-	ATAACTAAATATTTCCTTACTAAATACATATATAAACATTAAACTAAAATACAAAATCTTCCCTACAAAAACAAAAAAAAAATTATAAATATTCGTATAATCACACTTACTTTTCTTATTA
chr7	20918506	20918626	Hyper	1	+	GTAATTAAATATTTTTTTGTTGAATATATATATAAATATTGAATTGAAATATAGAGTTTTTTTTATAAGGATAAGGAAAAATTGTAAATATTCGTATAGTTATATTTATTTTTTTTGTTA
chr7	20918506	20918626	Hyper	1	-	ATAACTAAATATTTCCTTACTAAATACATATATAAACATTAAACTAAAATACAAAATCTTAACTACAAAAACAAAAAAAAAATTATAAATATTCGTATAATCACACTTACTTTTCTTATTA
chr7	20918506	20918626	Hyper	1	+	GTAATTAAATATTTTTTTGTTGAATATATATATAAATATTGAATTGAAATATAGAGTTTTAGTTATAAGGATAAGGAAAAATTGTAAATATTCGTATAGTTATATTTATTTTTTTTGTTA
chr4	158824111	158824231	Hypo	1	-	TAAAATATATTCCTAAAAATTAATTTCTACTTTATTAAAACTCTATAAAAAAAATTCTACTAATCCCTATACAATAATTAAAACACCTACTCCCTCACAAAAAAAATAAACATAACACAA
chr4	158824111	158824231	Hypo	1	+	TGAGATGTGTTTTTAGAAGTTGATTTTTGTTTTATTAGAGTTTTATAAGGGAAATTTTGTTGATTTTTGTATAGTGATTAAGATATTTGTTTTTTTATAGAAAGAATAAATATAGTATAG
chr4	158824111	158824231	Hypo	1	-	TAAAATATATTCCTAAAAATTAATTTCTACTTTATTAAAACTCTATAAAAAAAATTCTACATATCCCTATACAATAATTAAAACACCTACTCCCTCACAAAAAAAATAAACATAACACAA
chr4	158824111	158824231	Hypo	1	+	TGAGATGTGTTTTTAGAAGTTGATTTTTGTTTTATTAGAGTTTTATAAGGGAAATTTTGTATATTTTTGTATAGTGATTAAGATATTTGTTTTTTTATAGAAAGAATAAATATAGTATAG
chr4	158824111	158824231	Hyper	1	-	TAAAATATATTCCTAAAAATTAATTTCTACTTTATTAAAACTCTATAAAAAAAATTCTACTAATCCCTATACAATAATTAAAACACCTACTCCCTCACAAAAAAAATAAACATAACACAA
chr4	158824111	158824231	Hyper	1	+	TGAGATGTGTTTTTAGAAGTTGATTTTTGTTTTATTAGAGTTTTATAAGGGAAATTTTGTTGATTTTTGTATAGTGATTAAGATATTTGTTTTTTTATAGAAAGAATAAATATAGTATAG
chr4	158824111	158824231	Hyper	1	-	TAAAATATATTCCTAAAAATTAATTTCTACTTTATTAAAACTCTATAAAAAAAATTCTACATATCCCTATACAATAATTAAAACACCTACTCCCTCACAAAAAAAATAAACATAACACAA
chr4	158824111	158824231	Hyper	1	+	TGAGATGTGTTTTTAGAAGTTGATTTTTGTTTTATTAGAGTTTTATAAGGGAAATTTTGTATATTTTTGTATAGTGATTAAGATATTTGTTTTTTTATAGAAAGAATAAATATAGTATAG
chr11	116899187	116899307	Hypo	1	-	AAATAACAAAAAAAAATAAATACATAACACAATAAAAACACAAACAAAAAAACCCTTAACAATTCCTATAAAAAACTTACTTTCCATAAAAAATTATAATATTACCTAAATCTTAAAATA
chr11	116899187	116899307	Hypo	1	+	AGGTGGTAGAAAGAAGTAGGTATATGGTATAGTGGGAATATAGATAAGGAAGTTTTTAATAATTTTTATAGAGGGTTTGTTTTTTATAGGAGGTTATGATGTTATTTGAATTTTAGGATG
chr11	116899187	116899307	Hypo	1	-	AAATAACAAAAAAAAATAAATACATAACACAATAAAAACACAAACAAAAAAACCCTTAACTCTTCCTATAAAAAACTTACTTTCCATAAAAAATTATAATATTACCTAAATCTTAAAATA

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chr11	116899187	116899307	Hypo	1 +	AGGTGGTAGAAAGAAGTAGGTATATGGTATAGTGGGAATATAGATAAGGAAGTTTTTAATTTTTTTTATAGAGGGTTTGTTTTTTATAGGAGGTTATGATGTTATTTGAATTTTAGGATG
chr11	116899187	116899307	Hyper	1 -	AAATAACAAAAAAAAAATAAATACATAACACAATAAAAACACAAACAAAAAAAACCCTAACAATTCCTATAAAAAACTTACTTTCCATAAAAAATTATAATATTACCTAAATCTTAAAATA
chr11	116899187	116899307	Hyper	1 +	AGGTGGTAGAAAGAAGTAGGTATATGGTATAGTGGGAATATAGATAAGGAAGTTTTTAATAATTTTTATAGAGGGTTTGTTTTTTATAGGAGGTTATGATGTTATTTGAATTTTAGGATG
chr11	116899187	116899307	Hyper	1 -	AAATAACAAAAAAAAAATAAATACATAACACAATAAAAACACAAACAAAAAAACCCTAACTCTTCCTATAAAAAACTTACTTTCCATAAAAAATTATAATATTACCTAAATCTTAAAATA
chr11	116899187	116899307	Hyper	1 +	AGGTGGTAGAAAGAAGTAGGTATATGGTATAGTGGGAATATAGATAAGGAAGTTTTTAATTTTTTTTATAGAGGGTTTGTTTTTTATAGGAGGTTATGATGTTATTTGAATTTTAGGATG
chr11	126778953	126779073	Hypo	1 -	TATTATCTATTCACTTAATTAAATCATCTCTAAAAATACAAAACCCAAACAACACAAAAACCAACTATAATTACAATCTAAATAACCACCATAAAAACATAAATCACCATAAACATAAA
chr11	126778953	126779073	Hypo	1 +	TATTGTTATTTATTTGGTTGAATTATTTTTGAAGGTGTAGAATTTAGGTGATATAGGGGGTTAATTGTAATTGTAATTTGAATGATTATTATGAAGATATAGGTTATTATGAATATGAA
chr11	126778953	126779073	Hypo	1 -	TATTATCTATTCACTTAATTAAATCATCTCTAAAAATACAAAACCCAAACAACACAAAAACACAACTATAATTACAATCTAAATAACCACCATAAAAACATAAATCACCATAAACATAAA
chr11	126778953	126779073	Hypo	1 +	TATTGTTATTTATTTGGTTGAATTATTTTTGAAGGTGTAGAATTTAGGTGATATAGGGGGTTAATTGTAATTGTAATTTGAATGATTATTATGAAGATATAGGTTATTATGAATATGAA
chr11	126778953	126779073	Hypo	1 -	TATTATCTATTCACTTAATTAAATCATCTCTAAAAATACAAAACCCAAACAACACAAAAACACAACTATAATTACAATCTAAATAACCACCATAAAAACATAAATCACCATAAACATAAA
chr11	126778953	126779073	Hyper	1 +	TATTGTTATTTATTTGGTTGAATTATTTTTGAAGGTGTAGAATTTAGGCGATATAGGGGGTTAATTGTAATTGTAATTTGAATGATTATTATGAAGATATAGGTTATTATGAATATGAA
chr11	126778953	126779073	Hyper	1 -	TATTATCTATTCACTTAATTAAATCATCTCTAAAAATACAAAACCCAAACAACACAAAAACACAACTATAATTACAATCTAAATAACCACCATAAAAACATAAATCACCATAAACATAAA
chr11	126778953	126779073	Hyper	1 +	TATTGTTATTTATTTGGTTGAATTATTTTTGAAGGTGTAGAATTTAGGCGATATAGGGGGTTAATTGTAATTGTAATTTGAATGATTATTATGAAGATATAGGTTATTATGAATATGAA
chr20	53467680	53467800	Hypo	1 -	CTTCTCTAAAATAATCCCATACTATCTTCATAAATAACAACATAAAAAAACAACTAATTTACCCTATAAAACTATTATAAACATTTTCTTATTCTTATACTAATTTAATTATTCATTTTT
chr20	53467680	53467800	Hypo	1 +	TTTTTTGGGATGATTTTATGTTATTTTTATGGGTAATAATATAAAGAAATAATTGGTTTGTTTTGTAAAGTTGTTATAAAATATTTTTTTATTTTTGTATTAATTTGATTATTTATTTTT
chr20	53467680	53467800	Hypo	1 -	CTTCTCTAAAATAATCCCATACTATCTTCATAAATAACAACATAAAAAAACAACTAATTTACCCTATAAAACTATTATAAACATTTTCTTATTCTTATACTAATTTAATTATTCATTTTT
chr20	53467680	53467800	Hypo	1 +	TTTTTTGGGATGATTTTATGTTATTTTTATGGGTAATAATATAAAGAAATAATTGGTTTGTTTTGTAAAGTTGTTATAAAATATTTTTTTATTTTTGTATTAATTTGATTATTTATTTTT
chr20	53467680	53467800	Hyper	1 -	CTTCTCTAAAATAATCCCATACTATCTTCATAAATAACAACATAAAAAAACAACTAATTTACCCTATAAAACTATTATAAACATTTTCTTATTCTTATACTAATTTAATTATTCATTTTT
chr20	53467680	53467800	Hyper	1 +	TTTTTTGGGATGATTTTATGTTATTTTTATGGGTAATAATATAAAGAAATAATTGGTTTATTTGTAAAGTTGTTATAAAATATTTTTTTATTTTTGTATTAATTTGATTATTTATTTTT
chr20	53467680	53467800	Hyper	1 -	CTTCTCTAAAATAATCCCATACTATCTTCATAAATAACAACATAAAAAAACAACTAATTTACCCTATAAAACTATTATAAACATTTTCTTATTCTTATACTAATTTAATTATTCATTTTT
chr20	53467680	53467800	Hyper	1 +	TTTTTTGGGATGATTTTATGTTATTTTTATGGGTAATAATATAAAGAAATAATTGGTTTATTTGTAAAGTTGTTATAAAATATTTTTTTATTTTTGTATTAATTTGATTATTTATTTTT
chr15	74573669	74573789	Hypo	1 -	TACCTCAATTTCCTTACCTATAAAATAAATACATAACAATAACACTTTTTCATAAAATTACTATAAAATTTCATAAAAAAACCCATAAAAAACACTTAAAATAAATTCTCAACAAAAAT
chr15	74573669	74573789	Hypo	1 +	TGTTTTAGTTTTTTTGTTTATAAAATGGGTATATGGTAATAGTATTTTTTTTATAGGGTTGTTGTGAGATTTTATGAGAAAATTTATGGAAAGTATTTAGAGTAAGTTTTTAATAAGAAT
chr15	74573669	74573789	Hypo	1 -	TACCTCAATTTCCTTACCTATAAAATAAATACATAACAATAACACTTTTTCATAAAATTACTATAAAATTTCATAAAAAAACCCATAAAAAACACTTAAAATAAATTCTCAACAAAAAT
chr15	74573669	74573789	Hypo	1 +	TGTTTTAGTTTTTTTGTTTATAAAATGGGTATATGGTAATAGTATTTTTTTTATAGGGTTGTGTGAGATTTTATGAGAAAATTTATGGAAAGTATTTAGAGTAAGTTTTTAATAAGAAT
chr15	74573669	74573789	Hyper	1 -	TACCTCAATTTCCTTACCTATAAAATAAATACATAACAATAACACTTTTTCATAAAATTACTATAAAATTTCATAAAAAAACCCATAAAAAACACTTAAAATAAATTCTCAACAAAAAT
chr15	74573669	74573789	Hyper	1 +	TGTTTTAGTTTTTTTGTTTATAAAATGGGTATATGGTAATAGTATTTTTTTTATAGGGTTGTGTGAGATTTTATGAGAAAATTTATGGAAAGTATTTAGAGTAAGTTTTTAATAAGAAT
chr9	72523132	72523252	Hypo	1 -	ACTCAATAAACTCTACATTATTCTAACAACTTAATCTTTTAAATAAAAATATTTTATATTAAAATAAACACTTCAATAATTCATCTCACCAACATCAAAAACCACTTCAAATAAAACAAA
chr9	72523132	72523252	Hypo	1 +	ATTTAATGAATTTTATGTTATTTTAATAATTTGATTTTTTAGGTAAAAATATTTTATATTTGAGGTAAGTATTTTAATGGTTTATTTTATTAGTATTAAAGATTATTTTAAATAAGATAAG
chr9	72523132	72523252	Hypo	1 -	ACTCAATAAACTCTACATTATTCTAACAACTTAATCTTTTAAATAAAAATATTTTATATTTAATAAACACTTCAATAATTCATCTCACCAACATCAAAAACCACTTCAAATAAAACAAA
chr9	72523132	72523252	Hypo	1 +	ATTTAATGAATTTTATGTTATTTTAATAATTTGATTTTTTAGGTAAAAATATTTTATATTTGGTAAGTATTTTAATGGTTTATTTTATTAGTATTAAAGATTATTTTAAATAAGATAAG
chr9	72523132	72523252	Hypo	1 -	ACTCAATAAACTCTACGTTATTCTAACAACTTAATCTTTTAAATAAAAATATTTTATATTAAAATAAACACTTCAATAATTCATCTCACCAACATCAAAAACCACTTCAAATAAAACAAA
chr9	72523132	72523252	Hyper	1 +	ATTTAATGAATTTTACGTTATTTTAATAATTTGATTTTTTAGGTAAAAATATTTTATATTTGGTAAGTATTTTAATGGTTTATTTTATTAGTATTAAAGATTATTTTAAATAAGATAAG
chr9	72523132	72523252	Hyper	1 -	ACTCAATAAACTCTACGTTATTCTAACAACTTAATCTTTTAATAAAAATATTTTATATTTAATAAACACTTCAATAATTCATCTCACCAACATCAAAAACCACTTCAAATAAAACAAA
chr9	72523132	72523252	Hyper	1 +	ATTTAATGAATTTTACGTTATTTTAATAATTTGATTTTTTAGGTAAAAATATTTTATATTTGGTAAGTATTTTAATGGTTTATTTTATTAGTATTAAAGATTATTTTAAATAAGATAAG
chr7	49036864	49036984	Hypo	1 -	AAAATAAAACTATTACTAACAATAATAAATTCCATATTATTTTTTCATTAAATCCAAATACTCATCTAATATTAATTTTACCAAATTTCTATCATTTCTTTATTACTAAAAATTTTATTAT
chr7	49036864	49036984	Hypo	1 +	GGAATAAAATTATTATTGATAGTGATGGATTTTATGTTATTTTTTTTATTAAATTTAAAATTTAATTGATGTTGATTTTGTTAAATTTTTGTTATTTTTTTATTGTTGAGGATTTTATTGT
chr7	49036864	49036984	Hyper	1 -	AAAATAAAACTATTACTAACAATAATAAATTCCATATTATTTTTTCATTAAATCCAAAACTCATCTAATATTAATTTTACCAAATTTCTATCATTTCTTTATTACTAAAAATTTTATTAT
chr7	49036864	49036984	Hyper	1 +	GGAATAAAATTATTATTGATAGTGATGGATTTTATGTTATTTTTTTTATTAAATTTAAAATTTAATTGATGTTGATTTTGTTAAATTTTTGTTATTTTTTTATTGTTGAGGATTTTATTGT
chr7	49036864	49036984	Hyper	1 -	AAAATAAAACTATTACTAACAATAATAAATTCCATATTATTTTTTCATTAAATCCAAAACTCATCTAATATTAATTTTACCAAATTTCTATCATTTCTTTATTACTAAAAATTTTATTAT
chr7	49036864	49036984	Hyper	1 +	GGAATAAAATTATTATTGATAGTGATGGATTTTATGTTATTTTTTTTATTAAATTTAAAATTTAATTGATGTTGATTTTGTTAAATTTTTGTTATTTTTTTATTGTTGAGGATTTTATTGT
chr7	49036864	49036984	Hyper	1 -	AAAATAAAACTATTACTAACAATAATAAATTCCATATTATTTTTTCATTAAATCCAAAACTCATCTAATATTAATTTTACCAAATTTCTATCATTTCTTTATTACTAAAAATTTTATTAT
chr7	49036864	49036984	Hyper	1 +	GGAATAAAATTATTATTGATAGTGATGGATTTTATGTTATTTTTTTTATTAAATTTAAAATTTAATTGATGTTGATTTTGTTAAATTTTTGTTATTTTTTTATTGTTGAGGATTTTATTGT
chr19	10019939	10020059	Hypo	1 -	AACAATCAAAAATATAACATACAAAATTCAAATATTTTACTTCAAACCTCGAAAATAATACCATAACTAACAATACAACTAACAACTTCTAATCTAATCCTAAATTTATAATCCCCAAAT
chr19	10019939	10020059	Hypo	1 +	GATGGTTAAGGGTATAATATATAAGATTAGGTATTTTATTTTAGGTTTTGAAATGATGTTTGTGGTTGGTAATATAGTTGATAGTTTTTAGTTTGGTTTTGGATTTATGATTTTTAGGT
chr19	10019939	10020059	Hypo	1 -	AACAATCAAAAATATAACATACAAAATTCAAATATTTTACTTCAAACCTCGAAAATAATAACGATAACTAACAATACAACTAACAACTTCTAATCTAATCCTAAATTTATAATCCCCAAAT
chr19	10019939	10020059	Hypo	1 +	GATGGTTAAGGGTATAATATATAAGATTAGGTATTTTATTTTAGGTTTTGAAATGATGGTGGTTGGTAATATAGTTGATAGTTTTTAGTTTGGTTTTGGATTTATGATTTTTAGGT
chr19	10019939	10020059	Hyper	1 -	AACAATCAAAAATATAACATACAAAATTCAAATATTTTACTTCAAACCTCGAAATAATAACGATAACTAACAATACAACTAACAACTTCTAATCTAATCCTAAATTTATAATCCCCAAAT
chr19	10019939	10020059	Hyper	1 +	GACGGTTAAGGGTATAATATATAAGATTAGGTATTTTATTTTAGGTTTCGAAATGATGGCGGTGGTTGGTAATATAGTTGATAGTTTTTAGTTTGGTTTTGGATTTATGATTTTTAGGT

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chr22	35047634	35047754	Hypo	1 -	ACAAAAATCCCCAAATACAAATAACAAAAATTCCCAAAACAAAATAAACCACAAAAATCAAAAAACTAACAACAAATATAAAAAATTTTAAAAAAAATTACCCAAACTAATTAAATATA
chr22	35047634	35047754	Hypo	1 +	ATGGAGGTTTTTAAGTGTAGATGATAGAAGTTTTTAAGATAAAATGAGTTATAGGAATTTGGAGGGTTGGTAGTAGATGTGAGAGGTTTTGGAAGAAATTATTTAGGTTAATTAAATGTG
chr22	35047634	35047754	Hypo	1 -	ACAAAAATCCCCAAATACAAATAACAAAAATTCCCAAAACAAAATAAACCACAAAAATCCCAAAACTAACAACAAATATAAAAAATTTTAAAAAAAATTACCCAAACTAATTAAATATA
chr22	35047634	35047754	Hypo	1 +	ATGGAGGTTTTTAAGTGTAGATGATAGAAGTTTTTAAGATAAAATGAGTTATAGGAATTTTAGGGTTGGTAGTAGATGTGAGAGGTTTTGGAAGAAATTATTTAGGTTAATTAAATGTG
chr22	35047634	35047754	Hyper	1 -	ACGAAAATCCCCAAATACAAATAACAAAAATTCCCAAAACAAAATAAACCACAAAAATCCCAAAACTAACAACAAATATAAAAAATTTTAAAAAAAATTACCCAAACTAATTAAATATA
chr22	35047634	35047754	Hyper	1 +	ACGGAGGTTTTTAAGTGTAGATGATAGAAGTTTTTAAGATAAAATGAGTTATAGGAATTTCGGAAGGGTTGGTAGTAGATGTGAGAGGTTTTGGAAGAAATTATTTAGGTTAATTAAATGTG
chr22	35047634	35047754	Hyper	1 -	ACGAAAATCCCCAAATACAAATAACAAAAATTCCCAAAACAAAATAAACCACAAAAATCCCAAAACTAACAACAAATATAAAAAATTTTAAAAAAAATTACCCAAACTAATTAAATATA
chr22	35047634	35047754	Hyper	1 +	ACGGAGGTTTTTAAGTGTAGATGATAGAAGTTTTTAAGATAAAATGAGTTATAGGAATTTTAGGGTTGGTAGTAGATGTGAGAGGTTTTGGAAGAAATTATTTAGGTTAATTAAATGTG
chr5	38152300	38152420	Hypo	1 -	AAATATCCAAAAAATAAACCCACCAACCTAACTCTCTCCCTCCCTCTATTTAATTTTTTCAAAAATACTACTCTATAATAAACTACACTCATATAATAATTACTATATTATACATTTACT
chr5	38152300	38152420	Hypo	1 +	GGATGTTAAGGGATGAATTTATTAGTTTGATTTTTTTTTTTTTTTTTTTGTTTGATTTTTTTAGGAGTGTTATTTTGTGATAGGTTGTATTTATGTGATGATTATTGTATTGTGTATTTGTT
chr5	38152300	38152420	Hypo	1 -	AAATATCCAAAAAATAAACCCACCAACCTAACTCTCTCCCTCCCTCTATTTAATTTTTTCTCAAAATACTACTCTATAATAAACTACACTCATATAATAATTACTATATTATACATTTACT
chr5	38152300	38152420	Hypo	1 +	GGATGTTAAGGGATGAATTTATTAGTTTGATTTTTTTTTTTTTTTTTTTGTTTGATTTTTTTAGGAGTGTTATTTTGTGATAGGTTGTATTTATGTGATGATTATTGTATTGTGTATTTGTT
chr5	38152300	38152420	Hypo	1 -	AAATATCCAAAAAATAAACCCACCAACCTAACTCTCTCCCTCCCTCTATTTAATTTTTTCTTAAATACTACTCTATAATAAACTACACTCATATAATAATTACTATATTATACATTTACT
chr5	38152300	38152420	Hypo	1 +	GGATGTTAAGGGATGAATTTATTAGTTTGATTTTTTTTTTTTTTTTTTTGTTTGATTTTTTTAGGAGTGTTATTTTGTGATAGGTTGTATTTATGTGATGATTATTGTATTGTGTATTTGTT
chr5	38152300	38152420	Hyper	1 -	AAATATCCAAAAAATAAACCCACCAACCTAACTCTCTCCCTCCCTCTATTTAATTTTTTCCTAAATACTACTCTATAATAAACTACACTCATATAATAATTACTATATTATACATTTACT
chr5	38152300	38152420	Hyper	1 +	GGATGTTAAGGGATGAATTTATTAGTTTGATTTTTTTTTTTTTTTTTTTGTTTGATTTTTTTAGGAGTGTTATTTTGTGATAGGTTGTATTTATGTGATGATTATTGTATTGTGTATTTGTT
chr10	34890577	34890697	Hypo	1 -	CTTACCCTAAACACAACTTATTTCTCCAATCCCTATAACACTATAAAATCCTTCAATTTCCAACTACATTTAAAATTCATTAAATATCATTAAAAAATAATAACAAAATTTATTACAATA
chr10	34890577	34890697	Hypo	1 +	TTTGTTTTAAGTATAGTTTGTTTTTTTAATTTTTGTGGTATTATGGAATTTTTTAGTTTTCGATTATATTTGAAATTTATTAAATATTATTAAAAAATGATAGTAAAGTTTATTGTAATG
chr10	34890577	34890697	Hyper	1 -	CTTACCCTAAACACAACTTATTTCTCCAATCCCTATAACACTATAAAATCCTTCAATTTCCAACTACATTTAAAATTCATTAAATATCATTAAAAAATAATAACAAAATTTATTACAATA
chr10	34890577	34890697	Hyper	1 +	TTTGTTTTAAGTATAGTTTGTTTTTTTAATTTTTGTGGTATTATGGAATTTTTTAGTTTTCGATTATATTTGAAATTTATTAAATATTATTAAAAAATGATAGTAAAGTTTATTGTAATG
chr4	67075044	67075164	Hypo	1 -	ATAAAACTACAATTCTCTTTTTAACTTCTATTTACTACAAACACCATTATTTTTAAAAATATCCTTAAACTTAACATTCCCACAATTTACTACCAATAAAATAATTTCTTTTAAAAAAAA
chr4	67075044	67075164	Hypo	1 +	ATGAAGTTATAATTTTTTTTTTTAATTTTTGTTTATTATAAATATTATTGTTTTTGAAAGTATTTTTGGGTTTAATATTTTTATAGTTTGTTGTTAATAAAGTAATTTTTTTTAGGAGAGA
chr4	67075044	67075164	Hyper	1 -	ATAAAACTACAATTCTCTTTTTAACTTCTATTTACTACAAACACCATTATTTTTAAAAATATCCTTAAACTTAACATTCCCACAATTTACTACCAATAAAATAATTTCTTTTAAAAAAAA
chr4	67075044	67075164	Hyper	1 +	ATGAAGTTATAATTTTTTTTTTTAATTTTTGTTTATTATAAATATTATTGTTTTTGAAAGTATTTTTGGGTTTAATATTTTTATAGTTTGTTGTTAATAAAGTAATTTTTTTTTAGGAGAGA
chr10	13092842	13092862	Hypo	1 -	ATAAAACCCAATATCTCTCCTAAATCCCTACACCTCCCTAACCCCAAAACCCCCCTATAACTCCATCTAAAACAAACACTAATACTACCCAATACTCAAAACTAAATAAAAAAAAAATTA
chr10	13092842	13092862	Hyper	1 +	ATGGAGTTAGTGTTTTTTTGGGTTTTTGTATTTTTTTGGTTTGAGATTTTTTTGATTTTTTTGGGGTAAATATTGATGTTGTTTAATGTTTAGGGTTGGGTGAGGAGGGGGGTTG
chr10	13092842	13092862	Hyper	1 -	ATAAAACCCAATATCTCTCCTAAATCCCTACACCTCCCTAACCCCAAAACCCCCCTCTAACTCCCTCTAAAACAAACACTAATACTACCCAATACTCAAAACTAAATAAAAAAAAAATTA
chr10	13092842	13092862	Hyper	1 +	ATGGAGTTAGTGTTTTTTTGGGTTTTTGTATTTTTTTGGTTTGAGATTTTTTTGATTTTTTTGGGGTAAATATTGATGTTGTTTAATGTTTAGGGTTGGGTGAGGAGGGGGGTTG
chr10	13092842	13092862	Hyper	1 -	ATAAAACCCAATATCTCTCCTAAATCCCTACACCTCCCTAACCCCGAAACCCCCCTCTAACTCCCTCTAAAACAAACACTAATACTACCCAATACTCAAAACTAAATAAAAAAAAAATTA
chr10	13092842	13092862	Hyper	1 +	ATGGAGTTAGTGTTTTTTTGGGTTTTTGTATTTTTTTGGTTTGAGATTTTTTTGATTTTTTTGGGGTAAATATTGATGTTGTTTAATGTTTAGGGTTGGGTGAGGAGGGGGGTTG
chr7	78726713	78726833	Hypo	1 -	AAACTAATACTATAATAAAAAATCTATTATATTAAAATATAAATCAAAATAAAAAAACTCCTACTAAAAAATCACATAAATCCACAAAATTAAAACAAACAACCAAAAAAAAAACAAAA
chr7	78726713	78726833	Hypo	1 +	GAGTTGGTGTTATAATGGGGGATTTGTTATGTTGAGATGTGGATTAGAATGAGAAAGGTTTTTGTGATGGAGGATTATATAAATTTATAGAGTTAGGATAGGTAGTTAAGAAAAAGGTAGAG
chr7	78726713	78726833	Hyper	1 -	AAACTAATACTATAATAAAAAATCTATTATATTAAAATATAAATCAAAATAAAAAAACTCCTACTAAAAAATCACATAAATCCACAAAATTAAAACAAACAACCAAAAAAAAAACAAAA
chr7	78726713	78726833	Hyper	1 +	GAGTTGGTGTTATAATGGGGGATTTGTTATGTTGAGATGTGGATTAGAATGAGAAAGGTTTTTGTGATGGAGGATTATATAAATTTATAGAGTTAGGATAGGTAGTTAAGAAAAAGGTAGAG
chr7	78726713	78726833	Hyper	1 -	AAACTAATACTATAATAAAAAATCTATTATATTAAAATATAAATCAAAATAAAAAAACTCCTACTAAAAAATCACATAAATCCACAAAATTAAAACAAACAACCAAAAAAAAAACAAAA
chr7	78726713	78726833	Hyper	1 +	GAGTTGGTGTTATAATGGGGGATTTGTTATGTTGAGATGTGGATTAGAATGAGAAAGGTTTTTGTGGAGGATTATATAAATTTATAGAGTTAGGATAGGTAGTTAAGAAAAAGGTAGAG
chr10	49717241	49717361	Hypo	1 -	ACATACCATCCTACACTCAACTAACGAACCTAACGCAAAATATACTCCTAACCAACGTAAAAAACCAAAATCTCTACTAAACCCCATAAAACATCGCTCAAAAACACCCAAAACAAAAAA
chr10	49717241	49717361	Hypo	1 +	GTATGTTATTTTGTATTTAGTTGGTGAGTTTGGTGTAGGAGTGTTTTTGGTTAGTGTGGGGGGATTTAGAGTTTTTGTTGGATTTTATGGGGTATTGTTTAGGAGTATTTAGGATAGGGAG
chr10	49717241	49717361	Hyper	1 -	ACATACCATCCTACACTCAACTAACGAACCTAACGCAAAATATACTCCTAACCAACGTAAAAAACCAAAATCTCTACTAAAACCCCATAAAACATCGCTCAAAAACACCCAAAACAAAAAA
chr10	49717241	49717361	Hyper	1 +	GTATGTTATTTTGTATTTAGTTGGTGAGTTTGGTGTAGGAGTGTTTTTGGTTAGTGGGGGGGTTTAGAGTTTTTGTTGGATTTTATGGGGTATTGTTTAGGAGTATTTAGGATAGGGAG
chr10	49717241	49717361	Hyper	1 -	ACATACCATCCTACACTCAACTAACGAACCTAACGCAAAATATACTCCTAACCAACGTAAAAAACCAAAATCTCTACTAAAACCCCATAAAACATCGCTCAAAAACACCCAAAACAAAAAA

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chr10	49717241	49717361	Hyper	1 +	GTATGTTATTTTGTATTTAGTTGGCGAGTTTGGCGTAGGATGTGTTTTTGGTTAGCGTGGGGGATTAGAGTTTTTGTTGGATTTTATGGGGTATCGTTTAGGAGTATTTAGGATAGGGAG
chr10	49717241	49717361	Hyper	1 -	ACATACCATCCTACACTCAACTAACGAACCTAACGCAAAATATACTCCTAACCAACGAAAAAATCCAAAATCTCTACTAAACCCCATAAAACATCGCTCAAAAACACCCAAAACAAAAAA
chr10	49717241	49717361	Hyper	1 +	GTATGTTATTTTGTATTTAGTTGGCGAGTTTGGCGTAGGATGTGTTTTTGGTTAGCGGGGGGGTTTAGAGTTTTTGTTGGATTTTATGGGGTATCGTTTAGGAGTATTTAGGATAGGGAG
chr11	10801469	10801589	Hypo	1 -	ATTTTCAATAATTCAATAATTAACACTAATATTTTTATATAATAATTTATAAAAACTTTAATTATTATAATCAACAAATATTATTAAATATACTATATTAACCATTAAAATAAAAATACA
chr11	10801469	10801589	Hypo	1 +	ATTTTTAGTAATTTAGTAATTAATATTAATATTTTTATGTAGTGGTTTGTAAGAGTTTTAATTATTGTAGTTAATAAGTATTATTAAATGTGTTATATTAGTTATTGAGGTGAGAATGTA
chr11	10801469	10801589	Hypo	1 -	ATTTTCAATAATTCAATAATTAACACTAATATTTTTATATAATAATTTATAAAAAAATTTAATTATAATAATCAACAAATATTATTAAATATACTATATTAACCATTAAAATAAAAATACA
chr11	10801469	10801589	Hypo	1 +	ATTTTTAGTAATTTAGTAATTAATATTAATATTTTTATGTAGTGGTTTGTAAGAGATTTAATTATGGTAGTTAATAAGTATTATTAAATGTGTTATATTAGTTATTGAGGTGAGAATGTA
chr11	10801469	10801589	Hyper	1 -	ATTTTCAATAATTCAATAATTAACACTAATATTTTTATATAATAATTTATAAAAACTTTAATTATTATAATCAACAAATATTATTAAATATACTATATTAACCATTAAAATAAAAATACA
chr11	10801469	10801589	Hyper	1 +	ATTTTTAGTAATTTAGTAATTAATATTAATATTTTTATGTAGTGGTTTGTAAGAGTTTTAATTATTGTAGTTAATAAGTATTATTAAATGTGTTATATTAGTTATTGAGGTGAGAATGTA
chr11	10801469	10801589	Hyper	1 -	ATTTTCAATAATTCAATAATTAACACTAATATTTTTATATAATAATTTATAAAAAAATTTAATTATAATAATCAACAAATATTATTAAATATACTATATTAACCATTAAAATAAAAATACA
chr11	10801469	10801589	Hyper	1 +	ATTTTTAGTAATTTAGTAATTAATATTAATATTTTTATGTAGTGGTTTGTAAGAGATTTAATTATGGTAGTTAATAAGTATTATTAAATGTGTTATATTAGTTATTGAGGTGAGAATGTA
chr11	118134005	118134125	Hypo	1 -	ATAACAACTAAACTACCACACAACAAACCTTCACAATACTTTTACTTTCTCCACAACATTAAAACCTCACCTCATAATACTAACTTCAAAACTATTATAACAAACTACAAACATCCACAA
chr11	118134005	118134125	Hypo	1 +	GTGATAATTAAATTATTATATATAGTAAGTTTTTGTAGTGTTTTTATTTTTTTTATAGTATTAAAGTTTTGTTTTGTGGTATTGATTTTAAAATTGTTATAATAAATTATAAATATTTGTAA
chr11	118134005	118134125	Hypo	1 -	ATAACAACTAAACTACCACACAACAAACCTTCACAATACTTTTACTTTCTCCACAACATAATAACCTCACCTCATAATACTAACTTCAAAACTATTATAACAAACTACAAACATCCACAA
chr11	118134005	118134125	Hypo	1 +	GTGATAATTAAATTATTATATATAGTAAGTTTTTGTAGTGTTTTTATTTTTTTTATAGTATGATAGTTTTGTTTTGTGGTATTGATTTTAAAATTGTTATAATAAATTATAAATATTTGTAA
chr11	118134005	118134125	Hyper	1 -	ATAACAACTAAACTACCACACAACAAACCTTCGCAATACTTTTACTTTCTCCACAACATTAAAACCTCGCCTCGTAATACTAACTTCAAAACTATTATAACAAACTACAAACATCCGCAA
chr11	118134005	118134125	Hyper	1 +	GTGATAATTAAATTATTATATATAGTAAGTTTTCGTAGTGTTTTTATTTTTTTTATAGTATTAAAGTTTCGTTTCGTGGTATTGATTTTAAAATTGTTATAATAAATTATAAATATTCGTAA
chr11	118134005	118134125	Hyper	1 -	ATAACAACTAAACTACCACACAACAAACCTTCGCAATACTTTTACTTTCTCCACAACATAATAACCTCGCCTCGTAATACTAACTTCAAAACTATTATAACAAACTACAAACATCCGCAA
chr11	118134005	118134125	Hyper	1 +	GTGATAATTAAATTATTATATATAGTAAGTTTTCGTAGTGTTTTTATTTTTTTTATAGTATGATAGTTTCGTTTCGTGGTATTGATTTTAAAATTGTTATAATAAATTATAAATATTCGTAA
chr12	45002415	45002535	Hypo	1 -	TTCATAATTTTCAAAACTCTTTATTCTATAAACTTTATTCTTCATACTACATAAAAATTTATATCAAACAAAAATAAAAAAAAAACTTTTAAACTCCTAAATAAAACCTTAAACCTAAAC
chr12	45002415	45002535	Hypo	1 +	TTTATAATTTTTAGAGTTTTTTATTTTATGAATTTTATTTTTTATATTATATATAGGAATTTGTATTAAGTAGAAATAAGAGAAAAGTTTTTGGGTTTTTAGATGAAATTTTAAGTTTAAGT
chr12	45002415	45002535	Hypo	1 -	TTCATAATTTTCAAAACTCTTTATTCTATAAACTTTATTCTTCATACTACATAAAAATTAAAATCAAACAAAAATAAAAAAAAAACTTTTAAACTCCTAAATAAAACCTTAAACCTAAAC
chr12	45002415	45002535	Hypo	1 +	TTTATAATTTTTAGAGTTTTTTATTTTATGAATTTTATTTTTTATATTATATATAGGAATTGGAATTAAGTAGAAATAAGAGAAAAGTTTTTGGGTTTTTAGATGAAATTTTAAGTTTAAGT
chr12	45002415	45002535	Hyper	1 -	TTCATAATTTTCAAAACTCTTTATTCTATAAACTTTATTCTTCATACTACATAAAAATTTATATCAAACAAAAATAAAAAAAAAACTTTTAAACTCCTAAATAAAACCTTAAACCTAAAC
chr12	45002415	45002535	Hyper	1 +	TTTATAATTTTTAGAGTTTTTTATTTTATGAATTTTATTTTTTATATTATATATAGGAATTTGTATTAAGTAGAAATAAGAGAAAAGTTTTTGGGTTTTTAGATGAAATTTTAAGTTTAAGT
chr12	45002415	45002535	Hyper	1 -	TTCATAATTTTCAAAACTCTTTATTCTATAAACTTTATTCTTCATACTACATAAAAATTAAAATCAAACAAAAATAAAAAAAAAACTTTTAAACTCCTAAATAAAACCTTAAACCTAAAC
chr12	45002415	45002535	Hyper	1 +	TTTATAATTTTTAGAGTTTTTTATTTTATGAATTTTATTTTTTATATTATATATAGGAATTGGAATTAAGTAGAAATAAGAGAAAAGTTTTTGGGTTTTTAGATGAAATTTTAAGTTTAAGT
chr6	139941131	139941251	Hypo	1 -	CCTAAATCACAACTTAACATCTCCCTCAAAACAATAACCCAAAATAATCAAAAAATCCAACCTATCTTCCATCTAACAAAAATTACATCTTTCTTACCTAATATCTCATATCTTAAAAAT
chr6	139941131	139941251	Hypo	1 +	TTTGAATTATAATTTAGTATTTTTTTTAAAATGGTAATTTAGAGTAATTAGAGAATTTGATTTGTTTTTTGTTTAGTAGGAATTATGTTTTTTTTGTTTGATGTTTTATGTTTTGAAAGT
chr6	139941131	139941251	Hypo	1 -	CCTAAATCACAACTTAACATCTCCCTCAAAACAATAACCCAAAATAATCAAAAAATCCACCATATCTTCCATCTAACAAAAATTACATCTTTCTTACCTAATATCTCATATCTTAAAAAT
chr6	139941131	139941251	Hypo	1 +	TTTGAATTATAATTTAGTATTTTTTTTAAAATGGTAATTTAGAGTAATTAGAGAATTTGTTATGTTTTTTGTTTAGTAGGAATTATGTTTTTTTTGTTTGATGTTTTATGTTTTGAAAGT
chr6	139941131	139941251	Hyper	1 -	CCTAAATCACAACTTAACATCTCCCTCAAAACGATAACCCAAAATAATCAAAAAATCCGACCTATCTTCCGTCTAACAAAAATTACGTCTTTCTTACCTAATATCTCATATCTTAAAAAT
chr6	139941131	139941251	Hyper	1 +	TTTGAATTATAATTTAGTATTTTTTTTAAAACGGTAATTTAGAGTAATTAGAGAATTCGATTTGTTTTTCGTTTAGTAGGAATTACGTTTTTTTTGTTTGATGTTTTATGTTTTGAAAGT
chr6	139941131	139941251	Hyper	1 -	CCTAAATCACAACTTAACATCTCCCTCAAAACGATAACCCAAAATAATCAAAAAATCCGCCATATCTTCCGTCTAACAAAAATTACGTCTTTCTTACCTAATATCTCATATCTTAAAAAT
chr6	139941131	139941251	Hyper	1 +	TTTGAATTATAATTTAGTATTTTTTTTAAAACGGTAATTTAGAGTAATTAGAGAATTCGTTATGTTTTTCGTTTAGTAGGAATTACGTTTTTTTTGTTTGATGTTTTATGTTTTGAAAGT
chr6	151912292	151912412	Hypo	1 -	AATCTAATATACTTCAATTAACAAAAAATTATACCTATTTAAACATTTAATTACCTAAATAAACCAAATAAATAAATTATTACAATCAAAAAAAAATATCAAAAATAAAACCCAAATCAT
chr6	151912292	151912412	Hypo	1 +	AATTTGGTGTGTTTTAGTTGGTAGGAAGTTGTATTTATTTAAATATTTAATTGTTTGAATAAGTTAGATGGATAAGTTATTGTAATTAGAAGAAAATATTAAAGATAAAATTTAAATTAT
chr6	151912292	151912412	Hypo	1 -	AATCTAATATACTTCAATTAACAAAAAATTATACCTATTTAAACATTTAATTACCTAAAAATACCAAATAAATAAATTATTACAATCAAAAAAAAATATCAAAAATAAAACCCAAATCAT
chr6	151912292	151912412	Hypo	1 +	AATTTGGTGTGTTTTAGTTGGTAGGAAGTTGTATTTATTTAAATATTTAATTGTTTGAAAATGTTAGATGGATAAGTTATTGTAATTAGAAGAAAATATTAAAGATAAAATTTAAATTAT
chr6	151912292	151912412	Hyper	1 -	AATCTAATATACTTCAATTAACAAAAAATTATACCTATTTAAACATTTAATTACCTAAATAAACCAAATAAATAAATTATTACAATCAAAAAAAAATATCAAAAATAAAACCCAAATCAT
chr6	151912292	151912412	Hyper	1 +	AATTTGGTGTGTTTTAGTTGGTAGGAAGTTGTATTTATTTAAATATTTAATTGTTTGAATAAGTTAGATGGATAAGTTATTGTAATTAGAAGAAAATATTAAAGATAAAATTTAAATTAT
chr6	151912292	151912412	Hyper	1 -	AATCTAATATACTTCAATTAACAAAAAATTATACCTATTTAAACATTTAATTACCTAAAAATACCAAATAAATAAATTATTACAATCAAAAAAAAATATCAAAAATAAAACCCAAATCAT
chr6	151912292	151912412	Hyper	1 +	AATTTGGTGTGTTTTAGTTGGTAGGAAGTTGTATTTATTTAAATATTTAATTGTTTGAAAATGTTAGATGGATAAGTTATTGTAATTAGAAGAAAATATTAAAGATAAAATTTAAATTAT
chr13	113528439	113528559	Hypo	1 -	CACAACAAAATAAAACCCAAACATAATAAAACTAAACCTTACCCACAACAACCTAACTCATCAAAAAACCTCTAATTTAAAAAAAAACAACAAACACACAAACCCAAACAAAAAAAAATC
chr13	113528439	113528559	Hypo	1 +	TGTAGTAAGATGGGGTTTAGGTATGGTGGGGTTGGATTTTGTTTGTAGTAGTTTGATTTATTGGGGAGTTTTTGGTTTGGGGGAGAGTAGTAGGTATGTAGGTTTGGGTGGGAGGAGGTT
chr13	113528439	113528559	Hypo	1 -	CACAACAAAATAAAACCCAAACATAATAAAACTAAACCTTACCCACAACAACCTAACTCCTAAAAAAACCTCTAATTTAAAAAAAAACAACAAACACACAAACCCAAACAAAAAAAAATC
chr13	113528439	113528559	Hypo	1 +	TGTAGTAAGATGGGGTTTAGGTATGGTGGGGTTGGATTTTGTTTGTAGTAGTTTGATTTTTGGGGGAGTTTTTGGTTTGGGGGAGAGTAGTAGGTATGTAGGTTTGGGTGGGAGGAGGTT
chr13	113528439	113528559	Hyper	1 -	CGCAACAAAATAAAACCCAAACATAATAAAACTAAACCTTACCCGCAACAACCTAACTCATCGAAAAACCTCTAATTTAAAAAAAAACAACAAACACGCAAACCCGAACGAAAAAAAATC
chr13	113528439	113528559	Hyper	1 +	CGTAGTAAGATGGGGTTTAGGTATGGTGGGGTTGGATTTTGTTCGTAGTAGTTTGATTTATCGGGGAGTTTTTGGTTTGGGGGAGAGTAGTAGGTACGTAGGTTCGGGCGGGAGGAGGTT
chr13	113528439	113528559	Hyper	1 -	CGCAACAAAATAAAACCCAAACATAATAAAACTAAACCTTACCCGCAACAACCTAACTCCTAAAAAAACCTCTAATTTAAAAAAAAACAACAAACACGCAAACCCGAACGAAAAAAAATC
chr13	113528439	113528559	Hyper	1 +	CGTAGTAAGATGGGGTTTAGGTATGGTGGGGTTGGATTTTGTTCGTAGTAGTTTGATTTTTGGGGGAGTTTTTGGTTTGGGGGAGAGTAGTAGGTACGTAGGTTCGGGCGGGAGGAGGTT
chr12	60864663	60864783	Hypo	1 -	ACTATAATCTTTTTATCCCTTAATATTTAAAAAATATCTATTTAAATCCCTACAAAAAATCTTTACCCTCTTAAACACTATTATACATTCCCTAAAATTCACATTAACATAATTACTACT
chr12	60864663	60864783	Hypo	1 +	GTTATGATTTTTTTGTTTTTTAATATTTGAAAAATATTTATTTAAATTTTTGTAGAAGATTTTTGTTTTTTTAAATATTGTTATATATTTTTTGGAGTTTATATTAGTATGATTGTTGTT

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chr12	60864663	60864783	Hypo	1 -	ACTATAATCTTTTTATCCCTTAATATTTAAAAAATATCTATTTAAATCCCTACAAAAAAACTATACCCTCTTAAACACTATTATACATTCCCTAAAATTCACATTAACATAATTACTACT
chr12	60864663	60864783	Hypo	1 +	GTTATGATTTTTTTGTTTTTTAATATTTGAAAAATATTTATTTAAATTTTTGTAGAAGAGTTATGTTTTTTTAAATATTGTTATATATTTTTTGGAGTTTATATTAGTATGATTGTTGTT
chr12	60864663	60864783	Hyper	1 -	ACTATAATCTTTTTATCCCTTAATATTTAAAAAATATCTATTTAAATCCCTACAAAAAATCTTTACCCTCTTAAACACTATTATACATTCCCTAAAATTCACATTAACATAATTACTACT
chr12	60864663	60864783	Hyper	1 +	GTTATGATTTTTTTGTTTTTTAATATTTGAAAAATATTTATTTAAATTTTTGTAGAAGATTTTTGTTTTTTTAAATATTGTTATATATTTTTTGGAGTTTATATTAGTATGATTGTTGTT
chr12	60864663	60864783	Hyper	1 -	ACTATAATCTTTTTATCCCTTAATATTTAAAAAATATCTATTTAAATCCCTACAAAAAAACTATACCCTCTTAAACACTATTATACATTCCCTAAAATTCACATTAACATAATTACTACT
chr12	60864663	60864783	Hyper	1 +	GTTATGATTTTTTTGTTTTTTAATATTTGAAAAATATTTATTTAAATTTTTGTAGAAGAGTTATGTTTTTTTAAATATTGTTATATATTTTTTGGAGTTTATATTAGTATGATTGTTGTT
chr11	16386210	16386330	Hypo	1 -	AAAAAATATAAAACACCATACAAATATAAAATAAAACAATTAATTACTAATATTATCACTCAAAATAACTATATATTTCAAAAACCAAAAAACTATCTTATAAATCCAATTAAAAAAAAA
chr11	16386210	16386330	Hypo	1 +	GAAAAGTATAAAATATTATATAAATGTAAGGTAGAGTAATTAATTGTTAGTATTATTATTTAGAATGATTATGTATTTTAGAGGTTAGGAAGTTATTTTGTAAATTTAGTTAGAAAAGGG
chr11	16386210	16386330	Hypo	1 -	AAAAAATATAAAACACCATACAAATATAAAATAAAACAATTAATTACTAATATTATCACACACAATAACTATATATTTCAAAAACCAAAAAACTATCTTATAAATCCAATTAAAAAAAAA
chr11	16386210	16386330	Hypo	1 +	GAAAAGTATAAAATATTATATAAATGTAAGGTAGAGTAATTAATTGTTAGTATTATTATGTATAATGATTATGTATTTTAGAGGTTAGGAAGTTATTTTGTAAATTTAGTTAGAAAAGGG
chr11	16386210	16386330	Hyper	1 -	AAAAAATATAAAACACCATACAAATATAAAATAAAACAATTAATTACTAATATTATCACTCAAAATAACTATATATTTCAAAAACCAAAAAACTATCTTATAAATCCAATTAAAAAAAAA
chr11	16386210	16386330	Hyper	1 +	GAAAAGTATAAAATATTATATAAATGTAAGGTAGAGTAATTAATTGTTAGTATTATTATTTAGAATGATTATGTATTTTAGAGGTTAGGAAGTTATTTTGTAAATTTAGTTAGAAAAGGG
chr11	16386210	16386330	Hyper	1 -	AAAAAATATAAAACACCATACAAATATAAAATAAAACAATTAATTACTAATATTATCACGCACAATAACTATATATTTCAAAAACCAAAAAACTATCTTATAAATCCAATTAAAAAAAAA
chr11	16386210	16386330	Hyper	1 +	GAAAAGTATAAAATATTATATAAATGTAAGGTAGAGTAATTAATTGTTAGTATTATTACGTATAATGATTATGTATTTTAGAGGTTAGGAAGTTATTTTGTAAATTTAGTTAGAAAAGGG
chr2	56816302	56816422	Hypo	1 -	TCCAACCCTATCATTAAAAAAAAAAAAAATAAATCCTAATTCTTAAAAATACTCCTTCTAATTCAAATAATATATTATAACTTCAATTAAAACAAAATAAACTAATATATATTACTATTAT
chr2	56816302	56816422	Hypo	1 +	TTTAGTTTTGTTATTAGAAAAGGGAGAGTAAGTTTTAATTTTTAGAAATGTTTTTTTTAATTTAGATAATATGTTATAGTTTTAATTGAGATAAAGTAGATTAATGTATATTATTATTAT
chr2	56816302	56816422	Hypo	1 -	TCCAACCCTATCATTAAAAAAAAAAAAAATAAATCCTAATTCTTAAAAATACTCCTACTAATTCAATTAATATATTATAACTTCAATTAAAACAAAATAAACTAATATATATTACTATTAT
chr2	56816302	56816422	Hypo	1 +	TTTAGTTTTGTTATTAGAAAAGGGAGAGTAAGTTTTAATTTTTAGAAATGTTTTTATTAATTTAGTTAATATGTTATAGTTTTAATTGAGATAAAGTAGATTAATGTATATTATTATTAT
chr2	56816302	56816422	Hyper	1 -	TCCAACCCTATCATTAAAAAAAAAAAAAATAAATCCTAATTCTTAAAAATACTCCTTCTAATTCAAATAATATATTATAACTTCAATTAAAACAAAATAAACTAATATATATTACTATTAT
chr2	56816302	56816422	Hyper	1 +	TTTAGTTTTGTTATTAGAAAAGGGAGAGTAAGTTTTAATTTTTAGAAATGTTTTTTTTAATTTAGATAATATGTTATAGTTTTAATTGAGATAAAGTAGATTAATGTATATTATTATTAT
chr2	56816302	56816422	Hyper	1 -	TCCAACCCTATCATTAAAAAAAAAAAAAATAAATCCTAATTCTTAAAAATACTCCTACTAATTCAATTAATATATTATAACTTCAATTAAAACAAAATAAACTAATATATATTACTATTAT
chr2	56816302	56816422	Hyper	1 +	TTTAGTTTTGTTATTAGAAAAGGGAGAGTAAGTTTTAATTTTTAGAAATGTTTTTATTAATTTAGTTAATATGTTATAGTTTTAATTGAGATAAAGTAGATTAATGTATATTATTATTAT
chr13	20905719	20905839	Hypo	1 -	TTAAAAAAAATAATTAACCCTTTTAAAACATTAAATTATCCCCTAATAATAACATTACATCTCTAAAAAACATTTTATATCCTCCAAAAAAAAAATCTCATTAAATCAAATATATTAAAA
chr13	20905719	20905839	Hypo	1 +	TTAGGGGAAATAATTAGTTTTTTTAGGATATTAGATTATTTTTTAGTGGTGATATTATATTTTTGGGGAATATTTTATATTTTTTAGAAAAGGGATTTTATTAAGTTAAGTGTGTTAAAG
chr13	20905719	20905839	Hypo	1 -	TTAAAAAAAATAATTAACCCTTTTAAAACATTAAATTATCCCCTAATAATAACATTCCATCTCTACAAAACATTTTATATCCTCCAAAAAAAAAATCTCATTAAATCAAATATATTAAAA
chr13	20905719	20905839	Hypo	1 +	TTAGGGGAAATAATTAGTTTTTTTAGGATATTAGATTATTTTTTAGTGGTGATATTTTATTTTTGTGGAATATTTTATATTTTTTAGAAAAGGGATTTTATTAAGTTAAGTGTGTTAAAG
chr13	20905719	20905839	Hyper	1 -	TTAAAAAAAATAATTAACCCTTTTAAAACATTAAATTATCCCCTAATAATAACATTACATCTCTAAAAAACATTTTATATCCTCCAAAAAAAAAATCTCATTAAATCAAATATATTAAAA
chr13	20905719	20905839	Hyper	1 +	TTAGGGGAAATAATTAGTTTTTTTAGGATATTAGATTATTTTTTAGTGGTGATATTATATTTTTGGGGAATATTTTATATTTTTTAGAAAAGGGATTTTATTAAGTTAAGTGTGTTAAAG
chr13	20905719	20905839	Hyper	1 -	TTAAAAAAAATAATTAACCCTTTTAAAACATTAAATTATCCCCTAATAATAACATTCCATCTCTACGAAACATTTTATATCCTCCAAAAAAAAAATCTCATTAAATCAAATATATTAAAA
chr13	20905719	20905839	Hyper	1 +	TTAGGGGAAATAATTAGTTTTTTTAGGATATTAGATTATTTTTTAGTGGTGATATTTTATTTTTGCGGAATATTTTATATTTTTTAGAAAAGGGATTTTATTAAGTTAAGTGTGTTAAAG
chr1	42101783	42101903	Hypo	1 -	CAAAAAAAATCTATACCCTTATAAAACTAAAAATCTAATAAAAAAAAATAAATAACAAACAAATCCACAAATAAAACAAACCACATAACAAATAATAACAAATATTACAATAAAAAATTAA
chr1	42101783	42101903	Hypo	1 +	TAGAAAAGGTTTATGTTTTTATGGAGTTGAGAGTTTGGTGAGGGGAGATGAGTAATAAATAAATTTGTAGGTAAAATAAATTATATGGTAAATAGTGGTAGGTGTTATAATGAAAATTAA
chr1	42101783	42101903	Hypo	1 -	CAAAAAAAATCTATACCCTTATAAAACTAAAAATCTAATAAAAAAAAATAAATAACAAAAATATCCACAAATAAAACAAACCACATAACAAATAATAACAAATATTACAATAAAAAATTAA
chr1	42101783	42101903	Hypo	1 +	TAGAAAAGGTTTATGTTTTTATGGAGTTGAGAGTTTGGTGAGGGGAGATGAGTAATAAAAATATTTGTAGGTAAAATAAATTATATGGTAAATAGTGGTAGGTGTTATAATGAAAATTAA
chr1	42101783	42101903	Hyper	1 -	CAAAAAAAATCTATACCCTTATAAAACTAAAAATCTAATAAAAAAAAATAAATAACAAACAAATCCGCAAATAAAACAAACCACATAACAAATAATAACAAATATTACAATAAAAAATTAA
chr1	42101783	42101903	Hyper	1 +	TAGAAAAGGTTTATGTTTTTATGGAGTTGAGAGTTTGGTGAGGGGAGATGAGTAATAAATAAATTCGTAGGTAAAATAAATTATATGGTAAATAGTGGTAGGTGTTATAATGAAAATTAA
chr1	42101783	42101903	Hyper	1 -	CAAAAAAAATCTATACCCTTATAAAACTAAAAATCTAATAAAAAAAAATAAATAACAAAAATATCCGCAAATAAAACAAACCACATAACAAATAATAACAAATATTACAATAAAAAATTAA
chr1	42101783	42101903	Hyper	1 +	TAGAAAAGGTTTATGTTTTTATGGAGTTGAGAGTTTGGTGAGGGGAGATGAGTAATAAAAATATTCGTAGGTAAAATAAATTATATGGTAAATAGTGGTAGGTGTTATAATGAAAATTAA
chr15	61058520	61058640	Hypo	1 -	AAAATTCCAAAATTAATAAAAAAAAAATATAATAAAATAAAATAAAACCAATTTAAAAAAACCTTCAACAAAATATACAAACTAAATATTCAAACAAAAATATTTAAAATACCTCAACCTCA
chr15	61058520	61058640	Hypo	1 +	GAGATTTTAAAATTAGTAAAAAAAAAATATAATAAAGTAAAATAAAGTTAATTTAAAAAGTTTTTGATAGAATATATAAATTGGATATTTAAGTAGAAGTGTTTGAAATGTTTTAGTTTTA
chr15	61058520	61058640	Hypo	1 -	AAAATTCCAAAATTAATAAAAAAAAAATATAATAAAATAAAATAAAACCAATTTAAAAAAACATCAACAAAATATACAAACTAAATATTCAAACAAAAATATTTAAAATACCTCAACCTCA
chr15	61058520	61058640	Hypo	1 +	GAGATTTTAAAATTAGTAAAAAAAAAATATAATAAAGTAAAATAAAGTTAATTTAAAAAGGTATTGATAGAATATATAAATTGGATATTTAAGTAGAAGTGTTTGAAATGTTTTAGTTTTA
chr15	61058520	61058640	Hyper	1 -	AAAATTCCAAAATTAATAAAAAAAAAATATAATAAAATAAAATAAAACCAATTTAAAAAAACCTTCGACAAAATATACAAACTAAATATTCAAACAAAAATATTTAAAATACCTCAACCTCA
chr15	61058520	61058640	Hyper	1 +	GAGATTTTAAAATTAGTAAAAAAAAAATATAATAAAGTAAAATAAAGTTAATTTAAAAAGTTTTCGATAGAATATATAAATTGGATATTTAAGTAGAAGTGTTTGAAATGTTTTAGTTTTA
chr15	61058520	61058640	Hyper	1 -	AAAATTCCAAAATTAATAAAAAAAAAATATAATAAAATAAAATAAAACCAATTTAAAAAAACATCGACAAAATATACAAACTAAATATTCAAACAAAAATATTTAAAATACCTCAACCTCA
chr15	61058520	61058640	Hyper	1 +	GAGATTTTAAAATTAGTAAAAAAAAAATATAATAAAGTAAAATAAAGTTAATTTAAAAAGGTATCGATAGAATATATAAATTGGATATTTAAGTAGAAGTGTTTGAAATGTTTTAGTTTTA
chr2	180245759	180245879	Hypo	1 -	AAACCAAAAATAATTCTTAAAAATAATCAAAAAAATTAATAAAATTCCTACCACACTAATTAAAAAAAAAAAAAAAAAATCATAAATAACCAATATTTATAAAAAAAAAATATAACATCAC
chr2	180245759	180245879	Hypo	1 +	AAATTAAAGGTGGTTTTTAAAGATAGTTAAAAAAGTTGATAAAATTTTTGTTATATTGATTAGGAAAAAAGAGAGAAGTTATGAATGATTAATATTTGTGAAAGAGAAATGTGATATTAT
chr2	180245759	180245879	Hypo	1 -	AAACCAAAAATAATTCTTAAAAATAATCAAAAAAATTAATAAAATTCCTACCACACTAAATTAAAAAAAAAAAAAAAAAATCATAAATAACCAATATTTATAAAAAAAAAATATAACATCAC
chr2	180245759	180245879	Hypo	1 +	AAATTAAAGGTGGTTTTTAAAGATAGTTAAAAAAGTTGATAAAATTTTTGTTATATTGAATTGGAAAAAAGAGAGAAGTTATGAATGATTAATATTTGTGAAAGAGAAATGTGATATTAT
chr2	180245759	180245879	Hyper	1 -	AAACCAAAAATAATTCTTAAAAATAATCAAAAAAATTAATAAAATTCCTACCACACTAATTAAAAAAAAAAAAAAAAAATCATAAATAACCAATATTTATAAAAAAAAAATATAACATCAC
chr2	180245759	180245879	Hyper	1 +	AAATTAAAGGTGGTTTTTAAAGATAGTTAAAAAAGTTGATAAAATTTTTGTTATATTGATTAGGAAAAAAGAGAGAAGTTATGAATGATTAATATTTGTGAAAGAGAAATGTGATATTAT
chr2	180245759	180245879	Hyper	1 -	AAACCAAAAATAATTCTTAAAAATAATCAAAAAAATTAATAAAATTCCTACCACACTAAATTAAAAAAAAAAAAAAAAAATCATAAATAACCAATATTTATAAAAAAAAAATATAACATCAC

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chr2	180245759	180245879	Hyper	1 +	AAATTAAAGGTGGTTTTTAAAGATAGTTAAAAAAGTTGATAAAATTTTTGTTATATTGAATTGGAAAAAAGAGAGAAGTTATGAATGATTAATATTTGTGAAAGAGAAATGTGATATTAT
chr10	242773	242893	Hypo	1 -	TAAAATAAAAATAAAAAAAAAAACTATTAATAATTCTACCAATACAACATATAAATACAACAATCCAAAAAACACAATCCCCCTTTCATCATAAAAAAAAAATAAAAAATAAAATACTTTT
chr10	242773	242893	Hypo	1 +	TGGGGTAAGAGTAAAAGGGGAATTATTAATAGTTTGTTAGTATAATATGTAAATGAAATAGTTAAGGAAGTATAGTTTTTTTTTTATTATGAAGAAAGAATGGAAGGTGGAGTGTTTTT
chr10	242773	242893	Hypo	1 -	TAAAATAAAAATAAAAAAAAAACTATTAATAATTCTACCAATACAACATATAAATACAACAATCCAAAAAACACAATCCCCCTTTCATCATAAAAAAAAAATAAAAAATAAAATACTTTT
chr10	242773	242893	Hypo	1 +	TGGGGTAAGAGTAAAAGGGGAATTATTAATAGTTTGTTAGTATAATATGTAAATGAAATAGTTAAGGAAGTATAGTTTTTTTTTTATTATGAAGAAAGAATGGAAGGTGGAGTGTTTTT
chr10	242773	242893	Hypo	1 -	TAAAATAAAAATAAAAAAAAAACTATTAATAATTCTACCAATACAACATATAAATACAACAATCCAAAAAACACAATCCCCCTTTCATCATAAAAAAAAAATAAAAAATAAAATACTTTT
chr10	242773	242893	Hypo	1 +	TGGGGTAAGAGTAAAAGGGGAATTATTAATAGTTTGTTAGTATAATATGTAAATGAAATAGTTAAGGAAGTATAGTTTTTTTTTTATTATGAAGAAAGAATGGAAGGTGGAGTGTTTTT
chr10	242773	242893	Hypo	1 -	TAAAATAAAAATAAAAAAAAAACTATTAATAATTCTACCAATACAACATATAAATACAACAATCCAAAAAACACAATCCCCCTTTCATCATAAAAAAAAAATAAAAAATAAAATACTTTT
chr10	242773	242893	Hypo	1 +	TGGGGTAAGAGTAAAAGGGGAATTATTAATAGTTTGTTAGTATAATATGTAAATGAAATAGTTAAGGAAGTATAGTTTTTTTTTTATTATGAAGAAAGAATGGAAGGTGGAGTGTTTTT
chr13	86704002	86704122	Hypo	1 -	TAATTACATTATATACCTTTATAAAACACAATATATACATTAACATACAAATTTAAAATCTACAAATCAACAATACAAATTAAAAAAAATTACCCAAAATAATTTTAAAAAAAATATTAT
chr13	86704002	86704122	Hypo	1 +	TGATTGTATTGTGTATTTTTATGGGATATAGTATATGTATTAATATATGAATTTAAGATTTGTAAATTAATAATATAAATTAGAGAAGATTGTTTAGGATGATTTTGAGGAGAATGTTGT
chr13	86704002	86704122	Hypo	1 -	TAATTACATTATATACCTTTATAAAACACAATATATACATTAACATACAAATTTAATATCTACACATCAACAATACAAATTAAAAAAAATTACCCAAAATAATTTTAAAAAAAATATTAT
chr13	86704002	86704122	Hypo	1 +	TGATTGTATTGTGTATTTTTATGGGATATAGTATATGTATTAATATATGAATTTAAGATTTGTAAATTAATAATATAAATTAGAGAAGATTGTTTAGGATGATTTTGAGGAGAATGTTGT
chr13	86704002	86704122	Hypo	1 -	TAATTACATTATATACCTTTATAAAACACAATATATACATTAACATACGAATTTAAAATCTACAAATCAACAATACAAATTAAAAAAAATTACCCAAAATAATTTTAAAAAAAATATTAT
chr13	86704002	86704122	Hypo	1 +	TGATTGTATTGTGTATTTTTATGGGATATAGTATATGTATTAATATACGAATTTAATATTGTATATTAAATAATAAATTAGAGAAGATTGTTTAGGATGATTTTGAGGAGAATGTTGT
chr13	86704002	86704122	Hypo	1 -	TAATTACATTATATACCTTTATAAAACACAATATATACATTAACATACGAATTTAATATCTACACATCAACAATACAAATTAAAAAAAATTACCCAAAATAATTTTAAAAAAAATATTAT
chr13	86704002	86704122	Hypo	1 +	TGATTGTATTGTGTATTTTTATGGGATATAGTATATGTATTAATATACGAATTTAATATTGTATATTAAATAATAAATTAGAGAAGATTGTTTAGGATGATTTTGAGGAGAATGTTGT
chr13	83950105	83950225	Hypo	1 -	AAAAAATCAATAAAAAATAATAAAATTCAAAAACAAATTAATTCACTTTTTCCTACAAACTATAAATATAAAAAAAAATTCTATAAATAAAAAATAATAACTAAAATAAAAAATACAATAA
chr13	83950105	83950225	Hypo	1 +	GAAGAATTAATGAAAGATAATAAAATTTAAAAGTAAATTAATTTATTTTTTTTTGTGGATTGTGAGTGTGAAGAAAAATTTTGTAGGTAAGGATGGTAGTTAGAATGGAAAGTATAGTAA
chr13	83950105	83950225	Hypo	1 -	AAAAAATCAATAAAAAATAATAAAATTCAAAAACAAATTAATTCACTTTTTCCTACAAACTATAAATATAAAAAAAAATTCTATAAATAAAAAATAATAACTAAAATAAAAAATACAATAA
chr13	83950105	83950225	Hypo	1 +	GAAGAATTAATGAAAGATAATAAAATTTAAAAGTAAATTAATTTATTTTTTTTTGTTGATTGTGATTGTGAAGAAAAATTTTGTAGGTAAGGATGGTAGTTAGAATGGAAAGTATAGTAA
chr13	83950105	83950225	Hypo	1 -	AAAAAATCAATAAAAAATAATAAAATTCAAAAACAAATTAATTCACTTTTTCCTACAAACTATAAATATAAAAAAAAATTCTATAAATAAAAAATAATAACTAAAATAAAAAATACAATAA
chr13	83950105	83950225	Hypo	1 +	GAAGAATTAATGAAAGATAATAAAATTTAAAAGTAAATTAATTTATTTTTTTTTGCGGATTGTGAGTGTGAAGAAAAATTTTGTAGGTAAGGATGGTAGTTAGAATGGAAAGTATAGTAA
chr13	83950105	83950225	Hypo	1 -	AAAAAATCAATAAAAAATAATAAAATTCAAAAACAAATTAATTCACTTTTTCCTACAACTATAAATATAAAAAAAAATTCTATAAATAAAAAATAATAACTAAAATAAAAAATACAATAA
chr13	83950105	83950225	Hypo	1 +	GAAGAATTAATGAAAGATAATAAAATTTAAAAGTAAATTAATTTATTTTTTTTTGTTGATTGTGATTGTGAAGAAAAATTTTGTAGGTAAGGATGGTAGTTAGAATGGAAAGTATAGTAA
chr6	57293879	57293999	Hypo	1 -	AAAATATTATATAAATAAAATCATACTATTATTAAAAAAAAAACTTATTTAAACTCTTATACAAAACAATAAAACCAAACTTAATTCACTACTCCATTAAAATTTACCCTATAAAAAAA
chr6	57293879	57293999	Hypo	1 +	AGAATGTTATATAAATGGAATTATATTGTTGTTAAAGAAAAAATTTATTTAAATTTTTGTGTAAGATAGTAAGATTAGATTTAATTTATTATTTTATTGAGGTTTTGTTTTATGGGAGGG
chr6	57293879	57293999	Hypo	1 -	AAAATATTATATAAATAAAATCATACTATTATTAAAAAAAAACTTATTTAAACTCTTATACAAAACAATAAAACCAAACTTAATTCACTACTCCATTAAAATTTACCCTATAAAAAAA
chr6	57293879	57293999	Hypo	1 +	AGAATGTTATATAAATGGAATTATATTGTTGTTAAAGAAAAAATTTATTTAAATTTTTGTGTAAGATAGTAAGATTAGATTTAATTTATTATTTTATTGAGGTTTTGTTTTATGGGAGGG
chr6	57293879	57293999	Hypo	1 -	AAAATATTATATAAATAAAATCATACTATTATTAAAAAAAAACTTATTTAAACTCTTATACAAAACAATAAAACCAAACTTAATTCACTACTCCATTAAAATTTACCCTATAAAAAAA
chr6	57293879	57293999	Hypo	1 +	AGAATGTTATATAAATGGAATTATATTGTTGTTAAAGAAAAAATTTATTTAAATTTTTGTGTAAGATAGTAAGATTAGATTTAATTTATTATTTTATTGAGGTTTTGTTTTATGGGAGGG
chr6	57293879	57293999	Hypo	1 -	AAAATATTATATAAATAAAATCATACTATTATTAAAAAAAAACTTATTTAAACTCTTATACAAAACAATAAAACCAAACTTAATTCACTACTCCATTAAAATTTACCCTATAAAAAAA
chr6	57293879	57293999	Hypo	1 +	AGAATGTTATATAAATGGAATTATATTGTTGTTAAAGAAAAAATTTATTTAAATTTTTGTGTAAGATAGTAAGATTAGATTTAATTTATTATTTTATTGAGGTTTTGTTTTATGGGAGGG
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	123109310	123109430	Hypo	1 -	AACAAATAACCTATAAAAACCTAAATCCTCCTAAAATAATTTTAAACTTTCTCTACATCCACAAAAAATACATTTCCCTACAAAAAAAAATAATACATACTTAAATTTTTCAAAAACCCAAA
chr3	123109310	123109430	Hypo	1 +	AATAGGTGGTTTGTGGGAGTTTAGATTTTTTAAAATGGTTTTGAGTTTTTTTTGTATTTATAGAGGTGTATTTTTTTGTAGGAAGGATGATATATGTTTAGATTTTTAGAGGTTTAAA
chr3	128241219	128241339	Hypo	1 -	AACAAAACTACTAACAACTAATCCCAAATTTTACTCCACCTAAACATAATATAATAAAAACAAACCTTTACTATAAAAATTATAAAACAATCAAAAAATTTCCTCTTTCCAAAAATATCCT
chr3	128241219	128241339	Hypo	1 +	AGTAAAATTGTTGATGGTTAGTTTTGGTTTTGTTTTGTTTAGATATGGTGTGGTAAAGGTAAATTTTTGTTATGGGAGTTATAAGGTAATTAGAAGGTTTTTTTTTTTTAAAAATGTTTT
chr3	128241219	128241339	Hypo	1 -	AACAAAACTACTAACAACTAATCCCAAATTTTACTCCACCTAAACATAATATAATAAAAACAAACCTTTACTATAAAAATTATAAAACAATCAAAAAATTTCCTCTTTCCAAAAATATCCT
chr3	128241219	128241339	Hypo	1 +	AGTAAAATTGTTGATGGTTAGTTTTGGTTTTGTTTTGTTTAGATATGGTGTGGTAAAGGTTTATTTTTGTTATGGGAGTTATAAGGTAATTAGAAGGTTTTTTTTTTTTAAAAATGTTTT
chr3	128241219	128241339	Hypo	1 -	AACAAAACTACTAACGACTAATCCCGATTTTACTCCGCCTAAACATAATATAATAAAAACAAACCTTTACTATAAAAATTATAAAACAATCAAAAAATTTCCTCTTTCCAAAAATATCCT
chr3	128241219	128241339	Hypo	1 +	AGTAAAATTGTTGACGGTTAGTTTCGGTTTTGTTTCGTTTAGATATGGTGTGGTAAAGGTAAATTTTTGTTATGGGAGTTATAAGGTAATTAGAAGGTTTTTTTTTTTTAAAAATGTTTT
chr3	128241219	128241339	Hypo	1 -	AACAAAACTACTAACGACTAATCCCGATTTTACTCCGCCTAAACATAATATAATAAAAACCACCTTTACTATAAAAATTATAAAACAATCAAAAAATTTCCTCTTTCCAAAAATATCCT
chr3	128241219	128241339	Hypo	1 +	AGTAAAATTGTTGACGGTTAGTTTCGGTTTTGTTTCGTTTAGATATGGTGTGGTAAAGGTTTATTTTTGTTATGGGAGTTATAAGGTAATTAGAAGGTTTTTTTTTTTTAAAAATGTTTT
chr14	86768303	86768423	Hypo	1 -	AACACACTTCCTACTTTATCCACTAAATATTTAAAATATATAATAATTTAAAATCATTAAAAAAATTACAAATAATTAATAAACACCTAAATTTAACAAATATTTTACAACAATAAAAAA
chr14	86768303	86768423	Hypo	1 +	AGTATATTTTTTGTTTTATTTATTAGGTATTTAGGGTATATAATGATTTGGGGTTATTAAAGAAATTGTAGATGATTAGTAAATATTTGAATTTAGTAAATGTTTTATAATAATAAAGAG
chr14	86768303	86768423	Hypo	1 -	AACACACTTCCTACTTTATCCACTAAATATTTAAAATATATAATAATTTAAAATCATTAACTAAATTACAAATAATTAATAAACACCTAAATTTAACAAATATTTTACAACAATAAAAAA
chr14	86768303	86768423	Hypo	1 +	AGTATATTTTTTGTTTTATTTATTAGGTATTTAGGGTATATAATGATTTGGGGTTATTAAATAAATTGTAGATGATTAGTAAATATTTGAATTTAGTAAATGTTTTATAATAATAAAGAG
chr14	86768303	86768423	Hypo	1 -	AACACACTTCCTACTTTATCCACTAAATATTTAAAATATATAATAATTTAAAATCATTAACTAAATTACAAATAATTAATAAACACCTAAATTTAACAAATATTTTACAACAATAAAAAA
chr14	86768303	86768423	Hypo	1 +	AGTATATTTTTTGTTTTATTTATTAGGTATTTAGGGTATATAATGATTTGGGGTTATTAAATAAATTGTAGATGATTAGTAAATATTTGAATTTAGTAAATGTTTTATAATAATAAAGAG

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chr14	86768303	86768423	Hyper	1 -	AACACACTTCCTACTTTATCCACTAAATATTTAAAATATATAATAATTTAAAATCATTAAAAAAATTACAAATAATTAATAAACACCTAAATTTAACAAATATTTTACAACAATAAAAAA
chr14	86768303	86768423	Hyper	1 +	AGTATATTTTTTGTTTTATTTATTAGGTATTTAGGGTATATAATGATTTGGGGTTATTAAAGAAATTGTAGATGATTAGTAAATATTTGAATTTAGTAAATGTTTTATAATAATAAAGAG
chr14	86768303	86768423	Hyper	1 -	AACACACTTCCTACTTTATCCACTAAATATTTAAAATATATAATAATTTAAAATCATTAACTAAATTACAAATAATTAATAAACACCTAAATTTAACAAATATTTTACAACAATAAAAAA
chr14	86768303	86768423	Hyper	1 +	AGTATATTTTTTGTTTTATTTATTAGGTATTTAGGGTATATAATGATTTGGGGTTATTAAATAAATTGTAGATGATTAGTAAATATTTGAATTTAGTAAATGTTTTATAATAATAAAGAG
chr11	75939961	75940081	Hypo	1 -	AAACTCTACTATTCTAAAAAAACACCAAACCTTCCAAAATCCAATCTAAAACTATCTTAAAAAATCTACTATCAAAACATACTCCTTAAAAAACAAATATTAACAAAAAAAAAAAAAA
chr11	75939961	75940081	Hypo	1 +	AAGTTTGTTGTTTTGGAAGAGATGTTAGGTTTTTTTAGAATTTGGTTTAAGGTTGTTTTAAAGGATTTGTTGTTAAGGTGTATTTTTTAGGGAGTAGGTGTTGGTAAAGGGAGGAGAGA
chr11	75939961	75940081	Hypo	1 -	AAACTCTACTATTCTAAAAAAACACCAAACCTTCCAAAATCCAATCTAAAACTATCTTCCAAAATCTACTATCAAAACATACTCCTTAAAAAACAAATATTAACAAAAAAAAAAAAAA
chr11	75939961	75940081	Hypo	1 +	AAGTTTGTTGTTTTGGAAGAGATGTTAGGTTTTTTTAGAATTTGGTTTAAGGTTGTTTTAAAGGATTTGTTGTTAAGGTGTATTTTTTAGGGAGTAGGTGTTGGTAAAGGGAGGAGAGA
chr11	75939961	75940081	Hypo	1 -	AAACTCTACTATTCTAAAAAAACACCAAACCTTCCAAAATCCGATCTAAAACTATCTTCAAAAATCTACTATCAAAACGTACTCCTTAAAAAACAAATATTAACAAAAAAAAAAAAAA
chr11	75939961	75940081	Hypo	1 +	AAGTTTGTTGTTTTGGAAGAGACGTTAGGTTTTTTTAGAATTCGGTTTAAGGTTGTTTTAAAGGATTTGTTGTTAAGGGATTTTTGTGGTAAAGGGAGGAGAGA
chr11	75939961	75940081	Hypo	1 -	AAACTCTACTATTCTAAAAAAACACCAAACCTTCCAAAATCCGATCTAAAACTATCTTCCAAAATCTACTATCAAAACGTACTCCTTAAAAAACAAATATTAACAAAAAAAAAAAAAA
chr11	75939961	75940081	Hypo	1 +	AAGTTTGTTGTTTTGGAAGAGACGTTAGGTTTTTTTAGAATTCGGTTTAAGGTTGTTTTAAAGGATTTGTTGTTAAGGGATTTTTGTGGTAAAGGGAGGAGAGA
chr3	16097679	16097799	Hypo	1 -	CACAAATCTAATCAAATCATTTTTCTATTTACAAATTTCAATAACTACCCATTATCCTAAAAATAAATCAATACTTCTCAACAAACCTTAAAAATTAACAAACATAATCCAACTATAATT
chr3	16097679	16097799	Hypo	1 +	TATAAATTTGATTAGGTTATTTTTTTGTTTATAAATTTTAGTGATTGTTTATTGTTTTAAGGATAAATTAATATTTTTTAGTAGGTTTTAAGAGTTGATAGGTATGATTTAGTTATGATT
chr3	16097679	16097799	Hypo	1 -	CACAAATCTAATCAAATCATTTTTCTATTTACAAATTTCAATAACTACCCATTATCCTAATTATAAATCAATACTTCTCAACAAACCTTAAAAATTAACAAACATAATCCAACTATAATT
chr3	16097679	16097799	Hypo	1 +	TATAAATTTGATTAGGTTATTTTTTGTTTATAAATTTTAGTGATTGTTTATTGTTTAATTATAAATTAATATTTTTTAGTAGGTTTTAAGAGTTGATAGGTATGATTTAGTTATGATT
chr3	16097679	16097799	Hypo	1 -	CACAAATCTAATCAAATCATTTTTCTATTTACAAATTTCAATAACTACCCATTATCCTAATTATAAATCAATACTTCTCAACAAACCTTAAAAATTAACAAACATAATCCAACTATAATT
chr3	16097679	16097799	Hypo	1 +	TATAAATTTGATTAGGTTATTTTTTGTTTATAAATTTTAGTGATTGTTTATTGTTTAATTATAAATTAATATTTTTTAGTAGGTTTTAAGAGTTGATAGGTATGATTTAGTTATGATT
chr3	16097679	16097799	Hypo	1 -	CACAAATCTAATCAAATCATTTTTCTATTTACAAATTTCAATAACTACCCATTATCCTAATTATAAATCAATACTTCTCAACAAACCTTAAAAATTAACAAACATAATCCAACTATAATT
chr3	16097679	16097799	Hypo	1 +	TATAAATTTGATTAGGTTATTTTTTGTTTATAAATTTTAGTGATTGTTTATTGTTTAATTATAAATTAATATTTTTTAGTAGGTTTTAAGAGTTGATAGGTATGATTTAGTTATGATT
chr8	5996116	5996236	Hypo	1 -	ACAAACTCACACAAATCAATAAAAAACTAAAACTATCCTCTCTAATAAAAACTCAAAAATCCACCTCTACACTACAATCTAATAAACACCCAAAATCCTAATATATCTCTCTTATT
chr8	5996116	5996236	Hypo	1 +	GTAGATTTTATATAAGTTAATGAGGGAGTTTGGAGTTGTTTTTTTGGTGAGGATTTTAGAGAGTTTATTTTTGTATTGTAGTTTGATGAGTATTTAGAATTTTGATGTGTTTTTTTGTT
chr8	5996116	5996236	Hypo	1 -	ACAAACTCACACAAATCAATAAAAAACTAAAACTATCCTCTCTAATAAAAACTCAAAAATCCACCTCTACACTACAATCTAATAAACACCCAAAATCCTAATATATCTCTCTTATT
chr8	5996116	5996236	Hypo	1 +	GTAGATTTTATATAAGTTAATGAGGGAGTTTGGAGTTGTTTTTTTGGTGAGGATTTTAGAGAGTTTATTTTTGTATTGTAGTTTGATGAGTATTTAGAATTTTGATGTGTTTTTTTGTT
chr8	5996116	5996236	Hypo	1 -	ACAAACTCACACAAATCAATAAAAAACTAAAACTATCCTCTCTAATAAAAACTCAAAAATCCACCTCTACACTACAATCTAATAAACACCCAAAATCCTAATATATCTCTCTTATT
chr8	5996116	5996236	Hypo	1 +	GTAGATTTTATATAAGTTAATGAGGGAGTTTGGAGTTGTTTTTTTGGTGAGGATTTAGAGAGTTTATTTTTGTATTGTAGTTTGATGAGTATTTAGAATTTTGATGTGTTTTTTTGTT
chr8	5996116	5996236	Hypo	1 -	ACAAACTCACACAAATCAATAAAAAACTAAAACTATCCTCTCTAATAAAAACTCAAAAATCCACCTCTACACTACAATCTAATAAACACCCAAAATCCTAATATATCTCTCTTATT
chr8	5996116	5996236	Hypo	1 +	GTAGATTTTATATAAGTTAATGAGGGAGTTTGGAGTTGTTTTTTTGGTGAGGATTTAGAGAGTTTATTTTTGTATTGTAGTTTGATGAGTATTTAGAATTTTGATGTGTTTTTTTGTT
chr12	91207079	91207199	Hypo	1 -	ATTCATTTATTCAAAAAATTTATATTTAATACTATTCTATAAAAACAATTCTCCCAAATTCAAAAAAAATTAAAAATATATAAAACTAAATAACACACTCAAAAAACTTAAAATCTAAT
chr12	91207079	91207199	Hypo	1 +	ATTTGTTATTTAAGAAGTTATATTTGGTGTTTATTTTGTGGAAGTAGTTTTTTTAAATTTAAGAGGAATTAAAGATGTATAGGATTAAGTAATATTTAAAGGATTTAGATTTAGT
chr12	91207079	91207199	Hypo	1 -	ATTCATTTATTCAAAAAATTTATATTTAATACTATTCTATAAAAACAATTCTCCCAAATTTCAAAAAAATTAAAAATATATAAAACTAAATAACACACTCAAAAAACTTAAAATCTAAT
chr12	91207079	91207199	Hypo	1 +	ATTTGTTATTTAAGAAGTTTATATTTGGTGTTTATTTTGTGGAAGTAGTTTTTTTAATTTTAGAGGAATTAAAGATGTATAGGATTAAGTAATATTTAAAGGATTTAGATTTAGT
chr12	91207079	91207199	Hypo	1 -	ATTCGTTTATTCAAAAAATTTATATTTAATACTTATTCTATAAAAACAATTCTCCCAAATTTCAAAAAAATTAAAAATATATAAAACTAAATAACACACTCAAAAAACTTAAAATCTAAT
chr12	91207079	91207199	Hypo	1 +	ATTCGTTTATTTAAGAAGTTTATATTTGGTGTTTATTTTGTGGAAGTAGTTTTTTTAATTTTAGAGGAATTAAAGATGTATAGGATTAAGTAATATTTAAAGGATTTAGATTTAGT
chr12	91207079	91207199	Hypo	1 -	ATTCGTTTATTCAAAAAATTTATATTTAATACTATTCTATAAAAACAATTCTCCCAAATTTCAAAAAAATTAAAAATATATAAAACTAAATAACACACTCAAAAAACTTAAAATCTAAT
chr12	91207079	91207199	Hypo	1 +	ATTCGTTTATTTAAGAAGTTTATATTTGGTGTTTATTTTGTGGAAGTAGTTTTTTTAATTTTAGAGGAATTAAAGATGTATAGGATTAAGTAATATTTAAAGGATTTAGATTTAGT
chr14	56195935	56196055	Hypo	1 -	ACAAAACCTAAACTCCAAAAAAATTAAAAAATAATTTTCAACTTTCTAATATAAAAAATAATCAAACCAATCCACAATATCTACTATAATACCTTCCATAAAATTATTATAAAAATAAA
chr14	56195935	56196055	Hypo	1 +	GTAAAGTTTGAGTTTAAAGGAATTTGGGAAATAGTTTTTAGTTTTTTAGTATGGAGGATGATTAAGTTAATTTATAATATTTGTTATAGATTTTTATGAGATTGTTGTGAAGATGAA
chr14	56195935	56196055	Hypo	1 -	ACAAAACCTAAACTCCAAAAAAATTAAAAAATAATTTTCAACTTTCTAATATAAAAAATAAACAAACCAATCCACAATATCTACTATAATACCTTCCATAAAATTATTATAAAAATAAA
chr14	56195935	56196055	Hypo	1 +	GTAAAGTTTGAGTTTAAAGGAATTTGGGAAATAGTTTTTAGTTTTTTAGTATGGAGGATGATTAAGTTAATTTATAATATTTGTTATAGATTTTTATGAGATTGTTGTGAAGATGAA
chr14	56195935	56196055	Hypo	1 -	ACAAACCTAAACTCCAAAAAAATTAAAAAATAATTTTCAACTTTCTAATATAAAAAATAAACAAACCAATCCACAATATCTACTATAATACCTTCCATAAAATTATTATAAAAATAAA
chr14	56195935	56196055	Hypo	1 +	GTAAAGTTTGAGTTTAAAGGAATTTGGGAAATAGTTTTTAGTTTTTTAGTATGGAGGATGATTAAGTTAATTTATAATATTTGTTATAGATTTTTATGAGATTGTTGTGAAGATGAA
chr14	56195935	56196055	Hypo	1 -	ACAAACCTAAACTCCAAAAAAATTAAAAAATAATTTTCAACTTTCTAATATAAAAAATAAACAAACCAATCCACAATATCTACTATAATACCTTCCATAAAATTATTATAAAAATAAA
chr14	56195935	56196055	Hypo	1 +	GTAAAGTTTGAGTTTAAAGGAATTTGGGAAATAGTTTTTAGTTTTTTAGTATGGAGGATGATTAAGTTAATTTATAATATTTGTTATAGATTTTTATGAGATTGTTGTGAAGATGAA
chr2	56814917	56815037	Hypo	1 -	TTCTATTAACATCACCCCCCTTAAAATTTTAAAAAATAATATTAAATATCTACTAATAAAAAATCAAACTAAAACACTAATTTCTTACATAATAATATTATTTCTTATAAAATAAAA
chr2	56814917	56815037	Hypo	1 +	TTTTGTTAATATTGTTTTTTTTTAGGATTTTTAAGAAATAATATTGAATATTTATTAATGAGGAGTTAAATTAAAATATTAATTTTTTGATATAGTGTATTTGTTTTTTATAAAATGAAA
chr2	56814917	56815037	Hypo	1 -	TTCTATTAACATCACCCCCCTTAAAATTTTAAAAAATAATATTAAATATCTACTAATAAAAAATCAAACTAAAACACTAATTTCTTACATAATAATATTATTTCTTATAAAATAAAA
chr2	56814917	56815037	Hypo	1 +	TTTTGTTAATATTGTTTTTTTTTAGGATTTTTAAGAAATAATATTGAATATTTATTAATGAGGAGTTAAATTAAAATATTAATTTTTTGATATAGTGTATTTGTTTTTTATAAAATGAAA
chr2	56814917	56815037	Hypo	1 -	TTCTATTAACATCACCCCCCTTAAAATTTTAAAAAATAATATTAAATATCTACTAATAAAAAATCAAACTAAAACACTAATTTCTTACATAATAATATTATTTCTTATAAAATAAAA
chr2	56814917	56815037	Hypo	1 +	TTTTGTTAATATTGTTTTTTTTTAGGATTTTTAAGAAATAATATTGAATATTTATTAATGAGGAGTTAAATTAAAATATTAATTTTTTGATATAGTGTATTTGTTTTTTATAAAATGAAA
chr2	56814917	56815037	Hypo	1 -	TTCTATTAACATCACCCCCCTTAAAATTTTAAAAAATAATATTAAATATCTACTAATAAAAAATCAAACTAAAACACTAATTTCTTACATAATAATATTATTTCTTATAAAATAAAA
chr2	56814917	56815037	Hypo	1 +	TTTTGTTAATATTGTTTTTTTTTAGGATTTTTAAGAAATAATATTGAATATTTATTAATGAGGAGTTAAATTAAAATATTAATTTTTTGATATAGTGTATTTGTTTTTTATAAAATGAAA
chr11	103305247	103305347	Hypo	1 -	ACTTACATTCTCCTAAAAATCCCTCCAACTTCAACCCATCACCTAATCTCAAATCCAATACCATATAATTAAAAATTTATTAAAACAACACCCTACCTCTAATATCTAAAATCATTAT

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chr11	103305227	103305347	Hypo	1 +	ATTTATATTTTTTTAAAGATTTTTTTAGTTTTAGTTTATTATTTAGTTTTAAGTTTAATGTTATATGATTGAGGATTTTGTTAAGGTAGTATTTTGTTTTTGGTGTATTAAAATTATTAT
chr11	103305227	103305347	Hypo	1 -	ACTTACATTCTCCTAAAAATCCCTCCAACTTCAACCCATCACCTAATCTCAAATCCAAAACCCTATAATTAAAAATTTTATTAAAACAACACCCTACCTCTAATATATCAAAATCATTAT
chr11	103305227	103305347	Hypo	1 +	ATTTATATTTTTTTAAAGATTTTTTTAGTTTTAGTTTATTATTTAGTTTTAAGTTTAAAGTTTTATGATTGAGGATTTTGTTAAGGTAGTATTTTGTTTTTGGTGTATTAAAATTATTAT
chr11	103305227	103305347	Hyper	1 -	ACTTACATTCTCCTAAAAATCCCTCCAACTTCAACCCATCACCTAATCTCAAATCCAATACCATATAATTAAAAATTTTATTAAAACAACACCCTACCTCTAATATATCAAAATCATTAT
chr11	103305227	103305347	Hyper	1 +	ATTTATATTTTTTTAAAGATTTTTTTAGTTTTAGTTTATTATTTAGTTTTAAGTTTAATGTTATATGATTGAGGATTTTGTTAAGGTAGTATTTTGTTTTTGGTGTATTAAAATTATTAT
chr11	103305227	103305347	Hyper	1 -	ACTTACATTCTCCTAAAAATCCCTCCAACTTCAACCCATCACCTAATCTCAAATCCAAAACCCTATAATTAAAAATTTTATTAAAACAACACCCTACCTCTAATATATCAAAATCATTAT
chr11	103305227	103305347	Hyper	1 +	ATTTATATTTTTTTAAAGATTTTTTTAGTTTTAGTTTATTATTTAGTTTTAAGTTTAAAGTTTTATGATTGAGGATTTTGTTAAGGTAGTATTTTGTTTTTGGTGTATTAAAATTATTAT
chr6	41021446	41021566	Hypo	1 -	CCTTAAAAACAAAAACCCAAAAAATAAAACCACCCTTCAAACCTCCTAATATTAAAATAACCACCTACCTCTCTAAATAAAAACTTAATCCCAAAAAATTTAACAAAAACAAAAAATAAA
chr6	41021446	41021566	Hypo	1 +	TTTTGGAGGTAAAAGTTTAGAGAATAAAATTATTTTTTAGGTTTTTTGGTATTGGGATGGTTATTTGTTTTTTTGGGTAGAAGTTTAGTTTTAGGGAGTTTGGTGAGGATAGAGGATGAG
chr6	41021446	41021566	Hypo	1 -	CCTTAAAAACAAAAACCCAAAAAATAAAACCACCCTTCAAACCTCCTAATATTAAAATACCCCCCTACCTCTCTAAATAAAAACTTAATCCCAAAAAATTTAACAAAAACAAAAAATAAA
chr6	41021446	41021566	Hypo	1 +	TTTTGGAGGTAAAAGTTTAGAGAATAAAATTATTTTTTAGGTTTTTTGGTATTGGGATGTTTTTTTGTTTTTTTGGGTAGAAGTTTAGTTTTAGGGAGTTTGGTGAGGATAGAGGATGAG
chr6	41021446	41021566	Hyper	1 -	CCTTAAAAACAAAAACCCAAAAAATAAAACCACCCTTCAAACCTCCTAATATTAAAATAACCACCTACCTCTCTAAATAAAAACTTAATCCCAAAAAATTTAACGAAAACAAAAAATAAA
chr6	41021446	41021566	Hyper	1 +	TTTTGGAGGTAAAAGTTTAGAGAATAAAATTATTTTTTAGGTTTTTTGGTATTGGGATGGTTATTTGTTTTTTTGGGTAGAAGTTTAGTTTTAGGGAGTTTGGCGAGGATAGAGGATGAG
chr6	41021446	41021566	Hyper	1 -	CCTTAAAAACAAAAACCCAAAAAATAAAACCACCCTTCAAACCTCCTAATATTAAAATACCCCCCTACCTCTCTAAATAAAAACTTAATCCCAAAAAATTTAACGAAAACAAAAAATAAA
chr6	41021446	41021566	Hyper	1 +	TTTTGGAGGTAAAAGTTTAGAGAATAAAATTATTTTTTAGGTTTTTTGGTATTGGGATGTTTTTTTGTTTTTTTGGGTAGAAGTTTAGTTTTAGGGAGTTTGGCGAGGATAGAGGATGAG
chr2	155357045	155357165	Hypo	1 -	TATCTTCTTTACTACTAAAAAAATTCTCTATTTCTTACCACCACAATTAAAAATAAAAAATTAACCAATTTTAATTAAACTAATATTCTTTAAATTTATATTTAAAATTCTCTATTTATAA
chr2	155357045	155357165	Hypo	1 +	TGTTTTTTTTGTTATTAGGGAGTTTTTTGTTTTTTATTATTATAGTTGGAAGTGGAAGGTTAGTTAATTTTGATTGGATTGGTGTTTTTTAAATTTGTGTTTGGAGTTTTTTATTTGTGA
chr2	155357045	155357165	Hypo	1 -	TATCTTCTTTACTACTAAAAAAATTCTCTATTTCTTACCACCACAATTAAAAATAAAAAATTTAAACAATTTTAATTAAACTAATATTCTTTAAATTTATATTTAAAATTCTCTATTTATAA
chr2	155357045	155357165	Hypo	1 +	TGTTTTTTTTGTTATTAGGGAGTTTTTTGTTTTTTATTATTATAGTTGGAAGTGGAAGTTTAGATAATTTTGATTGGATTGGTGTTTTTTAAATTTGTGTTTGGAGTTTTTTATTTGTGA
chr2	155357045	155357165	Hyper	1 -	TATCTTCTTTACTACTAAAAAAATTCTCTATTTCTTACCACCACAATTAAAAATAAAAAATTAACCAATTTTAATTAAACTAATATTCTTTAAATTTATATTTAAAATTCTCTATTTATAA
chr2	155357045	155357165	Hyper	1 +	TGTTTTTTTTGTTATTAGGGAGTTTTTTGTTTTTTATTATTATAGTTGGAAGTGGAAGGTTAGTTAATTTTGATTGGATTGGTGTTTTTTAAATTTGTGTTTGGAGTTTTTTATTTGTGA
chr2	155357045	155357165	Hyper	1 -	TATCTTCTTTACTACTAAAAAAATTCTCTATTTCTTACCACCACAATTAAAAATAAAAAATTTAAACAATTTTAATTAAACTAATATTCTTTAAATTTATATTTAAAATTCTCTATTTATAA
chr2	155357045	155357165	Hyper	1 +	TGTTTTTTTTGTTATTAGGGAGTTTTTTGTTTTTTATTATTATAGTTGGAAGTGGAAGTTTAGATAATTTTGATTGGATTGGTGTTTTTTAAATTTGTGTTTGGAGTTTTTTATTTGTGA
chr1	95136012	95136132	Hypo	1 -	TTCACATTAAATACAAATAACTTTTTTAATAAAAATCAAATATATAAACCAAATCCCACATATAAATCACTTTAATATAAAACAAAAACAACATCTACAAACTAAAAAACTAAATCAAAA
chr1	95136012	95136132	Hypo	1 +	TTTATATTGAGTATGAGTGGTTTTTTTAGTGGAAGTTAAGTGTATAGGTTAAGTTTTATATGTGGGTTATTTTGATGTAAAATAAAGATAATATTTATAGATTGAAGAGTTGAGTTAGAA
chr1	95136012	95136132	Hypo	1 -	TTCACATTAAATACAAATAACTTTTTTAATAAAAATCAAATATATAAACCAAATCCCAAATATCAATCACTTTAATATAAAACAAAAACAACATCTACAAACTAAAAAACTAAATCAAAA
chr1	95136012	95136132	Hypo	1 +	TTTATATTGAGTATGAGTGGTTTTTTTAGTGGAAGTTAAGTGTATAGGTTAAGTTTTAAATGTTGGTTATTTTGATGTAAAATAAAGATAATATTTATAGATTGAAGAGTTGAGTTAGAA
chr1	95136012	95136132	Hyper	1 -	TTCACATTAAATACGAATAACTTTTTTAATAAAAATCAAATATATAAACCAAATCCCACATATAAATCACTTTAATATAAAACAAAAACAACATCTACAAACTAAAAAACTAAATCAAAA
chr1	95136012	95136132	Hyper	1 +	TTTATATTGAGTACGAGTGGTTTTTTTAGTGGAAGTTAAGTGTATAGGTTAAGTTTTATATGTGGGTTATTTTGATGTAAAATAAAGATAATATTTATAGATTGAAGAGTTGAGTTAGAA
chr1	95136012	95136132	Hyper	1 -	TTCACATTAAATACGAATAACTTTTTTAATAAAAATCAAATATATAAACCAAATCCCAAATATCGATCACTTTAATATAAAACAAAAACAACATCTACAAACTAAAAAACTAAATCAAAA
chr1	95136012	95136132	Hyper	1 +	TTTATATTGAGTACGAGTGGTTTTTTTAGTGGAAGTTAAGTGTATAGGTTAAGTTTTAAATGTCGGTTATTTTGATGTAAAATAAAGATAATATTTATAGATTGAAGAGTTGAGTTAGAA
chr1	110815893	110816013	Hypo	1 -	TAAACTTAATACTAAAAAAACAAATAAATACAACACTAAACCTTCACTAAATCATAAATTTCTACTCATAATTTAATAAAAACACTTTAACATTCTATTAATACTACAACAAAACAATCT
chr1	110815893	110816013	Hypo	1 +	TAGGTTTGGTGTTAAGGAAGTAGATAAATATAATATTAAATTTTTATTAAATTATGAGTTTTTGTTTATGGTTTAGTGGAGATATTTTGGTATTTTATTGGTATTGTAATAAAATAGTTT
chr1	110815893	110816013	Hypo	1 -	TAAACTTAATACTAAAAAAACAAATAAATACAACACTAAACCTTCACTAAATCATAAAATTCTTCTCATAATTTAATAAAAACACTTTAACATTCTATTAATACTACAACAAAACAATCT
chr1	110815893	110816013	Hypo	1 +	TAGGTTTGGTGTTAAGGAAGTAGATAAATATAATATTAAATTTTTATTAAATTATGAGATTTTTTTTATGGTTTAGTGGAGATATTTTGGTATTTTATTGGTATTGTAATAAAATAGTTT
chr1	110815893	110816013	Hyper	1 -	TAAACTTAATACTAAAAAAACAAATAAATACAACACTAAACCTTCACTAAATCATAAATTTCTACTCATAATTTAATAAAAACACTTTAACATTCTATTAATACTACAACAAAACAATCT
chr1	110815893	110816013	Hyper	1 +	TAGGTTTGGTGTTAAGGAAGTAGATAAATATAATATTAAATTTTTATTAAATTATGAGTTTTTGTTTATGGTTTAGTGGAGATATTTTGGTATTTTATTGGTATTGTAATAAAATAGTTT
chr1	110815893	110816013	Hyper	1 -	TAAACTTAATACTAAAAAAACAAATAAATACAACACTAAACCTTCACTAAATCATAAAATTCTTCTCATAATTTAATAAAAACACTTTAACATTCTATTAATACTACAACAAAACAATCT
chr1	110815893	110816013	Hyper	1 +	TAGGTTTGGTGTTAAGGAAGTAGATAAATATAATATTAAATTTTTATTAAATTATGAGATTTTTTTTATGGTTTAGTGGAGATATTTTGGTATTTTATTGGTATTGTAATAAAATAGTTT
chr18	3935997	3936117	Hypo	1 -	AAACTTAACCAACCCACAATACAAAATACTCTCTTAAAAAACATTCCAACCTCTACTAAAATCACATTACCATCTTACAAAATCTTAACCTATAACAAAAATACAAACTAAACCCCCCCA
chr18	3935997	3936117	Hypo	1 +	AGATTTAATTAGTTTATAATATAGAGTATTTTTTTGAGGGGTATTTTAGTTTTTGTTGGGGTTATATTGTTATTTTATAGAGTTTTAATTTGTGATAGGGGTATAGGTTGAATTTTTTTA
chr18	3935997	3936117	Hypo	1 -	AAACTTAACCAACCCACAATACAAAATACTCTCTTAAAAAACATTCCAACCTCTACTTAAATCAAATTACCATCTTACAAAATCTTAACCTATAACAAAAATACAAACTAAACCCCCCCA
chr18	3935997	3936117	Hypo	1 +	AGATTTAATTAGTTTATAATATAGAGTATTTTTTTGAGGGGTATTTTAGTTTTTGTTTGGGTTAGATTGTTATTTTATAGAGTTTTAATTTGTGATAGGGGTATAGGTTGAATTTTTTTA
chr18	3935997	3936117	Hyper	1 -	AAACTTAACCAACCCACAATACAAAATACTCTCTTAAAAAACATTCCAACCTCTACTAAAATCACATTACCATCTTACAAAATCTTAACCTATAACAAAAATACAAACTAAACCCCCCCA
chr18	3935997	3936117	Hyper	1 +	AGATTTAATTAGTTTATAATATAGAGTATTTTTTTGAGGGGTATTTTAGTTTTTGTTGGGGTTATATTGTTATTTTATAGAGTTTTAATTTGTGATAGGGGTATAGGTTGAATTTTTTTA
chr18	3935997	3936117	Hyper	1 -	AAACTTAACCAACCCACAATACAAAATACTCTCTTAAAAAACATTCCAACCTCTACTTAAATCAAATTACCATCTTACAAAATCTTAACCTATAACAAAAATACAAACTAAACCCCCCCA
chr18	3935997	3936117	Hyper	1 +	AGATTTAATTAGTTTATAATATAGAGTATTTTTTTGAGGGGTATTTTAGTTTTTGTTTGGGTTAGATTGTTATTTTATAGAGTTTTAATTTGTGATAGGGGTATAGGTTGAATTTTTTTA
chr1	107494712	107494832	Hypo	1 -	TCACACAAAAACCCACTAAAAAAAACCTCCTCTCCTATTTATATATCAACAACTAATACCTTATCAATACTCCAATTCTTTCCATAATACTATTATCTCCATATAAAACTACTATTATAAA
chr1	107494712	107494832	Hypo	1 +	TTATATAAGAGTTTATTAAGAAAATTTTTTTTTTTGTTTATGTATTAGTAGTTGGTGTTTTATTAATGTTTTAGTTTTTTTTATGGTGTTATTGTTTTTATATAAGGTTGTTGTTATGAA
chr1	107494712	107494832	Hypo	1 -	TCACACAAAAACCCACTAAAAAAAACCTCCTCTCCTATTTATATATCAACAACTAATACCTATTCAATACTCCAATTCTTTCCATAATACTATTATCTCCATATAAAACTACTATTATAAA
chr1	107494712	107494832	Hypo	1 +	TTATATAAGAGTTTATTAAGAAAATTTTTTTTTTTGTTTATGTATTAGTAGTTGGTGTTTATTTAATGTTTTAGTTTTTTTTATGGTGTTATTGTTTTTATATAAGGTTGTTGTTATGAA
chr1	107494712	107494832	Hyper	1 -	TCACACAAAAACCCACTAAAAAAAACCTCCTCTCCTATTTATATATCAACAACTAATACCTTATCAATACTCCAATTCTTTCCATAATACTATTATCTCCATATAAAACTACTATTATAAA
chr1	107494712	107494832	Hyper	1 +	TTATATAAGAGTTTATTAAGAAAATTTTTTTTTTTGTTTATGTATTAGTAGTTGGTGTTTTATTAATGTTTTAGTTTTTTTTATGGTGTTATTGTTTTTATATAAGGTTGTTGTTATGAA

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chr1	107494712	107494832	Hyper	1 -	TCACACAAAAACCCACTAAAAAAAACCTCCTCTCCTATTTATATATCAACAACTAATACCTATTCAATACTCCAATTCTTTCCATAATACTATTATCTCCATATAAAACTACTATTATAAA
chr1	107494712	107494832	Hyper	1 +	TTATATAAGAGTTTATTAAGAAAATTTTTTTTTTTGTTTATGTATTAGTAGTTGGTGTTTATTTAATGTTTTAGTTTTTTTTATGGTGTTATTGTTTTTATATAAGGTTGTTGTTATGAA
chr3	192994953	192995073	Hypo	1 -	AAAATTAAATCATTCATCAAATAATATTAATATTTCCAATTCTCCCAAAACAAATTCTACCTAAAATTCATTCTTTAAAAAAAACAAAAAAATATAAATATATTTTAATTAAAACTAAAT
chr3	192994953	192995073	Hypo	1 +	AAGATTAAATTATTTATTAAATAATGTTAATATTTTTAATTTTTTTAAAGTAAATTTTATTTGGAATTTATTTTTTAAGGAGGATAGAGAAATGTAAGTATATTTTGATTGAGATTAGAT
chr3	192994953	192995073	Hypo	1 -	AAAATTAAATCATTCATCAAATAATATTAATATTTCCAATTCTCCCAAAACAAATTCTACAAAAAAATTCATTCTTTAAAAAAAACAAAAAAATATAAATATATTTTAATTAAAACTAAAT
chr3	192994953	192995073	Hypo	1 +	AAGATTAAATTATTTATTAAATAATGTTAATATTTTTAATTTTTTTAAAGTAAATTTTATGGGGAATTTATTTTTTAAGGAGGATAGAGAAATGTAAGTATATTTTGATTGAGATTAGAT
chr3	192994953	192995073	Hyper	1 -	AAAATTAAATCATTCATCAAATAATATTAATATTTCCAATTCTCCCAAAACAAATTCTACCTAAAATTCATTCTTTAAAAAAAACAAAAAAATATAAATATATTTTAATTAAAACTAAAT
chr3	192994953	192995073	Hyper	1 +	AAGATTAAATTATTTATTAAATAATGTTAATATTTTTAATTTTTTTAAAGTAAATTTTATTTGGAATTTATTTTTTAAGGAGGATAGAGAAATGTAAGTATATTTTGATTGAGATTAGAT
chr3	192994953	192995073	Hyper	1 -	AAAATTAAATCATTCATCAAATAATATTAATATTTCCAATTCTCCCAAAACAAATTCTACGAAAAAATTCATTCTTTAAAAAAAACAAAAAAATATAAATATATTTTAATTAAAACTAAAT
chr3	192994953	192995073	Hyper	1 +	AAGATTAAATTATTTATTAAATAATGTTAATATTTTTAATTTTTTTAAAGTAAATTTTACGGGGAATTTATTTTTTAAGGAGGATAGAGAAATGTAAGTATATTTTGATTGAGATTAGAT
chr19	44551805	44551925	Hypo	1 -	TTAAATAAAACACACAATAAAATTTATAAAATTATAAAAAACATATACTCTATATAAAATAATTTTCCAAAATATATTATTAAATAACCATAAAAAATTTAAATAAATACTACCTTTTAT
chr19	44551805	44551925	Hypo	1 +	TTGAATAAAGTATATAATGGAGTTTGTGGAGTTGTGAAAAGTATGTATTTTATATGAAGTGATTTTTTAGGATATATTGTTGAGTGATTATAGAAGGTTTAGATGAATGTTATTTTTTGT
chr19	44551805	44551925	Hypo	1 -	TTAAATAAAACACACAATAAAATTTATAAAATTATAAAAAACATATACTCTATATAAAATTTTTTTCCAAAATATATTATTAAATAACCATAAAAAATTTAAATAAATACTACCTTTTAT
chr19	44551805	44551925	Hypo	1 +	TTGAATAAAGTATATAATGGAGTTTGTGGAGTTGTGAAAAGTATGTATTTTATATGAAGTTTTTTTTTAGGATATATTGTTGAGTGATTATAGAAGGTTTAGATGAATGTTATTTTTTGT
chr19	44551805	44551925	Hyper	1 -	TTAAATAAAACACACAATAAAATTTATAAAATTATAAAAAACATATACTCTATATAAAATAATTTTCCAAAATATATTATTAAATAACCATAAAAAATTTAAATAAATACTACCTTTTAT
chr19	44551805	44551925	Hyper	1 +	TTGAATAAAGTATATAATGGAGTTTGTGGAGTTGTGAAAAGTATGTATTTTATATGAAGTGATTTTTTAGGATATATTGTTGAGTGATTATAGAAGGTTTAGATGAATGTTATTTTTTGT
chr19	44551805	44551925	Hyper	1 -	TTAAATAAAACACACAATAAAATTTATAAAATTATAAAAAACATATACTCTATATAAAATTTTTTTCCAAAATATATTATTAAATAACCATAAAAAATTTAAATAAATACTACCTTTTAT
chr19	44551805	44551925	Hyper	1 +	TTGAATAAAGTATATAATGGAGTTTGTGGAGTTGTGAAAAGTATGTATTTTATATGAAGTTTTTTTTTAGGATATATTGTTGAGTGATTATAGAAGGTTTAGATGAATGTTATTTTTTGT
chr1	248514047	248514167	Hypo	1 -	TAATAAAAACACCCACCTCAAAACCTAAACAACTATTTCATCTTAAAACTAAACACATCACATTTATAAATTCTTTTATAAATATAAAAATAACCCAAAATATCCCCCTACATACCTTAC
chr1	248514047	248514167	Hypo	1 +	TGATGGGAGTATTTATTTTAAAGTTTAAGTGATTATTTTATTTTAGAGTTGAATATATTATGTTTATGAGTTTTTTTGTGAATATGGAAATAATTTAAAGTATTTTTTTGTATGTTTTAT
chr1	248514047	248514167	Hypo	1 -	TAATAAAAACACCCACCTCAAAACCTAAACAACTATTTCATCTTAAAACTAAACACATCAACTTTATAAATTCTTTTATAAATATAAAAATAACCCAAAATATCCCCCTACATACCTTAC
chr1	248514047	248514167	Hypo	1 +	TGATGGGAGTATTTATTTTAAAGTTTAAGTGATTATTTTATTTTAGAGTTGAATATATTAGTTTTATGAGTTTTTTTGTGAATATGGAAATAATTTAAAGTATTTTTTTGTATGTTTTAT
chr1	248514047	248514167	Hyper	1 -	TAATAAAAACACCCACCTCAAAACCTAAACGACTATTTCATCTTAAAACTAAACACATCACGTTTATAAATTCTTTTATAAATATAAAAATAACCCAAAATATCCCCCTACATACCTTAC
chr1	248514047	248514167	Hyper	1 +	TGATGGGAGTATTTATTTTAAAGTTTAAGCGATTATTTTATTTTAGAGTTGAATATATTACGTTTATGAGTTTTTTTGTGAATATGGAAATAATTTAAAGTATTTTTTTGTATGTTTTAT
chr1	248514047	248514167	Hyper	1 -	TAATAAAAACACCCACCTCAAAACCTAAACGACTATTTCATCTTAAAACTAAACACATCAACTTTATAAATTCTTTTATAAATATAAAAATAACCCAAAATATCCCCCTACATACCTTAC
chr1	248514047	248514167	Hyper	1 +	TGATGGGAGTATTTATTTTAAAGTTTAAGCGATTATTTTATTTTAGAGTTGAATATATTAGTTTTATGAGTTTTTTTGTGAATATGGAAATAATTTAAAGTATTTTTTTGTATGTTTTAT
chr9	83643464	83643584	Hypo	1 -	AACATCCTTCAATACACCCAAAAATTCTCCTCTCTATACAAAAACACTAATTCTTTAAATATCAAAAACTAAAACAAATTACACATTATCAAAAAAAAAATCACCCTCAATTACTCATCA
chr9	83643464	83643584	Hypo	1 +	GATATTTTTTAGTATATTTGAAAATTTTTTTTTTTGTGTAGAAATATTGGTTTTTTGAATGTTAGGGATTGGAATAGATTGTGTATTGTTGAGAAGAGAGTTATTTTTAATTATTTATTA
chr9	83643464	83643584	Hypo	1 -	AACATCCTTCAATACACCCAAAAATTCTCCTCTCTATACAAAAACACTAATTCTTTAAATTACAAAAACTAAAACAAATTACACATTATCAAAAAAAAAATCACCCTCAATTACTCATCA
chr9	83643464	83643584	Hypo	1 +	GATATTTTTTAGTATATTTGAAAATTTTTTTTTTTGTGTAGAAATATTGGTTTTTTGAATTATAGGGATTGGAATAGATTGTGTATTGTTGAGAAGAGAGTTATTTTTAATTATTTATTA
chr9	83643464	83643584	Hyper	1 -	AACATCCTTCAATACACCCGAAAATTCTCCTCTCTATACAAAAACACTAATTCTTTAAATATCAAAAACTAAAACAAATTACGCATTATCGAAAAAAAAATCACCCTCAATTACTCATCA
chr9	83643464	83643584	Hyper	1 +	GATATTTTTTAGTATATTCGAAAATTTTTTTTTTTGTGTAGAAATATTGGTTTTTTGAATGTTAGGGATTGGAATAGATTGCGTATTGTCGAGAAGAGAGTTATTTTTAATTATTTATTA
chr9	83643464	83643584	Hyper	1 -	AACATCCTTCAATACACCCGAAAATTCTCCTCTCTATACAAAAACACTAATTCTTTAAATTACAAAAACTAAAACAAATTACGCATTATCGAAAAAAAAATCACCCTCAATTACTCATCA
chr9	83643464	83643584	Hyper	1 +	GATATTTTTTAGTATATTCGAAAATTTTTTTTTTTGTGTAGAAATATTGGTTTTTTGAATTATAGGGATTGGAATAGATTGCGTATTGTCGAGAAGAGAGTTATTTTTAATTATTTATTA
chr1	172221657	172221777	Hypo	1 -	AAAATTATAACTAAATCTCCATTCTCTCCAACTCTAAACTTTAACCCTACTCTCTTTCACAAATAACACCAAAAATATAACCTAAAACCATACAAAAAACCATAATTAACAAAAACAACA
chr1	172221657	172221777	Hypo	1 +	AAAGTTATGATTAAGTTTTTATTTTTTTTAGTTTTGGATTTTAGTTTTGTTTTTTTTTATGGGTAATATTAGAGATGTAATTTGGGATTATATAGAGGATTATGGTTAATAAGGGTAGTG
chr1	172221657	172221777	Hypo	1 -	AAAATTATAACTAAATCTCCATTCTCTCCAACTCTAAACTTTAACCCTACTCTCTTTCACTCATAACACCAAAAATATAACCTAAAACCATACAAAAAACCATAATTAACAAAAACAACA
chr1	172221657	172221777	Hypo	1 +	AAAGTTATGATTAAGTTTTTATTTTTTTTAGTTTTGGATTTTAGTTTTGTTTTTTTTTATTTGTAATATTAGAGATGTAATTTGGGATTATATAGAGGATTATGGTTAATAAGGGTAGTG
chr1	172221657	172221777	Hyper	1 -	AAAATTATAACTAAATCTCCATTCTCTCCAACTCTAAACTTTAACCCTACTCTCTTTCACGAATAACACCAAAAATATAACCTAAAACCATACAAAAAACCATAATTAACAAAAACAACG
chr1	172221657	172221777	Hyper	1 +	AAAGTTATGATTAAGTTTTTATTTTTTTTAGTTTTGGATTTTAGTTTTGTTTTTTTTTACGGGTAATATTAGAGATGTAATTTGGGATTATATAGAGGATTATGGTTAATAAGGGTAGCG
chr1	172221657	172221777	Hyper	1 -	AAAATTATAACTAAATCTCCATTCTCTCCAACTCTAAACTTTAACCCTACTCTCTTTCACTCGTAACACCAAAAATATAACCTAAAACCATACAAAAAACCATAATTAACAAAAACAACG
chr1	172221657	172221777	Hyper	1 +	AAAGTTATGATTAAGTTTTTATTTTTTTTAGTTTTGGATTTTAGTTTTGTTTTTTTTTATTCGTAATATTAGAGATGTAATTTGGGATTATATAGAGGATTATGGTTAATAAGGGTAGCG
chr12	12813585	12813705	Hypo	1 -	TTCCAATATATAACATACTTTCCATAACAAATCTAACTAATAATTACTTAAAAAAAAAATAACATAACAACCTATACAATATTAACTCATCCTAAATATTACTTAATAAAAAAAAATATAAA
chr12	12813585	12813705	Hypo	1 +	TTTTAATATATGGTGTGTTTTTTATAGTAGATTTGGTTAGTGGTTATTTGGAGGAAGGTAATGTGATAATTTATATAATATTAATTTATTTTAAATGTTGTTTAGTGAAAGAAATATAAA
chr12	12813585	12813705	Hypo	1 -	TTCCAATATATAACATACTTTCCATAACAAATCTAACTAATAATTACTTAAAAAAAAAATATAATAACAACCTATACAATATTAACTCATCCTAAATATTACTTAATAAAAAAAAATATAAA
chr12	12813585	12813705	Hypo	1 +	TTTTAATATATGGTGTGTTTTTTATAGTAGATTTGGTTAGTGGTTATTTGGAGGAAGGTATAGTGATAATTTATATAATATTAATTTATTTTAAATGTTGTTTAGTGAAAGAAATATAAA
chr12	12813585	12813705	Hyper	1 -	TTCCAATATATAACGTACTTTCCATAACAAATCTAACTAATAATTACTTAAAAAAAAAATAACGTAACAACCTATACAATATTAACTCATCCTAAATATTACTTAATAAAAAAAAATATAAA
chr12	12813585	12813705	Hyper	1 +	TTTTAATATATGGCGTGTTTTTTATAGTAGATTTGGTTAGTGGTTATTTGGAGGAAGGTAACGTGATAATTTATATAATATTAATTTATTTTAAATGTTGTTTAGTGAAAGAAATATAAA
chr12	12813585	12813705	Hyper	1 -	TTCCAATATATAACGTACTTTCCATAACAAATCTAACTAATAATTACTTAAAAAAAAAATATAATAACAACCTATACAATATTAACTCATCCTAAATATTACTTAATAAAAAAAAATATAAA
chr12	12813585	12813705	Hyper	1 +	TTTTAATATATGGCGTGTTTTTTATAGTAGATTTGGTTAGTGGTTATTTGGAGGAAGGTATAGTGATAATTTATATAATATTAATTTATTTTAAATGTTGTTTAGTGAAAGAAATATAAA
chr2	160243122	160243242	Hypo	1 -	AAATAAAATAAAATACAAATAAAATAAAAACAACTTAATTTTTTAAAAACCATAATTTCATATCTTCTAAAATAAAATAAACTACTACCTTTTTTCCCCTCTTATATTATACCAATAACT
chr2	160243122	160243242	Hypo	1 +	AAATAAAATGAAATATAAATAAAATAAAAATAGTTTAATTTTTTAAAAGTTATGATTTTGTATTTTTTAAAGTAAAATAAGTTGTTATTTTTTTTTTTTTTTTGTATTGTATTAGTAGTT
chr2	160243122	160243242	Hypo	1 -	AAATAAAATAAAATACAAATAAAATAAAAACAACTTAATTTTTTAAAAACCATAATTTCAATTCTTCTAAAATAAAATAAACTACTACCTTTTTTCCCCTCTTATATTATACCAATAACT

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chr2	160243122	160243242	Hypo	1 +	AAATAAAATGAAATATAAATAAAATAAAAATAGTTTAATTTTTTAAAAGTTATGATTTTGATTTTTTTAAAGTAAAATAAGTTGTTATTTTTTTTTTTTTTTTGTATTGTATTAGTAGTT
chr2	160243122	160243242	Hyper	1 -	AAATAAAATAAAATACAAATAAAATAAAATACAACTTAATTTTTTAAAAACCATAATTTCGTATCTCTCAAAATAAAAATAAACTACTACCTTTTTCCCCTCTTATATTATACCAATAACT
chr2	160243122	160243242	Hypo	1 +	AAATAAAATGAAATATAAATAAAATAAAAATAGTTTAATTTTTTAAAAGTTATGATTTCGTATTTTTTAAAGTAAAATAAGTTGTTATTTTTTTTTTTTTTTGTATTGTATTAGTAGTT
chr2	160243122	160243242	Hyper	1 -	AAATAAAATAAAATACAAATAAAATAAAATACAACTTAATTTTTTAAAAACCATAATTTCGATTCTCTCAAAATAAAAATAAACTACTACCTTTTTTCCCCTCTTATATTATACCAATAACT
chr2	160243122	160243242	Hypo	1 +	AAATAAAATGAAATATAAATAAAATAAAAATAGTTTAATTTTTTAAAAGTTATGATTTCGATTTTTTTAAAGTAAAATAAGTTGTTATTTTTTTTTTTTTTTGTATTGTATTAGTAGTT
chr10	6221655	6221775	Hypo	1 -	TAAACCAAAATACCAAAACTACAACAACTCAAATAAAAAAAAAAACCCTATTTCTAAACATACAAACACCAAAATTATAAAACATTCTACCAAACACAAAAACCACAAAAACCCACCTTC
chr10	6221655	6221775	Hypo	1 +	TAAATTAAGGTGTTAAGGTTGTGGTAGTTTAGATGGGAAGGGGATTTTGTTTTTGAGTATGTAGATGTTAGGATTATAGGATATTTTGTTAGGTATAGAAATTATGAGAGTTTATTTTT
chr10	6221655	6221775	Hypo	1 -	TAAACCAAAATACCAAAACTACAACAACTCAAATAAAAAAAAAAACCCTATTTCTAAACAACCAAACACCAAAATTATAAAACATTCTACCAAACACAAAAACCACAAAAACCCACCTTC
chr10	6221655	6221775	Hypo	1 +	TAAATTAAGGTGTTAAGGTTGTGGTAGTTTAGATGGGAAGGGGATTTTGTTTTTGAGTATGTAGATGTTAGGATTATAGGATATTTTGTTAGGTATAGAAATTATGAGAGTTTATTTTT
chr10	6221655	6221775	Hyper	1 -	TAAACCAAAATACCAAAACTACAACAACTCAAATAAAAAAAAAAACCCTATTTCTAAACATACAAACGCCAAAATTATAAAACATTCTACCAAACACAAAAACCACAAAAACCCACCTTC
chr10	6221655	6221775	Hypo	1 +	TAAATTAAGGTGTTAAGGTTGTGGTAGTTTAGATGGGAAGGGGATTTTGTTTTTGAGTATGTAGATGTTAGGATTATAGGATATTTTGTTAGGTATAGAAATTATGAGAGTTTATTTTT
chr10	6221655	6221775	Hyper	1 -	TAAACCAAAATACCAAAACTACAACAACTCAAATAAAAAAAAAAACCCTATTTCTAAACATACAAACGCCAAAATTATAAAACATTCTACCAAACACAAAAACCACAAAAACCCACCTTC
chr10	6221655	6221775	Hypo	1 +	TAAATTAAGGTGTTAAGGTTGTGGTAGTTTAGATGGGAAGGGGATTTTGTTTTTGAGTATGTAGATGTTAGGATTATAGGATATTTTGTTAGGTATAGAAATTATGAGAGTTTATTTTT
chr10	6221655	6221775	Hyper	1 -	TAAACCAAAATACCAAAACTACAACAACTCAAATAAAAAAAAAAACCCTATTTCTAAACATACAAACGCCAAAATTATAAAACATTCTACCAAACACAAAAACCACAAAAACCCACCTTC
chr10	6221655	6221775	Hypo	1 +	TAAATTAAGGTGTTAAGGTTGTGGTAGTTTAGATGGGAAGGGGATTTTGTTTTTGAGTATGTAGACGTTAGGATTATAGGATATTTTGTTAGGTATAGAAATTACGAGAGTTTATTTTT
chr14	80067918	80068038	Hypo	1 -	AATCTTCATACTAACCCCTCATTCTCTAAAATATATACTATTTTCTACAACAAACTACACAACCAATACCCTTACTTAAAACAAATCTAAACATCATATCCACCACAATCTTCATTCTAAA
chr14	80067918	80068038	Hypo	1 +	AATTTTTATGTTGATTTTTATTTTTTAGAGTATATGTTGTTTTTTGTAGTAGATTATATTTTAGTGTTTTTGTTTGGAGTAGATTTAGATATTATATGTTATGGTTTTTATTTTGAA
chr14	80067918	80068038	Hyper	1 -	AATCTTCATACTAACCCCTCATTCTCTAAAATATATACTATTTTCTACAACAAACTACACGACCAATACCCTTACTTAAAACAAATCTAAACATCATATCGCCACGATCTTCATTCTAAA
chr14	80067918	80068038	Hypo	1 +	AATTTTTATGTTGATTTTTATTTTTTAGAGTATATGTTGTTTTTTGTAGTAGATTATATTTTAGTGTTTTTGTTTGGAGTAGATTTAGATATTATATGTTATGGTTTTTATTTTGAA
chr14	80067918	80068038	Hyper	1 -	AATCTTCATACTAACCCCTCATTCTCTAAAATATATACTATTTTCTACAACAAACTACACGACCAATACCCTTACTTAAAACAAATCTAAACATCATATCGCCACGATCTTCATTCTAAA
chr14	80067918	80068038	Hypo	1 +	AATTTTTATGTTGATTTTTATTTTTTAGAGTATATGTTGTTTTTTGTAGTAGATTATACGGTTAGTGTTTTTGTTTGGAGTAGATTTAGATATTATATCGTTACGGTTTTTATTTTGAA
chr14	80067918	80068038	Hyper	1 -	AATCTTCATACTAACCCCTCATTCTCTAAAATATATACTATTTTCTACAACAAACTACACTCCAATACCCTTACTTAAAACAAATCTAAACATCATATCGCCACGATCTTCATTCTAAA
chr14	80067918	80068038	Hypo	1 +	AATTTTTATGTTGATTTTTATTTTTTAGAGTATATGTTGTTTTTTGTAGTAGATTATATTTTAGTGTTTTTGTTTGGAGTAGATTTAGATATTATATCGTTACGGTTTTTATTTTGAA
chr9	34305014	34305134	Hypo	1 -	AATCTTAACATCCAATAAATTATCTAATTTTAAATTACTCACAATTTTCACAATTTTAAAATACCTAAATAATAATTCTTTCCATCTATAAAATTTACTATTTCCCTATAAAACTAAA
chr9	34305014	34305134	Hypo	1 +	AATTTTAATATTTAATGGATTATTTGGTTTTAGATTATTTATAATTTTTTATAATTTTAGGAGTATTTAAATGATGATTTTTTTTATTTGTGGAGTTTGTTGTTTTTTTATGAGATTAAA
chr9	34305014	34305134	Hyper	1 -	AATCTTAACATCCAATAAATTATCTAATTTTAAATTACTCACAATTTTCACAATTTTAAAATACCTAAATAATAATTCTTTCCATCTATAAAATTTACTATTTCCCTATAAAACTAAA
chr9	34305014	34305134	Hypo	1 +	AATTTTAATATTTAATGGATTATTTGGTTTTAGATTATTTATAATTTTTTATAATTTTAGGAGTATTTAAATGATGATTTTTTTTATTTGTGGAGTTTGTTGTTTTTTTATGAGATTAAA
chr9	34305014	34305134	Hyper	1 -	AATCTTAACATCCAATAAATTATCTAATTTTAAATTACTCACAATTTTCACAATTTTCACAATTTTAATTATACCTAAATAATAATTCTTTCCATCTATAAAATTTACTATTTCCCTATAAAACTAAA
chr9	34305014	34305134	Hypo	1 +	AATTTTAATATTTAATGGATTATTTGGTTTTAGATTATTTATAATTTTTTATAATTTTAGGAGTATTTAAATGATGATTTTTTTTATTTGTGGAGTTTGTTGTTTTTTTATGAGATTAAA
chr2	43336702	43336822	Hypo	1 -	TTCTCTTTTCAAAATCATAAAAAATCCTCTTTTCACACCCCCTAAATCAATAAAACCAAACCCTTCAACATCACCACAATAACCTAAAAAAAAAACACTTATCCTATCACCACCAAACCCT
chr2	43336702	43336822	Hypo	1 +	TTTTTTTTTAAATTATGGAAAATTTTTTTTTATATTTTTTGGGTTAGTGAAGTTAGAAATTTTAGTATTATTATAGTGGTTTAGAAAGGGATATTTGTTTTGTTATTATTAGGTTTT
chr2	43336702	43336822	Hyper	1 -	TTCTCTTTTCAAAATCATAAAAAATCCTCTTTTCACACCCCCTAAATCAATAAAACCAAAAACTTCAACATCACCACAATAACCTAAAAAAAAAACACTTATCCTATCACCACCAAACCCT
chr2	43336702	43336822	Hypo	1 +	TTTTTTTTTAAATTATGGAAAATTTTTTTTTATATTTTTTGGGTTAGTGAAGTTAGAAATTTTAGTATTATTATAGTGGTTTAGAAAGGGATATTTGTTTTGTTATTATTAGGTTTT
chr2	43336702	43336822	Hyper	1 -	TTCTCTTTTCAAAATCATAAAAAATCCTCTTTTCACACCCCCTAAATCAATAAAACCAAACCCTCAACATCACCACAATAACCTAAAAAAAAAACACTTATCCTATCACCACCAAACCCT
chr2	43336702	43336822	Hypo	1 +	TTTTTTTTTAAATTATGGAAAATTTTTTTTTATATTTTTTGGGTTAGTGAAGTTAGAAATTTTAGTATTATTATAGTGGTTTAGAAAGGGATATTTGTTTTGTTATTATTAGGTTTT
chr2	43336702	43336822	Hyper	1 -	TTCTCTTTTCAAAATCATAAAAAATCCTCTTTTCACACCCCCTAAATCAATAAAACCAAAAACTTCAACATCACCACAATAACCTAAAAAAAAAACACTTATCCTATCACCACCAAACCCT
chr2	43336702	43336822	Hypo	1 +	TTTTTTTTTAAATTATGGAAAATTTTTTTTTATATTTTTTGGGTTAGTGAAGTTAGAAATTTTAGTATTATTATAGTGGTTTAGAAAGGGATATTTGTTTTGTTATTATTAGGTTTT
chr3	708643	708763	Hypo	1 -	CCATTTAATAATATACTTTCAATTTTAAAATAAAACATTATATTAATAAAAAAACTTAACTTCTTCTTAAAAACAAAATATACTATTATTCAAATTCCATTTAAATTTAACTATTTAAT
chr3	708643	708763	Hypo	1 +	TTATTTAGTGATATATTTTTAGTTTTAAAATAAAATATTGTGTTGATGGAAAGGTTTGATGATTTTTTAGAAAATAGGATGTGTTATTTATTAAATTTTATTTAAGTTTAGTTATTTGGT
chr3	708643	708763	Hyper	1 -	CCATTTAATAATATACTTTCAATTTTAAAATAAAACATTATATTAATAAAAAAACTTAACTTCTTCTTAAAAACAAAATATACTATTATTCAAATTCCATTTAAATTTAACTATTTAAT
chr3	708643	708763	Hypo	1 +	TTATTTAGTGATATATTTTTAGTTTTAAAATAAAATATTGTGTTGATGGAAAGGTTTGATTTTTTTTAGAAAATAGGATGTGTTATTTATTAAATTTTATTTAAGTTTAGTTATTTGGT
chr3	708643	708763	Hyper	1 -	CCATTTAATAATATACTTTCAATTTTAAAATAAAACATTATATTAATAAAAAAACTTAACGACTTCTTAAAAACAAAATATACTATTATTCAAATTCCATTTAAATTTAACTATTTAAT
chr3	708643	708763	Hypo	1 +	TTATTTAGTGATATATTTTTAGTTTTAAAATAAAATATTGTGTTGATGGAAAGGTTTGACGATTTTTTAGAAAATAGGATGTGTTATTTATTAAATTTTATTTAAGTTTAGTTATTTGGT
chr3	708643	708763	Hyper	1 -	CCATTTAATAATATACTTTCAATTTTAAAATAAAACATTATATTAATAAAAAAACTTAACTTCTTCTTAAAAACAAAATATACTATTATTCAAATTCCATTTAAATTTAACTATTTAAT
chr3	708643	708763	Hypo	1 +	TTATTTAGTGATATATTTTTAGTTTTAAAATAAAATATTGTGTTGATGGAAAGGTTTGATGATTTTTTTAGAAAATAGGATGTGTTATTTATTAAATTTTATTTAAGTTTAGTTATTTGGT
chr3	708643	708763	Hyper	1 -	CCATTTAATAATATACTTTCAATTTTAAAATAAAACATTATATTAATAAAAAAACTTAACTTCTTCTTAAAAACAAAATATACTATTATTCAAATTCCATTTAAATTTAACTATTTAAT
chr10	4014624	4014744	Hypo	1 -	ATATAATAAATACCTTAACTCTCCTTAAAATATAAAAAATTATTAATACTACAATAAAAAAAATAACTATCCTATTTTTAACCTTATTTTTTAAAAAAAAAACTAAACAACATATTTAAC
chr10	4014624	4014744	Hypo	1 +	GTATGGTAGGTGTTTTAATTTTTTTTAGAATATAGAAGATTATTGATATTGTAATGAAAAAAATGGTTATTTTGTTTTTAATTTTATTTTTTAAAAGAAAAATTGAATAATATGTTTGAT
chr10	4014624	4014744	Hyper	1 -	ATATAATAAATACCTTAACTCTCCTTAAAATATAAAAAATTATTAATACTACAATAAAAAAAATAACTATCCTATTTTTAACCTTATTTTTTAAAAAAAAAACTAAACAACATATTTAAC
chr10	4014624	4014744	Hyper	1 +	GTATGGTAGGTGTTTAATTTTTTTTAGAATATAGAAGATTATTGATATTGTAATGAAAAAAATGGTTATTTTGTTTTTAATTTTATTTTTTAAAAGAAAAATTGAATAATATGTTTGAT
chr10	4014624	4014744	Hyper	1 -	ATATAATAAATACCTTAACTCTCCTTAAAATATAAAAAATTATTAATACTACAATAAAAAAAATAACTATCCTATTTTTAACCTTATTTTTTAAAAAAAAAACTAAACAACATATTTAAC
chr10	4014624	4014744	Hyper	1 +	GTATGGTAGGTGTTTAATTTTTTTTAGAATATAGAAGATTATTGATATTGTAATGAAAAAAATGGTTATTTTGTTTTTAATTTTATTTTTTAAAAGAAAAATTGAATAATATGTTTGAT
chr10	4014624	4014744	Hyper	1 -	ATATAATAAATACCTTAACTCTCCTTAAAATATAAAAAATTATTAATACTACAATAAAAAAAATAACTATCCTATTTTTAACCTTATTTTTTAAAAGAAAAATTGAATAATATGTTTGAT
chr10	4014624	4014744	Hyper	1 +	GTATGGTAGGTGTTTAATTTTTTTTAGAATATAGAAGATTATTGATATTGTAATGAAAAAAATGGTTATTTTGTTTTTAATTTTATTTTTTAAAAGAAAAATTGAATAATATGTTTGAT

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chr8	110150613	110150733	Hypo	1 -	AAAATAAAAATAAATCTAAATAATTCAATAAACTACATATAACCAAATCTAAATAATAATAAAAAATTATTCAAACTAAAATCCATTTCCCAAAATAATCAAATTAATATCATCTAATTAA
chr8	110150613	110150733	Hypo	1 +	AAAATAGAAATGAATTTGAATGATTTAATAGATTGTATATAATTAAGTTTAAATGATGGTAAAGGATTGTTTAAGTTAAAATTTATTTTTTAAATGGTTAGATTGATGTTATTTGATTAA
chr8	110150613	110150733	Hyper	1 -	AAAATAAAAATAAATCTAAATAATTCAATAAACTACATATAACCAAATCTAAATAATAATAAAAAATTATTCAAACTAAAATCCATTTCCCAAAATAATCAAATTAATATCATCTAATTAA
chr8	110150613	110150733	Hyper	1 +	AAAATAGAAATGAATTTGAATGATTTAATAGATTGTATATAATTAAGTTTAAATGATGGTAAAGGATTGTTTAAGTTAAAATTTATTTTTTAAATGGTTAGATTGATGTTATTTGATTAA
chr8	110150613	110150733	Hyper	1 -	AAAATAAAAATAAATCTAAATAATTCAATAAACTACATATAACCAAATCTAAATAATAATAAAAAATTATTCAAACTAAAATCCATTTCCCAAAATAATCAAATTAATATCATCTAATTAA
chr8	110150613	110150733	Hyper	1 +	AAAATAGAAATGAATTTGAATGATTTAATAGATTGTATATAATTAAGTTTAAATGATGGTAAAGGATTGTTTAAGTTAAAATTTATTTTTTAAATGGTTAGATTGATGTTATTTGATTAA
chr8	110150613	110150733	Hyper	1 -	AAAATAAAAATAAATCTAAATAATTCAATAAACTACATATAACCAAATCTAAATAATAATAAAAAATTATTCAAACTAAAATCCATTTCCCAAAATAATCAAATTAATATCATCTAATTAA
chr8	110150613	110150733	Hyper	1 +	AAAATAGAAATGAATTTGAATGATTTAATAGATTGTATATAATTAAGTTTAAATGATGGTAAAGGATTGTTTAAGTTAAAATTTATTTTTTAAATGGTTAGATTGATGTTATTTGATTAA
chr22	37314121	37314241	Hypo	1 -	TTAAAATCATCTAAATTTTAATTCAATATTCTTCTTTAACTTATCTATAAATATTACAAATTTATTTACCTCAATATTTCAACTTTCTTAAATTTTTTTTTCCTAAAATATAACCTAAAA
chr22	37314121	37314241	Hypo	1 +	TTAAAATTATTGAGTTTTAGTTTAATATTTTTTTTTTAATTTATTTGTAAGTGTTATAGGTTTATTTATTTTAGTATTTTAGTTTTTTTGGAATTTTTTTTTTGAAAATAATTTAGAG
chr22	37314121	37314241	Hypo	1 -	TTAAAATCATCTAAATTTTAATTCAATATTCTTCTTTAACTTATCTATAAATATTACAATTTATTTACCTCAATATTTCAACTTTCTTAAATTTTTTTTTCCTAAAATATAACCTAAAA
chr22	37314121	37314241	Hypo	1 +	TTAAAATTATTGAGTTTTAGTTTAATATTTTTTTTTTAATTTATTTGTAAGTGTTATAGGTTTATTTATTTTAGTATTTTAGTTTTTTTGGAATTTTTTTTTTGAAAATAATTTAGAG
chr22	37314121	37314241	Hypo	1 -	TTAAAATCATCTAAATTTTAATTCAATATTCTTCTTTAACTTATCTATAAATATTACAAATTTATTTACCTCAATATTTCAACTTTCTTAAATTTTTTTTTCCTAAAATATAACCTAAAA
chr22	37314121	37314241	Hypo	1 +	TTAAAATTATTGAGTTTTAGTTTAATATTTTTTTTTTAATTTATTTGTAAGTGTTATAGGTTTATTTATTTTAGTATTTTAGTTTTTTTGGAATTTTTTTTTTGAAAATAATTTAGAG
chr22	37314121	37314241	Hypo	1 -	TTAAAATCATCTAAATTTTAATTCAATATTCTTCTTTAACTTATCTATAAATATTACAAATTTATTTACCTCAATATTTCAACTTTCTTAAATTTTTTTTTCCTAAAATATAACCTAAAA
chr22	37314121	37314241	Hypo	1 +	TTAAAATTATTGAGTTTTAGTTTAATATTTTTTTTTTAATTTATTTGTAAGTGTTATAGGTTTATTTATTTTAGTATTTTAGTTTTTTTGGAATTTTTTTTTTGAAAATAATTTAGAG
chr2	130042181	130042301	Hypo	1 -	CAATTTATTAAAATCATTATAAATTCACATACAACTACAAAAAAAATAATAATATACAAAAATCCTCTATACAATTTACCAAATTCCCTTCAATAATAACATTTAACAAAAATATAATA
chr2	130042181	130042301	Hypo	1 +	TAATTTATTAAGATTATTGTAAATTTATATGTAGTTGTAAAAAAAATAATAATATAGAGAGATTTTTGTATGATTATTAAGTTTTTTTTAATGGTAATATTTGGTAAAAGTATAGTA
chr2	130042181	130042301	Hyper	1 -	CAATTTATTAAAATCATTATAAATTCACATACAACTACAAAAAAAATAATAATATACAAAAATCCTCTATACAATTTACCAAATTCCCTTCAATAATAACATTTAACAAAAATATAATA
chr2	130042181	130042301	Hyper	1 +	TAATTTATTAAGATTATTGTAAATTTATATGTAGTTGTAAAAAAAATAATAATATAGAGAGATTTTTGTACGATTTATTAAGTTTTTTTTAATGGTAATATTTGGTAAAAGTATAGTA
chr2	130042181	130042301	Hyper	1 -	CAATTTATTAAAATCATTATAAATTCACATACAACTACAAAAAAAATAATAATATACAAAAATCCTCTATACGATTTACCAAATTCCCTTCAATAATAACATTTAACAAAAATATAATA
chr2	130042181	130042301	Hyper	1 +	TAATTTATTAAGATTATTGTAAATTTATATGTAGTTGTAAAAAAAATAATAATATAGAGAGATTTTTGTACGATTTATTAAGTTTTTTTTAATGGTAATATTTGGTAAAAGTATAGTA
chr2	130042181	130042301	Hyper	1 -	CAATTTATTAAAATCATTATAAATTCACATACAACTACAAAAAAAATAATAATATACAAAAATCCTCTATACAATTTACCAAATTCCCTCAATAATAACATTTAACAAAAATATAATA
chr2	130042181	130042301	Hyper	1 +	TAATTTATTAAGATTATTGTAAATTTATATGTAGTTGTAAAAAAAATAATAATATAGAGAGATTTTTGTACGATTTATTAAGTTTTTTTTAATGGTAATATTTGGTAAAAGTATAGTA
chr18	11483915	11484035	Hypo	1 -	TATTTATAATCCATTATTTAAAAAACTTATACATAATCCATCACTACCATTACCTCCTTACTCACAATACTACTACACATACAAACAATACTAAACAAAAAACTATATAAAAAATAATAA
chr18	11483915	11484035	Hypo	1 +	TGTTTGTAATTTATTATTTAAGGAGTTTATGTATAATTTATTATTATTATTGTTTTTTGTTTATAGTATTATTGTATATGTAAGTAGTATTAAATAAGGAATTATATAAGGAATGATGA
chr18	11483915	11484035	Hypo	1 -	TATTTATAATCCATTATTTAAAAACTTATACATAATCCATCACTACCATTACCTCCTTACTCACAATACTACTACACATACAAACAATACTAAACAAAAAACTATATAAAAAATAATAA
chr18	11483915	11484035	Hypo	1 +	TGTTTGTAATTTATTATTTAAGGAGTTTATGTATAATTTATTATTATTATTGTTTTTTGTTTATAGTATTATTGTATATGTAAGTAGTATTAAATAAGGAATTATATAAGGAATGATGA
chr18	11483915	11484035	Hyper	1 -	TATTTATAATCCATTATTTAAAAACTTATACATAATCCATCACTACCATTACCTCCGTACTCCAATACTACTACACATACAAACAATACTAAACAAAAAACTATATAAAAAATAATAA
chr18	11483915	11484035	Hyper	1 +	TGTTTGTAATTTATTATTTAAGGAGTTTATGTATAATTTATTATTATTATTGTTTTTTGTTTATAGTATTATTGTATATGTAAGTAGTATTAAATAAGGAATTATATAAGGAATGATGA
chr18	11483915	11484035	Hyper	1 -	TATTTATAATCCATTATTTAAAAACTTATACATAATCCATCACTACCATTACCTCCGTACTCCAATACTACTACACATACAAACAATACTAAACAAAAAACTATATAAAAAATAATAA
chr18	11483915	11484035	Hyper	1 +	TGTTTGTAATTTATTATTTAAGGAGTTTATGTATAATTTATTATTATTATTGTTTTTTGTTTATAGTATTATTGTATATGTAAGTAGTATTAAATAAGGAATTATATAAGGAATGATGA
chr7	25821544	25821664	Hypo	1 -	ATAAATTAACCTTAATCAAAATAACTAAAATAACTTAACTTCTTTCACCTATCTCATTTTCCAACAAATTAACTCAAATATATTTCTCTCAAAACAATAACAAATAACAAAAACACAAAC
chr7	25821544	25821664	Hypo	1 +	ATAGGTTGGTTTTAATTAGAATGATTGGGATGATTTGGTTTTTTTATTTATTTTATTTTTTAGTAGGTTAGTTTAATGTATTTTTTTTAAGGTAATAGTAGATGGTAAGAGTATAAGT
chr7	25821544	25821664	Hyper	1 -	ATAAATTAACCTTAATCAAAATAACTAAAATAACTTAACTTCTTTCACCTATCTCATTTTCCAACAAATTAACTCAAATATATTTCTCTCAAAACAATAACAAATAACAAAAACACAAAC
chr7	25821544	25821664	Hyper	1 +	ATAGGTTGGTTTTAATTAGAATGATTGGGATGATTTGGTTTTTTTATTTATTTTATTTTTTAGTAGGTTAGTTTAATGTATTTTTTTTAAGGTAATAGTAGATGGTAAGAGTATAAGT
chr7	25821544	25821664	Hyper	1 -	ATAAATTAACCTTAATCAAAATAACTAAAATAACTTAACTTCTTTCACCTATCTCATTTTCCAACAAATTAACTCAAATATATTTCTCTCAAAACAATAACAAATAACAAAAACACAAAC
chr7	25821544	25821664	Hyper	1 +	ATAGGTTGGTTTTAATTAGAATGATTGGGATGATTTGGTTTTTTTATTTATTTTATTTTTTAGTAGGTTAGTTTAATGTATTTTTTTTAAGGTAATAGTAGATGGTAAGAGTATAAGT
chr5	76757274	76757394	Hypo	1 -	AACCTAAAAAACACCTATACTTTAAACTTACTCCAAAACTTCACCAATACTTAAAACATTTACACAAAACTTCAAATAAACATATACTTTTAAAAATTAATATAACCAAAAACAATA
chr5	76757274	76757394	Hypo	1 +	AGTTTAAGAAATATTTATATTTTTGGGTTTATTTTAAAATTTTATTAATGTTTGAAAGTGTTTATATAGAATTTTTAGATAAGTATATATTTTTAAAAATTAATATGATTGGAAATAGTG
chr5	76757274	76757394	Hyper	1 -	AACCTAAAAAACACCTATACTTTAAACTTACTCCAAAACTTCACCAATACTTAAAACATTTACACAAAACTTCAAATAAACATATACTTTTAAAAATTAATATAACCAAAAACAATA
chr5	76757274	76757394	Hyper	1 +	AGTTTAAGAAATATTTATATTTTTGGGTTTATTTTAAAATTTTATTAATGTTTGAAAGTGTTTATATAGAATTTTTAGATAAGTATATATTTTTAAAAATTAATATGATTGGAAATAGTG
chr5	76757274	76757394	Hyper	1 -	AACCTAAAAAACACCTATACTTTAAACTTACTCCAAAACTTCACCAATACTTAAAACATTTACACAAAACTTCAAATAAACATATACTTTTAAAAATTAATATAACCGAAAACAATA
chr5	76757274	76757394	Hyper	1 +	AGTTTAAGAAATATTTATATTTTTGGGTTTATTTTAAAATTTTATTAATGTTTGAAAGTGTTTATATAGAATTTTTAGATAAGTATATATTTTTAAAAATTAATATGATCGGAAATAGTG
chr12	81226607	81226727	Hypo	1 -	TAATTTAAAATAATAATTCTCAACCAAAAATAATTTTACTATTAAAAACAATTCAAAAATCTAAAACACTTTTTATATAATAACTAAATAAAAAAAAATATTACTAACCAAAATAA
chr12	81226607	81226727	Hypo	1 +	TAGTTTAAGATAGTGATTTTAATTAAGGATGATTTGTTTGTTAGGGGATAGTTTAAAAGGTTTGGGGGATATTTTTTGTTGTGGTGATTGGATGGGGAGGGTGTTATTGGTTAGGATAA
chr12	81226607	81226727	Hyper	1 -	TAATTAAAATAATAATTCTCAACCAAAAATAATTTTACTATTAAAAACAATTCAAAAATCTAAAACACTTTTTATATAATAACTAAATAAAAAAAAATATTACTAACCAAAATAA
chr12	81226607	81226727	Hyper	1 +	TAGTTTAAGATAGTGATTTTAATTAAGGATGATTTGTTTGTTAGGGGATAGTTTATAAGGTTGGGGGATATTTTTTGTTGTGGTGATTGGATGGGGAGGGTGTTATTGGTTAGGATAA

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chr12	81226607	81226727	Hyper	1	+
chr12	81226607	81226727	Hyper	1	-
chr12	81226607	81226727	Hyper	1	+
chr12	16539257	16539377	Hypo	1	-
chr12	16539257	16539377	Hypo	1	+
chr12	16539257	16539377	Hypo	1	-
chr12	16539257	16539377	Hypo	1	+
chr12	16539257	16539377	Hypo	1	-
chr12	16539257	16539377	Hypo	1	+
chr12	16539257	16539377	Hypo	1	-
chr12	16539257	16539377	Hypo	1	+
chr6	4947173	4947293	Hypo	1	-
chr6	4947173	4947293	Hypo	1	+
chr6	4947173	4947293	Hypo	1	-
chr6	4947173	4947293	Hypo	1	+
chr6	4947173	4947293	Hypo	1	-
chr6	4947173	4947293	Hypo	1	+
chr6	4947173	4947293	Hypo	1	-
chr6	4947173	4947293	Hypo	1	+
chr2	219155847	219155967	Hypo	1	-
chr2	219155847	219155967	Hypo	1	+
chr2	219155847	219155967	Hypo	1	-
chr2	219155847	219155967	Hypo	1	+
chr2	219155847	219155967	Hypo	1	-
chr2	219155847	219155967	Hypo	1	+
chr2	219155847	219155967	Hypo	1	-
chr1	230359593	230359713	Hypo	1	-
chr1	230359593	230359713	Hypo	1	+
chr1	230359593	230359713	Hypo	1	-
chr1	230359593	230359713	Hypo	1	+
chr1	230359593	230359713	Hyper	1	-
chr1	230359593	230359713	Hyper	1	+
chr1	230359593	230359713	Hyper	1	-
chr1	230359593	230359713	Hyper	1	+
chr2	200035444	200035564	Hypo	1	-
chr2	200035444	200035564	Hypo	1	+
chr2	200035444	200035564	Hypo	1	-
chr2	200035444	200035564	Hyper	1	-
chr2	200035444	200035564	Hyper	1	+
chr2	200035444	200035564	Hyper	1	-
chr2	200035444	200035564	Hyper	1	+
chr17	71569181	71569301	Hypo	1	-
chr17	71569181	71569301	Hypo	1	+
chr17	71569181	71569301	Hypo	1	-
chr17	71569181	71569301	Hypo	1	+
chr17	71569181	71569301	Hyper	1	-
chr17	71569181	71569301	Hyper	1	+
chr17	71569181	71569301	Hyper	1	-
chr9	1744847	1744967	Hypo	1	+
chr9	1744847	1744967	Hypo	1	+

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chr9	1744847	1744967	Hypo	1	-
chr9	1744847	1744967	Hypo	1	+
chr9	1744847	1744967	Hyper	1	-
chr9	1744847	1744967	Hyper	1	+
chr9	1744847	1744967	Hyper	1	-
chr9	1744847	1744967	Hyper	1	+
chr14	61145815	61145935	Hypo	1	-
chr14	61145815	61145935	Hypo	1	+
chr14	61145815	61145935	Hypo	1	-
chr14	61145815	61145935	Hypo	1	+
chr14	61145815	61145935	Hyper	1	-
chr14	61145815	61145935	Hyper	1	+
chr14	61145815	61145935	Hyper	1	-
chr14	61145815	61145935	Hyper	1	+
chr5	1299799	1299919	Hypo	1	-
chr5	1299799	1299919	Hypo	1	+
chr5	1299799	1299919	Hypo	1	-
chr5	1299799	1299919	Hypo	1	+
chr5	1299799	1299919	Hyper	1	-
chr5	1299799	1299919	Hyper	1	+
chr5	1299799	1299919	Hyper	1	-
chr5	1299799	1299919	Hyper	1	+
chr2	6918341	6918461	Hypo	1	-
chr2	6918341	6918461	Hypo	1	+
chr2	6918341	6918461	Hypo	1	-
chr2	6918341	6918461	Hypo	1	+
chr2	6918341	6918461	Hyper	1	-
chr2	6918341	6918461	Hyper	1	+
chr2	6918341	6918461	Hyper	1	-
chr2	6918341	6918461	Hyper	1	+
chr11	86785578	86785698	Hypo	1	-
chr11	86785578	86785698	Hypo	1	+
chr11	86785578	86785698	Hypo	1	-
chr11	86785578	86785698	Hyper	1	+
chr11	86785578	86785698	Hyper	1	-
chr11	86785578	86785698	Hyper	1	+
chr11	86785578	86785698	Hyper	1	-
chr11	86785578	86785698	Hyper	1	+
chr7	81411342	81411462	Hypo	1	-
chr7	81411342	81411462	Hypo	1	+
chr7	81411342	81411462	Hypo	1	-
chr7	81411342	81411462	Hypo	1	+
chr7	81411342	81411462	Hyper	1	-
chr7	81411342	81411462	Hyper	1	+
chr7	81411342	81411462	Hyper	1	-
chr7	81411342	81411462	Hyper	1	+
chr3	81034890	81035010	Hypo	1	-
chr3	81034890	81035010	Hypo	1	+
chr3	81034890	81035010	Hypo	1	-
chr3	81034890	81035010	Hyper	1	+
chr3	81034890	81035010	Hyper	1	-
chr3	81034890	81035010	Hyper	1	+
chr3	81034890	81035010	Hyper	1	-

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chr3	81034890	81035010	Hyper	1 +	TATAAGTATTTGATTTTGTAAGATAATATATATTTATGTGTATTTTTGGGTATATTTCGTAGGTAAATTATTATGATTTTATTAAAATATAGTTTATTGAGATGTATATGTAGGTATATA
chr5	73481970	73482090	Hypo	1 -	AATTAACAAAATAATTCATAAAACCACCATACCTAACCTCATATAAAACACTTTACCTTACACTTAAAAAATAATTAATATTAAATATTAATATTAAAAATAAAACAAATATTAAAAAAA
chr5	73481970	73482090	Hypo	1 +	AATTAGTGAAGTAATTTATGAGGTTATTATGTTTGGTTTTATGTAAAGTATTTTGTTTTGTATTTAGAAAATAATTAATATTAGATATTAGTATTAAGAATGAAGTAAATGTTAGAAAAG
chr5	73481970	73482090	Hypo	1 -	AATTAACAAAATAATTCATAAAACCACCATACCTAACCTCATATAAAACACTTTACCTAACACATAAAAAATAATTAATATTAAATATTAATATTAAAAATAAAACAAATATTAAAAAAA
chr5	73481970	73482090	Hypo	1 +	AATTAGTGAAGTAATTTATGAGGTTATTATGTTTGGTTTTATGTAAAGTATTTTGTTTAGTATATAGAAAATAATTAATATTAGATATTAGTATTAAGAATGAAGTAAATGTTAGAAAAG
chr5	73481970	73482090	Hyper	1 -	AATTAACGAAATAATTCATAAAACCACCATACCTAACCTCATATAAAACACTTTACCTTACACTTAAAAAATAATTAATATTAAATATTAATATTAAAAATAAAACAAATATTAAAAAAA
chr5	73481970	73482090	Hyper	1 +	AATTAGCGAAGTAATTTATGAGGTTATTATGTTTGGTTTTATGTAAAGTATTTTGTTTTGTATTTAGAAAATAATTAATATTAGATATTAGTATTAAGAATGAAGTAAATGTTAGAAAAG
chr5	73481970	73482090	Hyper	1 -	AATTAACGAAATAATTCATAAAACCACCATACCTAACCTCATATAAAACACTTTACCTAACACATAAAAAATAATTAATATTAAATATTAATATTAAAAATAAAACAAATATTAAAAAAA
chr5	73481970	73482090	Hyper	1 +	AATTAGCGAAGTAATTTATGAGGTTATTATGTTTGGTTTTATGTAAAGTATTTTGTTTAGTATATAGAAAATAATTAATATTAGATATTAGTATTAAGAATGAAGTAAATGTTAGAAAAG
chr13	82480994	82481114	Hypo	1 -	CAAAAACCTTAACAATAACCTATAAATCTCCACAACATCTTACCCTTTTCCTTTAATACCCAAATTACACATCCTATTACTCTCTAAACTACATACTCTATCTCACTACACTAAACTTAT
chr13	82480994	82481114	Hypo	1 +	TAAAGGTTTTAATAATGGTTTGTAAGTTTTTATAGTATTTTATTTTTTTTTTTTTAATGTTTAGATTGTATATTTTATTATTTTTTGAATTGTATATTTTGTTTTATTATATTGGATTTGT
chr13	82480994	82481114	Hypo	1 -	CAAAAACCTTAACAATAACCTATAAATCTCCACAACATCTTACCCTTTTCCTTTAATACACTAATTACACATCCTATTACTCTCTAAACTACATACTCTATCTCACTACACTAAACTTAT
chr13	82480994	82481114	Hypo	1 +	TAAAGGTTTTAATAATGGTTTGTAAGTTTTTATAGTATTTTATTTTTTTTTTTTTAATGTGTTGATTGTATATTTTATTATTTTTTGAATTGTATATTTTGTTTTATTATATTGGATTTGT
chr13	82480994	82481114	Hyper	1 -	CAAAAACCTTAACAATAACCTATAAATCTCCACAACATCTTACCCTTTTCCTTTAATACCCAAATTACACATCCTATTACTCTCTAAACTACATACTCTATCTCACTACACTAAACTTAT
chr13	82480994	82481114	Hyper	1 +	TAAAGGTTTTAATAATGGTTTGTAAGTTTTTATAGTATTTTATTTTTTTTTTTTTAATGTTTAGATTGTATATTTTATTATTTTTTGAATTGTATATTTTGTTTTATTATATTGGATTTGT
chr13	82480994	82481114	Hyper	1 -	CAAAAACCTTAACAATAACCTATAAATCTCCACAACATCTTACCCTTTTCCTTTAATACGCTAATTACACATCCTATTACTCTCTAAACTACATACTCTATCTCACTACACTAAACTTAT
chr13	82480994	82481114	Hyper	1 +	TAAAGGTTTTAATAATGGTTTGTAAGTTTTTATAGTATTTTATTTTTTTTTTTTTAATGCGTTGATTGTATATTTTATTATTTTTTGAATTGTATATTTTGTTTTATTATATTGGATTTGT
chr19	23003461	23003581	Hypo	1 -	TATTTACATAAAAATAATATCAAATTACCACTCTCTTACTTATAATATAAAACAATTTAATAAAACAAAAAATATCATCATATAATCCAACACAACACACACATAATACAATATTTCTCA
chr19	23003461	23003581	Hypo	1 +	TGTTTGTATAAAAATAATATTAAATTATTATTTTTTTGTTTATGGTATAAAGTAGTTTGATGGGATAGAAAGTGTTATTATATGGTTTAGTATGGTATATATGTGATATGGTGTTTTTTA
chr19	23003461	23003581	Hypo	1 -	TATTTACATAAAAATAATATCAAATTACCACTCTCTTACTTATAATATAAAACAATTAAATAAACCAAAAAATATCATCATATAATCCAACACAACACACACATAATACAATATTTCTCA
chr19	23003461	23003581	Hypo	1 +	TGTTTGTATAAAAATAATATTAAATTATTATTTTTTTGTTTATGGTATAAAGTAGTTGGATGGGTTAGAAAGTGTTATTATATGGTTTAGTATGGTATATATGTGATATGGTGTTTTTTA
chr19	23003461	23003581	Hyper	1 -	TATTTACATAAAAATAATATCAAATTACCACTCTCTTACTTATAATATAAAACAATTTAATAAAACAAAAAATATCATCATATAATCCAACACGACACACACGTAATACGATATTTCTCA
chr19	23003461	23003581	Hyper	1 +	TGTTTGTATAAAAATAATATTAAATTATTATTTTTTTGTTTATGGTATAAAGTAGTTTGATGGGATAGAAAGTGTTATTATATGGTTTAGTACGGTATATACGTGATACGGTGTTTTTTA
chr19	23003461	23003581	Hyper	1 -	TATTTACATAAAAATAATATCAAATTACCACTCTCTTACTTATAATATAAAACAATTAAATAAACCAAAAAATATCATCATATAATCCAACACGACACACACGTAATACGATATTTCTCA
chr19	23003461	23003581	Hyper	1 +	TGTTTGTATAAAAATAATATTAAATTATTATTTTTTTGTTTATGGTATAAAGTAGTTGGATGGGTTAGAAAGTGTTATTATATGGTTTAGTACGGTATATACGTGATACGGTGTTTTTTA
chr4	181054296	181054416	Hypo	1 -	TTACATCTCAATTTAAACACTAAAATCTAATATAACACTAAACAATCACTAATACCTACACCCAACATTCTCACTATTTATAAAAAATAAAACAAAAAAATCTCAAAATAATATTTAAAA
chr4	181054296	181054416	Hypo	1 +	TTATATTTTAGTTTGAATATTAAAATTTGGTATAGTATTGAGTAATTATTGATATTTGTATTTAGTATTTTTATTGTTTATGGAAGATGAAATAGAAAAGTTTTAAAATAATGTTTGAAA
chr4	181054296	181054416	Hypo	1 -	TTACATCTCAATTTAAACACTAAAATCTAATATAACACTAAACAATCACTAATACCTCCACCCTACATTCTCACTATTTATAAAAAATAAAACAAAAAAATCTCAAAATAATATTTAAAA
chr4	181054296	181054416	Hypo	1 +	TTATATTTTAGTTTGAATATTAAAATTTGGTATAGTATTGAGTAATTATTGATATTTTTATTTTGTATTTTTATTGTTTATGGAAGATGAAATAGAAAAGTTTTAAAATAATGTTTGAAA
chr4	181054296	181054416	Hyper	1 -	TTACATCTCAATTTAAACACTAAAATCTAATATAACACTAAACAATCACTAATACCTACACCCAACATTCTCACTATTTATAAAAAATAAAACAAAAAAATCTCAAAATAATATTTAAAA
chr4	181054296	181054416	Hyper	1 +	TTATATTTTAGTTTGAATATTAAAATTTGGTATAGTATTGAGTAATTATTGATATTTGTATTTAGTATTTTTATTGTTTATGGAAGATGAAATAGAAAAGTTTTAAAATAATGTTTGAAA
chr4	181054296	181054416	Hyper	1 -	TTACATCTCAATTTAAACACTAAAATCTAATATAACACTAAACAATCACTAATACCTCCACCCTACATTCTCACTATTTATAAAAAATAAAACAAAAAAATCTCAAAATAATATTTAAAA
chr4	181054296	181054416	Hyper	1 +	TTATATTTTAGTTTGAATATTAAAATTTGGTATAGTATTGAGTAATTATTGATATTTTTATTTTGTATTTTTATTGTTTATGGAAGATGAAATAGAAAAGTTTTAAAATAATGTTTGAAA
chr14	60450114	60450234	Hypo	1 -	TTTACTATTTTAATAAAAAAATTAATTTACCTAAATCAAAAACATCAATTTAATAAAACAAATATATATATATAAACACATATAAAAAACTCAAAATTACTAAAAAAAATTTATAAAAAAAAA
chr14	60450114	60450234	Hypo	1 +	TTTATTATTTTAGTAAGAAATTAGTTTATTTGAGTTAAAAATATTAATTTAGTGGAGTAAATATATATGTGAATATATGTAGGAAGTTTAGAGTTATTGGGAGAGATTTATAGAAAGAGG
chr14	60450114	60450234	Hypo	1 -	TTTACTATTTTAATAAAAAAATTAATTTACCTAAATCAAAAACATCAATTTAATAAAAAAAAATAAATATATAAACACATATAAAAAACTCAAAATTACTAAAAAAAATTTATAAAAAAAAA
chr14	60450114	60450234	Hypo	1 +	TTTATTATTTTAGTAAGAAATTAGTTTATTTGAGTTAAAAATATTAATTTAGTGGAGGAAATAGATATGTGAATATATGTAGGAAGTTTAGAGTTATTGGGAGAGATTTATAGAAAGAGG
chr14	60450114	60450234	Hyper	1 -	TTTACTATTTTAATAAAAAAATTAATTTACCTAAATCAAAAACATCAATTTAATAAAACAAATATATATATATAAACACATATAAAAAACTCAAAATTACTAAAAAAAATTTATAAAAAAAAA
chr14	60450114	60450234	Hyper	1 +	TTTATTATTTTAGTAAGAAATTAGTTTATTTGAGTTAAAAATATTAATTTAGTGGAGTAAATATATATGTGAATATATGTAGGAAGTTTAGAGTTATTGGGAGAGATTTATAGAAAGAGG
chr14	60450114	60450234	Hyper	1 -	TTTACTATTTTAATAAAAAAATTAATTTACCTAAATCAAAAACATCAATTTAATAAAAAAAAATAAATATATAAACACATATAAAAAACTCAAAATTACTAAAAAAAATTTATAAAAAAAAA
chr14	60450114	60450234	Hyper	1 +	TTTATTATTTTAGTAAGAAATTAGTTTATTTGAGTTAAAAATATTAATTTAGTGGAGGAAATAGATATGTGAATATATGTAGGAAGTTTAGAGTTATTGGGAGAGATTTATAGAAAGAGG
chr14	40111005	40111125	Hypo	1 -	ATCTATACAATTAAAACATAACACTTTACTATAACTTAACATTAATTATCTTTCTTAACACAAAAAAATAAAATTTAAAACAATACTTTAAAAAATATTAACATAAAATACAATCTTTTC
chr14	40111005	40111125	Hypo	1 +	ATTTGTATAATTGGAATATAATATTTTATTGTGGTTTAGTATTAATTGTTTTTTTTAGTATAGAAAAATAGAATTTAAAATAATGTTTTGAAGAATATTAATATGAAGTGTAGTTTTTTT
chr14	40111005	40111125	Hypo	1 -	ATCTATACAATTAAAACATAACACTTTACTATAACTTAACATTAATTATCTTTCTTACCACAAACAAATAAAATTTAAAACAATACTTTAAAAAATATTAACATAAAATACAATCTTTTC
chr14	40111005	40111125	Hypo	1 +	ATTTGTATAATTGGAATATAATATTTTATTGTGGTTTAGTATTAATTGTTTTTTTTATTATAGATAAATAGAATTTAAAATAATGTTTTGAAGAATATTAATATGAAGTGTAGTTTTTTT
chr14	40111005	40111125	Hyper	1 -	ATCTATACAATTAAAACATAACACTTTACTATAACTTAACATTAATTATCTTTCTTAACACAAAAAAATAAAATTTAAAACAATACTTTAAAAAATATTAACATAAAATACAATCTTTTC
chr14	40111005	40111125	Hyper	1 +	ATTTGTATAATTGGAATATAATATTTTATTGTGGTTTAGTATTAATTGTTTTTTTTAGTATAGAAAAATAGAATTTAAAATAATGTTTTGAAGAATATTAATATGAAGTGTAGTTTTTTT
chr14	40111005	40111125	Hyper	1 -	ATCTATACAATTAAAACATAACACTTTACTATAACTTAACATTAATTATCTTTCTTACCACAAACAAATAAAATTTAAAACAATACTTTAAAAAATATTAACATAAAATACAATCTTTTC
chr14	40111005	40111125	Hyper	1 +	ATTTGTATAATTGGAATATAATATTTTATTGTGGTTTAGTATTAATTGTTTTTTTTATTATAGATAAATAGAATTTAAAATAATGTTTTGAAGAATATTAATATGAAGTGTAGTTTTTTT
chr22	51025536	51025656	Hypo	1 -	CACTAAATCAAAATCTAATATATAATACTCTACCCCCAATAAATACTTCATATAAATCCAAACAAAAAAACACAAATCCAAAAACCCAAAAATTAAAATTAACTACTTCTCACCATCATT
chr22	51025536	51025656	Hypo	1 +	TATTGAATTAGAGTTTAATATATGGTGTTTTGTTTTTAGTAGATATTTTATGTGGATTTAAGTAGAAAGATATAGGTTTAGGAATTTAAGGGTTGGGATTAGTTATTTTTTATTATTATT
chr22	51025536	51025656	Hypo	1 -	CACTAAATCAAAATCTAATATATAATACTCTACCCCCAATAAATACTTCATATAAATCAAAAAAAAAAAAACACAAATCCAAAAACCCAAAAATTAAAATTAACTACTTCTCACCATCATT
chr22	51025536	51025656	Hypo	1 +	TATTGAATTAGAGTTTAATATATGGTGTTTTGTTTTTAGTAGATATTTTATGTGGATTGAAGAAGAAAGATATAGGTTTAGGAATTTAAGGGTTGGGATTAGTTATTTTTTATTATTATT

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chr22	51025536	51025656	Hyper	1 -	CACTAAATCAAAATCTAATATATAATACTCTACCCCCAATAAATACTTCATATAAATCCAAACAAAAAAACACAAATCCAAAAACCCAAAAATTAAAATTAACTACTTCTCACCATCATT
chr22	51025536	51025656	Hyper	1 +	TATTGAATTAGAGTTTAATATATGGTGTTTTGTTTTTAGTAGATATTTTATGTGGATTTAAGTAGAAAGATATAGGTTTAGGAATTTAAGGGTTGGGATTAGTTATTTTTTATTATTATT
chr22	51025536	51025656	Hyper	1 -	CACTAAATCAAAATCTAATATATAATACTCTACCCCCAATAAATACTTCATATAAATCGAAAAAAAAAAAACACAAATCCAAAAACCCAAAAATTAAAATTAACTACTTCTCACCATCATT
chr22	51025536	51025656	Hyper	1 +	TATTGAATTAGAGTTTAATATATGGTGTTTTGTTTTTAGTAGATATTTTATGTGGATCGAAGAAGAAAGATATAGGTTTAGGAATTTAAGGGTTGGGATTAGTTATTTTTTATTATTATT
chr11	95309311	95309431	Hypo	1 -	CTCCATCTAATTTAATAATTCCCTATTAAACAAACAAAACAAAAAAAATTATATCAATTATATCAACAACTAACTAACATTCATTAATTTATTAAAAAACTATATATACCAATACATAAC
chr11	95309311	95309431	Hypo	1 +	TTTTATTTAGTTTGATAATTTTTTATTGAGTGAGTAGAGTAGGGAAGGTTGTGTTAGTTATATTAATAATTAGTTAGTATTTATTAGTTTATTGAGAGATTATATGTGTTAGTATATGGT
chr11	95309311	95309431	Hypo	1 -	CTCCATCTAATTTAATAATTCCCTATTAAACAAACAAAACAAAAAAAATTATATCAATAATAACAACAACTAACTAACATTCATTAATTTATTAAAAAACTATATATACCAATACATAAC
chr11	95309311	95309431	Hypo	1 +	TTTTATTTAGTTTGATAATTTTTTATTGAGTGAGTAGAGTAGGGAAGGTTGTGTTAGTAATAGTAATAATTAGTTAGTATTTATTAGTTTATTGAGAGATTATATGTGTTAGTATATGGT
chr11	95309311	95309431	Hyper	1 -	CTCCATCTAATTTAATAATTCCCTATTAAACGAACAAAACAAAAAAAATTATATCAATTATATCAACAACTAACTAACATTCATTAATTTATTAAAAAACTATATATACCAATACATAAC
chr11	95309311	95309431	Hyper	1 +	TTTTATTTAGTTTGATAATTTTTTATTGAGCGAGTAGAGTAGGGAAGGTTGTGTTAGTTATATTAATAATTAGTTAGTATTTATTAGTTTATTGAGAGATTATATGTGTTAGTATATGGT
chr11	95309311	95309431	Hyper	1 -	CTCCATCTAATTTAATAATTCCCTATTAAACGAACAAAACAAAAAAAATTATATCAATAATAACAACAACTAACTAACATTCATTAATTTATTAAAAAACTATATATACCAATACATAAC
chr11	95309311	95309431	Hyper	1 +	TTTTATTTAGTTTGATAATTTTTTATTGAGCGAGTAGAGTAGGGAAGGTTGTGTTAGTAATAGTAATAATTAGTTAGTATTTATTAGTTTATTGAGAGATTATATGTGTTAGTATATGGT
chr14	34595875	34595995	Hypo	1 -	TAACCCTCTCATCCTTACATCATCTACCCTTAAAAAACAACCTACCTACAATCACCTCACAACCCCTAATAAAAATATTACCCACAACCTTTTTCTACATATTTTCAAACACACAAATCA
chr14	34595875	34595995	Hypo	1 +	TGGTTTTTTTATTTTTATATTATTTGTTTTTGAGAAGTAATTTGTTTATGATTATTTTATAATTTTTGATAGAAATGTTGTTTATAGTTTTTTTTTATATGTTTTTAAGTATATAAATTA
chr14	34595875	34595995	Hypo	1 -	TAACCCTCTCATCCTTACATCATCTACCCTTAAAAAACAACCTACCTACAATCACCTCCCAAACCCTAATAAAAATATTACCCACAACCTTTTTCTACATATTTTCAAACACACAAATCA
chr14	34595875	34595995	Hypo	1 +	TGGTTTTTTTATTTTTATATTATTTGTTTTTGAGAAGTAATTTGTTTATGATTATTTTTTAAATTTTGATAGAAATGTTGTTTATAGTTTTTTTTTATATGTTTTTAAGTATATAAATTA
chr14	34595875	34595995	Hyper	1 -	TAACCCTCTCATCCTTACATCATCTACCCTTAAAAAACAACCTACCTACGATCACCTCACAACCCCTAATAAAAATATTACCCACAACCTTTTTCTACATATTTTCAAACACACAAATCA
chr14	34595875	34595995	Hyper	1 +	TGGTTTTTTTATTTTTATATTATTTGTTTTTGAGAAGTAATTTGTTTACGATTATTTTATAATTTTTGATAGAAATGTTGTTTATAGTTTTTTTTTATATGTTTTTAAGTATATAAATTA
chr14	34595875	34595995	Hyper	1 -	TAACCCTCTCATCCTTACATCATCTACCCTTAAAAAACAACCTACCTACGATCACCTCCCAAACCCTAATAAAAATATTACCCACAACCTTTTTCTACATATTTTCAAACACACAAATCA
chr14	34595875	34595995	Hyper	1 +	TGGTTTTTTTATTTTTATATTATTTGTTTTTGAGAAGTAATTTGTTTACGATTATTTTTTAAATTTTGATAGAAATGTTGTTTATAGTTTTTTTTTATATGTTTTTAAGTATATAAATTA
chr9	118124316	118124436	Hypo	1 -	CAAACCTATAAACACAAAACCAACATAAAAACCCACTCTTTCTTACTATCTCTCTAAAATACATAAAAATAAACAAAAAAAAATTTCAACTAATCATAACAAATACCAAATTATTCAAAAA
chr9	118124316	118124436	Hypo	1 +	TAGATTTGTAAATATAAAGTTGGTATGAGAATTTATTTTTTTTTTATTGTTTTTTTGAAGTATATAGAGATAAATAAAAGAAATTTTAATTAATTATGATAAGTATTAAATTATTTAAGAG
chr9	118124316	118124436	Hypo	1 -	CAAACCTATAAACACAAAACCAACATAAAAACCCACTCTTTCTTACTATCTCTCTTAAATACATACAAATAAACAAAAAAAAATTTCAACTAATCATAACAAATACCAAATTATTCAAAAA
chr9	118124316	118124436	Hypo	1 +	TAGATTTGTAAATATAAAGTTGGTATGAGAATTTATTTTTTTTTTATTGTTTTTTTAAGTATATATAGATAAATAAAAGAAATTTTAATTAATTATGATAAGTATTAAATTATTTAAGAG
chr9	118124316	118124436	Hyper	1 -	CAAACCTATAAACACAAAACCGACATAAAAACCCACTCTTTCTTACTATCTCTCTAAAATACATAAAAATAAACAAAAAAAAATTTCAACTAATCATAACAAATACCAAATTATTCAAAAA
chr9	118124316	118124436	Hyper	1 +	TAGATTTGTAAATATAAAGTCGGTATGAGAATTTATTTTTTTTTTATTGTTTTTTTGAAGTATATAGAGATAAATAAAAGAAATTTTAATTAATTATGATAAGTATTAAATTATTTAAGAG
chr9	118124316	118124436	Hyper	1 -	CAAACCTATAAACACAAAACCGACATAAAAACCCACTCTTTCTTACTATCTCTCTTAAATACATACAAATAAACAAAAAAAAATTTCAACTAATCATAACAAATACCAAATTATTCAAAAA
chr9	118124316	118124436	Hyper	1 +	TAGATTTGTAAATATAAAGTCGGTATGAGAATTTATTTTTTTTTTATTGTTTTTTTAAGTATATATAGATAAATAAAAGAAATTTTAATTAATTATGATAAGTATTAAATTATTTAAGAG
chr13	34082739	34082859	Hypo	1 -	TAAATAACAATTCTTAAAATATAACACTAAATAAACTAAAATAAAAAAAAAAAACTACCCCATTCCTAAAAAAAAAACAAATACTATTAACAACAAAACCACCAAATAAAAAATACTTAAT
chr13	34082739	34082859	Hypo	1 +	TAAATGATAGTTTTTAAAATGTGATATTGGATAAGTTGAGGTGAGAGGGAGGATTGTTTTATTTTTGGGAAAAAGGTAAATGTTGTTGATAGTAAAGTTGTTAGATGAAAGATGTTTAAT
chr13	34082739	34082859	Hypo	1 -	TAAATAACAATTCTTAAAATATAACACTAAATAAACTAAAATAAAAAAAAAAAACTCCCCCATTCCAAAAAAAAAAAACAAATACTATTAACAACAAAACCACCAAATAAAAAATACTTAAT
chr13	34082739	34082859	Hypo	1 +	TAAATGATAGTTTTTAAAATGTGATATTGGATAAGTTGAGGTGAGAGGGAGGATTTTTTTTATTTTAGGGAAAAAGGTAAATGTTGTTGATAGTAAAGTTGTTAGATGAAAGATGTTTAAT
chr13	34082739	34082859	Hyper	1 -	TAAATAACAATTCTTAAAATATAACACTAAATAAACTAAAATAAAAAAAAAAAACTACCCCATTCCTAAAAAAAAAACAAATACTATTAACAACAAAACCGCCAAATAAAAAATACTTAAT
chr13	34082739	34082859	Hyper	1 +	TAAATGATAGTTTTTAAAATGTGATATTGGATAAGTTGAGGTGAGAGGGAGGATTGTTTTATTTTTGGGAAAAAGGTAAATGTTGTTGATAGTAAAGTCGTTAGATGAAAGATGTTTAAT
chr13	34082739	34082859	Hyper	1 -	TAAATAACAATTCTTAAAATATAACACTAAATAAACTAAAATAAAAAAAAAAAACTCCCCCATTCCAAAAAAAAAAAACAAATACTATTAACAACAAAACCGCCAAATAAAAAATACTTAAT
chr13	34082739	34082859	Hyper	1 +	TAAATGATAGTTTTTAAAATGTGATATTGGATAAGTTGAGGTGAGAGGGAGGATTTTTTTTATTTTAGGGAAAAAGGTAAATGTTGTTGATAGTAAAGTCGTTAGATGAAAGATGTTTAAT
chr17	13063344	13063464	Hypo	1 -	CATAAAAACACAAACTCTTTTAATTTATTTACAACAATATCCCCAACTCCTAAAACCATATCTAATACTATTCAATTTATCTAATAATTAAATCAATCAATTCTCAATACTAATATTCAC
chr17	13063344	13063464	Hypo	1 +	TATGAGAGTATAAGTTTTTTTGGTTTGTTTATAGTAGTGTTTTTAGTTTTTAAAATTATGTTTAGTATTATTTAATTTGTTTAATAATTGGATTGATTAATTTTTAGTATTAGTATTTAT
chr17	13063344	13063464	Hypo	1 -	CATAAAAACACAAACTCTTTTAATTTATTTACAACAATATCCCCAACTCCTAAAACCATAAATAATACTATTCAATTTATCTAATAATTAAATCAATCAATTCTCAATACTAATATTCAC
chr17	13063344	13063464	Hypo	1 +	TATGAGAGTATAAGTTTTTTTGGTTTGTTTATAGTAGTGTTTTTAGTTTTTAAAATTATGAATAGTATTATTTAATTTGTTTAATAATTGGATTGATTAATTTTTAGTATTAGTATTTAT
chr17	13063344	13063464	Hyper	1 -	CATAAAAACACAAACTCTTTTAATTTATTTACAACAATATCCCCAACTCCTAAAACCATATCTAATACTATTCAATTTATCTAATAATTAAATCGATCAATTCTCAATACTAATATTCAC
chr17	13063344	13063464	Hyper	1 +	TATGAGAGTATAAGTTTTTTTGGTTTGTTTATAGTAGTGTTTTTAGTTTTTAAAATTATGTTTAGTATTATTTAATTTGTTTAATAATTGGATCGATTAATTTTTAGTATTAGTATTTAT
chr17	13063344	13063464	Hyper	1 -	CATAAAAACACAAACTCTTTTAATTTATTTACAACAATATCCCCAACTCCTAAAACCATAAATAATACTATTCAATTTATCTAATAATTAAATCGATCAATTCTCAATACTAATATTCAC
chr17	13063344	13063464	Hyper	1 +	TATGAGAGTATAAGTTTTTTTGGTTTGTTTATAGTAGTGTTTTTAGTTTTTAAAATTATGAATAGTATTATTTAATTTGTTTAATAATTGGATCGATTAATTTTTAGTATTAGTATTTAT
chr13	105311423	105311543	Hypo	1 -	CACAATAAATTACCACCAAATATTAATATCCAAAATTCCTTTAAACCATAAATTAATATTCTCAAAATTTACTTTACCCTAAATTATTATAATTTTACTATAATTCTACTTAACTACAAT
chr13	105311423	105311543	Hypo	1 +	TATAATGGATTATTATTAGATATTAATATTTGAGGTTTTTTTAAATTATGAGTTGGTATTTTTAAAGTTTGTTTTATTTTAGATTGTTGTGATTTTATTATAGTTTTATTTGATTGTAAT
chr13	105311423	105311543	Hypo	1 -	CACAATAAATTACCACCAAATATTAATATCCAAAATTCCTTTAAACCATAAATTAATATTAACAAAATTTACTTTACCCTAAATTATTATAATTTTACTATAATTCTACTTAACTACAAT
chr13	105311423	105311543	Hypo	1 +	TATAATGGATTATTATTAGATATTAATATTTGAGGTTTTTTTAAATTATGAGTTGGTATTAATAAAGTTTGTTTTATTTTAGATTGTTGTGATTTTATTATAGTTTTATTTGATTGTAAT
chr13	105311423	105311543	Hyper	1 -	CACAATAAATTACCACCAAATATTAATATCCGAAATTCCTTTAAACCATAAATTAATATTCTCAAAATTTACTTTACCCTAAATTATTATAATTTTACTATAATTCTACTTAACTACAAT
chr13	105311423	105311543	Hyper	1 +	TATAATGGATTATTATTAGATATTAATATTCGAGGTTTTTTTAAATTATGAGTTGGTATTTTTAAAGTTTGTTTTATTTTAGATTGTTGTGATTTTATTATAGTTTTATTTGATTGTAAT
chr13	105311423	105311543	Hyper	1 -	CACAATAAATTACCACCAAATATTAATATCCGAAATTCCTTTAAACCATAAATTAATATTAACAAAATTTACTTTACCCTAAATTATTATAATTTTACTATAATTCTACTTAACTACAAT
chr13	105311423	105311543	Hyper	1 +	TATAATGGATTATTATTAGATATTAATATTCGAGGTTTTTTTAAATTATGAGTTGGTATTAATAAAGTTTGTTTTATTTTAGATTGTTGTGATTTTATTATAGTTTTATTTGATTGTAAT
chr15	67707771	67707891	Hypo	1 -	TATCAAACACTTACTAAAATAACTAATAAAACTCTCCCACCAAAATTTTCTAAATATTTCAAAAATTATTCAAATTTTTTAAACCCACTAAAAACATAATATCAAATATTTATCTTCTAC

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chr15	67707771	67707891	Hypo	1 +	TGTTAAGTATTTATTAAGATAATTAATGAAATTTTTTTATTAAGATTTTTTGGATATTTTGGAAGTTATTTAGATTTTTTGAATTTGTTGAGGGTATAGTGTTAGATGTTTGTTTTTTAT
chr15	67707771	67707891	Hypo	1 -	TATCAACACTTACTAAAATAACTAATAAAACTCTCCCACCAAAATTTTCTAAATATTTCCCAAATTATTCAAATTTTTTAAACCCGCTAAAAACATAATATCAAATATTTATCTTCTAC
chr15	67707771	67707891	Hyper	1 +	TGTTAAGTATTTATTAAGATAATTAATGAAATTTTTTTATTAAGATTTTTTGGATATTTTGGAAGTTATTTAGATTTTTTGAATTTGTTGAGGGTATAGTGTTAGATGTTTGTTTTTTAT
chr15	67707771	67707891	Hyper	1 -	TATCAACACTTACTAAAATAACTAATAAAACTCTCCCACCAAAATTTTCTAAATATTTCCCAAATTATTCAAATTTTTTAAACCCGCTAAAAACATAATATCAAATATTTATCTTCTAC
chr15	67707771	67707891	Hyper	1 +	TGTTAAGTATTTATTAAGATAATTAATGAAATTTTTTTATTAAGATTTTTTGGATATTTTGGAAGTTATTTAGATTTTTTGAATTCGTTGAGGGTATAGTGTTAGATGTTTGTTTTTTAT
chr10	97207965	97208085	Hypo	1 -	AAAAATTAAAAAACCAAAAAACCCCTCAACTAATCTTTATTCTATTCCAACTACATACTCACTTCTTTAAAACCAAAAACATCTATATAAATTACCCAACCCATTTTCCTAATTTTCCAA
chr10	97207965	97208085	Hypo	1 +	AGGAGTTAGGGAGTTAGAGGGTTTTTAGTTGGTTTTTATTTTGTTTTAATTATATGTTTTGTTTTTTAGAATTAGAAGTATTTATATAGGTTATTTAGTTTATTTTTTGGTTTTTTAG
chr10	97207965	97208085	Hyper	1 -	AAAAATTAAAAAACCAAAAAACCCCTCAACTAATCTTTATTCTATTCCAACTACATACTCACTTCTTTAAAACCAAAAACATCTATATAAATTACCCAACCCATTTTCCTAATTTTCCAA
chr10	97207965	97208085	Hyper	1 +	AGGAGTTAGGGAGTTAGAGGGTTTTTAGTTGGTTTTTATTTTGTTTTAATTATATGTTTTGTTTTTTAGAATTAGAAGTATTTATATAGGTTATTTAGTTTATTTTTTGGTTTTTTAG
chr10	97207965	97208085	Hyper	1 -	AAAAATTAAAAAACCAAAAAACCCCTCAACTAATCTTTATTCTATTCCAACTACATACTCACTTCTTTAAAACCAAAAACATCTATATAAATTACCCAACCCATTTTCCTAATTTTCCAA
chr10	97207965	97208085	Hyper	1 +	AGGAGTTAGGGAGTTAGAGGGTTTTTAGTTGGTTTTTATTTTGTTTTAATTATATGTTTTGTTTTTTAGAATTAGAAGTATTTATATAGGTTATTTAGTTTATTTTTTGGTTTTTTAG
chr10	97207965	97208085	Hyper	1 -	AAAAATTAAAAAACCAAAAAACCCCTCAACTAATCTTTATTCTATTCCAACTACATACTCACTTCTTTAAAACCAAAAACATCTATATAAATTACCCAACCCATTTTCCTAATTTTCCAA
chr10	97207965	97208085	Hyper	1 +	AGGAGTTAGGGAGTTAGAGGGTTTTTAGTTGGTTTTTATTTTGTTTTAATTATATGTTTTGTTTTTTAGAATTAGAAGTATTTATATAGGTTATTTAGTTTATTTTTTGGTTTTTTAG
chr2	71750015	71750135	Hypo	1 -	TAACCAATCTTATTAATAAAAAACCTCAATATACACCTCTCTTTTTCCCATCCCAAAACAAAAATTAAAATCCAACTCCCACTCTCTCTCACTTAAATCTCTTTATAAATTACAATAT
chr2	71750015	71750135	Hypo	1 +	TGGTTAGTTTTGTTGGTGGAAAATTTTAGTGTATGTTTTTTTTTTTTTTTTATTTTAAGATAGGAGTTTGAGGTTTAGTTTTATTTTTTTTTATTTGGGTTTTTTTGTGAATTATAATAT
chr2	71750015	71750135	Hyper	1 -	TAACCAATCTTATTAATAAAAAACCTCAATATACACCTCTCTTTTTCCCATCCCAAAACAAAAATTAAAATCCAACTCCCACTCTCTCTCACTTAAATCTCTTTATAAATTACAATAT
chr2	71750015	71750135	Hyper	1 +	TGGTTAGTTTTGTTGGTGGAAAATTTTAGTGTATGTTTTTTTTTTTTTTTTATTTTAAGATAGGAGTTTGAGGTTTAGTTTTATTTTTTTTTATTTGGGTTTTTTTGTGAATTATAATAT
chr2	71750015	71750135	Hyper	1 -	TAACCAATCTTATTAATAAAAAACCTCAATATACGCCTCTCTTTTTCCCATCCCAAAACAAAAATTAAAATCCAACTCCCACTCTCTCTCACTTAAATCTCTTTATAAATTACAATAT
chr2	71750015	71750135	Hyper	1 +	TGGTTAGTTTTGTTGGTGGAAAATTTTAGTGTACGTTTTTTTTTTTTTTTTATTTTAAGATAGGAGTTTGAGGTTTAGTTTTATTTTTTTTTATTTGGGTTTTTTTGTGAATTATAATAT
chr2	71750015	71750135	Hyper	1 -	TAACCAATCTTATTAATAAAAAACCTCAATATACGCCTCTCTTTTTCCCATCCCAAAACCGAATTTAAAATCCAACTCCCACTCTCTCTCACTTAAATCTCTTTATAAATTACAATAT
chr2	71750015	71750135	Hyper	1 +	TGGTTAGTTTTGTTGGTGGAAAATTTTAGTGTACGTTTTTTTTTTTTTTTTATTTTAAGATTCGAGTTTGAGGTTTAGTTTTATTTTTTTTTATTTGGGTTTTTTTGTGAATTATAATAT
chr16	53127785	53127905	Hypo	1 -	CTAACCCACCAACAAAAACACAAAAAAAAACCAAAAACTAACTTTAATTCAATTACAAATATCCCAATTAATTCTATCCATAAAACTAACCAACAATATACTCCTCT
chr16	53127785	53127905	Hypo	1 +	TTGATTTATTAGTAGAAGTATAAAAGAGAATTAGGGATTGGTTTTGGTTTGATTGTGAGTGTTTTAGTTAGTTTTGTTTATGAAGTTTGTTAATGATTGGGTTTAATAATGTGTGTTTTT
chr16	53127785	53127905	Hyper	1 -	CTAACCCACCAACAAAAACACAAAAAAAAACCAAAAACTAACTTTAATTCAATTACAAATTACCCAATTAATTCTATCCATAAAACTATCAATAACTAAACCTAACAATATACTCCTCT
chr16	53127785	53127905	Hyper	1 +	TTGATTTATTAGTAGAAGTATAAAAGAGAATTAGGGATTGGTTTTGGTTTGATTGTGAGTGTTTTAGTTAGTTTTGTTTATGAAGTTTGTTAATGATTGGGTTTAATAATGTGTGTTTTT
chr16	53127785	53127905	Hyper	1 -	CTAACCCACCAACAAAAACACAAAAAAAAACCAAAAACTAACTTTAATTCGATTACGAATATCCCAATTAATTCTATCCATAAAATCTATCAATAACTAAACCTAACAATATACTCCTCT
chr16	53127785	53127905	Hyper	1 +	TTGATTTATTAGTAGAAGTATAAAAGAGAATTAGGGATTGGTTTTGGTTCGATTGCGAGTGTTTTAGTTAGTTTTGTTTATGAAGTTTGTTAATGATTGGGTTTAATAATGTGTGTTTTT
chr16	53127785	53127905	Hyper	1 -	CTAACCCACCAACAAAAACACAAAAAAAAACCAAAAACTAACTTTAATTCGATTACGAATTACCCAATTAATTCTATCCATAAAATCTATCAATAACTAAACCTAACAATATACTCCTCT
chr16	53127785	53127905	Hyper	1 +	TTGATTTATTAGTAGAAGTATAAAAGAGAATTAGGGATTGGTTTTGGTTCGATTGCGAGTGTTTTAGTTAGTTTTGTTTATGAAGTTTGTTAATGATTGGGTTTAATAATGTGTGTTTTT
chr4	121184328	121184448	Hypo	1 -	ACAATTATATAACCCCCAATCCTTCCCTATCCTACACAACATAAAAACTACATCTTTATAAAAACTCTCTAAATTAAATAAAAAAAACTTCTAATAAAATTAATCAACATAAAATTTTAT
chr4	121184328	121184448	Hypo	1 +	ATAATTGTGTAGTTTTAATTTTTTTTTATTTTATATAATATGAAAGTTATATTTTTGTGAGAGTTTTTAAGTTGGATGAAGAAGTTTTGATAAAATTGATTAGTATGGAATTTTGT
chr4	121184328	121184448	Hypo	1 -	ACAATTATATAACCCCCAATCCTTCCCTATCCTACACAACATAAAAACTACATCTTTATATAACACTCTCTAAATTAAATAAAAAAAACTTCTAATAAAATTAATCAACATAAAATTTTAT
chr4	121184328	121184448	Hypo	1 +	ATAATTGTGTAGTTTTAATTTTTTTTTATTTTATATAATATGAAAGTTATATTTTTGTGTTAGTTTTTTAAGTTGGATGAAGAAGTTTTGATAAAATTGATTAGTATGGAATTTTGT
chr4	121184328	121184448	Hyper	1 -	ACAATTATATAACCCCCAATCCTTCCCTATCCTACACAACATAAAAACTACATCTTTATAAAAACTCTCTAAATTAAATAAAAAAAACTTCTAATAAAATTAATCAACATAAAATTTTAT
chr4	121184328	121184448	Hyper	1 +	ATAATTGTGTAGTTTTAATTTTTTTTTATTTTATATAATATGAAAGTTATATTTTTGTGTTAGTTTTTTAAGTTGGATGAAGAAGTTTTGATAAAATTGATTAGTATGGAATTTTGT
chr6	85802505	85802625	Hypo	1 -	CACACTACCAAAAAATAACAACTATCAACCTATTATTACCCTAAAATCACAACTACTCATATTAAAATTAAAAAAACTATAAAAAACAACCATATTTAACTCCTCTAATAAACAAAAATTA
chr6	85802505	85802625	Hypo	1 +	TATATTATTAAGAAATGGTGATTGTTAATTATTATTGTTTTGGGATTATAGTTATTTATATTAGAGTTAAAAGGATTGTGAGGGATAATTATGTTTGATTTTTTTGATAAATAGAAGTTG
chr6	85802505	85802625	Hyper	1 -	CACACTACCAAAAAATAACAACTATCAACCTATTATTACCCTAAAATCACAACTACTCATAAAAAATTAAAAAAACAACCATATTTAACTCCTCTAATAAACAAAAATTA
chr6	85802505	85802625	Hyper	1 +	TATATTATTAAGAAATGGTGATTGTTAATTATTATTGTTTTGGGATTATAGTTATTTATATTAGAGAAGAGTTAAAAGGATTGTGAGGGATAATTATGTTTGATTTTTTTGATAAATAGAAGTTG
chr6	85802505	85802625	Hyper	1 -	CACACTACCAAAAAATAACGACTATCAACCTATTATTACCCTAAAATCACAACTACTCATATTAAAATTAAAAAACTATAAAAAACAACCATATTTAACTCCTCTAATAAACAAAAATTA
chr6	85802505	85802625	Hyper	1 +	TATATTATTAAGAAATGGCGATTGTTAATTATTATTGTTTTGGGATTATAGTTATTTATATTAGAGTTAAAAGGATTGTGAGGGATAATTATGTTTGATTTTTTTGATAAATAGAAGTTG
chr6	85802505	85802625	Hyper	1 -	CACACTACCAAAAAATAACGACTATCAACCTATTATTACCCTAAAATCACAACTACTCATATTAAAATTAAAAAACAACCATATTTAACTCCTCTAATAAACAAAAATTA
chr6	85802505	85802625	Hyper	1 +	TATATTATTAAGAAATGGCGATTGTTAATTATTATTGTTTTGGGATTATAGTTATTTATATTAGAGTTAAAAGGATTGTGAGGGATAATTATGTTTGATTTTTTTGATAAATAGAAGTTG
chr11	118076892	118077012	Hypo	1 -	AAATACTCAAAACCTCCTCCCTCAAACCAACACAACATCATCCCCAAAATAAAAATACCCTCTAACTACCCACATATACCAAACCTAAAAATTTCTACTATCTCCATATCACCATAAACA
chr11	118076892	118077012	Hypo	1 +	AAGTATTTAGAGTTTTTTTTTTTAGATTAGTATAGTATTATTTTTAAGATGAGAATATTTAGTAGTTGTTTATATGTATTAAGTTTGAGGGTTTTTGTTGTTTTTATATTATTATAAATA
chr11	118076892	118077012	Hyper	1 -	AAATACTCAAAACCTCCTCCCTCAAACCAACACAACATCATCCCCAAAATAAAAATACCCTCTAACTACCCACATATACCAAACCTAAAAATTTCTACTATCTCCATATCACCATAAACA
chr11	118076892	118077012	Hyper	1 +	AAGTATTTAGAGTTTTTTTTTTTAGATTAGTATAGTATTATTTTTAAGATGAGAATATTTTAGTTGTTTATATGTATTAAGTTTGAGGGTTTTTGTTGTTTTTATATTATTATAAATA
chr11	118076892	118077012	Hyper	1 -	AAATACTCAAAACCTCCTCCCTCAAACCAACACAACATCATCCCCAAAATAAAAATACCCTCTAACTACCCACATATACCAAACCTAAAAATTTCTACTATCTCCATATCACCATAAACA
chr11	118076892	118077012	Hyper	1 +	AAGTATTTAGAGTTTTTTTTTTTAGATTAGTATAGTATTATTTTTAAGATGAGAATATTTTAGTTGTTTATATGTATTAAGTTTGAGGGTTTTTGTTGTTTTTATATTATTATAAATA

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chr11	118076892	118077012	Hyper	1 -	AAATACTCAAAACCTCCTCCCTCAAACCAACACAACATCATCCCCAAAATAAAAATACCCAATAACTACCCACATATACCAAACCTAAAAATTTCTACTATCTCCATATCACCATAAACA
chr11	118076892	118077012	Hyper	1 +	AAGTATTTAGAGTTTTTTTTTTTAGATTAGTATAGTATTATTTTTAAGATGAGAATATTTAGTAGTTGTTTATATGTATTAAGTTTGAGGGTTTTTGTTGTTTTTATATTATTATAAATA
chr4	112205717	112205837	Hypo	1 -	AATAAAACACTTAAAACCTTTATATTATTCAAAAAAAAAAAAATAACATTACTCAAACCTAAACTTCATTAAATCAAATATACATATTAAAAAATATCTAAAAATTAAAAA
chr4	112205717	112205837	Hypo	1 +	AATAGGGTATTTAGGGTTTTTGTGTTATTTAGGAGAAGAGAAAATAGTATTGTTTAAATTTTGTTTTGTTGAGTTAAGTGTGTATGTTAAAAATATAGGGAAATGTTTAAAAATTAAAAA
chr4	112205717	112205837	Hyper	1 -	AATAAAACACTTAAAACCTTTATATTATTCAAAAAAAAAAAAATAACATTACTCAAACCTAAACTTCATTAAATCAAATATACATATTAAAAAATATCTAAAAATTAAAAA
chr4	112205717	112205837	Hyper	1 +	AATAGGGTATTTAGGGTTTTTGTGTTATTTAGGAGAAGAGAAAATAGTATTGTTTAAATTTTGTTTCGTTGAGTTAAGTGTGTATGTTAAAAATATAGGGAAATGTTTAAAAATTAAAAA
chr4	112205717	112205837	Hyper	1 -	AATAAAACACTTAAAACCTTTATATTATTCAAAAAAAAAAAAATAACATTACTCAAACCTAAACTTCGTTAAATCAAATATACATATTAAAAAATATAAAAAAATATCTAAAAATTAAAAA
chr4	112205717	112205837	Hyper	1 +	AATAGGGTATTTAGGGTTTTTGTGTTATTTAGGAGAAGAGAAAATAGTATTGTTTAAATTTGGGTTTCGTTGAGTTAAGTGTGTATGTTAAAAATATAGGGAAATGTTTAAAAATTAAAAA
chr13	114251387	114251507	Hypo	1 -	CTAACCAAAATTACCACTCCATTCTAACCCCAAACCACCCTAAAAAAAAATTTCTAAAAATACCAATAACTCACTCTATCCTTAAATAACTTAATTTTTATTAAAATAAAAATAAAAATT
chr13	114251387	114251507	Hypo	1 +	TTGGTTGGGGTTGTTGTTTGTTTTGATTTTAGGTTATTTTGGAGGAGGGTTTTGAGAGGTTGGTGGTTATTTTGTTTTTGGATGATTTGATTTTTGTAAAATGGAAATGGAAATT
chr13	114251387	114251507	Hyper	1 -	CTAACCAAAATTACCACTCCATTCTAACCCCAAACCACCCTAAAAAAAAATTTCTAAAAATACCGATAACTCACTCTATCCTTAAATAACTTAATTTTTATTAAAATAAAAATAAAAATT
chr13	114251387	114251507	Hyper	1 +	TTGGTTGGGGTTGTTGTTTGTTTTGATTTTAGGTTATTTTGGAGGAGGGTTTTGAGAGGTTCGGTGGTTATTTTGTTTTTGGATGATTTGATTTTTGTAAAATGGAAATGGAAATT
chr13	114251387	114251507	Hyper	1 -	CTAACCAAAATTACCACTCCATTCTAACCCCAAACCACCCTAAAAAAAAATTTCTAAAAATCCGATAACTCACTCTATCCTTAAATAACTTAATTTTTATTAAAATAAAAATAAAAATT
chr13	114251387	114251507	Hyper	1 +	TTGGTCGGGGTTGTCGTTTCGTTTGATTTTAGGTTATTTTGGAGGAGGGTTTTGAGAGGTCGGTGGTTATTTTGTTTTGGATGATTTGATTTTTGTAAAATGGAAATGGAAATT
chr12	93915553	93915673	Hypo	1 -	AAAAAAAAACTCAAACACTAATAAATATTAACTACTTAACTTCACTCTCTAAACCCCATATTCTTTAAAAATAAAATTAATAATTACTATTTACCAACACTTTATAAAATTAAATA
chr12	93915553	93915673	Hypo	1 +	AGAAGAGAAATTTAAATATTGGTGAATGTTAGTTTGTTTGGTTTTATTTTTTGAGTTTTAATTTTTTTGAAAGTGGAATTAATAATTGTTATTTGTTAGTATTTTATGAAGATTAAATG
chr12	93915553	93915673	Hyper	1 -	AAAAAAAAACTCAAACACTAATAAATATTAACTACTTAACTTCACTCTCTAAACCCCAACTTCTTTTAAAAATAAAATTAATAATTACTATTTACCAACACTTTATAAAAATTAAATA
chr12	93915553	93915673	Hyper	1 +	AGAAGAGAAATTTAAATATTGGTGAATGTTAGTTTGTTTGGTTTTATTTTTTGAGTTTTAATTTTTTTGAAAGTGGAATTAATAATTGTTATTTGTTAGTATTTTATGAAGATTAAATG
chr12	93915553	93915673	Hyper	1 -	AAAAAAAAACTCAAACACTAATAAATATTAACTACTTAACTTCACTCTCTAAACCCCAACTTCTTTTAAAAATAAAATTAATAATTACTATTTACCAACACTTTATAAAAATTAAATA
chr12	93915553	93915673	Hyper	1 +	AGAAGAGAAATTTAAATATTGGTGAATGTTAGTTTGTTTGGTTTTATTTTTTGAGTTTTAATTTTTTTGAAAGTGGAATTAATAATTGTTATTTGTTAGTATTTTATGAAGATTAAATG
chr12	93915553	93915673	Hyper	1 -	AAAAAAAAACTCAAACACTAATAAATATTAACTACTTAACTTCACTCTCTAAACCCCAACTTCTTTTAAAAATAAAATTAATAATTACTATTTACCAACACTTTATAAAAATTAAATA
chr12	93915553	93915673	Hyper	1 +	AGAAGAGAAATTTAAATATTGGTGAATGTTAGTTTGTTTGGTTTTATTTTTTGAGTTTTAATTTTTTTGAAAGTGGAATTAATAATTGTTATTTGTTAGTATTTTATGAAGATTAAATG
chr18	70122589	70122709	Hypo	1 -	TTAAATTTTTTCTAACACTTTATATTATCCTTATACAAATCATAACTAAATACTTAAAAATCAATAAATATTTAAAAATAAAAAATAAAAATAAAAAATAATCCTAATATCATTTAACTATA
chr18	70122589	70122709	Hypo	1 +	TTAGATTTTTTTTGATATTTATGTTGTTTTTGTATAAGTTATAATTAAATGTTTAAGAGTTAGTGAGTATTTAAAGATAAAGAGTAATGTGAAAATAAGTTTTGATATTATTTGGTTGTG
chr18	70122589	70122709	Hyper	1 -	TTAAATTTTTTCTAACACTTTATATTATCCTTATACAAATCATAACTAAATACTTAAAAATCAATAAATATTTAAAAATAAAAAATAAAAATAAAAAATAATCCTAATATCATTTAACTATA
chr18	70122589	70122709	Hyper	1 +	TTAGATTTTTTTGATATTTATGTTGTTTTTGTATAAGTTATAATTAAATGTTTAAGAGTTAGTGAGTATTTAAAGATAAAGAGTAATGTGAAAATAAGTTTTGATATTATTTGGTTGTG
chr18	70122589	70122709	Hyper	1 -	TTAAATTTTTTCTAACACTTTATATTATCCTTATACAAATCATAACTAAATACTTAAAAAAAAATAAATATTTAAAAATAAAAATAAAAATAAAAAATAATCCTAATATCATTTAACTATA
chr18	70122589	70122709	Hyper	1 +	TTAGATTTTTTTGATATTTATGTTGTTTTTGTATAAGTTATAATTAAATGTTTAAGAGTTAGTGAGTATTTAAAGATAAAGAGTAATGTGAAAATAAGTTTTGATATTATTTGGTTGTG
chr4	44968056	44968176	Hypo	1 -	ATCTAAAAAACAACCAATCCTTTCAAAAATATACCTCTATCAAAAAAACTAAAATCTACACATTCTCTTCTTAACTAATAAAAAATAATCTATTTATTTCCTATAAAACTATATAATTTT
chr4	44968056	44968176	Hypo	1 +	GTTTGAAGAGTAGTTAGTTTTTTAGAAATGTATTTTTGTTAAAGAAATTGGAATTTGTAGTTTTTTTTTTGATTAGTGAAAAGTAATTTGTTTATTTTTTATGGGGTTATATAATTTT
chr4	44968056	44968176	Hyper	1 -	ATCTAAAAAACAACCAATCCTTTCAAAAATATACCTCTATCAAAAAAACTAAAATCTACACATTCTCTTCTTAACTAATAAAAAATAATCTATTTATTTCCTATAAAACTATATAATTTT
chr4	44968056	44968176	Hyper	1 +	GTTTGAAGAGTAGTTAGTTTTTTAGAAATGTATTTTTGTTAAAGAAATTGGAATTTGTAGTTTTTTTTTTGATTAGTGAAAAGTAATTTGTTTATTTTTTATGGGGTTATATAATTTT
chr20	58611239	58611359	Hypo	1 -	ACTTCTACACCTTCCTACACCAAACCAAACTTAACCCTAAAACACAACAATCTAACCTAAAACATATTCATATATAATAAATTAATAACCCATCTCTCATCCTAATCACTATCACCTC
chr20	58611239	58611359	Hypo	1 +	ATTTTTGTATTTTTTTGTATTAAATTAGATTTGATTTTGGAATATAGTAATTTGATTTGGTGTGTGTTTTATGTGTGGTGGGTTGATGGTTTATTTTTTATTTTGGTTATTGTTATTTT
chr20	58611239	58611359	Hyper	1 -	ACTTCTACACCTTCCTACACCAAACCAAACTTAACCCTAAAACACAACAATCTAACCTAAAACATATTCATATATAATAAATTAATAACCCATCTCTCATCCTAATCACTATCACCTC
chr20	58611239	58611359	Hyper	1 +	ATTTTTGTATTTTTTTGTATTAAATTAGATTTGATTTTGGAATATAGTAATTTGATTTGGGGGTGTGTTTTATGTGTGGTGGGTTGATGGTTTATTTTTTATTTTGGTTATTGTTATTTT
chr20	58611239	58611359	Hyper	1 -	ACTTCTACACCTTCCTACACCAAACCAAACTTAACCCTAAAACACAACAATCTAACCTAAAACATATTCATATATAATAAATTAATAACCCATCTCTCATCCTAATCACTATCACCTC
chr20	58611239	58611359	Hyper	1 +	ATTTTTGTATTTTTTTGTATTAAATTAGATTTGATTTTGGAATATAGTAATTTGATTTGGTGCGTGTTTTATGTGTGGTGGGTTGATGGTTTATTTTTTATTTTGGTTATTGTTATTTT
chr20	58611239	58611359	Hyper	1 -	ACTTCTACACCTTCCTACACCAAACCAAACTTAACCCTAAAACACAACAATCTAACCTAAAAACGTATTCATATATAATAAATTAATAACCCATCTCTCATCCTAATCACTATCACCTC
chr20	58611239	58611359	Hyper	1 +	ATTTTTGTATTTTTTTGTATTAAATTAGATTTGATTTTGGGGGCGTGTTTTATGTGTGGTGGGTTGATGGTTTATTTTTTATTTTGGTTATTGTTATTTT
chr22	21111628	21111748	Hypo	1 -	ATACTACAAAAATAAAAATCACTTTATTTTAAATTAAAATAAAAAAAAAACAATCAATCCCCCAAAACAATTTAACATCCTCTAATATCACAAAAACAAAAAAACAAAACTCAAAAAAAAA
chr22	21111628	21111748	Hyper	1 +	GTATTGTAAAAATGAAAATGTTTTATTTTGAATTAAGGTGAGGAAGGAATAATTAGTTTTTTGGAATAATTTAATGTTTTTGATGTTATAGGAATAGAAAAATAGAGTTTAGAGAGAAG
chr22	21111628	21111748	Hyper	1 -	ATACTACAAAAATAAAAATCACTTTATTTTAAATTAAAATAAAAAAAAAACAATCAATCCCCAAAACAATTTAACATCCTCTAATATCACAAAAACAAAAAAACAAAACTCAAAAAAAAA

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chr22	21111628	21111748	Hypo	1 +	GTATTGTAAAAATGAAAATTGTTTTATTTTGAATTAAGGTGAGGAGGAATAATTAGTTTTGGGGAATAATTTAATGTTTTTGATGTTATAGGAATAGAAAAATAGAGTTTAGAGAGAAG
chr22	21111628	21111748	Hyper	1 -	ATACTACAAAAATAAAAATCGCTTTATTTTAAATTAAAATAAAAAAAAACAATCAATCCCCGAAAAACAATTTAACGTCCTCTAATATCACAAAAACAAAAAAACAAAACTCAAAAAAAAA
chr22	21111628	21111748	Hyper	1 +	GTATTGTAAAAATGAAAATCGTTTTATTTTGAATTAAGGTGAGGAGGAATAATTAGTTTTCGGAATAATTTAACGTTTTTGATGTTATAGGAATAGAAAAATAGAGTTTAGAGAGAAG
chr22	21111628	21111748	Hyper	1 -	ATACTACAAAAATAAAAATCGCTTTATTTTAAATTAAAATAAAAAAAAACAATCAATCCCCGAAAAACAATTTAACGTCCTCTAATATCACAAAAACAAAAAAACAAAACTCAAAAAAAAA
chr22	21111628	21111748	Hyper	1 +	GTATTGTAAAAATGAAAATCGTTTTATTTTGAATTAAGGTGAGGAGGAATAATTAGTTTTCGGAATAATTTAACGTTTTTGATGTTATAGGAATAGAAAAATAGAGTTTAGAGAGAAG
chr6	166528003	166528123	Hypo	1 -	TTCCAAAAAACACCAAAAAACACAAAACTAAAAATCAAACAACTAATCCTAACTAAAAAACAATAAAACATAACACCTACCAAATCTAAAAAAAAAAAAAAAAAACCACAAAACAAAAC
chr6	166528003	166528123	Hypo	1 +	TTTTAAGGGATATTAGGGGGTATAGAATTGGAAGTTAGGTAGTTGAGTTTTGGTTAGGAATGAGTGGGATGTGATATTTGTTAAGTTTGAAGGGAGAGAAAGGAGGTTATAGGGTAGGGT
chr6	166528003	166528123	Hypo	1 -	TTCCAAAAAACACCAAAAAACACAAAACTAAAAATCAAACAACTAATCCTAACTAAAAATAAATAAAACATAACACCTACCAAATCTAAAAAAAAAAAAAAAAAACCACAAAACAAAAC
chr6	166528003	166528123	Hypo	1 +	TTTTAAGGGATATTAGGGGGTATAGAATTGGAAGTTAGGTAGTTGAGTTTTGGTTAGGAATGAGTGGGATGTGATATTTGTTAAGTTTGAAGGGAGAGAAAGGAGGTTATAGGGTAGGGT
chr6	166528003	166528123	Hypo	1 -	TTCCAAAAAACACCAAAAAACACAAAACTAAAAATCAAACAACTAATCCTAACTAAAAAACAATAAAACGTAACACCTACCAAATCTAAAAAAAAAAAAAAAAAACCACAAAACAAAAC
chr6	166528003	166528123	Hypo	1 +	TTTTAAGGGATATTAGGGGGTATAGAATTGGAAGTTAGGTAGTTGAGTTTTGGTTAGGAATGAGTGGGACGTGATATTTGTTAAGTTTGAAGGGAGAGAAAGGAGGTTATAGGGTAGGGT
chr6	166528003	166528123	Hypo	1 -	TTCCAAAAAACACCAAAAAACACAAAACTAAAAATCAAACAACTAATCCTAACTAAAAATAAATAAAACGTAACACCTACCAAATCTAAAAAAAAAAAAAAAAAACCACAAAACAAAAC
chr6	166528003	166528123	Hypo	1 +	TTTTAAGGGATATTAGGGGGTATAGAATTGGAAGTTAGGTAGTTGAGTTTTGGTTAGGAATGAGTGGGACGTGATATTTGTTAAGTTTGAAGGGAGAGAAAGGAGGTTATAGGGTAGGGT
chr14	101406154	101406274	Hypo	1 -	AAATTATTATTAAAACAATTTTAAAATTCTTAATCCCAATAAATTAATAACTAAAACTCTATTCATTTTAATAAAAAACATATAATCATCTATACACAAAACTAAATATTTTTATTCTAT
chr14	101406154	101406274	Hypo	1 +	GGATTATTATTGAAATAATTTTGAGGTTTTTAGTTTTAATAAATTAGTGGTTAAGGTTTTATTTATTTTGGTAAGGAGTATATGGTTATTTGTGTATAAGATTGAATGTTTTTGTTTTGT
chr14	101406154	101406274	Hypo	1 -	AAATTATTATTAAAACAATTTTAAAATTCTTAATCCCAATAAATTAATAACTAAAACTCTATTCATTTTAATAAAAAACATATAATCATCTATACACAAAACTAAATATTTTTATTCTAT
chr14	101406154	101406274	Hypo	1 +	GGATTATTATTGAAATAATTTTGAGGTTTTTAGTTTTAATAAATTAGTGGTTAAGGTTTTATTTATTTTGGTAAGGAGTATATGGTTATTTGTGTATAAGATTGAATGTTTTTGTTTTGT
chr14	101406154	101406274	Hypo	1 -	AAATTATTATTAAAACAATTTTAAAATTCTTAATCCCAATAAATTAATAACTAAAACTCTATTCATTTTAATAAAAAACATATAATCATCTATACACAAAACTAAATATTTTTATTCTAT
chr14	101406154	101406274	Hypo	1 +	GGATTATTATTGAAATAATTTTGAGGTTTTTAGTTTTAATAAATTAGTGGTTAAGGTTTTATTTATTTTGGTAAGGAGTATATGGTTATTTGTGTATAAGATTGAATGTTTTTGTTTTGT
chr2	156098874	156098994	Hypo	1 -	TATATAAAAATTAACTTCAAAATCTATAAAATTACACTCAAATTATCATCAATAATTCCTCCTAATACTTTTTAAAAAAAATTCATTCATTCCCTCCTTCAAATATACAATATAAATTC
chr2	156098874	156098994	Hypo	1 +	TGTGTAAAAATTAATTTTAGAATTTATGAAATTATATTTGAGTTGTTATTAGTAATTTTTTTAATGGTATTTTTAGAAAAAAATTTATTTATTTTTTTTTTTAAATATGTAATATAAATTT
chr2	156098874	156098994	Hypo	1 -	TATATAAAAATTAACTTCAAAATCTATAAAATTACACTCGAATTATCATCAATAATTCCTCCTAATACTTTTTAAAAAAAATTCATTCATTCCCTCCTTCAAATATACAATATAAATTC
chr2	156098874	156098994	Hypo	1 +	TGTGTAAAAATTAATTTTAGAATTTATGAAATTATATTCGAGTTGTTATTAGTAATTTTTTTAATGGTATTTTTAGAAAAAAATTTATTTATTTTTTTTTTTAAATATGTAATATAAATTT
chr2	156098874	156098994	Hypo	1 -	TATATAAAAATTAACTTCAAAATCTATAAAATTACACTCGAATTATCATCAATAATTCCTCCTAATACTTTTTAAAAAAAATTCATTCATTCCCTCCTTCAAATATACAATATAAATTC
chr2	156098874	156098994	Hypo	1 +	TGTGTAAAAATTAATTTTAGAATTTATGAAATTATATTCGAGTTGTTATTAGTAATTTTTTTGGTATTTTTAGAAAAAAATTTATTTATTTTTTTTTTTAAATATGTAATATAAATTT
chr11	14465007	14465127	Hypo	1 -	TAATAAAAATACCATATAAACTAACCATTAAAAATTAAATCTAAAAAAAAAAAAAACTATTCCACTCTCCTTAATTACTAATAAATATCTAAATAAAAACCAAAACCACAAACATACAATT
chr11	14465007	14465127	Hypo	1 +	TAGTGGAAATGTTATGTGAATTGGTTATTGAAGATTAAGTTTGAGAAAGGGAAAGTTATTTTATTTTTTTTAGTTATTGGTAGATATTTAAGTAGAAGTTAGGGTTATAAATATGTAGTT
chr11	14465007	14465127	Hypo	1 -	TAATAAAAATACCATATAAACTAACCATTAAAAATTAAATCTAAAAAAAAAAAAAACTATTAAACTCTCCTTAATTACTAATAAATATCTAAATAAAAACCAAAACCACAAACATACAATT
chr11	14465007	14465127	Hypo	1 +	TAGTGGAAATGTTATGTGAATTGGTTATTGAAGATTAAGTTTGAGAAAGGGAAAGTTATTAAATTTTTTTTAGTTATTGGTAGATATTTAAGTAGAAGTTAGGGTTATAAATATGTAGTT
chr11	14465007	14465127	Hypo	1 -	TAATAAAAATACCATATAAACTAACCATTAAAAATTAAATCTAAAAAAAAAAAAAACTATTCCACTCTCCTTAATTACTAATAAATATCTAAATAAAAACCAAAACCACAAACATACAATT
chr11	14465007	14465127	Hypo	1 +	TAGTGGAAATGTTATGTGAATTGGTTATTGAAGATTAAGTTTGAGAAAGGGAAAGTTATTTATTTTTTTTAGTTATTGGTAGATATTTAAGTAGAAGTTAGGGTTATAAATATGTAGTT
chr11	14465007	14465127	Hypo	1 -	TAATAAAAATACCATATAAACTAACCATTAAAAATTAAATCTAAAAAAAAAAAAAACTATTAAACTCTCCTTAATTACTAATAAATATCTAAATAAAAACCAAAACCACAAACATACAATT
chr11	14465007	14465127	Hypo	1 +	TAGTGGAAATGTTATGTGAATTGGTTATTGAAGATTAAGTTTGAGAAAGGGAAAGTTATTAAATTTTTTTTAGTTATTGGTAGATATTTAAGTAGAAGTTAGGGTTATAAATATGTAGTT
chr4	29358965	29359085	Hypo	1 -	TTTTAAACTTCTTTTCATTAATATAACTATAATTTTTTCAATTTTATTAAACTTCCATAAATAACAAACCCTCATTTTATTAAAATTTTCATTTACTCTACTCCTTATTATTTTATTC
chr4	29358965	29359085	Hypo	1 +	TTTTAAATTTTTTTTATTAATGTAGTTATAGTTTTTTTAGTTTTGTTGAGTTTTTATAAAAGAATAAATTTTTTATTTTGTTGAAATTTTTGTTTGTTTTATTTTTTATTATTTTATTT
chr4	29358965	29359085	Hypo	1 -	TTTTAAACTTCTTTTCATTAATATAACTATAATTTTTTCAATTTTATTAAACTTCCATAAATAACAAACCCTCATTTTATTAAAATTTTCATTTACTCTACTCCTTATTATTTTATTC
chr4	29358965	29359085	Hypo	1 +	TTTTAAATTTTTTTTATTAATGTAGTTATAGTTTTTTTAGTTTTGTTGAGTTTTTATAAAAGAATAAATTTTTTATTTTGTTGAAATTTTTGTTTGTTTTATTTTTTATTATTTTATTT
chr4	29358965	29359085	Hypo	1 -	TTTTAAACTTCTTTTCATTAATATAACTATAATTTTTTCAATTTTATTAAACTTCCATAAATAACAAACCCTCATTTTATTAAAATTTTCATTTACTCTACTCCTTATTATTTTATTC
chr4	29358965	29359085	Hypo	1 +	TTTTAAATTTTTTTTATTAATGTAGTTATAGTTTTTTTAGTTTTGTTGAGTTTTTATAAATAATAAATTTTTTATTTTGTTGAAATTTTTGTTTGTTTTATTTTTTATTATTTTATTT
chr4	29358965	29359085	Hypo	1 -	TTTTAAACTTCTTTTCATTAATATAACTATAATTTTTTCAATTTTATTAAACTTCCAAAAAAACAAACCCTCATTTTATTAAAATTTTCGTTTACTCTACTCCTTATTATTTTATTC
chr4	29358965	29359085	Hypo	1 +	TTTTAAATTTTTTTTATTAATGTAGTTATAGTTTTTTTAGTTTTGTTGAGTTTTTATAAATAATAAATTTTTTATTTTGTTGAAATTTTTGTTTGTTTTATTTTTTATTATTTTATTT
chr4	29358965	29359085	Hypo	1 -	TTTTAAACTTCTTTTCATTAATATAACTATAATTTTTTCAATTTTATTAAACTTCCAAAAAAACAAACCCTCATTTTATTAAAATTTTCGTTTACTCTACTCCTTATTATTTTATTC
chr4	29358965	29359085	Hypo	1 +	TTTTAAATTTTTTTTATTAATGTAGTTATAGTTTTTTTAGTTTTGTTGAGTTTTTATAAAAGAATAAATTTTTTATTTTGTTGAAATTTTTGTTTGTTTTATTTTTTATTATTTTATTT
chr6	116590743	116590863	Hypo	1 -	TAATAATAATACTTATCCACTATATTACAATTAATTCCTAATAATTCTAAACATATAATATTTTAAACTAATAAAAAAAAACAACCCTTTTTACTCTAACTAAAATACTTTACCACATTCT
chr6	116590743	116590863	Hypo	1 +	TAGTAATAATGTTTGTTTATTATGTTATAGTTAATTTTTAATGATTTTAGATATATGGAATTTGGGGTTGATAGGGAAAATAATTTTTTTTGTTTTAATTAAAGTGTTTTATTATATTTT
chr6	116590743	116590863	Hypo	1 -	TAATAATAATACTTATCCACTATATTACAATTAATTCCTAATAATTCTAAACATATAATATTTTAAACTAATAAAAAAAAACAACCCTTTTTACTCTAACTAAAATACTTTACCACATTCT
chr6	116590743	116590863	Hypo	1 +	TAGTAATAATGTTTGTTTATTATGTTATAGTTAATTTTTAATGATTTTAGATATATGGAATTTGGGGTTGATAGGGAAAATAATTTTTTTTGTTTTAATTAAAGTGTTTTATTATATTTT
chr6	116590743	116590863	Hypo	1 -	TAATAATAATACTTATCCACTATATTACAATTAATTCCTAATAATTCTAAACATATAATATTTTAAACTAATAAAAAAAAACAACCCTTTTTACTCTAACTAAAATACTTTACCACATTCT
chr6	116590743	116590863	Hypo	1 +	TAGTAATAATGTTTGTTTATTATGTTATAGTTAATTTTTAATGATTTTAGATATATGGAATTTGGGGTTGATAGGGAAAATAATTTTTTTTGTTTTAATTAAAGTGTTTTATTATATTTT

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chr4	115381353	115381473	Hypo	1 -	TTTTCCTCATCAAAATTTATAAAAACTCCATACCTTCAATTACCAAAAACCAAAATAATTAATTTTATCTTTAATTTTTCTATCTTTTCACCCCACATTCAAAACAAATTCTATTAATT
chr4	115381353	115381473	Hypo	1 +	TTTTTTTTATTAAAATTTATGGAAATTTTATATTTTTAGTTGTTAAGGATTAAAATGGTTGGTTTTATTTTTGATTTTTTTGTTTTTTTTATTTTATATTTGAGGTAAATTTTATTGATT
chr4	115381353	115381473	Hypo	1 -	TTTTCCTCATCAAAATTTATAAAAACTCCATACCTTCAATTACCAAAAACCAAAATAATTAATTTTATCTTTAATTTTTCTATCTTTTCACCCCACATTCAAAACAAATTCTATTAATT
chr4	115381353	115381473	Hypo	1 +	TTTTTTTTATTAAAATTTATGGAAATTTTATATTTTTAGTTGTTAAGGATTAAAATGGGTGGTATTATTTTTGATTTTTTTGTTTTTTTTATTTTATATTTGAGGTAAATTTTATTGATT
chr4	115381353	115381473	Hypo	1 -	TTTTCCTCATCAAAATTTATAAAAACTCCATACCTTCAATTACCAAAAACCAAAATAATTAATTTTATCTTTAATTTTTCTATCTTTTCACCCCACATTCGAAACAAATTCTATTAATT
chr4	115381353	115381473	Hypo	1 +	TTTTTTTTATTAAAATTTATGGAAATTTTATATTTTTAGTTGTTAAGGATTAAAATGGTTGGTTTTATTTTTGATTTTTTTGTTTTTTTTATTTTATATTTGAGGTAAATTTTATTGATT
chr4	115381353	115381473	Hypo	1 -	TTTTCCTCATCAAAATTTATAAAAACTCCATACCTTCAATTACCAAAAACCAAAATAATTAATTTTATCTTTAATTTTTCTATCTTTTCACCCCACATTCGAAACAAATTCTATTAATT
chr4	115381353	115381473	Hypo	1 +	TTTTTTTTATTAAAATTTATGGAAATTTTATATTTTTAGTTGTTAAGGATTAAAATGGTTGGTTTTATTTTTGATTTTTTTGTTTTTTTTATTTTATATTTGAGGTAAATTTTATTGATT
chr2	156028397	156028517	Hypo	1 -	AATAAAAAAAACTCACTAAAAAAATATAACTACTATACATTTAAACATATAACCTCAAATATATAAAAAAATTAACAAAATAAAAAAAAAAAATAACTTAACATATAATCATCAAAAATATA
chr2	156028397	156028517	Hypo	1 +	GATAAAAGGAATTTATTAAGAAAATGTAATTATTGTATATTTAAATATGTAGTTTTAAATATATGAAAAGTTGATAGAATAAAAGGAAAAATAGTTTAATATATAATTATAGAGATGTA
chr2	156028397	156028517	Hypo	1 -	AATAAAAAAAACTCACTAAAAAAATATAACTACTATACATTTAAACATATAACCTCACATATAAAAAAAATTAACAAAATAAAAAAAAAAAATAACTTAACATATAATCATCAAAAATATA
chr2	156028397	156028517	Hypo	1 +	GATAAAAGGAATTTATTAAGAAAATGTAATTATTGTATATTTAAATATGTAGTTTTAAATATATGAAAAGTTGATAGAATAAAAGGAAAAATAGTTTAATATATAATTATAGAGATGTA
chr2	156028397	156028517	Hypo	1 -	AATAAAAAAAACTCACTAAAAAAATATAACTACTATACATTTAAACATATAACCTCACATATAAAAAAAATTAACAAAATAAAAAAAAAAAATAACTTAACATATAATCATCAAAAATATA
chr2	156028397	156028517	Hypo	1 +	GATAAAAGGAATTTATTAAGAAAATGTAATTATTGTATATTTAAATATGTAGTTTTAAATATATGAAAAGTTGATAGAATAAAAGGAAAAATAGTTTAATATATAATTATAGAGATGTA
chr2	156028397	156028517	Hypo	1 -	AATAAAAAAAACTCACTAAAAAAATATAACTACTATACATTTAAACATATAACCTCACATATAAAAAAAATTAACAAAATAAAAAAAAAAAATAACTTAACATATAATCATCAAAAATATA
chr2	156028397	156028517	Hypo	1 +	GATAAAAGGAATTTATTAAGAAAATGTAATTATTGTATATTTAAATATGTAGTTTTAAATATATGAAAAGTTGATAGAATAAAAGGAAAAATAGTTTAATATATAATTATAGAGATGTA
chr2	145638540	145638660	Hypo	1 -	AATTAAATTAAAACATTATTTTCTTCTCAAATTCCATTTTAAATTAAACCTCATAAAAAAATACATCCATTCATTTAATAATACTCTAATACCTACTCAACAACAAAACATACAAAAAAA
chr2	145638540	145638660	Hypo	1 +	AATTAAATTAAGATATTATTTTTTTTTTAAATTTTATTTTGGATTGAGTTTTATGGGGGGGTATGTTTATTTATTTAATAATGTTTTGATGTTTATTTAGTAGTAAAATATATAAAGGAA
chr2	145638540	145638660	Hypo	1 -	AATTAAATTAAAACATTATTTTCTTCTCAAATTCCATTTTAAATTAAACCTCATAAAAAAATACATCCATTCATTTAATAATACTCTAATACCTACTCAACAACAAAACATACAAAAAAA
chr2	145638540	145638660	Hypo	1 +	AATTAAATTAAGATATTATTTTTTTTTTAAATTTTATTTTGGATTGAGTTTTATGGGGGGGTACGTTTATTTATTTAATAATGTTTTGATGTTTATTTAGTAGTAAAATATATAAAGGAA
chr2	145638540	145638660	Hypo	1 -	AATTAAATTAAAACATTATTTTCTTCTCAAATTCCATTTTAAATTAAACCTCATAAAAAAATACGTCCATTCATTTAATAATACTCTAATACCTACTCAACAACAAAACATACAAAAAAA
chr2	145638540	145638660	Hypo	1 +	AATTAAATTAAGATATTATTTTTTTTTTAAATTTTATTTTGGATTGAGTTTTATGGGGGGGTACGTTTATTTATTTAATAATGTTTTGATGTTTATTTAGTAGTAAAATATATAAAGGAA
chr2	145638540	145638660	Hypo	1 -	AATTAAATTAAAACATTATTTTCTTCTCAAATTCCATTTTAAATTAAACCTCATAAAAAAATAATCCATTCATTTAATAATACTCTAATACCTACTCAACAACAAAACATACAAAAAAA
chr2	145638540	145638660	Hypo	1 +	AATTAAATTAAGATATTATTTTTTTTTTAAATTTTATTTTGGATTGAGTTTTATGGGTGGGTAAGTTTATTTATTTAATAATGTTTTGATGTTTATTTAGTAGTAAAATATATAAAGGAA
chr8	9588048	9588168	Hypo	1 -	TAACAAACAATAAAACATATCTCAAAAAAAAAAAACTTACAAAAATAAAACAACAAAAAATTAATTACTTTAAAAATACTTACTTTATTATAAAATTTTCTATTTAATTCCAATTTTAAT
chr8	9588048	9588168	Hypo	1 +	TGATAAATAGTAGAGTATATTTAGGGAGGAAAGATTTATAAAGATAAAATAGTAAGGTATTATTTGTTTGGAAATGTTTGTTTTATTGTGGGTTTTTTTATTTGATTTTGATTTTGGT
chr8	9588048	9588168	Hypo	1 -	TAACAAACAATAAAACATATCTCAAAAAAAAAAACTTACAAAAATAAAACAACAAAAAATTAATTACTTTAAAAATACTTACTTTATTATAAAATTTTCTATTTAATTCCAATTTTAAT
chr8	9588048	9588168	Hypo	1 +	TGATAAATAGTAGAGTATATTTAGGGAGGAAAGATTTATAAAGATAAAATAGTAAGGATTAGTTGTTTTGGAAATGTTTGTTTTATTGTGGGTTTTTTTATTTGATTTTGATTTTGGT
chr8	9588048	9588168	Hypo	1 -	TAACAAACAATAAAACATATCTCAAAAAAAAAAACTTACAAAAATAAAACAACAAAAAATTAATTACTTTAAAAATACTTACTTTATTATAAAATTTTCTATTTAATTCCGATTTTAAT
chr8	9588048	9588168	Hypo	1 +	TGATAAATAGTAGAGTATATTTAGGGAGGAAAGATTTATAAAGATAAAATAGTAAGGATTAGTTGTTTTGGAAATGTTTGTTTTATTGTGGGTTTTTTTATTTGATTTTGATTTTGGT
chr7	78085862	78085982	Hypo	1 -	TAACTATATAATCAATACTCCATAAACATTTATTAAACACCTACTATATACTAAAACTAAAAACTTATATAAATTTATTCCAATATAATACAATAACTATATCAACAAAAAACATACA
chr7	78085862	78085982	Hypo	1 +	TGATTGTATAATTAATATTTTATAAATATTTGTTGAATATTTGTTATGTGTTAGGATTAAAAGATTTGTGTAAATTTATTTCGTATAATATAATAATTATATTAATAGGAAGATATATA
chr7	78085862	78085982	Hypo	1 -	TAACTATATAATCAATACTCCATAAACATTTATTAAACACCTACTATATACTAAAACTAAAAACTTATATAAATTTATTCCAATATAATACAATAACTATATCAACAAAAAACATACA
chr7	78085862	78085982	Hypo	1 +	TGATTGTATAATTAATATTTTATAAATATTTGTTGAATATTTGTTATGTGTTAGGATTAAAAGATTTGTGTAAATTTATTTCGTATAATATAATAATTATATTAATAGGAAGATATATA
chr7	78085862	78085982	Hypo	1 -	TAACTATATAATCAATACTCCATAAACATTTATTAAACACCTACTATATACTAAAACTAAAAACTTATATAAATTTATTCCAATATAATACAATAACTATATCAACAAAAAACATACA
chr7	78085862	78085982	Hypo	1 +	TGATTGTATAATTAATATTTTATAAATATTTGTTGAATATTTGTTATGTGTTAGGATTAAAAGATTTGTGTAAATTTATTTCGTATAATATAATAATTATATTAATAGGAAGATATATA
chr7	78085862	78085982	Hypo	1 -	TAACTATATAATCAATACTCCATAAACATTTATTAAACACCTACTATATACTAAAACTAAAAACTTATATAAATTTATTCCAATATAATACAATAACTATATCAACAAAAAACATACA
chr7	78085862	78085982	Hypo	1 +	TGATTGTATAATTAATATTTTATAAATATTTGTTGAATATTTGTTATGTGTTAGGATTAAAAGATTTGTGTAAATTTATTTCGTATAATATAATAATTATATTAATAGGAAGATATATA
chr3	73378953	73379073	Hypo	1 -	CAAATTCTTCTTTAATTCCCTAAAAAATATATAATCTTTTCTAACTCCATCTTCCTACTATACTAACTCAATAAAAACCCCCTACTTAATAACTAAAAACTCAAAAACTCCCAAAC
chr3	73378953	73379073	Hypo	1 +	TAGGTTTTTTTTTAATTTTTTAAAAAGTATGTAGTTTTTTTTTAGTTTTATTTTTTTTGTTATGGTTGGTTTAAGTAAAAATTTTTTGTTTGGTGATTAGAGAATTTAGAAGTTTTAGGT
chr3	73378953	73379073	Hypo	1 -	CAAATTCTTCTTTAATTCCCTAAAAAATATATAATCTTTTCTAACTCCATCTTCCTCCTATACTAACTCAATAAAAACCCCCTACTTAATAACTAAAAACTCAAAAACTCCCAAAC
chr3	73378953	73379073	Hypo	1 +	TAGGTTTTTTTTTAATTTTTTAAAAAGTATGTAGTTTTTTTTTAGTTTTATTTTTTTTGTTATGGTTGGTTTAAGTAAAAATTTTTTGTTTGGTGATTAGAGAATTTAGAAGTTTTAGGT
chr3	73378953	73379073	Hypo	1 -	CAAATTCTTCTTTAATTCCCTAAAAAATATATAATCTTTTCTAACTCCATCTTCCTCCTATACTAACTCAATAAAAACCCCCTACTTAATAACTAAAAACTCAAAAACTCCCAAAC
chr3	73378953	73379073	Hypo	1 +	TAGGTTTTTTTTTAATTTTTTAAAAAGTATGTAGTTTTTTTTTAGTTTTATTTTTTTTGTTATGGTTGGTTTAAGTAAAAATTTTTTGTTTGGTGATTAGAGAATTTAGAAGTTTTAGGT
chr5	96512807	96512927	Hypo	1 -	TAAAATAAATACCTTCATATAAACAAATTCCTTCATAACAAAAAACAAAATAAATATAACCATATACCATATACCTATATTTATAATAATCACATTTATTTTTCAAATTTCAAAACAA
chr5	96512807	96512927	Hypo	1 +	TAAAATAAATATTTTTATATAGGTAAATTTTTTTATGGTAGAGAGATGAGATAAATATAGTTATGATATATTGTGTTTATGTTTATGATAATTGTGTTTGTTTTTAAATTTTGAAATGA
chr5	96512807	96512927	Hypo	1 -	TAAAATAAATACCTTCATATAAACAAATTCCTTCATAACAAAAAACAAAATAAATATAACCATATACCATATACCTATATTTATAATAATCACATTTATTTTTCAAATTTCAAAACAA
chr5	96512807	96512927	Hypo	1 +	TAAAATAAATATTTTTATATAGGTAAATTTTTTTATGGTAGAGAGATGAGATAAATATAGTTATGATATATTGTGTTTATGTTTATGATAATTGTGTTTGTTTTTAAATTTTGAAATGA

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chr5	96512807	96512927	Hyper	1 +	TAAAATAAATATTTTATATAGGTAAATTTTTTTATGGTAGAGAGACGAGATAAATATAGTTATGATATATTGTGTTTATGTTTATGATAATCGCGTTTGTTTTTTAAATTTCGAAACGA
chr5	96512807	96512927	Hyper	1 -	TAAAATAAATACCTTCATATAAACAAATTCCTTCATAACAAAAAACGAAATAAATAAAACCAAAACACATTATACCTATATTTATAATAATCGCGTTTATTTTTCAAATTTCGAAACGA
chr5	96512807	96512927	Hyper	1 +	TAAAATAAATATTTTTATATAGGTAAATTTTTTTATGGTAGAGAGACGAGATAAATAAAGTTAAGATATATTGTGTTTATGTTTATGATAATCGCGTTTGTTTTTTAAATTTCGAAACGA
chr7	13213478	13213498	Hypo	1 -	CTCCTATTTTTCATTTCTCAAATCCCCTCTATCCTCCAAAAAAAAAAATAACTACTCTATAATACACCTCCACATACAAATAAACACACTAATATCCACAAAAACCATACAACTTACTCA
chr7	13213478	13213498	Hypo	1 +	TTTTTGTTTTTTATTTTTTGAGTTTTTTTTGTTTTTTAGGAAGGAAGATGATTGTTTTATGGTATATTTTTATATATAGGTGAGTATATTGATATTTATAGAGGTTATGTAATTTGTTTA
chr7	13213478	13213498	Hypo	1 -	CTCCTATTTTTCATTTCTCGAATCCCCTCTATCCTCCAAAAAAAAAAATAACTACTCTATAATACACCTCCACATACAAATAAACACACTAATATCCACAAAAACCATACAACTTACTCA
chr7	13213478	13213498	Hypo	1 +	TTTTTGTTTTTTATTTTTTGAGTTTTTTTTGTTTTTTAGGAAGGAAGATGATTGTTTTATGGTATATTTTTATATATAGGTGAGTATATTGATATTTATAGAGGTTATGTAATTTGTTTA
chr7	13213478	13213498	Hypo	1 -	CTCCTATTTTTCATTTCTCGAATCCCCTCTATCCTCCAAAAAAAAAAATAACTACTCTAAAAAACACCTCCACATACAAATAAACACACTAATATCCACAAAAACCATACAACTTACTCA
chr7	13213478	13213498	Hypo	1 +	TTTTTGTTTTTTATTTTTTGAGTTTTTTTTGTTTTTTAGGAAGGAAGATGATTGTTTTATGGTATATTTTTATATATAGGTGAGTATATTGATATTTATAGAGGTTATGTAATTTGTTTA
chr7	13213478	13213498	Hypo	1 -	CTCCTATTTTTCATTTCTCGAATCCCCTCTATCCTCCAAAAAAAAAAATAACTACTCTAAAAAACACCTCCACATACAAATAAACACACTAATATCCACAAAAACCATACAACTTACTCA
chr7	13213478	13213498	Hypo	1 +	TTTTTGTTTTTTATTTTTTGAGTTTTTTTTGTTTTTTAGGAAGGAAGATGATTGTTTTATGGTATATTTTTATATATAGGTGAGTATATTGATATTTATAGAGGTTATGTAATTTGTTTA
chr7	13234788	13234908	Hypo	1 -	AAACAAAACCTTAAACAAAAAAAAACAACATTCAACTAAAAAAAACCCCAACCACAATAATACATAAATCCTAACTAACTACAAAAAAAAAAAAAACACAAACCAAAATAAAATACTCTAA
chr10	114893893	114894013	Hypo	1 +	GAGTAAGGTTTAGATAGAAAGGAGTAATATTTAATTAAGGAAGATTTGGTTATGGTGATGTATGGGTTTGGTTAGTTGTGAGGGGAGAGGGGTATGGGTTAGGGTAAAATGTTTTGA
chr10	114893893	114894013	Hypo	1 -	AAACAAAACCTTAAACAAAAAAAACAACATTCAACTAAAAAAAACCCCAACCACAATACTAAATAAATCCTAACTAACTACAAAAAAAAAAAAACACAAACCAAAATAAAATACTCTAA
chr10	114893893	114894013	Hypo	1 +	GAGTAAGGTTTAGATAGAAAGGAGTAATATTTAATTAAGGAAGATTTGGTTATGGTGATGTATGGGTTTGGTTAGTTGTGAGGGGAGAGGGGTATGGGTTAGGGTAAAATGTTTTGA
chr10	114893893	114894013	Hypo	1 -	AAACAAAACCTTAAACAAAAAAAACAACATTCAACTAAAAAAAACCCCGACCACGATAATACATAAATCCTAACTAACTACGAAAAAAAAAAAAACACGAACCAAAATAAAATACTCTAA
chr10	114893893	114894013	Hypo	1 +	GAGTAAGGTTTAGATAGAAAGGAGTAATATTTAATTAAGGAAGATTTCGGTTACGGTGATGTATGGGTTTGGTTAGTTGCGAGGGGAGAGGGGTACGGGTTAGGGTAAAATGTTTTGA
chr10	114893893	114894013	Hypo	1 -	AAACAAACCTTAAACAAAAAAAACAACATTCAACTAAAAAAAACCCGACCACGATACTAAATAAATCCTAACTAACTACGAAAAAAAAAAAACACGAACCAAAATAAAATACTCTAA
chr10	114893893	114894013	Hypo	1 +	GAGTAAGGTTTAGATAGAAAGGAGTAATATTTAATTAAGGAAGATTTCGGTTACGGTGTTGGATGGGTTTTGGTTAGTTGCGAGGGGAGAGGGGTACGGGTTAGGGTAAAATGTTTTGA
chr18	70334316	70334436	Hypo	1 -	AACCTTAACCATCCCAACATCCAAAACTATAAAAAATAATTATCTATAATTCTTAAATCTCCAATAAATCAAACAAACTAACAAAAAACTAATACTAACAAATAAAATATTATAACAAATA
chr18	70334316	70334436	Hypo	1 +	GATTTTGGTTGTTTTAGTGTTTAGAATTGTGAGAAATAATTGTTTGTGGTTTTTAAGTTTTTAGTGAATTAAATAGATTGATAGAAATTGGTATTGATAAGTAAGGTGTTATAATAAATA
chr18	70334316	70334436	Hypo	1 -	AACCTTAACCATCCCAACATCCAAAACTATAAAAAATAATTATCTATAATTCTTAAATCACCATAAATCAAACAAACTAACAAAAAACTAATACTAACAAATAAAATATTATAACAAATA
chr18	70334316	70334436	Hypo	1 +	GATTTTGGTTGTTTTAGTGTTTAGAATTGTGAGAAATAATTGTTTGTGGTTTTTAAGTTTATTTGTGAATTAAATAGATTGATAGAAATTGGTATTGATAAGTAAGGTGTTATAATAAATA
chr18	70334316	70334436	Hypo	1 -	AACCTTAACCGTCCCAACGTCCAAAACTATAAAAAATAATTATCTATAATTCTTAAATCTCCAATAAATCAAACAAACTAACAAAAACTAATACTAACAAATAAAATATTATAACAAATA
chr18	70334316	70334436	Hypo	1 +	GATTTTGGTTGTTTTAGTGTTTAGAATTGTGAGAAATAATTGTTTGTGGTTTTTAAGTTTATTTGTGAATTAAATAGATTGATAGAAATTGGTATTGATAAGTAAGGTGTTATAATAAATA
chr18	70334316	70334436	Hypo	1 -	AACCTTAACGTCCCAACGTCCAAAACTATAAAAAATAATTATCTATAATTCTTAAATCTCCAATAAATCAAACAAACTAACAAAAACTAATACTAACAAATAAAATATTATAACAAATA
chr18	70334316	70334436	Hypo	1 +	GATTTTGGTCGTTTTAGCGTTTAGAATTGTGAGAAATAATTGTTTGTGGTTTTTAAGTTTATTTGTGAATTAAATAGATTGATAGAAATTGGTATTGATAAGTAAGGTGTTATAATAAATA
chr18	70334316	70334436	Hypo	1 -	AACCTTAACGTCCCAACGTCCAAAACTATAAAAAATAATTATCTATAATTCTTAAATCTCCAATAAATCAAACAAACTAACAAAAACTAATACTAACAAATAAAATATTATAACAAATA
chr18	70334316	70334436	Hypo	1 +	GATTTTGGTCGTTTTAGCGTTTAGAATTGTGAGAAATAATTGTTTGTGGTTTTTAAGTTTATTTGTGAATTAAATAGATTGATAGAAATTGGTATTGATAAGTAAGGTGTTATAATAAATA
chr18	22345352	22345472	Hypo	1 -	TTTCTAAATTTTTTTTTAAACCATAAAAAACCCTACTCCCTTTTCAAACAAAATCCTTTAATTCATCAACATATAAAACAAATAAAACTAAACTATTCCACCCCAATCCTTCACCCTCACC
chr18	22345352	22345472	Hypo	1 +	TTTTTAAATTTTTTTTTAAGTTATAGGAAGTTTTGTTTTTTTTTTAAATAAAATTTTTTAGTTTATTAATATGTGAAGTAGATAAAATTGAGTTGTTTTATTTAATTTTTTATTTTTATT
chr18	22345352	22345472	Hypo	1 -	TTTCTAAATTTTTTTTTAAACCATAAAAAACCCTACTCCCTTTTCAAACAAAATCCTTTAAAACATCAACATATAAAACAAATAAAACTAAACTATTCCACCCCAATCCTTCACCCTCACC
chr18	22345352	22345472	Hypo	1 +	TTTTTAAATTTTTTTTTAAGTTATAGGAAGTTTTGTTTTTTTTTTAAATAAAATTTTTTAGGGTATTAATATGTGAAGTAGATAAAATTGAGTTGTTTTATTTAATTTTTTATTTTTATT
chr18	22345352	22345472	Hypo	1 -	TTTCTAAATTTTTTTTTAAACCATAAAAAACCCTACTCCCTTTTCAAACAAAATCCTTTAATTCATCAACATATAAAACAAATAAAACTAAACTATTCCACCCCAATCCTTCACCCTCACC
chr18	22345352	22345472	Hypo	1 +	TTTTTAAATTTTTTTTTAAGTTATAGGAAGTTTTGTTTTTTTTTTAAATAAAATTTTTTAGGGTATTAATATGTGAAGTAGATAAAATTGAGTTGTTTTATTTAATTTTTTATTTTTATT
chr18	22345352	22345472	Hypo	1 -	TTTCTAAATTTTTTTTTAAACCATAAAAAACCCTACTCCCTTTTCAAACAAAATCCTTTAAAACATCAACATATAAAACAAATAAAACTAAACTATTCCACCCCAATCCTTCACCCTCACC
chr18	22345352	22345472	Hypo	1 +	TTTTTAAATTTTTTTTTAAGTTATAGGAAGTTTTGTTTTTTTTTTAAATAAAATTTTTTAGGGTATTAATATGTGAAGTAGATAAAATTGAGTTGTTTTATTTAATTTTTTATTTTTATT
chr5	142301062	142301182	Hypo	1 -	ATACTCACTTAACCTACATTTATATACTATTAAAAAAAAAAACCCAAAAAAACTAAAAATTAATAAAAATCAAAATAATAAAAACCAAAAAAATTTTTAAAAAATCTAAAAAATCTACTAA
chr5	142301062	142301182	Hypo	1 +	GTGTTTATTTAATTTGTATTTGTGTATTGTTAGGGAAGAGATTTAGGAAAATTGAAGATTTGGTGAAAGTTAGAATAGTGGAGGTTAGAAAGATTTTTGAAAGATTTGAAGAATTTATTGG
chr5	142301062	142301182	Hypo	1 -	ATACTCACTTAACCTACATTTATATACTATTAAAAAAAAAAACCCAAAAAACTAAAAATTAATAAAAATCAAAATAATAAAAACCAAAAAAATTTTTAAAAAATCTAAAAAATCTACTAA
chr5	142301062	142301182	Hypo	1 +	GTGTTTATTTAATTTGTATTTGTGTATTGTTAGGGAAGAGATTTAGGAAAATTGAAGATTTTTGAAAGTTAGAATAGTGGAGGTTAGAAAGATTTTTGAAAGATTTGAAGAATTTATTGG
chr5	142301062	142301182	Hypo	1 -	ATACTCACTTAACCTACATTTATATACTATTAAAAAAAAAAACCCAAAAAACTAAAAATTAATAAAAATCAAAATAATAAAAACCAAAAAAATTTTTAAAAAATCTAAAAAATCTACTAA
chr5	142301062	142301182	Hypo	1 +	GTGTTTATTTAATTTGTATTTGTGTATTGTTAGGGAAGAGATTTAGGAAAATTGAAGATTTGGTGAAAGTTAGAATAGTGGAGGTTAGAAAGATTTTTGAAAGATTTGAAGAATTTATTGG
chr5	142301062	142301182	Hypo	1 -	ATACTCACTTAACCTACATTTATATACTATTAAAAAAAAAAACCCAAAAAACTAAAAATTAATAAAAATCAAAATAATAAAAACCAAAAAAATTTTTAAAAAATCTAAAAAATCTACTAA
chr5	142301062	142301182	Hypo	1 +	GTGTTTATTTAATTTGTATTTGTGTATTGTTAGGGAAGAGATTTAGGAAAATTGAAGATTTTTGAAAGTTAGAATAGTGGAGGTTAGAAAGATTTTTGAAAGATTTGAAGAATTTATTGG
chr11	907637	907757	Hypo	1 -	TAACAACACAAACCCCTCTAAACCAACTAAAAAACCCACACAACCTAAACAAAAACAAATACCTAACAAATAAAAAACTCAACCCAACTCACTACCCAACAACTAAACACATAACCTTCC
chr11	907637	907757	Hypo	1 +	TGGTAGTATAGATTTTTTTAGATTAGTTGAGAGGTTTATATAGTTTGGGTAGAGGTAGATATTTGATAGGTGGGGAGTTTAGTTTAATTTATTATTTAGTAGTTGGGTATATGGTTTTTT
chr11	907637	907757	Hypo	1 -	TAACAACACAAACCCCTCTAAACCAACTAAAAAACCCACACAACCTAAACAAAAACAAATACCTAACAAATAAAAAACTCAACCCAACTCACTACCCAACAACTAAACACATAACCTTCC
chr11	907637	907757	Hypo	1 +	TGGTAGTATAGATTTTTTTAGATTAGTTGAGAGGTTTATATAGTTTGGGTAGAGGTAGAAAATTGATAGGTGGGGAGTTTAGTTTAATTTATTATTTAGTAGTTGGGTATATGGTTTTTT
chr11	907637	907757	Hypo	1 -	TAACAACACAAACCCCTCTAAACCAACTAAAAAACCCACACAACCTAAACAAAAACAAATACCTAACAAATAAAAAACTCAACCCAACTCACTACCCAACAACTAAACACATAACCTTCC
chr11	907637	907757	Hypo	1 +	TGGTAGTATAGATTTTTTTAGATTAGTTGAGAGGTTTATATAGTTTGGGTAGAGGTAGATATTTGATAGGTGGGGAGTTTAGTTTAATTTATTATTTAGTAGTTGGGTATATGGTTTTTT
chr11	907637	907757	Hypo	1 -	TAACAACACAAACCCCTCTAAACCAACTAAAAAACCCACACAACCTAAACAAAAACAAATACCTAACAAATAAAAAACTCAACCCAACTCACTACCCAACAACTAAACACATAACCTTCC
chr11	907637	907757	Hypo	1 +	TGGTAGTATAGATTTTTTTAGATTAGTTGAGAGGTTTATATAGTTTGGGTAGAGGTAGAAAATTGATAGGTGGGGAGTTTAGTTTAATTTATTATTTAGTAGTTGGGTATATGGTTTTTT
chr1	193250742	193250862	Hypo	1 -	CATAAAAAATCATTATCTAATCCTCACTAAATTTATTACAAAACTACCTACATATCACCCCAAAAAAATACACTATCATCTAATAAATCTATTATTAATACCTTAAACTTATATCAATTA
chr1	193250742	193250862	Hypo	1 +	TATAAGGAGTTATTATTTAGTTTTTATTAAATTTATTATAGAGTTGTTTATGTGTTATTTTAGAAAGGTATATTATTATTTGATAAATTTATTGTTGATATTTTAAGTTTATATTAGTTG

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chr1	193250742	193250862	Hypo	1 -	CATAAAAAATCATTATCTAATCCTCACTAAATTTATTACAAAACTACCTACATATCACCCCAAAAAAATACACTATCATCTAATAAATCTATTATTAATACCTTAAACTTATATCAATTA
chr1	193250742	193250862	Hypo	1 +	TATAAGGAGTTATTATTTAGTTTTTATTAAATTTATTATAGAGTTGTTTATGTGTTATTTTAGAAAGGTATATTATTATTTGATAAATTTATTGTTGATATTTTAAGTTTATATTAGTTG
chr1	193250742	193250862	Hypo	1 -	CATAAAAAATCATTATCTAATCCTCACTAAATTTATTACAAAACTACCTACGTATCACCACCGAAAAATACACTATCATCTAATAAATCTATTATTAATACCTTAAACTTATATCAATTA
chr1	193250742	193250862	Hypo	1 +	TATAAGGAGTTATTATTTAGTTTTTATTAAATTTATTATAGAGTTGTTTACGTGTTATTATCGAAAGGTATATTATTATTTGATAAATTTATTGTTGATATTTTAAGTTTATATTAGTTG
chr1	193250742	193250862	Hypo	1 -	CATAAAAAATCATTATCTAATCCTCACTAAATTTATTACAAAACTACCTACGTATCACCCCAAAAAATACACTATCATCTAATAAATCTATTATTAATACCTTAAACTTATATCAATTA
chr1	193250742	193250862	Hypo	1 +	TATAAGGAGTTATTATTTAGTTTTTATTAAATTTATTATAGAGTTGTTTACGTGTTATTATCGAAAGGTATATTATTATTTGATAAATTTATTGTTGATATTTTAAGTTTATATTAGTTG
chr9	102553976	102554096	Hypo	1 -	AAATCAAAAACATCCACCCACTCCAAAATTACCACATACTACCATAAACAACCACTATTCATTCTTCTATCAACATAAATTTTACCTATTCTAAAAATTTATATAAATAAAATTATTCAAT
chr9	102553976	102554096	Hypo	1 +	AGATTAAAAATATTTATTATTTAAAGTTATTATATATTATTAGGTAATTATTGTTTGTTTTTTATTAATATAAATTTTGTTTGTTTTAGAAGTTTATATAAATAGAAATTATTTAAT
chr9	102553976	102554096	Hypo	1 -	AAATCAAAAACATCCACCCACTCCAAAATTACCACATACTACCATAAACAACCACTATTCTTACTTCTATCAACATAAATTTTACCTATTCTAAAAATTTATATAAATAAAATTATTCAAT
chr9	102553976	102554096	Hypo	1 +	AGATTAAAAATATTTATTATTTAAAGTTATTATATATTATTAGGTAATTATTGTTTGTTTTTTATTAATATAAATTTTGTTTGTTTTAGAAGTTTATATAAATAGAAATTATTTAAT
chr9	102553976	102554096	Hypo	1 -	AAATCAAAAACATCCACCCACTCCAAAATTACCACATACTACCATAAACAACCACTATTCGTTCTTCTATCAACATAAATTTTACCTATTCTAAAAATTTATATAAATAAAATTATTCAAT
chr9	102553976	102554096	Hypo	1 +	AGATTAAAAATATTTATTATTTAAAGTTATTATATATTATTAGGTAATTATTGTTTGTTTTTTATTAATATAAATTTTGTTTGTTTTAGAAGTTTATATAAATAGAAATTATTTAAT
chr9	102553976	102554096	Hypo	1 -	AAATCAAAAACATCCACCCACTCCAAAATTACCACATACTACCATAAACAACCACTATTCATTCTTCTATCAACATAAATTTTACCTATTCTAAAAATTTATATAAATAAAATTATTCAAT
chr9	102553976	102554096	Hypo	1 +	AGATTAAAAATATTTATTATTTAAAGTTATTATATATTATTAGGTAATTATTGTTTATTTTTATTAATATAAATTTTGTTTGTTTTAGAAGTTTATATAAATAGAAATTATTTAAT
chr10	28309909	28310029	Hypo	1 -	TTAAACCCATCCTTCTAAAACTCTATACTAAACCTTTACATTATCTACTTATCAATCAAAAACCTCTCAAAAAAAATAAACCACTTAAATATTAAAACAAAAAAATCTAATACAAAAAAC
chr10	28309909	28310029	Hypo	1 +	TTGGATTTATTTTTTGAAGTTTTGTATTAAGTTTTGTTATTATTTATTAGTTAGGGATTTTTTAAGAAAGATAAATTATTTGAGTATTAAAATAGAGGGGTTTGGTGTAGGAAAT
chr10	28309909	28310029	Hypo	1 -	TTAAACCCATCCTTCTAAAACTCTATACTAAACCTTTACATTATCTACTTATCAATCAAAAACCTCTCAAAAAAAATAAACCACTTAAATATTAAAACAAAAAAATCTAATACAAAAAAC
chr10	28309909	28310029	Hypo	1 +	TTGGATTTATTTTTTGAAGTTTTGTATTAAGTTTTGTTATTATTTATTAGTTAGGGATTTTTTAAGAAAGATAAATTATTTGAGTATTAAAATAGAGGGGTTTGGTGTAGGAAAT
chr10	28309909	28310029	Hypo	1 -	TTAAACCCATCCTTCTAAAACTCTATACTAAACCTTTACATTATCTACTTATCAATCAAAAACCTCTCAAAAAAAATAAACCACTTAAATATTAAAACAAAAAAATCTAATACAAAAAAC
chr10	28309909	28310029	Hypo	1 +	TTGGATTTATTTTTTGAAGTTTTGTATTAAGTTTTGTTATTATTTATTAGTTAGGGATTTTTTAAGAAAGATAAATTATTTGAGTATTAAAATAGAGGGGTTTGGTGTAGGAAAT
chr10	28309909	28310029	Hypo	1 -	TTAAACCCATCCTTCTAAAACTCTATACTAAACCTTTACATTATCTACTTATCAATCAAAAACCTCTCAAAAAAAATAAACCACTTAAATATTAAAACAAAAAAATCTAATACAAAAAAC
chr10	28309909	28310029	Hypo	1 +	TTGGATTTATTTTTTGAAGTTTTGTATTAAGTTTTGTTATTATTTATTAGTTAGGGATTTTTTAAGAAAGATAAATTATTTGAGTATTAAAATAGAGGGGTTTGGTGTAGGAAAT
chr6	145075986	145076106	Hypo	1 -	CTTTCACTTTAATTAAAAAAAACCATATTCCTTACTATAAATATATTTATTTAAATAAATCCTTATAAAAAAATACTAACATCAAAAAAAATATTACTTAATAATTATTATTTATAATAAC
chr6	145075986	145076106	Hypo	1 +	TTTTTATTTTAATTGAAGAAGTTGTATTTTTTGTTATAAATATGTTTATTTAGATAGATTTTTGTAAGGAGGTATTAATATTAAAGAAAATATTGTTTAATGGTTATTATTTGTAATAAT
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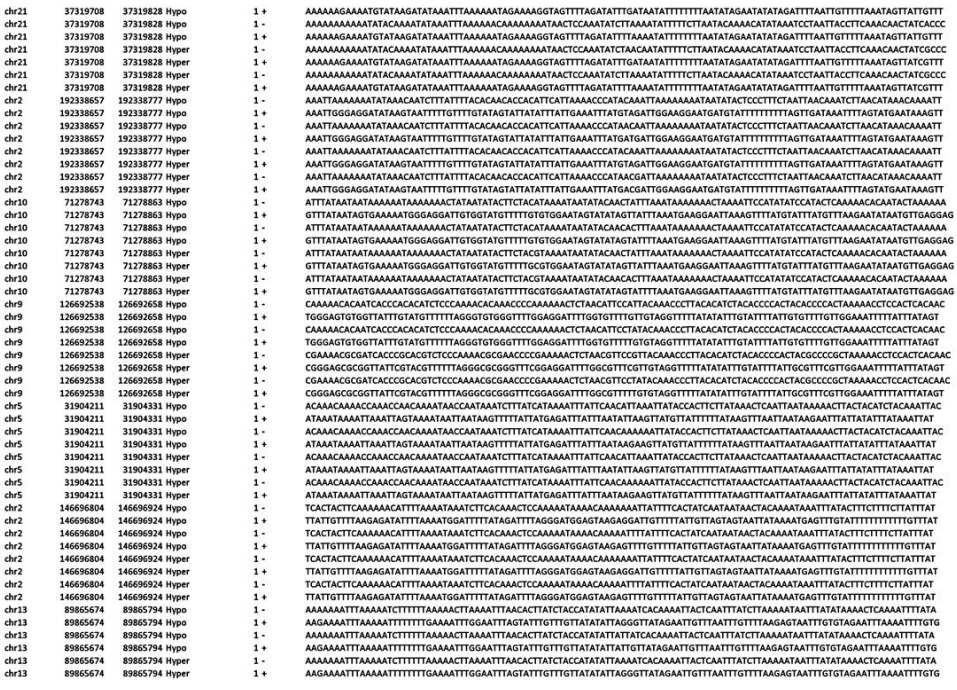
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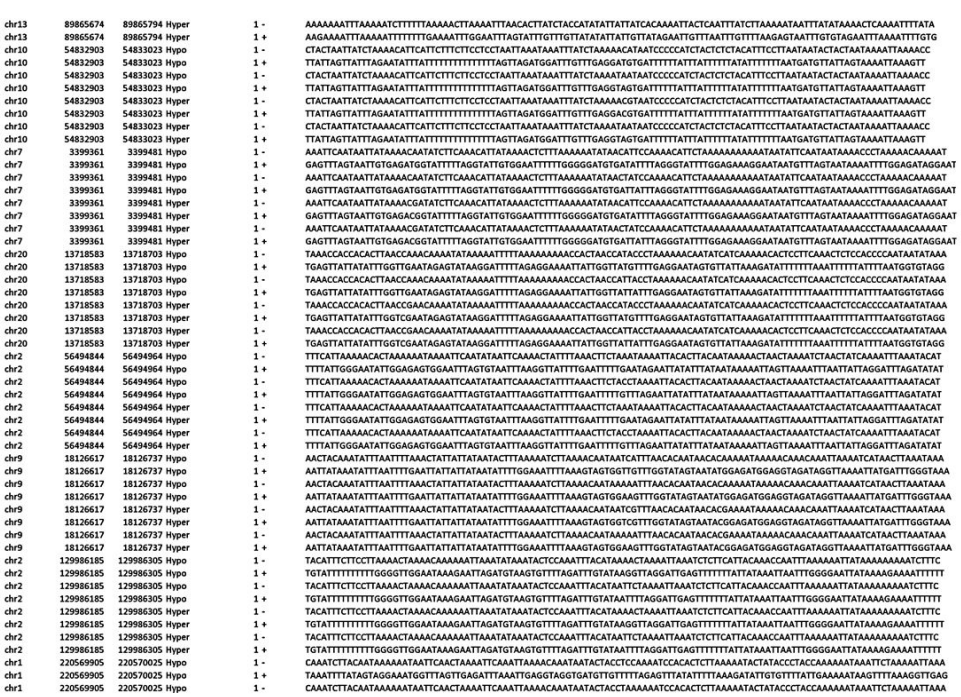
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도면24co



도면24cp



도면24cq

chr1	220569905	220570025	Hypo	1 +	TAAATTTTATAGTAGGAAATGGTTTAGTTGAGATTTAAATTGAGGTAGGTGATGTTGTTTAAAGAGTTTATATTTTTAAAGATATTGTGTTTTATTGAAAAATAAGTTTTAAAGGTTGAG
chr1	220569905	220570025	Hyper	1 -	CAAATCTTACAATAAAAAATAATTCAACTAAAATTCAAATTAAAACAAATAATACTACCTCCAAAATCCACACTCTAAAAATACTATACCCTACCGAAAAATAAATTCTAAAAATTAAA
chr1	220569905	220570025	Hyper	1 +	TAAATTTTATAGTAGGAAATGGTTTAGTTGAGATTTAAATTGAGGTAGGTGATGTTGTTTTAGAGTTTATATTTTTAAAGATATTGTGTTTTATCGAAAAATAAGTTTTAAAGGTTGAG
chr1	220569905	220570025	Hyper	1 -	CAAATCTTACAATAAAAAATAATTCAACTAAAATTCAAATTAAAACAAATAATACTACCTAAAAATCCACACTCTAAAAATACTATACCCTACCGAAAAATAAATTCTAAAAATTAAA
chr1	220569905	220570025	Hyper	1 +	TAAATTTTATAGTAGGAAATGGTTTAGTTGAGATTTAAATTGAGGTAGGTGATGTTGTTTAAAGAGTTTATATTTTTAAAGATATTGTGTTTTATCGAAAAATAAGTTTTAAAGGTTGAG
chr8	71472593	71472713	Hypo	1 -	AAAAATATATTACCTACTATAAATAACTAATAATTTTTAAAAATATTCAATAACCAAATTAACAAAACACTATTATTATAAATTTATCCTTTTACCTCTCATTTTATTCTAAAAAATTAA
chr8	71472593	71472713	Hyper	1 +	GGAGGTGTGTTGTTTGTTGTAAATGGTTAATAGTTTTAAAAGTGTTTAGTAATTAGATTAATAAAGTATTGTTATTATGAGTTTGTTTTTTTGTTTTTATTTTATTTTAGGGGATTGG
chr8	71472593	71472713	Hypo	1 -	AAAAATATATTACCTACTATAAATAACTAATAATTTTTAAAAATATTCAATAACCAAATTTTCAAAACACTATTATTATAAATTTATCCTTTTACCTCTCATTTTATTCTAAAAAATTAA
chr8	71472593	71472713	Hyper	1 +	GGAGGTGTGTTGTTTGTTGTAAATGGTTAATAGTTTTAAAAGTGTTTAGTAATTAGATTTTAAAGTATTGTTATTATGAGTTTGTTTTTTTGTTTTTATTTTATTTTAGGGGATTGG
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chr8	71472593	71472713	Hyper	1 +	GGAGGTGTGTTGTTTGTTGTAAATGGTTAATAGTTTTAAAAGTGTTTAGTAATTAGATTTTAAAGTATTGTTATTATGAGTTTGTTTTTTTGTTTTTATTTTATTTTAGGGGATTGG
chr8	71472593	71472713	Hyper	1 -	AAAAATATATTACCTACTATAAATAACTAATAATTTTTAAAAATATTCAATAACCAAATTTTCAAAACACTATTATTATAAATTTATCCTTTTACCTCTCATTTTATTCTAAAAAATTAA
chr8	71472593	71472713	Hyper	1 +	GGAGGTGTGTTGTTTGTTGTAAATGGTTAATAGTTTTAAAAGTGTTTAGTAATTAGATTTTAAAGTATTGTTATTATGAGTTTGTTTTTTTGTTTTTATTTTATTTTAGGGGATTGG
chr6	86033689	86033809	Hypo	1 -	ATTCCCTTAAAAACCACAAAAAAACAAACACAACCCACATAAAATAATAAACCTAATTCTATACCACCTAAACTAAAAATCAACTAAAAACTTAAATATACAATAAAACTCTCACAACCA
chr6	86033689	86033809	Hypo	1 +	GTTTTTTAAGAGTTATAGGAGGATAAATATAATTTATATGAGATGATAAGTTTGATTTTGTGTTATTTGGATTGGAAATCGATTAAGAGTTTGAGTGTATAATAAGATTTTATAATTA
chr6	86033689	86033809	Hypo	1 -	ATTCCCTTAAAAACCACAAAAAAACAAACACAACCCACATAAAATAATAAACCTAATTCTTAACCACCTAAACTAAAAATCGACTAAAACTTAAATATACAATAAAACTCTCACAACCA
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chr6	86033689	86033809	Hypo	1 -	ATTCCCTTAAAAACCACAAAAAAACAAACACAACCCACATAAAATAATAAACCTAATTCTTAACCACCTAAACTAAAAATCGACTAAAACTTAAATATACAATAAAACTCTCACAACCA
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chr6	167605159	167605279	Hypo	1 -	TATCACATAAACCTACTCTTACAAACATTTACTCATTCAACTACTATATTAACAAAAACTATTTACAATACATCTATTTTTCTAATATATAAAATAATAATTTTATAACTTAACATAATA
chr4	167605159	167605279	Hypo	1 +	TGTTATATAAGTTTATTTTTATAGATATTTATTTATTTAATTATTGTGTTAGTAGAGATTATTTATAATGTATTTATTTTTTTTGATGTGTAAGATAATGGTTTTATGGTTTGATGTAGTG
chr4	167605159	167605279	Hypo	1 -	TATCACATAAACCTACTCTTACAAACATTTACTCATTCAACTACTATATTAACAAAAACTATTTACAATACATCTATTTTTCTAATATATAAAATAATAATTTTATAACTTAACATAATA
chr4	167605159	167605279	Hypo	1 +	TGTTATATAAGTTTATTTTTATAGATATTTATTTATTTAATTATTGTGTTAGTAGAGATTATTTATAATGTATTTATTTTTTTTGATGTGTAAGATAATGGTTTTATGGTTTGATGTAGTG
chr4	167605159	167605279	Hyper	1 -	TATCACATAAACCTACTCTTACAAACATTTACTCATTCAACTACTATATTAACAAAAACTATTTACAATACATCTATTTTTCTAATATATAAAATAATAATTTTATAACTTAACGTAATA
chr4	167605159	167605279	Hyper	1 +	TGTTATATAAGTTTATTTTTATAGATATTTATTTATTTAATTATTGTGTTAGTAGAGATTATTTATAATGTATTTATTTTTTTTGATGTGTAAGATAATGGTTTTATGGTTTGACGTAGTG
chr4	167605159	167605279	Hyper	1 -	TATCACATAAACCTACTCTTACAAACATTTACTCATTCAACTACTATATTAACAAAAACTATTTACAATACATCTATTTTTCTAATATATAAAATAATAATTTTATAACTTAACGTAATA
chr4	167605159	167605279	Hyper	1 +	TGTTATATAAGTTTATTTTTATAGATATTTATTTATTTAATTATTGTGTTAGTAGAGATTATTTATAATGTATTTATTTTTTTTGATGTGTAAGATAATGGTTTTATGGTTTGACGTAGTG
chr1	170178458	170178578	Hypo	1 -	AATTCTTCCAAAACAATCACAATAACTTATTAATATCATCCAAATCCTCCATTCTTTAAACTACCATTTTAAATATATTAACTTTTATTCCTTAAACTTATACCTCATTATACTAAAAAA
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chr1	170178458	170178578	Hypo	1 -	AATTCTTCCAAAACAATCACAATAACTTATTAATATCATCCAAATCCTCCATTCTTTAAACTACCATTTTAAATATATTAACTTTTATTCCTTAAACTTATACCTCATTATACTAAAAAA
chr1	170178458	170178578	Hypo	1 +	GATTTTTTAAGGTAGTTATAGTGGTTTGTTGATGTTATTAGGTTTTATTTTTGGAAGGATTATTTTAAGTATGTTGGTTTTTGTTTTTAGATTTGTATTTTATTATGTTAAGAGA
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chr1	170178458	170178578	Hyper	1 +	GATTTTTTAAGGTAGTTATAGTGGTTTGTTGATGTTATTAGGTTTTATTTTTGGAAGGATTATTTTAAGTATGTTGGTTTTTGTTTTTAGATTTGTATTTTATTATGTTAAGAGA
chr1	170178458	170178578	Hyper	1 -	AATTCTTCCAAAACAATCACAATAACTTATTAATATCATCCAAATCCTCCATTCTTTAAACTACCATTTTAAATATATTAACTTTTATTCCTTAAACTTATACCTCATTATACTAAAAAA
chr1	170178458	170178578	Hyper	1 +	GATTTTTTAAGGTAGTTATAGTGGTTTGTTGATGTTATTAGGTTTTATTTTTGGAAGGATTATTTTAAGTATGTTGGTTTTTGTTTTTAGATTTGTATTTTATTATGTTAAGAGA
chr11	87166422	87166542	Hypo	1 -	CCCATCTACTAACTCACCTAATCAATAATAAATAAAAACCAAACCTACAACAATCCTCTATTACCAAAAAATTAAATAAAACATAATAAAATAAATTAAATTATAAAACATCTATATTTA
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chr11	87166422	87166542	Hyper	1 -	CCCGTCTACTAACTCACCTAATCAATAATAAATAAAAACCAAACCTACAACAATCCTCTATTACCAAAAAATTAAATAAAACGTAATAAAAATAAATTAAATTATAAAACATCTATATTTA
chr11	87166422	87166542	Hyper	1 +	TTCGTTTGTTGGTTTATTTGGTTAGTGGTGGGTAGGGATTAGGTTTGTAATAGTTTTTTGTTGTTAGGGAGTTGAGTGGGACGTGGTGAAATGAGTTGAGTTATAGGATATTTATATTTA
chr11	87166422	87166542	Hyper	1 -	CCCGTCTACTAACTCACCTAATCAATAATAAATAAAAACCAAACCTACAACAATCCTCTAAAACCAAAAAATTAAATAAAACGTAATAAAAATAAATTAAATTATAAAACATCTATATTTA
chr11	87166422	87166542	Hyper	1 +	TTCGTTTGTTGGTTTATTTGGTTAGTGGTGGGTAGGGATTAGGTTTGTAATAGTTTTTTGGAGTTAGGGAGTTGAGTGGGACGTGGTGAAATGAGTTGAGTTATAGGATATTTATATTTA
chr21	34561758	34561878	Hypo	1 -	TATTCCCAAACAACTACTTTAAAAACCTCTCCTAATTTATTTATTTTTTTTTCATACCCACTTTTAATTAACACATACTAAATTTTCCCAACTAACTATCAAACATTACTCACATTTAA
chr21	34561758	34561878	Hypo	1 +	TGTTTTAGGTAGTTGTTTTGGGAGTTTTTTTTGGTTTGTTTATTTTTTTTTTTATATTTGTTTGTTTAATATATGTTAGGTTTTTTTTAGTTAGTTATTAAATATTGTTTATGTTTAA
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chr21	34561758	34561878	Hypo	1 +	TGTTTTAGGTAGTTGTTTTGGGAGTTTTTTTTGGTTTGTTTATTTTTTTTTTTATATTTGTTTGTTTAATATATGTTAGGTTTTTTTTAGTTAGTTATTAAATATTGTTTATGTTTAA
chr21	34561758	34561878	Hyper	1 -	TATTCCCAAACAACTACTTTAAAAACCTCTCCTAATTTATTTATTTTTTTTTCATACCCACTTTTAATTAACACATACTAAATTTTCCCAACTAACTATCAAACATTACTCACGTTTAA
chr21	34561758	34561878	Hyper	1 +	TGTTTTAGGTAGTTGTTTTGGGAGTTTTTTTTGGTTTGTTTATTTTTTTTTTTATATTTCGTTTGTTTAATATATGTTAGGTTTTTTTTAGTTAGTTATTAAATATTGTTTACGTTTAA
chr21	34561758	34561878	Hyper	1 -	TATTCCCAAACAACTACTTTAAAAACCTCTCCTAATTTATTTATTTTTTTTTCATACCCCGTTTATTTAACACATACTAAATTTTCCCAACTAACTATCAAACATTACTCACGTTTAA
chr21	34561758	34561878	Hyper	1 +	TGTTTTAGGTAGTTGTTTTGGGAGTTTTTTTTGGTTTGTTTATTTTTTTTTTTATATTTCGTTTGTTTAATATATGTTAGGTTTTTTTTAGTTAGTTATTAAATATTGTTTACGTTTAA

도면24cr

chr2	18539368	18539488	Hypo	1 -	CTATCAAATTCTTAAAAAACCTATACACATTTATTTATCATTATATAACCTACTACAACTAACCCTATATCCTTCATCCTAATAATCCATTTACCTTCATTTCCTTCACCAATTACCAAC
chr2	18539368	18539488	Hypo	1 +	TTGTTAAGTTTTTGAGGGGTTTGTGTATATTTATTTATTATTGTATAATTTGTTGTAATTTTTTTTGTATTTTTTATTTTAGTGGTTTATTTATTTTTTTTTTATTAATTATTAAT
chr2	18539368	18539488	Hypo	1 -	CTATCAAATTCTTAAAAAACCTATACACATTTATTTATCATTATATAACCTACTACAACTACCCTATATCCTTCATCCTAATAATCCATTTACCTTCATTTCCTTCACCAATTACCAAC
chr2	18539368	18539488	Hypo	1 +	TTGTTAAGTTTTTGAGGGGTTTGTGTATATTTATTTATTATTGTATAATTTGTTGTAATTTTTTTTGTATTTTTTATTTTAGTGGTTTATTTATTTTTTTTTTATTAATTATTAAT
chr2	18539368	18539488	Hyper	1 -	CTATCAAATTCTTAAAAAACCTATACACATTTATTTATCATTATATAACCTACTACAACTACCCTATATCCTTCATCCTAATAATCCATTTACCTTCATTTCCTTCACCAATTACCAAC
chr2	18539368	18539488	Hyper	1 +	TTGTTAAGTTTTTGAGGGGTTTGTGTATATTTATTTATTATTGTATAATTTGTTGTAATTGATTTTGTATTTTTTATTTTAGTGGTTTATTTATTTTTTTTTTATTAATTATTAAT
chr2	18539368	18539488	Hyper	1 -	CTATCAAATTCTTAAAAAACCTATACACATTTATTTATCATTATATAACCTACTACAACTACCCTCCCTATATCCTTCATCCTAATAATCCATTTACCTTCATTTCCTTCACCAATTACCAAC
chr2	18539368	18539488	Hyper	1 +	TTGTTAAGTTTTTGAGGGGTTTGTGTATATTTATTTATTATTGTATAATTTGTTGTAATTTTTTTTGTATTTTTTATTTTAGTGGTTTATTTATTTTTTTTTTATTAATTATTAAT
chr20	58937110	58937230	Hypo	1 -	AAAAAAAAAAAATACTATTACATAATAAAAACTATTCAAATCTCCACACCTTAAAAAACAACTTAAACCCTAAAAAACAATAACAAAAAAAAAAAAATATTATAATAACTAATAATTACAA
chr20	58937110	58937230	Hypo	1 +	AAGAAGAAGGAATGTTATTATATAAATGAAGGTTATTTAAATTTTTATGTTTTGAGGAATAATTGAGTTTTGGAGGGTAGTGGTAGGGGAGGAAGTATTATAGTAATTGGTGGTTATAG
chr20	58937110	58937230	Hypo	1 -	AAAAAAAAAAAATACTATTACATAATAAAAACTATTCAAATCTCCACACCTTAAAAACAACTTAAACCCTAAAAAACAATAACAAAAAAAAAAAAATATTATAATAACTAATAATTACAA
chr20	58937110	58937230	Hypo	1 +	AAGAAGAAGGAATGTTATTATATAAATGAAGGTTATTTAAATTTTTATGTTTTGAGGAATAATTGAGTTTTGGAGGGTAGTGGTAGGGGAGGAAGTATTATAGTAATTGGTGGTTATAG
chr20	58937110	58937230	Hyper	1 -	AAAAAAAAAAAATACTATTACATAATAAAAACTATTCAAATCTCCACACCTTAAAAAACCTCTTAAACCCTAAAAAACAATAACAAAAAAAAAAAATATTATAATAACTAATAATTACAA
chr20	58937110	58937230	Hyper	1 +	AAGAAGAAGGAATGTTATTATATAAATGAAGGTTATTTAAATTTTTACGTTTTGAGGAATTTTTTGAGTTTTGGAGGGTAGTGGTAGGGGAGGAAGTATTATAGTAATTGGTGGTTATAG
chr4	32515002	32515122	Hypo	1 -	AAAAAATCTAATACAATAAATATATAAAAACAAACAAACAAACAATAATATCTTCAACTATATTACAACAAAAAATAAACCTACTATCAAAAAATTAAATTCAATTTTACACAAATTTAT
chr4	32515002	32515122	Hypo	1 +	AAGAAATTAATATAATGAATATGTAGAAATAAATAAATAAATAATAATATTTTAGTTATGTTGTAGTAAAGAGTAAGTTTGTTGTTAAAAAATTGAGTTTAATTTTATATAAATTTGT
chr4	32515002	32515122	Hypo	1 -	AAAAAATCTAATACAATAAATATATAAAAACAAACAAACAAACAATAATATCTTCAACTAATTTACAACAAAAAATAAACCTACTATCAAAAAATTAAATTCAATTTTACACAAATTTAT
chr4	32515002	32515122	Hypo	1 +	AAGAAATTAATATAATGAATATGTAGAAATAAATAAATAAATAATAATATTTTAGTTAATTTGTAGTAAAGAGTAAGTTTGTTGTTAAAAAATTGAGTTTAATTTTATATAAATTTGT
chr4	32515002	32515122	Hypo	1 -	AAAAAATCTAATACAATAAATATATAAAAACAAACAAACAAACAATAATATCTTCAACTATATTACAACAAAAATAAACCTACTATCAAAAAATTAAATTCAATTTTACACAAATTTAT
chr4	32515002	32515122	Hypo	1 +	AAGAAATTAATATAATGAATATGTAGAAATAAATAAATAAATAATAATATTTTAGTTATGTTGTAGTAAAGAGTAAGTTTGTTGTTAAAAAATTGAGTTTAATTTTATATAAATTTGT
chr4	32515002	32515122	Hypo	1 -	AAAAAATCTAATACAATAAATATATAAAAACAAACAAACAAACAATAATATCTTCAACTAATTTACAACAAAAATAAACCTACTATCAAAAAATTAAATTCAATTTTACACAAATTTAT
chr4	32515002	32515122	Hypo	1 +	AAGAAATTAATATAATGAATATGTAGAAATAAATAAATAAATAATAATATTTTAGTTATGTTGTAGTAAAGAGTAAGTTTGTTGTTAAAAAATTGAGTTTAATTTTATATAAATTTGT
chr10	98899242	98899362	Hypo	1 -	AAAAAAAAAATATTATCAACTTAATCAAAAAATAATTACTCTATAACAAACAAAATACCAAAACCCCTATCAACAAACACACTATCCTAAACTCTAAAACACCACTAATTATTTAAAAAA
chr10	98899242	98899362	Hypo	1 +	AAGAGAAGAGTATTATTAATTTGATTAAGAAATAGTTGTTTTGTGATAGATAGGGTATTAAAAATTTTGTTAATAAGTATATTATTTTGAATTTTGGGATATTATTGGTTGTTTGGGGAA
chr10	98899242	98899362	Hypo	1 -	AAAAAAAAAATATTATCAACTTAATCAAAAAATAATTACTCTATAACAAACAAAATACCAAAACCCCTATCAACAAACACACTATCCTAAACTCTAAAACACCACTAATTATTTAAAAAA
chr10	98899242	98899362	Hypo	1 +	AAGAGAAGAGTATTATTAATTTGATTAAGAAATAGTTGTTTTGTGATAGATAGGGTATTAAAAATTTTGTTAATAAGTATATTATTTTGAATTTTGGGATATTATTGGTTGTTTGGGGAA
chr10	98899242	98899362	Hypo	1 -	AAAAAAAAAATATTATCAACTTAATCAAAAAATAATTACTCTATAACAAACAAAATACCAAAACCCCTATCAACAAACACACTATCCTAAACTCTAAAACACCACTAATTATTTAAAAAA
chr10	98899242	98899362	Hypo	1 +	AAGAGAAGAGTATTATTAATTTGATTAAGAAATAGTTGTTTTGTGATAGATAGGGTATTAAAAATTTTGTTAATAAGTATATTATTTTGAATTTTGGGATATTATTGGTTGTTTGGGGAA
chr17	1446598	1446718	Hypo	1 -	ACAAAAACCAACTCTAATCAACAAAAATACCACAACTCATCACTCTAACATCAAAACATTCTCCCAACACCTCCCACCCCTCACCTCCAACCACAAAACAAAACAAAATACTT
chr17	1446598	1446718	Hypo	1 +	ATAGGGATTAGTTTGATTAGTAGAGGTGTTGTAATTTATTATTTTGGTATTAGAGTGTTTTTTGGTGTTTTTATTTTTATTTTAGTTTTTTATTTTTTGGGGTATAGAGTAGGGTGTTT
chr17	1446598	1446718	Hypo	1 -	ACAAAAACCAACTCTAATCAACAAAAATACCACAACTCATCACTCTAACATCAAAACATTCTCCCAACACCTCCCACCCCTCACCTCCAACCACAAAACAAAACAAAATACTT
chr17	1446598	1446718	Hypo	1 +	ATAGGGATTAGTTTGATTAGTAGAGGTGTTGTAATTTATTATTTTGGTATTAGAGTGTTTTTTGGTGTTTTTATTTTTATTTTAGTTTTTTATTTTTTGGGGTATAGAGTAGGGTGTTT
chr17	1446598	1446718	Hypo	1 -	ACAAAAACCAACTCTAATCAACAAAAATACCGCAACTCATCACTCTAACATCAAAACGTTCTCCGACGCCTCCCACCCCTCACCCCAACCTCTACCTCCCGAAACACAAAACAAAATACTT
chr17	1446598	1446718	Hypo	1 +	ATAGGGATTAGTTTGATTAGTAGAGGTGTCGTAATTTATTATTTTGGTATTAGAGCGTTTTTCGGCGTTTTTATTTTATTTTAGTTTTTATTTTTCGGGGTATAGAGTAGGGTGTTT
chr17	1446598	1446718	Hypo	1 -	ACAAAAACCAACTCTAATCAACAAAAATACCGCAACTCATCACTCTAACATCAAAACTTCTCGACGCCTCCCACCCCTCACCCCAACCTCTACCTCCCGAAACACAAAACAAAATACTT
chr17	1446598	1446718	Hypo	1 +	ATAGGGATTAGTTTGATTAGTAGAGGTGTCGTAATTTATTATTTTGGTATTAGAGCGTTTTTCGGCGTTTTTATTTTATTTTAGTTTTTATTTTTCGGGGTATAGAGTAGGGTGTTT
chr7	46119177	46119297	Hypo	1 -	ACTCTAAACTTTATACCCTAAAAATAACTAAACCACAAAACTAAATTTTTACAAAACATTCTACTCTAAATTAAATAAAAACAAAACCTCGTCTATTCTAAACAATTTCTTCTATCTCA
chr7	46119177	46119297	Hypo	1 +	ATTTTGGGTTTTATATTTTGAGGGTAATTGGGTTATAAAGTTAAATTTTTGTAGGATATTTTGTTTTGGGTTGGATAAGGATAAAGTTTCGTTTGTTTTGGATAGTTTTTTTTTATTTTA
chr7	46119177	46119297	Hypo	1 -	ACTCTAAACTTTATACCCTAAAAATAACTAAACCACAAAACTAAATTTTTACAAAACATTCTACTCTAAATTAAATAAAAACAAAACCTCGTCTATTCTAAACAATTTCTTCTATCTCA
chr7	46119177	46119297	Hypo	1 +	ATTTTGGGTTTTATATTTTGAGGGTAATTGGGTTATAAAGTTAAATTTTTGTAGGATATTTTGTTTTGGGTTGGATAAGGATAAAGTTTCGTTTGTTTTGGATAGTTTTTTTTTATTTTA
chr18	63590825	63590945	Hypo	1 -	ACATAATTACTATACTTAAAAATATTAAAAAAATCAATAATAACTTAATATTAAACTTATTCAACTAATCAATAACAAACCTCATCTTTCTAAAATAAAATAAACTTAATATATATTTT
chr18	63590825	63590945	Hypo	1 +	ATATGGTTGTTGTATTTAAGAATATTGGGAAAATTAGTAGTGGTTTGATATTAGGTTTATTTAATTAATTAGTAATAGGTTTTATTTTTTTTGGAATGAAATAAATTTAATATATGTTTT
chr18	63590825	63590945	Hypo	1 -	ACATAATTACTATACTTAAAAATATTAAAAAAATCAATAATAACTTAATATTAAACTTATTCAACTAATCAATAACAAACCTCATCTTTCTAAAATAAAATAAACTTAATATATATTTT
chr18	63590825	63590945	Hyper	1 +	ATATGGTTGTTGTATTTAAGAATATTGGGAAAATTAGTAGTGGTTTGATATTAGGTTTATTTAATTAATTAGTAATAGGTTTTATTTTTTTTGGAATGAAATAAATTTAATATATGTTTT
chr18	63590825	63590945	Hyper	1 -	ACATAATTACTATACTTAAAAATATTAAAAAAATCAATAATAACTTAATATTAAACTTATTCAACTAATCAATAACAAACCTCATCTTTCTAAAATAAAATAAACTTAATATATATTTT

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chr18	63590825	63590945 Hyper	1 +	ATATGGTTGTTGTATTTAAGAATATTGGGAAAATTAGTAGTGGTTTGATATTAGGTTTTATTTAATTAATTAGTAATAGGTTTTATTTTTTTGGAATGAAATAAATTTAATATATGTTTT
chr18	63590825	63590945 Hyper	1 -	ACATAATTACTATACTTAAAAATATTAAAAAAATCAATAATAACTTAATATTAAACTATATTCACCTAATCAATAACAAACCTCATCTTTCTAAAATAAAATAAACTTAATATATATTTT
chr18	63590825	63590945 Hyper	1 +	ATATGGTTGTTGTATTTAAGAATATTGGGAAAATTAGTAGTGGTTTGATATTAGGTTGTATTTATTTAATTAGTAATAGGTTTTATTTTTTTGGAATGAAATAAATTTAATATATGTTTT
chr9	74695381	74695501 Hypo	1 -	CACATAACAACCACAATAATTTAACAAAACATATTAATTTTCTACCCTAAATTTATAAATCTACCAAAAATAAAAAACTATAAAAAAACATAATTTATAATAAAAAAAAAATAAAATTAAA
chr9	74695381	74695501 Hypo	1 +	TATATGGTAATTATAATAATTTAGTAAAGTATATTAGTTTTTTGTTTTGAATTTATAAGTTTATTAAGAGTAAGAGGTTATAAAGAAATATGATTTATGGTGGGAGAGGGTAGAATTAAA
chr9	74695381	74695501 Hypo	1 -	CACATAACAACCACAATAATTTAACAAAACATATTAATTTTCTACCCTAAATTTATAAAACTCCCAAAAATAAAAAACTATAAAAAAACATAATTTATAATAAAAAAAAAATAAAATTAAA
chr9	74695381	74695501 Hypo	1 +	TATATGGTAATTATAATAATTTAGTAAAGTATATTAGTTTTTTGTTTTGAATTTATAAGGTTTTTAAGAGTAAGAGGTTATAAAGAAATATGATTTATGGTGGGAGAGGGTAGAATTAAA
chr9	74695381	74695501 Hyper	1 -	CACATAACAACCACAATAATTTAACAAAACATATTAATTTTCTACCCTAAATTTATAAATCTACCAAAAATAAAAAACTATAAAAAAACATAATTTATAATAAAAAAAAAATAAAATTAAA
chr9	74695381	74695501 Hyper	1 +	TATATGGTAATTATAATAATTTAGTAAAGTATATTAGTTTTTTGTTTTGAATTTATAAGTTTATTAAGAGTAAGAGGTTATAAAGAAATATGATTTATGGTGGGAGAGGGTAGAATTAAA
chr9	74695381	74695501 Hyper	1 -	CACATAACAACCACAATAATTTAACAAAACATATTAATTTTCTACCCTAAATTTATAAAACTCCCAAAAATAAAAAACTATAAAAAAACATAATTTATAATAAAAAAAAAATAAAATTAAA
chr9	74695381	74695501 Hyper	1 +	TATATGGTAATTATAATAATTTAGTAAAGTATATTAGTTTTTTGTTTTGAATTTATAAGGTTTTTAAGAGTAAGAGGTTATAAAGAAATATGATTTATGGTGGGAGAGGGTAGAATTAAA
chr16	80071957	80072077 Hypo	1 -	CCTCATACAAAAAAACTATATTTCAAATCAAAAAACCAAAATTAAAATCATAAATTTATTACTCATTATAAAATATTTAATCTCTAACAAACCACTTATTCCTTTTACACTTAAATTTAC
chr16	80071957	80072077 Hypo	1 +	TTTTATGTAAAAGGATTGTATTTTGAATTAGAAGGTTAGAGTTGGGATTATGAATTTGTTGTTTATTGTAAGATATTTGATTTTTGGTAAATTATTTGTTTTTTTTATATTTGAGTTTGT
chr16	80071957	80072077 Hypo	1 -	CCTCATACAAAAAAACTATATTTCAAATCAAAAAACCAAAATTAAAATCATAAATTAATTACTCAATATAAAATATTTAATCTCTAACAAACCACTTATTCCTTTTACACTTAAATTTAC
chr16	80071957	80072077 Hypo	1 +	TTTTATGTAAAAGGATTGTATTTTGAATTAGAAGGTTAGAGTTGGGATTATGAATTAGTTGTTTAATGTAAGATATTTGATTTTTGGTAAATTATTTGTTTTTTTTATATTTGAGTTTGT
chr16	80071957	80072077 Hyper	1 -	CCTCATACAAAAAAACTATATTTCGAATCAAAAAACCAAAATTAAAATCATAAATTTATTACTCATTATAAAATATTTAATCTCTAACAAACCACTTATTCCTTTTACACTTAAATTTAC
chr16	80071957	80072077 Hyper	1 +	TTTTATGTAAAAGGATTGTATTTCGAATTAGAAGGTTAGAGTTGGGATTATGAATTTGTTGTTTATTGTAAGATATTTGATTTTTGGTAAATTATTTGTTTTTTTTATATTTGAGTTTGT
chr16	80071957	80072077 Hyper	1 -	CCTCATACAAAAAAACTATATTTCGAATCAAAAAACCAAAATTAAAATCATAAATTAATTACTCAATATAAAATATTTAATCTCTAACAAACCACTTATTCCTTTTACACTTAAATTTAC
chr16	80071957	80072077 Hyper	1 +	TTTTATGTAAAAGGATTGTATTTCGAATTAGAAGGTTAGAGTTGGGATTATGAATTAGTTGTTTAATGTAAGATATTTGATTTTTGGTAAATTATTTGTTTTTTTTATATTTGAGTTTGT
chr2	139094315	139094435 Hypo	1 -	CTATTCCCTAAAAACATCAAAATACTCTCAAAATACAATAAAAATACATAATAAACAACTAAAACACCCCTAAAAATCCTTATTTCTTTCTTATATTAATATTATCAATCTATTTATTCA
chr2	139094315	139094435 Hypo	1 +	TTATTTTTTGGGGATATTGGAATGTTTTTAAGATGTAATGAGGATGTATAGTGAGTAGTTAAAATATTTTTGAAGATTTTTATTTTTTTTTTATATTGGTGTTATTAATTTATTTATTTA
chr2	139094315	139094435 Hypo	1 -	CTATTCCCTAAAAACATCAAAATACTCTCAAAATACAATAAAAATACATAATAAACAACAACAACACCCCTAAAAATCCTTATTTCTTTCTTATATTAATATTATCAATCTATTTATTCA
chr2	139094315	139094435 Hypo	1 +	TTATTTTTTGGGGATATTGGAATGTTTTTAAGATGTAATGAGGATGTATAGTGAGTAGTGATAATATTTTTGAAGATTTTTATTTTTTTTTTATATTGGTGTTATTAATTTATTTATTTA
chr2	139094315	139094435 Hyper	1 -	CTATTCCCTAAAAACATCGAAATACTCTCAAAATACAATAAAAATACATAATAAACAACTAAAACACCCCTAAAAATCCTTATTTCTTTCTTATATTAATATTATCAATCTATTTATTCA
chr2	139094315	139094435 Hyper	1 +	TTATTTTTTGGGGATATCGGAATGTTTTTAAGATGTAATGAGGATGTATAGTGAGTAGTTAAAATATTTTTGAAGATTTTTATTTTTTTTTTATATTGGTGTTATTAATTTATTTATTTA
chr2	139094315	139094435 Hyper	1 -	CTATTCCCTAAAAACATCGAAATACTCTCAAAATACAATAAAAATACATAATAAACAACGACAACACCCCTAAAAATCCTTATTTCTTTCTTATATTAATATTATCAATCTATTTATTCA
chr2	139094315	139094435 Hyper	1 +	TTATTTTTTGGGGATATCGGAATGTTTTTAAGATGTAATGAGGATGTATAGTGAGTAGCGATAATATTTTTGAAGATTTTTATTTTTTTTTTATATTGGTGTTATTAATTTATTTATTTA
chr1	80066430	80066550 Hypo	1 -	AAAAAAAAAAAAAACTTTTCCTACTAAAACCAATCTATAAAAATATAAAATATATCTACTTCTTCAAAAATATAAATACCAATACAACAATACAAACATAAAAAATAATTAAAAAAACATA
chr1	80066430	80066550 Hypo	1 +	GAGGGGGGAAGGGTTTTTTTTGTTGAAATTAGTTTATAAAGATGTAAGATATATTTGTTTTTTTAAAAGTGTAGATATTAATGTAATAATATAAGTATAAGGAGTAATTAGGAAAATATG
chr1	80066430	80066550 Hypo	1 -	AAAAAAAAAAAAAACTTTTCCTACTAAAACCAATCTATAAAAATATAAAATATATCTACTACATCAAAAATATAAATACCAATACAACAATACAAACATAAAAAATAATTAAAAAAACATA
chr1	80066430	80066550 Hypo	1 +	GAGGGGGGAAGGGTTTTTTTTGTTGAAATTAGTTTATAAAGATGTAAGATATATTTGTTGTATTAAAAGTGTAGATATTAATGTAATAATATAAGTATAAGGAGTAATTAGGAAAATATG
chr1	80066430	80066550 Hyper	1 -	AAAAAAAAAAAAAACTTTTCCTACTAAAACCAATCTATAAAAATATAAAATATATCTACTTCTTCAAAAATATAAATACCAATACAACAATACAAACATAAAAAATAATTAAAAAAACATA
chr1	80066430	80066550 Hyper	1 +	GAGGGGGGAAGGGTTTTTTTTGTTGAAATTAGTTTATAAAGATGTAAGATATATTTGTTTTTTTAAAAGTGTAGATATTAATGTAATAATATAAGTATAAGGAGTAATTAGGAAAATATG
chr1	80066430	80066550 Hyper	1 -	AAAAAAAAAAAAAACTTTTCCTACTAAAACCAATCTATAAAAATATAAAATATATCTACTACATCAAAAATATAAATACCAATACAACAATACAAACATAAAAAATAATTAAAAAAACATA
chr1	80066430	80066550 Hyper	1 +	GAGGGGGGAAGGGTTTTTTTTGTTGAAATTAGTTTATAAAGATGTAAGATATATTTGTTGTATTAAAAGTGTAGATATTAATGTAATAATATAAGTATAAGGAGTAATTAGGAAAATATG
chr5	80537960	80538080 Hypo	1 -	ACCACCCTAATTTACAAATACCAAAAAACAAAACAAATACATACTCAAAACCAAAACTAAATATCTCACTTAATAACTTTTATTAATAAAATTTCAAAATCCATATCTAAAAAAAATATA
chr5	80537960	80538080 Hypo	1 +	GTTATTTTAATTTGTAGATATTAGGAAATGGAGTAGGTATATGTTTAAAATTAGAATTGAGTGTTTTATTTGGTGGTTTTTATTGATAGGATTTTAAAATTTATGTTTGAAAGAAATGTG
chr5	80537960	80538080 Hypo	1 -	ACCACCCTAATTTACAAATACCAAAAAACAAAACAAATACATACTCAAAACCAAAACTATAAATCTCACTTAATAACTTTTATTAATAAAATTTCAAAATCCATATCTAAAAAAAATATA
chr5	80537960	80538080 Hypo	1 +	GTTATTTTAATTTGTAGATATTAGGAAATGGAGTAGGTATATGTTTAAAATTAGAATTGTGAGTTTTATTTGGTGGTTTTTATTGATAGGATTTTAAAATTTATGTTTGAAAGAAATGTG
chr5	80537960	80538080 Hyper	1 -	ACCACCCTAATTTACAAATACCAAAAAACGAAACAAATACATACTCAAAACCAAAACTAAATATCTCACTTAATAACTTTTATTAATAAAATTTCAAAATCCATATCTAAAAAAAATATA
chr5	80537960	80538080 Hyper	1 +	GTTATTTTAATTTGTAGATATTAGGAAACGGAGTAGGTATATGTTTAAAATTAGAATTGAGTGTTTTATTTGGTGGTTTTTATTGATAGGATTTTAAAATTTATGTTTGAAAGAAATGTG
chr5	80537960	80538080 Hyper	1 -	ACCACCCTAATTTACAAATACCAAAAAACGAAACAAATACATACTCAAAACCAAAACTATAAATCTCACTTAATAACTTTTATTAATAAAATTTCAAAATCCATATCTAAAAAAAATATA
chr5	80537960	80538080 Hyper	1 +	GTTATTTTAATTTGTAGATATTAGGAAACGGAGTAGGTATATGTTTAAAATTAGAATTGTGAGTTTTATTTGGTGGTTTTTATTGATAGGATTTTAAAATTTATGTTTGAAAGAAATGTG
chr3	184674142	184674262 Hypo	1 -	TCACTACAATAAACCAAACAAATATCTTATTTTCTATATACCACAATATAAAAAAACCTAAAAACTACTTCTTTAAACCATATACTTTAACCTTTCTTCAAAACTAAACTAATTTTCCAA
chr3	184674142	184674262 Hypo	1 +	TTATTATAGTGGATTAAATAAATATTTTATTTTTTGTGTGTTATAATATGAGAAAATTTGGAAATTATTTTTTTAGATTATGTGTTTTAATTTTTTTTTAGAATTGGGTTAGTTTTTTAA
chr3	184674142	184674262 Hypo	1 -	TCACTACAATAAACCAAACAAATATCTTATTTTCTATATACCACAATATAAAAAAAACTAAAAAATACTTCTTTAAACCATATACTTTAACCTTTCTTCAAAACTAAACTAATTTTCCAA
chr3	184674142	184674262 Hypo	1 +	TTATTATAGTGGATTAAATAAATATTTTATTTTTTGTGTGTTATAATATGAGAAAAGTTGGAAAGTATTTTTTTAGATTATGTGTTTTAATTTTTTTTTAGAATTGGGTTAGTTTTTTAA
chr3	184674142	184674262 Hyper	1 -	TCACTACAATAAACCAAACAAATATCTTATTTTCTATATACCACAATATAAAAAAACCTAAAAACTACTTCTTTAAACCATATACTTTAACCTTTCTTCAAAACTAAACTAATTTTCCAA
chr3	184674142	184674262 Hyper	1 +	TTATTATAGTGGATTAAATAAATATTTTATTTTTTGTGTGTTATAATATGAGAAAATTTGGAAATTATTTTTTTAGATTATGTGTTTTAATTTTTTTTTAGAATTGGGTTAGTTTTTTAA
chr3	184674142	184674262 Hyper	1 -	TCACTACAATAAACCAAACAAATATCTTATTTTCTATATACCACAATATAAAAAAAACTAAAAAATACTTCTTTAAACCATATACTTTAACCTTTCTTCAAAACTAAACTAATTTTCCAA
chr3	184674142	184674262 Hyper	1 +	TTATTATAGTGGATTAAATAAATATTTTATTTTTTGTGTGTTATAATATGAGAAAAGTTGGAAAGTATTTTTTTAGATTATGTGTTTTAATTTTTTTTTAGAATTGGGTTAGTTTTTTAA
chr12	101884326	101884446 Hypo	1 -	ATTAAAAAAAAAAAAATAAAAAAACTTTATAAAAACTAAATACCAACAAATAATAAACTAAAAAAAAAAACCAAAATATAAACAATCTAACTTAAAAACTATAACTTATTCTCCACATTTCA
chr12	101884326	101884446 Hypo	1 +	GTTAGAGAAGGAAAATAAAAAGATTTTATAAAGGTTAGATATTAGTAAATAGTAAATTGAGGAAGGGATTAGGATATAAGTAGTTTAGTTTGAAAGTTATGGTTTATTTTTTATATTTTA

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chr12	101884326	101884446 Hypo	1 -	ATTAAAAAAAAAAAAATAAAAAAACTTTATAAAAACTAAATACCAACAAATAATAAACTCAAACAAAAACCAAAATATAAACAATCTAACTTAAAAACTATAACTTATTCTCCACATTTCA
chr12	101884326	101884446 Hypo	1 +	GTTAGAGAAGGAAAATAAAAAGATTTTATAAAGGTTAGATATTAGTAAATAGTAAATTTAGGTAGGGATTAGGATATAAGTAGTTTAGTTTGAAAGTTATGGTTTATTTTTTATATTTTA
chr12	101884326	101884446 Hyper	1 -	ATTAAAAAAAAAAAAATAAAAAAACTTTATAAAAACTAAATACCAACAAATAATAAACTAAAAAAAAAAACCAAAATATAAACAATCTAACTTAAAAACTATAACTTATTCTCCACATTTCA
chr12	101884326	101884446 Hyper	1 +	GTTAGAGAAGGAAAATAAAAAGATTTTATAAAGGTTAGATATTAGTAAATAGTAAATTGAGGAAGGGATTAGGATATAAGTAGTTTAGTTTGAAAGTTATGGTTTATTTTTTATATTTTA
chr12	101884326	101884446 Hyper	1 -	ATTAAAAAAAAAAAAATAAAAAAACTTTATAAAAACTAAATACCAACAAATAATAAACTCAAACAAAAACCAAAATATAAACAATCTAACTTAAAAACTATAACTTATTCTCCACATTTCA
chr12	101884326	101884446 Hyper	1 +	GTTAGAGAAGGAAAATAAAAAGATTTTATAAAGGTTAGATATTAGTAAATAGTAAATTTAGGTAGGGATTAGGATATAAGTAGTTTAGTTTGAAAGTTATGGTTTATTTTTTATATTTTA
chr1	152223273	152223393 Hypo	1 -	TCTATATTCCTAACCAAAAATCTCTTCATCATCCATATATCACCTAAAAATACAATATTTTTTAATAAACAAAAATAAAAACTTTAACATTTTACTACCTAAAAATAAAATCTAATACTA
chr1	152223273	152223393 Hypo	1 +	TTTATATTTTTAATTAGAAATTTTTTTATTATTTGTGTATTATTTAAGGATGTAATATTTTTTAGTGGATAGGAATAGAAGTTTTGGTATTTTATTGTTTGGGAATAAAATTTGGTATTA
chr1	152223273	152223393 Hypo	1 -	TCTATATTCCTAACCAAAAATCTCTTCATCATCCATATATCACCTAAAAATACAATATTATATAATAAACAAAAATAAAAACTTTAACATTTTACTACCTAAAAATAAAATCTAATACTA
chr1	152223273	152223393 Hypo	1 +	TTTATATTTTTAATTAGAAATTTTTTTATTATTTGTGTATTATTTAAGGATGTAATATTGTATAGTGGATAGGAATAGAAGTTTTGGTATTTTATTGTTTGGGAATAAAATTTGGTATTA
chr1	152223273	152223393 Hyper	1 -	TCTATATTCCTAACCAAAAATCTCTTCATCATCCGTATATCACCTAAAAATACAATATTTTTTAATAAACAAAAATAAAAACTTTAACATTTTACTACCTAAAAATAAAATCTAATACTA
chr1	152223273	152223393 Hyper	1 +	TTTATATTTTTAATTAGAAATTTTTTTATTATTCGTGTATTATTTAAGGATGTAATATTTTTTAGTGGATAGGAATAGAAGTTTTGGTATTTTATTGTTTGGGAATAAAATTTGGTATTA
chr1	152223273	152223393 Hyper	1 -	TCTATATTCCTAACCAAAAATCTCTTCATCATCCGTATATCACCTAAAAATACAATATTATATAATAAACAAAAATAAAAACTTTAACATTTTACTACCTAAAAATAAAATCTAATACTA
chr1	152223273	152223393 Hyper	1 +	TTTATATTTTTAATTAGAAATTTTTTTATTATTCGTGTATTATTTAAGGATGTAATATTGTATAGTGGATAGGAATAGAAGTTTTGGTATTTTATTGTTTGGGAATAAAATTTGGTATTA
chr3	95254419	95254539 Hypo	1 -	ATTCACTAAAAATAAAATTAAACCAAAATTAAATATCTCTAATTTACTCTAAAATATTTCCAATTAAAAAAATATAAATACAACTTTCACATTTACAAAAAAAAAAAAAAAAATTTAATATT
chr3	95254419	95254539 Hypo	1 +	ATTTATTAGAAATAGAATTGAATTAGGATTGAGTATTTTTAATTTATTTTGGAATATTTTTAGTTAGAAAAATGTGAATGTAGTTTTTATATTTATAAAAAAAAAAAAAGAATTTAATATT
chr3	95254419	95254539 Hypo	1 -	ATTCACTAAAAATAAAATTAAACCAAAATTAAATATCTCTAATTTACTCTAAAATATTTACTATTAAAAAAATATAAATACAACTTTCACATTTACAAAAAAAAAAAAAAAAATTTAATATT
chr3	95254419	95254539 Hypo	1 +	ATTTATTAGAAATAGAATTGAATTAGGATTGAGTATTTTTAATTTATTTTGGAATATTTATTGTTAGAAAAATGTGAATGTAGTTTTTATATTTATAAAAAAAAAAAAAGAATTTAATATT
chr3	95254419	95254539 Hyper	1 -	ATTCACTAAAAATAAAATTAAACCAAAATTAAATATCTCTAATTTACTCTAAAATATTTCCAATTAAAAAAATATAAATACAACTTTCACATTTACAAAAAAAAAAAAAAAAATTTAATATT
chr3	95254419	95254539 Hyper	1 +	ATTTATTAGAAATAGAATTGAATTAGGATTGAGTATTTTTAATTTATTTTGGAATATTTTTAGTTAGAAAAATGTGAATGTAGTTTTTATATTTATAAAAAAAAAAAAAGAATTTAATATT
chr3	95254419	95254539 Hyper	1 -	ATTCACTAAAAATAAAATTAAACCAAAATTAAATATCTCTAATTTACTCTAAAATATTTACTATTAAAAAAATATAAATACAACTTTCACATTTACAAAAAAAAAAAAAAAAATTTAATATT
chr3	95254419	95254539 Hyper	1 +	ATTTATTAGAAATAGAATTGAATTAGGATTGAGTATTTTTAATTTATTTTGGAATATTTATTGTTAGAAAAATGTGAATGTAGTTTTTATATTTATAAAAAAAAAAAAAGAATTTAATATT
chr20	55007897	55008017 Hypo	1 -	CTTCTAAACATAACTAATAATCATTCTTACCAAAAATCATCCAAAAATATAAACAAAAACATCACAAAAATCTTCCCTCTTACCCTACTCCAAACAAAAATAAAAACACTCATCCTAATA
chr20	55007897	55008017 Hypo	1 +	TTTTTGGATATGGTTGGTGGTTATTTTTATTGAAGGTTATTTAAAAGTGTGGGTAGGGGTGTTATAGAAATTTTTTTTTTTATTTTATTTTAGATAGAAATAGGAGTGTTTATTTTGGTG
chr20	55007897	55008017 Hypo	1 -	CTTCTAAACATAACTAATAATCATTCTTACCAAAAATCATCCAAAAATATAAACAAAAAAAACACAAAAATCTTCCCTCTTACCCTACTCCAAACAAAAATAAAAACACTCATCCTAATA
chr20	55007897	55008017 Hypo	1 +	TTTTTGGATATGGTTGGTGGTTATTTTTATTGAAGGTTATTTAAAAGTGTGGGTAGGGGGGGTATAGAAATTTTTTTTTTTATTTTATTTTAGATAGAAATAGGAGTGTTTATTTTGGTG
chr20	55007897	55008017 Hyper	1 -	CTTCTAAACATAACTAATAATCATTCTTACCGAAAATCATCCAAAAATATAAACAAAAACGTCACAAAAATCTTCCCTCTTACCCTACTCCAAACAAAAATAAAAACGCTCATCCTAATA
chr20	55007897	55008017 Hyper	1 +	TTTTTGGATATGGTTGGTGGTTATTTTTATCGAAGGTTATTTAAAAGTGTGGGTAGGGGCGTTATAGAAATTTTTTTTTTTATTTTATTTTAGATAGAAATAGGAGCGTTTATTTTGGTG
chr20	55007897	55008017 Hyper	1 -	CTTCTAAACATAACTAATAATCATTCTTACCGAAAATCATCCAAAAATATAAACAAAAAAAACACAAAAATCTTCCCTCTTACCCTACTCCAAACAAAAATAAAAACGCTCATCCTAATA
chr20	55007897	55008017 Hyper	1 +	TTTTTGGATATGGTTGGTGGTTATTTTTATCGAAGGTTATTTAAAAGTGTGGGTAGGGGGGGTATAGAAATTTTTTTTTTTATTTTATTTTAGATAGAAATAGGAGCGTTTATTTTGGTG
chr9	104695707	104695827 Hypo	1 -	ATATTATCTATTTTTATCACCCATTCCTCTCCAAAAAAAAAACATTTATTAATATATATACTCAAAATTTATCATTCACTAAACTACAATTAATCATTAATAAAATTATACTTATTTTAC
chr9	104695707	104695827 Hypo	1 +	GTGTTGTTTATTTTTGTTATTTATTTTTTTTTAAGGAAGAAATATTTGTTAATATATATATTTAGAGTTTGTTATTTATTGGATTATAATTAATTATTGGTAAGATTATGTTTATTTTGT
chr9	104695707	104695827 Hypo	1 -	ATATTATCTATTTTTATCACCCATTCCTCTCCAAAAAAAAAACATTTATTAATATATCTACTCCAAATTTATCATTCACTAAACTACAATTAATCATTAATAAAATTATACTTATTTTAC
chr9	104695707	104695827 Hypo	1 +	GTGTTGTTTATTTTTGTTATTTATTTTTTTTTAAGGAAGAAATATTTGTTAATATATTTATTTTGAGTTTGTTATTTATTGGATTATAATTAATTATTGGTAAGATTATGTTTATTTTGT
chr9	104695707	104695827 Hyper	1 -	ATATTATCTATTTTTATCACCCATTCCTCTCCAAAAAAAAAACATTTATTAATATATATACTCAAAATTTATCATTCACTAAACTACAATTAATCATTAATAAAATTATACTTATTTTAC
chr9	104695707	104695827 Hyper	1 +	GTGTTGTTTATTTTTGTTATTTATTTTTTTTTAAGGAAGAAATATTTGTTAATATATATATTTAGAGTTTGTTATTTATTGGATTATAATTAATTATTGGTAAGATTATGTTTATTTTGT
chr9	104695707	104695827 Hyper	1 -	ATATTATCTATTTTTATCACCCATTCCTCTCCAAAAAAAAAACATTTATTAATATATCTACTCCGAATTTATCATTCACTAAACTACAATTAATCATTAATAAAATTATACTTATTTTAC
chr9	104695707	104695827 Hyper	1 +	GTGTTGTTTATTTTTGTTATTTATTTTTTTTTAAGGAAGAAATATTTGTTAATATATTTATTTCGAGTTTGTTATTTATTGGATTATAATTAATTATTGGTAAGATTATGTTTATTTTGT
chr10	94857327	94857447 Hypo	1 -	CCCACAATACAAAAATAAAAATTAAAAATTTACTCTTCTTTTCCAATAAATCTACCAAAAACTAACAAAAAAAAAAACTAAAAAACCTTATAATCTATATTAAACCTCAAAAAAACCTAAA
chr10	94857327	94857447 Hypo	1 +	TTTGTGGTGTAAAGATAGGGGTTGAGGGTTTGTTTTTTTTTTTTAGTGAATTTGTTGGAGGTTGATGGGGAGGGAGTTGGAAGGTTTTGTAGTTTGTATTGGGTTTTAGAGAGATTTGGG
chr10	94857327	94857447 Hypo	1 -	CCCACAATACAAAAATAAAAATTAAAAATTTACTCTTCTTTTCCAATAAATCTACAAAAAACTAAAAAAAAAAAAACTAAAAAACCTTATAATCTATATTAAACCTCAAAAAAACCTAAA
chr10	94857327	94857447 Hypo	1 +	TTTGTGGTGTAAAGATAGGGGTTGAGGGTTTGTTTTTTTTTTTTAGTGAATTTGTGGGAGGTTGAGGGGGAGGGAGTTGGAAGGTTTTGTAGTTTGTATTGGGTTTTAGAGAGATTTGGG
chr10	94857327	94857447 Hyper	1 -	CCCGCGATACAAAAATAAAAATTAAAAATTTACTCTTCTTTTCCAATAAATCTACCGAAAACTAACGAAAAAAAAACTAAAAAACCTTATAATCTATATTAAACCTCAAAAAAACCTAAA
chr10	94857327	94857447 Hyper	1 +	TTCGCGGTGTAAAGATAGGGGTTGAGGGTTTGTTTTTTTTTTTTAGTGAATTTGTCGGAGGTTGACGGGGAGGGAGTTGGAAGGTTTTGTAGTTTGTATTGGGTTTTAGAGAGATTTGGG
chr10	94857327	94857447 Hyper	1 -	CCCGCGATACAAAAATAAAAATTAAAAATTTACTCTTCTTTTCCAATAAATCTACGAAAAACTAAAAAAAAAAAAACTAAAAAACCTTATAATCTATATTAAACCTCAAAAAAACCTAAA
chr10	94857327	94857447 Hyper	1 +	TTCGCGGTGTAAAGATAGGGGTTGAGGGTTTGTTTTTTTTTTTTAGTGAATTTGCGGGAGGTTGAGGGGGAGGGAGTTGGAAGGTTTTGTAGTTTGTATTGGGTTTTAGAGAGATTTGGG
chr4	11496567	11496687 Hypo	1 -	ATCTCAAAAATCCAAAAATTCCTAAATAAAAAAACTTCTACCCTATTTAAAATAAACATTTCTATTTATATCTACCTATTATATAAAAATTCTAAATAATACATTATTAAATAAATAAAA
chr4	11496567	11496687 Hypo	1 +	GTTTTAGAGGTTTAGAAGTTTTTGAGTGGAAAGATTTTTGTTTTGTTTAAAATGAGTATTTTTATTTGTATTTGTTTGTTGTGTAGAAATTTTGAATAATATATTATTAGATAAGTAAAA
chr4	11496567	11496687 Hypo	1 -	ATCTCAAAAATCCAAAAATTCCTAAATAAAAAAACTTCTACCCTATTTAAAATAAACATTAATATTTATATCTACCTATTATATAAAAATTCTAAATAATACATTATTAAATAAATAAAA
chr4	11496567	11496687 Hypo	1 +	GTTTTAGAGGTTTAGAAGTTTTTGAGTGGAAAGATTTTTGTTTTGTTTAAAATGAGTATTAATATTTGTATTTGTTTGTTGTGTAGAAATTTTGAATAATATATTATTAGATAAGTAAAA
chr4	11496567	11496687 Hyper	1 -	ATCTCAAAAATCCAAAAATTCCTAAATAAAAAAACTTCTACCCTATTTAAAATAAACATTTCTATTTATATCTACCTATTATATAAAAATTCTAAATAATACATTATTAAATAAATAAAA
chr4	11496567	11496687 Hyper	1 +	GTTTTAGAGGTTTAGAAGTTTTTGAGTGGAAAGATTTTTGTTTTGTTTAAAATGAGTATTTTTATTTGTATTTGTTTGTTGTGTAGAAATTTTGAATAATATATTATTAGATAAGTAAAA
chr4	11496567	11496687 Hyper	1 -	ATCTCAAAAATCCAAAAATTCCTAAATAAAAAAACTTCTACCCTATTTAAAATAAACATTAATATTTATATCTACCTATTATATAAAAATTCTAAATAATACATTATTAAATAAATAAAA

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chr4	11496567	11496687	Hyper	1 +	GTTTTAGAGGTTTAGAAGTTTTTGAGTGGAAAGATTTTTGTTTTGTTTAAAATGAGTATTAATATTTGTATTTGTTTGTTGTGTAGAAATTTTGAATAATATATTATTAGATAAGTAAAA
chr10	64221229	64221349	Hypo	1 -	TCTTCAAATAAAAACTTAAATAAACACCCTACCTAAACTTTCCTAACCATATTCCACACAAAACTTTTCCCCTTTAACACACAATATATCCATCCCATCCCCCTCCCATTCCAATAAATA
chr10	64221229	64221349	Hypo	1 +	TTTTTAGATGGGGGTTTGGGTGGATGTTTTGTTTGGGTTTTTTTGATTGTGTTTTGTATGGAGTTTTTTTTTTTTGGTATATAGTGTATTTATTTTATTTTTTTTTTTTATTTTAATAAATA
chr10	64221229	64221349	Hypo	1 -	TCTTCAAATAAAAACTTAAATAAACACCCTACCTAAACTTTCCTAACCATATTCCACACATTACTTTTCCCCTTTAACACACAATATATCCATCCCATCCCCCTCCCATTCCAATAAATA
chr10	64221229	64221349	Hypo	1 +	TTTTTAGATGGGGGTTTGGGTGGATGTTTTGTTTGGGTTTTTTTGATTGTGTTTTGTATGTTGTTTTTTTTTTTTGGTATATAGTGTATTTATTTTATTTTTTTTTTTTATTTTAATAAATA
chr10	64221229	64221349	Hyper	1 -	TCTTCAAATAAAAACTTAAATAAACGCCCTACCTAAACTTTCCTAACCGTATTCCGCACGAAACTTTTCCCCTTTAACACACAATATATCCATCCCATCCCCCTCCCATTCCAATAAATA
chr10	64221229	64221349	Hyper	1 +	TTTTTAGATGGGGGTTTGGGTGGACGTTTTGTTTGGGTTTTTTTGATCGTGTTTCGTACGGAGTTTTTTTTTTTTGGTATATAGTGTATTTATTTTATTTTTTTTTTTTATTTTAATAAATA
chr10	64221229	64221349	Hyper	1 -	TCTTCAAATAAAAACTTAAATAAACGCCCTACCTAAACTTTCCTAACCGTATTCCGCACGTTACTTTTCCCCTTTAACACACAATATATCCATCCCATCCCCCTCCCATTCCAATAAATA
chr10	64221229	64221349	Hyper	1 +	TTTTTAGATGGGGGTTTGGGTGGACGTTTTGTTTGGGTTTTTTTGATCGTGTTTCGTACGTTGTTTTTTTTTTTTGGTATATAGTGTATTTATTTTATTTTTTTTTTTTATTTTAATAAATA
chr1	69850774	69850894	Hypo	1 -	TTCTACTAAAACAATACACCTTTAAAAATTTAAAAATAAAAAATAATACAAAATCCCTACAACTAAAAATTTTTTTATTACTACTAAAAAACAAAAATAAAAAATTTAATATTTAAATTT
chr1	69850774	69850894	Hypo	1 +	TTTTGTTAAGATAGTGTATTTTTGGAGATTTAGAAGTAAGAAGTGATGTAGGATTTTTGTGGTTGGGAATTTTTTTGTTATTATTGGAAAGTAAGGATGAGAAATTTGGTGTTTGGGTTT
chr1	69850774	69850894	Hypo	1 -	TTCTACTAAAACAATACACCTTTAAAAATTTAAAAATAAAAAATAATACAAAATCCCTACTCCTAAAAATTTTTTTATTACTACTAAAAAACAAAAATAAAAAATTTAATATTTAAATTT
chr1	69850774	69850894	Hypo	1 +	TTTTGTTAAGATAGTGTATTTTTGGAGATTTAGAAGTAAGAAGTGATGTAGGATTTTTGTTTTTGGGAATTTTTTTGTTATTATTGGAAAGTAAGGATGAGAAATTTGGTGTTTGGGTTT
chr1	69850774	69850894	Hyper	1 -	TTCTACTAAAACAATACACCTTTAAAAATTTAAAAATAAAAAATAATACAAAATCCCTACGACTAAAAATTTTTTTATTACTACTAAAAAACAAAAATAAAAAATTTAATATTTAAATTT
chr1	69850774	69850894	Hyper	1 +	TTTTGTTAAGATAGTGTATTTTTGGAGATTTAGAAGTAAGAAGTGATGTAGGATTTTTGCGGTTGGGAATTTTTTTGTTATTATTGGAAAGTAAGGATGAGAAATTTGGTGTTTGGGTTT
chr1	69850774	69850894	Hyper	1 -	TTCTACTAAAACAATACACCTTTAAAAATTTAAAAATAAAAAATAATACAAAATCCCTACTCCTAAAAATTTTTTTATTACTACTAAAAAACAAAAATAAAAAATTTAATATTTAAATTT
chr1	69850774	69850894	Hyper	1 +	TTTTGTTAAGATAGTGTATTTTTGGAGATTTAGAAGTAAGAAGTGATGTAGGATTTTTGTTTTTGGGAATTTTTTTGTTATTATTGGAAAGTAAGGATGAGAAATTTGGTGTTTGGGTTT
chr9	12926506	12926626	Hypo	1 -	CACTTATTACTCTAAAAAAAAATAAATAAAAAAATAAAACTTCATAATAAATTAAAATTTAAAATTAAAACCAACATCATTAAAATAAAATATAAACACAACATATATTCAAAATCTAATCC
chr9	12926506	12926626	Hypo	1 +	TATTTATTATTTTGAAAAAAATAAGTGGAAAGTGAAATTTTATAATAAATTGGGGTTTAAAATTGAGATTAATATTATTAGGGTAAAATGTGAGTATAGTATATATTTAGAATTTAATTT
chr9	12926506	12926626	Hypo	1 -	CACTTATTACTCTAAAAAAAAATAAATAAAAAAATAAAACTTCATAATAAATTAAAATATAAAATTTAAACCAACATCATTAAAATAAAATATAAACACAACATATATTCAAAATCTAATCC
chr9	12926506	12926626	Hypo	1 +	TATTTATTATTTTGAAAAAAATAAGTGGAAAGTGAAATTTTATAATAAATTGGGGTGTAAAATTTAGATTAATATTATTAGGGTAAAATGTGAGTATAGTATATATTTAGAATTTAATTT
chr9	12926506	12926626	Hyper	1 -	CACTTATTACTCTAAAAAAAAATAAATAAAAAAATAAAACTTCATAATAAATTAAAATTTAAAATTAAAACCAACATCATTAAAATAAAATATAAACACAACATATATTCAAAATCTAATCC
chr9	12926506	12926626	Hyper	1 +	TATTTATTATTTTGAAAAAAATAAGTGGAAAGTGAAATTTTATAATAAATTGGGGTTTAAAATTGAGATTAATATTATTAGGGTAAAATGTGAGTATAGTATATATTTAGAATTTAATTT
chr9	12926506	12926626	Hyper	1 -	CACTTATTACTCTAAAAAAAAATAAATAAAAAAATAAAACTTCATAATAAATTAAAATATAAAATTTAAACCAACATCATTAAAATAAAATATAAACACAACATATATTCAAAATCTAATCC
chr9	12926506	12926626	Hyper	1 +	TATTTATTATTTTGAAAAAAATAAGTGGAAAGTGAAATTTTATAATAAATTGGGGTGTAAAATTTAGATTAATATTATTAGGGTAAAATGTGAGTATAGTATATATTTAGAATTTAATTT
chr17	11715922	11716042	Hypo	1 -	AACTTCTTTCAAATAAAATCAATATCCCAAATTTCCTCACTATACTAACTACTAACCTTACACTCATACCACCCTCATTCCCTTCCCTCCCTACCCTATTCAAATTAACTTTATATCAAA
chr17	11715922	11716042	Hypo	1 +	GGTTTTTTTTAGGTGAGATTGATGTTTTAGGTTTTTTTATTGTGTTGGTTGTTAGTTTTGTATTTATATTATTTTTATTTTTTTTTTTTTTTTGTTTTGTTTAAGTTAGTTTTATATTAGA
chr17	11715922	11716042	Hypo	1 -	AACTTCTTTCAAATAAAATCAATATCCCAAATTTCCTCACTATACTAACTACTAACATTACACTAATACCACCCTCATTCCCTTCCCTCCCTACCCTATTCAAATTAACTTTATATCAAA
chr17	11715922	11716042	Hypo	1 +	GGTTTTTTTTAGGTGAGATTGATGTTTTAGGTTTTTTTATTGTGTTGGTTGTTAGTGTTGTATTGATATTATTTTTATTTTTTTTTTTTTTTTGTTTTGTTTAAGTTAGTTTTATATTAGA
chr17	11715922	11716042	Hyper	1 -	AACTTCTTTCAAATAAAATCGATATCCCAAATTTCCTCACTATACTAACTACTAACCTTACACTCATACCACCCTCATTCCCTTCCCTCCCTACCCTATTCAAATTAACTTTATATCAAA
chr17	11715922	11716042	Hyper	1 +	GGTTTTTTTTAGGTGAGATCGATGTTTTAGGTTTTTTTATTGTGTTGGTTGTTAGTTTTGTATTTATATTATTTTTATTTTTTTTTTTTTTTTTGTTTTGTTTAAGTTAGTTTTATATTAGA
chr17	11715922	11716042	Hyper	1 -	AACTTCTTTCAAATAAAATCGATATCCCAAATTTCCTCACTATACTAACTACTAACGTTACACTAATACCACCCTCATTCCCTTCCCTCCCTACCCTATTCAAATTAACTTTATATCAAA
chr17	11715922	11716042	Hyper	1 +	GGTTTTTTTTAGGTGAGATCGATGTTTTAGGTTTTTTTATTGTGTTGGTTGTTAGCGTTGTATTGATATTATTTTTATTTTTTTTTTTTTTTTGTTTTGTTTAAGTTAGTTTTATATTAGA
chr2	213328394	213328514	Hypo	1 -	ATAATACATTACAATACCCCAATACTAACAATCTAAAAAACACAAACTAATTATTTTATATATAACCCCAACCAATTTCATTCAATTAACTTCATAAATCAATTCAAAAAATAATTAATT
chr2	213328394	213328514	Hypo	1 +	ATGATATGTTATAATGTTTTAATATTGATAATTTGAGAGGTATAAATTAATTATTTTGTGTGTAATTTTAGTTAGTTTTATTTGATTAGTTTTATGAATTAGTTTAAAAGGTGATTAATT
chr2	213328394	213328514	Hypo	1 -	ATAATACATTACAATACCCCAATACTAACAATCTAAAAAACACAAACTAATTATTTTCTATATATCCCCAACCAATTTCATTCAATTAACTTCATAAATCAATTCAAAAAATAATTAATT
chr2	213328394	213328514	Hypo	1 +	ATGATATGTTATAATGTTTTAATATTGATAATTTGAGAGGTATAAATTAATTATTTTTTGTGTATTTTTAGTTAGTTTTATTTGATTAGTTTTATGAATTAGTTTAAAAGGTGATTAATT
chr2	213328394	213328514	Hyper	1 -	ATAATACGTTACAATACCCCAATACTAACAATCTAAAAAACACAAACTAATTATTTTATATATAACCCCAACCAATTTCATTCGATTAACTTCATAAATCAATTCAAAAAATAATTAATT
chr2	213328394	213328514	Hyper	1 +	ATGATACGTTATAATGTTTTAATATTGATAATTTGAGAGGTATAAATTAATTATTTTGTGTGTAATTTTAGTTAGTTTTATTCGATTAGTTTTATGAATTAGTTTAAAAGGTGATTAATT
chr2	213328394	213328514	Hyper	1 -	ATAATACGTTACAATACCCCAATACTAACAATCTAAAAAACACAAACTAATTATTTTCTATATATCCCCAACCAATTTCATTCGATTAACTTCATAAATCAATTCAAAAAATAATTAATT
chr2	213328394	213328514	Hyper	1 +	ATGATACGTTATAATGTTTTAATATTGATAATTTGAGAGGTATAAATTAATTATTTTTTGTGTATTTTTAGTTAGTTTTATTCGATTAGTTTTATGAATTAGTTTAAAAGGTGATTAATT
chr5	8823624	8823744	Hypo	1 -	ATATATAAATACAATTTAATATACAATACACAATATAACTAAAATTTTAAATTACTCAAATTTACAAATACTTTTATCCAAAATCATTATTTACATTTAATAATCTTTCCATTTTATTTT
chr5	8823624	8823744	Hypo	1 +	ATATGTAAATGTAATTTAATATGTAATGTATAATGTAATTAGAATTTTAGGTTATTTAAATTTATGAATATTTTTATTTGAGATTATTATTTGTATTTAATAATTTTTTTATTTTGTTTT
chr5	8823624	8823744	Hypo	1 -	ATATATAAATACAATTTAATATACAATACACAATATAACTAAAATTTTAAATTACTAAAATTTAAAAATACTTTTATCCAAAATCATTATTTACATTTAATAATCTTTCCATTTTATTTT
chr5	8823624	8823744	Hypo	1 +	ATATGTAAATGTAATTTAATATGTAATGTATAATGTAATTAGAATTTTAGGTTATTAAAATTTAAGAATATTTTTATTTGAGATTATTATTTGTATTTAATAATTTTTTTATTTTGTTTT
chr5	8823624	8823744	Hyper	1 -	ATATATAAATACAATTTAATATACAATACACAATATAACTAAAATTTTAAATTACTCAAATTTACGAATACTTTTATCCGAAATCATTATTTACATTTAATAATCTTTCCATTTTATTTT
chr5	8823624	8823744	Hyper	1 +	ATATGTAAATGTAATTTAATATGTAATGTATAATGTAATTAGAATTTTAGGTTATTTAAATTTACGAATATTTTTATTCGAGATTATTATTTGTATTTAATAATTTTTTTATTTTGTTTT
chr5	8823624	8823744	Hyper	1 -	ATATATAAATACAATTTAATATACAATACACAATATAACTAAAATTTTAAATTACTAAAATTTAAAAATACTTTTATCCGAAATCATTATTTACATTTAATAATCTTTCCATTTTATTTT
chr5	8823624	8823744	Hyper	1 +	ATATGTAAATGTAATTTAATATGTAATGTATAATGTAATTAGAATTTTAGGTTATTAAAATTTAAGAATATTTTTATTCGAGATTATTATTTGTATTTAATAATTTTTTTATTTTGTTTT
chr18	27366915	27367035	Hypo	1 -	CAAACTCAATTTTTTTTCCAATTACATCTTAAAAATTATCTACATATCTATAAAATCAAAATCATCATACATAATATTTAACTCAACATCCCAACTACCATTTCAAATACATTTCTTCAT
chr18	27366915	27367035	Hypo	1 +	TAGATTTAATTTTTTTTTTAGTTATATTTTAAAGGTTATTTATATGTTTGTAAGGTTAAAATTATTATATATGATATTTAATTTAGTATTTTAATTGTTATTTTAGATGTATTTTTTTAT
chr18	27366915	27367035	Hypo	1 -	CAAACTCAATTTTTTTTCCAATTACATCTTAAAAATTATCTACATATCTATAAAAACAAAATCATAATACATAATATTTAACTCAACATCCCAACTACCATTTCAAATACATTTCTTCAT
chr18	27366915	27367035	Hypo	1 +	TAGATTTAATTTTTTTTTTAGTTATATTTTAAAGGTTATTTATATGTTTGTAAGGGTAAAATTATAATATATGATATTTAATTTAGTATTTTAATTGTTATTTTAGATGTATTTTTTTAT

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chr18	27366915	27367035	Hyper	1 -	CAAACTCAATTTTTTTTCCAATTACATCTTAAAAATTATCTACATATCTATAAAATCAAAATCATCATACATAATATTTAACTCAACATCCCAACTACCATTTCAAATACATTTCTTCAT
chr18	27366915	27367035	Hyper	1 +	TAGATTTAATTTTTTTTTTAGTTATATTTTAAAGGTTATTTATATGTTTGTAAGGTTAAAATTATTATATATGATATTTAATTTAGTATTTTAATTGTTATTTTAGATGTATTTTTTTAT
chr18	27366915	27367035	Hyper	1 -	CAAACTCAATTTTTTTTCCAATTACATCTTAAAAATTATCTACATATCTATAAAAACAAAATCATAATACATAATATTTAACTCAACATCCCAACTACCATTTCAAATACATTTCTTCAT
chr18	27366915	27367035	Hyper	1 +	TAGATTTAATTTTTTTTTTAGTTATATTTTAAAGGTTATTTATATGTTTGTAAGGGTAAAATTATAATATATGATATTTAATTTAGTATTTTAATTGTTATTTTAGATGTATTTTTTTAT
chr5	52074838	52074958	Hypo	1 -	AAAATTAAAATCTCAAATCTTTCCAAACCATATACACAAACCCACACATATACATATACTTCTTAATTTCTAAAACATATACAACCTTTCTAAAATTCCCTATAAACATCTTTCAAATTA
chr5	52074838	52074958	Hypo	1 +	GAGATTGGGATTTTAGGTTTTTTTAGGTTGTATGTATAGATTTATATATGTATATGTATTTTTTGATTTTTGGAATATGTATAATTTTTTTAAAGTTTTTTATGGATATTTTTTAGATTA
chr5	52074838	52074958	Hypo	1 -	AAAATTAAAATCTCAAATCTTTCCAAACCATATACACAAACCCACACATATACATATCCTTCTAAATTTCTAAAACATATACAACCTTTCTAAAATTCCCTATAAACATCTTTCAAATTA
chr5	52074838	52074958	Hypo	1 +	GAGATTGGGATTTTAGGTTTTTTTAGGTTGTATGTATAGATTTATATATGTATATGTTTTTTTAGATTTTTGGAATATGTATAATTTTTTTAAAGTTTTTTATGGATATTTTTTAGATTA
chr5	52074838	52074958	Hyper	1 -	AAAATTAAAATCTCAAATCTTTCCAAACCGTATACACAAACCCACACATATACATATACTTCTTAATTTCTAAAACATATACAACCTTTCTAAAATTCCCTATAAACATCTTTCAAATTA
chr5	52074838	52074958	Hyper	1 +	GAGATTGGGATTTTAGGTTTTTTTAGGTCGTATGTATAGATTTATATATGTATATGTATTTTTTGATTTTTGGAATATGTATAATTTTTTTAAAGTTTTTTATGGATATTTTTTAGATTA
chr5	52074838	52074958	Hyper	1 -	AAAATTAAAATCTCAAATCTTTCCAAACCGTATACACAAACCCACACATATACATATCCTTCTAAATTTCTAAAACATATACAACCTTTCTAAAATTCCCTATAAACATCTTTCAAATTA
chr5	52074838	52074958	Hyper	1 +	GAGATTGGGATTTTAGGTTTTTTTAGGTCGTATGTATAGATTTATATATGTATATGTTTTTTTAGATTTTTGGAATATGTATAATTTTTTTAAAGTTTTTTATGGATATTTTTTAGATTA
chr11	37652855	37652975	Hypo	1 -	TATAACATCACTACATTACTAAAATATCTTAAATTTAATCTATAAATTTCCCTCTACTAATAAATTTTACCTATAATATATTTCTATTTAACAATTTTCTATAAACACATTTTAATTCTT
chr11	37652855	37652975	Hypo	1 +	TATAGTATTATTATATTGTTGGGGTATTTTGAGTTTGATTTATGAATTTTTTTTTATTGATGGGTTTTATTTATGGTGTGTTTTTATTTAATAGTTTTTTGTGAATATGTTTTAGTTTTT
chr11	37652855	37652975	Hypo	1 -	TATAACATCACTACATTACTAAAATATCTTAAATTTAATCTATAAATTTCCCTCTACAAATAACTTTTACCTATAATATATTTCTATTTAACAATTTTCTATAAACACATTTTAATTCTT
chr11	37652855	37652975	Hypo	1 +	TATAGTATTATTATATTGTTGGGGTATTTTGAGTTTGATTTATGAATTTTTTTTTATAGATGGTTTTTATTTATGGTGTGTTTTTATTTAATAGTTTTTTGTGAATATGTTTTAGTTTTT
chr11	37652855	37652975	Hyper	1 -	TATAACATCACTACATTACTAAAATATCTTAAATTTAATCTATAAATTTCCCTCTACTAATAAATTTTACCTATAATATATTTCTATTTAACAATTTTCTATAAACACGTTTTAATTCTT
chr11	37652855	37652975	Hyper	1 +	TATAGTATTATTATATTGTTGGGGTATTTTGAGTTTGATTTATGAATTTTTTTTTATTGATGGGTTTTATTTATGGTGTGTTTTTATTTAATAGTTTTTTGTGAATACGTTTTAGTTTTT
chr11	37652855	37652975	Hyper	1 -	TATAACATCACTACATTACTAAAATATCTTAAATTTAATCTATAAATTTCCCTCTACAAATAACTTTTACCTATAATATATTTCTATTTAACAATTTTCTATAAACACGTTTTAATTCTT
chr11	37652855	37652975	Hyper	1 +	TATAGTATTATTATATTGTTGGGGTATTTTGAGTTTGATTTATGAATTTTTTTTTATAGATGGTTTTTATTTATGGTGTGTTTTTATTTAATAGTTTTTTGTGAATACGTTTTAGTTTTT
chr7	124032012	124032132	Hypo	1 -	ACCATAAATTCTTAAATAAATAAACAATTTTCCTAATAAAAATAAATAACTACAAAAAAAACATCACCCCAACACTAACCAAACTTTCACCTATAATCTTAAATTAATTATCTCATTAAA
chr7	124032012	124032132	Hypo	1 +	ATTATGAATTTTTGGGTGAGTGGGTAATTTTTTTGATAAGAGTGGATGGTTATAAGAAAGGTATTATTTTAATATTGGTTAGATTTTTATTTATAATTTTGGGTTAGTTGTTTTATTGAG
chr7	124032012	124032132	Hypo	1 -	ACCATAAATTCTTAAATAAATAAACAATTTTCCTAATAAAAATAAATAACTACAAAAAAATAAATCACCCCAACACTAACCAAACTTTCACCTATAATCTTAAATTAATTATCTCATTAAA
chr7	124032012	124032132	Hypo	1 +	ATTATGAATTTTTGGGTGAGTGGGTAATTTTTTTGATAAGAGTGGATGGTTATAAGAAATGAATTATTTTAATATTGGTTAGATTTTTATTTATAATTTTGGGTTAGTTGTTTTATTGAG
chr7	124032012	124032132	Hyper	1 -	ACCATAAATTCTTAAATAAATAAACAATTTTCCTAATAAAAATAAATAACTACAAAAAAAACATCACCCCAACACTAACCAAACTTTCACCTATAATCTTAAATTAATTATCTCATTAAA
chr7	124032012	124032132	Hyper	1 +	ATTATGAATTTTTGGGTGAGTGGGTAATTTTTTTGATAAGAGTGGATGGTTATAAGAAAGGTATTATTTTAATATTGGTTAGATTTTTATTTATAATTTTGGGTTAGTTGTTTTATTGAG
chr7	124032012	124032132	Hyper	1 -	ACCATAAATTCTTAAATAAATAAACAATTTTCCTAATAAAAATAAATAACTACAAAAAAATAAATCACCCCAACACTAACCAAACTTTCACCTATAATCTTAAATTAATTATCTCATTAAA
chr7	124032012	124032132	Hyper	1 +	ATTATGAATTTTTGGGTGAGTGGGTAATTTTTTTGATAAGAGTGGATGGTTATAAGAAATGAATTATTTTAATATTGGTTAGATTTTTATTTATAATTTTGGGTTAGTTGTTTTATTGAG
chr13	94458274	94458394	Hypo	1 -	CTTTCAATTTTCTCTTTATAAAAACCTATAAAAATATTTTTATAAAAATTTCAATATTAAATCAACTACACATATTTTAAATAAAAATACTTTTCTTTAAACACCATAAAATACATACTT
chr13	94458274	94458394	Hypo	1 +	TTTTTAATTTTTTTTTTGTAGAAATTTGTAAAGATGTTTTTATAGAAATTTTAGTATTAAATTAGTTATATATATTTTGAATAAGAATGTTTTTTTTTGAATATTATGGAATGTATGTTT
chr13	94458274	94458394	Hypo	1 -	CTTTCAATTTTCTCTTTATAAAAACCTATAAAAATATTTTTATAAAAATTTCAATATTATAACAACTACACATATTTTAAATAAAAATACTTTTCTTTAAACACCATAAAATACATACTT
chr13	94458274	94458394	Hypo	1 +	TTTTTAATTTTTTTTTTGTAGAAATTTGTAAAGATGTTTTTATAGAAATTTTAGTATTATAGTAGTTATATATATTTTGAATAAGAATGTTTTTTTTTGAATATTATGGAATGTATGTTT
chr13	94458274	94458394	Hyper	1 -	CTTTCAATTTTCTCTTTATAAAAACCTATAAAAATATTTTTATAAAAATTTCAATATTAAATCAACTACACATATTTTAAATAAAAATACTTTTCTTTAAACACCATAAAATACATACTT
chr13	94458274	94458394	Hyper	1 +	TTTTTAATTTTTTTTTTGTAGAAATTTGTAAAGATGTTTTTATAGAAATTTTAGTATTAAATTAGTTATATATATTTTGAATAAGAATGTTTTTTTTTGAATATTATGGAATGTATGTTT
chr13	94458274	94458394	Hyper	1 -	CTTTCAATTTTCTCTTTATAAAAACCTATAAAAATATTTTTATAAAAATTTCAATATTATAACAACTACACATATTTTAAATAAAAATACTTTTCTTTAAACACCATAAAATACATACTT
chr13	94458274	94458394	Hyper	1 +	TTTTTAATTTTTTTTTTGTAGAAATTTGTAAAGATGTTTTTATAGAAATTTTAGTATTATAGTAGTTATATATATTTTGAATAAGAATGTTTTTTTTTGAATATTATGGAATGTATGTTT
chr1	14573320	14573440	Hypo	1 -	TATAAACTTCCTTCAAATAAAAACCTAACTATAAATCATCTCTCCCAATACAACTTTATAAAAATATCTCTAAAAATATAATTTCTAAATCTCCAAAAATACATATCTTAAAATAACCCA
chr1	14573320	14573440	Hypo	1 +	TGTGAGTTTTTTTTAGATGGAAGTTTAGTTGTGGGTTATTTTTTTTAGTGTAGTTTTGTAAAAATGTTTTTAGAAGTGTGATTTTTGAGTTTTTAGAAATGTATATTTTAAAATAATTTA
chr1	14573320	14573440	Hypo	1 -	TATAAACTTCCTTCAAATAAAAACCTAACTATAAATCATCTCTCCCAATACAACTTTATCACAATATCTCTAAAAATATAATTTCTAAATCTCCAAAAATACATATCTTAAAATAACCCA
chr1	14573320	14573440	Hypo	1 +	TGTGAGTTTTTTTTAGATGGAAGTTTAGTTGTGGGTTATTTTTTTTAGTGTAGTTTTGTTATAATGTTTTTAGAAGTGTGATTTTTGAGTTTTTAGAAATGTATATTTTAAAATAATTTA
chr1	14573320	14573440	Hyper	1 -	TATAAACTTCCTTCAAATAAAAACCTAACTATAAATCATCTCTCCCAATACAACTTTATAAAAATATCTCTAAAAATATAATTTCTAAATCTCCAAAAATACATATCTTAAAATAACCCA
chr1	14573320	14573440	Hyper	1 +	TGTGAGTTTTTTTTAGATGGAAGTTTAGTTGTGGGTTATTTTTTTTAGTGTAGTTTTGTAAAAATGTTTTTAGAAGTGTGATTTTTGAGTTTTTAGAAATGTATATTTTAAAATAATTTA
chr1	14573320	14573440	Hyper	1 -	TATAAACTTCCTTCAAATAAAAACCTAACTATAAATCATCTCTCCCAATACAACTTTATCACAATATCTCTAAAAATATAATTTCTAAATCTCCAAAAATACATATCTTAAAATAACCCA
chr1	14573320	14573440	Hyper	1 +	TGTGAGTTTTTTTTAGATGGAAGTTTAGTTGTGGGTTATTTTTTTTAGTGTAGTTTTGTTATAATGTTTTTAGAAGTGTGATTTTTGAGTTTTTAGAAATGTATATTTTAAAATAATTTA
chr6	3435052	3435172	Hypo	1 -	TCCTCCCTTATACTTAAAAAATAAATCTCTAAACCAAAAACTCAAAAAAAAAAATATAAAAATTTCCCACAAATACTATATCAAAACCTAAAATTCTTAACAAATATACTTATAAACTACC
chr6	3435052	3435172	Hypo	1 +	TTTTTTTTTGTGTTTAGGAAATAGATTTTTAGGTTAAGAATTTAGAAAAGAGATGTGAAAGTTTTTTATAGATGTTATGTTAAGGTTTGAGGTTTTTAGTAGGTGTGTTTATGGGTTGTT
chr6	3435052	3435172	Hypo	1 -	TCCTCCCTTATACTTAAAAAATAAATCTCTAAACCAAAAACTCAAAAAAAAAAATATAAACAATTCCCACAAATACTATATCAAAACCTAAAATTCTTAACAAATATACTTATAAACTACC
chr6	3435052	3435172	Hypo	1 +	TTTTTTTTTGTGTTTAGGAAATAGATTTTTAGGTTAAGAATTTAGAAAAGAGATGTGAATGATTTTTATAGATGTTATGTTAAGGTTTGAGGTTTTTAGTAGGTGTGTTTATGGGTTGTT
chr6	3435052	3435172	Hyper	1 -	TCCTCCCTTATACTTAAAAAATAAATCTCTAAACCAAAAACTCAAAAAAAAAAATATAAAAATTTCCCACAAATACTATATCAAAACCTAAAATTCTTAACAAATATACTTATAAACTACC
chr6	3435052	3435172	Hyper	1 +	TTTTTTTTTGTGTTTAGGAAATAGATTTTTAGGTTAAGAATTTAGAAAAGAGATGTGAAAGTTTTTTATAGATGTTATGTTAAGGTTTGAGGTTTTTAGTAGGTGTGTTTATGGGTTGTT
chr6	3435052	3435172	Hyper	1 -	TCCTCCCTTATACTTAAAAAATAAATCTCTAAACCAAAAACTCAAAAAAAAAAATATAAACGATTCCCACAAATACTATATCAAAACCTAAAATTCTTAACAAATATACTTATAAACTACC
chr6	3435052	3435172	Hyper	1 +	TTTTTTTTTGTGTTTAGGAAATAGATTTTTAGGTTAAGAATTTAGAAAAGAGATGTGAACGATTTTTATAGATGTTATGTTAAGGTTTGAGGTTTTTAGTAGGTGTGTTTATGGGTTGTT
chr1	166737907	166738027	Hypo	1 -	ACAATACACTAACTACTTTTTACTACTACAATTCTTCCAAAATAAATCATCTAAAAAACTATTTCTAAAAATTCATAATACATTATTCCTAAATATACTCTAAATATATATTTATAAAAA

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chr1	166737907	166738027	Hypo	1 +	GTAGTATATTGATTGTTTTTTGTTATTGTAGTTTTTTTAAAATAGGTTATTTGAAAGATTATTTTTGGAGATTTATGGTATATTATTTTTGAATGTATTTTAAGTGTATGTTTGTGGAAA
chr1	166737907	166738027	Hypo	1 -	ACAATACACTAACTACTTTTTACTACTACAATTCTTCCAAAATAAATCATCTAAAAAACGAATTCTAAAAATTCATAATACATTATTCCTAAATATACTCTAAATATATATTTATAAAAA
chr1	166737907	166738027	Hyper	1 +	GTAGTATATTGATTGTTTTTTGTTATTGTAGTTTTTTTAAAATAGGTTATTTGAAAGATTATTTTTGGAGATTTATGGTATATTATTTTTGAATGTATTTTAAGTGTATGTTTGTGGAAA
chr1	166737907	166738027	Hyper	1 -	ACAATACACTAACTACTTTTTACTACTACAATTCTTCCAAAATAAATCATCTAAAAAACGAATTCTAAAAATTCATAATACATTATTCCTAAATATACTCTAAATATATATTTATAAAAA
chr1	166737907	166738027	Hyper	1 +	GTAGTATATTGATTGTTTTTTGTTATTGTAGTTTTTTTAAAATAGGTTATTTGAAAGACGAATTTTGGAGATTTATGGTATATTATTTTTGAATGTATTTTAAGTGTATGTTTGTGGAAA
chr3	190569655	190569775	Hypo	1 -	AAAAATATTTCAAATTATATAAAAATCATATTATTTAAAATATTAAATATTAAATTATATTTAACAATTACAAAATATTTAATACAAAAATTAAAACTAAATATCTAATTATATTTATAA
chr3	190569655	190569775	Hypo	1 +	AGAAATATTTTAAATTATATAGAAATTATATTATTTAAAATATTAAGTGTTAAATTATATTTAATAATTGTAGGATATTTGATATAAGAATTAAAATTGGATGTTTGGTTATGTTTATAG
chr3	190569655	190569775	Hyper	1 -	AAAAATATTTCAAATTATATAAAAATCATATTATTTAAAATATTAAATATTAAATTATATTTAACAATTACAAAATATTTAATACAAAAATTAAAACTAAATATCTAATTATATTTATAA
chr3	190569655	190569775	Hyper	1 +	AGAAATATTTTAAATTATATAGAAATTATATTATTTAAAATATTAAGTGTTAAATTATATTTAATAATTGTAGGATATTTGATATAAGAATTAAAATTGGATGTTTGGTTATGTTTATAG
chr3	190569655	190569775	Hyper	1 -	AAAAATATTTCAAATTATATAAAAATCATATTATTTAAAATATTAAATATTAAATTATATTTAACAATTACAAAATATTTAATACAAAAATTAAAACTAAATATCTAATTATATTTATAA
chr3	190569655	190569775	Hyper	1 +	AGAAATATTTTAAATTATATAGAAATTATATTATTTAAAATATTAAGTGTTAAATTATATTTAATAATTGTAGGATATTTGATATAAGAATTAAAATTGGATGTTTGGTTATGTTTATAG
chr3	190569655	190569775	Hyper	1 -	AAAAATATTTCAAATTATATAAAAATCATATTATTTAAAATATTAAATATTAAATTATATTTAACAATTACAAAATATTTAATACAAAAATTAAAACTAAATATCTAATTATATTTATAA
chr3	190569655	190569775	Hyper	1 +	AGAAATATTTTAAATTATATAGAAATTATATTATTTAAAATATTAAGTGTTAAATTATATTTAATAATTGTAGGATATTTGATATAAGAATTAAAATTGGATGTTTGGTTATGTTTATAG
chr4	135277559	135277679	Hypo	1 -	TTTTCTCTACTTATCTAAACTTTTACAAAATAAAAATCATACTCACACTTAAACATATAAATAAAATTACTAATTAATAAAATTAATAAATCCTAATTCTACAAATACTAAACAATTTAC
chr4	135277559	135277679	Hyper	1 +	TTTTTTTGTTTATTTGAATTTTTATAAGATGAAGATTATATTTATATTTAAGTATGTGAATAAGATTGTTAATTAATAAAATTAGTGAATTTTAATTTTATAAATGTTGAGTAGTTTAT
chr4	135277559	135277679	Hyper	1 -	TTTTCTCTACTTATCTAAACTTTTACAAAATAAAAATCATACTCACACTTAAACATATAAATAAAATTACTAATTAATAAAATTAATAAATCCTAATTCTACAAATACTAAACAATTTAC
chr4	135277559	135277679	Hyper	1 +	TTTTTTTGTTTATTTGAATTTTTATAAGATGAAGATTATATTTATATTTAAGTATGTGAATAAGATTGTTAATTAATAAAATTAGTGAATTTTAATTTTATAAATGTTGAGTAGTTTAT
chr4	135277559	135277679	Hyper	1 -	TTTTCTCTACTTATCTAAACTTTTACAAAATAAAAATCATACTCACACTTAAACATATAAATAAAATTACTAATTAATAAAATTAATAAATCCTAATTCTACAAATACTAAACAATTTAC
chr4	135277559	135277679	Hyper	1 +	TTTTTTTGTTTATTTGAATTTTTATAAGATGAAGATTATATTTATATTTAAGTATGTGAATAAGATTGTTAATTAATAAAATTAGTGAATTTTAATTTTATAAATGTTGAGTAGTTTAT
chr4	135277559	135277679	Hyper	1 -	TTTTCTCTACTTATCTAAACTTTTACAAAATAAAAATCATACTCACACTTAAACATATAAATAAAATTACTAATTAATAAAATTAATAAATCCTAATTCTACAAATACTAAACAATTTAC
chr4	135277559	135277679	Hyper	1 +	TTTTTTTGTTTATTTGAATTTTTATAAGATGAAGATTATATTTATATTTAAGTATGTGAATAAGATTGTTAATTAATAAAATTAGTGAATTTTAATTTTATAAATGTTGAGTAGTTTAT
chr12	72364108	72364228	Hypo	1 -	ACTCATATTCCCAAAACTACAAAACTAAAAATTCATTATTAAATAACAAACCTATATAACTCTTTCCTATCCTAATTTACACTTAATCTCATTCTACCTATTAAATATTCAAATCCC
chr12	72364108	72364228	Hypo	1 +	ATTTATATTTTTAAGATTGTGAGGTTGGAAGTTTATTATTAAGTAATAGATTTGTATAATAATTTTTTTTTATTTTAATTTATATTTGATTTTATTTTGTTTGTTGAATATTTAGGTTTT
chr12	72364108	72364228	Hypo	1 -	ACTCATATTCCCAAAACTACAAAACTAAAAATTCATTATTAAATAACAAACCTATATAACTCTTTCCTATCCTAATTTACACTTAATCTCATTCTACCTATTAAATATTCAAATCCC
chr12	72364108	72364228	Hypo	1 +	ATTTATATTTTTAAGATTGTGAGGTTGGAAGTTTATTATTAAGTAATAGATTTGTATAATAATTTTTTTTTATTTTAATTTATATTTGATTTTATTTTGTTTGTTGAATATTTAGGTTTT
chr12	72364108	72364228	Hyper	1 -	ACTCATATTCCCAAAACTACGAAACTAAAAATTCATTATTAAATAACAAACCTATATAACTCTTTCCTATCCTAATTTACACTTAATCTCATTCTACCTATTAAATATTCAAATCCC
chr12	72364108	72364228	Hyper	1 +	ATTTATATTTTTAAGATTGCGAGGTTGGAAGTTTATTATTAAGTAATAGATTTGTATAATTTTTTTTTATTTTAATTTATATTTGATTTTATTTTGTTTGTTGAATATTTAGGTTTT
chr12	72364108	72364228	Hyper	1 -	ACTCATATTCCCAAAACTACGAAACTAAAAATTCATTATTAAATAACAAACCTATATAACTCTTTCCTATCCTAATTTACACTTAATCTCATTCTACCTATTAAATATTCAAATCCC
chr12	72364108	72364228	Hyper	1 +	ATTTATATTTTTAAGATTGCGAGGTTGGAAGTTTATTATTAAGTAATAGATTTGTATAATTTTTTTTTATTTTAATTTATATTTGATTTTATTTTGTTTGTTGAATATTTAGGTTTT
chr7	44173897	44174017	Hypo	1 -	TCCAAAAACCAATCCACAAAAAAAAATACTCTAAATTCCATTCAAAAAAATACCAAATAATTCTTCTACTATCAAACTAAACATAAATTCTTAACAAAAAAAAAAAAACAAAAACTAATAA
chr7	44173897	44174017	Hypo	1 +	TTTAGAGATTGGTTTATAAAGGAGGTATTTTGGGTTTTATTTAGGAGGGTGTTAGATGATTTTTTGTTATTAGATTGAATGTGAGTTTTTGGTAGAGGAGAAGGGGTAGAAATTGATGG
chr7	44173897	44174017	Hypo	1 -	TCCAAAAACCAATCCACAAAAAAAAATACTCTAAATTCCATTCAAAAAAATACCAAATAATAATTCTACTATCAAACTAAACATAAATTCTTAACAAAAAAAAAAAAACAAAAACTAATAA
chr7	44173897	44174017	Hypo	1 +	TTTAGAGATTGGTTTATAAAGGAGGTATTTTGGGTTTTATTTAGGAGGGTGTTAGATGATTTTTTGTTATTAGATTGAATGTGAGTTTTTGGTAGAGGAGAAGGGGTAGAAATTGATGG
chr7	44173897	44174017	Hyper	1 -	TCCAAAAACCGATCCACAAAAAAAATACTCTAAATTCCATTCAAAAAAATACCAAATAATAATTCTACTATCAAACTAAACGTAAATTCTTAACAAAAAAAAAAAAACAAAAACTAATAA
chr7	44173897	44174017	Hyper	1 +	TTTAGAGATCGGTTTATAAAGGAGGTATTTTGGGTTTTATTTAGGAGGGTGTTAGATGATTTTTTGTTATTAGATTGAACGTGAGTTTTTGGTAGAGGAGAAGGGGTAGAAATTGATGG
chr7	44173897	44174017	Hyper	1 -	TCCAAAAACCGATCCACAAAAAAAATACTCTAAATTCCATTCAAAAAAATACCAAATAATAATTCTACTATCAAACTAAACGTAAATTCTTAACAAAAAAAAAAAAACAAAAACTAATAA
chr7	44173897	44174017	Hyper	1 +	TTTAGAGATCGGTTTATAAAGGAGGTATTTTGGGTTTTATTTAGGAGGGTGTTAGATGATTTTTTGTTATTAGATTGAACGTGAGTTTTTGGTAGAGGAGAAGGGGTAGAAATTGATGG
chr1	201990265	201990385	Hypo	1 -	AATTCAATACATAACATAACATAAACCCTCATACACACTAAACTATCTCTACATAATCTTCTAAACTATAAATAACTACTTAACCCAAAATATCCAAAAATACCACCACTACCCAACAAT
chr1	201990265	201990385	Hypo	1 +	AATTTAGTGTATGGTATAGTATGGGTTTTTATGTATATTGGATTATTTTTGTATGGTTTTTGGGTGTAAATGGTTGTTTAATTTAGAGTGTTTAAAGATGTTATTATTGTTTAGTAGT
chr1	201990265	201990385	Hypo	1 -	AATTCAATACATAACATAACATAAACCCTCATACACACTAAACTATCTCTACATAATCTTCAAAACTATAAATAACTACTTAACCCAAAATATCCAAAAATACCACCACTACCCAACAAT
chr1	201990265	201990385	Hypo	1 +	AATTTAGTGTATGGTATAGTATGGGTTTTTATGTATATTGGATTATTTTTGTATGGTTTTGGGGGTTGTAAATGGTTGTTTAATTTAGAGTGTTTAAAGATGTTATTATTGTTTAGTAGT
chr1	201990265	201990385	Hypo	1 -	AATTCAATACATAACATAACATAAACCCTCATACACACTAAACTATCTCTACATAATCTTCTAAACTATAAATAACTACTTAACCCAAAATATCCAAAAATACCACCACTACCCAACAAT
chr1	201990265	201990385	Hypo	1 +	AATTTAGTGTATGGTATAGTATGGGTTTTTATGTATATTGGATTATTTTTGTATGGTTTTGGGGGTTGTAAATGGTTGTTTAATTTAGAGTGTTTAAAGATGTTATTATTGTTTAGTAGT
chr1	201990265	201990385	Hypo	1 -	AATTCAATACATAACATAACATAAACCCTCATACACACTAAACTATCTCTACATAATCTTCAAACTATAAATAACTACTTAACCCAAAATATCCAAAAATACCACCACTACCCAACAAT
chr1	201990265	201990385	Hypo	1 +	AATTTAGTGTATGGTATAGTATGGGTTTTTATGTATATTGGATTATTTTTGTATGGTTTTGGGGGTTGTAAATGGTTGTTTAATTTAGAGTGTTTAAAGATGTTATTATTGTTTAGTAGT
chr12	679304	679424	Hypo	1 -	AAAATAAAACCAACATAAAATAAAAAAACCCAAAAAAAAAAAAACCTCCAACACAACCTACACCGAAAAACGACGAACAAAAAAACCAACAATAAAACCCTAACAAAAATACCTAAAAA
chr12	679304	679424	Hypo	1 +	GAAATGGAGTTAGTGTGGGGTGGGGGGATTTAGAAGGGAGGGGTTTTTAGTATAATTTGTTGAGGGGATGGTGGGTAGAAGGGTTGGTAGTGAGGTTTGGTGAAGGTGTTTGGAAA
chr12	679304	679424	Hyper	1 -	AAAATAAAACCAACATAAAATAAAAAAACCCAAAAAAAAAAAAACCTCCAACACAACCTACACCGAAAAACGACGAACAAAAAAACCAACAATAAAACCCTAACAAAAATACCTAAAAA
chr12	679304	679424	Hyper	1 +	GAAATGGAGTTAGTGTGGGGTGGGGGGATTTAGAAGGGAGGGGTTTTTAGTATAATTTGTTGAGGGGATGGTGGGTAGAAGGGTTGGTAGTGAGGTTTGGTGAAGGTGTTTGGAAA
chr12	679304	679424	Hyper	1 -	AAAATAAAACCAACATAAAATAAAAAAACCCAAAAAAAAAAAAACCTCCAACACAACCTACACCGAAAAACGACGAACAAAAAAACCAACAATAAAACCCTAACAAAAATACCTAAAAA
chr12	679304	679424	Hyper	1 +	GAAATGGAGTTAGCGTGGGGTGGGGGGATTTAGAAGGGAGGGGTTTTTAGTATAATTTGTAGTCGAGGGGACGGCGGGTAGAAGGGTCGGTAGTGAGGTTTGGCGAAGGTGTTTGGAAA

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chr12	679304	679424	Hyper	1 -	AAAATAAAACCAACGTAAAATAAAAAAACCCAAAAAAAAAAAACCTCCAACACAACCTACCCCCGAAAAAACGACGAACAAAAAAACCGACAATAAAACCCTAACGAAAATACCTAAAAA
chr12	679304	679424	Hyper	1 +	GAAATGGAGTTAGCGTGGGGTGGGGGGATTTAGAAGGGAGGGGTTTTTAGTATAATTTGTTTTCGAGGGGACGGCGGGTAGAAGGGTCGGTAGTGAGGTTTGGCGAAGGTGTTTGGAAA
chr2	235571842	235571962	Hypo	1 -	AAAAAAACTATAACAAAAACAAAAAATCTAAACATTTAATCCCAAAATTTAATAACCTACATAAATACAAACAACAAAAACCAACCTCTCCTTTAAAAATTCCTAAAAATAAAAAACTTC
chr2	235571842	235571962	Hypo	1 +	AGAGGAGTTATGATGAGGGTAGAGAGGTTTGGGTATTTGATTTTAAAGTTTGATGATTTGTATAAATATAGATAATGAAGTTAGTTTTTTTTTTGAAGATTTTTGAAAATGAAAAATTTT
chr2	235571842	235571962	Hypo	1 -	AAAAAAACTATAACAAAAACAAAAAATCTAAACATTTAATCCCAAAATTTAATAACCTAATTAAATACAAACAACAAAAACCAACCTCTCCTTTAAAAATTCCTAAAAATAAAAAACTTC
chr2	235571842	235571962	Hypo	1 +	AGAGGAGTTATGATGAGGGTAGAGAGGTTTGGGTATTTGATTTTAAAGTTTGATGATTTGTATAAATATAGATAATGAAGTTAGTTTTTTTTTTGAAGATTTTTGAAAATGAAAAATTTT
chr2	235571842	235571962	Hyper	1 -	AAAAAAACTATAACGAAAACAAAAAATCTAAACATTTAATCCCAAAATTTAATAACCTACATAAATACAAACAACGAAACCAACCTCTCCTTTAAAAATTCCTAAAAATAAAAAACTTC
chr2	235571842	235571962	Hyper	1 +	AGAGGAGTTATGACGAGGGTAGAGAGGTTTGGGTATTTGATTTTAAAGTTTGATGATTTGTATAAATATAGATAACGAAGTTAGTTTTTTTTTTGAAGATTTTTGAAAATGAAAAATTTT
chr2	235571842	235571962	Hyper	1 -	AAAAAAACTATAACGAAAACAAAAAATCTAAACATTTAATCCCAAAATTTAATAACCTAATTAAATACAAACAACGAAACCAACCTCTCCTTTAAAAATTCCTAAAAATAAAAAACTTC
chr2	235571842	235571962	Hyper	1 +	AGAGGAGTTATGACGAGGGTAGAGAGGTTTGGGTATTTGATTTTAAAGTTTGATGATTTGTATAAATATAGATAACGAAGTTAGTTTTTTTTTTGAAGATTTTTGAAAATGAAAAATTTT
chr2	170154601	170154721	Hypo	1 -	CAAAACAAATTAATCCAATCAATATAATAATTTACCAAAAAAAATCTACCAATTTAACCACCAACACTTACTTCAAACACTACCCACAAAATTAAACAAACAATCATCATCATCATCATC
chr2	170154601	170154721	Hypo	1 +	TAAGATAGATTAATTTAGTTAATGTAATGATTTGTTAGAAAGAATTTATTAGTTTGGTTAAAAGTATTTATTTTAAGTGTTATTTATAAAGTTAAATAAGTAATTATTATTATTATTATT
chr2	170154601	170154721	Hypo	1 -	CAAAACAAATTAATCCAATCAATATAATAATTTACCAAAAAAAATCTACCAATTTAACCAAAAACACTTACTTCAAACACTACCCACAAAATTAAACAAACAATCATCATCATCATCATC
chr2	170154601	170154721	Hypo	1 +	TAAGATAGATTAATTTAGTTAATGTAATGATTTGTTAGAAAGAATTTATTAGTTTGGTTAAAAGTATTTATTTTAAGTGTTATTTATAAAGTTAAATAAGTAATTATTATTATTATTATT
chr2	170154601	170154721	Hypo	1 -	CAAAACAAATTAATCCAATCAATATAATAATTTACCAAAAAAAATCTACCAATTTAACCAACCAACTTACTTCAAACGCTACCCACAAAATTAAACAAACAATCATCATCATCATCATC
chr2	170154601	170154721	Hypo	1 +	TAAGATAGATTAATTTAGTTAATGTAATGATTTGTTAGAAAGAATTTATTAGTTTGGTTATTAGTATTTATTTTAAAGTTTAAATAAGTAATTATTATTATTATTATT
chr2	170154601	170154721	Hypo	1 -	CAAAACAAATTAATCCAATCAATATAATAATTTACCAAAAAAAATCTACCAATTTAACCAAAAACACTTACTTCAAACGCTACCCACAAAATTAAACAAACAATCATCATCATCATCATC
chr2	170154601	170154721	Hypo	1 +	TAAGATAGATTAATTTAGTTAATGTAATGATTTGTTAGAAAGAATTTATTAGTTTGGTTATTAGTATTTATTTTAAAGTTTAAATAAGTAATTATTATTATTATTATT
chr16	49684739	49684859	Hypo	1 -	CCAACTAAACTAAAAAAAATAATACCCTAAACAATAAATCATAAATCATCATAACTATCCTCCCACTAAACAATCTAAAAACCACCCAATTATCAATATTAATAATTTTATAAAAATACC
chr16	49684739	49684859	Hypo	1 +	TTAGTTGGATTGGGAGAAATGATGTTTTGAGTAATGGGTTATAGGTTATTATGGTTGTTTTTTTATTGGATAGTTTGGGGGTTATTTAGTTATTAGTATTAGTGATTTTGTGAAAATGTT
chr16	49684739	49684859	Hyper	1 -	CCAACTAAACTAAAAAAAATAATACCCTAAACAATAAATCATAAATCATCATAACTATCCTCCCACTAAACAATCTAAAAACCACCCAATTATCAATATTAATAATTTTATAAAAATACC
chr16	49684739	49684859	Hyper	1 +	TTAGTTGGATTGGGAGAAATGATGTTTTGAGTAATGGGTTATAGGTTATTATGGTTGTTTTTTTATTGGATAGTTTGGGGGTTATTTAGTTATTAGTATTAGTGATTTTGTGAAAATGTT
chr16	49684739	49684859	Hyper	1 -	CCAACTAAACTAAAAAAAATAATACCCTAAACAATAAATCATAAATCATCATAACTATCCTCCCACTAAACAATCTAAAAACCACCCAATTATCAATATTAATAATTTTATAAAAATACC
chr16	49684739	49684859	Hyper	1 +	TTAGTTGGATTGGGAGAAATGATGTTTTGAGTAATGGGTTATAGGTTATTATGGTTGTTTTTTTATTGGATAGTTTGGGGGTTATTTAGTTATTAGTATTAGTGATTTTGTGAAAATGTT
chr16	49684739	49684859	Hyper	1 -	CCAACTAAACTAAAAAAAATAATACCCTAAACAATAAATCATAAATCATCATAACTATCCTCCCACTAAACAATCTAAAAACCACCCAATTATCAATATTAATAATTTTATAAAAATACC
chr16	49684739	49684859	Hyper	1 +	TTAGTTGGATTGGGAGAAATGATGTTTTGAGTAATGGGTTATAGGTTATTATGGTTGTTTTTTTATTGGATAGTTTGGGGGTTATTTAGTTATTAGTATTAGTGATTTTGTGAAAATGTT

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참조	시작	종료	메틸화	점수	임계값	Pos_count	Neg_count	소스	설명
chr4	96000607	96000608	Hypo		0	0	0	0 contamination_indels	chr4:96000607:T>TGAAATAATAC
chr4	96000607	96000608	Hyper		0	0	0	0 contamination_indels	chr4:96000607:T>TGAAATAATAC
chr10	57769028	57769029	Hypo		0	0	0	0 contamination_indels	chr10:57769028:A>ACTTCACC
chr10	57769028	57769029	Hyper		0	0	0	0 contamination_indels	chr10:57769028:A>ACTTCACC
chr5	99455945	99455946	Hypo		0	0	0	0 contamination_indels	chr5:99455945:T>TGTATTAAAA
chr5	99455945	99455946	Hyper		0	0	0	0 contamination_indels	chr5:99455945:T>TGTATTAAAA
chr7	12499106	12499107	Hypo		0	0	0	0 contamination_indels	chr7:12499106:A>AATGTGGACAT
chr7	12499106	12499107	Hyper		0	0	0	0 contamination_indels	chr7:12499106:A>AATGTGGACAT
chr15	28267532	28267533	Hypo		0	0	0	0 contamination_indels	chr15:28267532:G>GTGGGTGAGAA
chr15	28267532	28267533	Hyper		0	0	0	0 contamination_indels	chr15:28267532:G>GTGGGTGAGAA
chr8	22949613	22949614	Hypo		0	0	0	0 contamination_indels	chr8:22949613:A>AAAGTACCTG
chr8	22949613	22949614	Hyper		0	0	0	0 contamination_indels	chr8:22949613:A>AAAGTACCTG
chr15	99930624	99930635	Hypo		0	0	0	0 contamination_indels	chr15:99930624:GACTTTTTTCC>G
chr15	99930624	99930635	Hyper		0	0	0	0 contamination_indels	chr15:99930624:GACTTTTTTCC>G
chr10	119487167	119487168	Hypo		0	0	0	0 contamination_indels	chr10:119487167:C>CTTATAGGA
chr10	119487167	119487168	Hyper		0	0	0	0 contamination_indels	chr10:119487167:C>CTTATAGGA
chr15	46642885	46642895	Hypo		0	0	0	0 contamination_indels	chr15:46642885:TCTATAAGGA>T
chr15	46642885	46642895	Hyper		0	0	0	0 contamination_indels	chr15:46642885:TCTATAAGGA>T
chr20	41072940	41072941	Hypo		0	0	0	0 contamination_indels	chr20:41072940:A>ACAGCAAAG
chr20	41072940	41072941	Hyper		0	0	0	0 contamination_indels	chr20:41072940:A>ACAGCAAAG
chr18	69074008	69074009	Hypo		0	0	0	0 contamination_indels	chr18:69074008:G>GTGGGCTAACA
chr18	69074008	69074009	Hyper		0	0	0	0 contamination_indels	chr18:69074008:G>GTGGGCTAACA
chr17	7401334	7401335	Hypo		0	0	0	0 contamination_indels	chr17:7401334:G>GGCTCTGGGGT
chr17	7401334	7401335	Hyper		0	0	0	0 contamination_indels	chr17:7401334:G>GGCTCTGGGGT
chr7	29793205	29793206	Hypo		0	0	0	0 contamination_indels	chr7:29793205:T>TGGGAGAC
chr7	29793205	29793206	Hyper		0	0	0	0 contamination_indels	chr7:29793205:T>TGGGAGAC
chr3	165404394	165404395	Hypo		0	0	0	0 contamination_indels	chr3:165404394:G>GAGTCTTAGA
chr3	165404394	165404395	Hyper		0	0	0	0 contamination_indels	chr3:165404394:G>GAGTCTTAGA
chr2	36366738	36366749	Hypo		0	0	0	0 contamination_indels	chr2:36366738:CTGCTAGAATA>C
chr2	36366738	36366749	Hyper		0	0	0	0 contamination_indels	chr2:36366738:CTGCTAGAATA>C
chr10	119492705	119492714	Hypo		0	0	0	0 contamination_indels	chr10:119492705:GCCGATATT>G
chr10	119492705	119492714	Hyper		0	0	0	0 contamination_indels	chr10:119492705:GCCGATATT>G
chr6	25408692	25408693	Hypo		0	0	0	0 contamination_indels	chr6:25408692:A>AAGATTAATG
chr6	25408692	25408693	Hyper		0	0	0	0 contamination_indels	chr6:25408692:A>AAGATTAATG
chr10	52475958	52475969	Hypo		0	0	0	0 contamination_indels	chr10:52475958:CACCACTGCAG>C
chr10	52475958	52475969	Hyper		0	0	0	0 contamination_indels	chr10:52475958:CACCACTGCAG>C
chr4	19758127	19758128	Hypo		0	0	0	0 contamination_indels	chr4:19758127:C>CATTTAAAATT
chr4	19758127	19758128	Hyper		0	0	0	0 contamination_indels	chr4:19758127:C>CATTTAAAATT
chr9	113129946	113129947	Hypo		0	0	0	0 contamination_indels	chr9:113129946:A>ACTACAGTT
chr9	113129946	113129947	Hyper		0	0	0	0 contamination_indels	chr9:113129946:A>ACTACAGTT
chr6	62730485	62730495	Hypo		0	0	0	0 contamination_indels	chr6:62730485:GCACTTTTGA>G
chr6	62730485	62730495	Hyper		0	0	0	0 contamination_indels	chr6:62730485:GCACTTTTGA>G
chr6	11692256	11692266	Hypo		0	0	0	0 contamination_indels	chr6:11692256:TTCAGATTCA>T
chr6	11692256	11692266	Hyper		0	0	0	0 contamination_indels	chr6:11692256:TTCAGATTCA>T
chr13	78028158	78028169	Hypo		0	0	0	0 contamination_indels	chr13:78028158:GAGTCGATCAC>G
chr13	78028158	78028169	Hyper		0	0	0	0 contamination_indels	chr13:78028158:GAGTCGATCAC>G
chr6	36288878	36288879	Hypo		0	0	0	0 contamination_indels	chr6:36288878:G>GGTCTCAGCT
chr6	36288878	36288879	Hyper		0	0	0	0 contamination_indels	chr6:36288878:G>GGTCTCAGCT
chr4	130620013	130620023	Hypo		0	0	0	0 contamination_indels	chr4:130620013:GCAAAAGAGA>G
chr4	130620013	130620023	Hyper		0	0	0	0 contamination_indels	chr4:130620013:GCAAAAGAGA>G
chr9	21162876	21162887	Hypo		0	0	0	0 contamination_indels	chr9:21162876:TAAAAACATAA>T
chr9	21162876	21162887	Hyper		0	0	0	0 contamination_indels	chr9:21162876:TAAAAACATAA>T
chr8	142424471	142424472	Hypo		0	0	0	0 contamination_indels	chr8:142424471:G>GGGTGACCCCA
chr8	142424471	142424472	Hyper		0	0	0	0 contamination_indels	chr8:142424471:G>GGGTGACCCCA
chr6	161638913	161638923	Hypo		0	0	0	0 contamination_indels	chr6:161638913:GGTTTGTTCT>G
chr6	161638913	161638923	Hyper		0	0	0	0 contamination_indels	chr6:161638913:GGTTTGTTCT>G
chr3	17375415	17375425	Hypo		0	0	0	0 contamination_indels	chr3:17375415:AGGGAGAATG>A
chr3	17375415	17375425	Hyper		0	0	0	0 contamination_indels	chr3:17375415:AGGGAGAATG>A
chr12	93046310	93046311	Hypo		0	0	0	0 contamination_indels	chr12:93046310:G>GCCATAATAA
chr12	93046310	93046311	Hyper		0	0	0	0 contamination_indels	chr12:93046310:G>GCCATAATAA
chr2	31142069	31142070	Hypo		0	0	0	0 contamination_indels	chr2:31142069:C>CCTGGAGA
chr2	31142069	31142070	Hyper		0	0	0	0 contamination_indels	chr2:31142069:C>CCTGGAGA
chr15	53945224	53945232	Hypo		0	0	0	0 contamination_indels	chr15:53945224:CCTCTGTA>C
chr15	53945224	53945232	Hyper		0	0	0	0 contamination_indels	chr15:53945224:CCTCTGTA>C
chr8	69536929	69536940	Hypo		0	0	0	0 contamination_indels	chr8:69536929:TACAGCAGCGA>T
chr8	69536929	69536940	Hyper		0	0	0	0 contamination_indels	chr8:69536929:TACAGCAGCGA>T
chr10	120791777	120791785	Hypo		0	0	0	0 contamination_indels	chr10:120791777:TAAATACC>T
chr10	120791777	120791785	Hyper		0	0	0	0 contamination_indels	chr10:120791777:TAAATACC>T
chrX	5996764	5996775	Hypo		0	0	0	0 contamination_indels	chrX:5996764:CCTATTACTCA>C
chrX	5996764	5996775	Hyper		0	0	0	0 contamination_indels	chrX:5996764:CCTATTACTCA>C
chr12	125926855	125926856	Hypo		0	0	0	0 contamination_indels	chr12:125926855:A>ATAGTGATTCC
chr12	125926855	125926856	Hyper		0	0	0	0 contamination_indels	chr12:125926855:A>ATAGTGATTCC
chr5	137787291	137787301	Hypo		0	0	0	0 contamination_indels	chr5:137787291:CCTCAATGAT>C

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chr5	137787291	137787301	Hyper	0	0	0	0	contamination_indels	chr5:137787291:CCTCAATGAT>C
chr5	63284075	63284076	Hypo	0	0	0	0	contamination_indels	chr5:63284075:A>AAACATTT
chr5	63284075	63284076	Hyper	0	0	0	0	contamination_indels	chr5:63284075:A>AAACATTT
chr8	51545718	51545729	Hypo	0	0	0	0	contamination_indels	chr8:51545718:TTAATGTGGAG>T
chr8	51545718	51545729	Hyper	0	0	0	0	contamination_indels	chr8:51545718:TTAATGTGGAG>T
chrX	128453280	128453281	Hypo	0	0	0	0	contamination_indels	chrX:128453280:C>CTGCCCTGAT
chrX	128453280	128453281	Hyper	0	0	0	0	contamination_indels	chrX:128453280:C>CTGCCCTGAT
chr16	11659676	11659677	Hypo	0	0	0	0	contamination_indels	chr16:11659676:T>TATCATATCCC
chr16	11659676	11659677	Hyper	0	0	0	0	contamination_indels	chr16:11659676:T>TATCATATCCC
chr5	10634461	10634470	Hypo	0	0	0	0	contamination_indels	chr5:10634461:TGTTCTGGG>T
chr5	10634461	10634470	Hyper	0	0	0	0	contamination_indels	chr5:10634461:TGTTCTGGG>T
chr6	137253421	137253430	Hypo	0	0	0	0	contamination_indels	chr6:137253421:CTAGTAACT>C
chr6	137253421	137253430	Hyper	0	0	0	0	contamination_indels	chr6:137253421:CTAGTAACT>C
chr2	159492437	159492446	Hypo	0	0	0	0	contamination_indels	chr2:159492437:TTCACTACA>T
chr2	159492437	159492446	Hyper	0	0	0	0	contamination_indels	chr2:159492437:TTCACTACA>T
chr8	90137090	90137091	Hypo	0	0	0	0	contamination_indels	chr8:90137090:C>CATGTTTTGA
chr8	90137090	90137091	Hyper	0	0	0	0	contamination_indels	chr8:90137090:C>CATGTTTTGA
chr13	41835505	41835515	Hypo	0	0	0	0	contamination_indels	chr13:41835505:CATAATTCTT>C
chr13	41835505	41835515	Hyper	0	0	0	0	contamination_indels	chr13:41835505:CATAATTCTT>C
chr2	117855213	117855214	Hypo	0	0	0	0	contamination_indels	chr2:117855213:A>AATATTTTAAT
chr2	117855213	117855214	Hyper	0	0	0	0	contamination_indels	chr2:117855213:A>AATATTTTAAT
chr15	98663288	98663289	Hypo	0	0	0	0	contamination_indels	chr15:98663288:T>TGACTAGGGGG
chr15	98663288	98663289	Hyper	0	0	0	0	contamination_indels	chr15:98663288:T>TGACTAGGGGG
chr6	89850215	89850216	Hypo	0	0	0	0	contamination_indels	chr6:89850215:C>CAATGTAGG
chr6	89850215	89850216	Hyper	0	0	0	0	contamination_indels	chr6:89850215:C>CAATGTAGG
chr4	169665647	169665648	Hypo	0	0	0	0	contamination_indels	chr4:169665647:A>ACTCCAGT
chr4	169665647	169665648	Hyper	0	0	0	0	contamination_indels	chr4:169665647:A>ACTCCAGT
chr10	79092334	79092345	Hypo	0	0	0	0	contamination_indels	chr10:79092334:ATGGACAGCCC>A
chr10	79092334	79092345	Hyper	0	0	0	0	contamination_indels	chr10:79092334:ATGGACAGCCC>A
chr12	19319028	19319038	Hypo	0	0	0	0	contamination_indels	chr12:19319028:TCCCAAGTCC>T
chr12	19319028	19319038	Hyper	0	0	0	0	contamination_indels	chr12:19319028:TCCCAAGTCC>T
chr14	93128620	93128621	Hypo	0	0	0	0	contamination_indels	chr14:93128620:A>ACACGGCATG
chr14	93128620	93128621	Hyper	0	0	0	0	contamination_indels	chr14:93128620:A>ACACGGCATG
chr15	68236643	68236650	Hypo	0	0	0	0	contamination_indels	chr15:68236643:TTATTGC>T
chr15	68236643	68236650	Hyper	0	0	0	0	contamination_indels	chr15:68236643:TTATTGC>T
chr17	11781553	11781561	Hypo	0	0	0	0	contamination_indels	chr17:11781553:ATTCTTAG>A
chr17	11781553	11781561	Hyper	0	0	0	0	contamination_indels	chr17:11781553:ATTCTTAG>A
chr3	41053481	41053482	Hypo	0	0	0	0	contamination_indels	chr3:41053481:C>CAGGGTGACCT
chr3	41053481	41053482	Hyper	0	0	0	0	contamination_indels	chr3:41053481:C>CAGGGTGACCT
chr13	83593567	83593576	Hypo	0	0	0	0	contamination_indels	chr13:83593567:GCCACAAAA>G
chr13	83593567	83593576	Hyper	0	0	0	0	contamination_indels	chr13:83593567:GCCACAAAA>G
chr2	241074410	241074420	Hypo	0	0	0	0	contamination_indels	chr2:241074410:TGAAGCCTAG>T
chr2	241074410	241074420	Hyper	0	0	0	0	contamination_indels	chr2:241074410:TGAAGCCTAG>T
chr2	136631233	136631243	Hypo	0	0	0	0	contamination_indels	chr2:136631233:ACAGAGGTAC>A
chr2	136631233	136631243	Hyper	0	0	0	0	contamination_indels	chr2:136631233:ACAGAGGTAC>A
chr21	41983767	41983768	Hypo	0	0	0	0	contamination_indels	chr21:41983767:G>GACAGGATATT
chr21	41983767	41983768	Hyper	0	0	0	0	contamination_indels	chr21:41983767:G>GACAGGATATT
chr20	54011253	54011263	Hypo	0	0	0	0	contamination_indels	chr20:54011253:GCAGAGGATA>G
chr20	54011253	54011263	Hyper	0	0	0	0	contamination_indels	chr20:54011253:GCAGAGGATA>G
chr13	31908674	31908675	Hypo	0	0	0	0	contamination_indels	chr13:31908674:A>ATGGCAAAAG
chr13	31908674	31908675	Hyper	0	0	0	0	contamination_indels	chr13:31908674:A>ATGGCAAAAG
chr11	8304227	8304238	Hypo	0	0	0	0	contamination_indels	chr11:8304227:AGTGCCCCCAG>A
chr11	8304227	8304238	Hyper	0	0	0	0	contamination_indels	chr11:8304227:AGTGCCCCCAG>A
chr11	13159373	13159384	Hypo	0	0	0	0	contamination_indels	chr11:13159373:GACACTGTACA>G
chr11	13159373	13159384	Hyper	0	0	0	0	contamination_indels	chr11:13159373:GACACTGTACA>G
chr10	84654321	84654322	Hypo	0	0	0	0	contamination_indels	chr10:84654321:T>TACGTTCC
chr10	84654321	84654322	Hyper	0	0	0	0	contamination_indels	chr10:84654321:T>TACGTTCC
chr4	80739726	80739736	Hypo	0	0	0	0	contamination_indels	chr4:80739726:TAGAGATAAA>T
chr4	80739726	80739736	Hyper	0	0	0	0	contamination_indels	chr4:80739726:TAGAGATAAA>T
chr8	87393306	87393307	Hypo	0	0	0	0	contamination_indels	chr8:87393306:C>CCATATAGA
chr8	87393306	87393307	Hyper	0	0	0	0	contamination_indels	chr8:87393306:C>CCATATAGA
chr16	71779747	71779757	Hypo	0	0	0	0	contamination_indels	chr16:71779747:GCATATATTT>G
chr16	71779747	71779757	Hyper	0	0	0	0	contamination_indels	chr16:71779747:GCATATATTT>G
chr3	12427800	12427809	Hypo	0	0	0	0	contamination_indels	chr3:12427800:ATCATGAAC>A
chr3	12427800	12427809	Hyper	0	0	0	0	contamination_indels	chr3:12427800:ATCATGAAC>A
chr1	84433007	84433015	Hypo	0	0	0	0	contamination_indels	chr1:84433007:CAAACTTG>C
chr1	84433007	84433015	Hyper	0	0	0	0	contamination_indels	chr1:84433007:CAAACTTG>C
chr4	64770176	64770185	Hypo	0	0	0	0	contamination_indels	chr4:64770176:GAAGACTCA>G
chr4	64770176	64770185	Hyper	0	0	0	0	contamination_indels	chr4:64770176:GAAGACTCA>G
chr4	115893184	115893185	Hypo	0	0	0	0	contamination_indels	chr4:115893184:T>TTAGGGTC
chr4	115893184	115893185	Hyper	0	0	0	0	contamination_indels	chr4:115893184:T>TTAGGGTC
chr1	108757914	108757924	Hypo	0	0	0	0	contamination_indels	chr1:108757914:GTAATCTATT>G
chr1	108757914	108757924	Hyper	0	0	0	0	contamination_indels	chr1:108757914:GTAATCTATT>G
chrX	91647391	91647400	Hypo	0	0	0	0	contamination_indels	chrX:91647391:TCAAATACA>T
chrX	91647391	91647400	Hyper	0	0	0	0	contamination_indels	chrX:91647391:TCAAATACA>T

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chr9	128894591	128894602	Hypo	0	0	0	0	contamination_indels	chr9:128894591:GAAATAACAGA>G
chr9	128894591	128894602	Hyper	0	0	0	0	contamination_indels	chr9:128894591:GAAATAACAGA>G
chr12	77795436	77795445	Hypo	0	0	0	0	contamination_indels	chr12:77795436:AGCATTAAT>A
chr12	77795436	77795445	Hyper	0	0	0	0	contamination_indels	chr12:77795436:AGCATTAAT>A
chr2	1656263	1656273	Hypo	0	0	0	0	contamination_indels	chr2:1656263:TCTCCCCAAG>T
chr2	1656263	1656273	Hyper	0	0	0	0	contamination_indels	chr2:1656263:TCTCCCCAAG>T
chr13	70536913	70536922	Hypo	0	0	0	0	contamination_indels	chr13:70536913:AGTAGCCTC>A
chr13	70536913	70536922	Hyper	0	0	0	0	contamination_indels	chr13:70536913:AGTAGCCTC>A
chr16	85593258	85593268	Hypo	0	0	0	0	contamination_indels	chr16:85593258:GCTCTGCCTC>G
chr16	85593258	85593268	Hyper	0	0	0	0	contamination_indels	chr16:85593258:GCTCTGCCTC>G
chr3	63093389	63093399	Hypo	0	0	0	0	contamination_indels	chr3:63093389:AGTACTGCTT>A
chr3	63093389	63093399	Hyper	0	0	0	0	contamination_indels	chr3:63093389:AGTACTGCTT>A
chr4	188545013	188545021	Hypo	0	0	0	0	contamination_indels	chr4:188545013:AGAAAATC>A
chr4	188545013	188545021	Hyper	0	0	0	0	contamination_indels	chr4:188545013:AGAAAATC>A
chr12	41730308	41730318	Hypo	0	0	0	0	contamination_indels	chr12:41730308:GAACATCAAC>G
chr12	41730308	41730318	Hyper	0	0	0	0	contamination_indels	chr12:41730308:GAACATCAAC>G
chr5	110584043	110584051	Hypo	0	0	0	0	contamination_indels	chr5:110584043:AAATGTTT>A
chr5	110584043	110584051	Hyper	0	0	0	0	contamination_indels	chr5:110584043:AAATGTTT>A
chr11	76299843	76299851	Hypo	0	0	0	0	contamination_indels	chr11:76299843:CCCAGTAT>C
chr11	76299843	76299851	Hyper	0	0	0	0	contamination_indels	chr11:76299843:CCCAGTAT>C
chr12	102362729	102362730	Hypo	0	0	0	0	contamination_indels	chr12:102362729:C>CTGGTTCAAGA
chr12	102362729	102362730	Hyper	0	0	0	0	contamination_indels	chr12:102362729:C>CTGGTTCAAGA
chr11	112041127	112041137	Hypo	0	0	0	0	contamination_indels	chr11:112041127:TTTTGTCCTG>T
chr11	112041127	112041137	Hyper	0	0	0	0	contamination_indels	chr11:112041127:TTTTGTCCTG>T
chr5	13705941	13705952	Hypo	0	0	0	0	contamination_indels	chr5:13705941:TCTTCACAAGA>T
chr5	13705941	13705952	Hyper	0	0	0	0	contamination_indels	chr5:13705941:TCTTCACAAGA>T
chr5	17764367	17764368	Hypo	0	0	0	0	contamination_indels	chr5:17764367:G>GCAGTCTAA
chr5	17764367	17764368	Hyper	0	0	0	0	contamination_indels	chr5:17764367:G>GCAGTCTAA
chr12	59059060	59059066	Hypo	0	0	0	0	contamination_indels	chr12:59059060:AGCCCT>A
chr12	59059060	59059066	Hyper	0	0	0	0	contamination_indels	chr12:59059060:AGCCCT>A
chr6	64997546	64997555	Hypo	0	0	0	0	contamination_indels	chr6:64997546:TAATTCTTC>T
chr6	64997546	64997555	Hyper	0	0	0	0	contamination_indels	chr6:64997546:TAATTCTTC>T
chr20	61842465	61842466	Hypo	0	0	0	0	contamination_indels	chr20:61842465:A>ACACAGGAAC
chr20	61842465	61842466	Hyper	0	0	0	0	contamination_indels	chr20:61842465:A>ACACAGGAAC
chr5	180045699	180045700	Hypo	0	0	0	0	contamination_indels	chr5:180045699:G>GGGTTACCCTA
chr5	180045699	180045700	Hyper	0	0	0	0	contamination_indels	chr5:180045699:G>GGGTTACCCTA
chr9	16418439	16418450	Hypo	0	0	0	0	contamination_indels	chr9:16418439:TGGCCCCTCAA>T
chr9	16418439	16418450	Hyper	0	0	0	0	contamination_indels	chr9:16418439:TGGCCCCTCAA>T
chr19	53805590	53805599	Hypo	0	0	0	0	contamination_indels	chr19:53805590:TTTTGTGAC>T
chr19	53805590	53805599	Hyper	0	0	0	0	contamination_indels	chr19:53805590:TTTTGTGAC>T
chr3	49851374	49851375	Hypo	0	0	0	0	contamination_indels	chr3:49851374:C>CCTGGCTCCT
chr3	49851374	49851375	Hyper	0	0	0	0	contamination_indels	chr3:49851374:C>CCTGGCTCCT
chr1	191863776	191863785	Hypo	0	0	0	0	contamination_indels	chr1:191863776:ATATCCACT>A
chr1	191863776	191863785	Hyper	0	0	0	0	contamination_indels	chr1:191863776:ATATCCACT>A
chr16	27040942	27040943	Hypo	0	0	0	0	contamination_indels	chr16:27040942:T>TGACCTGGCCG
chr16	27040942	27040943	Hyper	0	0	0	0	contamination_indels	chr16:27040942:T>TGACCTGGCCG
chr5	98722569	98722576	Hypo	0	0	0	0	contamination_indels	chr5:98722569:CTGGGGA>C
chr5	98722569	98722576	Hyper	0	0	0	0	contamination_indels	chr5:98722569:CTGGGGA>C
chr10	104909745	104909746	Hypo	0	0	0	0	contamination_indels	chr10:104909745:G>GAATATGAAC
chr10	104909745	104909746	Hyper	0	0	0	0	contamination_indels	chr10:104909745:G>GAATATGAAC
chr11	73031127	73031128	Hypo	0	0	0	0	contamination_indels	chr11:73031127:A>AACTCCCTC
chr11	73031127	73031128	Hyper	0	0	0	0	contamination_indels	chr11:73031127:A>AACTCCCTC
chr3	76100414	76100415	Hypo	0	0	0	0	contamination_indels	chr3:76100414:T>TATGTATTC
chr3	76100414	76100415	Hyper	0	0	0	0	contamination_indels	chr3:76100414:T>TATGTATTC
chr20	50022913	50022924	Hypo	0	0	0	0	contamination_indels	chr20:50022913:GGGGTGACAGT>G
chr20	50022913	50022924	Hyper	0	0	0	0	contamination_indels	chr20:50022913:GGGGTGACAGT>G
chr19	32452078	32452087	Hypo	0	0	0	0	contamination_indels	chr19:32452078:TTGCAAGAA>T
chr19	32452078	32452087	Hyper	0	0	0	0	contamination_indels	chr19:32452078:TTGCAAGAA>T
chr20	49940716	49940727	Hypo	0	0	0	0	contamination_indels	chr20:49940716:TTTGGCCCAGC>T
chr20	49940716	49940727	Hyper	0	0	0	0	contamination_indels	chr20:49940716:TTTGGCCCAGC>T
chr17	20841831	20841832	Hypo	0	0	0	0	contamination_indels	chr17:20841831:G>GCGATGA
chr17	20841831	20841832	Hyper	0	0	0	0	contamination_indels	chr17:20841831:G>GCGATGA
chr13	58898321	58898322	Hypo	0	0	0	0	contamination_indels	chr13:58898321:G>GATTATATTAC
chr13	58898321	58898322	Hyper	0	0	0	0	contamination_indels	chr13:58898321:G>GATTATATTAC
chr2	221564375	221564376	Hypo	0	0	0	0	contamination_indels	chr2:221564375:G>GGGTTTC
chr2	221564375	221564376	Hyper	0	0	0	0	contamination_indels	chr2:221564375:G>GGGTTTC
chr4	27894271	27894272	Hypo	0	0	0	0	contamination_indels	chr4:27894271:A>AATGCATTTT
chr4	27894271	27894272	Hyper	0	0	0	0	contamination_indels	chr4:27894271:A>AATGCATTTT
chr8	102578616	102578627	Hypo	0	0	0	0	contamination_indels	chr8:102578616:AACTTTGCAGC>A
chr8	102578616	102578627	Hyper	0	0	0	0	contamination_indels	chr8:102578616:AACTTTGCAGC>A
chr4	185056847	185056858	Hypo	0	0	0	0	contamination_indels	chr4:185056847:TCATAAGGGTA>T
chr4	185056847	185056858	Hyper	0	0	0	0	contamination_indels	chr4:185056847:TCATAAGGGTA>T
chr3	20765318	20765319	Hypo	0	0	0	0	contamination_indels	chr3:20765318:T>TTGAGAGAA
chr3	20765318	20765319	Hyper	0	0	0	0	contamination_indels	chr3:20765318:T>TTGAGAGAA
chr10	1213133	1213134	Hypo	0	0	0	0	contamination_indels	chr10:1213133:A>ATTATCTCCAC

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chr10	1213133	1213134	Hyper	0	0	0	0	contamination_indels	chr10:1213133:A>ATTATCTCCAC
chr7	80305277	80305278	Hypo	0	0	0	0	contamination_indels	chr7:80305277:T>TGAGGGTTGA
chr7	80305277	80305278	Hyper	0	0	0	0	contamination_indels	chr7:80305277:T>TGAGGGTTGA
chr4	157836032	157836033	Hypo	0	0	0	0	contamination_indels	chr4:157836032:G>GGGAAAGTCT
chr4	157836032	157836033	Hyper	0	0	0	0	contamination_indels	chr4:157836032:G>GGGAAAGTCT
chr5	95882835	95882846	Hypo	0	0	0	0	contamination_indels	chr5:95882835:ACCTGTGTATT>A
chr5	95882835	95882846	Hyper	0	0	0	0	contamination_indels	chr5:95882835:ACCTGTGTATT>A
chr15	31643668	31643678	Hypo	0	0	0	0	contamination_indels	chr15:31643668:CTGGTCTGAG>C
chr15	31643668	31643678	Hyper	0	0	0	0	contamination_indels	chr15:31643668:CTGGTCTGAG>C
chr7	75324233	75324234	Hypo	0	0	0	0	contamination_indels	chr7:75324233:G>GTGAAATTT
chr7	75324233	75324234	Hyper	0	0	0	0	contamination_indels	chr7:75324233:G>GTGAAATTT
chr11	134781124	134781133	Hypo	0	0	0	0	contamination_indels	chr11:134781124:AATAACTAC>A
chr11	134781124	134781133	Hyper	0	0	0	0	contamination_indels	chr11:134781124:AATAACTAC>A
chr9	71818109	71818120	Hypo	0	0	0	0	contamination_indels	chr9:71818109:CATGGGCTGAA>C
chr9	71818109	71818120	Hyper	0	0	0	0	contamination_indels	chr9:71818109:CATGGGCTGAA>C
chr4	124918121	124918122	Hypo	0	0	0	0	contamination_indels	chr4:124918121:T>TTCTTTGGC
chr4	124918121	124918122	Hyper	0	0	0	0	contamination_indels	chr4:124918121:T>TTCTTTGGC
chr8	102531277	102531288	Hypo	0	0	0	0	contamination_indels	chr8:102531277:CTGTCCATTTT>C
chr8	102531277	102531288	Hyper	0	0	0	0	contamination_indels	chr8:102531277:CTGTCCATTTT>C
chr4	102999987	102999988	Hypo	0	0	0	0	contamination_indels	chr4:102999987:A>AAAGGTAACAT
chr4	102999987	102999988	Hyper	0	0	0	0	contamination_indels	chr4:102999987:A>AAAGGTAACAT
chr12	8277800	8277811	Hypo	0	0	0	0	contamination_indels	chr12:8277800:AATAATAGGTC>A
chr12	8277800	8277811	Hyper	0	0	0	0	contamination_indels	chr12:8277800:AATAATAGGTC>A
chr14	37077053	37077063	Hypo	0	0	0	0	contamination_indels	chr14:37077053:CAACTATTGG>C
chr14	37077053	37077063	Hyper	0	0	0	0	contamination_indels	chr14:37077053:CAACTATTGG>C
chr11	44023507	44023517	Hypo	0	0	0	0	contamination_indels	chr11:44023507:TCCTCTCAGA>T
chr11	44023507	44023517	Hyper	0	0	0	0	contamination_indels	chr11:44023507:TCCTCTCAGA>T
chr13	74971697	74971707	Hypo	0	0	0	0	contamination_indels	chr13:74971697:ATTCCCTTGT>A
chr13	74971697	74971707	Hyper	0	0	0	0	contamination_indels	chr13:74971697:ATTCCCTTGT>A
chr3	179011284	179011295	Hypo	0	0	0	0	contamination_indels	chr3:179011284:AACCTCATTAG>A
chr3	179011284	179011295	Hyper	0	0	0	0	contamination_indels	chr3:179011284:AACCTCATTAG>A
chr3	32404516	32404526	Hypo	0	0	0	0	contamination_indels	chr3:32404516:AGTTACTGTG>A
chr3	32404516	32404526	Hyper	0	0	0	0	contamination_indels	chr3:32404516:AGTTACTGTG>A
chr13	24022438	24022439	Hypo	0	0	0	0	contamination_indels	chr13:24022438:G>GAAGCCTCAGC
chr13	24022438	24022439	Hyper	0	0	0	0	contamination_indels	chr13:24022438:G>GAAGCCTCAGC
chr11	58067064	58067065	Hypo	0	0	0	0	contamination_indels	chr11:58067064:C>CAGACGTTTA
chr11	58067064	58067065	Hyper	0	0	0	0	contamination_indels	chr11:58067064:C>CAGACGTTTA
chr1	21934043	21934052	Hypo	0	0	0	0	contamination_indels	chr1:21934043:ACTCTATTT>A
chr1	21934043	21934052	Hyper	0	0	0	0	contamination_indels	chr1:21934043:ACTCTATTT>A
chr15	27563040	27563041	Hypo	0	0	0	0	contamination_indels	chr15:27563040:C>CCACTGTTAA
chr15	27563040	27563041	Hyper	0	0	0	0	contamination_indels	chr15:27563040:C>CCACTGTTAA
chr19	5990014	5990025	Hypo	0	0	0	0	contamination_indels	chr19:5990014:GACCCTAATCT>G
chr19	5990014	5990025	Hyper	0	0	0	0	contamination_indels	chr19:5990014:GACCCTAATCT>G
chr18	69519024	69519035	Hypo	0	0	0	0	contamination_indels	chr18:69519024:CTTTGTAAATT>C
chr18	69519024	69519035	Hyper	0	0	0	0	contamination_indels	chr18:69519024:CTTTGTAAATT>C
chr6	139918291	139918299	Hypo	0	0	0	0	contamination_indels	chr6:139918291:AGCTACTG>A
chr6	139918291	139918299	Hyper	0	0	0	0	contamination_indels	chr6:139918291:AGCTACTG>A
chr1	9701654	9701655	Hypo	0	0	0	0	contamination_indels	chr1:9701654:A>AGCTCATTCCT
chr1	9701654	9701655	Hyper	0	0	0	0	contamination_indels	chr1:9701654:A>AGCTCATTCCT
chr3	170155873	170155884	Hypo	0	0	0	0	contamination_indels	chr3:170155873:TTTAAATATAA>T
chr3	170155873	170155884	Hyper	0	0	0	0	contamination_indels	chr3:170155873:TTTAAATATAA>T
chr20	24545414	24545421	Hypo	0	0	0	0	contamination_indels	chr20:24545414:TGCCTGG>T
chr20	24545414	24545421	Hyper	0	0	0	0	contamination_indels	chr20:24545414:TGCCTGG>T
chr7	120791919	120791920	Hypo	0	0	0	0	contamination_indels	chr7:120791919:A>ATTTGACTAAC
chr7	120791919	120791920	Hyper	0	0	0	0	contamination_indels	chr7:120791919:A>ATTTGACTAAC
chr3	193149907	193149918	Hypo	0	0	0	0	contamination_indels	chr3:193149907:AGAGAAAGGTT>A
chr3	193149907	193149918	Hyper	0	0	0	0	contamination_indels	chr3:193149907:AGAGAAAGGTT>A
chr20	41364074	41364083	Hypo	0	0	0	0	contamination_indels	chr20:41364074:TTAAATCCC>T
chr20	41364074	41364083	Hyper	0	0	0	0	contamination_indels	chr20:41364074:TTAAATCCC>T
chr8	4475819	4475820	Hypo	0	0	0	0	contamination_indels	chr8:4475819:G>GTCTTATTC
chr8	4475819	4475820	Hyper	0	0	0	0	contamination_indels	chr8:4475819:G>GTCTTATTC
chr3	53258031	53258032	Hypo	0	0	0	0	contamination_indels	chr3:53258031:T>TCACTATGGC
chr3	53258031	53258032	Hyper	0	0	0	0	contamination_indels	chr3:53258031:T>TCACTATGGC
chr6	113314885	113314894	Hypo	0	0	0	0	contamination_indels	chr6:113314885:TGGTCAGGA>T
chr6	113314885	113314894	Hyper	0	0	0	0	contamination_indels	chr6:113314885:TGGTCAGGA>T
chr15	59400743	59400744	Hypo	0	0	0	0	contamination_indels	chr15:59400743:T>TTCAGGGACA
chr15	59400743	59400744	Hyper	0	0	0	0	contamination_indels	chr15:59400743:T>TTCAGGGACA
chr1	212398425	212398436	Hypo	0	0	0	0	contamination_indels	chr1:212398425:TGGGAGAAGGG>T
chr1	212398425	212398436	Hyper	0	0	0	0	contamination_indels	chr1:212398425:TGGGAGAAGGG>T
chr16	31526947	31526948	Hypo	0	0	0	0	contamination_indels	chr16:31526947:C>CATGAAAGAAT
chr16	31526947	31526948	Hyper	0	0	0	0	contamination_indels	chr16:31526947:C>CATGAAAGAAT
chr5	90057019	90057020	Hypo	0	0	0	0	contamination_indels	chr5:90057019:A>ATAACTGCC
chr5	90057019	90057020	Hyper	0	0	0	0	contamination_indels	chr5:90057019:A>ATAACTGCC
chr17	30073464	30073474	Hypo	0	0	0	0	contamination_indels	chr17:30073464:GCAGAGTTCT>G
chr17	30073464	30073474	Hyper	0	0	0	0	contamination_indels	chr17:30073464:GCAGAGTTCT>G

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chr22	31090066	31090067	Hypo	0	0	0	0	contamination_indels	chr22:31090066:T>TCCACAACTA
chr22	31090066	31090067	Hyper	0	0	0	0	contamination_indels	chr22:31090066:T>TCCACAACTA
chr4	54322711	54322721	Hypo	0	0	0	0	contamination_indels	chr4:54322711:ATTTTAGCAG>A
chr4	54322711	54322721	Hyper	0	0	0	0	contamination_indels	chr4:54322711:ATTTTAGCAG>A
chr6	62567494	62567495	Hypo	0	0	0	0	contamination_indels	chr6:62567494:T>TAAAAAATAA
chr6	62567494	62567495	Hyper	0	0	0	0	contamination_indels	chr6:62567494:T>TAAAAAATAA
chr5	39394850	39394859	Hypo	0	0	0	0	contamination_indels	chr5:39394850:GGCATTATT>G
chr5	39394850	39394859	Hyper	0	0	0	0	contamination_indels	chr5:39394850:GGCATTATT>G
chr1	190920709	190920710	Hypo	0	0	0	0	contamination_indels	chr1:190920709:A>ATGAGGGT
chr1	190920709	190920710	Hyper	0	0	0	0	contamination_indels	chr1:190920709:A>ATGAGGGT
chr7	154737334	154737335	Hypo	0	0	0	0	contamination_indels	chr7:154737334:G>GCTCGGCC
chr7	154737334	154737335	Hyper	0	0	0	0	contamination_indels	chr7:154737334:G>GCTCGGCC
chr3	79721489	79721490	Hypo	0	0	0	0	contamination_indels	chr3:79721489:A>ATGTTCTCCC
chr3	79721489	79721490	Hyper	0	0	0	0	contamination_indels	chr3:79721489:A>ATGTTCTCCC
chr3	94456737	94456748	Hypo	0	0	0	0	contamination_indels	chr3:94456737:TGAAAAAGTAA>T
chr3	94456737	94456748	Hyper	0	0	0	0	contamination_indels	chr3:94456737:TGAAAAAGTAA>T
chr19	53753015	53753024	Hypo	0	0	0	0	contamination_indels	chr19:53753015:TTTAACAAG>T
chr19	53753015	53753024	Hyper	0	0	0	0	contamination_indels	chr19:53753015:TTTAACAAG>T
chr1	116435011	116435019	Hypo	0	0	0	0	contamination_indels	chr1:116435011:AGATAACC>A
chr1	116435011	116435019	Hyper	0	0	0	0	contamination_indels	chr1:116435011:AGATAACC>A
chr4	98183235	98183236	Hypo	0	0	0	0	contamination_indels	chr4:98183235:T>TAATGCTTTGG
chr4	98183235	98183236	Hyper	0	0	0	0	contamination_indels	chr4:98183235:T>TAATGCTTTGG
chr8	133527910	133527911	Hypo	0	0	0	0	contamination_indels	chr8:133527910:T>TAAAATCAA
chr8	133527910	133527911	Hyper	0	0	0	0	contamination_indels	chr8:133527910:T>TAAAATCAA
chr5	123194339	123194349	Hypo	0	0	0	0	contamination_indels	chr5:123194339:TCCATCTATC>T
chr5	123194339	123194349	Hyper	0	0	0	0	contamination_indels	chr5:123194339:TCCATCTATC>T
chr14	45977353	45977362	Hypo	0	0	0	0	contamination_indels	chr14:45977353:TTATTTAAA>T
chr14	45977353	45977362	Hyper	0	0	0	0	contamination_indels	chr14:45977353:TTATTTAAA>T
chr6	158926015	158926016	Hypo	0	0	0	0	contamination_indels	chr6:158926015:T>TAGGACCCAC
chr6	158926015	158926016	Hyper	0	0	0	0	contamination_indels	chr6:158926015:T>TAGGACCCAC
chr3	165775014	165775015	Hypo	0	0	0	0	contamination_indels	chr3:165775014:T>TTGTGGAC
chr3	165775014	165775015	Hyper	0	0	0	0	contamination_indels	chr3:165775014:T>TTGTGGAC
chr11	83348626	83348636	Hypo	0	0	0	0	contamination_indels	chr11:83348626:GGATCGCCGT>G
chr11	83348626	83348636	Hyper	0	0	0	0	contamination_indels	chr11:83348626:GGATCGCCGT>G
chr11	57986665	57986674	Hypo	0	0	0	0	contamination_indels	chr11:57986665:CATATCAGT>C
chr11	57986665	57986674	Hyper	0	0	0	0	contamination_indels	chr11:57986665:CATATCAGT>C
chr3	5086079	5086090	Hypo	0	0	0	0	contamination_indels	chr3:5086079:AACCTTCAAGG>A
chr3	5086079	5086090	Hyper	0	0	0	0	contamination_indels	chr3:5086079:AACCTTCAAGG>A
chr11	33581536	33581547	Hypo	0	0	0	0	contamination_indels	chr11:33581536:GCCACATACTA>G
chr11	33581536	33581547	Hyper	0	0	0	0	contamination_indels	chr11:33581536:GCCACATACTA>G
chr15	26414486	26414495	Hypo	0	0	0	0	contamination_indels	chr15:26414486:TCATAGATA>T
chr15	26414486	26414495	Hyper	0	0	0	0	contamination_indels	chr15:26414486:TCATAGATA>T
chr6	49758372	49758380	Hypo	0	0	0	0	contamination_indels	chr6:49758372:GACTAAAT>G
chr6	49758372	49758380	Hyper	0	0	0	0	contamination_indels	chr6:49758372:GACTAAAT>G
chr7	22851560	22851561	Hypo	0	0	0	0	contamination_indels	chr7:22851560:A>ACTGTGCT
chr7	22851560	22851561	Hyper	0	0	0	0	contamination_indels	chr7:22851560:A>ACTGTGCT
chr11	82022125	82022126	Hypo	0	0	0	0	contamination_indels	chr11:82022125:A>AACTGTTC
chr11	82022125	82022126	Hyper	0	0	0	0	contamination_indels	chr11:82022125:A>AACTGTTC
chr2	163547239	163547240	Hypo	0	0	0	0	contamination_indels	chr2:163547239:A>ATATCTGTCCT
chr2	163547239	163547240	Hyper	0	0	0	0	contamination_indels	chr2:163547239:A>ATATCTGTCCT
chr1	101863416	101863417	Hypo	0	0	0	0	contamination_indels	chr1:101863416:T>TTGTATAGCC
chr1	101863416	101863417	Hyper	0	0	0	0	contamination_indels	chr1:101863416:T>TTGTATAGCC
chr18	70332732	70332741	Hypo	0	0	0	0	contamination_indels	chr18:70332732:ACTCCACAT>A
chr18	70332732	70332741	Hyper	0	0	0	0	contamination_indels	chr18:70332732:ACTCCACAT>A
chr9	78731914	78731922	Hypo	0	0	0	0	contamination_indels	chr9:78731914:TTAAACTC>T
chr9	78731914	78731922	Hyper	0	0	0	0	contamination_indels	chr9:78731914:TTAAACTC>T
chr22	37366986	37366987	Hypo	0	0	0	0	contamination_indels	chr22:37366986:C>CAGGGGCAA
chr22	37366986	37366987	Hyper	0	0	0	0	contamination_indels	chr22:37366986:C>CAGGGGCAA
chr15	40046147	40046158	Hypo	0	0	0	0	contamination_indels	chr15:40046147:CCTATGCATAG>C
chr15	40046147	40046158	Hyper	0	0	0	0	contamination_indels	chr15:40046147:CCTATGCATAG>C
chr1	184071687	184071696	Hypo	0	0	0	0	contamination_indels	chr1:184071687:GTGCTTGCT>G
chr1	184071687	184071696	Hyper	0	0	0	0	contamination_indels	chr1:184071687:GTGCTTGCT>G
chr1	169525556	169525557	Hypo	0	0	0	0	contamination_indels	chr1:169525556:T>TCTCTGGC
chr1	169525556	169525557	Hyper	0	0	0	0	contamination_indels	chr1:169525556:T>TCTCTGGC
chr2	208966825	208966826	Hypo	0	0	0	0	contamination_indels	chr2:208966825:G>GATTTTGGAAA
chr2	208966825	208966826	Hyper	0	0	0	0	contamination_indels	chr2:208966825:G>GATTTTGGAAA
chr14	86059820	86059821	Hypo	0	0	0	0	contamination_indels	chr14:86059820:T>TGATTCGATAA
chr14	86059820	86059821	Hyper	0	0	0	0	contamination_indels	chr14:86059820:T>TGATTCGATAA
chr1	2441834	2441835	Hypo	0	0	0	0	contamination_indels	chr1:2441834:T>TCCGATCGGC
chr1	2441834	2441835	Hyper	0	0	0	0	contamination_indels	chr1:2441834:T>TCCGATCGGC
chr10	77406832	77406840	Hypo	0	0	0	0	contamination_indels	chr10:77406832:TGCCCAAC>T
chr10	77406832	77406840	Hyper	0	0	0	0	contamination_indels	chr10:77406832:TGCCCAAC>T
chr10	35480865	35480866	Hypo	0	0	0	0	contamination_indels	chr10:35480865:C>CCCACCTGGTG
chr10	35480865	35480866	Hyper	0	0	0	0	contamination_indels	chr10:35480865:C>CCCACCTGGTG
chr5	36232680	36232688	Hypo	0	0	0	0	contamination_indels	chr5:36232680:CCTAAAGA>C

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chr5	36232680	36232688	Hyper	0	0	0	0	contamination_indels	chr5:36232680:CCTAAAGA>C
chr9	124618855	124618863	Hypo	0	0	0	0	contamination_indels	chr9:124618855:ACCTAATT>A
chr9	124618855	124618863	Hyper	0	0	0	0	contamination_indels	chr9:124618855:ACCTAATT>A
chr6	10950444	10950455	Hypo	0	0	0	0	contamination_indels	chr6:10950444:AACACAGTCTG>A
chr6	10950444	10950455	Hyper	0	0	0	0	contamination_indels	chr6:10950444:AACACAGTCTG>A
chr22	24808882	24808892	Hypo	0	0	0	0	contamination_indels	chr22:24808882:TCACGTGAAA>T
chr22	24808882	24808892	Hyper	0	0	0	0	contamination_indels	chr22:24808882:TCACGTGAAA>T
chr8	120921227	120921237	Hypo	0	0	0	0	contamination_indels	chr8:120921227:ACAGCCAGCC>A
chr8	120921227	120921237	Hyper	0	0	0	0	contamination_indels	chr8:120921227:ACAGCCAGCC>A
chr17	49825906	49825907	Hypo	0	0	0	0	contamination_indels	chr17:49825906:C>CCTCAGCACTT
chr17	49825906	49825907	Hyper	0	0	0	0	contamination_indels	chr17:49825906:C>CCTCAGCACTT
chr2	134236343	134236352	Hypo	0	0	0	0	contamination_indels	chr2:134236343:CAAATATGT>C
chr2	134236343	134236352	Hyper	0	0	0	0	contamination_indels	chr2:134236343:CAAATATGT>C
chr13	70549635	70549646	Hypo	0	0	0	0	contamination_indels	chr13:70549635:CTTAAAAAAAT>C
chr13	70549635	70549646	Hyper	0	0	0	0	contamination_indels	chr13:70549635:CTTAAAAAAAT>C
chr9	128649077	128649087	Hypo	0	0	0	0	contamination_indels	chr9:128649077:TACAACTTGA>T
chr9	128649077	128649087	Hyper	0	0	0	0	contamination_indels	chr9:128649077:TACAACTTGA>T
chr6	137175217	137175228	Hypo	0	0	0	0	contamination_indels	chr6:137175217:CTTTACGGTTA>C
chr6	137175217	137175228	Hyper	0	0	0	0	contamination_indels	chr6:137175217:CTTTACGGTTA>C
chr10	57830169	57830170	Hypo	0	0	0	0	contamination_indels	chr10:57830169:T>TCAGAGG
chr10	57830169	57830170	Hyper	0	0	0	0	contamination_indels	chr10:57830169:T>TCAGAGG
chr19	35132552	35132561	Hypo	0	0	0	0	contamination_indels	chr19:35132552:ATCACCTTT>A
chr19	35132552	35132561	Hyper	0	0	0	0	contamination_indels	chr19:35132552:ATCACCTTT>A
chr9	106848998	106849009	Hypo	0	0	0	0	contamination_indels	chr9:106848998:ATGGGGAAAAC>A
chr9	106848998	106849009	Hyper	0	0	0	0	contamination_indels	chr9:106848998:ATGGGGAAAAC>A
chr5	43292482	43292483	Hypo	0	0	0	0	contamination_indels	chr5:43292482:C>CTTACTATGAA
chr5	43292482	43292483	Hyper	0	0	0	0	contamination_indels	chr5:43292482:C>CTTACTATGAA
chr7	101190150	101190161	Hypo	0	0	0	0	contamination_indels	chr7:101190150:GAGAAGTGAGC>G
chr7	101190150	101190161	Hyper	0	0	0	0	contamination_indels	chr7:101190150:GAGAAGTGAGC>G
chr20	54176329	54176330	Hypo	0	0	0	0	contamination_indels	chr20:54176329:T>TATTGGTG
chr20	54176329	54176330	Hyper	0	0	0	0	contamination_indels	chr20:54176329:T>TATTGGTG
chr20	6285364	6285365	Hypo	0	0	0	0	contamination_indels	chr20:6285364:T>TTGCTACTA
chr20	6285364	6285365	Hyper	0	0	0	0	contamination_indels	chr20:6285364:T>TTGCTACTA
chr3	188869015	188869016	Hypo	0	0	0	0	contamination_indels	chr3:188869015:C>CTTGGGGT
chr3	188869015	188869016	Hyper	0	0	0	0	contamination_indels	chr3:188869015:C>CTTGGGGT
chr2	104610809	104610810	Hypo	0	0	0	0	contamination_indels	chr2:104610809:T>TTCGATCATTA
chr2	104610809	104610810	Hyper	0	0	0	0	contamination_indels	chr2:104610809:T>TTCGATCATTA
chr2	181824611	181824612	Hypo	0	0	0	0	contamination_indels	chr2:181824611:C>CAATTTGAT
chr2	181824611	181824612	Hyper	0	0	0	0	contamination_indels	chr2:181824611:C>CAATTTGAT
chr6	78355202	78355203	Hypo	0	0	0	0	contamination_indels	chr6:78355202:T>TAGATTAGG
chr6	78355202	78355203	Hyper	0	0	0	0	contamination_indels	chr6:78355202:T>TAGATTAGG
chr1	190448802	190448803	Hypo	0	0	0	0	contamination_indels	chr1:190448802:G>GGCTATTT
chr1	190448802	190448803	Hyper	0	0	0	0	contamination_indels	chr1:190448802:G>GGCTATTT
chr2	217556145	217556156	Hypo	0	0	0	0	contamination_indels	chr2:217556145:AAACCCAGTAC>A
chr2	217556145	217556156	Hyper	0	0	0	0	contamination_indels	chr2:217556145:AAACCCAGTAC>A
chr8	91192018	91192026	Hypo	0	0	0	0	contamination_indels	chr8:91192018:GCTTGATC>G
chr8	91192018	91192026	Hyper	0	0	0	0	contamination_indels	chr8:91192018:GCTTGATC>G
chr17	53461992	53462002	Hypo	0	0	0	0	contamination_indels	chr17:53461992:GACGCTGTGT>G
chr17	53461992	53462002	Hyper	0	0	0	0	contamination_indels	chr17:53461992:GACGCTGTGT>G
chr5	56615248	56615256	Hypo	0	0	0	0	contamination_indels	chr5:56615248:GTGTTTCA>G
chr5	56615248	56615256	Hyper	0	0	0	0	contamination_indels	chr5:56615248:GTGTTTCA>G
chr4	186562285	186562294	Hypo	0	0	0	0	contamination_indels	chr4:186562285:TATGATAGA>T
chr4	186562285	186562294	Hyper	0	0	0	0	contamination_indels	chr4:186562285:TATGATAGA>T
chr3	107706442	107706451	Hypo	0	0	0	0	contamination_indels	chr3:107706442:ATTTGGGAC>A
chr3	107706442	107706451	Hyper	0	0	0	0	contamination_indels	chr3:107706442:ATTTGGGAC>A
chr12	28764358	28764359	Hypo	0	0	0	0	contamination_indels	chr12:28764358:G>GAGTACTC
chr12	28764358	28764359	Hyper	0	0	0	0	contamination_indels	chr12:28764358:G>GAGTACTC
chr11	5532515	5532526	Hypo	0	0	0	0	contamination_indels	chr11:5532515:TGGTAGACACA>T
chr11	5532515	5532526	Hyper	0	0	0	0	contamination_indels	chr11:5532515:TGGTAGACACA>T
chrX	126759573	126759584	Hypo	0	0	0	0	contamination_indels	chrX:126759573:CAAGGTGTTAT>C
chrX	126759573	126759584	Hyper	0	0	0	0	contamination_indels	chrX:126759573:CAAGGTGTTAT>C
chr18	41317126	41317136	Hypo	0	0	0	0	contamination_indels	chr18:41317126:AAGCTTTGAC>A
chr18	41317126	41317136	Hyper	0	0	0	0	contamination_indels	chr18:41317126:AAGCTTTGAC>A
chr10	128357574	128357575	Hypo	0	0	0	0	contamination_indels	chr10:128357574:C>CACTTTTGTAA
chr10	128357574	128357575	Hyper	0	0	0	0	contamination_indels	chr10:128357574:C>CACTTTTGTAA
chr18	61654828	61654829	Hypo	0	0	0	0	contamination_indels	chr18:61654828:C>CCTCTATGTG
chr18	61654828	61654829	Hyper	0	0	0	0	contamination_indels	chr18:61654828:C>CCTCTATGTG
chr11	78796789	78796790	Hypo	0	0	0	0	contamination_indels	chr11:78796789:G>GTCACTCTT
chr11	78796789	78796790	Hyper	0	0	0	0	contamination_indels	chr11:78796789:G>GTCACTCTT
chr6	65088057	65088065	Hypo	0	0	0	0	contamination_indels	chr6:65088057:TAACAGAC>T
chr6	65088057	65088065	Hyper	0	0	0	0	contamination_indels	chr6:65088057:TAACAGAC>T
chr11	78645448	78645456	Hypo	0	0	0	0	contamination_indels	chr11:78645448:ACATGAAT>A
chr11	78645448	78645456	Hyper	0	0	0	0	contamination_indels	chr11:78645448:ACATGAAT>A
chr4	64845117	64845128	Hypo	0	0	0	0	contamination_indels	chr4:64845117:GGGCAATAATT>G
chr4	64845117	64845128	Hyper	0	0	0	0	contamination_indels	chr4:64845117:GGGCAATAATT>G

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chr13	61411016	61411027	Hypo	0	0	0	0	contamination_indels	chr13:61411016:CATATTATGGG>C
chr13	61411016	61411027	Hyper	0	0	0	0	contamination_indels	chr13:61411016:CATATTATGGG>C
chr7	78257604	78257605	Hypo	0	0	0	0	contamination_indels	chr7:78257604:A>AAGAAGTATGC
chr7	78257604	78257605	Hyper	0	0	0	0	contamination_indels	chr7:78257604:A>AAGAAGTATGC
chr4	27476462	27476463	Hypo	0	0	0	0	contamination_indels	chr4:27476462:A>ACTACTCAGG
chr4	27476462	27476463	Hyper	0	0	0	0	contamination_indels	chr4:27476462:A>ACTACTCAGG
chr12	129979768	129979769	Hypo	0	0	0	0	contamination_indels	chr12:129979768:T>TTAAGCCTTAC
chr12	129979768	129979769	Hyper	0	0	0	0	contamination_indels	chr12:129979768:T>TTAAGCCTTAC
chr7	105588429	105588438	Hypo	0	0	0	0	contamination_indels	chr7:105588429:CAGTTTGGA>C
chr7	105588429	105588438	Hyper	0	0	0	0	contamination_indels	chr7:105588429:CAGTTTGGA>C
chr6	161693535	161693536	Hypo	0	0	0	0	contamination_indels	chr6:161693535:G>GCCCACTAGGA
chr6	161693535	161693536	Hyper	0	0	0	0	contamination_indels	chr6:161693535:G>GCCCACTAGGA
chr6	98821609	98821617	Hypo	0	0	0	0	contamination_indels	chr6:98821609:GCAGCTTT>G
chr6	98821609	98821617	Hyper	0	0	0	0	contamination_indels	chr6:98821609:GCAGCTTT>G
chr6	15866079	15866080	Hypo	0	0	0	0	contamination_indels	chr6:15866079:T>TGGCAAAA
chr6	15866079	15866080	Hyper	0	0	0	0	contamination_indels	chr6:15866079:T>TGGCAAAA
chr4	62591482	62591483	Hypo	0	0	0	0	contamination_indels	chr4:62591482:A>ACAGGGAGG
chr4	62591482	62591483	Hyper	0	0	0	0	contamination_indels	chr4:62591482:A>ACAGGGAGG
chr17	63785813	63785814	Hypo	0	0	0	0	contamination_indels	chr17:63785813:T>TCATCTCCTC
chr17	63785813	63785814	Hyper	0	0	0	0	contamination_indels	chr17:63785813:T>TCATCTCCTC
chr17	12504059	12504069	Hypo	0	0	0	0	contamination_indels	chr17:12504059:GCTTCTAGTC>G
chr17	12504059	12504069	Hyper	0	0	0	0	contamination_indels	chr17:12504059:GCTTCTAGTC>G
chr15	50427139	50427148	Hypo	0	0	0	0	contamination_indels	chr15:50427139:CACTCTGTG>C
chr15	50427139	50427148	Hyper	0	0	0	0	contamination_indels	chr15:50427139:CACTCTGTG>C
chr13	109726396	109726406	Hypo	0	0	0	0	contamination_indels	chr13:109726396:ATTTTTTAAG>A
chr13	109726396	109726406	Hyper	0	0	0	0	contamination_indels	chr13:109726396:ATTTTTTAAG>A
chr20	40943569	40943577	Hypo	0	0	0	0	contamination_indels	chr20:40943569:ATGCCAGT>A
chr20	40943569	40943577	Hyper	0	0	0	0	contamination_indels	chr20:40943569:ATGCCAGT>A
chr2	58659484	58659485	Hypo	0	0	0	0	contamination_indels	chr2:58659484:C>CACCTGACT
chr2	58659484	58659485	Hyper	0	0	0	0	contamination_indels	chr2:58659484:C>CACCTGACT
chr2	52926126	52926127	Hypo	0	0	0	0	contamination_indels	chr2:52926126:T>TTCTACAATA
chr2	52926126	52926127	Hyper	0	0	0	0	contamination_indels	chr2:52926126:T>TTCTACAATA
chr17	37440172	37440173	Hypo	0	0	0	0	contamination_indels	chr17:37440172:A>ATCCCGGT
chr17	37440172	37440173	Hyper	0	0	0	0	contamination_indels	chr17:37440172:A>ATCCCGGT
chr8	96802311	96802312	Hypo	0	0	0	0	contamination_indels	chr8:96802311:C>CATCAAGG
chr8	96802311	96802312	Hyper	0	0	0	0	contamination_indels	chr8:96802311:C>CATCAAGG
chr10	134975803	134975804	Hypo	0	0	0	0	contamination_indels	chr10:134975803:G>GGCAAGTGGCT
chr10	134975803	134975804	Hyper	0	0	0	0	contamination_indels	chr10:134975803:G>GGCAAGTGGCT
chr6	146145887	146145888	Hypo	0	0	0	0	contamination_indels	chr6:146145887:A>AAAATGATTTC
chr6	146145887	146145888	Hyper	0	0	0	0	contamination_indels	chr6:146145887:A>AAAATGATTTC
chr11	33855300	33855311	Hypo	0	0	0	0	contamination_indels	chr11:33855300:AGCAAATGAAT>A
chr11	33855300	33855311	Hyper	0	0	0	0	contamination_indels	chr11:33855300:AGCAAATGAAT>A
chr19	2101453	2101454	Hypo	0	0	0	0	contamination_indels	chr19:2101453:A>ACCACACACGC
chr19	2101453	2101454	Hyper	0	0	0	0	contamination_indels	chr19:2101453:A>ACCACACACGC
chr5	163202701	163202702	Hypo	0	0	0	0	contamination_indels	chr5:163202701:A>ATTTTCCCC
chr5	163202701	163202702	Hyper	0	0	0	0	contamination_indels	chr5:163202701:A>ATTTTCCCC
chr17	10021508	10021519	Hypo	0	0	0	0	contamination_indels	chr17:10021508:TGGAGTAAACA>T
chr17	10021508	10021519	Hyper	0	0	0	0	contamination_indels	chr17:10021508:TGGAGTAAACA>T
chr22	21093910	21093921	Hypo	0	0	0	0	contamination_indels	chr22:21093910:CTGACCCAAGA>C
chr22	21093910	21093921	Hyper	0	0	0	0	contamination_indels	chr22:21093910:CTGACCCAAGA>C
chr12	41472970	41472971	Hypo	0	0	0	0	contamination_indels	chr12:41472970:G>GTCATACCAA
chr12	41472970	41472971	Hyper	0	0	0	0	contamination_indels	chr12:41472970:G>GTCATACCAA
chr18	60742938	60742939	Hypo	0	0	0	0	contamination_indels	chr18:60742938:C>CTAGTTATAGT
chr18	60742938	60742939	Hyper	0	0	0	0	contamination_indels	chr18:60742938:C>CTAGTTATAGT
chr1	197327929	197327937	Hypo	0	0	0	0	contamination_indels	chr1:197327929:GGTCAAAT>G
chr1	197327929	197327937	Hyper	0	0	0	0	contamination_indels	chr1:197327929:GGTCAAAT>G
chr10	117722160	117722161	Hypo	0	0	0	0	contamination_indels	chr10:117722160:G>GGAGCTGATCT
chr10	117722160	117722161	Hyper	0	0	0	0	contamination_indels	chr10:117722160:G>GGAGCTGATCT
chr2	110886685	110886686	Hypo	0	0	0	0	contamination_indels	chr2:110886685:A>AGACCAGAT
chr2	110886685	110886686	Hyper	0	0	0	0	contamination_indels	chr2:110886685:A>AGACCAGAT
chr10	114777137	114777146	Hypo	0	0	0	0	contamination_indels	chr10:114777137:CAGTGGTGG>C
chr10	114777137	114777146	Hyper	0	0	0	0	contamination_indels	chr10:114777137:CAGTGGTGG>C
chr22	23961741	23961742	Hypo	0	0	0	0	contamination_indels	chr22:23961741:G>GGCACCCATAA
chr22	23961741	23961742	Hyper	0	0	0	0	contamination_indels	chr22:23961741:G>GGCACCCATAA
chr3	32976094	32976102	Hypo	0	0	0	0	contamination_indels	chr3:32976094:TCCCAGAA>T
chr3	32976094	32976102	Hyper	0	0	0	0	contamination_indels	chr3:32976094:TCCCAGAA>T
chr3	177802299	177802308	Hypo	0	0	0	0	contamination_indels	chr3:177802299:GATACTAAA>G
chr3	177802299	177802308	Hyper	0	0	0	0	contamination_indels	chr3:177802299:GATACTAAA>G
chr12	119510428	119510429	Hypo	0	0	0	0	contamination_indels	chr12:119510428:G>GATGGAGGTA
chr12	119510428	119510429	Hyper	0	0	0	0	contamination_indels	chr12:119510428:G>GATGGAGGTA
chr8	37242198	37242208	Hypo	0	0	0	0	contamination_indels	chr8:37242198:ATCTTGGAAT>A
chr8	37242198	37242208	Hyper	0	0	0	0	contamination_indels	chr8:37242198:ATCTTGGAAT>A
chr5	171606624	171606625	Hypo	0	0	0	0	contamination_indels	chr5:171606624:C>CGGGCCCCCTT
chr5	171606624	171606625	Hyper	0	0	0	0	contamination_indels	chr5:171606624:C>CGGGCCCCCTT
chr10	118873077	118873086	Hypo	0	0	0	0	contamination_indels	chr10:118873077:TACTAGGTA>T

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chr10	118873077	118873086	Hyper	0	0	0	0	contamination_indels	chr10:118873077:TACTAGGTA>T
chr10	124673112	124673113	Hypo	0	0	0	0	contamination_indels	chr10:124673112:G>GCCATCAGCAT
chr10	124673112	124673113	Hyper	0	0	0	0	contamination_indels	chr10:124673112:G>GCCATCAGCAT
chr2	102292015	102292022	Hypo	0	0	0	0	contamination_indels	chr2:102292015:CCTGTGG>C
chr2	102292015	102292022	Hyper	0	0	0	0	contamination_indels	chr2:102292015:CCTGTGG>C
chr2	55764753	55764764	Hypo	0	0	0	0	contamination_indels	chr2:55764753:AATATGAATAC>A
chr2	55764753	55764764	Hyper	0	0	0	0	contamination_indels	chr2:55764753:AATATGAATAC>A
chr10	98952620	98952621	Hypo	0	0	0	0	contamination_indels	chr10:98952620:C>CATCATA
chr10	98952620	98952621	Hyper	0	0	0	0	contamination_indels	chr10:98952620:C>CATCATA
chr7	90117634	90117635	Hypo	0	0	0	0	contamination_indels	chr7:90117634:A>ACAGAAACT
chr7	90117634	90117635	Hyper	0	0	0	0	contamination_indels	chr7:90117634:A>ACAGAAACT
chr19	30208563	30208564	Hypo	0	0	0	0	contamination_indels	chr19:30208563:G>GGGCCCCTGA
chr19	30208563	30208564	Hyper	0	0	0	0	contamination_indels	chr19:30208563:G>GGGCCCCTGA
chr4	90056586	90056587	Hypo	0	0	0	0	contamination_indels	chr4:90056586:T>TCTATTAGAA
chr4	90056586	90056587	Hyper	0	0	0	0	contamination_indels	chr4:90056586:T>TCTATTAGAA
chr11	98395125	98395126	Hypo	0	0	0	0	contamination_indels	chr11:98395125:C>CTAAGAAAGAT
chr11	98395125	98395126	Hyper	0	0	0	0	contamination_indels	chr11:98395125:C>CTAAGAAAGAT
chr12	47497391	47497401	Hypo	0	0	0	0	contamination_indels	chr12:47497391:ATGAACCGGT>A
chr12	47497391	47497401	Hyper	0	0	0	0	contamination_indels	chr12:47497391:ATGAACCGGT>A
chr7	104919744	104919745	Hypo	0	0	0	0	contamination_indels	chr7:104919744:A>AACTTCCAAGG
chr7	104919744	104919745	Hyper	0	0	0	0	contamination_indels	chr7:104919744:A>AACTTCCAAGG
chr5	23731192	23731201	Hypo	0	0	0	0	contamination_indels	chr5:23731192:TCCAAGATG>T
chr5	23731192	23731201	Hyper	0	0	0	0	contamination_indels	chr5:23731192:TCCAAGATG>T
chr20	22260140	22260141	Hypo	0	0	0	0	contamination_indels	chr20:22260140:A>AAAACCCT
chr20	22260140	22260141	Hyper	0	0	0	0	contamination_indels	chr20:22260140:A>AAAACCCT
chr4	87082142	87082150	Hypo	0	0	0	0	contamination_indels	chr4:87082142:AATGGAGC>A
chr4	87082142	87082150	Hyper	0	0	0	0	contamination_indels	chr4:87082142:AATGGAGC>A
chr20	61640933	61640934	Hypo	0	0	0	0	contamination_indels	chr20:61640933:A>AGCGGCTCCGC
chr20	61640933	61640934	Hyper	0	0	0	0	contamination_indels	chr20:61640933:A>AGCGGCTCCGC
chr15	90568245	90568254	Hypo	0	0	0	0	contamination_indels	chr15:90568245:ATGTGTTGC>A
chr15	90568245	90568254	Hyper	0	0	0	0	contamination_indels	chr15:90568245:ATGTGTTGC>A
chr2	3300808	3300809	Hypo	0	0	0	0	contamination_indels	chr2:3300808:T>TTAACATGC
chr2	3300808	3300809	Hyper	0	0	0	0	contamination_indels	chr2:3300808:T>TTAACATGC
chr13	81061363	81061364	Hypo	0	0	0	0	contamination_indels	chr13:81061363:G>GATGGAGTA
chr13	81061363	81061364	Hyper	0	0	0	0	contamination_indels	chr13:81061363:G>GATGGAGTA
chr13	24386325	24386333	Hypo	0	0	0	0	contamination_indels	chr13:24386325:TGTAACGC>T
chr13	24386325	24386333	Hyper	0	0	0	0	contamination_indels	chr13:24386325:TGTAACGC>T
chr12	8934730	8934740	Hypo	0	0	0	0	contamination_indels	chr12:8934730:ATGATAAACT>A
chr12	8934730	8934740	Hyper	0	0	0	0	contamination_indels	chr12:8934730:ATGATAAACT>A
chr14	60720993	60720994	Hypo	0	0	0	0	contamination_indels	chr14:60720993:T>TAAGACGTA
chr14	60720993	60720994	Hyper	0	0	0	0	contamination_indels	chr14:60720993:T>TAAGACGTA
chrX	95097994	95097995	Hypo	0	0	0	0	contamination_indels	chrX:95097994:G>GGCATAGCCA
chrX	95097994	95097995	Hyper	0	0	0	0	contamination_indels	chrX:95097994:G>GGCATAGCCA
chr5	59451634	59451642	Hypo	0	0	0	0	contamination_indels	chr5:59451634:CAAGAATT>C
chr5	59451634	59451642	Hyper	0	0	0	0	contamination_indels	chr5:59451634:CAAGAATT>C
chr17	59786722	59786733	Hypo	0	0	0	0	contamination_indels	chr17:59786722:GGGTGAAGAGT>G
chr17	59786722	59786733	Hyper	0	0	0	0	contamination_indels	chr17:59786722:GGGTGAAGAGT>G
chr15	70489343	70489344	Hypo	0	0	0	0	contamination_indels	chr15:70489343:A>AGGAAGCAG
chr15	70489343	70489344	Hyper	0	0	0	0	contamination_indels	chr15:70489343:A>AGGAAGCAG
chr6	55442032	55442042	Hypo	0	0	0	0	contamination_indels	chr6:55442032:GATAGAAAAA>G
chr6	55442032	55442042	Hyper	0	0	0	0	contamination_indels	chr6:55442032:GATAGAAAAA>G
chr11	115279747	115279757	Hypo	0	0	0	0	contamination_indels	chr11:115279747:AAGGGAGCCC>A
chr11	115279747	115279757	Hyper	0	0	0	0	contamination_indels	chr11:115279747:AAGGGAGCCC>A
chr2	74375265	74375276	Hypo	0	0	0	0	contamination_indels	chr2:74375265:CAGTCTCCCCA>C
chr2	74375265	74375276	Hyper	0	0	0	0	contamination_indels	chr2:74375265:CAGTCTCCCCA>C
chr8	27981344	27981345	Hypo	0	0	0	0	contamination_indels	chr8:27981344:G>GTCACAGCC
chr8	27981344	27981345	Hyper	0	0	0	0	contamination_indels	chr8:27981344:G>GTCACAGCC
chr20	31107275	31107276	Hypo	0	0	0	0	contamination_indels	chr20:31107275:C>CAAAACACCCA
chr20	31107275	31107276	Hyper	0	0	0	0	contamination_indels	chr20:31107275:C>CAAAACACCCA
chr2	144412979	144412990	Hypo	0	0	0	0	contamination_indels	chr2:144412979:TACTGCCAGAC>T
chr2	144412979	144412990	Hyper	0	0	0	0	contamination_indels	chr2:144412979:TACTGCCAGAC>T
chr10	116666058	116666059	Hypo	0	0	0	0	contamination_indels	chr10:116666058:G>GTTGCAAATAA
chr10	116666058	116666059	Hyper	0	0	0	0	contamination_indels	chr10:116666058:G>GTTGCAAATAA
chr15	64279053	64279054	Hypo	0	0	0	0	contamination_indels	chr15:64279053:G>GCTGAGAACCA
chr15	64279053	64279054	Hyper	0	0	0	0	contamination_indels	chr15:64279053:G>GCTGAGAACCA
chr18	58815242	58815243	Hypo	0	0	0	0	contamination_indels	chr18:58815242:A>AACAGGTC
chr18	58815242	58815243	Hyper	0	0	0	0	contamination_indels	chr18:58815242:A>AACAGGTC
chr7	108252123	108252124	Hypo	0	0	0	0	contamination_indels	chr7:108252123:A>ACAGATAAACT
chr7	108252123	108252124	Hyper	0	0	0	0	contamination_indels	chr7:108252123:A>ACAGATAAACT
chr11	92717632	92717633	Hypo	0	0	0	0	contamination_indels	chr11:92717632:C>CTCTTTGAGCT
chr11	92717632	92717633	Hyper	0	0	0	0	contamination_indels	chr11:92717632:C>CTCTTTGAGCT
chr10	98885039	98885040	Hypo	0	0	0	0	contamination_indels	chr10:98885039:T>TAAGAGCAAA
chr10	98885039	98885040	Hyper	0	0	0	0	contamination_indels	chr10:98885039:T>TAAGAGCAAA
chr5	60138730	60138731	Hypo	0	0	0	0	contamination_indels	chr5:60138730:C>CGTAGGGCA
chr5	60138730	60138731	Hyper	0	0	0	0	contamination_indels	chr5:60138730:C>CGTAGGGCA

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chr17	67389728	67389737	Hypo	0	0	0	0	contamination_indels	chr17:67389728:ATACATGCC>A
chr17	67389728	67389737	Hyper	0	0	0	0	contamination_indels	chr17:67389728:ATACATGCC>A
chr13	79398549	79398556	Hypo	0	0	0	0	contamination_indels	chr13:79398549:TATCTCC>T
chr13	79398549	79398556	Hyper	0	0	0	0	contamination_indels	chr13:79398549:TATCTCC>T
chr3	73107251	73107261	Hypo	0	0	0	0	contamination_indels	chr3:73107251:CTTAAAAATA>C
chr3	73107251	73107261	Hyper	0	0	0	0	contamination_indels	chr3:73107251:CTTAAAAATA>C
chr15	60104699	60104700	Hypo	0	0	0	0	contamination_indels	chr15:60104699:G>GAGCACC
chr15	60104699	60104700	Hyper	0	0	0	0	contamination_indels	chr15:60104699:G>GAGCACC
chr8	82414801	82414802	Hypo	0	0	0	0	contamination_indels	chr8:82414801:C>CATGACTGAT
chr8	82414801	82414802	Hyper	0	0	0	0	contamination_indels	chr8:82414801:C>CATGACTGAT
chr20	37306244	37306255	Hypo	0	0	0	0	contamination_indels	chr20:37306244:GTGGACTGATT>G
chr20	37306244	37306255	Hyper	0	0	0	0	contamination_indels	chr20:37306244:GTGGACTGATT>G
chr3	6802090	6802099	Hypo	0	0	0	0	contamination_indels	chr3:6802090:GTACCTATT>G
chr3	6802090	6802099	Hyper	0	0	0	0	contamination_indels	chr3:6802090:GTACCTATT>G
chr1	54150303	54150304	Hypo	0	0	0	0	contamination_indels	chr1:54150303:A>ACTTTCAGTGG
chr1	54150303	54150304	Hyper	0	0	0	0	contamination_indels	chr1:54150303:A>ACTTTCAGTGG
chr3	192103441	192103449	Hypo	0	0	0	0	contamination_indels	chr3:192103441:CATAGTTT>C
chr3	192103441	192103449	Hyper	0	0	0	0	contamination_indels	chr3:192103441:CATAGTTT>C
chr12	32695088	32695089	Hypo	0	0	0	0	contamination_indels	chr12:32695088:G>GGTTTGAAAA
chr12	32695088	32695089	Hyper	0	0	0	0	contamination_indels	chr12:32695088:G>GGTTTGAAAA
chr10	82217993	82218004	Hypo	0	0	0	0	contamination_indels	chr10:82217993:GAGGTGACTGA>G
chr10	82217993	82218004	Hyper	0	0	0	0	contamination_indels	chr10:82217993:GAGGTGACTGA>G
chr2	67481816	67481824	Hypo	0	0	0	0	contamination_indels	chr2:67481816:TAGAATAC>T
chr2	67481816	67481824	Hyper	0	0	0	0	contamination_indels	chr2:67481816:TAGAATAC>T
chr1	226041841	226041852	Hypo	0	0	0	0	contamination_indels	chr1:226041841:CGTGCAGAAAT>C
chr1	226041841	226041852	Hyper	0	0	0	0	contamination_indels	chr1:226041841:CGTGCAGAAAT>C
chr10	82031936	82031937	Hypo	0	0	0	0	contamination_indels	chr10:82031936:C>CCCAGCCTGAA
chr10	82031936	82031937	Hyper	0	0	0	0	contamination_indels	chr10:82031936:C>CCCAGCCTGAA
chr4	43382642	43382650	Hypo	0	0	0	0	contamination_indels	chr4:43382642:TACTTAGA>T
chr4	43382642	43382650	Hyper	0	0	0	0	contamination_indels	chr4:43382642:TACTTAGA>T
chr5	163072042	163072043	Hypo	0	0	0	0	contamination_indels	chr5:163072042:C>CAGTTTTCTA
chr5	163072042	163072043	Hyper	0	0	0	0	contamination_indels	chr5:163072042:C>CAGTTTTCTA
chr3	185842260	185842269	Hypo	0	0	0	0	contamination_indels	chr3:185842260:AGGTTCAGC>A
chr3	185842260	185842269	Hyper	0	0	0	0	contamination_indels	chr3:185842260:AGGTTCAGC>A
chr18	21592132	21592133	Hypo	0	0	0	0	contamination_indels	chr18:21592132:C>CCCATTTTGAA
chr18	21592132	21592133	Hyper	0	0	0	0	contamination_indels	chr18:21592132:C>CCCATTTTGAA
chr4	83379229	83379230	Hypo	0	0	0	0	contamination_indels	chr4:83379229:A>AGGCGGTGG
chr4	83379229	83379230	Hyper	0	0	0	0	contamination_indels	chr4:83379229:A>AGGCGGTGG
chr9	129696480	129696490	Hypo	0	0	0	0	contamination_indels	chr9:129696480:CAGACCTTGT>C
chr9	129696480	129696490	Hyper	0	0	0	0	contamination_indels	chr9:129696480:CAGACCTTGT>C
chr6	27437766	27437767	Hypo	0	0	0	0	contamination_indels	chr6:27437766:A>AAGTAATTTC
chr6	27437766	27437767	Hyper	0	0	0	0	contamination_indels	chr6:27437766:A>AAGTAATTTC
chr8	117389657	117389668	Hypo	0	0	0	0	contamination_indels	chr8:117389657:TTGAAGACAAA>T
chr8	117389657	117389668	Hyper	0	0	0	0	contamination_indels	chr8:117389657:TTGAAGACAAA>T
chr7	17452872	17452883	Hypo	0	0	0	0	contamination_indels	chr7:17452872:TCATAAGGAAA>T
chr7	17452872	17452883	Hyper	0	0	0	0	contamination_indels	chr7:17452872:TCATAAGGAAA>T
chr15	47165712	47165719	Hypo	0	0	0	0	contamination_indels	chr15:47165712:GTGTATT>G
chr15	47165712	47165719	Hyper	0	0	0	0	contamination_indels	chr15:47165712:GTGTATT>G
chr12	76674060	76674071	Hypo	0	0	0	0	contamination_indels	chr12:76674060:TTATAAAACTA>T
chr12	76674060	76674071	Hyper	0	0	0	0	contamination_indels	chr12:76674060:TTATAAAACTA>T
chr11	57803314	57803323	Hypo	0	0	0	0	contamination_indels	chr11:57803314:CTTTCCAGA>C
chr11	57803314	57803323	Hyper	0	0	0	0	contamination_indels	chr11:57803314:CTTTCCAGA>C
chr3	187630406	187630417	Hypo	0	0	0	0	contamination_indels	chr3:187630406:TGTTTTGTGAG>T
chr3	187630406	187630417	Hyper	0	0	0	0	contamination_indels	chr3:187630406:TGTTTTGTGAG>T
chr4	16676571	16676580	Hypo	0	0	0	0	contamination_indels	chr4:16676571:ATTCCCTGT>A
chr4	16676571	16676580	Hyper	0	0	0	0	contamination_indels	chr4:16676571:ATTCCCTGT>A
chr16	58002509	58002520	Hypo	0	0	0	0	contamination_indels	chr16:58002509:ACTAATTGTGT>A
chr16	58002509	58002520	Hyper	0	0	0	0	contamination_indels	chr16:58002509:ACTAATTGTGT>A
chr1	42751389	42751399	Hypo	0	0	0	0	contamination_indels	chr1:42751389:AGATTAAAAG>A
chr1	42751389	42751399	Hyper	0	0	0	0	contamination_indels	chr1:42751389:AGATTAAAAG>A
chr7	6522992	6523000	Hypo	0	0	0	0	contamination_indels	chr7:6522992:AGGGCTTG>A
chr7	6522992	6523000	Hyper	0	0	0	0	contamination_indels	chr7:6522992:AGGGCTTG>A
chr13	93034812	93034823	Hypo	0	0	0	0	contamination_indels	chr13:93034812:TTTGACTGAAG>T
chr13	93034812	93034823	Hyper	0	0	0	0	contamination_indels	chr13:93034812:TTTGACTGAAG>T
chrX	113671811	113671818	Hypo	0	0	0	0	contamination_indels	chrX:113671811:AACGTCT>A
chrX	113671811	113671818	Hyper	0	0	0	0	contamination_indels	chrX:113671811:AACGTCT>A
chr5	140075010	140075011	Hypo	0	0	0	0	contamination_indels	chr5:140075010:C>CAGTTGATAT
chr5	140075010	140075011	Hyper	0	0	0	0	contamination_indels	chr5:140075010:C>CAGTTGATAT
chr2	125404731	125404732	Hypo	0	0	0	0	contamination_indels	chr2:125404731:A>ATCTCTATGC
chr2	125404731	125404732	Hyper	0	0	0	0	contamination_indels	chr2:125404731:A>ATCTCTATGC
chr7	27878262	27878272	Hypo	0	0	0	0	contamination_indels	chr7:27878262:GTGAATAAGA>G
chr7	27878262	27878272	Hyper	0	0	0	0	contamination_indels	chr7:27878262:GTGAATAAGA>G
chr4	118355813	118355821	Hypo	0	0	0	0	contamination_indels	chr4:118355813:CTTTGACT>C
chr4	118355813	118355821	Hyper	0	0	0	0	contamination_indels	chr4:118355813:CTTTGACT>C
chr20	57654069	57654077	Hypo	0	0	0	0	contamination_indels	chr20:57654069:GTGACACA>G

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chr20	57654069	57654077	Hyper	0	0	0	0	contamination_indels	chr20:57654069:GTGACACA>G
chr9	21434410	21434411	Hypo	0	0	0	0	contamination_indels	chr9:21434410:T>TGTAGACCCC
chr9	21434410	21434411	Hyper	0	0	0	0	contamination_indels	chr9:21434410:T>TGTAGACCCC
chr6	142237688	142237689	Hypo	0	0	0	0	contamination_indels	chr6:142237688:A>AGCGCAAAGG
chr6	142237688	142237689	Hyper	0	0	0	0	contamination_indels	chr6:142237688:A>AGCGCAAAGG
chr13	94340043	94340044	Hypo	0	0	0	0	contamination_indels	chr13:94340043:T>TGATTACACA
chr13	94340043	94340044	Hyper	0	0	0	0	contamination_indels	chr13:94340043:T>TGATTACACA
chr5	122905494	122905495	Hypo	0	0	0	0	contamination_indels	chr5:122905494:G>GTGGATGTTC
chr5	122905494	122905495	Hyper	0	0	0	0	contamination_indels	chr5:122905494:G>GTGGATGTTC
chr12	116376917	116376918	Hypo	0	0	0	0	contamination_indels	chr12:116376917:G>GATTTTTTCAA
chr12	116376917	116376918	Hyper	0	0	0	0	contamination_indels	chr12:116376917:G>GATTTTTTCAA
chr11	113238572	113238573	Hypo	0	0	0	0	contamination_indels	chr11:113238572:T>TGTAGAGA
chr11	113238572	113238573	Hyper	0	0	0	0	contamination_indels	chr11:113238572:T>TGTAGAGA
chr2	34663027	34663037	Hypo	0	0	0	0	contamination_indels	chr2:34663027:AATCATAAAG>A
chr2	34663027	34663037	Hyper	0	0	0	0	contamination_indels	chr2:34663027:AATCATAAAG>A
chr2	45511171	45511172	Hypo	0	0	0	0	contamination_indels	chr2:45511171:G>GATCTTAC
chr2	45511171	45511172	Hyper	0	0	0	0	contamination_indels	chr2:45511171:G>GATCTTAC
chrX	3880180	3880181	Hypo	0	0	0	0	contamination_indels	chrX:3880180:A>AATAAACTT
chrX	3880180	3880181	Hyper	0	0	0	0	contamination_indels	chrX:3880180:A>AATAAACTT
chr1	44733940	44733941	Hypo	0	0	0	0	contamination_indels	chr1:44733940:A>AGGACTTCACG
chr1	44733940	44733941	Hyper	0	0	0	0	contamination_indels	chr1:44733940:A>AGGACTTCACG
chr14	60137363	60137372	Hypo	0	0	0	0	contamination_indels	chr14:60137363:TCAACTATA>T
chr14	60137363	60137372	Hyper	0	0	0	0	contamination_indels	chr14:60137363:TCAACTATA>T
chr6	89685583	89685594	Hypo	0	0	0	0	contamination_indels	chr6:89685583:AACAAATCCTG>A
chr6	89685583	89685594	Hyper	0	0	0	0	contamination_indels	chr6:89685583:AACAAATCCTG>A
chr5	96829265	96829276	Hypo	0	0	0	0	contamination_indels	chr5:96829265:AATATTCCTAG>A
chr5	96829265	96829276	Hyper	0	0	0	0	contamination_indels	chr5:96829265:AATATTCCTAG>A
chr17	5411824	5411825	Hypo	0	0	0	0	contamination_indels	chr17:5411824:A>ACAATCATC
chr17	5411824	5411825	Hyper	0	0	0	0	contamination_indels	chr17:5411824:A>ACAATCATC
chr21	44255255	44255265	Hypo	0	0	0	0	contamination_indels	chr21:44255255:CAGCCATCGT>C
chr21	44255255	44255265	Hyper	0	0	0	0	contamination_indels	chr21:44255255:CAGCCATCGT>C
chr11	33953115	33953116	Hypo	0	0	0	0	contamination_indels	chr11:33953115:A>ATGCTAGCAT
chr11	33953115	33953116	Hyper	0	0	0	0	contamination_indels	chr11:33953115:A>ATGCTAGCAT
chr6	130661036	130661044	Hypo	0	0	0	0	contamination_indels	chr6:130661036:TATTCTCC>T
chr6	130661036	130661044	Hyper	0	0	0	0	contamination_indels	chr6:130661036:TATTCTCC>T
chr16	27094605	27094606	Hypo	0	0	0	0	contamination_indels	chr16:27094605:A>ATGGCACCG
chr16	27094605	27094606	Hyper	0	0	0	0	contamination_indels	chr16:27094605:A>ATGGCACCG
chr15	48563719	48563720	Hypo	0	0	0	0	contamination_indels	chr15:48563719:T>TATTGAGCAG
chr15	48563719	48563720	Hyper	0	0	0	0	contamination_indels	chr15:48563719:T>TATTGAGCAG
chr11	19406849	19406860	Hypo	0	0	0	0	contamination_indels	chr11:19406849:ATAAATATGTT>A
chr11	19406849	19406860	Hyper	0	0	0	0	contamination_indels	chr11:19406849:ATAAATATGTT>A
chr18	45518161	45518162	Hypo	0	0	0	0	contamination_indels	chr18:45518161:A>AGCTGGAG
chr18	45518161	45518162	Hyper	0	0	0	0	contamination_indels	chr18:45518161:A>AGCTGGAG
chr18	7384255	7384256	Hypo	0	0	0	0	contamination_indels	chr18:7384255:T>TGTGATAAG
chr18	7384255	7384256	Hyper	0	0	0	0	contamination_indels	chr18:7384255:T>TGTGATAAG
chr3	111999735	111999736	Hypo	0	0	0	0	contamination_indels	chr3:111999735:A>ACTTGTTTTCT
chr3	111999735	111999736	Hyper	0	0	0	0	contamination_indels	chr3:111999735:A>ACTTGTTTTCT
chr9	111673998	111674007	Hypo	0	0	0	0	contamination_indels	chr9:111673998:GACTACTTC>G
chr9	111673998	111674007	Hyper	0	0	0	0	contamination_indels	chr9:111673998:GACTACTTC>G
chr2	222446029	222446040	Hypo	0	0	0	0	contamination_indels	chr2:222446029:AGTGATCCGAT>A
chr2	222446029	222446040	Hyper	0	0	0	0	contamination_indels	chr2:222446029:AGTGATCCGAT>A
chr10	7859371	7859382	Hypo	0	0	0	0	contamination_indels	chr10:7859371:ATGTTCAAAGT>A
chr10	7859371	7859382	Hyper	0	0	0	0	contamination_indels	chr10:7859371:ATGTTCAAAGT>A
chrX	154848758	154848759	Hypo	0	0	0	0	contamination_indels	chrX:154848758:T>TCTTAGAGCC
chrX	154848758	154848759	Hyper	0	0	0	0	contamination_indels	chrX:154848758:T>TCTTAGAGCC
chr6	53373623	53373624	Hypo	0	0	0	0	contamination_indels	chr6:53373623:G>GCTCCAC
chr6	53373623	53373624	Hyper	0	0	0	0	contamination_indels	chr6:53373623:G>GCTCCAC
chr10	29916155	29916166	Hypo	0	0	0	0	contamination_indels	chr10:29916155:TACTACCTTCC>T
chr10	29916155	29916166	Hyper	0	0	0	0	contamination_indels	chr10:29916155:TACTACCTTCC>T
chr10	63320963	63320964	Hypo	0	0	0	0	contamination_indels	chr10:63320963:A>ATGTATTGT
chr10	63320963	63320964	Hyper	0	0	0	0	contamination_indels	chr10:63320963:A>ATGTATTGT
chr8	132232617	132232618	Hypo	0	0	0	0	contamination_indels	chr8:132232617:T>TTAGTGGG
chr8	132232617	132232618	Hyper	0	0	0	0	contamination_indels	chr8:132232617:T>TTAGTGGG
chr12	115290120	115290121	Hypo	0	0	0	0	contamination_indels	chr12:115290120:G>GGAGTCT
chr12	115290120	115290121	Hyper	0	0	0	0	contamination_indels	chr12:115290120:G>GGAGTCT
chr6	107102341	107102351	Hypo	0	0	0	0	contamination_indels	chr6:107102341:TATTTTCCCC>T
chr6	107102341	107102351	Hyper	0	0	0	0	contamination_indels	chr6:107102341:TATTTTCCCC>T
chr7	121527117	121527118	Hypo	0	0	0	0	contamination_indels	chr7:121527117:G>GAAACTTTCT
chr7	121527117	121527118	Hyper	0	0	0	0	contamination_indels	chr7:121527117:G>GAAACTTTCT
chr12	103526573	103526574	Hypo	0	0	0	0	contamination_indels	chr12:103526573:C>CACCATGG
chr12	103526573	103526574	Hyper	0	0	0	0	contamination_indels	chr12:103526573:C>CACCATGG
chr4	122907996	122908005	Hypo	0	0	0	0	contamination_indels	chr4:122907996:GTATGAAAT>G
chr4	122907996	122908005	Hyper	0	0	0	0	contamination_indels	chr4:122907996:GTATGAAAT>G
chr1	156916639	156916640	Hypo	0	0	0	0	contamination_indels	chr1:156916639:G>GCCTATCCCTT
chr1	156916639	156916640	Hyper	0	0	0	0	contamination_indels	chr1:156916639:G>GCCTATCCCTT

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chr12	115897393	115897394	Hypo	0	0	0	0	contamination_indels	chr12:115897393:A>AAGAATATGGC
chr12	115897393	115897394	Hyper	0	0	0	0	contamination_indels	chr12:115897393:A>AAGAATATGGC
chr2	27039643	27039653	Hypo	0	0	0	0	contamination_indels	chr2:27039643:CTAATGTACG>C
chr2	27039643	27039653	Hyper	0	0	0	0	contamination_indels	chr2:27039643:CTAATGTACG>C
chr13	42793765	42793774	Hypo	0	0	0	0	contamination_indels	chr13:42793765:AGGTTTTTC>A
chr13	42793765	42793774	Hyper	0	0	0	0	contamination_indels	chr13:42793765:AGGTTTTTC>A
chr8	90769795	90769796	Hypo	0	0	0	0	contamination_indels	chr8:90769795:A>AGCGCCTCTG
chr8	90769795	90769796	Hyper	0	0	0	0	contamination_indels	chr8:90769795:A>AGCGCCTCTG
chr2	87402922	87402932	Hypo	0	0	0	0	contamination_indels	chr2:87402922:ATCTTAATAT>A
chr2	87402922	87402932	Hyper	0	0	0	0	contamination_indels	chr2:87402922:ATCTTAATAT>A
chr10	84073411	84073412	Hypo	0	0	0	0	contamination_indels	chr10:84073411:C>CCCAGACCACA
chr10	84073411	84073412	Hyper	0	0	0	0	contamination_indels	chr10:84073411:C>CCCAGACCACA
chr3	142720220	142720221	Hypo	0	0	0	0	contamination_indels	chr3:142720220:T>TGGACAACGA
chr3	142720220	142720221	Hyper	0	0	0	0	contamination_indels	chr3:142720220:T>TGGACAACGA
chr5	172566958	172566959	Hypo	0	0	0	0	contamination_indels	chr5:172566958:A>ACACAGGTAC
chr5	172566958	172566959	Hyper	0	0	0	0	contamination_indels	chr5:172566958:A>ACACAGGTAC
chr13	101879004	101879005	Hypo	0	0	0	0	contamination_indels	chr13:101879004:T>TCCATTCAGAC
chr13	101879004	101879005	Hyper	0	0	0	0	contamination_indels	chr13:101879004:T>TCCATTCAGAC
chr8	39862206	39862207	Hypo	0	0	0	0	contamination_indels	chr8:39862206:C>CAAAAGTTGAT
chr8	39862206	39862207	Hyper	0	0	0	0	contamination_indels	chr8:39862206:C>CAAAAGTTGAT
chr5	106329580	106329581	Hypo	0	0	0	0	contamination_indels	chr5:106329580:A>ACATTTGAAT
chr5	106329580	106329581	Hyper	0	0	0	0	contamination_indels	chr5:106329580:A>ACATTTGAAT
chr14	61291707	61291717	Hypo	0	0	0	0	contamination_indels	chr14:61291707:TAAAACAATA>T
chr14	61291707	61291717	Hyper	0	0	0	0	contamination_indels	chr14:61291707:TAAAACAATA>T
chr17	69208374	69208384	Hypo	0	0	0	0	contamination_indels	chr17:69208374:ATCCAGCCTT>A
chr17	69208374	69208384	Hyper	0	0	0	0	contamination_indels	chr17:69208374:ATCCAGCCTT>A
chr18	46384244	46384245	Hypo	0	0	0	0	contamination_indels	chr18:46384244:C>CCTAGACAGAG
chr18	46384244	46384245	Hyper	0	0	0	0	contamination_indels	chr18:46384244:C>CCTAGACAGAG
chr8	119406260	119406271	Hypo	0	0	0	0	contamination_indels	chr8:119406260:TAAGTGACAAA>T
chr8	119406260	119406271	Hyper	0	0	0	0	contamination_indels	chr8:119406260:TAAGTGACAAA>T
chr22	50984415	50984425	Hypo	0	0	0	0	contamination_indels	chr22:50984415:CTGGTGGGGT>C
chr22	50984415	50984425	Hyper	0	0	0	0	contamination_indels	chr22:50984415:CTGGTGGGGT>C
chr16	69567097	69567105	Hypo	0	0	0	0	contamination_indels	chr16:69567097:TGCCCGAA>T
chr16	69567097	69567105	Hyper	0	0	0	0	contamination_indels	chr16:69567097:TGCCCGAA>T
chr2	212961016	212961027	Hypo	0	0	0	0	contamination_indels	chr2:212961016:ACAGCATAGCC>A
chr2	212961016	212961027	Hyper	0	0	0	0	contamination_indels	chr2:212961016:ACAGCATAGCC>A
chr22	48898222	48898223	Hypo	0	0	0	0	contamination_indels	chr22:48898222:T>TGAGCCTTCCC
chr22	48898222	48898223	Hyper	0	0	0	0	contamination_indels	chr22:48898222:T>TGAGCCTTCCC
chr16	433842	433850	Hypo	0	0	0	0	contamination_indels	chr16:433842:GGGTTTAC>G
chr16	433842	433850	Hyper	0	0	0	0	contamination_indels	chr16:433842:GGGTTTAC>G
chr16	57576557	57576565	Hypo	0	0	0	0	contamination_indels	chr16:57576557:GAAGCTAC>G
chr16	57576557	57576565	Hyper	0	0	0	0	contamination_indels	chr16:57576557:GAAGCTAC>G
chr2	14002826	14002827	Hypo	0	0	0	0	contamination_indels	chr2:14002826:T>TTTTAATTGAG
chr2	14002826	14002827	Hyper	0	0	0	0	contamination_indels	chr2:14002826:T>TTTTAATTGAG
chr5	82088357	82088367	Hypo	0	0	0	0	contamination_indels	chr5:82088357:AGACTATAAT>A
chr5	82088357	82088367	Hyper	0	0	0	0	contamination_indels	chr5:82088357:AGACTATAAT>A
chr11	47383456	47383463	Hypo	0	0	0	0	contamination_indels	chr11:47383456:CTTTTAG>C
chr11	47383456	47383463	Hyper	0	0	0	0	contamination_indels	chr11:47383456:CTTTTAG>C
chr6	147054240	147054241	Hypo	0	0	0	0	contamination_indels	chr6:147054240:A>ATTAATGTAC
chr6	147054240	147054241	Hyper	0	0	0	0	contamination_indels	chr6:147054240:A>ATTAATGTAC
chr4	114345620	114345621	Hypo	0	0	0	0	contamination_indels	chr4:114345620:C>CTACTAATTT
chr4	114345620	114345621	Hyper	0	0	0	0	contamination_indels	chr4:114345620:C>CTACTAATTT
chr7	147304014	147304024	Hypo	0	0	0	0	contamination_indels	chr7:147304014:CACAGAGAAT>C
chr7	147304014	147304024	Hyper	0	0	0	0	contamination_indels	chr7:147304014:CACAGAGAAT>C
chr11	3028963	3028974	Hypo	0	0	0	0	contamination_indels	chr11:3028963:TCTGTGGCTGA>T
chr11	3028963	3028974	Hyper	0	0	0	0	contamination_indels	chr11:3028963:TCTGTGGCTGA>T
chr7	38080501	38080502	Hypo	0	0	0	0	contamination_indels	chr7:38080501:T>TTCGTCCTGTG
chr7	38080501	38080502	Hyper	0	0	0	0	contamination_indels	chr7:38080501:T>TTCGTCCTGTG
chr3	80679345	80679356	Hypo	0	0	0	0	contamination_indels	chr3:80679345:TTACAACCCTG>T
chr3	80679345	80679356	Hyper	0	0	0	0	contamination_indels	chr3:80679345:TTACAACCCTG>T
chr1	154817142	154817150	Hypo	0	0	0	0	contamination_indels	chr1:154817142:CTATCGGG>C
chr1	154817142	154817150	Hyper	0	0	0	0	contamination_indels	chr1:154817142:CTATCGGG>C
chr2	20679575	20679576	Hypo	0	0	0	0	contamination_indels	chr2:20679575:C>CCCTGAGCAT
chr2	20679575	20679576	Hyper	0	0	0	0	contamination_indels	chr2:20679575:C>CCCTGAGCAT
chr12	76390725	76390736	Hypo	0	0	0	0	contamination_indels	chr12:76390725:CAAGGATGATG>C
chr12	76390725	76390736	Hyper	0	0	0	0	contamination_indels	chr12:76390725:CAAGGATGATG>C
chr8	119320043	119320044	Hypo	0	0	0	0	contamination_indels	chr8:119320043:A>AATGCCTCAC
chr8	119320043	119320044	Hyper	0	0	0	0	contamination_indels	chr8:119320043:A>AATGCCTCAC
chr22	44397886	44397896	Hypo	0	0	0	0	contamination_indels	chr22:44397886:GTTTCCCTCC>G
chr22	44397886	44397896	Hyper	0	0	0	0	contamination_indels	chr22:44397886:GTTTCCCTCC>G
chr1	195045021	195045032	Hypo	0	0	0	0	contamination_indels	chr1:195045021:CTGCATGATTT>C
chr1	195045021	195045032	Hyper	0	0	0	0	contamination_indels	chr1:195045021:CTGCATGATTT>C
chr13	30565570	30565580	Hypo	0	0	0	0	contamination_indels	chr13:30565570:CCACTGGGTT>C
chr13	30565570	30565580	Hyper	0	0	0	0	contamination_indels	chr13:30565570:CCACTGGGTT>C
chr5	314144	314145	Hypo	0	0	0	0	contamination_indels	chr5:314144:C>CTGTGTCCTGA

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chr5	314144	314145	Hyper	0	0	0	0	contamination_indels	chr5:314144:C>CTGTGTCCTGA
chr18	2580053	2580062	Hypo	0	0	0	0	contamination_indels	chr18:2580053:ATTTCACCT>A
chr18	2580053	2580062	Hyper	0	0	0	0	contamination_indels	chr18:2580053:ATTTCACCT>A
chr7	15214384	15214394	Hypo	0	0	0	0	contamination_indels	chr7:15214384:ACTAGCTAAT>A
chr7	15214384	15214394	Hyper	0	0	0	0	contamination_indels	chr7:15214384:ACTAGCTAAT>A
chr20	55552207	55552216	Hypo	0	0	0	0	contamination_indels	chr20:55552207:TCTCCTGAA>T
chr20	55552207	55552216	Hyper	0	0	0	0	contamination_indels	chr20:55552207:TCTCCTGAA>T
chr1	63108679	63108690	Hypo	0	0	0	0	contamination_indels	chr1:63108679:AAGGCCACAAG>A
chr1	63108679	63108690	Hyper	0	0	0	0	contamination_indels	chr1:63108679:AAGGCCACAAG>A
chr4	113733354	113733365	Hypo	0	0	0	0	contamination_indels	chr4:113733354:TCAATGAGGGG>T
chr4	113733354	113733365	Hyper	0	0	0	0	contamination_indels	chr4:113733354:TCAATGAGGGG>T
chr1	63070536	63070546	Hypo	0	0	0	0	contamination_indels	chr1:63070536:AGTTAATGTG>A
chr1	63070536	63070546	Hyper	0	0	0	0	contamination_indels	chr1:63070536:AGTTAATGTG>A
chr6	55922899	55922910	Hypo	0	0	0	0	contamination_indels	chr6:55922899:AACATTTAGCT>A
chr6	55922899	55922910	Hyper	0	0	0	0	contamination_indels	chr6:55922899:AACATTTAGCT>A
chr7	118148839	118148848	Hypo	0	0	0	0	contamination_indels	chr7:118148839:GAAACAGTT>G
chr7	118148839	118148848	Hyper	0	0	0	0	contamination_indels	chr7:118148839:GAAACAGTT>G
chr7	148863413	148863421	Hypo	0	0	0	0	contamination_indels	chr7:148863413:CAGCTCCA>C
chr7	148863413	148863421	Hyper	0	0	0	0	contamination_indels	chr7:148863413:CAGCTCCA>C
chr8	121551534	121551545	Hypo	0	0	0	0	contamination_indels	chr8:121551534:ACAGTATGAAG>A
chr8	121551534	121551545	Hyper	0	0	0	0	contamination_indels	chr8:121551534:ACAGTATGAAG>A
chr15	95462831	95462832	Hypo	0	0	0	0	contamination_indels	chr15:95462831:A>AATTCAGAT
chr15	95462831	95462832	Hyper	0	0	0	0	contamination_indels	chr15:95462831:A>AATTCAGAT
chr15	84547543	84547553	Hypo	0	0	0	0	contamination_indels	chr15:84547543:TTTTCAGGTC>T
chr15	84547543	84547553	Hyper	0	0	0	0	contamination_indels	chr15:84547543:TTTTCAGGTC>T
chr11	109959101	109959108	Hypo	0	0	0	0	contamination_indels	chr11:109959101:AGCAGGT>A
chr11	109959101	109959108	Hyper	0	0	0	0	contamination_indels	chr11:109959101:AGCAGGT>A
chr15	40749533	40749541	Hypo	0	0	0	0	contamination_indels	chr15:40749533:CCTGGGTA>C
chr15	40749533	40749541	Hyper	0	0	0	0	contamination_indels	chr15:40749533:CCTGGGTA>C
chr9	136508308	136508309	Hypo	0	0	0	0	contamination_indels	chr9:136508308:T>TTGGCAGGAAA
chr9	136508308	136508309	Hyper	0	0	0	0	contamination_indels	chr9:136508308:T>TTGGCAGGAAA
chr1	112641198	112641199	Hypo	0	0	0	0	contamination_indels	chr1:112641198:A>AATGCCATCGT
chr1	112641198	112641199	Hyper	0	0	0	0	contamination_indels	chr1:112641198:A>AATGCCATCGT
chr12	115779997	115779998	Hypo	0	0	0	0	contamination_indels	chr12:115779997:A>AAAAGGTTCC
chr12	115779997	115779998	Hyper	0	0	0	0	contamination_indels	chr12:115779997:A>AAAAGGTTCC
chr20	31478299	31478300	Hypo	0	0	0	0	contamination_indels	chr20:31478299:A>AACCTCCATG
chr20	31478299	31478300	Hyper	0	0	0	0	contamination_indels	chr20:31478299:A>AACCTCCATG
chr6	112814334	112814335	Hypo	0	0	0	0	contamination_indels	chr6:112814334:T>TTATACTAC
chr6	112814334	112814335	Hyper	0	0	0	0	contamination_indels	chr6:112814334:T>TTATACTAC
chr13	39019401	39019411	Hypo	0	0	0	0	contamination_indels	chr13:39019401:TCTTAGTTCA>T
chr13	39019401	39019411	Hyper	0	0	0	0	contamination_indels	chr13:39019401:TCTTAGTTCA>T
chr16	62361845	62361846	Hypo	0	0	0	0	contamination_indels	chr16:62361845:T>TACACTGA
chr16	62361845	62361846	Hyper	0	0	0	0	contamination_indels	chr16:62361845:T>TACACTGA
chr5	3381310	3381311	Hypo	0	0	0	0	contamination_indels	chr5:3381310:G>GGGGGCAT
chr5	3381310	3381311	Hyper	0	0	0	0	contamination_indels	chr5:3381310:G>GGGGGCAT
chr14	50775739	50775750	Hypo	0	0	0	0	contamination_indels	chr14:50775739:GTTTTGAGAGT>G
chr14	50775739	50775750	Hyper	0	0	0	0	contamination_indels	chr14:50775739:GTTTTGAGAGT>G
chr7	71959965	71959975	Hypo	0	0	0	0	contamination_indels	chr7:71959965:GCTGCAACGC>G
chr7	71959965	71959975	Hyper	0	0	0	0	contamination_indels	chr7:71959965:GCTGCAACGC>G
chr15	84689011	84689020	Hypo	0	0	0	0	contamination_indels	chr15:84689011:TGGGATCCA>T
chr15	84689011	84689020	Hyper	0	0	0	0	contamination_indels	chr15:84689011:TGGGATCCA>T
chr2	13963804	13963805	Hypo	0	0	0	0	contamination_indels	chr2:13963804:A>AATATTAGAAT
chr2	13963804	13963805	Hyper	0	0	0	0	contamination_indels	chr2:13963804:A>AATATTAGAAT
chr5	154004466	154004467	Hypo	0	0	0	0	contamination_indels	chr5:154004466:G>GAACAAGGTT
chr5	154004466	154004467	Hyper	0	0	0	0	contamination_indels	chr5:154004466:G>GAACAAGGTT
chr11	15390741	15390749	Hypo	0	0	0	0	contamination_indels	chr11:15390741:ACCTTGAT>A
chr11	15390741	15390749	Hyper	0	0	0	0	contamination_indels	chr11:15390741:ACCTTGAT>A
chr2	6042561	6042562	Hypo	0	0	0	0	contamination_indels	chr2:6042561:C>CAAAAACTTAA
chr2	6042561	6042562	Hyper	0	0	0	0	contamination_indels	chr2:6042561:C>CAAAAACTTAA
chr13	22394054	22394055	Hypo	0	0	0	0	contamination_indels	chr13:22394054:C>CTGATACT
chr13	22394054	22394055	Hyper	0	0	0	0	contamination_indels	chr13:22394054:C>CTGATACT
chr2	138093685	138093695	Hypo	0	0	0	0	contamination_indels	chr2:138093685:AGTACTAAAG>A
chr2	138093685	138093695	Hyper	0	0	0	0	contamination_indels	chr2:138093685:AGTACTAAAG>A
chr5	123139453	123139462	Hypo	0	0	0	0	contamination_indels	chr5:123139453:AGCAGTTTT>A
chr5	123139453	123139462	Hyper	0	0	0	0	contamination_indels	chr5:123139453:AGCAGTTTT>A
chr8	41429585	41429586	Hypo	0	0	0	0	contamination_indels	chr8:41429585:T>TCCCTAA
chr8	41429585	41429586	Hyper	0	0	0	0	contamination_indels	chr8:41429585:T>TCCCTAA
chr10	63333496	63333504	Hypo	0	0	0	0	contamination_indels	chr10:63333496:GTGGAGCA>G
chr10	63333496	63333504	Hyper	0	0	0	0	contamination_indels	chr10:63333496:GTGGAGCA>G
chr13	31361983	31361992	Hypo	0	0	0	0	contamination_indels	chr13:31361983:CAGGGAGTA>C
chr13	31361983	31361992	Hyper	0	0	0	0	contamination_indels	chr13:31361983:CAGGGAGTA>C
chr11	28145114	28145115	Hypo	0	0	0	0	contamination_indels	chr11:28145114:A>ATATCATT
chr11	28145114	28145115	Hyper	0	0	0	0	contamination_indels	chr11:28145114:A>ATATCATT
chr19	33940661	33940669	Hypo	0	0	0	0	contamination_indels	chr19:33940661:GCGGTGTC>G
chr19	33940661	33940669	Hyper	0	0	0	0	contamination_indels	chr19:33940661:GCGGTGTC>G

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chr2	1708888	1708899	Hypo	0	0	0	0	contamination_indels	chr2:1708888:GAGCAGAGGGC>G
chr2	1708888	1708899	Hyper	0	0	0	0	contamination_indels	chr2:1708888:GAGCAGAGGGC>G
chr10	2752289	2752290	Hypo	0	0	0	0	contamination_indels	chr10:2752289:G>GCTTTGAAAGT
chr10	2752289	2752290	Hyper	0	0	0	0	contamination_indels	chr10:2752289:G>GCTTTGAAAGT
chr2	35108014	35108025	Hypo	0	0	0	0	contamination_indels	chr2:35108014:GACATATTAAA>G
chr2	35108014	35108025	Hyper	0	0	0	0	contamination_indels	chr2:35108014:GACATATTAAA>G
chr7	132195790	132195800	Hypo	0	0	0	0	contamination_indels	chr7:132195790:AGGAGAGTTT>A
chr7	132195790	132195800	Hyper	0	0	0	0	contamination_indels	chr7:132195790:AGGAGAGTTT>A
chr15	28130906	28130907	Hypo	0	0	0	0	contamination_indels	chr15:28130906:T>TGAGTATTGA
chr15	28130906	28130907	Hyper	0	0	0	0	contamination_indels	chr15:28130906:T>TGAGTATTGA
chr2	43825636	43825637	Hypo	0	0	0	0	contamination_indels	chr2:43825636:A>ACTCTTAAG
chr2	43825636	43825637	Hyper	0	0	0	0	contamination_indels	chr2:43825636:A>ACTCTTAAG
chr13	96638389	96638400	Hypo	0	0	0	0	contamination_indels	chr13:96638389:ATACACACATG>A
chr13	96638389	96638400	Hyper	0	0	0	0	contamination_indels	chr13:96638389:ATACACACATG>A
chr2	88393620	88393621	Hypo	0	0	0	0	contamination_indels	chr2:88393620:T>TTTCCTC
chr2	88393620	88393621	Hyper	0	0	0	0	contamination_indels	chr2:88393620:T>TTTCCTC
chr22	46366310	46366321	Hypo	0	0	0	0	contamination_indels	chr22:46366310:GGCACCACCTT>G
chr22	46366310	46366321	Hyper	0	0	0	0	contamination_indels	chr22:46366310:GGCACCACCTT>G
chr5	116592756	116592757	Hypo	0	0	0	0	contamination_indels	chr5:116592756:A>AATGGTATTT
chr5	116592756	116592757	Hyper	0	0	0	0	contamination_indels	chr5:116592756:A>AATGGTATTT
chr20	17501698	17501709	Hypo	0	0	0	0	contamination_indels	chr20:17501698:TTTCCTCAAGA>T
chr20	17501698	17501709	Hyper	0	0	0	0	contamination_indels	chr20:17501698:TTTCCTCAAGA>T
chr7	20917819	20917820	Hypo	0	0	0	0	contamination_indels	chr7:20917819:A>ATTGTTGGG
chr7	20917819	20917820	Hyper	0	0	0	0	contamination_indels	chr7:20917819:A>ATTGTTGGG
chr17	9193632	9193633	Hypo	0	0	0	0	contamination_indels	chr17:9193632:T>TGTGCCTTA
chr17	9193632	9193633	Hyper	0	0	0	0	contamination_indels	chr17:9193632:T>TGTGCCTTA
chrX	122638096	122638105	Hypo	0	0	0	0	contamination_indels	chrX:122638096:CCAAAGCAT>C
chrX	122638096	122638105	Hyper	0	0	0	0	contamination_indels	chrX:122638096:CCAAAGCAT>C
chr5	152244911	152244922	Hypo	0	0	0	0	contamination_indels	chr5:152244911:ATCCTCTTAAG>A
chr5	152244911	152244922	Hyper	0	0	0	0	contamination_indels	chr5:152244911:ATCCTCTTAAG>A
chr20	19637028	19637029	Hypo	0	0	0	0	contamination_indels	chr20:19637028:T>TTCAGAATG
chr20	19637028	19637029	Hyper	0	0	0	0	contamination_indels	chr20:19637028:T>TTCAGAATG
chr11	69538749	69538759	Hypo	0	0	0	0	contamination_indels	chr11:69538749:AGATGTCCCT>A
chr11	69538749	69538759	Hyper	0	0	0	0	contamination_indels	chr11:69538749:AGATGTCCCT>A
chr6	147799720	147799730	Hypo	0	0	0	0	contamination_indels	chr6:147799720:AACAGTGTTT>A
chr6	147799720	147799730	Hyper	0	0	0	0	contamination_indels	chr6:147799720:AACAGTGTTT>A
chr1	72707048	72707049	Hypo	0	0	0	0	contamination_indels	chr1:72707048:T>TAGCTATAA
chr1	72707048	72707049	Hyper	0	0	0	0	contamination_indels	chr1:72707048:T>TAGCTATAA
chr9	139410299	139410308	Hypo	0	0	0	0	contamination_indels	chr9:139410299:TGGGGCTGA>T
chr9	139410299	139410308	Hyper	0	0	0	0	contamination_indels	chr9:139410299:TGGGGCTGA>T
chr2	142466254	142466255	Hypo	0	0	0	0	contamination_indels	chr2:142466254:G>GTCCTAGCA
chr2	142466254	142466255	Hyper	0	0	0	0	contamination_indels	chr2:142466254:G>GTCCTAGCA
chr3	53220762	53220771	Hypo	0	0	0	0	contamination_indels	chr3:53220762:GCTCAGAGC>G
chr3	53220762	53220771	Hyper	0	0	0	0	contamination_indels	chr3:53220762:GCTCAGAGC>G
chr5	155662254	155662255	Hypo	0	0	0	0	contamination_indels	chr5:155662254:G>GCCTACTGA
chr5	155662254	155662255	Hyper	0	0	0	0	contamination_indels	chr5:155662254:G>GCCTACTGA
chrX	109838683	109838684	Hypo	0	0	0	0	contamination_indels	chrX:109838683:G>GTCAGGGACA
chrX	109838683	109838684	Hyper	0	0	0	0	contamination_indels	chrX:109838683:G>GTCAGGGACA
chr3	73109743	73109751	Hypo	0	0	0	0	contamination_indels	chr3:73109743:TGAGTCTC>T
chr3	73109743	73109751	Hyper	0	0	0	0	contamination_indels	chr3:73109743:TGAGTCTC>T
chr7	14734360	14734371	Hypo	0	0	0	0	contamination_indels	chr7:14734360:GTTTGCAATAC>G
chr7	14734360	14734371	Hyper	0	0	0	0	contamination_indels	chr7:14734360:GTTTGCAATAC>G
chr15	83550996	83550997	Hypo	0	0	0	0	contamination_indels	chr15:83550996:C>CCCTGCCCCCTG
chr15	83550996	83550997	Hyper	0	0	0	0	contamination_indels	chr15:83550996:C>CCCTGCCCCCTG
chr15	40533656	40533666	Hypo	0	0	0	0	contamination_indels	chr15:40533656:GAGCTCATCT>G
chr15	40533656	40533666	Hyper	0	0	0	0	contamination_indels	chr15:40533656:GAGCTCATCT>G
chr10	79180431	79180442	Hypo	0	0	0	0	contamination_indels	chr10:79180431:CAATCAATATT>C
chr10	79180431	79180442	Hyper	0	0	0	0	contamination_indels	chr10:79180431:CAATCAATATT>C
chr14	29561358	29561367	Hypo	0	0	0	0	contamination_indels	chr14:29561358:TATGGAACC>T
chr14	29561358	29561367	Hyper	0	0	0	0	contamination_indels	chr14:29561358:TATGGAACC>T
chr5	109011090	109011091	Hypo	0	0	0	0	contamination_indels	chr5:109011090:A>AATTAGCT
chr5	109011090	109011091	Hyper	0	0	0	0	contamination_indels	chr5:109011090:A>AATTAGCT
chr10	1619043	1619044	Hypo	0	0	0	0	contamination_indels	chr10:1619043:G>GGCCCCAT
chr10	1619043	1619044	Hyper	0	0	0	0	contamination_indels	chr10:1619043:G>GGCCCCAT
chr13	114082195	114082204	Hypo	0	0	0	0	contamination_indels	chr13:114082195:AAAGCTGTG>A
chr13	114082195	114082204	Hyper	0	0	0	0	contamination_indels	chr13:114082195:AAAGCTGTG>A
chr14	86471287	86471298	Hypo	0	0	0	0	contamination_indels	chr14:86471287:CTTGACTACAG>C
chr14	86471287	86471298	Hyper	0	0	0	0	contamination_indels	chr14:86471287:CTTGACTACAG>C
chr2	10697706	10697715	Hypo	0	0	0	0	contamination_indels	chr2:10697706:TCCACACAA>T
chr2	10697706	10697715	Hyper	0	0	0	0	contamination_indels	chr2:10697706:TCCACACAA>T
chr2	10525487	10525488	Hypo	0	0	0	0	contamination_indels	chr2:10525487:G>GCAGTGTC
chr2	10525487	10525488	Hyper	0	0	0	0	contamination_indels	chr2:10525487:G>GCAGTGTC
chr10	96312002	96312003	Hypo	0	0	0	0	contamination_indels	chr10:96312002:T>TTGTCTAGAC
chr10	96312002	96312003	Hyper	0	0	0	0	contamination_indels	chr10:96312002:T>TTGTCTAGAC
chr3	184381829	184381838	Hypo	0	0	0	0	contamination_indels	chr3:184381829:CATGGGAAG>C

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chr3	184381829	184381838	Hyper	0	0	0	0	contamination_indels	chr3:184381829:CATGGGAAG>C
chr3	66316590	66316591	Hypo	0	0	0	0	contamination_indels	chr3:66316590:A>ATAAAAGACCC
chr3	66316590	66316591	Hyper	0	0	0	0	contamination_indels	chr3:66316590:A>ATAAAAGACCC
chr2	21482888	21482897	Hypo	0	0	0	0	contamination_indels	chr2:21482888:TGCACTGAG>T
chr2	21482888	21482897	Hyper	0	0	0	0	contamination_indels	chr2:21482888:TGCACTGAG>T
chr13	36192667	36192668	Hypo	0	0	0	0	contamination_indels	chr13:36192667:C>CACTGAAGA
chr13	36192667	36192668	Hyper	0	0	0	0	contamination_indels	chr13:36192667:C>CACTGAAGA
chr6	113527586	113527597	Hypo	0	0	0	0	contamination_indels	chr6:113527586:TTCTTATTGTA>T
chr6	113527586	113527597	Hyper	0	0	0	0	contamination_indels	chr6:113527586:TTCTTATTGTA>T
chr8	41595719	41595720	Hypo	0	0	0	0	contamination_indels	chr8:41595719:T>TGTATCTGA
chr8	41595719	41595720	Hyper	0	0	0	0	contamination_indels	chr8:41595719:T>TGTATCTGA
chr8	136954533	136954534	Hypo	0	0	0	0	contamination_indels	chr8:136954533:T>TGATTAATG
chr8	136954533	136954534	Hyper	0	0	0	0	contamination_indels	chr8:136954533:T>TGATTAATG
chr1	244163332	244163341	Hypo	0	0	0	0	contamination_indels	chr1:244163332:ATGATCTGT>A
chr1	244163332	244163341	Hyper	0	0	0	0	contamination_indels	chr1:244163332:ATGATCTGT>A
chrX	12668565	12668573	Hypo	0	0	0	0	contamination_indels	chrX:12668565:GCACTTGT>G
chrX	12668565	12668573	Hyper	0	0	0	0	contamination_indels	chrX:12668565:GCACTTGT>G
chr5	157234121	157234122	Hypo	0	0	0	0	contamination_indels	chr5:157234121:A>AACTATGACT
chr5	157234121	157234122	Hyper	0	0	0	0	contamination_indels	chr5:157234121:A>AACTATGACT
chr9	127489398	127489408	Hypo	0	0	0	0	contamination_indels	chr9:127489398:TCCTATGTTG>T
chr9	127489398	127489408	Hyper	0	0	0	0	contamination_indels	chr9:127489398:TCCTATGTTG>T
chr5	57251001	57251009	Hypo	0	0	0	0	contamination_indels	chr5:57251001:ATGATATG>A
chr5	57251001	57251009	Hyper	0	0	0	0	contamination_indels	chr5:57251001:ATGATATG>A
chr5	5235582	5235591	Hypo	0	0	0	0	contamination_indels	chr5:5235582:GATCCTGCA>G
chr5	5235582	5235591	Hyper	0	0	0	0	contamination_indels	chr5:5235582:GATCCTGCA>G
chr3	118017692	118017702	Hypo	0	0	0	0	contamination_indels	chr3:118017692:GCATTTCTTC>G
chr3	118017692	118017702	Hyper	0	0	0	0	contamination_indels	chr3:118017692:GCATTTCTTC>G

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참조	시작	종료	메틸화	점수	가닥	서열
chr4	96000547	96000667	Hypo	1	-	CTCTTACTCTCATACAATTTATATTCTAATTTAAATATTCTAAATATTTCATATAAAATATCACAATTAAAATATCACATAAAAAAAATACTTTCAAAACTTCTCTATTTAATAATTTCA
chr4	96000547	96000667	Hypo	1	+	TTTTTGTTTTTATGTAGTTTATATTTTAATTTGGATATTTTAAATATTTTATGTAGAATGTTATAATTAAGATATTATATAAGAAAGATATTTTTAGAGTTTTTTTATTTAATAATTTTA
chr4	96000552	96000672	Hypo	1	-	ACTCTCATACAATTTATATTCTAATTTAAATATTCTAAATATTTCATATAAAATATAAAATAATACCACAATTAAAATATCACATAAAAAAAATACTTTCAAAACTTCTCTATTTAATAA
chr4	96000552	96000672	Hypo	1	+	GTTTTTATGTAGTTTATATTTTAATTTGGATATTTTAAATATTTTATGTAGAATGTGAAATAATATTATAATTAAGATATTATATAAGAAAGATATTTTTAGAGTTTTTTTATTTAATAA
chr4	96000547	96000667	Hyper	1	-	CTCTTACTCTCATACAATTTATATTCTAATTTAAATATTCTAAATATTTCATATAAAATATCACAATTAAAATATCACATAAAAAAAATACTTTCAAAACTTCTCTATTTAATAATTTCA
chr4	96000547	96000667	Hyper	1	+	TTTTTGTTTTTATGTAGTTTATATTTTAATTTGGATATTTTAAATATTTTATGTAGAATGTTATAATTAAGATATTATATAAGAAAGATATTTTTAGAGTTTTTTTATTTAATAATTTTA
chr4	96000552	96000672	Hyper	1	-	ACTCTCATACAATTTATATTCTAATTTAAATATTCTAAATATTTCATATAAAATATAAAATAATACCACAATTAAAATATCACATAAAAAAAATACTTTCAAAACTTCTCTATTTAATAA
chr4	96000552	96000672	Hyper	1	+	GTTTTTATGTAGTTTATATTTTAATTTGGATATTTTAAATATTTTATGTAGAATGTGAAATAATATTATAATTAAGATATTATATAAGAAAGATATTTTTAGAGTTTTTTTATTTAATAA
chr10	57768968	57769088	Hypo	1	-	TTAAATATTAAATTTCTTAATTTTTATCATAAATTTTTATAATACATTACAAATATTTTAAATATTAATTAAACCTATATAATAATAAATAATAAATTTACAATAAAACTATATTATACC
chr10	57768968	57769088	Hypo	1	+	TTAGGTATTGGATTTTTTAATTTTTGTTATAAATTTTTGTAATGTATTATAGATATTTTAAATATTAGTTAAGTTTATATAATAATGGGTGGTAGGTTTATAATAAAGTTATATTATGTT
chr10	57768972	57769092	Hypo	1	-	ATATTAAATTTCTTAATTTTTATCATAAATTTTTATAATACATTACAAATATTTTAACTTCACCATATTAATTAAACCTATATAATAATAAATAATAAATTTACAATAAAACTATATTAT
chr10	57768972	57769092	Hypo	1	+	GTATTGGATTTTTTAATTTTTGTTATAAATTTTTGTAATGTATTATAGATATTTTAATTTTATTATATTAGTTAAGTTTATATAATAATGGGTGGTAGGTTTATAATAAAGTTATATTAT
chr10	57768968	57769088	Hyper	1	-	TTAAATATTAAATTTCTTAATTTTTATCATAAATTTTTATAATACATTACAAATATTTTAAATATTAATTAAACCTATATAATAATAAATAATAAATTTACAATAAAACTATATTATACC
chr10	57768968	57769088	Hyper	1	+	TTAGGTATTGGATTTTTTAATTTTTGTTATAAATTTTTGTAATGTATTATAGATATTTTAAATATTAGTTAAGTTTATATAATAATGGGTGGTAGGTTTATAATAAAGTTATATTATGTT
chr10	57768972	57769092	Hyper	1	-	ATATTAAATTTCTTAATTTTTATCATAAATTTTTATAATACATTACAAATATTTTAACTTCACCATATTAATTAAACCTATATAATAATAAATAATAAATTTACAATAAAACTATATTAT
chr10	57768972	57769092	Hyper	1	+	GTATTGGATTTTTTAATTTTTGTTATAAATTTTTGTAATGTATTATAGATATTTTAATTTTATTATATTAGTTAAGTTTATATAATAATGGGTGGTAGGTTTATAATAAAGTTATATTAT
chr5	99455885	99456005	Hypo	1	-	CTCATACAACTTAAATATTCAAAATCTATAAAAAAACACTAAATTAAACATCTAAAATAATATACCCATTTTTATCTCTCTAAATAATATCCTTCACTATTAATTATTAAAATATATTTT
chr5	99455885	99456005	Hypo	1	+	TTTATGTAATTTGAGTATTTGGAGTTTGTAGAGAAGTATTAGATTAAATATTTGAAGTAATGTGTTTATTTTTGTTTTTTTGGATAATATTTTTTATTGTTGATTATTAAGATATGTTTT
chr5	99455890	99456010	Hypo	1	-	ACAACTTAAATATTCAAAATCTATAAAAAAACACTAAATTAAACATCTAAAATAATATATTAAAAATACCCATTTTTATCTCTCTAAATAATATCCTTCACTATTAATTATTAAAATATA
chr5	99455890	99456010	Hypo	1	+	GTAATTTGAGTATTTGGAGTTTGTAGAGAAGTATTAGATTAAATATTTGAAGTAATGTATTAAAAGTGTTTATTTTTGTTTTTTTGGATAATATTTTTTATTGTTGATTATTAAGATATG
chr5	99455885	99456005	Hyper	1	-	CTCATACAACTTAAATATTCGAAATCTATAAAAAAACACTAAATTAAACATCTAAAATAATATACCCATTTTTATCTCTCTAAATAATATCCTTCACTATTAATTATTAAAATATATTTT
chr5	99455885	99456005	Hyper	1	+	TTTATGTAATTTGAGTATTCGGAGTTTGTAGAGAAGTATTAGATTAAATATTTGAAGTAATGTGTTTATTTTTGTTTTTTTGGATAATATTTTTTATTGTTGATTATTAAGATATGTTTT
chr5	99455890	99456010	Hyper	1	-	ACAACTTAAATATTCGAAATCTATAAAAAAACACTAAATTAAACATCTAAAATAATATATTAAAAATACCCATTTTTATCTCTCTAAATAATATCCTTCACTATTAATTATTAAAATATA
chr5	99455890	99456010	Hyper	1	+	GTAATTTGAGTATTCGGAGTTTGTAGAGAAGTATTAGATTAAATATTTGAAGTAATGTATTAAAAGTGTTTATTTTTGTTTTTTTGGATAATATTTTTTATTGTTGATTATTAAGATATG
chr7	12499046	12499166	Hypo	1	-	ATTCCTCCAAATTCATATATATACATCTAACTTATTTTTAATAAATACAAAATATTCCACAACCACAATCCAATCAACATTTTATTCTTTATAAATAAACAAATTAATACCAATTTCTAA
chr7	12499046	12499166	Hypo	1	+	ATTTTTTTGGGTTTATATGTGTATATTTAATTTATTTTTAATAGATATAAAGTATTTTATAATTATAATTTAATTAATATTTTATTTTTTATAGATAAATAAGTTAATATTAGTTTTTGA
chr7	12499051	12499171	Hypo	1	-	TCCAAATTCATATATATACATCTAACTTATTTTTAATAAATACAAAATATTCCACAATATAAACATACCACAATCCAATCAACATTTTATTCTTTATAAATAAACAAATTAATACCAATT
chr7	12499051	12499171	Hypo	1	+	TTTGGGTTTATATGTGTATATTTAATTTATTTTTAATAGATATAAAGTATTTTATAATGTGGATATATTATAATTTAATTAATATTTTATTTTTTATAGATAAATAAGTTAATATTAGTT
chr7	12499046	12499166	Hyper	1	-	ATTCCTCCGAATTCATATATATACATCTAACTTATTTTTAATAAATACAAAATATTCCACAACCACAATCCAATCAACATTTTATTCTTTATAAATAAACAAATTAATACCAATTTCTAA
chr7	12499046	12499166	Hyper	1	+	ATTTTTTCGGGTTTATATGTGTATATTTAATTTATTTTTAATAGATATAAAGTATTTTATAATTATAATTTAATTAATATTTTATTTTTTATAGATAAATAAGTTAATATTAGTTTTTGA
chr7	12499051	12499171	Hyper	1	-	TCCGAATTCATATATATACATCTAACTTATTTTTAATAAATACAAAATATTCCACAATATAAACATACCACAATCCAATCAACATTTTATTCTTTATAAATAAACAAATTAATACCAATT
chr7	12499051	12499171	Hyper	1	+	TTCGGGTTTATATGTGTATATTTAATTTATTTTTAATAGATATAAAGTATTTTATAATGTGGATATATTATAATTTAATTAATATTTTATTTTTTATAGATAAATAAGTTAATATTAGTT
chr15	28267472	28267592	Hypo	1	-	CCCACCCCTCTATCCTAAAACTCCATCTCTCATCAAACATCCTAAAAAAACAAAATTCAAATAATAATAACCTATACCATAACCTTCAACAACAATCACAACCATCTACAAATATCTCCT
chr15	28267472	28267592	Hypo	1	+	TTTGTTTTTTTGTTTTGAGATTTTATTTTTTATTAGATATTTTGGAGAAATAAAATTTGAGTGGTAATGGTTTGTGTTGTGGTTTTTAGTAGTAGTTATAATTGTTTGTAAGTGTTTTTT
chr15	28267477	28267597	Hypo	1	-	CCCTCTATCCTAAAACTCCATCTCTCATCAAACATCCTAAAAAAACAAAATTCAAATAAATAAAAATAATAATAACCTATACCATAACCTTCAACAACAATCACAACCATCTACAAATAT
chr15	28267477	28267597	Hypo	1	+	TTTTTTGTTTTGAGATTTTATTTTTTATTAGATATTTTGGAGAAATAAAATTTGAGTGGGTGAGAATGGTAATGGTTTGTGTTGTGGTTTTTAGTAGTAGTTATAATTGTTTGTAAGTGT
chr15	28267472	28267592	Hyper	1	-	CCCGCCCCTCTATCCTAAAACTCCATCTCTCATCAAACATCCTAAAAAAACAAAATTCGAATAATAATAACCTATACCGTAACCTTCAACAACAATCACAACCGTCTACAAATATCTCCT
chr15	28267472	28267592	Hyper	1	+	TTCGTTTTTTTGTTTTGAGATTTTATTTTTTATTAGATATTTTGGAGAAATAAAATTCGAGTGGTAATGGTTTGTGTCGTGGTTTTTAGTAGTAGTTATAATCGTTTGTAAGTGTTTTTT
chr15	28267477	28267597	Hyper	1	-	CCCTCTATCCTAAAACTCCATCTCTCATCAAACATCCTAAAAAAACAAAATTCGAATAAATAAAAATAATAATAACCTATACCGTAACCTTCAACAACAATCACAACCGTCTACAAATAT
chr15	28267477	28267597	Hyper	1	+	TTTTTTGTTTTGAGATTTTATTTTTTATTAGATATTTTGGAGAAATAAAATTCGAGTGGGTGAGAATGGTAATGGTTTGTGTCGTGGTTTTTAGTAGTAGTTATAATCGTTTGTAAGTGT
chr8	22949553	22949673	Hypo	2	-	ACATAAAAAAAATAAAAATTATTAAAAAAATCCCCAATAAAAATCCTAAAACCAAAAAAAAATAAAATAAACAACACAACAAAAAAAATTCCACAACAAATTTAATCAAACAAAAAAAAAAAATC
chr8	22949553	22949673	Hypo	1	+	GTATAAAGAGATAAGAATTATTAAAAGGTTTTTAGTGGAAATTTTGGGGTTAAAAAAAAATAAAGTAAATAATATAGTAGAGGGATTTTATAGTAGATTTGATTAGGTAGAAGAAAGAATT
chr8	22949558	22949678	Hypo	1	-	AAAAAATAAAAATTATTAAAAAAATCCCCAATAAAAATCCTAAAACCAAAAAAAAATAAAATACCTAAAATAAACAACACAACAAAAAAAATTCCACAACAAATTTAATCAAACAAAAAAAAA
chr8	22949558	22949678	Hypo	1	+	AAGAGATAAGAATTATTAAAAGGTTTTTAGTGGAAATTTTGGGGTTAAAAAAAAATAAAGTATTTGAAGTAAATAATATAGTAGAGGGATTTTATAGTAGATTTGATTAGGTAGAAGAAAG
chr8	22949553	22949673	Hyper	2	-	ACATAAAAAAAATAAAAATTATTAAAAAAATCCCCAATAAAAATCCTAAAACCAAAAAAAAATAAAATAAACAACACAACAAAAAAAATTCCACAACAAATTTAATCAAACAAAAAAAAAAAATC
chr8	22949553	22949673	Hyper	1	+	GTATAAAGAGATAAGAATTATTAAAAGGTTTTTAGTGGAAATTTTGGGGTTAAAAAAAAATAAAGTAAATAATATAGTAGAGGGATTTTATAGTAGATTTGATTAGGTAGAAGAAAGAATT
chr8	22949558	22949678	Hyper	1	-	AAAAAATAAAAATTATTAAAAAAATCCCCAATAAAAATCCTAAAACCAAAAAAAAATAAAATACCTAAAATAAACAACACAACAAAAAAAATTCCACAACAAATTTAATCAAACAAAAAAAAA
chr8	22949558	22949678	Hyper	1	+	AAGAGATAAGAATTATTAAAAGGTTTTTAGTGGAAATTTTGGGGTTAAAAAAAAATAAAGTATTTGAAGTAAATAATATAGTAGAGGGATTTTATAGTAGATTTGATTAGGTAGAAGAAAG
chr15	99930569	99930689	Hypo	1	-	ATAACATTCAAAAATTATTTCTATATATAATTAAAAAACTTTCAAAAATTAACCAAACTTTTTTCCACTCAAATATAAATTATCTTTACTACCTATATTAAAAAATATCAAATTTTATTT
chr15	99930569	99930689	Hypo	1	+	GTAGTATTTGGAGATTATTTTTGTATGTAATTAAGAGATTTTTAAGGGTTAGTTAGATTTTTTTTTATTTAAGTGTGGATTATTTTTGTTATTTGTGTTAAAGAATATTAGGTTTTGTTT
chr15	99930564	99930684	Hypo	1	-	AAAATATAACATTCAAAAATTATTTCTATATATAATTAAAAAACTTTCAAAAATTAACCAAACTCAAATATAAATTATCTTTACTACCTATATTAAAAAATATCAAATTTTATTTCTTAT

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chr15	99930564	99930684	Hypo	1	+	AAGGTGTAGTATTTGGAGATTATTTTTGTATGTAATTAAGAGATTTTTAAGGGTTAGTTAGATTTAAGTGTGGATTATTTTTGTTATTTGTGTTAAAGAATATTAGGTTTTGTTTTTTAT
chr15	99930569	99930689	Hyper	1	-	ATAACATTCGAAAATTATTTCTATATATAATTAAAAAACTTTCAAAAATTAACCAAACTTTTTTCCACTCAAATATAAATTATCTTTACTACCTATATTAAAAAATATCAAATTTTATTT
chr15	99930569	99930689	Hyper	1	+	GTAGTATTCGGAGATTATTTTTGTATGTAATTAAGAGATTTTTAAGGGTTAGTTAGATTTTTTTTTATTTAAGTGTGGATTATTTTTGTTATTTGTGTTAAAGAATATTAGGTTTTGTTT
chr15	99930564	99930684	Hyper	1	-	AAAATATAACATTCGAAAATTATTTCTATATATAATTAAAAAACTTTCAAAAATTAACCAAACTCAAATATAAATTATCTTTACTACCTATATTAAAAAATATCAAATTTTATTTCTTAT
chr15	99930564	99930684	Hyper	1	+	AAGGTGTAGTATTCGGAGATTATTTTTGTATGTAATTAAGAGATTTTTAAGGGTTAGTTAGATTTAAGTGTGGATTATTTTTGTTATTTGTGTTAAAGAATATTAGGTTTTGTTTTTTAT
chr10	119487107	119487227	Hypo	1	-	CTTCCAACTACATAAAATAAAATCTAAACTCCACAACACTCACTATTCCAAACATAAAACCTTTCCACTATAAATTCCACTCTAAACTTAAAAAACCTAAAATCAACAAATCCAATAAAA
chr10	119487107	119487227	Hypo	1	+	TTTTTAGTTGTATGGAATGAAGTTTGGGTTTTATAGTATTTATTGTTTTAGATATGAGATTTTTTTATTGTGAGTTTTATTTTGGGTTTGGAAAGTTTGGAATTAATAGATTTAATGGGG
chr10	119487111	119487231	Hypo	1	-	CAACTACATAAAATAAAATCTAAACTCCACAACACTCACTATTCCAAACATAAAACCTTATAAAATTTCCACTATAAATTCCACTCTAAACTTAAAAAACCTAAAATCAACAAATCCAAT
chr10	119487111	119487231	Hypo	1	+	TAGTTGTATGGAATGAAGTTTGGGTTTTATAGTATTTATTGTTTTAGATATGAGATTTTATAGGATTTTTATTGTGAGTTTTATTTTGGGTTTGGAAAGTTTGGAATTAATAGATTTAAT
chr10	119487107	119487227	Hyper	1	-	CTTCCAACTACATAAAATAAAATCTAAACTCCACAACACTCACTATTCCAAACATAAAACCTTTCCACTATAAATTCCACTCTAAACTTAAAAAACCTAAAATCAACAAATCCAATAAAA
chr10	119487107	119487227	Hyper	1	+	TTTTTAGTTGTATGGAATGAAGTTTGGGTTTTATAGTATTTATTGTTTTAGATATGAGATTTTTTTATTGTGAGTTTTATTTTGGGTTTGGAAAGTTTGGAATTAATAGATTTAATGGGG
chr10	119487111	119487231	Hyper	1	-	CAACTACATAAAATAAAATCTAAACTCCACAACACTCACTATTCCAAACATAAAACCTTATAAAATTTCCACTATAAATTCCACTCTAAACTTAAAAAACCTAAAATCAACAAATCCAAT
chr10	119487111	119487231	Hyper	1	+	TAGTTGTATGGAATGAAGTTTGGGTTTTATAGTATTTATTGTTTTAGATATGAGATTTTATAGGATTTTTATTGTGAGTTTTATTTTGGGTTTGGAAAGTTTGGAATTAATAGATTTAAT
chr15	46642829	46642949	Hypo	1	-	TTTAAATAATCACCTATTTATTTATAATATCATACTAAACATACAACCATAACATTTCTATAAAAACTATCAATATTTTTTCTAAATTTTAAATTTACCAAACAAATAAATATAAATACT
chr15	46642829	46642949	Hypo	1	+	TTTAGGTAATTATTTATTTGTTTATAGTATTATGTTAGATATATAGTTATAGTATTTTTATAAGGATTATTGGTATTTTTTTTGAGTTTTGGGTTTGTTAAGTAAATAAATATGGATATT
chr15	46642825	46642945	Hypo	1	-	AAACTTTAAATAATCACCTATTTATTTATAATATCATACTAAACATACAACCATAACATTTCTATCAATATTTTTTCTAAATTTTAAATTTACCAAACAAATAAATATAAATACTTTTCC
chr15	46642825	46642945	Hypo	1	+	GGGTTTTAGGTAATTATTTATTTGTTTATAGTATTATGTTAGATATATAGTTATAGTATTTTTATTGGTATTTTTTTTGAGTTTTGGGTTTGTTAAGTAAATAAATATGGATATTTTTTT
chr15	46642829	46642949	Hyper	1	-	TTTAAATAATCACCTATTTATTTATAATATCATACTAAACATACAACCATAACATTTCTATAAAAACTATCGATATTTTTTCTAAATTTTAAATTTACCAAACAAATAAATATAAATACT
chr15	46642829	46642949	Hyper	1	+	TTTAGGTAATTATTTATTTGTTTATAGTATTATGTTAGATATATAGTTATAGTATTTTTATAAGGATTATCGGTATTTTTTTTGAGTTTTGGGTTTGTTAAGTAAATAAATATGGATATT
chr15	46642825	46642945	Hyper	1	-	AAACTTTAAATAATCACCTATTTATTTATAATATCATACTAAACATACAACCATAACATTTCTATCGATATTTTTTCTAAATTTTAAATTTACCAAACAAATAAATATAAATACTTTTCC
chr15	46642825	46642945	Hyper	1	+	GGGTTTTAGGTAATTATTTATTTGTTTATAGTATTATGTTAGATATATAGTTATAGTATTTTTATCGGTATTTTTTTTGAGTTTTGGGTTTGTTAAGTAAATAAATATGGATATTTTTTT
chr20	41072880	41073000	Hypo	1	-	TATCTTCATCTTCACTACTTTACCTTCAAAAACTTTAACTAACTTATAAACAAAAATTAAACAACTCCAAAAAAAAAATAAAATTTTTAATTTCATAAATTTAACATAAATTTACTTTCCC
chr20	41072880	41073000	Hypo	1	+	TGTTTTTATTTTTATTATTTTATTTTTAGAGATTTTGGTTGGTTTATAGGTAAGAATTAAATAATTTTAAAAAGAGGTAGAATTTTTGATTTTATGGGTTTGATATAGATTTATTTTTTT
chr20	41072884	41073004	Hypo	1	-	TTCATCTTCACTACTTTACCTTCAAAAACTTTAACTAACTTATAAACAAAAATTAAACAACAAAACAACTCCAAAAAAAAAATAAAATTTTTAATTTCATAAATTTAACATAAATTTACTT
chr20	41072884	41073004	Hypo	1	+	TTTATTTTTATTATTTTATTTTTAGAGATTTTGGTTGGTTTATAGGTAAGAATTAAATAGTAAAGTAATTTTAAAAAGAGGTAGAATTTTTGATTTTATGGGTTTGATATAGATTTATTT
chr20	41072880	41073000	Hyper	1	-	TATCTTCATCTTCACTACTTTACCTTCAAAAACTTTAACTAACTTATAAACAAAAATTAAACAACTCCAAAAAAAAAATAAAATTTTTAATTTCATAAATTTAACATAAATTTACTTTCCC
chr20	41072880	41073000	Hyper	1	+	TGTTTTTATTTTTATTATTTTATTTTTAGAGATTTTGGTTGGTTTATAGGTAAGAATTAAATAATTTTAAAAAGAGGTAGAATTTTTGATTTTATGGGTTTGATATAGATTTATTTTTTT
chr20	41072884	41073004	Hyper	1	-	TTCATCTTCACTACTTTACCTTCAAAAACTTTAACTAACTTATAAACAAAAATTAAACAACAAAACAACTCCAAAAAAAAAATAAAATTTTTAATTTCATAAATTTAACATAAATTTACTT
chr20	41072884	41073004	Hyper	1	+	TTTATTTTTATTATTTTATTTTTAGAGATTTTGGTTGGTTTATAGGTAAGAATTAAATAGTAAAGTAATTTTAAAAAGAGGTAGAATTTTTGATTTTATGGGTTTGATATAGATTTATTT
chr18	69073948	69074068	Hypo	1	-	ATATTTTAAAAAATCTAATAAATAAAAAATACAAAAAAAAATCACTATAATTTCTAACACATTATAAACAAAAAAAAAAAAATAAAATTAAATACAAATTTTTAAAAACTACTCTATTACT
chr18	69073948	69074068	Hypo	1	+	ATATTTTAAGAAATTTGGTAAATGAGGAATATAGAAAAAAATTATTGTGATTTTTGATATGTTATGAATAGAAAAGAAAGATAAAATTAAATATAAATTTTTAAAAGTTATTTTATTGTT
chr18	69073953	69074073	Hypo	1	-	TTAAAAAATCTAATAAATAAAAAATACAAAAAAAAATCACTATAATTTCTAACACATAAACTAACATTATAAACAAAAAAAAAAAAATAAAATTAAATACAAATTTTTAAAAACTACTCTA
chr18	69073953	69074073	Hypo	1	+	TTAAGAAATTTGGTAAATGAGGAATATAGAAAAAAATTATTGTGATTTTTGATATGTGGGTTAATATTATGAATAGAAAAGAAAGATAAAATTAAATATAAATTTTTAAAAGTTATTTTA
chr18	69073948	69074068	Hyper	1	-	ATATTTTAAAAAATCTAATAAATAAAAAATACAAAAAAAAATCACTATAATTTCTAACACGTTATAAACAAAAAAAAAAAAATAAAATTAAATACAAATTTTTAAAAACTACTCTATTACT
chr18	69073948	69074068	Hyper	1	+	ATATTTTAAGAAATTTGGTAAATGAGGAATATAGAAAAAAATTATTGTGATTTTTGATACGTTATGAATAGAAAAGAAAGATAAAATTAAATATAAATTTTTAAAAGTTATTTTATTGTT
chr18	69073953	69074073	Hyper	1	-	TTAAAAAATCTAATAAATAAAAAATACAAAAAAAAATCACTATAATTTCTAACACGTAAACTAACATTATAAACAAAAAAAAAAAAATAAAATTAAATACAAATTTTTAAAAACTACTCTA
chr18	69073953	69074073	Hyper	1	+	TTAAGAAATTTGGTAAATGAGGAATATAGAAAAAAATTATTGTGATTTTTGATACGTGGGTTAATATTATGAATAGAAAAGAAAGATAAAATTAAATATAAATTTTTAAAAGTTATTTTA
chr17	7401274	7401394	Hypo	1	-	CCTCAAACATAAACTTAAAACAAAAAAAAATTAAAATTCTAAAATTTAACTTCCACTCAAAAAAAATAACTACAAAAATATTTTAAAAAACATTAAATTCATTACACCTCTTTCCTTCCT
chr17	7401274	7401394	Hypo	1	+	TTTTGGGTGTGGGTTTGGAGTAAGGAGGAATTGAAGTTTTGAAGTTTAATTTTTATTTAGGGAGGGTGGTTGTAGGGGTATTTTAGGAAGTATTGAGTTTATTGTATTTTTTTTTTTTTT
chr17	7401279	7401399	Hypo	1	-	AACATAAACTTAAAACAAAAAAAAATTAAAATTCTAAAATTTAACTTCCACTCAAAACTCTAAAATAAAAATAACTACAAAAATATTTTAAAAAACATTAAATTCATTACACCTCTTTCC
chr17	7401279	7401399	Hypo	1	+	GGTGTGGGTTTGGAGTAAGGAGGAATTGAAGTTTTGAAGTTTAATTTTTATTTAGGGTTTTGGGGTGAGGGTGGTTGTAGGGGTATTTTAGGAAGTATTGAGTTTATTGTATTTTTTTTT
chr17	7401274	7401394	Hyper	1	-	CCTCGAACGTAAACTTAAAACAAAAAAAAATTAAAATTCTAAAATTTAACTTCCACTCAAAAAAAATAACTACAAAAATATTTTAAAAAACATTAAATTCATTACACCTCTTTCCTTCCT
chr17	7401274	7401394	Hyper	1	+	TTTCGGGCGTGGGTTTGGAGTAAGGAGGAATTGAAGTTTTGAAGTTTAATTTTTATTTAGGGAGGGTGGTTGTAGGGGTATTTTAGGAAGTATTGAGTTTATTGTATTTTTTTTTTTTTT
chr17	7401279	7401399	Hyper	1	-	AACGTAAACTTAAAACAAAAAAAAATTAAAATTCTAAAATTTAACTTCCACTCAAAACTCTAAAATAAAAATAACTACAAAAATATTTTAAAAAACATTAAATTCATTACACCTCTTTCC
chr17	7401279	7401399	Hyper	1	+	GGCGTGGGTTTGGAGTAAGGAGGAATTGAAGTTTTGAAGTTTAATTTTTATTTAGGGTTTTGGGGTGAGGGTGGTTGTAGGGGTATTTTAGGAAGTATTGAGTTTATTGTATTTTTTTTT
chr7	29793145	29793265	Hypo	1	-	TACACACCTCCTTCAATTTTACACCCTAAACACCACCCTAACTCACCCTAATCCTAACCCTATTTTTCACATAATACCACTCTATAAAATATAAAACAAATAAAAAAAAAATTCAATAACT
chr7	29793145	29793265	Hypo	1	+	TATATATTTTTTTTAGTTTTGTATTTTAGATATTATTTTGATTTATTTTAATTTTGATTTTGTTTTTTATATAGTATTATTTTGTAAAATGTAAGATAAATAGGAAAAAATTTAGTGGTT
chr7	29793149	29793269	Hypo	1	-	CACCTCCTTCAATTTTACACCCTAAACACCACCCTAACTCACCCTAATCCTAACCCTAAAAAACATTTTTCACATAATACCACTCTATAAAATATAAAACAAATAAAAAAAAAATTCAATA
chr7	29793149	29793269	Hypo	1	+	TATTTTTTTTAGTTTTGTATTTTAGATATTATTTTGATTTATTTTAATTTTGATTTTGGGAGATGTTTTTTATATAGTATTATTTTGTAAAATGTAAGATAAATAGGAAAAAATTTAGTG
chr7	29793145	29793265	Hyper	1	-	TACACACCTCCTTCAATTTTACACCCTAAACACCACCCTAACTCACCCTAATCCTAACCCTATTTTTCACATAATACCACTCTATAAAATATAAAACAAATAAAAAAAAAATTCAATAACT
chr7	29793145	29793265	Hyper	1	+	TATATATTTTTTTTAGTTTTGTATTTTAGATATTATTTTGATTTATTTTAATTTTGATTTTGTTTTTTATATAGTATTATTTTGTAAAATGTAAGATAAATAGGAAAAAATTTAGTGGTT
chr7	29793149	29793269	Hyper	1	-	CACCTCCTTCAATTTTACACCCTAAACACCACCCTAACTCACCCTAATCCTAACCCTAAAAAACGTTTTTCACATAATACCACTCTATAAAATATAAAACAAATAAAAAAAAAATTCAATA

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chr7	29793149	29793269	Hyper	1 +	TATTTTTTTTAGTTTTGTATTTTAGATATTATTTTGATTTATTTTAATTTTGATTTTGGGAGACGTTTTTTATATAGTATTATTTTGTAAAATGTAAGATAAATAGGAAAAAATTTAGTG
chr3	165404334	165404454	Hypo	1 -	CTTTAAATCTCTATAACATAACATAAATTTCTTTACCACTAACAACTTAACTTTAAAATTAACTAAACTTCCTTAAATATATTAATTTAATTACAATTCATACATCTCTTCCTCAACTCC
chr3	165404334	165404454	Hypo	1 +	TTTTGGGTTTTTGTAGTATGATATAGGTTTTTTTATTGTTAATAATTTAGTTTTGGAATTGATTGGATTTTTTTGGGTATGTTAATTTAGTTATAATTTATATATTTTTTTTTTAGTTTT
chr3	165404339	165404459	Hypo	1 -	AATCTCTATAACATAACATAAATTTCTTTACCACTAACAACTTAACTTTAAAATTAAATCTTAAAACTAAACTTCCTTAAATATATTAATTTAATTACAATTCATACATCTCTTCCTCAA
chr3	165404339	165404459	Hypo	1 +	GGTTTTTGTAGTATGATATAGGTTTTTTTATTGTTAATAATTTAGTTTTGGAATTGAGTTTTAGAATTGGATTTTTTTGGGTATGTTAATTTAGTTATAATTTATATATTTTTTTTTTAG
chr3	165404334	165404454	Hyper	1 -	CTTTAAATCTCTATAACATAACATAAATTTCTTTACCGCTAACAACTTAACTTTAAAATTAACTAAACTTCCTTAAATATATTAATTTAATTACAATTCATACATCTCTTCCTCAACTCC
chr3	165404334	165404454	Hyper	1 +	TTTTGGGTTTTTGTAGTATGATATAGGTTTTTTTATCGTTAATAATTTAGTTTTGGAATTGATTGGATTTTTTTGGGTATGTTAATTTAGTTATAATTTATATATTTTTTTTTTAGTTTT
chr3	165404339	165404459	Hyper	1 -	AATCTCTATAACATAACATAAATTTCTTTACCGCTAACAACTTAACTTTAAAATTAAATCTTAAAACTAAACTTCCTTAAATATATTAATTTAATTACAATTCATACATCTCTTCCTCAA
chr3	165404339	165404459	Hyper	1 +	GGTTTTTGTAGTATGATATAGGTTTTTTTATCGTTAATAATTTAGTTTTGGAATTGAGTTTTAGAATTGGATTTTTTTGGGTATGTTAATTTAGTTATAATTTATATATTTTTTTTTTAG
chr2	36366683	36366803	Hypo	1 -	ATTACAACCTAAAAATTACAAAAAAATACATCTTTAAAATAATCATTAATATCTTCTACTAAAATATACATAACTCTTCATAACAATTTAATACATCTTACATAAAAATTACAATAAAAC
chr2	36366683	36366803	Hypo	1 +	ATTATAGTTTGAAGGTTATAAAGGAATGTATTTTTAGAATAGTTATTAGTATTTTTTGTTAGAATATGTATGATTTTTTGTGATAATTTAATATATTTTATATGAAAATTATAATGGAGT
chr2	36366678	36366798	Hypo	1 -	AACCTATTACAACCTAAAAATTACAAAAAAATACATCTTTAAAATAATCATTAATATCTTCTACATAACTCTTCATAACAATTTAATACATCTTACATAAAAATTACAATAAAACCACAT
chr2	36366678	36366798	Hypo	1 +	AGTTTATTATAGTTTGAAGGTTATAAAGGAATGTATTTTTAGAATAGTTATTAGTATTTTTTGTATGATTTTTTGTGATAATTTAATATATTTTATATGAAAATTATAATGGAGTTATAT
chr2	36366683	36366803	Hyper	1 -	ATTACAACCTAAAAATTACAAAAAAATACATCTTTAAAATAATCATTAATATCTTCTACTAAAATATACATAACTCTTCGTAACAATTTAATACATCTTACATAAAAATTACAATAAAAC
chr2	36366683	36366803	Hyper	1 +	ATTATAGTTTGAAGGTTATAAAGGAATGTATTTTTAGAATAGTTATTAGTATTTTTTGTTAGAATATGTATGATTTTTCGTGATAATTTAATATATTTTATATGAAAATTATAATGGAGT
chr2	36366678	36366798	Hyper	1 -	AACCTATTACAACCTAAAAATTACAAAAAAATACATCTTTAAAATAATCATTAATATCTTCTACATAACTCTTCGTAACAATTTAATACATCTTACATAAAAATTACAATAAAACCACAT
chr2	36366678	36366798	Hyper	1 +	AGTTTATTATAGTTTGAAGGTTATAAAGGAATGTATTTTTAGAATAGTTATTAGTATTTTTTGTATGATTTTTCGTGATAATTTAATATATTTTATATGAAAATTATAATGGAGTTATAT
chr10	119492649	119492769	Hypo	1 -	AAAACATTTAATTTATTCTAAAAAAATTCATAACTTAAATTAAAACTTAAAATATTACCAATATTCCAAAAAATAACATCAAAACAAAAATATAAATCAAAACTTTATTTCATTTACTA
chr10	119492649	119492769	Hypo	1 +	AAGATATTTGATTTGTTTTGAAGGAATTTATGGTTTAGGTTGGAATTTAAAATGTTGTTGATATTTTAGGAGGTGATATTAGAATAGGAATATAGATTGGGGATTTTGTTTTATTTGTTG
chr10	119492645	119492765	Hypo	1 -	TTTAAAAACATTTAATTTATTCTAAAAAAATTCATAACTTAAATTAAAACTTAAAATATTACCAAAAAATAACATCAAAACAAAAATATAAATCAAAACTTTATTTCATTTACTAATAA
chr10	119492645	119492765	Hypo	1 +	TTTAAAGATATTTGATTTGTTTTGAAGGAATTTATGGTTTAGGTTGGAATTTAAAATGTTGTTAGGAGGTGATATTAGAATAGGAATATAGATTGGGGATTTTGTTTTATTTGTTGATGA
chr10	119492649	119492769	Hyper	1 -	AAAACATTTAATTTATTCTAAAAAAATTCATAACTTAAATTAAAACTTAAAATATTACCGATATTCCAAAAAATAACATCAAAACAAAAATATAAATCGAAAACTTTATTTCATTTACTA
chr10	119492649	119492769	Hyper	1 +	AAGATATTTGATTTGTTTTGAAGGAATTTATGGTTTAGGTTGGAATTTAAAATGTTGTCGATATTTTAGGAGGTGATATTAGAATAGGAATATAGATCGGGGATTTTGTTTTATTTGTTG
chr10	119492645	119492765	Hyper	1 -	TTTAAAAACATTTAATTTATTCTAAAAAAATTCATAACTTAAATTAAAACTTAAAATATTACCAAAAAATAACATCAAAACAAAAATATAAATCGAAAACTTTATTTCATTTACTAATAA
chr10	119492645	119492765	Hyper	1 +	TTTAAAGATATTTGATTTGTTTTGAAGGAATTTATGGTTTAGGTTGGAATTTAAAATGTTGTTAGGAGGTGATATTAGAATAGGAATATAGATCGGGGATTTTGTTTTATTTGTTGATGA
chr6	25408632	25408752	Hypo	1 -	AAATAAACAAAAAAACCAAAAAATTCAAAAACTTCCTAATCATCATATCTTTAAAAATACAATAATTTACACTAACTATCACCAACACTTTTCTAAACACCTTATATATATTACCTTCTT
chr6	25408632	25408752	Hypo	1 +	GAGTGAATAAGAAGGTTGAAGAATTTAAAGGTTTTTTGATTATTATATTTTTAGGGATGTAATGATTTATATTGATTATTGTTAATATTTTTTTAAGTATTTTGTGTGTATTATTTTTTT
chr6	25408637	25408757	Hypo	1 -	AACAAAAAAACCAAAAAATTCAAAAACTTCCTAATCATCATATCTTTAAAAATACAAAATTAATAATAATTTACACTAACTATCACCAACACTTTTCTAAACACCTTATATATATTACCT
chr6	25408637	25408757	Hypo	1 +	AATAAGAAGGTTGAAGAATTTAAAGGTTTTTTGATTATTATATTTTTAGGGATGTAAGATTAATGATGATTTATATTGATTATTGTTAATATTTTTTTAAGTATTTTGTGTGTATTATTT
chr6	25408632	25408752	Hyper	1 -	AAATAAACAAAAAAACCGAAAAATTCAAAAACTTCCTAATCATCATATCTTTAAAAATACAATAATTTACACTAACTATCGCCAACACTTTTCTAAACACCTTATATATATTACCTTCTT
chr6	25408632	25408752	Hyper	1 +	GAGTGAATAAGAAGGTCGAAGAATTTAAAGGTTTTTTGATTATTATATTTTTAGGGATGTAATGATTTATATTGATTATCGTTAATATTTTTTTAAGTATTTTGTGTGTATTATTTTTTT
chr6	25408637	25408757	Hyper	1 -	AACAAAAAAACCGAAAAATTCAAAAACTTCCTAATCATCATATCTTTAAAAATACAAAATTAATAATAATTTACACTAACTATCGCCAACACTTTTCTAAACACCTTATATATATTACCT
chr6	25408637	25408757	Hyper	1 +	AATAAGAAGGTCGAAGAATTTAAAGGTTTTTTGATTATTATATTTTTAGGGATGTAAGATTAATGATGATTTATATTGATTATCGTTAATATTTTTTTAAGTATTTTGTGTGTATTATTT
chr10	52475903	52476023	Hypo	2 -	TTCTATCTTTTTAAACATAAAATAAAACATATCTTATTATTTATACTTTCTAATACACCACTACAAACCACATATAAACTTACATCTTATATATTATAAAATCACCTTTAAAAATATCAA
chr10	52475903	52476023	Hypo	2 +	TTTTATTTTTTTAAATATAAAATGGAGTATGTTTTGTTATTTGTATTTTTTGATGTATTATTGTAGGTTATATATAGGTTTGTATTTTATATATTGTGAAATTATTTTTAAAAATATTAA
chr10	52475898	52476018	Hypo	2 -	CAAAATTCTATCTTTTTAAACATAAAATAAAACATATCTTATTATTTATACTTTCTAATACACCACATATAAACTTACATCTTATATATTATAAAATCACCTTTAAAAATATCAAAATAA
chr10	52475898	52476018	Hypo	2 +	TAGAATTTTATTTTTTTAAATATAAAATGGAGTATGTTTTGTTATTTGTATTTTTTGATGTGTTATATATAGGTTTGTATTTTATATATTGTGAAATTATTTTTAAAAATATTAAGGTGA
chr10	52475903	52476023	Hyper	2 -	TTCTATCTTTTTAAACATAAAATAAAACATATCTTATTATTTATACTTTCTAATACACCACTACAAACCACATATAAACTTACATCTTATATATTATAAAATCACCTTTAAAAATATCAA
chr10	52475903	52476023	Hyper	2 +	TTTTATTTTTTTAAATATAAAATGGAGTATGTTTTGTTATTTGTATTTTTTGATGTATTATTGTAGGTTATATATAGGTTTGTATTTTATATATTGTGAAATTATTTTTAAAAATATTAA
chr10	52475898	52476018	Hyper	2 -	CAAAATTCTATCTTTTTAAACATAAAATAAAACATATCTTATTATTTATACTTTCTAATACGCCACATATAAACTTACATCTTATATATTATAAAATCACCTTTAAAAATATCAAAATAA
chr10	52475898	52476018	Hyper	2 +	TAGAATTTTATTTTTTTAAATATAAAATGGAGTATGTTTTGTTATTTGTATTTTTTGATGCGTTATATATAGGTTTGTATTTTATATATTGTGAAATTATTTTTAAAAATATTAAGGTGA
chr4	19758067	19758187	Hypo	1 -	TTATAATAATTTAATAACTTACAAAAAAAATAATCAACAAAAACTTCATAAAAAAAATACCATTATCAAAAACCAAAAAAAAATATACTTAAAAACTATTTATAATTAAATTTAAAAAAC
chr4	19758067	19758187	Hypo	1 +	TTGTAATAATTTAATAATTTATAGAAGGGATGATTAGTAAAAGTTTTATAGAAGAGATATTATTGTTAAAGATTAAGAAAGAGTATGTTTAAAAATTGTTTATAATTGAATTTGAAAAAT
chr4	19758072	19758192	Hypo	1 -	ATAATTTAATAACTTACAAAAAAAATAATCAACAAAAACTTCATAAAAAAAATACCATTTAAAATTATTATCAAAAACCAAAAAAAAATATACTTAAAAACTATTTATAATTAAATTTAA
chr4	19758072	19758192	Hypo	1 +	ATAATTTAATAATTTATAGAAGGGATGATTAGTAAAAGTTTTATAGAAGAGATATTATTTAAAATTATTGTTAAAGATTAAGAAAGAGTATGTTTAAAAATTGTTTATAATTGAATTTGA
chr4	19758067	19758187	Hyper	1 -	TTATAATAATTTAATAACTTACAAAAAAAATAATCAACAAAAACTTCATAAAAAAAATACCATTATCAAAAACCAAAAAAAAATATACTTAAAAACTATTTATAATTAAATTTAAAAAAC
chr4	19758067	19758187	Hyper	1 +	TTGTAATAATTTAATAATTTATAGAAGGGATGATTAGTAAAAGTTTTATAGAAGAGATATTATTGTTAAAGATTAAGAAAGAGTATGTTTAAAAATTGTTTATAATTGAATTTGAAAAAT
chr4	19758072	19758192	Hyper	1 -	ATAATTTAATAACTTACAAAAAAAATAATCAACAAAAACTTCATAAAAAAAATACCATTTAAAATTATTATCAAAAACCAAAAAAAAATATACTTAAAAACTATTTATAATTAAATTTAA
chr4	19758072	19758192	Hyper	1 +	ATAATTTAATAATTTATAGAAGGGATGATTAGTAAAAGTTTTATAGAAGAGATATTATTTAAAATTATTGTTAAAGATTAAGAAAGAGTATGTTTAAAAATTGTTTATAATTGAATTTGA
chr9	113129886	113130006	Hypo	1 -	TTTTACCCAATTTTTTACCAAAATTACCCTTTATATTAATACAACATAATCCAACCTAAAACATTAATTCATACTTAACCATTAAATCAATCTAAACCAATCAAAATCCTAAATTTTTAA
chr9	113129886	113130006	Hypo	1 +	TTTTATTTAGTTTTTTGTTAAAATTATTTTTTATGTTGGTATAATATAATTTAATTTAGGATATTGATTTATGTTTGGTTATTGAATTAATTTGGATTAATTAGAGTTTTGGATTTTTAA
chr9	113129890	113130010	Hypo	1 -	ACCCAATTTTTTACCAAAATTACCCTTTATATTAATACAACATAATCCAACCTAAAACTACAATTCATTAATTCATACTTAACCATTAAATCAATCTAAACCAATCAAAATCCTAAATTT

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chr9	113129890	113130010	Hypo	1 +	ATTTAGTTTTTTGTTAAAATTATTTTTTATGTTGGTATAATATAATTTAATTTAGGATTATAGTTTATTGATTTATGTTTGGTTATTGAATTAATTTGGATTAATTAGAGTTTTGGATTT
chr9	113129886	113130006	Hyper	1 -	TTTTACCCAATTTTTTACCAAAATTACCCTTTATATTAATACAACATAATCCAACCTAAAACATTAATTCATACTTAACCATTAAATCAATCTAAACCAATCAAAATCCTAAATTTTTAA
chr9	113129886	113130006	Hyper	1 +	TTTTATTTAGTTTTTTGTTAAAATTATTTTTTATGTTGGTATAATATAATTTAATTTAGGATATTGATTTATGTTTGGTTATTGAATTAATTTGGATTAATTAGAGTTTTGGATTTTTAA
chr9	113129890	113130010	Hyper	1 -	ACCCAATTTTTTACCAAAATTACCCTTTATATTAATACAACATAATCCAACCTAAAACTACAATTCATTAATTCATACTTAACCATTAAATCAATCTAAACCAATCAAAATCCTAAATTT
chr9	113129890	113130010	Hyper	1 +	ATTTAGTTTTTTGTTAAAATTATTTTTTATGTTGGTATAATATAATTTAATTTAGGATTATAGTTTATTGATTTATGTTTGGTTATTGAATTAATTTGGATTAATTAGAGTTTTGGATTT
chr6	62730429	62730549	Hypo	1 -	ATTTACTAATAAAAAACATTTCTCAACTATAACTATAAATATATCTATTTATTAATACACTTTTAACAATTTTTACTTCATATACTTTATAACTATCTTTATATACATAAACTTTATAAT
chr6	62730429	62730549	Hypo	1 +	ATTTATTGATGGAGGGTATTTTTTAGTTATAATTGTGGATATGTTTATTTATTAATGTATTTTTGATAGTTTTTGTTTTATGTATTTTGTGGTTGTTTTTATGTGTGTAAATTTTATAAT
chr6	62730425	62730545	Hypo	1 -	TATAATTTACTAATAAAAAACATTTCTCAACTATAACTATAAATATATCTATTTATTAATACAATTTTTACTTCATATACTTTATAACTATCTTTATATACATAAACTTTATAATTTTTA
chr6	62730425	62730545	Hypo	1 +	TATAATTTATTGATGGAGGGTATTTTTTAGTTATAATTGTGGATATGTTTATTTATTAATGTAGTTTTTGTTTTATGTATTTTGTGGTTGTTTTTATGTGTGTAAATTTTATAATTTTTA
chr6	62730429	62730549	Hyper	1 -	ATTTACTAATAAAAAACATTTCTCAACTATAACTATAAATATATCTATTTATTAATACACTTTTAACAATTTTTACTTCATATACTTTATAACTATCTTTATATACGTAAACTTTATAAT
chr6	62730429	62730549	Hyper	1 +	ATTTATTGATGGAGGGTATTTTTTAGTTATAATTGTGGATATGTTTATTTATTAATGTATTTTTGATAGTTTTTGTTTTATGTATTTTGTGGTTGTTTTTATGTGCGTAAATTTTATAAT
chr6	62730425	62730545	Hyper	1 -	TATAATTTACTAATAAAAAACATTTCTCAACTATAACTATAAATATATCTATTTATTAATACAATTTTTACTTCATATACTTTATAACTATCTTTATATACGTAAACTTTATAATTTTTA
chr6	62730425	62730545	Hyper	1 +	TATAATTTATTGATGGAGGGTATTTTTTAGTTATAATTGTGGATATGTTTATTTATTAATGTAGTTTTTGTTTTATGTATTTTGTGGTTGTTTTTATGTGCGTAAATTTTATAATTTTTA
chr6	11692200	11692320	Hypo	1 -	CTCCTTAACCATTCTTCAAAATAAACTAAAATCTCAAAAATATATATTCTAATAAATTCAAATTCACATCTTCACTCACCAAAAACCAAAACAAAAATCTCTATATATCTTTCCAAACCT
chr6	11692200	11692320	Hypo	1 +	TTTTTTGATTATTTTTTAGAATGAATTGGAGTTTTAGGAGTATGTATTTTGATGGGTTTAGATTTATATTTTTATTTATTAGGAATTAGAATAGAGGTTTTTATGTATTTTTTTAGATTT
chr6	11692196	11692316	Hypo	1 -	AAATCTCCTTAACCATTCTTCAAAATAAACTAAAATCTCAAAAATATATATTCTAATAAATCATCTTCACTCACCAAAAACCAAAACAAAAATCTCTATATATCTTTCCAAACCTCTTAC
chr6	11692196	11692316	Hypo	1 +	AGGTTTTTTTGATTATTTTTTAGAATGAATTGGAGTTTTAGGAGTATGTATTTTGATGGGTTATTTTTATTTATTAGGAATTAGAATAGAGGTTTTTATGTATTTTTTTAGATTTTTTAT
chr6	11692200	11692320	Hyper	1 -	CTCCTTAACCATTCTTCAAAATAAACTAAAATCTCAAAAATATATATTCTAATAAATTCAAATTCACATCTTCACTCACCAAAAACCAAAACAAAAATCTCTATATATCTTTCCAAACCT
chr6	11692200	11692320	Hyper	1 +	TTTTTTGATTATTTTTTAGAATGAATTGGAGTTTTAGGAGTATGTATTTTGATGGGTTTAGATTTATATTTTTATTTATTAGGAATTAGAATAGAGGTTTTTATGTATTTTTTTAGATTT
chr6	11692196	11692316	Hyper	1 -	AAATCTCCTTAACCATTCTTCAAAATAAACTAAAATCTCAAAAATATATATTCTAATAAATCATCTTCACTCACCAAAAACCAAAACAAAAATCTCTATATATCTTTCCAAACCTCTTAC
chr6	11692196	11692316	Hyper	1 +	AGGTTTTTTTGATTATTTTTTAGAATGAATTGGAGTTTTAGGAGTATGTATTTTGATGGGTTATTTTTATTTATTAGGAATTAGAATAGAGGTTTTTATGTATTTTTTTAGATTTTTTAT
chr13	78028103	78028223	Hypo	1 -	CTAATAAAATTTAAAAAAAAAATTCTAAAAAAAAAAATCAATCATAATATTAAAAAAATCAATCACAACCTTAAAAAAACAAATCAAAAATAAACATAACATAAACAATTAAAAAAAAAA
chr13	78028103	78028223	Hypo	1 +	TTAATGAGATTTAAAAAAAAGATTTTAAGAAAAGAAATTAATTATAATATTAGAAGAGTTGATTATAGTTTTAGGAGGATAGATTAAAGATGAATATGATATAAATAATTAGGAGGAAGA
chr13	78028098	78028218	Hypo	2 -	TAAATCTAATAAAATTTAAAAAAAAAATTCTAAAAAAAAAAATCAATCATAATATTAAAAAAACCTTAAAAAAACAAATCAAAAATAAACATAACATAAACAATTAAAAAAAAAAACCCCT
chr13	78028098	78028218	Hypo	1 +	TGGATTTAATGAGATTTAAAAAAAAGATTTTAAGAAAAGAAATTAATTATAATATTAGAAGAGTTTTAGGAGGATAGATTAAAGATGAATATGATATAAATAATTAGGAGGAAGATTTTT
chr13	78028103	78028223	Hyper	1 -	CTAATAAAATTTAAAAAAAAAATTCTAAAAAAAAAAATCAATCATAATATTAAAAAAATCGATCACAACCTTAAAAAAACAAATCAAAAATAAACATAACATAAACAATTAAAAAAAAAA
chr13	78028103	78028223	Hyper	1 +	TTAATGAGATTTAAAAAAAAGATTTTAAGAAAAGAAATTAATTATAATATTAGAAGAGTCGATTATAGTTTTAGGAGGATAGATTAAAGATGAATATGATATAAATAATTAGGAGGAAGA
chr13	78028098	78028218	Hyper	2 -	TAAATCTAATAAAATTTAAAAAAAAAATTCTAAAAAAAAAAATCAATCATAATATTAAAAAAACCTTAAAAAAACAAATCAAAAATAAACATAACATAAACAATTAAAAAAAAAAACCCCT
chr13	78028098	78028218	Hyper	1 +	TGGATTTAATGAGATTTAAAAAAAAGATTTTAAGAAAAGAAATTAATTATAATATTAGAAGAGTTTTAGGAGGATAGATTAAAGATGAATATGATATAAATAATTAGGAGGAAGATTTTT
chr6	36288818	36288938	Hypo	1 -	AAAAAAATTAAAAAACATACTCAAAATTACCCAAAAATACAAACTTAAAAATAAAACCCAAATAAATAAATAAAACCCTAAAATTAACCTAAAAAAAACTAAATAATACTCACCTACTAC
chr6	36288818	36288938	Hypo	1 +	AGAGAGGTTAAGGGATATGTTTAAAGTTGTTTAGAGGTGTAGATTTGGGGATGGAATTTAGGTGGGTAGATGAGGTTTTGGGGTTGGTTTGGGGAGGGTTGAGTGGTATTTATTTGTTGT
chr6	36288823	36288943	Hypo	1 -	AATTAAAAAACATACTCAAAATTACCCAAAAATACAAACTTAAAAATAAAACCCAAATCTCAACTATAAATAAATAAAACCCTAAAATTAACCTAAAAAAAACTAAATAATACTCACCTA
chr6	36288823	36288943	Hypo	1 +	GGTTAAGGGATATGTTTAAAGTTGTTTAGAGGTGTAGATTTGGGGATGGAATTTAGGTTTTAGTTGTGGGTAGATGAGGTTTTGGGGTTGGTTTGGGGAGGGTTGAGTGGTATTTATTTG
chr6	36288818	36288938	Hyper	1 -	AAAAAAATTAAAAAACATACTCAAAATTACCCAAAAATACAAACTTAAAAATAAAACCCAAATAAATAAATAAAACCCTAAAATTAACCTAAAAAAAACTAAATAATACTCACCTACTAC
chr6	36288818	36288938	Hyper	1 +	AGAGAGGTTAAGGGATATGTTTAAAGTTGTTTAGAGGTGTAGATTTGGGGATGGAATTTAGGTGGGTAGATGAGGTTTTGGGGTTGGTTTGGGGAGGGTTGAGTGGTATTTATTTGTTGT
chr6	36288823	36288943	Hyper	1 -	AATTAAAAAACATACTCAAAATTACCCAAAAATACAAACTTAAAAATAAAACCCAAATCTCAACTATAAATAAATAAAACCCTAAAATTAACCTAAAAAAAACTAAATAATACTCACCTA
chr6	36288823	36288943	Hyper	1 +	GGTTAAGGGATATGTTTAAAGTTGTTTAGAGGTGTAGATTTGGGGATGGAATTTAGGTTTTAGTTGTGGGTAGATGAGGTTTTGGGGTTGGTTTGGGGAGGGTTGAGTGGTATTTATTTG
chr4	130619957	130620077	Hypo	1 -	AACAATACACATACTCACAAACATTTTAATATAAAAAAAAACACTCAACTTTAAAAACAAAAAAAACTTTAAATCCCAACTCTATACTTTACTATATAAATATAAACTATTTTATCTTTA
chr4	130619957	130620077	Hypo	1 +	GGTGGTGTATATATTTATAGGTATTTTGATGTAGGAGAAAGTATTTGGTTTTGGAGGTAAAAGAGATTTTGGGTTTTGGTTTTGTGTTTTATTATGTGAATGTAGGTTATTTTATTTTTA
chr4	130619953	130620073	Hypo	1 -	AACAAACAATACACATACTCACAAACATTTTAATATAAAAAAAAACACTCAACTTTAAAAACTTTAAATCCCAACTCTATACTTTACTATATAAATATAAACTATTTTATCTTTAACTTC
chr4	130619953	130620073	Hypo	1 +	AGTAGGTGGTGTATATATTTATAGGTATTTTGATGTAGGAGAAAGTATTTGGTTTTGGAGGTTTTGGGTTTTGGTTTTGTGTTTTATTATGTGAATGTAGGTTATTTTATTTTTAATTTT
chr4	130619957	130620077	Hyper	1 -	AACGATACACATACTCACAAACATTTTAATATAAAAAAAAACACTCGACTTTAAAAACAAAAAAAACTTTAAATCCCGACTCTATACTTTACTATATAAATATAAACTATTTTATCTTTA
chr4	130619957	130620077	Hyper	1 +	GGCGGTGTATATATTTATAGGTATTTTGATGTAGGAGAAAGTATTCGGTTTTGGAGGTAAAAGAGATTTTGGGTTTCGGTTTTGTGTTTTATTATGTGAATGTAGGTTATTTTATTTTTA
chr4	130619953	130620073	Hyper	1 -	AACAAACGATACACATACTCACAAACATTTTAATATAAAAAAAAACACTCGACTTTAAAAACTTTAAATCCCGACTCTATACTTTACTATATAAATATAAACTATTTTATCTTTAACTTC
chr4	130619953	130620073	Hyper	1 +	AGTAGGCGGTGTATATATTTATAGGTATTTTGATGTAGGAGAAAGTATTCGGTTTTGGAGGTTTTGGGTTTCGGTTTTGTGTTTTATTATGTGAATGTAGGTTATTTTATTTTTAATTTT
chr9	21162821	21162941	Hypo	1 -	TCATATTCCAATAAAATACAATTATTAACAACTATCACATTCCAATAAATATAACTAAAAACATAAAAAAAAAACAATTATTAACAAATAATATTCTCAAATTTTCTCTTAAAAAAAAAC
chr9	21162821	21162941	Hypo	1 +	TTATATTTTAGTAGGATATAATTATTAATAATTATTATATTTTAATAGGTGTAGTTAAAAATATAAAAAAAAGATAGTTGTTAATAAATAGTGTTTTTAGATTTTTTTTTAAAAAGGAGT
chr9	21162816	21162936	Hypo	1 -	AAATATCATATTCCAATAAAATACAATTATTAACAACTATCACATTCCAATAAATATAACTAAAAAAAACAATTATTAACAAATAATATTCTCAAATTTTCTCTTAAAAAAAAAACACTTT
chr9	21162816	21162936	Hypo	1 +	AAGTATTATATTTTAGTAGGATATAATTATTAATAATTATTATATTTTAATAGGTGTAGTTAAAAAAGATAGTTGTTAATAAATAGTGTTTTTAGATTTTTTTTTAAAAAGGAGTATTTT
chr9	21162821	21162941	Hyper	1 -	TCATATTCCAATAAAATACAATTATTAACAACTATCACATTCCAATAAATATAACTAAAAACATAAAAAAAAAACAATTATTAACAAATAATATTCTCAAATTTTCTCTTAAAAAAAAAC
chr9	21162821	21162941	Hyper	1 +	TTATATTTTAGTAGGATATAATTATTAATAATTATTATATTTTAATAGGTGTAGTTAAAAATATAAAAAAAAGATAGTTGTTAATAAATAGTGTTTTTAGATTTTTTTTTAAAAAGGAGT
chr9	21162816	21162936	Hyper	1 -	AAATATCATATTCCAATAAAATACAATTATTAACAACTATCACATTCCAATAAATATAACTAAAAAAAACAATTATTAACAAATAATATTCTCAAATTTTCTCTTAAAAAAAAAACACTTT

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chr9	21162816	21162936	Hyper	1	+	AAGTATTATATTTTAGTAGGATATAATTATTAATAATTATTATATTTTAATAGGTGTAGTTAAAAAAGATAGTTGTTAATAAATAGTGTTTTTAGATTTTTTTTTAAAAAGGAGTATTTT
chr8	142424411	142424531	Hypo	1	-	TCCCATAAAAAAATCAAAAAAAACCAAATATAACCCTAAAATCTAAAAACCCAACCTAATAAATAAACCTAACTTCTAAAACTATAATAATAAAAAATAACTAAAACAAAAAAAATTCAC
chr8	142424411	142424531	Hypo	1	+	TTTTATGGGGAGATTAAAAGGGGTTGAGTGTGGTTTTAGGGTTTGGGGGTTTAGTTTGGTGGGTAGATTTGGTTTTTGGGATTGTAGTGGTGGAAGGTGGTTGGGGTAGGGGAGGTTTAT
chr8	142424416	142424536	Hypo	1	-	TAAAAAAATCAAAAAAAACCAAATATAACCCTAAAATCTAAAAACCCAACCTAATAAATAACCCCAAATAAACCTAACTTCTAAAACTATAATAATAAAAAATAACTAAAACAAAAAAAA
chr8	142424416	142424536	Hypo	1	+	TGGGGAGATTAAAAGGGGTTGAGTGTGGTTTTAGGGTTTGGGGGTTTAGTTTGGTGGGTGATTTTAGGTAGATTTGGTTTTTGGGATTGTAGTGGTGGAAGGTGGTTGGGGTAGGGGAGG
chr8	142424411	142424531	Hyper	1	-	TCCCATAAAAAAATCAAAAAAAACCGAATATAACCCTAAAATCTAAAAACCCAACCTAATAAATAAACCTAACTTCTAAAACTATAATAATAAAAAATAACTAAAACAAAAAAAATTCAC
chr8	142424411	142424531	Hyper	1	+	TTTTATGGGGAGATTAAAAGGGGTCGAGTGTGGTTTTAGGGTTTGGGGGTTTAGTTTGGTGGGTAGATTTGGTTTTTGGGATTGTAGTGGTGGAAGGTGGTTGGGGTAGGGGAGGTTTAT
chr8	142424416	142424536	Hyper	1	-	TAAAAAAATCAAAAAAAACCGAATATAACCCTAAAATCTAAAAACCCAACCTAATAAATAACCCCAAATAAACCTAACTTCTAAAACTATAATAATAAAAAATAACTAAAACAAAAAAAA
chr8	142424416	142424536	Hyper	1	+	TGGGGAGATTAAAAGGGGTCGAGTGTGGTTTTAGGGTTTGGGGGTTTAGTTTGGTGGGTGATTTTAGGTAGATTTGGTTTTTGGGATTGTAGTGGTGGAAGGTGGTTGGGGTAGGGGAGG
chr6	161638857	161638977	Hypo	1	-	ACAAACAACACAACTAATACCTCTACTCCCACAAAACCCTACACACACCAACTCTAAATTTATTCTTATTTAAATAACATACAAAACTCACCATCACTAAACTATAACTAAATTAAAAAA
chr6	161638857	161638977	Hypo	1	+	ATAGGTAGTATAGTTGGTGTTTTTGTTTTTGTGGGGTTTTGTATATATTAGTTTTGGGTTTGTTTTTGTTTGGATAATATGTAGAATTTATTATTATTAGATTGTGATTGGGTTGAAGGA
chr6	161638853	161638973	Hypo	1	-	ACTCACAAACAACACAACTAATACCTCTACTCCCACAAAACCCTACACACACCAACTCTAATATTTAAATAACATACAAAACTCACCATCACTAAACTATAACTAAATTAAAAAACAAAA
chr6	161638853	161638973	Hypo	1	+	ATTTATAGGTAGTATAGTTGGTGTTTTTGTTTTTGTGGGGTTTTGTATATATTAGTTTTGGTGTTTGGATAATATGTAGAATTTATTATTATTAGATTGTGATTGGGTTGAAGGATAAGG
chr6	161638857	161638977	Hyper	1	-	ACAAACAACACAACTAATACCTCTACTCCCGCGAAACCCTACACACACCAACTCTAAATTTATTCTTATTTAAATAACATACAAAACTCACCATCACTAAACTATAACTAAATTAAAAAA
chr6	161638857	161638977	Hyper	1	+	ATAGGTAGTATAGTTGGTGTTTTTGTTTTCGCGGGGTTTTGTATATATTAGTTTTGGGTTTGTTTTTGTTTGGATAATATGTAGAATTTATTATTATTAGATTGTGATTGGGTTGAAGGA
chr6	161638853	161638973	Hyper	1	-	ACTCACAAACAACACAACTAATACCTCTACTCCCGCGAAACCCTACACACACCAACTCTAATATTTAAATAACATACAAAACTCACCATCACTAAACTATAACTAAATTAAAAAACAAAA
chr6	161638853	161638973	Hyper	1	+	ATTTATAGGTAGTATAGTTGGTGTTTTTGTTTTCGCGGGGTTTTGTATATATTAGTTTTGGTGTTTGGATAATATGTAGAATTTATTATTATTAGATTGTGATTGGGTTGAAGGATAAGG
chr3	17375359	17375479	Hypo	2	-	TTTTAACTATTCACTTACAAACATAAATAAAATTTAAATTTTTCTAAACAAATAACAAAAAAAATAAACAAAAATTTTAAAAAAATAAATTCAAAAAAATAATTAAAATAATAAAACATA
chr3	17375359	17375479	Hypo	1	+	TTTTGGTTGTTTATTTATAAGTATGAGTAGGGTTTGGGTTTTTTTAAGTAAGTAATAGGGAGAATGGGTAAGGGTTTTGAGGGGATAAATTTAAAGGAGTAATTAAAATGATAAAGTATG
chr3	17375355	17375475	Hypo	1	-	TTACTTTTAACTATTCACTTACAAACATAAATAAAATTTAAATTTTTCTAAACAAATAACAAACAAAAATTTTAAAAAAATAAATTCAAAAAAATAATTAAAATAATAAAACATAAAACA
chr3	17375355	17375475	Hypo	1	+	TTATTTTTGGTTGTTTATTTATAAGTATGAGTAGGGTTTGGGTTTTTTTAAGTAAGTAATAGGTAAGGGTTTTGAGGGGATAAATTTAAAGGAGTAATTAAAATGATAAAGTATGGAATA
chr3	17375359	17375479	Hyper	2	-	TTTTAACTATTCACTTACAAACATAAATAAAATTTAAATTTTTCTAAACAAATAACAAAAAAAATAAACAAAAATTTTAAAAAAATAAATTCAAAAAAATAATTAAAATAATAAAACATA
chr3	17375359	17375479	Hyper	1	+	TTTTGGTTGTTTATTTATAAGTATGAGTAGGGTTTGGGTTTTTTTAAGTAAGTAATAGGGAGAATGGGTAAGGGTTTTGAGGGGATAAATTTAAAGGAGTAATTAAAATGATAAAGTATG
chr3	17375355	17375475	Hyper	1	-	TTACTTTTAACTATTCACTTACAAACATAAATAAAATTTAAATTTTTCTAAACAAATAACAAACAAAAATTTTAAAAAAATAAATTCAAAAAAATAATTAAAATAATAAAACATAAAACA
chr3	17375355	17375475	Hyper	1	+	TTATTTTTGGTTGTTTATTTATAAGTATGAGTAGGGTTTGGGTTTTTTTAAGTAAGTAATAGGTAAGGGTTTTGAGGGGATAAATTTAAAGGAGTAATTAAAATGATAAAGTATGGAATA
chr12	93046250	93046370	Hypo	1	-	ACTTTCATCTACTTCCAAATCAAAAAAACTAAATTTTTAATAACCTCCTAAATATTCTTAACCTAAATTCCCCAAATCATAATACTCTTAACTTTCAACCTTACTATTAAAAAATACATC
chr12	93046250	93046370	Hypo	1	+	GTTTTTATTTATTTTTAAATTGAAAAGATTAGATTTTTGGTAATTTTTTGAATATTTTTAGTTTGAATTTTTTAAATTATAGTATTTTTAGTTTTTAGTTTTATTGTTAAAAGATATATT
chr12	93046255	93046375	Hypo	1	-	CATCTACTTCCAAATCAAAAAAACTAAATTTTTAATAACCTCCTAAATATTCTTAACCATAATAACCTAAATTCCCCAAATCATAATACTCTTAACTTTCAACCTTACTATTAAAAAATA
chr12	93046255	93046375	Hypo	1	+	TATTTATTTTTAAATTGAAAAGATTAGATTTTTGGTAATTTTTTGAATATTTTTAGTTATAATAATTTGAATTTTTTAAATTATAGTATTTTTAGTTTTTAGTTTTATTGTTAAAAGATA
chr12	93046250	93046370	Hyper	1	-	ACTTTCATCTACTTCCAAATCGAAAAAACTAAATTTTTAATAACCTCCTAAATATTCTTAACCTAAATTCCCCAAATCATAATACTCTTAACTTTCAACCTTACTATTAAAAAATACATC
chr12	93046250	93046370	Hyper	1	+	GTTTTTATTTATTTTTAAATCGAAAAGATTAGATTTTTGGTAATTTTTTGAATATTTTTAGTTTGAATTTTTTAAATTATAGTATTTTTAGTTTTTAGTTTTATTGTTAAAAGATATATT
chr12	93046255	93046375	Hyper	1	-	CATCTACTTCCAAATCGAAAAAACTAAATTTTTAATAACCTCCTAAATATTCTTAACCATAATAACCTAAATTCCCCAAATCATAATACTCTTAACTTTCAACCTTACTATTAAAAAATA
chr12	93046255	93046375	Hyper	1	+	TATTTATTTTTAAATCGAAAAGATTAGATTTTTGGTAATTTTTTGAATATTTTTAGTTATAATAATTTGAATTTTTTAAATTATAGTATTTTTAGTTTTTAGTTTTATTGTTAAAAGATA
chr2	31142009	31142129	Hypo	1	-	CTTTCTACCTTTCACAAATATTTTTCTAAAATCCAATAAAATTAAAAAAAAACTTATTAACCTTCTCAAACTTCACATATTTACAAACAAATAATATATTTCTCTCACATTTCACCTAAA
chr2	31142009	31142129	Hypo	1	+	TTTTTTATTTTTTATAAATATTTTTTTAGAGTTTAATAAAGTTAAGAGGAAATTTGTTAATTTTTTTGGGTTTTATATGTTTATAAATGGATGATGTATTTTTTTTGTATTTTATTTAAG
chr2	31142013	31142133	Hypo	1	-	CTACCTTTCACAAATATTTTTCTAAAATCCAATAAAATTAAAAAAAAACTTATTAACCTAAAAACTTCTCAAACTTCACATATTTACAAACAAATAATATATTTCTCTCACATTTCACCT
chr2	31142013	31142133	Hypo	1	+	TTATTTTTTATAAATATTTTTTTAGAGTTTAATAAAGTTAAGAGGAAATTTGTTAATTTGGAGATTTTTTGGGTTTTATATGTTTATAAATGGATGATGTATTTTTTTTGTATTTTATTT
chr2	31142009	31142129	Hyper	1	-	CTTTCTACCTTTCACAAATATTTTTCTAAAATCCAATAAAATTAAAAAAAAACTTATTAACCTTCTCGAACTTCACATATTTACAAACGAATAATATATTTCTCTCGCATTTCACCTAAA
chr2	31142009	31142129	Hyper	1	+	TTTTTTATTTTTTATAAATATTTTTTTAGAGTTTAATAAAGTTAAGAGGAAATTTGTTAATTTTTTCGGGTTTTATATGTTTATAAACGGATGATGTATTTTTTTCGTATTTTATTTAAG
chr2	31142013	31142133	Hyper	1	-	CTACCTTTCACAAATATTTTTCTAAAATCCAATAAAATTAAAAAAAAACTTATTAACCTAAAAACTTCTCGAACTTCACATATTTACAAACGAATAATATATTTCTCTCGCATTTCACCT
chr2	31142013	31142133	Hyper	1	+	TTATTTTTTATAAATATTTTTTTAGAGTTTAATAAAGTTAAGAGGAAATTTGTTAATTTGGAGATTTTTCGGGTTTTATATGTTTATAAACGGATGATGTATTTTTTTCGTATTTTATTT
chr15	53945167	53945287	Hypo	1	-	CTACTATATTTCAACAACCTCTTTACTATTATTAACTATTTTTTACTAAATCACTATCCTCTATACAACCAAATCACATATAAACCTAATTTAAACTTAAAACAATTAAATAACAAAATA
chr15	53945167	53945287	Hypo	1	+	TTGTTGTGTTTTAATAGTTTTTTTGTTATTATTGATTATTTTTTGTTAGGTTATTATTTTTTGTATAATTAAGTTATATGTAAATTTGATTTGGATTTAAAGTAATTGGGTGGTGAAATA
chr15	53945164	53945284	Hypo	1	-	CTACTACTATATTTCAACAACCTCTTTACTATTATTAACTATTTTTTACTAAATCACTATCCAACCAAATCACATATAAACCTAATTTAAACTTAAAACAATTAAATAACAAAATAAATA
chr15	53945164	53945284	Hypo	1	+	TTGTTGTTGTGTTTTAATAGTTTTTTTGTTATTATTGATTATTTTTTGTTAGGTTATTATTTAATTAAGTTATATGTAAATTTGATTTGGATTTAAAGTAATTGGGTGGTGAAATAAATA
chr15	53945167	53945287	Hyper	1	-	CTACTATATTTCAACAACCTCTTTACTATTATTAACTATTTTTTACTAAATCACTATCCTCTATACAACCAAATCACATATAAACCTAATTTAAACTTAAAACAATTAAATAACGAAATA
chr15	53945167	53945287	Hyper	1	+	TTGTTGTGTTTTAATAGTTTTTTTGTTATTATTGATTATTTTTTGTTAGGTTATTATTTTTTGTATAATTAAGTTATATGTAAATTTGATTTGGATTTAAAGTAATTGGGTGGCGAAATA
chr15	53945164	53945284	Hyper	1	-	CTACTACTATATTTCAACAACCTCTTTACTATTATTAACTATTTTTTACTAAATCACTATCCAACCAAATCACATATAAACCTAATTTAAACTTAAAACAATTAAATAACGAAATAAATA
chr15	53945164	53945284	Hyper	1	+	TTGTTGTTGTGTTTTAATAGTTTTTTTGTTATTATTGATTATTTTTTGTTAGGTTATTATTTAATTAAGTTATATGTAAATTTGATTTGGATTTAAAGTAATTGGGTGGCGAAATAAATA
chr8	69536874	69536994	Hypo	1	-	TCAATATATAACTAATATACTTTAATATTTCAAAAACAATTCTAAAAAATAACAATACAACAACAAATATAAACAATTCCTACCCTCCTAAAAATTTATTTATTTATTTATTATTTTTTA
chr8	69536874	69536994	Hypo	1	+	TTAATATATAATTAGTGTGTTTTGATATTTTAAGGATAATTTTAGGAAATAGTGATATAGTAGTGAATATAGATAGTTTTTGTTTTTTTGGGAATTTATTTATTTATTTATTATTTTTTG
chr8	69536869	69536989	Hypo	2	-	TTCATTCAATATATAACTAATATACTTTAATATTTCAAAAACAATTCTAAAAAATAACAATATATAAACAATTCCTACCCTCCTAAAAATTTATTTATTTATTTATTATTTTTTAAAACA

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chr8	69536869	69536989	Hypo	2	+	TTTATTTAATATATAATTAGTGTGTTTTGATATTTTAAGGATAATTTTAGGAAATAGTGATATATAGATAGTTTTTGTTTTTTTGGGAATTTATTTATTTATTTATTATTTTTTGAAATA
chr8	69536874	69536994	Hyper	1	-	TCAATATATAACTAATATACTTTAATATTTCAAAAACAATTCTAAAAAATAACGATACAACAACGAATATAAACAATTCCTACCCTCCTAAAAATTTATTTATTTATTTATTATTTTTTA
chr8	69536874	69536994	Hyper	1	+	TTAATATATAATTAGTGTGTTTTGATATTTTAAGGATAATTTTAGGAAATAGCGATATAGTAGCGAATATAGATAGTTTTTGTTTTTTTGGGAATTTATTTATTTATTTATTATTTTTTG
chr8	69536869	69536989	Hyper	2	-	TTCATTCAATATATAACTAATATACTTTAATATTTCAAAAACAATTCTAAAAAATAACGATATATAAACAATTCCTACCCTCCTAAAAATTTATTTATTTATTTATTATTTTTTAAAACA
chr8	69536869	69536989	Hyper	2	+	TTTATTTAATATATAATTAGTGTGTTTTGATATTTTAAGGATAATTTTAGGAAATAGCGATATATAGATAGTTTTTGTTTTTTTGGGAATTTATTTATTTATTTATTATTTTTTGAAATA
chr10	120791720	120791840	Hypo	1	-	CCACAACAAATTAACTCAATCAAAAACCTTCATTTAAAAATATATTAAAAAATAAAATAAATACCCAATAACTATCTTTTTAATAAAAAAAAAAATACATTTCAAAAACTTAAAAAACAA
chr10	120791720	120791840	Hypo	1	+	TTATAGTAAATTGATTTAATTAGGAATTTTTATTTGAAGGTGTGTTAGAGGATGGGGTAAATATTTGATAGTTGTTTTTTTGGTGAAAGAAAAGGTGTATTTTAAGAATTTGGGGGGTAG
chr10	120791717	120791837	Hypo	1	-	CATCCACAACAAATTAACTCAATCAAAAACCTTCATTTAAAAATATATTAAAAAATAAAATCAATAACTATCTTTTTAATAAAAAAAAAAATACATTTCAAAAACTTAAAAAACAAAAAA
chr10	120791717	120791837	Hypo	1	+	TATTTATAGTAAATTGATTTAATTAGGAATTTTTATTTGAAGGTGTGTTAGAGGATGGGGTTGATAGTTGTTTTTTTGGTGAAAGAAAAGGTGTATTTTAAGAATTTGGGGGGTAGGAGG
chr10	120791720	120791840	Hyper	1	-	CCACAACAAATTAACTCAATCAAAAACCTTCATTTAAAAATATATTAAAAAATAAAATAAATACCCGATAACTATCTTTTTAATAAAAAAAAAAATACATTTCAAAAACTTAAAAAACAA
chr10	120791720	120791840	Hyper	1	+	TTATAGTAAATTGATTTAATTAGGAATTTTTATTTGAAGGTGTGTTAGAGGATGGGGTAAATATTCGATAGTTGTTTTTTTGGTGAAAGAAAAGGTGTATTTTAAGAATTTGGGGGGTAG
chr10	120791717	120791837	Hyper	1	-	CATCCACAACAAATTAACTCAATCAAAAACCTTCATTTAAAAATATATTAAAAAATAAAATCGATAACTATCTTTTTAATAAAAAAAAAAATACATTTCAAAAACTTAAAAAACAAAAAA
chr10	120791717	120791837	Hyper	1	+	TATTTATAGTAAATTGATTTAATTAGGAATTTTTATTTGAAGGTGTGTTAGAGGATGGGGTCGATAGTTGTTTTTTTGGTGAAAGAAAAGGTGTATTTTAAGAATTTGGGGGGTAGGAGG
chrX	5996709	5996829	Hypo	1	-	TAAACTACAATACTAATAACTTTTAAATTCTATTAAAACCATTCCTAAATATAACCCTATTACTCACTAAAAAATAATTACAAAATAATTAATCAAAATAATTAAATAACAAATAATATA
chrX	5996709	5996829	Hypo	1	+	TAAATTATAATATTGATAATTTTTAAATTTTATTAAAATTATTTTTGAGTGTGGTTTTATTATTTATTAAGGAATGGTTGTAGGGTAGTTGATTAAGGTAATTAGATGGTAAGTGATATG
chrX	5996704	5996824	Hypo	1	-	ACAATTAAACTACAATACTAATAACTTTTAAATTCTATTAAAACCATTCCTAAATATAACCCTAAAAAATAATTACAAAATAATTAATCAAAATAATTAAATAACAAATAATATAATCTA
chrX	5996704	5996824	Hypo	1	+	ATAATTAAATTATAATATTGATAATTTTTAAATTTTATTAAAATTATTTTTGAGTGTGGTTTTAAGGAATGGTTGTAGGGTAGTTGATTAAGGTAATTAGATGGTAAGTGATATGGTTTG
chrX	5996709	5996829	Hyper	1	-	TAAACTACAATACTAATAACTTTTAAATTCTATTAAAACCATTCCTAAATATAACCCTATTACTCACTAAAAAATAATTACAAAATAATTAATCAAAATAATTAAATAACAAATAATATA
chrX	5996709	5996829	Hyper	1	+	TAAATTATAATATTGATAATTTTTAAATTTTATTAAAATTATTTTTGAGTGTGGTTTTATTATTTATTAAGGAATGGTTGTAGGGTAGTTGATTAAGGTAATTAGATGGTAAGTGATATG
chrX	5996704	5996824	Hyper	1	-	ACAATTAAACTACAATACTAATAACTTTTAAATTCTATTAAAACCATTCCTAAATATAACCCTAAAAAATAATTACAAAATAATTAATCAAAATAATTAAATAACAAATAATATAATCTA
chrX	5996704	5996824	Hyper	1	+	ATAATTAAATTATAATATTGATAATTTTTAAATTTTATTAAAATTATTTTTGAGTGTGGTTTTAAGGAATGGTTGTAGGGTAGTTGATTAAGGTAATTAGATGGTAAGTGATATGGTTTG
chr12	125926795	125926915	Hypo	1	-	CAAAAAATATATAAAATAAAAAACCAACAAATAATTTAAATTTTATATCAACTAATAACCATAAAATCAAAAATTTAAATATTATCCACTCATTAAAAAATATTTTATAATCTCCTAAAA
chr12	125926795	125926915	Hypo	1	+	TAGGAAATATATGAAATAGGGAATTAATAGATAGTTTAAATTTTATGTTAGTTAGTGATTATAGGATTAGGAATTTGAATATTATTTATTTATTGGGGGATGTTTTGTGATTTTTTGGAA
chr12	125926800	125926920	Hypo	1	-	AATATATAAAATAAAAAACCAACAAATAATTTAAATTTTATATCAACTAATAACCATAATAATTCCTAAAATCAAAAATTTAAATATTATCCACTCATTAAAAAATATTTTATAATCTCC
chr12	125926800	125926920	Hypo	1	+	AATATATGAAATAGGGAATTAATAGATAGTTTAAATTTTATGTTAGTTAGTGATTATAGTGATTTTTAGGATTAGGAATTTGAATATTATTTATTTATTGGGGGATGTTTTGTGATTTTT
chr12	125926795	125926915	Hyper	1	-	CAAAAAATATATAAAATAAAAAACCAACAAATAATTTAAATTTTATATCAACTAATAACCATAAAATCAAAAATTTAAATATTATCCACTCATTAAAAAATATTTTATAATCTCCTAAAA
chr12	125926795	125926915	Hyper	1	+	TAGGAAATATATGAAATAGGGAATTAATAGATAGTTTAAATTTTATGTTAGTTAGTGATTATAGGATTAGGAATTTGAATATTATTTATTTATTGGGGGATGTTTTGTGATTTTTTGGAA
chr12	125926800	125926920	Hyper	1	-	AATATATAAAATAAAAAACCAACAAATAATTTAAATTTTATATCAACTAATAACCATAATAATTCCTAAAATCAAAAATTTAAATATTATCCACTCATTAAAAAATATTTTATAATCTCC
chr12	125926800	125926920	Hyper	1	+	AATATATGAAATAGGGAATTAATAGATAGTTTAAATTTTATGTTAGTTAGTGATTATAGTGATTTTTAGGATTAGGAATTTGAATATTATTTATTTATTGGGGGATGTTTTGTGATTTTT
chr5	137787235	137787355	Hypo	1	-	CTAATCTCCACATCCTAAAATCCCATAATATTCTTACAAAAACTAAAAATAAAACTCCTCAATAATCTACCTTTCCCTAACCTTTTTCCCAAATTAACCCTACCAACCCTACATCCCCTA
chr5	137787235	137787355	Hypo	1	+	TTAGTTTTTATATTTTGGAATTTTATAGTATTTTTGTAGGGGTTGGGGGTGAGGTTTTTTAATGATTTATTTTTTTTTGATTTTTTTTTTAAGTTGATTTTATTAGTTTTGTATTTTTTA
chr5	137787231	137787351	Hypo	1	-	ATCCCTAATCTCCACATCCTAAAATCCCATAATATTCTTACAAAAACTAAAAATAAAACTCCTACCTTTCCCTAACCTTTTTCCCAAATTAACCCTACCAACCCTACATCCCCTATAAAT
chr5	137787231	137787351	Hypo	2	+	GTTTTTAGTTTTTATATTTTGGAATTTTATAGTATTTTTGTAGGGGTTGGGGGTGAGGTTTTTATTTTTTTTTTGATTTTTTTTTTAAGTTGATTTTATTAGTTTTGTATTTTTTATGAAT
chr5	137787235	137787355	Hyper	1	-	CTAATCTCCACATCCTAAAATCCCATAATATTCTTACAAAAACTAAAAATAAAACTCCTCAATAATCTACCTTTCCCTAACCTTTTTCCCAAATTAACCCTACCAACCCTACATCCCCTA
chr5	137787235	137787355	Hyper	1	+	TTAGTTTTTATATTTTGGAATTTTATAGTATTTTTGTAGGGGTTGGGGGTGAGGTTTTTTAATGATTTATTTTTTTTTGATTTTTTTTTTAAGTTGATTTTATTAGTTTTGTATTTTTTA
chr5	137787231	137787351	Hyper	1	-	ATCCCTAATCTCCACATCCTAAAATCCCATAATATTCTTACAAAAACTAAAAATAAAACTCCTACCTTTCCCTAACCTTTTTCCCAAATTAACCCTACCAACCCTACATCCCCTATAAAT
chr5	137787231	137787351	Hyper	2	+	GTTTTTAGTTTTTATATTTTGGAATTTTATAGTATTTTTGTAGGGGTTGGGGGTGAGGTTTTTATTTTTTTTTTGATTTTTTTTTTAAGTTGATTTTATTAGTTTTGTATTTTTTATGAAT
chr5	63284015	63284135	Hypo	1	-	TTTAAACTCTACCCCTCAAACCAAACTTCCTATCAAAAAATTAATACCCAAAACAACAAAAAATTCTACCTAAAACAAAAAACCAAACTTCACAATCAAACACTCCCCAACAACCACCAT
chr5	63284015	63284135	Hypo	1	+	TTTGGGTTTTGTTTTTTAGATTAAATTTTTTGTTAGGGAGTTGGTGTTTAAGATAGTAAGAAATTTTATTTAAAATAAGAGATTAAATTTTATAGTTAGGTATTTTTTAATAATTATTAT
chr5	63284019	63284139	Hypo	1	-	AACTCTACCCCTCAAACCAAACTTCCTATCAAAAAATTAATACCCAAAACAACAAAAAACATTTAATTCTACCTAAAACAAAAAACCAAACTTCACAATCAAACACTCCCCAACAACCAC
chr5	63284019	63284139	Hypo	1	+	GGTTTTGTTTTTTAGATTAAATTTTTTGTTAGGGAGTTGGTGTTTAAGATAGTAAGAAATATTTAATTTTATTTAAAATAAGAGATTAAATTTTATAGTTAGGTATTTTTTAATAATTAT
chr5	63284015	63284135	Hyper	1	-	TTTAAACTCTACCCCTCAAACCAAACTTCCTATCAAAAAATTAATACCCAAAACAACAAAAAATTCTACCTAAAACAAAAAACCAAACTTCACAATCAAACACTCCCCAACAACCACCAT
chr5	63284015	63284135	Hyper	1	+	TTTGGGTTTTGTTTTTTAGATTAAATTTTTTGTTAGGGAGTTGGTGTTTAAGATAGTAAGAAATTTTATTTAAAATAAGAGATTAAATTTTATAGTTAGGTATTTTTTAATAATTATTAT
chr5	63284019	63284139	Hyper	1	-	AACTCTACCCCTCAAACCAAACTTCCTATCAAAAAATTAATACCCAAAACAACAAAAAACATTTAATTCTACCTAAAACAAAAAACCAAACTTCACAATCAAACACTCCCCAACAACCAC
chr5	63284019	63284139	Hyper	1	+	GGTTTTGTTTTTTAGATTAAATTTTTTGTTAGGGAGTTGGTGTTTAAGATAGTAAGAAATATTTAATTTTATTTAAAATAAGAGATTAAATTTTATAGTTAGGTATTTTTTAATAATTAT
chr8	51545663	51545783	Hypo	1	-	TAATCAAATTATTCCTTCAACCAAACTATAAAACTATCTTCCATTTCATTACCTATTAATATAAAATAATTTAAAAAAAAAATATAAAAAAAAAATTAAAAAATAAATTCAAAAACAACT
chr8	51545663	51545783	Hypo	2	+	TGATTAAATTGTTTTTTTAATTAGGTTATAAAGTTGTTTTTTATTTTATTGTTTATTAATGTGGAGTAATTTGAGAAAAGGGTATAGGAAGAGAATTGAAAAGTAAGTTTAAAAATAGTT
chr8	51545658	51545778	Hypo	1	-	TATATTAATCAAATTATTCCTTCAACCAAACTATAAAACTATCTTCCATTTCATTACCTATTAATTTAAAAAAAAAATATAAAAAAAAAATTAAAAAATAAATTCAAAAACAACTTTCTA
chr8	51545658	51545778	Hypo	2	+	TATATTGATTAAATTGTTTTTTTAATTAGGTTATAAAGTTGTTTTTTATTTTATTGTTTATTAATTTGAGAAAAGGGTATAGGAAGAGAATTGAAAAGTAAGTTTAAAAATAGTTTTTTG
chr8	51545663	51545783	Hyper	1	-	TAATCAAATTATTCCTTCAACCAAACTATAAAACTATCTTCCATTTCATTACCTATTAATATAAAATAATTTAAAAAAAAAATATAAAAAAAAAATTAAAAAATAAATTCAAAAACAACT
chr8	51545663	51545783	Hyper	2	+	TGATTAAATTGTTTTTTTAATTAGGTTATAAAGTTGTTTTTTATTTTATTGTTTATTAATGTGGAGTAATTTGAGAAAAGGGTATAGGAAGAGAATTGAAAAGTAAGTTTAAAAATAGTT
chr8	51545658	51545778	Hyper	1	-	TATATTAATCAAATTATTCCTTCAACCAAACTATAAAACTATCTTCCATTTCATTACCTATTAATTTAAAAAAAAAATATAAAAAAAAAATTAAAAAATAAATTCAAAAACAACTTTCTA

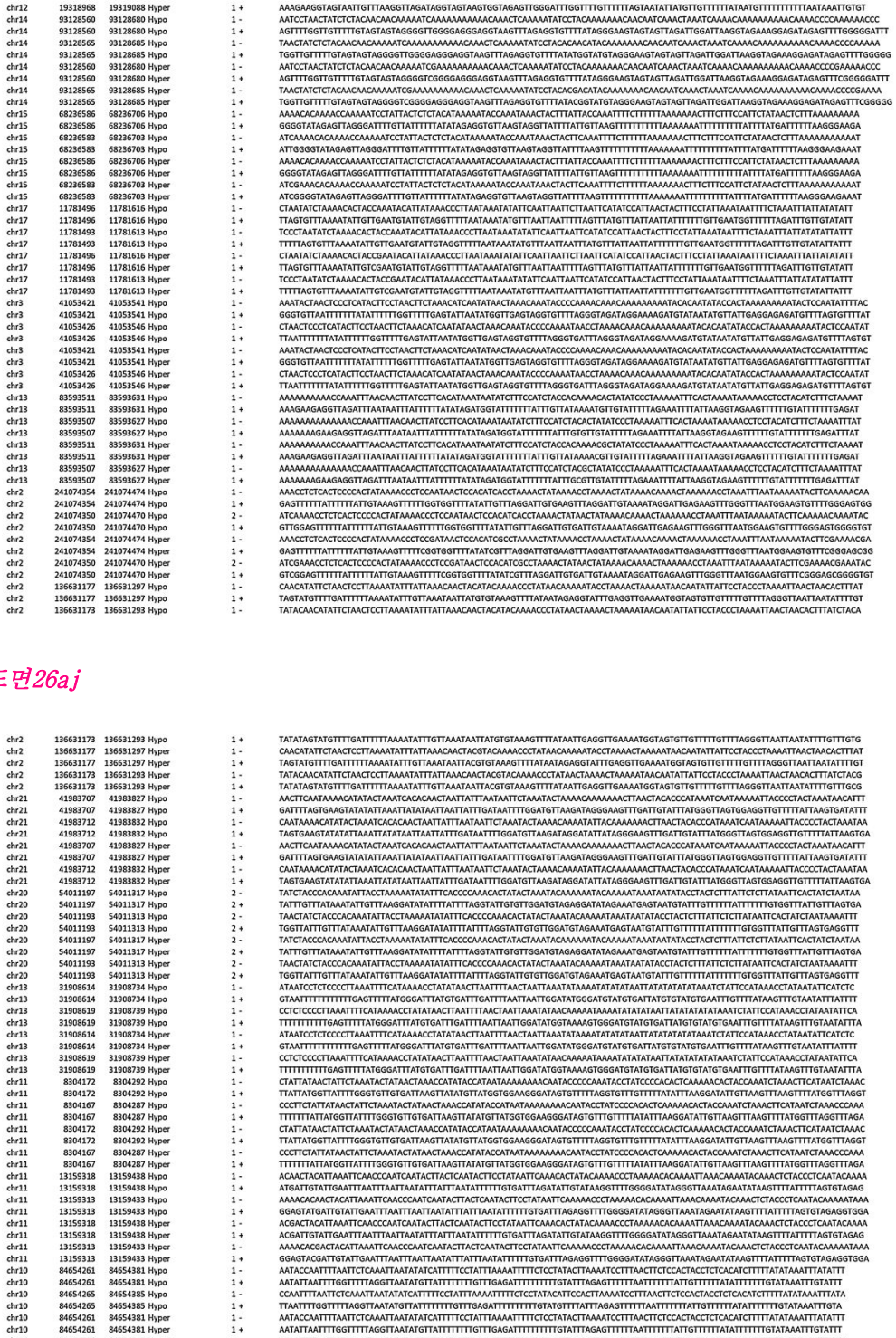
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chr8	51545658	51545778	Hyper	2	+	TATATTGATTAAATTGTTTTTTTAATTAGGTTATAAAGTTGTTTTTTATTTTATTGTTTATTAATTTGAGAAAAGGGTATAGGAAGAGAATTGAAAAGTAAGTTTAAAAATAGTTTTTTG
chrX	128453220	128453340	Hypo	1	-	CTATATTCTAATTCTTCAACTACCAAAACATAATAATTATTAACAACCCAACACAACAAACATCTTAAAAAATATAAAACTCAAAATAACTTTATAATTAACCCCTTAATCAATAATATC
chrX	128453220	128453340	Hypo	1	+	TTATATTTTAGTTTTTTAGTTGTTAAAATATGATAATTATTAGTAGTTTAGTATAATAAATATTTTGGGAAATGTGGGATTTAGAATAGTTTTGTAATTGGTTTTTTAGTTAATGATGTT
chrX	128453225	128453345	Hypo	1	-	TTCTAATTCTTCAACTACCAAAACATAATAATTATTAACAACCCAACACAACAAACTACCCTAATATCTTAAAAAATATAAAACTCAAAATAACTTTATAATTAACCCCTTAATCAATAA
chrX	128453225	128453345	Hypo	1	+	TTTTAGTTTTTTAGTTGTTAAAATATGATAATTATTAGTAGTTTAGTATAATAAATTGTTTTGATATTTTGGGAAATGTGGGATTTAGAATAGTTTTGTAATTGGTTTTTTAGTTAATGA
chrX	128453220	128453340	Hyper	1	-	CTATATTCTAATTCTTCAACTACCAAAACATAATAATTATTAACAACCCAACACAACAAACATCTTAAAAAATATAAAACTCAAAATAACTTTATAATTAACCCCTTAATCAATAATATC
chrX	128453220	128453340	Hyper	1	+	TTATATTTTAGTTTTTTAGTTGTTAAAATATGATAATTATTAGTAGTTTAGTATAATAAATATTTTGGGAAATGTGGGATTTAGAATAGTTTTGTAATTGGTTTTTTAGTTAATGATGTT
chrX	128453225	128453345	Hyper	1	-	TTCTAATTCTTCAACTACCAAAACATAATAATTATTAACAACCCAACACAACAAACTACCCTAATATCTTAAAAAATATAAAACTCAAAATAACTTTATAATTAACCCCTTAATCAATAA
chrX	128453225	128453345	Hyper	1	+	TTTTAGTTTTTTAGTTGTTAAAATATGATAATTATTAGTAGTTTAGTATAATAAATTGTTTTGATATTTTGGGAAATGTGGGATTTAGAATAGTTTTGTAATTGGTTTTTTAGTTAATGA
chr16	11659616	11659736	Hypo	1	-	ATCACAAACATACTCTTTCTTCCATCTACCTCCTTCCTAATAAATCTAACAAATTCCACTTAACTTACATATCACCTCCTCCAAAAAACCCTCTCTACTTACCCCCAAAAAAATTCATTC
chr16	11659616	11659736	Hypo	1	+	GTTATGGGTATGTTTTTTTTTTTGTTTGTTTTTTTTTTGATGGGTTTGGTAAATTTTGTTTAGTTTGTGTGTTATTTTTTTTAAGAAGTTTTTTTTGTTTGTTTTTGGGAGAATTTATTT
chr16	11659621	11659741	Hypo	1	-	AAACATACTCTTTCTTCCATCTACCTCCTTCCTAATAAATCTAACAAATTCCACTTATCATATCCCAACTTACATATCACCTCCTCCAAAAAACCCTCTCTACTTACCCCCAAAAAAATT
chr16	11659621	11659741	Hypo	2	+	GGGTATGTTTTTTTTTTTGTTTGTTTTTTTTTTGATGGGTTTGGTAAATTTTGTTTATTATATTTTAGTTTGTGTGTTATTTTTTTTAAGAAGTTTTTTTTGTTTGTTTTTGGGAGAATT
chr16	11659616	11659736	Hyper	1	-	ATCACGAACATACTCTTTCTTCCGTCTACCTCCTTCCTAATAAATCTAACAAATTCCGCTTAACTTACGTATCACCTCCTCCAAAAAACCCTCTCTACTTACCCCCGAAAAAAATTCATTC
chr16	11659616	11659736	Hyper	1	+	GTTACGGGTATGTTTTTTTTTTCGTTTGTTTTTTTTTTGATGGGTTTGGTAAATTTCGTTTAGTTTGCGTGTTATTTTTTTTAAGAAGTTTTTTTTGTTTGTTTTCGGGAGAATTTATTT
chr16	11659621	11659741	Hyper	1	-	AAACATACTCTTTCTTCCGTCTACCTCCTTCCTAATAAATCTAACAAATTCCGCTTATCATATCCCAACTTACGTATCACCTCCTCCAAAAAACCCTCTCTACTTACCCCCGAAAAAAATT
chr16	11659621	11659741	Hyper	2	+	GGGTATGTTTTTTTTTTCGTTTGTTTTTTTTTTGATGGGTTTGGTAAATTTCGTTTATTATATTTTAGTTTGCGTGTTATTTTTTTTAAGAAGTTTTTTTTGTTTGTTTTCGGGAGAATT
chr5	10634405	10634525	Hypo	1	-	CTAAATCACTTATAACCCTCTCTTAAACAAAATAAAACTTATTAATAAAAAAAAAAATATTCTAAAATTCTCTAAATAAACCTACCCTTTAAAAAAACTTCTCTAAAAATTTCAAAAACCA
chr5	10634405	10634525	Hypo	1	+	TTGGGTTATTTGTGATTTTTTTTTAAGTAGGGTAGGGTTTATTGGTGGAGAGGGGGTGTTTTGGGGTTTTTTAGGTGAATTTATTTTTTAAAAGGGTTTTTTTGAGGATTTTAGGAATTA
chr5	10634401	10634521	Hypo	1	-	CTCCCTAAATCACTTATAACCCTCTCTTAAACAAAATAAAACTTATTAATAAAAAAAAAAATATTCTCTAAATAAACCTACCCTTTAAAAAAACTTCTCTAAAAATTTCAAAAACCAAATC
chr5	10634401	10634521	Hypo	1	+	TTTTTTGGGTTATTTGTGATTTTTTTTTAAGTAGGGTAGGGTTTATTGGTGGAGAGGGGGTGTTTTTTAGGTGAATTTATTTTTTAAAAGGGTTTTTTTGAGGATTTTAGGAATTAAGTT
chr5	10634405	10634525	Hyper	1	-	CTAAATCACTTATAACCCTCTCTTAAACAAAATAAAACTTATTAATAAAAAAAAAAATATTCTAAAATTCTCTAAATAAACCTACCCTTTAAAAAAACTTCTCTAAAAATTTCAAAAACCA
chr5	10634405	10634525	Hyper	1	+	TTGGGTTATTTGTGATTTTTTTTTAAGTAGGGTAGGGTTTATTGGTGGAGAGGGGGTGTTTTGGGGTTTTTTAGGTGAATTTATTTTTTAAAAGGGTTTTTTTGAGGATTTTAGGAATTA
chr5	10634401	10634521	Hyper	1	-	CTCCCTAAATCACTTATAACCCTCTCTTAAACAAAATAAAACTTATTAATAAAAAAAAAAATATTCTCTAAATAAACCTACCCTTTAAAAAAACTTCTCTAAAAATTTCAAAAACCAAATC
chr5	10634401	10634521	Hyper	1	+	TTTTTTGGGTTATTTGTGATTTTTTTTTAAGTAGGGTAGGGTTTATTGGTGGAGAGGGGGTGTTTTTTAGGTGAATTTATTTTTTAAAAGGGTTTTTTTGAGGATTTTAGGAATTAAGTT
chr6	137253365	137253485	Hypo	1	-	TTCAAAAAATAAACTAAAATATAAAAAAACTACATAACTTACCCTAAATATTATAACTAATAACTTAAAAATCTAAAATTTAACATAAACCCTAATAATCTAACTTCAAAACCCATATTT
chr6	137253365	137253485	Hypo	1	+	TTTAAGGGGTAAATTGAAGTATGGAGGGGTTATATAATTTGTTTTAGGTGTTATAGTTAGTAATTTGGAGGTTTGGGATTTGATGTGAATTTTGGTAGTTTGGTTTTAGGGTTTATGTTT
chr6	137253361	137253481	Hypo	1	-	ATCATTCAAAAAATAAACTAAAATATAAAAAAACTACATAACTTACCCTAAATATTATAACTAAAAATCTAAAATTTAACATAAACCCTAATAATCTAACTTCAAAACCCATATTTCCCC
chr6	137253361	137253481	Hypo	1	+	ATTATTTAAGGGGTAAATTGAAGTATGGAGGGGTTATATAATTTGTTTTAGGTGTTATAGTTGGAGGTTTGGGATTTGATGTGAATTTTGGTAGTTTGGTTTTAGGGTTTATGTTTTTTT
chr6	137253365	137253485	Hyper	1	-	TTCAAAAAATAAACTAAAATATAAAAAAACTACATAACTTACCCTAAATATTATAACTAATAACTTAAAAATCTAAAATTTAACGTAAACCCTAATAATCTAACTTCAAAACCCATATTT
chr6	137253365	137253485	Hyper	1	+	TTTAAGGGGTAAATTGAAGTATGGAGGGGTTATATAATTTGTTTTAGGTGTTATAGTTAGTAATTTGGAGGTTTGGGATTTGACGTGAATTTTGGTAGTTTGGTTTTAGGGTTTATGTTT
chr6	137253361	137253481	Hyper	1	-	ATCATTCAAAAAATAAACTAAAATATAAAAAAACTACATAACTTACCCTAAATATTATAACTAAAAATCTAAAATTTAACGTAAACCCTAATAATCTAACTTCAAAACCCATATTTCCCC
chr6	137253361	137253481	Hyper	1	+	ATTATTTAAGGGGTAAATTGAAGTATGGAGGGGTTATATAATTTGTTTTAGGTGTTATAGTTGGAGGTTTGGGATTTGACGTGAATTTTGGTAGTTTGGTTTTAGGGTTTATGTTTTTTT
chr2	159492381	159492501	Hypo	1	-	TTAAAAACTCATAACAACTATTAATTTTTAATTTTAAAAATAACAATTTAAAATAATTCACTACAAATTTTATTCACTTATAAACCTTTATTATTAATACTACATTACAATTAACCTAAA
chr2	159492381	159492501	Hypo	1	+	TTAAAAGTTTATGATAATTGTTAATTTTTAGTTTTGAAAATAGTAATTTGAAGTAATTTATTATAAGTTTTATTTATTTGTAAGTTTTTATTATTAATGTTATATTATAGTTGGTTTGAA
chr2	159492377	159492497	Hypo	1	-	AAAATTAAAAACTCATAACAACTATTAATTTTTAATTTTAAAAATAACAATTTAAAATAATAATTTTATTCACTTATAAACCTTTATTATTAATACTACATTACAATTAACCTAAAAAAT
chr2	159492377	159492497	Hypo	1	+	AAAATTAAAAGTTTATGATAATTGTTAATTTTTAGTTTTGAAAATAGTAATTTGAAGTAATAGTTTTATTTATTTGTAAGTTTTTATTATTAATGTTATATTATAGTTGGTTTGAAAAAT
chr2	159492381	159492501	Hyper	1	-	TTAAAAACTCATAACAACTATTAATTTTTAATTTTAAAAATAACAATTTAAAATAATTCACTACAAATTTTATTCACTTATAAACCTTTATTATTAATACTACATTACAATTAACCTAAA
chr2	159492381	159492501	Hyper	1	+	TTAAAAGTTTATGATAATTGTTAATTTTTAGTTTTGAAAATAGTAATTTGAAGTAATTTATTATAAGTTTTATTTATTTGTAAGTTTTTATTATTAATGTTATATTATAGTTGGTTTGAA
chr2	159492377	159492497	Hyper	1	-	AAAATTAAAAACTCATAACAACTATTAATTTTTAATTTTAAAAATAACAATTTAAAATAATAATTTTATTCACTTATAAACCTTTATTATTAATACTACATTACAATTAACCTAAAAAAT
chr2	159492377	159492497	Hyper	1	+	AAAATTAAAAGTTTATGATAATTGTTAATTTTTAGTTTTGAAAATAGTAATTTGAAGTAATAGTTTTATTTATTTGTAAGTTTTTATTATTAATGTTATATTATAGTTGGTTTGAAAAAT
chr8	90137030	90137150	Hypo	1	-	CTTCATCATATAACAAAATTAAATAATCATACAATATCAATATCATATAACATAAAAAAACAATATCTCTTCAAAAATAAAAAATAACTAATATACATCACATAAATAAATATAAACATA
chr8	90137030	90137150	Hypo	1	+	TTTTATTATATATAATAGAGTTGGATAGTTATATAATATTAATGTTATATAATATGAGAAAGTAGTGTTTTTTTAAAAGTAAGGAATGATTAATGTGTATTATGTGAATAGATGTGGGTATG
chr8	90137035	90137155	Hypo	1	-	TCATATAACAAAATTAAATAATCATACAATATCAATATCATATAACATAAAAAAACATATTTTAAAATATCTCTTCAAAAATAAAAAATAACTAATATACATCACATAAATAAATATAAA
chr8	90137035	90137155	Hypo	1	+	TTATATAATAGAGTTGGATAGTTATATAATATTAATGTTATATAATATGAGAAAGTATGTTTTGAAGTGTTTTTTTAAAAGTAAGGAATGATTAATGTGTATTATGTGAATAGATGTGGG
chr8	90137030	90137150	Hyper	1	-	CTTCATCATATAACAAAATTAAATAATCATACAATATCAATATCATATAACATAAAAAAACAATATCTCTTCAAAAATAAAAAATAACTAATATACATCACGTAAATAAATATAAACATA
chr8	90137030	90137150	Hyper	1	+	TTTTATTATATATAATAGAGTTGGATAGTTATATAATATTAATGTTATATAATATGAGAAAGTAGTGTTTTTTTAAAAGTAAGGAATGATTAATGTGTATTACGTGAATAGATGTGGGTATG
chr8	90137035	90137155	Hyper	1	-	TCATATAACAAAATTAAATAATCATACAATATCAATATCATATAACATAAAAAAACATATTTTAAAATATCTCTTCAAAAATAAAAAATAACTAATATACATCACGTAAATAAATATAAA
chr8	90137035	90137155	Hyper	1	+	TTATATAATAGAGTTGGATAGTTATATAATATTAATGTTATATAATATGAGAAAGTATGTTTTGAAGTGTTTTTTTAAAAGTAAGGAATGATTAATGTGTATTACGTGAATAGATGTGGG
chr13	41835449	41835569	Hypo	1	-	ACAATACCAAAACTTCATCTCAAAAAAAAAAAAAAATTCAACTACCTACAAAAAAAACATAATTCTTCAAATATATAAATAACATATTAAAATAAATAAAAACAACACTACTTCCTACCTA
chr13	41835449	41835569	Hypo	1	+	ATAATATTAAGATTTTGTTTTAAAAAAAAAAAAAAATTTAGTTGTTTATAGAAAGAATATAATTTTTTAAATGTATGAATAATATATTAAAATAAATAAAAATAGTATTGTTTTTTATTTG
chr13	41835445	41835565	Hypo	1	-	AAAAACAATACCAAAACTTCATCTCAAAAAAAAAAAAAAATTCAACTACCTACAAAAAAAACCAAATATATAAATAACATATTAAAATAAATAAAAACAACACTACTTCCTACCTATTCAA

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chr13	41835445	41835565	Hypo	1	+	GGGGATAATATTAAGATTTTGTTTTAAAAAAAAAAAAAAATTTAGTTGTTTATAGAAAGAATTAAATGTATGAATAATATATTAAAATAAATAAAAATAGTATTGTTTTTTATTTGTTTAA
chr13	41835449	41835569	Hyper	1	-	ACAATACCAAAACTTCGTCTCAAAAAAAAAAAAAAATTCAACTACCTACAAAAAAAACATAATTCTTCAAATATATAAATAACATATTAAAATAAATAAAAACAACACTACTTCCTACCTA
chr13	41835449	41835569	Hyper	1	+	ATAATATTAAGATTTCGTTTTAAAAAAAAAAAAAAATTTAGTTGTTTATAGAAAGAATATAATTTTTTAAATGTATGAATAATATATTAAAATAAATAAAAATAGTATTGTTTTTTATTTG
chr13	41835445	41835565	Hyper	1	-	AAAAACAATACCAAAACTTCGTCTCAAAAAAAAAAAAAAATTCAACTACCTACAAAAAAAACCAAATATATAAATAACATATTAAAATAAATAAAAACAACACTACTTCCTACCTATTCAA
chr13	41835445	41835565	Hyper	1	+	GGGGATAATATTAAGATTTCGTTTTAAAAAAAAAAAAAAATTTAGTTGTTTATAGAAAGAATTAAATGTATGAATAATATATTAAAATAAATAAAAATAGTATTGTTTTTTATTTGTTTAA
chr2	117855153	117855273	Hypo	1	-	TAACAAAACACATAAACCTCAAAAAAACATTAAACTTAATCATTACCCCAAAAACTATAAAATTACTAATTAACTAATACATTCTATCAAAACCACATAAATCCAAACTAATTAAAATAC
chr2	117855153	117855273	Hypo	1	+	TAATAGAATATGTGGATTTTAAAAGAATATTGAATTTAATTATTGTTTTAAAGGTTATAAAATTGTTAATTAATTGATATATTTTATTAGAATTATGTAAGTTTGAGTTAATTAAAATGT
chr2	117855158	117855278	Hypo	1	-	AAACACATAAACCTCAAAAAAACATTAAACTTAATCATTACCCCAAAAACTATAAAATATTTTAATATTACTAATTAACTAATACATTCTATCAAAACCACATAAATCCAAACTAATTAA
chr2	117855158	117855278	Hypo	1	+	GAATATGTGGATTTTAAAAGAATATTGAATTTAATTATTGTTTTAAAGGTTATAAAATATTTTAATATTGTTAATTAATTGATATATTTTATTAGAATTATGTAAGTTTGAGTTAATTAA
chr2	117855153	117855273	Hyper	1	-	TAACAAAACACGTAAACCTCAAAAAAACATTAAACTTAATCATTACCCCAAAAACTATAAAATTACTAATTAACTAATACATTCTATCAAAACCACGTAAATCCGAACTAATTAAAATAC
chr2	117855153	117855273	Hyper	1	+	TAATAGAATACGTGGATTTTAAAAGAATATTGAATTTAATTATTGTTTTAAAGGTTATAAAATTGTTAATTAATTGATATATTTTATTAGAATTACGTAAGTTCGAGTTAATTAAAATGT
chr2	117855158	117855278	Hyper	1	-	AAACACGTAAACCTCAAAAAAACATTAAACTTAATCATTACCCCAAAAACTATAAAATATTTTAATATTACTAATTAACTAATACATTCTATCAAAACCACGTAAATCCGAACTAATTAA
chr2	117855158	117855278	Hyper	1	+	GAATACGTGGATTTTAAAAGAATATTGAATTTAATTATTGTTTTAAAGGTTATAAAATATTTTAATATTGTTAATTAATTGATATATTTTATTAGAATTACGTAAGTTCGAGTTAATTAA
chr15	98663228	98663348	Hypo	1	-	CCCCATACCTATAACAATCAAAACTCCATTTACCACCAAAAATAAACTTTCATTACCATCTAATCCAACTCCAAAATCCCATTTTAAAATCTACTTCCTCATCCCACTACTAACATCAAC
chr15	98663228	98663348	Hypo	1	+	TTTTATGTTTGTAGTAATTAGGATTTTATTTATTATTAGGAATGGGTTTTTATTATTATTTGATTTAGTTTTAAAATTTTATTTTAAAATTTGTTTTTTTATTTTATTGTTGGTATTAAT
chr15	98663233	98663353	Hypo	1	-	TACCTATAACAATCAAAACTCCATTTACCACCAAAAATAAACTTTCATTACCATCTAACTAAAAAAAATCCAACTCCAAAATCCCATTTTAAAATCTACTTCCTCATCCCACTACTAACA
chr15	98663233	98663353	Hypo	1	+	TGTTTGTAGTAATTAGGATTTTATTTATTATTAGGAATGGGTTTTTATTATTATTTGATTAGGGGGGATTTAGTTTTAAAATTTTATTTTAAAATTTGTTTTTTTATTTTATTGTTGGTA
chr15	98663228	98663348	Hyper	1	-	CCCCATACCTATAACAATCAAAACTCCATTTACCACCAAAAATAAACTTTCATTACCATCTAATCCAACTCCAAAATCCCATTTTAAAATCTACTTCCTCATCCCACTACTAACATCAAC
chr15	98663228	98663348	Hyper	1	+	TTTTATGTTTGTAGTAATTAGGATTTTATTTATTATTAGGAATGGGTTTTTATTATTATTTGATTTAGTTTTAAAATTTTATTTTAAAATTTGTTTTTTTATTTTATTGTTGGTATTAAT
chr15	98663233	98663353	Hyper	1	-	TACCTATAACAATCAAAACTCCATTTACCACCAAAAATAAACTTTCATTACCATCTAACTAAAAAAAATCCAACTCCAAAATCCCATTTTAAAATCTACTTCCTCATCCCACTACTAACA
chr15	98663233	98663353	Hyper	1	+	TGTTTGTAGTAATTAGGATTTTATTTATTATTAGGAATGGGTTTTTATTATTATTTGATTAGGGGGGATTTAGTTTTAAAATTTTATTTTAAAATTTGTTTTTTTATTTTATTGTTGGTA
chr6	89850155	89850275	Hypo	1	-	TAAAAATAATTATTAACCATAATATATACACAATCAAAATAAACACATTACTTAAAAAATCAATCTCTTCAAAAACTTTAAAAACACTACACCAAACCCAAACTCTAAATATTATATAAA
chr6	89850155	89850275	Hypo	1	+	TAAAGGTAATTATTAATTATGGTATGTATATAGTTGAGGTGAATATATTGTTTGAGGGATTAATTTTTTTTAAGGATTTTAAAAGTATTGTATTGGGTTTAAGTTTTAGATGTTGTATAGA
chr6	89850159	89850279	Hypo	1	-	AATAATTATTAACCATAATATATACACAATCAAAATAAACACATTACTTAAAAAATCAATATAAAAATCTCTTCAAAAACTTTAAAAACACTACACCAAACCCAAACTCTAAATATTATA
chr6	89850159	89850279	Hypo	1	+	GGTAATTATTAATTATGGTATGTATATAGTTGAGGTGAATATATTGTTTGAGGGATTAATGTAGGAATTTTTTTAAGGATTTTAAAAGTATTGTATTGGGTTTAAGTTTTAGATGTTGTA
chr6	89850155	89850275	Hyper	1	-	TAAAAATAATTATTAACCATAATATATACACAATCGAAATAAACACATTACTTAAAAAATCAATCTCTTCAAAAACTTTAAAAACACTACACCGAACCCAAACTCTAAATATTATATAAA
chr6	89850155	89850275	Hyper	1	+	TAAAGGTAATTATTAATTATGGTATGTATATAGTCGAGGTGAATATATTGTTTGAGGGATTAATTTTTTTTAAGGATTTTAAAAGTATTGTATCGGGTTTAAGTTTTAGATGTTGTATAGA
chr6	89850159	89850279	Hyper	1	-	AATAATTATTAACCATAATATATACACAATCGAAATAAACACATTACTTAAAAAATCAATATAAAAATCTCTTCAAAAACTTTAAAAACACTACACCGAACCCAAACTCTAAATATTATA
chr6	89850159	89850279	Hyper	1	+	GGTAATTATTAATTATGGTATGTATATAGTCGAGGTGAATATATTGTTTGAGGGATTAATGTAGGAATTTTTTTAAGGATTTTAAAAGTATTGTATCGGGTTTAAGTTTTAGATGTTGTA
chr4	169665587	169665707	Hypo	2	-	TATCTCTAAACTATAAAACAAAACAAAACAAAACCAAAACAAAATATCTAAAAAAACAAAACTCATAATCTTCCAACAAAACATCAAAAAATTTCTAAAATTTAAAACCAAAAAAAACCT
chr4	169665587	169665707	Hypo	1	+	TGTTTTTAGGTTATAGAGTAGAATAAAATAGAGTTAAGATAAGGTGTTTGGAAAAATAGAATTTATGGTTTTTTAATAGGGTATTAAAGGGTTTTTAAAATTTAAAGTTAAAGGGAATTT
chr4	169665591	169665711	Hypo	2	-	TCTAAACTATAAAACAAAACAAAACAAAACCAAAACAAAATATCTAAAAAAACAAAACTCCAATCTCATAATCTTCCAACAAAACATCAAAAAATTTCTAAAATTTAAAACCAAAAAAAA
chr4	169665591	169665711	Hypo	1	+	TTTAGGTTATAGAGTAGAATAAAATAGAGTTAAGATAAGGTGTTTGGAAAAATAGAATTTTAGTTTTATGGTTTTTTAATAGGGTATTAAAGGGTTTTTAAAATTTAAAGTTAAAGGGAA
chr4	169665587	169665707	Hyper	2	-	TATCTCTAAACTATAAAACAAAACAAAACAAAACCAAAACAAAATATCTAAAAAAACAAAACTCATAATCTTCCAACAAAACATCAAAAAATTTCTAAAATTTAAAACCAAAAAAAACCT
chr4	169665587	169665707	Hyper	1	+	TGTTTTTAGGTTATAGAGTAGAATAAAATAGAGTTAAGATAAGGTGTTTGGAAAAATAGAATTTATGGTTTTTTAATAGGGTATTAAAGGGTTTTTAAAATTTAAAGTTAAAGGGAATTT
chr4	169665591	169665711	Hyper	2	-	TCTAAACTATAAAACAAAACAAAACAAAACCAAAACAAAATATCTAAAAAAACAAAACTCCAATCTCATAATCTTCCAACAAAACATCAAAAAATTTCTAAAATTTAAAACCAAAAAAAA
chr4	169665591	169665711	Hyper	1	+	TTTAGGTTATAGAGTAGAATAAAATAGAGTTAAGATAAGGTGTTTGGAAAAATAGAATTTTAGTTTTATGGTTTTTTAATAGGGTATTAAAGGGTTTTTAAAATTTAAAGTTAAAGGGAA
chr10	79092279	79092399	Hypo	1	-	CCTCCCCACCTACTACTATTACCCTAATTAACCTCCTACCTCACTAAATAACAAAATAAACAACCCTACCATCTACTTCCCTCCCCAAAACACCAAACATAAAACACTAAAAATTTATAA
chr10	79092279	79092399	Hypo	1	+	TTTTTTTATTTGTTGTTGTTATTTTAGTTGATTTTTTGTTTTATTGGGTGGTAGAATGGATAGTTTTGTTATTTGTTTTTTTTTTTTAGAGTATTAGGTATGGAATATTGGGGATTTATGG
chr10	79092274	79092394	Hypo	1	-	CCCCACCTCCCCACCTACTACTATTACCCTAATTAACCTCCTACCTCACTAAATAACAAAATACCATCTACTTCCCTCCCCAAAACACCAAACATAAAACACTAAAAATTTATAAAATCA
chr10	79092274	79092394	Hypo	1	+	TTTTATTTTTTTATTTGTTGTTGTTATTTTAGTTGATTTTTTGTTTTATTGGGTGGTAGAATGTTATTTGTTTTTTTTTTTTAGAGTATTAGGTATGGAATATTGGGGATTTATGGGGTTA
chr10	79092279	79092399	Hyper	1	-	CCTCCCCACCTACTACTATTACCCTAATTAACCTCCTACCTCACTAAATAACAAAATAAACAACCCTACCATCTACTTCCCTCCCCAAAACACCAAACATAAAACACTAAAAATTTATAA
chr10	79092279	79092399	Hyper	1	+	TTTTTTTATTTGTTGTTGTTATTTTAGTTGATTTTTTGTTTTATTGGGTGGTAGAATGGATAGTTTTGTTATTTGTTTTTTTTTTTTAGAGTATTAGGTATGGAATATTGGGGATTTATGG
chr10	79092274	79092394	Hyper	1	-	CCCCACCTCCCCACCTACTACTATTACCCTAATTAACCTCCTACCTCACTAAATAACAAAATACCATCTACTTCCCTCCCCAAAACACCAAACATAAAACACTAAAAATTTATAAAATCA
chr10	79092274	79092394	Hyper	1	+	TTTTATTTTTTTATTTGTTGTTGTTATTTTAGTTGATTTTTTGTTTTATTGGGTGGTAGAATGTTATTTGTTTTTTTTTTTTAGAGTATTAGGTATGGAATATTGGGGATTTATGGGGTTA
chr12	19318972	19319092	Hypo	1	-	AAAACAATAACTACCCAAAATCAAACAAACAATAAATAACAAAATTAAAATCTAACTCCCAAATCCCTATTCTTCAATAACATTATACTACCTCTCATAATATTCTTTTTTTCAATAAAC
chr12	19318972	19319092	Hypo	1	+	AAGGTAGTAATTGTTTAAGGTTAGATAGGTAGTAAGTGGTAGAGTTGGGATTTGGTTTTTAAGTTTTTGTTTTTTAGTAATATTATGTTGTTTTTTATAATGTTTTTTTTTTTAATAAAT
chr12	19318968	19319088	Hypo	1	-	AAAAAAAACAATAACTACCCAAAATCAAACAAACAATAAATAACAAAATTAAAATCTAACTCTATTCTTCAATAACATTATACTACCTCTCATAATATTCTTTTTTTCAATAAACTATAT
chr12	19318968	19319088	Hypo	1	+	AAAGAAGGTAGTAATTGTTTAAGGTTAGATAGGTAGTAAGTGGTAGAGTTGGGATTTGGTTTTGTTTTTTAGTAATATTATGTTGTTTTTTATAATGTTTTTTTTTTTAATAAATTGTGT
chr12	19318972	19319092	Hyper	1	-	AAAACAATAACTACCCAAAATCAAACAAACAATAAATAACAAAATTAAAATCTAACTCCCAAATCCCTATTCTTCAATAACATTATACTACCTCTCATAATATTCTTTTTTTCAATAAAC
chr12	19318972	19319092	Hyper	1	+	AAGGTAGTAATTGTTTAAGGTTAGATAGGTAGTAAGTGGTAGAGTTGGGATTTGGTTTTTAAGTTTTTGTTTTTTAGTAATATTATGTTGTTTTTTATAATGTTTTTTTTTTTAATAAAT
chr12	19318968	19319088	Hyper	1	-	AAAAAAAACAATAACTACCCAAAATCAAACAAACAATAAATAACAAAATTAAAATCTAACTCTATTCTTCAATAACATTATACTACCTCTCATAATATTCTTTTTTTCAATAAACTATAT

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chr10	84654265	84654385	Hyper	1 +	TTAATTTTGGTTTTTAGGTTAATATGTTATTTTTTTTGTTTGAGATTTTTTTTTTGTACGTTTTATTTAGAGTTTTTTAATTTTTTTAATTGTTTTTTATATTTTTTTGTATAAATTTGTA
chr4	80739670	80739790	Hypo	2 -	CATTACAAAATTAACATACCTATATTACTATAAAAACTAACTTTACAAAATTTTATTAAAAATAAAAAAAACATATTTTATAATAAATAATCAAATCATCAAAAAAACATAAAATTCAC
chr4	80739670	80739790	Hyper	1 +	TATTATAAAATTGGTATGTTTATATTATTATAAAAATTGATTTTATAGAATTTGTTAGAGATAAAGAGAATATATTTTATGGTAGAATAGTTAAATATTTAAGAGGATATAAAATTTAT
chr4	80739666	80739786	Hypo	1 -	TAAACATTACAAAATTAACATACCTATATTACTATAAAAACTAACTTTACAAAATTTTATTAAAAACATATTTTATAATAAATAATCAAATCATCAAAAAACATAAAATTCACAAATA
chr4	80739666	80739786	Hypo	1 +	TGGGTATTATAAAATTGGTATGTTTATATTATTATAAAAATTGATTTTATAGAATTTTGTTGAGAATATATTTTATGGTAGAATAGTTAAATTATTAAGAGGATATAAAATTTATAGATA
chr4	80739670	80739790	Hyper	2 -	CATTACAAAATTAACATACCTATATTACTATAAAAACTAACTTTACAAAATTTTATTAAAAATAAAAAAAACATATTTTATAATAAATAATCAAATCATCAAAAAACATAAAATTCAC
chr4	80739670	80739790	Hyper	1 +	TATTATAAAATTGGTATGTTTATATTATTATAAAAATTGATTTTATAGAATTTGTTAGAGATAAAGAGAATATATTTTATGGTAGAATAGTTAAATTATTAAGAGGATATAAAATTTAT
chr4	80739666	80739786	Hyper	1 -	TAAACATTACAAAATTAACATACCTATATTACTATAAAAACTAACTTTACAAAATTTTATTAAAAACATATTTTATAATAAATAATCAAATCATCAAAAAACATAAAATTCACAAATA
chr4	80739666	80739786	Hyper	1 +	TGGGTATTATAAAATTGGTATGTTTATATTATTATAAAAATTGATTTTATAGAATTTTGTTGAGAATATATTTTATGGTAGAATAGTTAAATTATTAAGAGGATATAAAATTTATAGATA
chr8	87393246	87393366	Hypo	1 -	TTTTTTTTAAAAAAAAAATACATAATAATACTTACTTTTACTTTATAAACCAAATTATTTCCATTTTCTCTAACTATTTTAATACAAAAATAAATAAAACTACAAATTAATCATTCTTAA
chr8	87393246	87393366	Hypo	1 +	TTTTTTTTAAGGGGAGGATGTATAATAATGTTTGTTTTTGTTTTATAAATTAAATTATTTTTATTTTTTTGATTGTTTTGGTATAGAAATAAATAGGATTGTAAATTAGTTATTTTTAA
chr8	87393250	87393370	Hypo	1 -	TTTTAAAAAAAAAATACATAATAATACTTACTTTTACTTTATAAACCAAATTATTTCCATATAAACATTTTCTCTAACTATTTTAATACAAAAATAAATAAAACTACAAATTAATCATTC
chr8	87393250	87393370	Hyper	1 +	TTTTAAGGGGAGGATGTATAATAATGTTTGTTTTTGTTTTATAAATTAAATTATTTTTATTTTTTTGATTGTTTTGGTATAGAAATAAATAGGATTGTAAATTAGTTATTTTTAA
chr8	87393246	87393366	Hyper	1 +	TTTTTTTTAAGGGGAGGATGTATAATAATGTTTGTTTTTGTTTTATAAATTAAATTATTTTTATTTTTTTGATTGTTTTGGTATAGAAATAAATAGGATTGTAAATTAGTTATTTTTAA
chr8	87393250	87393370	Hyper	1 +	TTTTAAAAAAAAAATACATAATAATACTTACTTTTACTTTATAAACCAAATTATTTCCATATAAACATTTTCTCTAACTATTTTAATACAAAAATAAATAAAACTACAAATTAATCATTC
chr16	71779691	71779811	Hypo	1 -	AATTAAAAACAAACAAAAAAATCTTAAATAAACAAACTACCCAACTAAATCCCAAAACATATATTTCAATAATAAAAAAACTAAAATAAAAAAAAAAATAAATCCATAAAATATTAACAATC
chr16	71779691	71779811	Hypo	1 +	GATTAAGGGTAGATAAAAAAATTTGAATAAATAGATTGTTTAGTTAAATTTTAAAGTAGTGGTAGAGAGATTGAGATGAAAGAAAGGTAAATTTATAGGTATTAATAGTT
chr16	71779687	71779807	Hypo	1 -	ACTAAATTAAAAACAAACAAAAAAATCTTAAATAAACAAACTACCCAACTAAATCCCAAAACATATATTTCAATAATAAAAAAACTAAAATAAAAAAAAAAATAAATCCATAAAATATTAACAATC
chr16	71779687	71779807	Hypo	1 +	GTTGGATTAAGGGTAGATAAAAAAATTTGAATAAATAGATTGTTTAGTTAAATTTTAAAGTAGTGGTAGAGAGATTGAGATGAAAGAAAGGTAAATTTATAGGTATTAATAGTTAAGAA
chr16	71779691	71779811	Hyper	1 -	AATTAAAACAAACAAAAAAATCTTAAATAAACAAACTACCCAACTAAATCCCAAAACATATATTTCAATAATAAAAAAACTAAAATAAAAAAAAAAATAAATCCATAAAATATTAACAATC
chr16	71779691	71779811	Hyper	1 +	GATTAAGGGTAGATAAAAAAATTTGAATAAATAGATTGTTTAGTTAAATTTTAAAGTAGTGGTAGAGAGATTGAGATGAAAGAAAGGTAAATTTATAGGTATTAATAGTT
chr16	71779687	71779807	Hyper	1 -	ACTAAATTAAAAACAAACAAAAAAATCTTAAATAAACAAACTACCCAACTAAATCCCAAAACATATATTTCAATAATAAAAAAACTAAAATAAAAAAAAAAATAAATCCATAAAATATTAACAATC
chr16	71779687	71779807	Hyper	1 +	GTTGGATTAAGGGTAGATAAAAAAATTTGAATAAATAGATTGTTTAGTTAAATTTTAAAGTAGTGGTAGAGAGATTGAGATGAAAGAAAGGTAAATTTATAGGTATTAATAGTTAAGAA
chr3	12427744	12427864	Hypo	1 -	TCCTTACATCTTCCTCTCTAAATTCCTTAAATCACATAACAAAAAAACACTTAATTATCATAAACTCAATATAAAAAAAATAAAAACAAATTCCAAAATACATACTAAAATCTATATATT
chr3	12427744	12427864	Hypo	1 +	TTTTTATATTTTTTTTTTTAGATTTTTTGAGTTATATAATAAGAAAATATTTGGTTATTATGAATTTGGTGTAAAAAAAGTAAAAGTAAGTTTTAAGATGTATGTTAGGATTTGTGTATT
chr3	12427740	12427860	Hypo	1 -	AATATCCTTACATCTTCCTCTCTAAATTCCTTAAATCACATAACAAAAAAACACTTAATTATCATAAACTCGATATAAAAAAAATAAAAACAAATTCCAAAATACATACTAAAATCTATATATT
chr3	12427740	12427860	Hypo	1 +	AATATTTTATATTTTTTTTTTAGATTTTTGAGTTATATAATAAGAAAATATTTGGTTATTATGAATTCGGTGTAAAAAAAGTAAAAGTAAGTTTTAAGATGTATGTTAGGATTTGTGTATTTAGT
chr3	12427744	12427864	Hyper	1 -	TCCTTACATCTTCCTCTCTAAATTCCTTAAATCACATAACAAAAAAACACTTAATTATCATAAACTCGATATAAAAAAAATAAAAACAAATTCCAAAATACATACTAAAATCTATATATT
chr3	12427744	12427864	Hyper	1 +	TTTTTATATTTTTTTTTTTAGATTTTTGAGTTATATAATAAGAAAATATTTGGTTATTATGAATTCGGTGTAAAAAAAGTAAAAGTAAGTTTTAAGATGTATGTTAGGATTTGTGTATTT
chr3	12427740	12427860	Hyper	1 -	AATATCCTTACATCTTCCTCTCTAAATTCCTTAAATCACATAACAAAAAAACACTTAATTATCGATATAAAAAAAATAAAAACAAATTCCAAAATACATACTAAAATCTATATATTCAAT
chr3	12427740	12427860	Hyper	1 +	AATATTTTATATTTTTTTTTTAGATTTTTGAGTTATATAATAAGAAAATATTTGGTTATTATGGTGTAAAAAAAGTAAAAGTAAGTTTTAAGATGTATGTTAGGATTTGTGTATTTAGT
chr1	84432950	84433070	Hypo	1 -	CAACAAAATTTCTAAAAACAACAACAACCACCTTTTACCAACTATACCAACAATTCTCAAACTTAAATATACACAAAAATTTCCTAAAAAATATTACTAAACCCCATCTCCAACTTCTAA
chr1	84432950	84433070	Hypo	1 +	TAATAAAATTTTTAAGGATAATAATAATTATTTTTTGTTAATTATGTTAATAGTTTTAAATTTGAATGTGTATAAGAATTTTTTGGAGAATATTATTAGATTTTATTTTAATTTTTGG
chr1	84432947	84433067	Hypo	1 -	ATACAACAAATTCTAAAAACAACAACAACCACCTTTTACCAACTATACCAACAATTCTCAAACTTAAATATACACAAAAATTTCCTAAAAAATATTACTAAACCCCATCTCCAACTTCATTCA
chr1	84432947	84433067	Hypo	1 +	GTGTAATAAAATTTTTAAGGATAATAATAATTATTTTTTGTTAATTATGTTAATAGTTTTAAATTTGAATGTGTATAAGAATTTTTTGGAGAATATTATTAGATTTTATTTTAATTTTTGGTTTA
chr1	84432950	84433070	Hyper	1 -	CAACAAAATTTCTAAAAACAACAACAACCACCTTTTACCAACTATACCAACAATTCTCAAACTTAAATATACACAAAAATTTCCTAAAAAATATTACTAAACCCCATCTCCAACTTCTAA
chr1	84432950	84433070	Hyper	1 +	TAATAAAATTTTTAAGGATAATAATAATTATTTTTTGTTAATTATGTTAATAGTTTTAAATTTGAATGTGTATAAGAATTTTTTGGAGAATATTATTAGATTTTATTTTAATTTTTGG
chr1	84432947	84433067	Hyper	1 -	ATACAACAAATTCTAAAAACAACAACAACCACCTTTTACCAACTATACCAACAATTCTCAAACTTAAATATACACAAAAATTTCCTAAAAAATATTACTAAACCCCATCTCCAACTTCATTCA
chr1	84432947	84433067	Hyper	1 +	GTGTAATAAAATTTTTAAGGATAATAATAATTATTTTTTGTTAATTATGTTAATAGTTTTAAATTTGAATGTGTATAAGAATTTTTTGGAGAATATTATTAGATTTTATTTTAATTTTTGGTTTA
chr4	64770120	64770240	Hypo	1 -	ATAAAAAATAATATCCTAACAAACTACTATCAACAAACAATATTAAAACCTAATCAAAAAACTCAAAATTTCTACAAATTTCAACTATACAATTTTATCTCTTCCACTTCTAAAACAAAA
chr4	64770120	64770240	Hyper	1 +	ATAAAGAATAATGTTTGGTAAGTTATTAATAATGAATAGTATTAGGGTTTAATTAGAAGATTTAGGATTTTATAGATTTTAGTTGTGTGATTTATTTTTTTTATTTTGGAATAGGA
chr4	64770116	64770236	Hypo	1 -	ACCCATAAAAAATAATATCCTAACAAACTACTATCAACAAACAATATTAAAACCTAATCAAAAATTTCTACAAATTTCAACTATACAATTTTATCTCTTCCACTTCTAAAACAAAACCTT
chr4	64770116	64770236	Hyper	1 +	ATTTATAAAGAATAATGTTTGGTAAGTTATTAATAATGAATAGTATTAGGGTTTAATTAGGAGATTTTATAGATTTTAGTTGTGTGATTTATTTTTTTTATTTTGGAATAGGATTT
chr4	64770120	64770240	Hyper	1 +	ATAAAAAATAATATCCTAACAAACTACTATCAACGAACAATATTAAAACCTAATCAAAAATTTCTACAAATTTCAACTATACGATTTTATCTCTTCCACTTCTAAAACAAAACCTT
chr4	64770116	64770236	Hyper	1 +	ATTTATAAAGAATAATGTTTGGTAAGTTATTAATAACGAATAGTATTAGGGTTTAATTAGGAGATTTTATAGATTTTAGTTGTGCGATTTATTTTTTTTATTTTGGAATAGGATTT
chr4	64770116	64770236	Hyper	1 -	AAATTAATTTATTAAAACACTTAATATTACTACTTACAAATAATAAACACTTTTTAAATATTAAAATCACCTTAAAAATTCTATCTATTACTTTATATTTACTATATTTTAAATTTATATATATT
chr4	115893124	115893244	Hypo	1 -	AGATTAATTATTAAAGTATTTAATATTGTTATTTGTAAGTAGTAAGTATTTTTTGAATATTTTAAAAATTTTATTTATTGTTTGTATTTGTTGTGTTTTGAATTTATATGTATTTA
chr4	115893128	115893248	Hypo	1 -	TAATTTATTAAAACACTTAATATTACTACTTACAAATAATAAACACTTTTTAAATATTAAAATCACCTTAAAAATTCTATCTATTACTTTATATTTACTATATTTTAAATTTATATATAT

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chr4	115893128	115893248	Hypo	1 +	TAATTTATTAAAGTATTTAATATTGTTATTTGTAAGTAGTAAGTATTTTTTGAATATTAGGGTTATTTTAAAAATTTTATTTATTGTTTTGTATTTGTTGTGTTTTGAATTTATATGTAT
chr4	115893124	115893244	Hyper	1 -	AAATTAATTTATTAAAACACTTAATATTACTACTTACAAATAATAAACACTTTTTAAATATACCTTAAAAATTCTATCTATTACTTTATATTTACTATATTTTAAATTTATATATATTCA
chr4	115893124	115893244	Hyper	1 +	AGATTAATTTATTAAAGTATTTAATATTGTTATTTGTAAGTAGTAAGTATTTTTTGAATATTTTAAAAATTTTATTTATTGTTTGTATTTGTTGTGTTTTGAATTTATATGTATTTA
chr4	115893128	115893248	Hyper	1 -	TAATTTATTAAAACACTTAATATTACTACTTACAAATAATAAACACTTTTTAAATATTAAAATCACCTTAAAAATTCTATCTATTACTTTATATTTACTATATTTTAAATTTATATATAT
chr4	115893128	115893248	Hyper	1 +	TAATTTATTAAAGTATTTAATATTGTTATTTGTAAGTAGTAAGTATTTTTTGAATATTAGGGTTATTTTAAAAATTTTATTTATTGTTTGTATTTGTTGTGTTTTGAATTTATATGTAT
chr1	108757858	108757978	Hypo	2 -	AATTCATATTAAATCAAAACTTTTATAATTCCTATAAATAATTTATCCATAACTCAATAAATCTATTTAAACCTAAAATATATAATATAACTTTAAACTACAAAAATAAACTAAATAATT
chr1	108757858	108757978	Hypo	2 +	GGTTTATATTGAGTTAGGATTTTTATGATTTTTGTGAATGATTTATTTATGATTTAGTAATTTATTTAAGTTTGAAGTGTATAATGTGATTTTAAGTTGTAAAAATGGATTGAGATGGTT
chr1	108757854	108757974	Hypo	2 -	TAAAAATTCATATTAAATCAAAACTTTTATAATTCCTATAAATAATTTATCCATAACTCAATAAACCTAAAATATATAATATAACTTTAAACTACAAAAATAAACTAAATAATTAAAAT
chr1	108757854	108757974	Hypo	2 +	TAAAGGTTTATATTGAGTTAGGATTTTTATGATTTTTGTGAATGATTTATTTATGATTTAGTAATTTATTTAAGTTTGAAGTGTATAATGTGATTTTAAGTTGTAAAAATGGATTGAGATGGTTAAAGT
chr1	108757858	108757978	Hyper	2 -	AATTCATATTAAATCAAAACTTTTATAATTCCTATAAATAATTTATCCATAACTCAATAATCTATTTAAACCTAAAATATATAATATAACTTTAAACTACAAAAATAAACTAAATAATT
chr1	108757858	108757978	Hyper	2 +	GGTTTATATTGAGTTAGGATTTTTATGATTTTTGTGAATGATTTATTTATGATTTAGTAATTTATTTAAGTTTGAAGTGTATAATGTGATTTTAAGTTGTAAAAATGGATTGAGATGGTT
chr1	108757854	108757974	Hyper	2 -	TAAAAATTCATATTAAATCAAAACTTTTATAATTCCTATAAATAATTTATCCATAACTCAATAAACCTAAAATATATAATATAACTTTAAACTACAAAAATAAACTAAATAATTAAAAT
chr1	108757854	108757974	Hyper	2 +	TAAAGGTTTATATTGAGTTAGGATTTTTATGATTTTTGTGAATGATTTATTTATGATTTAGTAATTTATTTAAGTTTGAAGTGTATAATGTGATTTTAAGTTGTAAAAATGGATTGAGATGGTT
chrX	91647335	91647455	Hypo	2 -	TTAACAAATCTATTTAACATTCATTTTTATTTCAATAAATCAAATTTACTTAACACTCAAATACACTACTAATTAATTCACAACAAAAAAATAATTAATCTTTCCCTAACAAAACACTTT
chrX	91647335	91647455	Hypo	2 +	TTAGTAAATTTGTTTGATATTTATTTTTATTTTAGTAGATTAGGTTTGTTTAGTATTTTAAATATATTAATTAATTTATAATAAGGAAGTAATTAATTTTTTTTTGGTAAGGTATTTT
chrX	91647331	91647451	Hypo	2 -	CAAATTAACAAATCTATTTAACATTCATTTTTATTTCAATAAATCAAATTTACTTAACACTCTACTAATTAATTCACAACAAAAAAATAATTAATCTTTCCCTAACAAAACACTTTAATT
chrX	91647331	91647451	Hypo	2 +	TAGGTTAGTAAATTTGTTTGATATTTATTTTTATTTTAGTAGATTAGGTTTGTTTAGTATTTTAAATATATTAATTAATTTATAATAAGGAAGTAATTAATTTTTTTTTGGTAAGGTATTTT
chrX	91647335	91647455	Hyper	2 -	TTAACAAATCTATTTAACATTCATTTTTATTTCAATAAATCAAATTTACTTAACACTCTACTAATTAATTCACAACAAAAAAATAATTAATCTTTCCCTAACAAAACACTTTAATT
chrX	91647335	91647455	Hyper	2 +	TTAGTAAATTTGTTTGATATTTATTTTTATTTTAGTAGATTAGGTTTGTTTAGTATTTTAAATATATTAATTAATTTATAATAAGGAAGTAATTAATTTTTTTTTGGTAAGGTATTTT
chrX	91647331	91647451	Hyper	2 -	CAAATTAACAAATCTATTTAACATTCATTTTTATTTCAATAAATCAAATTTACTTAACACTCTACTAATTAATTCACAACAAAAAAATAATTAATCTTTCCCTAACAAAACACTTTAATT
chrX	91647331	91647451	Hyper	2 +	TAGGTTAGTAAATTTGTTTGATATTTATTTTTATTTTAGTAGATTAGGTTTGTTTAGTATTTTAAATATATTAATTAATTTATAATAAGGAAGTAATTAATTTTTTTTTGGTAAGGTATTTT
chr9	128894536	128894656	Hypo	1 -	AATAATTTTCAACTAAAAAATACAACTATTACATTTCAAAAACAATAAAAACAAAAAAATAACAAATTAAAAACACAAAAAAATAAAATAAAATCCTTTAAAAAATAAATACCAAAAAAC
chr9	128894536	128894656	Hyper	1 +	GATGATTTTTAGTTGAAAAGTGTAATTGTTATATTTTAGAAGGTAATGGAAGTAGGAAATAATAGATTGAAGATGTAGAAAAATGGAGTGGAGTTTTTAAAAGATGGGTATTAAGAAAT
chr9	128894531	128894651	Hypo	1 -	AAAAAAATAATTTTCAACTAAAAAATACAACTATTACATTTCAAAAACAATAAAAACAAAAAAATAACAAATTAAAAACACAAAAAAATAAAATAAAATCCTTTAAAAAATAAATACCAAAAAACCCCCC
chr9	128894531	128894651	Hypo	1 +	AAAAAGATGATTTTTAGTTGAAAAGTGTAATTGTTATATTTTAGAAGGTAATGGAAGTAGGTTGAAGATGTAGAAAAATGGAGTGGAGTTTTTAAAAGATGGGTATTAAGAAATTTTTT
chr9	128894536	128894656	Hyper	1 -	AATAATTTTCAACTAAAAAATACAACTATTACATTTCAAAAACAATAAAAACAAAAAAATAACAAATTAAAAACACAAAAAAATAAAATAAAATCCTTTAAAAAATAAATACCAAAAAAC
chr9	128894536	128894656	Hyper	1 +	GATGATTTTTAGTTGAAAAGTGTAATTGTTATATTTTAGAAGGTAATGGAAGTAGGAAATAATAGATTGAAGACGTAGAAAAATGGAGTGGAGTTTTTAAAAGATGGGTATTAAGAAAT
chr9	128894531	128894651	Hyper	1 -	AAAAAAATAATTTCAACTAAAAAATACAACTATTACATTTCAAAAACAATAAAAACAAAAAAATAACAAATTAAAACGCAAAAAAATAAAATAAAATCCTTTAAAAAATAAATACCAAAAAACCCCCC
chr9	128894531	128894651	Hyper	1 +	AAAAAGATGATTTTTAGTTGAAAAGTGTAATTGTTATATTTTAGAAGGTAATGGAAGTAGGTTGAAGACGTAGAAAAATGGAGTGGAGTTTTTAAAAGATGGGTATTAAGAAATTTTTT
chr12	77795380	77795500	Hypo	1 -	TCCTAAATAATAAAAATATAAAAAAATAAAAATTCACATACCAATAATTAATAAAAACATTAATCAAAACAAATTTATAAAAAACAATTTAACAATCTTAACACAACAATACTACCATAA
chr12	77795380	77795500	Hyper	1 +	TTTTGAGTGATAAGGGTGTGGGGAAATAGGAATTTTATATGTTAGTGGTTGGTAGAATAGAATAAGTTTATGGAGGATAATTTGGTAGTTTGATATAGTAGTATTATTAA
chr12	77795376	77795496	Hypo	1 -	TTTCTCCTAAATAATAAAAATATAAAAAAATAAAAATTCACATACCAATAATTAATAAAAACAATTTATAAAAAACAATTTAACAATCTTAACACAACAATACTACCATAATTAT
chr12	77795376	77795496	Hyper	1 +	TTTTTTTGAGTGATAAGGGTGTGGGGAAATAGGAATTTTATATGTTAGTGGTTGGTAGAATAGAATAAGTTTATGGAGGATAATTTGGTAGTTTGATATAGTAGTATTATTAATTGT
chr12	77795380	77795500	Hyper	1 +	TCCTAAATAATAAAAATATAAAAAAATAAAAATTCACATACCAATAATTAATAAAAACATTAATCAAAACAAATTTATAAAAAACAATTTAACAATCTTAACACAACAATACTACCATAA
chr12	77795376	77795496	Hyper	1 +	TTTTTTTGAGTGATAAGGGTGTGGGGAAATAGGAATTTTATATGTTAGTGGTTGGTAGAATAGAATAAGTTTATGGAGGATAATTTGGTAGTTTGATATAGTAGTATTATTAATTGT
chr2	1656207	1656327	Hypo	1 -	CAAACAAAAAATACCCAATAAATACTTATTAAAATAACAAAATAAACTCTAATACTTCTCCCCAAAAATATACCTAAAAAATAAAACTAAAATTTCACCCATCAAAAAAAACAAAAACAT
chr2	1656207	1656327	Hyper	1 +	TAAGTAGAAAGTGTTAATAAATATTTGTTGAAATAATAAAATGGGTTTTGATGTTTTTTTTAAGAATGTGTTTGGGAGGTGAGGTTGGAGTTTTATTTATCGAGAAAAGTAGAAATAT
chr2	1656203	1656323	Hypo	1 -	CTAACAAACAAAAAATACCCAATAAATACTTATTAAAATAACAAAATAAACTCTAATACTTCTCCCCAAAAATATACCTAAAAAATAAAACTAAAATTTCACCCATCAAAAAAAACAAAAACAT
chr2	1656203	1656323	Hyper	1 +	TGATAAGTAGAAAGTGTTAATAAATATTTGTTGAAATAATAAAATGGGTTTTGATGTTTTTTTTAAGAATGTGTTTGGGAGGTGAGGTTGGAGTTTTATTTATCGAGAAAAGTAGAAATAT
chr13	70536857	70536977	Hypo	1 -	AAATCTCTAATTTTATTTTCTTATATTTTCCTAATCTAATTTTTAATCAAAACTATAATAAATCTAAAACTACAACTCTTTAATTTTATATAACAACTTTTAAAATA
chr13	70536857	70536977	Hyper	1 +	AAATTTTTAATTTTATTTTTTTGTATTTTTTTGATTTGATTTTTAATTAAGGTTATAGTAGTTTTATAATATGAGTTGGGAGTTATAATTTTTTAATTTTGTGTAATAATTTTTAGAATA
chr13	70536853	70536973	Hypo	1 -	AAATAAATCTCTAATTTTATTTTCTTATATTTTCCTAATCTAATTTTTAATCAAAACTATAATAAATCTAAAACTACAACTCTTTAATTTTATATAACAACTTTTAAAATAAAAC
chr13	70536853	70536973	Hyper	1 +	GAATAAATTTTAATTTTATTTTTTTGTATTTTTTTGATTTGATTTTTAATTAAGGTTATAGTAGTTTTATAATATGAGTTGGGAGTTATAATTTTTTAATTTTGTGTAATAATTTTTAGAATAAAGT
chr13	70536857	70536977	Hyper	1 -	AAATCTCTAATTTTATTTTCTTATATTTTCCTAATCTAATTTTTAATCAAAACTATAATAAATCTAAAACTACAACTCTTTAATTTTATATAACAACTTTTAAAATA
chr13	70536857	70536977	Hyper	1 +	AAATTTTTAATTTTATTTTTTTGTATTTTTTTGATTTGATTTTTAATTAAGGTTATAGTAGTTTTATAATATGAGTTGGGAGTTATAATTTTTTAATTTTGTGTAATAATTTTTAGAATA
chr13	70536853	70536973	Hyper	1 -	AAATAAATCTCTAATTTTATTTTCTTATATTTTCCTAATCTAATTTTTAATCAAAACTATAATAAATCTAAAACTACAACTCTTTAATTTTATATAACAACTTTTAAAATAAAAC

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chr13	70536853	70536973	Hyper	1 +	GAATAAATTTTTAATTTTATTTTTTTGTATTTTTTTGATTTGATTTTTAATTAAGGTTATAATAATATGAGTTGGGAGTTATAATTTTTTAATTTTGTGTAATAATTTTTAGAATAAAGT
chr16	85593202	85593322	Hypo	1 -	ACTACTCCTATTTAACAAATAAAAAAACTAAAACTAAACAATAAATTTAAAATCAAACTCTACCTCTCCTAAACTATATCCTTAAACAAATAACTAATACTCTCAATTAAATCTATTTTC
chr16	85593202	85593322	Hypo	1 +	GTTGTTTTTGTTTGATAGGTGAGAGGATTGAGGTTGGGTAGTAGGTTTGAAGTTAGGTTTTGTTTTTTTTGAGTTGTGTTTTTGGGTGGGTGATTGATATTTTTAATTGAGTTTGTTTTT
chr16	85593198	85593318	Hypo	1 -	ACCCACTACTCCTATTTAACAAATAAAAAAACTAAAACTAAACAATAAATTTAAAATCAAATCCTAAACTATATCCTTAAACAAATAACTAATACTCTCAATTAAATCTATTTTCCCATT
chr16	85593198	85593318	Hypo	1 +	ATTTGTTGTTTTTGTTTGATAGGTGAGAGGATTGAGGTTGGGTAGTAGGTTTGAAGTTAGGTTTTGAGTTGTGTTTTTGGGTGGGTGATTGATATTTTTAATTGAGTTTGTTTTTTTATT
chr16	85593202	85593322	Hyper	1 -	ACTACTCCTATTTAACAAATAAAAAAACTAAAACTAAACAATAAATTTAAAATCAAACTCTACCTCTCCTAAACTATATCCTTAAACGAATAACTAATACTCTCAATTAAATCTATTTTC
chr16	85593202	85593322	Hyper	1 +	GTTGTTTTTGTTTGATAGGTGAGAGGATTGAGGTTGGGTAGTAGGTTTGAAGTTAGGTTTTGTTTTTTTTGAGTTGTGTTTTTGGGCGGGTGATTGATATTTTTAATTGAGTTTGTTTTT
chr16	85593198	85593318	Hyper	1 -	ACCCGCTACTCCTATTTAACAAATAAAAAAACTAAAACTAAACAATAAATTTAAAATCAAATCCTAAACTATATCCTTAAACGAATAACTAATACTCTCAATTAAATCTATTTTCCCATT
chr16	85593198	85593318	Hyper	1 +	ATTCGTTGTTTTTGTTTGATAGGTGAGAGGATTGAGGTTGGGTAGTAGGTTTGAAGTTAGGTTTTGAGTTGTGTTTTTGGGCGGGTGATTGATATTTTTAATTGAGTTTGTTTTTTTATT
chr3	63093333	63093453	Hypo	1 -	AAAACTAATACTATTAATCCAAAATCCAAAACTACTTAATCCTTACTACTTTAAATAATACTACTTACTCTAAACAATCAAAAAATTAATATTCTCATAAATTAAAAAATCCCTTTAAAT
chr3	63093333	63093453	Hypo	1 +	GAAATTGATGTTGTTAGTTTAAGGTTTAAAGTTATTTGGTTTTTGTTATTTTGAGTAGTATTGTTTGTTTTAAGTAATTAAGAAGTTAATGTTTTTATGAATTAAGAAATTTTTTTGAAT
chr3	63093329	63093449	Hypo	1 -	TTATAAAACTAATACTATTAATCCAAAATCCAAAACTACTTAATCCTTACTACTTTAAATAACTCTAAACAATCAAAAAATTAATATTCTCATAAATTAAAAAATCCCTTTAAATTATAA
chr3	63093329	63093449	Hypo	1 +	TTGTGAAATTGATGTTGTTAGTTTAAGGTTTAAAGTTATTTGGTTTTTGTTATTTTGAGTAGTTTTAAGTAATTAAGAAGTTAATGTTTTTATGAATTAAGAAATTTTTTTGAATTGTAG
chr3	63093333	63093453	Hyper	1 -	AAAACTAATACTATTAATCCAAAATCCAAAACTACTTAATCCTTACTACTTTAAATAATACTACTTACTCTAAACAATCAAAAAATTAATATTCTCATAAATTAAAAAATCCCTTTAAAT
chr3	63093333	63093453	Hyper	1 +	GAAATTGATGTTGTTAGTTTAAGGTTTAAAGTTATTTGGTTTTTGTTATTTTGAGTAGTATTGTTTGTTTTAAGTAATTAAGAAGTTAATGTTTTTATGAATTAAGAAATTTTTTTGAAT
chr3	63093329	63093449	Hyper	1 -	TTATAAAACTAATACTATTAATCCAAAATCCAAAACTACTTAATCCTTACTACTTTAAATAACTCTAAACAATCAAAAAATTAATATTCTCATAAATTAAAAAATCCCTTTAAATTATAA
chr3	63093329	63093449	Hyper	1 +	TTGTGAAATTGATGTTGTTAGTTTAAGGTTTAAAGTTATTTGGTTTTTGTTATTTTGAGTAGTTTTAAGTAATTAAGAAGTTAATGTTTTTATGAATTAAGAAATTTTTTTGAATTGTAG
chr4	188544956	188545076	Hypo	1 -	CCATTATAACTATACACAAAAATAACAAAAAATAAATTATTAAAACAAATATAAAATAAAAAATCTCAACAAAAAAATTAAAACTATTACAAATAAAAATTAAAAAACTAAAATATATCT
chr4	188544956	188545076	Hypo	1 +	TTATTATAATTGTGTGTAAGGATAGTAAGGAATAGATTGTTAAAATAAATATAAGATAGAAAATTTTAGTAGAGAAGTTAAAATTATTATAAATGAAAATTAGAAAATTAAAATATATTT
chr4	188544953	188545073	Hypo	1 -	TAACCATTATAACTATACACAAAAATAACAAAAAATAAATTATTAAAACAAATATAAAATATCAACAAAAAAATTAAAACTATTACAAATAAAAATTAAAAAACTAAAATATATCTAAAA
chr4	188544953	188545073	Hypo	1 +	TAGTTATTATAATTGTGTGTAAGGATAGTAAGGAATAGATTGTTAAAATAAATATAAGATATTAGTAGAGAAGTTAAAATTATTATAAATGAAAATTAGAAAATTAAAATATATTTGAAA
chr4	188544956	188545076	Hyper	1 -	CCATTATAACTATACGCAAAAATAACAAAAAATAAATTATTAAAACAAATATAAAATAAAAAATCTCAACAAAAAAATTAAAACTATTACAAATAAAAATTAAAAAACTAAAATATATCT
chr4	188544956	188545076	Hyper	1 +	TTATTATAATTGTGCGTAAGGATAGTAAGGAATAGATTGTTAAAATAAATATAAGATAGAAAATTTTAGTAGAGAAGTTAAAATTATTATAAATGAAAATTAGAAAATTAAAATATATTT
chr4	188544953	188545073	Hyper	1 -	TAACCATTATAACTATACGCAAAAATAACAAAAAATAAATTATTAAAACAAATATAAAATATCAACAAAAAAATTAAAACTATTACAAATAAAAATTAAAAAACTAAAATATATCTAAAA
chr4	188544953	188545073	Hyper	1 +	TAGTTATTATAATTGTGCGTAAGGATAGTAAGGAATAGATTGTTAAAATAAATATAAGATATTAGTAGAGAAGTTAAAATTATTATAAATGAAAATTAGAAAATTAAAATATATTTGAAA
chr12	41730252	41730372	Hypo	1 -	AAAATATCAACCTAAAAAAAAAATTTAAACATAATAACCATACAACTAATATATTCAAAACATCAACTTTCTCTATACATACAATATCATAACCACCTAATAAATTCACCTTACCTACTAC
chr12	41730252	41730372	Hypo	1 +	GAAGTGTTAATTTAAAGGAGAATTTGAATATAGTAGTTATGTAATTGATGTGTTTAGAATATTAATTTTTTTTGTATATGTAATGTTATAATTATTTAGTGGGTTTATTTTGTTTGTTGT
chr12	41730248	41730368	Hypo	1 -	TAAAAAAATATCAACCTAAAAAAAAAATTTAAACATAATAACCATACAACTAATATATTCAATTTCTCTATACATACAATATCATAACCACCTAATAAATTCACCTTACCTACTACCTAAA
chr12	41730248	41730368	Hypo	1 +	TAAGGAAGTGTTAATTTAAAGGAGAATTTGAATATAGTAGTTATGTAATTGATGTGTTTAGTTTTTTTGTATATGTAATGTTATAATTATTTAGTGGGTTTATTTTGTTTGTTGTTTAGA
chr12	41730252	41730372	Hyper	1 -	AAAATATCAACCTAAAAAAAAAATTTAAACATAATAACCATACAACTAATATATTCAAAACATCAACTTTCTCTATACATACAATATCATAACCACCTAATAAATTCACCTTACCTACTAC
chr12	41730252	41730372	Hyper	1 +	GAAGTGTTAATTTAAAGGAGAATTTGAATATAGTAGTTATGTAATTGATGTGTTTAGAATATTAATTTTTTTTGTATATGTAATGTTATAATTATTTAGTGGGTTTATTTTGTTTGTTGT
chr12	41730248	41730368	Hyper	1 -	TAAAAAAATATCAACCTAAAAAAAAAATTTAAACATAATAACCATACAACTAATATATTCAATTTCTCTATACATACAATATCATAACCACCTAATAAATTCACCTTACCTACTACCTAAA
chr12	41730248	41730368	Hyper	1 +	TAAGGAAGTGTTAATTTAAAGGAGAATTTGAATATAGTAGTTATGTAATTGATGTGTTTAGTTTTTTTGTATATGTAATGTTATAATTATTTAGTGGGTTTATTTTGTTTGTTGTTTAGA
chr5	110583986	110584106	Hypo	1 -	AATATTTATTCAAAACTATCACTTTCTCTTAACAAAAATTAAATTATAATAACTTTTAAATATTTACTAATCTTTAAAAATTTTCTTACTATAAAAAACCAACCAATAAAATCAAACAAA
chr5	110583986	110584106	Hypo	1 +	AATATTTGTTTAGAGTTATTATTTTTTTTTTGGTAGAAATTAAATTGTAATAGTTTTTAAATGTTTGTTGGTTTTTGGAGATTTTTTTATTGTGGGGAATTAGTTAGTAAGATTGAGTAGG
chr5	110583983	110584103	Hypo	1 -	TTTAATATTTATTCAAAACTATCACTTTCTCTTAACAAAAATTAAATTATAATAACTTTTAACTAATCTTTAAAAATTTTCTTACTATAAAAAACCAACCAATAAAATCAAACAAATTCT
chr5	110583983	110584103	Hypo	1 +	TTTAATATTTGTTTAGAGTTATTATTTTTTTTTTGGTAGAAATTAAATTGTAATAGTTTTTAGTTGGTTTTTGGAGATTTTTTTATTGTGGGGAATTAGTTAGTAAGATTGAGTAGGTTTT
chr5	110583986	110584106	Hyper	1 -	AATATTTATTCAAAACTATCACTTTCTCTTAACAAAAATTAAATTATAATAACTTTTAAATATTTACTAATCTTTAAAAATTTTCTTACTATAAAAAACCAACCAATAAAATCGAACAAA
chr5	110583986	110584106	Hyper	1 +	AATATTTGTTTAGAGTTATTATTTTTTTTTTGGTAGAAATTAAATTGTAATAGTTTTTAAATGTTTGTTGGTTTTTGGAGATTTTTTTATTGTGGGGAATTAGTTAGTAAGATCGAGTAGG
chr5	110583983	110584103	Hyper	1 -	TTTAATATTTATTCAAAACTATCACTTTCTCTTAACAAAAATTAAATTATAATAACTTTTAACTAATCTTTAAAAATTTTCTTACTATAAAAAACCAACCAATAAAATCGAACAAATTCT
chr5	110583983	110584103	Hyper	1 +	TTTAATATTTGTTTAGAGTTATTATTTTTTTTTTGGTAGAAATTAAATTGTAATAGTTTTTAGTTGGTTTTTGGAGATTTTTTTATTGTGGGGAATTAGTTAGTAAGATCGAGTAGGTTTT
chr11	76299786	76299906	Hypo	1 -	CACACTTCTCCCCTCCAAAACATCCCAACACTCACAACTTCCCTAAAACTTCAAAACCCCAATATATCTCCACCCTAACATACTCCAAAACTTCCTCCCTAAACCTAAAAACCCACCCAC
chr11	76299786	76299906	Hypo	1 +	TATGTTTTTTTTTTTTTAGGGTGTTTTAGTATTTGTAGTTTTTTTGGGGTTTTAGAGTTTTAGTATGTTTTTATTTTGATATATTTTAGAATTTTTTTTTTGGGTTTGGAGATTTATTTGT
chr11	76299783	76299903	Hypo	1 -	ATCCACACTTCTCCCCTCCAAAACATCCCAACACTCACAACTTCCCTAAAACTTCAAAACCATCTCCACCCTAACATACTCCAAAACTTCCTCCCTAAACCTAAAAACCCACCCACCTAA
chr11	76299783	76299903	Hypo	1 +	GTTTATGTTTTTTTTTTTTTAGGGTGTTTTAGTATTTGTAGTTTTTTTGGGGTTTTAGAGTTGTTTTTATTTTGATATATTTTAGAATTTTTTTTTTGGGTTTGGAGATTTATTTGTTTGG
chr11	76299786	76299906	Hyper	1 -	CACGCTTCTCCCCTCCAAAACGTCCCAACACTCGCAACTTCCCTAAAACTTCAAAACCCCAATATATCTCCACCCTAACATACTCCAAAACTTCCTCCCTAAACCTAAAAACCCACCCGC
chr11	76299786	76299906	Hyper	1 +	TACGTTTTTTTTTTTTTAGGGCGTTTTAGTATTCGTAGTTTTTTTGGGGTTTTAGAGTTTTAGTATGTTTTTATTTTGATATATTTTAGAATTTTTTTTTTGGGTTTGGAGATTTATTCGT
chr11	76299783	76299903	Hyper	1 -	ATCCACGCTTCTCCCCTCCAAAACGTCCCAACACTCGCAACTTCCCTAAAACTTCAAAACCGTCTCCACCCTAACATACTCCAAAACTTCCTCCCTAAACCTAAAAACCCACCCGCCTAA
chr11	76299783	76299903	Hyper	1 +	GTTTACGTTTTTTTTTTTTTAGGGCGTTTTAGTATTCGTAGTTTTTTTGGGGTTTTAGAGTCGTTTTTATTTTGATATATTTTAGAATTTTTTTTTTGGGTTTGGAGATTTATTCGTTTGG
chr12	102362669	102362789	Hypo	1 -	CTTTAATAATCTTCACCACAACCCTATAAAATTAAAAATAAAACACAAAAAACTAAATAACTCACATAAATAATAAACAATAAAACAAAAATTAACACCAAAACTATCTAACACCAATAC
chr12	102362669	102362789	Hypo	1 +	TTTTGATAATTTTTATTATAATTTTATGAGATTGGAAATGAGGTATAGGAAGTTAAGTGATTTATATAAGTAGTAAGTAGTAGAGTAAGAATTGATATTAAGGTTGTTTGGTATTAATGT
chr12	102362674	102362794	Hypo	2 -	ATAATCTTCACCACAACCCTATAAAATTAAAAATAAAACACAAAAAACTAAATAACTAATTCAAAATCACATAAATAATAAACAATAAAACAAAAATTAACACCAAAACTATCTAACACC

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chr12	102362674	102362794	Hypo	1 +	ATAATTTTTATTATAATTTTATGAGATTGGAAATGAGGTATAGGAAGTTAAGTGATTGGTTTAAGATTATATAAGTAGTAAGTAGTAGAGTAAGAATTGATATTAAGGTTGTTTGGTATT
chr12	102362669	102362789	Hyper	1 -	CTTTAATAATCTTCACCACAACCCTATAAAATTAAAAATAAAACACAAAAAACTAAATAACTCACATAAATAATAAACAATAAAACAAAAATTAACACCAAAACTATCTAACACCAATAC
chr12	102362669	102362789	Hyper	1 +	TTTTGATAATTTTTATTATAATTTTATGAGATTGGAAATGAGGTATAGGAAGTTAAGTGATTTATATAAGTAGTAAGTAGTAGAGTAAGAATTGATATTAAGGTTGTTTGGTATTAATGT
chr12	102362674	102362794	Hyper	2 -	ATAATCTTCACCACAACCCTATAAAATTAAAAATAAAACACAAAAAACTAAATAACTAATTCAAAATCACATAAATAATAAACAATAAAACAAAAATTAACACCAAAACTATCTAACACC
chr12	102362674	102362794	Hyper	1 +	ATAATTTTTATTATAATTTTATGAGATTGGAAATGAGGTATAGGAAGTTAAGTGATTGGTTTAAGATTATATAAGTAGTAAGTAGTAGAGTAAGAATTGATATTAAGGTTGTTTGGTATT
chr11	112041071	112041191	Hypo	1 -	TAATAAACAAAATATATATATCCTAAAAATCTTATTAACTATACCTATTTTCTTTATTTTATCCTATTAATCTCCAATACCAAATAATCCACAACTATCCTCTCTTAAAAAATCAAATTC
chr11	112041071	112041191	Hypo	1 +	TAATAAATAAAATGTATATGTTTTGAAGATTTTATTGATTGTATTTGTTTTTTTTATTTTGTTTTGTTAGTTTTTAGTGTTAGATAGTTTATAGTTGTTTTTTTTTGGAAAATTAGATTT
chr11	112041067	112041187	Hypo	1 -	TTCTTAATAAACAAAATATATATATCCTAAAAATCTTATTAACTATACCTATTTTCTTTATTTAATCTCCAATACCAAATAATCCACAACTATCCTCTCTTAAAAAATCAAATTCATCTT
chr11	112041067	112041187	Hypo	1 +	TTTTTAATAAATAAAATGTATATGTTTTGAAGATTTTATTGATTGTATTTGTTTTTTTTATTTAGTTTTTAGTGTTAGATAGTTTATAGTTGTTTTTTTTTGGAAAATTAGATTTATTTT
chr11	112041071	112041191	Hyper	1 -	TAATAAACAAAATATATATATCCTAAAAATCTTATTAACTATACCTATTTTCTTTATTTTATCCTATTAATCTCCAATACCAAATAATCCACAACTATCCTCTCTTAAAAAATCAAATTC
chr11	112041071	112041191	Hyper	1 +	TAATAAATAAAATGTATATGTTTTGAAGATTTTATTGATTGTATTTGTTTTTTTTATTTTGTTTTGTTAGTTTTTAGTGTTAGATAGTTTATAGTTGTTTTTTTTTGGAAAATTAGATTT
chr11	112041067	112041187	Hyper	1 -	TTCTTAATAAACAAAATATATATATCCTAAAAATCTTATTAACTATACCTATTTTCTTTATTTAATCTCCAATACCAAATAATCCACAACTATCCTCTCTTAAAAAATCAAATTCATCTT
chr11	112041067	112041187	Hyper	1 +	TTTTTAATAAATAAAATGTATATGTTTTGAAGATTTTATTGATTGTATTTGTTTTTTTTATTTAGTTTTTAGTGTTAGATAGTTTATAGTTGTTTTTTTTTGGAAAATTAGATTTATTTT
chr5	13705886	13706006	Hypo	2 -	CAAATATACATAAAAAAAAAATAATATAAATATACACAAAACAAAAAAAAATCATATCTTCACAAAACAAAAAAAAAAAACTAAACTAAAACTACCACAAACCAAAAAACTCCTAAAACCAC
chr5	13705886	13706006	Hypo	1 +	TAGATGTGTATAGAGGGAAGATGATGTGAATGTATATAAGGTAAAGAAAATTATATTTTTATAAGATAAAGGGAGAGATTGGATTAGGATTGTTATAAGTTAAGGAGTTTTTGGGGTTAT
chr5	13705881	13706001	Hypo	1 -	AAAAACAAATATACATAAAAAAAAAATAATATAAATATACACAAAACAAAAAAAAATCATATCAAAAAAAAAAAACTAAACTAAAACTACCACAAACCAAAAAACTCCTAAAACCACCAAAA
chr5	13705881	13706001	Hypo	1 +	AGAGATAGATGTGTATAGAGGGAAGATGATGTGAATGTATATAAGGTAAAGAAAATTATATTAAAGGGAGAGATTGGATTAGGATTGTTATAAGTTAAGGAGTTTTTGGGGTTATTAGAA
chr5	13705886	13706006	Hyper	2 -	CAAATATACATAAAAAAAAAATAATATAAATATACACAAAACAAAAAAAAATCATATCTTCACAAAACAAAAAAAAAAAACTAAACTAAAACTACCACAAACCAAAAAACTCCTAAAACCAC
chr5	13705886	13706006	Hyper	1 +	TAGATGTGTATAGAGGGAAGATGATGTGAATGTATATAAGGTAAAGAAAATTATATTTTTATAAGATAAAGGGAGAGATTGGATTAGGATTGTTATAAGTTAAGGAGTTTTTGGGGTTAT
chr5	13705881	13706001	Hyper	1 -	AAAAACAAATATACATAAAAAAAAAATAATATAAATATACACAAAACAAAAAAAAATCATATCAAAAAAAAAAAACTAAACTAAAACTACCACAAACCAAAAAACTCCTAAAACCACCAAAA
chr5	13705881	13706001	Hyper	1 +	AGAGATAGATGTGTATAGAGGGAAGATGATGTGAATGTATATAAGGTAAAGAAAATTATATTAAAGGGAGAGATTGGATTAGGATTGTTATAAGTTAAGGAGTTTTTGGGGTTATTAGAA
chr5	17764307	17764427	Hypo	1 -	CTCTCTCTTTCTAAAAAAATACAAACATATTCTTAAAATCATCAAAAATTTTTATATAAAACATTTTTTAAAAAAATATAAAAATTAAAAAAAATATACTTTCTTAAAACTCAAAAATTT
chr5	17764307	17764427	Hypo	1 +	TTTTTTTTTTTTAAAGAAATGTAGATATATTTTTGAAATTATTAGAAATTTTTATGTGAAGTATTTTTTGAAAAGATATGAGAATTAGGAAAAATGTATTTTTTTAAAATTTAAAAATTT
chr5	17764311	17764431	Hypo	1 -	CTCTTTCTAAAAAAATACAAACATATTCTTAAAATCATCAAAAATTTTTATATAAAACAATCTAACATTTTTTAAAAAAATATAAAAATTAAAAAAAATATACTTTCTTAAAACTCAAAA
chr5	17764311	17764431	Hypo	1 +	TTTTTTTTAAAGAAATGTAGATATATTTTTGAAATTATTAGAAATTTTTATGTGAAGTAGTTTAATATTTTTTGAAAAGATATGAGAATTAGGAAAAATGTATTTTTTTAAAATTTAAAA
chr5	17764307	17764427	Hyper	1 -	CTCTCTCTTTCTAAAAAAATACAAACATATTCTTAAAATCATCAAAAATTTTTATATAAAACATTTTTTAAAAAAATATAAAAATTAAAAAAAATATACTTTCTTAAAACTCAAAAATTT
chr5	17764307	17764427	Hyper	1 +	TTTTTTTTTTTTAAAGAAATGTAGATATATTTTTGAAATTATTAGAAATTTTTATGTGAAGTATTTTTTGAAAAGATATGAGAATTAGGAAAAATGTATTTTTTTAAAATTTAAAAATTT
chr5	17764311	17764431	Hyper	1 -	CTCTTTCTAAAAAAATACAAACATATTCTTAAAATCATCAAAAATTTTTATATAAAACAATCTAACATTTTTTAAAAAAATATAAAAATTAAAAAAAATATACTTTCTTAAAACTCAAAA
chr5	17764311	17764431	Hyper	1 +	TTTTTTTTAAAGAAATGTAGATATATTTTTGAAATTATTAGAAATTTTTATGTGAAGTAGTTTAATATTTTTTGAAAAGATATGAGAATTAGGAAAAATGTATTTTTTTAAAATTTAAAA
chr12	59059002	59059122	Hypo	1 -	TATAATTTTAATATAAATTTTAAAATTAAATTTATCTAAATAAAAATCTCAAATTAAAAACCCTACTTAATTACTTATCAAATATATAACATTCAACTATAAACTTTTCTAAACCTTAAA
chr12	59059002	59059122	Hypo	1 +	TGTGATTTTAATGTGAGTTTTGAAGTTGAGTTTATTTAAATGAAAATTTTAGGTTGAAAGTTTTGTTTAATTATTTATTAAGTATATGATATTTAGTTGTGAATTTTTTTGAATTTTGAG
chr12	59059000	59059120	Hypo	1 -	ACTATAATTTTAATATAAATTTTAAAATTAAATTTATCTAAATAAAAATCTCAAATTAAAAACTTAATTACTTATCAAATATATAACATTCAACTATAAACTTTTCTAAACCTTAAATTT
chr12	59059000	59059120	Hypo	1 +	ATTGTGATTTTAATGTGAGTTTTGAAGTTGAGTTTATTTAAATGAAAATTTTAGGTTGAAAGTTTAATTATTTATTAAGTATATGATATTTAGTTGTGAATTTTTTTGAATTTTGAGTTT
chr12	59059002	59059122	Hyper	1 -	TATAATTTTAATATAAATTTTAAAATTAAATTTATCTAAATAAAAATCTCAAATTAAAAACCCTACTTAATTACTTATCAAATATATAACATTCAACTATAAACTTTTCTAAACCTTAAA
chr12	59059002	59059122	Hyper	1 +	TGTGATTTTAATGTGAGTTTTGAAGTTGAGTTTATTTAAATGAAAATTTTAGGTTGAAAGTTTTGTTTAATTATTTATTAAGTATATGATATTTAGTTGTGAATTTTTTTGAATTTTGAG
chr12	59059000	59059120	Hyper	1 -	ACTATAATTTTAATATAAATTTTAAAATTAAATTTATCTAAATAAAAATCTCAAATTAAAAACTTAATTACTTATCAAATATATAACATTCAACTATAAACTTTTCTAAACCTTAAATTT
chr12	59059000	59059120	Hyper	1 +	ATTGTGATTTTAATGTGAGTTTTGAAGTTGAGTTTATTTAAATGAAAATTTTAGGTTGAAAGTTTAATTATTTATTAAGTATATGATATTTAGTTGTGAATTTTTTTGAATTTTGAGTTT
chr6	64997490	64997610	Hypo	1 -	AAAAAAACAAATTCTTCTCAAATATAATAAAACAATATAACCACCAACAATAAATATAATTCTTCAAAATCCCACCCTCTATTAAAATTCATATTATAACACCATTTTATTTAAAAAAAA
chr6	64997490	64997610	Hypo	1 +	GGAAGAATGGGTTTTTTTTAGATGTAATGAGGTGGTATGGTTATTAGTAGTGAGTATAATTTTTTAAAATTTTATTTTTTGTTAGAGTTTATGTTGTGATATTATTTTATTTAAAAGAAG
chr6	64997486	64997606	Hypo	1 -	ACATAAAAAAACAAATTCTTCTCAAATATAATAAAACAATATAACCACCAACAATAAATATAAAATCCCACCCTCTATTAAAATTCATATTATAACACCATTTTATTTAAAAAAAAACAAT
chr6	64997486	64997606	Hypo	1 +	ATATGGAAGAATGGGTTTTTTTTAGATGTAATGAGGTGGTATGGTTATTAGTAGTGAGTATAAAATTTTATTTTTTGTTAGAGTTTATGTTGTGATATTATTTTATTTAAAAGAAGTAAT
chr6	64997490	64997610	Hyper	1 -	AAAAAAACGAATTCTTCTCAAATATAATAAAACGATATAACCACCAACAATAAATATAATTCTTCAAAATCCCACCCTCTATTAAAATTCATATTATAACACCATTTTATTTAAAAAAAA
chr6	64997490	64997610	Hyper	1 +	GGAAGAACGGGTTTTTTTTAGATGTAATGAGGCGGTATGGTTATTAGTAGTGAGTATAATTTTTTAAAATTTTATTTTTTGTTAGAGTTTATGTTGTGATATTATTTTATTTAAAAGAAG
chr6	64997486	64997606	Hyper	1 -	ACATAAAAAAACGAATTCTTCTCAAATATAATAAAACGATATAACCACCAACAATAAATATAAAATCCCACCCTCTATTAAAATTCATATTATAACACCATTTTATTTAAAAAAAAACAAT
chr6	64997486	64997606	Hyper	1 +	ATATGGAAGAACGGGTTTTTTTTAGATGTAATGAGGCGGTATGGTTATTAGTAGTGAGTATAAAATTTTATTTTTTGTTAGAGTTTATGTTGTGATATTATTTTATTTAAAAGAAGTAAT
chr20	61842405	61842525	Hypo	1 -	ACAAACAAACATTCTCCTAAAACTTTCTAAACCATTCTAAATATAACAATTTCACACAAAACACAATAACCTCCAACTAACTACTACAAACCATATCTAAATTTTTCTCTTTTAAATACC
chr20	61842405	61842525	Hypo	1 +	ATAGGTAGGTATTTTTTTAAGATTTTTTAAATTATTTTAAGTATGATAGTTTTATATAAAATATGGTAGTTTTTAATTGGTTATTATAAATTATATTTAGATTTTTTTTTTTTTAAGTATT
chr20	61842410	61842530	Hypo	1 -	CAAACATTCTCCTAAAACTTTCTAAACCATTCTAAATATAACAATTTCACACAAAACACAAAAACCACAATAACCTCCAACTAACTACTACAAACCATATCTAAATTTTTCTCTTTTAAA
chr20	61842410	61842530	Hypo	1 +	TAGGTATTTTTTTAAGATTTTTTAAATTATTTTAAGTATGATAGTTTTATATAAAATATAGGAATTATGGTAGTTTTTAATTGGTTATTATAAATTATATTTAGATTTTTTTTTTTTTAAG
chr20	61842405	61842525	Hyper	1 -	ACAAACAAACATTCTCCTAAAACTTTCTAAACCATTCTAAATATAACAATTTCACACAAAACACGATAACCTCCAACTAACTACTACAAACCATATCTAAATTTTTCTCTTTTAAATACC
chr20	61842405	61842525	Hyper	1 +	ATAGGTAGGTATTTTTTTAAGATTTTTTAAATTATTTTAAGTATGATAGTTTTATATAAAATACGGTAGTTTTTAATTGGTTATTATAAATTATATTTAGATTTTTTTTTTTTTAAGTATT
chr20	61842410	61842530	Hyper	1 -	CAAACATTCTCCTAAAACTTTCTAAACCATTCTAAATATAACAATTTCACACAAAACACAAAAACCACGATAACCTCCAACTAACTACTACAAACCATATCTAAATTTTTCTCTTTTAAA

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chr20	61842410	61842530	Hyper	1 +	TAGGTATTTTTTTAAGATTTTTTAAATTATTTTAAGTATGATAGTTTTATATAAAATATAGGAATTACGGTAGTTTTTAATTGGTTATTATAAATTATATTTAGATTTTTTTTTTTTAAG
chr5	180045639	180045759	Hypo	1 -	TCCTAAAACAAAACCCATTCCACACTCTCCCATAAAAACCCCCACTAAAAACCCCAAACTAAAATACCTAATCACAAAATATAACCAAACCCATCAAACACTAAAAAAAAAAAAAAAACC
chr5	180045639	180045759	Hypo	1 +	TTTTAAGGTAGAGTTTATTTTATATTTTTTTATGAAAGTTTTTGTTGAGGATTTTAGGTTGGGGTGTTTGATTATGGGATATAATTGGGTTTGTTAGGTATTAGGAAAAGGGAAGAGGTT
chr5	180045644	180045764	Hypo	1 -	AAACAAAACCCATTCCACACTCTCCCATAAAAACCCCCACTAAAAACCCCAAACTAAATTACCCTAAAATACCTAATCACAAAATATAACCAAACCCATCAAACACTAAAAAAAAAAAAA
chr5	180045644	180045764	Hypo	1 +	AGGTAGAGTTTATTTTATATTTTTTTATGAAAGTTTTTGTTGAGGATTTTAGGTTGGGTTATTTTAGGGTGTTTGATTATGGGATATAATTGGGTTTGTTAGGTATTAGGAAAAGGGAAG
chr5	180045639	180045759	Hyper	1 -	TCCTAAAACAAAACCCATTCCACACTCTCCCATAAAAACCCCCGCTAAAAACCCCAAACTAAAATACCTAATCACGAAATATAACCGAACCCGTCAAACACTAAAAAAAAAAAAAAAACC
chr5	180045639	180045759	Hyper	1 +	TTTTAAGGTAGAGTTTATTTTATATTTTTTTATGAAAGTTTTCGTTGAGGATTTTAGGTTGGGGTGTTTGATTACGGGATATAATCGGGTTCGTTAGGTATTAGGAAAAGGGAAGAGGTT
chr5	180045644	180045764	Hyper	1 -	AAACAAAACCCATTCCACACTCTCCCATAAAAACCCCCGCTAAAAACCCCAAACTAAATTACCCTAAAATACCTAATCACGAAATATAACCGAACCCGTCAAACACTAAAAAAAAAAAAA
chr5	180045644	180045764	Hyper	1 +	AGGTAGAGTTTATTTTATATTTTTTTATGAAAGTTTTCGTTGAGGATTTTAGGTTGGGTTATTTTAGGGTGTTTGATTACGGGATATAATCGGGTTCGTTAGGTATTAGGAAAAGGGAAG
chr9	16418384	16418504	Hypo	1 -	TATAAAAATTAAACAAAAAAATTAAACAACCATCAATACAATTATTTTACATCAATAACCCCTCAAAACTAAATATTTACAAATAAATCTACCATACTTTAATTAAAAATTCTTTCAAAA
chr9	16418384	16418504	Hypo	1 +	TGTAAAAATTAAATAAAAAAGTTAAATAATTATTAATATAATTGTTTTATATTAATGGTTTTTTAAGGTTAAATATTTATAGGTGAATTTGTTATGTTTTAATTGAAGATTTTTTTAAAA
chr9	16418379	16418499	Hypo	2 -	ATAACTATAAAAATTAAACAAAAAAATTAAACAACCATCAATACAATTATTTTACATCAATAACTAAATATTTACAAATAAATCTACCATACTTTAATTAAAAATTCTTTCAAAACCTTA
chr9	16418379	16418499	Hypo	1 +	GTAATTGTAAAAATTAAATAAAAAAGTTAAATAATTATTAATATAATTGTTTTATATTAATGGTTAAATATTTATAGGTGAATTTGTTATGTTTTAATTGAAGATTTTTTTAAAATTTTA
chr9	16418384	16418504	Hyper	1 -	TATAAAAATTAAACAAAAAAATTAAACAACCATCAATACAATTATTTTACATCAATAACCCCTCAAAACTAAATATTTACAAATAAATCTACCATACTTTAATTAAAAATTCTTTCAAAA
chr9	16418384	16418504	Hyper	1 +	TGTAAAAATTAAATAAAAAAGTTAAATAATTATTAATATAATTGTTTTATATTAATGGTTTTTTAAGGTTAAATATTTATAGGTGAATTTGTTATGTTTTAATTGAAGATTTTTTTAAAA
chr9	16418379	16418499	Hyper	2 -	ATAACTATAAAAATTAAACAAAAAAATTAAACAACCATCAATACAATTATTTTACATCAATAACTAAATATTTACAAATAAATCTACCATACTTTAATTAAAAATTCTTTCAAAACCTTA
chr9	16418379	16418499	Hyper	1 +	GTAATTGTAAAAATTAAATAAAAAAGTTAAATAATTATTAATATAATTGTTTTATATTAATGGTTAAATATTTATAGGTGAATTTGTTATGTTTTAATTGAAGATTTTTTTAAAATTTTA
chr19	53805534	53805654	Hypo	2 -	CTAAATCACACCCACTATAACTTAATCCTCTCTAAACCCAAATCCCAATTATACTATTTTATAACTCTCTCCCATCCTAACCTACTCCCAAAACAAAACACAAATTTTATAAACCAAAAA
chr19	53805534	53805654	Hypo	2 +	TTGAGTTATGTTTATTGTAATTTGGTTTTTTTTGAATTTAGGTTTTAGTTGTGTTATTTTGTGATTTTTTTTTTATTTTGATTTATTTTTAGAATAGGATATAGATTTTATAAATTAAAGG
chr19	53805530	53805650	Hypo	2 -	ACCACTAAATCACACCCACTATAACTTAATCCTCTCTAAACCCAAATCCCAATTATACTATTCTCTCCCATCCTAACCTACTCCCAAAACAAAACACAAATTTTATAAACCAAAAACTAC
chr19	53805530	53805650	Hypo	2 +	GTTATTGAGTTATGTTTATTGTAATTTGGTTTTTTTTGAATTTAGGTTTTAGTTGTGTTATTTTTTTTTATTTTGATTTATTTTTAGAATAGGATATAGATTTTATAAATTAAAGGTTGT
chr19	53805534	53805654	Hyper	2 -	CTAAATCACGCCCACTATAACTTAATCCTCTCTAAACCCAAATCCCAATTATACTATTTTATAACTCTCTCCCATCCTAACCTACTCCCAAAACAAAACACAAATTTTATAAACCAAAAA
chr19	53805534	53805654	Hyper	2 +	TTGAGTTACGTTTATTGTAATTTGGTTTTTTTTGAATTTAGGTTTTAGTTGTGTTATTTTGTGATTTTTTTTTTATTTTGATTTATTTTTAGAATAGGATATAGATTTTATAAATTAAAGG
chr19	53805530	53805650	Hyper	2 -	ACCACTAAATCACGCCCACTATAACTTAATCCTCTCTAAACCCAAATCCCAATTATACTATTCTCTCCCATCCTAACCTACTCCCAAAACAAAACACAAATTTTATAAACCAAAAACTAC
chr19	53805530	53805650	Hyper	2 +	GTTATTGAGTTACGTTTATTGTAATTTGGTTTTTTTTGAATTTAGGTTTTAGTTGTGTTATTTTTTTTTATTTTGATTTATTTTTAGAATAGGATATAGATTTTATAAATTAAAGGTTGT
chr3	49851314	49851434	Hypo	1 -	CCAATACAAACAAAAACCAAAACCAAACAAATAAAAAACACTACTAATCACAACTCTCTTCCTAAAAAAAAAAAAAAATAAAAATTAAACTATACTCTAAACTAACTCCTAATCCTACCTC
chr3	49851314	49851434	Hypo	1 +	TTAGTGTAAATAGGAATTAAGGTTAAGTGAATAAGGGATGTTGTTGGTTATAGTTTTTTTTTTGGAGAAAAGAAAAGTGAAAGTTAAATTATGTTTTGAGTTGGTTTTTGATTTTGTTTT
chr3	49851319	49851439	Hypo	2 -	ACAAACAAAAACCAAAACCAAACAAATAAAAAACACTACTAATCACAACTCTCTTCCTAACTCCTCTAAAAAAAAAAAAAAATAAAAATTAAACTATACTCTAAACTAACTCCTAATCCTA
chr3	49851319	49851439	Hypo	1 +	GTAAATAGGAATTAAGGTTAAGTGAATAAGGGATGTTGTTGGTTATAGTTTTTTTTTTGGTTTTTTTGGAGAAAAGAAAAGTGAAAGTTAAATTATGTTTTGAGTTGGTTTTTGATTTTG
chr3	49851314	49851434	Hyper	1 -	CCAATACAAACAAAAACCAAAACCAAACGAATAAAAAACGCTACTAATCACAACTCTCTTCCTAAAAAAAAAAAAAAATAAAAATTAAACTATACTCTAAACTAACTCCTAATCCTACCTC
chr3	49851314	49851434	Hyper	1 +	TTAGTGTAAATAGGAATTAAGGTTAAGCGAATAAGGGACGTTGTTGGTTATAGTTTTTTTTTTGGAGAAAAGAAAAGTGAAAGTTAAATTATGTTTTGAGTTGGTTTTTGATTTTGTTTT
chr3	49851319	49851439	Hyper	2 -	ACAAACAAAAACCAAAACCAAACGAATAAAAAACGCTACTAATCACAACTCTCTTCCTAACTCCTCTAAAAAAAAAAAAAAATAAAAATTAAACTATACTCTAAACTAACTCCTAATCCTA
chr3	49851319	49851439	Hyper	1 +	GTAAATAGGAATTAAGGTTAAGCGAATAAGGGACGTTGTTGGTTATAGTTTTTTTTTTGGTTTTTTTGGAGAAAAGAAAAGTGAAAGTTAAATTATGTTTTGAGTTGGTTTTTGATTTTG
chr1	191863720	191863840	Hypo	1 -	TAAAAAACAACACCCAAACTAAAATCCCAACAAAATCTTTAATACAACAAATTAACATATCCACTTAAAAATTACAATTTAAAATTTATAATAAATAAAAATATTTAAAATATTTATAAT
chr1	191863720	191863840	Hypo	1 +	TAAAAAGTAATGTTTAGATTAAAATTTTAATAGAATTTTTGGTATAGTAAGTTAATATATTTATTTAAGGATTGTAATTTGGAATTTGTAGTAAATAAAAGTATTTGAAATATTTATAAT
chr1	191863716	191863836	Hypo	1 -	CACATAAAAAACAACACCCAAACTAAAATCCCAACAAAATCTTTAATACAACAAATTAACATAAAAATTACAATTTAAAATTTATAATAAATAAAAATATTTAAAATATTTATAATTATA
chr1	191863716	191863836	Hypo	1 +	TATATAAAAAGTAATGTTTAGATTAAAATTTTAATAGAATTTTTGGTATAGTAAGTTAATATAAGGATTGTAATTTGGAATTTGTAGTAAATAAAAGTATTTGAAATATTTATAATTATA
chr1	191863720	191863840	Hyper	1 -	TAAAAAACAACGCCCAAACTAAAATCCCAACAAAATCTTTAATACAACAAATTAACATATCCACTTAAAAATTACAATTTAAAATTTATAATAAATAAAAATATTTAAAATATTTATAAT
chr1	191863720	191863840	Hyper	1 +	TAAAAAGTAACGTTTAGATTAAAATTTTAATAGAATTTTTGGTATAGTAAGTTAATATATTTATTTAAGGATTGTAATTTGGAATTTGTAGTAAATAAAAGTATTTGAAATATTTATAAT
chr1	191863716	191863836	Hyper	1 -	CACATAAAAAACAACGCCCAAACTAAAATCCCAACAAAATCTTTAATACAACAAATTAACATAAAAATTACAATTTAAAATTTATAATAAATAAAAATATTTAAAATATTTATAATTATA
chr1	191863716	191863836	Hyper	1 +	TATATAAAAAGTAACGTTTAGATTAAAATTTTAATAGAATTTTTGGTATAGTAAGTTAATATAAGGATTGTAATTTGGAATTTGTAGTAAATAAAAGTATTTGAAATATTTATAATTATA
chr16	27040882	27041002	Hypo	1 -	AAAAAAAAAAAAAAAAAAAAAACAAAATAAAAACTAAATCAAACTAACAAACAATAAATAATAACCAACCCCAAAAAATTCAATAAAAAAATCAAAACTCAAAAACTAAACAACCTAATAC
chr16	27040882	27041002	Hypo	1 +	AAGGAGGAGGAAGAGAGAAAATAGAATGGAAATTGAATTAGGTTGGTAGGTAGTGGGTAATGATTAATTTTGAAGAGTTTGGTGGAAGAGTTGGAGTTTAGGAATTAGATGATTTGGTAT
chr16	27040887	27041007	Hypo	2 -	AAAAAAAAAAAAAAAAACAAAATAAAAACTAAATCAAACTAACAAACAATAAATAATAACCTAACCAAACCAACCCCAAAAAATTCAATAAAAAAATCAAAACTCAAAAACTAAACAACCT
chr16	27040887	27041007	Hypo	1 +	GGAGGAAGAGAGAAAATAGAATGGAAATTGAATTAGGTTGGTAGGTAGTGGGTAATGATTTGGTTGGATTAATTTTGAAGAGTTTGGTGGAAGAGTTGGAGTTTAGGAATTAGATGATTT
chr16	27040882	27041002	Hyper	1 -	AAAAAAAAAAAAAAAAAAAAAACAAAATAAAAACTAAATCAAACTAACAAACAATAAATAATAACCAACCCCGAAAAATTCGATAAAAAAATCGAAACTCAAAAACTAAACGACCTAATAC
chr16	27040882	27041002	Hyper	1 +	AAGGAGGAGGAAGAGAGAAAATAGAATGGAAATTGAATTAGGTTGGTAGGTAGTGGGTAATGATTAATTTCGAAGAGTTCGGTGGAAGAGTCGGAGTTTAGGAATTAGACGATTTGGTAT
chr16	27040887	27041007	Hyper	2 -	AAAAAAAAAAAAAAAAACAAAATAAAAACTAAATCAAACTAACAAACAATAAATAATAACCTAACCGAACCAACCCCGAAAAATTCGATAAAAAAATCGAAACTCAAAAACTAAACGACCT
chr16	27040887	27041007	Hyper	1 +	GGAGGAAGAGAGAAAATAGAATGGAAATTGAATTAGGTTGGTAGGTAGTGGGTAATGATTTGGTCGGATTAATTTCGAAGAGTTCGGTGGAAGAGTCGGAGTTTAGGAATTAGACGATTT
chr5	98722512	98722632	Hypo	1 -	TAATAACTTCAAATAAAAAATATACCTCATAAACTAAATATTTATCATCAAAAACCACTAAAAATATACTACCAAAACTCCCCCTCCCCCTACAAATCTACTACTAATCCATCTTACCTA
chr5	98722512	98722632	Hypo	1 +	TAATAGTTTTAAATAGGAGGTGTGTTTTATAAATTAAGTATTTATTATTAGAGGTTATTGGGGATGTGTTGTTAAAGTTTTTTTTTTTTTTTGTAAATTTATTGTTAATTTATTTTGTTTG
chr5	98722509	98722629	Hypo	1 -	TAATAATAACTTCAAATAAAAAATATACCTCATAAACTAAATATTTATCATCAAAAACCACTATACTACCAAAACTCCCCCTCCCCCTACAAATCTACTACTAATCCATCTTACCTAACT

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chr5	98722509	98722629	Hypo	1 +	TGATAATAGTTTTAAATAGGAGGTGTGTTTTATAAATTAAGTATTTATTATTAGAGGTTATTGTGTTGTTAAAGTTTTTTTTTTTTTTTGTAAATTTATTGTTAATTTATTTTGTTTGATT
chr5	98722512	98722632	Hyper	1 -	TAATAACTTCAAATAAAAAATATACCTCATAAACTAAATATTTATCATCAAAAACCACTAAAAATATACTACCAAAACTCCCCCTCCCCCTACAAATCTACTACTAATCCATCTTACCTA
chr5	98722512	98722632	Hyper	1 +	TAATAGTTTTAAATAGGAGGTGTGTTTTATAAATTAAGTATTTATTATTAGAGGTTATTGGGGATGTGTTGTTAAAGTTTTTTTTTTTTTTTGTAAATTTATTGTTAATTTATTTTGTTTG
chr5	98722509	98722629	Hyper	1 -	TAATAATAACTTCAAATAAAAAATATACCTCATAAACTAAATATTTATCATCAAAAACCACTATACTACCAAAACTCCCCCTCCCCCTACAAATCTACTACTAATCCATCTTACCTAACT
chr5	98722509	98722629	Hyper	1 +	TGATAATAGTTTTAAATAGGAGGTGTGTTTTATAAATTAAGTATTTATTATTAGAGGTTATTGTGTTGTTAAAGTTTTTTTTTTTTTTTGTAAATTTATTGTTAATTTATTTTGTTTGATT
chr10	104909685	104909805	Hypo	1 -	ATATTTTTCCCTACATTACACATCCTAAAAACAACCATATTTTCCCAAAAATATCCTTTTAAATCAACAACCACTTTACAAAATTTTAAATCAACAAAATAAAAAACTTCTCAAATCTCA
chr10	104909685	104909805	Hypo	1 +	ATATTTTTTTTTGTATTATATATATTTTAGGAGTAATTATATTTTTTTAAAGATATTTTTTTGAATTAATAATTGTTTTATAAAATTTTAAATTAGTAGGATGAGGAGTTTTTTAAGTTTTA
chr10	104909690	104909810	Hypo	1 -	TTTCCCTACATTACACATCCTAAAAACAACCATATTTTCCCAAAAATATCCTTTTAAATATAAACAATCAACAACCACTTTACAAAATTTTAAATCAACAAAATAAAAAACTTCTCAAAT
chr10	104909690	104909810	Hypo	1 +	TTTTTTTGTATTATATATATTTTAGGAGTAATTATATTTTTTTAAAGATATTTTTTTGAATATGAATAATTAATAATTGTTTTATAAAATTTTAAATTAGTAGGATGAGGAGTTTTTTAAGT
chr10	104909685	104909805	Hyper	1 -	ATATTTTTCCCTACATTACACATCCTAAAAACAACCATATTTTCCCAAAAATATCCTTTTAAATCAACAACCGCTTTACAAAATTTTAAATCAACAAAATAAAAAACTTCTCAAATCTCA
chr10	104909685	104909805	Hyper	1 +	ATATTTTTTTTTGTATTATATATATTTTAGGAGTAATTATATTTTTTTAAAGATATTTTTTTGAATTAATAATCGTTTTATAAAATTTTAAATTAGTAGGATGAGGAGTTTTTTAAGTTTTA
chr10	104909690	104909810	Hyper	1 -	TTTCCCTACATTACACATCCTAAAAACAACCATATTTTCCCAAAAATATCCTTTTAAATATAAACAATCAACAACCGCTTTACAAAATTTTAAATCAACAAAATAAAAAACTTCTCAAAT
chr10	104909690	104909810	Hyper	1 +	TTTTTTTGTATTATATATATTTTAGGAGTAATTATATTTTTTTAAAGATATTTTTTTGAATATGAATAATTAATAATCGTTTTATAAAATTTTAAATTAGTAGGATGAGGAGTTTTTTAAGT
chr11	73031067	73031187	Hypo	1 -	ATCTCTACCAAACTACCCCATCTAAAAACAAAACTAAAAACCCAACAACAAAAAAAAAAAAAACCCCATATTCTAAAAACTCCATATAAAAATTAATAACATTAATACTATCTAACCAAAA
chr11	73031067	73031187	Hypo	1 +	GTTTTTGTTAGGTTGTTTTATTTGAGGGTAGAATTGAGAGTTTAGTGGTAGAAGGAAAGAAATTTTATGTTTTGGGAGTTTTATGTGGGAATTGGTGGTATTGGTGTTGTTTGATTAGAG
chr11	73031071	73031191	Hypo	1 -	CTACCAAACTACCCCATCTAAAAACAAAACTAAAAACCCAACAACAAAAAAAAAAAAAACTCCCTCACCCCATATTCTAAAAACTCCATATAAAAATTAATAACATTAATACTATCTAACC
chr11	73031071	73031191	Hypo	1 +	TTGTTAGGTTGTTTTATTTGAGGGTAGAATTGAGAGTTTAGTGGTAGAAGGAAAGAAATTTTTTTATTTTATGTTTTGGGAGTTTTATGTGGGAATTGGTGGTATTGGTGTTGTTTGATT
chr11	73031067	73031187	Hyper	1 -	ATCTCTACCAAACTACCCCATCTAAAAACAAAACTAAAAACCCAACGACAAAAAAAAAAAAAACCCCATATTCTAAAAACTCCATATAAAAATTAATAACATTAATACTATCTAACCAAAA
chr11	73031067	73031187	Hyper	1 +	GTTTTTGTTAGGTTGTTTTATTTGAGGGTAGAATTGAGAGTTTAGCGGTAGAAGGAAAGAAATTTTATGTTTTGGGAGTTTTATGTGGGAATTGGTGGTATTGGTGTTGTTTGATTAGAG
chr11	73031071	73031191	Hyper	1 -	CTACCAAACTACCCCATCTAAAAACAAAACTAAAAACCCAACGACAAAAAAAAAAAAAACTCCCTCACCCCATATTCTAAAAACTCCATATAAAAATTAATAACATTAATACTATCTAACC
chr11	73031071	73031191	Hyper	1 +	TTGTTAGGTTGTTTTATTTGAGGGTAGAATTGAGAGTTTAGCGGTAGAAGGAAAGAAATTTTTTTATTTTATGTTTTGGGAGTTTTATGTGGGAATTGGTGGTATTGGTGTTGTTTGATT
chr3	76100354	76100474	Hypo	1 -	AACTCTAAAATACATTTTCTTCATATCTATTTTCTATATTTTAAAAATAAAATACTTTAATATATCACTATAATCATAAATTCCAATCCAAAATTCCTCTAAAAAACCACCTTATCTTAC
chr3	76100354	76100474	Hypo	1 +	AATTTTAAAATATATTTTTTTTGTGTTTGTTTTTTATATTTTAAAAATGAAGTATTTTGATATGTTATTATGGTTATAAGTTTTAGTTTAAAGTTTTTTTAAAGAATTATTTTATTTTAT
chr3	76100358	76100478	Hypo	1 -	CTAAAATACATTTTCTTCATATCTATTTTCTATATTTTAAAAATAAAATACTTTAATATATATTCATATCACTATAATCATAAATTCCAATCCAAAATTCCTCTAAAAAACCACCTTATC
chr3	76100358	76100478	Hypo	1 +	TTAAAATATATTTTTTTTGTGTTTGTTTTTTATATTTTAAAAATGAAGTATTTTGATATGTATTTATGTTATTATGGTTATAAGTTTTAGTTTAAAGTTTTTTTAAAGAATTATTTTATT
chr3	76100354	76100474	Hyper	1 -	AACTCTAAAATACATTTTCTTCGTATCTATTTTCTATATTTTAAAAATAAAATACTTTAATATATCACTATAATCATAAATTCCAATCCAAAATTCCTCTAAAAAACCACCTTATCTTAC
chr3	76100354	76100474	Hyper	1 +	AATTTTAAAATATATTTTTTTCGTGTTTGTTTTTTATATTTTAAAAATGAAGTATTTTGATATGTTATTATGGTTATAAGTTTTAGTTTAAAGTTTTTTTAAAGAATTATTTTATTTTAT
chr3	76100358	76100478	Hyper	1 -	CTAAAATACATTTTCTTCGTATCTATTTTCTATATTTTAAAAATAAAATACTTTAATATATATTCATATCACTATAATCATAAATTCCAATCCAAAATTCCTCTAAAAAACCACCTTATC
chr3	76100358	76100478	Hyper	1 +	TTAAAATATATTTTTTTCGTGTTTGTTTTTTATATTTTAAAAATGAAGTATTTTGATATGTATTTATGTTATTATGGTTATAAGTTTTAGTTTAAAGTTTTTTTAAAGAATTATTTTATT
chr20	50022858	50022978	Hypo	1 -	ACTTTTATCAAAATTAAACAATAAAAATCACCCACATAATACACAAAAAAAAAATAAAAATAACAATATTAACATCATTATTAACTTTAAATAACCTATAACAAAAAACAAATACTAAAAT
chr20	50022858	50022978	Hypo	1 +	GTTTTTATTAGGGTTGGGTAGTAGAAATTATTTATATGGTATATAAAGAAAAATGGGGGTGATAGTGTTGGTATTGTTGTTAGTTTTGGGTAATTTGTGGTGGGGAGTAGATATTGAGAT
chr20	50022853	50022973	Hypo	1 -	CCCTAACTTTTATCAAAATTAAACAATAAAAATCACCCACATAATACACAAAAAAAAAATAAATTAACATCATTATTAACTTTAAATAACCTATAACAAAAAACAAATACTAAAATTTAAA
chr20	50022853	50022973	Hypo	1 +	TTTTAGTTTTTATTAGGGTTGGGTAGTAGAAATTATTTATATGGTATATAAAGAAAAATGGGTTGGTATTGTTGTTAGTTTTGGGTAATTTGTGGTGGGGAGTAGATATTGAGATTTAAG
chr20	50022858	50022978	Hyper	1 -	ACTTTTATCAAAATTAAACAATAAAAATCACCCACATAATACACAAAAAAAAAATAAAAATAACAATATTAACATCGTTATTAACTTTAAATAACCTATAACGAAAAACAAATACTAAAAT
chr20	50022858	50022978	Hyper	1 +	GTTTTTATTAGGGTTGGGTAGTAGAAATTATTTATATGGTATATAAAGAAAAATGGGGGTGATAGTGTTGGTATCGTTGTTAGTTTTGGGTAATTTGTGGCGGGGAGTAGATATTGAGAT
chr20	50022853	50022973	Hyper	1 -	CCCTAACTTTTATCAAAATTAAACAATAAAAATCACCCACATAATACACAAAAAAAAAATAAATTAACATCGTTATTAACTTTAAATAACCTATAACGAAAAACAAATACTAAAATTTAAA
chr20	50022853	50022973	Hyper	1 +	TTTTAGTTTTTATTAGGGTTGGGTAGTAGAAATTATTTATATGGTATATAAAGAAAAATGGGTTGGTATCGTTGTTAGTTTTGGGTAATTTGTGGCGGGGAGTAGATATTGAGATTTAAG
chr19	32452022	32452142	Hypo	1 -	TCAAATAATCCTAACATATCCACCTATCATTACTCCAACCCTCTACTACTATTATTTTACAAAAATACTTCTCCTTTTTATTCAAAAATCCCTTAAAAAATTACCACATTCCCTACTTAC
chr19	32452022	32452142	Hypo	1 +	TTAGATAATTTTAGTATGTTTATTTGTTATTGTTTTGATTTTTTGTTATTGTTGTTTTGTAAGAATGTTTTTTTTTTTTGTTTAAGGGTTTTTTGAGAAATTGTTATATTTTTTGTTTGT
chr19	32452018	32452138	Hypo	1 -	TTTCTCAAATAATCCTAACATATCCACCTATCATTACTCCAACCCTCTACTACTATTATTTTACTTCTCCTTTTTATTCAAAAATCCCTTAAAAAATTACCACATTCCCTACTTACTTTC
chr19	32452018	32452138	Hypo	2 +	TTTTTTAGATAATTTTAGTATGTTTATTTGTTATTGTTTTGATTTTTTGTTATTGTTGTTTTGTTTTTTTTTTTTTGTTTAAGGGTTTTTTGAGAAATTGTTATATTTTTTGTTTGTTTTT
chr19	32452022	32452142	Hyper	1 -	TCAAATAATCCTAACATATCCACCTATCATTACTCCGACCCTCTACTACTATTATTTTACAAAAATACTTCTCCTTTTTATTCAAAAATCCCTTAAAAAATTACCACATTCCCTACTTAC
chr19	32452022	32452142	Hyper	1 +	TTAGATAATTTTAGTATGTTTATTTGTTATTGTTTCGATTTTTTGTTATTGTTGTTTTGTAAGAATGTTTTTTTTTTTTGTTTAAGGGTTTTTTGAGAAATTGTTATATTTTTTGTTTGT
chr19	32452018	32452138	Hyper	1 -	TTTCTCAAATAATCCTAACATATCCACCTATCATTACTCCGACCCTCTACTACTATTATTTTACTTCTCCTTTTTATTCAAAAATCCCTTAAAAAATTACCACATTCCCTACTTACTTTC
chr19	32452018	32452138	Hyper	2 +	TTTTTTAGATAATTTTAGTATGTTTATTTGTTATTGTTTCGATTTTTTGTTATTGTTGTTTTGTTTTTTTTTTTTTGTTTAAGGGTTTTTTGAGAAATTGTTATATTTTTTGTTTGTTTTT
chr20	49940661	49940781	Hypo	1 -	ACTCAATAAAACCCTAAAAAAAAAACATCCCTTTTCTCAAACCTCCTAAAATTAATTTAACCCAACTTAACTTAAATACAAACAAAAAACCCTTAACACAAACAAAACTATAAAACATAA
chr20	49940661	49940781	Hypo	1 +	GTTTAGTGAGGTTTTGGAAAAAGAGTATTTTTTTTTTTAAATTTTTTAGGGTTGATTTGGTTTAGTTTGGTTTGGGTGTGGGTAGGGAATTTTTGGTGTAGGTAGAGTTGTGGAGTGTGG
chr20	49940656	49940776	Hypo	1 -	CTACAACTCAATAAAACCCTAAAAAAAAAACATCCCTTTTCTCAAACCTCCTAAAATTAATTTAACTTAAATACAAACAAAAAACCCTTAACACAAACAAAACTATAAAACATAATAATA
chr20	49940656	49940776	Hypo	1 +	TTATAGTTTAGTGAGGTTTTGGAAAAAGAGTATTTTTTTTTTTAAATTTTTTAGGGTTGATTTGGTTTGGGTGTGGGTAGGGAATTTTTGGTGTAGGTAGAGTTGTGGAGTGTGGTGATG
chr20	49940661	49940781	Hyper	1 -	ACTCAATAAAACCCTAAAAAAAAAACATCCCTTTTCTCAAACCTCCTAAAATTAATTTAACCCAACTTAACTTAAATACGAACAAAAAACCCTTAACGCAAACAAAACTATAAAACGTAA
chr20	49940661	49940781	Hyper	1 +	GTTTAGTGAGGTTTTGGAAAAAGAGTATTTTTTTTTTTAAATTTTTTAGGGTTGATTTGGTTTAGTTTGGTTTGGGTGCGGGTAGGGAATTTTTGGCGTAGGTAGAGTTGTGGAGCGTGG
chr20	49940656	49940776	Hyper	1 -	CTACAACTCAATAAAACCCTAAAAAAAAAACATCCCTTTTCTCAAACCTCCTAAAATTAATTTAACTTAAATACGAACAAAAAACCCTTAACGCAAACAAAACTATAAAACGTAATAATA

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chr20	49940656	49940776	Hyper	1 +	TTATAGTTTAGTGAGGTTTGGAAAAAGAGTATTTTTTTTTTTAAATTTTTTAGGGTTGATTTGGTTTGGGTGCGGGTAGGGAATTTTTGGCGTAGGTAGAGTTGTGGAGCGTGGTGATG
chr17	20841771	20841891	Hypo	1 -	TTATTATCCAATAAAAATTATCAAAAAAATTCCTTACACAATAATCATCATAATTCAAAAACAACCAAAAACATATATAATACACACCTACCTTAAAACCAAACCTCAAAAAAAAATATC
chr17	20841771	20841891	Hypo	1 +	TTATTATTTAATAAGAGTTGTTAAAAAGGTTTTTTGTGTAGTGGTTGTTATAGTTTAGAAGTGATTGGGAGTGTGTGTGGTGTGTGTTTGTTTTGAGGTTAGGTTTTAGAGAAGGGTGTT
chr17	20841774	20841894	Hypo	1 -	TTATCCAATAAAAATTATCAAAAAATTCCTTACACAATAATCATCATAATTCAAAAACAATAACAACCAAAAACATATATAATACACACCTACCTTAAAACCAAACCTCAAAAAAAAATATC
chr17	20841774	20841894	Hypo	1 +	TTATTTAATAAGAGTTGTTAAAAAGGTTTTTTGTGTAGTGGTTGTTATAGTTTAGAAGTGATGATGATTGGGAGTGTGTGTGGTGTGTGTTTGTTTTGAGGTTAGGTTTTAGAGAAGGGT
chr17	20841771	20841891	Hyper	1 -	TTATTATCCAATAAAAATTATCAAAAAATTCCTTACGCAATAATCGTCATAATTCAAAACGACCGAAAACGTATATAATACGCGCCTACGTTAAAACCAACCTCAAAAAAAAATATC
chr17	20841771	20841891	Hyper	1 +	TTATTATTTAATAAGAGTTGTTAAAAAGGTTTTTTGCGTAGTGGTCGTTATAGTTTAGAAGCGATGACGATGCGGGAGCGTGTGTGGTGCGCGTTTGTTTTGAGGTTAGGTTTTAGAGAAGGGTGTT
chr17	20841774	20841894	Hyper	1 -	TTATCCAATAAAAATTATCAAAAAATTCCTTACGCAATAATCGTCATAATTCAAAACGATAACGACCGAAAACGTATATAATACGCGCCTACCTTAAAACCAAACCTCAAAAAAAAATATC
chr17	20841774	20841894	Hyper	1 +	TTATTTAATAAGAGTTGTTAAAAAGGTTTTTTGCGTAGTGGTCGTTATAGTTTAGAAGCGATGACGATGCGGGAGCGTGTGTGGTGCGCGTTTGTTTTGAGGTTAGGTTTTAGAGAAGGGTGTT
chr13	58898261	58898381	Hyper	1 -	TATTATTCTCAAATTATCAATTTTTATTCATTTTATTAAAAAATAACAACTTAACTCTTAAATTATCTTAAATATACCCACTTATATCCAAAAAATTCCTCTATTATTTCAACATATACT
chr13	58898261	58898381	Hyper	1 +	TGTTATTTTTAGATTATTAATTTTTATTTATTTTATTGAAAAATAGTAATTTAATTTTTAGATTGTTTTAAATATATTTATTTGTGTTTAGAAAGTTTTTTTGTTATTTTAATATATGTT
chr13	58898266	58898386	Hypo	1 -	TTCTCAAATTATCAATTTTTATTCATTTTATTAAAAAATAACAACTTAACTCTTAAATTATCTTAAATATACCCACTTATATCCAAAAAATTCCTCTATTATTTCAACATATACT
chr13	58898266	58898386	Hypo	1 +	TTTTTAGATTATTAATTTTTATTTATTTTATTGAAAAATAGTAATTTAATTTTTAGATTGTTTTAAATATATTTATTTGTGTTTAGAAAGTTTTTTTGTTATTTTAATATATGTT
chr13	58898261	58898381	Hyper	1 -	TATTATTCTCAAATTATCAATTTTTATTCATTTTATTAAAAAATAACAACTTAACTCTTAAATTATCTTAAATATACCCACTTATATCCAAAAAATTCCTCTATTATTTCAACATATACT
chr13	58898261	58898381	Hyper	1 +	TGTTATTTTTAGATTATTAATTTTTATTTATTTTATTGAAAAATAGTAATTTAATTTTTAGATTGTTTTAAATATATTTATTTGTGTTTAGAAAGTTTTTTTGTTATTTTAATATATGTT
chr13	58898266	58898386	Hyper	1 -	TTCTCAAATTATCAATTTTTATTCATTTTATTAAAAAATAACAACTTAACTCTTAAATTATATTACATTATCTTAAATATACCCACTTATATCCAAAAAATTCCTCTATTATTTCAACAT
chr13	58898266	58898386	Hyper	1 +	TTTTTAGATTATTAATTTTTATTTATTTTATTGAAAAATAGTAATTTAATTTTTAGATTGTTTTAAATATATTTATTTGTGTTTAGAAAGTTTTTTTGTTATTTTAATATATGTT
chr2	221564315	221564435	Hyper	1 -	AATAAACCTAAAAAAACTAACTAACACATTTAAAATAATCAAAAAAAACATCTAAACTATAAATCTATAACATTAAATAATAAACCTTACCCTAAATCAATAATTCTAAATCAAAAATAA
chr2	221564315	221564435	Hyper	1 +	AATAAGTTTAAAGAAGTTGGTTAATATATTTGAAATAGTTAAGAAGAATATTTGAATTATGGATTTGTAATATTGAATGATAAATTTTGTTTTAAATTAATGGTTTTAAATTAGGGGTGA
chr2	221564318	221564438	Hyper	1 -	AAACCTAAAAAAACTAACTAACACATTTAAAATAATCAAAAAAAACATCTAAACTATAAATTCAATCTATAACATTAAATAATAAACCTTACCCTAAATCAATAATTCTAAATCAAAAA
chr2	221564318	221564438	Hyper	1 +	AAGTTTAAGAAGTTGGTTAATATATTTGAAATAGTTAAGAAGAATATTTGAATTATGGATTTGTAATATTGAATGATAAATTTTGTTTTAAATTAATGGTTTTAAATTAGGGGTGA
chr2	221564315	221564435	Hyper	1 -	AATAAACCTAAAAAAACTAACTAACACATTTAAAATAATCAAAAAAAACATCTAAACTATAAATCTATAACATTAAATAATAAACCTTACCCTAAATCAATAATTCTAAATCAAAAATAA
chr2	221564315	221564435	Hyper	1 +	AATAAGTTTAAAGAAGTTGGTTAATATATTTGAAATAGTTAAGAAGAATATTTGAATTATGGATTTGTAATATTGAATGATAAATTTTGTTTTAAATTAATGGTTTTAAATTAGGGGTGA
chr2	221564318	221564438	Hyper	1 -	AAACCTAAAAAAACTAACTAACACATTTAAAATAATCAAAAAAAACATCTAAACTATAAATTCGATCTATAACATTAAATAATAAACCTTACCCTAAATCAATAATTCTAAATCAAAAA
chr2	221564318	221564438	Hyper	1 +	AAGTTTAAAGAAGTTGGTTAATATATTTGAAATAGTTAAGAAGAATATTTGAATTATGGGTTTCGATTTGTAATATTGAATGATAAATTTTGTTTTAAATTAATGGTTTTAAATTAGGGG
chr4	27894211	27894331	Hypo	1 -	AACAAAAACTAAATTTCTAATTTATTTCAAATCTATAACTCACTAAATATTACATAAAATTACTATATTAAATAAAAAATAATTCTTATTCTTAATAAAAAAAACACATAAAATTCT
chr4	27894211	27894331	Hypo	1 +	AGTAAAAAATAAATTTTTGATTTATTTTAGATTTTATAGTTTATTGAATATTGTATAAAATTGTATTTTATTTAATTGTATTAGATGGAAATGATTTTTGTTTTTAGTGGAGGAAGTATATGAAGTTTT
chr4	27894216	27894336	Hypo	1 -	AAAACTAAATTTCTAATTTATTTCAAATCTATAACTCACTAAATATTACATAAAATACATTTTATTTACTATATTAAATAAAAAATAATTCTTATTCTTAATAAAAAAAACACATAAAA
chr4	27894216	27894336	Hypo	1 +	AAAATTAAATTTTTGATTTATTTTAGATTTTATAGTTTATTGAATATTGTATAAAATTGTATTTTATTTAATTGTATTAGATGGAAATGATTTTTGTTTTTAGTGGAGGAAGTATATGAAG
chr4	27894211	27894331	Hyper	1 -	AACAAAAACTAAATTTCTAATTTATTTCAAATCTATAACTCACTAAATATTACATAAAATACATTTTATTTACTATATTAAATAAAAAATAATTCTTATTCTTAATAAAAAAAACACATAAAA
chr4	27894211	27894331	Hyper	1 +	AGTAAAAAATAAATTTTTGATTTATTTTAGATTTTATAGTTTATTGAATATTGTATAAAATTGTATTTTATTTAATTGTATTAGATGGAAATGATTTTTGTTTTTAGTGGAGGAAGTATATGAAGTTTT
chr4	27894216	27894336	Hyper	1 -	AAAACTAAATTTCTAATTTATTTCAAATCTATAACTCACTAAATATTACATAAAATACATTTTATTTACTATATTAAATAAAAAATAATTCTTATTCTTAATAAAAAAAACACATAAAA
chr4	27894216	27894336	Hyper	1 +	AAAATTAAATTTTTGATTTATTTTAGATTTTATAGTTTATTGAATATTGTATAAAATTGTATTTTATTTAATTGTATTAGATGGAAATGATTTTTGTTTTTAGTGGAGGAAGTATATGAAG
chr8	102578561	102578681	Hypo	1 -	TCACCTCATACACAAAATATCTATAAATATCCCAATTCATTAAAACTATTATTTAACTTTACAACACCATTTAACACTTAATCACTCCTCCCTCTTACAAATACTCTTAACTTCATATCCAC
chr8	102578561	102578681	Hypo	1 +	TTATTTTATGTATAGAATGTTTATGAATGTTTTAGTTTGTTAAAGTTGTTATTTAATTTTGTAGTATTATTTGATATTGTTGATTATTTTTTTTTTTGTAAATGTTTTTGGTTTTATG
chr8	102578556	102578676	Hypo	1 -	TTTACTCACCTCATACACAAATATCTATAAATATCCCAATTCATTAAAACTATTATTTAACTTTACAACACCATTTAACACTTAATCACTCCTCCCTCTTACAAATACTCTTAACTTCATATCCAC
chr8	102578556	102578676	Hypo	1 +	TTATTTTATGTATAGAATGTTTATGAATGTTTTAGTTTGTTAAAGTTGTTATTTAATTTTGTAGTATTATTTGATATTGTTGATTATTTTTTTTTTTGTAAATGTTTTTGGTTTTATG
chr8	102578561	102578681	Hyper	1 -	TCACCTCATACACAAAATATCTATAAATATCCCAATTCATTAAAACTATTATTTAACTTTACAACACCATTTAACACTTAATCACTCCTCCCTCTTACAAATACTCTTAACTTCATA
chr8	102578561	102578681	Hyper	1 +	TTATTTTATGTATAGAATGTTTATGAATGTTTTAGTTTGTTAAAGTTGTTATTTAATTTTGTAGTATTATTTGATATTGTTGATTATTTTTTTTTTTGTAAATGTTTTTGGTTTTATG
chr8	102578556	102578676	Hyper	1 -	TTTACTCACCTCATACACAAAATATCTATAAATATCCCAATTCATTAAAACTATTATTTAACCATTTAACACTATTAATCACTCCTCCCTCTTACAAATACTCTTAACTTCATATCCAC
chr8	102578556	102578676	Hyper	1 +	TTTATTTATTTTATGTATAGAATGTTTATGAATGTTTTAGTTTGTTAAAGTTGTTATTTAATTATTTGATATTGTTGATTATTTTTTTTTTTGTAAATGTTTTTGGTTTTATGTTTAT
chr4	185056792	185056912	Hypo	1 -	ATTTTTAAAATAAATTTCTATCAAAATTTAACATAAATACAAAAAAATAAATAATTCATAAAAATACTATTCAATAAATTATTAAAAAATAAAACAACTATATACTAAATACCCACATC
chr4	185056792	185056912	Hypo	1 +	ATTTTTAAAGTAAATTTTTATTAAAATTTAATATAGGTGTAAAAAGTGAATAATTTATAAGGGTATTGTTTAGTGAATTGTTAAAAGGTAAAGGTAGTTGTGTATTGAGTATTTATGTT
chr4	185056787	185056907	Hypo	1 -	TAATCATTTTTAAAATAAATTTCTATCAAAATTTAACATAAATACAAAAAAATAAATAATTCTATTCAATAAATTATTAAAAAATAAAACAACTATATACTAAATACCCACATCAAAAA
chr4	185056787	185056907	Hypo	1 +	TAGTTATTTTAAAGTAAATTTTTATTAAAATTTAATATAGGTGTAAAAAGTGAATAATTTTGTTTAGTGAATTGTTAAAAGGTAAAGGTAGTTGTGTATTGAGTATTTATGTTAGAAA
chr4	185056792	185056912	Hyper	1 -	ATTTTTAAAATAAATTTCTATCAAAATTTAACATAAATACAAAAAAATAAATAATTCATAAAAATACTATTCAATAAATTATTAAAAAATAAAACAACTATATACTAAATACCCACGTC
chr4	185056792	185056912	Hyper	1 +	ATTTTTAAAGTAAATTTTTATTAAAATTTAATATAGGTGTAAAAAGTGAATAATTTATAAGGGTATTGTTTAGTGAATTGTTAAAAGGTAAAGGTAGTTGTGTATTGAGTATTTACGTT
chr4	185056787	185056907	Hyper	1 -	TAATCATTTTTAAAATAAATTTCTATCAAAATTTAACATAAATACAAAAAAATAAATAATTCTATTCAATAAATTATTAAAAAATAAAACAACTATATACTAAATACCCACGTCAAAAA
chr4	185056787	185056907	Hyper	1 +	TAGTTATTTTAAAGTAAATTTTTATTAAAATTTAATATAGGTGTAAAAAGTGAATAATTTTGTTTAGTGAATTGTTAAAAGGTAAAGGTAGTTGTGTATTGAGTATTTACGTTAGAAA
chr3	20765258	20765378	Hypo	1 -	AAAAATATTTAAACTATAATAACAAAAATAAATAAATAACCATACCTTTCTAAAAAAAATTATTCCTTACAACCATTAAACCTATTACTACAAATAACTAAAAAAAAAAACAAATCAA
chr3	20765258	20765378	Hyper	1 +	AAGAATGTTTGGGTTATGATGGTAGAAATGGATGGATGATTATGTTTTTTTGGAAGAGATTGAGAGAATATTTTTTGTAATTATTGGATTTATTATTGTAAATAGTTGAGAAAAAGGAATAAA
chr3	20765262	20765382	Hypo	1 -	ATATTTTAAACTATAATAACAAAAATAAATAAATAACCATACCTTTCTAAAAAAAATTATTCCTTACAACCATTAAACCTATTACTACAAATAACTAAAAAAAAAAACAAATCAA
chr3	20765262	20765382	Hyper	1 +	ATGTTTGGGTTATGATGGTAGAAATGGATGGATGATTATGTTTTTTTGGAAGAGATTGAGAGAATATTTTTTGTAATTATTGGATTTATTATTGTAAATAGTTGAGAAAAAGGAATAAA
chr10	1213073	1213193	Hypo	1 -	ACCACACCAAATCCAACACCCACAACAACAACAAAAACCATTTCTAAAACAACTTTAAAAATATACTTATCCTTCCAAATAAAAAAAACTTAAAAAAACCCCTAAACAAAAAAAAAAAA
chr10	1213073	1213193	Hypo	1 +	GTTATATTAGGTTTGGTATTTATGGTAGTAGTAGGAGTTATTTTTGGGATAATTTTGGGGATATATTTGTTTTTTTAAGTGAAAGGAGTTTAAAAAGATTTTTGAGTAGGAGAGAAAAAG
chr10	1213078	1213198	Hypo	1 -	ACCAAATCCAACACCCACAACAACAACAAAAACCATTTCTAAAACAACTTTAAAAATATACTTATCCTTCCAAATAAAAAAACTTAAAAAAACCCCTAAACAAAAAAAAAAAA
chr10	1213078	1213198	Hypo	1 +	ATTAGGTTTGGTATTTATGGTAGTAGTAGGAGTTATTTTTGGGATAATTTTGGGGATATATTTGTTTTTTTAAGTGAAAGGAGTTTAAAAAGATTTTTGAGTAGGAGAGAAAAAG
chr10	1213073	1213193	Hyper	1 -	ACCAACCCAACACCCACAACAACAACAAAAACCATTTCTAAAACAACTTTAAAAATATACTTATCCTTCCAAATAAAAAAACTTAAAAAAACCCCTAAACAAAAAAAAAAAA
chr10	1213073	1213193	Hyper	1 +	GTTATATTAGGTTTGGTATTTATGGTAGTAGTAGGAGTTATTTTTGGGATAATTTTGGGGATATATTTGTTTTTTTAAGTGAAAGGAGTTTAAAAAGATTTTTGAGTAGGAGAGAAAAAG
chr10	1213078	1213198	Hyper	1 -	ACCAAATCCGACACCCACGACAACAACAAAAACCATTTCTAAAACAACTTTAAAAATATACTTATCCTTCCAAATAAAAAAACTTAAAAAAACCCCTAAACAAAAAAAAAAAA
chr10	1213078	1213198	Hyper	1 +	ATTAGGTTTGGTATTTACGGTAGTAGTAGGAGTTATTTTTGGGATAATTTTGGGGATATTTTTATTATATTTGTTTTTTTAAGTGAAAGGAGTTTAAAAAGATTTTTGAGTAGGAGAGAA
chr7	80305217	80305337	Hypo	1 -	AATACTAATCCAAAACAAATACACTTCAACTACCATTCCTTACCTAATATATACTTATCTTAAAACACCCTTCTTATATACCTTTCTAAAATAAAAATATATTTTACCCTATTAATAAAA
chr7	80305217	80305337	Hypo	1 +	AATGTTGGTTTAGGGTAGATGTATTTAGTTATTGTTTTTGTTTGGTGTGTGTTTGTTTGAAGTATTTTTTTTATGTGTTTTTTGGAATGGGAATGTGTTTTGTTTTATTGGTGAAG
chr7	80305222	80305342	Hypo	1 -	TAATCCAAAACAAATACACTTCAACTACCATTCCTTACCTAATATATACTTATCTTAAAAATTAAAAAACACCCTTCTTATATACCTTTCTAAAATAAAAATATATTTTACCCTATTAAT
chr7	80305222	80305342	Hypo	1 +	TGGTTTAGGGTAGATGTATTTAGTTATTGTTTTTGTTTGGTGTGTGTTTGTTTGAAGGATTATTTTTTTATGTGTTTTTTGGAATGGGAATGTGTTTTGTTTTATTGGTAAAG
chr7	80305217	80305337	Hyper	1 -	AATACTAATCCAAAACAAATACACTTCAACTACCGTTCCTTACCTAATATATACTTATCTTAAAACACCCTTCTTATATACCTTTCTAAAATAAAAATATATTTTACCCTATTAATAAAA
chr7	80305217	80305337	Hyper	1 +	AATGTTGGTTTAGGGTAGATGTATTTAGTTATCGTTTTTGTTTGGTGTGTGTTTGTTTGAAGGATTTTTTTTTATGTGTTTTTTGGAATGGGAATGTGTTTTGTTTTATTGGTGAAG
chr7	80305222	80305342	Hyper	1 -	TAATCCAAAACAAATACACTTCAACTACCGTTCCTTACCTAATATATACTTATCTTAAAAACACCCTTCTTATATACCTTTCTAAAATAAAAATATATTTTACCCTATTAATAAAA
chr7	80305222	80305342	Hyper	1 +	TGGTTTAGGGTAGATGTATTTAGTTATCGTTTTTGTTTGGTGTGTGTTTGTTTGAGGGTTGAGAAGTATTTTTTTTATGTGTTTTTTGGAATGGGAATGTGTTTTGTTTTATTGGT
chr4	157835972	157836092	Hypo	1 -	ACAAAACACTAAAAACCTAATAAATATTTAAAAACCAATCTATAAATACTATAACAAACTAACTTTACAATACCCAAAATTAAATAAAATTAACTAACAAACTTCCCTTCTATTTATTTCT
chr4	157835972	157836092	Hypo	1 +	ATAAAGTATTAAGAATTTGATAGTATTTAGGAATTAGTTTATAAATATTATGATAGATTGGTTTTATAATATTTAGGATTGGATAAAATTGATTAATAAATTTTTTTTTTGTTTATTTTT
chr4	157835977	157836097	Hypo	1 -	ACACTAAAAACCTAATAAATATTTAAAAACCAATCTATAAATACTATAACAAACTAACTTTACAATACCCAAAATTAAATAAAATTAACTAACAAACTTCCCTTCTATTTATTTCT
chr4	157835977	157836097	Hypo	1 +	GTATTAAGAATTTGATAGTATTTAGGAATTAGTTTATAAATATTATGATAGATTGGGGAAAGTTTTTTTATAATATTTAGGATTGGATAAAATTGATTAATAAATTTTTTTTTTGTTTATT
chr4	157835972	157836092	Hypo	1 -	ACAAAACACTAAAAACCTAATAAATATTTAAAAACCAATCTATAAATACTATAACAAACTAACTTTACAATACCCAAAATTAAATAAAATTAACTAACAAACTTCCCTTCTATTTATTTCT
chr4	157835972	157836092	Hypo	1 +	ATAAAGTATTAAGAATTTGATAGTATTTAGGAATTAGTTTATAAATATTATGATAGATTGGTTTTATAATATTTAGGATTGGATAAAATTGATTAATAAATTTTTTTTTTGTTTATTTTT
chr4	157835977	157836097	Hypo	1 -	ACACTAAAAACCTAATAAATATTTAAAAACCAATCTATAAATACTATAACAAACTAACTTTACAATACCCAAAATTAAATAAAATTAACTAACAAACTTCCCTTCTATTTATTTCT
chr4	157835977	157836097	Hypo	1 +	GTATTAAGAATTTGATAGTATTTAGGAATTAGTTTATAAATATTATGATAGATTGGGGAAAGTTTTTTTATAATATTTAGGATTGGATAAAATTGATTAATAAATTTTTTTTTTGTTTATT
chr5	95882780	95882900	Hypo	1 -	AAATACTAAAAACACCATTCACTTTATACAATAAAAATAATATATTTAAAATAACACCTATATATTCCCTAAAATTCTCCAAAAAAACAAAACCAATAAAATTAATTATAAAAATTAACT
chr5	95882780	95882900	Hypo	1 +	AAGTATTAGAGATATTATTTATTTATGTAGTAAAAATAGTATATTTGGGATAGTATTTGTGTATTTTTTGGGGTTTTTATAGAGAAATAGAATTAATAGGATTGATTATGGAAATTGGTT
chr5	95882775	95882895	Hypo	1 -	AAAACAAATACTAAAAACACCATTCACTTTATACAATAAAAATAATATATTTAAAATAACACCTATATATTCCCTAAAATTCTCCAAAAAACAAAACCAATAAAATTAATTATAAAAATTAACTCATAA
chr5	95882775	95882895	Hypo	1 +	AAAATAAGTATTAGAGATATTATTTATTTATGTAGTAAAAATAGTATATTTGGGATAGTATTTGTGTATTTTTTGGGGTTTTTATAGAGAAATAGAATTAATAGGATTGATTATGGAAATTGGTTTATGA
chr5	95882780	95882900	Hypo	1 -	AAATACTAAAAACACCATTCACTTTATACAATAAAAATAATATATTTAAAATAACACCTATATATTCCCTAAAATTCTCCAAAAAACAAAACCAATAAAATTAATTATAAAAATTAACT
chr5	95882780	95882900	Hypo	1 +	AAGTATTAGAGATATTATTTATTTATGTAGTAAAAATAGTATATTTGGGATAGTATTTGTGTATTTTTTGGGGTTTTTATAGAGAAATAGAATTAATAGGATTGATTATGGAAATTGGTTTATGA
chr5	95882775	95882895	Hypo	1 -	AAATACTAAAAACACCATTCACTTTATACAATAAAAATAATATATTTAAAATAACACCTATATATTCCCTAAAATTCTCCAAAAAACAAAACCAATAAAATTAATTATAAAAATTAACT
chr5	95882775	95882895	Hypo	1 +	AAATAAGTATTAGAGATATTATTTATTTATGTAGTAAAAATAGTATATTTGGGATAGTATTTGTGTATTTTTTGGGGTTTTTATAGAGAAATAGAATTAATAGGATTGATTATGGAAATTGGTTTATGA
chr15	31643612	31643732	Hypo	1 -	TCCTACTTTAACATCCTATTAAACTCATAACCCCAAAACACTAACTAATTTCTAACCTAATCTAAATAATTACCCCATATACACTTATCTTACACTAAAAACTCCAATAATTAACTATCC
chr15	31643612	31643732	Hypo	1 +	TTTTGTTTAATATTTTGTTAGGTTTATAATTTTAAGGTATTGATTGGTTTTTAATTTGGTTTGAGTGGTTGTTTCGTGTACGTTTGTTTTGTATTGAGAGTTTTAGTGATTGGTTGTTTTGGGA
chr15	31643608	31643728	Hypo	1 -	ATTTTTCTACTTTAACATCCTATTAAACTCATAACCCCAAAACACTAACTAATTTCTAACCTAATTACCCCGTATACGCTTATCTTACACTAAAAACTCCAATAATTAACTATCCCTAAAA
chr15	31643608	31643728	Hypo	1 +	ATTTTTTGTTTTAATATTTTGTTAGGTTTATAATTTTAAGGTATTGATTGGTTTTTAATTTGGTTTGAGTGGTTGTTTCGTGTACGTTTGTTTTGTATTGAGAGTTTTAGTGATTGGTTGTTTTGGGA
chr7	75324173	75324293	Hypo	2 -	TTTTAACTTTCTTAATACTTTCTAAAAAAATTCCTTAACTTTATCTTCTCTACATTCTAATAAAATTTTAAATTCTTTCCCACAACATTCTATTTTTATTTTATAAAACACTATCCTCTTAAACTCTA
chr7	75324173	75324293	Hypo	2 +	TTTTGGTTTTTTTGGGTATTTTTTGAGAGAGTTTTTTGATTTTATTTTTTTTGTATTTTGGTGAGTTTTTTTATAATATTTTATTTTTGTTTTATGAGGTATTGTTTTTTTGAATTTTA
chr7	75324177	75324297	Hypo	2 -	AACTTTCTTAAATACTTTCTAAAAAAATTCCTTAACTTTATCTTCTCTACATTCTAATAAAATTTTAAATTCTTTCCACAACATTCTATTTTTATTTTATAAAACACTATCCTCTTAAACTCTA
chr7	75324177	75324297	Hypo	2 +	GGTTTTTTTGGGTATTTTTTGAGAGAGTTTTTTGATTTTATTTTTTTTGTATTTTGGTGAAATTTTTGAGTTTTTTTTATAATATTTTATTTTTGTTTTATGAGGTATTGTTTTTTTGAATTTA
chr7	75324173	75324293	Hyper	2 -	TTTTAACTTTCTTAAATACTTTCTAAAAAAATTCCTTAACTTTATCTTCTCTACATTCTAATAAAATTTTAAATTCTTTCCACAACATTCTATTTTTATTTTATAAAACACTATCCTCTTAAACTCTA
chr7	75324173	75324293	Hyper	2 +	TTTTGGTTTTTTTGGGTATTTTTTGAGAGAGTTTTTTGATTTTATTTTTTTTGTATTTTGGTGAGTTTTTTTATAATATTTTATTTTTGTTTTATGAGGTATTGTTTTTTTGAATTTTA
chr7	75324177	75324297	Hyper	2 -	AACTTTCTTAAATACTTTCTAAAAAAATTCCTTAACTTTATCTTCTCTACATTCTAATAAAATTTTAAATTCTTTCCACAACATTCTATTTTTATTTTATAAAACACTATCCTCTTAAAC

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chr7	75324177	75324297	Hyper	2 +	GGTTTTTTTGGGTATTTTTTGAGAGAGTTTTTTGATTTTATTTTTTTTGTATTTTGGTGAAATTTTGAGTTTTTTTTATAATATTTTATTTTTGTTTTATGAGGTATTGTTTTTTTGAAT
chr11	134781068	134781188	Hypo	1 -	AAATACTACTTATAACATAAACCTTAATAATAAAAACTTTTAAACCTAACCTAATAAATAACTACATATACTTCTACTCCTCCAAATAAAACTAATTTTTCTCCTCTAAATTTAATATAA
chr11	134781068	134781188	Hypo	1 +	AGGTGTTGTTTATGATATAGATTTTGATGATGAGGGTTTTTAGGTTTGGTTTGGTGAATAATTATATATGTTTTTGTTTTTTTGAATGAAATTAATTTTTTTTTTTTTGAGTTTGATGTGG
chr11	134781064	134781184	Hypo	1 -	TAAAAAAATACTACTTATAACATAAACCTTAATAATAAAAACTTTTAAACCTAACCTAATAAATATACTTCTACTCCTCCAAATAAAACTAATTTTTCTCCTCTAAATTTAATATAATTTA
chr11	134781064	134781184	Hypo	1 +	TAAGAGGTGTTGTTTATGATATAGATTTTGATGATGAGGGTTTTTAGGTTTGGTTTGGTGAATATGTTTTTGTTTTTTTGAATGAAATTAATTTTTTTTTTTTTGAGTTTGATGTGGTTTG
chr11	134781068	134781188	Hyper	1 -	AAATACTACTTATAACATAAACCTTAATAATAAAAACTTTTAAACCTAACCTAATAAATAACTACATATACTTCTACTCCTCCGAATAAAACTAATTTTTCTCCTCTAAATTTAATATAA
chr11	134781068	134781188	Hyper	1 +	AGGTGTTGTTTATGATATAGATTTTGATGATGAGGGTTTTTAGGTTTGGTTTGGTGAATAATTATATATGTTTTTGTTTTTTCGAATGAAATTAATTTTTTTTTTTTTGAGTTTGATGTGG
chr11	134781064	134781184	Hyper	1 -	TAAAAAAATACTACTTATAACATAAACCTTAATAATAAAAACTTTTAAACCTAACCTAATAAATATACTTCTACTCCTCCGAATAAAACTAATTTTTCTCCTCTAAATTTAATATAATTTA
chr11	134781064	134781184	Hyper	1 +	TAAGAGGTGTTGTTTATGATATAGATTTTGATGATGAGGGTTTTTAGGTTTGGTTTGGTGAATATGTTTTTGTTTTTTCGAATGAAATTAATTTTTTTTTTTTTGAGTTTGATGTGGTTTG
chr9	71818054	71818174	Hypo	1 -	CCCCAAATTACCTAAATTCTCAAACTCCTCTACACCTAAAACTAATAAACCAACCCATAAACTAAACCTAACTAATATATACAAAACCTACACATATCTACATAACCTAAATTAAAATTT
chr9	71818054	71818174	Hypo	1 +	TTTTGAGTTGTTTGGGTTTTTAGGTTTTTTTGTATTTGGAGTTAGTGAGTTAGTTTATGGGTTGAATTTGGTTGGTGTGTATAGAGTTTGTATATGTTTGTATAGTTTAGGTTGAGGTTT
chr9	71818049	71818169	Hypo	1 -	ACCCTCCCCAAATTACCTAAATTCTCAAACTCCTCTACACCTAAAACTAATAAACCAACCCCCTAACTAATATATACAAAACCTACACATATCTACATAACCTAAATTAAAATTTAAACA
chr9	71818049	71818169	Hypo	1 +	ATTTTTTTTGAGTTGTTTGGGTTTTTAGGTTTTTTTGTATTTGGAGTTAGTGAGTTAGTTTTTTGGTTGGTGTGTATAGAGTTTGTATATGTTTGTATAGTTTAGGTTGAGGTTTGGATA
chr9	71818054	71818174	Hyper	1 -	CCCCGAATTACCTAAATTCTCAAACTCCTCTACACCTAAAACTAATAAACCAACCCATAAACTAAACCTAACTAATATATACAAAACCTACACATATCTACATAACCTAAATTAAAATTT
chr9	71818054	71818174	Hyper	1 +	TTTCGAGTTGTTTGGGTTTTTAGGTTTTTTTGTATTTGGAGTTAGTGAGTTAGTTTATGGGTTGAATTTGGTTGGTGTGTATAGAGTTTGTATATGTTTGTATAGTTTAGGTTGAGGTTT
chr9	71818049	71818169	Hyper	1 -	ACCCTCCCCGAATTACCTAAATTCTCAAACTCCTCTACACCTAAAACTAATAAACCAACCCCCTAACTAATATATACAAAACCTACACATATCTACATAACCTAAATTAAAATTTAAACA
chr9	71818049	71818169	Hyper	1 +	ATTTTTTTCGAGTTGTTTGGGTTTTTAGGTTTTTTTGTATTTGGAGTTAGTGAGTTAGTTTTTTGGTTGGTGTGTATAGAGTTTGTATATGTTTGTATAGTTTAGGTTGAGGTTTGGATA
chr4	124918061	124918181	Hypo	1 -	ACAACAATATATCTAATAAAAAATTAAAAATAAATAAAACTACATTCAATAAAAAAATATTTCACTATTACTTTCAAAATAAATATCTCATACTATTCAAACATAAAATATTTTAAACAA
chr4	124918061	124918181	Hypo	1 +	ATAGTAATATATTTGATGAGGAATTAAGGGTGGGTAAAGTTGTATTTAGTGAAGGAGTGTTTTATTGTTATTTTTAAGATAAATGTTTTATGTTATTTAGATATGGAATATTTTAAATAG
chr4	124918065	124918185	Hypo	1 -	CAATATATCTAATAAAAAATTAAAAATAAATAAAACTACATTCAATAAAAAAATATTTCTTTAACTCACTATTACTTTCAAAATAAATATCTCATACTATTCAAACATAAAATATTTTAA
chr4	124918065	124918185	Hypo	1 +	TAATATATTTGATGAGGAATTAAGGGTGGGTAAAGTTGTATTTAGTGAAGGAGTGTTTTTTTGGTTTATTGTTATTTTTAAGATAAATGTTTTATGTTATTTAGATATGGAATATTTTAA
chr4	124918061	124918181	Hyper	1 -	ACAACAATATATCTAATAAAAAATTAAAAATAAATAAAACTACATTCAATAAAAAAATATTTCACTATTACTTTCAAAATAAATATCTCATACTATTCAAACATAAAATATTTTAAACAA
chr4	124918061	124918181	Hyper	1 +	ATAGTAATATATTTGATGAGGAATTAAGGGTGGGTAAAGTTGTATTTAGTGAAGGAGTGTTTTATTGTTATTTTTAAGATAAATGTTTTATGTTATTTAGATATGGAATATTTTAAATAG
chr4	124918065	124918185	Hyper	1 -	CAATATATCTAATAAAAAATTAAAAATAAATAAAACTACATTCAATAAAAAAATATTTCTTTAACTCACTATTACTTTCAAAATAAATATCTCATACTATTCAAACATAAAATATTTTAA
chr4	124918065	124918185	Hyper	1 +	TAATATATTTGATGAGGAATTAAGGGTGGGTAAAGTTGTATTTAGTGAAGGAGTGTTTTTTTGGTTTATTGTTATTTTTAAGATAAATGTTTTATGTTATTTAGATATGGAATATTTTAA
chr8	102531222	102531342	Hypo	1 -	ACAATTAACAAATTTTTAAAATATCTACACACTCACATACACACATACACAATTTCTATCCATTTTTATTAAATTTTATAAAAAAATAAATTTATAATACAACCCTACTCTAATACCTTT
chr8	102531222	102531342	Hypo	1 +	GTAGTTGATAAATTTTTGAGATGTTTGTATATTTATATATATATATATATATAATTTTTGTTTATTTTTGTTAGGTTTTATGGGAGAGTGGGTTTGTAATGTAGTTTTATTTTAATGTTTTT
chr8	102531217	102531337	Hypo	1 -	ACTATACAATTAACAAATTTTTAAAATATCTACACACTCACATACACACATACACAATTTCTATTAAATTTTATAAAAAAATAAATTTATAATACAACCCTACTCTAATACCTTTCACCT
chr8	102531217	102531337	Hypo	1 +	GTTGTGTAGTTGATAAATTTTTGAGATGTTTGTATATTTATATATATATATATATATAATTTTTGTTAGGTTTTATGGGAGAGTGGGTTTGTAATGTAGTTTTATTTTAATGTTTTTTATTT
chr8	102531222	102531342	Hyper	1 -	ACAATTAACAAATTTTTAAAATATCTACACACTCACATACACACATACACAATTTCTATCCATTTTTATTAAATTTTATAAAAAAATAAATTTATAATACAACCCTACTCTAATACCTTT
chr8	102531222	102531342	Hyper	1 +	GTAGTTGATAAATTTTTGAGATGTTTGTATATTTATATATATATATATATATAATTTTTGTTTATTTTTGTTAGGTTTTATGGGAGAGTGGGTTTGTAATGTAGTTTTATTTTAATGTTTTT
chr8	102531217	102531337	Hyper	1 -	ACTATACAATTAACAAATTTTTAAAATATCTACACACTCACATACACACATACACAATTTCTATTAAATTTTATAAAAAAATAAATTTATAATACAACCCTACTCTAATACCTTTCACCT
chr8	102531217	102531337	Hyper	1 +	GTTGTGTAGTTGATAAATTTTTGAGATGTTTGTATATTTATATATATATATATATATAATTTTTGTTAGGTTTTATGGGAGAGTGGGTTTGTAATGTAGTTTTATTTTAATGTTTTTTATTT
chr4	102999927	103000047	Hypo	1 -	AAAAAATAACAAACAATCCATCTATAACTATAAAACTATCTACTTCCTCACCTTTTTAAAAATATACAAACATTATACTTTCCTAAAAACAAACCATTTCTACAACCAAAAAAAAAAACA
chr4	102999927	103000047	Hypo	1 +	AAAAAATGGTAAATAATTTATTTATGATTATAAAATTATTTGTTTTTTTATTTTTTTGAAAATATGTAAGTATTATGTTTTTTTGAAAATAAGTTATTTTTGTAGTTAGAAAAGAAAATA
chr4	102999932	103000052	Hypo	1 -	ATAACAAACAATCCATCTATAACTATAAAACTATCTACTTCCTCACCTTTTTAAAAAAAATAACATATATACAAACATTATACTTTCCTAAAAACAAACCATTTCTACAACCAAAAAAAA
chr4	102999932	103000052	Hypo	1 +	ATGGTAAATAATTTATTTATGATTATAAAATTATTTGTTTTTTTATTTTTTTGAAAAAGGTAATATATATGTAAGTATTATGTTTTTTTGAAAATAAGTTATTTTTGTAGTTAGAAAAGA
chr4	102999927	103000047	Hyper	1 -	AAAAAATAACAAACAATCCATCTATAACTATAAAACTATCTACTTCCTCACCTTTTTAAAAATATACAAACATTATACTTTCCTAAAAACAAACCATTTCTACAACCAAAAAAAAAAACA
chr4	102999927	103000047	Hyper	1 +	AAAAAATGGTAAATAATTTATTTATGATTATAAAATTATTTGTTTTTTTATTTTTTTGAAAATATGTAAGTATTATGTTTTTTTGAAAATAAGTTATTTTTGTAGTTAGAAAAGAAAATA
chr4	102999932	103000052	Hyper	1 -	ATAACAAACAATCCATCTATAACTATAAAACTATCTACTTCCTCACCTTTTTAAAAAAAATAACATATATACAAACATTATACTTTCCTAAAAACAAACCATTTCTACAACCAAAAAAAA
chr4	102999932	103000052	Hyper	1 +	ATGGTAAATAATTTATTTATGATTATAAAATTATTTGTTTTTTTATTTTTTTGAAAAAGGTAATATATATGTAAGTATTATGTTTTTTTGAAAATAAGTTATTTTTGTAGTTAGAAAAGA
chr12	8277745	8277865	Hypo	1 -	ATTAAAAAAAAAAATATAATAATATAAAAAATATTCATAATATAATATAAAAAAAAATAATAAATCAAAAATCAATATTTATAATATATCAATCATAAAAAAAATTTACATATATATATAT
chr12	8277745	8277865	Hypo	1 +	GTTAAAGAAGAAAATATAATGGTATGAAAAATGTTTATGATATAGTGTAAAGGAAAATAATAGGTTAGAAATTAGTATTTATGGTATGTTAATTGTGGGAAAATTTGTATATGTGTATAT
chr12	8277740	8277860	Hypo	1 -	AAAATATTAAAAAAAAAAATATAATAATATAAAAAATATTCATAATATAATATAAAAAAAAAAAAAATCAATATTTATAATATATCAATCATAAAAAAAATTTACATATATATATATATACA
chr12	8277740	8277860	Hypo	1 +	GGAGTGTTAAAGAAGAAAATATAATGGTATGAAAAATGTTTATGATATAGTGTAAAGGAAAAGAAATTAGTATTTATGGTATGTTAATTGTGGGAAAATTTGTATATGTGTATATATATA
chr12	8277745	8277865	Hyper	1 -	ATTAAAAAAAAAAATATAATAATATAAAAAATATTCATAATATAATATAAAAAAAAATAATAAATCAAAAATCAATATTTATAATATATCAATCGTAAAAAAAATTTACATATATATATAT
chr12	8277745	8277865	Hyper	1 +	GTTAAAGAAGAAAATATAATGGTATGAAAAATGTTTATGATATAGTGTAAAGGAAAATAATAGGTTAGAAATTAGTATTTATGGTATGTTAATCGTGGGAAAATTTGTATATGTGTATAT
chr12	8277740	8277860	Hyper	1 -	AAAATATTAAAAAAAAAAATATAATAATATAAAAAATATTCATAATATAATATAAAAAAAAAAAAAATCAATATTTATAATATATCAATCGTAAAAAAAATTTACATATATATATATATACA
chr12	8277740	8277860	Hyper	1 +	GGAGTGTTAAAGAAGAAAATATAATGGTATGAAAAATGTTTATGATATAGTGTAAAGGAAAAGAAATTAGTATTTATGGTATGTTAATCGTGGGAAAATTTGTATATGTGTATATATATA
chr14	37076997	37077117	Hypo	1 -	CAAAAACAATCAAAAATTCATATTTCTCTCTAATCTTAAAAAACATAACAACAACCCAACTATTAAACTTACCCACATCTTACTCCAAAAATTATTTCCTAACTCTAAAAATTAAATTCC
chr14	37076997	37077117	Hypo	1 +	TAGAAATAATTAGAAGTTTATATTTTTTTTTGATTTTGAGAAATATGATAATAGTTTAATTATTGGGTTTATTTATATTTTGTTTTAAAAATTATTTTTTAGTTTTAAAAATTAAATTTT
chr14	37076993	37077113	Hypo	1 -	AAAACAAAAACAATCAAAAATTCATATTTCTCTCTAATCTTAAAAAACATAACAACAACCCACTTACCCACATCTTACTCCAAAAATTATTTCCTAACTCTAAAAATTAAATTCCCTTTT

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chr14	37076993	37077113	Hypo	1 +	GAGATAGAAATAATTAGAAGTTTATATTTTTTTTTGATTTTGAGAAATATGATAATAGTTTGTTTATTTATATTTTGTTTTAAAAATTATTTTTTAGTTTTAAAAATTAAATTTTTTTTT
chr14	37076997	37077117	Hyper	1 -	CAAAAACAATCAAAAATTCATATTTCTCTCTAATCTTAAAAAACATAACAACAACCCAACTATTAAACTTACCCACATCTTACTCCAAAAATTATTTCCTAACTCTAAAAATTAAATTCC
chr14	37076997	37077117	Hyper	1 +	TAGAAATAATTAGAAGTTTATATTTTTTTTTGATTTTGAGAAATATGATAATAGTTTAATTATTGGGTTTATTTATATTTTGTTTTAAAAATTATTTTTTAGTTTTAAAAATTAAATTTT
chr14	37076993	37077113	Hyper	1 -	AAAACAAAAACAATCAAAAATTCATATTTCTCTCTAATCTTAAAAAACATAACAACAACCCGCTTACCCACATCTTACTCCAAAAATTATTTCCTAACTCTAAAAATTAAATTCCCTTTT
chr14	37076993	37077113	Hyper	1 +	GAGATAGAAATAATTAGAAGTTTATATTTTTTTTTGATTTTGAGAAATATGATAATAGTTCGTTTATTTATATTTTGTTTTAAAAATTATTTTTTAGTTTTAAAAATTAAATTTTTTTTT
chr11	44023451	44023571	Hypo	1 -	ACTTCTTCTCTCTACACTTCCTCACTATCCTCACCCCACTACACCCTAATAACAAATCCTCTCAAAACTAACACAACTCATTCCTAATATTAATAACTCAAAAAAAAAACCTTAAAATCA
chr11	44023451	44023571	Hypo	2 +	GTTTTTTTTTTTTGTATTTTTTTATTGTTTTTATTTTGTTGTATTTTGGTGATAGGTTTTTTTAGAGTTAGTATAGTTTATTTTTAGTATTAATGGTTTAGGGAGGGGGTTTTGGAGTTA
chr11	44023447	44023567	Hypo	1 -	AAAAACTTCTTCTCTCTACACTTCCTCACTATCCTCACCCCACTACACCCTAATAACAAATACTAACACAACTCATTCCTAATATTAATAACTCAAAAAAAAAACCTTAAAATCAACCCA
chr11	44023447	44023567	Hypo	2 +	GAGGGTTTTTTTTTTTTTGTATTTTTTTATTGTTTTTATTTTGTTGTATTTTGGTGATAGGTGTTAGTATAGTTTATTTTTAGTATTAATGGTTTAGGGAGGGGGTTTTGGAGTTAGTTTA
chr11	44023451	44023571	Hyper	1 -	ACTTCTTCTCTCTACACTTCCTCACTATCCTCACCCCGCTACACCCTAATAACAAATCCTCTCAAAACTAACACAACTCATTCCTAATATTAATAACTCAAAAAAAAAACCTTAAAATCA
chr11	44023451	44023571	Hyper	2 +	GTTTTTTTTTTTTGTATTTTTTTATTGTTTTTATTTCGTTGTATTTTGGTGATAGGTTTTTTTAGAGTTAGTATAGTTTATTTTTAGTATTAATGGTTTAGGGAGGGGGTTTTGGAGTTA
chr11	44023447	44023567	Hyper	1 -	AAAAACTTCTTCTCTCTACACTTCCTCACTATCCTCACCCCGCTACACCCTAATAACAAATACTAACACAACTCATTCCTAATATTAATAACTCAAAAAAAAAACCTTAAAATCAACCCA
chr11	44023447	44023567	Hyper	2 +	GAGGGTTTTTTTTTTTTTGTATTTTTTTATTGTTTTTATTTCGTTGTATTTTGGTGATAGGTGTTAGTATAGTTTATTTTTAGTATTAATGGTTTAGGGAGGGGGTTTTGGAGTTAGTTTA
chr13	74971641	74971761	Hypo	1 -	TACTAAAACTTTATTCTCTTTTTAAATCTCCATCCTATTATACAATTTAATAATCAATTCCCTTATTTCCTATCCTAAAATCAAATAATATTTAATAACTACAAACATTTTAATTTATTA
chr13	74971641	74971761	Hypo	1 +	TATTAGGATTTTGTTTTTTTTTTAGATTTTTATTTTGTTGTGTAGTTTAATAATTAATTTTTTTGTTTTTTATTTTGAAGTTAAATAATGTTTAATAATTATAGGTATTTTAGTTTGTTG
chr13	74971637	74971757	Hypo	1 -	TTCCTACTAAAACTTTATTCTCTTTTTAAATCTCCATCCTATTATACAATTTAATAATCAATTCCTATCCTAAAATCAAATAATATTTAATAACTACAAACATTTTAATTTATTATTTAT
chr13	74971637	74971757	Hypo	1 +	TTTTTATTAGGATTTTGTTTTTTTTTTAGATTTTTATTTTGTTGTGTAGTTTAATAATTAATTTTTATTTTGAAGTTAAATAATGTTTAATAATTATAGGTATTTTAGTTTGTTGTTTGT
chr13	74971641	74971761	Hyper	1 -	TACTAAAACTTTATTCTCTTTTTAAATCTCCATCCTATTATACAATTTAATAATCAATTCCCTTATTTCCTATCCTAAAATCAAATAATATTTAATAACTACAAACATTTTAATTTATTA
chr13	74971641	74971761	Hyper	1 +	TATTAGGATTTTGTTTTTTTTTTAGATTTTTATTTTGTTGTGTAGTTTAATAATTAATTTTTTTGTTTTTTATTTTGAAGTTAAATAATGTTTAATAATTATAGGTATTTTAGTTTGTTG
chr13	74971637	74971757	Hyper	1 -	TTCCTACTAAAACTTTATTCTCTTTTTAAATCTCCATCCTATTATACAATTTAATAATCAATTCCTATCCTAAAATCAAATAATATTTAATAACTACAAACATTTTAATTTATTATTTAT
chr13	74971637	74971757	Hyper	1 +	TTTTTATTAGGATTTTGTTTTTTTTTTAGATTTTTATTTTGTTGTGTAGTTTAATAATTAATTTTTATTTTGAAGTTAAATAATGTTTAATAATTATAGGTATTTTAGTTTGTTGTTTGT
chr3	179011229	179011349	Hypo	2 -	ACTTAAACAAATACTTCACAAAACAAAAAATCCAAATTATCAATAAAAAAATATAAACCTCATTAATTATCACACAAATTACAACCACACTAATACACACTATCCTAACACTATAATAAC
chr3	179011229	179011349	Hypo	1 +	ATTTGAATAGATATTTTATAAAATAAGAAATTTAAATTGTTAATGAAAAGGTGTAAATTTTATTAGTTATTATGTAAATTGTAATTATATTGATATATATTATTTTGGTATTGTAATAGT
chr3	179011224	179011344	Hypo	2 -	ATAAAACTTAAACAAATACTTCACAAAACAAAAAATCCAAATTATCAATAAAAAAATATAATTATCACACAAATTACAACCACACTAATACACACTATCCTAACACTATAATAACCACAA
chr3	179011224	179011344	Hypo	1 +	GTAAAATTTGAATAGATATTTTATAAAATAAGAAATTTAAATTGTTAATGAAAAGGTGTAATTATTATGTAAATTGTAATTATATTGATATATATTATTTTGGTATTGTAATAGTTATAA
chr3	179011229	179011349	Hyper	2 -	ACTTAAACAAATACTTCACAAAACAAAAAATCCAAATTATCAATAAAAAAATATAAACCTCATTAATTATCACGCAAATTACAACCACACTAATACACACTATCCTAACACTATAATAAC
chr3	179011229	179011349	Hyper	1 +	ATTTGAATAGATATTTTATAAAATAAGAAATTTAAATTGTTAATGAAAAGGTGTAAATTTTATTAGTTATTACGTAAATTGTAATTATATTGATATATATTATTTTGGTATTGTAATAGT
chr3	179011224	179011344	Hyper	2 -	ATAAAACTTAAACAAATACTTCACAAAACAAAAAATCCAAATTATCAATAAAAAAATATAATTATCACGCAAATTACAACCACACTAATACACACTATCCTAACACTATAATAACCACAA
chr3	179011224	179011344	Hyper	1 +	GTAAAATTTGAATAGATATTTTATAAAATAAGAAATTTAAATTGTTAATGAAAAGGTGTAATTATTACGTAAATTGTAATTATATTGATATATATTATTTTGGTATTGTAATAGTTATAA
chr3	32404460	32404580	Hypo	1 -	AATAACTACCTCTAACCTCTAACTAATACAATCATTAAACAAAAATAAAAAAAATAAATTACTATATATACTTTATAATTTACACAACTCTTTAACAATATAATCTCCTTTAAAATAAAT
chr3	32404460	32404580	Hypo	1 +	AATGATTGTTTTTGGTTTTTAGTTGATATAATTATTAAATAGGAATAAGAAAAGTAAGTTATTGTGTATATTTTATAGTTTATATAATTTTTTAATAATATGGTTTTTTTTGAGATGGGT
chr3	32404456	32404576	Hypo	1 -	TCTAAATAACTACCTCTAACCTCTAACTAATACAATCATTAAACAAAAATAAAAAAAATAATATACTTTATAATTTACACAACTCTTTAACAATATAATCTCCTTTAAAATAAATAAAAC
chr3	32404456	32404576	Hypo	1 +	TTTAAATGATTGTTTTTGGTTTTTAGTTGATATAATTATTAAATAGGAATAAGAAAAGTAATATATTTTATAGTTTATATAATTTTTTAATAATATGGTTTTTTTTGAGATGGGTGAGAT
chr3	32404460	32404580	Hyper	1 -	AATAACTACCTCTAACCTCTAACTAATACAATCATTAAACAAAAATAAAAAAAATAAATTACTATATATACTTTATAATTTACACAACTCTTTAACAATATAATCTCCTTTAAAATAAAT
chr3	32404460	32404580	Hyper	1 +	AATGATTGTTTTTGGTTTTTAGTTGATATAATTATTAAATAGGAATAAGAAAAGTAAGTTATTGTGTATATTTTATAGTTTATATAATTTTTTAATAATATGGTTTTTTTTGAGATGGGT
chr3	32404456	32404576	Hyper	1 -	TCTAAATAACTACCTCTAACCTCTAACTAATACAATCATTAAACAAAAATAAAAAAAATAATATACTTTATAATTTACACAACTCTTTAACAATATAATCTCCTTTAAAATAAATAAAAC
chr3	32404456	32404576	Hyper	1 +	TTTAAATGATTGTTTTTGGTTTTTAGTTGATATAATTATTAAATAGGAATAAGAAAAGTAATATATTTTATAGTTTATATAATTTTTTAATAATATGGTTTTTTTTGAGATGGGTGAGAT
chr13	24022378	24022498	Hypo	1 -	TAAACCAACATTTTTATCACAAACTAATCTACCAACCACAAATAAACTTTCTTCTTCAAAAACTACTTTTTAAAACCTTTCACCTATTTAAATCAAACCCACCCAAATTATCTAAAATCA
chr13	24022378	24022498	Hypo	1 +	TAGGTTGGTATTTTTGTTATAGGTTGATTTGTTGATTATAAGTAGATTTTTTTTTTTAAGGGTTGTTTTTTAGGGTTTTTTATTTGTTTGAATTGGGTTTATTTAGATTATTTAGGATTA
chr13	24022383	24022503	Hypo	1 -	CAACATTTTTATCACAAACTAATCTACCAACCACAAATAAACTTTCTTCTTCAAAAAAACCTCAACACTACTTTTTAAAACCTTTCACCTATTTAAATCAAACCCACCCAAATTATCTAA
chr13	24022383	24022503	Hypo	1 +	TGGTATTTTTGTTATAGGTTGATTTGTTGATTATAAGTAGATTTTTTTTTTTAAGGAAGTTTTAGTGTTGTTTTTTAGGGTTTTTTATTTGTTTGAATTGGGTTTATTTAGATTATTTAG
chr13	24022378	24022498	Hyper	1 -	TAAACCGACATTTTTATCACAAACTAATCTACCGACCACAAATAAACTTTCTTCTTCAAAAACTACTTTTTAAAACCTTTCACCTATTTAAATCGAACCCACCCAAATTATCTAAAATCA
chr13	24022378	24022498	Hyper	1 +	TAGGTCGGTATTTTTGTTATAGGTTGATTTGTCGATTATAAGTAGATTTTTTTTTTTAAGGGTTGTTTTTTAGGGTTTTTTATTTGTTTGAATCGGGTTTATTTAGATTATTTAGGATTA
chr13	24022383	24022503	Hyper	1 -	CGACATTTTTATCACAAACTAATCTACCGACCACAAATAAACTTTCTTCTTCAAAAAAACCTCAACGCTACTTTTTAAAACCTTTCACCTATTTAAATCGAACCCACCCAAATTATCTAA
chr13	24022383	24022503	Hyper	1 +	CGGTATTTTTGTTATAGGTTGATTTGTCGATTATAAGTAGATTTTTTTTTTTAAGGAAGTTTTAGCGTTGTTTTTTAGGGTTTTTTATTTGTTTGAATCGGGTTTATTTAGATTATTTAG
chr11	58067004	58067124	Hypo	1 -	ATCTAAAAAATATAAATACCCAATCCATTATATTATTTAAATTATTCAATTCTTTTTCAACTATACTCCCTACAATTAAAAACAAAAATTAACAAACTTTTATTATAAAAAACCAAATTA
chr11	58067004	58067124	Hypo	1 +	ATTTGGGAAGTGTAGATATTTAATTTATTATGTTATTTGAGTTATTTAATTTTTTTTTAATTGTGTTTTTTATAGTTGAAAGTAGGGATTGGTAAATTTTTGTTATAAAGGGTTAGATTG
chr11	58067009	58067129	Hypo	1 -	AAAAATATAAATACCCAATCCATTATATTATTTAAATTATTCAATTCTTTTTCAACAAACATTTATATACTCCCTACAATTAAAAACAAAAATTAACAAACTTTTATTATAAAAAACCAA
chr11	58067009	58067129	Hypo	1 +	GGAAGTGTAGATATTTAATTTATTATGTTATTTGAGTTATTTAATTTTTTTTTAATAGATGTTTATGTGTTTTTTATAGTTGAAAGTAGGGATTGGTAAATTTTTGTTATAAAGGGTTAG
chr11	58067004	58067124	Hyper	1 -	ATCTAAAAAATATAAATACCCAATCCATTATATTATTTAAATTATTCAATTCTTTTTCAACTATACTCCCTACAATTAAAAACAAAAATTAACAAACTTTTATTATAAAAAACCAAATTA
chr11	58067004	58067124	Hyper	1 +	ATTTGGGAAGTGTAGATATTTAATTTATTATGTTATTTGAGTTATTTAATTTTTTTTTAATTGTGTTTTTTATAGTTGAAAGTAGGGATTGGTAAATTTTTGTTATAAAGGGTTAGATTG
chr11	58067009	58067129	Hyper	1 -	AAAAATATAAATACCCAATCCATTATATTATTTAAATTATTCAATTCTTTTTCAACAAACGTTTATATACTCCCTACAATTAAAAACAAAAATTAACAAACTTTTATTATAAAAAACCAA

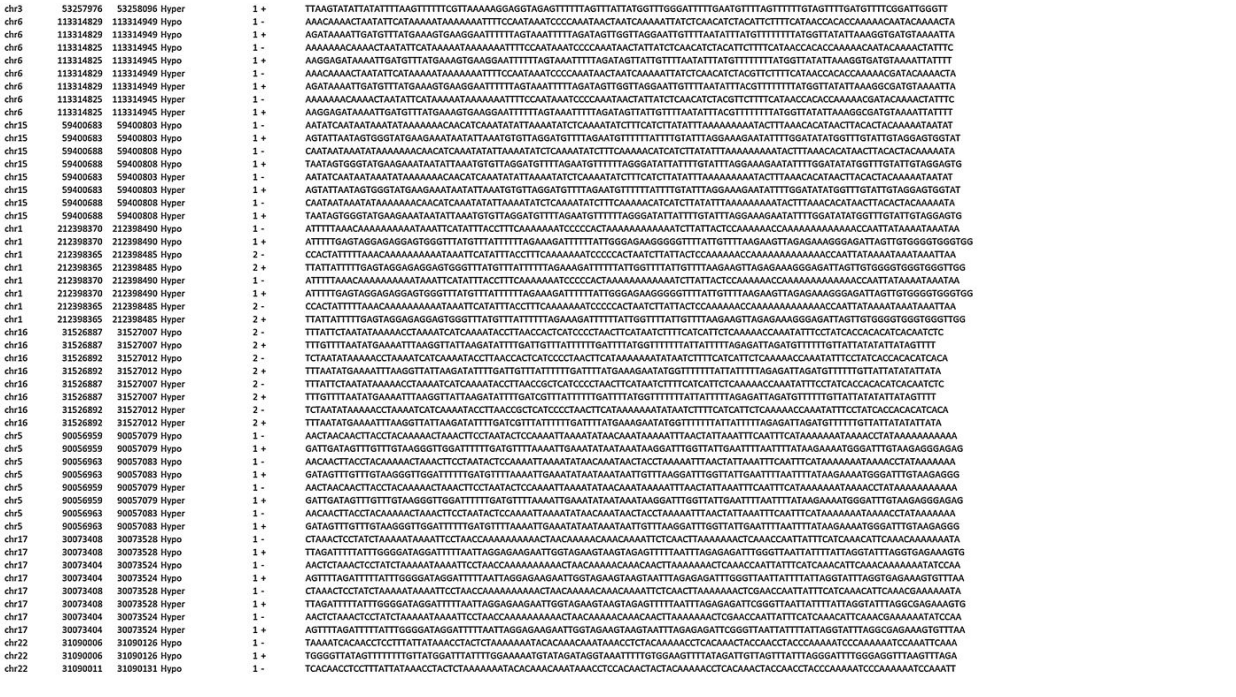
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chr11	58067009	58067129	Hyper	1 +	GGAAGTGTAGATATTTAATTTATTATGTTATTTGAGTTATTTAATTTTTTTTTAATAGACGTTTATGTGTTTTTTATAGTTGAAAGTAGGGATTGGTAAATTTTTGTTATAAAGGGTTAG
chr1	21933987	21934107	Hypo	1 -	AATCACACAAACCAAATCCCTCTCCAATAATCATAATTCACACACCTCTTCTAAAAACTCTATTTCTTTCCCTCAATCAAAACAAAACCTCTTCCTCTCTTCTCCTACTAACCTAAC
chr1	21933987	21934107	Hyper	2 +	GGTTATATAGGTTAAGTTTTTTTTTTAATGATTATGGTTTATATATTTTTTTTGAGAATTTTATTTTTTTTTTTTAGTTAAGATAGAGTTTTTTTTTTTTTTTTTTTTTTTTGTTGATTTAGT
chr1	21933983	21934103	Hypo	1 -	AATAAATCACACAAACCAAATCCCTCTCCAATAATCATAATTCACACACCTCTTCTAAAAACTCTATTTCTTTCCCTCAATCAAAACAAAACCTCTTCCTCTCTTCTCCTACTAACCTAAC
chr1	21933983	21934103	Hyper	2 +	GGTAGGTTATATAGGTTAAGTTTTTTTTTAATGATTATGGTTTATATATTTTTTTTGAGAATTTTATTTTTTTTTTTTAGTTAAGATAGAGTTTTTTTTTTTTTTTTTTTTTTTTGTTGATTTAGTAGTT
chr1	21933987	21934107	Hyper	1 -	AATCACACAAACCAAATCCCTCTCCAATAATCATAATTCACACACCTCTTCTAAAAACTCTATTTCTTTCCCTCAATCAAAACAAAACCTCTTCCTCTCTTCTCCTACTAACCTAAC
chr1	21933987	21934107	Hyper	2 +	GGTTATATAGGTTAAGTTTTTTTTTAATGATTATGGTTTATATATTTTTTTTGAGAATTTTATTTTTTTTTTTTAGTTAAGATAGAGTTTTTTTTTTTTTTTTTTTTTTTTGTTGATTTAGT
chr1	21933983	21934103	Hyper	1 -	AATAAATCACACAAACCAAATCCCTCTCCAATAATCATAATTCACACACCTCTTCTAAAAACTCTATTTCTTTCCCTCAATCAAAACAAAACCTCTTCCTCTCTTCTCCTACTAACCTAAC
chr1	21933983	21934103	Hyper	2 +	GGTAGGTTATATAGGTTAAGTTTTTTTTTAATGATTATGGTTTATATATTTTTTTTGAGAATTTTATTTTTTTTTTTTAGTTAAGATAGAGTTTTTTTTTTTTTTTTTTTTTTTTGTTGATTTAGTAGTT
chr15	27562980	27563100	Hyper	1 -	ATAAACAAAAAAAACATAAAAAAACTTCTACACATCCTTAACTCATACAATTTAAATCTACCACATCCTCAATACAACAAACACTCACTACATTCAAAACACAAAACACTCTAAAATATA
chr15	27562980	27563100	Hyper	1 +	GTGAGTAAGAAAGGTATGGAAAGATTTTTGTATATTTTTAGTTTATGTAGTTTAAATTTGTTATATTTTTAATATAGTAAATATTTATTGATTTAAAATATGGAATATTTTGAAGTGTG
chr15	27562985	27563105	Hyper	1 -	CAAAAAAACATAAAAAAACTTCTACACATCCTTAACTCATACAATTTAAATCTACCACATTATAACACATCCTCAATACAACAAACACTCACTACATTCAAAACACAAAACACTCTAAAA
chr15	27562985	27563105	Hyper	1 +	TAAGAAAGGTATGGAAAGATTTTTGTATATTTTAGTTTATGTAGTTTAAATTTGTTATATTTTTAATATAGTAAATATTTATTGATTTAAAATATGGAATATTTTGAAGTGTG
chr15	27562980	27563100	Hyper	1 -	ATAAACAAAAAAAACATAAAAAAACTTCTACACATCCTTAACTCATACAATTTAAATCTACCACATCCTCAATACAACAAACACTCACTACATTCAAAACACGAAACACTCTAAAATATA
chr15	27562980	27563100	Hyper	1 +	GTGAGTAAGAAAGGTATGGAAAGATTTTTGTATATTTTAGTTTATGTAGTTTAAATTTGTTATATTTTTAATATAGTAAATATTTATTGATTTAAAATATGGAATATTTTGAAGTGTG
chr15	27562985	27563105	Hyper	1 -	CAAAAAAACATAAAAAAACTTCTACACATCCTTAACTCATACAATTTAAATCTACCACATTATAACACATCCTCAATACAACAAACACTCACTACATTCAAAACACGAAACACTCTAAAA
chr15	27562985	27563105	Hyper	1 +	TAAGAAAGGTATGGAAAGATTTTTGTATATTTTAGTTTATGTAGTTTAAATTTGTTATATTTTTAATATAGTAAATATTTATTGATTTAAAATATGGAATATTTTGAAGTGTG
chr19	5989959	5990079	Hyper	1 -	AAACAAATTTACAAACAATAACTATAAAATATAATAAAAAAAAATTAAATCTAAATAACCCTAATCTACCCAAAAAACATCCAAAAAAACTTCCCAAAAAAAATACCAATCAAAATAAATA
chr19	5989959	5990079	Hyper	1 +	AGATAGATTTGTAAATAATGATTATAAAGTATGGTAGGGGAAGTTGGGTTTAAGTGATTTTAATTTATTTAGAGAGTATTTAGGAAGGTTTTTGAAAGAAGTGTTAATTAAGGTGAGTG
chr19	5989954	5990074	Hyper	1 -	AAAAAAAACAAATTTACAAACAATAACTATAAAATATAATAAAAAAAATTAAATCTAAATAACCCTAATCTACCCAAAAAACATCCCAAAAAAACTTCCCAAAAAAAATACCAATCAAAATAAATACTAAA
chr19	5989954	5990074	Hyper	1 +	GGGAAAGATAGATTTGTAAATAATGATTATAAAGTATGGTAGGGGAAGTTGGGTTTAAGTGATTTTAATTTATTTAGAGAGTATTTAGGAAGGTTTTTGAAAGAAGTGTTAATTAAGGTGAGTGTTAAA
chr19	5989959	5990079	Hyper	1 -	AAACAAATTTACAAACAATAACTATAAAATATAATAAAAAAAATTAAATCTAAATAACCCTAATCTACCCAAAAAACATCCCAAAAAAACTTCCCAAAAAAAATACCAATCAAAATAAATACTAAA
chr19	5989954	5990074	Hyper	1 +	AGATAGATTTGTAAATAATGATTATAAAGTATGGTAGGGGAAGTTGGGTTTAAGTGATTTTAATTTATTTAGAGAGTATTTAGGAAGGTTTTTGAAAGAAGTGTTAATTAAGGTGAGTG
chr19	5989954	5990074	Hyper	1 -	AAAAAAAACAAATTTACAAACAATAACTATAAAATATAATAAAAAAAATTAAATCTAAATAACCCAAAAAACATCCCAAAAAAACTTCCCGAAAAAAATACCAATCAAAATAAATACTAAA
chr19	5989954	5990074	Hyper	1 +	GGGAAAGATAGATTTGTAAATAATGATTATAAAGTATGGTAGGGGAAGTTGGGTTTAAGTGATTTTAATTTATTTAGAGAGTATTTAGGAAGGTTTTTGAAAGAAGTGTTAATTAAGGTGAGTGTTAAA
chr18	69518969	69519089	Hypo	1 -	CTAAAATATATACCAAAACAAAATAATATACTTAAAACAACCCCCATTTTAATTACTTTATAAATTATCTAAATCTACACTAAAATATATATTTCATAATAACAATAATTTTATAAATTTTATAT
chr18	69518969	69519089	Hypo	2 +	TTGAAATATGTGTTAAAGTAAGATAATATATTTAAAATAATTTTTATTTTAATTATTTTGTAAATTGTTTAAATTTGTATTAGAATGTATGTTTTATAATAGTAGTAATTTTGTGGATTT
chr18	69518964	69519084	Hypo	1 -	TATTTCTAAAATATATACCAAAACAAAATAATATACTTAAAACAACCCCCATTTTAATTACTTTATAAATTATCTAAATCTACACTAAAATATATATTTCATAATAACAATAATTTTATAAATTTTATAT
chr18	69518964	69519084	Hyper	1 +	TGTTTTTGAAATATGTGTTAAAGTAAGATAATATATTTAAAATAATTTTTATTTTAATTACGTTTAAATTTGTATTAGAATGTATGTTTTATAATAGTAGTAATTTTGTGGATTTTGTAT
chr6	139918234	139918354	Hypo	1 -	TTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTACTAACTAAATTCATCAACTCCTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAAAAAA
chr6	139918234	139918354	Hyper	1 +	TTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTATTGGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAG
chr6	139918231	139918351	Hypo	1 -	AAATTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTAAATTCATCAACTCCTTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAAAAAA
chr6	139918231	139918351	Hyper	1 +	AAGTTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAGGAAA
chr6	139918234	139918354	Hyper	1 -	TTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTACTAACTAAATTCATCAACTCCTTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAA
chr6	139918234	139918354	Hyper	1 +	TTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTATTGGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAG
chr6	139918231	139918351	Hyper	1 -	AAATTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTAAATTCATCAACTCCTTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAAAAAA
chr6	139918231	139918351	Hyper	1 +	AAGTTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAGGAAA
chr6	139918234	139918354	Hyper	1 -	TTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTACTAACTAAATTCATCAACTCCTTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAA
chr6	139918234	139918354	Hyper	1 +	TTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTATTGGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAG
chr6	139918231	139918351	Hyper	1 -	AAATTAAAAATCACAAAAAAATCTTAACTTTCTTAAAACTTACTCAAATTAAATAACTAAAACTAAATTCATCAACTCCTTTTAAAATTCTTTTTCTTAATAATTATAAATCTCAAAAAA
chr6	139918231	139918351	Hyper	1 +	AAGTTAAGGATTATAGAAGGATTTAATTTTTTAGGGTTATTTAAATTAAGTAGTTGGAGTTGGATTTATTAATTTTTTTGAGATTTTTTTTTTAGTGATTATAGGTTTTAGGAAA
chr1	9701594	9701714	Hypo	1 -	TTACAAAAAAAATTTCTAAAAAACCCCCATCTAACTAAACCCAAAAACACAATCTTCACCAACCTAAAATCCTAAAACACCTAACCACCTCTACACTATCTACTCTAACCCAAAATCAA
chr1	9701594	9701714	Hyper	1 +	TTATAGAAAGAATTTTGGGGAGTTTTATTTAGTTGGATTTAGAAATATAATTTTTATTAGTTTGGAGTTTTGGAGTATTTGGTTATTTTGCGTTGTTTGTTTTGGTTTAGAATTAA
chr1	9701599	9701719	Hypo	1 -	AAAAAATTTCTAAAAAACCCCCATCTAACTAAACCCAAAAACACAATCTTCACCAACTCATTCCTACCCTAAAATCCTAAAACACCTAACCACCTCTACACTATCTACTCTAACCCAAA
chr1	9701599	9701719	Hyper	1 +	GAAAGAATTTTGGGGAGTTTTATTTAGTTGGATTTAGAAATATAATTTTTATTAGTTTATTTTGTTTGGAGTTTTGGAGTATTTGGTTATTTTGCGTTGTTTGTTTTGGTTTAGA
chr3	170155818	170155938	Hypo	1 -	TAACCAATAATCTAATATAAAATCATTCTTTTAACTTCAAAATTTTATTCCTTATTTAAATATAAACACCCAATAATACTCTTAAACTAAATACTAACTCATTCACATTTTCAAAAAAT
chr3	170155818	170155938	Hyper	1 +	TGGTTAATAATTTTGGTGTAGAATTATTTTTTTGATTTTAAGGTTTTGTTTTTTATTTAAATATAAATATTTAGTGGTATTTTTGAGTTAAGTATTGGTTTATTTATATTTTTAGGAAGT
chr3	170155813	170155933	Hypo	1 -	CTCACTAACCAATAATTCTAATATAAAATCATTCTTTTAACTTCAAAATTTTATTCCTTATACACCCAATAATACTCTTAAACTAAATACTAACTCATTCACATTTTCAAAAAATTTACA

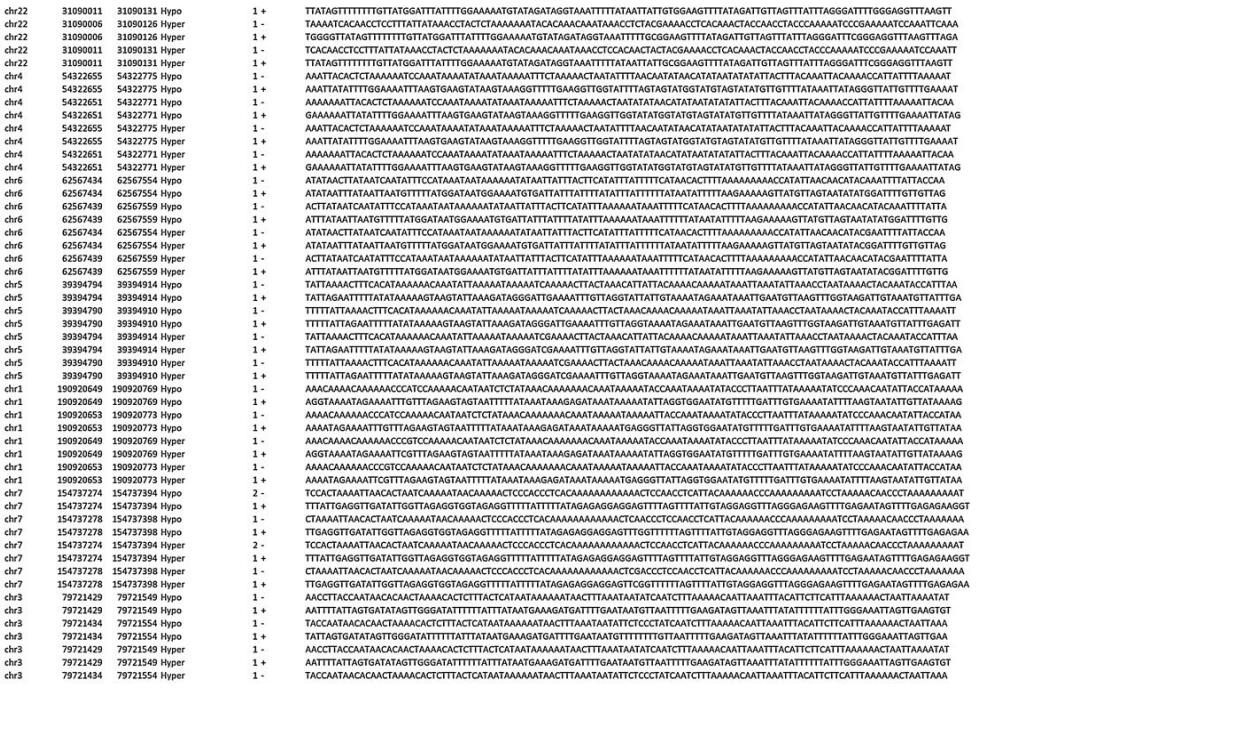
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chr3	170155813	170155933	Hypo	1 +	TTTATTGGTTAATAATTTTGGTGTAGAATTATTTTTTTGATTTTAAGGTTTTGTTTTTTATATATTTAGTGGTATTTTTGAGTTAAGTATTGGTTTATTTATATTTTTAGGAAGTTTGTA
chr3	170155818	170155938	Hyper	1 -	TAACCAATAATCTAATATAAAATCATTCTTTTAACTTCAAAATTTTATTCCTTATTTAAATATAAACACCCAATAATACTCTTAAACTAAATACTAACTCATTCACATTTTCAAAAAAT
chr3	170155818	170155938	Hyper	1 +	TGGTTAATAATTTTGGTGTAGAATTATTTTTTGATTTTAAGGTTTTGTTTTTTATTTAAATATAAATATTTAGTGGTATTTTTGAGTTAAGTATTGGTTTATTTATATTTTTAGGAAGT
chr3	170155813	170155933	Hyper	1 -	CTCACTAACCAATAATTCTAATATAAAATCATTCTTTTAACTTCAAAATTTTATTCCTTATACACCCAATAATACTCTTAAACTAAATACTAACTCATTCACATTTTCAAAAAATTTACA
chr3	170155813	170155933	Hyper	1 +	TTTATTGGTTAATAATTTTGGTGTAGAATTATTTTTTTGATTTTAAGGTTTTGTTTTTTATATATTTAGTGGTATTTTTGAGTTAAGTATTGGTTTATTTATATTTTTAGGAAGTTTGTA
chr20	24545357	24545477	Hypo	1 -	ACAACAAAAAAAAATAAAAAAAAAAACCCCCACTATACAAAATATACTAAATAATTCTTACTCATCTATATTAAAAAATATATTCTCATTCACAAATTAAAAAAAAAAAAAAACTACT
chr20	24545357	24545477	Hyper	1 +	GTAGTAGTAAAAGAGGTGAGAAGGAGGTTTTATTGTGTAAAGTGTGTTGAATGATTTTTGTTGGGTTTATTTGTATTGAAGAATGTGTTTTTATTTATAAGTTGAGGAAAAGAGGAAAGTTGTT
chr20	24545354	24545474	Hypo	1 -	ACAACAACAAAAAAATAAAAAAAAAACCCCCACTATACAAAATATACTAAATAATTCTTACTCATCTATATTAAAAAATATATTCTCATTCACAAATTAAAAAAAAAAAAAACTACT
chr20	24545354	24545474	Hyper	1 +	GTAGTAGTAAAAGAGGTGAGAAGGAGGTTTTATTGTGTAAAGTGTGTTGAATGATTTTTGTTGGGTTTATTTGTATTGAAGAATGTGTTTTTATTTATAAGTTGAGGAAAAGAGGAAAGTTGTT
chr20	24545357	24545477	Hypo	1 -	ACAACAACAAAAAAATAAAAAAAAAACCCCCACTATACAAAATATACTAAATAATTCTTACTCATCTATATTAAAAAATATATTCTCATTCACAAATTAAAAAAAAAAAAAACTACT
chr20	24545357	24545477	Hyper	1 +	GTAGTAGTAAAAGAGGTGAGAAGGAGGTTTTATTGTGTAAAGTGTGTTGAATGATTTTTGTTGGGTTTATTTGTATTGAAGAATGTGTTTTTATTTATAAGTTGAGGAAAAGAGGAAAGTT
chr20	24545354	24545474	Hypo	1 -	ACAACAACAAAAAAATAAAAAAAAAACCCCCACTATACAAAATATACTAAATAATTCTTACTCATCTATATTAAAAAATATATTCTCATTCACAAATTAAAAAAAAAAAAAACTACT
chr20	24545354	24545474	Hyper	1 +	GTAGTAGTAAAAGAGGTGAGAAGGAGGTTTTATTGTGTAAAGTGTGTTGAATGATTTTTGTTGGGTTTATTTGTATTGAAGAATGTGTTTTTATTTATAAGTTGAGGAAAAGAGGAAAGTTGTT
chr7	120791859	120791979	Hypo	1 -	ATTCAAAAAAAAATTAACCCAATATTTCAATTAAATAATACTAAAAAAATTTCCACATACATATAACATTTCCTTCAATAAACATATATTATAAAAACAAAATTAAAAAATAAAATATTC
chr7	120791859	120791979	Hyper	1 +	GTTTAAAGAAAGGTTGGTTTAATGTTTAATTAGGTAATGTTGAGAAAATTTTATATGTATGTGATATTTTTTTTAATAGGTATGTGTTGTAGGAATAAGATTGGGGGATGGAGTATTT
chr7	120791864	120791984	Hypo	1 -	AAAAAAAATTAACCCAATATTTCAATTAAATAATACTAAAAAAATTTCCACATACATTTAACTAACTATAACATTTCCTTCAATAAACATATATTATAAAAACAAAATTAAAAAATAAAA
chr7	120791864	120791984	Hyper	1 +	AAGAAAGGTTGGTTTAATGTTTAATTAGGTAATGTTGAGAAAATTTTATATGTATTTGATTAATTGTGATATTTTTTTTAATAGGTATGTGTTGTAGGAATAAGATTGGGGGATGGAGTATTT
chr7	120791859	120791979	Hyper	1 -	ATTCAAAAAAAATTAACCCAATATTTCAATTAAATAATACTAAAAAAATTTCCACATACATTTAACTAACTATAACATTTCCTTCAATAAACATATATTATAAAAACAAAATTAAAAAATAAAATATTC
chr7	120791864	120791984	Hyper	1 -	AAAAAAAATTAACCCAATATTTCAATTAAATAATACTAAAAAAATTTCCACATACATTTAACTAACTATAACATTTCCTTCAATAAACATATATTATAAAAACAAAATTAAAAAATAAAA
chr7	120791864	120791984	Hyper	1 +	AAGAAAGGTTGGTTTAATGTTTAATTAGGTAATGTTGAGAAAATTTTATATGTATTTGATTAATTGTGATATTTTTTTTAATAGGTATGTGTTGTAGGAATAAGATTGGGGGATGGAG
chr3	193149852	193149972	Hypo	2 -	AAAAAAAATATAAAAATATATTATATACCATCATTAAAAATAATCTAATAAACAAAAAAAAAATTAATAATAATAAAAAAATAAATTATTAAACAAATAAAATCCTTAAAAAAATTAAA
chr3	193149852	193149972	Hyper	1 +	GAAAGAAGATATGAGAATGTATTATATGTTATTATTGGGAATGATTTAGTAAATAAGAGAAAGGTTGATATAATGGAGAAATAGATTATTAGATGAATAAAATTTTTGAGAAGGTTGGAGGAAG
chr3	193149847	193149967	Hypo	2 -	TAAAAAAAAAAAATATAAAAATATATTATATACCATCATTAAAAATAATCTAATAAACAAAAAAAAATTAATAATAATAAAAAAATAAATTATTAAACAAATAAAATCCTTAAAAAAATTAAA
chr3	193149847	193149967	Hyper	1 +	TAAAAGAAAGAAGATATGAGAATGTATTATATGTTATTATTGGGAATGATTTAGTAAATAAGAGAAAGGTTGATATAATGGAGAAATAGATTATTAGATGAATAAAATTTTTGAGAAGGTTGGAGGAAG
chr3	193149852	193149972	Hyper	2 -	AAAAAAAATATAAAAATATATTATATACCATCATTAAAAATAATCTAATAAACAAAAAAAAAATTAATAATAATAAAAAAATAAATTATTAAACAAATAAAATCCTTAAAAAAATTAAA
chr3	193149852	193149972	Hyper	1 +	GAAAGAAGATATGAGAATGTATTATATGTTATTATTGGGAATGATTTAGTAAATAAGAGAAAGGTTGATATAATGGAGAAATAGATTATTAGATGAATAAAATTTTTGAGAAGGTTGGAGGAAG
chr3	193149847	193149967	Hyper	2 -	TAAAAAAAAAAAATATAAAAATATATTATATACCATCATTAAAAATAATCTAATAAACAAAAAAAAATTAATAATAATAAAAAAATAAATTATTAAACAAATAAAATCCTTAAAAAAATTAAA
chr3	193149847	193149967	Hyper	1 +	TAAAAGAAAGAAGATATGAGAATGTATTATATGTTATTATTGGGAATGATTTAGTAAATAAGAGAAAGGTTGATATAATGGAGAAATAGATTATTAGACGAATAAAATTTTTGAGAAGGTTGGAGGAAG
chr20	41364018	41364138	Hypo	1 -	CTAAATTCATAACAAAACCATAACTTAAACCCAAATTACCTTACTCTAATCTAAATTAAATCCCTACTCCACCCTCACTAAAAAAAAAAACATTTTAAAATAAAATTAATTCCTTTCTA
chr20	41364018	41364138	Hyper	1 +	TTGAGTTTATGGTAGAATTATGATTTAAATTTAGATTGTTTTATTTTAATTTTAGATTAAATTTTTTATTTTATTTTATTAGGAGAAAGAATATTTTGAGATGGAATTGATTTTTTTTTA
chr20	41364014	41364134	Hypo	1 -	AAAACTAAATTCATAACAAAACCATAACTTAAACCCAAATTACCTTACTCTAATTCTAAATTACTCCACCCTCACTAAAAAAAAAAACATTTTAAAATAAAATTAATTCCTTTCTACATA
chr20	41364014	41364134	Hyper	1 +	AAAATTGAGTTTATGGTAGAATTATGATTTAAATTTAGATTGTTTTATTTTAATTTTAGATTAAATTTTTTATTTTATTTTATTAGGAGAAAGAATATTTTGAGATGGAATTGATTTTTTTTTA
chr20	41364018	41364138	Hyper	1 -	CTAAATTCATAACAAAACCATAACTTAAACCCAAATTACCTTACTCTAATCTAAATTAAATCCCTACTCCACCCTCACTAAAAAAAAAAACATTTTAAAATAAAATTAATTCCTTTCTACATA
chr20	41364014	41364134	Hyper	1 -	AAACTAAATTCATAACAAAACCATAACTTAAACCCAAATTACCTTACTCTAATCTAAATTAAATCCCTACTCCACCCTCACTAAAAAAAAAAACATTTTAAAATAAAATTAATTCCTTTCTACATA
chr20	41364018	41364138	Hyper	1 +	TTGAGTTTATGGTAGAATTATGATTTAAATTTAGATTGTTTTATTTTAATTTTAGATTAAATTTTTTATTTTATTTTATTAGGAGAAAGAATATTTTGAGATGGAATTGATTTTTTTTTA
chr8	4475759	4475879	Hypo	1 -	CCAAACCTCATAAATATACTTCAATAACACCTCTTTTATAATATTACTAAACTCAACCATATCCCTCATAAACAAAAAATCCAAAAAACCCAACTTTACTTAACAAACACACCTTTACAA
chr8	4475759	4475879	Hyper	1 +	TTAGATTTTATAAATGTGTTTTAATGGTGTTTTTTTGTAATATTGTTAAGTTTAGTTATGTTTTTATAAGTAGGAAATTTAGGAAGTTTAGTTTTGTTTGATGAATATATTTTTGTAG
chr8	4475763	4475883	Hypo	1 -	ACCTCATAAATATACTTCAATAACACCTCTTTTATAATATTACTAAACTCAACCATATCTTATTCCCTCATAAACAAAAATCCAAAAAACCCAACTTTACTTAACAAACACACCTTTT
chr8	4475763	4475883	Hyper	1 +	ATTTTATAAATGTGTTTTAATGGTGTTTTTTTGTAATATTGTTAAGTTTAGTTATGTTTTTATAAGTAGGAAATTTAGGAAGTTTAGTTTTGTTTGATGAATATATTTTT
chr8	4475759	4475879	Hyper	1 -	CCAAACCTCATAAATATACTTCAATAACACCTCTTTTATAATATTACTAAACTCAACCATATCCCTCATAAACAAAAATCCAAAAAACCCAACTTTACTTAACAAACACACCTTTACAA
chr8	4475763	4475883	Hyper	1 -	ACCTCATAAATATACTTCAATAACACCTCTTTTATAATATTACTAAACTCAACCATATCCCTCATAAACAAAAATCCAAAAAACCCAACTTTACTTAACAAACACACCTTTT
chr3	53257971	53258091	Hypo	1 -	CTACACTAAACACATTATACTCTAAATCTTCTCACCAAAAAAAAAACAAAATTTTCAACTCTAAAATTCCTAATACCTCAAACTAAATCTAAA
chr3	53257971	53258091	Hyper	1 +	TTATATTAAGTATATTATATTTTAAGTTTTTTTGTTAAAAAGGAGGTAGAGTTTTTTAGTTTTGGGATTTTTGAATGTTTTAGTTTTTGTAGTTTTGATGTTTTTGGATTGGGTTTGGG
chr3	53257976	53258096	Hypo	1 -	CTAAACCATTATACTCTAAATCTTCTCACCAAAAAAAAAACAAAATTTTCAACTCACTATAAACCTAAAATTCCTAATACCCAACTTCCTATAACCTTAATATCCCCAAACTAAATC
chr3	53257976	53258096	Hyper	1 +	TTAAGTATATTATATTTTAAGTTTTTTTGTTAAAAAGGAGGTAGAGTTTTTTAGTTTTGGGATTTTTGAATGTTTTAGTTTTTGTAGTTTTGATGTTTTTGGATTGGGTT
chr3	53257971	53258091	Hyper	1 -	CTACACTAAACACATTATACTCTAAATCTTCTCGCCAAAAAAAAAACAAAATTTTCAACTCTAAAATTCCTAATACCTCAAACTAAATCTAAA
chr3	53257971	53258091	Hyper	1 +	TTATATTAAGTATATTATATTTTAAGTTTTTTTGTTAAAAAGGAGGTAGAGTTTTTTAGTTTTGGGATTTTTGAATGTTTTAGTTTTTGTAGTTTTGATGTTTTTGGATTGGGTTTGGG
chr3	53257976	53258096	Hyper	1 -	CTAAACATTATACTCTAAATCTTCTCGCCAAAAAAAAAACAAAATTTTCAACTCACTATAAACCTAAAATTCCTAATACCCAACTTCCTATAACCTTAATATCCCCAAACTAAATC

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chr3	79721434	79721554	Hyper	1 +	TATTAGTGATATAGTTGGGATATTTTTTATTTATAATGAAAGATGATTTTGAATAATGTTTTTTTGTTAATTTTTGAAGATAGTTAAATTTATATTTTTTATTTGGGAAATTAGTTGAA
chr3	94456682	94456802	Hypo	1 -	CCAAAAAATTTCTAAAATTAAAAAAAACACTATTTCTCAATCTTTCACCAAACATTAAAAAAATAAAAAAAATTATAAATAACAAAAATCAAATTAAAAAAATAACCATCTCAATTATCA
chr3	94456682	94456802	Hypo	1 +	TTAGGAGATTTTTGGGGTTGGAAAAGGTATTATTTTTTAGTTTTTTATTAGATATTGAAAAAGTAAGAAAGGTTGTGAGTGATAAGAATTAAATTAAGGGAATGATTATTTTAATTGTTA
chr3	94456677	94456797	Hypo	1 -	AAAAACCAAAAAATTTCTAAAATTAAAAAAAACACTATTTCTCAATCTTTCACCAAACATTAAAAAATTATAAATAACAAAAATCAAATTAAAAAAATAACCATCTCAATTATCATTATA
chr3	94456677	94456797	Hypo	1 +	AGAGATTAGGAGATTTTTGGGGTTGGAAAAGGTATTATTTTTTAGTTTTTTATTAGATATTGAAAGGTTGTGAGTGATAAGAATTAAATTAAGGGAATGATTATTTTAATTGTTATTATA
chr3	94456682	94456802	Hyper	1 -	CCAAAAAATTTCTAAAATTAAAAAAAACACTATTTCTCAATCTTTCACCAAACATTAAAAAAATAAAAAAAATTATAAATAACAAAAATCAAATTAAAAAAATAACCATCTCAATTATCA
chr3	94456682	94456802	Hyper	1 +	TTAGGAGATTTTTGGGGTTGGAAAAGGTATTATTTTTTAGTTTTTTATTAGATATTGAAAAAGTAAGAAAGGTTGTGAGTGATAAGAATTAAATTAAGGGAATGATTATTTTAATTGTTA
chr3	94456677	94456797	Hyper	1 -	AAAAACCAAAAAATTTCTAAAATTAAAAAAAACACTATTTCTCAATCTTTCACCAAACATTAAAAAATTATAAATAACAAAAATCAAATTAAAAAAATAACCATCTCAATTATCATTATA
chr3	94456677	94456797	Hyper	1 +	AGAGATTAGGAGATTTTTGGGGTTGGAAAAGGTATTATTTTTTAGTTTTTTATTAGATATTGAAAGGTTGTGAGTGATAAGAATTAAATTAAGGGAATGATTATTTTAATTGTTATTATA
chr19	53752959	53753079	Hypo	1 -	TTTTATCATAAAAAAATATATATATCATATAATATTTACTACAAAAAAAAATATAATATTTAACAAATAATATAATCAAAATTTAACTCCTACCTCTCTAATAACAAAAAATTCTACTCACA
chr19	53752959	53753079	Hypo	1 +	TTTTATTATAAAAAAATATATATATTATGTGATGTTTATTATAAAAGAAATGTAGTATTTAATAAGTAGTGTAATTAGAATTTGGTTTTTGTTTTTTTGATGATAGAAAGTTTTGTTTATA
chr19	53752955	53753075	Hypo	1 -	AACATTTTATCATAAAAAAATATATATATCATATAATATTTACTACAAAAAAAAATATAATATTAATATAATCAAAATTTAACTCCTACCTCTCTAATAACAAAAAATTCTACTCACAAATC
chr19	53752955	53753075	Hypo	1 +	GATATTTTATTATAAAAAAATATATATATTATGTGATGTTTATTATAAAAGAAATGTAGTATTAGTGTAATTAGAATTTGGTTTTTGTTTTTTTGATGATAGAAAGTTTTGTTTATAGGTT
chr19	53752959	53753079	Hyper	1 -	TTTTATCATAAAAAAATATATATATCATATAATATTTACTACAAAAAAAAATATAATATTTAACAAATAATATAATCAAAATTTAACTCCTACCTCTCTAATAACAAAAAATTCTACTCACA
chr19	53752959	53753079	Hyper	1 +	TTTTATTATAAAAAAATATATATATTATGTGATGTTTATTATAAAAGAAATGTAGTATTTAATAAGTAGTGTAATTAGAATTTGGTTTTTGTTTTTTTGATGATAGAAAGTTTTGTTTATA
chr19	53752955	53753075	Hyper	1 -	AACATTTTATCATAAAAAAATATATATATCATATAATATTTACTACAAAAAAAAATATAATATTAATATAATCAAAATTTAACTCCTACCTCTCTAATAACAAAAAATTCTACTCACAAATC
chr19	53752955	53753075	Hyper	1 +	GATATTTTATTATAAAAAAATATATATATTATGTGATGTTTATTATAAAAGAAATGTAGTATTAGTGTAATTAGAATTTGGTTTTTGTTTTTTTGATGATAGAAAGTTTTGTTTATAGGTT
chr1	116434954	116435074	Hypo	1 -	TAACCTATCTTCATTCCTAAAACTCTAAACTCTAAACTCCTAACTTATCTAAAAAAAAAAATAACCAAATACTCCTTAAAAAAAAATTCATATACATCAACTATCCTCTCTTTCTCCTATTT
chr1	116434954	116435074	Hypo	1 +	TGATTTATTTTTATTTTTAGAGTTTTGAATTTTAGGTTTTTAGTTTGTTTGAGAAGGAGATAATTGAATATTTTTTGGAGAAGGTTTATGTATATTAATTGTTTTTTTTTTTTTTTTATTT
chr1	116434951	116435071	Hypo	1 -	AAATAACCTATCTTCATTCCTAAAACTCTAAACTCTAAACTCCTAACTTATCTAAAAAAAAAAAATACTCCTTAAAAAAAAATTCATATACATCAACTATCCTCTCTTTCTCCTATTTAAAC
chr1	116434951	116435071	Hypo	1 +	AAATGATTTATTTTTATTTTTAGAGTTTTGAATTTTAGGTTTTTAGTTTGTTTGAGAAGGAGAATATTTTTTGGAGAAGGTTTATGTATATTAATTGTTTTTTTTTTTTTTTTATTTGAGT
chr1	116434954	116435074	Hyper	1 -	TAACCTATCTTCATTCCTAAAACTCTAAACTCTAAACTCCTAACTTATCTAAAAAAAAAAATAACCGAATACTCCTTAAAAAAAAATTCATATACATCAACTATCCTCTCTTTCTCCTATTT
chr1	116434954	116435074	Hyper	1 +	TGATTTATTTTTATTTTTAGAGTTTTGAATTTTAGGTTTTTAGTTTGTTTGAGAAGGAGATAATCGAATATTTTTTGGAGAAGGTTTATGTATATTAATTGTTTTTTTTTTTTTTTTATTT
chr1	116434951	116435071	Hyper	1 -	AAATAACCTATCTTCATTCCTAAAACTCTAAACTCTAAACTCCTAACTTATCTAAAAAAAAAAAATACTCCTTAAAAAAAAATTCATATACATCAACTATCCTCTCTTTCTCCTATTTAAAC
chr1	116434951	116435071	Hyper	1 +	AAATGATTTATTTTTATTTTTAGAGTTTTGAATTTTAGGTTTTTAGTTTGTTTGAGAAGGAGAATATTTTTTGGAGAAGGTTTATGTATATTAATTGTTTTTTTTTTTTTTTTATTTGAGT
chr4	98183175	98183295	Hypo	1 -	AATTCAAAATATATTATTACAATAAAAAAAATACAAATAATAAACATCACATTTTAAAAACTAAAATCACTAATAACATAAAATTAAATAAAAACAAATAAATAAAAAAAAACTATATTACA
chr4	98183175	98183295	Hypo	1 +	AATTTAAGGTATATTATTATAATAGAGGGATATAAGTAATAAATATTATATTTTAAAGATTAAAATTATTGATAATATAAAATTGAGTGAAAATAAATAAATAAGAAAGATTATATTGTA
chr4	98183180	98183300	Hypo	1 -	AAAATATATTATTACAATAAAAAAAATACAAATAATAAACATCACATTTTAAAAACTAATACTTTAAAAAATCACTAATAACATAAAATTAAATAAAAACAAATAAATAAAAAAAAACTATA
chr4	98183180	98183300	Hypo	1 +	AAGGTATATTATTATAATAGAGGGATATAAGTAATAAATATTATATTTTAAAGATTAATGTTTTGGAAAATTATTGATAATATAAAATTGAGTGAAAATAAATAAATAAGAAAGATTATA
chr4	98183175	98183295	Hyper	1 -	AATTCAAAATATATTATTACAATAAAAAAAATACAAATAATAAACATCACATTTTAAAAACTAAAATCACTAATAACATAAAATTAAATAAAAACAAATAAATAAAAAAAAACTATATTACA
chr4	98183175	98183295	Hyper	1 +	AATTTAAGGTATATTATTATAATAGAGGGATATAAGTAATAAATATTATATTTTAAAGATTAAAATTATTGATAATATAAAATTGAGTGAAAATAAATAAATAAGAAAGATTATATTGTA
chr4	98183180	98183300	Hyper	1 -	AAAATATATTATTACAATAAAAAAAATACAAATAATAAACATCACATTTTAAAAACTAATACTTTAAAAAATCACTAATAACATAAAATTAAATAAAAACAAATAAATAAAAAAAAACTATA
chr4	98183180	98183300	Hyper	1 +	AAGGTATATTATTATAATAGAGGGATATAAGTAATAAATATTATATTTTAAAGATTAATGTTTTGGAAAATTATTGATAATATAAAATTGAGTGAAAATAAATAAATAAGAAAGATTATA
chr8	133527850	133527970	Hypo	1 -	ATTATTTTTCTCTCAAAAAAACTAAAAACACTTAATTCAATACTAAAAACAATACTAAAATACCCTCCATCCCTAAATAACTACAACAAAAACCTACCCATTACTCCAAAAACAATATCA
chr8	133527850	133527970	Hypo	1 +	GTTATTTTTTTTTTTAGGAGAGTTAGGAATATTTAATTTGATATTAGAAGTAGTATTAGGATATTTTTTATTTTTAGATAGTTGTAGTGGAGATTTATTTATTATTTTAGGGGTAGTGTTA
chr8	133527854	133527974	Hypo	1 -	TTTTTCTCTCAAAAAAACTAAAAACACTTAATTCAATACTAAAAACAATACTAAAATAAAATCAAACCCTCCATCCCTAAATAACTACAACAAAAACCTACCCATTACTCCAAAAACAAT
chr8	133527854	133527974	Hypo	1 +	TTTTTTTTTTAGGAGAGTTAGGAATATTTAATTTGATATTAGAAGTAGTATTAGGATAAAATTAAATTTTTTATTTTTAGATAGTTGTAGTGGAGATTTATTTATTATTTTAGGGGTAGT
chr8	133527850	133527970	Hyper	1 -	ATTATTTTTCTCTCAAAAAAACTAAAAACACTTAATTCGATACTAAAAACAATACTAAAATACCCTCCATCCCTAAATAACTACAACGAAAACCTACCCATTACTCCAAAAACAATATCA
chr8	133527850	133527970	Hyper	1 +	GTTATTTTTTTTTTTAGGAGAGTTAGGAATATTTAATTCGATATTAGAAGTAGTATTAGGATATTTTTTATTTTTAGATAGTTGTAGCGGAGATTTATTTATTATTTTAGGGGTAGTGTTA
chr8	133527854	133527974	Hyper	1 -	TTTTTCTCTCAAAAAAACTAAAAACACTTAATTCGATACTAAAAACAATACTAAAATAAAATCAAACCCTCCATCCCTAAATAACTACAACGAAAACCTACCCATTACTCCAAAAACAAT
chr8	133527854	133527974	Hyper	1 +	TTTTTTTTTTAGGAGAGTTAGGAATATTTAATTCGATATTAGAAGTAGTATTAGGATAAAATTAAATTTTTTATTTTTAGATAGTTGTAGCGGAGATTTATTTATTATTTTAGGGGTAGT
chr5	123194283	123194403	Hypo	1 -	AAAATTCATACTATTTCTACTATACTAACATTTTACAACTTTTCTTTTATTTCTAATCCATCTATCCTTTTCACAAAATTAAATACTTATAACTCTATTAAAAAATTATTATAATTATTCT
chr5	123194283	123194403	Hypo	1 +	AAAATTTATATTATTTTTATTATATTAGTATTTTATAATTTTTTTTTTGTTTTTGGTTTATTTATTTTTTTTATAAGATTAAATATTTGTGATTTTATTAAAGATTATTGTAATTATTTT
chr5	123194279	123194399	Hypo	1 -	CTCCAAAATTCATACTATTTCTACTATACTAACATTTTACAACTTTTCTTTTATTTCTAATCTTTTCACAAAATTAAATACTTATAACTCTATTAAAAATTATTATAATTATTCTTTCAT
chr5	123194279	123194399	Hypo	1 +	TTTTAAAATTTATATTATTTTTATTATATTAGTATTTTATAATTTTTTTTTTGTTTTTGGTTTTTTTATAAGATTAAATATTTGTGATTTTATTAAAGATTATTGTAATTATTTTTTTAT
chr5	123194283	123194403	Hyper	1 -	AAAATTCATACTATTTCTACTATACTAACATTTTACAACTTTTCTTTTATTTCTAATCCATCTATCCTTTTCACAAAATTAAATACTTATAACTCTATTAAAAAATTATTATAATTATTCT
chr5	123194283	123194403	Hyper	1 +	AAAATTTATATTATTTTTATTATATTAGTATTTTATAATTTTTTTTTTGTTTTTGGTTTATTTATTTTTTTTATAAGATTAAATATTTGTGATTTTATTAAAGATTATTGTAATTATTTT
chr5	123194279	123194399	Hyper	1 -	CTCCAAAATTCATACTATTTCTACTATACTAACATTTTACAACTTTTCTTTTATTTCTAATCTTTTCACAAAATTAAATACTTATAACTCTATTAAAAATTATTATAATTATTCTTTCAT
chr5	123194279	123194399	Hyper	1 +	TTTTAAAATTTATATTATTTTTATTATATTAGTATTTTATAATTTTTTTTTTGTTTTTGGTTTTTTTATAAGATTAAATATTTGTGATTTTATTAAAGATTATTGTAATTATTTTTTTAT
chr14	45977297	45977417	Hypo	1 -	CTATTATTATAATCAAATAACTTACACTTCAACATATAAATTAAAAAATTCTATCTTTATTTAAAATAAAACTCACAACAATATTCAATATACTTTCTTAAAACATTTCTCTTTACTTTC
chr14	45977297	45977417	Hypo	1 +	TTATTATTATGGTTAAATGATTTATATTTTGGTATATAGATTGAAGAATTTTGTTTTTATTTAAAGTGAAATTTGTAATAATGTTTAATGTATTTTTTTAAAATATTTTTTTTTGTTTTT
chr14	45977293	45977413	Hypo	1 -	CTAACTATTATTATAATCAAATAACTTACACTTCAACATATAAATTAAAAAATTCTATCTTATAAAACTCACAACAATATTCAATATACTTTCTTAAAACATTTCTCTTTACTTTCTTAA

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chr14	45977293	45977413	Hypo	1 +	TTGGTTATTATTATGGTTAAATGATTTATATTTTGGTATATAGATTGAAGAATTTTGTTTTGTGAAATTTGTAATAATGTTTAATGTATTTTTTTAAAATATTTTTTTTTGTTTTTTTAA
chr14	45977297	45977417	Hyper	1 -	CTATTATTATAATCAAATAACTTACACTTCGACATATAAATTAAAAAATTCTATCTTTATTTAAAATAAAACTCGCAACAATATTCAATATACTTTCTTAAAACATTTCTCTTTACTTTC
chr14	45977297	45977417	Hyper	1 +	TTATTATTATGGTTAAATGATTTATATTTCGGTATATAGATTGAAGAATTTTGTTTTTATTTAAAGTGAAATTCGTAATAATGTTTAATGTATTTTTTTAAAATATTTTTTTTTGTTTTT
chr14	45977293	45977413	Hyper	1 -	CTAACTATTATTATAATCAAATAACTTACACTTCGACATATAAATTAAAAAATTCTATCTTATAAAACTCGCAACAATATTCAATATACTTTCTTAAAACATTTCTCTTTACTTTCTTAA
chr14	45977293	45977413	Hyper	1 +	TTGGTTATTATTATGGTTAAATGATTTATATTTCGGTATATAGATTGAAGAATTTTGTTTTGTGAAATTCGTAATAATGTTTAATGTATTTTTTTAAAATATTTTTTTTTGTTTTTTTAA
chr6	158925955	158926075	Hypo	1 -	ACACAACTTTTCCTTCCCCATTAAATCAATAATCACTAATTACCTTATTATACTAATCAATAACTAAACCATATATTACAACTTAATTACATTTCCTTTTTTATATACTTTTCTTCCCCT
chr6	158925955	158926075	Hypo	1 +	ATATAGTTTTTTTTTTTTTTATTAAATTAGTGGTTATTGGTTATTTTGTTATGTTAGTTAATAGTTGAGTTATGTATTATGGTTTAGTTATATTTTTTTTTTTGTATATTTTTTTTTTTTTT
chr6	158925960	158926080	Hypo	1 -	ACTTTTCCTTCCCCATTAAATCAATAATCACTAATTACCTTATTATACTAATCAATAAAACCCACAACTAAACCATATATTACAACTTAATTACATTTCCTTTTTTATATACTTTTCTTC
chr6	158925960	158926080	Hypo	1 +	GTTTTTTTTTTTTTTATTAAATTAGTGGTTATTGGTTATTTTGTTATGTTAGTTAATAGGATTTATAGTTGAGTTATGTATTATGGTTTAGTTATATTTTTTTTTTTGTATATTTTTTTTTT
chr6	158925955	158926075	Hyper	1 -	ACACAACTTTTCCTTCCCCATTAAATCAATAATCACTAATTACCTTATTATACTAATCAATAACTAAACCATATATTACGACTTAATTACATTTCCTTTTTTATATACTTTTCTTCCCCT
chr6	158925955	158926075	Hyper	1 +	ATATAGTTTTTTTTTTTTTTATTAAATTAGTGGTTATTGGTTATTTTGTTATGTTAGTTAATAGTTGAGTTATGTATTACGGTTTAGTTATATTTTTTTTTTTGTATATTTTTTTTTTTTTT
chr6	158925960	158926080	Hyper	1 -	ACTTTTCCTTCCCCATTAAATCAATAATCACTAATTACCTTATTATACTAATCAATAAAACCCACAACTAAACCATATATTACGACTTAATTACATTTCCTTTTTTATATACTTTTCTTC
chr6	158925960	158926080	Hyper	1 +	GTTTTTTTTTTTTTTATTAAATTAGTGGTTATTGGTTATTTTGTTATGTTAGTTAATAGGATTTATAGTTGAGTTATGTATTACGGTTTAGTTATATTTTTTTTTTTGTATATTTTTTTTTT
chr3	165774954	165775074	Hypo	1 -	TTTCAAATTAATCAAATACCCTTTACTTCCATCCAATTTTCTCAAACAAATTCTAATACCTTACAAAACAATATTTTTTCTCTATCCACTTATATTTATACATTCTTAAATATATATTTT
chr3	165774954	165775074	Hypo	1 +	TTTTAAATTGATTAGATGTTTTTTGTTTTTATTTAGTTTTTTTAAATAGATTTTGATATTTTGTAAAGTAGTGTTTTTTTTTTATTTATTTATATTTGTGTGTTTTTGGATATATATTTT
chr3	165774958	165775078	Hypo	1 -	AAATTAATCAAATACCCTTTACTTCCATCCAATTTTCTCAAACAAATTCTAATACCTTATAAACTACAAAACAATATTTTTTCTCTATCCACTTATATTTATACATTCTTAAATATATAT
chr3	165774958	165775078	Hypo	1 +	AAATTGATTAGATGTTTTTTGTTTTTATTTAGTTTTTTTAAATAGATTTTGATATTTTGTGGATTGTAAAGTAGTGTTTTTTTTTTATTTATTTATATTTGTGTGTTTTTGGATATATAT
chr3	165774954	165775074	Hyper	1 -	TTTCAAATTAATCAAATACCCTTTACTTCCATCCAATTTTCTCAAACAAATTCTAATACCTTACAAAACAATATTTTTTCTCTATCCACTTATATTTATACGTTCTTAAATATATATTTT
chr3	165774954	165775074	Hyper	1 +	TTTTAAATTGATTAGATGTTTTTTGTTTTTATTTAGTTTTTTTAAATAGATTTTGATATTTTGTAAAGTAGTGTTTTTTTTTTATTTATTTATATTTGTGCGTTTTTGGATATATATTTT
chr3	165774958	165775078	Hyper	1 -	AAATTAATCAAATACCCTTTACTTCCATCCAATTTTCTCAAACAAATTCTAATACCTTATAAACTACAAAACAATATTTTTTCTCTATCCACTTATATTTATACGTTCTTAAATATATAT
chr3	165774958	165775078	Hyper	1 +	AAATTGATTAGATGTTTTTTGTTTTTATTTAGTTTTTTTAAATAGATTTTGATATTTTGTGGATTGTAAAGTAGTGTTTTTTTTTTATTTATTTATATTTGTGCGTTTTTGGATATATAT
chr11	83348570	83348690	Hypo	1 -	ATCATAAAACTACTAAATAACAAAACTCATTAAACATAAAACTAAAATTCAACCCTAAATCACCATAAAACCATTTTATTTCCATAACATCATAACATTAATTATAACACCACAATTATT
chr11	83348570	83348690	Hypo	1 +	GTTATAGAGTTATTAGGTAATAGAGTTTATTGAATATGGAGTTAGGATTTAATTTTGGATTGTTGTGAAGTTATTTTGTTTTTATGATATTATGATATTGGTTATAATATTATAATTGTT
chr11	83348566	83348686	Hypo	1 -	AAAAATCATAAAACTACTAAATAACAAAACTCATTAAACATAAAACTAAAATTCAACCCTAAAAACCATTTTATTTCCATAACATCATAACATTAATTATAACACCACAATTATTTAAAA
chr11	83348566	83348686	Hypo	1 +	AAAAGTTATAGAGTTATTAGGTAATAGAGTTTATTGAATATGGAGTTAGGATTTAATTTTGGAAGTTATTTTGTTTTTATGATATTATGATATTGGTTATAATATTATAATTGTTTAGAA
chr11	83348570	83348690	Hyper	1 -	ATCATAAAACTACTAAATAACAAAACTCATTAAACATAAAACTAAAATTCAACCCTAAATCGCCGTAAAACCATTTTATTTCCATAACATCATAACATTAATTATAACACCACAATTATT
chr11	83348570	83348690	Hyper	1 +	GTTATAGAGTTATTAGGTAATAGAGTTTATTGAATATGGAGTTAGGATTTAATTTTGGATCGTCGTGAAGTTATTTTGTTTTTATGATATTATGATATTGGTTATAATATTATAATTGTT
chr11	83348566	83348686	Hyper	1 -	AAAAATCATAAAACTACTAAATAACAAAACTCATTAAACATAAAACTAAAATTCAACCCTAAAAACCATTTTATTTCCATAACATCATAACATTAATTATAACACCACAATTATTTAAAA
chr11	83348566	83348686	Hyper	1 +	AAAAGTTATAGAGTTATTAGGTAATAGAGTTTATTGAATATGGAGTTAGGATTTAATTTTGGAAGTTATTTTGTTTTTATGATATTATGATATTGGTTATAATATTATAATTGTTTAGAA
chr11	57986609	57986729	Hypo	1 -	ATATTCTAAATATATAACCTTAATCATATAACTTAACTCCTCATAACCCCCTTTACCATATCAATAAACTAAAAATAATATTTACACAACACCTAACTTAATCTCTAATAAAATAAAAAA
chr11	57986609	57986729	Hypo	1 +	ATGTTTTGAGTATATGATTTTGGTTATGTGGTTTAATTTTTTATAGTTTTTTTTATTATATTAGTAAATTGGAGATGATGTTTGTATAATATTTAATTTGGTTTTTGATGAGGTAGGAGA
chr11	57986605	57986725	Hypo	1 -	TACTATATTCTAAATATATAACCTTAATCATATAACTTAACTCCTCATAACCCCCTTTACCAAACTAAAAATAATATTTACACAACACCTAACTTAATCTCTAATAAAATAAAAAACCAA
chr11	57986605	57986725	Hypo	1 +	TGTTATGTTTTGAGTATATGATTTTGGTTATGTGGTTTAATTTTTTATAGTTTTTTTTATTAAATTGGAGATGATGTTTGTATAATATTTAATTTGGTTTTTGATGAGGTAGGAGATTAG
chr11	57986609	57986729	Hyper	1 -	ATATTCTAAATATATAACCTTAATCATATAACTTAACTCCTCATAACCCCCTTTACCATATCAATAAACTAAAAATAATATTTACACAACACCTAACTTAATCTCTAATAAAATAAAAAA
chr11	57986609	57986729	Hyper	1 +	ATGTTTTGAGTATATGATTTTGGTTATGTGGTTTAATTTTTTATAGTTTTTTTTATTATATTAGTAAATTGGAGATGATGTTTGTATAATATTTAATTTGGTTTTTGATGAGGTAGGAGA
chr11	57986605	57986725	Hyper	1 -	TACTATATTCTAAATATATAACCTTAATCATATAACTTAACTCCTCATAACCCCCTTTACCAAACTAAAAATAATATTTACACAACACCTAACTTAATCTCTAATAAAATAAAAAACCAA
chr11	57986605	57986725	Hyper	1 +	TGTTATGTTTTGAGTATATGATTTTGGTTATGTGGTTTAATTTTTTATAGTTTTTTTTATTAAATTGGAGATGATGTTTGTATAATATTTAATTTGGTTTTTGATGAGGTAGGAGATTAG
chr3	5086024	5086144	Hypo	1 -	CTAAATTTCAAAATAACTCTCATTTTCACAAACCTATAATATTCTAAATAATACCAACCTTCAAAAAAATAATTTCACAAAATAAATTCTTAAAAAATAAAAAACATTATATAACTCAAAA
chr3	5086024	5086144	Hypo	1 +	TTGAATTTTAAAGTAATTTTTATTTTTGTAGGTTTATAATGTTTTAAATGATATTAATTTTTAAGGAGTAATTTTATAGAATGAATTTTTAGGAAGTAAAGAATATTATGTAATTTAGAA
chr3	5086019	5086139	Hypo	1 -	TCTATCTAAATTTCAAAATAACTCTCATTTTCACAAACCTATAATATTCTAAATAATACCAAATAATTTCACAAAATAAATTCTTAAAAAATAAAAAACATTATATAACTCAAAAATAAT
chr3	5086019	5086139	Hypo	1 +	TTTGTTTGAATTTTAAAGTAATTTTTATTTTTGTAGGTTTATAATGTTTTAAATGATATTAAGTAATTTTATAGAATGAATTTTTAGGAAGTAAAGAATATTATGTAATTTAGAAATAGT
chr3	5086024	5086144	Hyper	1 -	CTAAATTTCAAAATAACTCTCATTTTCGCAAACCTATAATATTCTAAATAATACCAACCTTCAAAAAAATAATTTCACAAAATAAATTCTTAAAAAATAAAAAACATTATATAACTCAAAA
chr3	5086024	5086144	Hyper	1 +	TTGAATTTTAAAGTAATTTTTATTTTCGTAGGTTTATAATGTTTTAAATGATATTAATTTTTAAGGAGTAATTTTATAGAATGAATTTTTAGGAAGTAAAGAATATTATGTAATTTAGAA
chr3	5086019	5086139	Hyper	1 -	TCTATCTAAATTTCAAAATAACTCTCATTTTCGCAAACCTATAATATTCTAAATAATACCAAATAATTTCACAAAATAAATTCTTAAAAAATAAAAAACATTATATAACTCAAAAATAAT
chr3	5086019	5086139	Hyper	1 +	TTTGTTTGAATTTTAAAGTAATTTTTATTTTCGTAGGTTTATAATGTTTTAAATGATATTAAGTAATTTTATAGAATGAATTTTTAGGAAGTAAAGAATATTATGTAATTTAGAAATAGT
chr11	33581481	33581601	Hypo	1 -	ACCCCAATATTTCCCCTATAACCTTTCTCCATTTAACAAACATTTATAATACCAAACCACATACTACCACCTTTATCATAAAATAACAACTAAAATATATAATAAATTAAAATAACAACT
chr11	33581481	33581601	Hypo	1 +	ATTTTAGTGTTTTTTTTGTGGTTTTTTTTTATTTAGTAAATATTTATAGTGTTAGGTTATATATTATTATTTTTATTATAAAGTGATAGTTAAAATATGTGATGGATTAAGGTGATAGTT
chr11	33581476	33581596	Hypo	1 -	TAAAAACCCCAATATTTCCCCTATAACCTTTCTCCATTTAACAAACATTTATAATACCAAACCACCTTTATCATAAAATAACAACTAAAATATATAATAAATTAAAATAACAACTAAATA
chr11	33581476	33581596	Hypo	1 +	TGGGGATTTTAGTGTTTTTTTTGTGGTTTTTTTTTATTTAGTAAATATTTATAGTGTTAGGTTATTTTTATTATAAAGTGATAGTTAAAATATGTGATGGATTAAGGTGATAGTTAAATA
chr11	33581481	33581601	Hyper	1 -	ACCCCAATATTTCCCCTATAACCTTTCTCCATTTAACAAACATTTATAATACCAAACCACATACTACCACCTTTATCATAAAATAACAACTAAAATATATAATAAATTAAAATAACAACT
chr11	33581481	33581601	Hyper	1 +	ATTTTAGTGTTTTTTTTGTGGTTTTTTTTTATTTAGTAAATATTTATAGTGTTAGGTTATATATTATTATTTTTATTATAAAGTGATAGTTAAAATATGTGATGGATTAAGGTGATAGTT
chr11	33581476	33581596	Hyper	1 -	TAAAAACCCCAATATTTCCCCTATAACCTTTCTCCATTTAACAAACATTTATAATACCAAACCACCTTTATCATAAAATAACAACTAAAATATATAATAAATTAAAATAACAACTAAATA

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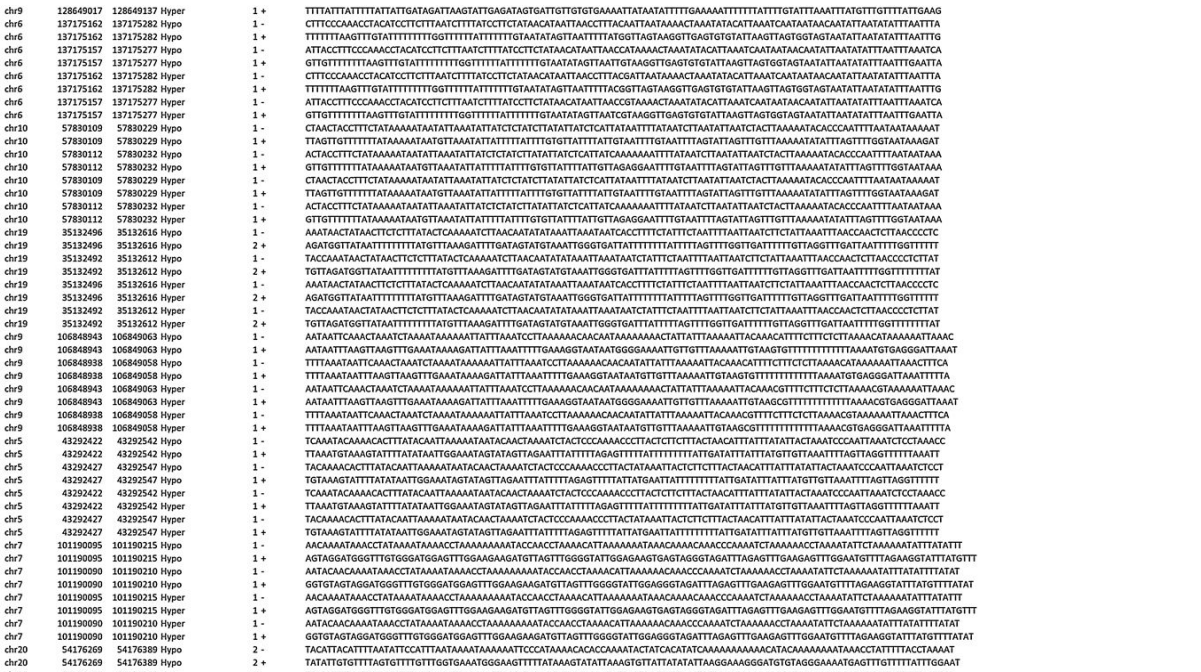
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chr2	208966770	208966890	Hyper	1 +	TATATATATTGTATAGTTGAGTATATTTTAAAAGTGTAGAATAATTTTTATTTGTGATTTTGGAAAAGGTTTTTAAATTATATTTGTTTTTTTTTTGGTTAGTATAGGGTGGAGTTTTTA
chr14	86059760	86059880	Hypo	1 -	TAATTTAAAACATATCATACCTTTCACAAAACTCTTCCTTACATATAATTAAAACTCTATTAATTAAAAATATATTAAACCCAAATCTATAAATACCAATAAAATTTTCAATATCATATA
chr14	86059760	86059880	Hypo	1 +	TAATTTAGAGTATGTTATATTTTTTATAGGGTTTTTTTTTATATATGATTGAAATTTTGTTGATTGAAAATGTGTTGAGTTTAAATTTGTGAGTGTTAGTAGGGTTTTTAATGTTATGTA
chr14	86059765	86059885	Hypo	1 -	TAAAACATATCATACCTTTCACAAAACTCTTCCTTACATATAATTAAAACTCTATTAATTCAATAAAATTAAAAATATATTAAACCCAAATCTATAAATACCAATAAAATTTTCAATATC
chr14	86059765	86059885	Hypo	1 +	TAGAGTATGTTATATTTTTTATAGGGTTTTTTTTTATATATGATTGAAATTTTGTTGATTTGATAAGATTGAAAATGTGTTGAGTTTAAATTTGTGAGTGTTAGTAGGGTTTTTAATGTT
chr14	86059760	86059880	Hyper	1 -	TAATTTAAAACATATCATACCTTTCACAAAACTCTTCCTTACATATAATTAAAACTCTATTAATTAAAAATATATTAAACCCAAATCTATAAATACCAATAAAATTTTCAATATCATATA
chr14	86059760	86059880	Hyper	1 +	TAATTTAGAGTATGTTATATTTTTTATAGGGTTTTTTTTTATATATGATTGAAATTTTGTTGATTGAAAATGTGTTGAGTTTAAATTTGTGAGTGTTAGTAGGGTTTTTAATGTTATGTA
chr14	86059765	86059885	Hyper	1 -	TAAAACATATCATACCTTTCACAAAACTCTTCCTTACATATAATTAAAACTCTATTAATTCGATAAAATTAAAAATATATTAAACCCAAATCTATAAATACCAATAAAATTTTCAATATC
chr14	86059765	86059885	Hyper	1 +	TAGAGTATGTTATATTTTTTATAGGGTTTTTTTTTATATATGATTGAAATTTTGTTGATTCGATAAGATTGAAAATGTGTTGAGTTTAAATTTGTGAGTGTTAGTAGGGTTTTTAATGTT
chr1	2441774	2441894	Hypo	1 -	AAAAAAACTAAACCAAAAAACAAAACTAAATTTAAAACCTACCCCTAAAACCTACCTATCTATAAAATCACAACCCCAAAACCTCCTTACTATAAACACCCTTCCAAAAACCTAACATCA
chr1	2441774	2441894	Hypo	1 +	GAGGGAGTTGAGTTGAGGGGTAGAGTTGAGTTTAGAGTTTGTTTTTGGGATTTGTTTGTTTGTGAAGTTATAGTTTTAAAGTTTTTTTGTTGTGAGTATTTTTTTAGGAGTTTGGTGTTA
chr1	2441779	2441899	Hypo	1 -	AACTAAACCAAAAAACAAAACTAAATTTAAAACCTACCCCTAAAACCTACCTATCTCCAATCAACATAAAATCACAACCCCAAAACCTCCTTACTATAAACACCCTTCCAAAAACCTAAC
chr1	2441779	2441899	Hypo	1 +	AGTTGAGTTGAGGGGTAGAGTTGAGTTTAGAGTTTGTTTTTGGGATTTGTTTGTTTTTGATTGGTGTGAAGTTATAGTTTTAAAGTTTTTTTGTTGTGAGTATTTTTTTAGGAGTTTGGT
chr1	2441774	2441894	Hyper	1 -	AAAAAAACTAAACCGAAAAACAAAACTAAATTTAAAACCTACCCCTAAAACCTACCTATCTATAAAATCACAACCCCAAAACCTCCTTACTATAAACACCCTTCCAAAAACCTAACGTCA
chr1	2441774	2441894	Hyper	1 +	GAGGGAGTTGAGTCGAGGGGTAGAGTTGAGTTTAGAGTTTGTTTTTGGGATTTGTTTGTTTGTGAAGTTATAGTTTTAAAGTTTTTTTGTTGTGAGTATTTTTTTAGGAGTTTGGCGTTA
chr1	2441779	2441899	Hyper	1 -	AACTAAACCGAAAAACAAAACTAAATTTAAAACCTACCCCTAAAACCTACCTATCTCCGATCGACGTAAAATCACAACCCCAAAACCTCCTTACTATAAACACCCTTCCAAAAACCTAAC
chr1	2441779	2441899	Hyper	1 +	AGTTGAGTCGAGGGGTAGAGTTGAGTTTAGAGTTTGTTTTTGGGATTTGTTTGTTTTCGATCGGCGTGAAGTTATAGTTTTAAAGTTTTTTTGTTGTGAGTATTTTTTTAGGAGTTTGGC
chr10	77406775	77406895	Hypo	1 -	CACAACTCAAAAAACAAACTTAACCAACAATCCCATACAAATTAAAAAAATAAAACTTACCCAACACTACTTTTCCCCCAAACCTCCCCAACTCTTACTACCAAACTTTCCTAAAACCTT
chr10	77406775	77406895	Hypo	1 +	TATAGTTTAGAGAGTAAATTTGGTTGGTAGTTTTATGTAGATTAGGGAGATGGAGTTTGTTTAATGTTGTTTTTTTTTTTGGATTTTTTTGGTTTTTGTTGTTAGATTTTTTTGAGGTTTT
chr10	77406772	77406892	Hypo	1 -	TCTCACAACTCAAAAAACAAACTTAACCAACAATCCCATACAAATTAAAAAAATAAAACTTACTACTTTTCCCCCAAACCTCCCCAACTCTTACTACCAAACTTTCCTAAAACCTTACTT
chr10	77406772	77406892	Hypo	1 +	TTTTATAGTTTAGAGAGTAAATTTGGTTGGTAGTTTTATGTAGATTAGGGAGATGGAGTTTGTTGTTTTTTTTTTTGGATTTTTTTGGTTTTTGTTGTTAGATTTTTTTGAGGTTTTGTTT
chr10	77406775	77406895	Hyper	1 -	CACAACTCAAAAAACAAACTTAACCGACAATCCCATACAAATTAAAAAAATAAAACTTACCCAACGCTACTTTTCCCCCGAACCTCCCCGACTCTTACTACCAAACTTTCCTAAAACCTT
chr10	77406775	77406895	Hyper	1 +	TATAGTTTAGAGAGTAAATTTGGTCGGTAGTTTTATGTAGATTAGGGAGATGGAGTTTGTTTAACGTTGTTTTTTTTTCGGATTTTTTCGGTTTTTGTTGTTAGATTTTTTTGAGGTTTT
chr10	77406772	77406892	Hyper	1 -	TCTCACAACTCAAAAAACAAACTTAACCGACAATCCCATACAAATTAAAAAAATAAAACTTACTACTTTTCCCCCGAACCTCCCCGACTCTTACTACCAAACTTTCCTAAAACCTTACTT
chr10	77406772	77406892	Hyper	1 +	TTTTATAGTTTAGAGAGTAAATTTGGTCGGTAGTTTTATGTAGATTAGGGAGATGGAGTTTGTTGTTTTTTTTTTCGGATTTTTTCGGTTTTTGTTGTTAGATTTTTTTGAGGTTTTGTTT
chr10	35480805	35480925	Hypo	1 -	ACACATACCTCTAACTCCTAAAATCCACTCTTCCTATCTTCAATAATTAACCACTACTATCCTTAATACCAAAAACCTAAATATTATCCAATATTCTTCCCAATCTCCATTCAAAATCAC
chr10	35480805	35480925	Hypo	2 +	ATATATATTTTTGATTTTTAAAATTTATTTTTTTTTATTTTTAGTGATTGATTATTATTATTTTTGATGTTAGAAATTTAGGTGTTGTTTAGTATTTTTTTTAGTTTTTATTTAAAGTTAT
chr10	35480810	35480930	Hypo	1 -	TACCTCTAACTCCTAAAATCCACTCTTCCTATCTTCAATAATTAACCACTACTATCCCACCTAATACTTAATACCAAAAACCTAAATATTATCCAATATTCTTCCCAATCTCCATTCAAA
chr10	35480810	35480930	Hypo	2 +	TATTTTTGATTTTTAAAATTTATTTTTTTTTATTTTTAGTGATTGATTATTATTATTTTTATTTGGTGTTTGATGTTAGAAATTTAGGTGTTGTTTAGTATTTTTTTTAGTTTTTATTTAAA
chr10	35480805	35480925	Hyper	1 -	ACACATACCTCTAACTCCTAAAATCCACTCTTCCTATCTTCAATAATTAACCACTACTATCCTTAATACCAAAAACCTAAATATTATCCAATATTCTTCCCAATCTCCATTCAAAATCAC
chr10	35480805	35480925	Hyper	2 +	ATATATATTTTTGATTTTTAAAATTTATTTTTTTTTATTTTTAGTGATTGATTATTATTATTTTTGATGTTAGAAATTTAGGTGTTGTTTAGTATTTTTTTTAGTTTTTATTTAAAGTTAT
chr10	35480810	35480930	Hyper	1 -	TACCTCTAACTCCTAAAATCCACTCTTCCTATCTTCAATAATTAACCACTACTATCCCACCTAATACTTAATACCAAAAACCTAAATATTATCCAATATTCTTCCCAATCTCCATTCAAA
chr10	35480810	35480930	Hyper	2 +	TATTTTTGATTTTTAAAATTTATTTTTTTTTATTTTTAGTGATTGATTATTATTATTTTTATTTGGTGTTTGATGTTAGAAATTTAGGTGTTGTTTAGTATTTTTTTTAGTTTTTATTTAAA
chr5	36232623	36232743	Hypo	1 -	ATCAACACCTAAATACTCAACCATTCACCTAACATAATCAAACCTAATACACTAAACCCTAAAAACTTCTTCACATATATTTAATATTTATCTTAAATCATCTCTATTCCACTTACTTTC
chr5	36232623	36232743	Hypo	1 +	ATTAATATTTAGATATTTAATTATTTATTTAATATGATTAGATTTAGTGTATTGAATTTTAAAGATTTTTTTATATATATATTTGGTATTTATTTTAGATTATTTTTATTTTATTTATTTTT
chr5	36232620	36232740	Hypo	1 -	CTAATCAACACCTAAATACTCAACCATTCACCTAACATAATCAAACCTAATACACTAAACCCTTCTTCACATATATTTAATATTTATCTTAAATCATCTCTATTCCACTTACTTTCTCCC
chr5	36232620	36232740	Hypo	1 +	TTAATTAATATTTAGATATTTAATTATTTATTTAATATGATTAGATTTAGTGTATTGAATTTTTTTTTATATATATATTTGGTATTTATTTTAGATTATTTTTATTTTATTTATTTTTTTTTT
chr5	36232623	36232743	Hyper	1 -	ATCAACACCTAAATACTCAACCATTCACCTAACATAATCAAACCTAATACACTAAACCCTAAAAACTTCTTCACATATATTTAATATTTATCTTAAATCATCTCTATTCCACTTACTTTC
chr5	36232623	36232743	Hyper	1 +	ATTAATATTTAGATATTTAATTATTTATTTAATATGATTAGATTTAGTGTATTGAATTTTAAAGATTTTTTTATATATATATTTGGTATTTATTTTAGATTATTTTTATTTTATTTATTTTT
chr5	36232620	36232740	Hyper	1 -	CTAATCAACACCTAAATACTCAACCATTCACCTAACATAATCAAACCTAATACACTAAACCCTTCTTCACATATATTTAATATTTATCTTAAATCATCTCTATTCCACTTACTTTCTCCC
chr5	36232620	36232740	Hyper	1 +	TTAATTAATATTTAGATATTTAATTATTTATTTAATATGATTAGATTTAGTGTATTGAATTTTTTTTTATATATATATTTGGTATTTATTTTAGATTATTTTTATTTTATTTATTTTTTTTTT
chr9	124618798	124618918	Hypo	1 -	CTCACATAAATATTCAATAAATAATCTCTTTTTTTCCCTTAAAAAACTAAAATCTATACCTAATTTATCTTTATATCCCTACAAAACACAATACCTAATAACACATTCACTAACTATTAA
chr9	124618798	124618918	Hypo	1 +	TTTATATAAATGTTTAGTAAATGGTTTTTTTTTTTTTTTTTAAGAGGTTAGGATTTGTATTTAATTTATTTTTATATTTTTGTAGGGTATAATATTTGGTAATATATTTATTAGTTGTTAG
chr9	124618795	124618915	Hypo	1 -	TATCTCACATAAATATTCAATAAATAATCTCTTTTTTTCCCTTAAAAAACTAAAATCTATATATCTTTATATCCCTACAAAACACAATACCTAATAACACATTCACTAACTATTAATTAA
chr9	124618795	124618915	Hypo	1 +	TGTTTTATATAAATGTTTAGTAAATGGTTTTTTTTTTTTTTTTTTAAGAGGTTAGGATTTGTATATTTTTATATTTTTGTAGGGTATAATATTTGGTAATATATTTATTAGTTGTTAGTTGA
chr9	124618798	124618918	Hyper	1 -	CTCACATAAATATTCAATAAATAATCTCTTTTTTTCCCTTAAAAAACTAAAATCTATACCTAATTTATCTTTATATCCCTACAAAACACAATACCTAATAACACATTCACTAACTATTAA
chr9	124618798	124618918	Hyper	1 +	TTTATATAAATGTTTAGTAAATGGTTTTTTTTTTTTTTTTTAAGAGGTTAGGATTTGTATTTAATTTATTTTTATATTTTTGTAGGGTATAATATTTGGTAATATATTTATTAGTTGTTAG
chr9	124618795	124618915	Hyper	1 -	TATCTCACATAAATATTCAATAAATAATCTCTTTTTTTCCCTTAAAAAACTAAAATCTATATATCTTTATATCCCTACAAAACACAATACCTAATAACACATTCACTAACTATTAATTAA
chr9	124618795	124618915	Hyper	1 +	TGTTTTATATAAATGTTTAGTAAATGGTTTTTTTTTTTTTTTTTTAAGAGGTTAGGATTTGTATATTTTTATATTTTTGTAGGGTATAATATTTGGTAATATATTTATTAGTTGTTAGTTGA
chr6	10950389	10950509	Hypo	1 -	TTTTAAAACTATCCTTTCATTACCTTTTACTAACTTATTACAACATAATCAAAAAAACACAATCTATACAATATTATTTATTTAAAATTTATTAAAACTTATATTAAAACCCAATTTAAC
chr6	10950389	10950509	Hypo	2 +	TTTTAAAGTTGTTTTTTTATTATTTTTTGTTAATTTATTGTAATATGGTTAGAGAAATATAGTTTGTATAATATTGTTTGTTTAGAATTTATTGGGGTTTATATTAAGATTTAATTTGAT
chr6	10950384	10950504	Hypo	1 -	AATTATTTTAAAACTATCCTTTCATTACCTTTTACTAACTTATTACAACATAATCAAAAAATACAATATTATTTATTTAAAATTTATTAAAACTTATATTAAAACCCAATTTAACTTACC

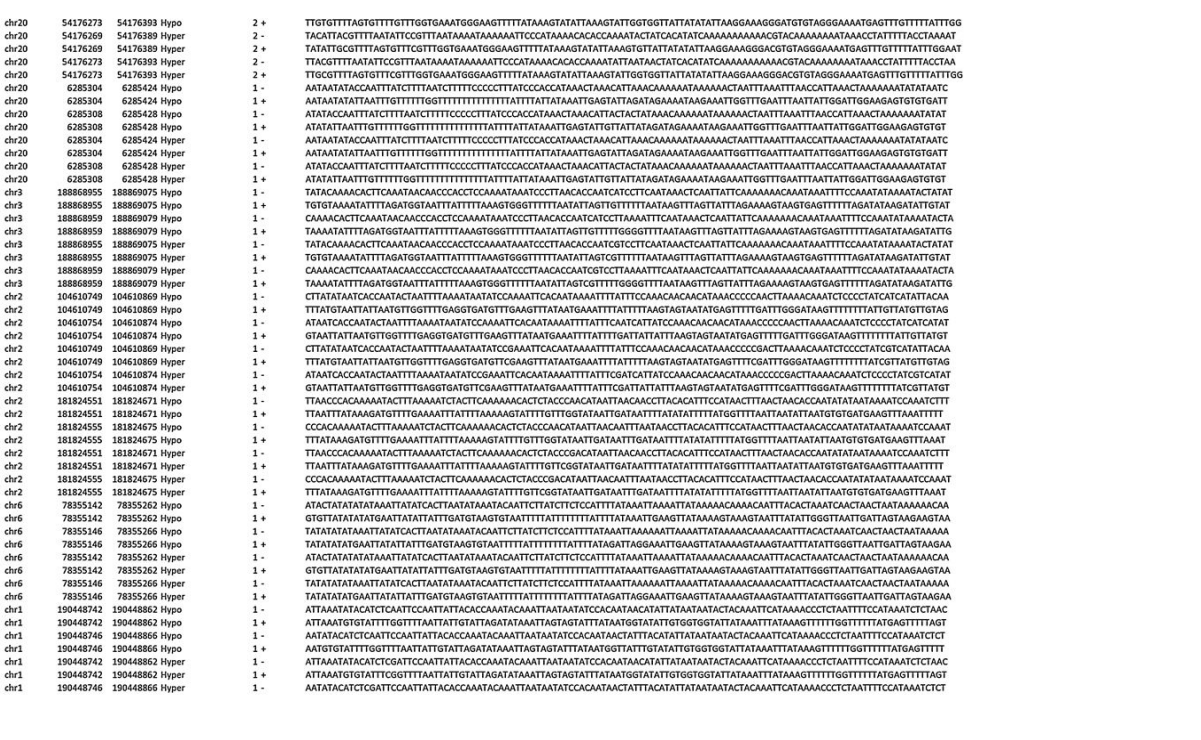
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chr6	10950384	10950504	Hypo	1 +	GGTTATTTTAAAGTTGTTTTTTTATTATTTTTTGTTAATTTATTGTAATATGGTTAGAGAATATAATATTGTTTGTTTAGAATTTATTGGGGTTTATATTAAGATTTAATTTGATTTGTT
chr6	10950389	10950509	Hyper	1 -	TTTTAAAACTATCCTTTCATTACCTTTTACTAACTTATTACAACATAATCAAAAAAACACAATCTATACAATATTATTTATTTAAAATTTATTAAAACTTATATTAAAACCCAATTTAAC
chr6	10950389	10950509	Hyper	2 +	TTTTAAAGTTGTTTTTTTATTATTTTTTGTTAATTTATTGTAATATGGTTAGAGAAATATAGTTTGTATAATATTGTTTGTTTAGAATTTATTGGGGTTTATATTAAGATTTAATTTGAT
chr6	10950384	10950504	Hyper	1 -	AATTATTTTAAAACTATCCTTTCATTACCTTTTACTAACTTATTACAACATAATCAAAAAATACAATATTATTTATTTAAAATTTATTAAAACTTATATTAAAACCCAATTTAACTTACC
chr6	10950384	10950504	Hyper	1 +	GGTTATTTTAAAGTTGTTTTTTTATTATTTTTTGTTAATTTATTGTAATATGGTTAGAGAATATAATATTGTTTGTTTAGAATTTATTGGGGTTTATATTAAGATTTAATTTGATTTGTT
chr22	24808826	24808946	Hypo	1 -	CATCAAAAATAAATACAAATATAAAATCTTATATCCTAACCCCCAACACTTTTATCTCACATAAAACACCCTAAAAATACCCCCTAAAAAAATAAAAAACCTAAAACCATAAACCCAACC
chr22	24808826	24808946	Hypo	1 +	TGTTAAGGGTGGGTGTAGATGTGGGATTTTGTGTTTTGGTTTTTAGTATTTTTATTTTATGTGAAATATTTTAAGGATGTTTTTTGAAAGGGTGGGAGGTTTGAGATTATGGGTTTAGTT
chr22	24808822	24808942	Hypo	1 -	ATCCCATCAAAAATAAATACAAATATAAAATCTTATATCCTAACCCCCAACACTTTTATCTCACCCTAAAAATACCCCCTAAAAAAATAAAAAACCTAAAACCATAAACCCAACCAACCT
chr22	24808822	24808942	Hypo	1 +	GTTTTGTTAAGGGTGGGTGTAGATGTGGGATTTTGTGTTTTGGTTTTTAGTATTTTTATTTTATTTTAAGGATGTTTTTTGAAAGGGTGGGAGGTTTGAGATTATGGGTTTAGTTAATTT
chr22	24808826	24808946	Hyper	1 -	CGTCAAAAATAAATACAAATATAAAATCTTATATCCTAACCCCCAACACTTTTATCTCACGTAAAACACCCTAAAAATACCCCCTAAAAAAATAAAAAACCTAAAACCATAAACCCAACC
chr22	24808826	24808946	Hyper	1 +	CGTTAAGGGTGGGTGTAGATGTGGGATTTTGTGTTTTGGTTTTTAGTATTTTTATTTTACGTGAAATATTTTAAGGATGTTTTTTGAAAGGGTGGGAGGTTTGAGATTATGGGTTTAGTT
chr22	24808822	24808942	Hyper	1 -	ATCCCGTCAAAAATAAATACAAATATAAAATCTTATATCCTAACCCCCAACACTTTTATCTCACCCTAAAAATACCCCCTAAAAAAATAAAAAACCTAAAACCATAAACCCAACCAACCT
chr22	24808822	24808942	Hyper	1 +	GTTTCGTTAAGGGTGGGTGTAGATGTGGGATTTTGTGTTTTGGTTTTTAGTATTTTTATTTTATTTTAAGGATGTTTTTTGAAAGGGTGGGAGGTTTGAGATTATGGGTTTAGTTAATTT
chr8	120921171	120921291	Hypo	1 -	CCAAAAAACAAAACCTTAAACTAAAATAAATACCAAAACCTCATTTAAAAACCATAACAACCAACCCACTAATTCTCAAAACACAAATATCATTTACTTCTTAATACCTAAAATAAAAAT
chr8	120921171	120921291	Hypo	1 +	TTAAGGAATAGAGTTTTAGGTTAAAATAGATGTTAGGGTTTTATTTAAAAATTATGATAGTTAGTTTATTAATTTTTAGAATATAAGTATTATTTATTTTTTGGTGTTTGGAGTGAGAGT
chr8	120921167	120921287	Hypo	1 -	ATCACCAAAAAACAAAACCTTAAACTAAAATAAATACCAAAACCTCATTTAAAAACCATAACACTAATTCTCAAAACACAAATATCATTTACTTCTTAATACCTAAAATAAAAATTTATC
chr8	120921167	120921287	Hypo	1 +	GTTATTAAGGAATAGAGTTTTAGGTTAAAATAGATGTTAGGGTTTTATTTAAAAATTATGATATTAATTTTTAGAATATAAGTATTATTTATTTTTTGGTGTTTGGAGTGAGAGTTTGTT
chr8	120921171	120921291	Hyper	1 -	CCAAAAAACAAAACCTTAAACTAAAATAAATACCAAAACCTCATTTAAAAACCATAACAACCAACCCACTAATTCTCAAAACACAAATATCATTTACTTCTTAATACCTAAAATAAAAAT
chr8	120921171	120921291	Hyper	1 +	TTAAGGAATAGAGTTTTAGGTTAAAATAGATGTTAGGGTTTTATTTAAAAATTATGATAGTTAGTTTATTAATTTTTAGAATATAAGTATTATTTATTTTTTGGTGTTTGGAGTGAGAGT
chr8	120921167	120921287	Hyper	1 -	ATCACCAAAAAACAAAACCTTAAACTAAAATAAATACCAAAACCTCATTTAAAAACCATAACACTAATTCTCAAAACACAAATATCATTTACTTCTTAATACCTAAAATAAAAATTTATC
chr8	120921167	120921287	Hyper	1 +	GTTATTAAGGAATAGAGTTTTAGGTTAAAATAGATGTTAGGGTTTTATTTAAAAATTATGATATTAATTTTTAGAATATAAGTATTATTTATTTTTTGGTGTTTGGAGTGAGAGTTTGTC
chr17	49825846	49825966	Hypo	1 -	ATTCCTTTTCCTTCTTTTCTTACTAAAACTTAATATTCAACTTCATTTTCCTAACTATAACCTCAACAACAATTAATTCTAAAACACTCATTCCCATCTAAAACTCTACTTTCTTACTCT
chr17	49825846	49825966	Hypo	1 +	ATTTTTTTTTTTTTTTTTTTTTGTTGGGATTTGATGTTTAGTTTTATTTTTTTGATTGTGATTTTAATAATAATTGATTTAGAATATTTATTTTTATTTGAAATTTTATTTTTTTATTTT
chr17	49825851	49825971	Hypo	1 -	TTTTCCTTCTTTTCTTACTAAAACTTAATATTCAACTTCATTTTCCTAACTATAACCTCAACACTTCTCAACAACAATTAATTCTAAAACACTCATTCCCATCTAAAACTCTACTTTCTT
chr17	49825851	49825971	Hypo	1 +	TTTTTTTTTTTTTTTTTGTTGGGATTTGATGTTTAGTTTTATTTTTTTGATTGTGATTTTAGTATTTTTTAATAATAATTGATTTAGAATATTTATTTTTATTTGAAATTTTATTTTTTT
chr17	49825846	49825966	Hyper	1 -	ATTCCTTTTCCTTCTTTTCTTACTAAAACTTAATATTCAACTTCATTTTCCTAACTATAACCTCAACAACAATTAATTCTAAAACACTCATTCCCATCTAAAACTCTACTTTCTTACTCT
chr17	49825846	49825966	Hyper	1 +	ATTTTTTTTTTTTTTTTTTTTTGTTGGGATTTGATGTTTAGTTTTATTTTTTTGATTGTGATTTTAATAATAATTGATTTAGAATATTTATTTTTATTTGAAATTTTATTTTTTTATTTT
chr17	49825851	49825971	Hyper	1 -	TTTTCCTTCTTTTCTTACTAAAACTTAATATTCAACTTCATTTTCCTAACTATAACCTCAACACTTCTCAACAACAATTAATTCTAAAACACTCATTCCCATCTAAAACTCTACTTTCTT
chr17	49825851	49825971	Hyper	1 +	TTTTTTTTTTTTTTTTTGTTGGGATTTGATGTTTAGTTTTATTTTTTTGATTGTGATTTTAGTATTTTTTAATAATAATTGATTTAGAATATTTATTTTTATTTGAAATTTTATTTTTTT
chr2	134236287	134236407	Hypo	1 -	CATTTCAAATATTTCATCTCTTTTCTATCACCTTAAAAAAACCAAAATCTTAAACCCAAATATATAAAAATCAAAAAATCACTAAAAATATATAAAAAATACCTCACACAAAATAAAACA
chr2	134236287	134236407	Hypo	1 +	TATTTTAAATGTTTTATTTTTTTTTTATTATTTTGAAAAAGTTAGAGTTTTAAATTTAAATATGTAAGGATTAGGGAGTTATTAGAAATGTGTAAAGAATATTTTGTATAAGATAAGATA
chr2	134236283	134236403	Hypo	1 -	AATACATTTCAAATATTTCATCTCTTTTCTATCACCTTAAAAAAACCAAAATCTTAAACCCAAAAATCAAAAAATCACTAAAAATATATAAAAAATACCTCACACAAAATAAAACACTAA
chr2	134236283	134236403	Hypo	1 +	GATGTATTTTAAATGTTTTATTTTTTTTTTATTATTTTGAAAAAGTTAGAGTTTTAAATTTAAGGATTAGGGAGTTATTAGAAATGTGTAAAGAATATTTTGTATAAGATAAGATATTAA
chr2	134236287	134236407	Hyper	1 -	CATTTCAAATATTTCATCTCTTTTCTATCACCTTAAAAAAACCAAAATCTTAAACCCAAATATATAAAAATCAAAAAATCACTAAAAATATATAAAAAATACCTCGCACAAAATAAAACA
chr2	134236287	134236407	Hyper	1 +	TATTTTAAATGTTTTATTTTTTTTTTATTATTTTGAAAAAGTTAGAGTTTTAAATTTAAATATGTAAGGATTAGGGAGTTATTAGAAATGTGTAAAGAATATTTCGTATAAGATAAGATA
chr2	134236283	134236403	Hyper	1 -	AATACATTTCAAATATTTCATCTCTTTTCTATCACCTTAAAAAAACCAAAATCTTAAACCCAAAAATCAAAAAATCACTAAAAATATATAAAAAATACCTCGCACAAAATAAAACACTAA
chr2	134236283	134236403	Hyper	1 +	GATGTATTTTAAATGTTTTATTTTTTTTTTATTATTTTGAAAAAGTTAGAGTTTTAAATTTAAGGATTAGGGAGTTATTAGAAATGTGTAAAGAATATTTCGTATAAGATAAGATATTAA
chr13	70549580	70549700	Hypo	1 -	AAAATAAAAAATAAAAACAAATATAAACAAAACAAACAACAACAACAACAAAAAACTTAAAAAAATATAAATCCTTATTTCTATAATCATATAATATTCTACAATCTACATACCAATCTA
chr13	70549580	70549700	Hypo	1 +	AAAATAAGAAATAAAAATAAGTATAAATAAAATAAATAATAATAATAATAAAAAAATTTAAAAAAATGTGAATTTTTATTTTTGTAGTTATATAATATTTTGTAATTTGTATGTTAGTTTG
chr13	70549575	70549695	Hypo	1 -	AAAAAAAAATAAAAAATAAAAACAAATATAAACAAAACAAACAACAACAACAACAAAAAACATAAATCCTTATTTCTATAATCATATAATATTCTACAATCTACATACCAATCTAACACT
chr13	70549575	70549695	Hypo	2 +	AAAGAAAAATAAGAAATAAAAATAAGTATAAATAAAATAAATAATAATAATAATAAAAAAATGTGAATTTTTATTTTTGTAGTTATATAATATTTTGTAATTTGTATGTTAGTTTGGTATT
chr13	70549580	70549700	Hyper	1 -	AAAATAAAAAATAAAAACAAATATAAACAAAACAAACAACAACAACAACAAAAAACTTAAAAAAATATAAATCCTTATTTCTATAATCATATAATATTCTACAATCTACATACCAATCTA
chr13	70549580	70549700	Hyper	1 +	AAAATAAGAAATAAAAATAAGTATAAATAAAATAAATAATAATAATAATAAAAAAATTTAAAAAAATGTGAATTTTTATTTTTGTAGTTATATAATATTTTGTAATTTGTATGTTAGTTTG
chr13	70549575	70549695	Hyper	1 -	AAAAAAAAATAAAAAATAAAAACAAATATAAACAAAACAAACAACAACAACAACAAAAAACGTAAATCCTTATTTCTATAATCATATAATATTCTACAATCTACATACCAATCTAACACT
chr13	70549575	70549695	Hyper	2 +	AAAGAAAAATAAGAAATAAAAATAAGTATAAATAAAATAAATAATAATAATAATAAAAAACGTGAATTTTTATTTTTGTAGTTATATAATATTTTGTAATTTGTATGTTAGTTTGGTATT
chr9	128649021	128649141	Hypo	1 -	ATTCATTTTTACCACTAATAAATCAAATATTAAAATAATAACTACTATATAAAAATTACAACTTAAACAACATTTCTAAAAAATTTTTTTATTTTACATTTAAATCCATATTTACCTTAT
chr9	128649021	128649141	Hypo	1 +	ATTTATTTTTATTATTGATAGATTAAGTATTGAGATAGTGATTGTTGTGTGAAAATTATAATTTGAATAATATTTTTGAAAAATTTTTTTATTTTGTATTTAAATTTATGTTTGTTTTAT
chr9	128649017	128649137	Hypo	1 -	CTTTATTCATTTTTACCACTAATAAATCAAATATTAAAATAATAACTACTATATAAAAATTACAACATTTCTAAAAAATTTTTTTATTTTACATTTAAATCCATATTTACCTTATTAAAA
chr9	128649017	128649137	Hypo	1 +	TTTTATTTATTTTTATTATTGATAGATTAAGTATTGAGATAGTGATTGTTGTGTGAAAATTATAATATTTTTGAAAAATTTTTTTATTTTGTATTTAAATTTATGTTTGTTTTATTGAAG
chr9	128649021	128649141	Hyper	1 -	ATTCATTTTTACCACTAATAAATCAAATATTAAAATAATAACTACTATATAAAAATTACAACTTAAACAACATTTCTAAAAAATTTTTTTATTTTACATTTAAATCCATATTTACCTTAT
chr9	128649021	128649141	Hyper	1 +	ATTTATTTTTATTATTGATAGATTAAGTATTGAGATAGTGATTGTTGTGTGAAAATTATAATTTGAATAATATTTTTGAAAAATTTTTTTATTTTGTATTTAAATTTATGTTTGTTTTAT
chr9	128649017	128649137	Hyper	1 -	CTTTATTCATTTTTACCACTAATAAATCAAATATTAAAATAATAACTACTATATAAAAATTACAACATTTCTAAAAAATTTTTTTATTTTACATTTAAATCCATATTTACCTTATTAAAA

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도면26bf



도면26bg

chr1	190448746	190448866	Hyper	1 +	AATGTGTATTTCGGTTTTAATTATTGTATTAGATATAAATTAGTAGTATTTATAATGGTTATTTGTATATTGTGGTGGTATTATAAATTTATAAAGTTTTTTGGTTTTTTATGAGTTTTT
chr2	217556090	217556210	Hypo	1 -	CTATACTAAAAACCAACCCATCAAACCTCATTCCCCACCAAAAATACCCAAAAACAAACCCAATACTTCCTTAACTCCCTCCACTCACCACTATTTACTAAACTTTACCCATCAAATAAC
chr2	217556090	217556210	Hypo	1 +	TTATGTTGGGGATTAGTTTATTAAATTTTATTTTTTATTAAAAATGTTTGAAAGTAAATTTAGTATTTTTTTGATTTTTTTTTATTTATTGTTATTTATTGAGTTTTGTTTATTAAATAAT
chr2	217556085	217556205	Hypo	1 -	AATATCTATACTAAAAACCAACCCATCAAACCTCATTCCCCACCAAAAATACCCAAAAACATTCCTTAACTCCCTCCACTCACCACTATTTACTAAACTTTACCCATCAAATAACTCCCA
chr2	217556085	217556205	Hypo	2 +	GGTATTTATGTTGGGGATTAGTTTATTAAATTTTATTTTTTATTAAAAATGTTTGAAAGTATTTTTTGATTTTTTTTTATTTATTGTTATTTATTGAGTTTTGTTTATTAAATAATTTTTG
chr2	217556090	217556210	Hyper	1 -	CTATACTAAAAACCAACCCATCAAACCTCATTCCCCACCAAAAATACCCGAAAACAAACCCAATACTTCCTTAACTCCCTCCACTCACCGCTATTTACTAAACTTTACCCATCAAATAAC
chr2	217556090	217556210	Hyper	1 +	TTATGTTGGGGATTAGTTTATTAAATTTTATTTTTTATTAAAAATGTTCGAAAGTAAATTTAGTATTTTTTTGATTTTTTTTTATTTATCGTTATTTATTGAGTTTTGTTTATTAAATAAT
chr2	217556085	217556205	Hyper	1 -	AATATCTATACTAAAAACCAACCCATCAAACCTCATTCCCCACCAAAAATACCCGAAAACATTCCTTAACTCCCTCCACTCACCGCTATTTACTAAACTTTACCCATCAAATAACTCCCG
chr2	217556085	217556205	Hyper	2 +	GGTATTTATGTTGGGGATTAGTTTATTAAATTTTATTTTTTATTAAAAATGTTCGAAAGTATTTTTTGATTTTTTTTTATTTATCGTTATTTATTGAGTTTTGTTTATTAAATAATTTTCG
chr8	91191961	91192081	Hypo	1 -	ACAAACCATATCCTTACATTATATTAACTCTAATAATATAAAAAAAAATTAAAAATAACTTAATCCTTCAAATATCCCAAAATCTAATAAAATAAACATCTCAACAAACAAAACATAACA
chr8	91191961	91192081	Hypo	1 +	ATAAATTATGTTTTTGTATTGTGTTAGTTTTAATGATATAAAGAAAAGTTGAAAATGGTTTGATTTTTTAAGTATTTTAAAATTTAATGGAGTAGATATTTTAGTAAATAAAATATGATA
chr8	91191958	91192078	Hypo	1 -	TAAACAAACCATATCCTTACATTATATTAACTCTAATAATATAAAAAAAAATTAAAAATAACTTCAAATATCCCAAAATCTAATAAAATAAACATCTCAACAAACAAAACATAACAAATT
chr8	91191958	91192078	Hypo	1 +	TAAATAAATTATGTTTTTGTATTGTGTTAGTTTTAATGATATAAAGAAAAGTTGAAAATGGTTTTAAGTATTTTAAAATTTAATGGAGTAGATATTTTAGTAAATAAAATATGATAAATT
chr8	91191961	91192081	Hyper	1 -	ACAAACCATATCCTTACATTATATTAACTCTAATAATATAAAAAAAAATTAAAAATAACTTAATCCTTCAAATATCCCAAAATCTAATAAAATAAACATCTCAACAAACAAAACATAACA
chr8	91191961	91192081	Hyper	1 +	ATAAATTATGTTTTTGTATTGTGTTAGTTTTAATGATATAAAGAAAAGTTGAAAATGGTTTGATTTTTTAAGTATTTTAAAATTTAATGGAGTAGATATTTTAGTAAATAAAATATGATA
chr8	91191958	91192078	Hyper	1 -	TAAACAAACCATATCCTTACATTATATTAACTCTAATAATATAAAAAAAAATTAAAAATAACTTCAAATATCCCAAAATCTAATAAAATAAACATCTCAACAAACAAAACATAACAAATT
chr8	91191958	91192078	Hyper	1 +	TAAATAAATTATGTTTTTGTATTGTGTTAGTTTTAATGATATAAAGAAAAGTTGAAAATGGTTTTAAGTATTTTAAAATTTAATGGAGTAGATATTTTAGTAAATAAAATATGATAAATT
chr17	53461936	53462056	Hypo	1 -	TCTTCCACTAATAATCACCTTACACTTATACCTATAAACCTTACCATAACTTACAAAACACTATATACCCCAACATTCAATACCCCTCCTAAAAAAAAAAATAATTCATAACACTTATTC
chr17	53461936	53462056	Hypo	1 +	TTTTTTATTAATAATTATTTTGTATTTGTGTTTGTGGGTTTTATTATGGTTTATAGGATGTTGTGTATTTTGGTATTTAGTATTTTTTTTAAAGAAAAAAATAATTTATGATATTTGTTT
chr17	53461932	53462052	Hypo	1 -	TAATTCTTCCACTAATAATCACCTTACACTTATACCTATAAACCTTACCATAACTTACAAAACCCCAACATTCAATACCCCTCCTAAAAAAAAAAATAATTCATAACACTTATTCAAAAT
chr17	53461932	53462052	Hypo	1 +	TGATTTTTTTATTAATAATTATTTTGTATTTGTGTTTGTGGGTTTTATTATGGTTTATAGGATTTTGGTATTTAGTATTTTTTTTAAAGAAAAAAATAATTTATGATATTTGTTTAAGAT
chr17	53461936	53462056	Hyper	1 -	TCTTCCACTAATAATCACCTTACACTTATACCTATAAACCTTACCATAACTTACAAAACGCTATATACCCCGACATTCAATACCCCTCCTAAAAAAAAAAATAATTCATAACACTTATTC
chr17	53461936	53462056	Hyper	1 +	TTTTTTATTAATAATTATTTTGTATTTGTGTTTGTGGGTTTTATTATGGTTTATAGGACGTTGTGTATTTCGGTATTTAGTATTTTTTTTAAAGAAAAAAATAATTTATGATATTTGTTT
chr17	53461932	53462052	Hyper	1 -	TAATTCTTCCACTAATAATCACCTTACACTTATACCTATAAACCTTACCATAACTTACAAAACCCCGACATTCAATACCCCTCCTAAAAAAAAAAATAATTCATAACACTTATTCAAAAT
chr17	53461932	53462052	Hyper	1 +	TGATTTTTTTATTAATAATTATTTTGTATTTGTGTTTGTGGGTTTTATTATGGTTTATAGGATTTCGGTATTTAGTATTTTTTTTAAAGAAAAAAATAATTTATGATATTTGTTTAAGAT
chr5	56615191	56615311	Hypo	2 -	CTTTTAAAATTTAATTACTATAAAATTTAAAAAAAAAAAATCCATAAAATCATCTATATATTTCATCTAAAAATCACCACATCCAATAATATACAACAACCTATTTACATTCAAAATCTA
chr5	56615191	56615311	Hypo	2 +	TTTTTGGGATTTAATTATTGTAGGATTTAAAGGGAAAGGGTTTATGGGGTTATTTATGTGTTTTATTTGGAAATTATTATGTTTAGTGATATGTAGTAATTTATTTATATTTAGAGTTTG
chr5	56615188	56615308	Hypo	2 -	ATCCTTTTAAAATTTAATTACTATAAAATTTAAAAAAAAAAAATCCATAAAATCATCTATATCTAAAAATCACCACATCCAATAATATACAACAACCTATTTACATTCAAAATCTACCCA
chr5	56615188	56615308	Hypo	2 +	GTTTTTTTGGGATTTAATTATTGTAGGATTTAAAGGGAAAGGGTTTATGGGGTTATTTATGTTTGGAAATTATTATGTTTAGTGATATGTAGTAATTTATTTATATTTAGAGTTTGTTTA
chr5	56615191	56615311	Hyper	2 -	CTTTTAAAATTTAATTACTATAAAATTTAAAAAAAAAAAATCCATAAAATCATCTATATATTTCATCTAAAAATCACCACGTCCAATAATATACAACAACCTATTTACATTCAAAATCTA
chr5	56615191	56615311	Hyper	2 +	TTTTTGGGATTTAATTATTGTAGGATTTAAAGGGAAAGGGTTTATGGGGTTATTTATGTGTTTTATTTGGAAATTATTACGTTTAGTGATATGTAGTAATTTATTTATATTTAGAGTTTG
chr5	56615188	56615308	Hyper	2 -	ATCCTTTTAAAATTTAATTACTATAAAATTTAAAAAAAAAAAATCCATAAAATCATCTATATCTAAAAATCACCACGTCCAATAATATACAACAACCTATTTACATTCAAAATCTACCCA
chr5	56615188	56615308	Hyper	2 +	GTTTTTTTGGGATTTAATTATTGTAGGATTTAAAGGGAAAGGGTTTATGGGGTTATTTATGTTTGGAAATTATTACGTTTAGTGATATGTAGTAATTTATTTATATTTAGAGTTTGTTTA
chr4	186562229	186562349	Hypo	1 -	TAAAAAAATATATAACAAATAAATATACCAAATCCTAATTTATAATAATACATCTCTATAATAAAATATAAAAAAAAAAACAAAATATCTACCATCTTACATCATACCTTAAAATAACAA
chr4	186562229	186562349	Hypo	1 +	TAAGAAAATATGTAATAAATGGATATATTAAGTTTTGATTTATAGTAATGTATTTTTATGATAGAATATGGAAAAGGAAGTAGAATATTTATTATTTTGTATTATATTTTAGAATGGTAG
chr4	186562225	186562345	Hypo	1 -	ACATTAAAAAAATATATAACAAATAAATATACCAAATCCTAATTTATAATAATACATCTCTATATAAAAAAAAAAACAAAATATCTACCATCTTACATCATACCTTAAAATAACAATTTT
chr4	186562225	186562345	Hypo	1 +	ATATTAAGAAAATATGTAATAAATGGATATATTAAGTTTTGATTTATAGTAATGTATTTTTATATGGAAAAGGAAGTAGAATATTTATTATTTTGTATTATATTTTAGAATGGTAGTTTT
chr4	186562229	186562349	Hyper	1 -	TAAAAAAATATATAACAAATAAATATACCAAATCCTAATTTATAATAATACATCTCTATAATAAAATATAAAAAAAAAAACAAAATATCTACCATCTTACATCATACCTTAAAATAACAA
chr4	186562229	186562349	Hyper	1 +	TAAGAAAATATGTAATAAATGGATATATTAAGTTTTGATTTATAGTAATGTATTTTTATGATAGAATATGGAAAAGGAAGTAGAATATTTATTATTTTGTATTATATTTTAGAATGGTAG
chr4	186562225	186562345	Hyper	1 -	ACATTAAAAAAATATATAACAAATAAATATACCAAATCCTAATTTATAATAATACATCTCTATATAAAAAAAAAAACAAAATATCTACCATCTTACATCATACCTTAAAATAACAATTTT
chr4	186562225	186562345	Hyper	1 +	ATATTAAGAAAATATGTAATAAATGGATATATTAAGTTTTGATTTATAGTAATGTATTTTTATATGGAAAAGGAAGTAGAATATTTATTATTTTGTATTATATTTTAGAATGGTAGTTTT
chr3	107706386	107706506	Hypo	1 -	TCAAATTCATATATTATACAAAAATACATTCCAAAATCAAAAATACAATTACTATAATTTAAAACTTTCTACCCCTATACTTCCTACTATTCACTAATATAATTATACATATTTTATAAT
chr3	107706386	107706506	Hypo	1 +	TTAGGTTTATATGTTATGTAGAAATGTATTTTAAAATTAAAAATATGGTTATTGTGATTTGGGATTTTTTATTTTTATATTTTTTGTTATTTATTAATATAATTATGTATGTTTTATAAT
chr3	107706382	107706502	Hypo	1 -	ATATTCAAATTCATATATTATACAAAAATACATTCCAAAATCAAAAATACAATTACTATAATTTCTACCCCTATACTTCCTACTATTCACTAATATAATTATACATATTTTATAATTAAA
chr3	107706382	107706502	Hypo	1 +	GTATTTAGGTTTATATGTTATGTAGAAATGTATTTTAAAATTAAAAATATGGTTATTGTGATTTTTATTTTTATATTTTTTGTTATTTATTAATATAATTATGTATGTTTTATAATTAGA
chr3	107706386	107706506	Hyper	1 -	TCAAATTCATATATTATACAAAAATACATTCCAAAATCAAAAATACGATTACTATAATTTAAAACTTTCTACCCCTATACTTCCTACTATTCACTAATATAATTATACATATTTTATAAT
chr3	107706386	107706506	Hyper	1 +	TTAGGTTTATATGTTATGTAGAAATGTATTTTAAAATTAAAAATACGGTTATTGTGATTTGGGATTTTTTATTTTTATATTTTTTGTTATTTATTAATATAATTATGTATGTTTTATAAT
chr3	107706382	107706502	Hyper	1 -	ATATTCAAATTCATATATTATACAAAAATACATTCCAAAATCAAAAATACGATTACTATAATTTCTACCCCTATACTTCCTACTATTCACTAATATAATTATACATATTTTATAATTAAA
chr3	107706382	107706502	Hyper	1 +	GTATTTAGGTTTATATGTTATGTAGAAATGTATTTTAAAATTAAAAATACGGTTATTGTGATTTTTATTTTTATATTTTTTGTTATTTATTAATATAATTATGTATGTTTTATAATTAGA
chr12	28764298	28764418	Hypo	1 -	TACTAATTAATACCTAATATTACTAAATACTCTACAAAATATTAAAAAAATCATAATAATAAATCTCTACCTTCCCAAAAATTTCAAATTCATAAAAAAAACCAACAAATTAACAAAAAA
chr12	28764298	28764418	Hypo	1 +	TATTAATTGATATTTAGTGTTATTGGATATTTTGTAGGATGTTGGGGAAATTATGGTGATGAGTTTTTGTTTTTTTAGGGGTTTTAGATTTGTGAGAGGAATTAGTAAGTTAATAGAAAA
chr12	28764302	28764422	Hypo	1 -	AATTAATACCTAATATTACTAAATACTCTACAAAATATTAAAAAAATCATAATAATAAATACTCAATCTCTACCTTCCCAAAAATTTCAAATTCATAAAAAAAACCAACAAATTAACAAA

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chr12	28764302	28764422	Hypo	1 +	AATTGATATTTAGTGTTATTGGATATTTTGTAGGATGTTGGGGAAATTATGGTGATGAGTATTTAGTTTTTGTTTTTTTAGGGGTTTTAGATTTGTGAGAGGAATTAGTAAGTTAATAGA
chr12	28764298	28764418	Hyper	1 -	TACTAATTAATACCTAATATTACTAAATACTCTACAAAATATTAAAAAAATCATAATAATAAATCTCTACCTTCCCAAAAATTTCAAATTCGTAAAAAAAACCAACAAATTAACAAAAAA
chr12	28764298	28764418	Hyper	1 +	TATTAATTGATATTTAGTGTTATTGGATATTTTGTAGGATGTTGGGGAAATTATGGTGATGAGTTTTTGTTTTTTTAGGGGTTTTAGATTCGTGAGAGGAATTAGTAAGTTAATAGAAAA
chr12	28764302	28764422	Hyper	1 -	AATTAATACCTAATATTACTAAATACTCTACAAAATATTAAAAAAATCATAATAATAAATACTCAATCTCTACCTTCCCAAAAATTTCAAATTCGTAAAAAAAACCAACAAATTAACAAA
chr12	28764302	28764422	Hyper	1 +	AATTGATATTTAGTGTTATTGGATATTTTGTAGGATGTTGGGGAAATTATGGTGATGAGTATTTAGTTTTTGTTTTTTTAGGGGTTTTAGATTCGTGAGAGGAATTAGTAAGTTAATAGA
chr11	5532460	5532580	Hypo	1 -	AATAAATAAAAAACAAAATATATTAAAACAATTATAAACTAATTAATTAATTTCATAATAAACACAAATAAAAATCCCTTCTAATTATTACTATCTTTCTTATTAAAATAAACACAACTT
chr11	5532460	5532580	Hypo	1 +	AATGAATGGGAGGTAGAGTGTATTGGGATAGTTGTAAGTTAGTTGGTTGATTTTATGGTAGATATAGGTAGAAGTTTTTTTTGATTATTATTGTTTTTTTTGTTGAAATAAGTATAATTT
chr11	5532455	5532575	Hypo	1 -	AACAAAATAAATAAAAAACAAAATATATTAAAACAATTATAAACTAATTAATTAATTTCATAATAAAAATCCCTTCTAATTATTACTATCTTTCTTATTAAAATAAACACAACTTTAAAA
chr11	5532455	5532575	Hypo	1 +	AGTAGAATGAATGGGAGGTAGAGTGTATTGGGATAGTTGTAAGTTAGTTGGTTGATTTTATGGTAGAAGTTTTTTTTGATTATTATTGTTTTTTTTGTTGAAATAAGTATAATTTTAAGA
chr11	5532460	5532580	Hyper	1 -	AATAAATAAAAAACAAAATATATTAAAACAATTATAAACTAATTAATTAATTTCATAATAAACACAAATAAAAATCCCTTCTAATTATTACTATCTTTCTTATTAAAATAAACACAACTT
chr11	5532460	5532580	Hyper	1 +	AATGAATGGGAGGTAGAGTGTATTGGGATAGTTGTAAGTTAGTTGGTTGATTTTATGGTAGATATAGGTAGAAGTTTTTTTTGATTATTATTGTTTTTTTTGTTGAAATAAGTATAATTT
chr11	5532455	5532575	Hyper	1 -	AACAAAATAAATAAAAAACAAAATATATTAAAACAATTATAAACTAATTAATTAATTTCATAATAAAAATCCCTTCTAATTATTACTATCTTTCTTATTAAAATAAACACAACTTTAAAA
chr11	5532455	5532575	Hyper	1 +	AGTAGAATGAATGGGAGGTAGAGTGTATTGGGATAGTTGTAAGTTAGTTGGTTGATTTTATGGTAGAAGTTTTTTTTGATTATTATTGTTTTTTTTGTTGAAATAAGTATAATTTTAAGA
chrX	126759518	126759638	Hypo	1 -	CAATAAAATAAAAATAATTATCCTCAAAAAAAAAAAAAATTAAAAAATTATAATACCAAAATATTATATAAAATACACATATAAATACAACAATAATATATAATCAACCCCATCAAACCCA
chrX	126759518	126759638	Hypo	1 +	TAATGAGGTAAAAGTGATTATTTTTAGAGAAAAGAAAATTAAGGAATTGTGATGTTAAGGTGTTATGTGGAATATGTATGTGAATATAATAATAGTATGTGATTAATTTTATTAAATTTA
chrX	126759513	126759633	Hypo	1 -	AACTACAATAAAATAAAAATAATTATCCTCAAAAAAAAAAAAAATTAAAAAATTATAATACCATAAAATACACATATAAATACAACAATAATATATAATCAACCCCATCAAACCCAATAAA
chrX	126759513	126759633	Hypo	1 +	GGTTGTAATGAGGTAAAAGTGATTATTTTTAGAGAAAAGAAAATTAAGGAATTGTGATGTTGTGGAATATGTATGTGAATATAATAATAGTATGTGATTAATTTTATTAAATTTAGTAAG
chrX	126759518	126759638	Hyper	1 -	CAATAAAATAAAAATAATTATCCTCAAAAAAAAAAAAAATTAAAAAATTATAATACCAAAATATTATATAAAATACGCATATAAATACAACAATAATATATAATCAACCCCATCAAACCCA
chrX	126759518	126759638	Hyper	1 +	TAATGAGGTAAAAGTGATTATTTTTAGAGAAAAGAAAATTAAGGAATTGTGATGTTAAGGTGTTATGTGGAATACGTATGTGAATATAATAATAGTATGTGATTAATTTTATTAAATTTA
chrX	126759513	126759633	Hyper	1 -	AACTACAATAAAATAAAAATAATTATCCTCAAAAAAAAAAAAAATTAAAAAATTATAATACCGTAAAATACGCATATAAATACAACAATAATATATAATCAACCCCATCAAACCCAATAAA
chrX	126759513	126759633	Hyper	1 +	GGTTGTAATGAGGTAAAAGTGATTATTTTTAGAGAAAAGAAAATTAAGGAATTGTGATGTCGTGGAATACGTATGTGAATATAATAATAGTATGTGATTAATTTTATTAAATTTAGTAAG
chr18	41317070	41317190	Hypo	1 -	AAAAACCAACATAAAAATTTAAACAAAAAAAACAAAACATAATTTTTTTAATAATAAAACTTTAACAACACATTAAAATATAATTTAAAAACAAATAAAAAAAAAAACAATTATACCTCC
chr18	41317070	41317190	Hypo	1 +	GGAAATTAGTATAAGAATTTAAGTAGGGAAGATAAAGTATAATTTTTTTAATAATAAAGTTTTGATAGTATGTTGAAATATGGTTTGAGGATAGGTAAAAGAGGAAGTAATTGTATTTTT
chr18	41317066	41317186	Hypo	1 -	AATAAAAAACCAACATAAAAATTTAAACAAAAAAAACAAAACATAATTTTTTTAATAATAAAACACATTAAAATATAATTTAAAAACAAATAAAAAAAAAAACAATTATACCTCCTTACT
chr18	41317066	41317186	Hypo	1 +	AGTAGGAAATTAGTATAAGAATTTAAGTAGGGAAGATAAAGTATAATTTTTTTAATAATAAAGTATGTTGAAATATGGTTTGAGGATAGGTAAAAGAGGAAGTAATTGTATTTTTTTGTT
chr18	41317070	41317190	Hyper	1 -	AAAAACCAACATAAAAATTTAAACAAAAAAAACAAAACATAATTTTTTTAATAATAAAACTTTAACAACACGTTAAAATATAATTTAAAAACAAATAAAAAAAAAAACAATTATACCTCC
chr18	41317070	41317190	Hyper	1 +	GGAAATTAGTATAAGAATTTAAGTAGGGAAGATAAAGTATAATTTTTTTAATAATAAAGTTTTGATAGTACGTTGAAATATGGTTTGAGGATAGGTAAAAGAGGAAGTAATTGTATTTTT
chr18	41317066	41317186	Hyper	1 -	AATAAAAAACCAACATAAAAATTTAAACAAAAAAAACAAAACATAATTTTTTTAATAATAAAACACGTTAAAATATAATTTAAAAACAAATAAAAAAAAAAACAATTATACCTCCTTACT
chr18	41317066	41317186	Hyper	1 +	AGTAGGAAATTAGTATAAGAATTTAAGTAGGGAAGATAAAGTATAATTTTTTTAATAATAAAGTACGTTGAAATATGGTTTGAGGATAGGTAAAAGAGGAAGTAATTGTATTTTTTTGTT
chr10	128357514	128357634	Hypo	1 -	AAAAAAACAAAAATACCAAATCTACCATTTACTACATAAAATTTAAAATAAAACTATAAACAATACATAATAATATAATTCAACAAATTTTTCTCTCTCTAAAAAACTAAAAAATAACCT
chr10	128357514	128357634	Hypo	1 +	AAGAAAATGAGAATGTTAGATTTATTATTTGTTATATAGGGTTTAAAATGAAGTTATGAATAATGTATAATAATGTAATTTAATAAGTTTTTTTTTTTTTGGAGGATTGGAAAATAATTT
chr10	128357519	128357639	Hypo	1 -	AACAAAAATACCAAATCTACCATTTACTACATAAAATTTAAAATAAAACTATAAACACTTTTATAAAATACATAATAATATAATTCAACAAATTTTTCTCTCTCTAAAAAACTAAAAAAT
chr10	128357519	128357639	Hypo	1 +	AATGAGAATGTTAGATTTATTATTTGTTATATAGGGTTTAAAATGAAGTTATGAATATTTTTGTAAAATGTATAATAATGTAATTTAATAAGTTTTTTTTTTTTTGGAGGATTGGAAAAT
chr10	128357514	128357634	Hyper	1 -	AAAAAAACGAAAATACCAAATCTACCATTTACTACATAAAATTTAAAATAAAACTATAAACAATACATAATAATATAATTCAACAAATTTTTCTCTCTCTAAAAAACTAAAAAATAACCT
chr10	128357514	128357634	Hyper	1 +	AAGAAAACGAGAATGTTAGATTTATTATTTGTTATATAGGGTTTAAAATGAAGTTATGAATAATGTATAATAATGTAATTTAATAAGTTTTTTTTTTTTTGGAGGATTGGAAAATAATTT
chr10	128357519	128357639	Hyper	1 -	AACGAAAATACCAAATCTACCATTTACTACATAAAATTTAAAATAAAACTATAAACACTTTTATAAAATACATAATAATATAATTCAACAAATTTTTCTCTCTCTAAAAAACTAAAAAAT
chr10	128357519	128357639	Hyper	1 +	AACGAGAATGTTAGATTTATTATTTGTTATATAGGGTTTAAAATGAAGTTATGAATATTTTTGTAAAATGTATAATAATGTAATTTAATAAGTTTTTTTTTTTTTGGAGGATTGGAAAAT
chr18	61654768	61654888	Hypo	1 -	AAATCTATACCCATTATTTCAAAAAATCTTATAAAACATCTCAAAACTTCAAAAACCAACCCTCTTCCATCCACCCAACTCTACCCACCACCACTACCAAACTAAACAAAAAACTAATAC
chr18	61654768	61654888	Hypo	1 +	AAGTTTGTGTTTATTGTTTTAGGGGATTTTATGGAGTATTTTAGGGTTTTAGGAGTTAGTTTTTTTTTTATTTGTTTGGTTTTGTTTATTATTATTGTTAGGTTGAATAGGGGATTAGTGT
chr18	61654773	61654893	Hypo	1 -	TATACCCATTATTTCAAAAAATCTTATAAAACATCTCAAAACTTCAAAAACCAACCCTCTATATACTCTTCCATCCACCCAACTCTACCCACCACCACTACCAAACTAAACAAAAAACTA
chr18	61654773	61654893	Hypo	1 +	TGTGTTTATTGTTTTAGGGGATTTTATGGAGTATTTTAGGGTTTTAGGAGTTAGTTTTTTATGTGTTTTTTTTATTTGTTTGGTTTTGTTTATTATTATTGTTAGGTTGAATAGGGGATTA
chr18	61654768	61654888	Hyper	1 -	AAATCTATACCCATTATTTCAAAAAATCTTATAAAACATCTCAAAACTTCAAAAACCAACCCTCTTCCATCCGCCCGACTCTACCCACCACCACTACCAAACTAAACAAAAAACTAATAC
chr18	61654768	61654888	Hyper	1 +	AAGTTTGTGTTTATTGTTTTAGGGGATTTTATGGAGTATTTTAGGGTTTTAGGAGTTAGTTTTTTTTTTATTCGTTCGGTTTTGTTTATTATTATTGTTAGGTTGAATAGGGGATTAGTGT
chr18	61654773	61654893	Hyper	1 -	TATACCCATTATTTCAAAAAATCTTATAAAACATCTCAAAACTTCAAAAACCAACCCTCTATATACTCTTCCATCCGCCCGACTCTACCCACCACCACTACCAAACTAAACAAAAAACTA
chr18	61654773	61654893	Hyper	1 +	TGTGTTTATTGTTTTAGGGGATTTTATGGAGTATTTTAGGGTTTTAGGAGTTAGTTTTTTATGTGTTTTTTTTATTCGTTCGGTTTTGTTTATTATTATTGTTAGGTTGAATAGGGGATTA
chr11	78796729	78796849	Hypo	1 -	CCTCACTCACATTATCTCCATCCTAACCATTCTTCTCTAAAAAAAATTTCTTTTAACTAATATAAAACACCAAAATTAAAAATTAAAATCAAATACAATCTTATTACCTAAAACTACTCTA
chr11	78796729	78796849	Hypo	1 +	TTTTATTTATGTTGTTTTTATTTTGGTTATTTTTTTTTGAAAAAGTTTTTTTTGGTTAATGTAAAATATTAAGGTTGAAAATTGAAGTTAGATGTAGTTTTATTATTTGAAATTGTTTTG
chr11	78796733	78796853	Hypo	1 -	ACTCACATTATCTCCATCCTAACCATTCTTCTCTAAAAAAAATTTCTTTTAACTAATATCACTCTTTAAAACACCAAAATTAAAAATTAAAATCAAATACAATCTTATTACCTAAAACTAC
chr11	78796733	78796853	Hypo	1 +	ATTTATGTTGTTTTTATTTTGGTTATTTTTTTTTGAAAAAGTTTTTTTTGGTTAATGTTATTTTTTAAAATATTAAGGTTGAAAATTGAAGTTAGATGTAGTTTTATTATTTGAAATTGT
chr11	78796729	78796849	Hyper	1 -	CCTCACTCACGTTATCTCCATCCTAACCATTCTTCTCTAAAAAAAATTTCTTTTAACTAATATAAAACACCAAAATTAAAAATTAAAATCAAATACAATCTTATTACCTAAAACTACTCTA
chr11	78796729	78796849	Hyper	1 +	TTTTATTTACGTTGTTTTTATTTTGGTTATTTTTTTTTGAAAAAGTTTTTTTTGGTTAATGTAAAATATTAAGGTTGAAAATTGAAGTTAGATGTAGTTTTATTATTTGAAATTGTTTTG
chr11	78796733	78796853	Hyper	1 -	ACTCACGTTATCTCCATCCTAACCATTCTTCTCTAAAAAAAATTTCTTTTAACTAATATCACTCTTTAAAACACCAAAATTAAAAATTAAAATCAAATACAATCTTATTACCTAAAACTAC

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chr11	78796733	78796853	Hyper	1 +	ATTTACGTTGTTTTTATTTTGGTTATTTTTTTTTGAAAAAGTTTTTTTGGTTAATGTTATTTTTTAAAATATTAAGGTTGAAAATTGAAGTTAGATGTAGTTTTATTATTTGAAATTGT
chr6	65088000	65088120	Hypo	1 -	TTTCCTCCCTTTAATAATAAAAATTAATAAATATAATATCAAAACCTAAAAAATAATTAACAAACAACATCAATAACAATAAAAAACAAAATTTCATAAAAATATAAAAATAATTTTTAT
chr6	65088000	65088120	Hypo	1 +	TTTTTTTTTTTTAATAATAAAGATTAATGGATATAGTGTTAAAGTTTGAGGAATGGTTAATAGATAATATTAGTGATAGTGAAGAATAAGATTTTATGGAAGTATGAAAATAATTTTTGT
chr6	65087997	65088117	Hypo	1 -	ATATTTCCTCCCTTTAATAATAAAAATTAATAAATATAATATCAAAACCTAAAAAATAATTAACATCAATAACAATAAAAAACAAAATTTCATAAAAATATAAAAATAATTTTTATTTTC
chr6	65087997	65088117	Hypo	1 +	GTGTTTTTTTTTTTTTAATAATAAAGATTAATGGATATAGTGTTAAAGTTTGAGGAATGGTTAATATTAGTGATAGTGAAGAATAAGATTTTATGGAAGTATGAAAATAATTTTTGTTTTT
chr6	65088000	65088120	Hyper	1 -	TTTCCTCCCTTTAATAATAAAAATTAATAAATATAATATCAAAACCTAAAAAATAATTAACAAACAACATCAATAACAATAAAAAACAAAATTTCATAAAAATATAAAAATAATTTTTAT
chr6	65088000	65088120	Hyper	1 +	TTTTTTTTTTTTAATAATAAAGATTAATGGATATAGTGTTAAAGTTTGAGGAATGGTTAATAGATAATATTAGTGATAGTGAAGAATAAGATTTTATGGAAGTATGAAAATAATTTTTGT
chr6	65087997	65088117	Hyper	1 -	ATATTTCCTCCCTTTAATAATAAAAATTAATAAATATAATATCAAAACCTAAAAAATAATTAACATCAATAACAATAAAAAACAAAATTTCATAAAAATATAAAAATAATTTTTATTTTC
chr6	65087997	65088117	Hyper	1 +	GTGTTTTTTTTTTTTTAATAATAAAGATTAATGGATATAGTGTTAAAGTTTGAGGAATGGTTAATATTAGTGATAGTGAAGAATAAGATTTTATGGAAGTATGAAAATAATTTTTGTTTTT
chr11	78645391	78645511	Hypo	1 -	TCTCAATTATTATCCTACATTATTTTACTATATAATAAACAAAAAATTCTCAAAAAAACATAAATCATATAAAATCTTTCCCCAACTCTACATATCTTAAAAACATCTCAAATATTCTCT
chr11	78645391	78645511	Hypo	1 +	TTTTAGTTATTGTTTTGTATTGTTTTGTTATGTGATGAGTGAAGGATTTTTAGGGAAATATGAATTATGTGGGATTTTTTTTTTAATTTTGTGTGTTTTGGGGATATTTTAGGTGTTTTTT
chr11	78645388	78645508	Hypo	1 -	AAATCTCAATTATTATCCTACATTATTTTACTATATAATAAACAAAAAATTCTCAAAAAAACATATAAAATCTTTCCCCAACTCTACATATCTTAAAAACATCTCAAATATTCTCTAAAC
chr11	78645388	78645508	Hypo	1 +	AGATTTTAGTTATTGTTTTGTATTGTTTTGTTATGTGATGAGTGAAGGATTTTTAGGGAAATATGTGGGATTTTTTTTTTAATTTTGTGTGTTTTGGGGATATTTTAGGTGTTTTTTAGGT
chr11	78645391	78645511	Hyper	1 -	TCTCAATTATTATCCTACATTATTTTACTATATAATAAACGAAAAATTCTCAAAAAAACATAAATCATATAAAATCTTTCCCCAACTCTACGTATCTTAAAAACATCTCAAATATTCTCT
chr11	78645391	78645511	Hyper	1 +	TTTTAGTTATTGTTTTGTATTGTTTTGTTATGTGATGAGCGAAGGATTTTTAGGGAAATATGAATTATGTGGGATTTTTTTTTTAATTTTGCGTGTTTTGGGGATATTTTAGGTGTTTTTT
chr11	78645388	78645508	Hyper	1 -	AAATCTCAATTATTATCCTACATTATTTTACTATATAATAAACGAAAAATTCTCAAAAAAACATATAAAATCTTTCCCCAACTCTACGTATCTTAAAAACATCTCAAATATTCTCTAAAC
chr11	78645388	78645508	Hyper	1 +	AGATTTTAGTTATTGTTTTGTATTGTTTTGTTATGTGATGAGCGAAGGATTTTTAGGGAAATATGTGGGATTTTTTTTTTAATTTTGCGTGTTTTGGGGATATTTTAGGTGTTTTTTAGGT
chr4	64845062	64845182	Hypo	1 -	CACCAAAAAAACCTAACTACTTATAAAAACAAATTCATAAAAAAATCTACTTTTTAAAACAATAATTTCTTTAAACCTCTTCCTTCTTAAAACACAATAATATAACATCTTATTTTAAATC
chr4	64845062	64845182	Hypo	1 +	TATTAGAAAATTTAATTATTTATAAGAGTAGATTTATGGAAAAATTTGTTTTTTAGGGTAATAATTTTTTTAAATTTTTTTTTTTTTTTAAAATATAATAATATGATATTTTATTTTGGATT
chr4	64845057	64845177	Hypo	1 -	ACACACACCAAAAAAACCTAACTACTTATAAAAACAAATTCATAAAAAAATCTACTTTTTAATCTTTAAACCTCTTCCTTCTTAAAACACAATAATATAACATCTTATTTTAAATCCTAAA
chr4	64845057	64845177	Hypo	1 +	ATATATATTAGAAAATTTAATTATTTATAAGAGTAGATTTATGGAAAAATTTGTTTTTTAGTTTTTAAATTTTTTTTTTTTTTTAAAATATAATAATATGATATTTTATTTTGGATTTTGGA
chr4	64845062	64845182	Hyper	1 -	CACCAAAAAAACCTAACTACTTATAAAAACAAATTCATAAAAAAATCTACTTTTTAAAACAATAATTTCTTTAAACCTCTTCCTTCTTAAAACACAATAATATAACATCTTATTTTAAATC
chr4	64845062	64845182	Hyper	1 +	TATTAGAAAATTTAATTATTTATAAGAGTAGATTTATGGAAAAATTTGTTTTTTAGGGTAATAATTTTTTTAAATTTTTTTTTTTTTTTAAAATATAATAATATGATATTTTATTTTGGATT
chr4	64845057	64845177	Hyper	1 -	ACACACACCAAAAAAACCTAACTACTTATAAAAACAAATTCATAAAAAAATCTACTTTTTAATCTTTAAACCTCTTCCTTCTTAAAACACAATAATATAACATCTTATTTTAAATCCTAAA
chr4	64845057	64845177	Hyper	1 +	ATATATATTAGAAAATTTAATTATTTATAAGAGTAGATTTATGGAAAAATTTGTTTTTTAGTTTTTAAATTTTTTTTTTTTTTTAAAATATAATAATATGATATTTTATTTTGGATTTTGGA
chr13	61410961	61411081	Hypo	1 -	CATTATATATAAAAATATATAATCTAATTAAATATAATATTTAAAATTCCCATCACATATTATAAATTAAACATAATATTCTTAATCATATTAAACTAAAAAAAAAACTCTAATTAAAAT
chr13	61410961	61411081	Hypo	1 +	TATTATATATGAAAATGTATAATTTAATTGGGTATAGTATTTGGGATTTTTATTGTATATTATGGGTTAAATATAGTATTTTTAGTTATATTAAGTTGGAAGGAAAATTTTAATTAAGGT
chr13	61410956	61411076	Hypo	1 -	CATATCATTATATATAAAAATATATAATCTAATTAAATATAATATTTAAAATTCCCATCACTTAAACATAATATTCTTAATCATATTAAACTAAAAAAAAAACTCTAATTAAAATTATAC
chr13	61410956	61411076	Hypo	1 +	TATATTATTATATATGAAAATGTATAATTTAATTGGGTATAGTATTTGGGATTTTTATTGTTTAAATATAGTATTTTTAGTTATATTAAGTTGGAAGGAAAATTTTAATTAAGGTTATGT
chr13	61410961	61411081	Hyper	1 -	CATTATATATAAAAATATATAATCTAATTAAATATAATATTTAAAATTCCCATCGCATATTATAAATTAAACATAATATTCTTAATCATATTAAACTAAAAAAAAAACTCTAATTAAAAT
chr13	61410961	61411081	Hyper	1 +	TATTATATATGAAAATGTATAATTTAATTGGGTATAGTATTTGGGATTTTTATCGTATATTATGGGTTAAATATAGTATTTTTAGTTATATTAAGTTGGAAGGAAAATTTTAATTAAGGT
chr13	61410956	61411076	Hyper	1 -	CATATCATTATATATAAAAATATATAATCTAATTAAATATAATATTTAAAATTCCCATCGCTTAAACATAATATTCTTAATCATATTAAACTAAAAAAAAAACTCTAATTAAAATTATAC
chr13	61410956	61411076	Hyper	1 +	TATATTATTATATATGAAAATGTATAATTTAATTGGGTATAGTATTTGGGATTTTTATCGTTTAAATATAGTATTTTTAGTTATATTAAGTTGGAAGGAAAATTTTAATTAAGGTTATGT
chr7	78257544	78257664	Hypo	1 -	ATACCACCTACATAAACATTTTACATAATCAAATTAAAATTTACATAATACATACATACAAAAAAATATATAAAAACCAAATATATAAAATAATACATTAACAAACTTCATATATATAAA
chr7	78257544	78257664	Hypo	1 +	ATGTTATTTATATAGGTATTTTGTATGGTTAGATTGGAATTTATATAATGTATATATGTAAAGAAATATATAGAAGTTAGATATATAAGGTAGTATATTGGTAGGTTTTATATATATAGA
chr7	78257549	78257669	Hypo	1 -	ACCTACATAAACATTTTACATAATCAAATTAAAATTTACATAATACATACATACAAAAAAATATACAAAAATATATAAAAACCAAATATATAAAATAATACATTAACAAACTTCATATAT
chr7	78257549	78257669	Hypo	1 +	ATTTATATAGGTATTTTGTATGGTTAGATTGGAATTTATATAATGTATATATGTAAAGAAGTATGTAGAAATATATAGAAGTTAGATATATAAGGTAGTATATTGGTAGGTTTTATATAT
chr7	78257544	78257664	Hyper	1 -	ATACCACCTACATAAACATTTTACATAATCAAATTAAAATTTACATAATACATACATACAAAAAAATATATAAAAACCAAATATATAAAATAATACATTAACAAACTTCATATATATAAA
chr7	78257544	78257664	Hyper	1 +	ATGTTATTTATATAGGTATTTTGTATGGTTAGATTGGAATTTATATAATGTATATATGTAAAGAAATATATAGAAGTTAGATATATAAGGTAGTATATTGGTAGGTTTTATATATATAGA
chr7	78257549	78257669	Hyper	1 -	ACCTACATAAACATTTTACATAATCAAATTAAAATTTACATAATACATACATACAAAAAAATATACAAAAATATATAAAAACCAAATATATAAAATAATACATTAACAAACTTCATATAT
chr7	78257549	78257669	Hyper	1 +	ATTTATATAGGTATTTTGTATGGTTAGATTGGAATTTATATAATGTATATATGTAAAGAAGTATGTAGAAATATATAGAAGTTAGATATATAAGGTAGTATATTGGTAGGTTTTATATAT
chr4	27476402	27476522	Hypo	2 -	CCAATTATAACTAAAAATAAACATATACAACAACCTTAACTTAAAAAAATTATAATTACCAAACAAAAACTTAAATCATACCACCTATAAACCACCAAAATCTACAAAAATAATAACTAA
chr4	27476402	27476522	Hypo	1 +	TTAATTATAATTGAAAATGGATATGTATAGTAATTTTGGTTTGAGAAGGTTGTGGTTATTAAATAAAGGTTTGAGTTATATTATTTGTAAGTTATTAAGATTTGTAGAGGTGATAGTTGA
chr4	27476407	27476527	Hypo	1 -	TATAACTAAAAATAAACATATACAACAACCTTAACTTAAAAAAATTATAATTACCACTACTCAAAAACAAAAACTTAAATCATACCACCTATAAACCACCAAAATCTACAAAAATAATAA
chr4	27476407	27476527	Hypo	1 +	TATAATTGAAAATGGATATGTATAGTAATTTTGGTTTGAGAAGGTTGTGGTTATTATTATTTAGGAATAAAGGTTTGAGTTATATTATTTGTAAGTTATTAAGATTTGTAGAGGTGATAG
chr4	27476402	27476522	Hyper	2 -	CCAATTATAACTAAAAATAAACATATACAACAACCTTAACTTAAAAAAATTATAATTACCAAACAAAAACTTAAATCATACCACCTATAAACCACCAAAATCTACAAAAATAATAACTAA
chr4	27476402	27476522	Hyper	1 +	TTAATTATAATTGAAAATGGATATGTATAGTAATTTTGGTTTGAGAAGGTTGTGGTTATTAAATAAAGGTTTGAGTTATATTATTTGTAAGTTATTAAGATTTGTAGAGGTGATAGTTGA
chr4	27476407	27476527	Hyper	1 -	TATAACTAAAAATAAACATATACAACAACCTTAACTTAAAAAAATTATAATTACCACTACTCAAAAACAAAAACTTAAATCATACCACCTATAAACCACCAAAATCTACAAAAATAATAA
chr4	27476407	27476527	Hyper	1 +	TATAATTGAAAATGGATATGTATAGTAATTTTGGTTTGAGAAGGTTGTGGTTATTATTATTTAGGAATAAAGGTTTGAGTTATATTATTTGTAAGTTATTAAGATTTGTAGAGGTGATAG
chr12	129979708	129979828	Hypo	1 -	AATAATACAAAAACTTAACTCATCTATTAAATTCACACAAACAAAAAATCAAAACCAATATTAATAATTTCAAAAATATAAACAACCCATAAATATCAACAAAACAAAATACAATTTAAA
chr12	129979708	129979828	Hypo	1 +	GATAATATAAAAGTTTGGTTTATTTATTAGATTTATATAAATAAGAGATTAAAGTTAATGTTAATAATTTTAAGGATATAAGTAATTTATAAGTATTAGTAAAATGAGGTGTAGTTTAGG
chr12	129979713	129979833	Hypo	1 -	TACAAAAACTTAACTCATCTATTAAATTCACACAAACAAAAAATCAAAACCAATATTAAACCTTACTAATAATTTCAAAAATATAAACAACCCATAAATATCAACAAAACAAAATACAAT

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chr12	129979713	129979833	Hypo	1 +	TATAAAAGTTTGGTTTATTTATTAGATTTATATAAATAAGAGATTAAAGTTAATGTTAAGTTTTATTAATAATTTTAAGGATATAAGTAATTTATAAGTATTAGTAAAATGAGGTGTAGT
chr12	129979708	129979828	Hyper	1 -	AATAATACAAAAACTTAACTCATCTATTAAATTCACACAAACAAAAAATCAAAACCAATATTAATAATTTCAAAAATATAAACAACCCATAAATATCAACAAAACGAAATACAATTTAAA
chr12	129979708	129979828	Hyper	1 +	GATAATATAAAAGTTTGGTTTATTTATTAGATTTATATAAATAAGAGATTAAAGTTAATGTTAATAATTTTAAGGATATAAGTAATTTATAAGTATTAGTAAAACGAGGTGTAGTTTAGG
chr12	129979713	129979833	Hyper	1 -	TACAAAAACTTAACTCATCTATTAAATTCACACAAACAAAAAATCAAAACCAATATTAAACCTTACTAATAATTTCAAAAATATAAACAACCCATAAATATCAACAAAACGAAATACAAT
chr12	129979713	129979833	Hyper	1 +	TATAAAAGTTTGGTTTATTTATTAGATTTATATAAATAAGAGATTAAAGTTAATGTTAAGTTTTATTAATAATTTTAAGGATATAAGTAATTTATAAGTATTAGTAAAACGAGGTGTAGT
chr7	105588373	105588493	Hypo	1 -	AATTTTTATCAAAAAATATCTATATTCTCACATTATCTATTAAAAAACAAAAATAACAATTTAAAAAATTAATTAACAAATTCTAAAAAATAATCAATAAAACAATTATAACAAAAAATA
chr7	105588373	105588493	Hypo	1 +	GATTTTTGTTAGAAAATATTTATATTTTTATATTGTTTGTTGAGGGATAGAGGTGGTAGTTTGGAAGATTGATTGGTAAGTTTTAAGAGATGGTTAATGAAGTAATTATAGTGGAAGATG
chr7	105588369	105588489	Hypo	1 -	ACCAAATTTTTATCAAAAAATATCTATATTCTCACATTATCTATTAAAAAACAAAAATAACAAATTAATTAACAAATTCTAAAAAATAATCAATAAAACAATTATAACAAAAAATATTAT
chr7	105588369	105588489	Hypo	1 +	ATTAGATTTTTGTTAGAAAATATTTATATTTTTATATTGTTTGTTGAGGGATAGAGGTGGTAGATTGATTGGTAAGTTTTAAGAGATGGTTAATGAAGTAATTATAGTGGAAGATGTTGT
chr7	105588373	105588493	Hyper	1 -	AATTTTTATCAAAAAATATCTATATTCTCACATTATCTATTAAAAAACAAAAATAACAATTTAAAAAATTAATTAACAAATTCTAAAAAATAATCAATAAAACAATTATAACGAAAAATA
chr7	105588373	105588493	Hyper	1 +	GATTTTTGTTAGAAAATATTTATATTTTTATATTGTTTGTTGAGGGATAGAGGTGGTAGTTTGGAAGATTGATTGGTAAGTTTTAAGAGATGGTTAATGAAGTAATTATAGCGGAAGATG
chr7	105588369	105588489	Hyper	1 -	ACCAAATTTTTATCAAAAAATATCTATATTCTCACATTATCTATTAAAAAACAAAAATAACAAATTAATTAACAAATTCTAAAAAATAATCAATAAAACAATTATAACGAAAAATATTAT
chr7	105588369	105588489	Hyper	1 +	ATTAGATTTTTGTTAGAAAATATTTATATTTTTATATTGTTTGTTGAGGGATAGAGGTGGTAGATTGATTGGTAAGTTTTAAGAGATGGTTAATGAAGTAATTATAGCGGAAGATGTTGT
chr6	161693475	161693595	Hypo	1 -	TCAAACACTTCCTTAAACATACTAAATAAAAACATCAATTTAACCAATACCTATTAAAAAACTATATCTTTCTAAAAAATATATTATTTAATTCTAATTATAATTAACTTTACTTATTAC
chr6	161693475	161693595	Hypo	1 +	TTAAATGTTTTTTTAGATGTATTGAATAAAAGTATTAGTTTAGTTGGTATTTGTTAAGAGGTTATGTTTTTTTAAGAGATGTGTTATTTGATTTTAATTATAATTAATTTTGTTTATTAT
chr6	161693480	161693600	Hypo	1 -	CACTTCCTTAAACATACTAAATAAAAACATCAATTTAACCAATACCTATTAAAAAACCCACTAAAACTATATCTTTCTAAAAAATATATTATTTAATTCTAATTATAATTAACTTTACTT
chr6	161693480	161693600	Hypo	1 +	TGTTTTTTTAGATGTATTGAATAAAAGTATTAGTTTAGTTGGTATTTGTTAAGAGGTTTATTAGGATTATGTTTTTTTAAGAGATGTGTTATTTGATTTTAATTATAATTAATTTTGTTT
chr6	161693475	161693595	Hyper	1 -	TCAAACGCTTCCTTAAACGTACTAAATAAAAACATCAATTTAACCGATACCTATTAAAAAACTATATCTTTCTAAAAAATATATTATTTAATTCTAATTATAATTAACTTTACTTATTAC
chr6	161693475	161693595	Hyper	1 +	TTAAACGTTTTTTTAGACGTATTGAATAAAAGTATTAGTTTAGTCGGTATTTGTTAAGAGGTTATGTTTTTTTAAGAGATGTGTTATTTGATTTTAATTATAATTAATTTTGTTTATTAT
chr6	161693480	161693600	Hyper	1 -	CGCTTCCTTAAACGTACTAAATAAAAACATCAATTTAACCGATACCTATTAAAAAACCCACTAAAACTATATCTTTCTAAAAAATATATTATTTAATTCTAATTATAATTAACTTTACTT
chr6	161693480	161693600	Hyper	1 +	CGTTTTTTTAGACGTATTGAATAAAAGTATTAGTTTAGTCGGTATTTGTTAAGAGGTTTATTAGGATTATGTTTTTTTAAGAGATGTGTTATTTGATTTTAATTATAATTAATTTTGTTT
chr6	98821552	98821672	Hypo	1 -	CACCATACACCTTAAAAAATTCTCCAAAAATTAATTATTTAATAAAACAACATAAAAACAACTTTCAAACAAAAATATTACTTCCACCTTTCTCTATCCAATTAACATTTCAAATCTATC
chr6	98821552	98821672	Hypo	1 +	TATTATATATTTTGAGGAATTTTTTAAGAATTAGTTATTTAGTAAAATAATATAAAAGTAGTTTTTAGATAGGAGTATTATTTTTATTTTTTTTTTATTTAATTGGTATTTTAAGTTTATT
chr6	98821549	98821669	Hypo	1 -	TACCACCATACACCTTAAAAAATTCTCCAAAAATTAATTATTTAATAAAACAACATAAAAACAAACAAAAATATTACTTCCACCTTTCTCTATCCAATTAACATTTCAAATCTATCTTCT
chr6	98821549	98821669	Hypo	1 +	TGTTATTATATATTTTGAGGAATTTTTTAAGAATTAGTTATTTAGTAAAATAATATAAAAGTAGATAGGAGTATTATTTTTATTTTTTTTTTATTTAATTGGTATTTTAAGTTTATTTTTT
chr6	98821552	98821672	Hyper	1 -	CACCATACACCTTAAAAAATTCTCCAAAAATTAATTATTTAATAAAACAACATAAAAACAACTTTCAAACAAAAATATTACTTCCACCTTTCTCTATCCAATTAACATTTCAAATCTATC
chr6	98821552	98821672	Hyper	1 +	TATTATATATTTTGAGGAATTTTTTAAGAATTAGTTATTTAGTAAAATAATATAAAAGTAGTTTTTAGATAGGAGTATTATTTTTATTTTTTTTTTATTTAATTGGTATTTTAAGTTTATT
chr6	98821549	98821669	Hyper	1 -	TACCACCATACACCTTAAAAAATTCTCCAAAAATTAATTATTTAATAAAACAACATAAAAACAAACAAAAATATTACTTCCACCTTTCTCTATCCAATTAACATTTCAAATCTATCTTCT
chr6	98821549	98821669	Hyper	1 +	TGTTATTATATATTTTGAGGAATTTTTTAAGAATTAGTTATTTAGTAAAATAATATAAAAGTAGATAGGAGTATTATTTTTATTTTTTTTTTATTTAATTGGTATTTTAAGTTTATTTTTT
chr6	15866019	15866139	Hypo	2 -	TTCTTAATAACCTCCTATAAAATAAAATTTTAAAAATTAAAACTAATTTTAAAAAAAAATTAAAATATAAATATAAAATATTAAATAAAAACAACTAAAAAATCCAAAAACAATATACAA
chr6	15866019	15866139	Hypo	1 +	TTTTTGATGATTTTTTATAGGATAAGATTTTGAGAATTGAGGTTGGTTTTGAGGAGAGGTTGGGATGTAGATGTAGAGTGTTGGATGAGAGTAGTTAGGGAATTTAAGGATAGTGTGTAA
chr6	15866023	15866143	Hypo	1 -	TAATAACCTCCTATAAAATAAAATTTTAAAAATTAAAACTAATTTTAAAAAAAAATTAACAAAAAAAAATATAAATATAAAATATTAAATAAAAACAACTAAAAAATCCAAAAACAATATA
chr6	15866023	15866143	Hypo	1 +	TGATGATTTTTTATAGGATAAGATTTTGAGAATTGAGGTTGGTTTTGAGGAGAGGTTGGTAAAAGGGATGTAGATGTAGAGTGTTGGATGAGAGTAGTTAGGGAATTTAAGGATAGTGTG
chr6	15866019	15866139	Hyper	2 -	TTCTTAATAACCTCCTATAAAATAAAATTTTAAAAATTAAAACTAATTTTAAAAAAAAATTAAAATATAAATATAAAATATTAAATAAAAACAACTAAAAAATCCAAAAACAATATACAA
chr6	15866019	15866139	Hyper	1 +	TTTTTGATGATTTTTTATAGGATAAGATTTTGAGAATTGAGGTTGGTTTTGAGGAGAGGTTGGGATGTAGATGTAGAGTGTTGGATGAGAGTAGTTAGGGAATTTAAGGATAGTGTGTAA
chr6	15866023	15866143	Hyper	1 -	TAATAACCTCCTATAAAATAAAATTTTAAAAATTAAAACTAATTTTAAAAAAAAATTAACAAAAAAAAATATAAATATAAAATATTAAATAAAAACAACTAAAAAATCCAAAAACAATATA
chr6	15866023	15866143	Hyper	1 +	TGATGATTTTTTATAGGATAAGATTTTGAGAATTGAGGTTGGTTTTGAGGAGAGGTTGGTAAAAGGGATGTAGATGTAGAGTGTTGGATGAGAGTAGTTAGGGAATTTAAGGATAGTGTG
chr4	62591422	62591542	Hypo	1 -	CAAAAAAATTCTATTTATATTTTTATCTTTTCTAAAATATACTTTTTCATAAATTTAATAAAAATAAAAAACAAAAATACAACAATTAAACTATATTTCATTAAATTTATATATTATAAA
chr4	62591422	62591542	Hypo	1 +	TAGGGAGATTTTATTTATATTTTTGTTTTTTTTAAAGTATGTTTTTTTATGGATTTGATGAAAATGGAGAGTAAGAGTATAATAATTAAATTGTGTTTTATTGAGTTTGTATGTTGTGAG
chr4	62591426	62591546	Hypo	1 -	AAAATTCTATTTATATTTTTATCTTTTCTAAAATATACTTTTTCATAAATTTAATAACAAAAAAAAAATAAAAAACAAAAATACAACAATTAAACTATATTTCATTAAATTTATATATTA
chr4	62591426	62591546	Hypo	1 +	GAGATTTTATTTATATTTTTGTTTTTTTTAAAGTATGTTTTTTTATGGATTTGATGATAGGGAGGAAATGGAGAGTAAGAGTATAATAATTAAATTGTGTTTTATTGAGTTTGTATGTTG
chr4	62591422	62591542	Hyper	1 -	CAAAAAAATTCTATTTATATTTTTATCTTTTCTAAAATATACTTTTTCATAAATTTAATAAAAATAAAAAACAAAAATACAACAATTAAACTATATTTCATTAAATTTATATATTATAAA
chr4	62591422	62591542	Hyper	1 +	TAGGGAGATTTTATTTATATTTTTGTTTTTTTTAAAGTATGTTTTTTTATGGATTTGATGAAAATGGAGAGTAAGAGTATAATAATTAAATTGTGTTTTATTGAGTTTGTATGTTGTGAG
chr4	62591426	62591546	Hyper	1 -	AAAATTCTATTTATATTTTTATCTTTTCTAAAATATACTTTTTCATAAATTTAATAACAAAAAAAAAATAAAAAACAAAAATACAACAATTAAACTATATTTCATTAAATTTATATATTA
chr4	62591426	62591546	Hyper	1 +	GAGATTTTATTTATATTTTTGTTTTTTTTAAAGTATGTTTTTTTATGGATTTGATGATAGGGAGGAAATGGAGAGTAAGAGTATAATAATTAAATTGTGTTTTATTGAGTTTGTATGTTG
chr17	63785753	63785873	Hypo	1 -	CATAAATATCATTCATTTCCTTAATAAAATCTTAATCATCTTACAATAATCATTTAAACATCAAAAAATCTTCCACAAAACCTCAAAAAATCTCAATTTAAACCAAATCACATTTCTCTA
chr17	63785753	63785873	Hypo	1 +	TATGAATATTATTTATTTTTTTGGTAGGATTTTAATTATTTTGTAATAATTATTTGAATATTAGGAAGTTTTTTATAAAATTTTAAGAAATTTTAGTTTGGGTTAAGTTATATTTTTTTA
chr17	63785758	63785878	Hypo	1 -	ATATCATTCATTTCCTTAATAAAATCTTAATCATCTTACAATAATCATTTAAACATCATCTCCTCCAAAAAATCTTCCACAAAACCTCAAAAAATCTCAATTTAAACCAAATCACATTTC
chr17	63785758	63785878	Hypo	1 +	ATATTATTTATTTTTTTGGTAGGATTTTAATTATTTTGTAATAATTATTTGAATATTATTTTTTTTTAGGAAGTTTTTTATAAAATTTTAAGAAATTTTAGTTTGGGTTAAGTTATATTTT
chr17	63785753	63785873	Hyper	1 -	CATAAATATCATTCATTTCCTTAATAAAATCTTAATCATCTTACAATAATCATTTAAACATCAAAAAATCTTCCACAAAACCTCAAAAAATCTCAATTTAAACCAAATCACATTTCTCTA
chr17	63785753	63785873	Hyper	1 +	TATGAATATTATTTATTTTTTTGGTAGGATTTTAATTATTTTGTAATAATTATTTGAATATTAGGAAGTTTTTTATAAAATTTTAAGAAATTTTAGTTTGGGTTAAGTTATATTTTTTTA
chr17	63785758	63785878	Hyper	1 -	ATATCATTCATTTCCTTAATAAAATCTTAATCATCTTACAATAATCATTTAAACATCATCTCCTCCAAAAAATCTTCCACAAAACCTCAAAAAATCTCAATTTAAACCAAATCACATTTC

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chr17	63785758	63785878	Hyper	1	+
chr17	12504003	12504123	Hypo	1	-
chr17	12504003	12504123	Hypo	1	+
chr17	12503999	12504119	Hypo	1	-
chr17	12503999	12504119	Hypo	1	+
chr17	12504003	12504123	Hyper	1	-
chr17	12504003	12504123	Hyper	1	+
chr17	12503999	12504119	Hyper	1	-
chr17	12503999	12504119	Hyper	1	+
chr15	50427083	50427203	Hypo	1	-
chr15	50427083	50427203	Hypo	1	+
chr15	50427079	50427199	Hypo	1	-
chr15	50427079	50427199	Hypo	1	+
chr15	50427083	50427203	Hyper	1	-
chr15	50427083	50427203	Hyper	1	+
chr15	50427079	50427199	Hyper	1	-
chr15	50427079	50427199	Hyper	1	+
chr13	109726340	109726460	Hypo	1	-
chr13	109726340	109726460	Hyper	1	-
chr13	109726340	109726460	Hyper	1	+
chr13	109726336	109726456	Hyper	2	-
chr13	109726336	109726456	Hyper	1	+
chr13	109726340	109726460	Hyper	1	-
chr13	109726340	109726460	Hyper	1	+
chr13	109726336	109726456	Hyper	2	-
chr13	109726336	109726456	Hyper	1	+
chr20	40943512	40943632	Hypo	1	-
chr20	40943512	40943632	Hyper	1	-
chr20	40943512	40943632	Hyper	1	+
chr20	40943509	40943629	Hypo	1	-
chr20	40943509	40943629	Hyper	1	+
chr20	40943512	40943632	Hyper	1	-
chr20	40943512	40943632	Hyper	1	+
chr20	40943509	40943629	Hyper	1	-
chr20	40943509	40943629	Hyper	1	+
chr2	58659424	58659544	Hypo	1	-
chr2	58659424	58659544	Hypo	1	+
chr2	58659428	58659548	Hypo	1	-
chr2	58659428	58659548	Hypo	1	+
chr2	58659424	58659544	Hyper	1	-
chr2	58659424	58659544	Hyper	1	+
chr2	58659428	58659548	Hyper	1	-
chr2	58659428	58659548	Hyper	1	+
chr2	52926066	52926186	Hypo	1	-
chr2	52926066	52926186	Hypo	1	+
chr2	52926071	52926191	Hypo	1	-
chr2	52926071	52926191	Hypo	1	+
chr2	52926066	52926186	Hyper	1	-
chr2	52926066	52926186	Hyper	1	+
chr2	52926071	52926191	Hyper	1	-
chr2	52926071	52926191	Hyper	2	+
chr17	37440112	37440232	Hypo	1	-
chr17	37440112	37440232	Hyper	1	+
chr17	37440116	37440236	Hypo	1	-

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chr17	37440116	37440236	Hypo	1	+
chr17	37440112	37440232	Hyper	1	-
chr17	37440112	37440232	Hyper	1	+
chr17	37440116	37440236	Hyper	1	-
chr17	37440116	37440236	Hyper	1	+
chr8	96802251	96802371	Hypo	1	-
chr8	96802251	96802371	Hypo	2	+
chr8	96802255	96802375	Hypo	1	-
chr8	96802255	96802375	Hypo	1	+
chr8	96802251	96802371	Hyper	1	-
chr8	96802251	96802371	Hyper	2	+
chr8	96802255	96802375	Hyper	1	-
chr8	96802255	96802375	Hyper	1	+
chr10	134975743	134975863	Hypo	1	-
chr10	134975743	134975863	Hypo	1	+
chr10	134975748	134975868	Hypo	1	-
chr10	134975748	134975868	Hypo	1	+
chr10	134975743	134975863	Hyper	1	-
chr10	134975743	134975863	Hyper	1	+
chr10	134975748	134975868	Hyper	1	-
chr10	134975748	134975868	Hyper	1	+
chr6	146145827	146145947	Hypo	1	-
chr6	146145827	146145947	Hypo	1	+
chr6	146145832	146145952	Hypo	1	-
chr6	146145832	146145952	Hypo	1	+
chr6	146145827	146145947	Hyper	1	-
chr6	146145827	146145947	Hyper	1	+
chr6	146145832	146145952	Hyper	1	-
chr6	146145832	146145952	Hyper	1	+
chr11	33855245	33855365	Hypo	1	-
chr11	33855245	33855365	Hypo	1	+
chr11	33855240	33855360	Hypo	1	-
chr11	33855240	33855360	Hypo	1	+
chr11	33855245	33855365	Hyper	1	-
chr11	33855245	33855365	Hyper	1	+
chr11	33855240	33855360	Hyper	1	-
chr11	33855240	33855360	Hyper	1	+
chr19	2101393	2101513	Hypo	1	-
chr19	2101393	2101513	Hypo	1	+
chr19	2101398	2101518	Hypo	1	-
chr19	2101398	2101518	Hypo	1	+
chr19	2101393	2101513	Hyper	1	-
chr19	2101393	2101513	Hyper	1	+
chr19	2101398	2101518	Hyper	1	-
chr19	2101398	2101518	Hyper	1	+
chr5	163202641	163202761	Hypo	1	-
chr5	163202641	163202761	Hypo	1	+
chr5	163202645	163202765	Hypo	1	-
chr5	163202645	163202765	Hypo	1	+
chr5	163202641	163202761	Hyper	1	-
chr5	163202641	163202761	Hyper	1	+
chr5	163202645	163202765	Hyper	1	-

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chr5	163202645	163202765	Hyper	1 +	AAAATTATAAGTTTTTTAGTTTTATTTTTTTTATTTTTTGTTTTATAAATGTATTAATTTTTTTTTAAGAGTAGAGAGAAATGAATTTTTTATATGTGTTTTATTTAGTTATAGTAATAA
chr17	10021453	10021573	Hypo	1 -	CATCCCAAATTACATTTCTAAATCAATCACTCATTACAAAACAAAATAATAAAAATAAAATAAACAAAAATATCACCTAAACCCTCAATTTCTCAACCAAATATTTTTCCACTTCTCACA
chr17	10021453	10021573	Hypo	1 +	TATTTTGGATTATATTTTTAAGTTAGTTATTTGTTGTAAGATAAGATGATAGAGATGGAGTAAATAGGGATATTGTTTGAGTTTTTGGTTTTTTAGTTAGGTATTTTTTTGTTTTTTATA
chr17	10021448	10021568	Hypo	1 -	AAAACCATCCCAAATTACATTTCTAAATCAATCACTCATTACAAAACAAAATAATAAAAATAAAATATCACCTAAACCCTCAATTTCTCAACCAAATATTTTTCCACTTCTCACAACACA
chr17	10021448	10021568	Hypo	1 +	AAGATTATTTTGGATTATATTTTTAAGTTAGTTATTTGTTGTAAGATAAGATGATAGAGATGGGATATTGTTTGAGTTTTTGGTTTTTTAGTTAGGTATTTTTTTGTTTTTTATAGTGTA
chr17	10021453	10021573	Hyper	1 -	CATCCCGAATTACATTTCTAAATCAATCACTCGTTACAAAACAAAATAATAAAAATAAAATAAACAAAAATATCGCCTAAACCCTCGATTTCTCAACCAAATATTTTTCCGCTTCTCACA
chr17	10021453	10021573	Hyper	1 +	TATTTCGGATTATATTTTTAAGTTAGTTATTCGTTGTAAGATAAGATGATAGAGATGGAGTAAATAGGGATATCGTTTGAGTTTTCGGTTTTTTAGTTAGGTATTTTTTCGTTTTTTATA
chr17	10021448	10021568	Hyper	1 -	AAAACCATCCCGAATTACATTTCTAAATCAATCACTCGTTACAAAACAAAATAATAAAAATAAAATATCGCCTAAACCCTCGATTTCTCAACCAAATATTTTTCCGCTTCTCACAACGCA
chr17	10021448	10021568	Hyper	1 +	AAGATTATTTCGGATTATATTTTTAAGTTAGTTATTCGTTGTAAGATAAGATGATAGAGATGGGATATCGTTTGAGTTTTCGGTTTTTTAGTTAGGTATTTTTTCGTTTTTTATAGCGTA
chr22	21093855	21093975	Hypo	2 -	TATCCAATATAAAAACAAAAACTTTCAAACATTAAAAAAAAAAAAAATAAAAAAAAAACTAACCCAAAATAACTCAAATACAAAAACAAACCAAATAACAATATAAAAATAATTACAATAAAT
chr22	21093855	21093975	Hypo	1 +	TGTTTAGTATAGAAATAAAAATTTTTAAATATTGAAGAAAAAAGATAAAAAGAAATTGATTTAAGATGATTTAAATATAAGAATAGATTAGATAATGATATAAAAATAATTATAATAAAT
chr22	21093850	21093970	Hypo	1 -	TACAATATCCAATATAAAAACAAAAACTTTCAAACATTAAAAAAAAAAAAAATAAAAAAAAAACTAACTCAAATACAAAAACAAACCAAATAACAATATAAAAATAATTACAATAAATATACT
chr22	21093850	21093970	Hypo	1 +	TATAATGTTTAGTATAGAAATAAAAATTTTTAAATATTGAAGAAAAAAGATAAAAAGAAATTGATTTAAATATAAGAATAGATTAGATAATGATATAAAAATAATTATAATAAATATGTT
chr22	21093855	21093975	Hyper	2 -	TATCCAATATAAAAACAAAAACTTTCAAACATTAAAAAAAAAAAAAATAAAAAAAAAACTAACCCAAAATAACTCAAATACAAAAACAAACCAAATAACGATATAAAAATAATTACAATAAAT
chr22	21093855	21093975	Hyper	1 +	TGTTTAGTATAGAAATAAAAATTTTTAAATATTGAAGAAAAAAGATAAAAAGAAATTGATTTAAGATGATTTAAATATAAGAATAGATTAGATAACGATATAAAAATAATTATAATAAAT
chr22	21093850	21093970	Hyper	1 -	TACAATATCCAATATAAAAACAAAAACTTTCAAACATTAAAAAAAAAAAAAATAAAAAAAAAACTAACTCAAATACAAAAACAAACCAAATAACGATATAAAAATAATTACAATAAATATACT
chr22	21093850	21093970	Hyper	1 +	TATAATGTTTAGTATAGAAATAAAAATTTTTAAATATTGAAGAAAAAAGATAAAAAGAAATTGATTTAAATATAAGAATAGATTAGATAACGATATAAAAATAATTATAATAAATATGTT
chr12	41472910	41473030	Hypo	1 -	ATTCATTCAACAACATACTTCTCCTCTCCATATTAAAAATACAACAATAAAAAAAATTAAATTTAAAAAAAATAACTCCAATTTTCACTTCTTTCAACACTTAAAAATTTCCATTTTCTC
chr12	41472910	41473030	Hypo	1 +	ATTTATTTAATAGTGTATTTTTTTTTTTTTATGTTGAGGATATAGTAATGAGAAAAATTAAGTTTGAAAAAGGTGATTTTAATTTTTATTTTTTTTAATATTTGAGGATTTTTATTTTTTT
chr12	41472915	41473035	Hypo	1 -	TTCAACAACATACTTCTCCTCTCCATATTAAAAATACAACAATAAAAAAAATTAAATCATACCAATTTAAAAAAAATAACTCCAATTTTCACTTCTTTCAACACTTAAAAATTTCCATTT
chr12	41472915	41473035	Hypo	1 +	TTTAATAGTGTATTTTTTTTTTTTTATGTTGAGGATATAGTAATGAGAAAAATTAAGTTATATTAATTTGAAAAAGGTGATTTTAATTTTTATTTTTTTTAATATTTGAGGATTTTTATTT
chr12	41472910	41473030	Hyper	1 -	ATTCATTCAACAACGTACTTCTCCTCTCCATATTAAAAATACAACAATAAAAAAAATTAAATTTAAAAAAAATAACTCCAATTTTCACTTCTTTCAACACTTAAAAATTTCCATTTTCTC
chr12	41472910	41473030	Hyper	1 +	ATTTATTTAATAGCGTATTTTTTTTTTTTTATGTTGAGGATATAGTAATGAGAAAAATTAAGTTTGAAAAAGGTGATTTTAATTTTTATTTTTTTTAATATTTGAGGATTTTTATTTTTTT
chr12	41472915	41473035	Hyper	1 -	TTCAACAACGTACTTCTCCTCTCCATATTAAAAATACAACAATAAAAAAAATTAAATCATACCAATTTAAAAAAAATAACTCCAATTTTCACTTCTTTCAACACTTAAAAATTTCCATTT
chr12	41472915	41473035	Hyper	1 +	TTTAATAGCGTATTTTTTTTTTTTTATGTTGAGGATATAGTAATGAGAAAAATTAAGTTATATTAATTTGAAAAAGGTGATTTTAATTTTTATTTTTTTTAATATTTGAGGATTTTTATTT
chr18	60742878	60742998	Hypo	1 -	TTTTCATACTAAAATCTTTAATTCTTCTAAAATTAATTTTTATATAATTAATATAAAAATCTTTTATATAAAAAACCAATACTTCCATCATCAATAATAACACAAACTCATCTTTCCCTA
chr18	60742878	60742998	Hypo	1 +	TTTTTGTGTTGAGGTTTTTAATTTTTTTGGAATTAATTTTTGTATAATTAGTGTAGGAGTTTTTTATATGAAAAGTTAATGTTTTTATTATTAATGATGGTATAAGTTTATTTTTTTTTG
chr18	60742883	60743003	Hypo	1 -	ATACTAAAATCTTTAATTCTTCTAAAATTAATTTTTATATAATTAATATAAAAATCTAATTATAATTTTTATATAAAAAACCAATACTTCCATCATCAATAATAACACAAACTCATCTTT
chr18	60742883	60743003	Hypo	1 +	GTGTTGAGGTTTTTAATTTTTTTGGAATTAATTTTTGTATAATTAGTGTAGGAGTTTAGTTATAGTTTTTATATGAAAAGTTAATGTTTTTATTATTAATGATGGTATAAGTTTATTTTT
chr18	60742878	60742998	Hyper	1 -	TTTTCGTACTAAAATCTTTAATTCTTCTAAAATTAATTTTTATATAATTAATATAAAAATCTTTTATATAAAAAACCAATACTTCCATCATCAATAATAACACAAACTCATCTTTCCCTA
chr18	60742878	60742998	Hyper	1 +	TTTTCGTGTTGAGGTTTTTAATTTTTTTGGAATTAATTTTTGTATAATTAGTGTAGGAGTTTTTTATATGAAAAGTTAATGTTTTTATTATTAATGATGGTATAAGTTTATTTTTTTTTG
chr18	60742883	60743003	Hyper	1 -	ATACTAAAATCTTTAATTCTTCTAAAATTAATTTTTATATAATTAATATAAAAATCTAATTATAATTTTTATATAAAAAACCAATACTTCCATCATCAATAATAACACAAACTCATCTTT
chr18	60742883	60743003	Hyper	1 +	GTGTTGAGGTTTTTAATTTTTTTGGAATTAATTTTTGTATAATTAGTGTAGGAGTTTAGTTATAGTTTTTATATGAAAAGTTAATGTTTTTATTATTAATGATGGTATAAGTTTATTTTT
chr1	197327872	197327992	Hypo	1 -	AAATTTTATAAACCAACCACTACAAATAATAAATATCTCTTTTACCCACATATTACTAATCAAATATAATCATATAACTACATTTAATTACAAAAAAAACAAAAAAATCTAATCTTTCTA
chr1	197327872	197327992	Hypo	1 +	AGATTTTATGGGTTAATTATTATAAGTAATGAATATTTTTTTTATTTATATATTATTGGTTAAATGTAATTATGTAATTATATTTAATTGTAGAAAAGATGAGAAAATTTAGTTTTTTTG
chr1	197327869	197327989	Hypo	1 -	TACAAATTTTATAAACCAACCACTACAAATAATAAATATCTCTTTTACCCACATATTACTAATAATCATATAACTACATTTAATTACAAAAAAAACAAAAAAATCTAATCTTTCTATATA
chr1	197327869	197327989	Hypo	1 +	TGTAGATTTTATGGGTTAATTATTATAAGTAATGAATATTTTTTTTATTTATATATTATTGGTAATTATGTAATTATATTTAATTGTAGAAAAGATGAGAAAATTTAGTTTTTTTGTGTA
chr1	197327872	197327992	Hyper	1 -	AAATTTTATAAACCAACCACTACAAATAATAAATATCTCTTTTACCCACATATTACTAATCAAATATAATCATATAACTACATTTAATTACAAAAAAAACGAAAAAATCTAATCTTTCTA
chr1	197327872	197327992	Hyper	1 +	AGATTTTATGGGTTAATTATTATAAGTAATGAATATTTTTTTTATTTATATATTATTGGTTAAATGTAATTATGTAATTATATTTAATTGTAGAAAAGACGAGAAAATTTAGTTTTTTTG
chr1	197327869	197327989	Hyper	1 -	TACAAATTTTATAAACCAACCACTACAAATAATAAATATCTCTTTTACCCACATATTACTAATAATCATATAACTACATTTAATTACAAAAAAAACGAAAAAATCTAATCTTTCTATATA
chr1	197327869	197327989	Hyper	1 +	TGTAGATTTTATGGGTTAATTATTATAAGTAATGAATATTTTTTTTATTTATATATTATTGGTAATTATGTAATTATATTTAATTGTAGAAAAGACGAGAAAATTTAGTTTTTTTGTGTA
chr10	117722100	117722220	Hypo	1 -	TTAAAAAAAATTTAACTTAACCATTTTATTTACTTCTACTTCCTTCTCTATCATTCCCATTAAAACAAATAATAACTTCCTATAAATAATCTCACTCATCCCACAAACTCATTAAATATAA
chr10	117722100	117722220	Hypo	1 +	TTGGAGGGATTTGGTTTGGTTATTTTATTTATTTTTATTTTTTTTTTTGTTATTTTTATTGGAATAGATGATGATTTTTTATGAATGGTTTTATTTATTTTATAGATTTATTGAATGTGG
chr10	117722105	117722225	Hypo	1 -	AAAATTTAACTTAACCATTTTATTTACTTCTACTTCCTTCTCTATCATTCCCATTAAAACTAATCTAAACAAATAATAACTTCCTATAAATAATCTCACTCATCCCACAAACTCATTAAA
chr10	117722105	117722225	Hypo	2 +	GGGATTTGGTTTGGTTATTTTATTTATTTTTATTTTTTTTTTTGTTATTTTTATTGGAGTTGATTTGAATAGATGATGATTTTTTATGAATGGTTTTATTTATTTTATAGATTTATTGAA
chr10	117722100	117722220	Hyper	1 -	TTAAAAAAAATTTAACTTAACCATTTTATTTACTTCTACTTCCTTCTCTATCATTCCCATTAAAACAAATAATAACTTCCTATAAATAATCTCACTCATCCCACAAACTCATTAAATATAA
chr10	117722100	117722220	Hyper	1 +	TTGGAGGGATTTGGTTTGGTTATTTTATTTATTTTTATTTTTTTTTTTGTTATTTTTATTGGAATAGATGATGATTTTTTATGAATGGTTTTATTTATTTTATAGATTTATTGAATGTGG
chr10	117722105	117722225	Hyper	1 -	AAAATTTAACTTAACCATTTTATTTACTTCTACTTCCTTCTCTATCATTCCCATTAAAACTAATCTAAACAAATAATAACTTCCTATAAATAATCTCACTCATCCCACAAACTCATTAAA
chr10	117722105	117722225	Hyper	2 +	GGGATTTGGTTTGGTTATTTTATTTATTTTTATTTTTTTTTTTGTTATTTTTATTGGAGTTGATTTGAATAGATGATGATTTTTTATGAATGGTTTTATTTATTTTATAGATTTATTGAA
chr2	110886625	110886745	Hypo	1 -	ATTACCTAAACAATAAATAAAAATTAAAAAACATCATCCTAATAACAAAAAAAAAAAACCTAAACAAAACTCATTAACACAAAATATATAACTACTTCCATAAACCAACAAATTTCCATTA
chr2	110886625	110886745	Hypo	1 +	GTTATTTAGATAATGGATAGGGATTGGGAGATATTATTTTAGTAATAAAAAAAAAGGTTTAGATAGAATTTATTAATATAGAGTGTATAATTGTTTTTATAAGTTAGTAGGTTTTTATTG
chr2	110886629	110886749	Hypo	1 -	CCTAAACAATAAATAAAAATTAAAAAACATCATCCTAATAACAAAAAAAAAAAACCTAAACCAAATAACAAAACTCATTAACACAAAATATATAACTACTTCCATAAACCAACAAATTTCC

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chr2	110886629	110886749	Hypo	1 +	TTTAGATAATGGATAGGGATTGGGAGATATTATTTTAGTAATAAAAAAAAAGGTTTAGATTAGATGATAGAATTTATTAATATAGAGTGTATAATTGTTTTTATAAGTTAGTAGGTTTTT
chr2	110886625	110886745	Hyper	1 -	ATTACCTAAACAATAAATAAAAATTAAAAAACATCATCCTAATAACAAAAAAAAAAAACCTAAACAAAACTCATTAACACAAAATATATAACTACTTCCATAAACCAACAAATTTCCATTA
chr2	110886625	110886745	Hyper	1 +	GTTATTTAGATAATGGATAGGGATTGGGAGATATTATTTTAGTAATAAAAAAAAAGGTTTAGATAGAATTTATTAATATAGAGTGTATAATTGTTTTTATAAGTTAGTAGGTTTTTATTG
chr2	110886629	110886749	Hyper	1 -	CCTAAACAATAAATAAAAATTAAAAAACATCATCCTAATAACAAAAAAAAAAAACCTAAACCAAATAACAAAACTCATTAACACAAAATATATAACTACTTCCATAAACCAACAAATTTCC
chr2	110886629	110886749	Hyper	1 +	TTTAGATAATGGATAGGGATTGGGAGATATTATTTTAGTAATAAAAAAAAAGGTTTAGATTAGATGATAGAATTTATTAATATAGAGTGTATAATTGTTTTTATAAGTTAGTAGGTTTTT
chr10	114777081	114777201	Hypo	1 -	TATATAATTAATAAAAACTAACATTATCCCATTTTACCCACAAAAAAACAAATAACCAATAATAAAACAAAAACTCAACATCCCATATACCCACTTCCTCCTCAAATAAACTTTTCACCT
chr10	114777081	114777201	Hypo	1 +	TGTGTGGTTGGTAGAAGTTGGTGTTATTTTATTTTATTTATGAGGAAATAAATGATTAGTGGTGGAGTGGGAGTTTAGTATTTTATGTGTTTATTTTTTTTTTGGGTGGATTTTTTATTT
chr10	114777077	114777197	Hypo	1 -	ATACTATATAATTAATAAAAACTAACATTATCCCATTTTACCCACAAAAAAACAAATAACCAACAAAAACTCAACATCCCATATACCCACTTCCTCCTCAAATAAACTTTTCACCTACCC
chr10	114777077	114777197	Hypo	1 +	GTGTTGTGTGGTTGGTAGAAGTTGGTGTTATTTTATTTTATTTATGAGGAAATAAATGATTAGTGGGAGTTTAGTATTTTATGTGTTTATTTTTTTTTTGGGTGGATTTTTTATTTGTTT
chr10	114777081	114777201	Hyper	1 -	TATATAATTAATAAAAACTAACGTTATCCCATTTTACCCACGAAAAAACAAATAACCAATAATAAAACGAAAACTCAACATCCCATATACCCACTTCCTCCTCGAATAAACTTTTCACCT
chr10	114777081	114777201	Hyper	1 +	TGTGTGGTTGGTAGAAGTTGGCGTTATTTTATTTTATTTACGAGGAAATAAATGATTAGTGGTGGAGCGGGAGTTTAGTATTTTATGTGTTTATTTTTTTTTTCGGGTGGATTTTTTATTT
chr10	114777077	114777197	Hyper	1 -	ATACTATATAATTAATAAAAACTAACGTTATCCCATTTTACCCACGAAAAAACAAATAACCAACGAAAACTCAACATCCCATATACCCACTTCCTCCTCGAATAAACTTTTCACCTACCC
chr10	114777077	114777197	Hyper	1 +	GTGTTGTGTGGTTGGTAGAAGTTGGCGTTATTTTATTTTATTTACGAGGAAATAAATGATTAGCGGGAGTTTAGTATTTTATGTGTTTATTTTTTTTTCGGGTGGATTTTTTATTTGTTT
chr22	23961681	23961801	Hypo	2 -	TTCATAAAATTAAAATCTACAAAAAACAAAAAAATACAAACAACATACTTCCAACATAAAAATATCACAAATATAAAATACAAAACCCAAAATTAAATACACACATACAAAATCAACTAA
chr22	23961681	23961801	Hypo	2 +	TTTATGAGATTGAAATTTATAAAAAATAGAGAAATGTAAATAGTATGTTTTTAGTATGGAGGTATTATAGATATAGAATATAGAGTTTAGAATTAAATGTATATATATAGAGTTAGTTGA
chr22	23961686	23961806	Hypo	2 -	AAAATTAAAATCTACAAAAAACAAAAAAATACAAACAACATACTTCCAACATAAAAACACCCATAAATATCACAAATATAAAATACAAAACCCAAAATTAAATACACACATACAAAATCA
chr22	23961686	23961806	Hypo	2 +	GAGATTGAAATTTATAAAAAATAGAGAAATGTAAATAGTATGTTTTTAGTATGGAGGTATTTATAAGTATTATAGATATAGAATATAGAGTTTAGAATTAAATGTATATATATAGAGTTA
chr22	23961681	23961801	Hyper	2 -	TTCATAAAATTAAAATCTACAAAAAACAAAAAAATACAAACAACATACTTCCAACATAAAAATATCACAAATATAAAATACAAAACCCAAAATTAAATACACACATACAAAATCAACTAA
chr22	23961681	23961801	Hyper	2 +	TTTATGAGATTGAAATTTATAAAAAATAGAGAAATGTAAATAGTATGTTTTTAGTATGGAGGTATTATAGATATAGAATATAGAGTTTAGAATTAAATGTATATATATAGAGTTAGTTGA
chr22	23961686	23961806	Hyper	2 -	AAAATTAAAATCTACAAAAAACAAAAAAATACAAACAACATACTTCCAACATAAAAACACCCATAAATATCACAAATATAAAATACAAAACCCAAAATTAAATACACACATACAAAATCA
chr22	23961686	23961806	Hyper	2 +	GAGATTGAAATTTATAAAAAATAGAGAAATGTAAATAGTATGTTTTTAGTATGGAGGTATTTATAAGTATTATAGATATAGAATATAGAGTTTAGAATTAAATGTATATATATAGAGTTA
chr3	32976037	32976157	Hypo	1 -	ATCAAAACACAACCACCAAACTAAACTTAAAAATATACTTTCTTCACTACTATACACTCCCAAAACCAATTTCACTTAATAATATCCTTACAAAACCAAATACAATAACTCACACCTATA
chr3	32976037	32976157	Hypo	1 +	ATTAAGGTATAATTATTAAATTGAATTTAAAAATGTATTTTTTTTATTGTTGTGTATTTTTAGAATTAGTTTTATTTAATAATGTTTTTGTAGGGTTAGGTGTGGTGGTTTATATTTATA
chr3	32976034	32976154	Hypo	1 -	CAAATCAAAACACAACCACCAAACTAAACTTAAAAATATACTTTCTTCACTACTATACACTCCAATTTCACTTAATAATATCCTTACAAAACCAAATACAATAACTCACACCTATAATAC
chr3	32976034	32976154	Hypo	1 +	TAAATTAAGGTATAATTATTAAATTGAATTTAAAAATGTATTTTTTTTATTGTTGTGTATTTTAGTTTTATTTAATAATGTTTTTGTAGGGTTAGGTGTGGTGGTTTATATTTATAATAT
chr3	32976037	32976157	Hyper	1 -	ATCAAAACACAACCACCAAACTAAACTTAAAAATATACTTTCTTCACTACTATACACTCCCAAAACCAATTTCACTTAATAATATCCTTACAAAACCAAATACGATAACTCACACCTATA
chr3	32976037	32976157	Hyper	1 +	ATTAAGGTATAATTATTAAATTGAATTTAAAAATGTATTTTTTTTATTGTTGTGTATTTTTAGAATTAGTTTTATTTAATAATGTTTTTGTAGGGTTAGGTGCGGTGGTTTATATTTATA
chr3	32976034	32976154	Hyper	1 -	CAAATCAAAACACAACCACCAAACTAAACTTAAAAATATACTTTCTTCACTACTATACACTCCAATTTCACTTAATAATATCCTTACAAAACCAAATACGATAACTCACACCTATAATAC
chr3	32976034	32976154	Hyper	1 +	TAAATTAAGGTATAATTATTAAATTGAATTTAAAAATGTATTTTTTTTATTGTTGTGTATTTTAGTTTTATTTAATAATGTTTTTGTAGGGTTAGGTGCGGTGGTTTATATTTATAATAT
chr3	177802243	177802363	Hypo	1 -	AATAAATTTAAAAAATATCTAAAAAAAAAAAAAAACCCTCATATAAACAAATAAATAATACTAAAAAAAAAATAAATCTTATCTACCTTACCAAATATAAAACATAATACCCTTAAATCT
chr3	177802243	177802363	Hypo	1 +	AATAAATTTAGGGAATGTTTAAAGAAAGAAAAAGATTTTTATGTAAGTAAATAAATGATATTAAAGGAAAGATAGGTTTTGTTTGTTTTATTAGATATGAGATGTGATGTTTTTAAGTTT
chr3	177802239	177802359	Hypo	1 -	AAACAATAAATTTAAAAAATATCTAAAAAAAAAAAAAAACCCTCATATAAACAAATAAATAAAAAAAAATAAATCTTATCTACCTTACCAAATATAAAACATAATACCCTTAAATCTAATA
chr3	177802239	177802359	Hypo	1 +	AAGTAATAAATTTAGGGAATGTTTAAAGAAAGAAAAAGATTTTTATGTAAGTAAATAAATGGGAAAGATAGGTTTTGTTTGTTTTATTAGATATGAGATGTGATGTTTTTAAGTTTAGTG
chr3	177802243	177802363	Hyper	1 -	AATAAATTTAAAAAATATCTAAAAAAAAAAAAAAACCCTCATATAAACAAATAAATAATACTAAAAAAAAAATAAATCTTATCTACCTTACCAAATATAAAACGTAATACCCTTAAATCT
chr3	177802243	177802363	Hyper	1 +	AATAAATTTAGGGAATGTTTAAAGAAAGAAAAAGATTTTTATGTAAGTAAATAAATGATATTAAAGGAAAGATAGGTTTTGTTTGTTTTATTAGATATGAGACGTGATGTTTTTAAGTTT
chr3	177802239	177802359	Hyper	1 -	AAACAATAAATTTAAAAAATATCTAAAAAAAAAAAAAAACCCTCATATAAACAAATAAATAAAAAAAAATAAATCTTATCTACCTTACCAAATATAAAACGTAATACCCTTAAATCTAATA
chr3	177802239	177802359	Hyper	1 +	AAGTAATAAATTTAGGGAATGTTTAAAGAAAGAAAAAGATTTTTATGTAAGTAAATAAATGGGAAAGATAGGTTTTGTTTGTTTTATTAGATATGAGACGTGATGTTTTTAAGTTTAGTG
chr12	119510368	119510488	Hypo	1 -	ATATACTCCATAAAATAAAAAAATTAATCAATCCATTACACAAAAACTATTTTACCCACAAATTAAACAAAAACATCAAACACCACCAAATCCTAACCAACCAACCAATCTACTCCAATT
chr12	119510368	119510488	Hypo	1 +	GTGTGTTTTGTGAGATAAGGAGATTAATTAGTTTATTATGTAGGGGTTGTTTTATTTGTAGATTGAATAGAGATGTTGGATATTATTAGGTTTTAGTTAGTTAGTTAGTTTGTTTTAGTT
chr12	119510373	119510493	Hypo	1 -	CTCCATAAAATAAAAAAATTAATCAATCCATTACACAAAAACTATTTTACCCACAAATAAAAATAATTAAACAAAAACATCAAACACCACCAAATCCTAACCAACCAACCAATCTACTCC
chr12	119510373	119510493	Hypo	2 +	TTTTGTGAGATAAGGAGATTAATTAGTTTATTATGTAGGGGTTGTTTTATTTGTAGATGGAGGTAATTGAATAGAGATGTTGGATATTATTAGGTTTTAGTTAGTTAGTTAGTTTGTTTT
chr12	119510368	119510488	Hyper	1 -	ATATACTCCGTAAAATAAAAAAATTAATCAATCCATTACGCAAAAACTATTTTACCCGCAAATTAAACAAAAACGTCGAACACCACCAAATCCTAACCAACCAACCAATCTACTCCAATT
chr12	119510368	119510488	Hyper	1 +	GTGTGTTTCGTGAGATAAGGAGATTAATTAGTTTATTACGTAGGGGTTGTTTTATTCGTAGATTGAATAGAGACGTCGGATATTATTAGGTTTTAGTTAGTTAGTTAGTTTGTTTTAGTT
chr12	119510373	119510493	Hyper	1 -	CTCCGTAAAATAAAAAAATTAATCAATCCATTACGCAAAAACTATTTTACCCGCAAATAAAAATAATTAAACAAAAACGTCGAACACCACCAAATCCTAACCAACCAACCAATCTACTCC
chr12	119510373	119510493	Hyper	2 +	TTTCGTGAGATAAGGAGATTAATTAGTTTATTACGTAGGGGTTGTTTTATTCGTAGATGGAGGTAATTGAATAGAGACGTCGGATATTATTAGGTTTTAGTTAGTTAGTTAGTTTGTTTT
chr8	37242142	37242262	Hypo	1 -	AAAAAACCTAAAATATATTTCCTACAATATTAACTACTATATCCTAAATATTTCCAATCTTAAAATTTTCTAACATCCTTAAACAAATAAAAAATTTCTATAAAATTTCTCTACTAACCA
chr8	37242142	37242262	Hypo	1 +	AAAAAGTTTAGGATGTGTTTTTTATAGTGTTAATTGTTGTGTTTTGAATGTTTTTAATTTTGGAATTTTTTAGTATTTTTGGGTAGATGAAGAATTTTTGTGGGATTTTTTTGTTGATTA
chr8	37242138	37242258	Hypo	1 -	CACCAAAAAAACCTAAAATATATTTCCTACAATATTAACTACTATATCCTAAATATTTCCAATTTCTAACATCCTTAAACAAATAAAAAATTTCTATAAAATTTCTCTACTAACCAAAAAA
chr8	37242138	37242258	Hypo	1 +	TATTAAAAAGTTTAGGATGTGTTTTTTATAGTGTTAATTGTTGTGTTTTGAATGTTTTTAATTTTTAGTATTTTTGGGTAGATGAAGAATTTTTGTGGGATTTTTTTGTTGATTAGGGGA
chr8	37242142	37242262	Hyper	1 -	AAAAAACCTAAAATATATTTCCTACAATATTAACTACTATATCCTAAATATTTCCAATCTTAAAATTTTCTAACATCCTTAAACAAATAAAAAATTTCTATAAAATTTCTCTACTAACCA
chr8	37242142	37242262	Hyper	1 +	AAAAAGTTTAGGATGTGTTTTTTATAGTGTTAATTGTTGTGTTTTGAATGTTTTTAATTTTGGAATTTTTTAGTATTTTTGGGTAGATGAAGAATTTTTGTGGGATTTTTTTGTTGATTA
chr8	37242138	37242258	Hyper	1 -	CACCAAAAAAACCTAAAATATATTTCCTACAATATTAACTACTATATCCTAAATATTTCCAATTTCTAACATCCTTAAACAAATAAAAAATTTCTATAAAATTTCTCTACTAACCAAAAAA

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chr8	37242138	37242258	Hyper	1 +	TATTAAAAAGTTTAGGATGTGTTTTTTATAGTGTTAATTGTTGTGTTTTGAATGTTTTTAATTTTTAGTATTTTTGGGTAGATGAAGAATTTTTGTGGGATTTTTTTGTTGATTAGGGGA
chr5	171606564	171606684	Hypo	1 -	CCAAAACAACCAATATAAAATCAAACCCACAAAACTATAAACAAAACCCCACACAAAAACCAAAAAACATCATCCACAAAAAATTCAAACCCCCTTAAATAAAAACTAAATCACAAATTA
chr5	171606564	171606684	Hypo	1 +	TTAGAATGGTTAGTGTGAAATTAGATTTGTAGGGTTGTGGGTAGGGTTTTATGTAGAAGTTGAAGGGTGTTATTTATGGGAAGTTTAGATTTTTTTGGATGAGGGTTGAGTTATGAGTTA
chr5	171606569	171606689	Hypo	1 -	ACAACCAATATAAAATCAAACCCACAAAACTATAAACAAAACCCCACACAAAAACCAAACCCCCTTAAAAAACATCATCCACAAAAAATTCAAACCCCCTTAAATAAAAACTAAATCACA
chr5	171606569	171606689	Hypo	1 +	ATGGTTAGTGTGAAATTAGATTTGTAGGGTTGTGGGTAGGGTTTTATGTAGAAGTTGGGTTTTTTTGAAGGGTGTTATTTATGGGAAGTTTAGATTTTTTTGGATGAGGGTTGAGTTATG
chr5	171606564	171606684	Hyper	1 -	CCAAAACGACCAATATAAAATCAAACCCGCAAAACTATAAACAAAACCCCACGCAAAAACCGAAAAACGTCATCCACGAAAAATTCAAACCCCCTTAAATAAAAACTAAATCACGAATTA
chr5	171606564	171606684	Hyper	1 +	TTAGAACGGTTAGTGTGAAATTAGATTCGTAGGGTTGTGGGTAGGGTTTTACGTAGAAGTCGAAGGGCGTTATTTACGGGAAGTTTAGATTTTTTTGGATGAGGGTTGAGTTACGAGTTA
chr5	171606569	171606689	Hyper	1 -	ACGACCAATATAAAATCAAACCCGCAAAACTATAAACAAAACCCCACGCAAAAACCGAACCCCCTTAAAAAACGTCATCCACGAAAAATTCAAACCCCCTTAAATAAAAACTAAATCACG
chr5	171606569	171606689	Hyper	1 +	ACGGTTAGTGTGAAATTAGATTCGTAGGGTTGTGGGTAGGGTTTTACGTAGAAGTCGGGTTTTTTTGAAGGGCGTTATTTACGGGAAGTTTAGATTTTTTTGGATGAGGGTTGAGTTACG
chr10	118873021	118873141	Hypo	1 -	CTCAAAATCCAAAAAAACTTACTTTAACCATCATTAAAACCTTCTATTTTCTACTTTACTAAATAACCATATACATTCATACTCAAAAACATTAACTTACTCATTAAAATAACATCACTT
chr10	118873021	118873141	Hypo	1 +	TTTAGGATTTAAAAGGGTTTGTTTTGATTATTATTAAGATTTTTTGTTTTTTATTTTATTAGGTAATTATATGTGTTTATGTTTAGAGATATTAATTTATTTATTAGAATAATATTATTT
chr10	118873017	118873137	Hypo	1 -	TTCTCTCAAAATCCAAAAAAACTTACTTTAACCATCATTAAAACCTTCTATTTTCTACTTTACCATATACATTCATACTCAAAAACATTAACTTACTCATTAAAATAACATCACTTAACC
chr10	118873017	118873137	Hypo	2 +	TTTTTTTAGGATTTAAAAGGGTTTGTTTTGATTATTATTAAGATTTTTTGTTTTTTATTTTATTATATGTGTTTATGTTTAGAGATATTAATTTATTTATTAGAATAATATTATTTGGTT
chr10	118873021	118873141	Hyper	1 -	CTCAAAATCCAAAAAAACTTACTTTAACCATCATTAAAACCTTCTATTTTCTACTTTACTAAATAACCATATACGTTCATACTCAAAAACATTAACTTACTCATTAAAATAACATCACTT
chr10	118873021	118873141	Hyper	1 +	TTTAGGATTTAAAAGGGTTTGTTTTGATTATTATTAAGATTTTTTGTTTTTTATTTTATTAGGTAATTATATGCGTTTATGTTTAGAGATATTAATTTATTTATTAGAATAATATTATTT
chr10	118873017	118873137	Hyper	1 -	TTCTCTCAAAATCCAAAAAAACTTACTTTAACCATCATTAAAACCTTCTATTTTCTACTTTACCATATACGTTCATACTCAAAAACATTAACTTACTCATTAAAATAACATCACTTAACC
chr10	118873017	118873137	Hyper	2 +	TTTTTTTAGGATTTAAAAGGGTTTGTTTTGATTATTATTAAGATTTTTTGTTTTTTATTTTATTATATGCGTTTATGTTTAGAGATATTAATTTATTTATTAGAATAATATTATTTGGTT
chr10	124673052	124673172	Hypo	1 -	AAATCATCAAAACAAATACCTCCTTTATAAATCACAATAACACTAATATACATTAATCCAACTTCAACTATAATAAAAACTTCCACCAAAACCCAAACTTTCTAAACCACAATAAAAAAA
chr10	124673052	124673172	Hypo	1 +	AGATTGTTAGAGTAGGTGTTTTTTTTGTGGATTATGATAATATTGATGTGTGTTGATTTAGTTTTAATTATAATAGGGATTTTTATTAAAGTTTAGATTTTTTGGATTATAGTGAGAAAG
chr10	124673057	124673177	Hypo	1 -	ATCAAAACAAATACCTCCTTTATAAATCACAATAACACTAATATACATTAATCCAACCATCAACATCTTCAACTATAATAAAAACTTCCACCAAAACCCAAACTTTCTAAACCACAATAA
chr10	124673057	124673177	Hypo	1 +	GTTAGAGTAGGTGTTTTTTTTGTGGATTATGATAATATTGATGTGTGTTGATTTAGTTATTAGTATTTTTAATTATAATAGGGATTTTTATTAAAGTTTAGATTTTTTGGATTATAGTGA
chr10	124673052	124673172	Hyper	1 -	AAATCGTCAAAACAAATACCTCCTTTATAAATCACGATAACACTAATATACGTTAATCCAACTTCAACTATAATAAAAACTTCCACCAAAACCCAAACTTTCTAAACCACAATAAAAAAA
chr10	124673052	124673172	Hyper	1 +	AGATCGTTAGAGTAGGTGTTTTTTTTGTGGATTACGATAATATTGATGTGCGTTGATTTAGTTTTAATTATAATAGGGATTTTTATTAAAGTTTAGATTTTTTGGATTATAGTGAGAAAG
chr10	124673057	124673177	Hyper	1 -	ATCAAAACAAATACCTCCTTTATAAATCACGATAACACTAATATACGTTAATCCAACCATCAACATCTTCAACTATAATAAAAACTTCCACCAAAACCCAAACTTTCTAAACCACAATAA
chr10	124673057	124673177	Hyper	1 +	GTTAGAGTAGGTGTTTTTTTTGTGGATTACGATAATATTGATGTGCGTTGATTTAGTTATTAGTATTTTTAATTATAATAGGGATTTTTATTAAAGTTTAGATTTTTTGGATTATAGTGA
chr2	102291958	102292078	Hypo	1 -	TCTACCATCATAATAATTTACCTAATTTCCAAAAAAAAAAATAATTCCACTCTATACACCTATAACCAAAAAAATTAATCAACACTAAAATAATCAACCTACCAAATAAATATCAAATCAA
chr2	102291958	102292078	Hypo	1 +	TTTGTTATTATAGTAATTTGTTTAGTTTTTAGGAAGGAGGTAATTTTATTTTATATATTTGTGGTTGGGAGGATTAGTTAATATTGAAGTGATTAATTTATTAAGTAAGTGTTAAGTTAA
chr2	102291955	102292075	Hypo	1 -	TAATCTACCATCATAATAATTTACCTAATTTCCAAAAAAAAAAATAATTCCACTCTATACACCCAAAAAAATTAATCAACACTAAAATAATCAACCTACCAAATAAATATCAAATCAATAA
chr2	102291955	102292075	Hypo	1 +	TGATTTGTTATTATAGTAATTTGTTTAGTTTTTAGGAAGGAGGTAATTTTATTTTATATATTTGGGAGGATTAGTTAATATTGAAGTGATTAATTTATTAAGTAAGTGTTAAGTTAATGA
chr2	102291958	102292078	Hyper	1 -	TCTACCATCATAATAATTTACCTAATTTCCAAAAAAAAAAATAATTCCACTCTATACACCTATAACCGAAAAAATTAATCAACACTAAAATAATCAACCTACCAAATAAATATCAAATCAA
chr2	102291958	102292078	Hyper	1 +	TTTGTTATTATAGTAATTTGTTTAGTTTTTAGGAAGGAGGTAATTTTATTTTATATATTTGTGGTCGGGAGGATTAGTTAATATTGAAGTGATTAATTTATTAAGTAAGTGTTAAGTTAA
chr2	102291955	102292075	Hyper	1 -	TAATCTACCATCATAATAATTTACCTAATTTCCAAAAAAAAAAATAATTCCACTCTATACACCCGAAAAAATTAATCAACACTAAAATAATCAACCTACCAAATAAATATCAAATCAATAA
chr2	102291955	102292075	Hyper	1 +	TGATTTGTTATTATAGTAATTTGTTTAGTTTTTAGGAAGGAGGTAATTTTATTTTATATATTCGGGAGGATTAGTTAATATTGAAGTGATTAATTTATTAAGTAAGTGTTAAGTTAATGA
chr2	55764698	55764818	Hypo	1 -	ACATTTTACACACCCACCCTCAAATAAAATTAAAATATACTAAACTTTCTCTAATAATATAAATACATAAACACCATATAAAATATACCACTTTCTCATACTTATTTAACTTCAAAAACC
chr2	55764698	55764818	Hypo	1 +	ATATTTTGTATATTTATTTTTAGGTAAGGTTGAGGTGTATTGAATTTTTTTTAATAATATGAATATATAAATATTATATAGAATGTGTTATTTTTTTATATTTATTTAATTTTAAAAGTT
chr2	55764693	55764813	Hypo	1 -	AATAAACATTTTACACACCCACCCTCAAATAAAATTAAAATATACTAAACTTTCTCTAATAATAAACACCATATAAAATATACCACTTTCTCATACTTATTTAACTTCAAAAACCCTAAA
chr2	55764693	55764813	Hypo	1 +	GGTGAATATTTTGTATATTTATTTTTAGGTAAGGTTGAGGTGTATTGAATTTTTTTTAATAATAAATATTATATAGAATGTGTTATTTTTTTATATTTATTTAATTTTAAAAGTTTTGGG
chr2	55764698	55764818	Hyper	1 -	ACATTTTACACACCCACCCTCAAATAAAATTAAAATATACTAAACTTTCTCTAATAATATAAATACATAAACACCATATAAAATATACCACTTTCTCATACTTATTTAACTTCAAAAACC
chr2	55764698	55764818	Hyper	1 +	ATATTTTGTATATTTATTTTTAGGTAAGGTTGAGGTGTATTGAATTTTTTTTAATAATATGAATATATAAATATTATATAGAATGTGTTATTTTTTTATATTTATTTAATTTTAAAAGTT
chr2	55764693	55764813	Hyper	1 -	AATAAACATTTTACACACCCACCCTCAAATAAAATTAAAATATACTAAACTTTCTCTAATAATAAACACCATATAAAATATACCACTTTCTCATACTTATTTAACTTCAAAAACCCTAAA
chr2	55764693	55764813	Hyper	1 +	GGTGAATATTTTGTATATTTATTTTTAGGTAAGGTTGAGGTGTATTGAATTTTTTTTAATAATAAATATTATATAGAATGTGTTATTTTTTTATATTTATTTAATTTTAAAAGTTTTGGG
chr10	98952560	98952680	Hypo	1 -	ACAATTTATTAAACACATAATACTTAATACAAACCAATCCCTACACTAAAATAATCTTCCCACAACTAATATAACTCTCTACACCCTTCAAATCTCAACTTAAACAATAACTCCTCAAAA
chr10	98952560	98952680	Hypo	1 +	GTAGTTTATTAAGTATATAATGTTTGGTGTAGGTTAGTTTTTATGTTAGAATGGTTTTTTTATGGTTGGTGTGGTTTTTTATATTTTTTAGGTTTTAGTTTAAGTAATAATTTTTTAAGA
chr10	98952563	98952683	Hypo	1 -	ATTTATTAAACACATAATACTTAATACAAACCAATCCCTACACTAAAATAATCTTCCCATCATAACAACTAATATAACTCTCTACACCCTTCAAATCTCAACTTAAACAATAACTCCTCA
chr10	98952563	98952683	Hypo	1 +	GTTTATTAAGTATATAATGTTTGGTGTAGGTTAGTTTTTATGTTAGAATGGTTTTTTTATTATAATGGTTGGTGTGGTTTTTTATATTTTTTAGGTTTTAGTTTAAGTAATAATTTTTTA
chr10	98952560	98952680	Hyper	1 -	ACAATTTATTAAACACATAATACTTAATACAAACCAATCCCTACGCTAAAATAATCTTCCCACGACTAATATAACTCTCTACACCCTTCAAATCTCAACTTAAACAATAACTCCTCAAAA
chr10	98952560	98952680	Hyper	1 +	GTAGTTTATTAAGTATATAATGTTTGGTGTAGGTTAGTTTTTACGTTAGAATGGTTTTTTTACGGTTGGTGTGGTTTTTTATATTTTTTAGGTTTTAGTTTAAGTAATAATTTTTTAAGA
chr10	98952563	98952683	Hyper	1 -	ATTTATTAAACACATAATACTTAATACAAACCAATCCCTACGCTAAAATAATCTTCCCATCATAACGACTAATATAACTCTCTACACCCTTCAAATCTCAACTTAAACAATAACTCCTCA
chr10	98952563	98952683	Hyper	1 +	GTTTATTAAGTATATAATGTTTGGTGTAGGTTAGTTTTTACGTTAGAATGGTTTTTTTATTATAACGGTTGGTGTGGTTTTTTATATTTTTTAGGTTTTAGTTTAAGTAATAATTTTTTA
chr7	90117574	90117694	Hypo	1 -	TATTTAAATCATACATATTTTTACCTTATAAAAAAATTACACTTCTTATAACTAATATAAACTAATCTCCTATTTCATATTTACCCTTCTAATTTCATTTTACAACATACCAAACTAATA
chr7	90117574	90117694	Hypo	1 +	TATTTAAATTATGTATGTTTTTGTTTTATAAAGAAGTTATATTTTTTGTAATTAGTATGAATTAGTTTTTTATTTTATGTTTGTTTTTTTAGTTTTATTTTATAATATATTAAGTTAATA
chr7	90117578	90117698	Hypo	1 -	TAAATCATACATATTTTTACCTTATAAAAAAATTACACTTCTTATAACTAATATAAACAAAAACTCTAATCTCCTATTTCATATTTACCCTTCTAATTTCATTTTACAACATACCAAACT

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chr7	90117578	90117698	Hypo	1 +	TAAATTATGTATGTTTTTGTTTTATAAAGAAGTTATATTTTTTGTAATTAGTATGAATAGAAATTTTAGTTTTTTATTTTATGTTTGTTTTTTTAGTTTTATTTTATAATATATTAAGTT
chr7	90117574	90117694	Hyper	1 -	TATTTAAATCATACATATTTTTACCTTATAAAAAAATTACACTTCTTATAACTAATATAAACTAATCTCCTATTTCATATTTACCCTTCTAATTTCATTTTACAACATACCAAACTAATA
chr7	90117574	90117694	Hyper	1 +	TATTTAAATTATGTATGTTTTTGTTTTATAAAGAAGTTATATTTTTTGTAATTAGTATGAATTAGTTTTTTATTTTATGTTTGTTTTTTTAGTTTTATTTTATAATATATTAAGTTAATA
chr7	90117578	90117698	Hyper	1 -	TAAATCATACATATTTTTACCTTATAAAAAAATTACACTTCTTATAACTAATATAAACAAAAACTCTAATCTCCTATTTCATATTTACCCTTCTAATTTCATTTTACAACATACCAAACT
chr7	90117578	90117698	Hyper	1 +	TAAATTATGTATGTTTTTGTTTTATAAAGAAGTTATATTTTTTGTAATTAGTATGAATAGAAATTTTAGTTTTTTATTTTATGTTTGTTTTTTTAGTTTTATTTTATAATATATTAAGTT
chr19	30208503	30208623	Hypo	1 -	AACAATACCCTAAAATACTAAATAATATTCACACAACCAACCAAAATCAAAACTCAAACAAAACCAACATTCTATACCCTCACTTTCTCCCAAAACTAAATACACCAACTCCTAAAACTT
chr19	30208503	30208623	Hypo	1 +	AATAATGTTTTAGGGTGTTAGGTGGTGTTTATATGGTTAGTTAGAGTTAAAATTTAGATGGGGTTAGTGTTTTATGTTTTTATTTTTTTTTAAAGTTGAGTGTATTAGTTTTTAAAATTT
chr19	30208508	30208628	Hypo	1 -	TACCCTAAAATACTAAATAATATTCACACAACCAACCAAAATCAAAACTCAAACAAAACCCCTAAAACCAACATTCTATACCCTCACTTTCTCCCAAAACTAAATACACCAACTCCTAAA
chr19	30208508	30208628	Hypo	1 +	TGTTTTAGGGTGTTAGGTGGTGTTTATATGGTTAGTTAGAGTTAAAATTTAGATGGGGTTTTTGAGGTTAGTGTTTTATGTTTTTATTTTTTTTTAAAGTTGAGTGTATTAGTTTTTAAA
chr19	30208503	30208623	Hyper	1 -	AACAATACCCTAAAATACTAAATAATATTCACACGACCAACCAAAATCAAAACTCAAACGAAACCAACGTTCTATACCCTCACTTTCTCCCAAAACTAAATACACCAACTCCTAAAACTT
chr19	30208503	30208623	Hyper	1 +	AATAATGTTTTAGGGTGTTAGGTGGTGTTTATACGGTTAGTTAGAGTTAAAATTTAGACGGGGTTAGCGTTTTATGTTTTTATTTTTTTTTAAAGTTGAGTGTATTAGTTTTTAAAATTT
chr19	30208508	30208628	Hyper	1 -	TACCCTAAAATACTAAATAATATTCACACGACCAACCAAAATCAAAACTCAAACGAAACCCCTAAAACCAACGTTCTATACCCTCACTTTCTCCCAAAACTAAATACACCAACTCCTAAA
chr19	30208508	30208628	Hyper	1 +	TGTTTTAGGGTGTTAGGTGGTGTTTATACGGTTAGTTAGAGTTAAAATTTAGACGGGGTTTTTGAGGTTAGCGTTTTATGTTTTTATTTTTTTTTAAAGTTGAGTGTATTAGTTTTTAAA
chr4	90056526	90056646	Hypo	1 -	ATATAAAAAAATAAACTAAATATCTAACATACATATAAACTTTCTACTTCTTCCACTTATATCTATTAAATATATTTACACTTAATAAATATTTTACAATATAAATATAAAAATCCACAAA
chr4	90056526	90056646	Hypo	1 +	ATGTAAGGGATAAATTGGATATTTAATATATATGTGAATTTTTTATTTTTTTTATTTATGTTTATTAAGTGTATTTGTATTTGATAGATATTTTATAATGTGGGTATAAAAATTTATAGG
chr4	90056531	90056651	Hypo	1 -	AAAAATAAACTAAATATCTAACATACATATAAACTTTCTACTTCTTCCACTTATATCTATTAAAACTATTAAATATATTTACACTTAATAAATATTTTACAATATAAATATAAAAATCCA
chr4	90056531	90056651	Hypo	1 +	AGGGATAAATTGGATATTTAATATATATGTGAATTTTTTATTTTTTTTATTTATGTTTATTAGAATTATTAAGTGTATTTGTATTTGATAGATATTTTATAATGTGGGTATAAAAATTTA
chr4	90056526	90056646	Hyper	1 -	ATATAAAAAAATAAACTAAATATCTAACATACATATAAACTTTCTACTTCTTCCACTTATATCTATTAAATATATTTACACTTAATAAATATTTTACAATATAAATATAAAAATCCACAAA
chr4	90056526	90056646	Hyper	1 +	ATGTAAGGGATAAATTGGATATTTAATATATATGTGAATTTTTTATTTTTTTTATTTATGTTTATTAAGTGTATTTGTATTTGATAGATATTTTATAATGTGGGTATAAAAATTTATAGG
chr4	90056531	90056651	Hyper	1 -	AAAAATAAACTAAATATCTAACATACATATAAACTTTCTACTTCTTCCACTTATATCTATTAAAACTATTAAATATATTTACACTTAATAAATATTTTACAATATAAATATAAAAATCCA
chr4	90056531	90056651	Hyper	1 +	AGGGATAAATTGGATATTTAATATATATGTGAATTTTTTATTTTTTTTATTTATGTTTATTAGAATTATTAAGTGTATTTGTATTTGATAGATATTTTATAATGTGGGTATAAAAATTTA
chr11	98395065	98395185	Hypo	1 -	AAATAAAATTAAAAAACATAAATCATAAAATAAAAAAATAAAATAAATATTATAAAATTTCATTTCAAAAAAAAATAAATTAAAAACATAATTTTTTAATATTTTATTTATTTTAAACAAA
chr11	98395065	98395185	Hypo	1 +	AGGTGAAGTTAAGAGATATGGATTATAGAGTGAGAAGGTAAAATAAATGTTATGGAGTTTTATTTTAAAAAAGGTAAATTAAGGATATGGTTTTTTGATGTTTTATTTGTTTTGAATAAA
chr11	98395070	98395190	Hypo	1 -	AAATTAAAAAACATAAATCATAAAATAAAAAAATAAAATAAATATTATAAAATTTCTAAAAAAAAATATTTCAAAAAAAAATAAATTAAAAACATAATTTTTTAATATTTTATTTATTTTAA
chr11	98395070	98395190	Hypo	1 +	AAGTTAAGAGATATGGATTATAGAGTGAGAAGGTAAAATAAATGTTATGGAGTTTTTAAGAAAGATATTTTAAAAAAGGTAAATTAAGGATATGGTTTTTTGATGTTTTATTTGTTTTGA
chr11	98395065	98395185	Hyper	1 -	AAATAAAATTAAAAAACATAAATCATAAAATAAAAAAATAAAATAAATATTATAAAATTTCATTTCAAAAAAAAATAAATTAAAAACATAATTTTTTAATATTTTATTTATTTTAAACAAA
chr11	98395065	98395185	Hyper	1 +	AGGTGAAGTTAAGAGATATGGATTATAGAGTGAGAAGGTAAAATAAATGTTATGGAGTTTTATTTTAAAAAAGGTAAATTAAGGATATGGTTTTTTGATGTTTTATTTGTTTTGAATAAA
chr11	98395070	98395190	Hyper	1 -	AAATTAAAAAACATAAATCATAAAATAAAAAAATAAAATAAATATTATAAAATTTCTAAAAAAAAATATTTCAAAAAAAAATAAATTAAAAACATAATTTTTTAATATTTTATTTATTTTAA
chr11	98395070	98395190	Hyper	1 +	AAGTTAAGAGATATGGATTATAGAGTGAGAAGGTAAAATAAATGTTATGGAGTTTTTAAGAAAGATATTTTAAAAAAGGTAAATTAAGGATATGGTTTTTTGATGTTTTATTTGTTTTGA
chr12	47497335	47497455	Hypo	1 -	TCACAAATCATTCCCACAATAACATTTAATCAAACCAATCAACCAAATAATAAAAAATAAACCAATTATTCTTAAAATTATAACTAATAAATCTCTAAATTAACCTCTACTTTCCTCATA
chr12	47497335	47497455	Hypo	1 +	TTATGAATTATTTTTATAGTAATGTTTGGTTAAATTAATTAATTAAGTAATGAAAAATGAATTGGTTGTTTTTGAGGTTGTGATTAATAGATTTTTAAGTTAGTTTTTATTTTTTTTATG
chr12	47497331	47497451	Hypo	1 -	TAATTCACAAATCATTCCCACAATAACATTTAATCAAACCAATCAACCAAATAATAAAAAATATTCTTAAAATTATAACTAATAAATCTCTAAATTAACCTCTACTTTCCTCATACTCTT
chr12	47497331	47497451	Hypo	1 +	TAGTTTATGAATTATTTTTATAGTAATGTTTGGTTAAATTAATTAATTAAGTAATGAAAAATGTTTTTGAGGTTGTGATTAATAGATTTTTAAGTTAGTTTTTATTTTTTTTATGTTTTT
chr12	47497335	47497455	Hyper	1 -	TCACGAATCATTCCCACAATAACGTTTAATCAAACCAATCAACCAAATAATAAAAAATAAACCGATTATTCTTAAAATTATAACTAATAAATCTCTAAATTAACCTCTACTTTCCTCATA
chr12	47497335	47497455	Hyper	1 +	TTACGAATTATTTTTATAGTAACGTTTGGTTAAATTAATTAATTAAGTAATGAAAAATGAATCGGTTGTTTTTGAGGTTGTGATTAATAGATTTTTAAGTTAGTTTTTATTTTTTTTATG
chr12	47497331	47497451	Hyper	1 -	TAATTCACGAATCATTCCCACAATAACGTTTAATCAAACCAATCAACCAAATAATAAAAAATATTCTTAAAATTATAACTAATAAATCTCTAAATTAACCTCTACTTTCCTCATACTCTT
chr12	47497331	47497451	Hyper	1 +	TAGTTTACGAATTATTTTTATAGTAACGTTTGGTTAAATTAATTAATTAAGTAATGAAAAATGTTTTTGAGGTTGTGATTAATAGATTTTTAAGTTAGTTTTTATTTTTTTTATGTTTTT
chr7	104919684	104919804	Hypo	2 -	ACAAAAAAAAAATAAAAAAAAAAAAAAAAAATAATCTCAAACTAATTAAATTTCTAATTTAAATAACTACTACTACTACTTATAAAAAACTCTATTTAAAAAAAAAATATTTTTCTATCACTT
chr7	104919684	104919804	Hypo	1 +	GTAGAAGAGAATGAAGAAGGAAAAGGAGGTAGTTTTAGGTTGGTTAGGTTTTTGATTTAGATAGTTGTTGTTATTATTTATGAGAAATTTTGTTTGAGAGAAAATGTTTTTTTGTTATTT
chr7	104919689	104919809	Hypo	2 -	AAAAAATAAAAAAAAAAAAAAAAAATAATCTCAAACTAATTAAATTTCTAATTTAAAACTTCCAAAATAACTACTACTACTACTTATAAAAAACTCTATTTAAAAAAAAAATATTTTTCTAT
chr7	104919689	104919809	Hypo	1 +	AGAGAATGAAGAAGGAAAAGGAGGTAGTTTTAGGTTGGTTAGGTTTTTGATTTAGAATTTTTAAGGTAGTTGTTGTTATTATTTATGAGAAATTTTGTTTGAGAGAAAATGTTTTTTTGT
chr7	104919684	104919804	Hyper	2 -	ACAAAAAAAAAATAAAAAAAAAAAAAAAAAATAATCTCAAACTAATTAAATTTCTAATTTAAATAACTACTACTACTACTTATAAAAAACTCTATTTAAAAAAAAAATATTTTTCTATCACTT
chr7	104919684	104919804	Hyper	1 +	GTAGAAGAGAATGAAGAAGGAAAAGGAGGTAGTTTTAGGTTGGTTAGGTTTTTGATTTAGATAGTTGTTGTTATTATTTATGAGAAATTTTGTTTGAGAGAAAATGTTTTTTTGTTATTT
chr7	104919689	104919809	Hyper	2 -	AAAAAATAAAAAAAAAAAAAAAAAATAATCTCAAACTAATTAAATTTCTAATTTAAAACTTCCAAAATAACTACTACTACTACTTATAAAAAACTCTATTTAAAAAAAAAATATTTTTCTAT
chr7	104919689	104919809	Hyper	1 +	AGAGAATGAAGAAGGAAAAGGAGGTAGTTTTAGGTTGGTTAGGTTTTTGATTTAGAATTTTTAAGGTAGTTGTTGTTATTATTTATGAGAAATTTTGTTTGAGAGAAAATGTTTTTTTGT
chr5	23731136	23731256	Hypo	1 -	AAAAATCAAAACATAACTTAACTAAAACATCAATTCAATCTTTCCAAAAATTACAATCCAAAATACCTACAAAATCTTCATTTTCACTTAAAACTAAAAACCCTCATTCAAATTTCTTTA
chr5	23731136	23731256	Hypo	1 +	GAGAGTTAAGGTATGGTTTAGTTGGAATATTGGTTTAGTTTTTTTAAGGGTTGTAATTTAAGATGTTTATAAAGTTTTTATTTTTATTTGAAGTTAAGGGTTTTTGTTTAAGTTTTTTTA
chr5	23731132	23731252	Hypo	1 -	TACTAAAAATCAAAACATAACTTAACTAAAACATCAATTCAATCTTTCCAAAAATTACAATCCTACAAAATCTTCATTTTCACTTAAAACTAAAAACCCTCATTCAAATTTCTTTAAATT
chr5	23731132	23731252	Hypo	1 +	TGTTGAGAGTTAAGGTATGGTTTAGTTGGAATATTGGTTTAGTTTTTTTAAGGGTTGTAATTTTATAAAGTTTTTATTTTTATTTGAAGTTAAGGGTTTTTGTTTAAGTTTTTTTAGATT
chr5	23731136	23731256	Hyper	1 -	AAAAATCAAAACATAACTTAACTAAAACATCGATTCAATCTTTCCAAAAATTACAATCCAAAATACCTACAAAATCTTCATTTTCACTTAAAACTAAAAACCCTCGTTCAAATTTCTTTA
chr5	23731136	23731256	Hyper	1 +	GAGAGTTAAGGTATGGTTTAGTTGGAATATCGGTTTAGTTTTTTTAAGGGTTGTAATTTAAGATGTTTATAAAGTTTTTATTTTTATTTGAAGTTAAGGGTTTTCGTTTAAGTTTTTTTA
chr5	23731132	23731252	Hyper	1 -	TACTAAAAATCAAAACATAACTTAACTAAAACATCGATTCAATCTTTCCAAAAATTACAATCCTACAAAATCTTCATTTTCACTTAAAACTAAAAACCCTCGTTCAAATTTCTTTAAATT

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chr5	23731132	23731252	Hyper	1 +	TGTTGAGAGTTAAGGTATGGTTTAGTTGGAATATCGGTTTAGTTTTTTTAAGGGTTGTAATTTTATAAAGTTTTTATTTTTATTTGAAGTTAAGGGTTTTCGTTTAAGTTTTTTTAGATT
chr20	22260080	22260200	Hypo	1 -	TAACCTCTTTAAAAACTACCATTTTCTACCAAAACAAAAACAAAAACAAAACAAAACAAAAAAAAAATTTTACATAACCAAATTACCTAAAATCAACTAATATACTAATACATTAAACAAT
chr20	22260080	22260200	Hypo	2 +	TAATTTTTTTAAAAGTTGTTATTTTTTATTAAAATAAAAATAAAAATAAAATAAAATAAAAAAGAGTTTTGTATGATTAAATTGTTTGAGGTTAGTTGGTATGTTAATATATTAAGTAAT
chr20	22260084	22260204	Hypo	2 -	CTCTTTAAAAACTACCATTTTCTACCAAAACAAAAACAAAAACAAAACAAAACAAAAAAAACCCTAAAAATTTTACATAACCAAATTACCTAAAATCAACTAATATACTAATACATTAAAC
chr20	22260084	22260204	Hypo	1 +	TTTTTTAAAAGTTGTTATTTTTTATTAAAATAAAAATAAAAATAAAATAAAATAAAAAAAATTTTAAGAGTTTTGTATGATTAAATTGTTTGAGGTTAGTTGGTATGTTAATATATTAAGT
chr20	22260080	22260200	Hyper	1 -	TAACCTCTTTAAAAACTACCATTTTCTACCAAAACAAAAACAAAAACAAAACAAAACAAAAAAAAAATTTTACATAACCAAATTACCTAAAATCAACTAATATACTAATACATTAAACAAT
chr20	22260080	22260200	Hyper	2 +	TAATTTTTTTAAAAGTTGTTATTTTTTATTAAAATAAAAATAAAAATAAAATAAAATAAAAAAGAGTTTTGTATGATTAAATTGTTTGAGGTTAGTTGGTATGTTAATATATTAAGTAAT
chr20	22260084	22260204	Hyper	2 -	CTCTTTAAAAACTACCATTTTCTACCAAAACAAAAACAAAAACAAAACAAAACAAAAAAAACCCTAAAAATTTTACATAACCAAATTACCTAAAATCAACTAATATACTAATACATTAAAC
chr20	22260084	22260204	Hyper	1 +	TTTTTTAAAAGTTGTTATTTTTTATTAAAATAAAAATAAAAATAAAATAAAATAAAAAAAATTTTAAGAGTTTTGTATGATTAAATTGTTTGAGGTTAGTTGGTATGTTAATATATTAAGT
chr4	87082085	87082205	Hypo	1 -	CCATATTCACTTAAAAAAAAAATCCAAACAACATCAATAATATAAATAAAAAAAAATACAATAAAACCCATATAAACACAAATAACAAAACCTACAAATCCAATACTAAAATCTTAAAACCT
chr4	87082085	87082205	Hypo	1 +	TTATATTTATTTAGAAAGGGATTTAAGTAGTATTAGTGATGTAAATGAGGAGAATATAATGGAGTTTATGTGAATATAGGTGGTAAAATTTATAAATTTAGTGTTAGGATTTTGAGGTTT
chr4	87082082	87082202	Hypo	1 -	TCCCCATATTCACTTAAAAAAAAAATCCAAACAACATCAATAATATAAATAAAAAAAAATACACCATATAAACACAAATAACAAAACCTACAAATCCAATACTAAAATCTTAAAACCTCCAA
chr4	87082082	87082202	Hypo	1 +	TTTTTATATTTATTTAGAAAGGGATTTAAGTAGTATTAGTGATGTAAATGAGGAGAATATATTATGTGAATATAGGTGGTAAAATTTATAAATTTAGTGTTAGGATTTTGAGGTTTTTAG
chr4	87082085	87082205	Hyper	1 -	CCATATTCACTTAAAAAAAAAATCCAAACAACATCAATAATATAAATAAAAAAAAATACAATAAAACCCATATAAACACAAATAACAAAACCTACAAATCCAATACTAAAATCTTAAAACCT
chr4	87082085	87082205	Hyper	1 +	TTATATTTATTTAGAAAGGGATTTAAGTAGTATTAGTGATGTAAATGAGGAGAATATAATGGAGTTTATGTGAATATAGGTGGTAAAATTTATAAATTTAGTGTTAGGATTTTGAGGTTT
chr4	87082082	87082202	Hyper	1 -	TCCCCATATTCACTTAAAAAAAAAATCCAAACAACATCAATAATATAAATAAAAAAAAATACACCATATAAACACAAATAACAAAACCTACAAATCCAATACTAAAATCTTAAAACCTCCAA
chr4	87082082	87082202	Hyper	1 +	TTTTTATATTTATTTAGAAAGGGATTTAAGTAGTATTAGTGATGTAAATGAGGAGAATATATTATGTGAATATAGGTGGTAAAATTTATAAATTTAGTGTTAGGATTTTGAGGTTTTTAG
chr20	61640873	61640993	Hypo	1 -	AACCCCACACCTTAACCAACTTCTCAAACCTCCTCTAAACAAAAACTATAAAAACTACAAAACAACAAAAACATTAACCAAACCAACTACTCAACCTTTCTAACCTCAATTTCCACAACT
chr20	61640873	61640993	Hypo	1 +	AGTTTTGTATTTTGGTTAGTTTTTTGAATTTTTTTTGGGTAGAGGTTGTGGAGGTTGTGAAGTGGTGGAGGTGTTGATTAGGTTAGTTGTTTAGTTTTTTTGGTTTTAGTTTTTATAGTT
chr20	61640878	61640998	Hypo	1 -	CACACCTTAACCAACTTCTCAAACCTCCTCTAAACAAAAACTATAAAAACTACAAAACAACTCCACACAACAAAAACATTAACCAAACCAACTACTCAACCTTTCTAACCTCAATTTCCA
chr20	61640878	61640998	Hypo	1 +	TGTATTTTGGTTAGTTTTTTGAATTTTTTTTGGGTAGAGGTTGTGGAGGTTGTGAAGTGGTTTTGTGTGGTGGAGGTGTTGATTAGGTTAGTTGTTTAGTTTTTTTGGTTTTAGTTTTTA
chr20	61640873	61640993	Hyper	1 -	AACCCCGCACCTTAACCAACTTCTCGAACCTCCTCTAAACAAAAACTATAAAAACTACGAAACGACGAAAACGTTAACCAAACCAACTACTCAACCTTTCTAACCTCAATTTCCACAACT
chr20	61640873	61640993	Hyper	1 +	AGTTTCGTATTTTGGTTAGTTTTTCGAATTTTTTTTGGGTAGAGGTTGTGGAGGTTGCGAAGCGGCGGAGGCGTTGATTAGGTTAGTTGTTTAGTTTTTTTGGTTTTAGTTTTTATAGTT
chr20	61640878	61640998	Hyper	1 -	CGCACCTTAACCAACTTCTCGAACCTCCTCTAAACAAAAACTATAAAAACTACGAAACGACTCCGCGCGACGAAAACGTTAACCAAACCAACTACTCAACCTTTCTAACCTCAATTTCCA
chr20	61640878	61640998	Hyper	1 +	CGTATTTTGGTTAGTTTTTCGAATTTTTTTTGGGTAGAGGTTGTGGAGGTTGCGAAGCGGTTTCGCGCGGCGGAGGCGTTGATTAGGTTAGTTGTTTAGTTTTTTTGGTTTTAGTTTTTA
chr15	90568189	90568309	Hypo	1 -	TTTTTTAAATAAACTTTAAAAATCATACTAAAAAAAAAAAAAAAAATAACATACACAAATATATTACTATAATTAAATTTCACTAACTATTTTTCATATACCTATCTTTTCCCTATAAAAAA
chr15	90568189	90568309	Hypo	1 +	TTTTTTGAGTGGGTTTTAGAGATTATGTTGAGGAAGAAAGAAAATAGTGTGTATGGATGTGTTGTTGTGGTTGGATTTTATTGGTTGTTTTTTATATATTTGTTTTTTTTTTGTGAGAGA
chr15	90568185	90568305	Hypo	1 -	ACAATTTTTTAAATAAACTTTAAAAATCATACTAAAAAAAAAAAAAAAAATAACATACACAAATATAATTAAATTTCACTAACTATTTTTCATATACCTATCTTTTCCCTATAAAAAAAAAC
chr15	90568185	90568305	Hypo	1 +	GTAGTTTTTTGAGTGGGTTTTAGAGATTATGTTGAGGAAGAAAGAAAATAGTGTGTATGGATGTGGTTGGATTTTATTGGTTGTTTTTTATATATTTGTTTTTTTTTTGTGAGAGAAAAT
chr15	90568189	90568309	Hyper	1 -	TTTTTTAAATAAACTTTAAAAATCATACTAAAAAAAAAAAAAAAAATAACGTACACGAATATATTACTATAATTAAATTTCACTAACTATTTTTCATATACCTATCTTTTCCCTATAAAAAA
chr15	90568189	90568309	Hyper	1 +	TTTTTTGAGTGGGTTTTAGAGATTATGTTGAGGAAGAAAGAAAATAGCGTGTACGGATGTGTTGTTGTGGTTGGATTTTATTGGTTGTTTTTTATATATTTGTTTTTTTTTTGTGAGAGA
chr15	90568185	90568305	Hyper	1 -	ACAATTTTTTAAATAAACTTTAAAAATCATACTAAAAAAAAAAAAAAAAATAACGTACACGAATATAATTAAATTTCACTAACTATTTTTCATATACCTATCTTTTCCCTATAAAAAAAAAC
chr15	90568185	90568305	Hyper	1 +	GTAGTTTTTTGAGTGGGTTTTAGAGATTATGTTGAGGAAGAAAGAAAATAGCGTGTACGGATGTGGTTGGATTTTATTGGTTGTTTTTTATATATTTGTTTTTTTTTTGTGAGAGAAAAT
chr2	3300748	3300868	Hypo	1 -	TACCTAACCTAAAAACCATCTACTTCTCCCAACACCCATCCAACAAACAAATAATAACAATTTCTCTCTATACCAAAATCACTTCCTTTTATCCATAAACTCCTAAATAACAAAAATTAA
chr2	3300748	3300868	Hypo	1 +	TGTTTAGTTTGGAAGTTATTTATTTTTTTTGGTATTTATTTGGTAGGTAGGTGGTGGTAGTTTTTTTTTGTATTAGAATTATTTTTTTTTGTTTATGAGTTTTTGGGTGGTAGGGATTAG
chr2	3300752	3300872	Hypo	1 -	TAACCTAAAAACCATCTACTTCTCCCAACACCCATCCAACAAACAAATAATAACAATTAACATACTTCTCTCTATACCAAAATCACTTCCTTTTATCCATAAACTCCTAAATAACAAAAA
chr2	3300752	3300872	Hypo	1 +	TAGTTTGGAAGTTATTTATTTTTTTTGGTATTTATTTGGTAGGTAGGTGGTGGTAGTTAATATGTTTTTTTTTGTATTAGAATTATTTTTTTTTGTTTATGAGTTTTTGGGTGGTAGGGA
chr2	3300748	3300868	Hyper	1 -	TACCTAACCTAAAAACCATCTACTTCTCCCGACACCCATCCGACAAACAAATAATAACAATTTCTCTCTATACCAAAATCACTTCCTTTTATCCATAAACTCCTAAATAACAAAAATTAA
chr2	3300748	3300868	Hyper	1 +	TGTTTAGTTTGGAAGTTATTTATTTTTTTCGGTATTTATTCGGTAGGTAGGTGGTGGTAGTTTTTTTTTGTATTAGAATTATTTTTTTTTGTTTATGAGTTTTTGGGTGGTAGGGATTAG
chr2	3300752	3300872	Hyper	1 -	TAACCTAAAAACCATCTACTTCTCCCGACACCCATCCGACAAACAAATAATAACAATTAACATACTTCTCTCTATACCAAAATCACTTCCTTTTATCCATAAACTCCTAAATAACAAAAA
chr2	3300752	3300872	Hyper	1 +	TAGTTTGGAAGTTATTTATTTTTTTCGGTATTTATTCGGTAGGTAGGTGGTGGTAGTTAATATGTTTTTTTTTGTATTAGAATTATTTTTTTTTGTTTATGAGTTTTTGGGTGGTAGGGA
chr13	81061303	81061423	Hypo	1 -	AACTACCAATTTATACCAATTCATAAATAATAATTACTAATTTAAATAATAAAAAATTTAAAAACAAAAAAACTAATAACAAATTAATCTAAAAAAAATAAATATAAATAAATCTCTTAA
chr13	81061303	81061423	Hypo	1 +	AATTATTAATTTATATTAATTTATAGATAGTGATTATTAGTTTAAATAGTAAGGGATTTGGAGATAGGAGGATTGGTAATAAATTGGTTTGGAGAAGATAAATGTGGATGGGTTTTTTAG
chr13	81061307	81061427	Hypo	1 -	ACCAATTTATACCAATTCATAAATAATAATTACTAATTTAAATAATAAAAAATTTAAATAAAATAAAACAAAAAAACTAATAACAAATTAATCTAAAAAAAATAAATATAAATAAATCTC
chr13	81061307	81061427	Hypo	1 +	ATTAATTTATATTAATTTATAGATAGTGATTATTAGTTTAAATAGTAAGGGATTTGGATGGAGTAAGATAGGAGGATTGGTAATAAATTGGTTTGGAGAAGATAAATGTGGATGGGTTTT
chr13	81061303	81061423	Hyper	1 -	AACTACCAATTTATACCAATTCATAAATAATAATTACTAATTTAAATAATAAAAAATTTAAAAACAAAAAAACTAATAACAAATTAATCTAAAAAAAATAAATATAAATAAATCTCTTAA
chr13	81061303	81061423	Hyper	1 +	AATTATTAATTTATATTAATTTATAGATAGTGATTATTAGTTTAAATAGTAAGGGATTTGGAGATAGGAGGATTGGTAATAAATTGGTTTGGAGAAGATAAATGTGGATGGGTTTTTTAG
chr13	81061307	81061427	Hyper	1 -	ACCAATTTATACCAATTCATAAATAATAATTACTAATTTAAATAATAAAAAATTTAAATAAAATAAAACAAAAAAACTAATAACAAATTAATCTAAAAAAAATAAATATAAATAAATCTC
chr13	81061307	81061427	Hyper	1 +	ATTAATTTATATTAATTTATAGATAGTGATTATTAGTTTAAATAGTAAGGGATTTGGATGGAGTAAGATAGGAGGATTGGTAATAAATTGGTTTGGAGAAGATAAATGTGGATGGGTTTT
chr13	24386268	24386388	Hypo	1 -	CCCCAAAACTTCTCAACTAACATTCTCCACATAAACACCAATTCCACAATTACTAACTATAACACATACAAAAAAAAAAAAAACCCATAAAAAACAATATATAAACTATAACCCTAAAAAA
chr13	24386268	24386388	Hypo	1 +	TTTTAAAATTTTTTAGTTAGTATTTTTTATGTAAGTATTAATTTTATAGTTATTAATTGTAATGTGTGTAGGGAAGAAAAGGTTTGTAGGGGATGGTATGTGAGTTGTGATTTTGAAAGG
chr13	24386265	24386385	Hypo	1 -	TACCCCCAAAACTTCTCAACTAACATTCTCCACATAAACACCAATTCCACAATTACTAACTATACAAAAAAAAAAAAAACCCATAAAAAACAATATATAAACTATAACCCTAAAAAACTTA

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chr13	24386265	24386385	Hypo	1 +	TGTTTTTAAAATTTTTTAGTTAGTATTTTTTATGTAAGTATTAATTTTATAGTTATTAATTGTGTAGGGAAGAAAAGGTTTGTAGGGGATGGTATGTGAGTTGTGATTTTGAAAGGTTTG
chr13	24386268	24386388	Hyper	1 -	CCCCAAAACTTCTCAACTAACATTCTCCACGTAAACACCAATTCCACAATTACTAACTATAACGCGTACAAAAAAAAAAAAAACCCGTAAAAAACGATATATAAACTATAACCCTAAAAAA
chr13	24386268	24386388	Hyper	1 +	TTTTAAAATTTTTTAGTTAGTATTTTTTACGTAAGTATTAATTTTATAGTTATTAATTGTAACGCGTGTAGGGAAGAAAAGGTTCGTAGGGGACGGTATGTGAGTTGTGATTTTGAAAGG
chr13	24386265	24386385	Hyper	1 -	TACCCCCAAAACTTCTCAACTAACATTCTCCACGTAAACACCAATTCCACAATTACTAACTATACAAAAAAAAAAAAAACCCGTAAAAAACGATATATAAACTATAACCCTAAAAAACTTA
chr13	24386265	24386385	Hyper	1 +	TGTTTTTAAAATTTTTTAGTTAGTATTTTTTACGTAAGTATTAATTTTATAGTTATTAATTGTGTAGGGAAGAAAAGGTTCGTAGGGGACGGTATGTGAGTTGTGATTTTGAAAGGTTTG
chr12	8934674	8934794	Hypo	1 -	AAAACAATAATTTTAATTACTATATAAAAATTTTAATACTTTAAAACTAAAAAAAAAATAATAAACTTAAATTTTAATCTAAATCAAAAATTATTTTTTTCTATAATTTATTATTAAATTA
chr12	8934674	8934794	Hypo	1 +	AGAATAGTAATTTTGATTATTATATAAAAATTTTAATGTTTTAGAATTGAAAGAAAATGATAAATTTGAGTTTTAATTTGAATTAAAAATTGTTTTTTTTTGTAATTTATTGTTAAGTTA
chr12	8934670	8934790	Hypo	1 -	TAACAAAACAATAATTTTAATTACTATATAAAAATTTTAATACTTTAAAACTAAAAAAAAAATAAATTTTAATCTAAATCAAAAATTATTTTTTTCTATAATTTATTATTAAATTAACCTA
chr12	8934670	8934790	Hypo	1 +	TGATAGAATAGTAATTTTGATTATTATATAAAAATTTTAATGTTTTAGAATTGAAAGAAAATGAGTTTTAATTTGAATTAAAAATTGTTTTTTTTTGTAATTTATTGTTAAGTTAATTTG
chr12	8934674	8934794	Hyper	1 -	AAAACAATAATTTTAATTACTATATAAAAATTTTAATACTTTAAAACTAAAAAAAAAATAATAAACTTAAATTTTAATCTAAATCAAAAATTATTTTTTTCTATAATTTATTATTAAATTA
chr12	8934674	8934794	Hyper	1 +	AGAATAGTAATTTTGATTATTATATAAAAATTTTAATGTTTTAGAATTGAAAGAAAATGATAAATTTGAGTTTTAATTTGAATTAAAAATTGTTTTTTTTTGTAATTTATTGTTAAGTTA
chr12	8934670	8934790	Hyper	1 -	TAACAAAACAATAATTTTAATTACTATATAAAAATTTTAATACTTTAAAACTAAAAAAAAAATAAATTTTAATCTAAATCAAAAATTATTTTTTTCTATAATTTATTATTAAATTAACCTA
chr12	8934670	8934790	Hyper	1 +	TGATAGAATAGTAATTTTGATTATTATATAAAAATTTTAATGTTTTAGAATTGAAAGAAAATGAGTTTTAATTTGAATTAAAAATTGTTTTTTTTTGTAATTTATTGTTAAGTTAATTTG
chr14	60720933	60721053	Hypo	1 -	TTTAAAAAACATTATAAACTCTATAAATTTAAAAAACTTACATTTAAATAAACTAAAAATTATAAAAAAAAAAAAAAAAATTAAATATAAATAACTTTATTTAACTCTACAAAACTAACAAA
chr14	60720933	60721053	Hypo	1 +	TTTAGAAGATATTGTAAATTTTGTGAGTTTAGAGAGTTTGTATTTGAATAGATTAAAAGTTATAGAAGAAAGAGAAAGTTGAGTATGAGTAGTTTTATTTGGTTTTGTAAAGTTGGTAAG
chr14	60720937	60721057	Hypo	2 -	AAAAACATTATAAACTCTATAAATTTAAAAAACTTACATTTAAATAAACTAAAAATTAAAACATAATAAAAAAAAAAAAAAAAATTAAATATAAATAACTTTATTTAACTCTACAAAACTAA
chr14	60720937	60721057	Hypo	1 +	GAAGATATTGTAAATTTTGTGAGTTTAGAGAGTTTGTATTTGAATAGATTAAAAGTTAAGATGTAATAGAAGAAAGAGAAAGTTGAGTATGAGTAGTTTTATTTGGTTTTGTAAAGTTGG
chr14	60720933	60721053	Hyper	1 -	TTTAAAAAACATTATAAACTCTATAAATTTAAAAAACTTACATTTAAATAAACTAAAAATTATAAAAAAAAAAAAAAAAATTAAATATAAATAACTTTATTTAACTCTACAAAACTAACAAA
chr14	60720933	60721053	Hyper	1 +	TTTAGAAGATATTGTAAATTTTGTGAGTTTAGAGAGTTTGTATTTGAATAGATTAAAAGTTATAGAAGAAAGAGAAAGTTGAGTATGAGTAGTTTTATTTGGTTTTGTAAAGTTGGTAAG
chr14	60720937	60721057	Hyper	2 -	AAAAACATTATAAACTCTATAAATTTAAAAAACTTACATTTAAATAAACTAAAAATTAAAACGTAATAAAAAAAAAAAAAAAAATTAAATATAAATAACTTTATTTAACTCTACAAAACTAA
chr14	60720937	60721057	Hyper	1 +	GAAGATATTGTAAATTTTGTGAGTTTAGAGAGTTTGTATTTGAATAGATTAAAAGTTAAGACGTAATAGAAGAAAGAGAAAGTTGAGTATGAGTAGTTTTATTTGGTTTTGTAAAGTTGG
chrX	95097934	95098054	Hypo	1 -	AATATATATTATCATATTTAAATTATCAATAACTAATTTACAATCACAAAACTAAAAAATAACATTCAAATTCAAATCTATCTAACCCTAAAACTAAAACTTACAAACATTATTAAATAC
chrX	95097934	95098054	Hypo	1 +	GGTATGTATTATTATGTTTAGGTTATTAGTGATTAATTTGTGGTTATAGAGTTAGGAAGTGGTATTTAAATTTAGATTTATTTGATTTTAAAGTTAGGGTTTATAAATATTATTGAATAT
chrX	95097939	95098059	Hypo	2 -	ATATTATCATATTTAAATTATCAATAACTAATTTACAATCACAAAACTAAAAAATAACATAACCAACATTCAAATTCAAATCTATCTAACCCTAAAACTAAAACTTACAAACATTATTAA
chrX	95097939	95098059	Hypo	1 +	GTATTATTATGTTTAGGTTATTAGTGATTAATTTGTGGTTATAGAGTTAGGAAGTGGTATAGTTAGTATTTAAATTTAGATTTATTTGATTTTAAAGTTAGGGTTTATAAATATTATTGA
chrX	95097934	95098054	Hyper	1 -	AATATATATTATCATATTTAAATTATCAATAACTAATTTACGATCACAAAACTAAAAAATAACATTCAAATTCAAATCTATCTAACCCTAAAACTAAAACTTACAAACATTATTAAATAC
chrX	95097934	95098054	Hyper	1 +	GGTATGTATTATTATGTTTAGGTTATTAGTGATTAATTTGCGGTTATAGAGTTAGGAAGTGGTATTTAAATTTAGATTTATTTGATTTTAAAGTTAGGGTTTATAAATATTATTGAATAT
chrX	95097939	95098059	Hyper	2 -	ATATTATCATATTTAAATTATCAATAACTAATTTACGATCACAAAACTAAAAAATAACATAACCAACATTCAAATTCAAATCTATCTAACCCTAAAACTAAAACTTACAAACATTATTAA
chrX	95097939	95098059	Hyper	1 +	GTATTATTATGTTTAGGTTATTAGTGATTAATTTGCGGTTATAGAGTTAGGAAGTGGTATAGTTAGTATTTAAATTTAGATTTATTTGATTTTAAAGTTAGGGTTTATAAATATTATTGA
chr5	59451577	59451697	Hypo	1 -	CACCCAAACTCATATAATTTCAAAAACCTTCAACTTCTAAAAATCTAAAAAACAATCCAAAAATTAAAATATATTCTTAAACCTATTACAATAATTCACATAACTTTTCATTAAATAAAT
chr5	59451577	59451697	Hypo	1 +	TATTTAAGTTTATATAATTTTAGAGGTTTTTGATTTTTAAAGGTTTAAAAAATAGTTTAAGAATTAAGGTGTGTTTTTGAATTTATTATAATAGTTTATATAGTTTTTTATTAAATGAAT
chr5	59451574	59451694	Hypo	1 -	CAACACCCAAACTCATATAATTTCAAAAACCTTCAACTTCTAAAAATCTAAAAAACAATCCAAAATATATTCTTAAACCTATTACAATAATTCACATAACTTTTCATTAAATAAATCAAA
chr5	59451574	59451694	Hypo	1 +	TAATATTTAAGTTTATATAATTTTAGAGGTTTTTGATTTTTAAAGGTTTAAAAAATAGTTTAAGGTGTGTTTTTGAATTTATTATAATAGTTTATATAGTTTTTTATTAAATGAATTAAA
chr5	59451577	59451697	Hyper	1 -	CACCCAAACTCATATAATTTCAAAAACCTTCGACTTCTAAAAATCTAAAAAACAATCCAAAAATTAAAATATATTCTTAAACCTATTACAATAATTCACATAACTTTTCATTAAATAAAT
chr5	59451577	59451697	Hyper	1 +	TATTTAAGTTTATATAATTTTAGAGGTTTTCGATTTTTAAAGGTTTAAAAAATAGTTTAAGAATTAAGGTGTGTTTTTGAATTTATTATAATAGTTTATATAGTTTTTTATTAAATGAAT
chr5	59451574	59451694	Hyper	1 -	CAACACCCAAACTCATATAATTTCAAAAACCTTCGACTTCTAAAAATCTAAAAAACAATCCAAAATATATTCTTAAACCTATTACAATAATTCACATAACTTTTCATTAAATAAATCAAA
chr5	59451574	59451694	Hyper	1 +	TAATATTTAAGTTTATATAATTTTAGAGGTTTTCGATTTTTAAAGGTTTAAAAAATAGTTTAAGGTGTGTTTTTGAATTTATTATAATAGTTTATATAGTTTTTTATTAAATGAATTAAA
chr17	59786667	59786787	Hypo	1 -	TTATAATATTATAAATTTAACATTTTCATTTCTTTATTATCATAAAATTTTAAAAAAATAAAAAATAACATAAATATTCAATTTTTCTACAAAAACAAAAAAAATCTAAATTTTATAAAA
chr17	59786667	59786787	Hypo	1 +	TTGTAATATTGTAGGTTTGATATTTTTATTTTTTTATTATTATAGGATTTTGAGGGGGTGAAGAGTAATATAAATGTTTAATTTTTTTATAAAGATAAAAAAAATTTAAATTTTATAGGG
chr17	59786662	59786782	Hypo	1 -	TCTCTTTATAATATTATAAATTTAACATTTTCATTTCTTTATTATCATAAAATTTTAAAAAAACATAAATATTCAATTTTTCTACAAAAACAAAAAAAATCTAAATTTTATAAAACATTA
chr17	59786662	59786782	Hypo	1 +	TTTTTTTGTAATATTGTAGGTTTGATATTTTTATTTTTTTATTATTATAGGATTTTGAGGGAATATAAATGTTTAATTTTTTTATAAAGATAAAAAAAATTTAAATTTTATAGGGTATTA
chr17	59786667	59786787	Hyper	1 -	TTATAATATTATAAATTTAACATTTTCATTTCTTTATTATCATAAAATTTTAAAAAAATAAAAAATAACATAAATATTCAATTTTTCTACAAAAACAAAAAAAATCTAAATTTTATAAAA
chr17	59786667	59786787	Hyper	1 +	TTGTAATATTGTAGGTTTGATATTTTTATTTTTTTATTATTATAGGATTTTGAGGGGGTGAAGAGTAATATAAATGTTTAATTTTTTTATAAAGATAAAAAAAATTTAAATTTTATAGGG
chr17	59786662	59786782	Hyper	1 -	TCTCTTTATAATATTATAAATTTAACATTTTCATTTCTTTATTATCATAAAATTTTAAAAAAACATAAATATTCAATTTTTCTACAAAAACAAAAAAAATCTAAATTTTATAAAACATTA
chr17	59786662	59786782	Hyper	1 +	TTTTTTTGTAATATTGTAGGTTTGATATTTTTATTTTTTTATTATTATAGGATTTTGAGGGAATATAAATGTTTAATTTTTTTATAAAGATAAAAAAAATTTAAATTTTATAGGGTATTA
chr15	70489283	70489403	Hypo	1 -	ACAAAAAAACTTTACTAATAATCATCAAACATAAACCCTTCAAAAAAAAAACCCATCTATAAACCCCAACAAAAAAACCTAACACCAATAAATACCTAAAAAACACTTAATAACAATTCAC
chr15	70489283	70489403	Hypo	1 +	ATAGGAAGGTTTTGTTAATGATTGTTAGGTATGAGTTTTTTAAGGAAGGGATTTGTTTGTAGGTTTTAGTAGAGGATTTGATATTAGTGGGTGTTTAGGGAGTATTTAGTGGTAGTTTAT
chr15	70489287	70489407	Hypo	1 -	AAAAACTTTACTAATAATCATCAAACATAAACCCTTCAAAAAAAAAACCCATCTATAAAAAACAAAACCCCAACAAAAAAACCTAACACCAATAAATACCTAAAAAACACTTAATAACAAT
chr15	70489287	70489407	Hypo	1 +	GAAGGTTTTGTTAATGATTGTTAGGTATGAGTTTTTTAAGGAAGGGATTTGTTTGTAGGAAGTAGGGTTTTAGTAGAGGATTTGATATTAGTGGGTGTTTAGGGAGTATTTAGTGGTAGT
chr15	70489283	70489403	Hyper	1 -	ACAAAAAAACTTTACTAATAATCGTCAAACATAAACCCTTCAAAAAAAAAACCCGTCTATAAACCCCAACAAAAAAACCTAACACCAATAAATACCTAAAAAACACTTAATAACAATTCAC
chr15	70489283	70489403	Hyper	1 +	ATAGGAAGGTTTTGTTAATGATCGTTAGGTATGAGTTTTTTAAGGAAGGGATTCGTTTGTAGGTTTTAGTAGAGGATTTGATATTAGTGGGTGTTTAGGGAGTATTTAGTGGTAGTTTAT
chr15	70489287	70489407	Hyper	1 -	AAAAACTTTACTAATAATCGTCAAACATAAACCCTTCAAAAAAAAAACCCGTCTATAAAAAACAAAACCCCAACAAAAAAACCTAACACCAATAAATACCTAAAAAACACTTAATAACAAT

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chr15	70489287	70489407	Hyper	1	+	GAAGGTTTTGTTAATGATCGTTAGGTATGAGTTTTTTAAGGAAGGGATTCGTTTGTAGGAAGTAGGGTTTTAGTAGAGGATTTGATATTAGTGGGTGTTTAGGGAGTATTTAGTGGTAGT
chr6	55441976	55442096	Hypo	1	-	AAATTCAAAAAACCAAATATCAAATATTAATACTACTATAAATTCAATTACAATAAAATAAAAAAAATCACAATTCAACAATATTAAAACTAAAACAAAATTATTTTTAAAAATTCCCAA
chr6	55441976	55442096	Hypo	1	+	AAGTTTAAAAAGTTAAGTGTTAGATGTTAGTGTTGTTGTGAGTTTAATTATGATAAGATAGAAAAAATTATAATTTAATAGTATTGGAATTAAAATAGAATTATTTTTAAAAATTTTTGA
chr6	55441972	55442092	Hypo	1	-	AATAAAATTCAAAAAACCAAATATCAAATATTAATACTACTATAAATTCAATTACAATAAAATCACAATTCAACAATATTAAAACTAAAACAAAATTATTTTTAAAAATTCCCAAAAACA
chr6	55441972	55442092	Hypo	1	+	GATAAAGTTTAAAAAGTTAAGTGTTAGATGTTAGTGTTGTTGTGAGTTTAATTATGATAAGATTATAATTTAATAGTATTGGAATTAAAATAGAATTATTTTTAAAAATTTTTGAGAATA
chr6	55441976	55442096	Hyper	1	-	AAATTCAAAAAACCAAATATCAAATATTAATACTACTATAAATTCAATTACGATAAAATAAAAAAAATCACAATTCAACAATATTAAAACTAAAACAAAATTATTTTTAAAAATTCCCGA
chr6	55441976	55442096	Hyper	1	+	AAGTTTAAAAAGTTAAGTGTTAGATGTTAGTGTTGTTGTGAGTTTAATTACGATAAGATAGAAAAAATTATAATTTAATAGTATTGGAATTAAAATAGAATTATTTTTAAAAATTTTCGA
chr6	55441972	55442092	Hyper	1	-	AATAAAATTCAAAAAACCAAATATCAAATATTAATACTACTATAAATTCAATTACGATAAAATCACAATTCAACAATATTAAAACTAAAACAAAATTATTTTTAAAAATTCCCGAAAACA
chr6	55441972	55442092	Hyper	1	+	GATAAAGTTTAAAAAGTTAAGTGTTAGATGTTAGTGTTGTTGTGAGTTTAATTACGATAAGATTATAATTTAATAGTATTGGAATTAAAATAGAATTATTTTTAAAAATTTTCGAGAATA
chr11	115279691	115279811	Hypo	1	-	CCAACTCTAATTACACAATATCACATATCACACATCATCAACCCAAAAAAATCAAAAAAAAAACCCAAACAACTATAACATATATAAAAAAATAAACAATAAACATTTTTAAAATCCTAA
chr11	115279691	115279811	Hypo	1	+	TTAATTTTAGTTGTATAGTGTTATATGTTATATATTATTAGTTTAAGGAGGTTAAAAAGGGAGTTTAGGTAGTTATAATGTATATGAAGAGATGAATAATGAATATTTTTAAAATTTTGA
chr11	115279687	115279807	Hypo	1	-	AATACCAACTCTAATTACACAATATCACATATCACACATCATCAACCCAAAAAAATCAAAAAAACAACTATAACATATATAAAAAAATAAACAATAAACATTTTTAAAATCCTAATCTAA
chr11	115279687	115279807	Hypo	1	+	AATATTAATTTTAGTTGTATAGTGTTATATGTTATATATTATTAGTTTAAGGAGGTTAAAAAGGTAGTTATAATGTATATGAAGAGATGAATAATGAATATTTTTAAAATTTTGATTTAG
chr11	115279691	115279811	Hyper	1	-	CCAACTCTAATTACACAATATCACATATCACACATCATCAACCCAAAAAAATCAAAAAAAAAACCCAAACAACTATAACGTATATAAAAAAATAAACAATAAACATTTTTAAAATCCTAA
chr11	115279691	115279811	Hyper	1	+	TTAATTTTAGTTGTATAGTGTTATATGTTATATATTATTAGTTTAAGGAGGTTAAAAAGGGAGTTTAGGTAGTTATAACGTATATGAAGAGATGAATAATGAATATTTTTAAAATTTTGA
chr11	115279687	115279807	Hyper	1	-	AATACCAACTCTAATTACACAATATCACATATCACACATCATCAACCCAAAAAAATCAAAAAAACAACTATAACGTATATAAAAAAATAAACAATAAACATTTTTAAAATCCTAATCTAA
chr11	115279687	115279807	Hyper	1	+	AATATTAATTTTAGTTGTATAGTGTTATATGTTATATATTATTAGTTTAAGGAGGTTAAAAAGGTAGTTATAACGTATATGAAGAGATGAATAATGAATATTTTTAAAATTTTGATTTAG
chr2	74375210	74375330	Hypo	1	-	AACACCTACCAACCTCAAAACCCCACCCTCTACCTTCACTCACACCACTCTCCTTCAATCTCCCCAAAACCTATTTCATAAATAAAATCCCCTTACCCACATAAAAATCTCATTCCTCCT
chr2	74375210	74375330	Hypo	1	+	AGTGTTTGTTGATTTTGGGGTTTTGTTTTTTGTTTTTGTTTGTGTTGTTTTTTTTTAGTTTTTTTAGGGTTTGTTTTATGGATAGGGTTTTTTTGTTTGTGTGAAAGTTTTATTTTTTTTT
chr2	74375205	74375325	Hypo	1	-	ACTACAACACCTACCAACCTCAAAACCCCACCCTCTACCTTCACTCACACCACTCTCCTTCAAACCTATTTCATAAATAAAATCCCCTTACCCACATAAAAATCTCATTCCTCCTCAACT
chr2	74375205	74375325	Hypo	1	+	ATTGTAGTGTTTGTTGATTTTGGGGTTTTGTTTTTTGTTTTTGTTTGTGTTGTTTTTTTTTGGGTTTGTTTTATGGATAGGGTTTTTTTGTTTGTGTGAAAGTTTTATTTTTTTTTTAGTT
chr2	74375210	74375330	Hyper	1	-	AACGCCTACCGACCTCGAAACCCCGCCCTCTACCTTCGCTCGCGCCGCTCTCCTTCAATCTCCCCAAAACCTATTTCATAAATAAAATCCCCTTACCCGCGTAAAAATCTCATTCCTCCT
chr2	74375210	74375330	Hyper	1	+	AGCGTTTGTCGATTTCGGGGTTTCGTTTTTTGTTTTCGTTCGCGTCGTTTTTTTTTAGTTTTTTTAGGGTTTGTTTTATGGATAGGGTTTTTTTGTTCGCGTGAAAGTTTTATTTTTTTTT
chr2	74375205	74375325	Hyper	1	-	ACTACAACGCCTACCGACCTCGAAACCCCGCCCTCTACCTTCGCTCGCGCCGCTCTCCTTCGAACCTATTTCATAAATAAAATCCCCTTACCCGCGTAAAAATCTCATTCCTCCTCAACT
chr2	74375205	74375325	Hyper	1	+	ATTGTAGCGTTTGTCGATTTCGGGGTTTCGTTTTTTGTTTTCGTTCGCGTCGTTTTTTTTCGGGTTTGTTTTATGGATAGGGTTTTTTTGTTCGCGTGAAAGTTTTATTTTTTTTTTAGTT
chr8	27981284	27981404	Hypo	1	-	TCATCATAAAATATCCTTCCACATCCCTAATCTTACAATTTACTTAATATTAATTTAACCATCATATACTTACTATTTACCCTATATATTATCCTTTTCCATACATTTACTTTCCACCCA
chr8	27981284	27981404	Hypo	1	+	TTATTATGAGATGTTTTTTTGTATTTTTGGTTTTGTAGTTTATTTGGTGTTAATTTAGTTGTTATGTGTTTATTGTTTGTTTTGTGTATTATTTTTTTTTATATATTTGTTTTTTATTTA
chr8	27981288	27981408	Hypo	1	-	CATAAAATATCCTTCCACATCCCTAATCTTACAATTTACTTAATATTAATTTAACCATCACAACCTCATATACTTACTATTTACCCTATATATTATCCTTTTCCATACATTTACTTTCCA
chr8	27981288	27981408	Hypo	1	+	TATGAGATGTTTTTTTGTATTTTTGGTTTTGTAGTTTATTTGGTGTTAATTTAGTTGTTATAGTTTTATGTGTTTATTGTTTGTTTTGTGTATTATTTTTTTTTATATATTTGTTTTTTA
chr8	27981284	27981404	Hyper	1	-	TCATCATAAAATATCCTTCCGCATCCCTAATCTTACAATTTACTTAATATTAATTTAACCGTCATATACTTACTATTTACCCTATATATTATCCTTTTCCATACATTTACTTTCCACCCA
chr8	27981284	27981404	Hyper	1	+	TTATTATGAGATGTTTTTTCGTATTTTTGGTTTTGTAGTTTATTTGGTGTTAATTTAGTCGTTATGTGTTTATTGTTTGTTTTGTGTATTATTTTTTTTTATATATTTGTTTTTTATTTA
chr8	27981288	27981408	Hyper	1	-	CATAAAATATCCTTCCGCATCCCTAATCTTACAATTTACTTAATATTAATTTAACCGTCACAACCTCATATACTTACTATTTACCCTATATATTATCCTTTTCCATACATTTACTTTCCA
chr8	27981288	27981408	Hyper	1	+	TATGAGATGTTTTTTCGTATTTTTGGTTTTGTAGTTTATTTGGTGTTAATTTAGTCGTTATAGTTTTATGTGTTTATTGTTTGTTTTGTGTATTATTTTTTTTTATATATTTGTTTTTTA
chr20	31107215	31107335	Hypo	1	-	ACTTAAATACCACCCAAATAAACAACACACCCTTCATTCAAATCTATTTCCATCCTCAAACCTAACTTCAACAACTTCCACAAACCCAATACCCAAAAACTAACATAATACACCAAACAA
chr20	31107215	31107335	Hypo	1	+	ATTTGAGTGTTATTTGGATAAATGGTGTGTTTTTTATTTGAGTTTGTTTTTATTTTTGGGTTTGATTTTAGTAATTTTTATAGGTTTGATGTTTGGGAGTTGGTATGATGTATTAGGTAG
chr20	31107220	31107340	Hypo	1	-	AATACCACCCAAATAAACAACACACCCTTCATTCAAATCTATTTCCATCCTCAAACAAAACACCCACTAACTTCAACAACTTCCACAAACCCAATACCCAAAAACTAACATAATACACCA
chr20	31107220	31107340	Hypo	1	+	AGTGTTATTTGGATAAATGGTGTGTTTTTTATTTGAGTTTGTTTTTATTTTTGGGTAAAATATTTATTGATTTTAGTAATTTTTATAGGTTTGATGTTTGGGAGTTGGTATGATGTATTA
chr20	31107215	31107335	Hyper	1	-	ACTTAAATACCACCCGAATAAACGACGCGCCCTTCATTCGAATCTATTTCCATCCTCGAACCTAACTTCAACAACTTCCACAAACCCGATACCCGAAAACTAACATAATACACCAAACAA
chr20	31107215	31107335	Hyper	1	+	ATTTGAGTGTTATTCGGATAAACGGCGCGTTTTTTATTCGAGTTTGTTTTTATTTTCGGGTTTGATTTTAGTAATTTTTATAGGTTCGATGTTCGGGAGTTGGTATGATGTATTAGGTAG
chr20	31107220	31107340	Hyper	1	-	AATACCACCCGAATAAACGACGCGCCCTTCATTCGAATCTATTTCCATCCTCGAACAAAACACCCACTAACTTCAACAACTTCCACAAACCCGATACCCGAAAACTAACATAATACACCA
chr20	31107220	31107340	Hyper	1	+	AGTGTTATTCGGATAAACGGCGCGTTTTTTATTCGAGTTTGTTTTTATTTTCGGGTAAAATATTTATTGATTTTAGTAATTTTTATAGGTTCGATGTTCGGGAGTTGGTATGATGTATTA
chr2	144412924	144413044	Hypo	1	-	AAAATATAAACCTTAAAATCAAATAAACTTAAATTTAAATTTAAACCCTACTACATACTACCAAACACAATATAATAATCAACAAAATTTCAACACATCAATTTTCTCATCTTTAAAATA
chr2	144412924	144413044	Hypo	1	+	AGAATATGAGTTTTAAAGTTAGGTAAATTTGGGTTTGAATTTGGGTTTTGTTATATATTGTTAGATATAGTGTGGTAATTAATAGGATTTTAATATATTAATTTTTTTATTTTTAGAATG
chr2	144412919	144413039	Hypo	1	-	TAAAAAAAATATAAACCTTAAAATCAAATAAACTTAAATTTAAATTTAAACCCTACTACATACAATATAATAATCAACAAAATTTCAACACATCAATTTTCTCATCTTTAAAATAAATCT
chr2	144412919	144413039	Hypo	1	+	TGGAGAGAATATGAGTTTTAAAGTTAGGTAAATTTGGGTTTGAATTTGGGTTTTGTTATATATAGTGTGGTAATTAATAGGATTTTAATATATTAATTTTTTTATTTTTAGAATGAATTT
chr2	144412924	144413044	Hyper	1	-	AAAATATAAACCTTAAAATCAAATAAACTTAAATTTAAATTTAAACCCTACTACATACTACCAAACACAATATAATAATCAACAAAATTTCAACACATCAATTTTCTCATCTTTAAAATA
chr2	144412924	144413044	Hyper	1	+	AGAATATGAGTTTTAAAGTTAGGTAAATTTGGGTTTGAATTTGGGTTTTGTTATATATTGTTAGATATAGTGTGGTAATTAATAGGATTTTAATATATTAATTTTTTTATTTTTAGAATG
chr2	144412919	144413039	Hyper	1	-	TAAAAAAAATATAAACCTTAAAATCAAATAAACTTAAATTTAAATTTAAACCCTACTACATACAATATAATAATCAACAAAATTTCAACACATCAATTTTCTCATCTTTAAAATAAATCT
chr2	144412919	144413039	Hyper	1	+	TGGAGAGAATATGAGTTTTAAAGTTAGGTAAATTTGGGTTTGAATTTGGGTTTTGTTATATATAGTGTGGTAATTAATAGGATTTTAATATATTAATTTTTTTATTTTTAGAATGAATTT
chr10	116665998	116666118	Hypo	1	-	AAATTCAAAATTTAAAATACATATATATATATAATTATTACATAACCCACTCTAAAATAATAAAAAAATTCAATAAAAATACATATAAAATACTAACTATAAATTATCACACATATTATCATC
chr10	116665998	116666118	Hypo	1	+	GAGTTTAGAATTTAAAATATATATGTATATAATTGTTGTATAGTTTATTTTGAAGTAGTAGAAGATTTAATGAAAATGTATGTGGAATGTTGATTATAAATTATTATATATATTATTATT
chr10	116666003	116666123	Hypo	1	-	CAAAATTTAAAATACATATATATATATAATTATTACATAACCCACTCTAAAATAATAATTACAAATAAAAAATTCAATAAAAATACATATAAAATACTAACTATAAATTATCACACATATTA

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chr10	116666003	116666123	Hypo	1	+	TAGAATTTAAAATATATATGTATATAATTGTTGTATAGTTTATTTTGAAGTAGTAGTTGTAAATAAAAGATTTAATGAAAATGTATGTGGAATGTTGATTATAAATTATTATATATATTA
chr10	116665998	116666118	Hyper	1	-	AAATTCAAAATTTAAAATACATATATATATATAATTATTACATAACCCACTCTAAAATAATAAAAAAATTCAATAAAAATACATATAAAATACTAACTATAAATTATCACACATATTATCATC
chr10	116665998	116666118	Hyper	1	+	GAGTTTAGAATTTAAAATATATATGTATATAATTGTTGTATAGTTTATTTTGAAGTAGTAGAAGATTTAATGAAAATGTATGTGGAATGTTGATTATAAATTATTATATATATTATTATT
chr10	116666003	116666123	Hyper	1	-	CAAAATTTAAAATACATATATATATATAATTATTACATAACCCACTCTAAAATAATAATTACAAATAAAAAATTCAATAAAAATACATATAAAATACTAACTATAAATTATCACACATATTA
chr10	116666003	116666123	Hyper	1	+	TAGAATTTAAAATATATATGTATATAATTGTTGTATAGTTTATTTTGAAGTAGTAGTTGTAAATAAAAGATTTAATGAAAATGTATGTGGAATGTTGATTATAAATTATTATATATATTA
chr15	64278993	64279113	Hypo	1	-	AATCTAAACCTAAAAATAAAACTATTTAAAAACCCACTAAATAACTAACATACAACCAAAACTAACTTACAACAACTTTCTAATTATCTCCATTTCACAAATAAAAAAACTATACCACTA
chr15	64278993	64279113	Hypo	2	+	GGTTTGGGTTTGAAGATGGGGTTATTTAAAAGTTTGTTGGGTAATTGATATGTAGTTAGGGTTGATTTATAATAGTTTTTTGATTATTTTTATTTTATAAATGAAGAAATTATATTATTG
chr15	64278998	64279118	Hypo	1	-	AAACCTAAAAATAAAACTATTTAAAAACCCACTAAATAACTAACATACAACCAAAACTAAAAACCACTAACTTACAACAACTTTCTAATTATCTCCATTTCACAAATAAAAAAACTATAC
chr15	64278998	64279118	Hypo	2	+	GGGTTTGAAGATGGGGTTATTTAAAAGTTTGTTGGGTAATTGATATGTAGTTAGGGTTGAGAATTATTGATTTATAATAGTTTTTTGATTATTTTTATTTTATAAATGAAGAAATTATAT
chr15	64278993	64279113	Hyper	1	-	AATCTAAACCTAAAAATAAAACTATTTAAAAACCCGCTAAATAACTAACATACAACCAAAACTAACTTACAACAACTTTCTAATTATCTCCATTTCACAAATAAAAAAACTATACCACTA
chr15	64278993	64279113	Hyper	2	+	GGTTTGGGTTTGAAGATGGGGTTATTTAAAAGTTCGTTGGGTAATTGATATGTAGTTAGGGTTGATTTATAATAGTTTTTTGATTATTTTTATTTTATAAATGAAGAAATTATATTATTG
chr15	64278998	64279118	Hyper	1	-	AAACCTAAAAATAAAACTATTTAAAAACCCGCTAAATAACTAACATACAACCAAAACTAAAAACCACTAACTTACAACAACTTTCTAATTATCTCCATTTCACAAATAAAAAAACTATAC
chr15	64278998	64279118	Hyper	2	+	GGGTTTGAAGATGGGGTTATTTAAAAGTTCGTTGGGTAATTGATATGTAGTTAGGGTTGAGAATTATTGATTTATAATAGTTTTTTGATTATTTTTATTTTATAAATGAAGAAATTATAT
chr18	58815182	58815302	Hypo	1	-	ACAACAATAAATTCTCAAAAAACAAATCTATTTCCAAAAAAAACAAAATATATATTAAAAAACTACATTTACACTATCACACATACACACACAAAAATATACACATATATATATCCATAT
chr18	58815182	58815302	Hypo	1	+	GTAATAATGAATTTTTAAAGGGTAAGTTTGTTTTTAAGAAAAGTAGAATATATATTGAAGAATTGTATTTATATTATTATATATATATATATATAAGAATATATATATGTGTGTGTTTATAT
chr18	58815186	58815306	Hypo	1	-	CAATAAATTCTCAAAAAACAAATCTATTTCCAAAAAAAACAAAATATATATTAAAAAACAAATCACTACATTTACACTATCACACATACACACACAAAAATATACACATATATATATCCA
chr18	58815186	58815306	Hypo	1	+	TAATGAATTTTTAAAGGGTAAGTTTGTTTTTAAGAAAAGTAGAATATATATTGAAGAATAGGTTATTGTATTTATATTATTATATATATATATATATAAGAATATATATATGTGTGTGTTTA
chr18	58815182	58815302	Hyper	1	-	ACAACAATAAATTCTCAAAAAACAAATCTATTTCCAAAAAAAACAAAATATATATTAAAAAACTACATTTACACTATCACACATACACACACAAAAATATACACATATATATATCCATAT
chr18	58815182	58815302	Hyper	1	+	GTAATAATGAATTTTTAAAGGGTAAGTTTGTTTTTAAGAAAAGTAGAATATATATTGAAGAATTGTATTTATATTATTATATATATATATATATAAGAATATATATATGTGTGTGTTTATAT
chr18	58815186	58815306	Hyper	1	-	CAATAAATTCTCAAAAAACAAATCTATTTCCAAAAAAAACAAAATATATATTAAAAAACAAATCACTACATTTACACTATCACACATACACACACAAAAATATACACATATATATATCCA
chr18	58815186	58815306	Hyper	1	+	TAATGAATTTTTAAAGGGTAAGTTTGTTTTTAAGAAAAGTAGAATATATATTGAAGAATAGGTTATTGTATTTATATTATTATATATATATATATATAAGAATATATATATGTGTGTGTTTA
chr7	108252063	108252183	Hypo	1	-	ACTAAACCAATATACACTAAAATATAAAAAAAAACAACAAAAATTAACTCAAAAACATTTAATAAACTAACTAAAAACAATAATTATACTTTCAATACCTTTATATCACACCATTCAACC
chr7	108252063	108252183	Hypo	1	+	GTTAAATTAATATATATATTAGGGTATAAGAAGAAGTGATAGAAATTGATTTAGGAGTGTTTAGTAAATTAATTGAAGGTAATGATTATGTTTTTAATGTTTTTGTATTATATTATTTAGTT
chr7	108252068	108252188	Hypo	1	-	ACCAATATACACTAAAATATAAAAAAAAACAACAAAAATTAACTCAAAAACATTTACAAATAAACTATAAACTAACTAAAAACAATAATTATACTTTCAATACCTTTATATCACACCATT
chr7	108252068	108252188	Hypo	1	+	ATTAATATATATATTAGGGTATAAGAAGAAGTGATAGAAATTGATTTAGGAGTGTTTATAGATAAATTGTAAATTAATTGAAGGTAATGATTATGTTTTTAATGTTTTTGTATTATATTATT
chr7	108252063	108252183	Hyper	1	-	ACTAAACCAATATACACTAAAATATAAAAAAAAACGACAAAAATTAACTCAAAAACGTTTAATAAACTAACTAAAAACAATAATTATACTTTCAATACCTTTATATCACACCATTCAACC
chr7	108252063	108252183	Hyper	1	+	GTTAAATTAATATATATATTAGGGTATAAGAAGAAGCGATAGAAATTGATTTAGGAGCGTTTAGTAAATTAATTGAAGGTAATGATTATGTTTTTAATGTTTTTGTATTATATTATTTAGTT
chr7	108252068	108252188	Hyper	1	-	ACCAATATACACTAAAATATAAAAAAAAACGACAAAAATTAACTCAAAAACGTTTACAAATAAACTATAAACTAACTAAAAACAATAATTATACTTTCAATACCTTTATATCACACCATT
chr7	108252068	108252188	Hyper	1	+	ATTAATATATATATTAGGGTATAAGAAGAAGCGATAGAAATTGATTTAGGAGCGTTTATAGATAAATTGTAAATTAATTGAAGGTAATGATTATGTTTTTAATGTTTTTGTATTATATTATT
chr11	92717572	92717692	Hypo	1	-	CAAAAAAACCTCTCAATCCACACCTCAATCCCAAAAAAATACAAAAAAATCCTAAAAATTCTCAACCACTTTTCCTAACTCTAAACAAAATTTACAACAACCTAATCAAACATATATTAT
chr11	92717572	92717692	Hypo	1	+	TAGGGAGATTTTTTAGTTTATATTTTAGTTTTAGAGAGGTGTAGAAGAGTTTTAAGGATTTTTAGTTATTTTTTTTGGTTTTGGGTAAAGTTTGTAGTGATTTGGTTAGGTATGTATTGT
chr11	92717577	92717697	Hypo	1	-	AAACCTCTCAATCCACACCTCAATCCCAAAAAAATACAAAAAAATCCTAAAAATTCTCTTTAAACTTCAACCACTTTTCCTAACTCTAAACAAAATTTACAACAACCTAATCAAACATAT
chr11	92717577	92717697	Hypo	1	+	AGATTTTTTAGTTTATATTTTAGTTTTAGAGAGGTGTAGAAGAGTTTTAAGGATTTTTTTTGAGTTTTAGTTATTTTTTTTGGTTTTGGGTAAAGTTTGTAGTGATTTGGTTAGGTATGT
chr11	92717572	92717692	Hyper	1	-	CAAAAAAACCTCTCAATCCACACCTCAATCCCAAAAAAATACAAAAAAATCCTAAAAATTCTCAACCACTTTTCCTAACTCTAAACAAAATTTACAACGACCTAATCAAACATATATTAT
chr11	92717572	92717692	Hyper	1	+	TAGGGAGATTTTTTAGTTTATATTTTAGTTTTAGAGAGGTGTAGAAGAGTTTTAAGGATTTTTAGTTATTTTTTTTGGTTTTGGGTAAAGTTTGTAGCGATTTGGTTAGGTATGTATTGT
chr11	92717577	92717697	Hyper	1	-	AAACCTCTCAATCCACACCTCAATCCCAAAAAAATACAAAAAAATCCTAAAAATTCTCTTTAAACTTCAACCACTTTTCCTAACTCTAAACAAAATTTACAACGACCTAATCAAACATAT
chr11	92717577	92717697	Hyper	1	+	AGATTTTTTAGTTTATATTTTAGTTTTAGAGAGGTGTAGAAGAGTTTTAAGGATTTTTTTTGAGTTTTAGTTATTTTTTTTGGTTTTGGGTAAAGTTTGTAGCGATTTGGTTAGGTATGT
chr10	98884979	98885099	Hypo	1	-	TCTTACCATATAAAAACACAAAATCAAACAAACAAAAACATTTCCTTATAACAATATTTATAAAACTAAAAACAATATAATATCCCTCCATAAAATACACATAATAAAACTATATAAACC
chr10	98884979	98885099	Hypo	1	+	TTTTGTTATATGAGAATATAGAGTTAGATAAATAAGGATGTTTTTTTGTAATAATGTTTATAAGATTGAAAATAATGTAATGTTTTTTTATGAAATATATATATAATAAGATTGTGTGAGTT
chr10	98884984	98885104	Hypo	1	-	CCATATAAAAACACAAAATCAAACAAACAAAAACATTTCCTTATAACAATATTTATAAAAACAAAAAAACTAAAAACAATATAATATCCCTCCATAAAATACACATAATAAAACTATATA
chr10	98884984	98885104	Hypo	1	+	TTATATGAGAATATAGAGTTAGATAAATAAGGATGTTTTTTTGTAATAATGTTTATAAGAGTAAAAAGATTGAAAATAATGTAATGTTTTTTTATGAAATATATATATAATAAGATTGTGTG
chr10	98884979	98885099	Hyper	1	-	TCTTACCATATAAAAACACAAAATCAAACAAACAAAAACGTTTCCTTATAACAATATTTATAAAACTAAAAACAATATAATATCCCTCCATAAAATACACATAATAAAACTATATAAACC
chr10	98884979	98885099	Hyper	1	+	TTTTGTTATATGAGAATATAGAGTTAGATAAATAAGGACGTTTTTTTGTAATAATGTTTATAAGATTGAAAATAATGTAATGTTTTTTTATGAAATATATATATAATAAGATTGTGTGAGTT
chr10	98884984	98885104	Hyper	1	-	CCATATAAAAACACAAAATCAAACAAACAAAAACGTTTCCTTATAACAATATTTATAAAAACAAAAAAACTAAAAACAATATAATATCCCTCCATAAAATACACATAATAAAACTATATA
chr10	98884984	98885104	Hyper	1	+	TTATATGAGAATATAGAGTTAGATAAATAAGGACGTTTTTTTGTAATAATGTTTATAAGAGTAAAAAGATTGAAAATAATGTAATGTTTTTTTATGAAATATATATATAATAAGATTGTGTG
chr5	60138670	60138790	Hypo	1	-	AACTTTTACACAAAAACTAACATCAATACCTAACACCTAAACACTAATAAATATCTACCACAAAATAAAAAATAAATTTTATTTAATTCTCAATAACCTTAAAAAAACCAATTTCTAATC
chr5	60138670	60138790	Hypo	1	+	AGTTTTTATATAAGAATTGATATTAGTGTTTGGTATTTAAGTATTGATAAATGTTTGTTATGGGGTGAGGGGTGGATTTTATTTAGTTTTTGGTGATTTTGGGGAGATTAATTTTTGATT
chr5	60138674	60138794	Hypo	1	-	TTTACACAAAAACTAACATCAATACCTAACACCTAAACACTAATAAATATCTACCACATAAAACAAAAATAAAAAATAAATTTTATTTAATTCTCAATAACCTTAAAAAAACCAATTTCT
chr5	60138674	60138794	Hypo	1	+	TTTATATAAGAATTGATATTAGTGTTTGGTATTTAAGTATTGATAAATGTTTGTTATGTAGGGTAGGGGTGAGGGGTGGATTTTATTTAGTTTTTGGTGATTTTGGGGAGATTAATTTTT
chr5	60138670	60138790	Hyper	1	-	AACTTTTACACAAAAACTAACATCAATACCTAACACCTAAACACTAATAAATATCTACCACGAAATAAAAAATAAATTTTATTTAATTCTCGATAACCTTAAAAAAACCAATTTCTAATC
chr5	60138670	60138790	Hyper	1	+	AGTTTTTATATAAGAATTGATATTAGTGTTTGGTATTTAAGTATTGATAAATGTTTGTTACGGGGTGAGGGGTGGATTTTATTTAGTTTTCGGTGATTTTGGGGAGATTAATTTTTGATT
chr5	60138674	60138794	Hyper	1	-	TTTACACAAAAACTAACATCAATACCTAACACCTAAACACTAATAAATATCTACCACGTAAAACAAAAATAAAAAATAAATTTTATTTAATTCTCGATAACCTTAAAAAAACCAATTTCT

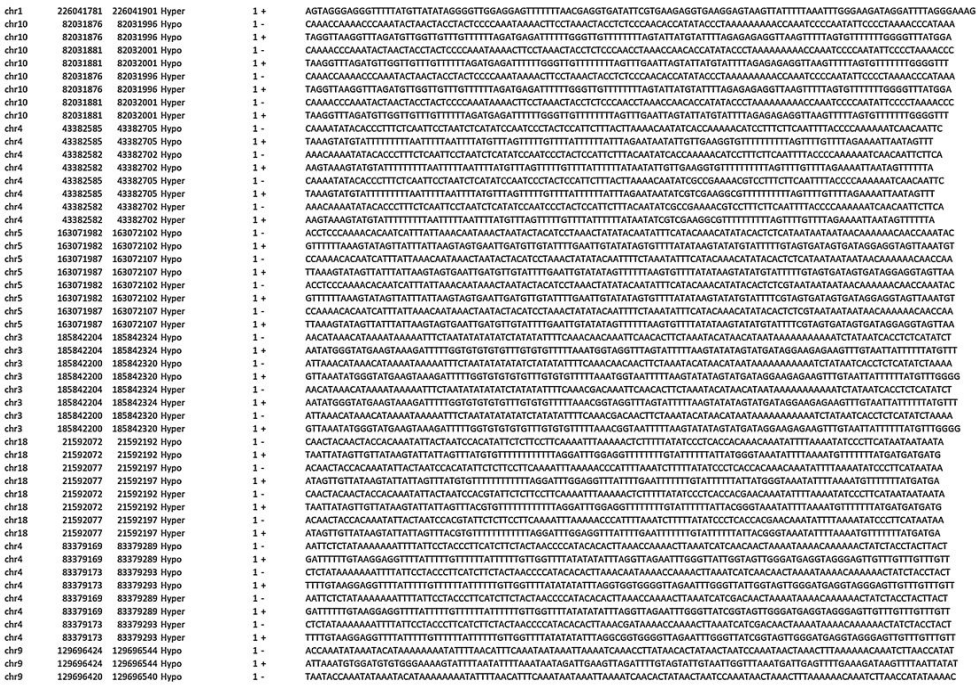
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chr5	60138674	60138794	Hyper	1 +	TTTATATAAGAATTGATATTAGTGTTTGGTATTTAAGTATTGATAAATGTTTGTTACGTAGGGTAGGGGTGAGGGGTGGATTTTATTTAGTTTTCGGTGATTTTGGGGAGATTAATTTTT
chr17	67389672	67389792	Hypo	1 -	ATAAATAAATCTTTAATAAAAATTTCTCCATTTTAAATAATAATAAAATATCCTTAATACATACCTAAACCTCTCTATTATTTATTCATCAAATATCCAAACCACTAAAAAAAACATATT
chr17	67389672	67389792	Hypo	1 +	ATGAATAAATTTTTTAATAAGAATTTTTTTATTTTAAATAATAATAAAATATTTTTAATATATGTTTAAATTTTTTTGTTATTTATTTATTAGGTATTTAGGTTATTAGGGAAAATATATT
chr17	67389668	67389788	Hypo	1 -	TTCAATAAATAAATCTTTAATAAAAATTTCTCCATTTTAAATAATAATAAAATATCCTTAATAAACCTCTCTATTATTTATTCATCAAATATCCAAACCACTAAAAAAAACATATTTTAA
chr17	67389668	67389788	Hypo	1 +	TTTAATGAATAAATTTTTAATAAGAATTTTTTTATTTTAAATAATAATAAAATATTTTTAATAAATTTTTTTGTTATTTATTTATTAGGTATTTAGGTTATTAGGGAAAATATATTTTAA
chr17	67389672	67389792	Hyper	1 -	ATAAATAAATCTTTAATAAAAATTTCTCCATTTTAAATAATAATAAAATATCCTTAATACATACCTAAACCTCTCTATTATTTATTCATCAAATATCCAAACCACTAAAAAAAACATATT
chr17	67389672	67389792	Hyper	1 +	ATGAATAAATTTTTTAATAAGAATTTTTTTATTTTAAATAATAATAAAATATTTTTAATATATGTTTAAATTTTTTTGTTATTTATTTATTAGGTATTTAGGTTATTAGGGAAAATATATT
chr17	67389668	67389788	Hyper	1 -	TTCAATAAATAAATCTTTAATAAAAATTTCTCCATTTTAAATAATAATAAAATATCCTTAATAAACCTCTCTATTATTTATTCATCAAATATCCAAACCACTAAAAAAAACATATTTTAA
chr17	67389668	67389788	Hyper	1 +	TTTAATGAATAAATTTTTAATAAGAATTTTTTTATTTTAAATAATAATAAAATATTTTTAATAAATTTTTTTGTTATTTATTTATTAGGTATTTAGGTTATTAGGGAAAATATATTTTAA
chr13	79398492	79398612	Hypo	1 -	TCTAAATCAACATTATACATACTAATACTTCAAATACTTTATAAAAACAATTTATTCTATCTCCAAATAAAAAAAATAAAATAAAATTTTTTATTTATTTTATTTAACTTTTATTTTTAT
chr13	79398492	79398612	Hypo	1 +	TTTAAATTAATATTATGTATGTTGATGTTTTAAGTATTTTATGAAAATAGTTTATTTTATTTTTAAGTGAAAAAGGTAGAATAAAGTTTTTTGTTTGTTTTATTTAATTTTTATTTTTGT
chr13	79398489	79398609	Hypo	1 -	ATTTCTAAATCAACATTATACATACTAATACTTCAAATACTTTATAAAAACAATTTATTCTAAATAAAAAAAATAAAATAAAATTTTTTATTTATTTTATTTAACTTTTATTTTTATTAT
chr13	79398489	79398609	Hypo	1 +	ATTTTTAAATTAATATTATGTATGTTGATGTTTTAAGTATTTTATGAAAATAGTTTATTTTAAGTGAAAAAGGTAGAATAAAGTTTTTTGTTTGTTTTATTTAATTTTTATTTTTGTTGT
chr13	79398492	79398612	Hyper	1 -	TCTAAATCAACATTATACATACTAATACTTCAAATACTTTATAAAAACAATTTATTCTATCTCCAAATAAAAAAAATAAAATAAAATTTTTTATTTATTTTATTTAACTTTTATTTTTAT
chr13	79398492	79398612	Hyper	1 +	TTTAAATTAATATTATGTATGTTGATGTTTTAAGTATTTTATGAAAATAGTTTATTTTATTTTTAAGTGAAAAAGGTAGAATAAAGTTTTTTGTTTGTTTTATTTAATTTTTATTTTTGT
chr13	79398489	79398609	Hyper	1 -	ATTTCTAAATCAACATTATACATACTAATACTTCAAATACTTTATAAAAACAATTTATTCTAAATAAAAAAAATAAAATAAAATTTTTTATTTATTTTATTTAACTTTTATTTTTATTAT
chr13	79398489	79398609	Hyper	1 +	ATTTTTAAATTAATATTATGTATGTTGATGTTTTAAGTATTTTATGAAAATAGTTTATTTTAAGTGAAAAAGGTAGAATAAAGTTTTTTGTTTGTTTTATTTAATTTTTATTTTTGTTGT
chr3	73107195	73107315	Hypo	1 -	ACTATTCTATTCAACTTATAATTCTTATAAATACTAATAACTACATAAACTCAAAACTTAAAAATATTTATAAAATAATTTTAATTCCAACTTATATCAATTTTATATTTACTATAATCA
chr3	73107195	73107315	Hypo	1 +	GTTGTTTTGTTTAGTTTGTAATTTTTATGAATGTTAATAGTTATATGAGTTTAAAATTTAAAAATATTTATAAAATGATTTTAGTTTTAATTTATATTAGTTTTGTATTTATTGTGGTTA
chr3	73107191	73107311	Hypo	1 -	CTTTACTATTCTATTCAACTTATAATTCTTATAAATACTAATAACTACATAAACTCAAAACTTTATAAAATAATTTTAATTCCAACTTATATCAATTTTATATTTACTATAATCAAAAAA
chr3	73107191	73107311	Hypo	1 +	TTTTGTTGTTTTGTTTAGTTTGTAATTTTTATGAATGTTAATAGTTATATGAGTTTAAAATTTTATAAAATGATTTTAGTTTTAATTTATATTAGTTTTGTATTTATTGTGGTTAAGGAA
chr3	73107195	73107315	Hyper	1 -	ACTATTCTATTCAACTTATAATTCTTATAAATACTAATAACTACATAAACTCAAAACTTAAAAATATTTATAAAATAATTTTAATTCCAACTTATATCAATTTTATATTTACTATAATCA
chr3	73107195	73107315	Hyper	1 +	GTTGTTTTGTTTAGTTTGTAATTTTTATGAATGTTAATAGTTATATGAGTTTAAAATTTAAAAATATTTATAAAATGATTTTAGTTTTAATTTATATTAGTTTTGTATTTATTGTGGTTA
chr3	73107191	73107311	Hyper	1 -	CTTTACTATTCTATTCAACTTATAATTCTTATAAATACTAATAACTACATAAACTCAAAACTTTATAAAATAATTTTAATTCCAACTTATATCAATTTTATATTTACTATAATCAAAAAA
chr3	73107191	73107311	Hyper	1 +	TTTTGTTGTTTTGTTTAGTTTGTAATTTTTATGAATGTTAATAGTTATATGAGTTTAAAATTTTATAAAATGATTTTAGTTTTAATTTATATTAGTTTTGTATTTATTGTGGTTAAGGAA
chr15	60104639	60104759	Hypo	1 -	AAAAAAACAACACATCACAACATAACATTTTTATAATCTTCCTCACATACCAACAACCAAAAACCCACACATATTTCTCCTCAATAAAATTTAAAATACATAAAACTATTAAATAATAAC
chr15	60104639	60104759	Hypo	1 +	AGAAGGGTAATATATTATAGTGTGGTGTTTTTGTAATTTTTTTTGTATGTTGATAGTTAGGGGTTTGTGTATGTTTTTTTTTGGTGGGGTTTAGGATGTATGGAATTGTTAGATGGTGAT
chr15	60104642	60104762	Hypo	1 -	AAAACAACACATCACAACATAACATTTTTATAATCTTCCTCACATACCAACAACCAAAAACACCAACCCACACATATTTCTCCTCAATAAAATTTAAAATACATAAAACTATTAAATAAT
chr15	60104642	60104762	Hypo	1 +	AGGGTAATATATTATAGTGTGGTGTTTTTGTAATTTTTTTTGTATGTTGATAGTTAGGAGTATTGGTTTGTGTATGTTTTTTTTTGGTGGGGTTTAGGATGTATGGAATTGTTAGATGGT
chr15	60104639	60104759	Hyper	1 -	AAAAAAACAACACATCACAACGTAACGTTTTTATAATCTTCCTCGCATACCGACAACCAAAAACCCGCGCATATTTCTCCTCGATAAAATTTAAAATACATAAAACTATTAAATAATAAC
chr15	60104639	60104759	Hyper	1 +	AGAAGGGTAATATATTATAGCGTGGCGTTTTTGTAATTTTTTTCGTATGTCGATAGTTAGGGGTTCGCGTATGTTTTTTTTCGGTGGGGTTTAGGATGTATGGAATTGTTAGATGGTGAT
chr15	60104642	60104762	Hyper	1 -	AAAACAACACATCACAACGTAACGTTTTTATAATCTTCCTCGCATACCGACAACCAAAAACACCGACCCGCGCATATTTCTCCTCGATAAAATTTAAAATACATAAAACTATTAAATAAT
chr15	60104642	60104762	Hyper	1 +	AGGGTAATATATTATAGCGTGGCGTTTTTGTAATTTTTTTCGTATGTCGATAGTTAGGAGTATCGGTTCGCGTATGTTTTTTTTCGGTGGGGTTTAGGATGTATGGAATTGTTAGATGGT
chr8	82414741	82414861	Hypo	1 -	CATAATTTACTATCATTTACTATTTTTAAATAATATATATCCTCTTATCTCCCACACCCACAACAATCTCCCTTCTCTAAAATACCACTACCCTCATCACATTCTAACTTCCAACATTTA
chr8	82414741	82414861	Hypo	1 +	TATAATTTGTTATTATTTGTTGTTTTTAAATAATATATGTTTTTTTATTTTTTATATTTATAGTAGTTTTTTTTTTTTGAAATATTATTGTTTTTATTATATTTTAATTTTTAATGTTTG
chr8	82414746	82414866	Hypo	1 -	TTTACTATCATTTACTATTTTTAAATAATATATATCCTCTTATCTCCCACACCCACATAACTAATAACAATCTCCCTTCTCTAAAATACCACTACCCTCATCACATTCTAACTTCCAACA
chr8	82414746	82414866	Hypo	1 +	TTTGTTATTATTTGTTGTTTTTAAATAATATATGTTTTTTTATTTTTTATATTTATATGATTGATAGTAGTTTTTTTTTTTTGAAATATTATTGTTTTTATTATATTTTAATTTTTAATG
chr8	82414741	82414861	Hyper	1 -	CATAATTTACTATCATTTACTATTTTTAAATAATATATATCCTCTTATCTCCCACACCCACAACAATCTCCCTTCTCTAAAATACCACTACCCTCATCACATTCTAACTTCCAACGTTTA
chr8	82414741	82414861	Hyper	1 +	TATAATTTGTTATTATTTGTTGTTTTTAAATAATATATGTTTTTTTATTTTTTATATTTATAGTAGTTTTTTTTTTTTGAAATATTATTGTTTTTATTATATTTTAATTTTTAACGTTTG
chr8	82414746	82414866	Hyper	1 -	TTTACTATCATTTACTATTTTTAAATAATATATATCCTCTTATCTCCCACACCCACATAACTAATAACAATCTCCCTTCTCTAAAATACCACTACCCTCATCACATTCTAACTTCCAACG
chr8	82414746	82414866	Hyper	1 +	TTTGTTATTATTTGTTGTTTTTAAATAATATATGTTTTTTTATTTTTTATATTTATATGATTGATAGTAGTTTTTTTTTTTTGAAATATTATTGTTTTTATTATATTTTAATTTTTAACG
chr20	37306189	37306309	Hypo	1 -	AAATACAACTAAAAATAATCAACTCATACCCAACAAAATACAATAACAAAAAAAAATAAACTAATTTAAATACCTCCAAAACCCCATCTAAAAAAAAAAAATAAACAAACATTACCAATC
chr20	37306189	37306309	Hypo	1 +	GGGTGTAGTTGAAGATGATTAGTTTATGTTTAATAGAGTGTAATGGTAAAGAAAAGTGGATTGATTTGAATGTTTTTAGAGTTTTATTTGGGAGGAGAGGGTAGGTAGATATTGTTAATT
chr20	37306184	37306304	Hypo	1 -	AACTTAAATACAACTAAAAATAATCAACTCATACCCAACAAAATACAATAACAAAAAAAAATAAATACCTCCAAAACCCCATCTAAAAAAAAAAAATAAACAAACATTACCAATCTAAAA
chr20	37306184	37306304	Hypo	1 +	GATTTGGGTGTAGTTGAAGATGATTAGTTTATGTTTAATAGAGTGTAATGGTAAAGAAAAGTGAATGTTTTTAGAGTTTTATTTGGGAGGAGAGGGTAGGTAGATATTGTTAATTTGAGG
chr20	37306189	37306309	Hyper	1 -	AAATACAACTAAAAATAATCAACTCATACCCAACAAAATACAATAACAAAAAAAAATAAACTAATTTAAATACCTCCAAAACCCCATCTAAAAAAAAAAAATAAACAAACATTACCAATC
chr20	37306189	37306309	Hyper	1 +	GGGTGTAGTTGAAGATGATTAGTTTATGTTTAATAGAGTGTAATGGTAAAGAAAAGTGGATTGATTTGAATGTTTTTAGAGTTTTATTTGGGAGGAGAGGGTAGGTAGATATTGTTAATT
chr20	37306184	37306304	Hyper	1 -	AACTTAAATACAACTAAAAATAATCAACTCATACCCAACAAAATACAATAACAAAAAAAAATAAATACCTCCAAAACCCCATCTAAAAAAAAAAAATAAACAAACATTACCAATCTAAAA
chr20	37306184	37306304	Hyper	1 +	GATTTGGGTGTAGTTGAAGATGATTAGTTTATGTTTAATAGAGTGTAATGGTAAAGAAAAGTGAATGTTTTTAGAGTTTTATTTGGGAGGAGAGGGTAGGTAGATATTGTTAATTTGAGG
chr3	6802034	6802154	Hypo	1 -	AATCAAAATAAATTTTTTTCCTAAACTACAATCATCAAATCTCATTTCCCATTAACATACCTATTTATATTTAAAACACAACTATTTAACTCTATCCATTTACATAAATCAATTAATAAA
chr3	6802034	6802154	Hypo	1 +	GATTAAGATGAATTTTTTTTTTTAAATTGTAGTTATTAAATTTTATTTTTTGTTGATGTATTTATTTATATTTGAAGTATAATTGTTTAATTTTGTTTATTTGTATAGGTTAGTTAATAAA
chr3	6802030	6802150	Hypo	1 -	ATTAAATCAAAATAAATTTTTTTCCTAAACTACAATCATCAAATCTCATTTCCCATTAACATATATTTAAAACACAACTATTTAACTCTATCCATTTACATAAATCAATTAATAAACCTT

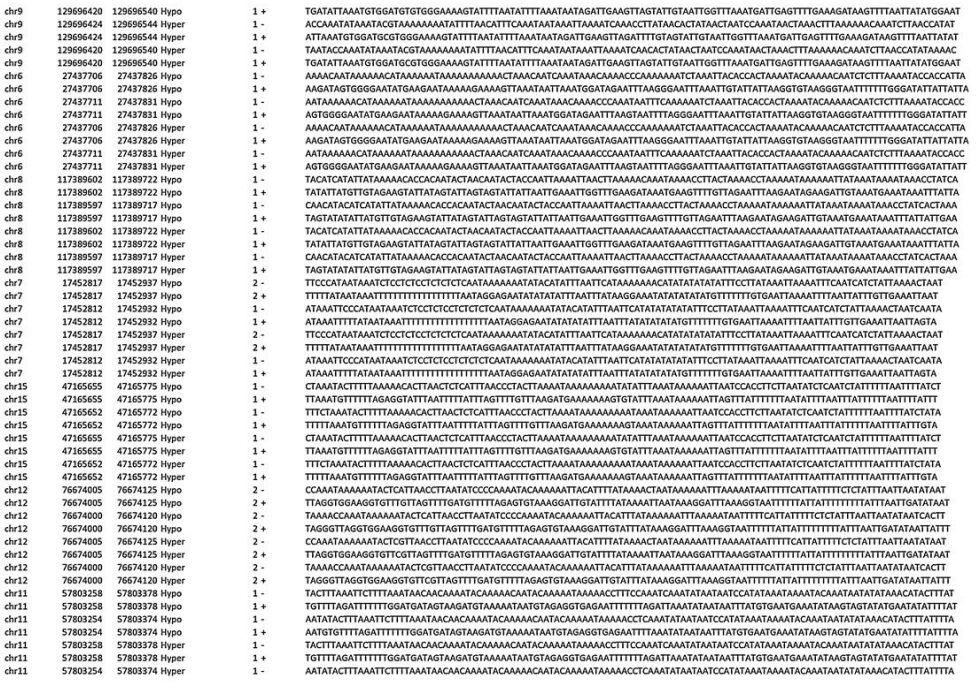
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chr3	6802030	6802150	Hypo	1 +	ATTGGATTAAGATGAATTTTTTTTTTTAAATTGTAGTTATTAAATTTTATTTTTTGTTGATGTATATTTGAAGTATAATTGTTTAATTTTGTTTATTTGTATAGGTTAGTTAATAAATTTT
chr3	6802034	6802154	Hyper	1 -	AATCAAAATAAATTTTTTTCCTAAACTACAATCATCAAATCTCATTTCCCGTTAACGTACCTATTTATATTTAAAACACAACTATTTAACTCTATCCATTTACATAAATCAATTAATAAA
chr3	6802034	6802154	Hyper	1 +	GATTAAGATGAATTTTTTTTTTTAAATTGTAGTTATTAAATTTTATTTTTCGTTGACGTATTTATTTATATTTGAAGTATAATTGTTTAATTTTGTTTATTTGTATAGGTTAGTTAATAAA
chr3	6802030	6802150	Hyper	1 -	ATTAAATCAAAATAAATTTTTTTCCTAAACTACAATCATCAAATCTCATTTCCCGTTAACGTATATTTAAAACACAACTATTTAACTCTATCCATTTACATAAATCAATTAATAAACCTT
chr3	6802030	6802150	Hyper	1 +	ATTGGATTAAGATGAATTTTTTTTTTTAAATTGTAGTTATTAAATTTTATTTTTCGTTGACGTATATTTGAAGTATAATTGTTTAATTTTGTTTATTTGTATAGGTTAGTTAATAAATTTT
chr1	54150243	54150363	Hypo	1 -	AAAAACCCTCCAATACCTCCTAAAACACAATTTAATTTCTATCACTACCTCAAATCAAAAACTCACTAATACCCACAAAATCACATCCAAACTCTTCAACCTAACACTCATTCCCTTCTT
chr1	54150243	54150363	Hypo	1 +	GAGGGTTTTTTAGTATTTTTTGAAGTATAGTTTGGTTTTTGTTATTATTTTAAATTAAGAATTTATTAGTGTTTATAGGGTTATATTTAGGTTTTTTAGTTTGGTATTTATTTTTTTTTT
chr1	54150248	54150368	Hypo	1 -	CCCTCCAATACCTCCTAAAACACAATTTAATTTCTATCACTACCTCAAATCAAAAACTTTCAATAACTCACTAATACCCACAAAATCACATCCAAACTCTTCAACCTAACACTCATTCCC
chr1	54150248	54150368	Hypo	1 +	TTTTTTAGTATTTTTTGAAGTATAGTTTGGTTTTTGTTATTATTTTAAATTAAGAATTTTTAGTGGTTTATTAGTGTTTATAGGGTTATATTTAGGTTTTTTAGTTTGGTATTTATTTTT
chr1	54150243	54150363	Hyper	1 -	AAAAACCCTCCAATACCTCCTAAAACACAATTTAATTTCTATCACTACCTCAAATCAAAAACTCACTAATACCCACAAAATCACATCCAAACTCTTCAACCTAACACTCATTCCCTTCTT
chr1	54150243	54150363	Hyper	1 +	GAGGGTTTTTTAGTATTTTTTGAAGTATAGTTTGGTTTTTGTTATTATTTTAAATTAAGAATTTATTAGTGTTTATAGGGTTATATTTAGGTTTTTTAGTTTGGTATTTATTTTTTTTTT
chr1	54150248	54150368	Hyper	1 -	CCCTCCAATACCTCCTAAAACACAATTTAATTTCTATCACTACCTCAAATCAAAAACTTTCAATAACTCACTAATACCCACAAAATCACATCCAAACTCTTCAACCTAACACTCATTCCC
chr1	54150248	54150368	Hyper	1 +	TTTTTTAGTATTTTTTGAAGTATAGTTTGGTTTTTGTTATTATTTTAAATTAAGAATTTTTAGTGGTTTATTAGTGTTTATAGGGTTATATTTAGGTTTTTTAGTTTGGTATTTATTTTT
chr3	192103384	192103504	Hypo	1 -	ACTCTAAACTCCAACCAACTAACACTACCAAAAACCCATAAAAATTCACATATAAACCATAATTTATATATCCAAACAACATCCACCTCCATCTAACAACCTTAATAAACCTTCAAACCA
chr3	192103384	192103504	Hypo	1 +	ATTTTGGGTTTTAGTTAATTGATATTGTTAGGGATTTATAGGGATTTATATATAAATTATAGTTTATATGTTTAAGTAATATTTATTTTTGTTTAATAGTTTTGGTGAATTTTTAGGTTA
chr3	192103381	192103501	Hypo	1 -	CCCACTCTAAACTCCAACCAACTAACACTACCAAAAACCCATAAAAATTCACATATAAACCATATATCCAAACAACATCCACCTCCATCTAACAACCTTAATAAACCTTCAAACCAAAAA
chr3	192103381	192103501	Hypo	1 +	TTTATTTTGGGTTTTAGTTAATTGATATTGTTAGGGATTTATAGGGATTTATATATAAATTATATGTTTAAGTAATATTTATTTTTGTTTAATAGTTTTGGTGAATTTTTAGGTTAGGGG
chr3	192103384	192103504	Hyper	1 -	ACTCTAAACTCCAACCAACTAACACTACCAAAAACCCATAAAAATTCACATATAAACCATAATTTATATATCCAAACAACATCCACCTCCGTCTAACAACCTTAATAAACCTTCAAACCA
chr3	192103384	192103504	Hyper	1 +	ATTTTGGGTTTTAGTTAATTGATATTGTTAGGGATTTATAGGGATTTATATATAAATTATAGTTTATATGTTTAAGTAATATTTATTTTCGTTTAATAGTTTTGGTGAATTTTTAGGTTA
chr3	192103381	192103501	Hyper	1 -	CCCACTCTAAACTCCAACCAACTAACACTACCAAAAACCCATAAAAATTCACATATAAACCATATATCCAAACAACATCCACCTCCGTCTAACAACCTTAATAAACCTTCAAACCAAAAA
chr3	192103381	192103501	Hyper	1 +	TTTATTTTGGGTTTTAGTTAATTGATATTGTTAGGGATTTATAGGGATTTATATATAAATTATATGTTTAAGTAATATTTATTTTCGTTTAATAGTTTTGGTGAATTTTTAGGTTAGGGG
chr12	32695028	32695148	Hypo	1 -	AAAAATTTTTCCTACTTAACAATATTCATTTTATCTATTAATACCATAAAACAAAATACAAATTAAATAAACAATATTAATAACTACAAAACAAAATATTACAACACAATAAACTAAAAT
chr12	32695028	32695148	Hypo	1 +	AGGAGTTTTTTTTATTTAGTAGTGTTTATTTTATTTATTAATGTTGTGAAGTAAAATATAGGTTGAATGAGTAGTGTTGGTAATTGTAAAATAAAGTGTTGTAATATAGTAGGTTGAGGT
chr12	32695033	32695153	Hypo	1 -	TTTTTCCTACTTAACAATATTCATTTTATCTATTAATACCATAAAACAAAATACAAATTTAAAAAATTAAATAAACAATATTAATAACTACAAAACAAAATATTACAACACAATAAACTA
chr12	32695033	32695153	Hypo	1 +	TTTTTTTTATTTAGTAGTGTTTATTTTATTTATTAATGTTGTGAAGTAAAATATAGGTTTGAAAAGTTGAATGAGTAGTGTTGGTAATTGTAAAATAAAGTGTTGTAATATAGTAGGTTG
chr12	32695028	32695148	Hyper	1 -	AAAAATTTTTCCTACTTAACAATATTCATTTTATCTATTAATACCGTAAAACAAAATACAAATTAAATAAACAATATTAATAACTACAAAACAAAATATTACAACACAATAAACTAAAAT
chr12	32695028	32695148	Hyper	1 +	AGGAGTTTTTTTTATTTAGTAGTGTTTATTTTATTTATTAATGTCGTGAAGTAAAATATAGGTTGAATGAGTAGTGTTGGTAATTGTAAAATAAAGTGTTGTAATATAGTAGGTTGAGGT
chr12	32695033	32695153	Hyper	1 -	TTTTTCCTACTTAACAATATTCATTTTATCTATTAATACCGTAAAACAAAATACAAATTTAAAAAATTAAATAAACAATATTAATAACTACAAAACAAAATATTACAACACAATAAACTA
chr12	32695033	32695153	Hyper	1 +	TTTTTTTTATTTAGTAGTGTTTATTTTATTTATTAATGTCGTGAAGTAAAATATAGGTTTGAAAAGTTGAATGAGTAGTGTTGGTAATTGTAAAATAAAGTGTTGTAATATAGTAGGTTG
chr10	82217938	82218058	Hypo	1 -	TATAAAACTCAAAAATTAAACTTACAAACATAAAAATATAAAAAACAATAATAACAAAATAACTAAAAATAAACTCCCACTAAAAATAAAATTAAATATAAAACTAAATCCCTAATCTAT
chr10	82217938	82218058	Hypo	1 +	TGTGGGATTTGGGGATTGAGTTTGTAGGTATAGGGGTGTAGAAAGTAGTGGTAGTGAGGTGATTGAAGGTGGATTTTTATTGGGGATGGGATTGAGTGTGGGGTTAGATTTTTGGTTTGT
chr10	82217933	82218053	Hypo	1 -	ACTTTTATAAAACTCAAAAATTAAACTTACAAACATAAAAATATAAAAAACAATAATAACAAAATAAACTCCCACTAAAAATAAAATTAAATATAAAACTAAATCCCTAATCTATAAAAA
chr10	82217933	82218053	Hypo	1 +	ATTTTTGTGGGATTTGGGGATTGAGTTTGTAGGTATAGGGGTGTAGAAAGTAGTGGTAGTGAGGTGGATTTTTATTGGGGATGGGATTGAGTGTGGGGTTAGATTTTTGGTTTGTAGAAG
chr10	82217938	82218058	Hyper	1 -	TATAAAACTCGAAAATTAAACTTACAAACATAAAAATATAAAAAACAATAATAACGAAATAACTAAAAATAAACTCCCACTAAAAATAAAATTAAATATAAAACTAAATCCCTAATCTAT
chr10	82217938	82218058	Hyper	1 +	TGTGGGATTCGGGGATTGAGTTTGTAGGTATAGGGGTGTAGAAAGTAGTGGTAGCGAGGTGATTGAAGGTGGATTTTTATTGGGGATGGGATTGAGTGTGGGGTTAGATTTTTGGTTTGT
chr10	82217933	82218053	Hyper	1 -	ACTTTTATAAAACTCGAAAATTAAACTTACAAACATAAAAATATAAAAAACAATAATAACGAAATAAACTCCCACTAAAAATAAAATTAAATATAAAACTAAATCCCTAATCTATAAAAA
chr10	82217933	82218053	Hyper	1 +	ATTTTTGTGGGATTCGGGGATTGAGTTTGTAGGTATAGGGGTGTAGAAAGTAGTGGTAGCGAGGTGGATTTTTATTGGGGATGGGATTGAGTGTGGGGTTAGATTTTTGGTTTGTAGAAG
chr2	67481759	67481879	Hypo	1 -	CCAAAATATACACTACAAAAAATCTACACCTAATATATAAAACTATACCCCAATAACTAAAATACACAAAACCATAATCTCCCAACAACCCACCTATTAAATTTATATATCTCATCACTA
chr2	67481759	67481879	Hypo	1 +	TTAGGATATATATTGTAAAAAGTTTATATTTAATATGTGAGGTTATGTTTTAATAGTTAGAATATATAGGGTTATGATTTTTTAGTAATTTATTTGTTGAATTTGTGTGTTTTATTATTA
chr2	67481756	67481876	Hypo	1 -	ACCCCAAAATATACACTACAAAAAATCTACACCTAATATATAAAACTATACCCCAATAACTACAAAACCATAATCTCCCAACAACCCACCTATTAAATTTATATATCTCATCACTACCAC
chr2	67481756	67481876	Hypo	1 +	GTTTTAGGATATATATTGTAAAAAGTTTATATTTAATATGTGAGGTTATGTTTTAATAGTTATAGGGTTATGATTTTTTAGTAATTTATTTGTTGAATTTGTGTGTTTTATTATTATTGT
chr2	67481759	67481879	Hyper	1 -	CCAAAATATACACTACAAAAAATCTACACCTAATATATAAAACTATACCCCAATAACTAAAATACACAAAACCATAATCTCCCAACAACCCACCTATTAAATTTATATATCTCATCACTA
chr2	67481759	67481879	Hyper	1 +	TTAGGATATATATTGTAAAAAGTTTATATTTAATATGTGAGGTTATGTTTTAATAGTTAGAATATATAGGGTTATGATTTTTTAGTAATTTATTTGTTGAATTTGTGTGTTTTATTATTA
chr2	67481756	67481876	Hyper	1 -	ACCCCAAAATATACACTACAAAAAATCTACACCTAATATATAAAACTATACCCCAATAACTACAAAACCATAATCTCCCAACAACCCACCTATTAAATTTATATATCTCATCACTACCGC
chr2	67481756	67481876	Hyper	1 +	GTTTTAGGATATATATTGTAAAAAGTTTATATTTAATATGTGAGGTTATGTTTTAATAGTTATAGGGTTATGATTTTTTAGTAATTTATTTGTTGAATTTGTGTGTTTTATTATTATCGT
chr1	226041786	226041906	Hypo	2 -	AAAAAATTCCTATATCATACAAAAATTAAAAAAACCTTTCTAACAAAATAATATTCATACAAAAATATAAAAAAATAAAAAAACAAATCATCCCCAAACCTAAAAAAACAAAATTCCAAA
chr1	226041786	226041906	Hypo	1 +	GGAGGGTTTTTATGTTATATAGGGGTTGGAGGAGTTTTTTTAATGAGGTGATATTTGTGTAGAAATGTGAAGAGGTGAAGGAGTAAGTTATTTTTAAATTTGGGAAGATAGGATTTTAGG
chr1	226041781	226041901	Hypo	1 -	AACAAAAAAAAATTCCTATATCATACAAAAATTAAAAAAACCTTTCTAACAAAATAATATTCATAAAAAAATAAAAAAACAAATCATCCCCAAACCTAAAAAAACAAAATTCCAAAAAAAA
chr1	226041781	226041901	Hypo	1 +	AGTAGGGAGGGTTTTTATGTTATATAGGGGTTGGAGGAGTTTTTTTAATGAGGTGATATTTGTGAAGAGGTGAAGGAGTAAGTTATTTTTAAATTTGGGAAGATAGGATTTTAGGGAAAG
chr1	226041786	226041906	Hyper	2 -	AAAAAATTCCTATATCATACAAAAATTAAAAAAACCTTTCTAACGAAATAATATTCGTACAAAAATATAAAAAAATAAAAAAACAAATCATCCCCAAACCTAAAAAAACAAAATTCCAAA
chr1	226041786	226041906	Hyper	1 +	GGAGGGTTTTTATGTTATATAGGGGTTGGAGGAGTTTTTTTAACGAGGTGATATTCGTGTAGAAATGTGAAGAGGTGAAGGAGTAAGTTATTTTTAAATTTGGGAAGATAGGATTTTAGG
chr1	226041781	226041901	Hyper	1 -	AACAAAAAAAAATTCCTATATCATACAAAAATTAAAAAAACCTTTCTAACGAAATAATATTCGTAAAAAAATAAAAAAACAAATCATCCCCAAACCTAAAAAAACAAAATTCCAAAAAAAA

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chr11	57803254	57803374	Hyper	1 +	AATGTGTTTTAGATTTTTTTGGATGATAGTAAGATGTAAAAATAATGTAGAGGTGAGAATTTTAAATATAATAATTTATGTGAATGAAATATAAGTAGTATATGAATATATTTTATTTTA
chr3	187630351	187630471	Hypo	1 -	AAAACACTTATAACTAAAAATTAAAAAAAACAATAAAAATATATAAAAAAATTATTATTTTATAAAATTTTATACATAATCATTATACACTTTATAAAATAAAAACACAAAAAAACTCTT
chr3	187630351	187630471	Hypo	1 +	AAAATATTTATGGTTAGAAATTGAGAGGGATAATAGGGGTATATAAAAAAATTATTGTTTTGTGAGATTTTGTGTATAATTATTGTATATTTTATAAAATGAAAATATAGAAGAATTTTT
chr3	187630346	187630466	Hypo	1 -	CTATAAAAACACTTATAACTAAAAATTAAAAAAAACAATAAAAATATATAAAAAAATTATTATTTTATACATAATCATTATACACTTTATAAAATAAAAACACAAAAAAACTCTTACCAT
chr3	187630346	187630466	Hypo	1 +	TTGTAAAAATATTTATGGTTAGAAATTGAGAGGGATAATAGGGGTATATAAAAAAATTATTATTTTGTGTATAATTATTGTATATTTTATAAAATGAAAATATAGAAGAATTTTTGTTGT
chr3	187630351	187630471	Hyper	1 -	AAAACACTTATAACTAAAAATTAAAAAAAACAATAAAAATATATAAAAAAATTATTATTTTATAAAATTTTATACATAATCATTATACACTTTATAAAATAAAAACACAAAAAAACTCTT
chr3	187630351	187630471	Hyper	1 +	AAAATATTTATGGTTAGAAATTGAGAGGGATAATAGGGGTATATAAAAAAATTATTGTTTTGTGAGATTTTGTGTATAATTATTGTATATTTTATAAAATGAAAATATAGAAGAATTTTT
chr3	187630346	187630466	Hyper	1 -	CTATAAAAACACTTATAACTAAAAATTAAAAAAAACAATAAAAATATATAAAAAAATTATTATTTTATACATAATCATTATACACTTTATAAAATAAAAACACAAAAAAACTCTTACCGT
chr3	187630346	187630466	Hyper	1 +	TTGTAAAAATATTTATGGTTAGAAATTGAGAGGGATAATAGGGGTATATAAAAAAATTATTATTTTGTGTATAATTATTGTATATTTTATAAAATGAAAATATAGAAGAATTTTTGTCGT
chr4	16676515	16676635	Hypo	1 -	TATTCAAAACTATTATACCAAAATATCTACTTTATTATCTAAAAACCTAAAAACAAATTCCCTATTTACTCATATTTACATACATAAAAACTCTATAAACACTAAAATATTCAAATTTTT
chr4	16676515	16676635	Hypo	1 +	TATTTAAAATTATTATATTAAAATATTTGTTTTATTATTTAGGAATTTGAAAGTGAATTTTTTGTTTGTTTATGTTTATATATATGGAAGTTTTGTGAATATTGGGATATTTAAATTTTT
chr4	16676511	16676631	Hypo	1 -	TTCTTATTCAAAACTATTATACCAAAATATCTACTTTATTATCTAAAAACCTAAAAACAAATTACTCATATTTACATACATAAAAACTCTATAAACACTAAAATATTCAAATTTTTACCT
chr4	16676511	16676631	Hypo	1 +	TTTTTATTTAAAATTATTATATTAAAATATTTGTTTTATTATTTAGGAATTTGAAAGTGAATTGTTTATGTTTATATATATGGAAGTTTTGTGAATATTGGGATATTTAAATTTTTATTT
chr4	16676515	16676635	Hyper	1 -	TATTCAAAACTATTATACCAAAATATCTACTTTATTATCTAAAAACCTAAAAACGAATTCCCTATTTACTCATATTTACATACATAAAAACTCTATAAACACTAAAATATTCAAATTTTT
chr4	16676515	16676635	Hyper	1 +	TATTTAAAATTATTATATTAAAATATTTGTTTTATTATTTAGGAATTTGAAAGCGAATTTTTTGTTTGTTTATGTTTATATATATGGAAGTTTTGTGAATATTGGGATATTTAAATTTTT
chr4	16676511	16676631	Hyper	1 -	TTCTTATTCAAAACTATTATACCAAAATATCTACTTTATTATCTAAAAACCTAAAAACGAATTACTCATATTTACATACATAAAAACTCTATAAACACTAAAATATTCAAATTTTTACCT
chr4	16676511	16676631	Hyper	1 +	TTTTTATTTAAAATTATTATATTAAAATATTTGTTTTATTATTTAGGAATTTGAAAGCGAATTGTTTATGTTTATATATATGGAAGTTTTGTGAATATTGGGATATTTAAATTTTTATTT
chr16	58002454	58002574	Hypo	1 -	TACCAAAAACTTAATAAATATTAACTATAACTATTACATAATATCAAATAAAAACACTAATTATATAATATACATATACTACATAATCTCATTATAAATAAAAATATTCATTATAAATAA
chr16	58002454	58002574	Hypo	1 +	TGTTGAGGGTTTAATAAATGTTGATTATGATTATTATATGGTATTAAATGAAAATATTAATTGTGTAATATGTATGTATTATATAATTTTATTATAAGTAAAAATATTTATTATGAGTAA
chr16	58002449	58002569	Hypo	1 -	ACACATACCAAAAACTTAATAAATATTAACTATAACTATTACATAATATCAAATAAAAACAAATATACATATACTACATAATCTCATTATAAATAAAAATATTCATTATAAATAATTACA
chr16	58002449	58002569	Hypo	1 +	GTATATGTTGAGGGTTTAATAAATGTTGATTATGATTATTATATGGTATTAAATGAAAATAAATATGTATGTATTATATAATTTTATTATAAGTAAAAATATTTATTATGAGTAATTATA
chr16	58002454	58002574	Hyper	1 -	TACCGAAAACTTAATAAATATTAACTATAACTATTACATAATATCAAATAAAAACACTAATTATATAATATACATATACTACATAATCTCATTATAAATAAAAATATTCATTATAAATAA
chr16	58002454	58002574	Hyper	1 +	TGTCGAGGGTTTAATAAATGTTGATTATGATTATTATATGGTATTAAATGAAAATATTAATTGTGTAATATGTATGTATTATATAATTTTATTATAAGTAAAAATATTTATTATGAGTAA
chr16	58002449	58002569	Hyper	1 -	ACACATACCGAAAACTTAATAAATATTAACTATAACTATTACATAATATCAAATAAAAACAAATATACATATACTACATAATCTCATTATAAATAAAAATATTCATTATAAATAATTACA
chr16	58002449	58002569	Hyper	1 +	GTATATGTCGAGGGTTTAATAAATGTTGATTATGATTATTATATGGTATTAAATGAAAATAAATATGTATGTATTATATAATTTTATTATAAGTAAAAATATTTATTATGAGTAATTATA
chr1	42751333	42751453	Hypo	1 -	ACAAAATAAAATTCCTTAAAAAACCATAAAAAACAATAAAAATCTTCCCAAAAAACAAATTAAAAAAACTTATTACTCTACCAAAAAATCTCTACCACTCCTATCCAACAAAATTTTATA
chr1	42751333	42751453	Hypo	1 +	ATAAGGTAAGATTTTTTGAAAGATTATAAAGGATAATGAAAATTTTTTTAAAGAGTAGATTAAAAGGATTTATTATTTTGTTAGGGAGTTTTTGTTATTTTTATTTAGTAGGATTTTATG
chr1	42751329	42751449	Hypo	1 -	ATAAACAAAATAAAATTCCTTAAAAAACCATAAAAAACAATAAAAATCTTCCCAAAAAACAAACTTATTACTCTACCAAAAAATCTCTACCACTCCTATCCAACAAAATTTTATAATCAA
chr1	42751329	42751449	Hypo	1 +	GTGGATAAGGTAAGATTTTTTGAAAGATTATAAAGGATAATGAAAATTTTTTTAAAGAGTAGATTTATTATTTTGTTAGGGAGTTTTTGTTATTTTTATTTAGTAGGATTTTATGATTAA
chr1	42751333	42751453	Hyper	1 -	ACAAAATAAAATTCCTTAAAAAACCATAAAAAACAATAAAAATCTTCCCAAAAAACAAATTAAAAAAACTTATTACTCTACCAAAAAATCTCTACCACTCCTATCCAACAAAATTTTATA
chr1	42751333	42751453	Hyper	1 +	ATAAGGTAAGATTTTTTGAAAGATTATAAAGGATAATGAAAATTTTTTTAAAGAGTAGATTAAAAGGATTTATTATTTTGTTAGGGAGTTTTTGTTATTTTTATTTAGTAGGATTTTATG
chr1	42751329	42751449	Hyper	1 -	ATAAACAAAATAAAATTCCTTAAAAAACCATAAAAAACAATAAAAATCTTCCCAAAAAACAAACTTATTACTCTACCAAAAAATCTCTACCACTCCTATCCAACAAAATTTTATAATCAA
chr1	42751329	42751449	Hyper	1 +	GTGGATAAGGTAAGATTTTTTGAAAGATTATAAAGGATAATGAAAATTTTTTTAAAGAGTAGATTTATTATTTTGTTAGGGAGTTTTTGTTATTTTTATTTAGTAGGATTTTATGATTAA
chr7	6522935	6523055	Hypo	1 -	AAAAATCACTAACAACCTCTCAACAAACCCCTCCCCAACAATATAATCCTAAACCCAAAAACTTAAATAATACCCACACAACACTTAAAAACAAATCTAACCCAACCCCACTACACCACA
chr7	6522935	6523055	Hypo	1 +	GAAAATTATTGATGATTTTTTGGTAAGTTTTTTTTTAGTGGTGTGATTTTGGATTTAAGGGTTTGGGTGATGTTTATATAATATTTAAGGATAGGTTTGATTTGATTTTATTATATTATA
chr7	6522932	6523052	Hypo	1 -	CAAAAAAATCACTAACAACCTCTCAACAAACCCCTCCCCAACAATATAATCCTAAACCCAAAATAATACCCACACAACACTTAAAAACAAATCTAACCCAACCCCACTACACCACACCTA
chr7	6522932	6523052	Hypo	1 +	TAAGAAAATTATTGATGATTTTTTGGTAAGTTTTTTTTTAGTGGTGTGATTTTGGATTTAAGGTGATGTTTATATAATATTTAAGGATAGGTTTGATTTGATTTTATTATATTATATTTA
chr7	6522935	6523055	Hyper	1 -	AAAAATCACTAACGACCTCTCGACAAACCCCTCCCCAACGATATAATCCTAAACCCAAAAACTTAAATAATACCCACACAACACTTAAAAACAAATCTAACCCGACCCCACTACACCACA
chr7	6522935	6523055	Hyper	1 +	GAAAATTATTGACGATTTTTCGGTAAGTTTTTTTTTAGCGGTGTGATTTTGGATTTAAGGGTTTGGGTGATGTTTATATAATATTTAAGGATAGGTTTGATTCGATTTTATTATATTATA
chr7	6522932	6523052	Hyper	1 -	CAAAAAAATCACTAACGACCTCTCGACAAACCCCTCCCCAACGATATAATCCTAAACCCAAAATAATACCCACACAACACTTAAAAACAAATCTAACCCGACCCCACTACACCACACCTA
chr7	6522932	6523052	Hyper	1 +	TAAGAAAATTATTGACGATTTTTCGGTAAGTTTTTTTTTAGCGGTGTGATTTTGGATTTAAGGTGATGTTTATATAATATTTAAGGATAGGTTTGATTCGATTTTATTATATTATATTTA
chr13	93034757	93034877	Hypo	1 -	CATAAAAAAAACATATTCTTAAATAAATTTAAATAAATTTATTTCTCAAAACTTCTTTAACTAAAATTATTCACACCAAACTCCCTATATCAACAACAATTAAAATTAAACTAAAAACAA
chr13	93034757	93034877	Hypo	1 +	TATGAAAAGAGTATATTTTTGGGTAAATTTAAATAAATTTATTTTTTAAAATTTTTTTGATTGAAGTTGTTTATATTAGATTTTTTATATTAATAATAATTAAAGTTGAATTGAAAGTAA
chr13	93034752	93034872	Hypo	1 -	ATCACCATAAAAAAAACATATTCTTAAATAAATTTAAATAAATTTATTTCTCAAAACTTCTTTATTCACACCAAACTCCCTATATCAACAACAATTAAAATTAAACTAAAAACAAACATA
chr13	93034752	93034872	Hypo	1 +	ATTATTATGAAAAGAGTATATTTTTGGGTAAATTTAAATAAATTTATTTTTTAAAATTTTTTTGTTTATATTAGATTTTTTATATTAATAATAATTAAAGTTGAATTGAAAGTAAATATG
chr13	93034757	93034877	Hyper	1 -	CATAAAAAAAACATATTCTTAAATAAATTTAAATAAATTTATTTCTCAAAACTTCTTTAACTAAAATTATTCACACCAAACTCCCTATATCAACAACAATTAAAATTAAACTAAAAACAA
chr13	93034757	93034877	Hyper	1 +	TATGAAAAGAGTATATTTTTGGGTAAATTTAAATAAATTTATTTTTTAAAATTTTTTTGATTGAAGTTGTTTATATTAGATTTTTTATATTAATAATAATTAAAGTTGAATTGAAAGTAA
chr13	93034752	93034872	Hyper	1 -	ATCACCATAAAAAAAACATATTCTTAAATAAATTTAAATAAATTTATTTCTCAAAACTTCTTTATTCACACCAAACTCCCTATATCAACAACAATTAAAATTAAACTAAAAACAAACATA
chr13	93034752	93034872	Hyper	1 +	ATTATTATGAAAAGAGTATATTTTTGGGTAAATTTAAATAAATTTATTTTTTAAAATTTTTTTGTTTATATTAGATTTTTTATATTAATAATAATTAAAGTTGAATTGAAAGTAAATATG
chrX	113671754	113671874	Hypo	2 -	ATATAATTATATCTCTCAATACCATTAATTTCCATTTATCCATTACTAATAATACTAAACATCTATTCATATACTTTTTACTATAATTATCTCTACCTTAATAAAATATTCATTCAAATA
chrX	113671754	113671874	Hypo	2 +	ATATAGTTGTATTTTTTAGTATTATTAATTTTTATTTATTTATTGTTAATGATGTTGAATGTTTATTTATGTGTTTTTTGTTATAATTATTTTTATTTGGTAAAATGTTTATTTAAGTA
chrX	113671751	113671871	Hypo	2 -	TATATATAATTATATCTCTCAATACCATTAATTTCCATTTATCCATTACTAATAATACTAAATTCATATACTTTTTACTATAATTATCTCTACCTTAATAAAATATTCATTCAAATATTT

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chrX	113671751	113671871	Hypo	2 +	TGTATATAGTTGTATTTTTTAGTATTATTAATTTTTATTTATTTATTGTTAATGATGTTGAATTTATGTGTTTTTTGTTATAATTATTTTTATTTGGTAAAATGTTTATTTAAGTATTT
chrX	113671754	113671874	Hyper	2 -	ATATAATTATATCTCTCAATACCATTAATTTCCATTTATCCATTACTAATAATACTAAACGTCTATTCATATACTTTTTACTATAATTATCTCTACCTTAATAAAATATTCATTCAAATA
chrX	113671754	113671874	Hyper	2 +	ATATAGTTGTATTTTTTAGTATTATTAATTTTTATTTATTTATTGTTAATGATGTTGAACGTTTATTTATGTGTTTTTTGTTATAATTATTTTTATTTGGTAAAATGTTTATTTAAGTA
chrX	113671751	113671871	Hyper	2 -	TATATATAATTATATCTCTCAATACCATTAATTTCCATTTATCCATTACTAATAATACTAAATTCATATACTTTTTACTATAATTATCTCTACCTTAATAAAATATTCATTCAAATATTT
chrX	113671751	113671871	Hyper	2 +	TGTATATAGTTGTATTTTTTAGTATTATTAATTTTTATTTATTTATTGTTAATGATGTTGAATTTATGTGTTTTTTGTTATAATTATTTTTATTTGGTAAAATGTTTATTTAAGTATTT
chr5	140074950	140075070	Hypo	1 -	AAACCTTAAAAATAATAAAAAAAAAAAAAAAAATCCTTATTCTTACCCTAATAAATAAAATCCAAACCCAATCCTCCCTAATATCTATATACTAAACCTAATCTTTAAATACAATATCCCTC
chr5	140074950	140075070	Hypo	1 +	AGGTTTTGGGGATAGTGGAAAAAAGGGAAGGTTTTTGTTTTTATTTTAGTGGATGAGATTTAGGTTTAGTTTTTTTTAATGTTTGTATATTGGGTTTAATTTTTGGATGTAGTATTTTTT
chr5	140074955	140075075	Hypo	1 -	TTAAAAATAATAAAAAAAAAAAAAAAAATCCTTATTCTTACCCTAATAAATAAAATCCAATTAATATAAACCCAATCCTCCCTAATATCTATATACTAAACCTAATCTTTAAATACAATATC
chr5	140074955	140075075	Hypo	1 +	TTGGGGATAGTGGAAAAAAGGGAAGGTTTTTGTTTTTATTTTAGTGGATGAGATTTAGTTGATATAGGTTTAGTTTTTTTTAATGTTTGTATATTGGGTTTAATTTTTGGATGTAGTATT
chr5	140074950	140075070	Hyper	1 -	AAACCTTAAAAATAATAAAAAAAAAAAAAAAAATCCTTATTCTTACCCTAATAAATAAAATCCAAACCCAATCCTCCCTAATATCTATATACTAAACCTAATCTTTAAATACAATATCCCTC
chr5	140074950	140075070	Hyper	1 +	AGGTTTTGGGGATAGTGGAAAAAAGGGAAGGTTTTTGTTTTTATTTTAGTGGATGAGATTTAGGTTTAGTTTTTTTTAATGTTTGTATATTGGGTTTAATTTTTGGATGTAGTATTTTTT
chr5	140074955	140075075	Hyper	1 -	TTAAAAATAATAAAAAAAAAAAAAAAAATCCTTATTCTTACCCTAATAAATAAAATCCAATTAATATAAACCCAATCCTCCCTAATATCTATATACTAAACCTAATCTTTAAATACAATATC
chr5	140074955	140075075	Hyper	1 +	TTGGGGATAGTGGAAAAAAGGGAAGGTTTTTGTTTTTATTTTAGTGGATGAGATTTAGTTGATATAGGTTTAGTTTTTTTTAATGTTTGTATATTGGGTTTAATTTTTGGATGTAGTATT
chr2	125404671	125404791	Hypo	1 -	CCTTACCTTCTTTCACCTATTAAACAAAATATATCCTTCCATCATAATTTAAAAATCCTCATCTTTCATTATAAATCTTCCCAAATATTTTTAACAAAAAAAAAATAATACAAAAAATAAA
chr2	125404671	125404791	Hypo	1 +	TTTTATTTTTTTTTGTTTATTAGGTAAAATATGTTTTTTTGTTATGATTTAAAGGTTTTTATTTTTTATTGTAAATTTTTTTAAATATTTTTGGTAAAGAGAGGTAATATGGGGAATAAA
chr2	125404676	125404796	Hypo	1 -	CCTTCTTTCACCTATTAAACAAAATATATCCTTCCATCATAATTTAAAAATCCTCATCTCTATACTCTTTCATTATAAATCTTCCCAAATATTTTTAACAAAAAAAAAATAATACAAAAAA
chr2	125404676	125404796	Hypo	1 +	TTTTTTTTTGTTTATTAGGTAAAATATGTTTTTTTGTTATGATTTAAAGGTTTTTATTTTTATGTTTTTTTTATTGTAAATTTTTTTAAATATTTTTGGTAAAGAGAGGTAATATGGGGAA
chr2	125404671	125404791	Hyper	1 -	CCTTACCTTCTTTCGCCTATTAAACAAAATATATCCTTCCGTCATAATTTAAAAATCCTCATCTTTCATTATAAATCTTCCCAAATATTTTTAACAAAAAAAAAATAATACGAAAAATAAA
chr2	125404671	125404791	Hyper	1 +	TTTTATTTTTTTTCGTTTATTAGGTAAAATATGTTTTTTCGTTATGATTTAAAGGTTTTTATTTTTTATTGTAAATTTTTTTAAATATTTTTGGTAAAGAGAGGTAATACGGGGAATAAA
chr2	125404676	125404796	Hyper	1 -	CCTTCTTTCGCCTATTAAACAAAATATATCCTTCCGTCATAATTTAAAAATCCTCATCTCTATACTCTTTCATTATAAATCTTCCCAAATATTTTTAACAAAAAAAAAATAATACGAAAAA
chr2	125404676	125404796	Hyper	1 +	TTTTTTTTCGTTTATTAGGTAAAATATGTTTTTTCGTTATGATTTAAAGGTTTTTATTTTTATGTTTTTTTTATTGTAAATTTTTTTAAATATTTTTGGTAAAGAGAGGTAATACGGGGAA
chr7	27878206	27878326	Hypo	1 -	CAATACCCAACTTATCCCACCCTCTTCTCTCCAATACCCAAACCAACAATAATACTATAAATAAAATAAAATACTAATCACACTAAAACACAACCCTACCTTCCAACCAACAACTTCAAA
chr7	27878206	27878326	Hypo	1 +	TAGTATTTAGTTTATTTTATTTTTTTTTTTTTTAGTATTTAAGTTAGTAATGATGTTGTGAATAAGATGAAATATTAATTGTATTGGAGTATAGTTTTGTTTTTTAGTTAGTAATTTTGGG
chr7	27878202	27878322	Hypo	1 -	TCCACAATACCCAACTTATCCCACCCTCTTCTCTCCAATACCCAAACCAACAATAATACTATAAAATACTAATCACACTAAAACACAACCCTACCTTCCAACCAACAACTTCAAAACAAA
chr7	27878202	27878322	Hypo	1 +	TTTATAGTATTTAGTTTATTTTATTTTTTTTTTTTTTAGTATTTAAGTTAGTAATGATGTTGTGAAATATTAATTGTATTGGAGTATAGTTTTGTTTTTTAGTTAGTAATTTTGGGGTAGA
chr7	27878206	27878326	Hyper	1 -	CAATACCCAACTTATCCCACCCTCTTCTCTCCAATACCCAAACCAACAATAATACTATAAATAAAATAAAATACTAATCGCACTAAAACACAACCCTACCTTCCAACCAACAACTTCGAA
chr7	27878206	27878326	Hyper	1 +	TAGTATTTAGTTTATTTTATTTTTTTTTTTTTTAGTATTTAAGTTAGTAATGATGTTGTGAATAAGATGAAATATTAATCGTATTGGAGTATAGTTTTGTTTTTTAGTTAGTAATTTCGGG
chr7	27878202	27878322	Hyper	1 -	TCCACAATACCCAACTTATCCCACCCTCTTCTCTCCAATACCCAAACCAACAATAATACTATAAAATACTAATCGCACTAAAACACAACCCTACCTTCCAACCAACAACTTCGAAACAAA
chr7	27878202	27878322	Hyper	1 +	TTTATAGTATTTAGTTTATTTTATTTTTTTTTTTTTTAGTATTTAAGTTAGTAATGATGTTGTGAAATATTAATCGTATTGGAGTATAGTTTTGTTTTTTAGTTAGTAATTTCGGGGTAGA
chr4	118355756	118355876	Hypo	1 -	AACTTTCTACTTCAAAATATCACATACTAAATTCCATATATCAACAAAACAACAATCCTTTAACTTCCCAAAAATTACCTAAAAAAAAATCCACTTCCATACTTATTCATATAATTATAA
chr4	118355756	118355876	Hypo	1 +	GATTTTTTGTTTTAAAGTGTTATATGTTGAATTTTATGTGTTAGTAGGGTAGTAGTTTTTTGATTTTTTAAGGATTATTTGGGGAAGGATTTATTTTTATGTTTATTTATGTGATTGTAG
chr4	118355753	118355873	Hypo	1 -	CTAAACTTTCTACTTCAAAATATCACATACTAAATTCCATATATCAACAAAACAACAATCCTCCCAAAAATTACCTAAAAAAAAATCCACTTCCATACTTATTCATATAATTATAACAAA
chr4	118355753	118355873	Hypo	1 +	TTGGATTTTTTGTTTTAAAGTGTTATATGTTGAATTTTATGTGTTAGTAGGGTAGTAGTTTTTTTAAGGATTATTTGGGGAAGGATTTATTTTTATGTTTATTTATGTGATTGTAGTAGA
chr4	118355756	118355876	Hyper	1 -	AACTTTCTACTTCAAAATATCACATACTAAATTCCATATATCAACAAAACAACAATCCTTTAACTTCCCAAAAATTACCTAAAAAAAAATCCACTTCCATACTTATTCATATAATTATAA
chr4	118355756	118355876	Hyper	1 +	GATTTTTTGTTTTAAAGTGTTATATGTTGAATTTTATGTGTTAGTAGGGTAGTAGTTTTTTGATTTTTTAAGGATTATTTGGGGAAGGATTTATTTTTATGTTTATTTATGTGATTGTAG
chr4	118355753	118355873	Hyper	1 -	CTAAACTTTCTACTTCAAAATATCACATACTAAATTCCATATATCAACAAAACAACAATCCTCCCAAAAATTACCTAAAAAAAAATCCACTTCCATACTTATTCATATAATTATAACAAA
chr4	118355753	118355873	Hyper	1 +	TTGGATTTTTTGTTTTAAAGTGTTATATGTTGAATTTTATGTGTTAGTAGGGTAGTAGTTTTTTTAAGGATTATTTGGGGAAGGATTTATTTTTATGTTTATTTATGTGATTGTAGTAGA
chr20	57654012	57654132	Hypo	1 -	TACTAATTACACATAAAACTTTCAAAATACAAAAAATAAACACTTCTTTAATAAACAATAACACATATCATCAACTCCACAATTTTACTTTAAAATCCACAAAATAAACCACCACCAAAA
chr20	57654012	57654132	Hypo	1 +	TATTAATTATATGTAGGATTTTTAAGGTGTAGAAAATGGGTATTTTTTTGGTAAGTAGTGATATATGTTATTAATTTTATAATTTTATTTTAGGATTTATAAAGTGGATTGTTATTAAAG
chr20	57654009	57654129	Hypo	1 -	AATTACTAATTACACATAAAACTTTCAAAATACAAAAAATAAACACTTCTTTAATAAACAATATCATCAACTCCACAATTTTACTTTAAAATCCACAAAATAAACCACCACCAAAAAAAA
chr20	57654009	57654129	Hypo	1 +	AATTATTAATTATATGTAGGATTTTTAAGGTGTAGAAAATGGGTATTTTTTTGGTAAGTAGTGTTATTAATTTTATAATTTTATTTTAGGATTTATAAAGTGGATTGTTATTAAAGAGGG
chr20	57654012	57654132	Hyper	1 -	TACTAATTACACGTAAAACTTTCAAAATACAAAAAATAAACACTTCTTTAATAAACAATAACACATATCATCAACTCCACAATTTTACTTTAAAATCCACAAAATAAACCGCCACCAAAA
chr20	57654012	57654132	Hyper	1 +	TATTAATTATACGTAGGATTTTTAAGGTGTAGAAAATGGGTATTTTTTTGGTAAGTAGTGATATATGTTATTAATTTTATAATTTTATTTTAGGATTTATAAAGTGGATCGTTATTAAAG
chr20	57654009	57654129	Hyper	1 -	AATTACTAATTACACGTAAAACTTTCAAAATACAAAAAATAAACACTTCTTTAATAAACAATATCATCAACTCCACAATTTTACTTTAAAATCCACAAAATAAACCGCCACCAAAAAAAA
chr20	57654009	57654129	Hyper	1 +	AATTATTAATTATACGTAGGATTTTTAAGGTGTAGAAAATGGGTATTTTTTTGGTAAGTAGTGTTATTAATTTTATAATTTTATTTTAGGATTTATAAAGTGGATCGTTATTAAAGAGGG
chr9	21434350	21434470	Hypo	1 -	AATTAAAATCACCCTAACCAAACTAATCTTAACAAAATATTATCACAAACTAAAAAACACTCAATAAAAACATTATAAAAAAAAAAAACTATATCTATAATAATCCTAACCTAATAACCC
chr9	21434350	21434470	Hypo	1 +	GGTTAGGGTTGTTTTGATTGGGTTGGTTTTGGTAGGATATTATTATAGATTGAGGAGTATTTAGTAAGAATATTATGGGAAGAAAGGGTTATGTTTATAGTAATTTTGATTTGGTGGTTT
chr9	21434355	21434475	Hypo	1 -	AAATCACCCTAACCAAACTAATCTTAACAAAATATTATCACAAACTAAAAAACACTATAAACCCCCAATAAAAACATTATAAAAAAAAAAAACTATATCTATAATAATCCTAACCTAATA
chr9	21434355	21434475	Hypo	1 +	GGGTTGTTTTGATTGGGTTGGTTTTGGTAGGATATTATTATAGATTGAGGAGTATTGTAGATTTTTAGTAAGAATATTATGGGAAGAAAGGGTTATGTTTATAGTAATTTTGATTTGGTG
chr9	21434350	21434470	Hyper	1 -	AATTAAAATCGCCCTAACCGAACTAATCTTAACAAAATATTATCACAAACTAAAAAACACTCAATAAAAACATTATAAAAAAAAAAAACTATATCTATAATAATCCTAACCTAATAACCC
chr9	21434350	21434470	Hyper	1 +	GGTTAGGGTCGTTTTGATCGGGTTGGTTTTGGTAGGATATTATTATAGATTGAGGAGTATTTAGTAAGAATATTATGGGAAGAAAGGGTTATGTTTATAGTAATTTTGATTTGGTGGTTT
chr9	21434355	21434475	Hyper	1 -	AAATCGCCCTAACCGAACTAATCTTAACAAAATATTATCACAAACTAAAAAACACTATAAACCCCCAATAAAAACATTATAAAAAAAAAAAACTATATCTATAATAATCCTAACCTAATA

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chr9	21434355	21434475	Hyper	1 +	GGGTCGTTTTGATCGGGTTGGTTTTGGTAGGATATTATTATAGATTGAGGAGTATTGTAGATTTTTAGTAAGAATATTATGGGAAGAAAGGGTTATGTTTATAGTAATTTTGATTTGGTG
chr6	142237628	142237748	Hypo	1 -	AATAAAAAAAAAATATCATATAAATATCTAAAAAAAAAAAATTCTTAAAAAAAAAAAAACCACATCCTTAAAATATAAATCAACCTAACATTTTCAAAAAACAATAAAAAAAACCAATATAAAT
chr6	142237628	142237748	Hypo	1 +	AATGAGGGAAAATGTTATGTGGATATTTGGGAGAGAGAGTTTTTAAAAGAAGAAAATTATATTTTTGAGATGTGAGTTAATTTAGTATTTTTAAGAAATAATAAGGAGGTTGGTATGGAT
chr6	142237633	142237753	Hypo	1 -	AAAAAAATATCATATAAATATCTAAAAAAAAAAAATTCTTAAAAAAAAAAAAACCACAACACAAAAATCCTTAAAATATAAATCAACCTAACATTTTCAAAAAACAATAAAAAAAACCAATAT
chr6	142237633	142237753	Hypo	1 +	GGGAAAATGTTATGTGGATATTTGGGAGAGAGAGTTTTTAAAAGAAGAAAATTATAGTGTAAAGGTTTTTGAGATGTGAGTTAATTTAGTATTTTTAAGAAATAATAAGGAGGTTGGTAT
chr6	142237628	142237748	Hyper	1 -	AATAAAAAAAAAATATCATATAAATATCTAAAAAAAAAAAATTCTTAAAAAAAAAAAAACCACATCCTTAAAATATAAATCAACCTAACATTTTCAAAAAACAATAAAAAAAACCGATATAAAT
chr6	142237628	142237748	Hyper	1 +	AATGAGGGAAAATGTTATGTGGATATTTGGGAGAGAGAGTTTTTAAAAGAAGAAAATTATATTTTTGAGATGTGAGTTAATTTAGTATTTTTAAGAAATAATAAGGAGGTCGGTATGGAT
chr6	142237633	142237753	Hyper	1 -	AAAAAAATATCATATAAATATCTAAAAAAAAAAAATTCTTAAAAAAAAAAAAACCACAACGCAAAAATCCTTAAAATATAAATCAACCTAACATTTTCAAAAAACAATAAAAAAAACCGATAT
chr6	142237633	142237753	Hyper	1 +	GGGAAAATGTTATGTGGATATTTGGGAGAGAGAGTTTTTAAAAGAAGAAAATTATAGCGTAAAGGTTTTTGAGATGTGAGTTAATTTAGTATTTTTAAGAAATAATAAGGAGGTCGGTAT
chr13	94339983	94340103	Hypo	1 -	AACTAATTTTACCAAACCTATCAAAAAAAACCAAAACTACTACATATCATAAAAAAAAAACTAAATACATTATCTAAACTCCTAAAAACCCACTTAACCCTTTCATCCCTTCCATATATTA
chr13	94339983	94340103	Hypo	1 +	GGTTAGTTTTATTAAATTTATTAAGAAAGGTTAAGGTTATTATGTATTATGAGAAGGGATTGAATGTATTGTTTGGGTTTTTAGAGGTTTATTTAATTTTTTTATTTTTTTTGTATATTA
chr13	94339988	94340108	Hypo	1 -	ATTTTACCAAACCTATCAAAAAAAACCAAAACTACTACATATCATAAAAAAAAAACTAATTACACAAAATACATTATCTAAACTCCTAAAAACCCACTTAACCCTTTCATCCCTTCCATAT
chr13	94339988	94340108	Hypo	1 +	GTTTTATTAAATTTATTAAGAAAGGTTAAGGTTATTATGTATTATGAGAAGGGATTGATTATATAGAATGTATTGTTTGGGTTTTTAGAGGTTTATTTAATTTTTTTATTTTTTTTGTAT
chr13	94339983	94340103	Hyper	1 -	AACTAATTTTACCAAACCTATCAAAAAAAACCAAAACTACTACGTATCATAAAAAAAAAACTAAATACATTATCTAAACTCCTAAAAACCCACTTAACCCTTTCATCCCTTCCGTATATTA
chr13	94339983	94340103	Hyper	1 +	GGTTAGTTTTATTAAATTTATTAAGAAAGGTTAAGGTTATTACGTATTATGAGAAGGGATTGAATGTATTGTTTGGGTTTTTAGAGGTTTATTTAATTTTTTTATTTTTTTCGTATATTA
chr13	94339988	94340108	Hyper	1 -	ATTTTACCAAACCTATCAAAAAAAACCAAAACTACTACGTATCATAAAAAAAAAACTAATTACACAAAATACATTATCTAAACTCCTAAAAACCCACTTAACCCTTTCATCCCTTCCGTAT
chr13	94339988	94340108	Hyper	1 +	GTTTTATTAAATTTATTAAGAAAGGTTAAGGTTATTACGTATTATGAGAAGGGATTGATTATATAGAATGTATTGTTTGGGTTTTTAGAGGTTTATTTAATTTTTTTATTTTTTTCGTAT
chr5	122905434	122905554	Hypo	1 -	AATACTTTTTATTTATTTATTTATTTTACTTCATTATACTCTTAAATAAAAAAATTAAAAATTCTCTTACTCTCAATCATTAATAAAAAACATTCAATCTTTCACCATTAAATATAATAT
chr5	122905434	122905554	Hypo	1 +	AATGTTTTTTATTTATTTATTTGTTTTGTTTTGTTGTATTTTTGAATAGAAAAGTTAAAAGTTTTTTTGTTTTTAGTTATTAATGGAAAGTATTTAATTTTTTATTATTAAATGTGATGT
chr5	122905439	122905559	Hypo	1 -	TTTTTATTTATTTATTTATTTTACTTCATTATACTCTTAAATAAAAAAATTAAAAATAAATATTCTTCTCTTACTCTCAATCATTAATAAAAAACATTCAATCTTTCACCATTAAATATA
chr5	122905439	122905559	Hypo	1 +	TTTTTATTTATTTATTTGTTTTGTTTTGTTGTATTTTTGAATAGAAAAGTTAAAAGTGGATGTTTTTTTTTTGTTTTTAGTTATTAATGGAAAGTATTTAATTTTTTATTATTAAATGTG
chr5	122905434	122905554	Hyper	1 -	AATACTTTTTATTTATTTATTTATTTTACTTCGTTATACTCTTAAATAAAAAAATTAAAAATTCTCTTACTCTCAATCATTAATAAAAAACATTCAATCTTTCACCATTAAATATAATAT
chr5	122905434	122905554	Hyper	1 +	AATGTTTTTTATTTATTTATTTGTTTTGTTTCGTTGTATTTTTGAATAGAAAAGTTAAAAGTTTTTTTGTTTTTAGTTATTAATGGAAAGTATTTAATTTTTTATTATTAAATGTGATGT
chr5	122905439	122905559	Hyper	1 -	TTTTTATTTATTTATTTATTTTACTTCGTTATACTCTTAAATAAAAAAATTAAAAATAAATATTCTTCTCTTACTCTCAATCATTAATAAAAAACATTCAATCTTTCACCATTAAATATA
chr5	122905439	122905559	Hyper	1 +	TTTTTATTTATTTATTTGTTTTGTTTCGTTGTATTTTTGAATAGAAAAGTTAAAAGTGGATGTTTTTTTTTTGTTTTTAGTTATTAATGGAAAGTATTTAATTTTTTATTATTAAATGTG
chr12	116376857	116376977	Hypo	1 -	AATAAAAAATTTAATATTAAAACTTTATTAATAATCTTTCTTTACCTTTCACTTAATCAAATAAATTACAATATCTTTCTTAACTTTTATATTCTATAATTATATTATAACATATATTTA
chr12	116376857	116376977	Hypo	1 +	GGTGAGAAGTTTAGTGTTAGGATTTTGTTGGTAATTTTTTTTTATTTTTTATTTGATTAAGTGGATTATAATATTTTTTTTGGTTTTTATGTTTTATGGTTGTATTATGATATGTATTTA
chr12	116376862	116376982	Hypo	1 -	AAAATTTAATATTAAAACTTTATTAATAATCTTTCTTTACCTTTCACTTAATCAAAATTTTTTCAATAAATTACAATATCTTTCTTAACTTTTATATTCTATAATTATATTATAACATAT
chr12	116376862	116376982	Hypo	1 +	GAAGTTTAGTGTTAGGATTTTGTTGGTAATTTTTTTTTATTTTTTATTTGATTAAGATTTTTTTAATGGATTATAATATTTTTTTTGGTTTTTATGTTTTATGGTTGTATTATGATATGT
chr12	116376857	116376977	Hyper	1 -	AATAAAAAATTTAATATTAAAACTTTATTAATAATCTTTCTTTACCTTTCACTTAATCAAATAAATTACAATATCTTTCTTAACTTTTATATTCTATAATTATATTATAACATATATTTA
chr12	116376857	116376977	Hyper	1 +	GGTGAGAAGTTTAGTGTTAGGATTTTGTTGGTAATTTTTTTTTATTTTTTATTTGATTAAGTGGATTATAATATTTTTTTTGGTTTTTATGTTTTATGGTTGTATTATGATATGTATTTA
chr12	116376862	116376982	Hyper	1 -	AAAATTTAATATTAAAACTTTATTAATAATCTTTCTTTACCTTTCACTTAATCAAAATTTTTTCAATAAATTACAATATCTTTCTTAACTTTTATATTCTATAATTATATTATAACATAT
chr12	116376862	116376982	Hyper	1 +	GAAGTTTAGTGTTAGGATTTTGTTGGTAATTTTTTTTTATTTTTTATTTGATTAAGATTTTTTTAATGGATTATAATATTTTTTTTGGTTTTTATGTTTTATGGTTGTATTATGATATGT
chr11	113238512	113238632	Hypo	1 -	AAAAAACTCACTAAAACACTCTATAATAACACCCTAAATAACAAACAAATAACAAACCACTAACCAAAACCTACCCATCAATCCTATCATACAAACAAACACCCTTCAAAAAACTACTAA
chr11	113238512	113238632	Hypo	1 +	AGGGAGTTTATTGGGGTATTTTGTGGTGGTGTTTTGGGTGGTAAGTAAGTGATAGGTTATTAGTTAGGATTTGTTTATTAGTTTTATTATGTAAATAAATATTTTTTAAGAGGTTATTGA
chr11	113238516	113238636	Hypo	1 -	AACTCACTAAAACACTCTATAATAACACCCTAAATAACAAACAAATAACAAACCACTATAAAAAAACCAAAACCTACCCATCAATCCTATCATACAAACAAACACCCTTCAAAAAACTAC
chr11	113238516	113238636	Hypo	1 +	AGTTTATTGGGGTATTTTGTGGTGGTGTTTTGGGTGGTAAGTAAGTGATAGGTTATTGTAGAGAAGTTAGGATTTGTTTATTAGTTTTATTATGTAAATAAATATTTTTTAAGAGGTTAT
chr11	113238512	113238632	Hyper	1 -	AAAAAACTCACTAAAACACTCTATAATAACGCCCTAAATAACAAACAAATAACAAACCACTAACCAAAACCTACCCATCAATCCTATCATACAAACAAACACCCTTCAAAAAACTACTAA
chr11	113238512	113238632	Hyper	1 +	AGGGAGTTTATTGGGGTATTTTGTGGTGGCGTTTTGGGTGGTAAGTAAGTGATAGGTTATTAGTTAGGATTTGTTTATTAGTTTTATTATGTAAATAAATATTTTTTAAGAGGTTATTGA
chr11	113238516	113238636	Hyper	1 -	AACTCACTAAAACACTCTATAATAACGCCCTAAATAACAAACAAATAACAAACCACTATAAAAAAACCAAAACCTACCCATCAATCCTATCATACAAACAAACACCCTTCAAAAAACTAC
chr11	113238516	113238636	Hyper	1 +	AGTTTATTGGGGTATTTTGTGGTGGCGTTTTGGGTGGTAAGTAAGTGATAGGTTATTGTAGAGAAGTTAGGATTTGTTTATTAGTTTTATTATGTAAATAAATATTTTTTAAGAGGTTAT
chr2	34662971	34663091	Hypo	1 -	ATAACACTATACCTACCTATTTTAATTAAAATCACTATATTATACAAAAATTAATTAATCATAAAATAAAATTACTATCAAAAAAAAAATTCTTATTTTCCTATTACATAATTCTTACCA
chr2	34662971	34663091	Hypo	1 +	ATGATATTATGTTTGTTTATTTTAATTAAAATTATTATGTTATATAAAAGTTGATTAATTATAAAGTAAAATTGTTATTAAGGGAAAAATTTTTATTTTTTTATTATATGATTTTTGTTA
chr2	34662967	34663087	Hypo	1 -	ATACATAACACTATACCTACCTATTTTAATTAAAATCACTATATTATACAAAAATTAATTATAAAATTACTATCAAAAAAAAAATTCTTATTTTCCTATTACATAATTCTTACCATTATA
chr2	34662967	34663087	Hypo	1 +	ATATATGATATTATGTTTGTTTATTTTAATTAAAATTATTATGTTATATAAAAGTTGATTATAAAATTGTTATTAAGGGAAAAATTTTTATTTTTTTATTATATGATTTTTGTTATTATA
chr2	34662971	34663091	Hyper	1 -	ATAACACTATACCTACCTATTTTAATTAAAATCACTATATTATACAAAAATTAATTAATCATAAAATAAAATTACTATCAAAAAAAAAATTCTTATTTTCCTATTACATAATTCTTACCA
chr2	34662971	34663091	Hyper	1 +	ATGATATTATGTTTGTTTATTTTAATTAAAATTATTATGTTATATAAAAGTTGATTAATTATAAAGTAAAATTGTTATTAAGGGAAAAATTTTTATTTTTTTATTATATGATTTTTGTTA
chr2	34662967	34663087	Hyper	1 -	ATACATAACACTATACCTACCTATTTTAATTAAAATCACTATATTATACAAAAATTAATTATAAAATTACTATCAAAAAAAAAATTCTTATTTTCCTATTACATAATTCTTACCATTATA
chr2	34662967	34663087	Hyper	1 +	ATATATGATATTATGTTTGTTTATTTTAATTAAAATTATTATGTTATATAAAAGTTGATTATAAAATTGTTATTAAGGGAAAAATTTTTATTTTTTTATTATATGATTTTTGTTATTATA
chr2	45511111	45511231	Hypo	1 -	ACAAACTAACTACATCAAAATCTTAAAAAAAAAAAACAAACATAATCTATAACCCCAAATAACCCAAAACCAACTTTAACAAACCTACCACAAACAAACATCTCAATCATCTAACTAAAC
chr2	45511111	45511231	Hypo	1 +	GTAAATTGATTGTATTAGAATTTTGGAGAGGGGGAATGGGTATGGTTTGTAGTTTTAGGTGATTTAAGGTTAGTTTTGGTAAATTTGTTATAGATAAATATTTTAATTGTTTGGTTGAAT
chr2	45511115	45511235	Hypo	1 -	ACTAACTACATCAAAATCTTAAAAAAAAAAAACAAACATAATCTATAACCCCAAATAATCTTACACCCAAAACCAACTTTAACAAACCTACCACAAACAAACATCTCAATCATCTAACTA

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chr2	45511115	45511235	Hypo	1 +	ATTGATTGTATTAGAATTTTGGAGAGGGGGAATGGGTATGGTTTGTAGTTTTAGGTGATTTTATATTTAAGGTTAGTTTTGGTAAATTTGTTATAGATAAATATTTTAATTGTTTGGTTG
chr2	45511111	45511231	Hyper	1 -	ACAAACTAACTACATCAAAATCTTAAAAAAAAAAAACGAACATAATCTATAACCCCAAATAACCCAAAACCAACTTTAACAAACCTACCACAAACAAACATCTCAATCGTCTAACTAAAC
chr2	45511111	45511231	Hyper	1 +	GTAAATTGATTGTATTAGAATTTTGGAGAGGGGGAACGGGTATGGTTTGTAGTTTTAGGTGATTTAAGGTTAGTTTTGGTAAATTTGTTATAGATAAATATTTTAATCGTTTGGTTGAAT
chr2	45511115	45511235	Hyper	1 -	ACTAACTACATCAAAATCTTAAAAAAAAAAAACGAACATAATCTATAACCCCAAATAATCTTACACCCAAAACCAACTTTAACAAACCTACCACAAACAAACATCTCAATCGTCTAACTA
chr2	45511115	45511235	Hyper	1 +	ATTGATTGTATTAGAATTTTGGAGAGGGGGAACGGGTATGGTTTGTAGTTTTAGGTGATTTTATATTTAAGGTTAGTTTTGGTAAATTTGTTATAGATAAATATTTTAATCGTTTGGTTG
chrX	3880120	3880240	Hypo	2 -	TATTCATTAACTAAACAATTTTACAAAATAAAACTACAAAAATTAAAAACCCCTAAAAATAAAAAAATAAAACAAATATATAAAAAAAAAACCATAAAAACTAAATTCTCAAATAATTCAC
chrX	3880120	3880240	Hypo	1 +	TGTTTATTGATTGGATAATTTTGTAGGGTGAGATTGTGAAAATTAAGGGTTTTTAAAAATAAAGAGATGGAATAAATATGTAAGAAAGAGTTATGAAAATTGAATTTTTAAGTAATTTAT
chrX	3880124	3880244	Hypo	2 -	CATTAACTAAACAATTTTACAAAATAAAACTACAAAAATTAAAAACCCCTAAAAATAATAAACTTAAAAAATAAAACAAATATATAAAAAAAAAACCATAAAAACTAAATTCTCAAATAAT
chrX	3880124	3880244	Hypo	1 +	TATTGATTGGATAATTTTGTAGGGTGAGATTGTGAAAATTAAGGGTTTTTAAAAATAATAAATTTAAGAGATGGAATAAATATGTAAGAAAGAGTTATGAAAATTGAATTTTTAAGTAAT
chrX	3880120	3880240	Hyper	2 -	TATTCATTAACTAAACAATTTTACAAAATAAAACTACGAAAATTAAAAACCCCTAAAAATAAAAAAATAAAACAAATATATAAAAAAAAAACCATAAAAACTAAATTCTCAAATAATTCAC
chrX	3880120	3880240	Hyper	1 +	TGTTTATTGATTGGATAATTTTGTAGGGTGAGATTGCGAAAATTAAGGGTTTTTAAAAATAAAGAGATGGAATAAATATGTAAGAAAGAGTTATGAAAATTGAATTTTTAAGTAATTTAC
chrX	3880124	3880244	Hyper	2 -	CATTAACTAAACAATTTTACAAAATAAAACTACGAAAATTAAAAACCCCTAAAAATAATAAACTTAAAAAATAAAACAAATATATAAAAAAAAAACCATAAAAACTAAATTCTCAAATAAT
chrX	3880124	3880244	Hyper	1 +	TATTGATTGGATAATTTTGTAGGGTGAGATTGCGAAAATTAAGGGTTTTTAAAAATAATAAATTTAAGAGATGGAATAAATATGTAAGAAAGAGTTATGAAAATTGAATTTTTAAGTAAT
chr1	44733880	44734000	Hypo	1 -	AACTCTATACAAATAAAAATCAAATCTAAATCACCTCTAAATCCAAAAATCCCAACCCATAAAATAACTAATAACTAAAAATAAATATAAATATCCCAACCCAAACAAAACACAAAACTC
chr1	44733880	44734000	Hypo	1 +	AGTTTTGTATAGGTGGAGATTAGGTTTGAGTTATTTTTGAGTTTAGAGGTTTTAATTTATAGGGTGATTGGTGGTTGGAGGTGAATATAGATGTTTTAGTTTAGGTAGAGTATAGGATTT
chr1	44733885	44734005	Hypo	1 -	TATACAAATAAAAATCAAATCTAAATCACCTCTAAATCCAAAAATCCCAACCCATAAAACTTCACAAAATAACTAATAACTAAAAATAAATATAAATATCCCAACCCAAACAAAACACAA
chr1	44733885	44734005	Hypo	1 +	TGTATAGGTGGAGATTAGGTTTGAGTTATTTTTGAGTTTAGAGGTTTTAATTTATAGGATTTTATGGGGTGATTGGTGGTTGGAGGTGAATATAGATGTTTTAGTTTAGGTAGAGTATAG
chr1	44733880	44734000	Hyper	1 -	AACTCTATACAAATAAAAATCAAATCTAAATCACCTCTAAATCCAAAAATCCCAACCCATAAAATAACTAATAACTAAAAATAAATATAAATATCCCAACCCAAACAAAACACAAAACTC
chr1	44733880	44734000	Hyper	1 +	AGTTTTGTATAGGTGGAGATTAGGTTTGAGTTATTTTTGAGTTTAGAGGTTTTAATTTATAGGGTGATTGGTGGTTGGAGGTGAATATAGATGTTTTAGTTTAGGTAGAGTATAGGATTT
chr1	44733885	44734005	Hyper	1 -	TATACAAATAAAAATCAAATCTAAATCACCTCTAAATCCAAAAATCCCAACCCATAAAACTTCACGAAATAACTAATAACTAAAAATAAATATAAATATCCCAACCCAAACAAAACACAA
chr1	44733885	44734005	Hyper	1 +	TGTATAGGTGGAGATTAGGTTTGAGTTATTTTTGAGTTTAGAGGTTTTAATTTATAGGATTTTACGGGGTGATTGGTGGTTGGAGGTGAATATAGATGTTTTAGTTTAGGTAGAGTATAG
chr14	60137307	60137427	Hypo	1 -	AAACTTAAAATAAAAAAAAATTTAACCAATTCAACACATATTTTAACCAATCTCCTTCAACTATATATATCAATACCTCCATAACATATACTAATCTCAATCTCTTCACTTACTCAAAAA
chr14	60137307	60137427	Hypo	1 +	AAATTTGAAGTGAAAAGAAGTTTGATTAATTTGGTATATGTTTTAATTAATTTTTTTTAATTATATGTGTTAGTATTTTTATAGTATATATTGGTTTTAGTTTTTTTATTTGTTTGAAGA
chr14	60137303	60137423	Hypo	1 -	TATTAAACTTAAAATAAAAAAAAATTTAACCAATTCAACACATATTTTAACCAATCTCCTTTATATCAATACCTCCATAACATATACTAATCTCAATCTCTTCACTTACTCAAAAATAAA
chr14	60137303	60137423	Hypo	1 +	TGTTAAATTTGAAGTGAAAAGAAGTTTGATTAATTTGGTATATGTTTTAATTAATTTTTTTTGTGTTAGTATTTTTATAGTATATATTGGTTTTAGTTTTTTTATTTGTTTGAAGATGAA
chr14	60137307	60137427	Hyper	1 -	AAACTTAAAATAAAAAAAAATTTAACCAATTCGACACATATTTTAACCAATCTCCTTCAACTATATATATCAATACCTCCATAACATATACTAATCTCAATCTCTTCACTTACTCGAAAA
chr14	60137307	60137427	Hyper	1 +	AAATTTGAAGTGAAAAGAAGTTTGATTAATTCGGTATATGTTTTAATTAATTTTTTTTAATTATATGTGTTAGTATTTTTATAGTATATATTGGTTTTAGTTTTTTTATTTGTTCGAAGA
chr14	60137303	60137423	Hyper	1 -	TATTAAACTTAAAATAAAAAAAAATTTAACCAATTCGACACATATTTTAACCAATCTCCTTTATATCAATACCTCCATAACATATACTAATCTCAATCTCTTCACTTACTCGAAAATAAA
chr14	60137303	60137423	Hyper	1 +	TGTTAAATTTGAAGTGAAAAGAAGTTTGATTAATTCGGTATATGTTTTAATTAATTTTTTTTGTGTTAGTATTTTTATAGTATATATTGGTTTTAGTTTTTTTATTTGTTCGAAGATGAA
chr6	89685528	89685648	Hypo	1 -	AAAATCAAAATAAAATCACTTCTATTTTTTAAAAACCACCACCACCAAAAACAAAAACAAATCCTAACAAATAAAACCAAATAAAAAATATAAAAAAAAAACCCTCATATATATATACCT
chr6	89685528	89685648	Hypo	1 +	AGAATTAAAATGGAGTTATTTTTGTTTTTTAAAAATTATTGTTATTAAAAATAAAAATAAATTTTGATAAATAGAGTTAGGTAAAGGGTATGAAAAGAGGGTTTTTATGTGTGTGTGTTT
chr6	89685523	89685643	Hypo	1 -	TTATCAAAATCAAAATAAAATCACTTCTATTTTTTAAAAACCACCACCACCAAAAACAAAAACAAATAAAACCAAATAAAAAATATAAAAAAAAAACCCTCATATATATATACCTAATAA
chr6	89685523	89685643	Hypo	1 +	TTGTTAGAATTAAAATGGAGTTATTTTTGTTTTTTAAAAATTATTGTTATTAAAAATAAAAATAAATAGAGTTAGGTAAAGGGTATGAAAAGAGGGTTTTTATGTGTGTGTGTTTGATAA
chr6	89685528	89685648	Hyper	1 -	AAAATCAAAATAAAATCACTTCTATTTTTTAAAAACCACCGCCACCAAAAACAAAAACAAATCCTAACAAATAAAACCAAATAAAAAATATAAAAAAAAAACCCTCATATATATATACCT
chr6	89685528	89685648	Hyper	1 +	AGAATTAAAATGGAGTTATTTTTGTTTTTTAAAAATTATCGTTATTAAAAATAAAAATAAATTTTGATAAATAGAGTTAGGTAAAGGGTATGAAAAGAGGGTTTTTATGTGTGTGTGTTT
chr6	89685523	89685643	Hyper	1 -	TTATCAAAATCAAAATAAAATCACTTCTATTTTTTAAAAACCACCGCCACCAAAAACAAAAACAAATAAAACCAAATAAAAAATATAAAAAAAAAACCCTCATATATATATACCTAATAA
chr6	89685523	89685643	Hyper	1 +	TTGTTAGAATTAAAATGGAGTTATTTTTGTTTTTTAAAAATTATCGTTATTAAAAATAAAAATAAATAGAGTTAGGTAAAGGGTATGAAAAGAGGGTTTTTATGTGTGTGTGTTTGATAA
chr5	96829210	96829330	Hypo	1 -	AATATATATTTATATATATATATATCCATATATATAAATACATAAACTCTCTTACAAAATATTCCTAATAAAAACCTAAATATACTATTACTTATAAAAATAAAAACTAAACAAATTAAAAA
chr5	96829210	96829330	Hypo	1 +	AATGTGTGTTTGTATGTGTGTGTTTATGTGTATAAATGTATAAGTTTTTTTATAGAATATTTTTAGTAAAAATTTAAATATATTGTTGTTTGTGAGGATAGGAATTGAATAGATTGGAGA
chr5	96829205	96829325	Hypo	2 -	AAAAAAATATATATTTATATATATATATATCCATATATATAAATACATAAACTCTCTTACAAATAAAAACCTAAATATACTATTACTTATAAAAATAAAAACTAAACAAATTAAAAATCAAA
chr5	96829205	96829325	Hypo	1 +	AGGAAAATGTGTGTTTGTATGTGTGTGTTTATGTGTATAAATGTATAAGTTTTTTTATAGATAAAAATTTAAATATATTGTTGTTTGTGAGGATAGGAATTGAATAGATTGGAGATTGAA
chr5	96829210	96829330	Hyper	1 -	AATATATATTTATATATATATATATCCATATATATAAATACATAAACTCTCTTACAAAATATTCCTAATAAAAACCTAAATATACTATTACTTATAAAAATAAAAACTAAACAAATTAAAAA
chr5	96829210	96829330	Hyper	1 +	AATGTGTGTTTGTATGTGTGTGTTTATGTGTATAAATGTATAAGTTTTTTTATAGAATATTTTTAGTAAAAATTTAAATATATTGTTGTTTGTGAGGATAGGAATTGAATAGATTGGAGA
chr5	96829205	96829325	Hyper	2 -	AAAAAAATATATATTTATATATATATATATCCATATATATAAATACATAAACTCTCTTACAAATAAAAACCTAAATATACTATTACTTATAAAAATAAAAACTAAACAAATTAAAAATCGAA
chr5	96829205	96829325	Hyper	1 +	AGGAAAATGTGTGTTTGTATGTGTGTGTTTATGTGTATAAATGTATAAGTTTTTTTATAGATAAAAATTTAAATATATTGTTGTTTGTGAGGATAGGAATTGAATAGATTGGAGATCGAA
chr17	5411764	5411884	Hypo	1 -	CAACATAAAAAAAAACTATTACAAAATATAAAAAATCATAAAACTATTTATACCCTTTAATACTATCCCTTAATATTAACTTCAAAACAATAATCTAAAAAATAACAAAAAACTCTCTACA
chr17	5411764	5411884	Hypo	1 +	TAGTATGAGGGAAGTTATTGTAAAATATAGAAAGTTATGAGATTATTTATGTTTTTTGATATTATTTTTTTAGTATTGATTTTAAGATAGTGATTTAAAGGATAATGAAAAGTTTTTTGTA
chr17	5411768	5411888	Hypo	1 -	ATAAAAAAAAACTATTACAAAATATAAAAAATCATAAAACTATTTATACCCTTTAATACAATCATCCTATCCCTTAATATTAACTTCAAAACAATAATCTAAAAAATAACAAAAAACTCTC
chr17	5411768	5411888	Hypo	1 +	ATGAGGGAAGTTATTGTAAAATATAGAAAGTTATGAGATTATTTATGTTTTTTGATATAATTATTTTATTTTTTAGTATTGATTTTAAGATAGTGATTTAAAGGATAATGAAAAGTTTTT
chr17	5411764	5411884	Hyper	1 -	CAACATAAAAAAAAACTATTACAAAATATAAAAAATCATAAAACTATTTATACCCTTTAATACTATCCCTTAATATTAACTTCAAAACAATAATCTAAAAAATAACGAAAAACTCTCTACA
chr17	5411764	5411884	Hyper	1 +	TAGTATGAGGGAAGTTATTGTAAAATATAGAAAGTTATGAGATTATTTATGTTTTTTGATATTATTTTTTTAGTATTGATTTTAAGATAGTGATTTAAAGGATAACGAAAAGTTTTTTGTA
chr17	5411768	5411888	Hyper	1 -	ATAAAAAAAAACTATTACAAAATATAAAAAATCATAAAACTATTTATACCCTTTAATACAATCATCCTATCCCTTAATATTAACTTCAAAACAATAATCTAAAAAATAACGAAAAACTCTC

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chr17	5411768	5411888	Hyper	1 +	ATGAGGGAAGTTATTGTAAAATATAGAAAGTTATGAGATTATTTATGTTTTTGATATAATTATTTTATTTTTTAGTATTGATTTTAAGATAGTGATTTAAAGGATAACGAAAAGTTTTT
chr21	44255199	44255319	Hypo	1 -	CCAAAACCCTACTAAAAACAACCAAAAAAACAAAAATATAAACAACACTAAAAATACAACCATCATAACTAAAAATCCAAATAAACCCATAACTAAAAATCTCCTACTTCTACTAAAAA
chr21	44255199	44255319	Hyper	1 +	TTAGAGTTTTGTTGGAGGTGGTTAGGGAGGTAGGGGTGTGGGTGATATTGGGAATGTAGTTATTGTAGTTGAGGAGTTTAAGTGGGTTTATGATTGGAAGTTTTTGTTTTTATTAAGAA
chr21	44255195	44255315	Hypo	1 -	TAACCCAAAACCCTACTAAAAACAACCAAAAAAACAAAAATATAAACAACACTAAAAATACAACCATCGTAACTAAAAATCCAAATAAACCCATAACTAAAAATCTCCTACTTCTACTAAAAATTTT
chr21	44255195	44255315	Hyper	1 +	TGATTTAGAGTTTTGTTGGAGGTGGTTAGGGAGGTAGGGGTGTGGGTGATATTGGGAATGTAGTTATTGTAGTTGAGGAGTTTAAGTGGGTTTATGATTGGAAGTTTTTGTTTTTATTAAGAATTTTT
chr21	44255199	44255319	Hyper	1 -	CCAAAACCCTACTAAAAACAACCAAAAAAACAAAAATATAAACGACACTAAAAATACAACCATCGTAACTAAAAATCCAAATAAACCCATAACTAAAAATCTCCTACTTCTACTAAAAA
chr21	44255199	44255319	Hyper	1 +	TTAGAGTTTTGTTGGAGGCGGTTAGGGAGGTAGGGGTGTGGGCGATATTGGGAATGTAGTTATCGTAGTTGAGGAGTTTAAGTGGGTTTATGATTGGAAGTTTTTGTTTTTATTAAGAA
chr21	44255195	44255315	Hyper	1 -	TAACCCAAACCCTACTAAAACGCACCAAAAAACAAAAATATAAACGACACTAAAAATACAACCTAAAAATCCAAATAAACCCATAACTAAAAATCTCCTACTTCTACTAAAAATTTT
chr21	44255195	44255315	Hyper	1 +	TGATTTAGAGTTTTGTTGGAGGCGGTTAGGGAGGTAGGGGTGTGGGCGATATTGGGAATGTAGTTATCGTAGTTGAGGAGTTTAAGTGGGTTTATGATTGGAAGTTTTTGTTTTTATTAAGAATTTTT
chr11	33953055	33953175	Hypo	1 -	CTTAATTAAACCCCTTTATTAACTAATAAAAAAAAAAAAAAATTTCTAAAAATTTTCACTCAATACCCCAAAAACTACTACACATTTTATCTAAACTTAACCACCTCCTCTACCAAAATTAT
chr11	33953055	33953175	Hyper	1 +	TTTGGTTGAATTTTTTTATTGGTTGATAGGAGAGAGAAGATTTTTAGAGATTTTTATTTAATGTTTTAGAAGTTATTGTATATTTTGTTTGAGTTTGGTTATTTTTTTTGTTAGAGTTGT
chr11	33953060	33953180	Hypo	1 -	TTAAACCCCTTTATTAACTAATAAAAAAAAAAAAAAATTTCTAAAAATTTTCACTCAATACCCCAAAAACTACTACACATTTTATCTAAACTTAACCACCTCCTCTACCAAAA
chr11	33953060	33953180	Hyper	1 +	TTGAATTTTTTTATTGGTTGATAGGAGAGAGAAGATTTTTAGAGATTTTTATTTAATGTTTAGAAGTTATTGTATATTTTGTTTGAGTTTGGTTATTTTTTTTGTTAGAG
chr11	33953055	33953175	Hyper	1 -	CTTAATTAAACCCCTTTATTAACTAATAAAAAAAAAAAAAAATTTCTAAAAATTTTCACTCAATACCCCAAAAACTACTACACATTTTATCTAAACTTAACCACCTCCTCTACCAAAATTAT
chr11	33953055	33953175	Hyper	1 +	TTTGGTTGAATTTTTTTATTGGTTGATAGGAGAGAGAAGATTTTTAGAGATTTTTATTTAATGTTTTAGAAGTTATTGTATATTTTGTTTGAGTTTGGTTATTTTTTTTGTTAGAGTTGT
chr11	33953060	33953180	Hyper	1 -	TTAAACCCCTTTATTAACTAATAAAAAAAAAAAAAAATTTCTAAAAATTTTCACTCAATACCCCAAAAACTACTACACATTTTATCTAAACTTAACCACCTCCTCTACCAAAA
chr11	33953060	33953180	Hyper	1 +	TTGAATTTTTTTATTGGTTGATAGGAGAGAGAAGATTTTTAGAGATTTTTATTTAATGTTTAGAAGTTATTGTATATTTTGTTTGAGTTTGGTTATTTTTTTTGTTAGAG
chr6	130660979	130661099	Hypo	1 -	TAATTATCAAAATATAAATCCTAATTCAATAAAAAATAATAACCTTTCCAATTTAAATATTCTCCATTCATTTCCAAATCTATTTCTCTCCATTTATATAATCATCTATATCCTCCTAAT
chr6	130660979	130661099	Hyper	1 +	TGATTATTAGGATATAAGTTTGATTTAATGAAAGATGATAGTTTTTTTAATTTGAATATTTATTTTTAAGTTTATTTTTTTTATTTATGTAATTATTTATATTTTTTTAATGTAA
chr6	130660976	130661096	Hypo	1 -	GTGTGATTATTAGGATATAAGTTTGATTTAATGAAAGATGATAGTTTTTTTAATTTGAATATTTATTTTTAAGTTTATTTTTTTTATTTATGTAATTATTTATATTTTTTTAATGTAA
chr6	130660979	130661099	Hyper	1 -	TAATTATCAAAATATAAATCCTAATTCAATAAAAAATAATAACCTTTCCAATTTAAATATTCTCCATTCATTTCCAAATCTATTTCTCTCCATTTATATAATCATCTATATCCTCCTAAT
chr6	130660979	130661099	Hyper	1 +	TGATTATTAGGATATAAGTTTGATTTAATGAAAGATGATAGTTTTTTTAATTTGAATATTTATTTTTAAGTTTATTTTTTTTATTTATGTAATTATTTATATTTTTTTAATGTAA
chr6	130660976	130661096	Hyper	1 -	ATATAATTATCAAAATATAAATCCTAATTCAATAAAAAATAATAACCTTTCCAATTTAAATATTCTCCATTCATTTCCAAATCTATTTCTCTCCATTTATATAATCATCTATATCCTCCTAAT
chr6	130660979	130661099	Hyper	1 +	GTGTGATTATTAGGATATAAGTTTGATTTAATGAAAGATGATAGTTTTTTTAATTTGAATATTTATTTTTAAGTTTATTTTTTTTATTTATGTAATTATTTATATTTTTTTAATGTAA
chr16	27094545	27094665	Hypo	1 -	TTAAACAATAACAAACACTTCTTTATACCACCTATAACACCCAACCCCAATCATAAACAAATAATACTAAAATCTAACAAAATAAAACAACCCAAACTTATAAATCAAACCATCCTA
chr16	27094545	27094665	Hyper	1 +	TTAAGTAGTGATAAATATTTTTTTGTGTTGTTTGTAATATTTAGTTTTAATTATAGATAGATGGTGGTGTTAGAGTTTGGTAGAATAAAATGATTTAGGTTTGTGAGTTAGATTATTTTG
chr16	27094549	27094669	Hypo	1 -	ACAATAACAAACACTTCTTTATACCACCTATAACACCCAACCCCAATCATAAACAAATAATACTAAAATCTAACAAAATAAAACAACCCAAACTTATAAATCAAACCATCCTA
chr16	27094549	27094669	Hyper	1 +	GTAGTGATAAATATTTTTTTGTGTTGTTTGTAATATTTAGTTTTAATTATAGATAGATGGTATTGTGGTGGTGTTAGAGTTTGGTAGAATAAAATGATTTAGGTTTGTGAGTTAGATTAT
chr16	27094545	27094665	Hyper	1 -	TTAAACAATAACAAACACTTCTTTATACCGCCTATAACACCCAACCCCAATCATAAACAAATAACACCGTAATAATACTAAAATCTAACAAAATAAAACGACCCAAACTTATAAATCAAACCAT
chr16	27094545	27094665	Hyper	1 +	TTAAGTAGTGATAAATATTTTTTTGTGTCGTTTGTAATATTTAGTTTTAATTATAGATAGATGGTATCGTGGTGGTGTTAGAGTTTGGTAGAATAAAACGATTTAGGTTTGTGAGTTAGATTAT
chr16	27094549	27094669	Hyper	1 +	GTAGTGATAAATATTTTTTTGTGTCGTTTGTAATATTTAGTTTTAATTATAGATAGATGGTATCGTGGTGGTGTTAGAGTTTGGTAGAATAAAACGATTTAGGTTTGTGAGTTAGATTAT
chr15	48563659	48563779	Hypo	1 -	CTTCTTAAAACAAACTATTTCTTCTACCCCTTATTATTATAATCATAACATTTATCATTATATTTATACAACATATTAACAAAAATACTCTTAATTCTACTAAAAAAAACATAAAAAAA
chr15	48563659	48563779	Hyper	1 +	TTTTTTAAAGTAGGTTATTTTTTTTATTTTTTGTTATTATAATTATAATATTTATTATTATTTATTTATGTAATATATTAATAAAAGTATTTTTAGTTTTATTGAAAGGAAGTATAAGAAAA
chr15	48563664	48563784	Hypo	1 -	TAAAACAAACTATTTCTTCTACCCCTTATTATTATAATCATAACATTTATCATTATATTTATACAACAAATACTCTTAATTCTACTAAAAAAAACATAAAAAA
chr15	48563664	48563784	Hyper	1 +	TAAAGTAGGTTATTTTTTTTATTTTTTGTTATTATAATTATAATATTTATTATTATTTATTTATGTAATATATTAATAAAAGTATTTTTAGTTTTATTGAAAGGAAGTATAAG
chr15	48563659	48563779	Hyper	1 -	CTTCTTAAAACAAACTATTTCTTCTACCCCTTATTATTATAATCATAACATTTATCATTATATTTATACAACATATTAACAAAAATACTCTTAATTCTACTAAAAAAAACATAAAAAA
chr15	48563659	48563779	Hyper	1 +	TTTTTTAAAGTAGGTTATTTTTTTTATTTTTTGTTATTATAATTATAATATTTATTATTATTTATTTATGTAATATATTAATAAAAGTATTTTTAGTTTTATTGAAAGGAAGTATAAGAAAA
chr15	48563664	48563784	Hyper	1 -	TAAAACAAACTATTTCTTCTACCCCTTATTATTATAATCATAACATTTATCATTATATTTATACAACAAATACTCTTAATTCTACTAAAAAAAACATAAAAAA
chr15	48563664	48563784	Hyper	1 +	TAAAGTAGGTTATTTTTTTTATTTTTTGTTATTATAATTATAATATTTATTATTATTTATTTATGTAATATATTAATAAAAGTATTTTTAGTTTTATTGAAAGGAAGTATAAG
chr11	19406794	19406914	Hypo	1 -	TCTAATTTATATTAAACTCTATTCAAAATAATTTAATATAATAAAAATAATTTTAAATAAATATATTTATTCATTCATACACTTATCCAACAATTATATATTTAAAATTCATAATAAATAA
chr11	19406794	19406914	Hyper	1 +	TTTGGTTTATGTTAAATTTTGTTTAAAATGATTTGATGTGATAAAATAGTTTTGGATAAATATGTTTATTTATTATGTATTTATTTAATAGGTTATATATTTAGAGTTTATGGTGAATAA
chr11	19406789	19406909	Hypo	1 -	TAAATTCTAATTTATATTAAACTCTATTCAAAATAATTTAATATAATAAAAATAATTTTAAATATTCATTCATACACTTATCCAACAATTATATATTTAAAATTCATAATAAATAAACAA
chr11	19406789	19406909	Hyper	1 +	TAAATTTGGTTTATGTTAAATTTTGTTTAAAATGATTTGATGTGATAAAATAGTTTTGGATAAATATGTTTATTTATTATGTATTTATTTAATAGGTTATATATTTAGAGTTTATGGTGAATAA
chr11	19406794	19406914	Hypo	1 -	TCTAATTTATATTAAACTCTATTCAAAATAATTTAATATAATAAAAATAATTTTAAATATTCATTCATACACTTATCCAACAATTATATATTTAAAATTCATAATAAATAAACAA
chr11	19406794	19406914	Hyper	1 +	TTTGGTTTATGTTAAATTTTGTTTAAAATGATTTGATGTGATAAAATAGTTTTGGATAAATATGTTTATTTATTATGTATTTATTTAATAGGTTATATATTTAGAGTTTATGGTGAATAA
chr11	19406789	19406909	Hyper	1 -	TAAATTCTAATTTATATTAAACTCTATTCAAAATAATTTAATATAATAAAAATAATTTTAAATATTCATTCATACACTTATCCAACAATTATATATTTAAAATTCATAATAAATAAACAA
chr11	19406789	19406909	Hyper	1 +	TAAATTTGGTTTATGTTAAATTTTGTTTAAAATGATTTGATGTGATAAAATAGTTTTGGATAAATATGTTTATTTATTATGTATTTATTTAATAGGTTATATATTTAGAGTTTATGGTGAATAA
chr18	45518101	45518221	Hypo	1 -	TCCCTTCAAAAATATTCAAATATTCCCCCTCCATACAACCTTACCTAACTATCTCCAACCCAACTCATCAACCTCTCCCCTAACCTCCAACTACCCTTAAAATTCAAATTTAAACTATAT
chr18	45518101	45518221	Hyper	1 +	TTTTTTTAAAGGTGTTTAAGTATTTTTTTTTATGTAGTTTTATTTGATTATTTTAGTTTAGTTTATTAGTTTTTTTTTGATTTTTAATTGTTTTTGGAGTTTGAGTTTAGGTTGTGT
chr18	45518105	45518225	Hypo	1 -	TTCAAAATATTCAAATATTCCCCCTCCATACAACCTTACCTAACTATCTCCAACCCAACTCATCAACCTCTCCCCTAACCTCCAACTACCCTTAAAATTCAAATTTAAACTATAAAATTA
chr18	45518105	45518225	Hyper	1 +	TTTAAAGGTGTTTAAGTATTTTTTTTTATGTAGTTTTATTTGATTATTTTAGTTTAGTTTATTAGTTTTTTTTTGATTTTTAATTGTTTTTGGAGTTTGAGTTTAGGTTG
chr18	7384195	7384315	Hypo	1 -	CACTTAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACATATATAAAATATAATAAAAAACAAAAACCATCATACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384195	7384315	Hyper	1 +	TATTTAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATAAATAAAAGTTATTGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATGTTTT
chr18	7384199	7384319	Hypo	1 -	TAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACATATATAAAATATAATAAAAAACAAAAACCATCATACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384199	7384319	Hyper	1 +	TAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATGTAATAAGAAATAAAAGTTATCGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATG
chr18	7384195	7384315	Hyper	1 -	CACTTAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACGTATATAAAATATAATAAAAAACAAAAACCATCGTACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384195	7384315	Hyper	1 +	TATTTAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATAAATAAAAGTTATTGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATGTTTT
chr18	7384199	7384319	Hypo	1 -	TAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACGTATATAAAATATAATAAAAAACAAAAACCATCGTACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384199	7384319	Hyper	1 +	TAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAACGTGTGTGAAATGTAATAAGAAATAAAAGTTATCGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATG
chr3	111999675	111999795	Hypo	1 -	TATAAAACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATATAACTA
chr3	111999675	111999795	Hyper	1 +	TATAGAATTTTAATGTGATATGATTTTTTAAAATTGTTAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGTAATTG
chr3	111999680	111999800	Hypo	1 -	AACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTATTTTCTCTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATAT
chr3	111999680	111999800	Hyper	1 +	AATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGT
chr3	111999675	111999795	Hyper	1 -	TATAAAACTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATATAACTA
chr3	111999675	111999795	Hyper	1 +	TATAGAATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGTAATTG
chr3	111999680	111999800	Hyper	1 -	AACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTATTTTCTCTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATAT
chr3	111999680	111999800	Hyper	1 +	AATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGT
chr9	111673942	111674062	Hyper	1 -	CAATCTTAAAAACCAATACTCCCTTCATATCAACAATAAACTATTCATTAAAATAACTACTTCACTCTTCAATCTTACCCTTCCCACCCCACCCCCTAAAAAAACCTTCTACCTCATT
chr9	111673942	111674062	Hyper	2 +	TAATTTTAGAAGTTAGTGTTTTTTTTATATTAGTAATGAAATTATTTATTAAGGTGATTATTTTATTTTTTAGTTTTGTTTTTTTTATTTTATTTTTTAAAAAAATTTTTTATTTTATT
chr9	111673938	111674058	Hyper	1 -	ATTACAATCTTAAAAACCAATACTCCCTTCATATCAACAATAAACTATTCATTAAAATAACTACTTCACTCTTCAATCTTACCCTTCCCACCCCACCCCCTAAAAAAACCTTCTACCTCATT
chr9	111673938	111674058	Hyper	1 +	ATTATAATTTTAGAAGTTAGTGTTTTTTTTATATTAGTAATGAAATTATTTATTAAGGTGATTATTTTATTTTTTAGTTTTGTTTTTTTTATTTTATTTTTTAAAAAAATTTTTTATTTTATTATAA
chr2	222445974	222446094	Hyper	1 -	TATACTTTAACAAAAAATTAAAACCCAAAAATAACCCTAATTTCTATCCTAATATAAATAATCCAATATATCTAAATTTCCCTTTCTTAAATTAACTAACTCTTAACTAACCTATAAATAC
chr2	222445974	222446094	Hyper	1 +	TGTATTTTAATAGGGGTTGGAGTTTAAGAATAGTTTTAGTTTTATTTTAATGTGAGTGATTTGATGTGTTTAGATTTTTTTTTTTTGGATTGATTGATTTTTAGTTGATTTGTAAGTAT
chr2	222445969	222446089	Hyper	1 -	CTTACTATACTTTAACAAAAATTAAACCCAAAATAACCCTAATTTCTATCCTAATATAAATAATCCAATATATCTAAATTTCCCTTTCTTAAATTAACTAACTCTTAACTAACCTATAAATAC
chr2	222445969	222446089	Hyper	1 +	TTTGTTGTATTTTAATAGGGGTTGGAGTTTAAGAATAGTTTTAGTTTTATTTTAATGTGAGTGATTTGATGTGTTTAGATTTTTTTTTTTTGGATTGATTGATTTTTAGTTGATTTGTAAGTATT
chr10	7859316	7859436	Hypo	1 -	ACCATAATTTCAATTCTATTATTAAATTTCCCAAACTTTAAAAAATATAAATATCATATTCAAAATCTAAAATAATCCCTATCAAAAAAATATAAAACCACTCATAAACTCGACAATTTA
chr10	7859316	7859436	Hyper	1 +	ATTATAATTTTAGTTTTATTATTGAGTTTTTTAGATTTTGAAAAATGTGAATATTATGTTTAAAGTTTTGGAATAGTTTTGTCGGAGGAATATAGAGTTATTTATAAATTTGTAATTTTA
chr10	7859311	7859431	Hypo	1 -	AAAAAACCATAATTTCAATTCTATTATTAAATTTCCCAAACTTTAAAAAATATAAATATCATATTCAAAATCTAAAATAATCCCTATCAAAAAAATATAAAACCACTCATAAACTCGCAATTTA
chr10	7859311	7859431	Hyper	1 +	GAAGAATTATAATTTTAGTTTTATTATTGAGTTTTTTAGATTTTGAAAAATGTGAATATTATGTTTAAAGTTTTGGAATAGTTTTGTCGGAGGAATATAGAGTTATTTATAAATTTGTAATTTTA
chrX	154848698	154848818	Hypo	2 -	CTAAATTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACACTTTAAATATCAAATCTTACTAAAACCTATATCCAAAAATTTATCATATTTTTAAAAAAAATTTTATAATTT
chrX	154848698	154848818	Hyper	2 +	TTGAATTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGTGTTTTAGATGTTAAGTTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATAGTTT
chrX	154848703	154848823	Hypo	2 -	TTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACACTTTAAATATCAAATCTTAAAACCCTTACTAAAACCTATATCCAAAAATTTATCATATTTTAAAAAAAATTTTATA
chrX	154848703	154848823	Hyper	2 +	TTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGTGTTTTAGATGTTAAGTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATA
chrX	154848698	154848818	Hyper	2 -	TTAAATTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACACTTTAAATATCAAATCTTACAAAACCTATATCCAAAAATTTATCATATTTTAAAAAAAATTTTATAATTT
chrX	154848698	154848818	Hyper	2 +	TTGAATTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGCGTTTTAGATGTTAAGTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATAGTTT
chrX	154848703	154848823	Hyper	2 -	TTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACGCTTTAAATATCAAATCTTAAAACCCTTACTAAAACCTATATCCAAAAATTTATCATATTTTAAAAAAAATTTTATA

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chr18	45518105	45518225	Hypo	1 +	TTTAAAGGTGTTTAAGTATTTTTTTTTATGTAGTTTTATTTGATTATTTTAGTTTAGTTGGAGGTTTATTAGTTTTTTTTTGATTTTTAATTGTTTTTGGAGTTTGAGTTTAGGTTG
chr18	45518101	45518221	Hyper	1 -	TCCCTTCAAAAATATTCAAATATTCCCCCTCCATACAACCTTACCTAACTATCTCCAACCCAACTCATCAACCTCTCCCCTAACCTCCAACTACCCTTAAAATTCAAATTTAAACTATAT
chr18	45518101	45518221	Hyper	1 +	TTTTTTTAAAGGTGTTTAAGTATTTTTTTTTATGTAGTTTTATTTGATTATTTTAGTTTAGTTTATTAGTTTTTTTTTGATTTTTAATTGTTTTTGGAGTTTGAGTTTAGGTTGTGT
chr18	45518105	45518225	Hyper	1 -	TTCAAAATATTCAAATATTCCCCCTCCATACAACCTTACCTAACTATCTCCAACCCAACTCATCAACCTCTCCCCTAACCTCCAACTACCCTTAAAATTCAAATTTAAACTATAAAATTA
chr18	45518105	45518225	Hyper	1 +	TTTAAAGGTGTTTAAGTATTTTTTTTTATGTAGTTTTATTTGATTATTTTAGTTTAGTTGGAGGTTTATTAGTTTTTTTTTGATTTTTAATTGTTTTTGGAGTTTGAGTTTAGGTTG
chr18	7384195	7384315	Hypo	1 -	CACTTAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACATATATAAAATATAATAAAAAACAAAAACCATCATACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384195	7384315	Hyper	1 +	TATTTAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATAAATAAAAGTTATTGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATGTTTT
chr18	7384199	7384319	Hypo	1 -	TAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACATATATAAAATATAATAAAAAACAAAAACCATCATACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384199	7384319	Hyper	1 +	TAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATGTAATAAGAAATAAAAGTTATCGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATG
chr18	7384195	7384315	Hyper	1 -	CACTTAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACGTATATAAAATATAATAAAAAACAAAAACCATCGTACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384195	7384315	Hyper	1 +	TATTTAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAATGTGTGTGAAATAAATAAAAGTTATCGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATGTTTT
chr18	7384199	7384319	Hypo	1 -	TAATAAACCCAAAATTAAAACAATCTCTAACTTTAACATTATCAACGTATATAAAATATAATAAAAAACAAAAACCATCATACAACTATAAAAACAATAATTATTATAACACTTAAAATA
chr18	7384199	7384319	Hyper	1 +	TAATAAATTTAGAGTTGAAATAGTTTTAATTTTGATATTATTAACGTGTGTGAAATGTAATAAGAAATAAAAGTTATCGTGTAATTATGAGGGTAGTAATTATTGTAATATTTGAAATG
chr3	111999675	111999795	Hypo	1 -	TATAAAACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATATAACTA
chr3	111999675	111999795	Hyper	1 +	TATAGAATTTTAATGTGATATGATTTTTTAAAATTGTTAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGTAATTG
chr3	111999680	111999800	Hypo	1 -	AACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTATTTTCTCTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATAT
chr3	111999680	111999800	Hyper	1 +	AATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGT
chr3	111999675	111999795	Hyper	1 -	TATAAAACTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATATAACTA
chr3	111999675	111999795	Hyper	1 +	TATAGAATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGTAATTG
chr3	111999680	111999800	Hyper	1 -	AACTTTAATATAACATAATTTCTTAAAATTATAAACAATATCTTACAATTTCACTACTTATTTTCTCTTTCATAAATTTAAAATCCTCCCTCACACTTATCAACACACAAAATCAATAT
chr3	111999680	111999800	Hyper	1 +	AATTTTAATGTGATATGATTTTTTAAAATTGTGAATAATGTTTTATAGTTTTATTATTTTTTATGAGTTTAAAATTTTTTTTTATATTTATTAGTATATAGAATTAGTGT
chr9	111673942	111674062	Hyper	1 -	CAATCTTAAAAACCAATACTCCCTTCATATCAACAATAAACTATTCATTAAAATAACTACTTCACTCTTCAATCTTACCCTTCCCACCCCACCCCCTAAAAAAACCTTCTACCTCATT
chr9	111673942	111674062	Hyper	2 +	TAATTTTAGAAGTTAGTGTTTTTTTTATATTAGTAATGAAATTATTTATTAAGGTGATTATTTTATTTTTTAGTTTTGTTTTTTTTATTTTATTTTTTAAAAAAATTTTTTATTTTATT
chr9	111673938	111674058	Hyper	1 -	ATTACAATCTTAAAAACCAATACTCCCTTCATATCAACAATAAACTATTCATTAAAATAACTACTTCACTCTTCAATCTTACCCTTCCCACCCCACCCCCTAAAAAAACCTTCTACCTCATT
chr9	111673938	111674058	Hyper	1 +	ATTATAATTTTAGAAGTTAGTGTTTTTTTTATATTAGTAATGAAATTATTTATTAAGGTGATTATTTTATTTTTTAGTTTTGTTTTTTTTATTTTATTTTTTAAAAAAATTTTTTATTTTATTATAA
chr2	222445974	222446094	Hyper	1 -	TATACTTTAACAAAAAATTAAAACCCAAAATAACCCTAATTTCTATCCTAATATAAATAATCCAATATATCTAAATTTCCCTTTCTTAAATTAACTAACTCTTAACTAACCTATAAATAC
chr2	222445974	222446094	Hyper	1 +	TGTATTTTAATAGGGGTTGGAGTTTAAGAATAGTTTTAGTTTTATTTTAATGTGAGTGATTTGATGTGTTTAGATTTTTTTTTTTTGGATTGATTGATTTTTAGTTGATTTGTAAGTAT
chr2	222445969	222446089	Hyper	1 -	CTTACTATACTTTAACAAAAATTAAACCCAAAATAACCCTAATTTCTATCCTAATATAAATAATCCAATATATCTAAATTTCCCTTTCTTAAATTAACTAACTCTTAACTAACCTATAAATAC
chr2	222445969	222446089	Hyper	1 +	TTTGTTGTATTTTAATAGGGGTTGGAGTTTAAGAATAGTTTTAGTTTTATTTTAATGTGAGTGATTTGATGTGTTTAGATTTTTTTTTTTTGGATTGATTGATTTTTAGTTGATTTGTAAGTATT
chr10	7859316	7859436	Hypo	1 -	ACCATAATTTCAATTCTATTATTAAATTTCCCAAACTTTAAAAAATATAAATATCATATTCAAAATCTAAAATAATCCCTATCAAAAAAATATAAAACCACTCATAAACTCGACAATTTA
chr10	7859316	7859436	Hyper	1 +	ATTATAATTTTAGTTTTATTATTGAGTTTTTTAGATTTTGAAAAATGTGAATATTATGTTTAAAGTTTTGGAATAGTTTTGTCGGAGGAATATAGAGTTATTTATAAATTTGTAATTTTA
chr10	7859311	7859431	Hypo	1 -	AAAAAACCATAATTTCAATTCTATTATTAAATTTCCCAAACTTTAAAAAATATAAATATCATATTCAAAATCTAAAATAATCCCTATCAAAAAAATATAAAACCACTCATAAACTCGCAATTTA
chr10	7859311	7859431	Hyper	1 +	GAAGAATTATAATTTTAGTTTTATTATTGAGTTTTTTAGATTTTGAAAAATGTGAATATTATGTTTAAAGTTTTGGAATAGTTTTGTCGGAGGAATATAGAGTTATTTATAAATTTGTAATTTTA
chrX	154848698	154848818	Hypo	2 -	CTAAATTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACACTTTAAATATCAAATCTTACAAAACCTATATCCAAAAATTTATCATATTTTAAAAAAAATTTTATAATTT
chrX	154848698	154848818	Hyper	2 +	TTGAATTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGTGTTTTAGATGTTAAGTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATA
chrX	154848703	154848823	Hypo	2 -	TTTTAAAAAATCCAATCTACCAAATTTTTTTATAAATTACACTTTAAATATCAAATCTTAAAACCCTTACTAAAACCTATATCCAAAAATTTATCATATTTTAAAAAAAATTTTATA
chrX	154848703	154848823	Hyper	2 +	TTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGCGTTTTAGATGTTAAGTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATA

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chrX	154848703	154848823	Hyper	2 +	TTTTGAGGAATTTAATTTATTAAGTTTTTTTATGGATTGCGTTTTAGATGTTAAGTTTTAGAGTTTTTTTATTGAAATTTATATTTAAAGATTTTATTATGTTTTTAAAAAAAGTTTTATA
chr6	53373563	53373683	Hypo	1 -	AAAAAAACTCCATACAATTATATTTCTAATCAAAAAACATATTTATACAACCCATACAAAACACATATACCTATACCTATCTTACAATAAAATATACCAAAAAAAATCCAATTCCTTAAA
chr6	53373563	53373683	Hypo	1 +	AAAAAAGTTTTATGTAGTTATATTTTTGATTAAAAAGTATGTTTATGTAATTTATATAGAGTATATGTATTTGTGTTTATTTTATAGTGAAATATATTAGGAAGAATTTAGTTTTTTGGG
chr6	53373566	53373686	Hypo	1 -	AAAACTCCATACAATTATATTTCTAATCAAAAAACATATTTATACAACCCATACAAAACTCCACCACATATACCTATACCTATCTTACAATAAAATATACCAAAAAAAATCCAATTCCTT
chr6	53373566	53373686	Hypo	1 +	AAAGTTTTATGTAGTTATATTTTTGATTAAAAAGTATGTTTATGTAATTTATATAGAGTTTTATTATATGTATTTGTGTTTATTTTATAGTGAAATATATTAGGAAGAATTTAGTTTTTT
chr6	53373563	53373683	Hyper	1 -	AAAAAAACTCCATACAATTATATTTCTAATCAAAAAACATATTTATACAACCCATACAAAACACATATACCTATACCTATCTTACAATAAAATATACCAAAAAAAATCCAATTCCTTAAA
chr6	53373563	53373683	Hyper	1 +	AAAAAAGTTTTATGTAGTTATATTTTTGATTAAAAAGTATGTTTATGTAATTTATATAGAGTATATGTATTTGTGTTTATTTTATAGTGAAATATATTAGGAAGAATTTAGTTTTTTGGG
chr6	53373566	53373686	Hyper	1 -	AAAACTCCATACAATTATATTTCTAATCAAAAAACATATTTATACAACCCATACAAAACTCCACCACATATACCTATACCTATCTTACAATAAAATATACCAAAAAAAATCCAATTCCTT
chr6	53373566	53373686	Hyper	1 +	AAAGTTTTATGTAGTTATATTTTTGATTAAAAAGTATGTTTATGTAATTTATATAGAGTTTTATTATATGTATTTGTGTTTATTTTATAGTGAAATATATTAGGAAGAATTTAGTTTTTT
chr10	29916100	29916220	Hypo	1 -	AAAAATCTTCTTTCTCAACACATTTCTAATTTATTCCTACTCTCCCACCTTAAACTACTACCTTCCAAATACAAAATATTACCTTTCCAAAAAAAACAAATTATTCTCAATCTCTAAAAC
chr10	29916100	29916220	Hypo	1 +	AAAGATTTTTTTTTTTAATATATTTTTAATTTGTTTTTGTTTTTTTATTTTGAATTATTATTTTTTAGATATAAGGTGTTGTTTTTTTAAGGAAGATAGATTATTTTTGATTTTTGAAAT
chr10	29916095	29916215	Hypo	1 -	TTAAAAAAAATCTTCTTTCTCAACACATTTCTAATTTATTCCTACTCTCCCACCTTAAACTAAATACAAAATATTACCTTTCCAAAAAAAACAAATTATTCTCAATCTCTAAAACCTTTA
chr10	29916095	29916215	Hypo	1 +	TTAAAAAAGATTTTTTTTTTTAATATATTTTTAATTTGTTTTTGTTTTTTTATTTTGAATTAGATATAAGGTGTTGTTTTTTTAAGGAAGATAGATTATTTTTGATTTTTGAAATTTTTG
chr10	29916100	29916220	Hyper	1 -	AAAAATCTTCTTTCTCAACACATTTCTAATTTATTCCTACTCTCCCACCTTAAACTACTACCTTCCAAATACAAAATATTACCTTTCCAAAAAAAACAAATTATTCTCGATCTCTAAAAC
chr10	29916100	29916220	Hyper	1 +	AAAGATTTTTTTTTTTAATATATTTTTAATTTGTTTTTGTTTTTTTATTTTGAATTATTATTTTTTAGATATAAGGTGTTGTTTTTTTAAGGAAGATAGATTATTTTCGATTTTTGAAAT
chr10	29916095	29916215	Hyper	1 -	TTAAAAAAAATCTTCTTTCTCAACACATTTCTAATTTATTCCTACTCTCCCACCTTAAACTAAATACAAAATATTACCTTTCCAAAAAAAACAAATTATTCTCGATCTCTAAAACCTTTA
chr10	29916095	29916215	Hyper	1 +	TTAAAAAAGATTTTTTTTTTTAATATATTTTTAATTTGTTTTTGTTTTTTTATTTTGAATTAGATATAAGGTGTTGTTTTTTTAAGGAAGATAGATTATTTTCGATTTTTGAAATTTTTG
chr10	63320903	63321023	Hypo	1 -	AATTTCAAAAAAATAATTAAAAAAATCTAAACAATAAATTTCATCAAATCCCTTTTAAAAATATCTAACAAACAAAAAACAACATAAATAAAAATACATCAAAAACAAACTAAAACTAAA
chr10	63320903	63321023	Hypo	1 +	AATTTTGGGAGGATAATTGAAGAGATTTGGATAATAAATTTTATTAAATTTTTTTTAAAAATGTTTAATAAATAAAGAATAGTATAAATAAAAATATATTAAAAATAAATTGGAATTAAA
chr10	63320907	63321027	Hypo	1 -	TCAAAAAAATAATTAAAAAAATCTAAACAATAAATTTCATCAAATCCCTTTTAAAAATATATTATTATCTAACAAACAAAAAACAACATAAATAAAAATACATCAAAAACAAACTAAAAC
chr10	63320907	63321027	Hypo	1 +	TTGGGAGGATAATTGAAGAGATTTGGATAATAAATTTTATTAAATTTTTTTTAAAAATGTATTGTTGTTTAATAAATAAAGAATAGTATAAATAAAAATATATTAAAAATAAATTGGAAT
chr10	63320903	63321023	Hyper	1 -	AATTTCGAAAAAATAATTAAAAAAATCTAAACAATAAATTTCATCAAATCCCTTTTAAAAATATCTAACAAACAAAAAACAACATAAATAAAAATACATCAAAAACAAACTAAAACTAAA
chr10	63320903	63321023	Hyper	1 +	AATTTCGGGAGGATAATTGAAGAGATTTGGATAATAAATTTTATTAAATTTTTTTTAAAAATGTTTAATAAATAAAGAATAGTATAAATAAAAATATATTAAAAATAAATTGGAATTAAA
chr10	63320907	63321027	Hyper	1 -	TCGAAAAAATAATTAAAAAAATCTAAACAATAAATTTCATCAAATCCCTTTTAAAAATATATTATTATCTAACAAACAAAAAACAACATAAATAAAAATACATCAAAAACAAACTAAAAC
chr10	63320907	63321027	Hyper	1 +	TCGGGAGGATAATTGAAGAGATTTGGATAATAAATTTTATTAAATTTTTTTTAAAAATGTATTGTTGTTTAATAAATAAAGAATAGTATAAATAAAAATATATTAAAAATAAATTGGAAT
chr8	132232557	132232677	Hypo	1 -	AAAACAAAAACTTTATCTAAATTCCCATTTACTCTTAAAACCAAACATAAAACCTAACACTTTCCAAATTAATATTTCTTTAATAAATAATTAAACTTAAAAATAAAAACTCAACTAAAT
chr8	132232557	132232677	Hypo	1 +	AGGATAGGGATTTTATTTAGGTTTTTATTTATTTTTGGAGTTAAATATAGGATTTGGTATTTTTTAAGTTAATATTTTTTTAATGAATAGTTAGATTTAAGAATAGAGGTTTAGTTGAGT
chr8	132232561	132232681	Hypo	1 -	CAAAAACTTTATCTAAATTCCCATTTACTCTTAAAACCAAACATAAAACCTAACACTTAATAAATTCCAAATTAATATTTCTTTAATAAATAATTAAACTTAAAAATAAAAACTCAACTA
chr8	132232561	132232681	Hypo	1 +	TAGGGATTTTATTTAGGTTTTTATTTATTTTTGGAGTTAAATATAGGATTTGGTATTTAGTGGGTTTTAAGTTAATATTTTTTTAATGAATAGTTAGATTTAAGAATAGAGGTTTAGTTG
chr8	132232557	132232677	Hyper	1 -	AAAACAAAAACTTTATCTAAATTCCCATTTACTCTTAAAACCAAACATAAAACCTAACACTTTCCAAATTAATATTTCTTTAATAAATAATTAAACTTAAAAATAAAAACTCAACTAAAT
chr8	132232557	132232677	Hyper	1 +	AGGATAGGGATTTTATTTAGGTTTTTATTTATTTTTGGAGTTAAATATAGGATTTGGTATTTTTTAAGTTAATATTTTTTTAATGAATAGTTAGATTTAAGAATAGAGGTTTAGTTGAGT
chr8	132232561	132232681	Hyper	1 -	CAAAAACTTTATCTAAATTCCCATTTACTCTTAAAACCAAACATAAAACCTAACACTTAATAAATTCCAAATTAATATTTCTTTAATAAATAATTAAACTTAAAAATAAAAACTCAACTA
chr8	132232561	132232681	Hyper	1 +	TAGGGATTTTATTTAGGTTTTTATTTATTTTTGGAGTTAAATATAGGATTTGGTATTTAGTGGGTTTTAAGTTAATATTTTTTTAATGAATAGTTAGATTTAAGAATAGAGGTTTAGTTG
chr12	115290060	115290180	Hypo	1 -	ACTTCCTATCTTATAACTAATCTAATTCCTCACCCAAAAAAAAAAAACTAAAAATTATCCTATCATTCACTAATTTTCCTTATATTCATCATATCATAACACTCCATAACCTAAACAACCT
chr12	115290060	115290180	Hypo	1 +	GTTTTTTGTTTTGTGGTTAGTTTGATTTTTTATTTAAGAGAGAAAATTAAAAGTTATTTTGTTATTTATTAATTTTTTTTTATATTTATTATGTTATGGTATTTTATAGTTTAGATAGTTT
chr12	115290063	115290183	Hypo	1 -	TCCTATCTTATAACTAATCTAATTCCTCACCCAAAAAAAAAAAACTAAAAATTATCCTAAAATCTTCATTCACTAATTTTCCTTATATTCATCATATCATAACACTCCATAACCTAAACAA
chr12	115290063	115290183	Hypo	1 +	TTTTGTTTTGTGGTTAGTTTGATTTTTTATTTAAGAGAGAAAATTAAAAGTTATTTTGGAGTTTTTATTTATTAATTTTTTTTTATATTTATTATGTTATGGTATTTTATAGTTTAGATAG
chr12	115290060	115290180	Hyper	1 -	ACTTCCTATCTTATAACTAATCTAATTCCTCACCCAAAAAAAAAAAACTAAAAATTATCCTATCATTCACTAATTTTCCTTATATTCATCATATCATAACACTCCATAACCTAAACAACCT
chr12	115290060	115290180	Hyper	1 +	GTTTTTTGTTTTGTGGTTAGTTTGATTTTTTATTTAAGAGAGAAAATTAAAAGTTATTTTGTTATTTATTAATTTTTTTTTATATTTATTATGTTATGGTATTTTATAGTTTAGATAGTTT
chr12	115290063	115290183	Hyper	1 -	TCCTATCTTATAACTAATCTAATTCCTCACCCAAAAAAAAAAAACTAAAAATTATCCTAAAATCTTCATTCACTAATTTTCCTTATATTCATCATATCATAACACTCCATAACCTAAACAA
chr12	115290063	115290183	Hyper	1 +	TTTTGTTTTGTGGTTAGTTTGATTTTTTATTTAAGAGAGAAAATTAAAAGTTATTTTGGAGTTTTTATTTATTAATTTTTTTTTATATTTATTATGTTATGGTATTTTATAGTTTAGATAG
chr6	107102285	107102405	Hypo	1 -	ACTAATATATACTAATATACTATTAAATTCCTAATACATAATAAACATTTAACAAATATTTTCCCCAACCAAATCTCCAATCTTTAATATTATTATATCCAAATCATAATATCTAATACT
chr6	107102285	107102405	Hypo	1 +	GTTGATATATGTTGATATGTTGTTAGGTTTTTGATATATAATGAGTATTTAATAAATATTTTTTTTAATTAGATTTTTAATTTTTAATGTTGTTATATTTAGATTATAATATTTAGTATT
chr6	107102281	107102401	Hypo	1 -	ATATACTAATATATACTAATATACTATTAAATTCCTAATACATAATAAACATTTAACAAATAACCAAATCTCCAATCTTTAATATTATTATATCCAAATCATAATATCTAATACTATACT
chr6	107102281	107102401	Hypo	1 +	ATATGTTGATATATGTTGATATGTTGTTAGGTTTTTGATATATAATGAGTATTTAATAAATAATTAGATTTTTAATTTTTAATGTTGTTATATTTAGATTATAATATTTAGTATTGTGTT
chr6	107102285	107102405	Hyper	1 -	ACTAATATATACTAATATACTATTAAATTCCTAATACATAATAAACATTTAACAAATATTTTCCCCAACCAAATCTCCAATCTTTAATATTATTATATCCAAATCATAATATCTAATACT
chr6	107102285	107102405	Hyper	1 +	GTTGATATATGTTGATATGTTGTTAGGTTTTTGATATATAATGAGTATTTAATAAATATTTTTTTTAATTAGATTTTTAATTTTTAATGTTGTTATATTTAGATTATAATATTTAGTATT
chr6	107102281	107102401	Hyper	1 -	ATATACTAATATATACTAATATACTATTAAATTCCTAATACATAATAAACATTTAACAAATAACCAAATCTCCAATCTTTAATATTATTATATCCAAATCATAATATCTAATACTATACT
chr6	107102281	107102401	Hyper	1 +	ATATGTTGATATATGTTGATATGTTGTTAGGTTTTTGATATATAATGAGTATTTAATAAATAATTAGATTTTTAATTTTTAATGTTGTTATATTTAGATTATAATATTTAGTATTGTGTT
chr7	121527057	121527177	Hypo	1 -	TTCCTCATCTTAAAATAAATTTAAACCCCATACATTCCTATTATCTTTTACTTTATCTATACTAACACATCATTATCCCCTTCCACAAAAAAAAAAAACATCATCTCACCCATAATAACAC
chr7	121527057	121527177	Hypo	1 +	TTTTTTGTTTTGGGGTGGATTTGGGTTTTATGTATTTTTGTTGTTTTTTATTTTGTTTGTGTTAATATATTATTGTTTTTTTTTATAGGAAGGGAAATATTATTTTTATTTATGATGGTAT
chr7	121527062	121527182	Hypo	1 -	CATCTTAAAATAAATTTAAACCCCATACATTCCTATTATCTTTTACTTTATCTATAAAACTTTCTCTAACACATCATTATCCCCTTCCACAAAAAAAAAAAACATCATCTCACCCATAATA

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chr7	121527062	121527182	Hypo	1 +	TGTTTTGGGGTGGATTTGGGTTTTATGTATTTTTGTTGTTTTTTATTTTGTTTGTGAAATTTTTTTTAATATATTATTGTTTTTTTTTATAGGAAGGGAAATATTATTTTTATTTATGATG
chr7	121527057	121527177	Hyper	1 -	TTCCTCGTCTTAAAATAAATTTAAACCCCATACATTCCTATTATCTTTTACTTTATCTATACTAACACATCATTATCCCCTTCCACAAAAAAAAAAAACATCATCTCACCCATAATAACAC
chr7	121527057	121527177	Hyper	1 +	TTTTTCGTTTTGGGGTGGATTTGGGTTTTATGTATTTTTGTTGTTTTTTATTTTGTTTGTGTTAATATATTATTGTTTTTTTTTATAGGAAGGGAAATATTATTTTTATTTATGATGGTAT
chr7	121527062	121527182	Hyper	1 -	CGTCTTAAAATAAATTTAAACCCCATACATTCCTATTATCTTTTACTTTATCTATAAAACTTTCTCTAACACATCATTATCCCCTTCCACAAAAAAAAAAAACATCATCTCACCCATAATA
chr7	121527062	121527182	Hyper	1 +	CGTTTTGGGGTGGATTTGGGTTTTATGTATTTTTGTTGTTTTTTATTTTGTTTGTGAAATTTTTTTTAATATATTATTGTTTTTTTTTATAGGAAGGGAAATATTATTTTTATTTATGATG
chr12	103526513	103526633	Hypo	1 -	TATAACCACTACATATTTTCATATACACCAAAAACAAACTCACCCACCCACAACAACCACCACTACCACAACTAAAACCAAAACTCAAATAAAATACACATTCCCCAAAACATCTAACAT
chr12	103526513	103526633	Hypo	1 +	TGTAGTTATTGTATGTTTTTATGTGTATTAAGGATAAATTTATTTATTTATAGTAGTTATTGTTATTGTAGTTGGGGTTAAAGTTTAAATGAAGTATATATTTTTTGAAATGTTTGGTAT
chr12	103526517	103526637	Hypo	1 -	ACCACTACATATTTTCATATACACCAAAAACAAACTCACCCACCCACAACAACCACCACCATAAACTACCACAACTAAAACCAAAACTCAAATAAAATACACATTCCCCAAAACATCTAA
chr12	103526517	103526637	Hypo	1 +	GTTATTGTATGTTTTTATGTGTATTAAGGATAAATTTATTTATTTATAGTAGTTATTATTATGGGTTATTGTAGTTGGGGTTAAAGTTTAAATGAAGTATATATTTTTTGAAATGTTTGG
chr12	103526513	103526633	Hyper	1 -	TATAACCACTACATATTTTCATATACACCAAAAACAAACTCACCCACCCACAACAACCACCGCTACCGCAACTAAAACCAAAACTCAAATAAAATACACATTCCCCGAAACGTCTAACAT
chr12	103526513	103526633	Hyper	1 +	TGTAGTTATTGTATGTTTTTATGTGTATTAAGGATAAATTTATTTATTTATAGTAGTTATCGTTATCGTAGTTGGGGTTAAAGTTTAAATGAAGTATATATTTTTCGAAACGTTTGGTAT
chr12	103526517	103526637	Hyper	1 -	ACCACTACATATTTTCATATACACCAAAAACAAACTCACCCACCCACAACAACCACCACCATAAACTACCGCAACTAAAACCAAAACTCAAATAAAATACACATTCCCCGAAACGTCTAA
chr12	103526517	103526637	Hyper	1 +	GTTATTGTATGTTTTTATGTGTATTAAGGATAAATTTATTTATTTATAGTAGTTATTATTATGGGTTATCGTAGTTGGGGTTAAAGTTTAAATGAAGTATATATTTTTCGAAACGTTTGG
chr4	122907940	122908060	Hypo	1 -	AAAACAAAAAAAAAATAAAATTCCACAAATAAAAAAAACCAAATTATAAAAATAATTATATAAAATAATAAATTACATACTAACTATTATCTAACCAACACTATTTTAATACAAAATCCTA
chr4	122907940	122908060	Hypo	1 +	GGAGTAGGAGGAGATAAAGTTTTATAGGTAGAGAGGGTTAAATTGTGAAGATAGTTGTATGAAATAATAAGTTATATATTGATTATTGTTTGGTTAGTATTGTTTTAATGTAGGGTTTTG
chr4	122907936	122908056	Hypo	1 -	AAAAAAAACAAAAAAAAAATAAAATTCCACAAATAAAAAAAACCAAATTATAAAAATAATTAAATAAATTACATACTAACTATTATCTAACCAACACTATTTTAATACAAAATCCTACTAA
chr4	122907936	122908056	Hypo	1 +	AGGAGGAGTAGGAGGAGATAAAGTTTTATAGGTAGAGAGGGTTAAATTGTGAAGATAGTTGAATAAGTTATATATTGATTATTGTTTGGTTAGTATTGTTTTAATGTAGGGTTTTGTTGG
chr4	122907940	122908060	Hyper	1 -	AAAACAAAAAAAAAATAAAATTCCACAAATAAAAAAAACCAAATTATAAAAATAATTATATAAAATAATAAATTACATACTAACTATTATCTAACCAACACTATTTTAATACAAAATCCTA
chr4	122907940	122908060	Hyper	1 +	GGAGTAGGAGGAGATAAAGTTTTATAGGTAGAGAGGGTTAAATTGTGAAGATAGTTGTATGAAATAATAAGTTATATATTGATTATTGTTTGGTTAGTATTGTTTTAATGTAGGGTTTTG
chr4	122907936	122908056	Hyper	1 -	AAAAAAAACAAAAAAAAAATAAAATTCCACAAATAAAAAAAACCAAATTATAAAAATAATTAAATAAATTACATACTAACTATTATCTAACCAACACTATTTTAATACAAAATCCTACTAA
chr4	122907936	122908056	Hyper	1 +	AGGAGGAGTAGGAGGAGATAAAGTTTTATAGGTAGAGAGGGTTAAATTGTGAAGATAGTTGAATAAGTTATATATTGATTATTGTTTGGTTAGTATTGTTTTAATGTAGGGTTTTGTTGG
chr1	156916579	156916699	Hypo	1 -	CTAAAAAAACAAAATAAACACAAAACCAAACATCAAACCCCTACCTAAAACCAAACCCCTACCTTTACCAAATTCTCTAACCTTAAATAATAAAACCCTACCTCCCCCAATCTCCTCCTT
chr1	156916579	156916699	Hypo	1 +	TTGAAGAGGTAGAATGGATATGGGGTTAGGTATTAAATTTTTGTTTGGGATTAGATTTTTGTTTTTGTTAAATTTTTTGGTTTTGGGTAATGAGATTTTGTTTTTTTTAATTTTTTTTTT
chr1	156916584	156916704	Hypo	2 -	AAAACAAAATAAACACAAAACCAAACATCAAACCCCTACCTAAAACCAAACCCCTACCTATCCCTTCCTTTACCAAATTCTCTAACCTTAAATAATAAAACCCTACCTCCCCCAATCTCC
chr1	156916584	156916704	Hypo	2 +	GAGGTAGAATGGATATGGGGTTAGGTATTAAATTTTTGTTTGGGATTAGATTTTTGTTTATTTTTTTTTTTTGTTAAATTTTTTGGTTTTGGGTAATGAGATTTTGTTTTTTTTAATTTTT
chr1	156916579	156916699	Hyper	1 -	CTAAAAAAACAAAATAAACACGAAACCAAACATCAAACCCCTACCTAAAACCAAACCCCTACCTTTACCAAATTCTCTAACCTTAAATAATAAAACCCTACCTCCCCCAATCTCCTCCTT
chr1	156916579	156916699	Hyper	1 +	TTGAAGAGGTAGAATGGATACGGGGTTAGGTATTAAATTTTTGTTTGGGATTAGATTTTTGTTTTTGTTAAATTTTTTGGTTTTGGGTAATGAGATTTTGTTTTTTTTAATTTTTTTTTT
chr1	156916584	156916704	Hyper	2 -	AAAACAAAATAAACACGAAACCAAACATCAAACCCCTACCTAAAACCAAACCCCTACCTATCCCTTCCTTTACCAAATTCTCTAACCTTAAATAATAAAACCCTACCTCCCCCAATCTCC
chr1	156916584	156916704	Hyper	2 +	GAGGTAGAATGGATACGGGGTTAGGTATTAAATTTTTGTTTGGGATTAGATTTTTGTTTATTTTTTTTTTTTGTTAAATTTTTTGGTTTTGGGTAATGAGATTTTGTTTTTTTTAATTTTT
chr12	115897333	115897453	Hypo	1 -	AAATAAATAAATAAATAAATATTTTATTAAAATCAACAACCAATCAAATATCTATCTACCAAATTATAAAAATAAATCTAAAAAAAACTATATACTTAAAAAAATATACTTTATACATCC
chr12	115897333	115897453	Hypo	1 +	GAATAAATGGATGAATGAATATTTTATTAGGATTAATAATTAATTAAGTGTTTATTTGTTAAATTATAAGGATGAATTTGAGAAAAATTATGTGTTTAGAGAAATGTGTTTTATGTATTT
chr12	115897338	115897458	Hypo	2 -	AATAAATAAATAAATATTTTATTAAAATCAACAACCAATCAAATATCTATCTACCAAAAATATAACAATTATAAAAATAAATCTAAAAAAAACTATATACTTAAAAAAATATACTTTATA
chr12	115897338	115897458	Hypo	1 +	AATGGATGAATGAATATTTTATTAGGATTAATAATTAATTAAGTGTTTATTTGTTAAGAATATGGTAATTATAAGGATGAATTTGAGAAAAATTATGTGTTTAGAGAAATGTGTTTTATG
chr12	115897333	115897453	Hyper	1 -	AAATAAATAAATAAATAAATATTTTATTAAAATCAACAACCAATCAAATATCTATCTACCAAATTATAAAAATAAATCTAAAAAAAACTATATACTTAAAAAAATATACTTTATACATCC
chr12	115897333	115897453	Hyper	1 +	GAATAAATGGATGAATGAATATTTTATTAGGATTAATAATTAATTAAGTGTTTATTTGTTAAATTATAAGGATGAATTTGAGAAAAATTATGTGTTTAGAGAAATGTGTTTTATGTATTT
chr12	115897338	115897458	Hyper	2 -	AATAAATAAATAAATATTTTATTAAAATCAACAACCAATCAAATATCTATCTACCAAAAATATAACAATTATAAAAATAAATCTAAAAAAAACTATATACTTAAAAAAATATACTTTATA
chr12	115897338	115897458	Hyper	1 +	AATGGATGAATGAATATTTTATTAGGATTAATAATTAATTAAGTGTTTATTTGTTAAGAATATGGTAATTATAAGGATGAATTTGAGAAAAATTATGTGTTTAGAGAAATGTGTTTTATG
chr2	27039587	27039707	Hypo	1 -	ACATCAATCACATAAAAAAAAAAACAAAAAATAATCTCAAATATTCTAAAATCACTCTAATATACATAAAAAAAACCAACCAAAAAAAAAAAAACTATAATATCTAAAAAATTCCTAAACCT
chr2	27039587	27039707	Hypo	1 +	GTATTAGTTATATAGGGGAGGGGATAGAGGATGGTTTTAAGTGTTTTGAAATTATTTTAATGTATGTAGAGGGGTTAATTAGAAGAGGGAAGTTATAGTGTTTAAAGAGTTTTTGAGTTT
chr2	27039583	27039703	Hypo	1 -	TCAAACATCAATCACATAAAAAAAAAAACAAAAAATAATCTCAAATATTCTAAAATCACTCTAAAAAAAACCAACCAAAAAAAAAAAAACTATAATATCTAAAAAATTCCTAAACCTCTAAT
chr2	27039583	27039703	Hypo	1 +	TTAAGTATTAGTTATATAGGGGAGGGGATAGAGGATGGTTTTAAGTGTTTTGAAATTATTTTAGAGGGGTTAATTAGAAGAGGGAAGTTATAGTGTTTAAAGAGTTTTTGAGTTTTTGAT
chr2	27039587	27039707	Hyper	1 -	ACATCAATCACATAAAAAAAAAAACAAAAAATAATCTCAAATATTCTAAAATCACTCTAATATACGTAAAAAAACCAACCAAAAAAAAAAAAACTATAATATCTAAAAAATTCCTAAACCT
chr2	27039587	27039707	Hyper	1 +	GTATTAGTTATATAGGGGAGGGGATAGAGGATGGTTTTAAGTGTTTTGAAATTATTTTAATGTACGTAGAGGGGTTAATTAGAAGAGGGAAGTTATAGTGTTTAAAGAGTTTTTGAGTTT
chr2	27039583	27039703	Hyper	1 -	TCAAACATCAATCACATAAAAAAAAAAACAAAAAATAATCTCAAATATTCTAAAATCACTCTAAAAAAAACCAACCAAAAAAAAAAAAACTATAATATCTAAAAAATTCCTAAACCTCTAAT
chr2	27039583	27039703	Hyper	1 +	TTAAGTATTAGTTATATAGGGGAGGGGATAGAGGATGGTTTTAAGTGTTTTGAAATTATTTTAGAGGGGTTAATTAGAAGAGGGAAGTTATAGTGTTTAAAGAGTTTTTGAGTTTTTGAT
chr13	42793709	42793829	Hypo	1 -	ATTCTATAATATTTAATATTTATAACTTATTCCTATATTATCCCTATTATCAAAATAAATTTTTCTCCTTTTCATATCCTAAAAAAATTATTTTCTTACTCAATTTAAACAAAAACCTCC
chr13	42793709	42793829	Hypo	1 +	GTTTTATAATGTTTAGTGTTTATAATTTATTTTTGTGTTATTTTTATTATTAGAGTAGGTTTTTTTTTTTTTTTATATTTTGAAAAAATTATTTTTTTGTTTGATTTGAATAGGAATTTTT
chr13	42793705	42793825	Hypo	1 -	CACTATTCTATAATATTTAATATTTATAACTTATTCCTATATTATCCCTATTATCAAAATATCCTTTTCATATCCTAAAAAAATTATTTTCTTACTCAATTTAAACAAAAACCTCCTATA
chr13	42793705	42793825	Hypo	1 +	TATTGTTTTATAATGTTTAGTGTTTATAATTTATTTTTGTGTTATTTTTATTATTAGAGTATTTTTTTTATATTTTGAAAAAATTATTTTTTTGTTTGATTTGAATAGGAATTTTTTATG
chr13	42793709	42793829	Hyper	1 -	ATTCTATAATATTTAATATTTATAACTTATTCCTATATTATCCCTATTATCAAAATAAATTTTTCTCCTTTTCATATCCTAAAAAAATTATTTTCTTACTCGATTTAAACAAAAACCTCC
chr13	42793709	42793829	Hyper	1 +	GTTTTATAATGTTTAGTGTTTATAATTTATTTTTGTGTTATTTTTATTATTAGAGTAGGTTTTTTTTTTTTTTTATATTTTGAAAAAATTATTTTTTTGTTCGATTTGAATAGGAATTTTT
chr13	42793705	42793825	Hyper	1 -	CACTATTCTATAATATTTAATATTTATAACTTATTCCTATATTATCCCTATTATCAAAATATCCTTTTCATATCCTAAAAAAATTATTTTCTTACTCGATTTAAACAAAAACCTCCTATA

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chr13	42793705	42793825	Hyper	1 +	TATTGTTTTATAATGTTTAGTGTTTATAATTTATTTTTGTGTTATTTTTATTATTAGAGTATTTTTTTTATATTTTGAAAAAATTATTTTTTTGTTCGATTTGAATAGGAATTTTTTATG
chr8	90769735	90769855	Hypo	1 -	AAAACTTTCCCAAAAAAAAAAACTTTCCCAAACCTAAAAAATAAAAAAAAAAAACAAAAAAAACTCCCTTTCCCACTTCCCAACCACCCATCCCAACCCTCAACCTCCACTACACAACCCA
chr8	90769735	90769855	Hypo	1 +	GGGGTTTTTTTAAAAGGAAAATTTTTTTAAATTTGGGGGATGGGAAGAGAAGATAAAAGGAGTTTTTTTTTTTATTTTTTAGTTGTTTGTTTTAGTTTTTGGTTTTTGTTGTGTGATTTG
chr8	90769740	90769860	Hypo	2 -	TTTCCCAAAAAAAAAAACTTTCCCAAACCTAAAAAATAAAAAAAAAAAACAAAAAAAACACCTCTAACTCCCTTTCCCACTTCCCAACCACCCATCCCAACCCTCAACCTCCACTACACAA
chr8	90769740	90769860	Hypo	2 +	TTTTTTAAAAGGAAAATTTTTTTAAATTTGGGGGATGGGAAGAGAAGATAAAAGGAGTGTTTTTGGTTTTTTTTTTTATTTTTTAGTTGTTTGTTTTAGTTTTTGGTTTTTGTTGTGTGA
chr8	90769735	90769855	Hyper	1 -	AAAACTTTCCCAAAAAAAAAAACTTTCCCAAACCTAAAAAATAAAAAAAAAAAACAAAAAAAACTCCCTTTCCCACTTCCCAACCGCCCGTCCCAACCCTCGACCTCCGCTACGCGACCCG
chr8	90769735	90769855	Hyper	1 +	GGGGTTTTTTTAAAAGGAAAATTTTTTTAAATTTGGGGGATGGGAAGAGAAGATAAAAGGAGTTTTTTTTTTTATTTTTTAGTCGTTCGTTTTAGTTTTCGGTTTTCGTTGCGCGATTCG
chr8	90769740	90769860	Hyper	2 -	TTTCCCAAAAAAAAAAACTTTCCCAAACCTAAAAAATAAAAAAAAAAAACAAAAAAAACGCCTCTAACTCCCTTTCCCACTTCCCAACCGCCCGTCCCAACCCTCGACCTCCGCTACGCGA
chr8	90769740	90769860	Hyper	2 +	TTTTTTAAAAGGAAAATTTTTTTAAATTTGGGGGATGGGAAGAGAAGATAAAAGGAGCGTTTTTGGTTTTTTTTTTTATTTTTTAGTCGTTCGTTTTAGTTTTCGGTTTTCGTTGCGCGA
chr2	87402866	87402986	Hypo	2 -	TTTAAACTTAACATAACTACACCATTATATTTCTACCCAAAATTTCTAACATTAATATCTTAATATTTATCTTTAAATTTTAATTTATCAAAAAAATACAAAAAAAATAACTTATTCCAT
chr2	87402866	87402986	Hypo	2 +	TTTAAATTTAGTATAGTTATATTATTATGTTTTTATTTAAAATTTTTAATATTAGTATTTTAATATTTATTTTTGAATTTTGGTTTATTAAAAGGGTATAAAGAAAATGGTTTATTTTAT
chr2	87402862	87402982	Hypo	2 -	AACATTTAAACTTAACATAACTACACCATTATATTTCTACCCAAAATTTCTAACATTAATATTATCTTTAAATTTTAATTTATCAAAAAAATACAAAAAAAATAACTTATTCCATACACA
chr2	87402862	87402982	Hypo	2 +	AATATTTAAATTTAGTATAGTTATATTATTATGTTTTTATTTAAAATTTTTAATATTAGTATTATTTTTGAATTTTGGTTTATTAAAAGGGTATAAAGAAAATGGTTTATTTTATGTATA
chr2	87402866	87402986	Hyper	2 -	TTTAAACTTAACATAACTACACCATTATATTTCTACCCAAAATTTCTAACATTAATATCTTAATATTTATCTTTAAATTTTAATTTATCAAAAAAATACAAAAAAAATAACTTATTCCAT
chr2	87402866	87402986	Hyper	2 +	TTTAAATTTAGTATAGTTATATTATTATGTTTTTATTTAAAATTTTTAATATTAGTATTTTAATATTTATTTTTGAATTTTGGTTTATTAAAAGGGTATAAAGAAAATGGTTTATTTTAT
chr2	87402862	87402982	Hyper	2 -	AACATTTAAACTTAACATAACTACACCATTATATTTCTACCCAAAATTTCTAACATTAATATTATCTTTAAATTTTAATTTATCAAAAAAATACAAAAAAAATAACTTATTCCATACACA
chr2	87402862	87402982	Hyper	2 +	AATATTTAAATTTAGTATAGTTATATTATTATGTTTTTATTTAAAATTTTTAATATTAGTATTATTTTTGAATTTTGGTTTATTAAAAGGGTATAAAGAAAATGGTTTATTTTATGTATA
chr10	84073351	84073471	Hypo	1 -	AAACAACCATAACCCATAAATAACCTAATAATAAATATAAAAATAAACTAAAACCTCATTCCCAAATCAAATTCTATATAAATATAAATTCTAATTTCCAACTATATCAAAACCAACAAA
chr10	84073351	84073471	Hypo	1 +	AAGTAATTGTAGTTTATAAATAGTTTGATGATGGATGTGGGAATGAGTTGGGATTTTATTTTTAGGTTAGATTTTATGTGAATATGGGTTTTGGTTTTTAATTATGTTAGGGTTAGTAGA
chr10	84073356	84073476	Hypo	1 -	ACCATAACCCATAAATAACCTAATAATAAATATAAAAATAAACTAAAACCTCATTCCCAAACCACACCAAATCAAATTCTATATAAATATAAATTCTAATTTCCAACTATATCAAAACCA
chr10	84073356	84073476	Hypo	1 +	ATTGTAGTTTATAAATAGTTTGATGATGGATGTGGGAATGAGTTGGGATTTTATTTTTAGATTATATTAGGTTAGATTTTATGTGAATATGGGTTTTGGTTTTTAATTATGTTAGGGTTA
chr10	84073351	84073471	Hyper	1 -	AAACAACCGTAACCCATAAATAACCTAATAATAAATATAAAAATAAACTAAAACCTCATTCCCAAATCAAATTCTATATAAATATAAATTCTAATTTCCAACTATATCAAAACCAACAAA
chr10	84073351	84073471	Hyper	1 +	AAGTAATCGTAGTTTATAAATAGTTTGATGATGGATGTGGGAATGAGTTGGGATTTTATTTTTAGGTTAGATTTTATGTGAATATGGGTTTTGGTTTTTAATTATGTTAGGGTTAGTAGA
chr10	84073356	84073476	Hyper	1 -	ACCGTAACCCATAAATAACCTAATAATAAATATAAAAATAAACTAAAACCTCATTCCCAAACCACACCAAATCAAATTCTATATAAATATAAATTCTAATTTCCAACTATATCAAAACCA
chr10	84073356	84073476	Hyper	1 +	ATCGTAGTTTATAAATAGTTTGATGATGGATGTGGGAATGAGTTGGGATTTTATTTTTAGATTATATTAGGTTAGATTTTATGTGAATATGGGTTTTGGTTTTTAATTATGTTAGGGTTA
chr3	142720160	142720280	Hypo	1 -	ACTAATTCACATCTATCAAAAATTAACATTAAAATAAAAAAATAAAATATCAACTAACCCTAATTCTCTAAATTCCCAAACCCAATAACACAACCAAACACCATAACTCCCAAAAAAACT
chr3	142720160	142720280	Hypo	1 +	ATTGGTTTGTATTTATTAAGGGTTGGTGTTGGGATAAGAGGGTGAAGTATTAGTTGGTTTTGATTTTTTGAATTTTTGGATTTAATAATGTGATTAAGTATTGTGATTTTTAGGAAAATT
chr3	142720165	142720285	Hypo	1 -	TTCACATCTATCAAAAATTAACATTAAAATAAAAAAATAAAATATCAACTAACCCTAAACAACAAAATTCTCTAAATTCCCAAACCCAATAACACAACCAAACACCATAACTCCCAAAAA
chr3	142720165	142720285	Hypo	1 +	TTTGTATTTATTAAGGGTTGGTGTTGGGATAAGAGGGTGAAGTATTAGTTGGTTTTGGATAATGAGATTTTTTGAATTTTTGGATTTAATAATGTGATTAAGTATTGTGATTTTTAGGAA
chr3	142720160	142720280	Hyper	1 -	ACTAATTCGCATCTATCAAAAATTAACGTTAAAATAAAAAAATAAAATATCAACTAACCCTAATTCTCTAAATTCCCGAACCCAATAACGCGACCAAACACCGTAACTCCCAAAAAAACT
chr3	142720160	142720280	Hyper	1 +	ATTGGTTCGTATTTATTAAGGGTTGGCGTTGGGATAAGAGGGTGAAGTATTAGTTGGTTTTGATTTTTTGAATTTTCGGATTTAATAACGCGATTAAGTATCGTGATTTTTAGGAAAATT
chr3	142720165	142720285	Hyper	1 -	TTCGCATCTATCAAAAATTAACGTTAAAATAAAAAAATAAAATATCAACTAACCCTAAACAACGAAATTCTCTAAATTCCCGAACCCAATAACGCGACCAAACACCGTAACTCCCAAAAA
chr3	142720165	142720285	Hyper	1 +	TTCGTATTTATTAAGGGTTGGCGTTGGGATAAGAGGGTGAAGTATTAGTTGGTTTTGGATAACGAGATTTTTTGAATTTTCGGATTTAATAACGCGATTAAGTATCGTGATTTTTAGGAA
chr5	172566898	172567018	Hypo	1 -	AACTATTACAAATATACAAAAAACTCTAAACACATTATTATTACTAAAATATTTTCATAAACACATCCAATAATATATTAAAAAATTAATAAACTTAAATTCTTAATATCCTAAACCCTT
chr5	172566898	172567018	Hypo	1 +	AGTTGTTATAGATATGTAAAGGGTTTTAGGTATATTATTGTTGTTGAGGTGTTTTTATGGATATATTTAGTGGTGTATTAGAGAATTGATAGATTTGGGTTTTTAGTATTTTGGATTTTT
chr5	172566903	172567023	Hypo	1 -	TTACAAATATACAAAAAACTCTAAACACATTATTATTACTAAAATATTTTCATAAACACAAATACCACATCCAATAATATATTAAAAAATTAATAAACTTAAATTCTTAATATCCTAAAC
chr5	172566903	172567023	Hypo	1 +	TTATAGATATGTAAAGGGTTTTAGGTATATTATTGTTGTTGAGGTGTTTTTATGGATATAGGTATTATATTTAGTGGTGTATTAGAGAATTGATAGATTTGGGTTTTTAGTATTTTGGAT
chr5	172566898	172567018	Hyper	1 -	AACTATTACAAATATACAAAAAACTCTAAACACATTATTATTACTAAAATATTTTCATAAACACATCCAATAATATATTAAAAAATTAATAAACTTAAATTCTTAATATCCTAAACCCTT
chr5	172566898	172567018	Hyper	1 +	AGTTGTTATAGATATGTAAAGGGTTTTAGGTATATTATTGTTGTTGAGGTGTTTTTATGGATATATTTAGTGGTGTATTAGAGAATTGATAGATTTGGGTTTTTAGTATTTTGGATTTTT
chr5	172566903	172567023	Hyper	1 -	TTACAAATATACAAAAAACTCTAAACACATTATTATTACTAAAATATTTTCATAAACACAAATACCACATCCAATAATATATTAAAAAATTAATAAACTTAAATTCTTAATATCCTAAAC
chr5	172566903	172567023	Hyper	1 +	TTATAGATATGTAAAGGGTTTTAGGTATATTATTGTTGTTGAGGTGTTTTTATGGATATAGGTATTATATTTAGTGGTGTATTAGAGAATTGATAGATTTGGGTTTTTAGTATTTTGGAT
chr13	101878944	101879064	Hypo	1 -	CTTACCTCCCTCCAACCTCCATTCCAAAAATCCTACTCCTAACCAAAATCCTATATATAATCTAATAACAAAACCTTACCTAAAAAACCTCCCAAAAACCACTACCATCCCCACCCTAAA
chr13	101878944	101879064	Hypo	1 +	TTTGTTTTTTTTTAGTTTTTGTTTTAGGAGTTTTGTTTTTGGTTAAAATTTTATGTGTGATTTGATGGTAAGGTTTTGTTTGGGAGATTTTTTGGGGATTATTGTTATTTTTATTTTAGA
chr13	101878949	101879069	Hypo	1 -	CTCCCTCCAACCTCCATTCCAAAAATCCTACTCCTAACCAAAATCCTATATATAATCCATTCAAACCTAATAACAAAACCTTACCTAAAAAACCTCCCAAAAACCACTACCATCCCCACC
chr13	101878949	101879069	Hypo	1 +	TTTTTTTTAGTTTTTGTTTTAGGAGTTTTGTTTTTGGTTAAAATTTTATGTGTGATTTATTTAGATTTGATGGTAAGGTTTTGTTTGGGAGATTTTTTGGGGATTATTGTTATTTTTATT
chr13	101878944	101879064	Hyper	1 -	CTTACCTCCCTCCAACCTCCGTTCCAAAAATCCTACTCCTAACCAAAATCCTATATATAATCTAATAACAAAACCTTACCTAAAAAACCTCCCGAAAACCACTACCATCCCCACCCTAAA
chr13	101878944	101879064	Hyper	1 +	TTTGTTTTTTTTTAGTTTTCGTTTTAGGAGTTTTGTTTTTGGTTAAAATTTTATGTGTGATTTGATGGTAAGGTTTTGTTTGGGAGATTTTTCGGGGATTATTGTTATTTTTATTTTAGA
chr13	101878949	101879069	Hyper	1 -	CTCCCTCCAACCTCCGTTCCAAAAATCCTACTCCTAACCAAAATCCTATATATAATCCATTCAAACCTAATAACAAAACCTTACCTAAAAAACCTCCCGAAAACCACTACCATCCCCACC
chr13	101878949	101879069	Hyper	1 +	TTTTTTTTAGTTTTCGTTTTAGGAGTTTTGTTTTTGGTTAAAATTTTATGTGTGATTTATTTAGATTTGATGGTAAGGTTTTGTTTGGGAGATTTTTCGGGGATTATTGTTATTTTTATT
chr8	39862146	39862266	Hypo	1 -	CATATACCAAATAACAAAATTCAAAAAAATCCCACTACATAAAAACAATAAAACAACCTTCAAAAAAAAAATTTAATACAAATAAAAAAACAAACTTCCTTACATACAAATTAATAAACTA
chr8	39862146	39862266	Hypo	1 +	TATATGTTAGGTGATAGAATTTAGAGGGGTTTTATTATGTGAAAATAATAGAATAATTTTTGAAAAGAAATTTAGTATAAATAAGAGGGTAGGTTTTTTTATATATAAGTTAGTAAATTG
chr8	39862151	39862271	Hypo	1 -	ACCAAATAACAAAATTCAAAAAAATCCCACTACATAAAAACAATAAAACAACCTTCAAAAATTAATAAAAAAAAAATTTAATACAAATAAAAAAACAAACTTCCTTACATACAAATTAATA

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chr8	39862151	39862271	Hypo	1 +	GTTAGGTGATAGAATTTAGAGGGGTTTTATTATGTGAAAATAATAGAATAATTTTTAAAAGTTGATGAAAAGAAATTTAGTATAAATAAGAGGGTAGGTTTTTTTATATATAAGTTAGTA
chr8	39862146	39862266	Hyper	1 -	CATATACCAAATAACAAAATTCAAAAAAATCCCACTACGTAAAAACAATAAAACAACCTTCGAAAAAAAAATTTAATACAAATAAAAAAACAAACTTCCTTACATACAAATTAATAAACTA
chr8	39862146	39862266	Hyper	1 +	TATATGTTAGGTGATAGAATTTAGAGGGGTTTTATTACGTGAAAATAATAGAATAATTTTCGAAAAGAAATTTAGTATAAATAAGAGGGTAGGTTTTTTTATATATAAGTTAGTAAATTG
chr8	39862151	39862271	Hyper	1 -	ACCAAATAACAAAATTCAAAAAAATCCCACTACGTAAAAACAATAAAACAACCTTCAAAAATTAATAAAAAAAAAATTTAATACAAATAAAAAAACAAACTTCCTTACATACAAATTAATA
chr8	39862151	39862271	Hyper	1 +	GTTAGGTGATAGAATTTAGAGGGGTTTTATTACGTGAAAATAATAGAATAATTTTTAAAAGTTGATGAAAAGAAATTTAGTATAAATAAGAGGGTAGGTTTTTTTATATATAAGTTAGTA
chr5	106329520	106329640	Hypo	1 -	ACTTTATTTATAATCCAAAATCTAATTTTAAATCCATATAACTATTTTCACATCTATTCTACAATTCAACAAATAATAAAATATAACATCAATTTTTTCCTATAATTAAAACATTAAATA
chr5	106329520	106329640	Hypo	1 +	GTTTTATTTATGGTTTAAAATTTAGTTTTGAATTTGTATGATTATTTTTATATTTATTTTATAATTTAGTAAATAATAAAGTGTGGTATTAATTTTTTTTTATAATTGAAATATTAAATA
chr5	106329525	106329645	Hypo	1 -	ATTTATAATCCAAAATCTAATTTTAAATCCATATAACTATTTTCACATCTATTCTACATTTAAATCAATTCAACAAATAATAAAATATAACATCAATTTTTTCCTATAATTAAAACATTA
chr5	106329525	106329645	Hypo	1 +	ATTTATGGTTTAAAATTTAGTTTTGAATTTGTATGATTATTTTTATATTTATTTTATATTTGAATTAATTTAGTAAATAATAAAGTGTGGTATTAATTTTTTTTTATAATTGAAATATTA
chr5	106329520	106329640	Hyper	1 -	ACTTTATTTATAATCCAAAATCTAATTTTAAATCCGTATAACTATTTTCACATCTATTCTACAATTCAACAAATAATAAAATATAACATCAATTTTTTCCTATAATTAAAACATTAAATA
chr5	106329520	106329640	Hyper	1 +	GTTTTATTTATGGTTTAAAATTTAGTTTTGAATTCGTATGATTATTTTTATATTTATTTTATAATTTAGTAAATAATAAAGTGTGGTATTAATTTTTTTTTATAATTGAAATATTAAATA
chr5	106329525	106329645	Hyper	1 -	ATTTATAATCCAAAATCTAATTTTAAATCCGTATAACTATTTTCACATCTATTCTACATTTAAATCAATTCAACAAATAATAAAATATAACATCAATTTTTTCCTATAATTAAAACATTA
chr5	106329525	106329645	Hyper	1 +	ATTTATGGTTTAAAATTTAGTTTTGAATTCGTATGATTATTTTTATATTTATTTTATATTTGAATTAATTTAGTAAATAATAAAGTGTGGTATTAATTTTTTTTTATAATTGAAATATTA
chr14	61291651	61291771	Hypo	2 -	TATTAAATCACTTACCCCCACCCCATTAAATCAATTCCAAATAAATAATAAAAAAATAAAACAATAAAAACATCCTTAAAAAAATAAAAAAAAAACAAACCACAAAATAACAAAAATTAT
chr14	61291651	61291771	Hypo	1 +	TATTGGATTATTTATTTTTATTTTATTGGATTAATTTTAGATGGATAATAGAAAAGTAAAATAATAAAAATATTTTTAAGAGAGTGGGAAAAAAATAAGTTATAAAGTGATAAAAGTTAT
chr14	61291647	61291767	Hypo	2 -	AAAATATTAAATCACTTACCCCCACCCCATTAAATCAATTCCAAATAAATAATAAAAAAATAAAACATCCTTAAAAAAATAAAAAAAAAACAAACCACAAAATAACAAAAATTATTTACA
chr14	61291647	61291767	Hypo	1 +	AAAATATTGGATTATTTATTTTTATTTTATTGGATTAATTTTAGATGGATAATAGAAAAGTAAAATATTTTTAAGAGAGTGGGAAAAAAATAAGTTATAAAGTGATAAAAGTTATTTATA
chr14	61291651	61291771	Hyper	2 -	TATTAAATCACTTACCCCCACCCCATTAAATCAATTCCAAATAAATAATAAAAAAATAAAACAATAAAAACATCCTTAAAAAAATAAAAAAAAAACAAACCACAAAATAACAAAAATTAT
chr14	61291651	61291771	Hyper	1 +	TATTGGATTATTTATTTTTATTTTATTGGATTAATTTTAGATGGATAATAGAAAAGTAAAATAATAAAAATATTTTTAAGAGAGTGGGAAAAAAATAAGTTATAAAGTGATAAAAGTTAT
chr14	61291647	61291767	Hyper	2 -	AAAATATTAAATCACTTACCCCCACCCCATTAAATCAATTCCAAATAAATAATAAAAAAATAAAACATCCTTAAAAAAATAAAAAAAAAACAAACCACAAAATAACAAAAATTATTTACA
chr14	61291647	61291767	Hyper	1 +	AAAATATTGGATTATTTATTTTTATTTTATTGGATTAATTTTAGATGGATAATAGAAAAGTAAAATATTTTTAAGAGAGTGGGAAAAAAATAAGTTATAAAGTGATAAAAGTTATTTATA
chr17	69208318	69208438	Hypo	1 -	AAAATAACAAAACACTCCTATCCCTCCCAATAAAAAAAAAACAAAATAAAAATTACATCCAACCTTTCCTCACTAATCATACAAATAAAAAAAAAATAAAATTAAATAAAATATTAAAAA
chr17	69208318	69208438	Hypo	1 +	GAAATAGTAAGGTATTTTTGTTTTTTTTAATGAGAGAGGGATAAGATAGGAATTATATTTAGTTTTTTTTTATTAATTATATAAGTAAGGAGAGAGTGGAGTTAGATAAAGTGTTGAGAG
chr17	69208314	69208434	Hypo	2 -	TAAAAAAATAACAAAACACTCCTATCCCTCCCAATAAAAAAAAAACAAAATAAAAATTACATCCTCACTAATCATACAAATAAAAAAAAAATAAAATTAAATAAAATATTAAAAAAAAA
chr17	69208314	69208434	Hypo	1 +	TGAAGAAATAGTAAGGTATTTTTGTTTTTTTTAATGAGAGAGGGATAAGATAGGAATTATATTTTTATTAATTATATAAGTAAGGAGAGAGTGGAGTTAGATAAAGTGTTGAGAGAAAGA
chr17	69208318	69208438	Hyper	1 -	AAAATAACAAAACACTCCTATCCCTCCCAATAAAAAAAAAACAAAATAAAAATTACATCCAACCTTTCCTCACTAATCATACAAATAAAAAAAAAATAAAATTAAATAAAATATTAAAAA
chr17	69208318	69208438	Hyper	1 +	GAAATAGTAAGGTATTTTTGTTTTTTTTAATGAGAGAGGGATAAGATAGGAATTATATTTAGTTTTTTTTTATTAATTATATAAGTAAGGAGAGAGTGGAGTTAGATAAAGTGTTGAGAG
chr17	69208314	69208434	Hyper	2 -	TAAAAAAATAACAAAACACTCCTATCCCTCCCAATAAAAAAAAAACAAAATAAAAATTACATCCTCACTAATCATACAAATAAAAAAAAAATAAAATTAAATAAAATATTAAAAAAAAA
chr17	69208314	69208434	Hyper	1 +	TGAAGAAATAGTAAGGTATTTTTGTTTTTTTTAATGAGAGAGGGATAAGATAGGAATTATATTTTTATTAATTATATAAGTAAGGAGAGAGTGGAGTTAGATAAAGTGTTGAGAGAAAGA
chr18	46384184	46384304	Hypo	1 -	AAAATAAACACTAATAATAAAAACAACTCACCCCTAACTAAAAAAAAAAAAAAAATAATTCCCAATAACATTACCTACTTCCCTATCCCCCAAAAACCCCCTACACCCCAACTCAAACATA
chr18	46384184	46384304	Hypo	1 +	AGAGTGAATATTGATGGTGAGAGTAGTTTATTTTTGATTGAAGGGAGAGAGAAGTGATTTTTAGTGGTATTGTTTATTTTTTTGTTTTTTAAAGATTTTTTGTGTTTTAGTTTAGGTATG
chr18	46384189	46384309	Hypo	1 -	AAACACTAATAATAAAAACAACTCACCCCTAACTAAAAAAAAAAAAAAAATAATTCCCTAAACAAAACAATAACATTACCTACTTCCCTATCCCCCAAAAACCCCCTACACCCCAACTCAA
chr18	46384189	46384309	Hypo	1 +	GAATATTGATGGTGAGAGTAGTTTATTTTTGATTGAAGGGAGAGAGAAGTGATTTTTTAGATAGAGTAGTGGTATTGTTTATTTTTTTGTTTTTTAAAGATTTTTTGTGTTTTAGTTTAG
chr18	46384184	46384304	Hyper	1 -	AAAATAAACACTAATAATAAAAACAACTCACCCCTAACTAAAAAAAAAAAAAAAATAATTCCCAATAACATTACCTACTTCCCTATCCCCCAAAAACCCCCTACGCCCCAACTCAAACATA
chr18	46384184	46384304	Hyper	1 +	AGAGTGAATATTGATGGTGAGAGTAGTTTATTTTTGATTGAAGGGAGAGAGAAGTGATTTTTAGTGGTATTGTTTATTTTTTTGTTTTTTAAAGATTTTTTGCGTTTTAGTTTAGGTATG
chr18	46384189	46384309	Hyper	1 -	AAACACTAATAATAAAAACAACTCACCCCTAACTAAAAAAAAAAAAAAAATAATTCCCTAAACAAAACAATAACATTACCTACTTCCCTATCCCCCAAAAACCCCCTACGCCCCAACTCAA
chr18	46384189	46384309	Hyper	1 +	GAATATTGATGGTGAGAGTAGTTTATTTTTGATTGAAGGGAGAGAGAAGTGATTTTTTAGATAGAGTAGTGGTATTGTTTATTTTTTTGTTTTTTAAAGATTTTTTGCGTTTTAGTTTAG
chr8	119406205	119406325	Hypo	1 -	CAAAAACTTCATCAATAAAAAAATAATAAAAATAAACTAAATTTCCCCTATTTAATAAATAACAAAAATTTAAAAAAACCAAAACCATAAATATAAATTAACACTAACATTACTTCAATA
chr8	119406205	119406325	Hypo	1 +	TAGGGGTTTTATTAATAAAAGAGTAATAAAAGTGGGTTAAATTTTTTTTATTTGATAAGTGATAAAAATTTGAGGAAATTAAGGTTATAAATATGGATTGATATTGGTATTGTTTTAGTG
chr8	119406200	119406320	Hypo	1 -	AAATTCAAAAACTTCATCAATAAAAAAATAATAAAAATAAACTAAATTTCCCCTATTTAATAATTTAAAAAAACCAAAACCATAAATATAAATTAACACTAACATTACTTCAATACTAAA
chr8	119406200	119406320	Hypo	1 +	AAATTTAGGGGTTTTATTAATAAAAGAGTAATAAAAGTGGGTTAAATTTTTTTTATTTGATAATTTGAGGAAATTAAGGTTATAAATATGGATTGATATTGGTATTGTTTTAGTGTTGAA
chr8	119406205	119406325	Hyper	1 -	CAAAAACTTCATCAATAAAAAAATAATAAAAATAAACTAAATTTCCCCTATTTAATAAATAACAAAAATTTAAAAAAACCAAAACCATAAATATAAATTAACACTAACATTACTTCAATA
chr8	119406205	119406325	Hyper	1 +	TAGGGGTTTTATTAATAAAAGAGTAATAAAAGTGGGTTAAATTTTTTTTATTTGATAAGTGATAAAAATTTGAGGAAATTAAGGTTATAAATATGGATTGATATTGGTATTGTTTTAGTG
chr8	119406200	119406320	Hyper	1 -	AAATTCAAAAACTTCATCAATAAAAAAATAATAAAAATAAACTAAATTTCCCCTATTTAATAATTTAAAAAAACCAAAACCATAAATATAAATTAACACTAACATTACTTCAATACTAAA
chr8	119406200	119406320	Hyper	1 +	AAATTTAGGGGTTTTATTAATAAAAGAGTAATAAAAGTGGGTTAAATTTTTTTTATTTGATAATTTGAGGAAATTAAGGTTATAAATATGGATTGATATTGGTATTGTTTTAGTGTTGAA
chr22	50984359	50984479	Hypo	2 -	CTCAAAAACACTACCTAAAAACCCTAAAACCTACAAAAAAAAAAAAAAAAACAAAAACTAATAAAATACTTACAAAAACCCTAAACTCCTATCCTACCATAAACCTCACTATCTCCTAATA
chr22	50984359	50984479	Hypo	1 +	TTTAGGAATGTTGTTTGAGGATTTTGGGGTTTATGAGGAGGAGAAGAGGGTAGGAGTTGGTGGGGTGTTTGTAGAGATTTTGGGTTTTTATTTTGTTATAAGTTTTGTTGTTTTTTGATA
chr22	50984355	50984475	Hypo	1 -	AAAACTCAAAAACACTACCTAAAAACCCTAAAACCTACAAAAAAAAAAAAAAAAACAAAAACACTTACAAAAACCCTAAACTCCTATCCTACCATAAACCTCACTATCTCCTAATATCTAC
chr22	50984355	50984475	Hypo	1 +	AGAGTTTAGGAATGTTGTTTGAGGATTTTGGGGTTTATGAGGAGGAGAAGAGGGTAGGAGTGTTTGTAGAGATTTTGGGTTTTTATTTTGTTATAAGTTTTGTTGTTTTTTGATATTTGT
chr22	50984359	50984479	Hyper	2 -	CTCAAAAACGCTACCTAAAAACCCTAAAACCTACGAAAAAAAAAAAAAAAACAAAAACTAATAAAATACTTACAAAAACCCTAAACTCCTATCCTACCATAAACCTCGCTATCTCCTAATA
chr22	50984359	50984479	Hyper	1 +	TTTAGGAACGTTGTTTGAGGATTTTGGGGTTTACGAGGAGGAGAAGAGGGTAGGAGTTGGTGGGGTGTTTGTAGAGATTTTGGGTTTTTATTTTGTTATAAGTTTCGTTGTTTTTTGATA
chr22	50984355	50984475	Hyper	1 -	AAAACTCAAAAACGCTACCTAAAAACCCTAAAACCTACGAAAAAAAAAAAAAAAACAAAAACGCTTACAAAAACCCTAAACTCCTATCCTACCATAAACCTCGCTATCTCCTAATATCTAC

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chr22	50984355	50984475	Hyper	1 +	AGAGTTTAGGAACGTTGTTTGAGGATTTTGGGGTTTACGAGGAGGAGAAGAGGGTAGGAGCGTTTGTAGAGATTTTGGGTTTTTATTTTGTTATAAGTTTCGTTGTTTTTTGATATTTGT
chr16	69567040	69567160	Hypo	1 -	TTTAAAAAAATATTCTATACTTTATCAAATATTTACTATCCTAACCTCTACCACTAAATACCCAAAACACTCCTCCCCCACCCCCCAAAAATAACATTCAAAAATATCTACAAACATTACC
chr16	69567040	69567160	Hypo	1 +	TTTAGGAGGTGTTTTGTATTTTGTTGGATGTTTATTATTTTGATTTTTATTATTAGGTGTTTGAAGTATTTTTTTTTTGTTTTTTAGAAGTGATATTTAAAAATGTTTGTAGATATTGTT
chr16	69567037	69567157	Hypo	1 -	TATTTTAAAAAAATATTCTATACTTTATCAAATATTTACTATCCTAACCTCTACCACTAAATACACTCCTCCCCCACCCCCCAAAAATAACATTCAAAAATATCTACAAACATTACCAAAT
chr16	69567037	69567157	Hypo	1 +	TGTTTTAGGAGGTGTTTTGTATTTTGTTGGATGTTTATTATTTTGATTTTTATTATTAGGTGTATTTTTTTTTTGTTTTTTAGAAGTGATATTTAAAAATGTTTGTAGATATTGTTAAAT
chr16	69567040	69567160	Hyper	1 -	TTTAAAAAAATATTCTATACTTTATCGAATATTTACTATCCTAACCTCTACCACTAAATACCCGAAACACTCCTCCCCCGCCCCCCAAAAATAACATTCAAAAATATCTACAAACATTACC
chr16	69567040	69567160	Hyper	1 +	TTTAGGAGGTGTTTTGTATTTTGTCGGATGTTTATTATTTTGATTTTTATTATTAGGTGTTCGAAGTATTTTTTTTTCGTTTTTTAGAAGTGATATTTAAAAATGTTTGTAGATATTGTT
chr16	69567037	69567157	Hyper	1 -	TATTTTAAAAAAATATTCTATACTTTATCGAATATTTACTATCCTAACCTCTACCACTAAATACACTCCTCCCCCGCCCCCCAAAAATAACATTCAAAAATATCTACAAACATTACCAAAT
chr16	69567037	69567157	Hyper	1 +	TGTTTTAGGAGGTGTTTTGTATTTTGTCGGATGTTTATTATTTTGATTTTTATTATTAGGTGTATTTTTTTTTCGTTTTTTAGAAGTGATATTTAAAAATGTTTGTAGATATTGTTAAAT
chr2	212960961	212961081	Hypo	1 -	TCTAAAAAATAAATATTTATTAAATCCCAAATTTTAAAACTTTAATAAATTAATAACAACATAACCTTTATACAAATCAAATTACAAATTAAAAATTAATTAAAAAAAAAAATAAAAAATA
chr2	212960961	212961081	Hypo	1 +	TTTGAGAAATAGGTGTTTATTAAATTTTAGATTTTAGAATTTTAGTAGATTGATAATAGTATAGTTTTTGTGTAAGTTAAATTATAAGTTAAAAGTTAATTAGAAAAAAAAATAGAAAATA
chr2	212960956	212961076	Hypo	2 -	CAAAATCTAAAAAATAAATATTTATTAAATCCCAAATTTTAAAACTTTAATAAATTAATAATTTATACAAATCAAATTACAAATTAAAAATTAATTAAAAAAAAAAATAAAAAATAAAAAA
chr2	212960956	212961076	Hypo	1 +	TAAAATTTGAGAAATAGGTGTTTATTAAATTTTAGATTTTAGAATTTTAGTAGATTGATAATTTGTGTAAGTTAAATTATAAGTTAAAAGTTAATTAGAAAAAAAAATAGAAAATAAAGGA
chr2	212960961	212961081	Hyper	1 -	TCTAAAAAATAAATATTTATTAAATCCCAAATTTTAAAACTTTAATAAATTAATAACAACATAACCTTTATACAAATCAAATTACAAATTAAAAATTAATTAAAAAAAAAAATAAAAAATA
chr2	212960961	212961081	Hyper	1 +	TTTGAGAAATAGGTGTTTATTAAATTTTAGATTTTAGAATTTTAGTAGATTGATAATAGTATAGTTTTTGTGTAAGTTAAATTATAAGTTAAAAGTTAATTAGAAAAAAAAATAGAAAATA
chr2	212960956	212961076	Hyper	2 -	CAAAATCTAAAAAATAAATATTTATTAAATCCCAAATTTTAAAACTTTAATAAATTAATAATTTATACAAATCAAATTACAAATTAAAAATTAATTAAAAAAAAAAATAAAAAATAAAAAA
chr2	212960956	212961076	Hyper	1 +	TAAAATTTGAGAAATAGGTGTTTATTAAATTTTAGATTTTAGAATTTTAGTAGATTGATAATTTGTGTAAGTTAAATTATAAGTTAAAAGTTAATTAGAAAAAAAAATAGAAAATAAAGGA
chr22	48898162	48898282	Hypo	1 -	ACACATTATTCTAAAACATACCTAAAACCCAATACCTTAATACTACATTTCTAAAAAAACTAAAAATACTTTTATCTTAAACTTTTACAACAATTACAATATTAATAACTCCAAAACTTC
chr22	48898162	48898282	Hypo	1 +	GTATATTGTTTTAAAGTATGTTTGGGGTTTGATGTTTTGGTGTTGTATTTTTGGGGGAGTTGGGAGTATTTTTGTTTTAGGTTTTTGTAGTAGTTATAGTGTTAATGGTTTTAAGATTTT
chr22	48898167	48898287	Hypo	1 -	TTATTCTAAAACATACCTAAAACCCAATACCTTAATACTACATTTCTAAAAAAACTAAACCTTCCCAAAAATACTTTTATCTTAAACTTTTACAACAATTACAATATTAATAACTCCAAA
chr22	48898167	48898287	Hypo	1 +	TTGTTTTAAAGTATGTTTGGGGTTTGATGTTTTGGTGTTGTATTTTTGGGGGAGTTGAGTTTTTTTGGGAGTATTTTTGTTTTAGGTTTTTGTAGTAGTTATAGTGTTAATGGTTTTAAG
chr22	48898162	48898282	Hyper	1 -	ACACATTATTCTAAAACATACCTAAAACCCGATACCTTAATACTACATTTCTAAAAAAACTAAAAATACTTTTATCTTAAACTTTTACAACAATTACAATATTAATAACTCCAAAACTTC
chr22	48898162	48898282	Hyper	1 +	GTATATTGTTTTAAAGTATGTTTGGGGTTCGATGTTTTGGTGTTGTATTTTTGGGGGAGTTGGGAGTATTTTTGTTTTAGGTTTTTGTAGTAGTTATAGTGTTAATGGTTTTAAGATTTT
chr22	48898167	48898287	Hyper	1 -	TTATTCTAAAACATACCTAAAACCCGATACCTTAATACTACATTTCTAAAAAAACTAAACCTTCCCGAAAATACTTTTATCTTAAACTTTTACAACAATTACAATATTAATAACTCCAAA
chr22	48898167	48898287	Hyper	1 +	TTGTTTTAAAGTATGTTTGGGGTTCGATGTTTTGGTGTTGTATTTTTGGGGGAGTTGAGTTTTTTCGGGAGTATTTTTGTTTTAGGTTTTTGTAGTAGTTATAGTGTTAATGGTTTTAAG
chr16	433785	433905	Hypo	1 -	AAATAACCACAAAAACCATACCTATTTATACCTTTTAAACACCACAACAAATAATAAAAATTTACAAAACAAAAAAAAAAAAAACTAACTCCACAAACCCAAACCCCTAAAAACCAAAACA
chr16	433785	433905	Hypo	1 +	GGATGGTTGTAGGGATTATATTTGTTTGTATTTTTTGAATGTTGTAGTGGGTGGTGAGGGTTTATGGAGTGGGGGAGGGGAAGTTGATTTTATGAGTTTAGATTTTTGAAGGTTAGAGTA
chr16	433782	433902	Hypo	1 -	TAAAAATAACCACAAAAACCATACCTATTTATACCTTTTAAACACCACAACAAATAATAAAAAAACAAAAAAAAAAAAAACTAACTCCACAAACCCAAACCCCTAAAAACCAAAACAACAA
chr16	433782	433902	Hypo	1 +	TGGGGATGGTTGTAGGGATTATATTTGTTTGTATTTTTTGAATGTTGTAGTGGGTGGTGAGGGAGTGGGGGAGGGGAAGTTGATTTTATGAGTTTAGATTTTTGAAGGTTAGAGTAGTGG
chr16	433785	433905	Hyper	1 -	AAATAACCGCAAAAACCATACCTATTTATACCTTTTAAACGCCGCAACGAATAATAAAAATTTACGAAACGAAAAAAAAAAAAACTAACTCCACGAACCCAAACCCCTAAAAACCAAAACA
chr16	433785	433905	Hyper	1 +	GGATGGTCGTAGGGATTATATTTGTTTGTATTTTTTGAACGTCGTAGCGGGTGGTGAGGGTTTACGGAGCGGGGGAGGGGAAGTTGATTTTACGAGTTTAGATTTTTGAAGGTTAGAGTA
chr16	433782	433902	Hyper	1 -	TAAAAATAACCGCAAAAACCATACCTATTTATACCTTTTAAACGCCGCAACGAATAATAAAAAAACGAAAAAAAAAAAAACTAACTCCACGAACCCAAACCCCTAAAAACCAAAACAACGA
chr16	433782	433902	Hyper	1 +	TGGGGATGGTCGTAGGGATTATATTTGTTTGTATTTTTTGAACGTCGTAGCGGGTGGTGAGGGAGCGGGGGAGGGGAAGTTGATTTTACGAGTTTAGATTTTTGAAGGTTAGAGTAGCGG
chr16	57576500	57576620	Hypo	1 -	ATAAAACAAAAAAAAAAACCACCCACAAACACCTCCCAACTTCCCCTTCTTCCTACAAAAACTACAAAACAACAACCAAAACAACAACTAAAACAACAACAACAACTTCTCAAATCAACC
chr16	57576500	57576620	Hypo	1 +	GTGGGGTAAAGGGAGAGGTTATTTATAGATGTTTTTTGATTTTTTTTTTTTTTTTGTAGAAGTTATAAGATAGTAGTTGAGATAGTAGTTGAGATGGTAGTGGTAGTTTTTTAGGTTAGTT
chr16	57576497	57576617	Hypo	2 -	AATATAAAACAAAAAAAAAAACCACCCACAAACACCTCCCAACTTCCCCTTCTTCCTACAAAAAACAACAACCAAAACAACAACTAAAACAACAACAACAACTTCTCAAATCAACCTCCT
chr16	57576497	57576617	Hypo	2 +	GGTGTGGGGTAAAGGGAGAGGTTATTTATAGATGTTTTTTGATTTTTTTTTTTTTTTTGTAGAAGATAGTAGTTGAGATAGTAGTTGAGATGGTAGTGGTAGTTTTTTAGGTTAGTTTTTT
chr16	57576500	57576620	Hyper	1 -	ATAAAACAAAAAAAAAAACCACCCACAAACGCCTCCCGACTTCCCCTTCTTCCTACAAAAACTACAAAACAACAACCGAAACAACAACTAAAACGACAACGACAACTTCTCAAATCAACC
chr16	57576500	57576620	Hyper	1 +	GTGGGGTAAAGGGAGAGGTTATTTATAGACGTTTTTCGATTTTTTTTTTTTTTTTGTAGAAGTTATAAGATAGTAGTCGAGATAGTAGTTGAGACGGTAGCGGTAGTTTTTTAGGTTAGTT
chr16	57576497	57576617	Hyper	2 -	AATATAAAACAAAAAAAAAAACCACCCACAAACGCCTCCCGACTTCCCCTTCTTCCTACAAAAAACAACAACCGAAACAACAACTAAAACGACAACGACAACTTCTCAAATCAACCTCCT
chr16	57576497	57576617	Hyper	2 +	GGTGTGGGGTAAAGGGAGAGGTTATTTATAGACGTTTTTCGATTTTTTTTTTTTTTTTGTAGAAGATAGTAGTCGAGATAGTAGTTGAGACGGTAGCGGTAGTTTTTTAGGTTAGTTTTTT
chr2	14002766	14002886	Hypo	1 -	ACACATAAACATACCTATCAAATAATAATCACTACTTCCATAATTCTTTATCATTTTATTTTTTATATATAAATAAATAAAACAAATAAACAAAAAAATTTTAAAAAATCTACTCTTCTA
chr2	14002766	14002886	Hypo	1 +	ATATATGAGTATGTTTATTAAATAGTGGTTATTATTTTTATAGTTTTTTATTATTTTATTTTTTGTATATAAATGAATAAAGTAAATGAGTAAAGAAGTTTTAAGAGATTTGTTTTTTTG
chr2	14002771	14002891	Hypo	1 -	TAAACATACCTATCAAATAATAATCACTACTTCCATAATTCTTTATCATTTTATTTTTTAATTAAATTTATATATAAATAAATAAAACAAATAAACAAAAAAATTTTAAAAAATCTACTC
chr2	14002771	14002891	Hypo	1 +	TGAGTATGTTTATTAAATAGTGGTTATTATTTTTATAGTTTTTTATTATTTTATTTTTTAATTGAGTTTGTATATAAATGAATAAAGTAAATGAGTAAAGAAGTTTTAAGAGATTTGTTT
chr2	14002766	14002886	Hyper	1 -	ACACATAAACATACCTATCAAATAATAATCACTACTTCCATAATTCTTTATCATTTTATTTTTTATATATAAATAAATAAAACAAATAAACAAAAAAATTTTAAAAAATCTACTCTTCTA
chr2	14002766	14002886	Hyper	1 +	ATATATGAGTATGTTTATTAAATAGTGGTTATTATTTTTATAGTTTTTTATTATTTTATTTTTTGTATATAAATGAATAAAGTAAATGAGTAAAGAAGTTTTAAGAGATTTGTTTTTTTG
chr2	14002771	14002891	Hyper	1 -	TAAACATACCTATCAAATAATAATCACTACTTCCATAATTCTTTATCATTTTATTTTTTAATTAAATTTATATATAAATAAATAAAACAAATAAACAAAAAAATTTTAAAAAATCTACTC
chr2	14002771	14002891	Hyper	1 +	TGAGTATGTTTATTAAATAGTGGTTATTATTTTTATAGTTTTTTATTATTTTATTTTTTAATTGAGTTTGTATATAAATGAATAAAGTAAATGAGTAAAGAAGTTTTAAGAGATTTGTTT
chr5	82088301	82088421	Hypo	1 -	AAAAAATATAAAATAAAAAACAAACTATTTTAATAAACTCTCTTTAATCCTCTAAAAAACTATAATAAATAATTTTTATTAAAATTTTAAATAATACTAATATCATCTAAAACATCTACT
chr5	82088301	82088421	Hypo	1 +	GGGAAATGTGGAATGAAGAATAAATTGTTTTGGTAAATTTTTTTTAATTTTTTAAAAGATTATAATGAGTGATTTTTGTTAGAATTTTAGATGATGTTGATGTTATTTGAAATATTTATT
chr5	82088297	82088417	Hypo	1 -	CCAAAAAAAAATATAAAATAAAAAACAAACTATTTTAATAAACTCTCTTTAATCCTCTAAAAAAAATAATTTTTATTAAAATTTTAAATAATACTAATATCATCTAAAACATCTACTTAAAT

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chr5	82088297	82088417	Hypo	1 +	TTAAGGGAAATGTGGAATGAAGAATAAATTGTTTTGGTAAATTTTTTTTAATTTTTTAAAAGAGTGATTTTTGTTAGAATTTTAGATGATGTTGATGTTATTTGAAATATTTATTTAGGT
chr5	82088301	82088421	Hyper	1 -	AAAAAATATAAAATAAAAAACAAACTATTTTAATAAACTCTCTTTAATCCTCTAAAAAACTATAATAAATAATTTTTATTAAAATTTTAAATAATACTAATATCATCTAAAACATCTACT
chr5	82088301	82088421	Hyper	1 +	GGGAAATGTGGAATGAAGAATAAATTGTTTTGGTAAATTTTTTTTAATTTTTTAAAAGATTATAATGAGTGATTTTTGTTAGAATTTTAGATGATGTTGATGTTATTTGAAATATTTATT
chr5	82088297	82088417	Hyper	1 -	CCAAAAAAAAATATAAAATAAAAAACAAACTATTTTAATAAACTCTCTTTAATCCTCTAAAAAAAATAATTTTTATTAAAATTTTAAATAATACTAATATCATCTAAAACATCTACTTAAAT
chr5	82088297	82088417	Hyper	1 +	TTAAGGGAAATGTGGAATGAAGAATAAATTGTTTTGGTAAATTTTTTTTAATTTTTTAAAAGAGTGATTTTTGTTAGAATTTTAGATGATGTTGATGTTATTTGAAATATTTATTTAGGT
chr11	47383399	47383519	Hypo	1 -	AACAAAACATTTTTTTCTCCCAAAACCTCTCATTCCCCACTCTAAAAATCAAAAATACTTTTAAACCTAAATAATTACTAAAACCTTATCTACATATATAATTATTTAACCTCACAATCC
chr11	47383399	47383519	Hypo	1 +	GATAAGATATTTTTTTTTTTTGGAGTTTTTTATTTTTTATTTTAAAAGTTAGAAATGTTTTTAGATTTGGGTAGTTATTGAGGTTTTGTTTATATGTATAATTATTTGGTTTTATAGTTT
chr11	47383396	47383516	Hypo	1 -	ATAAACAAAACATTTTTTTCTCCCAAAACCTCTCATTCCCCACTCTAAAAATCAAAAATACACCTAAATAATTACTAAAACCTTATCTACATATATAATTATTTAACCTCACAATCCAAA
chr11	47383396	47383516	Hypo	1 +	ATGGATAAGATATTTTTTTTTTTTGGAGTTTTTTATTTTTTATTTTAAAAGTTAGAAATGTATTTGGGTAGTTATTGAGGTTTTGTTTATATGTATAATTATTTGGTTTTATAGTTTAGA
chr11	47383399	47383519	Hyper	1 -	AACAAAACATTTTTTTCTCCCGAAACCTCTCATTCCCCACTCTAAAAATCAAAAATACTTTTAAACCTAAATAATTACTAAAACCTTATCTACATATATAATTATTTAACCTCACAATCC
chr11	47383399	47383519	Hyper	1 +	GATAAGATATTTTTTTTTTTTCGGAGTTTTTTATTTTTTATTTTAAAAGTTAGAAATGTTTTTAGATTTGGGTAGTTATTGAGGTTTTGTTTATATGTATAATTATTTGGTTTTATAGTTT
chr11	47383396	47383516	Hyper	1 -	ATAAACAAAACATTTTTTTCTCCCGAAACCTCTCATTCCCCACTCTAAAAATCAAAAATACACCTAAATAATTACTAAAACCTTATCTACATATATAATTATTTAACCTCACAATCCAAA
chr11	47383396	47383516	Hyper	1 +	ATGGATAAGATATTTTTTTTTTTTCGGAGTTTTTTATTTTTTATTTTAAAAGTTAGAAATGTATTTGGGTAGTTATTGAGGTTTTGTTTATATGTATAATTATTTGGTTTTATAGTTTAGA
chr6	147054180	147054300	Hypo	1 -	ATCTAAAAATTTTTTAAAACTTCTCTAACCAAATAATAATATTTTCTTACTATAAAAAAAATTTATATATTTCAAATTTTTCATCTTTCCTTATAACATTTAATAAAAAAAAATTCAAATA
chr6	147054180	147054300	Hypo	1 +	ATTTAAAAATTTTTTAGAGTTTTTTTGGTTAGATGATGGTATTTTTTTGTTATAAAAAAAAATTTATGTGTTTTAGGTTTTTTATTTTTTTTTATGGTGTTTAATGAAAAAAGTTTAAATA
chr6	147054185	147054305	Hypo	1 -	AAAATTTTTTAAAACTTCTCTAACCAAATAATAATATTTTCTTACTATAAAAAAAATTAATATACTTTATATATTTCAAATTTTTCATCTTTCCTTATAACATTTAATAAAAAAAAATTCA
chr6	147054185	147054305	Hypo	1 +	AAAATTTTTTAGAGTTTTTTTGGTTAGATGATGGTATTTTTTTGTTATAAAAAAAAATTAATGTATTTTATGTGTTTTAGGTTTTTTATTTTTTTTTATGGTGTTTAATGAAAAAAGTTTA
chr6	147054180	147054300	Hyper	1 -	ATCTAAAAATTTTTTAAAACTTCTCTAACCAAATAATAATATTTTCTTACTATAAAAAAAATTTATATATTTCAAATTTTTCATCTTTCCTTATAACGTTTAATAAAAAAAAATTCAAATA
chr6	147054180	147054300	Hyper	1 +	ATTTAAAAATTTTTTAGAGTTTTTTTGGTTAGATGATGGTATTTTTTTGTTATAAAAAAAAATTTATGTGTTTTAGGTTTTTTATTTTTTTTTATGGCGTTTAATGAAAAAAGTTTAAATA
chr6	147054185	147054305	Hyper	1 -	AAAATTTTTTAAAACTTCTCTAACCAAATAATAATATTTTCTTACTATAAAAAAAATTAATATACTTTATATATTTCAAATTTTTCATCTTTCCTTATAACGTTTAATAAAAAAAAATTCA
chr6	147054185	147054305	Hyper	1 +	AAAATTTTTTAGAGTTTTTTTGGTTAGATGATGGTATTTTTTTGTTATAAAAAAAAATTAATGTATTTTATGTGTTTTAGGTTTTTTATTTTTTTTTATGGCGTTTAATGAAAAAAGTTTA
chr4	114345560	114345680	Hypo	1 -	CTAAAACAATCCTTTCTAACTTCAAATCTATACCATTATTTCTTAAAAAACTTTCTCTAACTAAAACACAAATCTTAAACAAAAAAAATTTTTTTTTTCTTTTTTTAAATTTTATTATT
chr4	114345560	114345680	Hypo	1 +	TTAGGATAGTTTTTTTTAATTTTAGATTTATATTATTATTTTTTAAGAAATTTTTTTTAATTAAGGTATAGATTTTAAGTAAAAAAAGTTTTTTTTTTTTTTTTTTTAAATTTTATTATT
chr4	114345565	114345685	Hypo	1 -	ACAATCCTTTCTAACTTCAAATCTATACCATTATTTCTTAAAAAACTTTCTCTAACTACTAATTTTAAAACACAAATCTTAAACAAAAAAAATTTTTTTTTTCTTTTTTTAAATTTTAT
chr4	114345565	114345685	Hypo	2 +	ATAGTTTTTTTTAATTTTAGATTTATATTATTATTTTTTAAGAAATTTTTTTTAATTATTAATTTTAAGGTATAGATTTTAAGTAAAAAAAGTTTTTTTTTTTTTTTTTTTAAATTTTAT
chr4	114345560	114345680	Hyper	1 -	CTAAAACAATCCTTTCTAACTTCAAATCTATACCATTATTTCTTAAAAAACTTTCTCTAACTAAAACACAAATCTTAAACAAAAAAAATTTTTTTTTTCTTTTTTTAAATTTTATTATT
chr4	114345560	114345680	Hyper	1 +	TTAGGATAGTTTTTTTTAATTTTAGATTTATATTATTATTTTTTAAGAAATTTTTTTTAATTAAGGTATAGATTTTAAGTAAAAAAAGTTTTTTTTTTTTTTTTTTTAAATTTTATTATT
chr4	114345565	114345685	Hyper	1 -	ACAATCCTTTCTAACTTCAAATCTATACCATTATTTCTTAAAAAACTTTCTCTAACTACTAATTTTAAAACACAAATCTTAAACAAAAAAAATTTTTTTTTTCTTTTTTTAAATTTTAT
chr4	114345565	114345685	Hyper	2 +	ATAGTTTTTTTTAATTTTAGATTTATATTATTATTTTTTAAGAAATTTTTTTTAATTATTAATTTTAAGGTATAGATTTTAAGTAAAAAAAGTTTTTTTTTTTTTTTTTTTAAATTTTAT
chr7	147303958	147304078	Hypo	1 -	CTACATAAAAACAAAATTTACTAAATTTAAAAACACTTAAATATTTTAATAAACCTCACAAAAAAATTTTTTTTTAATAAATAAAATCACCAAATACATTTATACTTTTATTAAAATTAA
chr7	147303958	147304078	Hypo	1 +	TTGTATGGGGGTAGAATTTGTTGGATTTAGAGGTATTTGAATATTTTGATAAGTTTTATAGAGAATTTTTTTTTTAATGAGTGAAATTATTAAATGTATTTGTATTTTTGTTAAAATTAA
chr7	147303954	147304074	Hypo	1 -	TATCCTACATAAAAACAAAATTTACTAAATTTAAAAACACTTAAATATTTTAATAAACCTCTTTTTTTTTAATAAATAAAATCACCAAATACATTTATACTTTTATTAAAATTAAAATTA
chr7	147303954	147304074	Hypo	1 +	TGTTTTGTATGGGGGTAGAATTTGTTGGATTTAGAGGTATTTGAATATTTTGATAAGTTTTTTTTTTTTTTAATGAGTGAAATTATTAAATGTATTTGTATTTTTGTTAAAATTAAAGTTG
chr7	147303958	147304078	Hyper	1 -	CTACATAAAAACAAAATTTACTAAATTTAAAAACACTTAAATATTTTAATAAACCTCACAAAAAAATTTTTTTTTAATAAATAAAATCACCAAATACATTTATACTTTTATTAAAATTAA
chr7	147303958	147304078	Hyper	1 +	TTGTATGGGGGTAGAATTTGTTGGATTTAGAGGTATTTGAATATTTTGATAAGTTTTATAGAGAATTTTTTTTTTAATGAGTGAAATTATTAAATGTATTTGTATTTTTGTTAAAATTAA
chr7	147303954	147304074	Hyper	1 -	TATCCTACATAAAAACAAAATTTACTAAATTTAAAAACACTTAAATATTTTAATAAACCTCTTTTTTTTTAATAAATAAAATCACCAAATACATTTATACTTTTATTAAAATTAAAATTA
chr7	147303954	147304074	Hyper	1 +	TGTTTTGTATGGGGGTAGAATTTGTTGGATTTAGAGGTATTTGAATATTTTGATAAGTTTTTTTTTTTTTTAATGAGTGAAATTATTAAATGTATTTGTATTTTTGTTAAAATTAAAGTTG
chr11	3028908	3029028	Hypo	1 -	AAACAACTATAACCTCCATCACATAAAAAAAAAAACTTCACTTAAAAACCCATATATCTATAACTAACTTCAAAACACAACAATACAAACTTACCCAACATCCCACAATTCTCCTAATAAA
chr11	3028908	3029028	Hypo	1 +	GGGTGATTGTGATTTTTATTATATGGGGAGGGAGTTTTGTTTGGAAATTTATGTGTTTGTGGTTGATTTTAGAGTGTAGTAGTGTAGATTTGTTTGGTATTTTATGGTTTTTTTAGTGGG
chr11	3028903	3029023	Hypo	1 -	AAAAAAAACAACTATAACCTCCATCACATAAAAAAAAAAACTTCACTTAAAAACCCATATATCTTCAAAACACAACAATACAAACTTACCCAACATCCCACAATTCTCCTAATAAACTCCT
chr11	3028903	3029023	Hypo	1 +	AGGGAGGGTGATTGTGATTTTTATTATATGGGGAGGGAGTTTTGTTTGGAAATTTATGTGTTTTTAGAGTGTAGTAGTGTAGATTTGTTTGGTATTTTATGGTTTTTTTAGTGGGTTTTT
chr11	3028908	3029028	Hyper	1 -	AAACGACTATAACCTCCATCACATAAAAAAAAAAACTTCGCTTAAAAACCCATATATCTATAACTAACTTCAAAACGCAACAATACAAACTTACCCGACATCCCACGATTCTCCTAATAAA
chr11	3028908	3029028	Hyper	1 +	GGGCGATTGTGATTTTTATTATATGGGGAGGGAGTTTCGTTTGGAAATTTATGTGTTTGTGGTTGATTTTAGAGCGTAGTAGTGTAGATTTGTTCGGTATTTTACGGTTTTTTTAGTGGG
chr11	3028903	3029023	Hyper	1 -	AAAAAAAACGACTATAACCTCCATCACATAAAAAAAAAAACTTCGCTTAAAAACCCATATATCTTCAAAACGCAACAATACAAACTTACCCGACATCCCACGATTCTCCTAATAAACTCCT
chr11	3028903	3029023	Hyper	1 +	AGGGAGGGCGATTGTGATTTTTATTATATGGGGAGGGAGTTTCGTTTGGAAATTTATGTGTTTTTAGAGCGTAGTAGTGTAGATTTGTTCGGTATTTTACGGTTTTTTTAGTGGGTTTTT
chr7	38080441	38080561	Hypo	1 -	TTTCCTACATACCATTACCTTACCCCCAAAACACTAAAAAAATATACTATTTTCTCCATTTTCTATAAAAAACAATCAATAAAACATAAAAAACCAACAAAAATTAAAAAAAACCAATAA
chr7	38080441	38080561	Hypo	1 +	TTTTTTATATGTTATTGTTTTGTTTTTAGGGTATTGAAAAGATGTGTTATTTTTTTTATTTTTTGTGAAAAGTAGTTAGTGAGGTATGAGAGATTAGTAAGGGTTAAAGAGGGTTAGTGG
chr7	38080446	38080566	Hypo	1 -	TACATACCATTACCTTACCCCCAAAACACTAAAAAAATATACTATTTTCTCCATTTTCATCCTATATCTATAAAAAACAATCAATAAAACATAAAAAACCAACAAAAATTAAAAAAAACC
chr7	38080446	38080566	Hypo	1 +	TATATGTTATTGTTTTGTTTTTAGGGTATTGAAAAGATGTGTTATTTTTTTTATTTTTGTTTTGTGTTTGTGAAAAGTAGTTAGTGAGGTATGAGAGATTAGTAAGGGTTAAAGAGGGTT
chr7	38080441	38080561	Hyper	1 -	TTTCCTACATACCATTACCTTACCCCCAAAACACTAAAAAAATATACTATTTTCTCCATTTTCTATAAAAAACAATCAATAAAACATAAAAAACCAACAAAAATTAAAAAAAACCAATAA
chr7	38080441	38080561	Hyper	1 +	TTTTTTATATGTTATTGTTTTGTTTTTAGGGTATTGAAAAGATGTGTTATTTTTTTTATTTTTTGTGAAAAGTAGTTAGTGAGGTATGAGAGATTAGTAAGGGTTAAAGAGGGTTAGTGG
chr7	38080446	38080566	Hyper	1 -	TACATACCATTACCTTACCCCCAAAACACTAAAAAAATATACTATTTTCTCCATTTTCGTCCTATATCTATAAAAAACAATCAATAAAACATAAAAAACCAACAAAAATTAAAAAAAACC

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chr7	38080446	38080566	Hyper	1 +	TATATGTTATTGTTTTGTTTTTAGGGTATTGAAAAGATGTGTTATTTTTTTTATTTTCGTTTTGTGTTTGTGAAAAGTAGTTAGTGAGGTATGAGAGATTAGTAAGGGTTAAAGAGGGTT
chr3	80679290	80679410	Hypo	1 -	TATATTAACTATAATACTATTAAACATAATTTCAAACATACATCATAATAATTCTTTACAACCCTATATAAAAAAACCAAAAATAATAATCAAAACCTAACAAAAATCTTATTTACCTAA
chr3	80679290	80679410	Hypo	1 +	TATATTGATTGTAATATTGTTAAATATAATTTTAAATATATATTATGATGATTTTTTATAATTTTGTATAGGAAGGTTAAGGGTAGTAGTTAAAGTTTGGTAGGAATTTTGTTTATTTAA
chr3	80679285	80679405	Hypo	1 -	TAATCTATATTAACTATAATACTATTAAACATAATTTCAAACATACATCATAATAATTCTTTATAAAAAAACCAAAAATAATAATCAAAACCTAACAAAAATCTTATTTACCTAAAAATA
chr3	80679285	80679405	Hypo	1 +	TAGTTTATATTGATTGTAATATTGTTAAATATAATTTTAAATATATATTATGATGATTTTTTATAGGAAGGTTAAGGGTAGTAGTTAAAGTTTGGTAGGAATTTTGTTTATTTAAAGATA
chr3	80679290	80679410	Hyper	1 -	TATATTAACTATAATACTATTAAACATAATTTCAAACATACATCATAATAATTCTTTACAACCCTATATAAAAAAACCAAAAATAATAATCAAAACCTAACAAAAATCTTATTTACCTAA
chr3	80679290	80679410	Hyper	1 +	TATATTGATTGTAATATTGTTAAATATAATTTTAAATATATATTATGATGATTTTTTATAATTTTGTATAGGAAGGTTAAGGGTAGTAGTTAAAGTTTGGTAGGAATTTTGTTTATTTAA
chr3	80679285	80679405	Hyper	1 -	TAATCTATATTAACTATAATACTATTAAACATAATTTCAAACATACATCATAATAATTCTTTATAAAAAAACCAAAAATAATAATCAAAACCTAACAAAAATCTTATTTACCTAAAAATA
chr3	80679285	80679405	Hyper	1 +	TAGTTTATATTGATTGTAATATTGTTAAATATAATTTTAAATATATATTATGATGATTTTTTATAGGAAGGTTAAGGGTAGTAGTTAAAGTTTGGTAGGAATTTTGTTTATTTAAAGATA
chr1	154817085	154817205	Hypo	1 -	TTTTATATTTTACAAAAAACTTTCACTCTACTATCTTACTCAACACCCACAATAAAACTATCAAATTAAAAAAACCACATTTTTACCCTCATTTTAAACATAAAAAAACTAAAAAACCAA
chr1	154817085	154817205	Hypo	1 +	TTTTATATTTTATAAAGGGTTTTTGTTTTGTTATTTTATTTAGTGTTTATAATAAGGTTATTGGGTTGGAAGGGTTATATTTTTATTTTTATTTTAGATATGAGGAAATTAGGGGGTTAG
chr1	154817082	154817202	Hypo	1 -	CTTTTTTATATTTTACAAAAAACTTTCACTCTACTATCTTACTCAACACCCACAATAAAACTTAAAAAAACCACATTTTTACCCTCATTTTAAACATAAAAAAACTAAAAAACCAATTAC
chr1	154817082	154817202	Hypo	2 +	TTTTTTTATATTTTATAAAGGGTTTTTGTTTTGTTATTTTATTTAGTGTTTATAATAAGGTTTGGAAGGGTTATATTTTTATTTTTATTTTAGATATGAGGAAATTAGGGGGTTAGTTGT
chr1	154817085	154817205	Hyper	1 -	TTTTATATTTTACAAAAAACTTTCGCTCTACTATCTTACTCAACGCCCACAATAAAACTATCGAATTAAAAAAACCACATTTTTACCCTCATTTTAAACATAAAAAAACTAAAAAACCAA
chr1	154817085	154817205	Hyper	1 +	TTTTATATTTTATAAAGGGTTTTCGTTTTGTTATTTTATTTAGCGTTTATAATAAGGTTATCGGGTTGGAAGGGTTATATTTTTATTTTTATTTTAGATATGAGGAAATTAGGGGGTTAG
chr1	154817082	154817202	Hyper	1 -	CTTTTTTATATTTTACAAAAAACTTTCGCTCTACTATCTTACTCAACGCCCACAATAAAACTTAAAAAAACCACATTTTTACCCTCATTTTAAACATAAAAAAACTAAAAAACCAATTAC
chr1	154817082	154817202	Hyper	2 +	TTTTTTTATATTTTATAAAGGGTTTTCGTTTTGTTATTTTATTTAGCGTTTATAATAAGGTTTGGAAGGGTTATATTTTTATTTTTATTTTAGATATGAGGAAATTAGGGGGTTAGTTGT
chr2	20679515	20679635	Hypo	1 -	AAACCAAAATTTAAAAACAAAACTTTCTCCAAATCACTCTACTTAATCCTTCTCTCCAAACCCAAATATCCTCCATACACCTAAAAAACTACACAAATCATTCAAAATTACAATAAATAC
chr2	20679515	20679635	Hypo	1 +	GAGTTAAGATTTGAAGGTAGAGTTTTTTTTAAGTTATTTTATTTAGTTTTTTTTTTTAGGTTTAGGTGTTTTTTATGTATTTGGGAAGTTGTATAGGTTATTTAAGGTTGTAGTGGATGT
chr2	20679520	20679640	Hypo	1 -	AAAATTTAAAAACAAAACTTTCTCCAAATCACTCTACTTAATCCTTCTCTCCAAACCCTAAACATCCAAATATCCTCCATACACCTAAAAAACTACACAAATCATTCAAAATTACAATAA
chr2	20679520	20679640	Hypo	1 +	AAGATTTGAAGGTAGAGTTTTTTTTAAGTTATTTTATTTAGTTTTTTTTTTTAGGTTTTGAGTATTTAGGTGTTTTTTATGTATTTGGGAAGTTGTATAGGTTATTTAAGGTTGTAGTGG
chr2	20679515	20679635	Hyper	1 -	AAACCAAAATTTAAAAACAAAACTTTCTCCAAATCACTCTACTTAATCCTTCTCTCCAAACCCAAATATCCTCCATACACCTAAAAAACTACACAAATCATTCAAAATTACAATAAATAC
chr2	20679515	20679635	Hyper	1 +	GAGTTAAGATTTGAAGGTAGAGTTTTTTTTAAGTTATTTTATTTAGTTTTTTTTTTTAGGTTTAGGTGTTTTTTATGTATTTGGGAAGTTGTATAGGTTATTTAAGGTTGTAGTGGATGT
chr2	20679520	20679640	Hyper	1 -	AAAATTTAAAAACAAAACTTTCTCCAAATCACTCTACTTAATCCTTCTCTCCAAACCCTAAACATCCAAATATCCTCCATACACCTAAAAAACTACACAAATCATTCAAAATTACAATAA
chr2	20679520	20679640	Hyper	1 +	AAGATTTGAAGGTAGAGTTTTTTTTAAGTTATTTTATTTAGTTTTTTTTTTTAGGTTTTGAGTATTTAGGTGTTTTTTATGTATTTGGGAAGTTGTATAGGTTATTTAAGGTTGTAGTGG
chr12	76390670	76390790	Hypo	1 -	AAAAAACCAAAAAACTAATCCCAAACCCAACCAAAATAAATTATTCTTAAAAATCCAAAAATAATAAAACACATAAAAAATTCCTAATAAAAAACATAATAAAATATCCAAAATTATTAC
chr12	76390670	76390790	Hypo	1 +	GAAAGGTTAGAGAATTGGTTTTAGGTTTAGTTAAGATGAGTTATTTTTGGAGATTTAAGGATGATGAAGTATATGGGAAATTTTTGGTGAAAGGTATGGTGGGATATTTAAGATTATTAT
chr12	76390665	76390785	Hypo	1 -	CTCTAAAAAAAACCAAAAAACTAATCCCAAACCCAACCAAAATAAATTATTCTTAAAAATCCAAACACATAAAAAATTCCTAATAAAAAACATAATAAAATATCCAAAATTATTACTAAAA
chr12	76390665	76390785	Hypo	1 +	TTTTAGAAAGGTTAGAGAATTGGTTTTAGGTTTAGTTAAGATGAGTTATTTTTGGAGATTTAAGTATATGGGAAATTTTTGGTGAAAGGTATGGTGGGATATTTAAGATTATTATTGAAA
chr12	76390670	76390790	Hyper	1 -	AAAAAACCAAAAAACTAATCCCAAACCCAACCAAAATAAATTATTCTTAAAAATCCAAAAATAATAAAACACATAAAAAATTCCTAATAAAAAACATAATAAAATATCCAAAATTATTAC
chr12	76390670	76390790	Hyper	1 +	GAAAGGTTAGAGAATTGGTTTTAGGTTTAGTTAAGATGAGTTATTTTTGGAGATTTAAGGATGATGAAGTATATGGGAAATTTTTGGTGAAAGGTATGGTGGGATATTTAAGATTATTAT
chr12	76390665	76390785	Hyper	1 -	CTCTAAAAAAAACCAAAAAACTAATCCCAAACCCAACCAAAATAAATTATTCTTAAAAATCCAAACACATAAAAAATTCCTAATAAAAAACATAATAAAATATCCAAAATTATTACTAAAA
chr12	76390665	76390785	Hyper	1 +	TTTTAGAAAGGTTAGAGAATTGGTTTTAGGTTTAGTTAAGATGAGTTATTTTTGGAGATTTAAGTATATGGGAAATTTTTGGTGAAAGGTATGGTGGGATATTTAAGATTATTATTGAAA
chr8	119319983	119320103	Hypo	1 -	CAATTTAACTCTATACACTTATTCATCATACTTTACACTCCTAAATACTAACCTATACAAAAAAATACTCTACCTCTAACTTTTATTTAAATTAAATTCTACCAATATAAAATACTAAAA
chr8	119319983	119320103	Hypo	1 +	TAGTTTGGTTTTATATATTTGTTTATTGTGTTTTGTGTTTTTAGATGTTGATTTGTATAGAGGGATGTTTTGTTTTTGGTTTTTGTTTGGGTTGGGTTTTGTTAATGTGAAGTGTTGGGA
chr8	119319988	119320108	Hypo	1 -	TAACTCTATACACTTATTCATCATACTTTACACTCCTAAATACTAACCTATACAAAATACCTCACAAAATACTCTACCTCTAACTTTTATTTAAATTAAATTCTACCAATATAAAATACT
chr8	119319988	119320108	Hypo	1 +	TGGTTTTATATATTTGTTTATTGTGTTTTGTGTTTTTAGATGTTGATTTGTATAGAATGTTTTATGGGATGTTTTGTTTTTGGTTTTTGTTTGGGTTGGGTTTTGTTAATGTGAAGTGTT
chr8	119319983	119320103	Hyper	1 -	CAATTTAACTCTATACACTTATTCATCGTACTTTACGCTCCTAAATACTAACCTATACAAAAAAATACTCTACCTCTAACTTTTATTTAAATTAAATTCTACCAATATAAAATACTAAAA
chr8	119319983	119320103	Hyper	1 +	TAGTTTGGTTTTATATATTTGTTTATCGTGTTTTGCGTTTTTAGATGTTGATTTGTATAGAGGGATGTTTTGTTTTTGGTTTTTGTTTGGGTTGGGTTTTGTTAATGTGAAGTGTTGGGA
chr8	119319988	119320108	Hyper	1 -	TAACTCTATACACTTATTCATCGTACTTTACGCTCCTAAATACTAACCTATACAAAATACCTCACGAAATACTCTACCTCTAACTTTTATTTAAATTAAATTCTACCAATATAAAATACT
chr8	119319988	119320108	Hyper	1 +	TGGTTTTATATATTTGTTTATCGTGTTTTGCGTTTTTAGATGTTGATTTGTATAGAATGTTTTACGGGATGTTTTGTTTTTGGTTTTTGTTTGGGTTGGGTTTTGTTAATGTGAAGTGTT
chr22	44397830	44397950	Hypo	1 -	AATATAATAACAAAAAACATTTTACTACTTCATTCATAAACAAAACTAACATTTATATTTCCCTCCCCAAACACAATAACAAAAAATACAATAACCATAAAAATATATTACCTCTACCAT
chr22	44397830	44397950	Hypo	1 +	GATGTAATGATAGGGAGTATTTTGTTGTTTTATTTATGAGTGAAATTGGTATTTGTGTTTTTTTTTTTAAGTATAGTGGTGAAGAATATAATGGTTATAGGGGTGTGTTGTTTTTGTTAT
chr22	44397826	44397946	Hypo	1 -	CTAAAATATAATAACAAAAAACATTTTACTACTTCATTCATAAACAAAACTAACATTTATACCAAACACAATAACAAAAAATACAATAACCATAAAAATATATTACCTCTACCATTCTCT
chr22	44397826	44397946	Hypo	1 +	TTGAGATGTAATGATAGGGAGTATTTTGTTGTTTTATTTATGAGTGAAATTGGTATTTGTGTTAAGTATAGTGGTGAAGAATATAATGGTTATAGGGGTGTGTTGTTTTTGTTATTTTTT
chr22	44397830	44397950	Hyper	1 -	AATATAATAACAAAAAACATTTTACTACTTCATTCATAAACGAAACTAACATTTATATTTCCCTCCCCAAACACAATAACGAAAAATACAATAACCATAAAAATATATTACCTCTACCAT
chr22	44397830	44397950	Hyper	1 +	GATGTAATGATAGGGAGTATTTTGTTGTTTTATTTATGAGCGAAATTGGTATTTGTGTTTTTTTTTTTAAGTATAGTGGCGAAGAATATAATGGTTATAGGGGTGTGTTGTTTTTGTTAT
chr22	44397826	44397946	Hyper	1 -	CTAAAATATAATAACAAAAAACATTTTACTACTTCATTCATAAACGAAACTAACATTTATACCAAACACAATAACGAAAAATACAATAACCATAAAAATATATTACCTCTACCATTCTCT
chr22	44397826	44397946	Hyper	1 +	TTGAGATGTAATGATAGGGAGTATTTTGTTGTTTTATTTATGAGCGAAATTGGTATTTGTGTTAAGTATAGTGGCGAAGAATATAATGGTTATAGGGGTGTGTTGTTTTTGTTATTTTTT
chr1	195044966	195045086	Hypo	1 -	ACTTCATACCTCCCTTAAAATTATATTCAAAATCTATACTATAATCCATAATATTCTACATAATTTTACTTACTTATTATATTTAATCTCTACTATAACCACAATTCCTCAAACAATTTT
chr1	195044966	195045086	Hypo	1 +	GTTTTATATTTTTTTTAGGATTGTGTTTAGAATTTGTATTATGATTTATAATATTTTGTATGATTTTGTTTATTTGTTATGTTTAGTTTTTGTTATAGTTATAATTTTTTAGGTAGTTTT
chr1	195044961	195045081	Hypo	1 -	ATTCTACTTCATACCTCCCTTAAAATTATATTCAAAATCTATACTATAATCCATAATATTCTACTTACTTATTATATTTAATCTCTACTATAACCACAATTCCTCAAACAATTTTAACTC

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chr1	195044961	195045081	Hypo	1 +	GTTTTGTTTTATATTTTTTTTAGGATTGTGTTTAGAATTTGTATTATGATTTATAATATTTTGTTTATTTGTTATGTTTAGTTTTTGTTATAGTTATAATTTTTTAGGTAGTTTTAGTTT
chr1	195044966	195045086	Hyper	1 -	ACTTCATACCTCCCTTAAAATTATATTCAAAATCTATACTATAATCCATAATATTCTACATAATTTTACTTACTTATTATATTTAATCTCTACTATAACCACAATTCCTCAAACAATTTT
chr1	195044966	195045086	Hyper	1 +	GTTTTATATTTTTTTTAGGATTGTGTTTAGAATTTGTATTATGATTTATAATATTTTGTATGATTTTGTTTATTTGTTATGTTTAGTTTTTGTTATAGTTATAATTTTTTAGGTAGTTTT
chr1	195044961	195045081	Hyper	1 -	ATTCTACTTCATACCTCCCTTAAAATTATATTCAAAATCTATACTATAATCCATAATATTCTACTTACTTATTATATTTAATCTCTACTATAACCACAATTCCTCAAACAATTTTAACTC
chr1	195044961	195045081	Hyper	1 +	GTTTTGTTTTATATTTTTTTTAGGATTGTGTTTAGAATTTGTATTATGATTTATAATATTTTGTTTATTTGTTATGTTTAGTTTTTGTTATAGTTATAATTTTTTAGGTAGTTTTAGTTT
chr13	30565514	30565634	Hypo	1 -	CAAAAAAACATCTTCCCTAAAAAAACATAAAAAAAATTCTAAAAAACTAACACAAACCACTAAATTCCAAAAAACCAAACTAACATCAATCATTTAAAAATACAAAAATACTATAATTAC
chr13	30565514	30565634	Hypo	1 +	TAGAGAAATATTTTTTTTAGGGGAGTATAAGGAAGGTTTTGGAAAGTTGGTATAGATTATTGGGTTTTAGAGGGTTAAGTTGATATTAGTTGTTTAGGGATGTAGGAATGTTGTGGTTGT
chr13	30565510	30565630	Hypo	1 -	ACAACAAAAAAACATCTTCCCTAAAAAAACATAAAAAAAATTCTAAAAAACTAACACAAACCCAAAAAACCAAACTAACATCAATCATTTAAAAATACAAAAATACTATAATTACCACTA
chr13	30565510	30565630	Hypo	1 +	GTAATAGAGAAATATTTTTTTTAGGGGAGTATAAGGAAGGTTTTGGAAAGTTGGTATAGATTTAGAGGGTTAAGTTGATATTAGTTGTTTAGGGATGTAGGAATGTTGTGGTTGTTATTG
chr13	30565514	30565634	Hyper	1 -	CAAAAAAACATCTTCCCTAAAAAAACATAAAAAAAATTCTAAAAAACTAACACAAACCACTAAATTCCAAAAAACCAAACTAACATCAATCGTTTAAAAATACAAAAATACTATAATTAC
chr13	30565514	30565634	Hyper	1 +	TAGAGAAATATTTTTTTTAGGGGAGTATAAGGAAGGTTTTGGAAAGTTGGTATAGATTATTGGGTTTTAGAGGGTTAAGTTGATATTAGTCGTTTAGGGATGTAGGAATGTTGTGGTTGT
chr13	30565510	30565630	Hyper	1 -	ACAACAAAAAAACATCTTCCCTAAAAAAACATAAAAAAAATTCTAAAAAACTAACACAAACCCAAAAAACCAAACTAACATCAATCGTTTAAAAATACAAAAATACTATAATTACCACTA
chr13	30565510	30565630	Hyper	1 +	GTAATAGAGAAATATTTTTTTTAGGGGAGTATAAGGAAGGTTTTGGAAAGTTGGTATAGATTTAGAGGGTTAAGTTGATATTAGTCGTTTAGGGATGTAGGAATGTTGTGGTTGTTATTG
chr5	314084	314204	Hypo	1 -	AAACTAAAAAAAACCTAAAACCCTCATAATATCACAAACCCATCTAACTAAACATCCCCTACACTACACATACCCCAAATAACCCCCACAACAAAAACAAACCACTAAAAAATAAAAAACT
chr5	314084	314204	Hypo	1 +	GGGTTGGAGGAATTTGAAGTTTTTGTGATGTTATAAGTTTATTTGGTTGGGTATTTTTTGTGTTGTATATGTTTTAGGTGGTTTTTATAGTAGAGGTGAGTTATTGGAGGGTGGAGGGTT
chr5	314089	314209	Hypo	1 -	AAAAAAACCTAAAACCCTCATAATATCACAAACCCATCTAACTAAACATCCCCTACTATATCCTAAACTACACATACCCCAAATAACCCCCACAACAAAAACAAACCACTAAAAAATAAA
chr5	314089	314209	Hypo	1 +	GGAGGAATTTGAAGTTTTTGTGATGTTATAAGTTTATTTGGTTGGGTATTTTTTGTTGTGTTTTGAGTTGTATATGTTTTAGGTGGTTTTTATAGTAGAGGTGAGTTATTGGAGGGTGGA
chr5	314084	314204	Hyper	1 -	AAACTAAAAAAAACCTAAAACCCTCGTAATATCACAAACCCATCTAACTAAACATCCCCTACGCTACACATACCCCAAATAACCCCCACAACAAAAACGAACCACTAAAAAATAAAAAACT
chr5	314084	314204	Hyper	1 +	GGGTTGGAGGAATTTGAAGTTTTCGTGATGTTATAAGTTTATTTGGTTGGGTATTTTTTGCGTTGTATATGTTTTAGGTGGTTTTTATAGTAGAGGCGAGTTATTGGAGGGTGGAGGGTT
chr5	314089	314209	Hyper	1 -	AAAAAAACCTAAAACCCTCGTAATATCACAAACCCATCTAACTAAACATCCCCTACTATATCCTAAACTACACATACCCCAAATAACCCCCACAACAAAAACGAACCACTAAAAAATAAA
chr5	314089	314209	Hyper	1 +	GGAGGAATTTGAAGTTTTCGTGATGTTATAAGTTTATTTGGTTGGGTATTTTTTGTTGTGTTTTGAGTTGTATATGTTTTAGGTGGTTTTTATAGTAGAGGCGAGTTATTGGAGGGTGGA
chr18	2579997	2580117	Hypo	1 -	TTTATATAATTATTTTTCTTTTAACTTACTTATACATAATTTTTCAAACAAATTTTATTTCACCTTTACTTTTTACCATAAATTTAAATCTTTATATATTAAACTTACTAATAATTTTAA
chr18	2579997	2580117	Hypo	1 +	TTTATATGGTTATTTTTTTTTTTAATTTGTTTGTATATGGTTTTTTAGGTAAGTTTTATTTTATTTTTGTTTTTTGTTATGAATTTGAATTTTTATATATTAAATTTATTGATGGTTTTAA
chr18	2579993	2580113	Hypo	1 -	TATTTTTATATAATTATTTTTCTTTTAACTTACTTATACATAATTTTTCAAACAAATTTTATTACTTTTTACCATAAATTTAAATCTTTATATATTAAACTTACTAATAATTTTAATAAT
chr18	2579993	2580113	Hypo	1 +	TGTTTTTATATGGTTATTTTTTTTTTTAATTTGTTTGTATATGGTTTTTTAGGTAAGTTTTATTGTTTTTTGTTATGAATTTGAATTTTTATATATTAAATTTATTGATGGTTTTAATAGT
chr18	2579997	2580117	Hyper	1 -	TTTATATAATTATTTTTCTTTTAACTTACTTATACATAATTTTTCAAACAAATTTTATTTCACCTTTACTTTTTACCATAAATTTAAATCTTTATATATTAAACTTACTAATAATTTTAA
chr18	2579997	2580117	Hyper	1 +	TTTATATGGTTATTTTTTTTTTTAATTTGTTTGTATATGGTTTTTTAGGTAAGTTTTATTTTATTTTTGTTTTTTGTTATGAATTTGAATTTTTATATATTAAATTTATTGATGGTTTTAA
chr18	2579993	2580113	Hyper	1 -	TATTTTTATATAATTATTTTTCTTTTAACTTACTTATACATAATTTTTCAAACAAATTTTATTACTTTTTACCATAAATTTAAATCTTTATATATTAAACTTACTAATAATTTTAATAAT
chr18	2579993	2580113	Hyper	1 +	TGTTTTTATATGGTTATTTTTTTTTTTAATTTGTTTGTATATGGTTTTTTAGGTAAGTTTTATTGTTTTTTGTTATGAATTTGAATTTTTATATATTAAATTTATTGATGGTTTTAATAGT
chr7	15214328	15214448	Hypo	1 -	AAAATAAACATACATACCTTACTAAACACACCTATTTTAAATAAATATAAAAAAAAACTAACTAATACATTCCAAAAATATTTTTTCTATAAAAAAAACATTCAAAAATTAAATTAAATT
chr7	15214328	15214448	Hypo	1 +	AAAGTAAGTATATATGTTTTATTGGGTATATTTATTTTAAATAAATGTGGAAAAAGATTAGTTAATATATTTTAAAAATATTTTTTTTATGAAAAGGATATTTAAAGATTGAATTAAATT
chr7	15214324	15214444	Hypo	1 -	TTACAAAATAAACATACATACCTTACTAAACACACCTATTTTAAATAAATATAAAAAAAAAACATTCCAAAAATATTTTTTCTATAAAAAAAACATTCAAAAATTAAATTAAATTATTTT
chr7	15214324	15214444	Hypo	1 +	TTATAAAGTAAGTATATATGTTTTATTGGGTATATTTATTTTAAATAAATGTGGAAAAAGAATATTTTAAAAATATTTTTTTTATGAAAAGGATATTTAAAGATTGAATTAAATTATTTT
chr7	15214328	15214448	Hyper	1 -	AAAATAAACATACATACCTTACTAAACACACCTATTTTAAATAAATATAAAAAAAAACTAACTAATACATTCCAAAAATATTTTTTCTATAAAAAAAACATTCAAAAATTAAATTAAATT
chr7	15214328	15214448	Hyper	1 +	AAAGTAAGTATATATGTTTTATTGGGTATATTTATTTTAAATAAATGTGGAAAAAGATTAGTTAATATATTTTAAAAATATTTTTTTTATGAAAAGGATATTTAAAGATTGAATTAAATT
chr7	15214324	15214444	Hyper	1 -	TTACAAAATAAACATACATACCTTACTAAACACACCTATTTTAAATAAATATAAAAAAAAAACATTCCAAAAATATTTTTTCTATAAAAAAAACATTCAAAAATTAAATTAAATTATTTT
chr7	15214324	15214444	Hyper	1 +	TTATAAAGTAAGTATATATGTTTTATTGGGTATATTTATTTTAAATAAATGTGGAAAAAGAATATTTTAAAAATATTTTTTTTATGAAAAGGATATTTAAAGATTGAATTAAATTATTTT
chr20	55552151	55552271	Hypo	1 -	AAAAACAAAAATTAAAAAAATATTTATACAAATAATTCATCCCAACAATTAAAAATTCTCCTAAAAAAAAATAACAAAAAACCCTTTAAAAATAAAAAAATCAAAATTAATAAAAAATAA
chr20	55552151	55552271	Hypo	1 +	GGAGATAGAGATTAAAGGAATATTTGTATAAATAATTTATTTTAGTGGTTGAAAGTTTTTTTGAAGGAGAATGATAGGGGATTTTTTGGGAATGGAAAGGTTAAGATTGGTGGGAGATGA
chr20	55552147	55552267	Hypo	1 -	TAAAAAAAACAAAAATTAAAAAAATATTTATACAAATAATTCATCCCAACAATTAAAAATTAAAAAATAACAAAAAACCCTTTAAAAATAAAAAAATCAAAATTAATAAAAAATAACAAC
chr20	55552147	55552267	Hypo	1 +	TGGGGGAGATAGAGATTAAAGGAATATTTGTATAAATAATTTATTTTAGTGGTTGAAAGTTGGAGAATGATAGGGGATTTTTTGGGAATGGAAAGGTTAAGATTGGTGGGAGATGATAGT
chr20	55552151	55552271	Hyper	1 -	AAAAACAAAAATTAAAAAAATATTTATACAAATAATTCATCCCAACGATTAAAAATTCTCCTAAAAAAAAATAACAAAAAACCCTTTAAAAATAAAAAAATCAAAATTAATAAAAAATAA
chr20	55552151	55552271	Hyper	1 +	GGAGATAGAGATTAAAGGAATATTTGTATAAATAATTTATTTTAGCGGTTGAAAGTTTTTTTGAAGGAGAATGATAGGGGATTTTTTGGGAATGGAAAGGTTAAGATTGGTGGGAGATGA
chr20	55552147	55552267	Hyper	1 -	TAAAAAAAACAAAAATTAAAAAAATATTTATACAAATAATTCATCCCAACGATTAAAAATTAAAAAATAACAAAAAACCCTTTAAAAATAAAAAAATCAAAATTAATAAAAAATAACAAC
chr20	55552147	55552267	Hyper	1 +	TGGGGGAGATAGAGATTAAAGGAATATTTGTATAAATAATTTATTTTAGCGGTTGAAAGTTGGAGAATGATAGGGGATTTTTTGGGAATGGAAAGGTTAAGATTGGTGGGAGATGATAGT
chr1	63108624	63108744	Hypo	1 -	CTACCCTTATAATTTATTTTAATCAATAAATAATATACTATAAAAATTTTAATCCAAAACCACAAAAAATCTTACAACTTCCACTCTCCTTTTTCTAAAAACCCTTCCACCACTACATAA
chr1	63108624	63108744	Hypo	2 +	TTATTTTTGTGATTTGTTTTGATTAATAAATGATATGTTGTAAGAGTTTTAATTTAAGGTTATAAGAGGTTTTATAGTTTTTATTTTTTTTTTTTTTGAAAATTTTTTTATTATTATATGA
chr1	63108619	63108739	Hypo	1 -	TCAAACTACCCTTATAATTTATTTTAATCAATAAATAATATACTATAAAAATTTTAATCCAAAATCTTACAACTTCCACTCTCCTTTTTCTAAAAACCCTTCCACCACTACATAAACAAA
chr1	63108619	63108739	Hypo	1 +	TTAGGTTATTTTTGTGATTTGTTTTGATTAATAAATGATATGTTGTAAGAGTTTTAATTTAAGGTTTTATAGTTTTTATTTTTTTTTTTTTTGAAAATTTTTTTATTATTATATGAATAAG
chr1	63108624	63108744	Hyper	1 -	CTACCCTTATAATTTATTTTAATCAATAAATAATATACTATAAAAATTTTAATCCAAAACCACAAAAAATCTTACAACTTCCACTCTCCTTTTTCTAAAAACCCTTCCACCACTACATAA
chr1	63108624	63108744	Hyper	2 +	TTATTTTTGTGATTTGTTTTGATTAATAAATGATATGTTGTAAGAGTTTTAATTTAAGGTTATAAGAGGTTTTATAGTTTTTATTTTTTTTTTTTTTGAAAATTTTTTTATTATTATATGA
chr1	63108619	63108739	Hyper	1 -	TCAAACTACCCTTATAATTTATTTTAATCAATAAATAATATACTATAAAAATTTTAATCCAAAATCTTACAACTTCCACTCTCCTTTTTCTAAAAACCCTTCCACCACTACATAAACAAA

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chr1	63108619	63108739	Hyper	1 +	TTAGGTTATTTTTGTGATTTGTTTTGATTAATAAATGATATGTTGTAAGAGTTTTAATTTAAGGTTTTATAGTTTTATTTTTTTTTTTTTGAAAATTTTTTTATTATTATATGAATAAG
chr4	113733299	113733419	Hypo	1 -	ATTCATACTAACTCTCAACTAATTTTCATATAAAAAATTAATATAATAATTACCTCAATAAAAAACAAATATATCTTTTCATTCTAAACTAAATATCATTAAAACTTTTATATATTCAA
chr4	113733299	113733419	Hypo	1 +	ATTTATATTTAATTTTTGATTAATTTTTGTGTAAGGAATTGGTATAATAGTTATTTTAATGAGGGGTAAATATGTTTTTTTATTTTGGGTTGAGTATTATTAGGATTTTTATATATTTAA
chr4	113733294	113733414	Hypo	1 -	AAAAAATCATACTTAACTCTCGACTAATTTTCGTATAAAAAATTAATATAATAATTACCTCAAATAAAAACAAATATATCTTTTCATTCTAAACTAAATATCATTAAAACTTTTATATATTCAAATATA
chr4	113733294	113733414	Hyper	1 +	AAAGAATTTATATTTAATTTTTGATTAATTTTTGTGTAAGGAATTGGTATAATAGTTATTTTAATGAGGGGTAAATATGTTTTTTTATTTTGGGTTGAGTATTATTAGGATTTTTATATATTTAA
chr4	113733294	113733414	Hyper	1 -	ATTCATACTAACTCTCGACTAATTTTCGTATAAAAAATTAATATAATAATTACCTCAATAAAAAACAAATATATCTTTTCATTCTAAACTAAATATCATTAAAACTTTTATATATTCAA
chr4	113733299	113733419	Hyper	1 +	ATTTATATTTAATTTTCGATTAATTTTCGTGTAAGGAATTGGTATAATAGTTATTTTAATGAGGGGTAAATATGTTTTTTTATTTTGGGTTGAGTATTATTAGGATTTTTATATATTTAA
chr4	113733294	113733414	Hyper	1 -	AAAAAATCATACTTAACTCTCGACTAATTTTCGTATAAAAAATTAATATAATAATTACCTCAAATATATCTTTTCATTCTAAACTAAATATCATTAAAACTTTTATATATTCAAATATA
chr4	113733294	113733414	Hyper	1 +	AAAGAATTTATATTTAATTTTCGATTAATTTTCGTGTAAGGAATTGGTATAATAGTTATTTTAATGAGGGGTAAATATGTTTTTTTATTTTGGGTTGAGTATTATTAGGATTTTTATATATTTAAGTGTG
chr1	63070480	63070600	Hypo	1 -	TTAAATAAACTAAAACAAATTTAAAAACAATAATTTAAACATTAACCTCATTCCAAATTAATATAATCTAATAATCTAATATTAATATTAAATCCTTAAAAAAAAACTTAAAAAATAAATTTTTT
chr1	63070480	63070600	Hypo	1 +	TTGAATGAATTGAGGTAAATTTAAAAGGTAATAATTTAAATATTAATTTTATTTAAGTTAATGTGGTTTAAATAATTTGGTATTAAATTTTTAAGAGAAAGTTTGAGAAATAGATTTTTT
chr1	63070476	63070596	Hypo	1 -	AACTTTAAATAAACTAAAACAAATTTAAAAAACAATAATTTAAACATTAACCTCATTCCAAATTAATATAATCTAATAATCTAATATTAAATCCTTAAAAAAAAACTTAAAAAATAAATTTTTTTTATC
chr1	63070476	63070596	Hypo	1 +	AGTTTTGAATGAATTGAGGTAAATTTAAAAGGTAATAATTTAAATATTAATTTTATTTAAGTTAATGTGGTTTAAATAATTTGGTATTAAATTTTTAAGAGAAAGTTTGAGAAATAGATTTTTTTATT
chr1	63070480	63070600	Hyper	1 -	TTAAATAAACTAAAACAAATTTAAAAAACAATAATTTAAACATTAACCTCATTCCAAATTAATATAATCTAATAATCTAATATTAAATCCTTAAAAAAAAACTTAAAAAATAAATTTTTT
chr1	63070480	63070600	Hyper	1 +	TTGAATGAATTGAGGTAAATTTAAAAGGTAATAATTTAAATATTAATTTTATTTAAGTTAATGTGGTTTAAATAATTTGGTATTAAATTTTTAAGAGAAAGTTTGAGAAATAGATTTTTTTATT
chr1	63070476	63070596	Hyper	1 -	AACTTTAAATAAACTAAAACAAATTTAAAAAACAATAATTTAAACATTAACCTCATTCCAAATTAATATAATCTAATAATCTAATATTAAATCCTTAAAAAAAAACTTAAAAAATAAATTTTTTTTATC
chr1	63070476	63070596	Hyper	1 +	AGTTTTGAATGAATTGAGGTAAATTTAAAAGGTAATAATTTAAATATTAATTTTATTTAAGTTAATGTGGTTTAAATAATTTGGTATTAAATTTTTAAGAGAAAGTTTGAGAAATAGATTTTTTTATT
chr6	55922844	55922964	Hypo	1 -	TAATTTTTAAAAACTAAACTAAACATATTAACATAATAACCATACTACTAATTAAAACATTTAACTAACATTATAATATTCCATTTATATATTATCCAATCTTATTTCTTCCTTTCAACC
chr6	55922844	55922964	Hypo	1 +	TAATTTTGAAAATTAGGTTAAGTATATTAATATAGTAATTATGTTATTGATTAAAATATTTAGTTAATATTATAATATTTTATTTGTGTATTGTTAATTTTATTTTTTTTTTTTAGTTTATT
chr6	55922839	55922959	Hypo	1 -	ATCAATAAATTTTAAAAACTAAACTAAACATATTAACATAATAACCATACTACTAATTAAAAACATTTAACTAACATTATAATATTCCATTTATATATTATCCAATCTTATTTCTTCCTTTCAACC
chr6	55922839	55922959	Hypo	2 +	ATTAGTAATTTTGAAAATTAGGTTAAGTATATTAATATAGTAATTATGTTATTGATTAAAATATTTAGTTAATATTATAATATTTTATTTGTGTATTGTTAATTTTATTTTTTTTTTTTAGTTTATT
chr7	118148783	118148903	Hypo	1 -	CTTCTATTTATTTTAAAAAAAAAAAAAATTTTAAAATCTTTTAATACAATATTTCAAAAACAATTAATATATATCTTTATAATAACATTACAAATTATTTAAATAATACAAATAATTTTAT
chr7	118148783	118148903	Hypo	1 +	TTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAAATAGTTAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGT
chr7	118148779	118148899	Hypo	1 -	CACTCTTCTATTTATTTTAAAAAAAAAAAAATTTAAAATCTTTTAATACAATATTTCAAAATATATATCTTTATAATAACATTACAATTATTTAAATAATACAAATAATTTTATATTA
chr7	118148779	118148899	Hypo	1 +	TATTTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGTATTA
chr7	118148783	118148903	Hypo	1 -	CTTCTATTTATTTTAAAAAAAAAAAAATTTAAAATCTTTTAATACAATATTTCAAAAACAATTAATATATATCTTTATAATAACATTACAATTATTTAAATAATACAAATAATTTTATATTA
chr7	118148783	118148903	Hypo	1 +	TTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAAATAGTTAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGT
chr7	118148779	118148899	Hypo	1 -	CACTCTTCTATTTATTTTAAAAAAAAAAAAATTTAAAATCTTTTAATACAATATTTCAAAATATATATCTTTATAATAACATTACAATTATTTAAATAATACAAATAATTTTATATTA
chr7	118148779	118148899	Hypo	1 +	TATTTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGTATTA
chr7	118148783	118148903	Hypo	1 -	CTTCTATTTATTTTAAAAAAAAAAAAATTTAAAATCTTTTAATACAATATTTCAAAAACAATTAATATATATCTTTATAATAACATTACAATTATTTAAATAATACAAATAATTTTATATTA
chr7	118148783	118148903	Hypo	1 +	TTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAAATAGTTAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGT
chr7	118148779	118148899	Hypo	1 -	CACTCTTCTATTTATTTTAAAAAAAAAAAAATTTAAAATCTTTTAATACAATATTTCAAAATATATATCTTTATAATAACATTACAATTATTTAAATAATACAAATAATTTTATATTA
chr7	118148779	118148899	Hypo	1 +	TATTTTTTATTTATTTTAAGAAAAAAAGAAATTTTGAAGTTTTTTAGTGTAGTATTTTAGAATATGTGTTTTTATGATGGTATTGTAATTATTTGGATAATATAGATGATTTTGTATTA
chr7	114863356	114863476	Hypo	1 -	CAAATCTCTCATCTCCATAAATAAAACTAAATTAACACCTTTTAAATAAATAACAACAACTCCAAAAAAACTCAAACAATCCCTTTTCCTCCAATAACCTCATTCTCACTCTATCTTCC
chr7	114863356	114863476	Hypo	1 +	TGAGTTTTTTATTTTTAGGGTGAGGTTGAGTTGATATTTTTTGAATGAAGTGATAGTAGTTTTAAGAGGGTTTAGAATAGTTTTTTTTTTTTTAGTGATTTTATTTTTATTTGTTTTT
chr7	114863353	114863473	Hypo	1 -	CTACAAATCTCTCATCTCCATAAATAAAACTAAATTAACACCTTTTAAATAAATAACAACAAAAAACTCAAACAATCCCTTTTCCTCCAATAACCTCATTCTCACTCTATCTTCACAC
chr7	114863353	114863473	Hypo	1 +	TTATGAGTTTTTTATTTTTATGGGTGAGGTTGAGTTGATATTTTTTGAATGAAGTGATAGTAGAGGGTTTAGAATAGTTTTTTTTTTTTTAGTGATTTTATTTTTATTTGTTTTT
chr7	114863356	114863476	Hyper	1 -	CGAATCTCTCATCTCCATAAATAAAACTAAATTAACACCTTTTAAATAAATAACAACAACTCCAAAAAAACTCAAACAATCCCTTTTCCTCCAATAACCTCATTCTCACTCTATCTTCC
chr7	114863356	114863476	Hyper	1 +	CGAGTTTTTTATTTTTATGGGTGAGGTTGAGTTGATATTTTTTGAATGAAGTGATAGTAGTTTTAAGAGGGTTTAGAATAGTTTTTTTTTTTTTAGTGATTTTATTTTTATTTGTTTTT
chr7	114863353	114863473	Hyper	1 -	CTACGAATCTCTCATCTCCATAAATAAAACTAAATTAACACCTTTTAAATAAATAACAACAAAAAACTCAAACAATCCCTTTTCCTCCAATAACCTCATTCTCACTCTATCTTCACAC
chr7	114863353	114863473	Hyper	1 +	TTACGAGTTTTTTATTTTTATGGGTGAGGTTGAGTTGATATTTTTTGAATGAAGTGATAGTAGAGGGTTTAGAATAGTTTTTTTTTTTTTAGTGATTTTATTTTTATTTGTTTTTATAT
chr8	121551479	121551599	Hypo	1 -	TAAACCATTTATTTTTAATACCACAATAATAATATTTATTCATATTAAATTTAACACAATATAAAACAATACTAAATTTCACATCTAAAAATTAAATTTAAATCCTAATTCTAACACTTT
chr8	121551479	121551599	Hypo	1 +	TAAGTTATTTATTTTGGTATTATAATAGTGATATTTATTTATTGTTGGATTTGATATAGTATGAAGTAGTATTAAATTTTATATTTGAAGATTAGGTTTGAATTTTGGTTTTGATGTTTT
chr8	121551474	121551594	Hypo	1 -	CTATCTAAACCATTTATTTTTAATACCACAATAATAATATTTATTCATATTAAATTTAACACAATACTAAATTTCACATCTAAAAATTAAATTTAAATCCTAATTCTAACACTTTTTAAA
chr8	121551474	121551594	Hypo	1 +	TTGTTAAGTTATTTATTTTTGGTATTATAATAGTGATATTTATTTATTGTTGGATTTGATATAGTATTAAATTTTATATTTGAAGATTAGGTTTGAATTTTGGTTTTGATGTTTTTAGA
chr8	121551479	121551599	Hyper	1 -	TAAACCATTTATTTTTAATACCACAATAATAATATTTATTCATATTAAATTTAACACAATATAAAACAATACTAAATTTCACATCTAAAAATTAAATTTAAATCCTAATTCTAACGCTTT
chr8	121551479	121551599	Hyper	1 +	TAAGTTATTTATTTTGGTATTATAATAGTGATATTTATTTATTGTTGGATTTGATATAGTATGAAGTAGTATTAAATTTTATATTTGAAGATTAGGTTTGAATTTTGGTTTTGACGTTTT
chr8	121551474	121551594	Hyper	1 -	CTATCTAAACCATTTATTTTTAATACCACAATAATAATATTTATTCATATTAAATTTAACACAATACTAAATTTCACATCTAAAAATTAAATTTAAATCCTAATTCTAACGCTTTTTAAA
chr8	121551474	121551594	Hyper	1 +	TTGTTAAGTTATTTATTTTTGGTATTATAATAGTGATATTTATTTATTGTTGGATTTGATATAGTATTAAATTTTATATTTGAAGATTAGGTTTGAATTTTGGTTTTGATGTTTTTAGA
chr15	95462771	95462891	Hypo	1 -	ACTTCCCCAATAATACAAATCTTTCCATTATACCACTTAAACCAAAACCAATAACCCATCAATAAAAACCTTCCTTTCCAATAACAAAAAAAAAAAATCATTATAAATACTTACAATTATA
chr15	95462771	95462891	Hypo	1 +	GTTTTTTAGTGGTGTAAGTTTTTTATTGTATTATTTAGGTTAAAGTTAGTGATTTATTAATTGAGAATTTTTTTTTTAGTAGTAGGAAGAAGGGTTATTGTAAATATTTATAATTGTG
chr15	95462775	95462895	Hyper	1 -	CCCCAATAATACAAATCTTTCCATTATACCACTTAAACCAAAACCAATAACCCATCAATTCAAATATAAAAACCTTCCTTTCCAATAACAAAAAAAAAAATCATTATAAATACTTACAATTATA
chr15	95462775	95462895	Hyper	1 +	TTTTAGTGGTGTAAGTTTTTTATTGTATTATTTAGGTTAAAGTTAGTGATTTATTAATTGAGAATTTTTTTTTTAGTAGTAGGAAGAAGGGTTATTGTAAATATTTATAATTGTG
chr15	84547487	84547607	Hypo	1 -	TTAATACCTATATAAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTCAAATCTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTC
chr15	84547487	84547607	Hypo	1 +	TTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTATTT
chr15	84547483	84547603	Hypo	1 -	TATTTTAATACCTATATAAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTCAAATCTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTC
chr15	84547483	84547603	Hypo	1 +	TGTTTTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTGT
chr15	84547487	84547607	Hyper	1 -	TTAATACCTATATAAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTCAAATCTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTC
chr15	84547487	84547607	Hyper	1 +	TTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTATTT
chr15	84547483	84547603	Hyper	1 -	TATTTTAATACCTATATAAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTCTCTAC
chr15	84547483	84547603	Hyper	1 +	TGTTTTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTATTTTTGT
chr11	109959044	109959164	Hypo	1 -	ATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACAAATACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATT
chr11	109959044	109959164	Hypo	1 +	GTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTAGGTGTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATT
chr11	109959041	109959161	Hypo	1 -	CCAATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATTAAC
chr11	109959041	109959161	Hypo	1 +	TTAGTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATTAAT
chr11	109959044	109959164	Hyper	1 -	ATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACAAATACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATT
chr11	109959044	109959164	Hyper	1 +	GTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTAGGTGTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATT
chr11	109959041	109959161	Hyper	1 -	CCAATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATTAAC
chr11	109959041	109959161	Hyper	1 +	TTAGTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATTAAT
chr15	40749476	40749596	Hyper	1 -	CCTAATTTTCTCTACCCCCAAAAATATACTAATCCTAACCTACTATTACCCTTACCCTAAACTACTCTACCTAAAATTTAAACCAAAATCAAATAAAAC
chr15	40749476	40749596	Hyper	1 +	TTTGGGTTTTTTTTATTTTTAGGAATATGTTGATTTTGGTTTTATTGTTATTTTTGTTTTGGGTATTGGTATTTTTTGGGTTGTTTTTGTTTGGAATTTGAATTAAAGTTTAAATGAGAT
chr15	40749473	40749593	Hyper	1 -	ATCCCTAAATTTTCTCTACCCCCAAAAATATACTAATCCTAACCTTACTATTACCCTTACCCTAACACCCTTTAAACTACTCTACCTAAAATTTAAACCAAAATCAAATAAAACTCT
chr15	40749473	40749593	Hyper	1 +	GTTTTTGGGTTTTTTTTATTTTTAGGAATATGTTGATTTTGGTTTTATTGTTATTTTTGTTTTGGTATTTTTTGGGTTGTTTTTGTTTGGAATTTGAATTAAAGTTTAAATGAGATTTTT
chr9	136508248	136508368	Hypo	1 -	ACAAAAACTAACCCAACCACAACCCCATATACATAAAAACAACTACATCCTATCCCTACCTTAACCTATACAAACCTCATTTCCTTCACTCTAAAACTACCTACAAAATTTCTTTCTAAA
chr9	136508248	136508368	Hypo	1 +	GTAGGAGTTGGTTTGGTTATAGTTTTATATGTATGAGGATGGTTGTGTTTTGTTTTTGTTTTGGTAGGAAATGGTTTGTATGAATTTTATTTTTTTTATTTTGGAGTTGTTTATGGGATTTTTTTTGGG
chr9	136508253	136508373	Hypo	1 -	AACTAACCGACCACAACCCCATATACATAAAAACAACTACGTCCTATCCCTACCTTAACCTATACAAACCTCATTTCCTTCACTCTAAAACTACCTACAAAATTTCTTTCTAAAAAAAAAAA
chr9	136508253	136508373	Hypo	1 +	AGTTGGTTGGTTATAGTTTTATATGTATGAGGACGGTTGCGTTTTGTTTTTGTTTTGGTAGGAAATGGTTTGTATGAATTTTATTTTTTTTATTTTGGAGTTGTTTATGGGATTTTTTTTGGG
chr1	112641138	112641258	Hypo	2 -	ACTTTTCAATAACTTTAAAAATTATCACCTTATAATATAAATTCTAACCAAAAAACCTAAAAATCCTAAAATTAAAAAAAAAAATTTATAAAAACCAAATAATAAATAAAATCCTAACTCT
chr1	112641138	112641258	Hypo	1 +	ATTTTTTAATAATTTTAAGAATTGTTATTTTGTAATATAAGTTTTGATTAAGGGATTTGAAAGTTTAAAGTTATGAGAAGGAGGTTAGGTAGTAAATAGAATTTTAGTTTT
chr1	112641143	112641263	Hypo	1 -	TCAATAACTTTAAAAATTATCACCTTATAATATAAATTCTAACCAAAAAACCTAAAATACCATCGTAATCCTAAAATTAAAAAAAAAAATTTATAAAAACCAAATAATAAATAAAATCCTA
chr1	112641143	112641263	Hypo	1 +	TTAATAATTTTAAGAATTGTTATTTTGTAATATAAGTTTTGATTAAGGGATTTGAAATGTTATCGTAGTTTTAAAGTTATGAGAAGGAGGTTAGGTAGTAAATAGAATTTTAGTTTT
chr12	115779937	115780057	Hypo	1 -	TTACACAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATTAACT
chr12	115779937	115780057	Hypo	1 +	TTATATAGTTAAGAGAGTGTGAATTTTAGGTTTTGTGAAAGATTAAAATAAGTATAAAATAAATGTATGTTATAAATTATTATTGAAAAGGAGTAAATGTATTTAATTTTAAAGTTAGTT
chr12	115779942	115780062	Hypo	1 -	CAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATT
chr12	115779942	115780062	Hypo	1 +	TAGTTAAGAGAGTGTGAATTTTAGGTTTTGTGAAAGATTAAAATAAGTATAAAATAAATGTATGTTATAAATTATTATTGAAAAGGAGTAAATGTATTTAATTTTAAAGTT
chr12	115779937	115780057	Hyper	1 -	TTACACAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATTAACT
chr12	115779937	115780057	Hyper	1 +	TTATATAGTTAAGAGAGTGTGAATTTTAGGTTTTGTGAAAGATTAAAATAAGTATAAAATAAATGTATGTTATAAATTATTATTGAAAAGGAGTAAATGTATTTAATTTTAAAGTT
chr12	115779942	115780062	Hyper	1 -	CAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATT

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chr15	95462775	95462895	Hypo	1 +	TTTTAGTGGTGTAAGTTTTTTATTGTATTATTTAGGTTAAAGTTAGTGATTTATTAATTTAGATATGAGAATTTTTTTTTTTAGTAGTAGGAAGAAGGGTTATTGTAAATATTTATAAT
chr15	95462771	95462891	Hypo	1 -	ACTTCCCCAATAATACAAATCTTTCCATTATACCACTTAAACCAAAACCAATAACCCATCAATAAAAACCTTCCTTTCCAATAACAAAAAAAAAAATCATTATAAATACTTACAATTATA
chr15	95462771	95462891	Hyper	1 +	GTTTTTTAGTGGTGTAAGTTTTTTATTGTATTATTTAGGTTAAAGTTAGTGATTTATTAATGAGAATTTTTTTTTTTAGTAGTAGGAAGAAGGGTTATTGTAAATATTTATAATTGTG
chr15	95462775	95462895	Hyper	1 -	CCCCAATAATACAAATCTTTCCATTATACCACTTAAACCAAAACCAATAACCCATCAATTCAAATATAAAAACCTTCCTTTCCAATAACAAAAAAAAAAATCATTATAAATACTTACAAT
chr15	95462775	95462895	Hyper	1 +	TTTTAGTGGTGTAAGTTTTTTATTGTATTATTTAGGTTAAAGTTAGTGATTTATTAATTAGATATGAGAATTTTTTTTTTTAGTAGTAGGAAGAAGGGTTATTGTAAATATTTATAAT
chr15	84547487	84547607	Hypo	1 -	TTAATACCTATATAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTCAAATCTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTC
chr15	84547487	84547607	Hypo	1 +	TTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTATTT
chr15	84547483	84547603	Hypo	1 -	TATTTTAATACCTATATAAAAAAAAAAATTTACTATTTATTATTTATTTCTCAAAATACCTTTTAACATTTTATTCTACTTTTATAAAACAAATTTAAAAATATTTCCTCTTATTCTCTAC
chr15	84547483	84547603	Hypo	1 +	TGTTTTGGTATTTATGTGAAGGAAAGGGTTTGTTTGTTTGTTTTTTTGGAATGTTTTTTTAGGTTTTGATATTTTATTTGTTTTTATAAAAATAAGTTTAGAAGTGTTTTTTTTTATTTTGT
chr11	109959044	109959164	Hypo	1 -	ATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACAAATACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATT
chr11	109959044	109959164	Hypo	1 +	GTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTAGGTGTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATT
chr11	109959041	109959161	Hypo	1 -	CCAATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATTAAC
chr11	109959041	109959161	Hypo	1 +	TTAGTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATTAAT
chr11	109959044	109959164	Hyper	1 -	ATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACAAATACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATT
chr11	109959044	109959164	Hyper	1 +	GTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTAGGTGTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATT
chr11	109959041	109959161	Hyper	1 -	CCAATCACTAAAACTTATAAACAAAAATATATTTCAACCCTCAATATCTACCTTATACACAACTTAATAAATAATTATAATATAATAATACTTAACATTTCATAAATTATTAAAATTAAC
chr11	109959041	109959161	Hyper	1 +	TTAGTTATTGAAGTTATAAGTAAGGATATATTTAGTTTTATGTTTGTATATAGTTTAGTAATGGTTGTAATGTGGTAATGTTGATGTTTATGGGTTGTTGGAATTAAT
chr15	40749476	40749596	Hyper	1 -	CCTAATTTTCTCTACCCCCAAAAATATACTAATCCTAACCTACTATTACCCTTACCCTAACCTAAATACTAACACCCTTTAAACTACTCTACCTAAAATTTAAACCAAAATCAAATAAAAC
chr15	40749476	40749596	Hyper	1 +	TTTGGGTTTTTTTTATTTTTAGGAATATGTTGATTTTGGTTTTATTGTTATTTTTGTTTTGGGTATTGGTATTTTTTGGGTTGTTTTTGTTTGGAATTTGAATTAAAGTTTAAATGAGAT
chr15	40749473	40749593	Hyper	1 -	ATCCCTAAATTTTCTCTACCCCCAAAAATATACTAATCCTAACCTTACTATTACCCTTACCCTAACACCCTTTAAACTACTCTACCTAAAATTTAAACCAAAATCAAATAAAACTCT
chr15	40749473	40749593	Hyper	1 +	GTTTTTGGGTTTTTTTTATTTTTAGGAATATGTTGATTTTGGTTTTATTGTTATTTTTGTTTTGGTATTTTTTGGGTTGTTTTTGTTTGGAATTTGAATTAAAGTTTAAATGAGATTTTT
chr9	136508248	136508368	Hypo	1 -	ACAAAAACTAACCCAACCACAACCCCATATACATAAAAACAACTACATCCTATCCCTACCTTAACCTATACAAACCTCATTTCCTTCACTCTAAAACTACCTACAAAATTTCTTTCTAAA
chr9	136508248	136508368	Hypo	1 +	GTAGGAGTTGGTTTGGTTATAGTTTTATATGTATGAGGATGGTTGTGTTTTGTTTTTGTTTTGGTAGGAAATGGTTTGTATGAATTTTATTTTTTTTATTTTGGAGTTGTTTATGGGATTTTTTTTGGG
chr9	136508253	136508373	Hypo	1 -	AACTAACCGACCACAACCCCATATACATAAAAACAACTACGTCCTATCCCTACCTTAACCTATACAAACCTCATTTCCTTCACTCTAAAACTACCTACAAAATTTCTTTCTAAAAAAAAAA
chr9	136508253	136508373	Hypo	1 +	AGTTGGTTGGTTATAGTTTTATATGTATGAGGACGGTTGCGTTTTGTTTTTGTTTTGGTAGGAAATGGTTTGTATGAATTTTATTTTTTTTATTTTGGAGTTGTTTATGGGATTTTTTTTGGG
chr1	112641138	112641258	Hypo	2 -	ACTTTTCAATAACTTTAAAAATTATCACCTTATAATATAAATTCTAACCAAAAAACCTAAAATCCTAAAATTAAAAAAAAAAATTTATAAAAACCAAATAATAAATAAAATCCTAACTCT
chr1	112641138	112641258	Hypo	1 +	ATTTTTTAATAATTTTAAGAATTGTTATTTTGTAATATAAGTTTTGATTAAGGGATTTGAAAGTTTAAAGTTATGAGAAGGAGGTTAGGTAGTAAATAGAATTTTAGTTTT
chr1	112641143	112641263	Hyper	1 -	TCAATAACTTTAAAAATTATCACCTTATAATATAAATTCTAACCAAAAAACCTAAAATACCATCGTAATCCTAAAATTAAAAAAAAAAATTTATAAAAACCAAATAATAAATAAAATCCTA
chr1	112641143	112641263	Hyper	1 +	TTAATAATTTTAAGAATTGTTATTTTGTAATATAAGTTTTGATTAAGGGATTTGAAATGTTATCGTAGTTTTAAAGTTATGAGAAGGAGGTTAGGTAGTAAATAGAATTTTAGTTTT
chr12	115779937	115780057	Hyper	1 -	TTACACAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATTAACT
chr12	115779937	115780057	Hyper	1 +	TTATATAGTTAAGAGAGTGTGAATTTTAGGTTTTGTGAAAGATTAAAATAAGTATAAAATAAATGTATGTTATAAATTATTATTGAAAAGGAGTAAATGTATTTAATTTTAAAGTT
chr12	115779942	115780062	Hyper	1 -	CAATTAAAAAAATATAAATCCCAAACTTTATAAAAAATTAAAATAAACACAAAATAAATACATATTACAAATCATTACTAAAAAAAAACAAATACATTTAACCTCAAAATT

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chr12	115779942	115780062	Hyper	1 +	TAGTTAAGAGAGTGTGAATTTTAGGTTTTGTGAAAGATTAAAATAAGTATAAAATAAAAGGTTTTAATGTATGTTATAAATTATTATTGAAAAGGAGTAAATGTATTTAATTTTAAAGTT
chr20	31478239	31478359	Hypo	1 -	ATATCATCTCACATATATTAATTTACTTCTATTTAACACATATCTCCTCCTCCAAACTAAAAAATCAAAAACTACATCTATTCTACTCAACTCAATATCTCAATACCTAATACCTTCTAA
chr20	31478239	31478359	Hypo	1 +	GTGTTATTTTATATGTATTAGTTTGTTTTTGTTTAGTATATGTTTTTTTTTTTAGATTGGAAGGTTAGGGATTGTATTTGTTTTGTTTAATTTAGTGTTTTAGTGTTTGGTATTTTTTGG
chr20	31478244	31478364	Hypo	1 -	ATCTCACATATATTAATTTACTTCTATTTAACACATATCTCCTCCTCCAAACTAAAACCTCCATAAAATCAAAAACTACATCTATTCTACTCAACTCAATATCTCAATACCTAATACCTT
chr20	31478244	31478364	Hypo	1 +	ATTTTATATGTATTAGTTTGTTTTTGTTTAGTATATGTTTTTTTTTTTAGATTGGAATTTTTATGAGGTTAGGGATTGTATTTGTTTTGTTTAATTTAGTGTTTTAGTGTTTGGTATTTT
chr20	31478239	31478359	Hyper	1 -	ATATCATCTCACATATATTAATTTACTTCTATTTAACACATATCTCCTCCTCCAAACTAAAAAATCAAAAACTACATCTATTCTACTCAACTCAATATCTCAATACCTAATACCTTCTAA
chr20	31478239	31478359	Hyper	1 +	GTGTTATTTTATATGTATTAGTTTGTTTTTGTTTAGTATATGTTTTTTTTTTTAGATTGGAAGGTTAGGGATTGTATTTGTTTTGTTTAATTTAGTGTTTTAGTGTTTGGTATTTTTTGG
chr20	31478244	31478364	Hyper	1 -	ATCTCACATATATTAATTTACTTCTATTTAACACATATCTCCTCCTCCAAACTAAAACCTCCATAAAATCAAAAACTACATCTATTCTACTCAACTCAATATCTCAATACCTAATACCTT
chr20	31478244	31478364	Hyper	1 +	ATTTTATATGTATTAGTTTGTTTTTGTTTAGTATATGTTTTTTTTTTTAGATTGGAATTTTTATGAGGTTAGGGATTGTATTTGTTTTGTTTAATTTAGTGTTTTAGTGTTTGGTATTTT
chr6	112814274	112814394	Hypo	1 -	CATCAAAATTCAAAAATTTAAATCCCAACTCCATTACATAATAATAATATAAATTTCAAATTAATTAATCTCTAAATACTTCAATTTTCTCATCTATAAAATAAAAAAAACAATACTTTC
chr6	112814274	112814394	Hypo	1 +	TATTAGAATTTAGGGGTTTGAATTTTAGTTTTATTATGTAGTAGTAGTATAAATTTTAAATTAATTAATTTTTAGGTATTTTAGTTTTTTTATTTGTAAAATGGAGAAAATAGTGTTTTT
chr6	112814278	112814398	Hypo	1 -	AAAATTCAAAAATTTAAATCCCAACTCCATTACATAATAATAATATAAATTTCAAATTATACTACTAATTAATCTCTAAATACTTCAATTTTCTCATCTATAAAATAAAAAAAACAATAC
chr6	112814278	112814398	Hypo	1 +	AGAATTTAGGGGTTTGAATTTTAGTTTTATTATGTAGTAGTAGTATAAATTTTAAATTATATTATTAATTAATTTTTAGGTATTTTAGTTTTTTTATTTGTAAAATGGAGAAAATAGTGT
chr6	112814274	112814394	Hyper	1 -	CATCAAAATTCAAAAATTTAAATCCCAACTCCATTACGTAATAATAATATAAATTTCAAATTAATTAATCTCTAAATACTTCAATTTTCTCATCTATAAAATAAAAAAAACAATACTTTC
chr6	112814274	112814394	Hyper	1 +	TATTAGAATTTAGGGGTTTGAATTTTAGTTTTATTACGTAGTAGTAGTATAAATTTTAAATTAATTAATTTTTAGGTATTTTAGTTTTTTTATTTGTAAAATGGAGAAAATAGTGTTTTT
chr6	112814278	112814398	Hyper	1 -	AAAATTCAAAAATTTAAATCCCAACTCCATTACGTAATAATAATATAAATTTCAAATTATACTACTAATTAATCTCTAAATACTTCAATTTTCTCATCTATAAAATAAAAAAAACAATAC
chr6	112814278	112814398	Hyper	1 +	AGAATTTAGGGGTTTGAATTTTAGTTTTATTACGTAGTAGTAGTATAAATTTTAAATTATATTATTAATTAATTTTTAGGTATTTTAGTTTTTTTATTTGTAAAATGGAGAAAATAGTGT
chr13	39019345	39019465	Hypo	1 -	AAAAATAATTATTTACACTCCCAAAAAATTTTCACCAAAACCCTATACTTACCATCTCTTAATTCACTTCCTAACACCACATTCTAAAATTAAAATATTAAAACAACTCTCTAACCTTCT
chr13	39019345	39019465	Hypo	1 +	GGAGGTAGTTATTTGTATTTTTAGAAAATTTTTATTAAGGTTTTGTGTTTGTTATTTTTTAGTTTATTTTTTGATATTATATTTTGAAATTGAGATGTTGGAATGATTTTTTGATTTTTT
chr13	39019341	39019461	Hypo	1 -	CTCAAAAAAATAATTATTTACACTCCCAAAAAATTTTCACCAAAACCCTATACTTACCATCTCTTCCTAACACCACATTCTAAAATTAAAATATTAAAACAACTCTCTAACCTTCTCTACT
chr13	39019341	39019461	Hypo	1 +	TTTAGGAGGTAGTTATTTGTATTTTTAGAAAATTTTTATTAAGGTTTTGTGTTTGTTATTTTTTTTTGATATTATATTTTGAAATTGAGATGTTGGAATGATTTTTTGATTTTTTTTGTT
chr13	39019345	39019465	Hyper	1 -	AAAAATAATTATTTACACTCCCAAAAAATTTTCACCAAAACCCTATACTTACCATCTCTTAATTCACTTCCTAACACCACATTCTAAAATTAAAATATTAAAACGACTCTCTAACCTTCT
chr13	39019345	39019465	Hyper	1 +	GGAGGTAGTTATTTGTATTTTTAGAAAATTTTTATTAAGGTTTTGTGTTTGTTATTTTTTAGTTTATTTTTTGATATTATATTTTGAAATTGAGATGTTGGAACGATTTTTTGATTTTTT
chr13	39019341	39019461	Hyper	1 -	CTCAAAAAAATAATTATTTACACTCCCAAAAAATTTTCACCAAAACCCTATACTTACCATCTCTTCCTAACACCACATTCTAAAATTAAAATATTAAAACGACTCTCTAACCTTCTCTACT
chr13	39019341	39019461	Hyper	1 +	TTTAGGAGGTAGTTATTTGTATTTTTAGAAAATTTTTATTAAGGTTTTGTGTTTGTTATTTTTTTTTGATATTATATTTTGAAATTGAGATGTTGGAACGATTTTTTGATTTTTTTTGTT
chr16	62361785	62361905	Hypo	1 -	AAAAAACAATACTTAATTAATATTCTCACCCAATAAAACAATAATTAAAATTACCAATCTTACTAATATCTATAAAAAAAAATTCCCAATTATTATTACTATTACTTCTACATTTTCAAAA
chr16	62361785	62361905	Hypo	1 +	GAGAAGTAATATTTGGTTAATATTTTTATTTAGTGAGATAGTAGTTAGGATTATTAGTTTTATTAATATTTGTAGAAAGGGTTTTTAATTGTTATTGTTGTTGTTTTTGTATTTTTAGGA
chr16	62361789	62361909	Hypo	1 -	AACAATACTTAATTAATATTCTCACCCAATAAAACAATAATTAAAATTACCAATCTTACACTAAACTAATATCTATAAAAAAAAATTCCCAATTATTATTACTATTACTTCTACATTTTCA
chr16	62361789	62361909	Hypo	1 +	AGTAATATTTGGTTAATATTTTTATTTAGTGAGATAGTAGTTAGGATTATTAGTTTTATATTGAATTAATATTTGTAGAAAGGGTTTTTAATTGTTATTGTTGTTGTTTTTGTATTTTTA
chr16	62361785	62361905	Hyper	1 -	AAAAAACAATACTTAATTAATATTCTCACCCAATAAAACAATAATTAAAATTACCAATCTTACTAATATCTATAAAAAAAAATTCCCAATTATTATTACTATTACTTCTACATTTTCAAAA
chr16	62361785	62361905	Hyper	1 +	GAGAAGTAATATTTGGTTAATATTTTTATTTAGTGAGATAGTAGTTAGGATTATTAGTTTTATTAATATTTGTAGAAAGGGTTTTTAATTGTTATTGTTGTTGTTTTTGTATTTTTAGGA
chr16	62361789	62361909	Hyper	1 -	AACAATACTTAATTAATATTCTCACCCAATAAAACAATAATTAAAATTACCAATCTTACACTAAACTAATATCTATAAAAAAAAATTCCCAATTATTATTACTATTACTTCTACATTTTCA
chr16	62361789	62361909	Hyper	1 +	AGTAATATTTGGTTAATATTTTTATTTAGTGAGATAGTAGTTAGGATTATTAGTTTTATATTGAATTAATATTTGTAGAAAGGGTTTTTAATTGTTATTGTTGTTGTTTTTGTATTTTTA
chr5	3381250	3381370	Hypo	1 -	CCCTACCTCTCAAAACCCAATACCCATTCACAAAAAACCAACACCCCTATAACTACCTCTAAAAACTAATATTAACCCTAACTAACTTAAAAACCATAAAATCCACTAAATAAAAACCCA
chr5	3381250	3381370	Hypo	1 +	TTTTGTTTTTTAGGATTTAATGTTTGTTTATAGGAGGTTAATATTTTTGTGGTTGTTTTTGGAGGTTGGTATTGGTTTTAGTTGGTTTGGAGGTTATGGGGTTTATTGGGTGAAGATTTA
chr5	3381254	3381374	Hypo	1 -	ACCTCTCAAAACCCAATACCCATTCACAAAAAACCAACACCCCTATAACTACCTCTAAAAACATAAAACTAATATTAACCCTAACTAACTTAAAAACCATAAAATCCACTAAATAAAAAC
chr5	3381254	3381374	Hypo	1 +	GTTTTTTAGGATTTAATGTTTGTTTATAGGAGGTTAATATTTTTGTGGTTGTTTTTGGGGGTATGAGGTTGGTATTGGTTTTAGTTGGTTTGGAGGTTATGGGGTTTATTGGGTGAAGAT
chr5	3381250	3381370	Hyper	1 -	CCCTACCTCTCAAAACCCAATACCCGTTCACAAAAAACCAACACCCCTATAACTACCTCTAAAAACTAATATTAACCCTAACTAACTTAAAAACCATAAAATCCACTAAATAAAAACCCA
chr5	3381250	3381370	Hyper	1 +	TTTTGTTTTTTAGGATTTAATGTTCGTTTATAGGAGGTTAATATTTTTGTGGTTGTTTTTGGAGGTTGGTATTGGTTTTAGTTGGTTTGGAGGTTATGGGGTTTATTGGGTGAAGATTTA
chr5	3381254	3381374	Hyper	1 -	ACCTCTCAAAACCCAATACCCGTTCACAAAAAACCAACACCCCTATAACTACCTCTAAAAACATAAAACTAATATTAACCCTAACTAACTTAAAAACCATAAAATCCACTAAATAAAAAC
chr5	3381254	3381374	Hyper	1 +	GTTTTTTAGGATTTAATGTTCGTTTATAGGAGGTTAATATTTTTGTGGTTGTTTTTGGGGGTATGAGGTTGGTATTGGTTTTAGTTGGTTTGGAGGTTATGGGGTTTATTGGGTGAAGAT
chr14	50775684	50775804	Hypo	2 -	ACATAAATCTTAAAAATAATATACTATATAAAAAAAAACCAATCTCCAAAAACTTATTTTAAAAATTCTTTATATATTTTATATATTAATCCTTTAAAAAATATACAATTACTAATATTT
chr14	50775684	50775804	Hypo	1 +	GTATGGATTTTAAGGATAGTATGTTGTGTGAAAAAAAGTTAATTTTTAAAGGTTTGTTTTGAGAGTTTTTTATGTATTTTGTGTATTAGTTTTTTGGGAGATATGTAGTTGTTGGTATTT
chr14	50775679	50775799	Hypo	2 -	ACCTTACATAAATCTTAAAAATAATATACTATATAAAAAAAAACCAATCTCCAAAAACTTATCTTTATATATTTTATATATTAATCCTTTAAAAAATATACAATTACTAATATTTTTTTC
chr14	50775679	50775799	Hypo	1 +	GTTTTGTATGGATTTTAAGGATAGTATGTTGTGTGAAAAAAAGTTAATTTTTAAAGGTTTGTTTTTATGTATTTTGTGTATTAGTTTTTTGGGAGATATGTAGTTGTTGGTATTTTTTTTT
chr14	50775684	50775804	Hyper	2 -	ACATAAATCTTAAAAATAATATACTATATAAAAAAAAACCAATCTCCAAAAACTTATTTTAAAAATTCTTTATATATTTTATATATTAATCCTTTAAAAAATATACAATTACTAATATTT
chr14	50775684	50775804	Hyper	1 +	GTATGGATTTTAAGGATAGTATGTTGTGTGAAAAAAAGTTAATTTTTAAAGGTTTGTTTTGAGAGTTTTTTATGTATTTTGTGTATTAGTTTTTTGGGAGATATGTAGTTGTTGGTATTT
chr14	50775679	50775799	Hyper	2 -	ACCTTACATAAATCTTAAAAATAATATACTATATAAAAAAAAACCAATCTCCAAAAACTTATCTTTATATATTTTATATATTAATCCTTTAAAAAATATACAATTACTAATATTTTTTTC
chr14	50775679	50775799	Hyper	1 +	GTTTTGTATGGATTTTAAGGATAGTATGTTGTGTGAAAAAAAGTTAATTTTTAAAGGTTTGTTTTTATGTATTTTGTGTATTAGTTTTTTGGGAGATATGTAGTTGTTGGTATTTTTTTTT
chr7	71959909	71960029	Hypo	2 -	ACTATATAAATACCCTTATAACATAATAACTAACTTCCCCAAAATAACACCTATAAACTACAACACCTACATAACCTAATCTTAAAAATCACCCCCTATTACTTCCACTTTCTTCTATAA
chr7	71959909	71960029	Hypo	2 +	GTTGTGTGAGTGTTTTTATGGTATGATAGTTGGTTTTTTTAAAATAATATTTGTAAGTTGTAATGTTTGTATGATTTGGTTTTGGAAATTATTTTTTATTATTTTTATTTTTTTTTTGTGA
chr7	71959905	71960025	Hypo	2 -	AAAAACTATATAAATACCCTTATAACATAATAACTAACTTCCCCAAAATAACACCTATAAACTACATAACCTAATCTTAAAAATCACCCCCTATTACTTCCACTTTCTTCTATAAACCAC

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chr7	71959905	71960025	Hypo	2 +	AAGGGTTGTGTGAGTGTTTTTATGGTATGATAGTTGGTTTTTTTAAAATAATATTTGTAAGTTGTATGATTTGGTTTTGGAAATTATTTTTTATTATTTTTATTTTTTTTTGTGAGTTAT
chr7	71959909	71960029	Hyper	2 -	ACTATATAAATACCCTTATAACATAATAACTAACTTCCCCAAAATAACACCTATAAACTACAACGCCTACATAACCTAATCTTAAAAATCACCCCCTATTACTTCCACTTTCTTCTATAA
chr7	71959909	71960029	Hyper	2 +	GTTGTGTGAGTGTTTTTATGGTATGATAGTTGGTTTTTTTAAAATAATATTTGTAAGTTGTAACGTTTGTATGATTTGGTTTTGGAAATTATTTTTTATTATTTTTATTTTTTTTTTGTGA
chr7	71959905	71960025	Hyper	2 -	AAAAACTATATAAATACCCTTATAACATAATAACTAACTTCCCCAAAATAACACCTATAAACTACATAACCTAATCTTAAAAATCACCCCCTATTACTTCCACTTTCTTCTATAAACCAC
chr7	71959905	71960025	Hyper	2 +	AAGGGTTGTGTGAGTGTTTTTATGGTATGATAGTTGGTTTTTTTAAAATAATATTTGTAAGTTGTATGATTTGGTTTTGGAAATTATTTTTTATTATTTTTATTTTTTTTTGTGAGTTAT
chr15	84688955	84689075	Hypo	1 -	ACCTTAAACTACCAAAATATCTTTATAAAATATAACATAATAAAATCAAACACACTTAAAATCCAATCCAACTAACAAATAACAAACCTTAAACAAAATACTCAATTTCATTCAATTTCC
chr15	84688955	84689075	Hypo	1 +	GTTTTGAATTGTTAAGGTGTTTTTGTGAAATGTGGTATAATAGAGTTAGATATATTTGGGATTTAGTTTGGTTAATAGGTGATAGATTTTGGGTAAGGTATTTAGTTTTATTTAGTTTTT
chr15	84688951	84689071	Hypo	1 -	TCCTACCTTAAACTACCAAAATATCTTTATAAAATATAACATAATAAAATCAAACACACTTATCCAACTAACAAATAACAAACCTTAAACAAAATACTCAATTTCATTCAATTTCCACCT
chr15	84688951	84689071	Hypo	1 +	TTTTGTTTTGAATTGTTAAGGTGTTTTTGTGAAATGTGGTATAATAGAGTTAGATATATTTGTTTGGTTAATAGGTGATAGATTTTGGGTAAGGTATTTAGTTTTATTTAGTTTTTATTT
chr15	84688955	84689075	Hyper	1 -	ACCTTAAACTACCAAAATATCTTTATAAAATATAACATAATAAAATCAAACACACTTAAAATCCAATCCGACTAACAAATAACAAACCTTAAACAAAATACTCAATTTCATTCAATTTCC
chr15	84688955	84689075	Hyper	1 +	GTTTTGAATTGTTAAGGTGTTTTTGTGAAATGTGGTATAATAGAGTTAGATATATTTGGGATTTAGTTCGGTTAATAGGTGATAGATTTTGGGTAAGGTATTTAGTTTTATTTAGTTTTT
chr15	84688951	84689071	Hyper	1 -	TCCTACCTTAAACTACCAAAATATCTTTATAAAATATAACATAATAAAATCAAACACACTTATCCGACTAACAAATAACAAACCTTAAACAAAATACTCAATTTCATTCAATTTCCACCT
chr15	84688951	84689071	Hyper	1 +	TTTTGTTTTGAATTGTTAAGGTGTTTTTGTGAAATGTGGTATAATAGAGTTAGATATATTTGTTCGGTTAATAGGTGATAGATTTTGGGTAAGGTATTTAGTTTTATTTAGTTTTTATTT
chr2	13963744	13963864	Hypo	1 -	TTATCAATAAAAAATAAACTTAAAAAAATACTTTATAATTAATTTTAAAAAATCATATTTAATACATTTCTACTTAACATAAACAATAATTAAAAAATAAACCATAAAATTCCACATAAA
chr2	13963744	13963864	Hypo	1 +	TTGTTAATAAAAGATAGGTTTGGAAGGGTGTTTTGTGATTAATTTTGGAAAATTATATTTAATATATTTTTATTTGATATAGATAATAGTTAAAAAATGGATTATAAAATTTTATATAAA
chr2	13963749	13963869	Hypo	1 -	AATAAAAAATAAACTTAAAAAAATACTTTATAATTAATTTTAAAAAATCATATTTAATATTAAAATATACATTTCTACTTAACATAAACAATAATTAAAAAATAAACCATAAAATTCCAC
chr2	13963749	13963869	Hypo	1 +	AATAAAAGATAGGTTTGGAAGGGTGTTTTGTGATTAATTTTGGAAAATTATATTTAATATTAGAATATATATATTTTTATTTGATATAGATAATAGTTAAAAAATGGATTATAAAATTTTAT
chr2	13963744	13963864	Hyper	1 -	TTATCAATAAAAAATAAACTTAAAAAAATACTTTATAATTAATTTTAAAAAATCATATTTAATACATTTCTACTTAACATAAACAATAATTAAAAAATAAACCATAAAATTCCACATAAA
chr2	13963744	13963864	Hyper	1 +	TTGTTAATAAAAGATAGGTTTGGAAGGGTGTTTTGTGATTAATTTTGGAAAATTATATTTAATATATTTTTATTTGATATAGATAATAGTTAAAAAATGGATTATAAAATTTTATATAAA
chr2	13963749	13963869	Hyper	1 -	AATAAAAAATAAACTTAAAAAAATACTTTATAATTAATTTTAAAAAATCATATTTAATATTAAAATATACATTTCTACTTAACATAAACAATAATTAAAAAATAAACCATAAAATTCCAC
chr2	13963749	13963869	Hyper	1 +	AATAAAAGATAGGTTTGGAAGGGTGTTTTGTGATTAATTTTGGAAAATTATATTTAATATTAGAATATATATATTTTTATTTGATATAGATAATAGTTAAAAAATGGATTATAAAATTTTAT
chr5	154004406	154004526	Hypo	1 -	TTACTAACACTCCTTACCTAAAATACCAAACCAATACCAATAAACTATCAAACTATAAAAAAAAATAAATACAAAACCACAACCTAAACACAACAAAAAAAACATCTCTATAAAATAATA
chr5	154004406	154004526	Hypo	1 +	TTATTGGTATTTTTTGTTTGGAATGTTAAGTTAATGTTAGTGAGTTGTTAGGTTGTAGGGGAAAATGGGTGTAGGGTTATAATTTAGGTATAGTAGGGGAGGTATTTTTGTGAGATGATG
chr5	154004411	154004531	Hypo	1 -	AACACTCCTTACCTAAAATACCAAACCAATACCAATAAACTATCAAACTATAAAAAAACAAAATTAAAATAAATACAAAACCACAACCTAAACACAACAAAAAAAACATCTCTATAAAAT
chr5	154004411	154004531	Hypo	1 +	GGTATTTTTTGTTTGGAATGTTAAGTTAATGTTAGTGAGTTGTTAGGTTGTAGGGGAATAAGGTTAAAATGGGTGTAGGGTTATAATTTAGGTATAGTAGGGGAGGTATTTTTGTGAGAT
chr5	154004406	154004526	Hyper	1 -	TTACTAACACTCCTTACCTAAAATACCAAACCAATACCAATAAACTATCAAACTATAAAAAAAAATAAATACAAAACCACAACCTAAACACAACAAAAAAAACATCTCTATAAAATAATA
chr5	154004406	154004526	Hyper	1 +	TTATTGGTATTTTTTGTTTGGAATGTTAAGTTAATGTTAGTGAGTTGTTAGGTTGTAGGGGAAAATGGGTGTAGGGTTATAATTTAGGTATAGTAGGGGAGGTATTTTTGTGAGATGATG
chr5	154004411	154004531	Hyper	1 -	AACACTCCTTACCTAAAATACCAAACCAATACCAATAAACTATCAAACTATAAAAAAACAAAATTAAAATAAATACAAAACCACAACCTAAACACAACAAAAAAAACATCTCTATAAAAT
chr5	154004411	154004531	Hyper	1 +	GGTATTTTTTGTTTGGAATGTTAAGTTAATGTTAGTGAGTTGTTAGGTTGTAGGGGAATAAGGTTAAAATGGGTGTAGGGTTATAATTTAGGTATAGTAGGGGAGGTATTTTTGTGAGAT
chr11	15390684	15390804	Hypo	1 -	TCCTCAACTTCATCCCTAAAATACATATTCTCTACTCTCATTATAATATATAAATATACCTTAATCTCTAAACAACCAATTTAAAAATTAATCTAAAATTAACTAAAATATTCTTCCTCC
chr11	15390684	15390804	Hypo	1 +	TTTTTAATTTTATTTTTAAGATATATATATTTTTTGTTTTTATTGTGATGTGTGGATATATTTTGATTTTTGGGTAGTTAGTTTGGGGGTTGGTTTGAGGTTAATTGAAATGTTTTTTTTT
chr11	15390681	15390801	Hypo	1 -	ACCTCCTCAACTTCATCCCTAAAATACATATTCTCTACTCTCATTATAATATATAAATATACTCTAAACAACCAATTTAAAAATTAATCTAAAATTAACTAAAATATTCTTCCTCCAAAA
chr11	15390681	15390801	Hypo	1 +	GTTTTTTTAATTTTATTTTTAAGATATATATATTTTTTGTTTTTATTGTGATGTGTGGATATATTTTGGGTAGTTAGTTTGGGGGTTGGTTTGAGGTTAATTGAAATGTTTTTTTTTTAAGG
chr11	15390684	15390804	Hyper	1 -	TCCTCAACTTCATCCCTAAAATACATATTCTCTACTCTCATTATAATATATAAATATACCTTAATCTCTAAACAACCAATTTAAAAATTAATCTAAAATTAACTAAAATATTCTTCCTCC
chr11	15390684	15390804	Hyper	1 +	TTTTTAATTTTATTTTTAAGATATATATATTTTTTGTTTTTATTGTGATGTGTGGATATATTTTGATTTTTGGGTAGTTAGTTTGGGGGTTGGTTTGAGGTTAATTGAAATGTTTTTTTTT
chr11	15390681	15390801	Hyper	1 -	ACCTCCTCAACTTCATCCCTAAAATACATATTCTCTACTCTCATTATAATATATAAATATACTCTAAACAACCAATTTAAAAATTAATCTAAAATTAACTAAAATATTCTTCCTCCAAAA
chr11	15390681	15390801	Hyper	1 +	GTTTTTTTAATTTTATTTTTAAGATATATATATTTTTTGTTTTTATTGTGATGTGTGGATATATTTTGGGTAGTTAGTTTGGGGGTTGGTTTGAGGTTAATTGAAATGTTTTTTTTTTAAGG
chr2	6042501	6042621	Hypo	1 -	AATATATACAAAATCAAAATAAAAAAAAAAAAATATAATTCTATTTCTTCTACTTCTAAAACAAAAATCTATACAATAAAACTATTAAATTTATAAACAACAAATAACTTTACCAAAATAA
chr2	6042501	6042621	Hypo	1 +	AGTGTGTATAGGGTTAAGGTAGGGAGGAAGAATGTGATTTTATTTTTTTTGTTTTTGAAGTAAGGATTTGTATAATGAAATTGTTAGGTTTGTAGATAATAGATGATTTTATTAAAATAG
chr2	6042506	6042626	Hypo	1 -	ATACAAAATCAAAATAAAAAAAAAAAAATATAATTCTATTTCTTCTACTTCTAAAACAAAAACTTAAAAAAATCTATACAATAAAACTATTAAATTTATAAACAACAAATAACTTTACCAA
chr2	6042506	6042626	Hypo	1 +	GTATAGGGTTAAGGTAGGGAGGAAGAATGTGATTTTATTTTTTTTGTTTTTGAAGTAAAAATTTAAAAGGATTTGTATAATGAAATTGTTAGGTTTGTAGATAATAGATGATTTTATTAA
chr2	6042501	6042621	Hyper	1 -	AATATATACAAAATCAAAATAAAAAAAAAAAAATATAATTCTATTTCTTCTACTTCTAAAACAAAAATCTATACAATAAAACTATTAAATTTATAAACAACAAATAACTTTACCAAAATAA
chr2	6042501	6042621	Hyper	1 +	AGTGTGTATAGGGTTAAGGTAGGGAGGAAGAATGTGATTTTATTTTTTTTGTTTTTGAAGTAAGGATTTGTATAATGAAATTGTTAGGTTTGTAGATAATAGATGATTTTATTAAAATAG
chr2	6042506	6042626	Hyper	1 -	ATACAAAATCAAAATAAAAAAAAAAAAATATAATTCTATTTCTTCTACTTCTAAAACAAAAACTTAAAAAAATCTATACAATAAAACTATTAAATTTATAAACAACAAATAACTTTACCAA
chr2	6042506	6042626	Hyper	1 +	GTATAGGGTTAAGGTAGGGAGGAAGAATGTGATTTTATTTTTTTTGTTTTTGAAGTAAAAATTTAAAAGGATTTGTATAATGAAATTGTTAGGTTTGTAGATAATAGATGATTTTATTAA
chr13	22393994	22394114	Hypo	1 -	ACACCTAAAAATTAATATTACTTACATAATAAAAATTTCTATATTATTTAAAAATATTTTCTAACTTATTCAATTAAAATACCATATCTTAACCACTTCACACAATAATAATAAAATACC
chr13	22393994	22394114	Hypo	1 +	ATATTTAAAAATTAATATTATTTGTATAATAGAAATTTTTGTGTTGTTTAAAAATGTTTTTTGGTTTGTTTAATTGAGATGTTGTGTTTTGGTTATTTTATGTGGTGATGATAAAGTATT
chr13	22393998	22394118	Hypo	1 -	CTAAAAATTAATATTACTTACATAATAAAAATTTCTATATTATTTAAAAATATTTTCTAATACTTAACTTATTCAATTAAAATACCATATCTTAACCACTTCACACAATAATAATAAAAT
chr13	22393998	22394118	Hypo	1 +	TTAAAAATTAATATTATTTGTATAATAGAAATTTTTGTGTTGTTTAAAAATGTTTTTTGATATTTGGTTTGTTTAATTGAGATGTTGTGTTTTGGTTATTTTATGTGGTGATGATAAAGT
chr13	22393994	22394114	Hyper	1 -	ACACCTAAAAATTAATATTACTTACATAATAAAAATTTCTATATTATTTAAAAATATTTTCTAACTTATTCAATTAAAATACCGTATCTTAACCACTTCACGCGATAATAATAAAATACC
chr13	22393994	22394114	Hyper	1 +	ATATTTAAAAATTAATATTATTTGTATAATAGAAATTTTTGTGTTGTTTAAAAATGTTTTTTGGTTTGTTTAATTGAGATGTCGTGTTTTGGTTATTTTACGCGGTGATGATAAAGTATT
chr13	22393998	22394118	Hyper	1 -	CTAAAAATTAATATTACTTACATAATAAAAATTTCTATATTATTTAAAAATATTTTCTAATACTTAACTTATTCAATTAAAATACCGTATCTTAACCACTTCACGCGATAATAATAAAAT

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chr13	22393998	22394118	Hyper	1 +	TTAAAAATTAATATTATTTGTATAATAGAAATTTTTGTGTTGTTTAAAAATGTTTTTTGATATTTGGTTTGTTTAATTGAGATGTCGTGTTTTGGTTATTTTACGCGGTGATGATAAAGT
chr2	138093629	138093749	Hypo	1 -	AAATCATTAATTAAATATTATTTTCCAAAAACAAAAAAAAAAAATCCACAATTAACAATACTAAAATATCAAAAAAACAATTAATTATAAAAATTAAATCATCAAAAATATTCAAAATAA
chr2	138093629	138093749	Hyper	1 +	AGGTTATTGATTAAGTGTTGTTTTTTAGAGATAGAAGAGGGAAGTTTATAATTAATAGTATTAAAGTGTTAGAGAAATAGTTAATTATGAGGATTAGATTATTAAAAATATTTAAGGTGA
chr2	138093625	138093745	Hypo	1 -	TATAAAATCATTAATTAAATATTATTTTCCAAAAACAAAAAAAAAAAATCCACAATTAACATATCAAAAAACAATTAATTATAAAAATTAAATCATCAAAAATATTCAAAATAACTTTA
chr2	138093625	138093745	Hyper	1 +	TATGAGGTTATTGATTAAGTGTTGTTTTTAGAGATAGAAGAGGGAAGTTTATAATTAATAGTATTAAAGTGTTAGAGAAATAGTTAATTATGAGGATTAGATTATTAAAAATATTTAAGGTGATTTTA
chr2	138093629	138093749	Hyper	1 -	AAATCATTAATTAAATATTATTTTCCAAAAACAAAAAAAAAAATCCACAATTAACAATACTAAAATATCAAAAAACAATTAATTATAAAAATTAAATCATCAAAAATATTCAAAATAA
chr2	138093629	138093749	Hyper	1 +	AGGTTATTGATTAAGTGTTGTTTTTAGAGATAGAAGAGGGAAGTTTATAATTAATAGTATTAAAGTGTTAGAGAAATAGTTAATTATGAGGATTAGATTATTAAAAATATTTAAGGTGA
chr2	138093625	138093745	Hyper	1 -	TATAAAATCATTAATTAAATATTATTTTCCAAAAACAAAAAAAAAAATCCACAATTAACATATCAAAAAACAATTAATTATAAAAATTAAATCATCAAAAATATTCAAAATAACTTTA
chr2	138093625	138093745	Hyper	1 +	TATGAGGTTATTGATTAAGTGTTGTTTTTAGAGATAGAAGAGGGAAGTTTATAATTAATAGTATTAAAGTGTTAGAGAAATAGTTAATTATGAGGATTAGATTATTAAAAATATTTAAGGTGATTTTA
chr5	123139397	123139517	Hypo	1 -	CTTACTAAAAAAAAATATCTAAAAAATTCTATAAAATATAAACTCTAAAATTCCCAAAACAATTTTACAAAACTATAAAAATAAAAATACTACTCTAACTTAATAATCCTTATACCAAACA
chr5	123139397	123139517	Hyper	1 +	TTTGTAGGAGAGATGTTTGGGGAGTTTTGTGAAATATGGGTTTTGAGGTTTTAGAGTAGTTTTGTAAAGTTGTAGGAATGAAAGTGTTGTTTTAGTTAGTGGTTTTGTGTTAAATA
chr5	123139393	123139513	Hypo	1 -	TAAACTTACTAAAAAAAAATATCTAAAAAATTCATAAAATATAAACTCTAAAATTCCCAAAACAAACTATAAAATAAAAATACTACTCTAACTTAATAATCCTTATACCAAACATAAT
chr5	123139393	123139513	Hyper	1 +	TGAGTTTGTTAGGAGAGATGTTTGGGGAGTTTTGTGAAATATGGGTTTTGAGGTTTTAGAGTAAAGTTGTAGGAATGAAAGTGTTGTTTTAGTTAGTGGTTTTGTGTTAAATATGGT
chr5	123139397	123139517	Hyper	1 -	CTTACTAAAAAAAAATATCTAAAAAATTCTATAAAATATAAACTCTAAAATTCCCAAAACAATTTTACAAAACTATAAAATAAAAATACTACTCTAACTTAATAATCCTTATACCAAACA
chr5	123139397	123139517	Hyper	1 +	TTTGTAGGAGAGATGTTTGGGGAGTTTTGTGAAATATGGGTTTTGAGGTTTTAGAGTAGTTTTGTAAAGTTGTAGGAATGAAAGTGTTGTTTTAGTTAGTGGTTTTGTGTTAAATA
chr5	123139393	123139513	Hypo	1 -	TAAACTTACTAAAAAAAAATATCTAAAAAATTCATAAAATATAAACTCTAAAATTCCCAAAACAAACTATAAAATAAAAATACTACTCTAACTTAATAATCCTTATACCAAACATAAT
chr5	123139393	123139513	Hyper	1 +	TGAGTTTGTTAGGAGAGATGTTTGGGGAGTTTTGTGAAATATGGGTTTTGAGGTTTTAGAGTAAAGTTGTAGGAATGAAAGTGTTGTTTTAGTTAGTGGTTTTGTGTTAAATATGGT
chr8	41429525	41429645	Hypo	1 -	AAAAATAAACTCCTAAAAAAATCAAAAAAAACTTTCTATTAAAATTAATCTTAAAATAAATCCCTAACATATAAACAAATATCTACAAAAAATTACATTTTAATCTATTTAAATATCCTTATTCA
chr8	41429525	41429645	Hyper	1 +	GAGAATGAGTTTTTGGGGGAATTAGAGAAAATTTTTTGTTGGGGTTGATTTTGAAGTGAGTTTTATATGAGTGGATATTTGTAAAAAATTATATTTTAGTTTGTTTAAGTATTTTTATTTTA
chr8	41429528	41429648	Hypo	1 -	AATAAACTCCTAAAAAAATCAAAAAAAACTTTCTATTAAAATTAATCTTAAAATAAATCCCTAACATATAAACAAATATCTACAAAAAATTACATTTTAATCTATTTAAATATCCTTATT
chr8	41429528	41429648	Hyper	1 +	AATGAGTTTTTGGGGGAATTAGAGAAAATTTTTTGTTGGGGTTGATTTTGAAGTGAGTTTTATATATGAGTGGATATTTGTAAAAAATTATATTTTAGTTTGTTTAAGTATTTTTATT
chr8	41429525	41429645	Hyper	1 -	AAAAATAAACTCCTAAAAAAATCAAAAAAAACTTTCTATTAAAATTAATCTTAAAATAAATCCCTAACATATAAACAAATATCTACAAAAAATTACATTTTAATCTATTTAAATATCCTTATTCA
chr8	41429525	41429645	Hyper	1 +	GAGAATGAGTTTTTGGGGGAATTAGAGAAAATTTTTTGTTGGGGTTGATTTTGAAGTGAGTTTTATATATGAGTGGATATTTGTAAAAAATTATATTTTAGTTTGTTTAAGTATTTTTATT
chr8	41429528	41429648	Hypo	1 -	AATAAACTCCTAAAAAAATCAAAAAAAACTTTCTATTAAAATTAATCTTAAAATAAATCCCTAACATATAAACAAATATCTACAAAAAATTACATTTTAATCTATTTAAATATCCTTATT
chr8	41429528	41429648	Hyper	1 +	GAGAATGAGTTTTTGGGGGAATTAGAGAAAATTTTTTGTTGGGGTTGATTTTGAAGTGAGTTTTATATATGAGTGGATATTTGTAAAAAATTATATTTTAGTTTGTTTAAGTATTTTTATT
chr10	63333439	63333559	Hypo	1 -	ATATATTTATAACAACTATAATTCTTATTAAAATACAAATTCAAACTCAATACTCATATTCCTACCTAACCTCTAATATACTAAACCTCTTACAACACAAAAAAAAACTAAAAAAA
chr10	63333439	63333559	Hyper	1 +	GTGTATTTGTAATAATTGTAATTTTTATTAAAATGTAGATTTAGATTTAGTATTTATGTTGGAGTATTTTTATTTAATTTTTAGTGTATTGAATTTTTTATAATATAGAAGAGGGTTAAAA
chr10	63333436	63333556	Hypo	1 -	AATATATATTTATAACAACTATAATTCTTATTAAAATACAAATTCAAACTCAATACTCATATTCCTACCTAACCTCTAATATACTAAACCTCTTACAACACAAAAAAAACTAAAAAAA
chr10	63333436	63333556	Hyper	1 +	AATGTGTATTTGTAATAATTGTAATTTTTATTAAAATGTAGATTTAGATTTAGTATTTATGTTGGAGTATTTTTATTTAATTTTTAGTGTATTGAATTTTTTATAATATAGAAGAGGGTTAAAAAAA
chr10	63333439	63333559	Hypo	1 -	ATATATTTATAACAACTATAATTCTTATTAAAATACAAATTCAAACTCAATACTCATATTCCTACCTAACCTCTAATATACTAAACCTCTTACAACACAAAAAAAACTAAAAAAA
chr10	63333439	63333559	Hyper	1 +	GTGTATTTGTAATAATTGTAATTTTTATTAAAATGTAGATTTAGATTTAGTATTTATGTTGGAGTATTTTTATTTAATTTTTAGTGTATTGAATTTTTTATAATATAGAAGAGGGTTAAAA
chr10	63333436	63333556	Hypo	1 -	AATATATATTTATAACAACTATAATTCTTATTAAAATACAAATTCAAACTCAATACTCATATTCCTACCTAACCTCTAATATACTAAACCTCTTACAACACAAAAAAAACTAAAAAAA
chr10	63333436	63333556	Hyper	1 +	AATGTGTATTTGTAATAATTGTAATTTTTATTAAAATGTAGATTTAGATTTAGTATTTATGTTTTATTTAATTTTTAGTGTATTGAATTTTTTATAATATAGAAGAGGGTTAAAAAAA
chr13	31361927	31362047	Hypo	1 -	AAAAAATACTAACCCCTAAACAATTCCCATAACAACCTATAAACAAACTCCAACAACAAAAAATAAAAACAAAACTCAAAAAACCCCAACAAAAAATACTCTATAAATAACTAATTCCCAT
chr13	31361927	31362047	Hyper	1 +	GGGAGGTGTTGGTTTTTGGGTAGTTTTATGGTAGTTTGTGAGTAGGTTTAGTAGTAGGGAGTAAGGGTAGAGTTTAGGGATTTTAGTGAAGGATGTTTTGTGAGTGGTTGGTTTTTAT
chr13	31361923	31362043	Hypo	1 -	TAAAAAAAATACTAACCCCTAAACAATTCCCATAACAACCTATAAACAAACTCCAACAACAAAAAATAAAACAAAACTCAAAAAACCCCAACAAAAAATACTCTATAAATAACTAATTCCCAT
chr13	31361923	31362043	Hyper	1 +	GGGAGGTGTTGGTTTTTGGGTAGTTTTATGGTAGTTTGTGAGTAGGTTTAGTAGTAGGGAGTAAGGGTAGAGTTTAGGGATTTTAGTGAAGGATGTTTTGTGAGTGGTTGGTTTTTAT
chr13	31361927	31362047	Hypo	1 -	AAAAAATACTAACCCCTAAACAATTCCCATAACAACCTATAAACAAACTCCAACAACAAAAAATAAAACAAAACTCAAAAAACCCCAACAAAAAATACTCTATAAATAACTAATTCCCAT
chr13	31361927	31362047	Hyper	1 +	GGGAGGTGTTGGTTTTTGGGTAGTTTTATGGTAGTTTGTGAGTAGGTTTAGTAGTAGGGAGTAAGGGTAGAGTTTAGGGATTTTAGCGAAGGATGTTTTGTGAGTGGTTGGTTTTTAT
chr13	31361923	31362043	Hypo	1 -	TAAAAAAAATACTAACCCCTAAACAATTCCCATAACAACCTATAAACAAACTCCAACAACAAAAAATAAAACAAAACTCAAAAAACCCCAACAAAAAATACTCTATAAATAACTAATTCCCATAACA
chr13	31361923	31362043	Hyper	1 +	TGGAGGGAGGTGTTGGTTTTTGGGTAGTTTTATGGTAGTTTGTGAGTAGGTTTAGTAGTAGGGAGTAAGGGTAGAGTTTAGGGATTTTAGCGAAGGATGTTTTGTGAGTGGTTGGTTTTTATGGTA
chr11	28145054	28145174	Hypo	1 -	TAAACTCTCTTTTTCCTTTATAATCAATTACTAATAATTATCCCCTTTAAATAAAACAAATACCAAAAAATAATATACATTTAAATATTTTATTTTCTTAATAAATATTACTTTAAAA
chr11	28145054	28145174	Hyper	1 +	TAAATTTTTTTTTTTTTTTGTGGTTAGTTGTTAGTAGTTGTTTTTTTGGGTGAAATAAATATTAGGAGGTAATATGTATTAAATGTTTTATTTTTTTTGGTGAATATTGTTTTAGAA
chr11	28145058	28145178	Hypo	1 -	CTCTCTTTTTCCTTTATAATCAATTACTAATAATTATCCCCTTTAAATAAAACAAATATCATTTACCAAAAAATAATATACATTTAAATATTTTATTTTCTTAATAAATATTACTTTA
chr11	28145058	28145178	Hyper	1 +	TTTTTTTTTTTTTTGTGGTTAGTTGTTAGTAGTTGTTTTTTTGGGTGAAATAAATATTATTTATTAGGAGGTAATATGTATTAAATGTTTTATTTTTTTGGTGAATATTGTTTTA
chr11	28145054	28145174	Hyper	1 -	TAAACTCTCTTTTTCCTTTATAATCAATTACTAATAATTATCCCCTTTAAATAAAACAAATACCAAAAAATAATATACATTTAAATATTTTATTTTCTTAATAAATATTACTTTAAAA
chr11	28145054	28145174	Hyper	1 +	TAAATTTTTTTTTTTTTTGTGGTTAGTTGTTAGTAGTTGTTTTTTTGGGTGAAATAAATATTAGGAGGTAATATGTATTAAATGTTTTATTTTTTTTGGTGAATATTGTTTTAGAA
chr11	28145058	28145178	Hyper	1 -	CTCTCTTTTTCCTTTATAATCAATTACTAATAATTATCCCCTTTAAATAAAACAAATATCATTTACCAAAAAATAATATACATTTAAATATTTTATTTTCTTAATAAATATTACTTTA
chr11	28145058	28145178	Hyper	1 +	TTTTTTTTTTTTTTGTGGTTAGTTGTTAGTAGTTGTTTTTTTGGGTGAAATAAATATTATTTATTAGGAGGTAATATGTATTAAATGTTTTATTTTTTTTGGTGAATATTGTTTTA
chr19	33940604	33940724	Hypo	1 -	CTCAAATAAAAAAAATCAATCATAAACTATCACAAATACTCACAAAAACCACCCCAAACAATATCCCAATATACATAACTCCAATCCCAACAAATACCACATTACCTTCTAAAACTAATA
chr19	33940604	33940724	Hyper	1 +	TTAGATGAAAGAAGTTGGTTATAGATTATTGTAGGTGTTTATAGGGATTATTTTAGGTTAATGTGTATGGTTTTGATTTTAGTGGGTGTTATGTTATTTTTTGAAATTGATAAGGA
chr19	33940601	33940721	Hypo	1 -	CTACTCAAATAAAAAAAATCGATCATAAACTATCGCAAATACTCACAAAAACCACCCCAAACCAATATACATAACTCCGATCCCAACGAATACCACGATTACCTCTAAAACTAATAAAAA
chr19	33940601	33940721	Hyper	1 +	TTGTTTAGATGAAAGAAGTTGGTTATAGATTATCGTAGGTGTTTATAGGGATTATTTTAGGTTAATGTGTATGGTTTTGATTTTAGTGGGTGTTATCGTTTATTTTTTGAAATTGATAAGGA
chr2	1708833	1708953	Hypo	1 -	ACTAAAAACTCAACCCTAATATCACCCAACACTACCCATCACATAAAAACCATAAAACATCTACACACATCCCAATACCCTAAACCTCCCCAAAACCATAAAAACAAAACATATCC
chr2	1708833	1708953	Hyper	1 +	ATTAAGAGTTTAATTTTGATGTTGTTTGGTATTGTTTATTATGTGAGAGTTGTGAGAGTAGAGGGTATGTTTGTATATATTTTAGTGTTTTGGGTTTTTTGGAGTTGTGAGAGTAGAGT
chr2	1708828	1708948	Hypo	1 -	ACAATACTAAAAACTCAACCCTAATATCACCCAACACTACCCATCACATAAAAACCATAAAACATCTACACACATCCCAATACCCTAAACCTCCCCAAAACCATAAAAACAAAACATATC
chr2	1708828	1708948	Hyper	1 +	ATAGTATTAAGAGTTTAATTTTGATGTTGTTTGGTATTGTTTATTATGTGAGAGTTGTGAGATGTTTGTATATATTTTAGTGTTTTGGGTTTTTTGGAGTTGTGAGAGTAGATGTT
chr2	1708833	1708953	Hyper	1 -	ACTAAAAACTCAACCCTAATATCGCCCGACACTACCCATCACGTAAAAACCGTAAAAACAAAAAACACGTCTACACACATCCCAATACCCTAAACCTCCCCGAAACCGTAAAAACAAAAC
chr2	1708833	1708953	Hyper	1 +	ATTAAGAGTTTAATTTTGATGTCGTTCGGTATTGTTTATTATGTGAGAGTCGTGAGAGTAGAGGGTACGTTTGTATATATTTTAGTGTTTTGGGTTTTTTCGGAGTCGTGAGAGTAGAGT
chr2	1708828	1708948	Hyper	1 -	ACAATACTAAAAACTCAACCCTAATATCGCCCGACACTACCCATCACGTAAAAACCGTAAAACGTCTACACACATCCCAATACCCTAAACCTCCCCGAAACCGTAAAAACAAAACATATC
chr2	1708828	1708948	Hyper	1 +	ATAGTATTAAGAGTTTAATTTTGATGTCGTTCGGTATTGTTTATTACGTGAGAGTCGTGAGACGTTTGTATATATTTTAGTGTTTTGGGTTTTTTCGGAGTCGTGAGAGTAGATGTT
chr10	2752229	2752349	Hypo	1 -	ACATATATCTTCCCTAAATCTATAAATATACTTTTTCCCAATTCCTCCATAAATATAACTACTTTATTTCTCTAAAATAAAAACTTACCCTACTTCTTCTCAATACCTTAAATATTTTAT
chr10	2752229	2752349	Hyper	1 +	GTATGTGTTTTTTTTGAGTTGTGAGTGTGTTTTTTTTAATTTTTTTATAAATATGGTTGTTTTATTTTTTTAAAATAAAGATTTATTTTGTTTTTTTTTAATGTTTTAGGTGTTTTGT
chr10	2752234	2752354	Hypo	1 -	TATCTTCCCTAAATCTATAAATATACTTTTTCCCAATTCCTCCATAAATATAACTACTTTATTTCTCTAAAATAAAAACTTACCCTACTTCTTCTCAATACCTTAAATAT
chr10	2752234	2752354	Hyper	1 +	TGTTTTTTTTGAGTTTGTGAGTGTGTTTTTTTTAATTTTTTTATAAATATGGTTGTTTTATTTTTTTAAAATAAAGATTTATTTTGTTTTTTTTTAATGTTTTAGGTGT
chr2	35107959	35108079	Hypo	1 -	ACAATAAATCACTTTTTCTTAATTTTATTATATCTCATAAAAACATTCAATACCAAACATATTAAAATATATTAACAACAAAAATAAATTAATTACATCCCAAAATATACACACTTCT
chr2	35107959	35108079	Hyper	1 +	ATAGTGGGTTATTTTTTTTTGATTTTATTGTGTTTTATAAAGATATTTAGTGTTAGATATATTAAAATATATTAGTAATAAAGATGAATATTAATTATATTTTAGAATATGTATATTTTT
chr2	35107954	35108074	Hypo	1 -	TTTTAACAATAAATCACTTTTTCTTAATTTTATTATATCTCATAAAAACATTCAATACCAAACATATTAAAATATATTAACAACAAAAATAAATTAATTACATCCCAAAATATACACACTTCTCTTT
chr2	35107954	35108074	Hyper	1 +	TTTTGATAGTGGGTTATTTTTTTTTGATTTTATTGTGTTTTATAAAGATATTTAGTGTTAGATATATTAGTAATAAAGATGAATATTAATTATATTTTAGAATATGTATATTTTTTTT
chr2	35107959	35108079	Hyper	1 -	ACAATAAATCACTTTTTCTTAATTTTATTATATCTCATAAAAACATTCAATACCAAACATATTAAAATATATTAACAACAAAAATAAATTAATTACATCCCAAAATATACACACTTCT
chr2	35107959	35108079	Hyper	1 +	ATAGTGGGTTATTTTTTTTTGATTTTATTGTGTTTTATAAAGATATTTAGTGTTAGATATATTAGTAATAAAGATGAATATTAATTATATTTTAGAATATGTATATTTTT
chr2	35107954	35108074	Hyper	1 +	TTTTGATAGTGGGTTATTTTTTTTTGATTTTATTGTGTTTTATAAAGATATTTAGTGTTAGATATATTAGTAATAAAGATGAATATTAATTATATTTTAGAATATGTATATTTTTTTTT
chr7	132195734	132195854	Hypo	1 -	ACAAAAACCCCCAAAAAAAACCTCTCCCTTTCCATTTAACCTTAACCTTTACAAAAAAAAATTTAAAACTAAAAATCTATAAACTCCACAAAACAAAACTAAATCTATCTTACTCATC
chr7	132195734	132195854	Hyper	1 +	GTAAAGGTTTTTAGAGAGGAGTTTTTTTTTTTTTATTTAGTTTTAGTTTTGTAGAAGGAGAGTTTGGAGTTGAGGGTTTGTGAATTTTATAGGGTAGGGTTGGGTTTGTTTTGTTTGTT
chr7	132195730	132195850	Hypo	1 -	AAAAACAAAACCCCCAAAAAAAACCTCTCCCTTTCCATTTAACCTTAACCTTTACAAAAAAAACTAAAAATCTATAAACTCCACAAAACAAAACTAAATCTATCTTACTCATCAACAC
chr7	132195730	132195850	Hyper	1 +	AAGAGTAAAGGTTTTAGAGAGGAGTTTTTTTTTTTTTATTTAGTTTTAGTTTTGTAGAAGGAGTTGAGGGTTTGTGAATTTTATAGGGTAGGGTTGGGTTTGTTTTGTTTAATAT
chr7	132195734	132195854	Hyper	1 -	ACAAAAACCCCCAAAAAAAACCTCTCCCTTTCCATTTAACCTTAACCTTTACAAAAAAAACTAAAAATCTATAAACTCCACAAAACAAAACTAAATCTATCTTACTCATCAACAC
chr7	132195734	132195854	Hyper	1 +	AAGAGTAAAGGTTTTAGAGAGGAGTTTTTTTTTTTTTATTTAGTTTTAGTTTTGTAGAAGGAGTTGAGGGTTTGTGAATTTTATAGGGTAGGGTTGGGTTTGTTTTGTTTAATAT
chr15	28130846	28130966	Hypo	1 -	AATCCTCATAAACCAACATCCCATATTACTTAATCTCCATTCACTCCTTTATTTATTTAATATACTTACTATATAACAACACTATCAAAACCACCCAAAATACCACAATAACCAAAATAA
chr15	28130846	28130966	Hyper	1 +	AGTTTTATGAGTTAGTATTTTATATTGTTTAGTTTTTATTTTTTTTTTTATTTGTTTGATGTGTTTATTATGTGGTAGTATTGTTAGGATTATTAGGATGTTATAGTGATTAAGATAG
chr15	28130851	28130971	Hypo	1 -	TCATAAACCAACATCCCATATTACTTAATCTCCATTCACTCCTTTATTTATTTAATAATATTAAATACTTACTATATAACAACACTATCAAAACCACCCAAAATACCACAATAACCAAAA
chr15	28130851	28130971	Hyper	1 +	TTATGAGTTAGTATTTTATATTGTTTAGTTTTTATTTTTTTTTTTATTTGTTTGATGAGTATTGAGTGTTTATTATGTGGTAGTATTGTTAGGATTATTAGGATGTTATAGTGATTAAGATAG
chr15	28130846	28130966	Hyper	1 -	AATCCTCATAAACCAACATCCCATATTACTTAATCTCCATTCACTCCTTTATTTATTTAATAATATTAAATACTTACTATATAACAACACTATCAAAACCACCCAAAATACCACAATAACCAAAATAA
chr15	28130846	28130966	Hyper	1 +	AGTTTTATGAGTTAGTATTTTATATTGTTTAGTTTTTATTTTTTTTTTATTTGTTTGATGTGTTTATTATGTGGTAGTATTGTTAGGATTATTAGGATGTTATAGTGATTAAGATAG
chr15	28130851	28130971	Hyper	1 -	TCATAAACCAACATCCCATATTACTTAATCTCCATTCACTCCTTTATTTATTTAATAATATTAAATACTTACTATATAACAACACTATCAAAACCACCCAAAATACCACAATAACCAAAA
chr15	28130851	28130971	Hyper	1 +	TTATGAGTTAGTATTTTATATTGTTTAGTTTTTATTTTTTTTTTATTTGTTTGATGAGTATTGAGTGTTTATTATGTGGTAGTATTGTTAGGATTATTAGGATGTTATAGTGATTAAGATAG
chr2	43825576	43825696	Hypo	1 -	AAAATAAAACAAAAAACTTTAAATTATATAAAACTTTCACATTATTTCATAAACTCTTTCATAAAATAAAAAATAATTTTAAACAAAAAAATAATAACATCTAATATACATTTCAAAATA
chr2	43825576	43825696	Hyper	1 +	GGAGTGGGATAAGGGGTTTGGATTATATAAGGTTTTATATTATTTTATGGATTTTTTTATGAAATGAGGAGTGATTTTGAGTAAAAGAATAATAATATTTAATGTATATTTTAAAATA
chr2	43825580	43825700	Hypo	1 -	TAAAACAAAAAACTTTAAATTATATAAAACTTTCACATTATTTCATAAACTCTTTCATAAAATAAAAAATAATTTTAAACAAAAAAATAATAACATCTAATATACATTTCAAA
chr2	43825580	43825700	Hyper	1 +	TGGGATAAGGGGTTTGGATTATATAAGGTTTTATATTATTTTATGGATTTTTTTATTTTAAGTGAAATGAGGAGTGATTTTGAGTAAAAGAATAATAATATTTAATGTATATTTTAA
chr2	43825576	43825696	Hyper	1 -	AAAATAAAACAAAAAACTTTAAATTATATAAAACTTTCACATTATTTCATAAACTCTTTCATAAAATAAAAAATAATTTTAAACAAAAAAATAATAACATCTAATATACATTTCAAAATA
chr2	43825576	43825696	Hyper	1 +	GGAGTGGGATAAGGGGTTTGGATTATATAAGGTTTTATATTATTTTATGGATTTTTTTATGAAATGAGGAGTGATTTTGAGTAAAAGAATAATAATATTTAATGTATATTTTAAAATA
chr2	43825580	43825700	Hyper	1 -	TAAAACAAAAAACTTTAAATTATATAAAACTTTCACATTATTTCATAAACTCTTTCACTCTTAAATAAAATAAAAAATAATTTTAAACAAAAAAATAATAACATCTAATATACATTTCAA

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chr2	43825580	43825700	Hyper	1	+	TGGGATAAGGGGTTTTGGATTATATAAGGTTTTTATATTATTTTATGGATTTTTTTATTTTTAAGTGAAATGAGGAGTGATTTTGAGTAAAAGAATAATAATATTTAATGTATATTTTAA
chr13	96638334	96638454	Hypo	1	-	TTTTTTAAAACTTTTTTTCCTATTTACCTCTAACAAAAATTCTACCTTACAATACATACACACATATATACACAAACCAATATTTTACTCTAATCAAAAAATATATATATATTAAAAAAA
chr13	96638334	96638454	Hypo	1	+	TTTTTTAGGATTTTTTTTTTTTATTTGTTTTTAATAAGAGTTTTATTTTATAGTGTATATATATATGTATGTATAAGTTAATATTTTGTTTTAATTAAAAAATATATATATATTGAAAAGG
chr13	96638329	96638449	Hypo	1	-	AAAAATTTTTTAAAACTTTTTTTCCTATTTACCTCTAACAAAAATTCTACCTTACAATACATATACACAAACCAATATTTTACTCTAATCAAAAAATATATATATATTAAAAAAACCCTA
chr13	96638329	96638449	Hypo	1	+	GAAAATTTTTTAGGATTTTTTTTTTTTATTTGTTTTTAATAAGAGTTTTATTTTATAGTGTATATGTATAAGTTAATATTTTGTTTTAATTAAAAAATATATATATATTGAAAAGGTTTTG
chr13	96638334	96638454	Hyper	1	-	TTTTTTAAAACTTTTTTTCCTATTTACCTCTAACAAAAATTCTACCTTACAATACATACACACATATATACACAAACCAATATTTTACTCTAATCAAAAAATATATATATATTAAAAAAA
chr13	96638334	96638454	Hyper	1	+	TTTTTTAGGATTTTTTTTTTTTATTTGTTTTTAATAAGAGTTTTATTTTATAGTGTATATATATATGTATGTATAAGTTAATATTTTGTTTTAATTAAAAAATATATATATATTGAAAAGG
chr13	96638329	96638449	Hyper	1	-	AAAAATTTTTTAAAACTTTTTTTCCTATTTACCTCTAACAAAAATTCTACCTTACAATACATATACACAAACCAATATTTTACTCTAATCAAAAAATATATATATATTAAAAAAACCCTA
chr13	96638329	96638449	Hyper	1	+	GAAAATTTTTTAGGATTTTTTTTTTTTATTTGTTTTTAATAAGAGTTTTATTTTATAGTGTATATGTATAAGTTAATATTTTGTTTTAATTAAAAAATATATATATATTGAAAAGGTTTTG
chr2	88393560	88393680	Hypo	1	-	TAATAATTTAAATTAAATTTTACTTTTCTTAATAACAACCAAATAACCCCAAATAAATCTTAAAATAAAATTAACAACTCTTAAAATAATCTTTAAATTAAAAACAAAATACTATATAAA
chr2	88393560	88393680	Hypo	1	+	TAGTAGTTTAGGTTAAATTTTATTTTTTTTAATGATAATTAAATGGTTTTAGATGGGTTTTAGGGTGGGGTTGATAGTTTTTGAAATAGTTTTTGGATTAAGAATAAAATGTTGTGTGAG
chr2	88393563	88393683	Hypo	1	-	TAATTTAAATTAAATTTTACTTTTCTTAATAACAACCAAATAACCCCAAATAAATCTTTTCCTCAAAATAAAATTAACAACTCTTAAAATAATCTTTAAATTAAAAACAAAATACTATAT
chr2	88393563	88393683	Hypo	1	+	TAGTTTAGGTTAAATTTTATTTTTTTTAATGATAATTAAATGGTTTTAGATGGGTTTTTTTTTTTAGGGTGGGGTTGATAGTTTTTGAAATAGTTTTTGGATTAAGAATAAAATGTTGTGT
chr2	88393560	88393680	Hyper	1	-	TAATAATTTAAATTAAATTTTACTTTTCTTAATAACAACCAAATAACCCCAAATAAATCTTAAAATAAAATTAACAACTCTTAAAATAATCTTTAAATTAAAAACAAAATACTATATAAA
chr2	88393560	88393680	Hyper	1	+	TAGTAGTTTAGGTTAAATTTTATTTTTTTTAATGATAATTAAATGGTTTTAGATGGGTTTTAGGGTGGGGTTGATAGTTTTTGAAATAGTTTTTGGATTAAGAATAAAATGTTGTGTGAG
chr2	88393563	88393683	Hyper	1	-	TAATTTAAATTAAATTTTACTTTTCTTAATAACAACCAAATAACCCCAAATAAATCTTTTCCTCAAAATAAAATTAACAACTCTTAAAATAATCTTTAAATTAAAAACAAAATACTATAT
chr2	88393563	88393683	Hyper	1	+	TAGTTTAGGTTAAATTTTATTTTTTTTAATGATAATTAAATGGTTTTAGATGGGTTTTTTTTTTTAGGGTGGGGTTGATAGTTTTTGAAATAGTTTTTGGATTAAGAATAAAATGTTGTGT
chr22	46366255	46366375	Hypo	1	-	AACCCAAATAAAAAACCAACCCTAAAATAAACCCAAAATCTACAAAAATACACTAAACACCACCTTACCCCAAAAACCCCTCACTACTACCTTAACATCAACTCCCACCAAACTTCTAAA
chr22	46366255	46366375	Hypo	1	+	GGTTTGGATGAGGGGTTAGTTTTGAGGTAAATTTGGGGTTTGTAGAGGTATATTGGGTATTATTTTGTTTTAGAGGTTTTTTATTGTTGTTTTGGTATTAATTTTTATTAGGTTTTTGGG
chr22	46366250	46366370	Hypo	1	-	CTACAAACCCAAATAAAAAACCAACCCTAAAATAAACCCAAAATCTACAAAAATACACTAAACCCCAAAAACCCCTCACTACTACCTTAACATCAACTCCCACCAAACTTCTAAAACCCC
chr22	46366250	46366370	Hypo	1	+	TTGTAGGTTTGGATGAGGGGTTAGTTTTGAGGTAAATTTGGGGTTTGTAGAGGTATATTGGGTTTTAGAGGTTTTTTATTGTTGTTTTGGTATTAATTTTTATTAGGTTTTTGGGGTTTT
chr22	46366255	46366375	Hyper	1	-	AACCCGAATAAAAAACCAACCCTAAAATAAACCCGAAATCTACAAAAATACACTAAACACCACCTTACCCCAAAAACCCCTCACTACTACCTTAACATCAACTCCCACCAAACTTCTAAA
chr22	46366255	46366375	Hyper	1	+	GGTTCGGATGAGGGGTTAGTTTTGAGGTAAATTCGGGGTTTGTAGAGGTATATTGGGTATTATTTTGTTTTAGAGGTTTTTTATTGTTGTTTTGGTATTAATTTTTATTAGGTTTTTGGG
chr22	46366250	46366370	Hyper	1	-	CTACAAACCCGAATAAAAAACCAACCCTAAAATAAACCCGAAATCTACAAAAATACACTAAACCCCAAAAACCCCTCACTACTACCTTAACATCAACTCCCACCAAACTTCTAAAACCCC
chr22	46366250	46366370	Hyper	1	+	TTGTAGGTTCGGATGAGGGGTTAGTTTTGAGGTAAATTCGGGGTTTGTAGAGGTATATTGGGTTTTAGAGGTTTTTTATTGTTGTTTTGGTATTAATTTTTATTAGGTTTTTGGGGTTTT
chr5	116592696	116592816	Hypo	1	-	ACAACCTCCATAATTCTACATAATCCACTTATACATATATTTCTTAATCTATCAATTTCAAATAAACTCCCTAACATAAAATATTACACATTTAATACACACTTAAACATTTCTCTATAA
chr5	116592696	116592816	Hypo	1	+	GTAATTTTTATAATTTTATATAATTTATTTGTATATATATTTTTTGATTTGTTAATTTTAAATAGATTTTTTGATATAGAATATTATATATTTGATATATATTTAAATATTTTTTTATAA
chr5	116592701	116592821	Hypo	1	-	CTCCATAATTCTACATAATCCACTTATACATATATTTCTTAATCTATCAATTTCAAATAATATTTATAAACTCCCTAACATAAAATATTACACATTTAATACACACTTAAACATTTCTCT
chr5	116592701	116592821	Hypo	1	+	TTTTATAATTTTATATAATTTATTTGTATATATATTTTTTGATTTGTTAATTTTAAATGGTATTTTATAGATTTTTTGATATAGAATATTATATATTTGATATATATTTAAATATTTTTTT
chr5	116592696	116592816	Hyper	1	-	ACAACCTCCATAATTCTACATAATCCACTTATACATATATTTCTTAATCTATCAATTTCAAATAAACTCCCTAACATAAAATATTACACATTTAATACACACTTAAACATTTCTCTATAA
chr5	116592696	116592816	Hyper	1	+	GTAATTTTTATAATTTTATATAATTTATTTGTATATATATTTTTTGATTTGTTAATTTTAAATAGATTTTTTGATATAGAATATTATATATTTGATATATATTTAAATATTTTTTTATAA
chr5	116592701	116592821	Hyper	1	-	CTCCATAATTCTACATAATCCACTTATACATATATTTCTTAATCTATCAATTTCAAATAATATTTATAAACTCCCTAACATAAAATATTACACATTTAATACACACTTAAACATTTCTCT
chr5	116592701	116592821	Hyper	1	+	TTTTATAATTTTATATAATTTATTTGTATATATATTTTTTGATTTGTTAATTTTAAATGGTATTTTATAGATTTTTTGATATAGAATATTATATATTTGATATATATTTAAATATTTTTTT
chr20	17501643	17501763	Hypo	1	-	TCTAAAAATTTTAAAAAAAAAAAAAAAAAAAAAATTTTAAAATCTACTACTTACAATTTCCTCAAAATAAACAAATCAAACATCATAACAAACCAATAACTTCATACATATATATTTAATA
chr20	17501643	17501763	Hypo	1	+	TTTGGGAATTTTAAAGAGAAAAGGAGAGGGAGATTTTAAAGTTTGTTGTTTATAGTTTTTTTAAGATAAGTAAATTAGGTATTATAGTAGATTAGTAATTTTATATGTATATATTTGGTG
chr20	17501638	17501758	Hypo	1	-	AAAATTCTAAAAATTTTAAAAAAAAAAAAAAAAAAAAAATTTTAAAATCTACTACTTACAATTAAACAAATCAAACATCATAACAAACCAATAACTTCATACATATATATTTAATAACCAT
chr20	17501638	17501758	Hypo	1	+	AAAATTTTGGGAATTTTAAAGAGAAAAGGAGAGGGAGATTTTAAAGTTTGTTGTTTATAGTTAAGTAAATTAGGTATTATAGTAGATTAGTAATTTTATATGTATATATTTGGTGATTAT
chr20	17501643	17501763	Hyper	1	-	TCTAAAAATTTTAAAAAAAAAAAAAAAAAAAAAATTTTAAAATCTACTACTTACAATTTCCTCAAAATAAACAAATCAAACATCATAACAAACCAATAACTTCATACGTATATATTTAATA
chr20	17501643	17501763	Hyper	1	+	TTTGGGAATTTTAAAGAGAAAAGGAGAGGGAGATTTTAAAGTTTGTTGTTTATAGTTTTTTTAAGATAAGTAAATTAGGTATTATAGTAGATTAGTAATTTTATACGTATATATTTGGTG
chr20	17501638	17501758	Hyper	1	-	AAAATTCTAAAAATTTTAAAAAAAAAAAAAAAAAAAAAATTTTAAAATCTACTACTTACAATTAAACAAATCAAACATCATAACAAACCAATAACTTCATACGTATATATTTAATAACCAT
chr20	17501638	17501758	Hyper	1	+	AAAATTTTGGGAATTTTAAAGAGAAAAGGAGAGGGAGATTTTAAAGTTTGTTGTTTATAGTTAAGTAAATTAGGTATTATAGTAGATTAGTAATTTTATACGTATATATTTGGTGATTAT
chr7	20917759	20917879	Hypo	1	-	TTTTACATAAATTATTTCTTACATATACAAATATATCTTTAAAATATACACATATATAAAATTTAAAAATACATTTAATTAAAATTTTAACAAACTTTACCAATATAATATTTAAACATT
chr7	20917759	20917879	Hypo	1	+	TTTTATATAGATTATTTTTTATATATGTAAGTATATTTTTAGGATATATATATATGTGGAATTTAAGAATATGTTTAATTAAAATTTTGGTAAGTTTTGTTAGTGTGATATTTGGGTATT
chr7	20917763	20917883	Hypo	1	-	ACATAAATTATTTCTTACATATACAAATATATCTTTAAAATATACACATATATAAAATTATTAAATTTAAAAATACATTTAATTAAAATTTTAACAAACTTTACCAATATAATATTTAAA
chr7	20917763	20917883	Hypo	1	+	ATATAGATTATTTTTTATATATGTAAGTATATTTTTAGGATATATATATATGTGGAATTGTTGGGTTTAAGAATATGTTTAATTAAAATTTTGGTAAGTTTTGTTAGTGTGATATTTGGG
chr7	20917759	20917879	Hyper	1	-	TTTTACATAAATTATTTCTTACATATACAAATATATCTTTAAAATATACACATATATAAAATTTAAAAATACGTTTAATTAAAATTTTAACAAACTTTACCAATATAATATTTAAACATT
chr7	20917759	20917879	Hyper	1	+	TTTTATATAGATTATTTTTTATATATGTAAGTATATTTTTAGGATATATATATATGTGGAATTTAAGAATACGTTTAATTAAAATTTTGGTAAGTTTTGTTAGTGTGATATTTGGGTATT
chr7	20917763	20917883	Hyper	1	-	ACATAAATTATTTCTTACATATACAAATATATCTTTAAAATATACACATATATAAAATTATTAAATTTAAAAATACGTTTAATTAAAATTTTAACAAACTTTACCAATATAATATTTAAA
chr7	20917763	20917883	Hyper	1	+	ATATAGATTATTTTTTATATATGTAAGTATATTTTTAGGATATATATATATGTGGAATTGTTGGGTTTAAGAATACGTTTAATTAAAATTTTGGTAAGTTTTGTTAGTGTGATATTTGGG
chr17	9193572	9193692	Hypo	1	-	TAAATTATACCATTATTTTAACTCATCACCAAATAAAAATCTATATCAAATACATACCACTATATATAAATTAAAAACAAATATAAAACAAAATAAAAATAAATACCACCTACATCTAAA
chr17	9193572	9193692	Hypo	1	+	TAAATTATGTTATTATTTTGATTTATTATTAGGTGAAAGTTTATGTTAAATGTATGTTATTGTGTGTGGATTGAGGGTAGGTGTAGGGTAGGATGGGGGTGAGTGTTATTTGTATTTGAA
chr17	9193576	9193696	Hypo	1	-	TTATACCATTATTTTAACTCATCACCAAATAAAAATCTATATCAAATACATACCACTATACCTTAATATATAAATTAAAAACAAATATAAAACAAAATAAAAATAAATACCACCTACATC

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chr17	9193576	9193696	Hypo	1	+	TTATGTTATTATTTTGATTTATTATTAGGTGAAAGTTTATGTTAAATGTATGTTATTGTGTTTTAGTGTGTGGATTGAGGGTAGGTGTAGGGTAGGATGGGGGTGAGTGTTATTTGTATT
chr17	9193572	9193692	Hyper	1	-	TAAATTATACCATTATTTTAACTCATCACCAAATAAAAATCTATATCAAATACATACCACTATATATAAATTAAAAACAAATATAAAACAAAATAAAAATAAATACCACCTACATCTAAA
chr17	9193572	9193692	Hyper	1	+	TAAATTATGTTATTATTTTGATTTATTATTAGGTGAAAGTTTATGTTAAATGTATGTTATTGTGTGTGGATTGAGGGTAGGTGTAGGGTAGGATGGGGGTGAGTGTTATTTGTATTTGAA
chr17	9193576	9193696	Hyper	1	-	TTATACCATTATTTTAACTCATCACCAAATAAAAATCTATATCAAATACATACCACTATACCTTAATATATAAATTAAAAACAAATATAAAACAAAATAAAAATAAATACCACCTACATC
chr17	9193576	9193696	Hyper	1	+	TTATGTTATTATTTTGATTTATTATTAGGTGAAAGTTTATGTTAAATGTATGTTATTGTGTTTTAGTGTGTGGATTGAGGGTAGGTGTAGGGTAGGATGGGGGTGAGTGTTATTTGTATT
chrX	122638040	122638160	Hypo	1	-	ATATCCACTTATTAAAAAAAAATCATCTAAATATCAAATAATAAAAAAAATCCTAACCAAAACATCACTTACAATAAAACCACTATATCTACTAACTCACATAATAATCATTTTCCTAAT
chrX	122638040	122638160	Hypo	1	+	ATGTTTGTTTGTTAAAGGGGGGTTATTTGGGTGTTAAGTAATAAAAAAAATTTTAGTTAAAGTATTATTTATAATGGAGTTATTGTATTTGTTGATTTATATGATGGTTATTTTTTTGGT
chrX	122638036	122638156	Hypo	1	-	CATCATATCCACTTATTAAAAAAAAATCATCTAAATATCAAATAATAAAAAAAATCCTAACCACTTACAATAAAACCACTATATCTACTAACTCACATAATAATCATTTTCCTAATCCCT
chrX	122638036	122638156	Hypo	1	+	TATTATGTTTGTTTGTTAAAGGGGGGTTATTTGGGTGTTAAGTAATAAAAAAAATTTTAGTTATTTATAATGGAGTTATTGTATTTGTTGATTTATATGATGGTTATTTTTTTGGTTTTT
chrX	122638040	122638160	Hyper	1	-	ATATCCGCTTATTAAAAAAAAATCATCTAAATATCAAATAATAAAAAAAATCCTAACCAAAACATCACTTACAATAAAACCACTATATCTACTAACTCACATAATAATCATTTTCCTAAT
chrX	122638040	122638160	Hyper	1	+	ATGTTCGTTTGTTAAAGGGGGGTTATTTGGGTGTTAAGTAATAAAAAAAATTTTAGTTAAAGTATTATTTATAATGGAGTTATTGTATTTGTTGATTTATATGATGGTTATTTTTTTGGT
chrX	122638036	122638156	Hyper	1	-	CATCATATCCGCTTATTAAAAAAAAATCATCTAAATATCAAATAATAAAAAAAATCCTAACCACTTACAATAAAACCACTATATCTACTAACTCACATAATAATCATTTTCCTAATCCCT
chrX	122638036	122638156	Hyper	1	+	TATTATGTTCGTTTGTTAAAGGGGGGTTATTTGGGTGTTAAGTAATAAAAAAAATTTTAGTTATTTATAATGGAGTTATTGTATTTGTTGATTTATATGATGGTTATTTTTTTGGTTTTT
chr5	152244856	152244976	Hypo	1	-	AAACATATATTTTTCAATATTCAATAACAATAAATACAATACTATATTTTAACTCATCCTCTTAAATCATAAAAAATTCCTTTTATCCCTAAAAAACAAATAACACTAACCTTAAATATT
chr5	152244856	152244976	Hypo	1	+	AGATATATATTTTTTAATGTTTAGTAATAATAAATGTAGTGTTATGTTTTAATTTATTTTTTTAAGTTATGGGGAATTTTTTTTTATTTTTAGAAAATAGATGATATTGATTTTAAATGTT
chr5	152244851	152244971	Hypo	1	-	TCCCAAAACATATATTTTTCAATATTCAATAACAATAAATACAATACTATATTTTAACTCATCATAAAAAATTCCTTTTATCCCTAAAAAACAAATAACACTAACCTTAAATATTTAATA
chr5	152244851	152244971	Hypo	1	+	TTTTAAGATATATATTTTTTAATGTTTAGTAATAATAAATGTAGTGTTATGTTTTAATTTATTATGGGGAATTTTTTTTTATTTTTAGAAAATAGATGATATTGATTTTAAATGTTTGGTA
chr5	152244856	152244976	Hyper	1	-	AAACATATATTTTTCAATATTCAATAACAATAAATACAATACTATATTTTAACTCATCCTCTTAAATCATAAAAAATTCCTTTTATCCCTAAAAAACAAATAACACTAACCTTAAATATT
chr5	152244856	152244976	Hyper	1	+	AGATATATATTTTTTAATGTTTAGTAATAATAAATGTAGTGTTATGTTTTAATTTATTTTTTTAAGTTATGGGGAATTTTTTTTTATTTTTAGAAAATAGATGATATTGATTTTAAATGTT
chr5	152244851	152244971	Hyper	1	-	TCCCAAAACATATATTTTTCAATATTCAATAACAATAAATACAATACTATATTTTAACTCATCATAAAAAATTCCTTTTATCCCTAAAAAACAAATAACACTAACCTTAAATATTTAATA
chr5	152244851	152244971	Hyper	1	+	TTTTAAGATATATATTTTTTAATGTTTAGTAATAATAAATGTAGTGTTATGTTTTAATTTATTATGGGGAATTTTTTTTTATTTTTAGAAAATAGATGATATTGATTTTAAATGTTTGGTA
chr20	19636968	19637088	Hypo	1	-	CTAATTCCAAAATCCCTTTATCATTAAAAAAATTAAAACCCACCCCACAAAACAAAAAAATTCATACTAAAACTAAAAACATACTTCTATTAAAAAATTTAAAAACATACATAAACTATA
chr20	19636968	19637088	Hypo	1	+	TTAATTTTAGGGTTTTTTTATTATTGGGAGGGTTAGAATTTATTTTATAGAGTAGAGAGGTTTATGTTGGAATTGAAGATATGTTTTTGTTAGGAGATTTAAGGATATATATGAATTATG
chr20	19636972	19637092	Hypo	1	-	TTCCAAAATCCCTTTATCATTAAAAAAATTAAAACCCACCCCACAAAACAAAAAAATTCAAAATATCATACTAAAACTAAAAACATACTTCTATTAAAAAATTTAAAAACATACATAAAC
chr20	19636972	19637092	Hypo	1	+	TTTTAGGGTTTTTTTATTATTGGGAGGGTTAGAATTTATTTTATAGAGTAGAGAGGTTTAGAATGTTATGTTGGAATTGAAGATATGTTTTTGTTAGGAGATTTAAGGATATATATGAAT
chr20	19636968	19637088	Hyper	1	-	CTAATTCCAAAATCCCTTTATCATTAAAAAAATTAAAACCCACCCCACAAAACAAAAAAATTCATACTAAAACTAAAAACATACTTCTATTAAAAAATTTAAAAACATACATAAACTATA
chr20	19636968	19637088	Hyper	1	+	TTAATTTTAGGGTTTTTTTATTATTGGGAGGGTTAGAATTTATTTTATAGAGTAGAGAGGTTTATGTTGGAATTGAAGATATGTTTTTGTTAGGAGATTTAAGGATATATATGAATTATG
chr20	19636972	19637092	Hyper	1	-	TTCCAAAATCCCTTTATCATTAAAAAAATTAAAACCCACCCCACAAAACAAAAAAATTCAAAATATCATACTAAAACTAAAAACATACTTCTATTAAAAAATTTAAAAACATACATAAAC
chr20	19636972	19637092	Hyper	1	+	TTTTAGGGTTTTTTTATTATTGGGAGGGTTAGAATTTATTTTATAGAGTAGAGAGGTTTAGAATGTTATGTTGGAATTGAAGATATGTTTTTGTTAGGAGATTTAAGGATATATATGAAT
chr11	69538693	69538813	Hypo	1	-	CCCAAACCATAAATAACTATACCAATCAATAACAAAATATACTTACTAACATAAACAAATATCCCTAACATTCCATAAAACCAAACTTCAAAACATCACCTACCATATAAACCCAAAACA
chr11	69538693	69538813	Hypo	1	+	TTTAAATTATGAGTGGTTGTGTTAGTTAGTAGTAAGGTGTGTTTGTTGATATAGATAGATGTTTTTGGTATTTTATAAAATTAGGTTTTAGAATATTATTTGTTATATGAGTTTAAAATA
chr11	69538689	69538809	Hypo	1	-	AATACCCAAACCATAAATAACTATACCAATCAATAACAAAATATACTTACTAACATAAACAAACATTCCATAAAACCAAACTTCAAAACATCACCTACCATATAAACCCAAAACAAACAT
chr11	69538689	69538809	Hypo	1	+	GGTATTTAAATTATGAGTGGTTGTGTTAGTTAGTAGTAAGGTGTGTTTGTTGATATAGATAGGTATTTTATAAAATTAGGTTTTAGAATATTATTTGTTATATGAGTTTAAAATAAATAT
chr11	69538693	69538813	Hyper	1	-	CCCAAACCATAAATAACTATACCAATCAATAACAAAATATACTTACTAACATAAACAAATATCCCTAACATTCCATAAAACCAAACTTCAAAACATCACCTACCATATAAACCCAAAACA
chr11	69538693	69538813	Hyper	1	+	TTTAAATTATGAGTGGTTGTGTTAGTTAGTAGTAAGGTGTGTTTGTTGATATAGATAGATGTTTTTGGTATTTTATAAAATTAGGTTTTAGAATATTATTTGTTATATGAGTTTAAAATA
chr11	69538689	69538809	Hyper	1	-	AATACCCAAACCATAAATAACTATACCAATCAATAACAAAATATACTTACTAACATAAACAAACATTCCATAAAACCAAACTTCAAAACATCACCTACCATATAAACCCAAAACAAACAT
chr11	69538689	69538809	Hyper	1	+	GGTATTTAAATTATGAGTGGTTGTGTTAGTTAGTAGTAAGGTGTGTTTGTTGATATAGATAGGTATTTTATAAAATTAGGTTTTAGAATATTATTTGTTATATGAGTTTAAAATAAATAT
chr6	147799664	147799784	Hypo	1	-	AATCAATTATATTTCTTTATAAAACCAATAAATTATCAAAAATTAAAATTTTTTAAAACAATATTTACAATAACTAAATATAAAATACTTAAAAATAAACTTTTACTAAAATTTACAAAA
chr6	147799664	147799784	Hypo	1	+	AATTAATTGTATTTTTTTTATAAGGTTAATAAATTATTAGAAGTTGGAATTTTTTAAAATAGTGTTTATAATAGTTAAATATGAAATATTTAGGAATAAATTTTTATTAAAGTTTATAGAA
chr6	147799660	147799780	Hypo	1	-	AAAAAATCAATTATATTTCTTTATAAAACCAATAAATTATCAAAAATTAAAATTTTTTAAAACAATAACTAAATATAAAATACTTAAAAATAAACTTTTACTAAAATTTACAAAAACTAT
chr6	147799660	147799780	Hypo	1	+	AAAAAATTAATTGTATTTTTTTTATAAGGTTAATAAATTATTAGAAGTTGGAATTTTTTAAAATAATAGTTAAATATGAAATATTTAGGAATAAATTTTTATTAAAGTTTATAGAAATTGT
chr6	147799664	147799784	Hyper	1	-	AATCAATTATATTTCTTTATAAAACCAATAAATTATCAAAAATTAAAATTTTTTAAAACAATATTTACAATAACTAAATATAAAATACTTAAAAATAAACTTTTACTAAAATTTACAAAA
chr6	147799664	147799784	Hyper	1	+	AATTAATTGTATTTTTTTTATAAGGTTAATAAATTATTAGAAGTTGGAATTTTTTAAAATAGTGTTTATAATAGTTAAATATGAAATATTTAGGAATAAATTTTTATTAAAGTTTATAGAA
chr6	147799660	147799780	Hyper	1	-	AAAAAATCAATTATATTTCTTTATAAAACCAATAAATTATCAAAAATTAAAATTTTTTAAAACAATAACTAAATATAAAATACTTAAAAATAAACTTTTACTAAAATTTACAAAAACTAT
chr6	147799660	147799780	Hyper	1	+	AAAAAATTAATTGTATTTTTTTTATAAGGTTAATAAATTATTAGAAGTTGGAATTTTTTAAAATAATAGTTAAATATGAAATATTTAGGAATAAATTTTTATTAAAGTTTATAGAAATTGT
chr1	72706988	72707108	Hypo	1	-	TAAATAACAAATATTCAAAAAAATCCAAATTTATAAATACCTAATATTCCCTATCCACTATAATTACTAACATAATTTTAATTAATTAATTCTCTATAAAAACTTTAAAAAAAAACTTTAT
chr1	72706988	72707108	Hypo	1	+	TAAATAGTAAATATTTAGAAGGGTTTAGATTTGTGGATATTTGATATTTTTTGTTTATTATAGTTGTTAATATGGTTTTAATTAGTTAATTTTTTGTGAGAATTTTAGAAAGGGTTTTGT
chr1	72706992	72707112	Hypo	1	-	TAACAAATATTCAAAAAAATCCAAATTTATAAATACCTAATATTCCCTATCCACTATAACTATAAAATTACTAACATAATTTTAATTAATTAATTCTCTATAAAAACTTTAAAAAAAAACT
chr1	72706992	72707112	Hypo	1	+	TAGTAAATATTTAGAAGGGTTTAGATTTGTGGATATTTGATATTTTTTGTTTATTATAGTTATAAAGTTGTTAATATGGTTTTAATTAGTTAATTTTTTGTGAGAATTTTAGAAAGGGTT
chr1	72706988	72707108	Hyper	1	-	TAAATAACAAATATTCAAAAAAATCCAAATTTATAAATACCTAATATTCCCTATCCACTATAATTACTAACATAATTTTAATTAATTAATTCTCTATAAAAACTTTAAAAAAAAACTTTAT
chr1	72706988	72707108	Hyper	1	+	TAAATAGTAAATATTTAGAAGGGTTTAGATTTGTGGATATTTGATATTTTTTGTTTATTATAGTTGTTAATATGGTTTTAATTAGTTAATTTTTTGTGAGAATTTTAGAAAGGGTTTTGT
chr1	72706992	72707112	Hyper	1	-	TAACAAATATTCAAAAAAATCCAAATTTATAAATACCTAATATTCCCTATCCACTATAACTATAAAATTACTAACATAATTTTAATTAATTAATTCTCTATAAAAACTTTAAAAAAAAACT

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chr1	72706992	72707112	Hyper	1 +	TAGTAAATATTTAGAAGGGTTTAGATTTGTGGATATTTGATATTTTTTGTTTATTATAGTTATAAAGTTGTTAATATGGTTTTAATTAGTTAATTTTTTGTGAGAATTTTAGAAAGGGTT
chr9	139410243	139410363	Hypo	1 -	TCACCTATACCAACCTAAAAAAAACTCCAAACATAACATTCCCACCTACTCAAAATTAAAACTAAACTATACTCTCAACCTCTAAACCAAATAACCCAAACCAAAATATCCATAACCTTA
chr9	139410243	139410363	Hypo	1 +	TTATTTGTGTTAATTTGAGGAGGGTTTTGAGTGTGGTATTTTTATTTATTTAGGATTGGGGTTGAGTTGTGTTTTTGGTTTTTGGATTAGGTGGTTTAGATTAAGGTGTTTATGATTTTG
chr9	139410239	139410359	Hypo	1 -	AAAATCACCTATACCAACCTAAAAAAAACTCCAAACATAACATTCCCACCTACTCAAAATTACTATACTCTCAACCTCTAAACCAAATAACCCAAACCAAAATATCCATAACCTTATCAA
chr9	139410239	139410359	Hypo	1 +	GGGGTTATTTGTGTTAATTTGAGGAGGGTTTTGAGTGTGGTATTTTTATTTATTTAGGATTGTTGTGTTTTTGGTTTTTGGATTAGGTGGTTTAGATTAAGGTGTTTATGATTTTGTTAG
chr9	139410243	139410363	Hyper	1 -	TCACCTATACCAACCTAAAAAAAACTCCGAACGTAACATTCCCACCTACTCAAAATTAAAACTAAACTATACTCTCGACCTCTAAACCAAATAACCCAAACCAAAATATCCATAACCTTA
chr9	139410243	139410363	Hyper	1 +	TTATTTGTGTTAATTTGAGGAGGGTTTCGAGCGTGGTATTTTTATTTATTTAGGATTGGGGTTGAGTTGTGTTTTCGGTTTTTGGATTAGGTGGTTTAGATTAAGGTGTTTATGATTTTG
chr9	139410239	139410359	Hyper	1 -	AAAATCACCTATACCAACCTAAAAAAAACTCCGAACGTAACATTCCCACCTACTCAAAATTACTATACTCTCGACCTCTAAACCAAATAACCCAAACCAAAATATCCATAACCTTATCAA
chr9	139410239	139410359	Hyper	1 +	GGGGTTATTTGTGTTAATTTGAGGAGGGTTTCGAGCGTGGTATTTTTATTTATTTAGGATTGTTGTGTTTTCGGTTTTTGGATTAGGTGGTTTAGATTAAGGTGTTTATGATTTTGTTAG
chr2	142466194	142466314	Hypo	1 -	TAATCTTAATAACCACCTATAATAAACTAAATTATATCTCCCCAAAATTTATATTTTTATACATCAAAATATAACTATTATTAAACATAAAATCTTTAAAAAAATAACCAAATTCAAATA
chr2	142466194	142466314	Hypo	1 +	TAGTTTTAATGATTATTTGTGATGAATTGAATTGTGTTTTTTTAAAATTTGTATTTTTATGTATTAGAATGTAATTGTTGTTGGATATAGGGTTTTTAAAGAGGTGATTAAATTTAAATG
chr2	142466198	142466318	Hypo	1 -	CTTAATAACCACCTATAATAAACTAAATTATATCTCCCCAAAATTTATATTTTTATATCCTAACACATCAAAATATAACTATTATTAAACATAAAATCTTTAAAAAAATAACCAAATTCA
chr2	142466198	142466318	Hypo	1 +	TTTAATGATTATTTGTGATGAATTGAATTGTGTTTTTTTAAAATTTGTATTTTTATGTTTTAGTATATTAGAATGTAATTGTTGTTGGATATAGGGTTTTTAAAGAGGTGATTAAATTTA
chr2	142466194	142466314	Hyper	1 -	TAATCTTAATAACCACCTATAATAAACTAAATTATATCTCCCCAAAATTTATATTTTTATACATCAAAATATAACTATTATTAAACATAAAATCTTTAAAAAAATAACCAAATTCAAATA
chr2	142466194	142466314	Hyper	1 +	TAGTTTTAATGATTATTTGTGATGAATTGAATTGTGTTTTTTTAAAATTTGTATTTTTATGTATTAGAATGTAATTGTTGTTGGATATAGGGTTTTTAAAGAGGTGATTAAATTTAAATG
chr2	142466198	142466318	Hyper	1 -	CTTAATAACCACCTATAATAAACTAAATTATATCTCCCCAAAATTTATATTTTTATATCCTAACACATCAAAATATAACTATTATTAAACATAAAATCTTTAAAAAAATAACCAAATTCA
chr2	142466198	142466318	Hyper	1 +	TTTAATGATTATTTGTGATGAATTGAATTGTGTTTTTTTAAAATTTGTATTTTTATGTTTTAGTATATTAGAATGTAATTGTTGTTGGATATAGGGTTTTTAAAGAGGTGATTAAATTTA
chr3	53220706	53220826	Hypo	1 -	ACCACATACATAAAAACCATAATAAAAAAAAACCCAATATAAAAAAAAAACTACTAACTCAAAACCCACTTCCAATCTACCCTCCATACCTTCTTCCCTCTCCCTAAAAAAACCAACCTA
chr3	53220706	53220826	Hypo	1 +	GTTATGTATGTAAGGGTTATGGTGGGGAAGGGTTTAGTGTGGAGGAAGGGTTATTGGTTTAGAGTTTATTTTTAGTTTGTTTTTTATGTTTTTTTTTTTTTTTTTTAGAAAAGTTAGTTTG
chr3	53220702	53220822	Hypo	1 -	CCATACCACATACATAAAAACCATAATAAAAAAAAACCCAATATAAAAAAAAAACTACTAACCACTTCCAATCTACCCTCCATACCTTCTTCCCTCTCCCTAAAAAAACCAACCTAAACT
chr3	53220702	53220822	Hypo	2 +	TTGTGTTATGTATGTAAGGGTTATGGTGGGGAAGGGTTTAGTGTGGAGGAAGGGTTATTGGTTATTTTTAGTTTGTTTTTTATGTTTTTTTTTTTTTTTTTTAGAAAAGTTAGTTTGGGTT
chr3	53220706	53220826	Hyper	1 -	ACCACGTACGTAAAAACCATAATAAAAAAAAACCCAATATAAAAAAAAAACTACTAACTCAAAACCCACTTCCAATCTACCCTCCATACCTTCTTCCCTCTCCCTAAAAAAACCAACCTA
chr3	53220706	53220826	Hyper	1 +	GTTACGTACGTAAGGGTTATGGTGGGGAAGGGTTTAGTGTGGAGGAAGGGTTATTGGTTTAGAGTTTATTTTTAGTTTGTTTTTTATGTTTTTTTTTTTTTTTTTTAGAAAAGTTAGTTTG
chr3	53220702	53220822	Hyper	1 -	CCGTACCACGTACGTAAAAACCATAATAAAAAAAAACCCAATATAAAAAAAAAACTACTAACCACTTCCAATCTACCCTCCATACCTTCTTCCCTCTCCCTAAAAAAACCAACCTAAACT
chr3	53220702	53220822	Hyper	2 +	TCGTGTTACGTACGTAAGGGTTATGGTGGGGAAGGGTTTAGTGTGGAGGAAGGGTTATTGGTTATTTTTAGTTTGTTTTTTATGTTTTTTTTTTTTTTTTTTAGAAAAGTTAGTTTGGGTT
chr5	155662194	155662314	Hypo	1 -	AATTTAAAAAAATAATATAAACCAACTATTACAAATAAAATTTAAAAAACTATACATATAACTTAAAACTCATCATTTCATTTAATATTCAATTTTATTCTAAAACAAAAAATCAATTCT
chr5	155662194	155662314	Hypo	1 +	AGTTTGAAAGAATAATGTAGGTTAATTATTGTAAATGAGATTTGGAGGATTGTGTATGTGGTTTGGGATTTATTATTTTATTTGGTATTTAGTTTTGTTTTGAGGTAGAAAATTAATTTT
chr5	155662198	155662318	Hypo	1 -	TAAAAAAATAATATAAACCAACTATTACAAATAAAATTTAAAAAACTATACATATAACCTACTAACTTAAAACTCATCATTTCATTTAATATTCAATTTTATTCTAAAACAAAAAATCAA
chr5	155662198	155662318	Hypo	1 +	TGAAAGAATAATGTAGGTTAATTATTGTAAATGAGATTTGGAGGATTGTGTATGTGGTTTATTGATTTGGGATTTATTATTTTATTTGGTATTTAGTTTTGTTTTGAGGTAGAAAATTAA
chr5	155662194	155662314	Hyper	1 -	AATTTAAAAAAATAATATAAACCAACTATTACAAATAAAATTTAAAAAACTATACATATAACTTAAAACTCATCATTTCATTTAATATTCAATTTTATTCTAAAACAAAAAATCAATTCT
chr5	155662194	155662314	Hyper	1 +	AGTTTGAAAGAATAATGTAGGTTAATTATTGTAAATGAGATTTGGAGGATTGTGTATGTGGTTTGGGATTTATTATTTTATTTGGTATTTAGTTTTGTTTTGAGGTAGAAAATTAATTTT
chr5	155662198	155662318	Hyper	1 -	TAAAAAAATAATATAAACCAACTATTACAAATAAAATTTAAAAAACTATACATATAACCTACTAACTTAAAACTCATCATTTCATTTAATATTCAATTTTATTCTAAAACAAAAAATCAA
chr5	155662198	155662318	Hyper	1 +	TGAAAGAATAATGTAGGTTAATTATTGTAAATGAGATTTGGAGGATTGTGTATGTGGTTTATTGATTTGGGATTTATTATTTTATTTGGTATTTAGTTTTGTTTTGAGGTAGAAAATTAA
chrX	109838623	109838743	Hypo	1 -	AATAAATCCTACAAAATTTCAAAAACCTACCATTTTCTTAAAATTTTTAAAATTCTAATAATACCAAAATATCCATTCCATAACAAAAAAATACTTACAACATCTTACATTCCTTACCAC
chrX	109838623	109838743	Hypo	1 +	GATAAATTTTATAAAGTTTTAGAGATTTGTTATTTTTTTAAAATTTTTAAGGTTTTGGTGGTGTTAAAATATTTATTTTATAGTAAAAGAATATTTGTAGTATTTTGTATTTTTTATTAT
chrX	109838628	109838748	Hypo	1 -	ATCCTACAAAATTTCAAAAACCTACCATTTTCTTAAAATTTTTAAAATTCTAATAATCAAAAACATACCAAAATATCCATTCCATAACAAAAAAATACTTACAACATCTTACATTCCTTA
chrX	109838628	109838748	Hypo	1 +	ATTTTATAAAGTTTTAGAGATTTGTTATTTTTTTAAAATTTTTAAGGTTTTGGTGGTTAGGGATATGTTAAAATATTTATTTTATAGTAAAAGAATATTTGTAGTATTTTGTATTTTTTA
chrX	109838623	109838743	Hyper	1 -	AATAAATCCTACAAAATTTCAAAAACCTACCATTTTCTTAAAATTTTTAAAATTCTAATAATACCAAAATATCCATTCCATAACAAAAAAATACTTACAACATCTTACATTCCTTACCAC
chrX	109838623	109838743	Hyper	1 +	GATAAATTTTATAAAGTTTTAGAGATTTGTTATTTTTTTAAAATTTTTAAGGTTTTGGTGGTGTTAAAATATTTATTTTATAGTAAAAGAATATTTGTAGTATTTTGTATTTTTTATTAT
chrX	109838628	109838748	Hyper	1 -	ATCCTACAAAATTTCAAAAACCTACCATTTTCTTAAAATTTTTAAAATTCTAATAATCAAAAACATACCAAAATATCCATTCCATAACAAAAAAATACTTACAACATCTTACATTCCTTA
chrX	109838628	109838748	Hyper	1 +	ATTTTATAAAGTTTTAGAGATTTGTTATTTTTTTAAAATTTTTAAGGTTTTGGTGGTTAGGGATATGTTAAAATATTTATTTTATAGTAAAAGAATATTTGTAGTATTTTGTATTTTTTA
chr3	73109686	73109806	Hypo	1 -	AAATATTAATAAAATTATTTTTACTAAAAAAATCATAAATATATTACAAAAAAAATTTAAATCTCTTTCTATAAAATATATAATACAACACAACAAACCATAAATTAAATATTACTTTAT
chr3	73109686	73109806	Hypo	1 +	GAATATTAGTAAAGTTATTTTTATTGGGAAGATTATAAATATATTATAAAAAAGGTTTGAGTTTTTTTTTGTGGGATATATGATGTAATATAATAAGTTGTGGATTGGGTGTTGTTTTGT
chr3	73109683	73109803	Hypo	1 -	ACTAAATATTAATAAAATTATTTTTACTAAAAAAATCATAAATATATTACAAAAAAAATTTTTTCTATAAAATATATAATACAACACAACAAACCATAAATTAAATATTACTTTATAAAA
chr3	73109683	73109803	Hypo	1 +	ATTGAATATTAGTAAAGTTATTTTTATTGGGAAGATTATAAATATATTATAAAAAAGGTTTTTTTTGTGGGATATATGATGTAATATAATAAGTTGTGGATTGGGTGTTGTTTTGTAAGG
chr3	73109686	73109806	Hyper	1 -	AAATATTAATAAAATTATTTTTACTAAAAAAATCATAAATATATTACAAAAAAAATTTAAATCTCTTTCTATAAAATATATAATACAACACAACAAACCGTAAATTAAATATTACTTTAT
chr3	73109686	73109806	Hyper	1 +	GAATATTAGTAAAGTTATTTTTATTGGGAAGATTATAAATATATTATAAAAAAGGTTTGAGTTTTTTTTTGTGGGATATATGATGTAATATAATAAGTCGTGGATTGGGTGTTGTTTTGT
chr3	73109683	73109803	Hyper	1 -	ACTAAATATTAATAAAATTATTTTTACTAAAAAAATCATAAATATATTACAAAAAAAATTTTTTCTATAAAATATATAATACAACACAACAAACCGTAAATTAAATATTACTTTATAAAA
chr3	73109683	73109803	Hyper	1 +	ATTGAATATTAGTAAAGTTATTTTTATTGGGAAGATTATAAATATATTATAAAAAAGGTTTTTTTTGTGGGATATATGATGTAATATAATAAGTCGTGGATTGGGTGTTGTTTTGTAAGG
chr7	14734305	14734425	Hypo	1 -	TTCATTTCTAAAAATAACTTACACATAATATCTTAAAATATTCTCTACAATATTTATTTACAATACATTTACCTCTCTATAATATAATAACAATATCAATACTTACCTAAAAAAACTATT
chr7	14734305	14734425	Hypo	1 +	TTTGTTTTTAAAGATGATTTGTATGTAATGTTTTAAAATGTTTTTTGTAGTGTTTGTTTGTAATATATTTATTTTTTTGTGGTATGGTGGTAATATTAGTATTTATTTAGAAGGGTTGTT
chr7	14734300	14734420	Hypo	1 -	TAAACTTCATTTCTAAAAATAACTTACACATAATATCTTAAAATATTCTCTACAATATTTAATTTACCTCTCTATAATATAATAACAATATCAATACTTACCTAAAAAAACTATTATAAA

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chr7	14734300	14734420	Hypo	1 +	TAAATTTTGTTTTTAAAGATGATTTGTATGTAATGTTTTAAAATGTTTTTTGTAGTGTTTGATTTATTTTTTTGTGGTATGGTGGTAATATTAGTATTTATTTAGAAGGGTTGTTGTGAG
chr7	14734305	14734425	Hyper	1 -	TTCGTTTCTAAAAATAACTTACACGTAATATCTTAAAATATTCTCTACAATATTTATTTACAATACATTTACCTCTCTATAATATAATAACAATATCAATACTTACCTAAAAAAACTATT
chr7	14734305	14734425	Hyper	1 +	TTCGTTTTTAAAGATGATTTGTACGTAATGTTTTAAAATGTTTTTTGTAGTGTTTGTTTGTAATATATTTATTTTTTTGTGGTATGGTGGTAATATTAGTATTTATTTAGAAGGGTTGTT
chr7	14734300	14734420	Hyper	1 -	TAAACTTCGTTTCTAAAAATAACTTACACGTAATATCTTAAAATATTCTCTACAATATTTAATTTACCTCTCTATAATATAATAACAATATCAATACTTACCTAAAAAAACTATTATAAA
chr7	14734300	14734420	Hyper	1 +	TAAATTTCGTTTTTAAAGATGATTTGTACGTAATGTTTTAAAATGTTTTTTGTAGTGTTTGATTTATTTTTTTGTGGTATGGTGGTAATATTAGTATTTATTTAGAAGGGTTGTTGTGAG
chr15	83550936	83551056	Hypo	1 -	CAATATCTATAAACAAAAACAACCCAAAATTTAAATCCTTAAATCCCCCCTTAACAATAACCCTACTATCCTTCTATAAACACAATACACCTACCACAAACCTAAAAAAAAAATAACCAA
chr15	83550936	83551056	Hypo	1 +	TAGTGTTTATAAATAGGGATAATTTAAGGTTTGGGTTTTTGGGTTTTTTTTTGGTAGTGATTTTGTTGTTTTTTTGTGGATATAGTATATTTGTTATAGGTTTGGAGAGAAGGTGGTTAG
chr15	83550941	83551061	Hypo	1 -	TCTATAAACAAAAACAACCCAAAATTTAAATCCTTAAATCCCCCCTTAACAATAACCCTACCCCTACCTACTATCCTTCTATAAACACAATACACCTACCACAAACCTAAAAAAAAAATA
chr15	83550941	83551061	Hypo	1 +	TTTATAAATAGGGATAATTTAAGGTTTGGGTTTTTGGGTTTTTTTTTGGTAGTGATTTTGTTTTTGTTTGTTGTTTTTTTGTGGATATAGTATATTTGTTATAGGTTTGGAGAGAAGGTG
chr15	83550936	83551056	Hyper	1 -	CAATATCTATAAACAAAAACAACCCAAAATTTAAATCCTTAAATCCCCCCTTAACAATAACCCTACTATCCTTCTATAAACACAATACACCTACCACAAACCTAAAAAAAAAATAACCAA
chr15	83550936	83551056	Hyper	1 +	TAGTGTTTATAAATAGGGATAATTTAAGGTTTGGGTTTTTGGGTTTTTTTTTGGTAGTGATTTTGTTGTTTTTTTGTGGATATAGTATATTTGTTATAGGTTTGGAGAGAAGGTGGTTAG
chr15	83550941	83551061	Hyper	1 -	TCTATAAACAAAAACAACCCAAAATTTAAATCCTTAAATCCCCCCTTAACAATAACCCTACCCCTACCTACTATCCTTCTATAAACACAATACACCTACCACAAACCTAAAAAAAAAATA
chr15	83550941	83551061	Hyper	1 +	TTTATAAATAGGGATAATTTAAGGTTTGGGTTTTTGGGTTTTTTTTTGGTAGTGATTTTGTTTTTGTTTGTTGTTTTTTTGTGGATATAGTATATTTGTTATAGGTTTGGAGAGAAGGTG
chr15	40533600	40533720	Hypo	1 -	AAACTTAAAAACCATATAACCCCCAAACCTAATAAACCTAAAACTCAACCCCACAAAAACTCATCTAACTAAAATTAAAACCTTTAAAACAAACAAAAAATCCCCTCTACAAACAAACTT
chr15	40533600	40533720	Hypo	1 +	GAGTTTAGGAGTTGTGTGGTTTTTAGGTTTGGTGGGTTTGGGATTTAGTTTTATGGGAGTTTATTTAGTTGGGGTTGAGGTTTTTGGGGTAAGTAAGGAGTTTTTTTTGTAGGTAGGTTT
chr15	40533596	40533716	Hypo	1 -	AAATAAACTTAAAAACCATATAACCCCCAAACCTAATAAACCTAAAACTCAACCCCACAAAAACTAAAATTAAAACCTTTAAAACAAACAAAAAATCCCCTCTACAAACAAACTTCCCTA
chr15	40533596	40533716	Hypo	1 +	GGATGAGTTTAGGAGTTGTGTGGTTTTTAGGTTTGGTGGGTTTGGGATTTAGTTTTATGGGAGTTGGGGTTGAGGTTTTTGGGGTAAGTAAGGAGTTTTTTTTGTAGGTAGGTTTTTTTG
chr15	40533600	40533720	Hyper	1 -	AAACTTAAAAACCGTATAACCCCCAAACCTAATAAACCTAAAACTCAACCCCACGAAAACTCATCTAACTAAAATTAAAACCTTTAAAACAAACAAAAAATCCCCTCTACAAACAAACTT
chr15	40533600	40533720	Hyper	1 +	GAGTTTAGGAGTCGTGTGGTTTTTAGGTTTGGTGGGTTTGGGATTTAGTTTTACGGGAGTTTATTTAGTTGGGGTTGAGGTTTTTGGGGTAAGTAAGGAGTTTTTTTTGTAGGTAGGTTT
chr15	40533596	40533716	Hyper	1 -	AAATAAACTTAAAAACCGTATAACCCCCAAACCTAATAAACCTAAAACTCAACCCCACGAAAACTAAAATTAAAACCTTTAAAACAAACAAAAAATCCCCTCTACAAACAAACTTCCCTA
chr15	40533596	40533716	Hyper	1 +	GGATGAGTTTAGGAGTCGTGTGGTTTTTAGGTTTGGTGGGTTTGGGATTTAGTTTTACGGGAGTTGGGGTTGAGGTTTTTGGGGTAAGTAAGGAGTTTTTTTTGTAGGTAGGTTTTTTTG
chr10	79180376	79180496	Hypo	1 -	TATTTCATAACATCTAACACTAAACCTAATAAATTTATAACAAATATACAACAAACAATCAATATTTATTAATATATCAAAATCCAAAAACACAAACCCAATAACCAAAAAAAAAAAATTC
chr10	79180376	79180496	Hypo	1 +	TATTTTATAGTATTTAGTATTGGGTTTGGTGGATTTGTAGTAGGTGTGTAATAAATAATTAATATTTATTAATATATTAGGGTTTAAGAGTATAGATTTAGTAATTAGGAAGGAAGGTTT
chr10	79180371	79180491	Hypo	1 -	TCTTATATTTCATAACATCTAACACTAAACCTAATAAATTTATAACAAATATACAACAAACTATTAATATATCAAAATCCAAAAACACAAACCCAATAACCAAAAAAAAAAAATTCTTTAA
chr10	79180371	79180491	Hypo	1 +	TTTTATATTTTATAGTATTTAGTATTGGGTTTGGTGGATTTGTAGTAGGTGTGTAATAAATTATTAATATATTAGGGTTTAAGAGTATAGATTTAGTAATTAGGAAGGAAGGTTTTTTAG
chr10	79180376	79180496	Hyper	1 -	TATTTCATAACATCTAACACTAAACCTAATAAATTTATAACAAATATACAACAAACAATCAATATTTATTAATATATCAAAATCCAAAAACACAAACCCAATAACCAAAAAAAAAAAATTC
chr10	79180376	79180496	Hyper	1 +	TATTTTATAGTATTTAGTATTGGGTTTGGTGGATTTGTAGTAGGTGTGTAATAAATAATTAATATTTATTAATATATTAGGGTTTAAGAGTATAGATTTAGTAATTAGGAAGGAAGGTTT
chr10	79180371	79180491	Hyper	1 -	TCTTATATTTCATAACATCTAACACTAAACCTAATAAATTTATAACAAATATACAACAAACTATTAATATATCAAAATCCAAAAACACAAACCCAATAACCAAAAAAAAAAAATTCTTTAA
chr10	79180371	79180491	Hyper	1 +	TTTTATATTTTATAGTATTTAGTATTGGGTTTGGTGGATTTGTAGTAGGTGTGTAATAAATTATTAATATATTAGGGTTTAAGAGTATAGATTTAGTAATTAGGAAGGAAGGTTTTTTAG
chr14	29561302	29561422	Hypo	1 -	CTTAATAAAACATAAATACAAAACATATTATTTTAAACATTTCCAATTACCAAATTTATAAAACCATAAATATATAACATTTTAAATATAAACCTAATATTCATTACTAACTTAAATTTC
chr14	29561302	29561422	Hypo	1 +	TTTAATAAAATATAAATATAGGATATGTTATTTTGAATATTTTTAGTTGTTAAATTTATGGAATTATAGGTATATAATATTTTAAGTGTAAATTTAATATTTATTATTGATTTAAATTTT
chr14	29561298	29561418	Hypo	1 -	TAAACTTAATAAAACATAAATACAAAACATATTATTTTAAACATTTCCAATTACCAAATTTATAAATATATAACATTTTAAATATAAACCTAATATTCATTACTAACTTAAATTTCTTTC
chr14	29561298	29561418	Hypo	1 +	TAGGTTTAATAAAATATAAATATAGGATATGTTATTTTGAATATTTTTAGTTGTTAAATTTATAGGTATATAATATTTTAAGTGTAAATTTAATATTTATTATTGATTTAAATTTTTTTT
chr14	29561302	29561422	Hyper	1 -	CTTAATAAAACATAAATACAAAACATATTATTTTAAACATTTCCAATTACCAAATTTATAAAACCATAAATATATAACATTTTAAATATAAACCTAATATTCATTACTAACTTAAATTTC
chr14	29561302	29561422	Hyper	1 +	TTTAATAAAATATAAATATAGGATATGTTATTTTGAATATTTTTAGTTGTTAAATTTATGGAATTATAGGTATATAATATTTTAAGTGTAAATTTAATATTTATTATTGATTTAAATTTT
chr14	29561298	29561418	Hyper	1 -	TAAACTTAATAAAACATAAATACAAAACATATTATTTTAAACATTTCCAATTACCAAATTTATAAATATATAACATTTTAAATATAAACCTAATATTCATTACTAACTTAAATTTCTTTC
chr14	29561298	29561418	Hyper	1 +	TAGGTTTAATAAAATATAAATATAGGATATGTTATTTTGAATATTTTTAGTTGTTAAATTTATAGGTATATAATATTTTAAGTGTAAATTTAATATTTATTATTGATTTAAATTTTTTTT
chr5	109011030	109011150	Hypo	1 -	TAAATATCTATAAACTAACTAAATAACCTAAAAACCTTACTATTTTTATAAATAATTTTAAAAAAACACCAAACAAATCTAATTTTAAAAAAAACTAACCAATTATTAACAAAATCATTA
chr5	109011030	109011150	Hypo	1 +	TAAATGTTTATGGATTGATTGAATGGTTTAAGAGTTTTATTATTTTTATAAATGATTTTAAAAAAGTATTAAATAAATTTGGTTTTAGGAGAGGTTAGTTAGTTGTTAATAAGGTTATTA
chr5	109011034	109011154	Hypo	1 -	TATCTATAAACTAACTAAATAACCTAAAAACCTTACTATTTTTATAAATAATTTTAAATTAACTAAAAACACCAAACAAATCTAATTTTAAAAAAAACTAACCAATTATTAACAAAATCA
chr5	109011034	109011154	Hypo	1 +	TGTTTATGGATTGATTGAATGGTTTAAGAGTTTTATTATTTTTATAAATGATTTTAAATTAGTTAAAAGTATTAAATAAATTTGGTTTTAGGAGAGGTTAGTTAGTTGTTAATAAGGTTA
chr5	109011030	109011150	Hyper	1 -	TAAATATCTATAAACTAACTAAATAACCTAAAAACCTTACTATTTTTATAAATAATTTTAAAAAAACACCAAACAAATCTAATTTTAAAAAAAACTAACCAATTATTAACAAAATCATTA
chr5	109011030	109011150	Hyper	1 +	TAAATGTTTATGGATTGATTGAATGGTTTAAGAGTTTTATTATTTTTATAAATGATTTTAAAAAAGTATTAAATAAATTTGGTTTTAGGAGAGGTTAGTTAGTTGTTAATAAGGTTATTA
chr5	109011034	109011154	Hyper	1 -	TATCTATAAACTAACTAAATAACCTAAAAACCTTACTATTTTTATAAATAATTTTAAATTAACTAAAAACACCAAACAAATCTAATTTTAAAAAAAACTAACCAATTATTAACAAAATCA
chr5	109011034	109011154	Hyper	1 +	TGTTTATGGATTGATTGAATGGTTTAAGAGTTTTATTATTTTTATAAATGATTTTAAATTAGTTAAAAGTATTAAATAAATTTGGTTTTAGGAGAGGTTAGTTAGTTGTTAATAAGGTTA
chr10	1618983	1619103	Hypo	1 -	CAAAACACATTAAAAATAAAAAATAAAAAAAAACATATAAACTTCATCAAATACAATTCAATCTACTATATAACCCTAAAACAACAACTACTTACCCTCTCCAAACCTCAATTCCCCTTC
chr10	1618983	1619103	Hypo	1 +	TAAAATATATTGAAGGTGGAGGATGAGGAGGGGTGTGTGGATTTTGTTAAGTGTGATTTAGTTTGTTGTGTGGTTTTGGGGTAGTAGTTGTTTGTTTTTTTTAAGTTTTAGTTTTTTTTT
chr10	1618987	1619107	Hypo	1 -	ACACATTAAAAATAAAAAATAAAAAAAAACATATAAACTTCATCAAATACAATTCAAACCCCATTCTACTATATAACCCTAAAACAACAACTACTTACCCTCTCCAAACCTCAATTCCCC
chr10	1618987	1619107	Hypo	1 +	ATATATTGAAGGTGGAGGATGAGGAGGGGTGTGTGGATTTTGTTAAGTGTGATTTAGGTTTTATTTTGTTGTGTGGTTTTGGGGTAGTAGTTGTTTGTTTTTTTTAAGTTTTAGTTTTTT
chr10	1618983	1619103	Hyper	1 -	CAAAACACATTAAAAATAAAAAATAAAAAAAAACGTATAAACTTCGTCAAATACGATTCAATCTACTATATAACCCTAAAACAACAACTACTTACCCTCTCCAAACCTCAATTCCCCTTC
chr10	1618983	1619103	Hyper	1 +	TAAAATATATTGAAGGTGGAGGATGAGGAGGGGCGTGTGGATTTCGTTAAGTGCGATTTAGTTTGTTGTGTGGTTTTGGGGTAGTAGTTGTTTGTTTTTTTTAAGTTTTAGTTTTTTTTT
chr10	1618987	1619107	Hyper	1 -	ACACATTAAAAATAAAAAATAAAAAAAAACGTATAAACTTCGTCAAATACGATTCAAACCCCATTCTACTATATAACCCTAAAACAACAACTACTTACCCTCTCCAAACCTCAATTCCCC

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chr10	1618987	1619107	Hyper	1 +	ATATATTGAAGGTGGAGGATGAGGAGGGGCGTGTGGATTTCGTTAAGTGCGATTTAGGTTTTATTTTGTTGTGTGGTTTTGGGGTAGTAGTTGTTTGTTTTTTTTAAGTTTTAGTTTTTT
chr13	114082139	114082259	Hypo	1 -	AACTAAACAACCCCTAAACTACATCCAAACAAATATCCATACCTACACCCCCATAAAAAACTATAAACCAAACCCCCATAAAACATTTCAAAACACATACCTATACCTTACAAAAAAAAT
chr13	114082139	114082259	Hypo	1 +	GGTTGAGTAGTTTTTGAGTTGTGTTTAGGTGGGTATTTGTGTTTGTATTTTTGTGGAAAGTTGTGAATTAGATTTTTATAAGGTGTTTTAGAATATGTGTTTGTGTTTTGTAGGGGAAAT
chr13	114082135	114082255	Hypo	1 -	TAATAACTAAACAACCCCTAAACTACATCCAAACAAATATCCATACCTACACCCCCATAAAAACCAAACCCCCATAAAACATTTCAAAACACATACCTATACCTTACAAAAAAAAATAAAA
chr13	114082135	114082255	Hypo	1 +	TGGTGGTTGAGTAGTTTTTGAGTTGTGTTTAGGTGGGTATTTGTGTTTGTATTTTTGTGGAAATTAGATTTTTATAAGGTGTTTTAGAATATGTGTTTGTGTTTTGTAGGGGAAATAAAG
chr13	114082139	114082259	Hyper	1 -	AACTAAACAACCCCTAAACTACGTCCAAACGAATATCCGTACCTACACCCCCGTAAAAAACTATAAACCAAACCCCCATAAAACGTTTCAAAACACGTACCTATACCTTACAAAAAAAAT
chr13	114082139	114082259	Hyper	1 +	GGTTGAGTAGTTTTTGAGTTGCGTTTAGGCGGGTATTCGTGTTTGTATTTTCGTGGAAAGTTGTGAATTAGATTTTTATAAGGCGTTTTAGAATACGTGTTTGTGTTTTGTAGGGGAAAT
chr13	114082135	114082255	Hyper	1 -	TAATAACTAAACAACCCCTAAACTACGTCCAAACGAATATCCGTACCTACACCCCCGTAAAAACCAAACCCCCATAAAACGTTTCAAAACACGTACCTATACCTTACAAAAAAAAATAAAA
chr13	114082135	114082255	Hyper	1 +	TGGTGGTTGAGTAGTTTTTGAGTTGCGTTTAGGCGGGTATTCGTGTTTGTATTTTCGTGGAAATTAGATTTTTATAAGGCGTTTTAGAATACGTGTTTGTGTTTTGTAGGGGAAATAAAG
chr14	86471232	86471352	Hypo	1 -	TTACACCAAAAAAAAAAATAATAAAAAATAAATCTAAAATCTTCATTCAAAACATACTTAACTACAATTAACAACTATAAAAAAACTCCCTTTAAAAATCACAATCATTCTTCATAAAAAA
chr14	86471232	86471352	Hypo	1 +	TTGTATTAGAGAGGAAATAATGAAAAGTGAATTTAAAATTTTTATTTAAAGTATATTTGATTATAGTTGATAATTATAAAGAAGTTTTTTTTGAAAATTGTAATTATTTTTTATGAGGGA
chr14	86471227	86471347	Hypo	1 -	ACATATTACACCAAAAAAAAAAATAATAAAAAATAAATCTAAAATCTTCATTCAAAACATACTTAACAACTATAAAAAAACTCCCTTTAAAAATCACAATCATTCTTCATAAAAAACATCA
chr14	86471227	86471347	Hypo	1 +	ATATGTTGTATTAGAGAGGAAATAATGAAAAGTGAATTTAAAATTTTTATTTAAAGTATATTTGATAATTATAAAGAAGTTTTTTTTGAAAATTGTAATTATTTTTTATGAGGGATGTTA
chr14	86471232	86471352	Hyper	1 -	TTACACCAAAAAAAAAAATAATAAAAAATAAATCTAAAATCTTCATTCAAAACATACTTAACTACAATTAACAACTATAAAAAAACTCCCTTTAAAAATCGCAATCATTCTTCATAAAAAA
chr14	86471232	86471352	Hyper	1 +	TTGTATTAGAGAGGAAATAATGAAAAGTGAATTTAAAATTTTTATTTAAAGTATATTTGATTATAGTTGATAATTATAAAGAAGTTTTTTTTGAAAATCGTAATTATTTTTTATGAGGGA
chr14	86471227	86471347	Hyper	1 -	ACATATTACACCAAAAAAAAAAATAATAAAAAATAAATCTAAAATCTTCATTCAAAACATACTTAACAACTATAAAAAAACTCCCTTTAAAAATCGCAATCATTCTTCATAAAAAACGTCA
chr14	86471227	86471347	Hyper	1 +	ATATGTTGTATTAGAGAGGAAATAATGAAAAGTGAATTTAAAATTTTTATTTAAAGTATATTTGATAATTATAAAGAAGTTTTTTTTGAAAATCGTAATTATTTTTTATGAGGGACGTTA
chr2	10697650	10697770	Hypo	1 -	AAAAAATAATAAAAATAAATAAATAATAAACTATAACAACAAAAAAAACTATAAAATCCACACAACAAAAATATCAAAAAAAATATAAATTCCCTTAAACTACCCTTACCAAACACTACA
chr2	10697650	10697770	Hypo	1 +	AAAAAATAATAAAAATAAATAAATGATAAGTTATGATAGTAGGGAGAGTTGTGAGATTTATATAATAGAGGTGTTAGAGAGGGTGTGGGTTTTTTTAGGTTGTTTTTGTTAGGTATTATA
chr2	10697646	10697766	Hypo	1 -	CACAAAAAAAATAATAAAAATAAATAAATAATAAACTATAACAACAAAAAAAACTATAAAATCAAAAATATCAAAAAAAATATAAATTCCCTTAAACTACCCTTACCAAACACTACAAAAT
chr2	10697646	10697766	Hypo	1 +	TGTAAAAAAAATAATAAAAATAAATAAATGATAAGTTATGATAGTAGGGAGAGTTGTGAGATTAGAGGTGTTAGAGAGGGTGTGGGTTTTTTTAGGTTGTTTTTGTTAGGTATTATAAGGT
chr2	10697650	10697770	Hyper	1 -	AAAAAATAATAAAAATAAATAAATAATAAACTATAACAACAAAAAAAACTATAAAATCCACACAACAAAAATATCAAAAAAAATATAAATTCCCTTAAACTACCCTTACCAAACACTACA
chr2	10697650	10697770	Hyper	1 +	AAAAAATAATAAAAATAAATAAATGATAAGTTATGATAGTAGGGAGAGTTGTGAGATTTATATAATAGAGGTGTTAGAGAGGGTGTGGGTTTTTTTAGGTTGTTTTTGTTAGGTATTATA
chr2	10697646	10697766	Hyper	1 -	CGCAAAAAAAATAATAAAAATAAATAAATAATAAACTATAACAACAAAAAAAACTATAAAATCAAAAATATCAAAAAAAATATAAATTCCCTTAAACTACCCTTACCAAACACTACAAAAT
chr2	10697646	10697766	Hyper	1 +	CGTAAAAAAAATAATAAAAATAAATAAATGATAAGTTATGATAGTAGGGAGAGTTGTGAGATTAGAGGTGTTAGAGAGGGTGTGGGTTTTTTTAGGTTGTTTTTGTTAGGTATTATAAGGT
chr2	10525427	10525547	Hypo	1 -	AACTCCAAAACCCCAATACTTCCTACTAATAACTTCAACTCCCAATCACTTATCAAAAATACAAAACTAAACCCCTAAAAATTATATAAAACAAAACCCAAAAATCTACATTCTAACAAA
chr2	10525427	10525547	Hypo	1 +	GATTTTAGGATTTTAGTGTTTTTTATTGGTGGTTTTAGTTTTTGGTTATTTGTTGGGAATGTAGGGTTGAATTTTTGGAGGTTGTGTGGGATAGGGTTTAGGAATTTGTATTTTAGTAAG
chr2	10525431	10525551	Hypo	1 -	CCAAAACCCCAATACTTCCTACTAATAACTTCAACTCCCAATCACTTATCAAAAATACAATATCCAAAACTAAACCCCTAAAAATTATATAAAACAAAACCCAAAAATCTACATTCTAAC
chr2	10525431	10525551	Hypo	1 +	TTAGGATTTTAGTGTTTTTTATTGGTGGTTTTAGTTTTTGGTTATTTGTTGGGAATGTAGTGTTTAGGGTTGAATTTTTGGAGGTTGTGTGGGATAGGGTTTAGGAATTTGTATTTTAGT
chr2	10525427	10525547	Hyper	1 -	AACTCCAAAACCCCAATACTTCCTACTAATAACTTCAACTCCCGATCACTTATCGAAAATACAAAACTAAACCCCTAAAAATTATATAAAACAAAACCCAAAAATCTACATTCTAACAAA
chr2	10525427	10525547	Hyper	1 +	GATTTTAGGATTTTAGTGTTTTTTATTGGTGGTTTTAGTTTTCGGTTATTTGTCGGGAATGTAGGGTTGAATTTTTGGAGGTTGTGTGGGATAGGGTTTAGGAATTTGTATTTTAGTAAG
chr2	10525431	10525551	Hyper	1 -	CCAAAACCCCAATACTTCCTACTAATAACTTCAACTCCCGATCACTTATCGAAAATACAATATCCAAAACTAAACCCCTAAAAATTATATAAAACAAAACCCAAAAATCTACATTCTAAC
chr2	10525431	10525551	Hyper	1 +	TTAGGATTTTAGTGTTTTTTATTGGTGGTTTTAGTTTTCGGTTATTTGTCGGGAATGTAGTGTTTAGGGTTGAATTTTTGGAGGTTGTGTGGGATAGGGTTTAGGAATTTGTATTTTAGT
chr10	96311942	96312062	Hypo	1 -	AATTTAATTAAAAAAACAAAATACTAAAAAATCTACCACTAAACTTTTTAAATCAAAAATTTATATAAAATAAAACATATCTACTATCTAATCTATAAAATTTAAAATCTTTTAATTCT
chr10	96311942	96312062	Hypo	1 +	GGTTTAGTTGAGAAAATAAAATATTAAAAAATTTGTTATTAGATTTTTTAAGTTAAGAGTTTGTATAAAATGAAATATATTTATTATTTAATTTATAAAATTTAGAATTTTTTTAATTTT
chr10	96311947	96312067	Hypo	1 -	AATTAAAAAAACAAAATACTAAAAAATCTACCACTAAACTTTTTAAATCAAAAATTTATCTAAACTATATAAAATAAAACATATCTACTATCTAATCTATAAAATTTAAAATCTTTTTAA
chr10	96311947	96312067	Hypo	1 +	AGTTGAGAAAATAAAATATTAAAAAATTTGTTATTAGATTTTTTAAGTTAAGAGTTTGTTTAGATTGTATAAAATGAAATATATTTATTATTTAATTTATAAAATTTAGAATTTTTTTAA
chr10	96311942	96312062	Hyper	1 -	AATTTAATTAAAAAAACAAAATACTAAAAAATCTACCACTAAACTTTTTAAATCAAAAATTTATATAAAATAAAACATATCTACTATCTAATCTATAAAATTTAAAATCTTTTAATTCT
chr10	96311942	96312062	Hyper	1 +	GGTTTAGTTGAGAAAATAAAATATTAAAAAATTTGTTATTAGATTTTTTAAGTTAAGAGTTTGTATAAAATGAAATATATTTATTATTTAATTTATAAAATTTAGAATTTTTTTAATTTT
chr10	96311947	96312067	Hyper	1 -	AATTAAAAAAACAAAATACTAAAAAATCTACCACTAAACTTTTTAAATCAAAAATTTATCTAAACTATATAAAATAAAACATATCTACTATCTAATCTATAAAATTTAAAATCTTTTTAA
chr10	96311947	96312067	Hyper	1 +	AGTTGAGAAAATAAAATATTAAAAAATTTGTTATTAGATTTTTTAAGTTAAGAGTTTGTTTAGATTGTATAAAATGAAATATATTTATTATTTAATTTATAAAATTTAGAATTTTTTTAA
chr3	184381773	184381893	Hypo	1 -	ACCACACAAAACAAACAAACTAAAAAAATACAAACTCCCTCCATAAACTCTCTCTACATAAAAAACAAACAAACAAAACCCTAAAAAATAACCAAAAAAAAACAACTCCATAATTAAAAA
chr3	184381773	184381893	Hypo	1 +	GTTATGTAAAGTAGGTGGGTTGAAAAGATGTAGGTTTTTTTTATGGGTTTTTTTTGTATGGGAAGTAGGTGGGTGGGGTTTTGGAAGGTGGTTAGGGAAGAGTAGTTTTATGATTAAAGG
chr3	184381769	184381889	Hypo	1 -	ACAAACCACACAAAACAAACAAACTAAAAAAATACAAACTCCCTCCATAAACTCTCTCTACCAAACAAACAAAACCCTAAAAAATAACCAAAAAAAAACAACTCCATAATTAAAAAATTA
chr3	184381769	184381889	Hypo	1 +	GTAAGTTATGTAAAGTAGGTGGGTTGAAAAGATGTAGGTTTTTTTTATGGGTTTTTTTTGTTAGGTGGGTGGGGTTTTGGAAGGTGGTTAGGGAAGAGTAGTTTTATGATTAAAGGGTTG
chr3	184381773	184381893	Hyper	1 -	ACCACGCAAAACAAACGAACTAAAAAAATACAAACTCCCTCCATAAACTCTCTCTACATAAAAAACAAACGAACGAAACCCTAAAAAATAACCAAAAAAAAACAACTCCATAATTAAAAA
chr3	184381773	184381893	Hyper	1 +	GTTACGTAAAGTAGGCGGGTTGAAAAGATGTAGGTTTTTTTTATGGGTTTTTTTTGTATGGGAAGTAGGCGGGCGGGGTTTTGGAAGGTGGTTAGGGAAGAGTAGTTTTATGATTAAAGG
chr3	184381769	184381889	Hyper	1 -	ACAAACCACGCAAAACAAACGAACTAAAAAAATACAAACTCCCTCCATAAACTCTCTCTACCAAACGAACGAAACCCTAAAAAATAACCAAAAAAAAACAACTCCATAATTAAAAAATTA
chr3	184381769	184381889	Hyper	1 +	GTAAGTTACGTAAAGTAGGCGGGTTGAAAAGATGTAGGTTTTTTTTATGGGTTTTTTTTGTTAGGCGGGCGGGGTTTTGGAAGGTGGTTAGGGAAGAGTAGTTTTATGATTAAAGGGTTG
chr3	66316530	66316650	Hypo	1 -	ACTCAAAATAACAACATTTTATTAAAAATTTAATTAAAATCTTCTACATTATACATATTTATTCAAAATTAATTTTAATTAAAATATTACTTTTATACAAATTCTATAATAAAATAAAAA
chr3	66316530	66316650	Hypo	1 +	ATTTAAAATGGTAGTGTTTTGTTGGAGATTTAATTGAGGTTTTTGTATTATGTATATTTATTTAGAGTTGATTTTAGTTGAGGTATTGTTTTTGTATAGATTTTGTGATAGAATGAGAG
chr3	66316535	66316655	Hypo	1 -	AAATAACAACATTTTATTAAAAATTTAATTAAAATCTTCTACATTATACATATTTATAAAAAACCCTTCAAAATTAATTTTAATTAAAATATTACTTTTATACAAATTCTATAATAAAAT

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chr3	66316535	66316655	Hypo	1 +	AAATGGTAGTGTTTTGTTGGAGATTTAATTGAGGTTTTTTGTATTATGTATATTTATAAAAGATTTTTTAGAGTTGATTTTAGTTGAGGTATTGTTTTTGTATAGATTTTGTGATAGAAT
chr3	66316530	66316650	Hyper	1 -	ACTCAAAATAACAACGTTTTATTAAAAATTTAATTAAAATCTTCTACATTATACATATTTATTCAAAATTAATTTTAATTAAAATATTACTTTTATACAAATTCTATAATAAAATAAAAA
chr3	66316530	66316650	Hyper	1 +	ATTTAAAATGGTAGCGTTTTGTTGGAGATTTAATTGAGGTTTTTGTATTATGTATATTTATTTAGAGTTGATTTTAGTTGAGGTATTGTTTTTGTATAGATTTTGTGATAGAATGAGAG
chr3	66316535	66316655	Hyper	1 -	AAATAACAACGTTTTATTAAAAATTTAATTAAAATCTTCTACATTATACATATTTATAAAAAACCCTTCAAAATTAATTTTAATTAAAATATTACTTTTATACAAATTCTATAATAAAAT
chr3	66316535	66316655	Hyper	1 +	AAATGGTAGCGTTTTGTTGGAGATTTAATTGAGGTTTTTTGTATTATGTATATTTATAAAAGATTTTTTAGAGTTGATTTTAGTTGAGGTATTGTTTTTGTATAGATTTTGTGATAGAAT
chr2	21482832	21482952	Hypo	1 -	CTTAAACTACCATTCTCTAAATCTTTTCTATCCCAATCCATCTCTCCTCATCAATCTACACTAAAAATATCCCATAATTATTTCTTCTTAATTATCCAAACTACTTTCTAAAAAAAAAAT
chr2	21482832	21482952	Hypo	1 +	TTTGGGTTGTTATTTTTTGGATTTTTTTTGTTTTAGTTTATTTTTTTTTGTTAGTTTGTATTGAGGGTGTTTTATAATTATTTTTTTTTGGTTATTTAGATTATTTTTTGAAAAGGAAAT
chr2	21482828	21482948	Hypo	1 -	CTCTCTTAAACTACCATTCTCTAAATCTTTTCTATCCCAATCCATCTCTCCTCATCAATCTAATATCCCATAATTATTTCTTCTTAATTATCCAAACTACTTTCTAAAAAAAAAAATACAA
chr2	21482828	21482948	Hypo	1 +	TTTTTTTGGGTTGTTATTTTTTGGATTTTTTTTGTTTTAGTTTATTTTTTTTTGTTAGTTTGGTGTTTTATAATTATTTTTTTTTGGTTATTTAGATTATTTTTTGAAAAGGAAATATGA
chr2	21482832	21482952	Hyper	1 -	CTTAAACTACCATTCTCTAAATCTTTTCTATCCCAATCCATCTCTCCTCGTCAATCTACACTAAAAATATCCCATAATTATTTCTTCTTAATTATCCAAACTACTTTCTAAAAAAAAAAT
chr2	21482832	21482952	Hyper	1 +	TTTGGGTTGTTATTTTTTGGATTTTTTTTGTTTTAGTTTATTTTTTTTCGTTAGTTTGTATTGAGGGTGTTTTATAATTATTTTTTTTTGGTTATTTAGATTATTTTTTGAAAAGGAAAT
chr2	21482828	21482948	Hyper	1 -	CTCTCTTAAACTACCATTCTCTAAATCTTTTCTATCCCAATCCATCTCTCCTCGTCAATCTAATATCCCATAATTATTTCTTCTTAATTATCCAAACTACTTTCTAAAAAAAAAAATACGA
chr2	21482828	21482948	Hyper	1 +	TTTTTTTGGGTTGTTATTTTTTGGATTTTTTTTGTTTTAGTTTATTTTTTTTCGTTAGTTTGGTGTTTTATAATTATTTTTTTTTGGTTATTTAGATTATTTTTTGAAAAGGAAATACGA
chr13	36192607	36192727	Hypo	1 -	ACATATATATAATTAATTAAAATTATTTATTTTATAAATACAATACCAAAAATTATATTTCACTATAAAATACAAAATTTACTCTCACTAAAAAACCTAAAAAAACAATACAAACACATT
chr13	36192607	36192727	Hypo	1 +	ATATGTATGTAATTGGTTAGAATTGTTTGTTTTGTAAATATAGTGTTAAGAGTTATGTTTTGTTGTGAAATATAAAGTTTATTTTTATTAGAAAATTTGGAAAAGTGATATAGATATATT
chr13	36192611	36192731	Hypo	1 -	ATATATAATTAATTAAAATTATTTATTTTATAAATACAATACCAAAAATTATATTTCACTAAAAAACTATAAAATACAAAATTTACTCTCACTAAAAAACCTAAAAAAACAATACAAACA
chr13	36192611	36192731	Hypo	1 +	GTATGTAATTGGTTAGAATTGTTTGTTTTGTAAATATAGTGTTAAGAGTTATGTTTTATTGAAGAGTTGTGAAATATAAAGTTTATTTTTATTAGAAAATTTGGAAAAGTGATATAGATA
chr13	36192607	36192727	Hyper	1 -	ACATATATATAATTAATTAAAATTATTTATTTTATAAATACAATACCAAAAATTATATTTCGCTATAAAATACAAAATTTACTCTCACTAAAAAACCTAAAAAAACGATACAAACACATT
chr13	36192607	36192727	Hyper	1 +	ATATGTATGTAATTGGTTAGAATTGTTTGTTTTGTAAATATAGTGTTAAGAGTTATGTTTCGTTGTGAAATATAAAGTTTATTTTTATTAGAAAATTTGGAAAAGCGATATAGATATATT
chr13	36192611	36192731	Hyper	1 -	ATATATAATTAATTAAAATTATTTATTTTATAAATACAATACCAAAAATTATATTTCACTAAAAAACTATAAAATACAAAATTTACTCTCACTAAAAAACCTAAAAAAACGATACAAACA
chr13	36192611	36192731	Hyper	1 +	GTATGTAATTGGTTAGAATTGTTTGTTTTGTAAATATAGTGTTAAGAGTTATGTTTTATTGAAGAGTTGTGAAATATAAAGTTTATTTTTATTAGAAAATTTGGAAAAGCGATATAGATA
chr6	113527531	113527651	Hypo	1 -	ACATTATAATATTAATCCCAAAAAACATTACTAATTTATCATTTTCTTAATTATCTTCTTATTATATATTATATCATTAAAACAAAAATTTCTTCATCAATACAAAAAATAATACAAAAA
chr6	113527531	113527651	Hypo	1 +	GTATTATGGTGTTGGTTTTGGAAAATATTATTAATTTGTTATTTTTTTGATTATTTTTTTATTGTATGTTGTATTATTGAGATAGGGATTTTTTTATTAATATAAAAGATGATGTGGAGA
chr6	113527526	113527646	Hypo	1 -	AAAAAACATTATAATATTAATCCCAAAAAACATTACTAATTTATCATTTTCTTAATTATCTTATTATATATCATTAAAACAAAAATTTCTTCATCAATACAAAAAATAATACAAAAACAACT
chr6	113527526	113527646	Hypo	1 +	GAAAGGTATTATGGTGTTGGTTTTGGAAAATATTATTAATTTGTTATTTTTTTGATTATTTTGTTGTATTATTGAGATAGGGATTTTTTTATTAATATAAAAGATGATGTGGAGATAATT
chr6	113527531	113527651	Hyper	1 -	ACATTATAATATTAATCCCGAAAAACATTACTAATTTATCATTTTCTTAATTATCTTCTTATTATATATTATATCATTAAAACAAAAATTTCTTCATCAATACAAAAAATAATACGAAAA
chr6	113527531	113527651	Hyper	1 +	GTATTATGGTGTTGGTTTCGGAAAATATTATTAATTTGTTATTTTTTTGATTATTTTTTTATTGTATGTTGTATTATTGAGATAGGGATTTTTTTATTAATATAAAAGATGATGCGGAGA
chr6	113527526	113527646	Hyper	1 -	AAAAAACATTATAATATTAATCCCGAAAAACATTACTAATTTATCATTTTCTTAATTATCTTATTATATATCATTAAAACAAAAATTTCTTCATCAATACAAAAAATAATACGAAAACAACT
chr6	113527526	113527646	Hyper	1 +	GAAAGGTATTATGGTGTTGGTTTCGGAAAATATTATTAATTTGTTATTTTTTTGATTATTTTGTTGTATTATTGAGATAGGGATTTTTTTATTAATATAAAAGATGATGCGGAGATAATT
chr8	41595659	41595779	Hypo	1 -	AAAATACCCACCTACACAAAAACAAAATTACAAATTCATTAAAAACAACAAAATAAAAAATATTTAAATTCTAAACCCATAAACTAAAATATACTCCCAACTCTCTCAACAAATACCCTC
chr8	41595659	41595779	Hypo	1 +	GAGGTGTTTATTTGTATAAAGATAGAGTTGTAAGTTTATTAAAAATAGTAAGATGAGAAGTGTTTAGATTTTAAATTTATAAGTTAAAATATGTTTTTAGTTTTTTTAGTAAGTGTTTTT
chr8	41595663	41595783	Hypo	1 -	TACCCACCTACACAAAAACAAAATTACAAATTCATTAAAAACAACAAAATAAAAAATATATCTAAATTTAAATTCTAAACCCATAAACTAAAATATACTCCCAACTCTCTCAACAAATAC
chr8	41595663	41595783	Hypo	1 +	TGTTTATTTGTATAAAGATAGAGTTGTAAGTTTATTAAAAATAGTAAGATGAGAAGTGTATTTGAGTTTAGATTTTAAATTTATAAGTTAAAATATGTTTTTAGTTTTTTTAGTAAGTGT
chr8	41595659	41595779	Hyper	1 -	AAAATACCCACCTACACAAAAACAAAATTACAAATTCATTAAAAACAACAAAATAAAAAATATTTAAATTCTAAACCCATAAACTAAAATATACTCCCAACTCTCTCAACAAATACCCTC
chr8	41595659	41595779	Hyper	1 +	GAGGTGTTTATTTGTATAAAGATAGAGTTGTAAGTTTATTAAAAATAGTAAGATGAGAAGTGTTTAGATTTTAAATTTATAAGTTAAAATATGTTTTTAGTTTTTTTAGTAAGTGTTTTT
chr8	41595663	41595783	Hyper	1 -	TACCCACCTACACAAAAACAAAATTACAAATTCATTAAAAACAACAAAATAAAAAATATATCTAAATTTAAATTCTAAACCCATAAACTAAAATATACTCCCAACTCTCTCAACAAATAC
chr8	41595663	41595783	Hyper	1 +	TGTTTATTTGTATAAAGATAGAGTTGTAAGTTTATTAAAAATAGTAAGATGAGAAGTGTATTTGAGTTTAGATTTTAAATTTATAAGTTAAAATATGTTTTTAGTTTTTTTAGTAAGTGT
chr8	136954473	136954593	Hypo	2 -	TAAAAAAAATCCCAACAATACACATTTCAAAAATATAAAATAATCAAACTTACAAAAACCTAAAAAACAATTAAAAAAAATATAAAAAAACATAAATAAAAAACCTAAAATTATAAAACA
chr8	136954473	136954593	Hypo	1 +	TAAAGGGGATTTTAGTAGTATATATTTTGAGGGTATGAAATAGTTAGGTTTATAGAGGTTTGAGGAGTAATTGAAGGAAGTATGGAGGGGTATGAGTAGAAAGTTTGAGGTTGTGGGGTA
chr8	136954477	136954597	Hypo	1 -	AAAAATCCCAACAATACACATTTCAAAAATATAAAATAATCAAACTTACAAAAACCTAATTAATAAAAAAACAATTAAAAAAAATATAAAAAAACATAAATAAAAAACCTAAAATTATAA
chr8	136954477	136954597	Hypo	1 +	GGGGATTTTAGTAGTATATATTTTGAGGGTATGAAATAGTTAGGTTTATAGAGGTTTGATTAATGGAGGAGTAATTGAAGGAAGTATGGAGGGGTATGAGTAGAAAGTTTGAGGTTGTGG
chr8	136954473	136954593	Hyper	2 -	TAAAAAAAATCCCAACAATACACATTTCGAAAATATAAAATAATCAAACTTACAAAAACCTAAAAAACAATTAAAAAAAATATAAAAAAACATAAATAAAAAACCTAAAATTATAAAACA
chr8	136954473	136954593	Hyper	1 +	TAAAGGGGATTTTAGTAGTATATATTTCGAGGGTATGAAATAGTTAGGTTTATAGAGGTTTGAGGAGTAATTGAAGGAAGTATGGAGGGGTATGAGTAGAAAGTTTGAGGTTGTGGGGTA
chr8	136954477	136954597	Hyper	1 -	AAAAATCCCAACAATACACATTTCGAAAATATAAAATAATCAAACTTACAAAAACCTAATTAATAAAAAAACAATTAAAAAAAATATAAAAAAACATAAATAAAAAACCTAAAATTATAA
chr8	136954477	136954597	Hyper	1 +	GGGGATTTTAGTAGTATATATTTCGAGGGTATGAAATAGTTAGGTTTATAGAGGTTTGATTAATGGAGGAGTAATTGAAGGAAGTATGGAGGGGTATGAGTAGAAAGTTTGAGGTTGTGG
chr1	244163276	244163396	Hypo	1 -	ATACCACTCAACCAATTAATAAAAAATCAAAAACCAATTTTCATTTTCTAACTATAATAATCTATTTAATTTTTTTCTAATTAAATTAAATCAAACAATTCAAAAAAAAAAAATAAATATA
chr1	244163276	244163396	Hypo	1 +	ATGTTATTTAGTTAATTAGTAGGAGATTAAAGATTAGTTTTTATTTTTTGATTATGATGATTTGTTTGGTTTTTTTTTAATTAGATTGGGTTAAGTAGTTTAGAAAGAAGGGTGAATGTA
chr1	244163272	244163392	Hypo	1 -	TATAATACCACTCAACCAATTAATAAAAAATCAAAAACCAATTTTCATTTTCTAACTATAATTAATTTTTTTCTAATTAAATTAAATCAAACAATTCAAAAAAAAAAAATAAATATAAAAT
chr1	244163272	244163392	Hypo	1 +	TATGATGTTATTTAGTTAATTAGTAGGAGATTAAAGATTAGTTTTTATTTTTTGATTATGATTGGTTTTTTTTTAATTAGATTGGGTTAAGTAGTTTAGAAAGAAGGGTGAATGTAGAGT
chr1	244163276	244163396	Hyper	1 -	ATACCACTCAACCAATTAATAAAAAATCAAAAACCAATTTTCATTTTCTAACTATAATAATCTATTTAATTTTTTTCTAATTAAATTAAATCAAACAATTCAAAAAAAAAAAATAAATATA
chr1	244163276	244163396	Hyper	1 +	ATGTTATTTAGTTAATTAGTAGGAGATTAAAGATTAGTTTTTATTTTTTGATTATGATGATTTGTTTGGTTTTTTTTTAATTAGATTGGGTTAAGTAGTTTAGAAAGAAGGGTGAATGTA
chr1	244163272	244163392	Hyper	1 -	TATAATACCACTCAACCAATTAATAAAAAATCAAAAACCAATTTTCATTTTCTAACTATAATTAATTTTTTTCTAATTAAATTAAATCAAACAATTCAAAAAAAAAAAATAAATATAAAAT

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chr1	244163272	244163392	Hyper	1 +	TATGATGTTATTTAGTTAATTAGTAGGAGATTAAAGATTAGTTTTTATTTTTTGATTATGATTGGTTTTTTTTTAATTAGATTGGGTTAAGTAGTTTAGAAAGAAGGGTGAATGTAGAGT
chrX	12668508	12668628	Hypo	1 -	TCTATTTTCTTCATCAATCTATCCACAAAATCTAAAACAATCTTCATTACATAATAAACACTTATCAAATATCTATTTAATAAATTCCAACAATCTTTAAAATTAAAATATAAATAAAAA
chrX	12668508	12668628	Hypo	1 +	TTTGTTTTTTTTATTGGTTTATTTATAAAGTTTAGAATAGTTTTTGTTGTATAGTAGGTATTTGTTAAATATTTGTTTAATGAATTTTAATGGTTTTTAAAGTTGAAGTGTAGGTGAAGA
chrX	12668505	12668625	Hypo	2 -	TTTTCTATTTTCTTCATCAATCTATCCACAAAATCTAAAACAATCTTCATTACATAATAAACAAATATCTATTTAATAAATTCCAACAATCTTTAAAATTAAAATATAAATAAAAATAAA
chrX	12668505	12668625	Hypo	2 +	TTTTTTGTTTTTTTTATTGGTTTATTTATAAAGTTTAGAATAGTTTTTGTTGTATAGTAGGTAAATATTTGTTTAATGAATTTTAATGGTTTTTAAAGTTGAAGTGTAGGTGAAGATAAG
chrX	12668508	12668628	Hyper	1 -	TCTATTTTCTTCATCGATCTATCCACAAAATCTAAAACAATCTTCGTTACATAATAAACACTTATCAAATATCTATTTAATAAATTCCAACGATCTTTAAAATTAAAATATAAATAAAAA
chrX	12668508	12668628	Hyper	1 +	TTTGTTTTTTTTATCGGTTTATTTATAAAGTTTAGAATAGTTTTCGTTGTATAGTAGGTATTTGTTAAATATTTGTTTAATGAATTTTAACGGTTTTTAAAGTTGAAGTGTAGGTGAAGA
chrX	12668505	12668625	Hyper	2 -	TTTTCTATTTTCTTCATCGATCTATCCACAAAATCTAAAACAATCTTCGTTACATAATAAACAAATATCTATTTAATAAATTCCAACGATCTTTAAAATTAAAATATAAATAAAAATAAA
chrX	12668505	12668625	Hyper	2 +	TTTTTTGTTTTTTTTATCGGTTTATTTATAAAGTTTAGAATAGTTTTCGTTGTATAGTAGGTAAATATTTGTTTAATGAATTTTAACGGTTTTTAAAGTTGAAGTGTAGGTGAAGATAAG
chr5	157234061	157234181	Hypo	1 -	TTAAAATAAATAATTTAATTTATAAATATTCTAAAATATAATATTTAAAATTCTCCTTTAAACTACTAATACAATTTACCTCAAACTAAACTATAACAACTTATACTTAAATATAAACCA
chr5	157234061	157234181	Hypo	1 +	TTAGAGTAGGTGGTTTAATTTATAAATATTTTGGAATATAATGTTTAAAATTTTTTTTTAAATTATGATTATTGTTGATGTAATTTATTTTAGATTGAATTATAGTAATTTGTATTTAAATATAAATTA
chr5	157234066	157234186	Hypo	1 -	ATAAATAATTTAATTTATAAATATTCTAAAATATAATATTTAAAATTCTCCTTTAAACTATAACTACTACTAATACAATTTACCTCAAACTAAACTATAACAACTTATACTTAAATATAA
chr5	157234066	157234186	Hypo	1 +	GTAGGTGGTTTAATTTATAAATATTTTGGAATATAATGTTTAAAATTTTTTTTTAAATTATGATTATTGTTGATGTAATTTATTTTAGATTGAATTATAGTAATTTGTATTTAAATATAA
chr5	157234061	157234181	Hyper	1 -	TTAAAATAAATAATTTAATTTATAAATATTCTAAAATATAATATTTAAAATTCTCCTTTAAACTACTAATACAATTTACCTCAAACTAAACTATAACAACTTATACTTAAATATAAACCA
chr5	157234061	157234181	Hyper	1 +	TTAGAGTAGGTGGTTTAATTTATAAATATTTTGGAATATAATGTTTAAAATTTTTTTTTAAATTATGATTATTGTTGATGTAATTTATTTTAGATTGAATTATAGTAATTTGTATTTAAATATAAATTA
chr5	157234066	157234186	Hyper	1 -	ATAAATAATTTAATTTATAAATATTCTAAAATATAATATTTAAAATTCTCCTTTAAACTATAACTACTACTAATACAATTTACCTCAAACTAAACTATAACAACTTATACTTAAATATAA
chr5	157234066	157234186	Hyper	1 +	GTAGGTGGTTTAATTTATAAATATTTTGGAATATAATGTTTAAAATTTTTTTTTAAATTATGATTATTGTTGATGTAATTTATTTTAGATTGAATTATAGTAATTTGTATTTAAATATAA
chr9	127489342	127489462	Hypo	1 -	ATACTAAATCATTTTTAAATAAACTCTTAATTAATAAACCTATATTTTTTAATACCTCCTATATTATCCATTCATCTAAAATAAAAACTCTTTTTTACACTACAAAACTACAACATATAT
chr9	127489342	127489462	Hypo	2 +	ATGTTGAATTATTTTAAATGGGTTTTTGATTAATAGATTTGTATTTTTTAGTGTTTTTATTGTTAAAATGAAAGTTTTTTTTTGTATTGTAAAATTATAATATATGTTATTT
chr9	127489338	127489458	Hypo	1 -	CTAAATACTAAATCATTTTTAAATAAACTCTTAATTAATAAACCTATATTTTTTAATACCTCCATTCATCTAAAATAAAAACTCTTTTTTACACTACAAAACTACAACATATATCATCT
chr9	127489338	127489458	Hyper	1 +	TTAAATGTTGAATTATTTTAAATGGGTTTTTGATTAATAGATTTGTATTTTTTAGTGTTTTTATTGTTAAAATGAAAGTTTTTTTTTGTATTGTAAAATTATAATATATGTTATTT
chr9	127489342	127489462	Hyper	1 -	ATACTAAATCATTTTTAAATAAACTCTTAATTAATAAACCTATATTTTTTAATACCTCCTATATTATCCATTCGTCTAAAATAAAAACTCTTTTTTACACTACAAAACTACAACATATAT
chr9	127489342	127489462	Hyper	2 +	ATGTTGAATTATTTTAAATGGGTTTTTGATTAATAGATTTGTATTTTTTAGTGTTTTTATTGTTAAAATGAAAGTTTTTTTTTGTATTGTAAAATTATAATATATGTTATTT
chr9	127489338	127489458	Hyper	1 -	CTAAATACTAAATCATTTTTAAATAAACTCTTAATTAATAAACCTATATTTTTTAATACCTCCATTCGTCTAAAATAAAAACTCTTTTTTACACTACAAAACTACAACATATATCATCT
chr9	127489338	127489458	Hyper	1 +	TTAAATGTTGAATTATTTTAAATGGGTTTTTGATTAATAGATTTGTATTTTTTAGTGTTTTTATTCGTTTAAAATGAAAGTTTTTTTTTGTATTGTAAAATTATAATATATGTTATTT
chr5	57250944	57251064	Hypo	1 -	AAAATTTTTACAAATCAAATAATTTTACCTCTTTCCAAAAAAAAAAACTCAAAAATATAATATATACATTTCAAAAAACCATAACTAATTCATCAAAATTATCAAAACTTATAACATTT
chr5	57250944	57251064	Hypo	1 +	AAAATTTTTATAAGTTAAATAGTTTTGTTTTTTTTTAGAGAAAGAGATTTTAGGAGTATGATATGTGTATTTTAAAAGGTTATGGTTAATTTATTAAGGTTATTAAAGTTTATGGTATTT
chr5	57250941	57251061	Hypo	1 -	TTAAAAATTTTTACAAATCAAATAATTTTACCTCTTTCCAAAAAAAAAAACTCAAAAATATACATTTCAAAAAACCATAACTAATTCATCAAAATTATCAAAACTTATAACATTTCTAA
chr5	57250941	57251061	Hypo	1 +	TTGAAAATTTTTATAAGTTAAATAGTTTTGTTTTTTTTTAGAGAAAGAGATTTTAGGAGTATGTATTTTAAAAGGTTATGGTTAATTTATTAAGGTTATTAAAGTTTATGGTATTTTTGA
chr5	57250944	57251064	Hyper	1 -	AAAATTTTTACAAATCAAATAATTTTACCTCTTTCCAAAAAAAAAAACTCAAAAATATACATTTCAAAAAACCATAACTAATTCATCAAAATTATCAAAACTTATAACATTT
chr5	57250944	57251064	Hyper	1 +	AAAATTTTTATAAGTTAAATAGTTTTGTTTTTTTTTAGAGAAAGAGATTTTAGGAGTATGATATGTGTATTTTAAAAGGTTATGGTTAATTTATTAAGGTTATTAAAGTTTATGGTATTTT
chr5	57250941	57251061	Hyper	1 -	TTAAAAATTTTTACAAATCAAATAATTTTACCTCTTTCCAAAAAAAAAAACTCAAAAATATACATTTCAAAAAACCATAACTAATTCATCAAAATTATCAAAACTTATAACATTTCTAA
chr5	57250941	57251061	Hyper	1 +	TTGAAAATTTTTATAAGTTAAATAGTTTTGTTTTTTTTTAGAGAAAGAGATTTTAGGAGTATGTATTTTAAAAGGTTATGGTTAATTTATTAAGGTTATTAAAGTTTATGGTATTTTTGA
chr5	5235526	5235646	Hypo	1 -	AAACATATACATAATACAATAAAACTCATCAAAAAAATAATAAAAAACACAAAATAAATCCTACATAAAAATTAAATCAATATATTTTTAAATTAAAAATTACAATAATTATTACTATAA
chr5	5235526	5235646	Hypo	1 +	AAGTGTGTGTATAATATAATGAAATTTATTAAAGAAGTGATAAAAAATATAAAGTAGATTTTGTATGGAAATTGAATTAGTATGTTTTGAATTAAGAATTATAGTAGTTGTTGTTATAA
chr5	5235522	5235642	Hypo	1 -	TAAAAACATATACATAATACAATAAACTCATCAAAAAATAATAAAAACACAAAATAATAAAATTAAATCAATATATTTTTAAATTAAAAATTACAATAATTATTACTATAAACAA
chr5	5235522	5235642	Hypo	1 +	TAGAAAGTGTGTGTATAATATAATGAAATTTATTAAAGAAGTGATAAAAAATATAAAGTAGTGGAAATTGAATTAGTATGTTTTGAATTAAGAATTATAGTAGTTGTTGTTATAAGTAA
chr5	5235526	5235646	Hyper	1 -	AAACGTATACATAATACAATAAAACTCATCAAAAAAATAATAAAAAACACAAAATAAATCCTACATAAAAATTAAATCAATATATTTTTAAATTAAAAATTACAATAATTATTACTATAA
chr5	5235526	5235646	Hyper	1 +	AAGCGTGTGTATAATATAATGAAATTTATTAAAGAAGTGATAAAAAATATAAAGTAGATTTTGTATGGAAATTGAATTAGTATGTTTTGAATTAAGAATTATAGTAGTTGTTGTTATAA
chr5	5235522	5235642	Hyper	1 -	TAAAAAACGTATACATAATACAATAAAACTCATCAAAAAAATAATAAAAAACACAAAATAATAAAATTAAATCAATATATTTTTAAATTAAAAATTACAATAATTATTACTATAAACAA
chr5	5235522	5235642	Hyper	1 +	TAGAAAGCGTGTGTATAATATAATGAAATTTATTAAAGAAGTGATAAAAAATATAAAGTAGTGGAAATTGAATTAGTATGTTTTGAATTAAGAATTATAGTAGTTGTTGTTATAAGTAA
chr3	118017636	118017756	Hypo	1 -	TATTACTTTTACTAATTAAATCTAATAATTTATAAATAATATTAAAATTTCTATATACATTTCTTCCATTCTAATCTTTTTAAAATTTATATAAAATACACTAATATATTTATTTATATT
chr3	118017636	118017756	Hypo	1 +	TGTTGTTTTTATTAATTAAGTTTAATAGTTTATAGATAGTATTGGAATTTTTATGTGTATTTTTTTTATTTTAATTTTTTTAAAATTTATATAGGATATATTAATATATTTATTTATGTT
chr3	118017632	118017752	Hypo	1 -	CTAATATTACTTTTACTAATTAAATCTAATAATTTATAAATAATATTAAAATTTCTATATACATTCTAATCTTTTTAAAATTTATATAAAATACACTAATATATTTATTTATATTTATTT
chr3	118017632	118017752	Hyper	1 +	TTGATGTTGTTTTTATTAATTAAGTTTAATAGTTTATAGATAGTATTGGAATTTTTATGTGTATTTTAATTTTTTTAAAATTTATATAGGATATATTAATATATTTATTTATGTTTATTT
chr3	118017636	118017756	Hyper	1 -	TATTACTTTTACTAATTAAATCTAATAATTTATAAATAATATTAAAATTTCTATATACATTTCTTCCATTCTAATCTTTTTAAAATTTATATAAAATACACTAATATATTTATTTATATT
chr3	118017636	118017756	Hyper	1 +	TGTTGTTTTTATTAATTAAGTTTAATAGTTTATAGATAGTATTGGAATTTTTATGTGTATTTTTTTTATTTTAATTTTTTTAAAATTTATATAGGATATATTAATATATTTATTTATGTT
chr3	118017632	118017752	Hyper	1 -	CTAATATTACTTTTACTAATTAAATCTAATAATTTATAAATAATATTAAAATTTCTATATACATTCTAATCTTTTTAAAATTTATATAAAATACACTAATATATTTATTTATATTTATTT
chr3	118017632	118017752	Hyper	1 +	TTGATGTTGTTTTTATTAATTAAGTTTAATAGTTTATAGATAGTATTGGAATTTTTATGTGTATTTTAATTTTTTTAAAATTTATATAGGATATATTAATATATTTATTTATGTTTATTT

서 열 목 록 (첨부)



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