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(71) Demandeur/Applicant:
SINGLERA GENOMICS, INC., US
(72) Inventeurs/Inventors:
GORE, ATHURVA J., US;
GOLE, JEFFREY A., US;
LIU, RUI, US
(74) Agent: CHATTERJEE, ALAKANANDA

(54) Titre : COMPOSITIONS ET METHODES D'EVALUATION ET DE TRAITEMENT D'UN CANCER OU D'UNE NEOPLASIE

(54) Title: COMPOSITIONS AND METHODS FOR CANCER OR NEOPLASIA ASSESSMENT

Figure 4

Python Code:

```
from sklearn import linear_model

filter_matrix = data_matrix >= 0.1
methylation_sums = data_matrix[filter_matrix].sum()

clf = linear_model.LogisticRegression(C=5)

# Fit to training set
X = np.array([methylation_sums.loc[healthy_plasma[:10]]+cancer_plasma[:6]+cancer_plasma[:6]].values]).T
y = [0]*len(healthy_plasma[:10]) + [1]*len(cancer_plasma[:6]+cancer_plasma[:6])
clf.fit(X, y)

# Predict on test set
print "Sample\tP(Cancer)\tCall"
for i, methylation_sum in enumerate(methylation_sums.loc[healthy_plasma[10:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Healthy Sample %s\t%s\t%s" % (i+1, probability_cancer, call)

for i, methylation_sum in enumerate(methylation_sums.loc[cancer_plasma[6:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Cancer Sample %s\t%s\t%s" % (i+1, probability_cancer, call)
```

Code Results:

Sample	P(Cancer)	Call
Healthy Sample 1	0.48991419229	Healthy
Healthy Sample 2	0.492222997727	Healthy
Healthy Sample 3	0.362647868404	Healthy
Healthy Sample 4	0.291369093105	Healthy
Healthy Sample 5	0.656083361246	Cancer
Healthy Sample 6	0.444135105722	Healthy
Healthy Sample 7	0.404667407834	Healthy
Healthy Sample 8	0.674615468424	Cancer
Healthy Sample 9	0.248090390611	Healthy
Healthy Sample 10	0.270796583956	Healthy
Cancer Sample 1	0.860345212988	Cancer
Cancer Sample 2	0.613015848532	Cancer
Cancer Sample 3	0.682635445446	Cancer
Cancer Sample 4	0.59569270394	Cancer
Cancer Sample 5	0.562215154423	Cancer
Cancer Sample 6	0.475035178964	Healthy
Cancer Sample 7	0.966873847323	Cancer

(57) Abrégé/Abstract:

The present disclosure relates to certain compositions, kits, devices, systems and methods, e.g., certain compositions, kits, devices, systems and methods for assessing cancer or neoplasia in a subject. In particular aspects, provided herein are compositions, kits, devices, systems and methods for assessing cancer or neoplasia in a subject based on assessing methylation status of selected target polynucleotide sequences, e.g., target genomic DNA sequences, from the subject.

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COMPOSITIONS AND METHODS FOR CANCER OR NEOPLASIA ASSESSMENT

RELATED APPLICATIONS

[0001] The present application claims priority to U.S. provisional patent application No. 62/656,820, filed on April 12, 2018, the disclosure of which is incorporated by reference in its entirety for all purposes. In some aspects, the present disclosure relates to U.S. provisional application serial No. 62/487,422, filed on April 19, 2017 and U.S. provisional application serial No. 62/487,423, filed on April 19, 2017, the contents of which are incorporated by reference in their entireties for all purposes.

TECHNICAL FIELD

[0002] The present disclosure relates to certain compositions, kits, devices, systems and methods, *e.g.*, compositions, kits, devices, systems and methods for assessing cancer or neoplasia in a subject. In particular aspects, provided herein are compositions, kits, devices, systems and methods for assessing cancer or neoplasia in a subject based on assessing methylation status of selected target polynucleotide sequences, *e.g.*, target genomic DNA sequences, from the subject.

BACKGROUND

[0003] Various reagents, kits and methods for assessing cancer or neoplasia in a subject are known. However, there is a need for improved compositions, kits, devices, systems and methods for assessing cancer or neoplasia in a subject, *e.g.*, tests with better sensitivity, specificity and/or providing more information. The present disclosure addresses this and other related needs.

BRIEF SUMMARY

[0004] The summary is not intended to be used to limit the scope of the claimed subject matter. Other features, details, utilities, and advantages of the claimed subject matter will be apparent from the detailed description including those aspects disclosed in the accompanying drawings and in the appended claims.

[0005] In one aspect, provided herein is a panel of isolated polynucleotides comprising, consisting of, or consisting essentially of at least two isolated polynucleotides, each of said

isolated polynucleotides having a polynucleotide sequence of any of Target 1 to Target 1849 listed in Table 1, or a complementary sequence thereof. A kit, device, system or an article of manufacture that comprises any of the above panels is also provided.

[0006] In another aspect, a kit, device, system or an article of manufacture that is configured for assessing methylation status of at least two of Target 1 to Target 1849 listed in Table 1 is provided. In some embodiments, the present kit, device, system or an article of manufacture is configured for assessing cancer or neoplasia in a subject.

[0007] In still another aspect, provided herein is a method for assessing cancer or neoplasia in a subject, which method comprises: a) providing a sample from a subject containing at least two target polynucleotides of said subject, said at least two target polynucleotides having polynucleotide sequences of at least two of Target 1 to Target 1849 listed in Table 1, or a complementary sequence thereof; b) assessing methylation status of said at least two target polynucleotides; and c) assessing cancer or neoplasia in said subject based on assessment of methylation status of said at least two target polynucleotides. In some embodiments, the present methods are used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of cancer or neoplasia in a subject.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Figure 1 illustrates an exemplary support vector machines analysis. Image of Figure 1 is taken from Wikipedia: https://en.wikipedia.org/wiki/Support_vector_machine), and does not represent any DNA methylation status analysis or cancer assessment.

[0009] Figure 2 illustrates detection of cancer in colon tissue as described in Example 1.

[0010] Figure 3a and 3b illustrate detection of lung cancer in plasma as described in Example 2.

[0011] Figure 4 illustrates detection of pan-cancer in plasma as described in Example 3.

[0012] Figure 5 (Table 1) shows exemplary target regions and primers.

[0013] Figure 6 illustrates steps for constructing a single-stranded polynucleotide library and performing sequencing analysis using the library, according to one aspect of the present disclosure.

[0014] Figure 7 illustrates a construct comprising a target molecule for sequencing, according to one aspect of the present disclosure.

DETAILED DESCRIPTION

[0015] Numerous specific details are set forth in the following description in order to provide a thorough understanding of the present disclosure. These details are provided for the purpose of example and the claimed subject matter may be practiced according to the claims without some or all of these specific details. It is to be understood that other embodiments can be used and structural changes can be made without departing from the scope of the claimed subject matter. It should be understood that the various features and functionality described in one or more of the individual embodiments are not limited in their applicability to the particular embodiment with which they are described. They instead can, be applied, alone or in some combination, to one or more of the other embodiments of the disclosure, whether or not such embodiments are described, and whether or not such features are presented as being a part of a described embodiment. For the purpose of clarity, technical material that is known in the technical fields related to the claimed subject matter has not been described in detail so that the claimed subject matter is not unnecessarily obscured.

[0016] All publications, including patent documents, scientific articles and databases, referred to in this application are incorporated by reference in their entireties for all purposes to the same extent as if each individual publication were individually incorporated by reference. Citation of the publications or documents is not intended as an admission that any of them is pertinent prior art, nor does it constitute any admission as to the contents or date of these publications or documents.

[0017] All headings are for the convenience of the reader and should not be used to limit the meaning of the text that follows the heading, unless so specified.

[0018] The practice of the provided embodiments will employ, unless otherwise indicated, conventional techniques and descriptions of organic chemistry, polymer technology, molecular biology (including recombinant techniques), cell biology, biochemistry, and sequencing technology, which are within the skill of those who practice in the art. Such conventional techniques include polypeptide and protein synthesis and modification, polynucleotide synthesis and modification, polymer array synthesis, hybridization and ligation of polynucleotides, detection of hybridization, and nucleotide sequencing. Specific illustrations of suitable techniques can be had by reference to the examples herein. However, other equivalent conventional procedures can, of course, also be used. Such conventional techniques and

descriptions can be found in standard laboratory manuals such as Green, *et al.*, Eds., *Genome Analysis: A Laboratory Manual Series* (Vols. I-IV) (1999); Weiner, Gabriel, Stephens, Eds., *Genetic Variation: A Laboratory Manual* (2007); Dieffenbach, Dveksler, Eds., *PCR Primer: A Laboratory Manual* (2003); Bowtell and Sambrook, *DNA Microarrays: A Molecular Cloning Manual* (2003); Mount, *Bioinformatics: Sequence and Genome Analysis* (2004); Sambrook and Russell, *Condensed Protocols from Molecular Cloning: A Laboratory Manual* (2006); and Sambrook and Russell, *Molecular Cloning: A Laboratory Manual* (2002) (all from Cold Spring Harbor Laboratory Press); Ausubel *et al.* eds., *Current Protocols in Molecular Biology* (1987); T. Brown ed., *Essential Molecular Biology* (1991), IRL Press; Goeddel ed., *Gene Expression Technology* (1991), Academic Press; A. Bothwell *et al.* eds., *Methods for Cloning and Analysis of Eukaryotic Genes* (1990), Bartlett Publ.; M. Kriegler, *Gene Transfer and Expression* (1990), Stockton Press; R. Wu *et al.* eds., *Recombinant DNA Methodology* (1989), Academic Press; M. McPherson *et al.*, *PCR: A Practical Approach* (1991), IRL Press at Oxford University Press; Stryer, *Biochemistry* (4th Ed.) (1995), W. H. Freeman, New York N.Y.; Gait, *Oligonucleotide Synthesis: A Practical Approach* (2002), IRL Press, London; Nelson and Cox, *Lehninger, Principles of Biochemistry* (2000) 3rd Ed., W. H. Freeman Pub., New York, N.Y.; Berg, *et al.*, *Biochemistry* (2002) 5th Ed., W. H. Freeman Pub., New York, N.Y., all of which are herein incorporated in their entireties by reference for all purposes.

A. Definitions

[0019] Unless defined otherwise, all technical and scientific terms used herein have the same meaning as is commonly understood by one of ordinary skill in the art to which the present disclosure belongs. If a definition set forth in this section is contrary to or otherwise inconsistent with a definition set forth in the patents, applications, published applications and other publications that are herein incorporated by reference, the definition set forth in this section prevails over the definition that is incorporated herein by reference.

[0020] As used herein, “a” or “an” means “at least one” or “one or more.” As used herein, the singular forms “a,” “an,” and “the” include the plural reference unless the context clearly dictates otherwise.

[0021] Throughout this disclosure, various aspects of the claimed subject matter are presented in a range format. It should be understood that the description in range format is

merely for convenience and brevity and should not be construed as an inflexible limitation on the scope of the claimed subject matter. Accordingly, the description of a range should be considered to have specifically disclosed all the possible sub-ranges as well as individual numerical values within that range. For example, where a range of values is provided, it is understood that each intervening value, between the upper and lower limit of that range and any other stated or intervening value in that stated range is encompassed within the claimed subject matter. The upper and lower limits of these smaller ranges may independently be included in the smaller ranges, and are also encompassed within the claimed subject matter, subject to any specifically excluded limit in the stated range. Where the stated range includes one or both of the limits, ranges excluding either or both of those included limits are also included in the claimed subject matter. This applies regardless of the breadth of the range.

[0022] Reference to “about” a value or parameter herein includes (and describes) variations that are directed to that value or parameter per se. For example, description referring to “about X” includes description of “X”. Additionally, use of “about” preceding any series of numbers includes “about” each of the recited numbers in that series. For example, description referring to “about X, Y, or Z” is intended to describe “about X, about Y, or about Z.”

[0023] The term “average” as used herein refers to either a mean or a median, or any value used to approximate the mean or the median, unless the context clearly indicates otherwise.

[0024] A “subject” as used herein refers to an organism, or a part or component of the organism, to which the provided compositions, methods, kits, devices, and systems can be administered or applied. For example, the subject can be a mammal or a cell, a tissue, an organ, or a part of the mammal. As used herein, “mammal” refers to any of the mammalian class of species, preferably human (including humans, human subjects, or human patients). Subjects and mammals include, but are not limited to, farm animals, sport animals, pets, primates, horses, dogs, cats, and rodents such as mice and rats.

[0025] As used herein the term “sample” refers to anything which may contain a target molecule for which analysis is desired, including a biological sample. As used herein, a “biological sample” can refer to any sample obtained from a living or viral (or prion) source or other source of macromolecules and biomolecules, and includes any cell type or tissue of a subject from which nucleic acid, protein and/or other macromolecule can be obtained. The biological sample can be a sample obtained directly from a biological source or a sample that is

processed. For example, isolated nucleic acids that are amplified constitute a biological sample. Biological samples include, but are not limited to, body fluids, such as blood, plasma, serum, cerebrospinal fluid, synovial fluid, urine, sweat, semen, stool, sputum, tears, mucus, amniotic fluid or the like, an effusion, a bone marrow sample, ascitic fluid, pelvic wash fluid, pleural fluid, spinal fluid, lymph, ocular fluid, extract of nasal, throat or genital swab, cell suspension from digested tissue, or extract of fecal material, and tissue and organ samples from humans, animals, *e.g.*, non-human mammals, and plants and processed samples derived therefrom.

[0026] The terms “polynucleotide,” “oligonucleotide,” “nucleic acid” and “nucleic acid molecule” are used interchangeably herein to refer to a polymeric form of nucleotides of any length, and comprise ribonucleotides, deoxyribonucleotides, and analogs or mixtures thereof. The terms include triple-, double- and single-stranded deoxyribonucleic acid (“DNA”), as well as triple-, double- and single-stranded ribonucleic acid (“RNA”). It also includes modified, for example by alkylation, and/or by capping, and unmodified forms of the polynucleotide. More particularly, the terms “polynucleotide,” “oligonucleotide,” “nucleic acid,” and “nucleic acid molecule” include polydeoxyribonucleotides (containing 2-deoxy-D-ribose), polyribonucleotides (containing D-ribose), including tRNA, rRNA, hRNA, and mRNA, whether spliced or unspliced, any other type of polynucleotide which is an N- or C-glycoside of a purine or pyrimidine base, and other polymers containing nonnucleotidic backbones, for example, polyamide (*e.g.*, peptide nucleic acids (“PNAs”)) and polymorpholino (commercially available from the Anti-Virals, Inc., Corvallis, OR, as Neugene) polymers, and other synthetic sequence-specific nucleic acid polymers providing that the polymers contain nucleobases in a configuration which allows for base pairing and base stacking, such as is found in DNA and RNA. Thus, these terms include, for example, 3'-deoxy-2',5'-DNA, oligodeoxyribonucleotide N3' to P5' phosphoramidates, 2'-O-alkyl-substituted RNA, hybrids between DNA and RNA or between PNAs and DNA or RNA, and also include known types of modifications, for example, labels, alkylation, “caps,” substitution of one or more of the nucleotides with an analog, inter-nucleotide modifications such as, for example, those with uncharged linkages (*e.g.*, methyl phosphonates, phosphotriesters, phosphoramidates, carbamates, *etc.*), with negatively charged linkages (*e.g.*, phosphorothioates, phosphorodithioates, *etc.*), and with positively charged linkages (*e.g.*, aminoalkylphosphoramidates, aminoalkylphosphotriesters), those containing pendant moieties, such as, for example, proteins (including enzymes (*e.g.* nucleases), toxins,

antibodies, signal peptides, poly-L-lysine, *etc.*), those with intercalators (*e.g.*, acridine, psoralen, *etc.*), those containing chelates (of, *e.g.*, metals, radioactive metals, boron, oxidative metals, *etc.*), those containing alkylators, those with modified linkages (*e.g.*, alpha anomeric nucleic acids, *etc.*), as well as unmodified forms of the polynucleotide or oligonucleotide. A nucleic acid generally will contain phosphodiester bonds, although in some cases nucleic acid analogs may be included that have alternative backbones such as phosphoramidite, phosphorodithioate, or methylphosphoramidite linkages; or peptide nucleic acid backbones and linkages. Other analog nucleic acids include those with bicyclic structures including locked nucleic acids, positive backbones, non-ionic backbones and non-ribose backbones. Modifications of the ribose-phosphate backbone may be done to increase the stability of the molecules; for example, PNA:DNA hybrids can exhibit higher stability in some environments. The terms “polynucleotide,” “oligonucleotide,” “nucleic acid” and “nucleic acid molecule” can comprise any suitable length, such as at least 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 100, 200, 300, 400, 500, 1,000, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000, 8,000, 9,000, 10,000, or more nucleotides.

[0027] It will be appreciated that, as used herein, the terms “nucleoside” and “nucleotide” include those moieties which contain not only the known purine and pyrimidine bases, but also other heterocyclic bases which have been modified. Such modifications include methylated purines or pyrimidines, acylated purines or pyrimidines, or other heterocycles. Modified nucleosides or nucleotides can also include modifications on the sugar moiety, *e.g.*, wherein one or more of the hydroxyl groups are replaced with halogen, aliphatic groups, or are functionalized as ethers, amines, or the like. The term “nucleotidic unit” is intended to encompass nucleosides and nucleotides.

[0028] The terms “complementary” and “substantially complementary” include the hybridization or base pairing or the formation of a duplex between nucleotides or nucleic acids, for instance, between the two strands of a double-stranded DNA molecule or between an oligonucleotide primer and a primer binding site on a single-stranded nucleic acid. Complementary nucleotides are, generally, A and T (or A and U), or C and G. Two single-stranded RNA or DNA molecules are said to be substantially complementary when the nucleotides of one strand, optimally aligned and compared and with appropriate nucleotide insertions or deletions, pair with at least about 80% of the other strand, usually at least about 90% to about 95%, and even about 98% to about 100%. In one aspect, two complementary

sequences of nucleotides are capable of hybridizing, preferably with less than 25%, more preferably with less than 15%, even more preferably with less than 5%, most preferably with no mismatches between opposed nucleotides. Preferably the two molecules will hybridize under conditions of high stringency.

[0029] As used herein, for a reference sequence, the reverse complementary sequence is the complementary sequence of the reference sequence in the reverse order. For example, for 5'-ATCG-3', the complementary sequence is 3'-TAGC-5', and the reverse-complementary sequence is 5'-CGAT-3'.

[0030] "Hybridization" as used herein may refer to the process in which two single-stranded polynucleotides bind non-covalently to form a stable double-stranded polynucleotide. In one aspect, the resulting double-stranded polynucleotide can be a "hybrid" or "duplex."

"Hybridization conditions" typically include salt concentrations of approximately less than 1 M, often less than about 500 mM and may be less than about 200 mM. A "hybridization buffer" includes a buffered salt solution such as 5% SSPE, or other such buffers known in the art.

Hybridization temperatures can be as low as 5°C, but are typically greater than 22°C, and more typically greater than about 30°C, and typically in excess of 37°C. Hybridizations are often performed under stringent conditions, *i.e.*, conditions under which a sequence will hybridize to its target sequence but will not hybridize to other, non-complementary sequences. Stringent conditions are sequence-dependent and are different in different circumstances. For example, longer fragments may require higher hybridization temperatures for specific hybridization than short fragments. As other factors may affect the stringency of hybridization, including base composition and length of the complementary strands, presence of organic solvents, and the extent of base mismatching, the combination of parameters is more important than the absolute measure of any one parameter alone. Generally stringent conditions are selected to be about 5°C lower than the T_m for the specific sequence at a defined ionic strength and pH. The melting temperature T_m can be the temperature at which a population of double-stranded nucleic acid molecules becomes half dissociated into single strands. Several equations for calculating the T_m of nucleic acids are well known in the art. As indicated by standard references, a simple estimate of the T_m value may be calculated by the equation, $T_m = 81.5 + 0.41 (\% G + C)$, when a nucleic acid is in aqueous solution at 1 M NaCl (*see e.g.*, Anderson, M.L.M. and Young, B.D. 1985, Quantitative filter hybridization. In: Nucleic acid hybridization: a practical approach, 73–

111. B. D. Hames and S. J. Higgins (eds.). IRL Press Limited, Oxford.). Other references (*e.g.*, Allawi and SantaLucia, Jr., *Biochemistry*, 36:10581-94 (1997)) include alternative methods of computation which take structural and environmental, as well as sequence characteristics into account for the calculation of T_m .

[0031] In general, the stability of a hybrid is a function of the ion concentration and temperature. Typically, a hybridization reaction is performed under conditions of lower stringency, followed by washes of varying, but higher, stringency. Exemplary stringent conditions include a salt concentration of at least 0.01 M to no more than 1 M sodium ion concentration (or other salt) at a pH of about 7.0 to about 8.3 and a temperature of at least 25°C. For example, conditions of 5 × SSPE (750 mM NaCl, 50 mM sodium phosphate, 5 mM EDTA at pH 7.4) and a temperature of approximately 30°C are suitable for allele-specific hybridizations, though a suitable temperature depends on the length and/or GC content of the region hybridized. In one aspect, “stringency of hybridization” in determining percentage mismatch can be as follows: 1) high stringency: 0.1 × SSPE, 0.1% SDS, 65°C; 2) medium stringency: 0.2 × SSPE, 0.1% SDS, 50°C (also referred to as moderate stringency); and 3) low stringency: 1.0 × SSPE, 0.1% SDS, 50°C. It is understood that equivalent stringencies may be achieved using alternative buffers, salts and temperatures. For example, moderately stringent hybridization can refer to conditions that permit a nucleic acid molecule such as a probe to bind a complementary nucleic acid molecule. The hybridized nucleic acid molecules generally have at least 60% identity, including for example at least any of 70%, 75%, 80%, 85%, 90%, or 95% identity. Moderately stringent conditions can be conditions equivalent to hybridization in 50% formamide, 5 × Denhardt’s solution, 5x SSPE, 0.2% SDS at 42°C, followed by washing in 0.2 × SSPE, 0.2% SDS, at 42°C. High stringency conditions can be provided, for example, by hybridization in 50% formamide, 5 × Denhardt’s solution, 5 × SSPE, 0.2% SDS at 42°C, followed by washing in 0.1 × SSPE, and 0.1% SDS at 65°C. Low stringency hybridization can refer to conditions equivalent to hybridization in 10% formamide, 5 × Denhardt’s solution, 6 × SSPE, 0.2% SDS at 22°C, followed by washing in 1x SSPE, 0.2% SDS, at 37°C. Denhardt’s solution contains 1% Ficoll, 1% polyvinylpyrrolidone, and 1% bovine serum albumin (BSA). 20 × SSPE (sodium chloride, sodium phosphate, EDTA) contains 3 M sodium chloride, 0.2 M sodium phosphate, and 0.025 M EDTA. Other suitable moderate stringency and high stringency hybridization buffers and conditions are well known to those of skill in the art and are described,

for example, in Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual*, 2nd ed., Cold Spring Harbor Press, Plainview, N.Y. (1989); and Ausubel *et al.*, *Short Protocols in Molecular Biology*, 4th ed., John Wiley & Sons (1999).

[0032] Alternatively, substantial complementarity exists when an RNA or DNA strand will hybridize under selective hybridization conditions to its complement. Typically, selective hybridization will occur when there is at least about 65% complementary over a stretch of at least 14 to 25 nucleotides, preferably at least about 75%, more preferably at least about 90% complementary. *See* M. Kanehisa, *Nucleic Acids Res.* 12:203 (1984).

[0033] A “primer” used herein can be an oligonucleotide, either natural or synthetic, that is capable, upon forming a duplex with a polynucleotide template, of acting as a point of initiation of nucleic acid synthesis and being extended from its 3' end along the template so that an extended duplex is formed. The sequence of nucleotides added during the extension process is determined by the sequence of the template polynucleotide. Primers usually are extended by a polymerase, for example, a DNA polymerase.

[0034] “Ligation” may refer to the formation of a covalent bond or linkage between the termini of two or more nucleic acids, *e.g.*, oligonucleotides and/or polynucleotides, in a template-driven reaction. The nature of the bond or linkage may vary widely and the ligation may be carried out enzymatically. As used herein, ligations are usually carried out enzymatically to form a phosphodiester linkage between a 5' carbon terminal nucleotide of one oligonucleotide with a 3' carbon of another nucleotide.

[0035] “Amplification,” as used herein, generally refers to the process of producing multiple copies of a desired sequence. “Multiple copies” means at least 2 copies. A “copy” does not necessarily mean perfect sequence complementarity or identity to the template sequence. For example, copies can include nucleotide analogs such as deoxyinosine, intentional sequence alterations (such as sequence alterations introduced through a primer comprising a sequence that is hybridizable, but not complementary, to the template), and/or sequence errors that occur during amplification.

[0036] “Sequence determination” and the like include determination of information relating to the nucleotide base sequence of a nucleic acid. Such information may include the identification or determination of partial as well as full sequence information of the nucleic acid. Sequence information may be determined with varying degrees of statistical reliability or

confidence. In one aspect, the term includes the determination of the identity and ordering of a plurality of contiguous nucleotides in a nucleic acid.

[0037] The term “Sequencing,” “High throughput sequencing,” or “next generation sequencing” includes sequence determination using methods that determine many (typically thousands to billions) of nucleic acid sequences in an intrinsically parallel manner, *i.e.* where DNA templates are prepared for sequencing not one at a time, but in a bulk process, and where many sequences are read out preferably in parallel, or alternatively using an ultra-high throughput serial process that itself may be parallelized. Such methods include but are not limited to pyrosequencing (for example, as commercialized by 454 Life Sciences, Inc., Branford, CT); sequencing by ligation (for example, as commercialized in the SOLiD™ technology, Life Technologies, Inc., Carlsbad, CA); sequencing by synthesis using modified nucleotides (such as commercialized in TruSeq™ and HiSeq™ technology by Illumina, Inc., San Diego, CA; HeliScope™ by Helicos Biosciences Corporation, Cambridge, MA; and PacBio RS by Pacific Biosciences of California, Inc., Menlo Park, CA), sequencing by ion detection technologies (such as Ion Torrent™ technology, Life Technologies, Carlsbad, CA); sequencing of DNA nanoballs (Complete Genomics, Inc., Mountain View, CA); nanopore-based sequencing technologies (for example, as developed by Oxford Nanopore Technologies, LTD, Oxford, UK), and like highly parallelized sequencing methods.

[0038] “SNP” or “single nucleotide polymorphism” may include a genetic variation between individuals; *e.g.*, a single nitrogenous base position in the DNA of organisms that is variable. SNPs are found across the genome; much of the genetic variation between individuals is due to variation at SNP loci, and often this genetic variation results in phenotypic variation between individuals. SNPs for use in the present disclosure and their respective alleles may be derived from any number of sources, such as public databases (U.C. Santa Cruz Human Genome Browser Gateway (genome.ucsc.edu/cgi-bin/hgGateway) or the NCBI dbSNP website (ncbi.nlm.nih.gov/SNP/), or may be experimentally determined as described in U.S. Pat. No. 6,969,589; and US Pub. No. 2006/0188875 entitled “Human Genomic Polymorphisms.” Although the use of SNPs is described in some of the embodiments presented herein, it will be understood that other biallelic or multi-allelic genetic markers may also be used. A biallelic genetic marker is one that has two polymorphic forms, or alleles. As mentioned above, for a biallelic genetic marker that is associated with a trait, the allele that is more abundant in the

genetic composition of a case group as compared to a control group is termed the “associated allele,” and the other allele may be referred to as the “unassociated allele.” Thus, for each biallelic polymorphism that is associated with a given trait (*e.g.*, a disease or drug response), there is a corresponding associated allele. Other biallelic polymorphisms that may be used with the methods presented herein include, but are not limited to multinucleotide changes, insertions, deletions, and translocations.

[0039] It will be further appreciated that references to DNA herein may include genomic DNA, mitochondrial DNA, episomal DNA, and/or derivatives of DNA such as amplicons, RNA transcripts, cDNA, DNA analogs, *etc.* The polymorphic loci that are screened in an association study may be in a diploid or a haploid state and, ideally, would be from sites across the genome. Sequencing technologies are available for SNP sequencing, such as the BeadArray platform (GOLDENGATE™ assay) (Illumina, Inc., San Diego, CA) (see Fan, *et al.*, *Cold Spring Symp. Quant. Biol.*, 68:69-78 (2003)), may be employed.

[0040] In some embodiments, the term “methylation state” or “methylation status” refers to the presence or absence of 5-methylcytosine (“5-mC” or “5-mCyt”) at one or a plurality of CpG dinucleotides within a DNA sequence. Methylation states at one or more particular CpG methylation sites (each having two CpG dinucleotide sequences) within a DNA sequence include “unmethylated,” “fully-methylated,” and “hemi-methylated.” The term “hemi-methylation” or “hemimethylation” refers to the methylation state of a double stranded DNA wherein only one strand thereof is methylated. The term “hypermethylation” refers to the average methylation state corresponding to an increased presence of 5-mCyt at one or a plurality of CpG dinucleotides within a DNA sequence of a test DNA sample, relative to the amount of 5-mCyt found at corresponding CpG dinucleotides within a normal control DNA sample. The term “hypomethylation” refers to the average methylation state corresponding to a decreased presence of 5-mCyt at one or a plurality of CpG dinucleotides within a DNA sequence of a test DNA sample, relative to the amount of 5-mCyt found at corresponding CpG dinucleotides within a normal control DNA sample.

[0041] “Multiplexing” or “multiplex assay” herein may refer to an assay or other analytical method in which the presence, amount and/or methylation state (or methylation status) of multiple targets, *e.g.*, multiple nucleic acid sequences, can be assayed simultaneously by using more than one markers, each of which has at least one different detection characteristic, *e.g.*,

fluorescence characteristic (for example excitation wavelength, emission wavelength, emission intensity, FWHM (full width at half maximum peak height), or fluorescence lifetime) or a unique nucleic acid or protein sequence characteristic.

[0042] As used herein, “disease or disorder” refers to a pathological condition in an organism resulting from, *e.g.*, infection or genetic defect, and characterized by identifiable symptoms.

B. Panels of isolated polynucleotides and related compositions

[0043] In one aspect, provided herein is a panel of isolated polynucleotides comprising, consisting of, or consisting essentially of at least two isolated polynucleotides, each of said isolated polynucleotides having a polynucleotide sequence of any of Target 1 to Target 1849 listed in Table 1 (shown in Figure 5), or a complementary or substantially complementary sequence thereof.

[0044] The present panel can comprise, consist of, or consist essentially of any suitable number of the above isolated polynucleotides. For example, the present panel can comprise, consist of, or consist essentially of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof.

[0045] In one embodiment, the present panel can comprise at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof. In another embodiment, the present panel can consist of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof. In still another embodiment, the present panel can consist essentially of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600,

1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof.

[0046] The isolated polynucleotides in the present panel can be any suitable type(s) of polynucleotides. For example, the isolated polynucleotides can be DNA molecules, RNA molecules, or a combination thereof. In some embodiments, the DNA molecules can be genomic DNA molecules or fragments thereof.

[0047] The isolated polynucleotides can be immobilized on a substrate. The isolated polynucleotides can be immobilized on any suitable substrate. For example, the substrate can comprise a solid surface, a porous surface, or a combination thereof. In some embodiments, the substrate can be a part of a bead, a tube, a microtiter plate, a membrane, a gel, or a glass slide. In other embodiments, the isolated polynucleotide molecules can be immobilized spatially apart from each other on a substrate so that each of the isolated polynucleotide molecules can be assessed or analyzed individually.

[0048] Kits, devices, systems or articles of manufacture that comprise any of the above panel(s) are also provided.

[0049] The present kits, devices, systems or articles of manufacture can be configured for any suitable use or purpose. For example, the present kits, devices, systems or articles of manufacture can be configured for assessing methylation status of at least two of Target 1 to Target 1849 listed in Table 1. In some embodiments, the present kits, devices, systems or articles of manufacture can be configured for assessing methylation status of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof. In other embodiments, the isolated polynucleotides in the present kits, devices, systems or articles of manufacture can be configured as control polynucleotides.

[0050] The isolated polynucleotides in the present kits, devices, systems or articles of manufacture can have any suitable level of concentration. For example, the isolated polynucleotides can have a level of concentration from about 1 femtomolar to about 100 millimolar, *e.g.*, at about 1 femtomolar (fM), 10 fM, 100 fM, 1 picomolar (pM), 10 pM, 100 pM,

1 nanomolar (nM), 10 nM, 100 nM, 1 micromolar (μ M), 10 μ M, 100 μ M, 1 millimolar (mM), 10 mM, 100 mM, or a subrange thereof.

[0051] The present kits, devices, systems or articles of manufacture can be configured for any suitable use or purpose. For example, the kits, devices, systems or articles of manufacture can be configured for assessing cancer or neoplasia in a subject, *e.g.*, for assessing lung cancer or colorectal cancer in a subject, or for pan-cancer analysis or profiling in a subject.

C. Kits, systems and related compositions for assessing methylation

[0052] In another aspect, a kit, device, system or an article of manufacture that is configured for assessing methylation status of at least two of Target 1 to Target 1849 listed in Table 1 is provided.

[0053] The present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of any suitable number of the Targets listed in Table 1. For example, the present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof.

[0054] In some embodiments, the present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of any subgroup of the Targets listed in Table 1. For example, the present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of Targets 1-100 listed in Table 1. In other embodiments, the present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of all of the Targets listed in Table 1, excluding one or more Targets listed in Table 1. For example, the present kits, devices, systems or articles of manufacture can comprise reagents for assessing methylation status of Targets 1-1848 listed in Table 1, but do not comprise reagent(s) for assessing methylation status of Target 1849 listed in Table 1, etc.

[0055] The present kits, devices, systems or articles of manufacture can comprise any suitable reagents for assessing methylation status of the target polynucleotides. For example, the reagents can comprise, consist essentially of, or consist of a probe or primer configured for

hybridizing with each of the targets whose methylation status is to be assessed. In some embodiments, the reagents comprise, consist essentially of, or consist of a single probe or primer configured for hybridizing with each of the targets whose methylation status is to be assessed. In other embodiments, the reagents comprise, consist essentially of, or consist of multiple probes or primers configured for hybridizing with each of the targets whose methylation status is to be assessed.

[0056] In some embodiments, the one or more primers in the present kits, devices, systems or articles of manufacture comprise, consist essentially of, or consist of a sequence set forth in SEQ ID NOs: 1-17504 listed in Table 1, a complementary or substantially complementary sequence thereof, or any combination thereof. For each Target listed in Table 1, the present kits, devices, systems or articles of manufacture can comprise, consist essentially of, or consist of one or more corresponding primers for that Target. For example, for Target 1 listed in Table 1, the present kits, devices, systems or articles of manufacture can comprise, consist essentially of, or consist of any of a sequence set forth in SEQ ID NOs: 1-10 listed in Table 1, *e.g.*, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 primers comprising, consisting essentially of, or consisting of sequence(s) set forth in SEQ ID NOs: 1-10, a complementary or substantially complementary sequence thereof, or any combination thereof. Similarly, for Target 2 listed in Table 1, the present kits, devices, systems or articles of manufacture can comprise, consist essentially of, or consist of any of a sequence set forth in SEQ ID NOs: 11-20 listed in Table 1, *e.g.*, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 primers comprising, consisting essentially of, or consisting of sequence(s) set forth in SEQ ID NOs: 11-20, a complementary or substantially complementary sequence thereof, or any combination thereof. For any of Targets 3-1849 listed in Table 1, the present kits, devices, systems or articles of manufacture can comprise, consist essentially of, or consist of any of the corresponding sequence(s) listed in Table 1, a complementary or substantially complementary sequence thereof, or any combination thereof, as illustrated for Target 1 or 2 listed in Table 1 above.

[0057] In some embodiments, the present kits, devices, systems or articles of manufacture can comprise a common primer, *e.g.*, a common primer for amplifying each of the targets whose methylation status is to be assessed. An exemplary common primer can comprise, consist essentially of, or consist of a sequence set forth in SEQ ID NO:17505

CACTCTTTCCCTACACGACGC), or a complementary or substantially complementary sequence thereof.

[0058] The present kits, devices, systems or articles of manufacture can further comprise any other suitable reagents. In some embodiments, the present kits, devices, systems or articles of manufacture can further comprise any other suitable reagents disclosed and/or claimed in U.S. provisional application serial No. 62/487,422, filed on April 19, 2017 and U.S. provisional application serial No. 62/487,423, filed on April 19, 2017.

[0059] For example, the present kits, devices, systems or articles of manufacture can further comprise an agent for isolating the targets from a sample.

[0060] In another example, the present kits, devices, systems or articles of manufacture can further comprise a reagent for preparing a library of the targets. Any suitable reagents for preparing a library of the targets can be included. In some embodiments, the reagent for preparing a library of the targets can comprise an enzyme, *e.g.*, a ligase or a single-stranded DNA (ssDNA) ligase. Any suitable ssDNA ligase can be included, *e.g.*, a *Thermus* bacteriophage RNA ligase such as a bacteriophage TS2126 RNA ligase (*e.g.*, CircLigase™ and CircLigase II™), or an archaebacterium RNA ligase such as *Methanobacterium thermoautotrophicum* RNA ligase 1.

[0061] In still another example, the present kits, devices, systems or articles of manufacture can further comprise a reagent for amplifying the targets or a library of the targets. Any suitable reagents for amplifying the targets or a library of the targets can be included. In some embodiments, the reagent for amplifying the targets or a library of the targets can comprise an enzyme, *e.g.*, an enzyme to be used in a polynucleotide amplification reaction. Exemplary polynucleotide amplification reactions include polymerase chain reaction (PCR), strand displacement amplification (SDA), transcription mediated amplification (TMA), ligase chain reaction (LCR), nucleic acid sequence based amplification (NASBA), primer extension, rolling circle amplification (RCA), self sustained sequence replication (3SR), and loop-mediated isothermal amplification (LAMP).

[0062] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise an agent for purifying the targets, a library of the targets, amplified targets or a library of amplified targets.

[0063] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a reagent for assessing methylation status of the targets. Any suitable reagents for assessing methylation status of the targets can be included. In some embodiments, the reagent for assessing methylation status of the targets can be a reagent to be used in a polynucleotide methylation, *e.g.*, DNA methylation, detecting method. Exemplary polynucleotide methylation or DNA methylation detecting methods include mass spectrometry, methylation-specific PCR (MSP), bisulphite sequencing, the HpaII tiny fragment Enrichment by ligation-mediated PCR assay (HELP Assay), Glal hydrolysis and ligation adapter dependent PCR assay (GLAD-PCR assay), restriction landmark genomic scanning (RLGS), methylated DNA immunoprecipitation (MeDIP or mDIP), pyrosequencing, molecular break light assay for DNA adenine methyltransferase activity, methyl sensitive Southern blotting and high resolution Melt (HRM) analysis.

[0064] The reagent for assessing methylation status of the targets can be a chemical agent, *e.g.*, bisulfite or sodium bisulfite. The reagent for assessing methylation status of the targets can also be a biological agent, *e.g.*, a polypeptide or an enzyme.

[0065] Any suitable enzyme can be included. In some embodiments, the enzyme can be a methylation-sensitive restriction enzyme (MSRE). The MSRE can selectively cleave at a residue when it is unmethylated. The MSRE can also selectively cleave at the residue when it is methylated. Exemplary MSRE can be selected from the group consisting of *HpaII*, *SalI*, *SalI*-HF[®], *ScrFI*, *BbeI*, *NotI*, *SmaI*, *XmaI*, *MboI*, *BstBI*, *ClaI*, *MluI*, *NaeI*, *NarI*, *PvuI*, *SacII*, *HhaI*, and a combination thereof.

[0066] In some embodiments, the enzyme can be a polynucleotide polymerase. The polynucleotide polymerase is configured to be used in polynucleotide amplification reaction, *e.g.*, PCR. Any suitable polynucleotide polymerase can be included. For example, the polynucleotide polymerase can be a DNA polymerase, *e.g.*, a DNA polymerase without a 3' to 5' exonuclease activity.

[0067] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a denaturing reagent for denaturing a double-stranded polynucleotide from a sample to obtain the single-stranded polynucleotide.

[0068] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a crowding agent for the ligation reaction. In one aspect, the crowding

agent comprises a polyethylene glycol (PEG), such as PEG 4000 or PEG 6000, Dextran, and/or Ficoll.

[0069] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a set of primers each comprising a sequence that is reverse-complement to the adaptor and/or hybridizable to the adaptor, for converting the single-stranded polynucleotide to a double-stranded polynucleotide.

[0070] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a reagent for removing primer dimer and/or primer-adaptor duplex.

[0071] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a primer comprising a sequence specific for a target sequence (*e.g.*, an EGFR gene sequence), for obtaining an amplified linear, double-stranded ligation product comprising sequence information of the target sequence. In a further aspect, the kit can further comprise a sequencing adapter and/or a sample-specific barcode, for sequencing the amplified linear, double-stranded ligation product.

[0072] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a panel of isolated polynucleotides described in the above Section B.

[0073] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a reference sample and/or information of a control locus.

[0074] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise separate containers, *e.g.*, vials, for one or more components and/or instructions for using the kits, devices, systems or articles of manufacture.

[0075] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a computer readable medium containing executable instructions for obtaining a methylation metric of a sample based on the methylation status assessment. The computer readable medium can be configured for obtaining a methylation metric in any suitable form, *e.g.*, in the form of average methylation frequency, methylation haplotype load, unmethylation haplotype load, percent discordant reads, or a combination thereof.

[0076] In yet another example, the present kits, devices, systems or articles of manufacture can further comprise a computer readable medium containing executable instructions for classification using the methylation metric(s). Exemplary classification algorithm can be linear discriminant analysis, logistic regression, naïve bayes classification, perceptron classification,

quadratic classification, k-nearest neighbors, boosting, decision tree, random forest, neural network, learning vector quantization, or support vector machines, or a combination thereof.

[0077] The present kits, devices, systems or articles of manufacture can be configured for any suitable use or purpose. For example, the present kits, devices, systems or articles of manufacture can be configured for assessing cancer or neoplasia in a subject, *e.g.*, for assessing lung cancer or colorectal cancer in a subject, or for pan-cancer analysis or profiling in a subject.

[0078] In some embodiments, the kit may additionally comprise reagents for detecting presence of polypeptides. Such reagents may be antibodies or other binding molecules that specifically bind to a polypeptide. In some embodiments, such antibodies or binding molecules may be capable of distinguishing a structural variation to the polypeptide as a result of polymorphism, and thus may be used for genotyping. The antibodies or binding molecules may be labeled with a detectable marker, such as, for example, a radioisotope, fluorescent compound, bioluminescent compound, a chemiluminescent compound, metal chelator or enzyme. Other reagents for performing binding assays, such as ELISA, may be included in the kit.

[0079] In some embodiments, the kits comprise reagents for genotyping at least two, at least three, at least five, at least ten, or more markers. The markers may be a polynucleotide marker (such as a cancer-associated mutation or SNP) or a polypeptide marker (such as overexpression or a post-translational modification, including hyper- or hypo-phosphorylation, of a protein) or any combination thereof. In some embodiments, the kits may further comprise a surface or substrate (such as a microarray) for capture probes for detecting of amplified nucleic acids.

[0080] The kits may further comprise a carrier means being compartmentalized to receive in close confinement one or more container means such as vials, tubes, and the like, each of the container means comprising one of the separate elements to be used in the method. For example, one of the container means may comprise a probe that is or can be detectably labeled. Such probe may be a polynucleotide specific for a biomarker. The kit may also have containers containing nucleotide(s) for amplification of the target nucleic acid sequence and/or a container comprising a reporter-means bound to a reporter molecule, such as an enzymatic, florescent, or radioisotope label.

[0081] The kit typically comprises the container(s) described above and one or more other containers comprising materials desirable from a commercial and user standpoint, including buffers, diluents, filters, needles, syringes, and package inserts with instructions for use. A label

may be present on the container to indicate that the composition is used for a specific therapy or non-therapeutic application, and may also indicate directions for either *in vivo* or *in vitro* use, such as those described above.

[0082] The kit can further comprise a set of instructions and materials for preparing a tissue or cell or body fluid sample and preparing nucleic acids (such as ctDNA) from the sample.

D. Methods for assessing cancer or neoplasia in a subject

[0083] In still another aspect, provided herein is a method for assessing cancer or neoplasia in a subject, which method comprises: a) providing a sample from a subject containing at least two target polynucleotides of said subject, said at least two target polynucleotides having polynucleotide sequences of at least two of Target 1 to Target 1849 listed in Table 1, or a complementary or substantially complementary sequence thereof; b) assessing methylation status of said at least two target polynucleotides; and c) assessing cancer or neoplasia in said subject based on assessment of methylation status of said at least two target polynucleotides.

[0084] The present methods can be used on any suitable sample, *e.g.*, any suitable sample obtained or derived from a subject whose cancer or neoplasia status is to be assessed. For example, the sample can comprise circulating cell-free or tumor DNA (ctDNA). In another example, the sample can be a blood, serum, plasma, or body fluid sample, or any combination thereof.

[0085] The target or template polynucleotides can be target DNA molecules, RNA molecules, or a complex or a combination thereof. DNA can include be regular genomic DNA, chromosomal DNA, extrachromosomal DNA (such as mitochondrial DNA), or a fragment thereof. In other embodiments, the target or template DNA is a processed DNA, for example, one that has undergone enzyme digestion, cross-linking, chemical or physical shearing, bisulfite conversion, and/or degradation.

[0086] In some embodiments, the target nucleic acid molecule of interest disclosed herein is a cell-free DNA, such as cell-free fetal DNA (also referred to as “cfDNA”) or ctDNA. cfDNA circulates in the body, such as in the blood, of a pregnant mother, and represents the fetal genome, while ctDNA circulates in the body, such as in the blood, of a cancer patient, and is generally pre-fragmented. In other embodiments, the target nucleic acid molecule of interest

disclosed herein is an ancient and/or damaged DNA, for example, due to storage under damaging conditions such as in formalin-fixed samples, or partially digested samples.

[0087] As cancer cells die, they release DNA into the bloodstream. This DNA, known as circulating tumor DNA (ctDNA), is highly fragmented, with an average length of approximately 150 base pairs. Once the white blood cells are removed, ctDNA generally comprises a very small fraction of the remaining plasma DNA, for example, ctDNA may constitute less than about 10% of the plasma DNA. Generally, this percentage is less than about 1%, for example, less than about 0.5% or less than about 0.01%. Additionally, the total amount of plasma DNA is generally very low, for example, at about 10 ng/mL of plasma.

[0088] The variants in the ctDNA can be interrogated using various methods, including next generation sequencing. Due to the low ratio of ctDNA to plasma DNA, it is difficult to call a variant with high confidence due to PCR and sequencing errors. Unique molecular identifiers (UMIs) can be used to tag original molecules such that any variant seen can be compared to a consensus sequence. This is an effective manner to separate true from false positives. If the variant is matched to a consensus, it is a true positive. Otherwise, it is removed from analysis. Furthermore, it is essential that a high percentage of original molecules are turned into sequencing libraries so that the sensitivity remains high, *i.e.*, variants are not missed due to dropout. Thus, ligation efficiency can be important during library construction.

[0089] In one aspect, a technique to improve ligation efficiency while still targeting selected regions of the genome, as disclosed and/or claimed in U.S. provisional application serial No. 62/487,423, filed on April 19, 2017, can be used to prepare target polynucleotides to be analyzed in the present methods. In one embodiment, polynucleotides to be detected by sequencing, such as ctDNA, are first dephosphorylated to remove 5' phosphates to prevent ligation of ctDNA to itself. The ctDNA is then denatured such that all DNA is single stranded. Circligase™, a single stranded DNA ligase, is used to ligate an adapter to the 3' end of the ctDNA. In one aspect, the adapter contains 2 specific bases on the 5' end to optimize ligation efficiency, followed by a UMI. In one aspect, the 3' end of the adapter contains a carbon spacer to prevent self-ligation of the adapters. In another aspect, the ligation reaction is further optimized using a crowding agent, such as PEG 4000. In one aspect, following ligation, molecules are double-stranded using a primer that is reverse complement to the adapter. This allows efficient removal of excess unligated adapters without removed usable DNA by a standard purification.

[0090] In one aspect, the DNA is then amplified using a semi-targeted PCR. One primer is reverse complement to the adapter, while the other (*e.g.*, as one primer in a primer pool) anneals to specific, targeted regions of the genome. The specific primers were designed to minimize primer-dimer interactions and off-target annealing. In one aspect, the target-specific primers are further optimized to land in close proximity to specific variants due to the small DNA size. Following another cleanup, a PCR adds the full-length sequencing adapters and barcodes. The final library is then sequenced, for example, on an Illumina machine.

[0091] In one aspect, the semi-targeted PCR results in enrichments of > about 40,000 fold of the original molecule set despite having a relatively small target region of ~30,000 bp. In one aspect, the overall conversion rates of the present method are at least 60%, implying that at least ~3 times more of the original molecules are converted into sequenceable material when compared to standard library construction and hybridization capture. In other embodiments, the overall conversion rates are between about 60% and about 70%, between about 70% and about 80%, between about 80% and about 90%, or over 90%. In one aspect, the present method thus is able to accurately call genetic or genomic variants, such as SNVs, indels, CNVs, and fusions at extremely low mutant allele fractions, for example, as low as 0.01%. In other aspects, the allele fraction of the genetic or genomic variant is about 0.05%, about 0.1%, about 0.5%, about 1%, or about 2%.

[0092] The present methods can be used for assessing cancer or neoplasia in any suitable subject. For example, the present methods can be used for assessing cancer or neoplasia in a mammal. The mammal can be a non-human mammal, *e.g.*, a pet, a farm animal, a companion animal or an experimental animal. Preferably, the mammal is a human. For example, a subject can be a human that needs to be screened for cancer or neoplasia risks, a human in a high-risk group, a human that has been diagnosed as having cancer or neoplasia but needs further stratification, a human that has been diagnosed as having cancer or neoplasia and under active treatment, or a human having cancer or neoplasia and is in remission.

[0093] The present methods can comprise assessing methylation status of any suitable number of the Targets listed in Table 1. For example, the methods can comprise assessing methylation status of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800,

more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof.

[0094] The methylation status of target polynucleotides can be assessed using any suitable methods or reagents. For example, the methylation status of target polynucleotides can be assessed using a probe or primer configured for hybridizing with each of the target polynucleotides. In some embodiments, the methylation status of a target polynucleotide can be assessed using a single probe or primer configured for hybridizing with the target polynucleotide. In other embodiments, the methylation status of a target polynucleotide can be assessed using multiple probes or primers configured for hybridizing with the target polynucleotide.

[0095] In some embodiments, the one or more primers used in the present methods can comprise, consist essentially of, or consist of a sequence set forth in any of SEQ ID NOs: 1-17504 listed in Table 1, a complementary or substantially complementary sequence thereof, or any combination thereof. For each Target listed in Table 1, the one or more primers used in the present methods can comprise, consist essentially of, or consist of one or more corresponding primers for that Target. For example, for Target 1 listed in Table 1, the one or more primers used in the present methods can comprise, consist essentially of, or consist of any of a sequence set forth in SEQ ID NOs: 1-10 listed in Table 1, *e.g.*, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 primers comprising, consisting essentially of, or consisting of sequence(s) set forth in SEQ ID NOs: 1-10, a complementary or substantially complementary sequence thereof, or any combination thereof. Similarly, for Target 2 listed in Table 1, the one or more primers used in the present methods can comprise, consist essentially of, or consist of any of a sequence set forth in SEQ ID NOs: 11-20 listed in Table 1, *e.g.*, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 primers comprising, consisting essentially of, or consisting of sequence(s) set forth in SEQ ID NOs: 11-20, a complementary or substantially complementary sequence thereof, or any combination thereof. For any of Targets 3-1849 listed in Table 1, the one or more primers used in the present methods can comprise, consist essentially of, or consist of any of the corresponding sequence(s) listed in Table 1, a complementary or substantially complementary sequence thereof, or any combination thereof, as illustrated for Target 1 or 2 listed in Table 1 above.

[0096] The present methods can further comprise using a common primer for amplifying each of the target polynucleotide whose methylation status is to be assessed. An exemplary

common primer can comprise, consist essentially of, or consist of a sequence set forth in SEQ ID NO:17505 CACTCTTTCCCTACACGACGC), or a complementary or substantially complementary sequence thereof.

[0097] The present methods can further comprise any other suitable steps. In some embodiments, the present methods can further comprise any other suitable steps disclosed and/or claimed in U.S. provisional application serial No. 62/487,422, filed on April 19, 2017 and U.S. provisional application serial No. 62/487,423, filed on April 19, 2017. For example, techniques and steps for constructing single-stranded polynucleotide, conversion of single-stranded polynucleotide library to double-stranded polynucleotide library, semi-targeted amplification of double-stranded polynucleotide library, and construction of sequence library and analysis of sequencing reads disclosed and/or claimed in U.S. provisional application serial No. 62/487,423, filed on April 19, 2017 can be used to obtain and/or prepare target polynucleotides to be analyzed.

[0098] For example, the present methods can further comprise isolating the target polynucleotides from a sample.

[0099] In another example, the present methods can further comprise preparing a library of the target polynucleotides. Any suitable reagents for preparing a library of the targets can be used. In some embodiments, the reagent for preparing a library of the targets can comprise an enzyme, *e.g.*, a ligase or a single-stranded DNA (ssDNA) ligase. Any suitable ssDNA ligase can be included, *e.g.*, a *Thermus* bacteriophage RNA ligase such as a bacteriophage TS2126 RNA ligase (*e.g.*, CircLigase™ and CircLigase II™), or an archaeobacterium RNA ligase such as *Methanobacterium thermoautotrophicum* RNA ligase 1.

[00100] In still another example, the present methods can further comprise amplifying the target polynucleotides. Any suitable reagents for amplifying the targets or a library of the targets can be used. In some embodiments, the reagent for amplifying the targets or a library of the targets can comprise an enzyme, *e.g.*, an enzyme to be used in a polynucleotide amplification reaction. Exemplary polynucleotide amplification reactions include polymerase chain reaction (PCR), strand displacement amplification (SDA), transcription mediated amplification (TMA), ligase chain reaction (LCR), nucleic acid sequence based amplification (NASBA), primer extension, rolling circle amplification (RCA), self-sustained sequence replication (3SR), and loop-mediated isothermal amplification (LAMP).

[00101] In yet another example, the present methods can further comprise purifying the target polynucleotides, a library of the target polynucleotides, amplified target polynucleotides or a library of amplified target polynucleotides.

[00102] The methylation status of target polynucleotides can be assessed using any suitable methods and/or reagents. In some embodiments, the methylation status of target polynucleotides can be assessed using mass spectrometry, methylation-specific PCR (MSP), methylation-sensitive sequencing, *e.g.*, bisulphite sequencing, the HpaII tiny fragment Enrichment by ligation-mediated PCR assay (HELP Assay), Glal hydrolysis and ligation adapter dependent PCR assay (GLAD-PCR assay), restriction landmark genomic scanning (RLGS), methylated DNA immunoprecipitation (MeDIP or mDIP), pyrosequencing, molecular break light assay for DNA adenine methyltransferase activity, methyl sensitive Southern blotting or high resolution Melt (HRM) analysis.

[00103] In other embodiments, the methylation status of target polynucleotides can be assessed using a chemical agent, *e.g.*, bisulfite or sodium bisulfite. In still other embodiments, the methylation status of target polynucleotides can be assessed using a biological agent, *e.g.*, a polypeptide or an enzyme.

[00104] Any suitable enzyme can be used. In some embodiments, the enzyme can be a methylation-sensitive restriction enzyme (MSRE). The MSRE can selectively cleave at a residue when it is unmethylated. The MSRE can also selectively cleave at the residue when it is methylated. Exemplary MSRE can be selected from the group consisting of *HpaII*, *SalI*, *SalI*-HF[®], *ScrFI*, *BbeI*, *NotI*, *SmaI*, *XmaI*, *MboI*, *BstBI*, *ClaI*, *MluI*, *NaeI*, *NarI*, *PvuI*, *SacII*, *HhaI*, and a combination thereof.

[00105] In some embodiments, the enzyme can be a polynucleotide polymerase. The polynucleotide polymerase can be used in polynucleotide amplification reaction, *e.g.*, PCR. Any suitable polynucleotide polymerase can be used. For example, the polynucleotide polymerase can be a DNA polymerase, *e.g.*, a DNA polymerase without a 3' to 5' exonuclease activity.

[00106] In some embodiments, the methylation status of target polynucleotides can be assessed using methylation-sensitive sequencing, *e.g.*, bisulphite sequencing. Bisulfite conversion is a method that uses bisulfite to determine the methylation pattern of DNA. DNA methylation is a biochemical process involving the addition of a methyl group to the cytosine or adenine DNA nucleotides. DNA methylation stably alters the expression of genes in cells as

cells divide and differentiate from embryonic stem cells into specific tissues. In bisulfite conversion, target nucleic acids are first treated with bisulfite reagents that specifically convert un-methylated cytosines to uracils while having no impact of methylated cytosine. One consequence of bisulfite conversion is that the double-stranded conformation of the original target is disrupted due to loss of sequence complementarity. The target sequences exist as two separate single-stranded DNAs during sample preparation and analytical or diagnostic testing. Target nucleic acid sequences frequently also exist at very low concentrations. This is an especially important consideration for circulating tumor DNA (also referred to as “cell-free tumor DNA,” or “ctDNA”) due to its often low concentration in circulation and the very low variant allele fraction.

[00107] Any suitable format of methylation-sensitive sequencing can be used. For example, the methylation-sensitive sequencing can be conducted with a format selected from the group consisting of Maxam-Gilbert sequencing, a chain-termination method, shotgun sequencing, bridge PCR, single-molecule real-time sequencing, ion semiconductor (ion torrent sequencing), sequencing by synthesis, sequencing by ligation (SOLiD sequencing), chain termination (Sanger sequencing), massively parallel signature sequencing (MPSS), polony sequencing, 454 pyrosequencing, Illumina (Solexa) sequencing, DNA nanoball sequencing, heliscope single molecule sequencing, single molecule real time (SMRT) sequencing, nanopore DNA sequencing, tunnelling currents DNA sequencing, sequencing by hybridization, sequencing with mass spectrometry, microfluidic Sanger sequencing, a microscopy-based technique, RNAP sequencing, and *in vitro* virus high-throughput sequencing.

[00108] In some embodiments, the present methods can further comprise, prior to the methylation-sensitive sequencing, *e.g.*, bisulphite sequencing, obtaining a library of linear, single-stranded ligation products, each of the linear, single-stranded ligation products comprises of a linear, single-stranded target polynucleotide linked to an adaptor comprising a unique molecular identifier (UMI) sequence that earmarks the single-stranded target polynucleotide to which the adaptor is ligated. The sequencing reads from the target polynucleotides can be first adapter trimmed to remove any adapter sequence originating from the library construction process to obtain trimmed sequencing reads. The trimmed sequencing reads can be mapped to a reference genome, *e.g.*, a human reference genome, using an alignment program to obtain an aligned read file. The aligned read file can be grouped into sets corresponding to each target

region from Target 1 to Target 1849 listed in Table 1, or a complementary or substantially complementary sequence thereof, that can be used for methylation status assessment.

[00109] Methylation status of one, more or each of the target polynucleotides can be assessed. In some embodiments, the methylation status of each of the target polynucleotides can be assessed to obtain a methylation metric, *e.g.*, in the form of average methylation frequency, methylation haplotype load, unmethylation haplotype load, percent discordant reads, or a combination thereof.

[00110] Methylation status of a sample can be assessed using the methylation metrics from each of the target polynucleotides. The methylation metrics can be analyzed or used in any suitable manner. For example, the methylation metric for each of the target polynucleotides can be compared to a threshold or reference value to assess methylation status of a sample.

[00111] In another example, a numerical methylation matrix can be computed using the methylation metrics from each of the target polynucleotides to assess methylation status of a sample. The numerical methylation matrix can be in any suitable format. In some embodiments, the numerical methylation matrix from a sample can comprise a single numerical number or value. In other embodiments, the numerical methylation matrix from a sample can comprise multiple numerical numbers or values. The numerical methylation matrix can be obtained or computed using any suitable formulae or algorithm. In some embodiments, the numerical methylation matrix can be computed using a classification algorithm, *e.g.*, linear discriminant analysis, logistic regression, naïve bayes classification, perceptron classification, quadratic classification, k-nearest neighbors, boosting, decision tree, random forest, neural network, learning vector quantization, or support vector machines, or a combination thereof.

[00112] The methylation matrix can be used in any suitable manner in assess methylation status of a sample. For example, the methylation matrix can be compared to a threshold or reference value to assess methylation status of a sample.

[00113] The methylation status of at least two target polynucleotides from multiple samples, *e.g.*, multiple samples from multiple subjects, can be assessed sequentially or simultaneously. In some embodiments, the methylation status of at least two target polynucleotides from multiple samples, *e.g.*, multiple samples from multiple subjects, can be assessed sequentially. For example, methylation status of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600,

1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof, can be assessed sequentially. In other embodiments, the methylation status of at least two target polynucleotides from multiple samples, *e.g.*, multiple samples from multiple subjects, can be assessed simultaneously. For example, methylation status of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1, or a numerical range or subrange thereof, can be assessed simultaneously.

[00114] In some embodiments, the methylation metric for each of the target polynucleotides is obtained using a computer. In other embodiments, the methylation matrix of a sample is obtained using a computer based on the methylation metrics from each of the target polynucleotides.

[00115] The present methods can be used for any suitable purpose. For example, the present methods can be used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of cancer or neoplasia in a subject.

[00116] The present methods can be used for assessing any suitable type of cancer or neoplasia in a subject. For example, the present methods can be used for assessing a lymphoma, a leukemia, a brain cancer, a multiple myeloma, a pancreatic cancer, a liver cancer, a stomach cancer, a breast cancer, a kidney cancer, a lung cancer, a colorectal cancer, a colon cancer, a prostate cancer, an ovarian cancer, a cervical cancer, a skin cancer, an esophagus cancer, or a head and neck cancer in a subject.

[00117] In some embodiments, the present methods can be used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of lung cancer in a subject. The lung cancer can be non-small-cell lung carcinoma or small-cell lung carcinoma. Exemplary non-small-cell lung carcinoma can be adenocarcinoma of the lung (also known as pulmonary adenocarcinoma), squamous-cell carcinoma (SCC) of the lung or large-cell carcinoma (LCC).

[00118] In other embodiments, the present methods can be used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of colorectal cancer in a subject. In still other embodiments, the present methods can be used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of pan-cancer analysis or profiling in a subject.

[00119] The cancer or neoplasia in multiple subjects can be assessed sequentially or simultaneously. In some embodiments, the cancer or neoplasia in multiple subjects can be assessed sequentially. For example, the cancer or neoplasia in at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, 1,900, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000, 8,000, 9,000, 10,000 or more subjects can be assessed sequentially. In other embodiments, the cancer or neoplasia in multiple subjects can be assessed simultaneously. For example, the cancer or neoplasia in at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, 1,900, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000, 8,000, 9,000, 10,000 or more subjects can be assessed simultaneously.

[00120] The present tests can have any suitable sensitivity. For example, the present tests can have a sensitivity of at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, 99.9%, 99.999%, 99.9999%, or 100%.

[00121] The present tests can have any suitable specificity. For example, the present tests can have a specificity of at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, 99.9%, 99.999%, 99.9999%, or 100%.

[00122] The present methods can further comprise treating a subject or altering treatment of a subject based on the assessment of cancer or neoplasia in the subject. For example, the present methods can further comprise treating a human patient or altering treatment of a human patient based on the assessment of cancer or neoplasia in the human patient. Exemplary treatment can be chemotherapy, radiotherapy, immunotherapy, cell therapy, surgery, treatment with a drug, *e.g.*, a small molecule drug or a large molecule drug such as an antibody drug.

[00123] The present methods can further comprise subjecting a subject to further tests, *e.g.*, gold-standard diagnostic or prognostic test(s), based on the assessment of cancer or neoplasia in the subject. For example, the present methods can further comprise subjecting a human patient to further tests, *e.g.*, gold-standard diagnostic or prognostic test(s), based on the assessment of cancer or neoplasia in the human patient. Exemplary test can be any suitable type of tests, *e.g.*, *in vivo* test, *in vitro* test, tests on molecules such as DNA, RNA, protein, peptide, a complex or combination thereof, immunotest, molecular test, cellular test, tissue test, organ test or whole-body test, *etc.*

E. Exemplary Data Analysis Methods

Preprocessing

[00124] In some embodiments, sequencing reads are first adapter trimmed (to remove any synthetic adapter sequence originating from the sequencing library construction process) using a trimming program such as Cutadapt (<http://journal.embnnet.org/index.php/embnnetjournal/article/view/200/479>) or Trimmomatic (<https://www.ncbi.nlm.nih.gov/pubmed/24695404>). Trimmed reads are then mapped to the human reference genome using an alignment program such as Bowtie (<http://bowtie-bio.sourceforge.net/index.shtml>), Bowtie2 (<http://bowtie-bio.sourceforge.net/bowtie2/index.shtml>), or BWA (<http://bio-bwa.sourceforge.net>). The resultant aligned read file is then sorted and indexed using a suitable tool, *e.g.*, Samtools (<https://github.com/samtools/samtools>). Reads are then grouped into sets corresponding to each target region that can be used for methylation metric computation.

Methylation Metric Computation

[00125] In some embodiments, for each target, a “methylation metric” representing that individual region’s methylation state is computed using the aligned reads. Four metrics that can be used are Average Methylation Frequency (AMF), Methylation Haplotype Load (MHL), UnMethylation Haplotype Load (UMHL), and Percent Discordant Reads (PDR).

[00126] Average Methylation Frequency is computed by summing the number of cytosine bases observed at CpG sites within the target region and dividing by the number of cytosine and thymine bases observed at CpG sites within the target region:

$$AMF = \frac{\sum_{i=1}^N C_i}{\sum_{i=1}^N C_i + T_i}$$

Where N is the number of reads within the target region, i is the i th read in the target region, C_i is the number of cytosines observed in the i th read, and T_i is the number of thymines observed in the i th read.

[00127] Methylation Haplotype Load is computed by taking all possible substrings of adjacent CpG sites within a target region and calculating a weighted sum of the fraction of reads showing full methylation within each substring:

$$MHL = \frac{\sum_{L_i=1}^n L_i \frac{C_i}{N_i}}{\sum_{L_i=1}^n L_i}$$

Where n is the number of CpG sites within the target region, L_i is the length of the current substring, C_i is the number of reads containing all cytosines at CpG sites within substrings of length L_i , and N_i is the number of reads containing a substring of length L_i .

[00128] Unmethylation Haplotype Load is computed by taking all possible substrings of adjacent CpG sites within a target region and calculating a weighted sum of the fraction of reads showing no methylation within each substring:

$$UMHL = \frac{\sum_{L_i=1}^n L_i \frac{T_i}{N_i}}{\sum_{L_i=1}^n L_i}$$

Where n is the number of CpG sites within the target region, L_i is the length of the current substring, T_i is the number of reads containing all thymines at CpG sites within substrings of length L_i , and N_i is the number of reads containing a substring of length L_i .

[00129] Percent Discordant Reads is computed by taking one hundred minus the percent of reads within each region showing all cytosines or all thymines at CpG sites within the target region:

$$PDR = 100(1 - \frac{C_i + T_i}{N_i})$$

Where N_i is the number of reads within the target region, C_i is the number of reads containing cytosines at all covered CpG sites, and T_i is the number of reads containing thymines at all covered CpG sites.

Classification

[00130] In some embodiments, using the methylation metrics for each target region, a numerical matrix is computed (with one row for each target region, one column for each sample, and values representing the methylation metric for that region and sample). Samples are then classified using a classification algorithm such as linear discriminant analysis, logistic

regression, naïve bayes classification, perceptron classification, quadratic classification, k-nearest neighbors, boosting, decision tree, random forest, neural network, learning vector quantization, or support vector machines, or a combination thereof.

[00131] logistic regression, k-nearest neighbors, random forest, or support vector machines.

[00132] Logistic Regression classification involves curve-fitting an equation for the probability of a sample being cancerous to the weighted sum of methylation metric values using a set of known samples. Using a least-squares regression on data from samples with known categories, the parameters for the below equation are estimated:

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \sum_i^n \beta_i M_i$$

Where n is the set of target regions, i is the current target region, M_i is the methylation metric value for the i th target region, β_i is the least-square parameter for the i th target region, and p is the probability that the sample is a cancer sample. Once the parameters for this equation are derived using known samples, an unknown sample can be classified as cancer or healthy by computing the weighted sum of methylation metric values, computing the probability using the derived equation, and comparing to a threshold.

[00133] K-nearest neighbor algorithm classifies an unknown sample using the distance of methylation metric values between the unknown sample and its k closest neighbors with known categories. First, the distances (in this case Euclidean distances) between the methylation metric values of the current sample and all other samples are computed:

$$E_i = \sqrt{\sum_t^N \sum_j^n (M_j - m_{ij})^2}$$

Where N is the set of known samples, i is the current known sample, n is the set of target regions, j is the current target region, M_j is the methylation metric value of the unknown sample in the j th target region, m_{ij} is the methylation metric value of the i th known sample in the j th target region, and E_i is the Euclidean distance between the current sample and the i th known sample. The categories of the k known samples with the lowest Euclidean distance are used to determine the category of the unknown sample; the category with the highest occurrence is assigned to the unknown sample.

[00134] In K-Nearest Neighbors, an unknown sample is classified as either normal or cancer by identifying the k known samples that it is most similar to (where k is any number of our choice). If an unknown sample is more similar to known normal samples, we classify it as normal; if it is more similar to cancer samples, we classify it as cancer. The following is a hypothetical example that illustrates how K-Nearest Neighbors analysis may be conducted.

[00135] Suppose we are looking at 2 target regions and using the MHL methylation metric for our assay, and we want to use a K nearest neighbors approach with $k = 3$. We would first run some samples that we know are healthy and some samples that we know are cancer, and compute the MHL values for each target in each sample. Suppose we ran 4 known samples of each type, and obtained the matrix shown in Table 2 below.

Table 2

	No rml 1	No rml 2	No rml 3	No rml 4	Ca ncer 1	Ca ncer 2	Ca ncer 3	Ca ncer 4
T arget 1	1	0.9	0.9	0.8	0.	0	0.	0.
T arget 2	0.0	0	0.1	0.2	0.	0.	1.	0.
	5				98	7	0	6

We could then process an unknown sample. Suppose we ran an unknown sample, and obtained the values shown in Table 3 below.

Table 3

	UNKN OWN
Target 1	0.2
Target 2	0.8

Based on the values we observed, we identify the $k=3$ samples that are most similar to our unknown sample shown in Table 4 below.

Table 4

	UNKN	Cance	Cance	Cance
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	OWN	r 1	r 2	r 4
1 Target	0.2	0.1	0	0.08
2 Target	0.8	0.98	0.7	0.6

Because a majority of these 3 Nearest Neighbors are CANCER, we classify the UNKNOWN sample as CANCER.

[00136] Random Forest classification involves creating multiple decision trees using a randomly chosen subset of samples with known categories and a subset of target regions; the methylation metric values of an unknown sample are then subjected to each individual decision tree, and the majority vote is used for classification. For example, using known data, the following three decision trees might be constructed:

$MHL_1 \geq 0.5$: Cancer
 $MHL_1 < 0.5$: Healthy
 $MHL_2 \geq 0.1$: Cancer
 $MHL_2 < 0.1$: Healthy
 $MHL_3 < 0.2$: Cancer
 $MHL_3 \geq 0.2$: Healthy

An unknown sample containing the MHL values (MHL_1 : 0.6, MHL_2 : 0.2, MHL_3 : 0.6) would then be classified as Cancer, as it would have two votes for cancer and one vote for healthy.

[00137] Support Vector Machines construct a hyperplane between known samples of different categories that maximizes the distance between each known sample and the hyperplane. This plane is then used as a “divider” to classify unknown samples, with samples falling on different sides of the plane being categorized differently. To illustrate an example using 2 target regions, the methylation metric values of known samples are plotted in space, and a hyperplane is drawn between the different groups (*see* Figure 1), where X_1 is the methylation metric value of the first target region, X_2 is the methylation metric value of the second target region, known cancer samples are drawn in black, known healthy samples are drawn in white, and the black line represents the hyperplane. To classify an unknown sample (shown in orange), the methylation metric values are compared to the hyperplane; if the sample falls on the same side as the healthy known samples (as it does here), the sample is classified as healthy. Image of Figure 1 is taken from Wikipedia: https://en.wikipedia.org/wiki/Support_vector_machine) for

illustration purpose only, and does not represent any DNA methylation status analysis or cancer assessment.

F. Exemplary polynucleotide fragment analysis by library construction and polynucleotide sequencing

[00138] In one aspect, the target (or template) polynucleotide of the present method is a fragmented polynucleotide, for example, ranging from about 100 residues to about 1000 residues, and in some embodiments, ranging from about 150 residues to about 400 residues.

[00139] The target or template DNA can include be regular genomic DNA, chromosomal DNA, extrachromosomal DNA (such as mitochondrial DNA), or a fragment thereof. In other embodiments, the target or template DNA is a processed DNA, for example, one that has undergone enzyme digestion, cross-linking, chemical or physical shearing, bisulfite conversion, and/or degradation.

[00140] Bisulfite conversion is a method that uses bisulfite to determine the methylation pattern of DNA. DNA methylation is a biochemical process involving the addition of a methyl group to the cytosine or adenine DNA nucleotides. DNA methylation stably alters the expression of genes in cells as cells divide and differentiate from embryonic stem cells into specific tissues. In bisulfite conversion, target nucleic acids are first treated with bisulfite reagents that specifically convert un-methylated cytosines to uracils while having no impact of methylated cytosine. One consequence of bisulfite conversion is that the double-stranded conformation of the original target is disrupted due to loss of sequence complementarity. The target sequences exist as two separate single-stranded DNAs during sample preparation and analytical or diagnostic testing. Target nucleic acid sequences frequently also exist at very low concentrations. This is an especially important consideration for circulating tumor DNA (also referred to as “cell-free tumor DNA,” or “ctDNA”) due to its often low concentration in circulation and the very low variant allele fraction.

[00141] In some embodiments, the nucleic acid molecule of interest disclosed herein is a cell-free DNA, such as cell-free fetal DNA (also referred to as “cfDNA”) or ctDNA. cfDNA circulates in the body, such as in the blood, of a pregnant mother, and represents the fetal genome, while ctDNA circulates in the body, such as in the blood, of a cancer patient, and is generally pre-fragmented. In other embodiments, the nucleic acid molecule of interest disclosed

herein is an ancient and/or damaged DNA, for example, due to storage under damaging conditions such as in formalin-fixed samples, or partially digested samples.

[00142] As cancer cells die, they release DNA into the bloodstream. This DNA, known as circulating tumor DNA (ctDNA), is highly fragmented, with an average length of approximately 150 base pairs. Once the white blood cells are removed, ctDNA generally comprises a very small fraction of the remaining plasma DNA, for example, ctDNA may constitute less than about 10% of the plasma DNA. Generally, this percentage is less than about 1%, for example, less than about 0.5% or less than about 0.01%. Additionally, the total amount of plasma DNA is generally very low, for example, at about 10 ng/mL of plasma.

[00143] The variants in the ctDNA can be interrogated using various methods, including next generation sequencing. Due to the low ratio of ctDNA to plasma DNA, it is difficult to call a variant with high confidence due to PCR and sequencing errors. Unique molecular identifiers (UMIs) are generally used to tag original molecules such that any variant seen can be compared to a consensus sequence. This is an effective manner to separate true from false positives. If the variant is matched to a consensus, it is a true positive. Otherwise, it is removed from analysis. Furthermore, it is essential that a high percentage of original molecules are turned into sequencing libraries so that the sensitivity remains high, *i.e.*, variants are not missed due to dropout. Thus, ligation efficiency is extremely important during library construction.

[00144] In one aspect, provided herein is a technique to vastly improve ligation efficiency while still targeting selected regions of the genome. In one embodiment, polynucleotides to be detected by sequencing, such as ctDNA, are first dephosphorylated to remove 5' phosphates to prevent ligation of ctDNA to itself. The ctDNA is then denatured such that all DNA is single stranded. Circuligase™, a single stranded DNA ligase, is used to ligate an adapter to the 3' end of the ctDNA. In one aspect, the adapter contains 2 specific bases on the 5' end to optimize ligation efficiency, followed by a UMI. In one aspect, the 3' end of the adapter contains a carbon spacer to prevent self-ligation of the adapters. In another aspect, the ligation reaction is further optimized using a crowding agent, such as PEG 4000. In one aspect, following ligation, molecules are double-stranded using a primer that is reverse complement to the adapter. This allows efficient removal of excess unligated adapters without removed usable DNA by a standard purification.

[00145] In one aspect, the DNA is then amplified using a semi-targeted PCR. One primer is reverse complement to the adapter, while the other (*e.g.*, as one primer in a primer pool) anneals to specific, targeted regions of the genome. The specific primers were designed to minimize primer-dimer interactions and off-target annealing. In one aspect, the target-specific primers are further optimized to land in close proximity to specific variants due to the small DNA size. Following another cleanup, a PCR adds the full-length sequencing adapters and barcodes. The final library is then sequenced, for example, on an Illumina machine.

[00146] In one aspect, the semi-targeted PCR results in enrichments of > about 40,000 fold of the original molecule set despite having a relatively small target region of ~30,000 bp. In one aspect, the overall conversion rates of the present method are at least 60%, implying that at least ~3 times more of the original molecules are converted into sequenceable material when compared to standard library construction and hybridization capture. In other embodiments, the overall conversion rates are between about 60% and about 70%, between about 70% and about 80%, between about 80% and about 90%, or over 90%. In one aspect, the present method thus is able to accurately call genetic or genomic variants, such as SNVs, indels, CNVs, and fusions at extremely low mutant allele fractions, for example, as low as 0.01%. In other aspects, the allele fraction of the genetic or genomic variant is about 0.05%, about 0.1%, about 0.5%, about 1%, or about 2%.

[00147] The following sections describe certain steps of the present method in greater detail.

Single-stranded polynucleotide libraries and method of constructing the same

[00148] Library construction for next generation sequencing, for example, for ctDNA, generally consists of several steps, including end repair, A-tailing, and a double stranded ligation of an adapter molecule. These ligated molecules can then be enriched 1000-2000 times at certain genomic regions using hybridization capture. Despite several improvements in library construction over the last several years, the process remains inefficient, resulting in many original molecules lost during the various steps. Double stranded ligation efficiency remains low, with ~20-30% of the molecules being properly ligated. Additionally, many molecules are lost during the purification and hybridization capture steps, so that the final conversion rate approximates 10-20%. Sensitivity remains low when interrogating low allele fraction variants

found in ctDNA. This limits the accuracy when calling low allele fraction mutants, since the low efficiency will result in sensitivity loss when looking at libraries with low allele fractions.

[00149] In addition, the small size of certain polynucleotides, such as ctDNA, prevents the use of tagmentation-based library construction. For example, the polynucleotides are first tagged (*e.g.*, with biotin) to generate a targeted library, and then enriched by capturing the tags (*e.g.*, by streptavidin). This way, the library for the regions of interest can be enriched by about 1000-2000 fold. Finally, a PCR is performed to amplify and index the molecules for sequencing. However, PCR based methods prove difficult to add UMIs to original molecules and result in high error rates.

[00150] In one aspect, the compositions, kits, and methods described herein addressed the above problems. In some embodiments, the compositions, kits, and methods are useful in sequencing nucleic acid molecules, including but not limited to construction of various libraries, various amplification reactions (such as by PCR and/or primer extension), purification of the constructed libraries, and analysis of sequencing reads.

[00151] In certain aspects, a sequencing library can be prepared, for example, from a sample containing fragmented polynucleotides, such as fragment DNA. In one aspect, the sample is obtained a naturally occurring sample, for example, directly from a subject, such as tissue fluid or body fluid, including but not limited to blood, plasma, serum, cerebrospinal fluid, synovial fluid, urine, sweat, semen, sputum, tear, mucus, or amniotic fluid. In other aspects, a sequencing library can be prepared by forming fragments of DNA (for example, by shearing the DNA), and attaching the adapters herein to the DNA fragments. In particular embodiments, the fragmented polynucleotides and the adapters are single-stranded.

[00152] The fragments (for example, the ctDNA or fragments formed by fragmenting longer DNA strands) are sometimes referred to as “inserts,” as they can be “inserted” or ligated adjacent to an adapter such as a single-stranded adaptor disclosed herein. RNA molecules can also be sequenced, for example by reverse transcribing the RNA molecules to form DNA molecules, which are attached to the adapters.

[00153] In one aspect, a method comprising ligating a set of adaptors to a library of single-stranded polynucleotides is provided, and in the method, the ligation is catalyzed by a single-stranded DNA (ssDNA) ligase. As used herein, a ssDNA ligase is capable of ligating ends of ssDNA in the absence of a complementary sequence. For example, CircLigase™ ssDNA Ligase

and CircLigase™ II ssDNA Ligase are both thermostable ligases that are typically used to catalyze intramolecular ligation (*i.e.*, circularization) of ssDNA templates having a 5'-phosphate and a 3'-hydroxyl group. In contrast to T4 DNA Ligase and Ampligase® DNA Ligase, which ligate DNA ends that are annealed adjacent to each other on a complementary DNA sequence, a ssDNA ligase ligates ends of ssDNA in the absence of a complementary sequence. The enzyme is therefore useful for making circular ssDNA molecules from linear ssDNA. Circular ssDNA molecules can be used as substrates for rolling-circle replication or rolling-circle transcription. In addition to its activity on ssDNA, a CircLigase enzyme also has activity in ligating a single-stranded nucleic acid having a 3'-hydroxyl ribonucleotide and a 5'-phosphorylated ribonucleotide or deoxyribonucleotide.

[00154] Either CircLigase™ ssDNA Ligase or CircLigase™ II ssDNA Ligase can be used in the present disclosure. The two enzymes are different in that CircLigase I is far less adenylated than CircLigase II and requires ATP for best activity. CircLigase I recircularizes ssDNA in the presence of ATP. CircLigase II is nearly 100% adenylated, therefore it is not necessary to add ATP to the reaction buffer. CircLigase II works as a stoichiometric reaction, where the enzyme bonds the 5'-end of an oligo that is adenylated in the enzyme active site, and then ligates the oligo and stops. Since the reaction doesn't contain ATP, CircLigase II works in a 1:1 enzyme:oligo configuration. Once the circularization is complete, the circular ssDNA is released from the active site and the reaction stops.

[00155] In one aspect, each single-stranded polynucleotide is blocked at the 5' end to prevent ligation at the 5' end, each adaptor comprises a unique molecular identifier (UMI) sequence that earmarks the single-stranded polynucleotide to which the adaptor is ligated, each adaptor is blocked at the 3' end to prevent ligation at the 3' end, and the 5' end of the adaptor is ligated to the 3' end of the single-stranded polynucleotide by the ssDNA ligase to form a linear ligation product, thereby obtaining a library of linear, single-stranded ligation products. Template-independent circularization of single-stranded DNA is described in WO2010/094040 A1, the disclosure of which is incorporated herein in its entirety. WO2010/094040 A1, however, only discloses intramolecular ligation (*e.g.*, circularization) of single-stranded polynucleotides.

[00156] Thus, the present method uses a ssDNA ligase, such as CircLigase or CircLigase II, in an unconventional manner. Instead of circularization, the present ligation method aims to generate a linear ligation product between the single-stranded target polynucleotide and an

adaptor molecule. In one aspect, the present disclosure uses a ssDNA ligase to carry out intramolecular ligation, *e.g.*, for ligating an adaptor to single-stranded polynucleotides. In order to do, in one aspect, the single-stranded polynucleotide is blocked at the 5' end to prevent circularization. This way, intramolecular ligation of the 3' end of an ssDNA to its own 5' end, as well as intermolecular ligation of the 3' end of one ssDNA to the 5' end of another ssDNA within the same library, is prevented. Thus, in one aspect, both circularization of the single-stranded polynucleotide and formation of linear concatemers (containing the single-stranded polynucleotides and/or the adaptors) are prevented during the ligation reaction. As shown in Figure 6, the blocking of each single-stranded polynucleotide can comprise dephosphorylation at its 5' end to prevent ligation at that end.

[00157] In another aspect, each adaptor is blocked at the 3' end to prevent ligation at the 3' end. This way, intramolecular ligation of the 3' end of an adaptor to its own 5' end, as well as intermolecular ligation of the 3' end of one adaptor molecule to the 5' end of another adaptor molecule, is prevented. The blocking of each adaptor can comprise a carbon spacer, ddCTP, ddATP, ddTTP, ddGTP, hexanediol, triethylene glycol (TEG), and/or hexaethylene glycol, to prevent ligation at its 3' end. Thus, in one aspect, both circularization of the single-stranded adaptor and formation of linear concatemers (containing the single-stranded polynucleotides and/or the adaptors) are prevented during the ligation reaction.

[00158] The adaptor may comprise one or more copies of one or more spacers, in any suitable combination. For example, Gansauge and Meyer disclosed an adaptor that comprises ten copies of a C3Spacer and a biotinylated TEG spacer. Gansauge and Meyer (2013), "Single-stranded DNA library preparation for the sequencing of ancient or damaged DNA," *Nature Protocols*, 8(4): 737-48, which is incorporated herein by reference in its entirety. This reference, however, requires capturing the ligated ssDNA, via biotin-streptavidin interaction, immediately after ligation. This step may cause a significant loss of the ssDNA molecules in the library. The reference then converts the captured ssDNA to dsDNA while the ssDNA remains captured on a bead.

[00159] As shown in Figure 6, the present disclosure does not require capturing the ligated ssDNA immediately after ligation. Instead, the ligated ssDNA remains in the ligation reaction volume when it is converted into dsDNA.

[00160] In one aspect, the ligation efficiency of the ssDNA in the library is high, for example, at least about 40%, at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, or at least about 99% of the single-stranded polynucleotides in the sample are ligated to an adaptor. In particular embodiments, the ligation efficiency is about 80%. With this vastly improved ligation efficiency, the presently claimed method is still capable of targeting selected regions of the genome, as explained below.

[00161] In one aspect, the adaptor has the following structure: /5'Phos/ $N_1N_2 \dots N_i$ -UMI- $M_1M_2 \dots M_j$ -Blocker, wherein "5'Phos" represents a 5' phosphate group, " $N_1N_2 \dots N_i$ " represents the sequence 5' to the UMI sequence, " $M_1M_2 \dots M_j$ " represents the sequence 3' to the UMI sequence, and "Blocker" indicates that the 3' end of the adaptor is blocked to prevent ligation thereto. Both i and j are integers, wherein i can be 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, or greater than 30; and j can be 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, or greater than 50. In specific embodiments, i can be 2. In some embodiments, the dinucleotide sequence N_1N_2 at the 5' end of $N_1N_2 \dots N_i$ can be GA (5' to 3'), GG (5' to 3'), AA (5' to 3'), or AG (5' to 3'), in order to enhance the ligation efficiency.

[00162] In one aspect, a portion or all of the $M_1M_2 \dots M_j$ sequence is used in later steps for designing a reverse-complement sequence that is used as a primer to convert the ligated single-stranded polynucleotide into a double-stranded polynucleotide, and/or for the semi-targeted PCR to amplify a selected target sequence (the other primer of the primer pair being the target-specific primer). In one aspect, the $M_1M_2 \dots M_j$ sequence comprises AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG (SEQ ID NO:17506) or a portion thereof that comprises between about 18 and 22 nucleotide residues.

[00163] In another aspect, the "Blocker" comprises a carbon spacer, ddCTP, ddATP, ddTTP, ddGTP, hexanediol, triethylene glycol (TEG), and/or hexaethylene glycol, in one or more copies of one or more blocker groups in any suitable combination and order in the 5' to 3' direction.

[00164] In one aspect, use of the UMI facilitates the determination, selection, and/or isolation of error-free sequencing reads of a target sequence, and the sequencing reads can be selected with high accuracy and high throughput. Such validated, error-free sequencing reads are useful

in any technique that requires sequence fidelity, including the construction of larger molecules of known sequence, polymorphism and/or mutation screening, massively parallel sequencing, and quantification methods to preclude bias in the methodologies.

[00165] In one aspect, the Unique Molecular Identifier is associated with and uniquely identifies a ligated construct comprising a single-stranded target polynucleotide and an adaptor. In other words, two single-stranded target polynucleotides having the same sequence may be ligated to two different adaptors which differ from each other at their UMI sequences; the resultant ligation products are different, and each ligation product (rather than the target polynucleotides having the same sequence) is uniquely identified by the UMI. In another aspect, when the single-stranded ligation products are converted into double-stranded polynucleotides and amplified, amplification errors may be introduced during repeated copying even though very high fidelity polymerases are available. As a result, even a low error rate can have a significant impact, particularly in the construction of large libraries. Although massively parallel sequencing has advantages in cost and throughput, the accuracy of the reads can be comprised by the limitations of the amplification and/or detection technologies.

[00166] By using the UMI, the present method is capable of identifying error-free amplification products and/or sequencing reads, and excluding those with technical errors from analysis. The amplification products and/or sequencing reads having the same UMI can be confirmed as related (identical by descent), and thus sequence differences between molecules with the same UMI can be identified as technical errors rather than real differences in the sequence (*e.g.*, sequence differences between a wild-type sequence and a cancer-related mutant sequence). In other words, since each single-stranded ligation product is unique identifiable by its UMI, all of its descendants (due to amplification and/or sequencing) should have the same target sequence if no technical error is introduced. If, however, an error such as a single-nucleotide insertion is introduced into the target sequence during amplification and/or sequencing, some amplification products and/or sequencing reads identical by descent (*e.g.*, sharing the same UMI) will have the insertion while the others will not. The exact ratio between the products having the insertion and those that do not have the insert will vary, depending on when the error occurs during the amplification and/or sequencing process. In general, when very high fidelity polymerases are used, the products without errors will be in the majority. In another aspect, because amplification products and/or sequencing reads that are identical by

descent can be identified, a consensus sequence can be determined using data from multiple molecules, thereby achieving a high accuracy for high throughput sequencing.

[00167] In one aspect, the UMI is a degenerate nucleic acid sequence, and the number of nucleotides in the UMI is designed such that the number of potential and actual sequences represented by the UMI sequences is greater than the total number of target single-stranded target polynucleotide in the initial library. In one aspect, UMI sequence diversity (or “uniqueness” with regard to each single UMI sequence) can be provided by using a degenerate collection of sequences randomly generated by synthesizing with a mixture of all four bases at each position. Alternatively, a diverse but pre-defined set of sequences can be synthesized and ligated to the initial single-stranded polynucleotide library. The diversity of the UMI set needs to be sufficient so that molecules that are not related by descent won’t be mistaken as such. In one aspect, a “unique” molecular identifier need not be absolutely unique, and may be used on different target single-stranded polynucleotides provided it is clear that they are different and not mistaken for a molecule that is identical by descent. The large number of UMI sequences that can be generated from the random assembly of nucleotides provides a high probability that each individual ligation product can be uniquely identified. For example, if the UMI comprises a 12-mer synthesized with a mixture of A, C, G and T at each position, there are 4^{12} possible sequences. If the UMI comprises a 20-mer synthesized with a mixture of A, C, G and T at each position, there are 4^{20} (about 10^{12}) possible sequences. The use of such random identifiers allows a large library with single-stranded target polynucleotides that can be individually distinguished from each other.

[00168] In particular aspects, the UMI is a 5-mer, 6-mer, 7-mer, 8-mer, 9-mer, 10-mer, 11-mer, 12-mer, 13-mer, 14-mer, 15-mer, 16-mer, 17-mer, 18-mer, 19-mer, 20-mer, 21-mer, 22-mer, 23-mer, 24-mer, 25-mer, or even longer degenerate sequence. In one aspect, the adaptor has the following structure: /5’ Phos/

GANNNNNNNNNNNAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG/3SpC3/,

wherein “NNNNNNNNNNNN” represents a 12-mer UMI sequence, and “3SpC3” represents a 3’ carbon spacer. The sequence of

GANNNNNNNNNNNAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG is SEQ ID NO:17507.

[00169] The concentration of DNA can be artificially increased by adding condensing agents such as cobalt hexamine and biogenic polyamines such as spermidine, or by using crowding agents such as polyethylene glycol (PEG) which also increase the effective concentration of enzymes. In one aspect, additives such as cobalt hexamine can produce exclusively intermolecular reaction, resulting in linear ligation products rather than circular products. Thus, in case the 5' ends of the single-stranded target polynucleotides and the 3' ends of the single-stranded adaptor may not be completely blocked to prevent ligation, additives such as cobalt hexamine may be used to enhance intermolecular reaction and further prevent circularization of the single-stranded target polynucleotide and/or the adaptor.

[00170] In some embodiments, more than one configurations of the adaptor can be used in the same ligation reaction. For example, two configurations of the adaptor may be used:

Configuration No. 1: /5'Phos/ $N_1N_2 \dots N_i$ -UMI₁-M₁M₂...M_j-Blocker₁, and

Configuration No. 2: /5'Phos/ $P_1P_2 \dots P_k$ -UMI₂-Q₁Q₂...Q_l-Blocker₂.

[00171] $N_1N_2 \dots N_i$ and $P_1P_2 \dots P_k$ can be the same or different, UMI₁ and UMI₂ can be the same or different, M₁M₂...M_j and Q₁Q₂...Q_l, can be the same or different, and Blocker₁ and Blocker₂ can be the same or different. In one embodiment, UMI₁ is different from UMI₂ (for example, UMI₁ is a 12-mer degenerate sequence while UMI₂ is a 13-mer degenerate sequence), while the other features of the adaptors are the same. In another embodiment, $N_1N_2 \dots N_i$ is different from $P_1P_2 \dots P_k$ (for example, one is AG while the other is GA), while the other features of the adaptors are the same. In yet another embodiment, M₁M₂...M_j is different from Q₁Q₂...Q_l, while the other features of the adaptors are the same. In still another embodiment, Blocker₁ and Blocker₂ are different, while the other features of the adaptors are the same.

[00172] After the ligation reaction, the single-stranded ligation products, without any need for purification (*e.g.*, separation of the ligation products from the excess, unligated adaptor molecules), can be immediately subject to conversion into double-stranded ligation products. In addition, neither the single-stranded target polynucleotide nor the adaptor needs to be captured on a solid support (*e.g.*, by biotin-streptavidin mediated binding to a bead) in order for the subsequent conversion of the ligation product into a double-stranded polynucleotide and/or amplification step. Thus, the present method avoids and/or reduces loss of the already small allele fraction of the mutant in a DNA sample, such as ctDNA, due to the purification or

isolation of the single-stranded ligation products. Instead, in one aspect, the single-stranded ligation products remain in the solution which is directed subject to primer extension.

Conversion of single-stranded polynucleotide library to double-stranded polynucleotide library

[00173] In one aspect as shown in Figure 6, following construction of the library containing the single-stranded ligation products, the method can further comprise converting the library of linear, single-stranded ligation products into a library of linear, double-stranded ligation products. In one aspect, the conversion uses a primer or a set of primers each comprising a sequence that is reverse-complement to the adaptor and/or hybridizable to the adaptor.

[00174] For an adaptor having the following structure: /5'Phos/ $N_1N_2 \dots N_i$ -UMI- $M_1M_2 \dots M_j$ -Blocker, the primer can comprise a sequence that is reverse-complement and/or hybridizable to $M_1M_2 \dots M_j$. In this example, when the primer hybridizes to the ligated product having the structure ssDNA- $N_1N_2 \dots N_i$ -UMI- $M_1M_2 \dots M_j$ -Blocker, the primer extension reaction can convert the ssDNA- $N_1N_2 \dots N_i$ -UMI sequence (and optionally, all or a portion of the $M_1M_2 \dots M_j$ sequence) into double-stranded polynucleotides. In one specific example, a reverse-complement primer comprises the sequence set forth in SEQ ID NO:17505: CACTCTTTCCCTACACGACGC (5' to 3').

[00175] In some embodiments, the primer may not be a perfect reverse-complement of $M_1M_2 \dots M_j$ or a portion thereof; nonetheless, the primer is hybridizable to $M_1M_2 \dots M_j$ (and thus the ssDNA ligated to the adaptor) under stringent conditions.

[00176] In any of the preceding embodiments, the method can further comprise amplifying and/or purifying the library of linear, double-stranded ligation products. In one aspect, the double-stranded ligation products are purified and size selected to remove unbound adaptor molecules and/or unbound primers, and/or complexes formed between an adaptor and its reverse-complement primer. Any suitable methods can be used to remove these fragments which are generally shorter than the desired double-stranded ligation products. For example, using PCR purification column from Qiagen could help to eliminate the smaller fragments from the samples and running the column-purified samples on 2% certified low range ultra agarose gel can help to select the desired fragment size. The beads-based DNA purification including AMPure method is also helpful to remove the smaller fragments. In some embodiments, the

desired double-stranded ligation products size is from about 100bps to about 600 bps, such as from about 100bps to about 400 bps, from about 150bps to about 200 bps, from about 200bps to about 250 bps, and from about 250bps to about 300 bps. In one embodiment, dsDNA (>150 bps and <400 bps) is purified and collected, for example, by eluting beads suspended in a Tri-EDTA buffer.

[00177] In one aspect, the purification is bead-based. In another aspect, the purification is based on size selection, for example, the purification step selectively purifies polynucleotides between about 50 nucleotides and about 1000 nucleotides in lengths, for example, adaptors of about 40 nucleotides in length (and primer dimers and/or primer-adaptor duplexes of about 40bp) are removed. In one aspect, the purification is column-based, for example, by using a dsDNA or ssDNA purification column, such as those from Zymo or Qiagen.

[00178] In another aspect, the purification does not comprise using a specific binding pair (such as biotin/streptavidin), one of which is attached to the linear, double-stranded ligation product and the other is attached to a solid support (such as a bead).

[00179] In any of the preceding embodiments, the method herein can further comprise amplifying the library of linear, double-stranded ligation products, *e.g.*, by a polymerase chain reaction (PCR), to obtain an amplified library of linear, double-stranded ligation products comprising sequence information of a target sequence. This amplification can be an unbiased amplification, for example, by ligating a universal adaptor pair to the ends of the double-stranded ligation products, and amplifying all the tagged double-stranded ligation products with a universal primer pair. In other embodiments, a semi-targeted amplification is conducted in lieu of or in addition to the unbiased amplification. The semi-targeted amplification can be performed before or after the unbiased amplification.

Semi-targeted amplification of double-stranded polynucleotide library

[00180] In one aspect, as shown in Figure 6, a semi-targeted amplification of the double-stranded ligation product library comprises using a primer comprising a sequence that is reverse-complement and/or hybridizable to the adaptor, and a primer hybridizable to a target sequence (*e.g.*, an EGFR gene sequence) or primers hybridizable to the same target sequence or multiple target sequences.

[00181] For an adaptor having the following structure: /5'Phos/ $N_1N_2 \dots N_i$ -UMI- $M_1M_2 \dots M_j$ -Blocker, the primer can comprise a sequence that is reverse-complement and/or hybridizable to $M_1M_2 \dots M_j$. This way, when the primer hybridizes to one strand of the dsDNA and the target-specific primer hybridizes to the other strand of the dsDNA, the PCR product will contain a target sequence as well as the $N_1N_2 \dots N_i$ -UMI sequence (and optionally, all or a portion of the $M_1M_2 \dots M_j$ sequence). In one specific example, a reverse-complement primer comprises the sequence set forth in SEQ ID NO:17505: CACTCTTTCCCTACACGACGC (5' to 3').

[00182] In one aspect, a plurality of target-specific primers can be used, each comprising a sequence specific for the same or a different target sequence. In other words, the primers can have the same or different target sequences. In some embodiments, the pool of target-specific primers comprises about 5, about 10, about 25, about 50, about 100, about 150, about 200, about 250, about 300, about 400, about 500, about 600, about 700, about 800, about 900, about 1000, or more than about 1000 different primers, such as about 10^4 , about 10^5 , about 10^6 , or more primers. In other embodiments, the pool comprises between about 20 and about 60, between about 60 and about 100, between about 100 and about 140, between about 140 and about 180, between about 180 and about 220, between about 220 and about 260, between about 260 and about 300, between about 300 and about 350, or between about 350 and about 400 different primers. In one aspect, the pool of target-specific primers are used together with one common reverse-complement primer, wherein the common reverse-complement primer forms a primer pair with each individual target-specific primer in the pool to amplify the target sequence in and/or between the primers in a semi-targeted fashion. Thus, in this aspect, the semi-targeted amplification is not a whole genome amplification.

[00183] Since ctDNA fragments randomly, in one aspect, the primer position of the target-specific primer may be important. For example, if the primer landing spans a break point, it may result in lower conversion rates. A larger target-specific primer pool and/or using multiple partially overlapping primers for the same target sequence may solve the problem.

[00184] In one aspect, the sequence information of the target sequence can comprise a mutation, a single nucleotide polymorphism (SNP), a copy number variation (CNV), or an epigenetic change. In one aspect, the mutation comprises a point mutation, an insertion, a deletion, an inversion, a truncation, a fusion, an amplification, or any combination thereof.

[00185] In some embodiments, the amplified library of linear, double-stranded ligation products can be a library other than a whole genome library, for example, a semi-targeted genome library.

[00186] In some embodiments, the method can further comprise purifying the amplified library of linear, double-stranded ligation products. Any suitable methods can be used to remove smaller fragments including primer dimers. For example, using PCR purification column from Qiagen could help to eliminate the smaller fragments from the samples and running the column-purified samples on 2% certified low range ultra agarose gel can help to select the desired fragment size. The beads-based DNA purification including AMPure method is also helpful to remove the smaller fragments. In some embodiments, the amplification product size is from about 100bps to about 600 bps, such as from about 100bps to about 400 bps, from about 150bps to about 200 bps, from about 200bps to about 250 bps, and from about 250bps to about 300 bps. In one embodiment, dsDNA (>150 bps and <400 bps) is purified and collected, for example, by eluting beads suspended in a Tri-EDTA buffer.

[00187] In one aspect, the purification is bead-based. In another aspect, the purification is based on size selection, for example, the purification step selectively purifies polynucleotides greater about 150 nucleotides in lengths. In another aspect, the purification does not comprise using a specific binding pair (such as biotin/streptavidin), one of which is attached to the linear, double-stranded ligation product and the other is attached to a solid support (such as a bead). In one aspect, the purification is column-based, for example, by using a dsDNA or ssDNA purification column, such as those from Zymo or Qiagen.

Construction of sequence library and analysis of sequencing reads

[00188] In one aspect, the method further comprises sequencing the purified amplified library of linear, double-stranded ligation products. In one aspect, the sequencing step comprises attaching a sequencing adapter and/or a sample-specific barcode to each linear, double-stranded ligation product. In one particular aspect, the attaching step is performed using a polymerase chain reaction (PCR).

[00189] Figure 7 shows an exemplary configuration of a construct comprising a target molecule for sequencing. For Illumina sequencing, on each end, these constructs have flow cell binding sites, P5 and P7, which allow the library fragment to attach to the flow cell surface. The

P5 and P7 regions of single-stranded library fragments anneal to their complementary oligos on the flowcell surface. The flow cell oligos act as primers and a strand complementary to the library fragment is synthesized. Then, the original strand is washed away, leaving behind fragment copies that are covalently bonded to the flowcell surface in a mixture of orientations. Copies of each fragment are then generated by bridge amplification, creating clusters. Then, the P5 region is cleaved, resulting in clusters containing only fragments which are attached by the P7 region. This ensures that all copies are sequenced in the same direction. The sequencing primer anneals to the P5 end of the fragment, and begins the sequencing by synthesis process. Index reads are performed when a sample is barcoded. When Read 1 is finished, everything from Read 1 is removed and an index primer is added, which anneals at the P7 end of the fragment and sequences the barcode. Then, everything is stripped from the template, which forms clusters by bridge amplification as in Read 1. This leaves behind fragment copies that are covalently bonded to the flowcell surface in a mixture of orientations. This time, P7 is cut instead of P5, resulting in clusters containing only fragments which are attached by the P5 region. This ensures that all copies are sequenced in the same direction (opposite Read 1). The sequencing primer anneals to the P7 region and sequences the other end of the template.

[00190] Next-generation sequencing platforms, such as MiSeq (Illumina Inc., San Diego, CA), can be used for highly multiplexed assay readout. A variety of statistical tools, such as the Proportion test, multiple comparison corrections based on False Discovery Rates (*see* Benjamini and Hochberg, 1995, *Journal of the Royal Statistical Society Series B* (Methodological) 57, 289-300), and Bonferroni corrections for multiple testing, can be used to analyze assay results. In addition, approaches developed for the analysis of differential expression from RNA-Seq data can be used to reduce variance for each target sequence and increase overall power in the analysis. *See* Smyth, 2004, Stat. Appl. Genet. Mol. Biol. 3, Article 3.

[00191] Overall, in some embodiments, the conversion rate of the present method is at least about 40%, at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, or at least about 95%. In one aspect, the conversion rate is the percentage of targeted single-stranded polynucleotides in the initial library that give rise to sequencing reads.

[00192] In any of the preceding embodiments, the method can be used for the diagnosis and/or prognosis of a disease or condition in a subject, predicting the responsiveness of a subject to a treatment, identifying a pharmacogenetics marker for the disease/condition or treatment,

and/or screening a population for a genetic information. In one aspect, the disease or condition is a cancer or neoplasia, and the treatment is a cancer or neoplasia treatment.

[00193] Mutant DNA molecules offer unique advantages over cancer-associated biomarkers because they are so specific. Though mutations occur in individual normal cells at a low rate (about 10^{-9} to 10^{-10} mutations/bp/generation), such mutations represent such a tiny fraction of the total normal DNA that they are orders of magnitude below the detection limit of certain art methods. Several studies have shown that mutant DNA can be detected in stool, urine, and blood of CRC patients (Osborn and Ahlquist, Stool screening for colorectal cancer: molecular approaches, *Gastroenterology* 2005;128:192-206).

[00194] Based on the sequencing results herein, detection of circulating tumor DNA in the patient can be made, and diagnosis of cancer and predictions regarding tumor recurrence can be made. Based on the predictions, treatment and surveillance decisions can be made. For example, circulating tumor DNA which indicates a future recurrence, can lead to additional or more aggressive therapies as well as additional or more sophisticated imaging and monitoring. Circulating DNA refers to DNA that is ectopic to a tumor.

[00195] Samples which can be monitored for ctDNA include blood and stool. Blood samples may be for example a fraction of blood, such as serum or plasma. Similarly stool can be fractionated to purify DNA from other components. Tumor samples are used to identify a somatically mutated gene in the tumor that can be used as a marker of tumor in other locations in the body. Thus, as an example, a particular somatic mutation in a tumor can be identified by any standard means known in the art. Typical means include direct sequencing of tumor DNA, using allele-specific probes, allele-specific amplification, primer extension, *etc.* Once the somatic mutation is identified, it can be used in other compartments of the body to distinguish tumor derived DNA from DNA derived from other cells of the body. Somatic mutations are confirmed by determining that they do not occur in normal tissues of the body of the same patient. Types of tumors which can be diagnosed and/or monitored in this fashion are virtually unlimited. Any tumor which sheds cells and/or DNA into the blood or stool or other bodily fluid can be used. Such tumors include, in addition to colorectal tumors, tumors of the breast, lung, kidney, liver, pancreas, stomach, brain, head and neck, lymphatics, ovaries, uterus, bone, blood, *etc.*

[00196] In one aspect, the method disclosed herein can be used to construct a library for use in sequencing and/or in determining an epigenetic status/state of one or more regions of the target sequence. DNA methylation was first the discovered epigenetic mark. Epigenetics is the study of changes in gene expression or cellular phenotype caused by mechanisms other than changes in the underlying DNA sequence. Methylation predominately involves the addition of a methyl group to the carbon-5 position of cytosine residues of the dinucleotide CpG and is associated with repression or inhibition of transcriptional activity.

[00197] Bisulfite conversion is the use of bisulfite reagents to treat DNA to determine its pattern of methylation. The treatment of DNA with bisulfite converts cytosine residues to uracil but leaves 5-methylcytosine residues unaffected. Thus, bisulfite treatment introduces specific changes in the DNA sequence that depend on the methylation status of the individual cytosine residues. Various analyses can be performed on the altered sequence to retrieve this information, for example, in order to differentiate between single nucleotide polymorphisms (SNP) resulting from the bisulfite conversion. U.S. Patent No. 7,620,386, U.S. Patent No. 9,365,902, and U.S. Patent Application Publication 2006/0134643, all of which are incorporated herein by reference, exemplify methods known to one of ordinary skill in the art with regard to detecting sequences altered due to bisulfite conversion.

[00198] As discussed above, one consequence of bisulfite conversion is that the double-stranded conformation of the original target is disrupted due to loss of sequence complementarity. While this may cause problem for traditional methods for constructing double-stranded libraries, in one aspect the present method is uniquely suited to construct single-stranded libraries from bisulfite conversion sample for sequencing analysis.

[00199] In another aspect, the present method can be used in combination with a method for determining a methylation state/status, for example, as described in U.S. Provisional Application No. ___, entitled "Compositions and Methods for Detection of Genomic Variance and DNA Methylation Status," filed April 19, 2017 (Attorney Docket No. 737993000100), which is incorporated herein by reference in its entirety for all purposes. In one embodiment, a sample is contacted with a methylation-sensitive restriction enzyme (MSRE) before the dephosphorylation and/or the denaturing step, and methylation profiles are then be analyzed by constructing a single-stranded library by ligation as disclosed herein.

Further exemplary embodiments

[00200] In any of the preceding embodiments, the ssDNA ligase can be a *Thermus* bacteriophage RNA ligase such as a bacteriophage TS2126 RNA ligase (*e.g.*, CircLigase™ and CircLigase II™), or an archaeobacterium RNA ligase such as *Methanobacterium thermoautotrophicum* RNA ligase 1. In other aspects, the ssDNA ligase is an RNA ligase, such as a T4 RNA ligase, *e.g.*, T4 RNA ligase I, *e.g.*, New England Biosciences, M0204S, T4 RNA ligase 2, *e.g.*, New England Biosciences, M0239S, T4 RNA ligase 2 truncated, *e.g.*, New England Biosciences, M0242S, T4 RNA ligase 2 truncated KQ, *e.g.*, M0373S, or T4 RNA ligase 2 truncated K227Q, *e.g.*, New England Biosciences, M0351S. In any of the preceding embodiments, the kit can also comprise a thermostable 5' App DNA/RNA ligase, *e.g.*, New England Biosciences, M0319S, or T4 DNA ligase, *e.g.*, New England Biosciences, M0202S.

[00201] In some embodiments, the present methods comprise ligating a set of adaptors to a library of single-stranded polynucleotides using a single-stranded DNA (ssDNA) ligase. Any suitable ssDNA ligase, including the ones disclosed herein, can be used. The adaptors can be used at any suitable level or concentration, *e.g.*, from about 1 µM to about 100 µM such as about 1 µM, 10 µM, 20 µM, 30 µM, 40 µM, 50 µM, 60 µM, 70 µM, 80 µM, 90 µM, or 100 µM, or any subrange thereof. The adapter can comprise or begin with any suitable sequences or bases. For example, the adapter sequence can begin with all 2 bp combinations of bases.

[00202] In some embodiments, the ligation reaction can be conducted in the presence of a crowding agent. In one aspect, the crowding agent comprises a polyethylene glycol (PEG), such as PEG 4000, PEG 6000, or PEG 8000, Dextran, and/or Ficoll. The crowding agent, *e.g.*, PEG, can be used at any suitable level or concentration. For example, the crowding agent, *e.g.*, PEG, can be used at a level or concentration from about 0% (w/v) to about 25% (w/v), *e.g.*, at about 0% (w/v), 1% (w/v), 2% (w/v), 3% (w/v), 4% (w/v), 5% (w/v), 6% (w/v), 7% (w/v), 8% (w/v), 9% (w/v), 10% (w/v), 11% (w/v), 12% (w/v), 13% (w/v), 14% (w/v), 15% (w/v), 16% (w/v), 17% (w/v), 18% (w/v), 19% (w/v), 20% (w/v), 21% (w/v), 22% (w/v), 23% (w/v), 24% (w/v), or 25% (w/v), or any subrange thereof.

[00203] In some embodiments, the ligation reaction can be conducted for any suitable length of time. For example, the ligation reaction can be conducted for a time from about 2 to about 16 hours, *e.g.*, for about 2 hours, 3 hours, 4 hours, 5 hours, 6 hours, 7 hours, 8 hours, 9 hours, 10 hours, 11 hours, 12 hours, 13 hours, 14 hours, 15 hours, or 16 hours, or any subrange thereof.

[00204] In some embodiments, the ssDNA ligase in the ligation reaction can be used in any suitable volume. For example, the ssDNA ligase in the ligation reaction can be used at a volume from about 0.5 μ l to about 2 μ l, *e.g.*, at about 0.5 μ l, 0.6 μ l, 0.7 μ l, 0.8 μ l, 0.9 μ l, 1 μ l, 1.1 μ l, 1.2 μ l, 1.3 μ l, 1.4 μ l, 1.5 μ l, 1.6 μ l, 1.7 μ l, 1.8 μ l, 1.9 μ l, or 2 μ l, or any subrange thereof.

[00205] In some embodiments, the ligation reaction can be conducted in the presence of a ligation enhancer, *e.g.*, betaine. The ligation enhancer, *e.g.*, betaine, can be used at any suitable volume, *e.g.*, from about 0 μ l to about 1 μ l, *e.g.*, at about 0 μ l, 0.1 μ l, 0.2 μ l, 0.3 μ l, 0.4 μ l, 0.5 μ l, 0.6 μ l, 0.7 μ l, 0.8 μ l, 0.9 μ l, 1 μ l, or any subrange thereof.

[00206] In some embodiments, the ligation reaction can be conducted using a T4 RNA ligase I, *e.g.*, the T4 RNA ligase I from New England Biosciences, M0204S, in the following exemplary reaction mix (20 μ l): 1 X Reaction Buffer (50 mM Tris-HCl, pH 7.5, 10 mM MgCl₂, 1 mM DTT), 25% (wt/vol) PEG 8000, 1 mM hexamine cobalt chloride (optional), 1 μ l (10 units) T4 RNA Ligase, and 1 mM ATP. The reaction can be incubated at 25°C for 16 hours. The reaction can be stopped by adding 40 μ l of 10 mM Tris-HCl pH 8.0, 2.5 mM EDTA.

[00207] In some embodiments, the ligation reaction can be conducted using a Thermostable 5' App DNA/RNA ligase, *e.g.*, the Thermostable 5' App DNA/RNA ligase from New England Biosciences, M0319S, in the following exemplary reaction mix (20 μ l): ssDNA/RNA Substrate 20 pmol (1 pmol/ μ l), 5' App DNA Oligonucleotide 40 pmol (2 pmol/ μ l), 10X NEBuffer 1 (2 μ l), 50 mM MnCl₂ (for ssDNA ligation only) (2 μ l), Thermostable 5' App DNA/RNA Ligase (2 μ l (40 pmol)), and Nuclease-free Water (to 20 μ l). The reaction can be incubated at 65°C for 1 hour. The reaction can be stopped by heating at 90°C for 3 minutes.

[00208] In some embodiments, the ligation reaction can be conducted using a T4 RNA ligase 2, *e.g.*, the T4 RNA ligase 2 from New England Biosciences, M0239S, in the following exemplary reaction mix (20 μ l): T4 RNA ligase buffer (2 μ l), enzyme (1 μ l), PEG (10 μ l), DNA (1 μ l), Adapter (2 μ l), and water (4 μ l). The reaction can be incubated at 25°C for 16 hours. The reaction can be stopped by heating at 65°C for 20 minutes.

[00209] In some embodiments, the ligation reaction can be conducted using a T4 RNA ligase 2 Truncated, *e.g.*, the T4 RNA ligase 2 Truncated from New England Biosciences, M0242S, in the following exemplary reaction mix (20 μ l): T4 RNA ligase buffer (2 μ l), enzyme (1 μ l), PEG (10 μ l), DNA (1 μ l), Adapter (2 μ l), and water (4 μ l). The reaction can be incubated at 25°C for 16 hours. The reaction can be stopped by heating at 65°C for 20 minutes.

[00210] In some embodiments, the ligation reaction can be conducted using a T4 RNA ligase 2 Truncated K227Q, *e.g.*, the T4 RNA ligase 2 Truncated K227Q from New England Biosciences, M0351S, in the following exemplary reaction mix (20 μ l): T4 RNA ligase buffer (2 μ l), enzyme (1 μ l), PEG (10 μ l), DNA (1 μ l), Adenylated Adapter (0.72 μ l), and water (5.28 μ l). The reaction can be incubated at 25°C for 16 hours. The reaction can be stopped by heating at 65°C for 20 minutes.

[00211] In some embodiments, the ligation reaction can be conducted using a T4 RNA ligase 2 Truncated KQ, *e.g.*, the T4 RNA ligase 2 Truncated KQ from New England Biosciences, M0373S, in the following exemplary reaction mix (20 μ l): T4 RNA ligase buffer (2 μ l), enzyme (1 μ l), PEG (10 μ l), DNA (1 μ l), Adenylated Adapter (0.72 μ l), and water (5.28 μ l). The reaction can be incubated at 25°C for 16 hours. The reaction can be stopped by heating at 65°C for 20 minutes.

[00212] In some embodiments, the ligation reaction can be conducted using a T4 DNA ligase, *e.g.*, the T4 DNA ligase from New England Biosciences, M0202S, in the following exemplary reaction mix (20 μ l): T4 RNA ligase buffer (2 μ l), enzyme (1 μ l), PEG (10 μ l), DNA (1 μ l), Adenylated Adapter (0.72 μ l), and water (5.28 μ l). The reaction can be incubated at 16°C for 16 hours. The reaction can be stopped by heating at 65°C for 10 minutes.

[00213] The second strand synthesis step can be conducted using any suitable enzyme. For example, the second strand synthesis step can be conducted using Bst polymerase, *e.g.*, New England Biosciences, M0275S or Klenow fragment (3'->5' exo-), *e.g.*, New England Biosciences, M0212S.

[00214] In some embodiments, the second strand synthesis step can be conducted using Bst polymerase, *e.g.*, New England Biosciences, M0275S, in the following exemplary reaction mix (10 μ l): water (1.5 μ l), primer (0.5 μ l), dNTP (1 μ l), ThermoPol Reaction buffer (5 μ l), and Bst (2 μ l). The reaction can be incubated at 62°C for 2 minutes and at 65°C for 30 minutes. After the reaction, the double stranded DNA molecules are further purified.

[00215] In some embodiments, the second strand synthesis step can be conducted using Klenow fragment (3'->5' exo-), *e.g.*, New England Biosciences, M0212S, in the following exemplary reaction mix (10 μ l): water (0.5 μ l), primer (0.5 μ l), dNTP (1 μ l), NEB buffer (2 μ l), and exo- (3 μ l). The reaction can be incubated at 37°C for 5 minutes and at 75°C for 20 minutes. After the reaction, the double stranded DNA molecules are further purified.

[00216] After the second strand synthesis, but before the first or semi-targeted PCR, the double stranded DNA can be purified. The double stranded DNA can be purified using any suitable technique or procedure. For example, the double stranded DNA can be purified using any of the following kits: Zymo clean and concentrator, Zymo research, D4103; Qiaquick, Qiagen, 28104; Zymo ssDNA purification kit, Zymo Research, D7010; Zymo Oligo purification kit, Zymo Research, D4060; and AmpureXP beads, Beckman Coulter, A63882: 1.2x-4x bead ratio.

[00217] The first or semi-targeted PCR can be conducted using any suitable enzyme or reaction conditions. For example, the polynucleotides or DNA strands can be annealed at a temperature ranging from about 52°C to about 72°C, *e.g.*, at about 52°C, 53°C, 54°C, 55°C, 56°C, 57°C, 58°C, 59°C, 60°C, 61°C, 62°C, 63°C, 64°C, 65°C, 66°C, 67°C, 68°C, 69°C, 70°C, 71°C, or 72°C, or any subrange thereof. The first or semi-targeted PCR can be conducted for any suitable rounds of cycles. For example, the first or semi-targeted PCR can be conducted for 10-40 cycles, *e.g.*, for 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, or 40 cycles. The primer pool can be used at any suitable concentration. For example, the primer pool can be used at a concentration ranging from about 5 nM to about 200 nM, *e.g.*, at about 5 nM, 6 nM, 7 nM, 8 nM, 9 nM, 10 nM, 20 nM, 30 nM, 40 nM, 50 nM, 60 nM, 70 nM, 80 nM, 90 nM, 100 nM, 110 nM, 120 nM, 130 nM, 140 nM, 150 nM, 160 nM, 170 nM, 180 nM, 190 nM, or 200 nM, or any subrange thereof.

[00218] The first or semi-targeted PCR can be conducted using any suitable temperature cycle conditions. For example, the first or semi-targeted PCR can be conducted using any of the following cycle conditions: 95°C 3 minutes, (95°C 15 seconds, 62°C 30 seconds, 72°C 90 seconds) x3 or x5; or (95°C 15 seconds, 72°C 90 seconds) x23 or x 21, 72C 1 minute, 4°C forever.

[00219] In some embodiments, the first or semi-targeted PCR can be conducted using KAPA SYBR FAST, *e.g.*, KAPA biosciences, KK4600, in the following exemplary reaction mix (50 µl): DNA (2 µl), KAPASYBR (25 µl), Primer Pool (26nM each) (10 µl), Aprimer (100uM) (.4 µl), and water (12.6 µl). The first or semi-targeted PCR can be conducted using any of the following cycle conditions: 95°C 30 seconds, (95°C 10 seconds, 50-56°C 45 seconds, 72°C 35 seconds) x40.

[00220] In some embodiments, the first or semi-targeted PCR can be conducted using KAPA HiFi, *e.g.*, KAPA Biosciences, KK2601, in the following exemplary reaction mix (50 μ l): DNA (15 μ l), KAPAHiFi (25 μ l), Primer Pool (26nM each) (10 μ l), and Aprimer (100uM) (0.4 μ l). The first or semi-targeted PCR can be conducted using any of the following cycle conditions: 95°C 3min, (98°C 20 seconds, 53-54°C 15 seconds, 72°C 35 seconds) x15, 72°C 2 minutes, 4°C forever.

[00221] Bisulfite conversion can be conducted using any suitable techniques, procedures or reagents. In some embodiments, bisulfite conversion can be conducted using any of the following kits and procedures provided in the kit: EpiMark Bisulfite Conversion Kit, New England Biosciences, E3318S; EZ DNA Methylation Kit, Zymo Research, D5001; MethylCode Bisulfite Conversion Kit, Thermo Fisher Scientific, MECOV50; EZ DNA Methylation Gold Kit, Zymo Research, D5005; EZ DNA Methylation Direct Kit, Zymo Research, D5020; EZ DNA Methylation Lightning Kit, Zymo Research, D5030T; EpiJET Bisulfite Conversion Kit, Thermo Fisher Scientific, K1461; or EpiTect Bisulfite Kit, Qiagen, 59104.

[00222] In some embodiments, DNA molecules can be prepared using the procedures illustrated in Example 4, including the steps for constructing single-stranded polynucleotide, conversion of single-stranded polynucleotide library to double-stranded polynucleotide library, semi-targeted amplification of double-stranded polynucleotide library, and construction of sequence library. Such DNA molecules can further be analyzed for methylation status using any suitable methods or procedures.

G. Examples.

Example 1. Detection of Cancer in Colon Tissue

[00223] In this example, methylation status of 10 Target Regions listed in Table 1: Target30, Target369, Target677, Target1558, Target1628, Target1691, Target1725, Target1795, Target1823, Target1841 was analyzed. Methylation metric is computed as unmethylation haplotype load (uMHL). The classification method used in the analysis is support vector machines.

[00224] An experimental panel interrogating the 10 target regions listed above was developed. Eight (8) healthy colon and 40 colon cancer tissue samples were processed using the

experimental panel, and the uMHL metric was computed for each target region to create a data matrix. In order to develop a SVM-based classifier, a subset of 4 healthy colon and 20 colon cancer tissue samples were selected as the “training” set. The training set samples were used to fit an SVM-based classifier in Python (using the scikit-learn library) (Figure 2). The SVM-based classifier was then used to predict the categories for the remaining 24 “test” set samples. The classifier was able to achieve 100% accuracy in the test set and correctly identify if a colon tissue sample was cancerous.

Example 2. Detection of Lung Cancer in Plasma

[00225] In this example, methylation status of 95 Target Regions listed in Table 1: Target35, Target36, Target102, Target115, Target117, Target118, Target120, Target136, Target141, Target154, Target155, Target166, Target207, Target226, Target241, Target243, Target252, Target253, Target267, Target284, Target338, Target397, Target398, Target422, Target423, Target432, Target439, Target440, Target445, Target460, Target461, Target504, Target514, Target574, Target575, Target589, Target596, Target625, Target626, Target637, Target640, Target650, Target674, Target691, Target693, Target710, Target736, Target840, Target852, Target867, Target868, Target884, Target903, Target911, Target916, Target926, Target936, Target940, Target941, Target1005, Target1041, Target1048, Target1085, Target1093, Target1113, Target1139, Target1181, Target1182, Target1183, Target1216, Target1229, Target1240, Target1311, Target1324, Target1333, Target1340, Target1342, Target1356, Target1357, Target1385, Target1392, Target1403, Target1408, Target1489, Target1521, Target1566, Target1584, Target1609, Target1616, Target1626, Target1630, Target1635, Target1655, and Target1656 was analyzed. Methylation metric is computed as percent discordant reads (PDR). The classification method used in the analysis is K-Nearest Neighbors.

[00226] An experimental panel interrogating the 95 target regions listed above was developed. Forty (40) lung cancer tissue samples, 10 healthy plasma samples, and 4 lung cancer plasma samples were processed using the experimental panel, and the PDR metric was computed for each target region to create a data matrix. In order to develop a K-Nearest Neighbor-based classifier, a subset of 10 healthy plasma and 40 lung cancer tissue samples were selected as the “training” set. For the remaining test set samples, the Euclidean distance to all training set samples was computed in Python (using the seaborn.clustermap function) (Figure

3a). Each sample was assigned to the category of its nearest training set neighbor; this led to a sensitivity of 75.00% and a specificity of 100.00% in the plasma samples.

[00227] The test or analytic results are shown in Figure 3b. Each vertical line represents a single sample. Purple samples are KNOWN CANCER SAMPLES. Green samples are KNOWN NORMAL SAMPLES. Red samples are UNKNOWN SAMPLES (for which the truth is that they are CANCER samples). Blue samples are UNKNOWN SAMPLES (for which the truth is that they are NORMAL samples). In this analysis, all five blue samples were most similar to green samples, so they were all called normal (for a specificity of 100%). Three out of four red samples were most similar to purple samples, so three out of four were called cancer (for a sensitivity of 75%). One red sample was most similar to the green samples, so it was miscalled as normal.

Example 3. Pan-Cancer Detection in Plasma

[00228] In this example, methylation status of 86 Target Regions listed in Table 1: Target11, Target35, Target36, Target102, Target115, Target141, Target154, Target155, Target168, Target184, Target209, Target210, Target211, Target226, Target241, Target284, Target323, Target333, Target338, Target397, Target432, Target439, Target440, Target460, Target472, Target482, Target485, Target570, Target574, Target589, Target596, Target616, Target637, Target660, Target661, Target674, Target692, Target693, Target710, Target728, Target840, Target852, Target867, Target868, Target903, Target911, Target916, Target940, Target941, Target942, Target1048, Target1055, Target1061, Target1085, Target1093, Target1116, Target1122, Target1129, Target1139, Target1142, Target1190, Target1191, Target1212, Target1213, Target1216, Target1229, Target1247, Target1248, Target1296, Target1297, Target1311, Target1322, Target1324, Target1340, Target1342, Target1343, Target1356, Target1378, Target1392, Target1403, Target1447, Target1522, Target1535, Target1543, Target1566, Target1616 was analyzed. Methylation metric is computed as average methylation frequency (AMF). The classification method used in the analysis is logistic regression.

[00229] An experimental panel interrogating the 86 target regions listed above was developed. Twenty (20) healthy plasma samples, 5 lung cancer plasma samples, 4 liver cancer plasma samples, 1 breast cancer plasma sample, 1 ovarian cancer plasma sample, and 2 esophageal cancer plasma samples were processed using the experimental panel, and the AMF

metric was computed for each target region to create a data matrix. In order to develop a Logistic Regression-based classifier, a subset of 10 healthy plasma and 6 cancer plasma samples were selected as the “training” set. A Logistic Regression model was fit to the sum of the average methylation values across all target regions in Python (using the sklearn module) (Figure 4). The cancer status of the remaining test set samples was then predicted; this led to a sensitivity of 85.71% and a specificity of 80.00% in the plasma samples.

Example 4

[00230] In this example, the templates (*e.g.*, polynucleotides to be sequenced) are short DNA fragments less than about 200 bp long. These DNA fragments can include extracted DNA from plasma, enzyme-treated (*e.g.*, by a fragmentase) genomic DNA, or physically sheared DNA. The physically sheared DNA may be end repaired. In particular aspects, the template has a 3' hydroxyl group for ligation.

[00231] Typically, 10-30 ng of the properly prepared template DNA was dephosphorylated, for example, using 1 U FastAP Thermosensitive Alkaline Phosphatase (Thermo Scientific) in 100 mM MOPS (pH 7.5), 20 mM KCl, 10 mM MgCl₂, 2 mM DTT, and 5 mM MnCl₂ at 37°C for 10 minutes. The DNA was then denatured, for example, at 95°C for 2 minutes and put on ice for 1 minute.

[00232] A single-stranded adapter was synthesized from IDT with a 5' phosphate group and a 3' carbon spacer. The 5' end contains GA following by a 12-mer unique molecular identifier (UMI) sequence. A typical single-stranded adapter has the following sequence: /5Phos/GANNNNNNNNNNNNNAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG/3SpC3/ (“5Phos” represents a 5' phosphate group, “NNNNNNNNNNNNNN” represents a 12-mer UMI sequence, and “3SpC3” represents a 3' carbon spacer).

[00233] A ligation reaction was then performed using the dephosphorylated, single-stranded DNA as template. The following final concentrations were used in the ligation reaction: 50 mM MOPS (pH 7.5), 10 mM KCl, 5 mM MgCl₂, 1 mM DTT, and 2.5 mM MnCl₂, 50% PEG 4000, 0.5 μM adapter, 125 μM ATP, and 200 U Epicentre CircLigase™. The reaction was incubated at 60°C for 2 hours, 80°C for 10 minutes, 85°C for 2 minutes, and held at 4°C.

[00234] The DNA was then double-stranded by adding the previous reaction volume to the following: 10 mM Tris-HCl (pH 8.3), 50 mM KCl, 1.5 mM MgCl₂, 1.25 U Taq DNA

Polymerase (NEB), 1 μ M reverse-complement primer (a primer that is reverse-complement to the adaptor), and 200 μ M dNTP mix. The reaction was incubated at 95°C for 30 seconds, 62°C for 2 minutes, 68°C for 10 minutes, and held at 4°C. A typical reverse-complement primer comprises the sequence set forth in SEQ ID NO:17505: CACTCTTTCCTACACGACGC (5' to 3'). The following is an alignment between the adaptor and the reverse-complement primer:

Adaptor	/5Phos/GANNNNNNNNNNNAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG/3SpC3/
	
Primer	CGCAGCACATCCCTTTCTCAC

[00235] The reaction was then purified using 1.6 (bead ratio) $\times$ AmPure® XP beads. The beads were added and incubated for 10 minutes. The mixtures were then transferred to a magnet for 5 minutes. The supernatant was then removed. The beads were washed 2 $\times$ with 150 μ L 80% ethanol for 30 seconds each. All residual ethanol was then removed and the beads were dried for 3 minutes at room temperature off of the magnet. 15 μ L of Low TE buffer (Thermo Fisher) was added to the beads and incubated for 2 minutes. The beads were then returned to the magnet for 1 minute. The supernatant was removed and stored for the next reaction. In one aspect, the bead ratio causes size selectivity in the purification process, and a bead ratio (such as 1.6 $\times$) can be selected that removes molecules shorter than about 100 bp.

[00236] A set of PCR primers were designed to minimize primer-primer interactions and off-target annealing. The primers were further optimized to land within close proximity to specific variants. Once designed, the primers were synthesized by IDT. The primers were mixed in equal volume ratios into a primer pool. A semi-targeted PCR reaction was performed with the following reagents: all purified DNA from previous reaction, 1 $\times$ KAPA 2G multiplex master mix, 66 nM of each primer from pool, and 800 nM reverse-complement primer. The reaction underwent the following thermo-cycling program: 95°C 3 minutes, (95°C 15 seconds, 72°C 90 seconds) $\times$ 20, 72°C 1 minute, and held at 4°C.

[00237] The reaction was then purified using 1.6 (bead ratio) $\times$ AmPure® XP beads. The beads were added and incubated for 10 minutes. The mixtures were then transferred to a magnet for 5 minutes. The supernatant was then removed. The beads were washed 2 $\times$ with 150 μ L 80% ethanol for 30 seconds each. All residual ethanol was then removed and the beads were dried for 3 minutes at room temperature off of the magnet. 20 μ L of Low TE buffer (Thermo Fisher) was added to the beads and incubated for 2 minutes. The beads were then returned to the magnet for 1 minute. The supernatant is removed and stored for the next reaction. A bead ratio

(such as 1.6 ×) can be selected that removes molecules shorter than about 100 bp, including free adaptor molecules, free primer molecules, and/or adaptor/primer dimers.

[00238] Another PCR reaction was then completed to add full length sequencing adapters and sample specific barcodes. The PCR reaction contained the following: 2 µL purified DNA from previous reaction, 1 × NEB ultra Q5 II master mix, 400 nM universal primer, and 400 nM barcode specific primer. The reaction underwent the following thermo-cycling program: 95°C 3 minutes, (98°C 10 seconds, 65°C 75 seconds) × 10, 65°C 2 minute, and held at 4°C.

[00239] The reaction was then purified using 0.8 (bead ratio) × AmPure® XP beads. The beads were added and incubated for 10 minutes. The mixtures were then transferred to a magnet for 5 minutes. The supernatant was then removed. The beads were washed 2 × with 150 µL 80% ethanol for 30 seconds each. All residual ethanol was then removed and the beads were dried for 3 minutes at room temperature off of the magnet. 25 µl of Low TE buffer (Thermo Fisher) is added to the beads and incubated for 2 minutes. The beads were then returned to the magnet for 1 minute. The supernatant is removed and is ready for sequencing. A bead ratio (such as 0.8 ×) can be selected that removes a majority of molecules shorter than about 200 bp

CLAIMS

1. A panel of isolated polynucleotides comprising, consisting of, or consisting essentially of at least two isolated polynucleotides, each of said isolated polynucleotides having a polynucleotide sequence of any of Target 1 to Target 1849 listed in Table 1, or a complementary or substantially complementary sequence thereof.

2. The panel of claim 1, which comprises, consists of, or consists essentially of at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1.

3. The panel of claim 1 or 2, which comprises at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1.

4. The panel of claim 1 or 2, which consists of at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all Target 1 to Target 1849 listed in Table 1.

5. The panel of claim 1 or 2, which consists essentially of at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, or more of the isolated polynucleotides, or the isolated polynucleotides corresponding to all of Target 1 to Target 1849 listed in Table 1.

6. The panel of any one of claims 1-5, wherein the isolated polynucleotides are DNA molecules, RNA molecules, or a combination thereof.

7. The panel of any one of claims 1-6, wherein the isolated polynucleotides are immobilized on a substrate.
8. The panel of claim 7, wherein the substrate comprises a solid surface, a porous surface, or a combination thereof.
9. The panel of claim 7 or 8, wherein the substrate is a part of a bead, a tube, a microtiter plate, a membrane, a gel, or a glass slide.
10. The panel of any one of claims 7-9, wherein the isolated polynucleotide molecules are immobilized spatially apart from each other on a substrate.
11. A kit or system, which comprises a panel of any one of claims 1-10.
12. The kit or system of claim 11, which is configured for assessing methylation status of at least two of Target 1 to Target 1849 listed in Table 1.
13. The kit or system of claim 12, which is configured for assessing methylation status of at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, or all of Target 1 to Target 1849 listed in Table 1.
14. The kit or system of any one of claims 11-13, wherein the isolated polynucleotides are configured as control polynucleotides.
15. The kit or system of claim 14, wherein the isolated polynucleotides have a level of concentration from about 1 femtomolar to about 1 millimolar.
16. A kit or system, which comprises reagents for assessing methylation status of at least two of Target 1 to Target 1849 listed in Table 1.

17. The kit or system of claim 16, which comprises reagents for assessing methylation status of at least 10, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, or all of Target 1 to Target 1849 listed in Table 1.

18. The kit or system of claim 16 or 17, wherein the reagents comprise, consist essentially of, or consist of a probe or primer configured for hybridizing with each of the targets whose methylation status is to be assessed.

19. The kit or system of claim 18, wherein the reagents comprise, consist essentially of, or consist of a single probe or primer configured for hybridizing with each of the targets whose methylation status is to be assessed.

20. The kit or system of claim 18, wherein the reagents comprise, consist essentially of, or consist of multiple probes or primers configured for hybridizing with each of the targets whose methylation status is to be assessed.

21. The kit or system of any one of claims 18-20, wherein the one or more primers comprise, consist essentially of, or consist of a sequence set forth in any of SEQ ID NO:1- SEQ ID NO:17504, a complementary or substantially complementary sequence thereof, or any combination thereof.

22. The kit or system of any one of claims 16-21, which further comprises a common primer for amplifying each of the targets whose methylation status is to be assessed.

23. The kit or system of claim 22, wherein the common primer comprises, consists essentially of, or consists of a sequence set forth in SEQ ID NO. 17505, or a complementary or substantially complementary sequence thereof.

24. The kit or system of any one of claims 16-23, which further comprises an agent for isolating the targets from a sample.

25. The kit or system of any one of claims 16-24, which further comprises a reagent for preparing a library of the targets.

26. The kit or system of claim 25, wherein the reagent for preparing a library of the targets comprises an enzyme, *e.g.*, a ligase or a single-stranded DNA (ssDNA) ligase.

27. The kit or system of claim 26, wherein the ssDNA ligase is T4 RNA ligase I, thermostable 5' App DNA/RNA ligase, T4 RNA ligase 2, truncated T4 RNA ligase 2, *e.g.*, T4 RNA ligase 2 Truncated, T4 RNA ligase2 Truncated K227Q, T4 RNA ligase2 Truncated KQ, or T4 DNA ligase, a *Thermus* bacteriophage RNA ligase such as a bacteriophage TS2126 RNA ligase (*e.g.*, CircLigase™ and CircLigase II™), or an archaeobacterium RNA ligase such as *Methanobacterium thermoautotrophicum* RNA ligase 1

28. The kit or system of any one of claims 16-27, which further comprises a reagent for amplifying the targets or a library of the targets.

29. The kit or system of claim 28, wherein the reagent for amplifying the targets or a library of the targets comprises an enzyme, *e.g.*, an enzyme to be used in a polynucleotide amplification reaction selected from the group consisting of polymerase chain reaction (PCR), strand displacement amplification (SDA), transcription mediated amplification (TMA), ligase chain reaction (LCR), nucleic acid sequence based amplification (NASBA), primer extension, rolling circle amplification (RCA), self sustained sequence replication (3SR), and loop-mediated isothermal amplification (LAMP).

30. The kit or system of any one of claims 16-29, which further comprises an agent for purifying the targets, a library of the targets, amplified targets or a library of amplified targets.

31. The kit or system of any one of claims 16-30, which further comprises a reagent for assessing methylation status of the targets.

32. The kit or system of claim 31, wherein the reagent for assessing methylation status of the targets is a reagent to be used in a polynucleotide methylation, *e.g.*, DNA methylation, detecting method selected from the group consisting of mass spectrometry, methylation-specific PCR (MSP), bisulphite sequencing, the HpaII tiny fragment Enrichment by ligation-mediated PCR assay (HELP Assay), Glal hydrolysis and ligation adapter dependent PCR assay (GLAD-PCR assay), restriction landmark genomic scanning (RLGS), methylated DNA immunoprecipitation (MeDIP or mDIP), pyrosequencing, molecular break light assay for DNA adenine methyltransferase activity, methyl sensitive Southern blotting and high resolution Melt (HRM) analysis.

33. The kit or system of claim 31 or 32, wherein the reagent for assessing methylation status of the targets is a chemical agent, *e.g.*, bisulfite or sodium bisulfite.

34. The kit or system of claim 31 or 32, wherein the reagent for assessing methylation status of the targets is a biological agent, *e.g.*, a polypeptide or an enzyme.

35. The kit or system of claim 34, wherein the enzyme is a methylation-sensitive restriction enzyme (MSRE).

36. The kit or system of claim 35, wherein the MSRE selectively cleaves at a residue when it is unmethylated.

37. The kit or system of claim 35, wherein the MSRE selectively cleaves at the residue when it is methylated.

38. The kit or system of any one of claims 35-38, wherein the MSRE is selected from the group consisting of HpaII, SalI, SalI-HF®, ScrFI, BbeI, NotI, SmaI, XmaI, MboI, BstBI, ClaI, MluI, NaeI, NarI, PvuI, SacII, HhaI, and a combination thereof.

39. The kit or system of claim 34, wherein the enzyme is a polynucleotide polymerase.
40. The kit or system of claim 39, wherein the polynucleotide polymerase is configured to be used in PCR.
41. The kit or system of claim 40, wherein the polynucleotide polymerase is a DNA polymerase, e.g., a DNA polymerase without a 3' to 5' exonuclease activity.
42. The kit or system of any one of claims 16-41, which further comprises a panel of any one of claims 1-10.
43. The kit or system of any one of claims 16-42, which further comprises a reference sample and/or information of a control locus.
44. The kit or system of any one of claims 16-43, which further comprises separate containers, e.g., vials, for one or more components and/or instructions for using the kit or system.
45. The kit or system of any one of claims 16-44, which further comprises a computer readable medium containing executable instructions for obtaining a methylation metric of a sample based on the methylation status assessment.
46. The kit or system of claim 45, wherein the computer readable medium is configured for obtaining a methylation metric in the form of average methylation frequency, methylation haplotype load, unmethylation haplotype load, percent discordant reads, or a combination thereof.
47. The kit or system of any one of claims 16-46, which is configured for assessing cancer or neoplasia in a subject.

48. The kit or system of claim 47, which is configured for assessing lung cancer or colorectal cancer in a subject.

49. The kit or system of claim 47, which is configured for pan-cancer analysis or profiling in a subject.

50. A method for assessing cancer or neoplasia in a subject, which method comprises:

- a) providing a sample from a subject containing at least two target polynucleotides of said subject, said at least two target polynucleotides having polynucleotide sequences of at least two of Target 1 to Target 1849 listed in Table 1, or a complementary or substantially complementary sequence thereof;
- b) assessing methylation status of said at least two target polynucleotides; and
- c) assessing cancer or neoplasia in said subject based on assessment of methylation status of said at least two target polynucleotides.

51. The method of claim 50, wherein the sample comprises circulating cell-free or tumor DNA (ctDNA).

52. The method of claim 50 or 51, wherein the sample is a blood, serum, plasma, or body fluid sample, or any combination thereof.

53. The method of any one of claims 50-52, wherein the subject is a mammal.

54. The method of claim 53, wherein the mammal is a non-human mammal, *e.g.*, a pet, a farm animal, a companion animal or an experimental animal.

55. The method of claim 53, wherein the mammal is a human.

56. The method of any one of claims 50-55, which comprises assessing methylation status of target polynucleotides having polynucleotide sequences of at least 10, 50, 100, 200,

300, 400, 500, 600, 700, 800, 900, 1,000, 1,100, 1,200, 1,300, 1,400, 1,500, 1,600, 1,700, 1,800, or all of Target 1 to Target 1849 listed in Table 1, or a complementary or substantially complementary sequence thereof.

57. The method of any one of claims 50-56, wherein the methylation status of target polynucleotides is assessed using a probe or primer configured for hybridizing with each of the target polynucleotides.

58. The method of any one of claim 50-57 wherein the methylation status of a target polynucleotide is assessed using a single probe or primer configured for hybridizing with the target polynucleotide.

59. The method of any one of claim 50-57 wherein the methylation status of a target polynucleotide is assessed using multiple probes or primers configured for hybridizing with the target polynucleotide.

60. The method of any one of claim 50-59 wherein the one or more primers comprise, consist essentially of, or consist of a sequence set forth in any of SEQ ID NO:1- SEQ ID NO:17504, a complementary or substantially complementary sequence thereof, or any combination thereof.

61. The method of any one of claim 50-60 which further comprises using a common primer for amplifying each of the target polynucleotide whose methylation status is to be assessed.

62. The method of claim 61, wherein the common primer comprises, consists essentially of, or consists of a sequence set forth in SEQ ID NO:17505, a complementary or substantially complementary sequence thereof.

63. The method of any one of claim 50-62 which further comprises isolating the target polynucleotides from a sample.

64. The method of any one of claim 50-63 which further comprises preparing a library of the target polynucleotides.

65. The method of claim 64, wherein the library of the target polynucleotides is prepared using an enzyme, e.g., a ligase or a single-stranded DNA (ssDNA) ligase.

66. The method of claim 65, wherein the ssDNA ligase is T4 RNA ligase I, thermostable 5' App DNA/RNA ligase, T4 RNA ligase 2, truncated T4 RNA ligase 2, *e.g.*, T4 RNA ligase 2 Truncated, T4 RNA ligase2 Truncated K227Q, T4 RNA ligase2 Truncated KQ, or T4 DNA ligase, a *Thermus* bacteriophage RNA ligase such as a bacteriophage TS2126 RNA ligase (*e.g.*, CircLigase™ and CircLigase II™), or an archaeobacterium RNA ligase such as *Methanobacterium thermoautotrophicum* RNA ligase 1.

67. The method of any one of claim 50-66 which further comprises amplifying the target polynucleotides.

68. The method of claim 67, wherein the target polynucleotides are amplified using a procedure selected from the group consisting of polymerase chain reaction (PCR), strand displacement amplification (SDA), transcription mediated amplification (TMA), ligase chain reaction (LCR), nucleic acid sequence based amplification (NASBA), primer extension, rolling circle amplification (RCA), self sustained sequence replication (3SR), and loop-mediated isothermal amplification (LAMP).

69. The method of any one of claim 50-68 which further comprises purifying the target polynucleotides, a library of the target polynucleotides, amplified target polynucleotides or a library of amplified target polynucleotides.

70. The method of any one of claim 50-69, wherein the methylation status of target polynucleotides is assessed using mass spectrometry, methylation-specific PCR (MSP), methylation-sensitive sequencing, *e.g.*, bisulphite sequencing, the HpaII tiny fragment

Enrichment by ligation-mediated PCR assay (HELP Assay), Glal hydrolysis and ligation adapter dependent PCR assay (GLAD-PCR assay), restriction landmark genomic scanning (RLGS), methylated DNA immunoprecipitation (MeDIP or mDIP), pyrosequencing, molecular break light assay for DNA adenine methyltransferase activity, methyl sensitive Southern blotting or high resolution Melt (HRM) analysis.

71. The method of claim 70, wherein assessing methylation status of target polynucleotides comprises using a chemical agent, *e.g.*, bisulfite or sodium bisulfite.

72. The method of claim 70, wherein assessing methylation status of target polynucleotides comprises using a biological agent, *e.g.*, a polypeptide or an enzyme.

73. The method of claim 72, wherein the enzyme is a methylation-sensitive restriction enzyme (MSRE).

74. The method of claim 73, wherein the MSRE selectively cleaves at a residue when it is unmethylated.

75. The method of claim 73, wherein the MSRE selectively cleaves at the residue when it is methylated.

76. The method of claim 73-75, wherein the MSRE is selected from the group consisting of HpaII, SalI, SalI-HF®, ScrFI, BbeI, NotI, SmaI, XmaI, MboI, BstBI, ClaI, MluI, NaeI, NarI, PvuI, SacII, HhaI, and a combination thereof.

77. The method of claim 72, wherein the enzyme is a polynucleotide polymerase.

78. The method of claim 77, wherein the polynucleotide polymerase is configured to be used in PCR.

79. The method of claim 78, wherein the polynucleotide polymerase is a DNA polymerase, e.g., a DNA polymerase without a 3' to 5' exonuclease activity.

80. The method of any one of claim 50-79, wherein the methylation status of target polynucleotides is assessed using methylation-sensitive sequencing, *e.g.*, bisulphite sequencing.

81. The method of claim 80, wherein the methylation-sensitive sequencing is conducted with a format selected from the group consisting of Maxam-Gilbert sequencing, a chain-termination method, shotgun sequencing, bridge PCR, single-molecule real-time sequencing, ion semiconductor (ion torrent sequencing), sequencing by synthesis, sequencing by ligation (SOLiD sequencing), chain termination (Sanger sequencing), massively parallel signature sequencing (MPSS), polony sequencing, 454 pyrosequencing, Illumina (Solexa) sequencing, DNA nanoball sequencing, heliscope single molecule sequencing, single molecule real time (SMRT) sequencing, nanopore DNA sequencing, tunnelling currents DNA sequencing, sequencing by hybridization, sequencing with mass spectrometry, microfluidic Sanger sequencing, a microscopy-based technique, RNAP sequencing, and in vitro virus high-throughput sequencing.

82. The method of claim 80 or 81, which further comprises, prior to the methylation-sensitive sequencing, *e.g.*, bisulphite sequencing, obtaining a library of linear, single-stranded ligation products, each of the linear, single-stranded ligation products comprises of a linear, single-stranded target polynucleotide linked to an adaptor comprising a unique molecular identifier (UMI) sequence that earmarks the single-stranded target polynucleotide to which the adaptor is ligated.

83. The method of claim 82, wherein the sequencing reads from the target polynucleotides are first adapter trimmed to remove any adapter sequence originating from the library construction process to obtain trimmed sequencing reads.

84. The method of claim 83, wherein the trimmed sequencing reads are mapped to a reference genome, e.g., a human reference genome, using an alignment program to obtain an aligned read file.

85. The method of claim 84, wherein the aligned read file is grouped into sets corresponding to each target region from Target 1 to Target 1849 listed in Table 1, or a complementary sequence or substantially complementary thereof, that can be used for methylation status assessment.

86. The method of any one of claim 50-85, wherein methylation status of each of the target polynucleotides is assessed.

87. The method of claim 86, wherein the methylation status of each of the target polynucleotides is assessed to obtain a methylation metric, *e.g.*, in the form of average methylation frequency, methylation haplotype load, unmethylation haplotype load, percent discordant reads, or a combination thereof.

88. The method of claim 87, wherein methylation status of a sample is assessed using the methylation metrics from each of the target polynucleotides.

89. The method of claim 88, wherein the methylation metric for each of the target polynucleotides is compared to a threshold or reference value to assess methylation status of a sample.

90. The method of claim 88 or 89, wherein a numerical methylation matrix is computed using the methylation metrics from each of the target polynucleotides to assess methylation status of a sample.

91. The method of claim 90, wherein the numerical methylation matrix from a sample comprises a single numerical number or value.

92. The method of claim 90, wherein the numerical methylation matrix from a sample comprises multiple numerical numbers or values.

93. The method of any one of claim 90-92, wherein the numerical methylation matrix is computed using a classification algorithm.

94. The method of claim 93, wherein the classification algorithm is linear discriminant analysis, logistic regression, naïve bayes classification, perceptron classification, quadratic classification, k-nearest neighbors, boosting, decision tree, random forest, neural network, learning vector quantization, or support vector machines.

95. The method of any one of claim 90-94, wherein the methylation matrix is compared to a threshold or reference value to assess methylation status of a sample.

96. The method of any one of claim 87-95, wherein the methylation metric for each of the target polynucleotides is obtained using a computer.

97. The method of any one of claim 90-96, wherein the methylation matrix of a sample is obtained using a computer based on the methylation metrics from each of the target polynucleotides.

98. The method of any of claims 50-97, wherein methylation status of at least two target polynucleotides from multiple samples, *e.g.*, multiple samples from multiple subjects, are assessed sequentially or simultaneously.

99. The method of any of claims 50-98, which is used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of cancer or neoplasia in a subject.

100. The method of claim 99, wherein the cancer is a lymphoma, a leukemia, a brain cancer, a multiple myeloma, a pancreatic cancer, a liver cancer, a stomach cancer, a breast

cancer, a kidney cancer, a lung cancer, a colorectal cancer, a colon cancer, a prostate cancer, an ovarian cancer, a cervical cancer, a skin cancer, an esophagus cancer, or a head and neck cancer.

101. The method of claim 99, which is used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of lung cancer in a subject.

102. The method of claim 101, wherein the lung cancer is non-small-cell lung carcinoma or small-cell lung carcinoma.

103. The method of claim 102, wherein the non-small-cell lung carcinoma is adenocarcinoma of the lung (also known as pulmonary adenocarcinoma), squamous-cell carcinoma (SCC) of the lung or large-cell carcinoma (LCC).

104. The method of claim 99, which is used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of colorectal cancer in a subject.

105. The method of claim 99, which is used for diagnosis, prognosis, stratification, risk assessment, or treatment monitoring of pan-cancer analysis or profiling in a subject.

106. The method of any of claims 50-105, wherein cancer or neoplasia in multiple subjects are assessed sequentially or simultaneously.

107. The method of any one of claim 50-106, which has sensitivity of at least 10%.

108. The method of any one of claim 50-107, which has specificity of at least 10%.

109. The method of any one of claim 50-108, which further comprises treating a subject or altering treatment of a subject based on the assessment of cancer or neoplasia in the subject.

110. The method of claim 109, which comprises treating a human patient or altering treatment of a human patient based on the assessment of cancer or neoplasia in the human patient.

111. The method of claim 109 or 110, wherein the treatment is chemotherapy, radiotherapy, immunotherapy cell therapy, surgery, treatment with a drug, *e.g.*, a small molecule drug or a large molecule drug such an antibody drug.

DEMANDE OU BREVET VOLUMINEUX

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CECI EST LE TOME 1 DE 2
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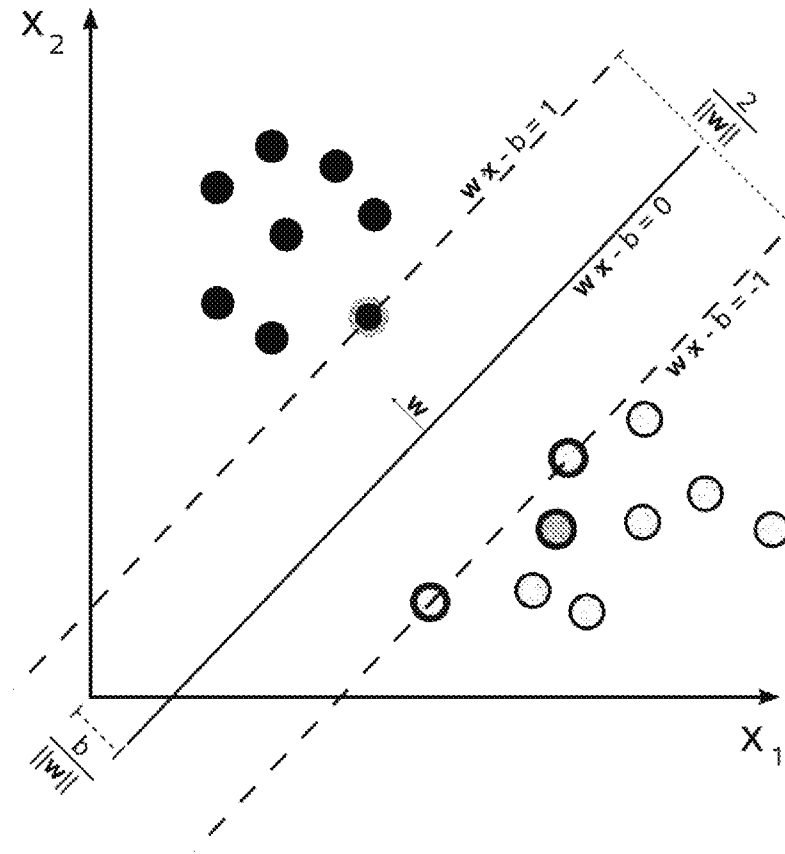
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Figure 1



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Figure 2**Python Code:**

```

from sklearn import svm

training_set = ['BC Colon Healthy 1', 'BC Colon Healthy 2', 'BC Colon Healthy 3', 'BC Colon Healthy 4',
               'BC Colon Cancer 1', 'BC Colon Cancer 2', 'BC Colon Cancer 3', 'BC Colon Cancer 4',
               'BC Colon Cancer 5', 'BC Colon Cancer 6', 'BC Colon Cancer 7', 'BC Colon Cancer 8',
               'BC Colon Cancer 9', 'BC Colon Cancer 10', 'BC Colon Cancer 11', 'BC Colon Cancer 12',
               'BC Colon Cancer 13', 'BC Colon Cancer 14', 'BC Colon Cancer 15', 'BC Colon Cancer 16',
               'BC Colon Cancer 17', 'BC Colon Cancer 18', 'BC Colon Cancer 19', 'BC Colon Cancer 20']
test_set = ['BC Colon Healthy 5', 'BC Colon Healthy 6', 'BC Colon Healthy 7', 'BC Colon Healthy 8',
            'BC Colon Cancer 21', 'BC Colon Cancer 22', 'BC Colon Cancer 23', 'BC Colon Cancer 24',
            'BC Colon Cancer 25', 'BC Colon Cancer 26', 'BC Colon Cancer 27', 'BC Colon Cancer 28',
            'BC Colon Cancer 29', 'BC Colon Cancer 30', 'BC Colon Cancer 31', 'BC Colon Cancer 32',
            'BC Colon Cancer 33', 'BC Colon Cancer 34', 'BC Colon Cancer 35', 'BC Colon Cancer 36',
            'BC Colon Cancer 37', 'BC Colon Cancer 38', 'BC Colon Cancer 39', 'BC Colon Cancer 40']
X = data_matrix.loc[training_set].values
y = np.array(['Healthy']*4 + ['Cancer']*20)
clf = svm.SVC(C=10, kernel='linear', gamma='auto')
clf.fit(X, y)
predictions = clf.predict(data_matrix.loc[test_set].values)
results = pd.DataFrame(zip(test_set, predictions))
results.columns = ['Sample', 'Prediction']
results.set_index('Sample')
print "Specificity: %s" % (float(results.loc[test_set[:4]].query('Prediction == "Healthy"').count()) / 4)
print "Sensitivity: %s" % (float(results.loc[test_set[4:]].query('Prediction != "Healthy"').count()) /
20)

```

Code Results:

Specificity: 1.0
Sensitivity: 1.0

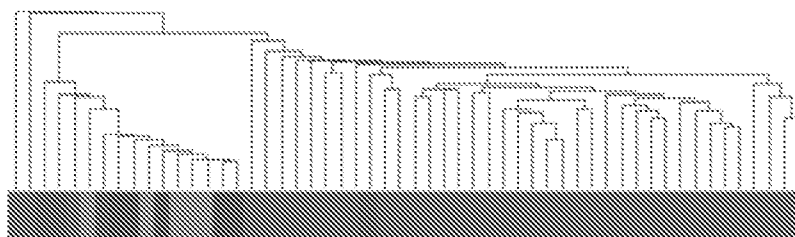
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Figure 3a**Python Code:**

```
col_colors = [sns.color_palette()[1]] * len(healthy_plasma [0:5]) + \
[sns.color_palette()[0]] * len(healthy_plasma [5:10]) + \
[sns.color_palette()[2]] * len(lung_cancer_plasma) + \
[sns.color_palette()[3]] * len(BC_Lung_Cancer)

to_plot = data_matrix.loc[:, healthy_plasma+lung_cancer_plasma+BC_Lung_Cancer]

z = sns.clustermap(to_plot.fillna(0),
                    mask=to_plot.isnull(),
                    cmap='viridis', yticklabels=False,
                    col_cluster=True, row_cluster=True,
                    col_colors=col_colors)
```

Figure 3b

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Figure 4**Python Code:**

```

from sklearn import linear_model

filter_matrix = data_matrix >= 0.1
methylation_sums = data_matrix[filter_matrix].sum()

clf = linear_model.LogisticRegression(C=5)

# Fit to training set
X = np.array([methylation_sums.loc[healthy_plasma[:10]+cancer_plasma[:6]+cancer_plasma[:6]].values]).T
y = [0]*len(healthy_plasma[:10]) + [1]*len(cancer_plasma[:6]+cancer_plasma[:6])
clf.fit(X, y)

# Predict on test set
print "Sample\tP(Cancer)\tCall"
for i, methylation_sum in enumerate(methylation_sums.loc[healthy_plasma[10:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Healthy Sample %s\t%s\t%s" % (i+1, probability_cancer, call)

for i, methylation_sum in enumerate(methylation_sums.loc[cancer_plasma[6:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Cancer Sample %s\t%s\t%s" % (i+1, probability_cancer, call)

```

Code Results:

Sample	P(Cancer)	Call
Healthy Sample 1	0.48991419229	Healthy
Healthy Sample 2	0.402222997727	Healthy
Healthy Sample 3	0.362647868404	Healthy
Healthy Sample 4	0.291360093105	Healthy
Healthy Sample 5	0.666083361246	Cancer
Healthy Sample 6	0.444135105722	Healthy
Healthy Sample 7	0.404667407834	Healthy
Healthy Sample 8	0.674616468424	Cancer
Healthy Sample 9	0.248090390611	Healthy
Healthy Sample 10	0.270796583956	Healthy
Cancer Sample 1	0.860345212988	Cancer
Cancer Sample 2	0.613016848532	Cancer
Cancer Sample 3	0.682635445446	Cancer
Cancer Sample 4	0.59569270394	Cancer
Cancer Sample 5	0.562216154423	Cancer
Cancer Sample 6	0.475035178964	Healthy
Cancer Sample 7	0.966879847323	Cancer

Figure 5 (Table 1)

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Target Name	Target Region	Example Primers
Target1	chr1:1098736-1098773	TAGGGGGAGGCGGTTTTTTGTAGGGGG (SEQ ID NO:1), AATTGTGCGGGTAGGTAAGGGCGGGT (SEQ ID NO:2), GCGTAGGGGGAGGCGGTTTTTTGTAGG (SEQ ID NO:3), GCGTAGGGGGAGGCGGTTTTTTGTAG (SEQ ID NO:4), GGGGAGGCGGTTTTTTGTAGGGGGTT (SEQ ID NO:5), TTTTGGACGTTGGTTAGGTTGGCGA (SEQ ID NO:6), TTTTGGACGTTGGTTAGGTTGGCGAT (SEQ ID NO:7), TTTTGGACGTTGGTTAGGTTGGCGATAG (SEQ ID NO:8), TTTTGGACGTTGGTTAGGTTGGCGATAG (SEQ ID NO:9), AGGATTCGTTTTAGTTGTGTTGTAGTGATCGGA (SEQ ID NO:10)
Target2	chr1:1098787-1099554	AAGGGTTTGGTCGGGTGCGAGGATGAT (SEQ ID NO:11), GGGTTTTGGAGTTTGGCGTGGGAAGGG (SEQ ID NO:12), AGGTCGGTCGAGTTTATGGGCGGTGAG (SEQ ID NO:13), AGAGTTCGGTCGAGTTTATGGGCGGTG (SEQ ID NO:14), GAGGTCGGTCGAGTTTATGGGCGGTGA (SEQ ID NO:15), GCGCGGGGTTTGGGAATCGGTTTTAGT (SEQ ID NO:16), AGCGCGGGGTTTGGGAATCGGTTTTAG (SEQ ID NO:17), AGGACGGCGGTGTTGTTTTGGAGAG (SEQ ID NO:18), GGACGGCGGTGTTGTTTTGGAGAGA (SEQ ID NO:19), ATAGCGCGGGGTTTGGGAATCGGTTTT (SEQ ID NO:20)
Target3	chr1:1474968-1474978	TGGTAGTTTTTAAGGGTGGAAGGCGGT (SEQ ID NO:21), TGGTAGTTTTTAAGGGTGGAAGGCGGTT (SEQ ID NO:22), TTGGTAGTTTTTAAGGGTGGAAGGCGGT (SEQ ID NO:23), TGGTAGTTTTTAAGGGTGGAAGGCGGTTT (SEQ ID NO:24), GGTAGTTTTTAAGGGTGGAAGGCGGTTT (SEQ ID NO:25), GGTATTTCGGGGCGCGGGGAATTAG (SEQ ID NO:26), TTCGGGGCGCGGGGAATTAGTTTAC (SEQ ID NO:27), GGGTTTATTCGGGGCGCGGGGAATTA (SEQ ID NO:28), CGTGAGCGTATATGTGTGGCGGGGTTT (SEQ ID NO:29), TCGGGGCGCGGGGAATTAGTTTACG (SEQ ID NO:30)
Target4	chr1:1474994-1475002	GCGGTTTGCCTGGGGTTGGTTTTTCG (SEQ ID NO:31), GCGGTTTGCCTGGGGTTGGTTTTTC (SEQ ID NO:32), CGGTTTGCCTGGGGTTGGTTTTTCG (SEQ ID NO:33), TGGTAGTTTTTAAGGGTGGAAGGCGGT (SEQ ID NO:34), GCGGTTTGCCTGGGGTTGGTTTTTC (SEQ ID NO:35), CGTGAGCGTATATGTGTGGCGGGGTTT (SEQ ID NO:36), ATATGTGTGGCGGGGTTTATTCGGGGC (SEQ ID NO:38), TATGTGTGGCGGGGTTTATTCGGGGC (SEQ ID NO:38), ATATGTGTGGCGGGGTTTATTCGGGGC (SEQ ID NO:39), TATGTGTGGCGGGGTTTATTCGGGGC (SEQ ID NO:40)
Target5	chr1:1475031-1475165	GCGGTTTGCCTGGGGTTGGTTTTTCG (SEQ ID NO:41), CGGTTTTCGTTTCGTAGGTGCGGGAGG (SEQ ID NO:42), GGTTTTCGTTTCGTAGGTGCGGGAGGA (SEQ ID NO:43), CGTAGGTGCGGGAGGATGTAGTTGTGG (SEQ ID NO:44), CGGTTTTCGTTTCGTAGGTGCGGGAGGA (SEQ ID NO:45), TGTGGTCGCTGAGTTTATAATCGGCGT (SEQ ID NO:46), CGTTTCGTTTCGTTTCGTTTTTGGCGT (SEQ ID NO:47), TCGTTTCGTTTCGTTTCGTTTTTGGCGT (SEQ ID NO:48), TCGTTTCGTTTCGTTTCGTTTTTGGCG (SEQ ID NO:49), TGTGGTCGCTGAGTTTATAATCGGCGTC (SEQ ID NO:50)
Target6	chr1:2375223-2375249	GTAGGGGGTGTTGGTGCGGGCGGTAC (SEQ ID NO:51), GGTAGGGGGTGTTGGTGCGGGCGGTAC (SEQ ID NO:52), TAGGGGGTGTTGGTGCGGGCGGTAC (SEQ ID NO:53), GTAGGGGGTGTTGGTGCGGGCGGTA (SEQ ID NO:54), GGGTAGGGGGTGTTGGTGCGGGCGGTAC (SEQ ID NO:55), CGGGTTCGGGTTGGGGTTTCGTTTTTC (SEQ ID NO:56), CGGTATCGTTTCGTTAGTTCGGGCGGT (SEQ ID NO:57), CGGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:58), CGGTATCGTTTCGTTAGTTCGGGCGGTT (SEQ ID NO:59), CGGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:60)
Target7	chr1:2375267-2375277	TCGTTTCGAGTTGGCGGGGCGATGTC (SEQ ID NO:61), CGTTCGAGTTGGCGGGGCGATGTC (SEQ ID NO:62), TCGTTTCGAGTTGGCGGGGCGATGT (SEQ ID NO:63), CGTTCGAGTTGGCGGGGCGATGT (SEQ ID NO:64), TCGTTTCGAGTTGGCGGGGCGATG (SEQ ID NO:65), CGGGTTCGGGTTGGGGTTTCGTTTTTC (SEQ ID NO:66), CGGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:67), CGGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:68), GGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:69), CGGGTTCGGGTTGGGGTTTCGTTTTT (SEQ ID NO:70)
Target8	chr1:2705891-2705920	TCGGATTGCGGTTTCGGTCGATGGAAGT (SEQ ID NO:71), TTCGGATTGCGGTTTCGGTCGATGGAAG (SEQ ID NO:72), TTCGGATTGCGGTTTCGGTCGATGGAAG (SEQ ID NO:73), TTCGGATTGCGGTTTCGGTCGATGGA (SEQ ID NO:74), TTCGGATTGCGGTTTCGGTCGATGGAAGT (SEQ ID NO:75), TGGGGTCGTTGTTTTTTCGGGTTTTT (SEQ ID NO:76), AGGAATGAACGGAGGTAGTGGTTGGTG (SEQ ID NO:77), GGAATGAACGGAGGTAGTGGTTGGTG (SEQ ID NO:78), AGGAATGAACGGAGGTAGTGGTTGGTG (SEQ ID NO:79), TGGGGTCGTTGTTTTTTCGGGTTTTT (SEQ ID NO:80)
Target9	chr1:2706004-2706027	TCGGATTGCGGTTTCGGTCGATGGAAGT (SEQ ID NO:81), TTCGGATTGCGGTTTCGGTCGATGGAAG (SEQ ID NO:82), TTCGGATTGCGGTTTCGGTCGATGGAAG (SEQ ID NO:83), TTCGGATTGCGGTTTCGGTCGATGGA (SEQ ID NO:84), TTCGGATTGCGGTTTCGGTCGATGGAAGT (SEQ ID NO:85), CGTAGGAGGGGTGAGGATTCGTTTCGGG (SEQ ID NO:86), GAGCGTAGGGTCGAGGGAGGTCGTAG (SEQ ID NO:87), ACGTAGGAGGGGTGAGGATTCGTTTCGG (SEQ ID NO:88), CGTTGGGGTCGTTGTTTTTTCGGGGTT (SEQ ID NO:89), AGGAGGGGTGAGGATTCGTTTCGGGTAC (SEQ ID NO:90)
Target10	chr1:2706076-2706092	TTTTTTCGTTGGTGGGGTCGTTTCG (SEQ ID NO:91), TTTTTCGTTGGTGGGGTCGTTTCG (SEQ ID NO:92), TTTTTCGTTGGTGGGGTCGTTTCG (SEQ ID NO:93), TTTTTCGTTGGTGGGGTCGTTTCG (SEQ ID NO:94), GCGGGAGGAGGTTTCGTTGGGATGTTGTA (SEQ ID NO:95), GTTGTGTTGGTGGTGGTTCGGGGAGGA (SEQ ID NO:96), GGTGTTGTTGGTGGTGGTTCGGGGAGG (SEQ ID NO:97), GGTGTTGTTGGTGGTGGTTCGGGGAG (SEQ ID NO:98), TTGTTGGTGGTGGTTCGGGGAGGAGTT (SEQ ID NO:99)

Figure 5 (Table 1)

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Target11	chr1:2706118-2706138	TGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:100), GTGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:101), TTGCGTGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:102), GGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:103), TGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:104), GCGGGAGGAGGTTTCGTTGGGATGTTGTA (SEQ ID NO:105), GTTTGTAGGTTGCGGTTTCGAGGAGGCG (SEQ ID NO:106), CGTTTGTAGGTTGCGGTTTCGAGGAGGC (SEQ ID NO:107), TAGGTTGCGGTTTCGAGGAGGCGTTGTT (SEQ ID NO:108), TTGTAGGTTGCGGTTTCGAGGAGGCGTT (SEQ ID NO:109)
Target12	chr1:2706146-2706174	TGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:110), GTGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:111), GGTTCGCGCGTGGAGATCGTTGTAGT (SEQ ID NO:112), TTGCGTGGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:113), GGTGGGGTCGTTTCGTTTTGCGGTTT (SEQ ID NO:114), GCGGGAGGAGGTTTCGTTGGGATGTTGTA (SEQ ID NO:115), GTTTGTAGGTTGCGGTTTCGAGGAGGCG (SEQ ID NO:116), CGTTTGTAGGTTGCGGTTTCGAGGAGGC (SEQ ID NO:117), TAGGTTGCGGTTTCGAGGAGGCGTTGTT (SEQ ID NO:118), TTGTAGGTTGCGGTTTCGAGGAGGCGTT (SEQ ID NO:119)
Target13	chr1:2706213-2706262	GGTTCGCGCGTGGAGATCGTTGTAGT (SEQ ID NO:120), GGTTCGCGCGTGGAGATCGTTGTAGTA (SEQ ID NO:121), GTTCGCGCGTGGAGATCGTTGTAGTA (SEQ ID NO:122), CGGTTTCGCGCGTGGAGATCGTTGTAGT (SEQ ID NO:123), GGTTCGCGCGTGGAGATCGTTGTAGT (SEQ ID NO:124), ACGGTAGTGGAGTAGGGGGCGTCGTAT (SEQ ID NO:125), TAGACGTTAGTGGAGTAGGGGGCGTCG (SEQ ID NO:126), GTTTGTAGGTTGCGGTTTCGAGGAGGCG (SEQ ID NO:127), CGTTTGTAGGTTGCGGTTTCGAGGAGGC (SEQ ID NO:128), TAGGTTGCGGTTTCGAGGAGGCGTTGTT (SEQ ID NO:129)
Target14	chr1:2706277-2706336	TTCGGGTCGTAGTTTGTAGGCGGTGAT (SEQ ID NO:130), TCGGGTCGTAGTTTGTAGGCGGTGATA (SEQ ID NO:131), TCGGGTCGTAGTTTGTAGGCGGTGAT (SEQ ID NO:132), CGGGTCGTAGTTTGTAGGCGGTGATAT (SEQ ID NO:133), TCGGGTCGTAGTTTGTAGGCGGTGATAT (SEQ ID NO:134), ACGGTAGTGGAGTAGGGGGCGTCGTAT (SEQ ID NO:135), TAGACGTTAGTGGAGTAGGGGGCGTCG (SEQ ID NO:136), GACGTTAGTGGAGTAGGGGGCGTCGTA (SEQ ID NO:137), CGGTAGTGGAGTAGGGGGCGTCGTATT (SEQ ID NO:138), ACGGTAGTGGAGTAGGGGGCGTCGTA (SEQ ID NO:139)
Target15	chr1:2706355-2706422	TTTCGGGTCGTAGTTTGTAGGCGGTGA (SEQ ID NO:140), GCGTATATAGTTTTCGGGTGCGGCGT (SEQ ID NO:141), TTCGGGTCGTAGTTTGTAGGCGGTGAT (SEQ ID NO:142), AGTTTTCGGGTGCGGCGTTTGTGTT (SEQ ID NO:143), TTTCGGGTCGTAGTTTGTAGGCGGTG (SEQ ID NO:144), GGATTTTCGGGGGATCGTGTAGGGGA (SEQ ID NO:145), AGGATTTTCGGGGGATCGTGTAGGGG (SEQ ID NO:146), GGATTTTCGGGGGATCGTGTAGGGGAT (SEQ ID NO:147), TGAGGATTTTCGGGGGATCGTGTAGGG (SEQ ID NO:148), GAGGATTTTCGGGGGATCGTGTAGGG (SEQ ID NO:149)
Target16	chr1:2706423-2706476	GCGTAGAGTTAGGAGAGGTGCGCGGTT (SEQ ID NO:150), GGAGAGGTGCGCGGTTTTTGTACGGT (SEQ ID NO:151), AGGAGAGGTGCGCGGTTTTTGTACGG (SEQ ID NO:152), GCGTAGAGTTAGGAGAGGTGCGCGGT (SEQ ID NO:153), GCGTAGAGTTAGGAGAGGTGCGCGGTTT (SEQ ID NO:154), GGATTTTCGGGGGATCGTGTAGGGGA (SEQ ID NO:155), AGGATTTTCGGGGGATCGTGTAGGGG (SEQ ID NO:156), GTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:157), AGTGTGTTGTTGGTAGGGGACGCGG (SEQ ID NO:158), GGATTTTCGGGGGATCGTGTAGGGGAT (SEQ ID NO:159)
Target17	chr1:2706491-2706525	CGTGCGGGTCGTAGTAGGCGTTCGTAT (SEQ ID NO:160), GCGTAGAGTTAGGAGAGGTGCGCGGTT (SEQ ID NO:161), GGAGAGGTGCGCGGTTTTTGTACGGT (SEQ ID NO:162), TTCGTAGGGTTTTAGGGCGTGGGGT (SEQ ID NO:163), TAGGGTTTTAGGGCGTGGGGTCGTA (SEQ ID NO:164), GTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:165), AGTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:166), TGTGTTGTTGTTGGTAGGGGACGCGG (SEQ ID NO:167), TTCGGTTATGTGCGAGCGTTGTTGC (SEQ ID NO:168), CGAGTGTTTGTGTTGGTAGGGGACGCG (SEQ ID NO:169)
Target18	chr1:2706532-2706583	CGTGCGGGTCGTAGTAGGCGTTCGTAT (SEQ ID NO:170), GCGTAGAGTTAGGAGAGGTGCGCGGTT (SEQ ID NO:171), GGTATTCGCGAGGCGGTTTTTACGG (SEQ ID NO:172), GCGTTCGTATATGGTTCGGGCGTTTCG (SEQ ID NO:173), GGAGAGGTGCGCGGTTTTTGTACGGT (SEQ ID NO:174), GTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:175), AGTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:176), CGAGTGTTTGTGTTGGTAGGGGACGCG (SEQ ID NO:177), AGTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:178), GAGTGTTTGTGTTGGTAGGGGACGCGG (SEQ ID NO:179)
Target19	chr1:2706587-2706602	CGTGCGGGTCGTAGTAGGCGTTCGTAT (SEQ ID NO:180), GGTATTCGCGAGGCGGTTTTTACGG (SEQ ID NO:181), GCGGTTTCGTATATGGTTCGGGCGTTTCG (SEQ ID NO:182), TAGGGTTTTAGGGCGTGGGGTCGTA (SEQ ID NO:183), TTTTAGGGCGTGCGGTCGTAGTAGG (SEQ ID NO:184), CGAGTTGTTGTTTCGGTAATTCGCGCG (SEQ ID NO:185), AGTTGTTGTTTCGGTAATTCGCGCGT (SEQ ID NO:186), CGAGTTGTTGTTTCGGTAATTCGCGCGT (SEQ ID NO:187), GAGTTGTTGTTTCGGTAATTCGCGCGT (SEQ ID NO:188), GAGTTGTTGTTTCGGTAATTCGCGCG (SEQ ID NO:189)

Figure 5 (Table 1)

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Target20	chr1:2706608-2706621	CGTGCGGGTCGTAGTAGGCGTTCGTAT (SEQ ID NO:190), GGTATTCGGCGAGGCGGGTTTTAGCG (SEQ ID NO:191), GGC GTTCGTATATGGTTCGGGCGTTCG (SEQ ID NO:192), GCGTTCGTATATGGTTCGGGCGTTCGT (SEQ ID NO:193), AGGTATTCGGCGAGGCGGGTTTTAGC (SEQ ID NO:194), CGAGTTGTTGGTTTCGGTAATTCGCGCG (SEQ ID NO:195), AGTTGTTGGTTTCGGTAATTCGCGCGT (SEQ ID NO:196), CGAGTTGTTGGTTTCGGTAATTCGCGCGT (SEQ ID NO:197), GAGTTGTTGGTTTCGGTAATTCGCGCGT (SEQ ID NO:198), GAGTTGTTGGTTTCGGTAATTCGCGCG (SEQ ID NO:199)
Target21	chr1:2706629-2706667	GGTATTCGGCGAGGCGGGTTTTAGCG (SEQ ID NO:200), GCGTTCGTATATGGTTCGGGCGTTCG (SEQ ID NO:201), GCGTTCGTATATGGTTCGGGCGTTCGT (SEQ ID NO:202), AGGTATTCGGCGAGGCGGGTTTTAGC (SEQ ID NO:203), AGGCGTTCGTATATGGTTCGGGCGTTC (SEQ ID NO:204), GCGTTCGGGTTTAGGCGTAGGAGGTCG (SEQ ID NO:205), GCGTTCGGGTTTAGGCGTAGGAGGTC (SEQ ID NO:206), CGTTCGGGTTTAGGCGTAGGAGGTCG (SEQ ID NO:207), TCGTTCGTTTTAGGAAGTCGTGCGGA (SEQ ID NO:208), GCGTTCGGGTTTAGGCGTAGGAGGT (SEQ ID NO:209)
Target22	chr1:2706668-2706691	GGTATTCGGCGAGGCGGGTTTTAGCG (SEQ ID NO:210), AGGTATTCGGCGAGGCGGGTTTTAGC (SEQ ID NO:211), AGTAGTAGGTATTCGGCGAGGCGGGTT (SEQ ID NO:212), TCGCGAGTTTAGGGTGGTTTCGTACG (SEQ ID NO:213), AGTAGGTATTCGGCGAGGCGGGTTTT (SEQ ID NO:214), TTGGGGCGCGGAGGTAGTTTTAGGTCG (SEQ ID NO:215), GCGTTCGGGTTTAGGCGTAGGAGGTCG (SEQ ID NO:216), GGGGCGCGGAGGTAGTTTTAGGTCGTG (SEQ ID NO:217), TTTGGGGCGCGGAGGTAGTTTTAGGTC (SEQ ID NO:218), TGGGGCGCGGAGGTAGTTTTAGGTCG (SEQ ID NO:219)
Target23	chr1:2706721-2706734	CGCGGAGTTTAGGGTGGTTTCGTACGG (SEQ ID NO:220), TCGCGGAGTTTAGGGTGGTTTCGTACGG (SEQ ID NO:221), GCGGAGTTTAGGGTGGTTTCGTACGGT (SEQ ID NO:222), CGCGGAGTTTAGGGTGGTTTCGTACGGT (SEQ ID NO:223), TCGCGGAGTTTAGGGTGGTTTCGTACG (SEQ ID NO:224), CGTTCGGGTTTAGGCGTAGGAGGTCGT (SEQ ID NO:225), GGGCGCGGAGGTAGTTTTAGGTCGTG (SEQ ID NO:226), TTGGGGCGCGGAGGTAGTTTTAGGTCG (SEQ ID NO:227), GCGTTCGGGTTTAGGCGTAGGAGGTCG (SEQ ID NO:228), GGGGCGCGGAGGTAGTTTTAGGTCGTG (SEQ ID NO:229)
Target24	chr1:6125159-6125201	GGCGTTGTAGTTAGGGTGGATTTGCGGG (SEQ ID NO:230), AGGGTGGATTTGCGGGTTGGATGTTT (SEQ ID NO:231), GGGTGGATTTGCGGGTTGGATGTTT (SEQ ID NO:232), GCGTTGTAGTTAGGGTGGATTTGCGGG (SEQ ID NO:233), GCGTTGTAGTTAGGGTGGATTTGCGG (SEQ ID NO:234)
Target25	chr1:6125229-6125498	GGTGTGCTTGGGTATGCGTTAGGAGGT (SEQ ID NO:235), GGTGTGCTTGGGTATGCGTTAGGGAGG (SEQ ID NO:236), AGGTGTGCTTGGGTATGCGTTAGGGAGG (SEQ ID NO:237), GTGTGCTTGGGTATGCGTTAGGGAGGT (SEQ ID NO:238), AGGTGTGCTTGGGTATGCGTTAGGGAG (SEQ ID NO:239), AGGGTGGATTTGCGGGTTGGATGTTT (SEQ ID NO:240), GGATTGGTTGAGGTTTGGGTAGGCGT (SEQ ID NO:241), GGGTGGATTTGCGGGTTGGATGTTT (SEQ ID NO:242), AGGATTGGTTGAGGTTTGGGTAGGCGT (SEQ ID NO:243), TTGGTTGAGGTTTGGGTAGGCGTTGT (SEQ ID NO:244)
Target26	chr1:7728694-7728716	CGTTTGGTTGCGTTGAATTGGTGGTGACG (SEQ ID NO:245), TTTGGTTGCGTTGAATTGGTGGTGACG (SEQ ID NO:246), CGTTTGGTTGCGTTGAATTGGTGGTGA (SEQ ID NO:247), TCGTTTGGTTGCGTTGAATTGGTGGTG (SEQ ID NO:248), TCGTTTGGTTGCGTTGAATTGGTGGTGA (SEQ ID NO:249)
Target27	chr1:7728839-7729031	TGGATGTTGAGTTGTTTTGCGGCGGT (SEQ ID NO:250), ATGGATGTTGAGTTGTTTTGCGGCGGT (SEQ ID NO:251), GGATGGATGTTGAGTTGTTTTGCGGCGG (SEQ ID NO:252), TGGATGGATGTTGAGTTGTTTTGCGGCGG (SEQ ID NO:253), GATGGATGTTGAGTTGTTTTGCGGCGGT (SEQ ID NO:254), GGGTATTGGGGGAGTGGGTGTGTTGGT (SEQ ID NO:255), GTTTCGTGGAAGTGGCGGGTATTGGG (SEQ ID NO:256), TGGGGGAGTGGGTGTGTTGGTTGAGAA (SEQ ID NO:257), TTGGGGGAGTGGGTGTGTTGGTTGAGA (SEQ ID NO:258), GGGGTATTGGGGGAGTGGGTGTGTTGG (SEQ ID NO:259)
Target28	chr1:8137417-8137568	CGTGGTTGGGTTGAGGGTCGTAGGGT (SEQ ID NO:260), ACGTGGTTGGGTTGAGGGTCGTAGGG (SEQ ID NO:261), TGGGTTGAGGGTCGTAGGGTTGTGGT (SEQ ID NO:262), GACGTGGTTGGGTTGAGGGTCGTAGGG (SEQ ID NO:263), CGTGGTTGGGTTGAGGGTCGTAGGGT (SEQ ID NO:264)
Target29	chr1:9377821-9377886	GGGATTATAGGCGTGAGTTATCGTGTGTTGGT (SEQ ID NO:265), TGGGATTATAGGCGTGAGTTATCGTGTGTTGG (SEQ ID NO:266), GTGTTGGGATTATAGGCGTGAGTTATCGTGT (SEQ ID NO:267), TGGGATTATAGGCGTGAGTTATCGTGTGTTGGT (SEQ ID NO:268), AGTGTGGGATTATAGGCGTGAGTTATCGTGT (SEQ ID NO:269), CGGAGCGAATGGTGTGTTAAGGAAGTAAGA (SEQ ID NO:270), CGGAGCGAATGGTGTGTTAAGGAAGTAAGAA (SEQ ID NO:271), CGGAGCGAATGGTGTGTTAAGGAAGTAAGAAA (SEQ ID NO:272), CGGAGCGAATGGTGTGTTAAGGAAGTAAGAAAT (SEQ ID NO:273), CGGAGCGAATGGTGTGTTAAGGAAGTAAGAAATT (SEQ ID NO:274)

Figure 5 (Table 1)

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Target30	chr1:9377977-9378177	AGATTGGCGGGTCGTTTTGGTGGGAGT (SEQ ID NO:275), GATTGGCGGGTCGTTTTGGTGGGAGTT (SEQ ID NO:276), TGCGCGGTTCGTTTTGGTGGGAGTTTTT (SEQ ID NO:277), TTGGCGGGTCGTTTTGGTGGGAGTTTT (SEQ ID NO:278), ATTGGCGGGTCGTTTTGGTGGGAGTTT (SEQ ID NO:279), TGTATTCGTGGTGGAGGATTTGGGGT (SEQ ID NO:280), CGGTTGTATTCGTGGTGGAGGATTTGGGG (SEQ ID NO:281), GGTGTATTCGTGGTGGAGGATTTGGGG (SEQ ID NO:282), GGTGTATTCGTGGTGGAGGATTTGGGGT (SEQ ID NO:283), TTGTATTCGTGGTGGAGGATTTGGGGT (SEQ ID NO:284)
Target31	chr1:9378325-9378377	GGGAAGGTGGGTGTGGGTATTCGAGG (SEQ ID NO:285), GGGAAGGTGGGTGTGGGTATTCGAG (SEQ ID NO:286), GTGGGGGAAGGTGGGTGTGGGTATTCG (SEQ ID NO:287), AGTGGGGGAAGGTGGGTGTGGGTATTC (SEQ ID NO:288), GGAAGGTGGGTGTGGGTATTCGAGGT (SEQ ID NO:289), AGTAAGGGAGGCGTGGGTGGGTAGAGA (SEQ ID NO:290), AAGGGAGGCGTGGGTGGGTAGAGATTT (SEQ ID NO:291), GCGTGGGTGGGTAGAGATTTAAGCGGG (SEQ ID NO:292), GCGTGGGTGGGTAGAGATTTAAGCGG (SEQ ID NO:293), GTAAGGGAGGCGTGGGTGGGTAGAGAT (SEQ ID NO:294)
Target32	chr1:9378451-9378489	TGCGGATAGATAGGGAATGGGGATAGCGT (SEQ ID NO:295), GCGGATAGATAGGGAATGGGGATAGCGT (SEQ ID NO:296), TGCGGATAGATAGGGAATGGGGATAGCG (SEQ ID NO:297), GCGGATAGATAGGGAATGGGGATAGCG (SEQ ID NO:298), GCGGATAGATAGGGAATGGGGATAGCGTT (SEQ ID NO:299), TGGGAGTGGAGGAAGGAGGGTGGTTT (SEQ ID NO:300), TTGGGAGTGGAGGAAGGAGGGTGGTTT (SEQ ID NO:301), TTTGGGAGTGGAGGAAGGAGGGTGGTT (SEQ ID NO:302), ATTTGGGAGTGGAGGAAGGAGGGTGGT (SEQ ID NO:303), GGAATATGTAGGGGGTTCGTGGGC (SEQ ID NO:304)
Target33	chr1:15672463-15672644	TGATTTAGATGTGTGAAAATAGGGGCGTTCGT (SEQ ID NO:305), ATGATTTAGATGTGTGAAAATAGGGGCGTTCGT (SEQ ID NO:306), TGATTTAGATGTGTGAAAATAGGGGCGTTCGTA (SEQ ID NO:307), GATGATTTAGATGTGTGAAAATAGGGGCGTTCG (SEQ ID NO:308), GATGATTTAGATGTGTGAAAATAGGGGCGTTCGT (SEQ ID NO:309), ATAAGGGCGTTTGGGTTCCGGGAGGAG (SEQ ID NO:310), TATTTTGTGGGAGCGTAGGGGAGGGCG (SEQ ID NO:311), AGCGTAGGGGAGGGCGGAGGATTGATA (SEQ ID NO:312), GCGGTTTGGGTTCCGGGAGGAGTAGAT (SEQ ID NO:313), AATAAGGGCGTTTGGGTTCCGGGAGGA (SEQ ID NO:314)
Target34	chr1:29586062-29586108	GCGTCGTTTTAGTGTATGGTCGCGGGT (SEQ ID NO:315), GCGTCGTTTTAGTGTATGGTCGCGGGTA (SEQ ID NO:316), CGGGAGCGGTGATTTTGGTTGGGGG (SEQ ID NO:317), GGGAGCGGTGATTTTGGTTGGGGG (SEQ ID NO:318), GGAGCGGTGATTTTGGTTGGGGGCG (SEQ ID NO:319), GCGTAGAGTAGAGTTAGGGGAGGGTCGGG (SEQ ID NO:320), AGAGTAGAGTTAGGGGAGGGTCGGAC (SEQ ID NO:321), GCGTAGAGTAGAGTTAGGGGAGGGTCGG (SEQ ID NO:322), AGCGTAGAGTAGAGTTAGGGGAGGGTCGG (SEQ ID NO:323), CGTAGAGTAGAGTTAGGGGAGGGTCGGG (SEQ ID NO:324)
Target35	chr1:29586281-29586300	TTATGTTCCGCGGTGTAGTAGGGACG (SEQ ID NO:325), TTTATGTTCCGCGGTGTAGTAGGGACG (SEQ ID NO:326), TATGTTCCGCGGTGTAGTAGGGACG (SEQ ID NO:327), TTTATGTTCCGCGGTGTAGTAGGGAC (SEQ ID NO:328), ATGTTCCGCGGTGTAGTAGGGACG (SEQ ID NO:329), GAGAGTGAGGGGTTAGGGGCGTTTCG (SEQ ID NO:330), AGGGAAGAGAGTGAGGGGGTTAGGGG (SEQ ID NO:331), AGAGAGTGAGGGGTTAGGGGCGTTTC (SEQ ID NO:332), GAAGAGAGTGAGGGGGTTAGGGGCGTT (SEQ ID NO:333), GGAAGAGAGTGAGGGGGTTAGGGGCGT (SEQ ID NO:334)
Target36	chr1:29586324-29586346	GTTCCGCGGTGTAGTAGGGACGGTAA (SEQ ID NO:335), TATGTTCCGCGGTGTAGTAGGGACGG (SEQ ID NO:336), TCGCGCGGTGTAGTAGGGACGGTTAAA (SEQ ID NO:337), TTCGCGCGGTGTAGTAGGGACGGTTAA (SEQ ID NO:338), TTATGTTCCGCGGTGTAGTAGGGACGG (SEQ ID NO:339), GAGAGTGAGGGGTTAGGGGCGTTTCG (SEQ ID NO:340), AGCGTCGCGGTGTATGTGTCTACGT (SEQ ID NO:341), AGGAAGCGTCGGTGGTTGATGTGTCTG (SEQ ID NO:342), AGGGAAGAGAGTGAGGGGGTTAGGGG (SEQ ID NO:343), AGCGGAAAGTGGTTAGGAAGCGTCGG (SEQ ID NO:344)
Target37	chr1:29586382-29586522	GTTCCGCGGTGTAGTAGGGACGGTAA (SEQ ID NO:345), TATGTTCCGCGGTGTAGTAGGGACGG (SEQ ID NO:346), CGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:347), TCGCGCGGTGTAGTAGGGACGGTTAAA (SEQ ID NO:348), TTCGCGCGGTGTAGTAGGGACGGTTAA (SEQ ID NO:349), GCGGTATAGGTTTTGTTCCGCGCGGTT (SEQ ID NO:350), AGCGTCGCGGTGATGTGTCTACGT (SEQ ID NO:351), AGGAAGCGTCGGTGGTTGATGTGTCTG (SEQ ID NO:352), AGCGGAAAGTGGTTAGGAAGCGTCGG (SEQ ID NO:353), GCGTCGGTGGTTGATGTGTCTACGTT (SEQ ID NO:354)
Target38	chr1:29586539-29586574	CGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:355), TCGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:356), TCGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:357), ATCGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:358), ATCGTTGTGTGTTTTAGGTTTCGCGCGG (SEQ ID NO:359), CGAGGGTGAGGTTTCGGCGTTTTT (SEQ ID NO:360), CGAGGGTGAGGTTTCGGCGTTTTT (SEQ ID NO:361), CGAGGGTGAGGTTTCGGCGTTTTT (SEQ ID NO:362), TCGCGTTTATTAGTTGATTTTACGATGAGTTT (SEQ ID NO:363), TTCGGCGTTTATTAGTTGATTTTACGATGAGTT (SEQ ID NO:364)

Figure 5 (Table 1)

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Target39	chr1:37941024-37941707	TGTTTAGTAGGAGTTGTGGCGCGGGGT (SEQ ID NO:365), AGGAGTTGTGGCGCGGGGTTTTTAGG (SEQ ID NO:366), GGAGTTGTGGCGCGGGGTTTTTAGGA (SEQ ID NO:367), AGTTGTGGCGCGGGGTTTTTAGGAGT (SEQ ID NO:368), AGTAGGAGTTGTGGCGCGGGGTTTTT (SEQ ID NO:369), AGGGAGTTGAGGGTAGGGGTTCCGTGA (SEQ ID NO:370), AGAGGGAGTTGAGGGTAGGGGTTCCGT (SEQ ID NO:371), GAGGGTAGGGGTTCCGTGAGGTTTGGC (SEQ ID NO:372), AGGGGTTCCGTGAGGTTTGGCGTTTC (SEQ ID NO:373), GGAGTTGAGGGTAGGGGTTCCGTGAGG (SEQ ID NO:374)
Target40	chr1:44015742-44015768	TGTGTTGTGTTTTGCGGGTGGAGGTGG (SEQ ID NO:375), GTGGAGGTGGATTGGAGGGAAGCGGAG (SEQ ID NO:376), GTGTTGTGTTTTGCGGGTGGAGGTGGA (SEQ ID NO:377), GTTTTGGCGGGTGGAGGTGGATTGGAGG (SEQ ID NO:378), TGTGTTTTGCGGGTGGAGGTGGATTGG (SEQ ID NO:379), AGTTCGGGGGATTAGATAGGTAGGTTTCGT (SEQ ID NO:380), AGGTTAAGTTGGTTAAGGTAGTTCGGGGG (SEQ ID NO:381), GGTAAAGTTGGTTAAGGTAGTTCGGGGGA (SEQ ID NO:382), AGGTTAAGTTGGTTAAGGTAGTTCGGGGGA (SEQ ID NO:383), AGTTCGGGGGATTAGATAGGTAGGTTTCGTT (SEQ ID NO:384)
Target41	chr1:47691665-47691676	CGACGTGGGTTGGGGTAAAGGGGAGAA (SEQ ID NO:385), CGTGGGTTGGGGTAAAGGGGAGAAGGG (SEQ ID NO:386), CGCGCGTCGTTCCGTTATTTGTGGGT (SEQ ID NO:387), ATCGACGTGGGTTGGGGTAAAGGGGAG (SEQ ID NO:388), ACGTGGGTTGGGGTAAAGGGGAGAAGG (SEQ ID NO:389)
Target42	chr1:47696673-47696702	GAGGTTTCGAGGTTTGGTGAATGTGTTTATTGT (SEQ ID NO:390), GAGGTTTCGAGGTTTGGTGAATGTGTTTATTGTT (SEQ ID NO:391), GGTGTTGGTGAATGTGTTTATTGTTTTTCGGGG (SEQ ID NO:392), GGTGTTGGTGAATGTGTTTATTGTTTTTCGGGGT (SEQ ID NO:393), AGGTTTCGAGGTTTGGTGAATGTGTTTATTGTTT (SEQ ID NO:394), TTGGTTAGTTTCGTGGGTGCGGTCGTC (SEQ ID NO:395), TTTGGTTAGTTTCGTGGGTGCGGTCGT (SEQ ID NO:396), TTTGGTTAGTTTCGTGGGTGCGGTCGTC (SEQ ID NO:397), TGGTTAGTTTCGTGGGTGCGGTCGTC (SEQ ID NO:398), TTTTGGTTAGTTTCGTGGGTGCGGTCGT (SEQ ID NO:399)
Target43	chr1:47696752-47696769	TGGATGAAGTCGGAGTGTAGCGGGAAT (SEQ ID NO:400), ATGGATGAAGTCGGAGTGTAGCGGGAA (SEQ ID NO:401), AATGGATGAAGTCGGAGTGTAGCGGGA (SEQ ID NO:402), TGGATGAAGTCGGAGTGTAGCGGGAATC (SEQ ID NO:403), GGATGAAGTCGGAGTGTAGCGGGAATC (SEQ ID NO:404), CGGCGGTTGTTTGTTCGGAGGTTTCGT (SEQ ID NO:405), GGTGCGCGGTTGTTTGTTCGGAGGTT (SEQ ID NO:406), TCGGCGGTTGTTTGTTCGGAGGTTTCG (SEQ ID NO:407), GAGGGGTTTCGTTGGTGAGTGGGAGGTT (SEQ ID NO:408), TTGAGGGGTTTCGTTGGTGAGTGGGAGG (SEQ ID NO:409)
Target44	chr1:47696782-47696792	TGGATGAAGTCGGAGTGTAGCGGGAAT (SEQ ID NO:410), ATGGATGAAGTCGGAGTGTAGCGGGAA (SEQ ID NO:411), AATGGATGAAGTCGGAGTGTAGCGGGA (SEQ ID NO:412), TGGATGAAGTCGGAGTGTAGCGGGAATC (SEQ ID NO:413), GGATGAAGTCGGAGTGTAGCGGGAATC (SEQ ID NO:414), GTTCGGTCGCGGTTGTTTGTTCGGA (SEQ ID NO:415), CGGCGGTTGTTTGTTCGAGGTTTCGT (SEQ ID NO:416), GGTGCGCGGTTGTTTGTTCGAGGTT (SEQ ID NO:417), TCGGCGGTTGTTTGTTCGAGGTTTCG (SEQ ID NO:418), TTCGGTCGCGGTTGTTTGTTCGAG (SEQ ID NO:419)
Target45	chr1:48173984-48174046	GGGGATGGGGGTAGTTTCGCGGGTAA (SEQ ID NO:420), GGGGATGGGGGTAGTTTCGCGGGTAA (SEQ ID NO:421), GGGATGGGGGTAGTTTCGCGGGTAAAG (SEQ ID NO:422), GGGGATGGGGGTAGTTTCGCGGGTAAAG (SEQ ID NO:423), GGGGATGGGGGTAGTTTCGCGGGTAAAG (SEQ ID NO:424), GTTAGGTTGTTGGGTACGGTATTTTGTAGGT (SEQ ID NO:425), TGTTTAGGTTGTTGGGTACGGTATTTTGTAGG (SEQ ID NO:426)
Target46	chr1:50882017-50882035	ATTTTGGGTGCGGTGGGGTAGAGGACG (SEQ ID NO:427), TATTTTGGGTGCGGTGGGGTAGAGGACG (SEQ ID NO:428), TTTTGGGTGCGGTGGGGTAGAGGACG (SEQ ID NO:429), GAGGACGGGGATGAGGCGGTGCGGAATC (SEQ ID NO:430), TATTTTGGGTGCGGTGGGGTAGAGGAC (SEQ ID NO:431), GCGGGGAGAAAGCGTGCAGGAAGTTTT (SEQ ID NO:432), GCGGGAGAAAGCGTGCAGGAAGTTTTG (SEQ ID NO:433), CGGGAGAAAGCGTGCAGGAAGTTTTGG (SEQ ID NO:434), AGGCGGGAGAAAGCGTGCAGGAAGTTTT (SEQ ID NO:435), GGGAGAAAGCGTGCAGGAAGTTTTGGG (SEQ ID NO:436)
Target47	chr1:50882232-50882249	AGCGCGATGAGATGAAAGTGGGGGAGA (SEQ ID NO:437), GAGCGGATGAGATGAAAGTGGGGGAG (SEQ ID NO:438), GAGCGGATGAGATGAAAGTGGGGGAGA (SEQ ID NO:439), GCGCGATGAGATGAAAGTGGGGGAGAA (SEQ ID NO:440), AGCGCGATGAGATGAAAGTGGGGGAGAA (SEQ ID NO:441)
Target48	chr1:50884372-50884775	GCGGAGTAGGTTAGGCGTAGGGGTTG (SEQ ID NO:442), GTTAGGCGTAGGGGTTGAGGTCGAGC (SEQ ID NO:443), AGGTTAGGCGTAGGGGTTGAGGTCGA (SEQ ID NO:444), AGGCGTAGTTATGGGTGGGCGGAAGT (SEQ ID NO:445), GGTAGGCGTAGGGGTTGAGGTCGAG (SEQ ID NO:446), TGGGGCGTTGGGTTGTTGAGTAGTCG (SEQ ID NO:447), CGTTTGGGGCGTTGGGTTGTTGAGTA (SEQ ID NO:448), GGGGTTTGGGCGTGGGTTTGGGTTTGG (SEQ ID NO:449), GGGCGTTGGGTTGTTGAGTAGTCGTT (SEQ ID NO:450), CGTTTGGGGCGTTGGGTTGTTGAGT (SEQ ID NO:451)

Figure 5 (Table 1)

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Target49	chr1:50884780-50884810	CGGGTTTCGTTTGTAGCGGCGTAGGTA (SEQ ID NO:452), GCGTCGGTTAGTAAGGGTTTGTGGTGCG (SEQ ID NO:453), TAGTAAGGGTTTGTGGTGCGGAGGTGC (SEQ ID NO:454), GGCCTCGGTTAGTAAGGGTTTGTGGTGCG (SEQ ID NO:455), GGCCTTAGGCGTCGGTTAGTAAGGGT (SEQ ID NO:456), TATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:457), GGTCGGTTTGGGTTTGGCGCGTTTTT (SEQ ID NO:458), ATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:459), TTATCGTGGGGTTTGGCGGTCGGTT (SEQ ID NO:460), GGGGTTTGGCGGTCGGTTTGGGTTTTG (SEQ ID NO:461)
Target50	chr1:50884820-50884826	CGGGTTTCGTTTGTAGCGGCGTAGGTA (SEQ ID NO:462), GCGTCGGTTAGTAAGGGTTTGTGGTGCG (SEQ ID NO:463), TAGTAAGGGTTTGTGGTGCGGAGGTGC (SEQ ID NO:464), GGCCTCGGTTAGTAAGGGTTTGTGGTGCG (SEQ ID NO:465), CGTCGGTTAGTAAGGGTTTGTGGTGCGG (SEQ ID NO:466), TATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:467), GGTCGGTTTGGGTTTGGCGCGTTTTT (SEQ ID NO:468), ATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:469), TTATCGTGGGGTTTGGCGGTCGGTT (SEQ ID NO:470), GGGGTTTGGCGGTCGGTTTGGGTTTTG (SEQ ID NO:471)
Target51	chr1:50884849-50884886	GCGGTTTATTTGGGGGCGTCGTAGGG (SEQ ID NO:472), TTTGGGGGCGTCGTAGGGTTAGGTCG (SEQ ID NO:473), CGGTTTTATTTGGGGGCGTCGTAGGGT (SEQ ID NO:474), TTGGGGGCGTCGTAGGGTTAGGTCG (SEQ ID NO:475), ATTTGGGGGCGTCGTAGGGTTAGGTCG (SEQ ID NO:476), GGCAGAGCGTTTTGGAGTTGGTGTGT (SEQ ID NO:477), TATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:478), GGTCGGTTTGGGTTTGGCGGCTTTTT (SEQ ID NO:479), ATTATCGTGGGGTTTGGCGGTCGGT (SEQ ID NO:480), TTGGAGTTGGTGTGTAGGGTTGCGGC (SEQ ID NO:481)
Target52	chr1:50884939-50884946	GGCGTCGTAGGGTTTAGGTCGGTCGTT (SEQ ID NO:482), GCGGTTTTATTTGGGGGCGTCGTAGGG (SEQ ID NO:483), GCGGTTTTATTTGGGGGCGTCGTAGG (SEQ ID NO:484), TTGGGGGCGTCGTAGGGTTAGGTCG (SEQ ID NO:485), CGGTTTTATTTGGGGGCGTCGTAGGGT (SEQ ID NO:486), TAGGGTTGGGCGGAGGTTCCGGGTTTAC (SEQ ID NO:487), TTGGGCGGAGGTTCCGGGTTTACGGTAG (SEQ ID NO:488), GCGAGGCGTTTTGGAGTTGGTGTGT (SEQ ID NO:489), GTTGGGCGGAGGTTCCGGGTTTACGGTA (SEQ ID NO:490), TTGGAGTTGGTGTGTAGGGTTGCGGC (SEQ ID NO:491)
Target53	chr1:50885018-50885048	CGTCGGTGTTTTGGGAATACGCGTGTT (SEQ ID NO:492), TCGTCGGTGTTTTGGGAATACGCGTGT (SEQ ID NO:493), TTCGTCGGTGTTTTGGGAATACGCGTG (SEQ ID NO:494), TTCGTCGGTGTTTTGGGAATACGCGT (SEQ ID NO:495), CGTTTCGTCGGTGTTTTGGGAATACGCG (SEQ ID NO:496), TAGGGTTGGGCGGAGGTTCCGGGTTTAC (SEQ ID NO:497), TAAAGAAGAGGGTGAGGTCGCGTCGGC (SEQ ID NO:498), GTTGGGCGGAGGTTCCGGGTTTACGGTA (SEQ ID NO:499), GGAGGTTCCGGGTTTACGGTAGCGGACG (SEQ ID NO:500), CGGAGGTTCCGGGTTTACGGTAGCGGAC (SEQ ID NO:501)
Target54	chr1:50885060-50885069	CGTCGGTGTTTTGGGAATACGCGTGTT (SEQ ID NO:502), TCGTCGGTGTTTTGGGAATACGCGTGT (SEQ ID NO:503), TTCGTCGGTGTTTTGGGAATACGCGTG (SEQ ID NO:504), TTCGTCGGTGTTTTGGGAATACGCGT (SEQ ID NO:505), CGTTTCGTCGGTGTTTTGGGAATACGCG (SEQ ID NO:506), TTTAGGTAGCGTTGGTTTTGGCGGCGG (SEQ ID NO:507), TAAAGAAGAGGGTGAGGTCGCGTCGGT (SEQ ID NO:508), GTTGTAGGTAGCGTTGGTTTTGGCGGCG (SEQ ID NO:509), TGTTTAGGTAGCGTTGGTTTTGGCGGCG (SEQ ID NO:510), TTAGGTAGCGTTGGTTTTGGCGGCGG (SEQ ID NO:511)
Target55	chr1:50885146-50885156	TCGGATTAGAGTTTAGAGGGTTAGCGGAGT (SEQ ID NO:512), CGGATTAGAGTTTAGAGGGTTAGCGGAGTT (SEQ ID NO:513), TCGGATTAGAGTTTAGAGGGTTAGCGGAGTT (SEQ ID NO:514), ATCGGATTAGAGTTTAGAGGGTTAGCGGAGT (SEQ ID NO:515), CGGATTAGAGTTTAGAGGGTTAGCGGAGTTC (SEQ ID NO:516), TTTAGGTAGCGTTGGTTTTGGCGGCGG (SEQ ID NO:517), AGGTGCGGTTTCGGTTTAGGTTTCGGAGA (SEQ ID NO:518), AGAGGTGCGGTTTCGGTTTAGGTTTCGGA (SEQ ID NO:519), GAGGTGCGGTTTCGGTTTAGGTTTCGGAG (SEQ ID NO:520), GTTTAGGTAGCGTTGGTTTTGGCGGCG (SEQ ID NO:521)
Target56	chr1:50885205-50885295	TGAGTCGGGTCGTATTTTGGGGACGA (SEQ ID NO:522), TTGAGTCGGGTCGTATTTTGGGGACG (SEQ ID NO:523), TTGAGTCGGGTCGTATTTTGGGGACGA (SEQ ID NO:524), TTTTGGAGGTTTCAGTTAGGGGCGA (SEQ ID NO:525), TTTGAGTCGGGTCGTATTTTGGGGACG (SEQ ID NO:526), AGGTGCGGTTTCGGTTTAGGTTTCGGAGA (SEQ ID NO:527), AGAGGTGCGGTTTCGGTTTAGGTTTCGGA (SEQ ID NO:528), GAGGTGCGGTTTCGGTTTAGGTTTCGGAG (SEQ ID NO:529), AGAGGTGCGGTTTCGGTTTAGGTTTCGGAG (SEQ ID NO:530), GAGGTGCGGTTTCGGTTTAGGTTTCGGAGA (SEQ ID NO:531)
Target57	chr1:50885302-50885309	TGAGTCGGGTCGTATTTTGGGGACGA (SEQ ID NO:532), TTGAGTCGGGTCGTATTTTGGGGACG (SEQ ID NO:533), TTGAGTCGGGTCGTATTTTGGGGACGA (SEQ ID NO:534), TTTTGGAGGTTTCAGTTAGGGGCGA (SEQ ID NO:535), TTTGAGTCGGGTCGTATTTTGGGGACG (SEQ ID NO:536), ACGTTGTTGTAGGTAGGTCGTTTCGGG (SEQ ID NO:537), AGGTAGGTCGTTTCGGGTAGTTCGTTGT (SEQ ID NO:538), GACGTTGTTGTAGGTAGGTCGTTTCGGG (SEQ ID NO:539), GACGTTGTTGTAGGTAGGTCGTTTCGGG (SEQ ID NO:540), GGTAGGTCGTTTCGGGTAGTTCGTTGTC (SEQ ID NO:541)

Figure 5 (Table 1)

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Target58	chr1:50885327-50885349	TGAGTCGGGTCGTATTTTTGGGGACGA (SEQ ID NO:542), TTGAGTCGGGTCGTATTTTTGGGGACG (SEQ ID NO:543), TTGAGTCGGGTCGTATTTTTGGGGACGA (SEQ ID NO:544), TTTGAGTCGGGTCGTATTTTTGGGGACG (SEQ ID NO:545), TTTGAGTCGGGTCGTATTTTTGGGGACGA (SEQ ID NO:546), ACGTTGTTGTAGGTAGGTCGTTCCGGT (SEQ ID NO:547), AGGTAGGTCGTTCCGGTAGTTCGTTGT (SEQ ID NO:548), GACGTTGTTGTAGGTAGGTCGTTCCGGT (SEQ ID NO:549), GACGTTGTTGTAGGTAGGTCGTTCCGGG (SEQ ID NO:550), GGTAGGTCGTTCCGGTAGTTCGTTGTC (SEQ ID NO:551)
Target59	chr1:50885369-50885429	TAGCGGTTGTTCCGGGCGGTTTGTGTTG (SEQ ID NO:552), GTAGCGGTTGTTCCGGGCGGTTTGTGTT (SEQ ID NO:553), GCGGGTTGTTCCGGGCGGTTTGTGTTGTA (SEQ ID NO:554), GTAGCGGTTGTTCCGGGCGGTTTGTGTT (SEQ ID NO:555), CGGGTTGTTCCGGGCGGTTTGTGTTGTAG (SEQ ID NO:556), AGGGTTGTGGGTTGAGGGAGAGGAAA (SEQ ID NO:557), AAGGGTTGTGGGTTGAGGGAGAGGAAA (SEQ ID NO:558), TAAGGGTTGTGGGTTGAGGGAGAGGAA (SEQ ID NO:559), AAGGGTTGTGGGTTGAGGGAGAGGAAA (SEQ ID NO:560), GGGTTGTGGGTTGAGGGAGAGGAAAT (SEQ ID NO:561)
Target60	chr1:63785937-63785947	GGGTCGTGGTAGAGGGAGGGTAGGAGG (SEQ ID NO:562), GGTCGTGGTAGAGGGAGGGTAGGAGGT (SEQ ID NO:563), TGGGTCGTGGTAGAGGGAGGGTAGGAG (SEQ ID NO:564), AGGTTGGGTCGTGGTAGAGGGAGGGTA (SEQ ID NO:565), TAGGTTGGGTCGTGGTAGAGGGAGGGT (SEQ ID NO:566), GGTGTTGGTGGTTGGGTTCCGCTGGAT (SEQ ID NO:567), TCGCGTCGGAGGATGTTGTTATAGG (SEQ ID NO:568), AGTATGTGTGGATGCGCGTCGGAGGAT (SEQ ID NO:569), TTGTCGCGGTTTGGTGGTTGGGTTCCG (SEQ ID NO:570), CGCGTCGGAGGATGGTGGTTATAGGGT (SEQ ID NO:571)
Target61	chr1:63786016-63786079	CGGGTTAGTTATTAAGGTCGCGTAGGG (SEQ ID NO:572), CGGGTTAGTTATTAAGGTCGCGTAGGGT (SEQ ID NO:573), GGGTTAGTTATTAAGGTCGCGTAGGGT (SEQ ID NO:574), CGGGTTAGTTATTAAGGTCGCGTAGGGTT (SEQ ID NO:575), GGGTTAGTTATTAAGGTCGCGTAGGGTT (SEQ ID NO:576), GGTGTTGGTGGTTGGGTTCCGCTGGAT (SEQ ID NO:577), TTGTCGCGGTTTGGTGGTTGGGTTCCG (SEQ ID NO:578), GGTGTTGTCGCGGTTTGGTGGTTGGG (SEQ ID NO:579), CGTTGGTTTGTGCGCGGTTTGGTGGT (SEQ ID NO:580), GGTGTTGGTGGTTGGGTTCCGCTGGA (SEQ ID NO:581)
Target62	chr1:63795446-63795472	TAGTTCGCGATGAGTGTTTTCGCGG (SEQ ID NO:582), TTCGCGATGAGTGTTTTCGCGGGAT (SEQ ID NO:583), TCGCGATGAGTGTTTTCGCGGGATC (SEQ ID NO:584), AGTTCGCGATGAGTGTTTTCGCGG (SEQ ID NO:585), ACGCGTCGGTCGGTGGAAATTAAGTTT (SEQ ID NO:586), CGAGGTAAGAAGGAAATGGGGTCGTCGGT (SEQ ID NO:587), CGAGGTAAGAAGGAAATGGGGTCGTCGGT (SEQ ID NO:588), AGGTAAGAAGGAAATGGGGTCGTCGGT (SEQ ID NO:589), GGGGAGTTTCGCGGTTTGTAGTTGTCGT (SEQ ID NO:590), CGAGGTAAGAAGGAAATGGGGTCGTCG (SEQ ID NO:591)
Target63	chr1:68025026-68025081	TAGGGACGGTTAGAGGGGCGTGTGAGA (SEQ ID NO:592), TAGGTAGGGACGGTTAGAGGGGCGTGT (SEQ ID NO:593), GGGACGGTTAGAGGGGCGTGTGAGATT (SEQ ID NO:594), GTAGGGACGGTTAGAGGGGCGTGTGAG (SEQ ID NO:595), AGGGACGGTTAGAGGGGCGTGTGAGAT (SEQ ID NO:596)
Target64	chr1:68025115-68025305	TTTGGTCGTTTTTTGGGATATCGAGTTGAA (SEQ ID NO:597), TTTGGTCGTTTTTTGGGATATCGAGTTGA (SEQ ID NO:598), TTTGGTCGTTTTTTGGGATATCGAGTTGAA (SEQ ID NO:599), TGGTCGTTTTTTGGGATATCGAGTTGAATTT (SEQ ID NO:600), TTGGTCGTTTTTTGGGATATCGAGTTGAATT (SEQ ID NO:601), TAGGGACGGTTAGAGGGGCGTGTGAGA (SEQ ID NO:602), TAGGTAGGGACGGTTAGAGGGGCGTGT (SEQ ID NO:603), GGGACGGTTAGAGGGGCGTGTGAGATT (SEQ ID NO:604), GTAGGGACGGTTAGAGGGGCGTGTGAG (SEQ ID NO:605), AGGGACGGTTAGAGGGGCGTGTGAGAT (SEQ ID NO:606)
Target65	chr1:91183133-91183416	GCGGTTGCGGTAATTCGAGGAGGAGGA (SEQ ID NO:607), AGGAGGAGGAGGAAGAGGAGGACGACG (SEQ ID NO:608), CGAGGAGGAGGAGGAAGAGGAGGACGA (SEQ ID NO:609), TCGAGGAGGAGGAGGAAGAGGAGGACG (SEQ ID NO:610), AGGCGCGGGAAGTTACGTTAAAGTCG (SEQ ID NO:611), GTTGTTGGGTAGATTTCGGTAGCGGCGG (SEQ ID NO:612), GGTGTTGGGTAGATTTCGGTAGCGGCGG (SEQ ID NO:613), AGGTTGTGGGTAGATTTCGGTAGCGGCG (SEQ ID NO:614), AGGTTGTGGGTAGATTTCGGTAGCGGC (SEQ ID NO:615), CGTTGTCGTTCCGTTGTTAGGTTGTGGGT (SEQ ID NO:616)
Target66	chr1:91183444-91183454	GCGGTTGCGGTAATTCGAGGAGGAGGA (SEQ ID NO:617), GGAGGAGGAGGAAGAGGAGGACGACGA (SEQ ID NO:618), AGGAGGAGGAAGAGGAGGACGACGAG (SEQ ID NO:619), CGGTTGCGGTAATTCGAGGAGGAGGAGG (SEQ ID NO:620), GGAGGAGGAGGAAGAGGAGGACGACGAG (SEQ ID NO:621), GAGCGCGGTAGTGGTCGTGACGTTAC (SEQ ID NO:622), GAGCGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:623), AGCGGCGGTAGTGGTCGTGACGTTAC (SEQ ID NO:624), GGAGCGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:625), AGCGGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:626)

Figure 5 (Table 1)

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Target67	chr1:91183455-91183523	GCGGTTGCGGTAATTCGAGGAGGAGGA (SEQ ID NO:627), GCGTTGCGGTAATTCGAGGAGGAGGAGG (SEQ ID NO:628), CGGTTGCGGTAATTCGAGGAGGAGGAG (SEQ ID NO:629), GCGGTTGCGGTAATTCGAGGAGGAGGAG (SEQ ID NO:630), GGTTGCGGTAATTCGAGGAGGAGGAGG (SEQ ID NO:631), GAGCGGCGGTAGTGGTCGTGACGTTAC (SEQ ID NO:632), GAGCGGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:633), AGCGGCGGTAGTGGTCGTGACGTTAC (SEQ ID NO:634), GGAGCGGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:635), AGCGGCGGTAGTGGTCGTGACGTTA (SEQ ID NO:636)
Target68	chr1:91183553-91183587	CGCGTTGCGTTTGTAAATTCGGTTGTTGGCG (SEQ ID NO:637), GCGTTGCGTTTGTAAATTCGGTTGTTGGCGG (SEQ ID NO:638), CGTTCGTTTGTAAATTCGGTTGTTGGCGGG (SEQ ID NO:639), GCGTTGCGTTTGTAAATTCGGTTGTTGGCG (SEQ ID NO:640), CGCGTTGCGTTTGTAAATTCGGTTGTTGGC (SEQ ID NO:641), GCGGTTAATAGGGGCGCGGGGTC (SEQ ID NO:642), TCGGTTTATTGGTTTTTGGTACGTCGGC (SEQ ID NO:643), GCGTTTATTGGTTTTTGGTACGTCGGC (SEQ ID NO:644), CGAGCGTTGCGTTTATTGGTTTTTGGT (SEQ ID NO:645), GCGGTTAATAGGGGCGCGGGGT (SEQ ID NO:646)
Target69	chr1:91183598-91183770	CGTTTGTAAATTCGGTTGTTGGCGGGCG (SEQ ID NO:647), GTTGTAAATTCGGTTGTTGGCGGGCGG (SEQ ID NO:648), TCGTTTGTAAATTCGGTTGTTGGCGGGCG (SEQ ID NO:649), TCGTTTGTAAATTCGGTTGTTGGCGGGC (SEQ ID NO:650), CGTTTGTAAATTCGGTTGTTGGCGGGCGG (SEQ ID NO:651), GTTGGCGGTTTAGGGATGTGCGGGTTT (SEQ ID NO:652), TAGGGTTGCGGGTTTAGGGATGTGCGG (SEQ ID NO:653), TCGGGGTTTAGGGATGTGCGGGTTTT (SEQ ID NO:654), TTGCGGGTTTAGGGATGTGCGGGTTTT (SEQ ID NO:655), TTAGGGTTGCGGGTTTAGGGATGTGCG (SEQ ID NO:656)
Target70	chr1:110334826-110334876	TGGGATTTAGGTGGGTTGGGGGGTTGG (SEQ ID NO:657), GGGTTGGGGGGTTGGGGGAATGTAGAT (SEQ ID NO:658), GTGGGTTGGGGGGTTGGGGGAATGTAG (SEQ ID NO:659), GATTAGGTGGGTTGGGGGGTTGGGGG (SEQ ID NO:660), GGATTAGGTGGGTTGGGGGGTTGGGG (SEQ ID NO:661), GTGGGGTTTGAAGTTGTAGAGTAGGAAGT (SEQ ID NO:662), AGTGGGGTTTGAAGTTGTAGAGTAGGAAGT (SEQ ID NO:663), GTGGGGTTTGAAGTTGTAGAGTAGGAAGT (SEQ ID NO:664), AGTGGGGTTTGAAGTTGTAGAGTAGGAAGT (SEQ ID NO:665), TAGTGGGGTTTGAAGTTGTAGAGTAGGAAGT (SEQ ID NO:666)
Target71	chr1:110612365-110612398	GCGCGGGGAAGTTAAGATTGTTAGAAGGGC (SEQ ID NO:667), CGCGGGGAAGTTAAGATTGTTAGAAGGGCG (SEQ ID NO:668), GCGGGGAAGTTAAGATTGTTAGAAGGGCGG (SEQ ID NO:669), GCGGGGAAGTTAAGATTGTTAGAAGGGCGT (SEQ ID NO:670), AGCGCGGGGAAGTTAAGATTGTTAGAAGGGC (SEQ ID NO:671), GGTCGGTTGGGGATTGCGGTTTGGTTT (SEQ ID NO:672), CGGTTGGGGATTGCGGTTTGGTTTGG (SEQ ID NO:673), GGTGCGTTGGGGATTGCGGTTTGGTT (SEQ ID NO:674), TCGGTTGGGGATTGCGGTTTGGTTTGG (SEQ ID NO:675), GGTGCGTTGGGGATTGCGGTTTGGTTT (SEQ ID NO:676)
Target72	chr1:110612544-110612555	AGGTTAGGTTGCGGGAGGAGAGACGGG (SEQ ID NO:677), GGTTAGGTTGCGGGAGGAGAGACGGGT (SEQ ID NO:678), GTTAGGTTGCGGGAGGAGAGACGGGTT (SEQ ID NO:679), AGGTTGCGGGAGGAGAGACGGGTTAAG (SEQ ID NO:680), AAGGTTAGGTTGCGGGAGGAGAGACGG (SEQ ID NO:681), GTTAGATTGCGTCGAGGGTTGTGGAGT (SEQ ID NO:682), AGTTTAGATTGCGTCGAGGGTTGTGGAGT (SEQ ID NO:683), AGTTTAGATTGCGTCGAGGGTTGTGGAG (SEQ ID NO:684), TTTAGATTGCGTCGAGGGTTGTGGAGT (SEQ ID NO:685), AAGTTTAGATTGCGTCGAGGGTTGTGGA (SEQ ID NO:686)
Target73	chr1:110612670-110612689	CGGTGCGGTTTGGGTTTATAGGGTAGGT (SEQ ID NO:687), TCGGTGCGGTTTGGGTTTATAGGGTAGGT (SEQ ID NO:688), TCGGTGCGGTTTGGGTTTATAGGGTAGG (SEQ ID NO:689), CGGTGCGGTTTGGGTTTATAGGGTAGGTG (SEQ ID NO:690), GGTGCGGTTTGGGTTTATAGGGTAGGTGGT (SEQ ID NO:691), AGTGTGGGCGGGAGGGTGAATTATCG (SEQ ID NO:692), TGTGGGGCGGGAGGGTGAATTATCGTT (SEQ ID NO:693), GGTTAGTGTGGGGCGGGAGGGTGAATT (SEQ ID NO:694), GGTAAGGTTAGTGTGGGGCGGGAGGG (SEQ ID NO:695), GAATGGAAGGCGGGAGGTCGAGGGAAG (SEQ ID NO:696)
Target74	chr1:110612735-110612742	AGTGTGGGGCGGGAGGGTGAATTATCG (SEQ ID NO:697), TGTGGGGCGGGAGGGTGAATTATCGTT (SEQ ID NO:698), GGTTAGTGTGGGGCGGGAGGGTGAATT (SEQ ID NO:699), GGTAAGGTTAGTGTGGGGCGGGAGGG (SEQ ID NO:700), GTGTGGGGCGGGAGGGTGAATTATCGT (SEQ ID NO:701)
Target75	chr1:110612790-110612823	TGGTTTTGTTGTTGTTGCGGTTAGCGT (SEQ ID NO:702), TGGTTTTGTTGTTGTTGCGGTTAGCGTT (SEQ ID NO:703), TTGGTTTTGTTGTTGTTGCGGTTAGCGT (SEQ ID NO:704), TGTTTGTTGTTGTTGCGGTTAGCGTTAATTCGG (SEQ ID NO:705), TTGGTTTTGTTGTTGTTGCGGTTAGCGTT (SEQ ID NO:706), GGAAGTCGGGTTGGCGTTGGTTT (SEQ ID NO:707), GGAAGTCGGGTTGGCGTTGGTT (SEQ ID NO:708)
Target76	chr1:110612834-110612867	TGGTTTTGTTGTTGTTGCGGTTAGCGT (SEQ ID NO:709), TGGTTTTGTTGTTGTTGCGGTTAGCGTT (SEQ ID NO:710), TTGGTTTTGTTGTTGTTGCGGTTAGCGT (SEQ ID NO:711), TGTTTGTTGTTGTTGCGGTTAGCGTTAATTCGG (SEQ ID NO:712), CGGTTTTGTTGTTGTTGCGGTTAGCGT (SEQ ID NO:713)

Figure 5 (Table 1)

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Target77	chr1:110626175-110626311	TGGGTTTTCGTTTGGGGAGGATTTGGT (SEQ ID NO:714), GGGTTTTCGTTTGGGGAGGATTTGGTTGG (SEQ ID NO:715), GGGTTTTCGTTTGGGGAGGATTTGGTTGGT (SEQ ID NO:716), TGGGTTTTCGTTTGGGGAGGATTTGGTTGG (SEQ ID NO:717), TGGGTTTTCGTTTGGGGAGGATTTGGTT (SEQ ID NO:718), TACGTTTTGGCGAGGGGAATCGAA (SEQ ID NO:719), ATACGTTTTGGCGAGGGGAATCGA (SEQ ID NO:720), GCGGAGGGGAATCGAAGTTGGGGAAT (SEQ ID NO:721), TTTGGCGAGGGGAATCGAAGTTGGG (SEQ ID NO:722), GGTTTGGCGAGGGGAATCGAAGTT (SEQ ID NO:723)
Target78	chr1:110626375-110626397	TGGTTGGAGATAGAGATAAGGAGAGTTAGAAAGCG (SEQ ID NO:724), GGTGGAGATAGAGATAAGGAGAGTTAGAAAGCGA (SEQ ID NO:725), TGGTTGGAGATAGAGATAAGGAGAGTTAGAAAGCGA (SEQ ID NO:726), ATGTTGGAGATAGAGATAAGGAGAGTTAGAAAGCG (SEQ ID NO:727), GGTGGAGATAGAGATAAGGAGAGTTAGAAAGCGAT (SEQ ID NO:728), TTATACGTTTTGGCGAGGGGAATT (SEQ ID NO:729), ATTATACGTTTTGGCGAGGGGAAT (SEQ ID NO:730), ATTATACGTTTTGGCGAGGGGAATT (SEQ ID NO:731), TCGGGGTAGGAGGTAAGTTTATAGGGGT (SEQ ID NO:732), TATACGTTTTGGCGAGGGGAATT (SEQ ID NO:733)
Target79	chr1:110626480-110626703	GCGGTAGTGGCGCGGTTTTAGTTTT (SEQ ID NO:734), CGGGGATTGCGGAGGGAGGGTTAGG (SEQ ID NO:735), GGGGATTGCGGAGGGAGGGTTAGGC (SEQ ID NO:736), GGGATTGCGGAGGGAGGGTTAGGCG (SEQ ID NO:737), GCGGGGATTGCGGAGGGAGGGTTAG (SEQ ID NO:738), TTAGGGCGTTGCGAGGTATAGGGTGCG (SEQ ID NO:739), CGGGGAGATTAGGGCGTTGCGAGGTAT (SEQ ID NO:740), GCGGGGAGATTAGGGCGTTGCGAGGTA (SEQ ID NO:741), ATTAGGGCGTTGCGAGGTATAGGGTGCG (SEQ ID NO:742), TAGGGCGTTGCGAGGTATAGGGTGCG (SEQ ID NO:743)
Target80	chr1:111813478-111813500	TGACGTCGTTTTGGTTGTTGGTCGT (SEQ ID NO:744), TGACGTCGTTTTGGTTGTTGGTCGT (SEQ ID NO:745), ATGACGTCGTTTTGGTTGTTGGTCGT (SEQ ID NO:746), TGACGTCGTTTTGGTTGTTGGTCGT (SEQ ID NO:747), ATGACGTCGTTTTGGTTGTTGGTCGT (SEQ ID NO:748), TCGTAGGTTGTGTGGGTGTGAGGTGGT (SEQ ID NO:749), GTGGGTGTGAGGTGTTTTCGGTTCTG (SEQ ID NO:750), TGTGGGTGTGAGGTGTTTTCGGTTCTG (SEQ ID NO:751), GGTGTGTGGGTGTGAGGTGTTTTCGG (SEQ ID NO:752), TGGGTGTGAGGTGTTTTCGGTTCTG (SEQ ID NO:753)
Target81	chr1:111813562-111813604	ATAAGGTGAGGGTAGTTTCGCGCGGGG (SEQ ID NO:754), TCGGGTGGTTTAGGGTAAGGCGGATCG (SEQ ID NO:755), GGGTGGTTTAGGGTAAGGCGGATCGGG (SEQ ID NO:756), GGTGGTTTAGGGTAAGGCGGATCGGGA (SEQ ID NO:757), CGGGTGGTTTAGGGTAAGGCGGATCGG (SEQ ID NO:758), GGATATTTTTGGCGAGGGGTCGGAGCG (SEQ ID NO:759), CGGATATTTTTGGCGAGGGGTCGGAGC (SEQ ID NO:760), ATATTTTTGGCGAGGGGTCGGAGCGA (SEQ ID NO:761), TCGGATATTTTTGGCGAGGGGTCGGGA (SEQ ID NO:762), GATATTTTTGGCGAGGGGTCGGAGCG (SEQ ID NO:763)
Target82	chr1:111813667-111813827	ATAAGGTGAGGGTAGTTTCGCGCGGGG (SEQ ID NO:764), CGATAAGGTGAGGGTAGTTTCGCGCGG (SEQ ID NO:765), GATAAGGTGAGGGTAGTTTCGCGCGGG (SEQ ID NO:766), TATTGAGTTGATGTACGCGCGCGAGG (SEQ ID NO:767), TCGATAAGGTGAGGGTAGTTTCGCGCGG (SEQ ID NO:768), GGATATTTTTGGCGAGGGGTCGGAGCG (SEQ ID NO:769), CGGATATTTTTGGCGAGGGGTCGGAGC (SEQ ID NO:770), ATATTTTTGGCGAGGGGTCGGAGCGA (SEQ ID NO:771), TCGGATATTTTTGGCGAGGGGTCGGGA (SEQ ID NO:772), GATATTTTTGGCGAGGGGTCGGAGCG (SEQ ID NO:773)
Target83	chr1:119522444-119522487	GGGTTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:774), GGGTTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:775), AGGGTTTCGGGTTTTAGGGTTTCGGG (SEQ ID NO:776), GGTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:777), GGGTTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:778), TTTTCGGTTTCGGTTTTGGAGGCGTCGC (SEQ ID NO:779), CGGTTTTTCGGTTTCGGTTTTGGAGGCG (SEQ ID NO:780), TCGGTTTTTCGGTTTCGGTTTTGGAGGCG (SEQ ID NO:781), CGGTTTTTCGGTTTCGGTTTTGGAGGCGT (SEQ ID NO:782), TTTTCGGTTTCGGTTTTGGAGGCGTCGC (SEQ ID NO:783)
Target84	chr1:119522500-119522638	GGTGGGGTTAGCGCGGAGTTTATAGGC (SEQ ID NO:784), GGGTTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:785), GCGGAGTTTATAGCGCGAGAATAGGAA (SEQ ID NO:786), GGGTTTCGGGTTTTAGGGTTTCGGGT (SEQ ID NO:787), AGGGTTTCGGGTTTTAGGGTTTCGGG (SEQ ID NO:788), TTTTCGGTTTCGGTTTTGGAGGCGTCGC (SEQ ID NO:789), CGGTTTTTCGGTTTCGGTTTTGGAGGCG (SEQ ID NO:790), TCGGTTTTTCGGTTTCGGTTTTGGAGGCG (SEQ ID NO:791), CGGTTTTTCGGTTTCGGTTTTGGAGGCGT (SEQ ID NO:792), TTTTCGGTTTCGGTTTTGGAGGCGTCGC (SEQ ID NO:793)
Target85	chr1:119526848-119526885	TAGTTGAGTTGACGGGTGCGTGCGAGA (SEQ ID NO:794), AGTAGTTGAGTTGACGGGTGCGTGCGA (SEQ ID NO:795), GTTGAGTTGACGGGTGCGTGCGAGAAT (SEQ ID NO:796), TTGAGTTGACGGGTGCGTGCGAGAATG (SEQ ID NO:797), GTAGTTGAGTTGACGGGTGCGTGCGAG (SEQ ID NO:798), TTTAGAGTTTGGGGATGTGGTGCGC (SEQ ID NO:799), TTAGAGTTTGGGGATGTGGTGCGC (SEQ ID NO:800), TTTTAGAGTTTGGGGATGTGGTGCGC (SEQ ID NO:801), GCGCGGGGTGGGTATTTAGATAGGTA (SEQ ID NO:802), TAGAGTTTGGGGATGTGGTGCGC (SEQ ID NO:803)

Figure 5 (Table 1)

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Target86	chr1:119526915-119527309	AGGGGTTGAGGTTTCGAGCGTAGATGGC (SEQ ID NO:804), GGGTGGAGTAGGGGTTGAGGTTTCGAGC (SEQ ID NO:805), GGTGGAGTAGGGGTTGAGGTTTCGAGCG (SEQ ID NO:806), TCGGGTGGAGTAGGGGTTGAGGTTTCGA (SEQ ID NO:807), GTTTTGGGAGAGGGCGGGGAGAGTAG (SEQ ID NO:808), TCGGCGGCGTTATTTGCGTTCGGAATT (SEQ ID NO:809), TTCGCGGCGGTTATTTGCGTTCGGATT (SEQ ID NO:810), GTTCGCGGCGTTATTTGCGTTCGGAT (SEQ ID NO:811), CGGCGGCGTTATTTGCGTTCGGATTTT (SEQ ID NO:812), TCGGCGGCGTTATTTGCGTTCGGATT (SEQ ID NO:813)
Target87	chr1:119527311-119527546	GGCGGGTTTTGGGGTTTTTCGGGGTTA (SEQ ID NO:814), GTTTTGGGAGAGGGCGGGGAGAGTAG (SEQ ID NO:815), TGTTTTAAGTTGCGGGTTCGGGCGT (SEQ ID NO:816), TTTGTTGTTTTGGGAGAGGGCGGGGGA (SEQ ID NO:817), TTTGTTGTTTTGGGAGAGGGCGGGGG (SEQ ID NO:818), GGGGGATTAGTTCGGTTTGCCTGTTGT (SEQ ID NO:819), CGGGGGATTAGTTCGGTTTGCCTGTTG (SEQ ID NO:820), TAACGGGGATTAGTTCGGTTTGCCTG (SEQ ID NO:821), ACGGGGGATTAGTTCGGTTTGCCTGTT (SEQ ID NO:822), AACGGGGATTAGTTCGGTTTGCCTG (SEQ ID NO:823)
Target88	chr1:119532785-119533029	ATTTGGGAGTTCGGATGGAGAGGCGT (SEQ ID NO:824), GGGGAGTTCGGATGGAGAGGCGTAGGA (SEQ ID NO:825), TTGGGAGTTCGGATGGAGAGGCGTAG (SEQ ID NO:826), TGGGAGTTCGGATGGAGAGGCGTAGG (SEQ ID NO:827), TTTGGGAGTTCGGATGGAGAGGCGTA (SEQ ID NO:828), AGTCGTTGGGGAAGGAAATTGCGGGTT (SEQ ID NO:829), TAGTCGTTGGGGAAGGAAATTGCGGGT (SEQ ID NO:830), GTCGTTGGGGAAGGAAATTGCGGGTTT (SEQ ID NO:831), AGTCGTTGGGGAAGGAAATTGCGGGTTT (SEQ ID NO:832), AGTCGTTGGGGAAGGAAATTGCGGGT (SEQ ID NO:833)
Target89	chr1:119535725-119535751	GGGGTAAGAGGAGAGCGAAAAGGGGGG (SEQ ID NO:834), TGGGGTAAGAGGAGAGCGAAAAGGGGGG (SEQ ID NO:835), GTCGTCGCGGTGTGGTCGGTAGAGTC (SEQ ID NO:836), TTGGGGTAAGAGGAGAGCGAAAAGGGGGG (SEQ ID NO:837), TGGGGTAAGAGGAGAGCGAAAAGGGGGG (SEQ ID NO:838), TGGGGAAAGAGAAGTTGGGTTTGGGGG (SEQ ID NO:839), TGGGGAAAGAGAAGTTGGGTTTGGGGGA (SEQ ID NO:840), GGGGAAAGAGAAGTTGGGTTTGGGGGA (SEQ ID NO:841), GTGGGGAAGAGAAGTTGGGTTTGGGGG (SEQ ID NO:842), GTGGGGAAGAGAAGTTGGGTTTGGGGGA (SEQ ID NO:843)
Target90	chr1:119535812-119535824	TTTTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:844), GTTTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:845), GTCGTCGCGGTGTGGTCGGTAGAGTC (SEQ ID NO:846), AGTTTTGTGTGGTTAGGTCGGAGCGGT (SEQ ID NO:847), GGAGTTTTGTGTGGTTAGGTCGGAGCGG (SEQ ID NO:848), TGGAACGGCGGGCGTATTTGTAGTCG (SEQ ID NO:849), CGGCGGGCGTATTTGTAGTCGAAGGT (SEQ ID NO:850), ACGGCGGGCGTATTTGTAGTCGAAGG (SEQ ID NO:851), GGAACGGCGGGCGTATTTGTAGTCGA (SEQ ID NO:852), TGGAACGGCGGGCGTATTTGTAGTCGA (SEQ ID NO:853)
Target91	chr1:119535884-119535902	TTTTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:854), GTTTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:855), AGTTTTGTGTGGTTAGGTCGGAGCGGT (SEQ ID NO:856), GGAGTTTTGTGTGGTTAGGTCGGAGCGG (SEQ ID NO:857), GGGAGTTTTGTGTGGTTAGGTCGGAGCG (SEQ ID NO:858), TGGAACGGCGGGCGTATTTGTAGTCG (SEQ ID NO:859), CGGCGGGCGTATTTGTAGTCGAAGGT (SEQ ID NO:860), ACGGCGGGCGTATTTGTAGTCGAAGG (SEQ ID NO:861), GGAACGGCGGGCGTATTTGTAGTCGA (SEQ ID NO:862), GCGAAGGTAGGTAGGATCGAGTTGGCG (SEQ ID NO:863)
Target92	chr1:119535921-119535963	TTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:864), TTGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:865), TGTGTGGTTAGGTCGGAGCGGTCG (SEQ ID NO:866), GTTCGTCGTTTAGGCGTTAGTTTCGGT (SEQ ID NO:867), TTTGTGTGGTTAGGTCGGAGCGGTC (SEQ ID NO:868), GCGAAGGTAGGTAGGATCGGAGTTGGCG (SEQ ID NO:869), TGCGAAGGTAGGTAGGATCGGAGTTGGC (SEQ ID NO:870), GCGAAGGTAGGTAGGATCGGAGTTGGC (SEQ ID NO:871), CGAAGGTAGGTAGGATCGGAGTTGGCGT (SEQ ID NO:872), CGAAGGTAGGTAGGATCGGAGTTGGCG (SEQ ID NO:873)
Target93	chr1:119542854-119542943	CGGAAGGATTGGGGGAGATTAGATTATTTGGG (SEQ ID NO:874), CGGAAGGATTGGGGGAGATTAGATTATTTGGGA (SEQ ID NO:875), TCGGAAGGATTGGGGGAGATTAGATTATTTGGG (SEQ ID NO:876), TCGGAAGGATTGGGGGAGATTAGATTATTTGGGA (SEQ ID NO:877), TCGGAAGGATTGGGGGAGATTAGATTATTTGG (SEQ ID NO:878), GGAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:879), AGGAAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:880), AGGAAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:881), AAGGAAAGCGTAGTGGGGATAGAGGTAATTTT (SEQ ID NO:882), GGAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:883)
Target94	chr1:119542959-119543008	GGTTAGCGGGGTATAGAGGTTAGCGGGT (SEQ ID NO:884), GGTTAGCGGGGTATAGAGGTTAGCGGG (SEQ ID NO:885), AGGTTAGCGGGGTATAGAGGTTAGCGGGT (SEQ ID NO:886), AGGTTAGCGGGGTATAGAGGTTAGCGGG (SEQ ID NO:887), AGCGGGGTATAGAGGTTAGCGGGTTTT (SEQ ID NO:888), GGAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:889), AGGAAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:890), AGGAAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:891), AAGGAAAGCGTAGTGGGGATAGAGGTAATTTT (SEQ ID NO:892), GGAAGCGTAGTGGGGATAGAGGTAATTTTGT (SEQ ID NO:893)

Figure 5 (Table 1)

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Target95	chr1:119543057-119543271	GGGTTTGGGAGTTTTTTCGGCGGAAG (SEQ ID NO:894), CGTAGGGTTTGGGAGTTTTTTCGGCG (SEQ ID NO:895), GGGTTTGGGAGTTTTTTCGGCGGAAGA (SEQ ID NO:896), AGGGTTTGGGAGTTTTTTCGGCGGAAG (SEQ ID NO:897), GTAGGGTTTGGGAGTTTTTTCGGCGG (SEQ ID NO:898), AAGGTCGTTGGGAGTTCGGTGAGGACG (SEQ ID NO:899), GAGTTCGGTGAGGACGTGGCGGTTTTT (SEQ ID NO:900), GTCGTTGGGAGTTCGGTGAGGACGTGG (SEQ ID NO:901), GGTGTTGGGAGTTCGGTGAGGACGTG (SEQ ID NO:902), AGTTCGGTGAGGACGTGGCGGTTTTT (SEQ ID NO:903)
Target96	chr1:145030711-145031192	CGGGTTTGTGGTAATAATGTTGTTTTGTGGTGT (SEQ ID NO:904), TCGGGTTTGTGGTAATAATGTTGTTTTGTGGTGT (SEQ ID NO:905), AGGTAAGGTTAGATGTGTAGGTGGGAATAATTGGT (SEQ ID NO:906), CGGGTTTGTGGTAATAATGTTGTTTTGTGGTGT (SEQ ID NO:907), TCGGTTTTTGGGGAATGTTTTTGGAAAGTTTTT (SEQ ID NO:908), CGGGGAGTTGGTTGGAGAGTTATTGCG (SEQ ID NO:909), CGGGGAGTTGGTTGGAGAGTTATTGCGA (SEQ ID NO:910), TCGGGGAGTTGGTTGGAGAGTTATTGCG (SEQ ID NO:911), TCGGGGAGTTGGTTGGAGAGTTATTGCGA (SEQ ID NO:912), GGGGAGTTGGTTGGAGAGTTATTGCGA (SEQ ID NO:913)
Target97	chr1:145075536-145075651	GTTTCGGGGTTTTAGTTTTTCGCGCGGT (SEQ ID NO:914), AGTTCGGGGTTTTAGTTTTTCGCGCGGT (SEQ ID NO:915), AGTTCGGGGTTTTAGTTTTTCGCGCGG (SEQ ID NO:916), AGCGCTCGGGATTTTTAGTTCGGGGTT (SEQ ID NO:917), TTCGGGGTTTTAGTTTTTCGCGCGGT (SEQ ID NO:918), GCGTTCGGAGTTAGTCGGAGTTGGGT (SEQ ID NO:919), CGAGGAGGAAGAGTAGTTGCGGCGGT (SEQ ID NO:920), TCGAGGAGGAAGAGTAGTTGCGGCGG (SEQ ID NO:921), AGTCGGGAGTTGGGTAGTAGCGGTGCGA (SEQ ID NO:922), GTCGGGAGTTGGGTAGTAGCGGTGCGA (SEQ ID NO:923)
Target98	chr1:145075691-145075709	TGTTTAGTTTTCGGTTGGTTTCGGGCGT (SEQ ID NO:924), GTTTAGTTTTCGGTTGGTTTCGGGCGT (SEQ ID NO:925), TGTTTAGTTTTCGGTTGGTTTCGGGCGG (SEQ ID NO:926), TTTAGTTTTCGGTTGGTTTCGGGCGTC (SEQ ID NO:927), GTTTAGTTTTCGGTTGGTTTCGGGCGTC (SEQ ID NO:928), CGATTTTGGTTGTTGTTGTCGCGCGTT (SEQ ID NO:929), CGATTTTGGTTGTTGTTGTCGCGCGTTT (SEQ ID NO:930), CGATTTTGGTTGTTGTTGTCGCGCGT (SEQ ID NO:931), CGATTTTGGTTGTTGTTGTCGCGCGTTT (SEQ ID NO:932), ATTTTGGTTGTTGTTGTCGCGCGTTT (SEQ ID NO:933)
Target99	chr1:145075722-145075928	TGCGCGGCGGTAGTAGGATTCGTTGT (SEQ ID NO:934), GTTGTGCTGGGGATTGAGGGGTTGCG (SEQ ID NO:935), CGTATCGGCGGCGGTAGTAGGATTCGT (SEQ ID NO:936), ATCGGCGGCGGTAGTAGGATTCGTTGT (SEQ ID NO:937), TTTTTCGGTTTCGGGTTTGTGTTGGGG (SEQ ID NO:938), AGGTGGTAGAGGTAGTCGCGGAGGAGG (SEQ ID NO:939), GGTGGTAGAGGTAGTCGCGGAGGAGGT (SEQ ID NO:940), GCGGAGTAGGTGGTAGAGGTAGTCGCG (SEQ ID NO:941), GCGGAGTAGGTGGTAGAGGTAGTCGCG (SEQ ID NO:942), CGGAGTAGGTGGTAGAGGTAGTCGCGG (SEQ ID NO:943)
Target100	chr1:145562692-145562810	TGGGGAAGTTGGAGGAAGAGTTGCGGG (SEQ ID NO:944), GGGGAAGTTGGAGGAAGAGTTGCGGGT (SEQ ID NO:945), TTGGGGAAGTTGGAGGAAGAGTTGCGGG (SEQ ID NO:946), TTGGGGAAGTTGGAGGAAGAGTTGCGG (SEQ ID NO:947), GGGGAAGTTGGAGGAAGAGTTGCGGGTA (SEQ ID NO:948), CGTGTGTCGTAGGTTGGTTGTTTTTCGGG (SEQ ID NO:949), CGTGTGTCGTAGGTTGGTTGTTTTTCGGG (SEQ ID NO:950), TGTGTGTCGTAGGTTGGTTGTTTTTCGGG (SEQ ID NO:951), GTTGTGTCGTAGGTTGGTTGTTTTTCGGG (SEQ ID NO:952), TGTGTGTCGTAGGTTGGTTGTTTTTCGGG (SEQ ID NO:953)
Target101	chr1:145562817-145562835	AGTGGTTGAGTTAAGGGTTTCGGGAGGT (SEQ ID NO:954), TGAGCGGGAAGAGTTAGGAGATCGGAA (SEQ ID NO:955), ATGAGCGGGAAGAGTTAGGAGATCGGA (SEQ ID NO:956), AAGTGGTTGAGTTAAGGGTTTCGGGAGGT (SEQ ID NO:957), AAGTGGTTGAGTTAAGGGTTTCGGGAGG (SEQ ID NO:958)
Target102	chr1:145562897-145563019	TACGGTTTGTGCGGAAGTGCGGTCGTT (SEQ ID NO:959), ATACGGTTTGTGCGGAAGTGCGGTCGTT (SEQ ID NO:960), ACGGTTTGTGCGGAAGTGCGGTCGTTG (SEQ ID NO:961), GGTGTGTCGGGAAGTGCGGTCGTTG (SEQ ID NO:962), CGGTTTGTGCGGAAGTGCGGTCGTTG (SEQ ID NO:963), TGAGCGGTTAGGTTTTCGTTTCGGCGG (SEQ ID NO:964), CGGTTAGGTTTTCGTTTCGGCGGCTT (SEQ ID NO:965), GAGCGGTTAGGTTTTCGTTTCGGCGGC (SEQ ID NO:966), TTGAGCGGTTAGGTTTTCGTTTCGGCGG (SEQ ID NO:967), GGTAGGTTTTCGTTTCGGCGGCTTT (SEQ ID NO:968)
Target103	chr1:155265010-155265083	CGTCGTTAATGTAGATGCGGTTTTTATCGGT (SEQ ID NO:969), TCGTCGTTAATGTAGATGCGGTTTTTATCGG (SEQ ID NO:970), TCGTCGTTAATGTAGATGCGGTTTTTATCGGT (SEQ ID NO:971), TTGTCGTTAATGTAGATGCGGTTTTTATCGG (SEQ ID NO:972), GATGAGTTCGTCGTTAATGTAGATGCGGTTTTT (SEQ ID NO:973), CGGCGTTTGTAGGGTTGGGTTTAGGCG (SEQ ID NO:974), GCGGCGTTTGTAGGGTTGGGTTTAGG (SEQ ID NO:975), GTCGGAAGGCGGCGTTTGTAGGGTTG (SEQ ID NO:976), GAAAGGCGGCGTTTGTAGGGTTGGGTT (SEQ ID NO:977), GCGGCGTTTGTAGGGTTGGGTTTAGG (SEQ ID NO:978)

Figure 5 (Table 1)

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Target104	chr1:155265132-155265147	AGGAGGGAGTTAGAGGAGATGTGAGTTTGA (SEQ ID NO:979), AGAGGAGATGTGAGTTTGTAGTTTCGGAGTT (SEQ ID NO:980), GGAGGGAGTTAGAGGAGATGTGAGTTTGTAGT (SEQ ID NO:981), AGGAGGGAGTTAGAGGAGATGTGAGTTTGTAG (SEQ ID NO:982), AGGAGGGAGTTAGAGGAGATGTGAGTTTGTAGT (SEQ ID NO:983), CGGCGTTGTAGGGTTGGGTTTAGGCG (SEQ ID NO:984), GGGGGTGAGTAGTGGGGTTGGGATTCTG (SEQ ID NO:985), GGCGCGTTTGTAGGGTTGGGTTTAGG (SEQ ID NO:986), TGTAGGGGGTGAGTAGTGGGGTTGGGA (SEQ ID NO:987), GTCGGAAGGGCGCGTTTGTAGGGTTG (SEQ ID NO:988)
Target105	chr1:155265158-155265276	GGCGTCGTTTTTCGGTTTTGTTTAGC (SEQ ID NO:989), AGGCGTCGTTTTTCGGTTTTGTTTAGC (SEQ ID NO:990), GCGGATTTTCGGTTTTTGGTGTTAGGGCG (SEQ ID NO:991), GCGGATTTTCGGTTTTTGGTGTTAGGGC (SEQ ID NO:992), TCGGATTTTCGGTTTTTGGTGTTAGGGCG (SEQ ID NO:993), GGGGGTGAGTAGTGGGGTTGGGATTCTG (SEQ ID NO:994), CGGGAGGCGGTGGAGAGTTTGTAGGT (SEQ ID NO:995), GCGGCGTTTGTAGGGTTGGGTTTAGG (SEQ ID NO:996), TGTAGGGGGTGAGTAGTGGGGTTGGGA (SEQ ID NO:997), GTCGGAAGGGCGCGTTTGTAGGGTTG (SEQ ID NO:998)
Target106	chr1:155265331-155265342	TGGTTACGGGTCGGTAGTTGAGTGGGG (SEQ ID NO:999), GGTACGGGTCGGTAGTTGAGTGGGGA (SEQ ID NO:1000), TGGTTACGGGTCGGTAGTTGAGTGGGGA (SEQ ID NO:1001), TGGTGTAGGGCGATGTTACGGGTC (SEQ ID NO:1002), ATGTTACGGGTCGGTAGTTGAGTGGGG (SEQ ID NO:1003), TCGGGTAGTGGGTGGGGTAGGAGGATG (SEQ ID NO:1004), GTCGGGTAGTGGGTGGGGTAGGAGGAT (SEQ ID NO:1005), CGGGTAGTGGGTGGGGTAGGAGGATGT (SEQ ID NO:1006), GGGTGGGGTAGGAGGATGTTTCGAGGT (SEQ ID NO:1007), TGGGTGGGGTAGGAGGATGTTTCGAGG (SEQ ID NO:1008)
Target107	chr1:155265438-155265468	GGAGCGAGGGTTTTAGGGGAAGGTGGT (SEQ ID NO:1009), CGGAGCGAGGGTTTTAGGGGAAGGTGG (SEQ ID NO:1010), GGAGCGAGGGTTTTAGGGGAAGGTGGT (SEQ ID NO:1011), AGTATGGTATTGGGGGAGGGAGCGGAG (SEQ ID NO:1012), GAGCGAGGGTTTTAGGGGAAGGTGGT (SEQ ID NO:1013), GGAGCGTTTAAAGGAGATGATTAAGGTCGGG (SEQ ID NO:1014), TGGAGCGTTTAAAGGAGATGATTAAGGTCGGG (SEQ ID NO:1015), GGAGCGTTTAAAGGAGATGATTAAGGTCGGG (SEQ ID NO:1016), TGGAGCGTTTAAAGGAGATGATTAAGGTCGGG (SEQ ID NO:1017), TGGAGCGTTTAAAGGAGATGATTAAGGTCGG (SEQ ID NO:1018)
Target108	chr1:156092302-156092455	TTTTTGGACGGTGGAAGGGTTGTGT (SEQ ID NO:1019), TGGACGGTGGAAGGGTTGTGTATAGAGT (SEQ ID NO:1020), GGACGGTGGAAGGGTTGTGTATAGAGT (SEQ ID NO:1021), TGGACGGTGGAAGGGTTGTGTATAGAG (SEQ ID NO:1022), TTGGACGGTGGAAGGGTTGTGTATAGAG (SEQ ID NO:1023), GTTTGAAGGGAGAGGTATCGAAAACGAGTTGT (SEQ ID NO:1024)
Target109	chr1:156092497-156092579	TTGATTCGGGTTGGGGTTAGGGCGAA (SEQ ID NO:1025), ATTGATTCGGGTTGGGGTTAGGGCGA (SEQ ID NO:1026), CGGGTTGGGGTTAGGGCGAAGGTTTA (SEQ ID NO:1027), TGATTCGGGTTGGGGTTAGGGCGAAG (SEQ ID NO:1028), AGTGTTCGGAATCGGGGGAGGGGTAC (SEQ ID NO:1029), TGGGTGTTGGAAGGGTAGAAGGTGGGT (SEQ ID NO:1030), ATGGGTGTTGGAAGGGTAGAAGGTGGGT (SEQ ID NO:1031), ATGGGTGTTGGAAGGGTAGAAGGTGGG (SEQ ID NO:1032), TGGGTGTTGGAAGGGTAGAAGGTGGGTA (SEQ ID NO:1033), GGGTGTTGGAAGGGTAGAAGGTGGGTA (SEQ ID NO:1034)
Target110	chr1:156406194-156406230	CGTAGTGTTCGGTTCGCGGCGTTAAG (SEQ ID NO:1035), GCGTGTGTTTCGGTTCGAGGTTTTG (SEQ ID NO:1036), GCGTGTGTTTCGGTTCGAGGTTTTGT (SEQ ID NO:1037), CGTGTGTTTCGGTTCGAGGTTTTGT (SEQ ID NO:1038), CGTAGTGTTCGGTTCGCGGCGTTAA (SEQ ID NO:1039), GTTGGGGTTTCGAACGGTTGGCGGG (SEQ ID NO:1040), TTGGGGTTTCGAACGGTTGGCGGGGAG (SEQ ID NO:1041), GTTGGGGTTTCGAACGGTTGGCGGGGA (SEQ ID NO:1042), TTGGGGTTTCGAACGGTTGGCGGG (SEQ ID NO:1043), GGGTTTCGAACGGTTGGCGGGGAG (SEQ ID NO:1044)
Target111	chr1:156406255-156406284	CGTAGTGTTCGGTTCGCGGCGTTAAG (SEQ ID NO:1045), GCGTGTGTTTCGGTTCGAGGTTTTG (SEQ ID NO:1046), GCGTGTGTTTCGGTTCGAGGTTTTGT (SEQ ID NO:1047), CGTGTGTTTCGGTTCGAGGTTTTGT (SEQ ID NO:1048), CGTAGTGTTCGGTTCGCGGCGTTAA (SEQ ID NO:1049), GTTGGGGTTTCGAACGGTTGGCGGG (SEQ ID NO:1050), TTGGGGTTTCGAACGGTTGGCGGGGAG (SEQ ID NO:1051), GTTGGGGTTTCGAACGGTTGGCGGGGA (SEQ ID NO:1052), TTGGGGTTTCGAACGGTTGGCGGG (SEQ ID NO:1053), GGGTTTCGAACGGTTGGCGGGGAG (SEQ ID NO:1054)
Target112	chr1:156406318-156406350	CGTAGTGTTCGGTTCGCGGCGTTAAG (SEQ ID NO:1055), CGTAGTGTTCGGTTCGCGGCGTTAA (SEQ ID NO:1056), AGTCGTTTCGGATTTTAGTTGGGGGA (SEQ ID NO:1057), CGTAGTGTTCGGTTCGCGGCGTTAA (SEQ ID NO:1058), GTAGTGTTCGGTTCGCGGCGTTAAG (SEQ ID NO:1059), AGTTTAGGTTGTCGCGTGGAGTTGC (SEQ ID NO:1060), TTAGTTAGGTTGTCGCGTGGAGTTGC (SEQ ID NO:1061), TTTAGTTAGGTTGTCGCGTGGAGTTGC (SEQ ID NO:1062), TTTTAGTTAGGTTGTCGCGTGGAGTTGC (SEQ ID NO:1063), ATTTAGTTAGGTTGTCGCGTGGAGTTGC (SEQ ID NO:1064)

Figure 5 (Table 1)

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Target113	chr1:156406506-156406512	AGAAGTCGGGGAGAGCGGGAAGTTTGG (SEQ ID NO:1065), GAAGTCGGGGAGAGCGGGAAGTTTGGT (SEQ ID NO:1066), TAGGAGAAGTCGGGGAGAGCGGGAAGT (SEQ ID NO:1067), GGAGAAGTCGGGGAGAGCGGGAAGTTT (SEQ ID NO:1068), AGGAGAAGTCGGGGAGAGCGGGAAGTT (SEQ ID NO:1069), GGGTACGGGCGTTTTTGGTTAAGTTTITAGA (SEQ ID NO:1070), CGGGCGTTTTTGGTTAAGTTTTAGAGAGGT (SEQ ID NO:1071), ACGGGCGTTTTTGGTTAAGTTTTAGAGAGG (SEQ ID NO:1072), ACGGGCGTTTTTGGTTAAGTTTTAGAGAGGT (SEQ ID NO:1073), GGGTACGGGCGTTTTTGGTTAAGTTTTAGAG (SEQ ID NO:1074)
Target114	chr1:156611713-156611785	TCGTTTTGTTTTCGTCGTTGTTGTCGGA (SEQ ID NO:1075), CGTTTTGTTTTCGTCGTTGTTGTCGGAG (SEQ ID NO:1076), CGTTTTGTTTTCGTCGTTGTTGTCGGAGT (SEQ ID NO:1077), CGTTCGTTTTGTTTTCGTCGTTGTTGTCGG (SEQ ID NO:1078), TCGTTTTGTTTTCGTCGTTGTTGTCGGAG (SEQ ID NO:1079), GCGGCGAGAGTAAGGACGAGCGAAGTA (SEQ ID NO:1080), GTTTCGTTTTTGGTCGGGAGCGCGG (SEQ ID NO:1081), TTTTGGTCGGGAGCGCGGGGTTTC (SEQ ID NO:1082), TTTTCGTTTTTGGTCGGGAGCGCGGG (SEQ ID NO:1083), GTTTTTGTCGGGAGCGCGGGGTTT (SEQ ID NO:1084)
Target115	chr1:156611915-156612106	AAAGGGGGTTTTGTGTTGCGTCGGGAG (SEQ ID NO:1085), AGAAAGGGGGTTTTGTGTTGCGTCGGG (SEQ ID NO:1086), GAAAGGGGGTTTTGTGTTGCGTCGGGA (SEQ ID NO:1087), CGGGGGGAAGAAAGGGGGTTTTGTGTT (SEQ ID NO:1088), TTCGGAGGAGATTTTCGGAGGAGGCGA (SEQ ID NO:1089), TCGGTTGTTAGGAGTCGACGAGTTGGG (SEQ ID NO:1090), GCGGTGTTAGGAGTCGACGAGTTGGGT (SEQ ID NO:1091), TAGGGTTGGGGTTGGGTCGCGGTATTG (SEQ ID NO:1092), TTAGGGTTGGGGTTGGGTCGCGGTATT (SEQ ID NO:1093), TTTAGGGTTGGGGTTGGGTCGCGGTAT (SEQ ID NO:1094)
Target116	chr1:156612166-156612354	GGGTCGGGGATAGGGAGAAGGGAGTGT (SEQ ID NO:1095), GGGGTCGGGGATAGGGAGAAGGGAGTG (SEQ ID NO:1096), GTGGGGTCGGGGATAGGGAGAAGGGAG (SEQ ID NO:1097), GTCGTGGGGTCGGGGATAGGGAGAAGG (SEQ ID NO:1098), TGGGGTCGGGGATAGGGAGAAGGGAG (SEQ ID NO:1099), TCGCGTTGTTAGGAGTCGACGAGTTGGG (SEQ ID NO:1100), GCGGTGTTAGGAGTCGACGAGTTGGGT (SEQ ID NO:1101), CGTTGGGATAGGAGCGCGTAGTAGGGA (SEQ ID NO:1102), TTGCGGTGTTAGGAGTCGACGAGTTGGG (SEQ ID NO:1103), CGTTGCGGTGTTAGGAGTCGACGAGTT (SEQ ID NO:1104)
Target117	chr1:161038779-161038975	GCGGTTTAGTAAGGTTGTAGTGGGAATAGAGT (SEQ ID NO:1105), TCGCGTTTAGTAAGGTTGTAGTGGGAATAGAG (SEQ ID NO:1106), TCGCGTTTAGTAAGGTTGTAGTGGGAATAGAGT (SEQ ID NO:1107), GCGGTTTAGTAAGGTTGTAGTGGGAATAGAGT (SEQ ID NO:1108), TTGCGGTTTAGTAAGGTTGTAGTGGGAATAGAG (SEQ ID NO:1109), GGGGAATAGGAGAGGGAGGGTGAGGCGA (SEQ ID NO:1110), TGGGAATAGGAGAGGGAGGGTGAGGCG (SEQ ID NO:1111), GGAGAGGGAGGGTGAGGCGATAGGGTT (SEQ ID NO:1112), TAGGAGAGGGAGGGTGAGGCGATAGGG (SEQ ID NO:1113), AGGGAGGGTGAGGCGATAGGGTTAGGA (SEQ ID NO:1114)
Target118	chr1:161039011-161039132	TTTGGGGATGGGGTGTTGAGGGGATG (SEQ ID NO:1115), TTGGGGAAGGGGTAGTGGTTTGGGGT (SEQ ID NO:1116), TTTGGGGAAGGGGTAGTGGTTTGGGGT (SEQ ID NO:1117), GGGATGGGGTGTTGAGGGGATGAGAA (SEQ ID NO:1118), TTGGGATGGGGTGTTGAGGGGATGA (SEQ ID NO:1119)
Target119	chr1:161039306-161039440	AGGTTGGATCGGGTTGTAGATGTTTAGTGTT (SEQ ID NO:1120), AGGTTGGATCGGGTTGTAGATGTTTAGTGTTT (SEQ ID NO:1121), AGGTTGGATCGGGTTGTAGATGTTTAGTGTTT (SEQ ID NO:1122), GGTGTTAGTGTTGTAGGTGTTTTGTAAGTCGT (SEQ ID NO:1123), TGGTTTGTAGTGTTGTAGGTGTTTTGTAAGTCG (SEQ ID NO:1124), CGTAAAGGAGCGGGTTTTTGGGTGCGA (SEQ ID NO:1125), AGGAGCGGGTTTTTGGGTGCGATTGT (SEQ ID NO:1126), GCGTAAAGGAGCGGGTTTTTGGGTGCG (SEQ ID NO:1127), CGTAAAGGAGCGGGTTTTTGGGTGCGAT (SEQ ID NO:1128), AAGGAGCGGGTTTTTGGGTGCGATTGT (SEQ ID NO:1129)
Target120	chr1:161039593-161039696	ATTGGGGGTGGAGGGTGTTTGGGTAA (SEQ ID NO:1130), AATTGGGGGTGGAGGGTGTTTGGGTAA (SEQ ID NO:1131), TAATTGGGGGTGGAGGGTGTTTGGGT (SEQ ID NO:1132), AATTGGGGGTGGAGGGTGTTTGGGT (SEQ ID NO:1133), AATTGGGGGTGGAGGGTGTTTGGGTAA (SEQ ID NO:1134), CGAGGAGGGCGAGTGTTAGGTTGGGT (SEQ ID NO:1135), TTAAAGTTGAGCGGGGCGAGGAGGGC (SEQ ID NO:1136), TTTAAAGTTGAGCGGGGCGAGGAGGG (SEQ ID NO:1137), CGAGGAGGGCGAGTGTTAGGTTGGGT (SEQ ID NO:1138), GGAGGGCGAGTGTTAGGTTGGGTACG (SEQ ID NO:1139)
Target121	chr1:166889943-166890501	TGGTCGATTGTTGGGTGCGGTGTTGGC (SEQ ID NO:1140), TTGTTGTGGTAGGGTAGGTCGCGGTG (SEQ ID NO:1141), TCGTATTGTTGGGTGCGGTGTTGGCGTG (SEQ ID NO:1142), CGGTAGGACGGGTGCGGGTTAGTTTT (SEQ ID NO:1143), TTTGTAGGTGTCGGGCGGCGATTAAGC (SEQ ID NO:1144), GCGGTTGGGTTTTAGTTTCGCGCGTC (SEQ ID NO:1145), TCGCGGTGGGTGAGTCGTACGTTAGGT (SEQ ID NO:1146), ACGGGGGTGTGCGGTGTTTTATGGAC (SEQ ID NO:1147), TATTGATTGTTGGGTAGCGCGCGGGAG (SEQ ID NO:1148), AGAATTCGTTACGGGGGTGTCGGTGC (SEQ ID NO:1149)

Figure 5 (Table 1)

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Target122	chr1:166890503-166890517	GCGTTTCGTGATTGTTGTCGTTTGTTCGG (SEQ ID NO:1150), GCGTTTCGTGATTGTTGTCGTTTGTTCG (SEQ ID NO:1151), GGAGTCGTTTGGTAGAAGTCGTTGTGC (SEQ ID NO:1152), AGGAGTCGTTTGGTAGAAGTCGTTGTGC (SEQ ID NO:1153), CGTTTCGTGATTGTTGTCGTTTGTTCGG (SEQ ID NO:1154), ACGGGGGTGTGCGGTCGTTTATGGAC (SEQ ID NO:1155), AGAATTCGTTACGGGGGTGTGCGTCG (SEQ ID NO:1156), AAGAATTCGTTACGGGGGTGTGCGTCG (SEQ ID NO:1157), ACGGGGGTGTGCGGTCGTTTATGGA (SEQ ID NO:1158), GAAGAATTCGTTACGGGGGTGTGCGTCG (SEQ ID NO:1159)
Target123	chr1:166890584-166890611	GCGTTTCGTGATTGTTGTCGTTTGTTCGG (SEQ ID NO:1160), GCGTTTCGTGATTGTTGTCGTTTGTTCG (SEQ ID NO:1161), CGTTTCGTGATTGTTGTCGTTTGTTCGG (SEQ ID NO:1162), TGGAGTTTATAGGGAGGGATCGGTCGTT (SEQ ID NO:1163), TTGGAGTTTATAGGGAGGGATCGGTCGTT (SEQ ID NO:1164), TGGAGTTTATAGGGAGGGATCGGTCGTT (SEQ ID NO:1165), TTGGAGTTTATAGGGAGGGATCGGTCGTT (SEQ ID NO:1166), TTTGGAGTTTATAGGGAGGGATCGGTCGTT (SEQ ID NO:1167)
Target124	chr1:180904425-180904463	GGTGGGTATAGGTCGAGGCGGGGTTTT (SEQ ID NO:1168), TTAGCGGTGGGTATAGGTCGAGGCGG (SEQ ID NO:1169), TTAGCGGTGGGTATAGGTCGAGGCGG (SEQ ID NO:1170), GTTAGCGGTGGGTATAGGTCGAGGCGG (SEQ ID NO:1171), GGTGGGTATAGGTCGAGGCGGGTTTT (SEQ ID NO:1172), CGTAGGGGGTTTTGGTTCGCGTTTGT (SEQ ID NO:1173), GTCGGGTTTGGAGCGTAGGGGGTTTTG (SEQ ID NO:1174), TCGGGTTTGGAGCGTAGGGGGTTTTGG (SEQ ID NO:1175), GGTGCGGGTTTGGAGCGTAGGGGGTTTT (SEQ ID NO:1176), CGGGGAGTTTCGTTGATGATAGTCGGCG (SEQ ID NO:1177)
Target125	chr1:180904552-180904566	TGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1178), TTGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1179), GTTGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1180), TGTGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1181), GTTGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1182), CGGTGTCGGGTGTTTTTGCGGTTTAGG (SEQ ID NO:1183), CGGTGTCGGGTGTTTTTGCGGTTAGG (SEQ ID NO:1184), CGGTGTCGGGTGTTTTTGCGGTTAG (SEQ ID NO:1185), GGTGTCGGGTGTTTTTGCGGTTAGG (SEQ ID NO:1186), GGTGTCGGGTGTTTTTGCGGTTAGG (SEQ ID NO:1187)
Target126	chr1:180904606-180904626	TGTAGGTCGCGGATTAGGGTTTTTGC (SEQ ID NO:1188), GGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1189), AGGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1190), GGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1191), GGGACGCGGGGTAGGGGATATTTATAGG (SEQ ID NO:1192), GTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1193), AGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1194), TTTTGGAGGGTTTTGGGACGGGGGG (SEQ ID NO:1195), GGTTTGGGACGGGGGGCGTTTTT (SEQ ID NO:1196), GAGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1197)
Target127	chr1:180904628-180904642	GGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1198), AGGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1199), GGTTTGTGGGTAGTTGGATCGTAGGGG (SEQ ID NO:1200), GGGACGCGGGGTAGGGGATATTTATAGG (SEQ ID NO:1201), GGGACGCGGGGTAGGGGATATTTATAGG (SEQ ID NO:1202), GTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1203), AGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1204), TTTTGGAGGGTTTTGGGACGGGGGG (SEQ ID NO:1205), GGTTTGGGACGGGGGGCGTTTTT (SEQ ID NO:1206), GAGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1207)
Target128	chr1:180904682-180904704	AGCGAGAGGAGGTGTTAGGTTTTCGGT (SEQ ID NO:1208), TCGGGTAGCGAGAGGAGGTGTTAGGTT (SEQ ID NO:1209), GCGAGAGGAGGTGTTAGGTTTTCGGT (SEQ ID NO:1210), ATCGGGTAGCGAGAGGAGGTGTTAGGTT (SEQ ID NO:1211), AGCGAGAGGAGGTGTTAGGTTTTCGGT (SEQ ID NO:1212), GTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1213), AGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1214), TTTTGGAGGGTTTTGGGACGGGGGG (SEQ ID NO:1215), GGTTTGGGACGGGGGGCGTTTTT (SEQ ID NO:1216), GAGTTTTTGGAGGGTTTTGGGACGGGGG (SEQ ID NO:1217)
Target129	chr1:180904786-180904863	GTGGGATGGAGAGGGTGTGGGTGGTT (SEQ ID NO:1218), TTGTGGGATGGAGAGGGTGTGGGTGG (SEQ ID NO:1219), TGGGATGGAGAGGGTGTGGGTGGTT (SEQ ID NO:1220), TGTGGGATGGAGAGGGTGTGGGTGGTT (SEQ ID NO:1221), GGGATGGAGAGGGTGTGGGTGGTTG (SEQ ID NO:1222), AGTCGCGGTTGTGTTTGGGTTTCGTT (SEQ ID NO:1223), GTCGCGGTTGTGTTTGGGTTTCGTT (SEQ ID NO:1224), AGTCGCGGTTGTGTTTGGGTTTCGTT (SEQ ID NO:1225), TCGCGGTTGTGTTTGGGTTTCGTT (SEQ ID NO:1226), CGTAGTCGCGGTTGTGTTTGGGTT (SEQ ID NO:1227)
Target130	chr1:203598330-203598987	TTAGGGGTCGATGTTGGTGGGTTTCGGG (SEQ ID NO:1228), GCGTATCGGGTCGTTGAGTTTCGGGGT (SEQ ID NO:1229), CGTATCGGGTCGTTTGAAGTTTCGGGGT (SEQ ID NO:1230), ATTAGGGGTCGATGTTGGTGGGTTTCGGG (SEQ ID NO:1231), TAGGGGTCGATGTTGGTGGGTTTCGGG (SEQ ID NO:1232), AGGGGAAATTGGAGTTAGACGGCGGG (SEQ ID NO:1233), CGTGTGGGCGTTGGGAGTTTATGGGG (SEQ ID NO:1234), GGGGAAATTGGAGTTAGACGGCGGGT (SEQ ID NO:1235), AGAGGTCGCGGAGAGTATAGGGGTCGTT (SEQ ID NO:1236), GGGGGAAGGGTTGAGATTGCGGGAGTC (SEQ ID NO:1237)
Target131	chr1:209825672-209825748	TGTTTTATTGTTTGGTGCGGGTCGGA (SEQ ID NO:1238), TTTTATTGTTTGGTGCGGGTCGGATGT (SEQ ID NO:1239), TTGTTTTATTGTTTGGTGCGGGTCGGA (SEQ ID NO:1240), TTTTATTGTTTGGTGCGGGTCGGATGT (SEQ ID NO:1241), TGTTTTATTGTTTGGTGCGGGTCGGAT (SEQ ID NO:1242)

Figure 5 (Table 1)

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Target132	chr1:209825786-209825857	TTTTTTGGTTGGGTGTAGTTTATCGTAGGGC (SEQ ID NO:1243), ATTTTTGGTTGGGTGTAGTTTATCGTAGGGC (SEQ ID NO:1244), GATTTTTGGTTGGGTGTAGTTTATCGTAGGGC (SEQ ID NO:1245), AGATTTTTGGTTGGGTGTAGTTTATCGTAGGGC (SEQ ID NO:1246), GAGATTTTTGGTTGGGTGTAGTTTATCGTAGGGC (SEQ ID NO:1247), TTTTGGGAGGTGGGGGTGTAGTGACGA (SEQ ID NO:1248), TCGTTTTGGGAGGTGGGGGTGTAGTGA (SEQ ID NO:1249), TTTGGGAGGTGGGGGTGTAGTGACGAT (SEQ ID NO:1250), GTTTTGGGAGGTGGGGGTGTAGTGACG (SEQ ID NO:1251), CGTTTTGGGAGGTGGGGGTGTAGTGAC (SEQ ID NO:1252)
Target133	chr1:209943022-209943127	TGAGGGAGGCGGATTTAAAGTCGAGT (SEQ ID NO:1253), TGAGGGAGGCGGATTTAAAGTCGAGTT (SEQ ID NO:1254), TTAGAGGAGGCGGATTTAAAGTCGAGT (SEQ ID NO:1255), TGAGGGAGGCGGATTTAAAGTCGAGTTT (SEQ ID NO:1256), TTAGAGGGAGGCGGATTTAAAGTCGAGTT (SEQ ID NO:1257), GGGGGTAGAGGAGGGGGTTCGGTTTTG (SEQ ID NO:1258), TGGGGGTAGAGGAGGGGGTTCGGTTTT (SEQ ID NO:1259), TTGGGGGTAGAGGAGGGGGTTCGGTTTT (SEQ ID NO:1260), TTTGGGGGTAGAGGAGGGGGTTCGGTTT (SEQ ID NO:1261), GGGGTAGAGGAGGGGGTTCGGTTTTGA (SEQ ID NO:1262)
Target134	chr1:209943131-209943218	TGGCGTTTCGGGTTTAAAGAGAGGTGG (SEQ ID NO:1263), TGGCGTTTCGGGTTTAAAGAGAGGTGGA (SEQ ID NO:1264), GGCCTTTTCGGGTTTAAAGAGAGGTGGA (SEQ ID NO:1265), ATGGCGTTTCGGGTTTAAAGAGAGGTGG (SEQ ID NO:1266), TGGCGTTTCGGGTTTAAAGAGAGGTGGAA (SEQ ID NO:1267), TGAGGGGAGGGGGCGGAGGAGTTATT (SEQ ID NO:1268), GTATTTGTGTAGGGGAGGGGGCGGAGG (SEQ ID NO:1269), TATTTGTGTAGGGGAGGGGGCGGAGGA (SEQ ID NO:1270), GGTGTATTTGTGTAGGGGAGGGGGCGG (SEQ ID NO:1271), GGGTGTATTTGTGTAGGGGAGGGGGCGG (SEQ ID NO:1272)
Target135	chr1:221049931-221050384	GTGGGGAGTAAGGAGGGCGGGAGTTTG (SEQ ID NO:1273), AGTGGGGAGTAAGGAGGGCGGGAGTTT (SEQ ID NO:1274), GAAGAGTGGGGAGTAAGGAGGGCGGGA (SEQ ID NO:1275), AAGAGTGGGGAGTAAGGAGGGCGGGAG (SEQ ID NO:1276), TTGAAGAGTGGGGAGTAAGGAGGGCGG (SEQ ID NO:1277), TCGGGTTGTGGCGAAATGAATTGGTTT (SEQ ID NO:1278), TTCGGTTGTGGCGAAATGAATTGGTT (SEQ ID NO:1279), TTTTCGGTTGTGGCGAAATGAATTGGT (SEQ ID NO:1280), CGGGATTAATGAGCGGATGTGTTTGGC (SEQ ID NO:1281), TCGGGATTAATGAGCGGATGTGTTTGGC (SEQ ID NO:1282)
Target136	chr1:221050449-221050743	CGGCGAGGGGTTTGTAGGGGTTAGGTT (SEQ ID NO:1283), GCGGTTGCGAGGAAGTTGAGGTTTGGG (SEQ ID NO:1284), GTGGGGAGTAAGGAGGGCGGGAGTTTG (SEQ ID NO:1285), AGGTTTGGGAGAGTAAGGGGGCGCGTAG (SEQ ID NO:1286), TTCGGCGAGGGGTTTGTAGGGGTTAGG (SEQ ID NO:1287), CGGGGTGGGTACGGGATATAGATTTCGGG (SEQ ID NO:1288), GGGTGGGTACGGGATATAGATTTCGGGGG (SEQ ID NO:1289), GGGGTGGGTACGGGATATAGATTTCGGGG (SEQ ID NO:1290), TCGGGGTGGGTACGGGATATAGATTTCGGG (SEQ ID NO:1291), GGGTGGGTACGGGATATAGATTTCGGGGGA (SEQ ID NO:1292)
Target137	chr1:225606525-225606597	AATTCGTTTAGTAGGTAGGGTAGTTTTCGGGATTTT (SEQ ID NO:1293), TGAGGCGGTAGGGGTTAGTAGTGGGTT (SEQ ID NO:1294), TTGAGGCGGTAGGGGTTAGTAGTGGGT (SEQ ID NO:1295), TGAGGCGGTAGGGGTTAGTAGTGGGTTT (SEQ ID NO:1296), TTGAGGCGGTAGGGGTTAGTAGTGGGTT (SEQ ID NO:1297), TTTGAGGCGGTAGGGGTTAGTAGTGGGT (SEQ ID NO:1298)
Target138	chr1:235098925-235099196	AGGAGGGATTTAGAGGAGTGCGGGG (SEQ ID NO:1299), GGAGGGATTTAGAGGAGTGCGGGGA (SEQ ID NO:1300), AGGAGGGATTTAGAGGAGTGCGGGGA (SEQ ID NO:1301), GAGGAGGGATTTAGAGGAGTGCGGGG (SEQ ID NO:1302), GGAGGGATTTAGAGGAGTGCGGGGAA (SEQ ID NO:1303), AGGTTTTTGGGATTGTAGCGCGGTGA (SEQ ID NO:1304), AAGTTTTTGGGATTGTAGCGCGGTG (SEQ ID NO:1305), AAGTTTTTGGGATTGTAGCGCGGTGA (SEQ ID NO:1306), GGTTTTTTGGGATTGTAGCGCGGTGAT (SEQ ID NO:1307), AGGTTTTTGGGATTGTAGCGCGGTGAT (SEQ ID NO:1308)
Target139	chr1:235099368-235099536	AGTGTTCGTTGTTAATTGTTGATAGAGGGGGA (SEQ ID NO:1309), AGTGAATAGATGGTGTGTTGGATAGCGTTTGGT (SEQ ID NO:1310), AGTGAATAGATGGTGTGTTGGATAGCGTTTGGTA (SEQ ID NO:1311), TAGTGAATAGATGGTGTGTTGGATAGCGTTTGGT (SEQ ID NO:1312), AGGTTAGTGAATAGATGGTGTGTTGGATAGCGTT (SEQ ID NO:1313), TTAGTGAATAGATGGTGTGTTGGATAGCGTTTGGT (SEQ ID NO:1314)
Target140	chr1:237205518-237205594	TCGCGTATTTGTTTCGGAGGAGTCGGGG (SEQ ID NO:1315), GCGGTTGGGTTGCGGGGTTGTTTTTC (SEQ ID NO:1316), CGCGTATTTGTTTCGGAGGAGTCGGGGT (SEQ ID NO:1317), CGGTTGGGTTGCGGGGTTGTTTTTCG (SEQ ID NO:1318), GCGTATTTGTTTCGGAGGAGTCGGGGT (SEQ ID NO:1319), TGTTTCGTATTGTGCGGGAGGAGGGCG (SEQ ID NO:1320), TTGTTTCGTATTGTGCGGGAGGAGGGC (SEQ ID NO:1321), GTTTCGTATTGTGCGGGAGGAGGGCG (SEQ ID NO:1322), GTTTCGTATTGTGCGGGAGGAGGGCG (SEQ ID NO:1323), TTGTTTCGTATTGTGCGGGAGGAGGGC (SEQ ID NO:1324)

Figure 5 (Table 1)

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Target141	chr1:237205633-237206037	GTGCGTCGCGTGTGTTGTTAGGGGAAG (SEQ ID NO:1325), GGGCGAGGGGGTGTGTTTTGAGGATGC (SEQ ID NO:1326), CGAGGGGGTGTGTTTTGAGGATGCGGG (SEQ ID NO:1327), GTTGTAGGGGAAGGGGCGTTAGGGT (SEQ ID NO:1328), TGTGTTAGGGGAAGGGGCGTTAGGG (SEQ ID NO:1329), GTTGTAGAGCGGAGGAGGAGGCGCG (SEQ ID NO:1330), CGTTTGTAGAGCGGAGGAGGAGGCGC (SEQ ID NO:1331), GTTGTAGAGCGGAGGAGGAGGCGCGG (SEQ ID NO:1332), TTTGTAGAGCGGAGGAGGAGGCGCG (SEQ ID NO:1333), CGTTTGTAGAGCGGAGGAGGAGGCGCG (SEQ ID NO:1334)
Target142	chr1:237206046-237206177	GCGCGCGTGTGGAAGTTAGAGGATGG (SEQ ID NO:1335), TTGTGCGCGTGTGGAAGTTAGAGG (SEQ ID NO:1336), GGGCGAGGGGGTGTGTTTTGAGGATGC (SEQ ID NO:1337), CGAGGGGGTGTGTTTTGAGGATGCGGG (SEQ ID NO:1338), GAGGGAAGGTAAGGGCGCGTGTGTTGTG (SEQ ID NO:1339), CGGTCGTTGCGGAGGTTTGTGCGTGT (SEQ ID NO:1340), TCGGTCGTTGCGGAGGTTTGTGCGTGT (SEQ ID NO:1341), TCGGTCGTTGCGGAGGTTTGTGCGTGT (SEQ ID NO:1342), TTCGGTCGTTGCGGAGGTTTGTGCGTGT (SEQ ID NO:1343), CGGTCGTTGCGGAGGTTTGTGCGTGT (SEQ ID NO:1344)
Target143	chr1:240161087-240161285	GGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1345), CGGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1346), GGGAAACGGGTTGGTGGCGGTTTAAAGC (SEQ ID NO:1347), GGATTAGGGTTTCGAGGGTGTGCGGCG (SEQ ID NO:1348), TCGGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1349), GCGCGCGGGAGGAATTGTTGAGTAG (SEQ ID NO:1350), GGGCGCGGGAGGAATTGTTGAGTAG (SEQ ID NO:1351), CGTTTTTGTGCGTAGGTGGGTGGGTGGG (SEQ ID NO:1352), CGTAAGTGTGTTAGGGGGTGTGCGTGTG (SEQ ID NO:1353), GTTTTTGCGTAGGTGGGTGGGTGGGA (SEQ ID NO:1354)
Target144	chr1:240161289-240161383	GGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1355), CGGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1356), GGGAAACGGGTTGGTGGCGGTTTAAAGC (SEQ ID NO:1357), GGATTAGGGTTTCGAGGGTGTGCGGCG (SEQ ID NO:1358), TCGGGATTAGGGTTTCGAGGGTGTGCGG (SEQ ID NO:1359), TCGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1360), TTCGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1361), CGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1362), TCGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1363), TTCGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1364)
Target145	chr1:240161390-240161547	GCGAGGTTGCGGTTTTGTTTGAATTT (SEQ ID NO:1365), GGGGCGTCGCGGGTGTAAAGGG (SEQ ID NO:1366), GCGAGGTTGCGGTTTTGTTTGAATTT (SEQ ID NO:1367), GGGCGTCGCGGGTGTAAAGGGC (SEQ ID NO:1368), GAGTTTACGCGGATGTTACGGTCGTC (SEQ ID NO:1369), TTTTGGGTTTCGGGCGGTTGATTTTCG (SEQ ID NO:1370), TTAGTTTTTTCGGGTCGGGCGGTTGT (SEQ ID NO:1371), AGTTTTTTCGGGTCGGGCGGTTGTAT (SEQ ID NO:1372), TTTTTCGGGTCGGGCGGTTGTATTTTCG (SEQ ID NO:1373), TCGGAGTAGGGTCGTAATTCGCGGTT (SEQ ID NO:1374)
Target146	chr1:240161558-240161600	TTGGGGATTTCGCGGGGTGTAGTCGTT (SEQ ID NO:1375), GGGTGTAGTCGTTTCGGGTCGTAGGAGG (SEQ ID NO:1376), GGGGTGTAGTCGTTTCGGGTCGTAGGAG (SEQ ID NO:1377), GTTGGGGATTTCGCGGGGTGTAGTCGTT (SEQ ID NO:1378), TTTTCGGTTGGGGATTTCGCGGGGTGTAG (SEQ ID NO:1379), TTTTCGGTTTCGGGCGGTTGATTTTCG (SEQ ID NO:1380), TTTTTCGGTTTCGGGCGGTTGATTTTCG (SEQ ID NO:1381), TTTTTCGGTTTCGGGCGGTTGATTTTCG (SEQ ID NO:1382), TTTTCGGTTTCGGGCGGTTGATTTTCG (SEQ ID NO:1383), TTAGTTTTTTCGGGTCGGGCGGTTGT (SEQ ID NO:1384)
Target147	chr1:248020450-248020544	TGTGACGGGGGCGGGGAATTATAACGT (SEQ ID NO:1385), TTGTGTAGATCGCGAGGGGAGACGGTG (SEQ ID NO:1386), TTTGTGTAGATCGCGAGGGGAGACGGT (SEQ ID NO:1387), GGTGCGGAGCGTAGTTTTTCGGGAGGC (SEQ ID NO:1388), TGTGACGGGGGCGGGGAATTATAACGTT (SEQ ID NO:1389), TCGGGCGGCGTTAGGTTATGATTCGT (SEQ ID NO:1390), CGGGCGGCGTTAGGTTATGATTCGT (SEQ ID NO:1391), TCGGGCGGCGTTAGGTTATGATTCGT (SEQ ID NO:1392), TTCGGGCGGCGTTAGGTTATGATTCGT (SEQ ID NO:1393), TTCGGGCGGCGTTAGGTTATGATTCG (SEQ ID NO:1394)
Target148	chr1:248020559-248020742	TTGTGTAGATCGCGAGGGGAGACGGTG (SEQ ID NO:1395), GGAGCGTAGTTTTTCGGGAGGCGGGTT (SEQ ID NO:1396), TTTTCGGGAGGCGGGTTATGTTTGGG (SEQ ID NO:1397), TTTGTGTAGATCGCGAGGGGAGACGGT (SEQ ID NO:1398), GGTGCGGAGCGTAGTTTTTCGGGAGGC (SEQ ID NO:1399), AGGTTTCGTTAGTTGTGCGTTGGGGCGA (SEQ ID NO:1400), GGTTCGTTAGTTGTGCGTTGGGGCGAA (SEQ ID NO:1401), AGGTTTCGTTAGTTGTGCGTTGGGGCGAA (SEQ ID NO:1402), TAGGTTTCGTTAGTTGTGCGTTGGGGCG (SEQ ID NO:1403), TCGTTAGTTGTGCGTTGGGGCGAAAGT (SEQ ID NO:1404)
Target149	chr1:248020748-248020776	CGGGTTTTTCGTTTTAATCGGTAGTTGGCG (SEQ ID NO:1405), TCGGGTTTTTCGTTTTAATCGGTAGTTGGCG (SEQ ID NO:1406), TCGGGTTTTTCGTTTTAATCGGTAGTTGGCG (SEQ ID NO:1407), TTCGGGTTTTTCGTTTTAATCGGTAGTTGGCG (SEQ ID NO:1408), TTCGGGTTTTTCGTTTTAATCGGTAGTTGGCG (SEQ ID NO:1409), AGGTTTCGTTAGTTGTGCGTTGGGGCGA (SEQ ID NO:1410), GGTTCGTTAGTTGTGCGTTGGGGCGAA (SEQ ID NO:1411), AGGTTTCGTTAGTTGTGCGTTGGGGCGAA (SEQ ID NO:1412), TAGGTTTCGTTAGTTGTGCGTTGGGGCG (SEQ ID NO:1413), TCGTTAGTTGTGCGTTGGGGCGAAAGT (SEQ ID NO:1414)

Figure 5 (Table 1)

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Target150	chr1:248020791-248021097	TCGGTAGTTGGCGGGTTTGGTGGAGAG (SEQ ID NO:1415), ATCGGTAGTTGGCGGGTTTGGTGGAGA (SEQ ID NO:1416), TAGTTGGCGGGTTTGGTGGAGAGCGTG (SEQ ID NO:1417), GTAGTTGGCGGGTTTGGTGGAGAGCGT (SEQ ID NO:1418), AATCGGTAGTTGGCGGGTTTGGTGGAG (SEQ ID NO:1419), GGGGAGGGGCGGACGGTGTAAATAA (SEQ ID NO:1420), GGAGCGGTCTGGGAGTCGTTAGGAG (SEQ ID NO:1421), GATAGGAGAGTGTGGGGGAGGGGCG (SEQ ID NO:1422), CGATAGGAGAGTGTGGGGGAGGGGC (SEQ ID NO:1423), TAGCGTTCGTAGTTTCGTGGGGGGC (SEQ ID NO:1424)
Target151	chr2:467943-467958	ACGTCGGGGGTTTAGGTAGGTAGAGAA (SEQ ID NO:1425), GGTGAGTTATTTAGGCGTTCGTGGGT (SEQ ID NO:1426), GGTGAGTTATTTAGGCGTTCGTGGG (SEQ ID NO:1427), AGGTGAGTTATTTAGGCGTTCGTGGT (SEQ ID NO:1428), AGGTGAGTTATTTAGGCGTTCGTGGG (SEQ ID NO:1429), ACGAGGGTTTGAATGTATAGCGCGGG (SEQ ID NO:1430), ACGAGGGTTTGAATGTATAGCGCGGGA (SEQ ID NO:1431), CGAGGGTTTGAATGTATAGCGCGGGA (SEQ ID NO:1432), AGCGCGGAGTTTGGTTTAGGAGTG (SEQ ID NO:1433), GCGCGGGAGTTTGGTTTAGGAGTGA (SEQ ID NO:1434)
Target152	chr2:467982-468022	AGGGTTTTCTGGTTTTTAGAGGCGCG (SEQ ID NO:1435), TAGGGTTTTCTGGTTTTTAGAGGCGCG (SEQ ID NO:1436), GGGTTTTCTGGTTTTTAGAGGCGCG (SEQ ID NO:1437), ACGTCGGGGTTTAGGTAGGTAGAGAA (SEQ ID NO:1438), GGTGAGTTATTTAGGCGTTCGTGGGT (SEQ ID NO:1439), CGCGGTTTTCTGGTTTTGCGT (SEQ ID NO:1440), CGCGGTTTTCTGGTTTTGTTTTGCG (SEQ ID NO:1441), CGCGGTTTTCTGGTTTTGTTTTGCGTT (SEQ ID NO:1442), CGCGGTTTTCTGGTTTTGCGTTT (SEQ ID NO:1443), CGCGGTTTTCTGGTTTTGTTTTGCGTTTT (SEQ ID NO:1444)
Target153	chr2:468061-468079	GTTGGGTAGTTTCGTGGGTTGTGGCG (SEQ ID NO:1445), TTGGGTAGTTTCGTGGGTTGTGGCGA (SEQ ID NO:1446), GGTGGGTAGTTTCGTGGGTTGTGGC (SEQ ID NO:1447), GGGTTGGGTAGTTTCGTGGGTTGTGG (SEQ ID NO:1448), TGGGTAGTTTCGTGGGTTGTGGCGA (SEQ ID NO:1449), AGGTTTCGCGTTATTTGGTTGCGGTGTC (SEQ ID NO:1450), TAGGTTTCGCGTTATTTGGTTGCGGTGTC (SEQ ID NO:1451), TTAGGTTTCGCGTTATTTGGTTGCGGTGTC (SEQ ID NO:1452), TTTAGGTTTCGCGTTATTTGGTTGCGGTGTC (SEQ ID NO:1453)
Target154	chr2:468093-468192	CGCGAGGGGTAGGACGAGGTTGTATGG (SEQ ID NO:1454), GTGGGTAGTTTCGTGGGTTGTGGCG (SEQ ID NO:1455), GCGAGGGGTAGGACGAGGTTGTATGGG (SEQ ID NO:1456), TTGGGTAGTTTCGTGGGTTGTGGCGA (SEQ ID NO:1457), GGTGGGTAGTTTCGTGGGTTGTGGC (SEQ ID NO:1458), TTTTCGGTTTTTTGGGCGGGTTTTGCG (SEQ ID NO:1459), TTCGGTTTTTTGGGCGGGTTTTGCGT (SEQ ID NO:1460), CGCGGTTTAGTTCGGTGTAGTTGAGGG (SEQ ID NO:1461), TTTTCGGTTTTTTGGGCGGGTTTTGCG (SEQ ID NO:1462), CGCGGTTTAGTTCGGTGTAGTTGAGGGA (SEQ ID NO:1463)
Target155	chr2:468212-468304	CGCGAGGGGTAGGACGAGGTTGTATGG (SEQ ID NO:1464), GCGAGGGGTAGGACGAGGTTGTATGGG (SEQ ID NO:1465), TCGAGTTAGAGTGAGCGCGGGTTTGG (SEQ ID NO:1466), CGAGGTTGTATGGGTTAGCGAGGGGGT (SEQ ID NO:1467), ACGAGGTTGTATGGGTTAGCGAGGGGG (SEQ ID NO:1468), TCGGAGGCGCGGTTGTTTTGTAGTT (SEQ ID NO:1469), TTCGAGGCGCGGTTGTTTTGTAGTT (SEQ ID NO:1470), TTTCGAGGCGCGGTTGTTTTGTAGT (SEQ ID NO:1471), AGTTTCGAGGCGCGGTTGTTTTGTA (SEQ ID NO:1472), GTTTCGAGGCGCGGTTGTTTTGTAG (SEQ ID NO:1473)
Target156	chr2:468313-468383	GGCGTAGAGTTTCGTTTAGGGAGTCGGGA (SEQ ID NO:1474), GCGTAGAGTTTCGTTTAGGGAGTCGGGA (SEQ ID NO:1475), GCGTAGAGTTTCGTTTAGGGAGTCGGGAG (SEQ ID NO:1476), GCGTAGAGTTTCGTTTAGGGAGTCGGGAG (SEQ ID NO:1477), GCGTAGAGTTTCGTTTAGGGAGTCGGGAGA (SEQ ID NO:1478), TTAAGGGGCGCGTAGGAGTTTCGGAGG (SEQ ID NO:1479), TCGGAGGCGCGGTTGTTTTGTAGTTT (SEQ ID NO:1480), TTCGAGGCGCGGTTGTTTTGTAGTT (SEQ ID NO:1481), TTTTCGAGGCGCGGTTGTTTTGTAGT (SEQ ID NO:1482), AGTTTCGAGGCGCGGTTGTTTTGTA (SEQ ID NO:1483)
Target157	chr2:468413-468458	AGGGGTGCGTTTTTAAAGTTTCGGGTG (SEQ ID NO:1484), GGGGTGCGTTTTTAAAGTTTCGGGTGA (SEQ ID NO:1485), GGGGTGCGTTTTTAAAGTTTCGGGTGAGG (SEQ ID NO:1486), GGGGTGCGTTTTTAAAGTTTCGGGTGAGG (SEQ ID NO:1487), AGGGGTGCGTTTTTAAAGTTTCGGGTGA (SEQ ID NO:1488), GGGAGGTAGGAGGTGGGAGTGCCTTC (SEQ ID NO:1489), TTAAGGGGCGCGTAGGAGTTTCGGAGG (SEQ ID NO:1490), GGAGGTAGGAGGTGGGAGTGCCTTCG (SEQ ID NO:1491), GAGGTAGGAGGTGGGAGTGCCTTCG (SEQ ID NO:1492), GTTTCGGGAGGTAGGAGGTGGGAGTG (SEQ ID NO:1493)
Target158	chr2:1036257-1036451	TTTTGTTGGAGTTTTTGTGCGTTATTGTCGA (SEQ ID NO:1494), TTTTGGTTGGAGTTTTTGTGCGTTATTGTCGA (SEQ ID NO:1495), TTTTGGTTGGAGTTTTTGTGCGTTATTGTCGA (SEQ ID NO:1496), AACGTTAAGGGTGGTAGGATAGGGAGGA (SEQ ID NO:1497), ACGTTAAGGGTGGTAGGATAGGGAGGAT (SEQ ID NO:1498), AAACGTTAAGGGTGGTAGGATAGGGAGGA (SEQ ID NO:1499), ACGTTAAGGGTGGTAGGATAGGGAGGATT (SEQ ID NO:1500), AACGTTAAGGGTGGTAGGATAGGGAGGAT (SEQ ID NO:1501)

Figure 5 (Table 1)

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Target159	chr2:2120400-2120800	CGTGGAGAGGTTGTGTAGGGAGTGAGGG (SEQ ID NO:1502), AGGTTGTGTAGGGAGTGAGGGAGGTGT (SEQ ID NO:1503), AGAGGTTGTGTAGGGAGTGAGGGAGGT (SEQ ID NO:1504), ACGTGGAGAGGTTGTGTAGGGAGTGAGG (SEQ ID NO:1505), TGGAGAGGTTGTGTAGGGAGTGAGGGA (SEQ ID NO:1506), TGGTTTGGTTTTTCGGGGCGGATTT (SEQ ID NO:1507), ATGTTTGGTTTTTCGGGGCGGATT (SEQ ID NO:1508), TGTGGGTGTTTTGTAGGGGGAGAGGTT (SEQ ID NO:1509), TTGTGGGTGTTTTGTAGGGGGAGAGGT (SEQ ID NO:1510), TATGTTTTGGTTTTTCGGGGCGGAT (SEQ ID NO:1511)
Target160	chr2:5832899-5832916	GTGGGAGGGGGAGGGGATTTTCGTAC (SEQ ID NO:1512), GGAGGGGGAGGGGATTTTCGTACGAG (SEQ ID NO:1513), GGGAGGGGGAGGGGATTTTCGTACGA (SEQ ID NO:1514), GGTGGGAGGGGGAGGGGATTTTCGTA (SEQ ID NO:1515), AGGCGGAGAGTTTGAAGCGGAGAGTA (SEQ ID NO:1516), CGTTTAGGGTTATCGGGTTGTAAGTTATGAATTCGT (SEQ ID NO:1517), TCGTTTAGGGTTATCGGGTTGTAAGTTATGAATTCG (SEQ ID NO:1518)
Target161	chr2:5832945-5832965	AGGCGGAGAGTTTGAAGCGGAGAGTA (SEQ ID NO:1519), TAGGCGGAGAGTTTGAAGCGGAGAGT (SEQ ID NO:1520), AGTAGGCGGAGAGTTTGAAGCGGAGA (SEQ ID NO:1521), GTAGGCGGAGAGTTTGAAGCGGAGAGT (SEQ ID NO:1522), GTAGGCGGAGAGTTTGAAGCGGAGAG (SEQ ID NO:1523)
Target162	chr2:5832990-5833082	GCGGAGAGTAATTTGTTTCGGGAGGCGT (SEQ ID NO:1524), GCGGAGAGTAATTTGTTTCGGGAGGCG (SEQ ID NO:1525), AGCGGAGAGTAATTTGTTTCGGGAGGCGT (SEQ ID NO:1526), AGCGGAGAGTAATTTGTTTCGGGAGGCGT (SEQ ID NO:1527), GCGGAGAGTAATTTGTTTCGGGAGGCGTT (SEQ ID NO:1528), TGGAGATTTCCGCGTTGTGTATGTTCCG (SEQ ID NO:1529), GGAGATTTCCGCGTTGTGTATGTTCCG (SEQ ID NO:1530), TGGAGATTTCCGCGTTGTGTATGTTCCGA (SEQ ID NO:1531), GGAGATTTCCGCGTTGTGTATGTTCCGA (SEQ ID NO:1532), CGGGGTAGTCGGTTATGTGTTGAGTCGT (SEQ ID NO:1533)
Target163	chr2:5833151-5833215	AGCGTTGGAATAATTTGAAGGATAGCGAG (SEQ ID NO:1534), GCGTTGGAATAATTTGAAGGATAGCGAGA (SEQ ID NO:1535), GGTGGGTAAGCGTTGGAATAATTTGAAGG (SEQ ID NO:1536), AGCGTTGGAATAATTTGAAGGATAGCGAGA (SEQ ID NO:1537), GGTGGGTAAGCGTTGGAATAATTTGAAGG (SEQ ID NO:1538), TTTGGTTGGCGTTGGGTTTGGTCGAGG (SEQ ID NO:1539), TGGGTTTTGGTTGGCGTTGGGTTTGGT (SEQ ID NO:1540), TGGCGTTGGGTTGGTCGAGGGGTTTA (SEQ ID NO:1541), GGTTTGGTTGGCGTTGGGTTTGGTCG (SEQ ID NO:1542), GGGTTTTGGTTGGCGTTGGGTTTGGTC (SEQ ID NO:1543)
Target164	chr2:8314701-8315101	TGGGGTTGTTTTGAGGAGGAGAGTAGGG (SEQ ID NO:1544), AGGTGGTATTAGGGCGGTTTGTGGAT (SEQ ID NO:1545), GGGGTTGTTTTGAGGAGGAGAGTAGGG (SEQ ID NO:1546), TGGGGTTGTTTTGAGGAGGAGAGTAGGGA (SEQ ID NO:1547), GGGGTTGTTTTGAGGAGGAGAGTAGGGA (SEQ ID NO:1548), AGTTATGGTGGGGTGGGGGTGGAAGTT (SEQ ID NO:1549), TAGTTATGGTGGGGTGGGGGTGGAAGT (SEQ ID NO:1550), GTTATGGTGGGGTGGGGGTGGAAGTTT (SEQ ID NO:1551), TATGGTGGGGTGGGGGTGGAAGTTTG (SEQ ID NO:1552), AGTTATGGTGGGGTGGGGGTGGAAGTTT (SEQ ID NO:1553)
Target165	chr2:10471440-10471578	CGGGGAGTTCCGAGTTTTGTAGGTACGGG (SEQ ID NO:1554), GGGGAGTTCCGAGTTTTGTAGGTACGGGG (SEQ ID NO:1555), TCGGAGTTTTGTAGGTACGGGGTTGGT (SEQ ID NO:1556), CGGGGAGTTCCGAGTTTTGTAGGTACGG (SEQ ID NO:1557), GGGGAGTTCCGAGTTTTGTAGGTACGGGGT (SEQ ID NO:1558), TAGGTGGCGAGGTGAGGAAGGAGAGGG (SEQ ID NO:1559), GATGCGTAGGTGGCGAGGTGAGGAAGG (SEQ ID NO:1560), CGTAGGTGGCGAGGTGAGGAAGGAGAG (SEQ ID NO:1561), CGATGCGTAGGTGGCGAGGTGAGGAAG (SEQ ID NO:1562), GTAGGTGGCGAGGTGAGGAAGGAGAGG (SEQ ID NO:1563)
Target166	chr2:10471621-10471748	CGTTGGTTGGTGGTGAGTTGCGTTGA (SEQ ID NO:1564), TAAGCGTTGGTTGGTGGTGAGTTGCG (SEQ ID NO:1565), CGGTTAAGCGTTGGTTGGTGGTGAGT (SEQ ID NO:1566), ACGGTTAAGCGTTGGTTGGTGGTGAG (SEQ ID NO:1567), GCGTTGGTTGGTGGTGAGTTGCGTTG (SEQ ID NO:1568), TGATAGTCGGGCGTGTAGTGGGGGGTA (SEQ ID NO:1569), TCGGGCGTGTAGTGGGGGGTAGATAGT (SEQ ID NO:1570), AGTCGGGCGTGTAGTGGGGGGTAGATA (SEQ ID NO:1571), TAGTCGGGCGTGTAGTGGGGGGTAGAT (SEQ ID NO:1572), ATAGTCGGGCGTGTAGTGGGGGGTAGA (SEQ ID NO:1573)
Target167	chr2:19550067-19550093	GCGTGGTTTTGAGCGTGGAGGTTAGGG (SEQ ID NO:1574), GGGTTGGTTAGTAGGGGGTAGCGTGGT (SEQ ID NO:1575), AGGGTTGGTTAGTAGGGGGTAGCGTGG (SEQ ID NO:1576), CGTGGAGGTTAGGGTTGGTTCCGCTCG (SEQ ID NO:1577), CGTGGTTTTGAGCGTGGAGGTTAGGGT (SEQ ID NO:1578), TATTGGAGGTTGGTTTTGTCGGCGCGG (SEQ ID NO:1579), GGAGGTTGGTTTTGTCGGCGCGGATTA (SEQ ID NO:1580), AGGTTGGTTTTGTCGGCGCGGATTAGT (SEQ ID NO:1581), GGAGGTTGGTTTTGTCGGCGCGGATTAG (SEQ ID NO:1582), GTATTGGAGGTTGGTTTTGTCGGCGCGG (SEQ ID NO:1583)
Target168	chr2:19550147-19550409	GGAGGTGGGGATGGGGTGGTGAAAGTT (SEQ ID NO:1584), GAGGAGGTGGGGATGGGGTGGTGAAAG (SEQ ID NO:1585), GGGTGGTTCCGCTCGGTAGGGTTAGT (SEQ ID NO:1586), AGGGTTGGTTCCGCTCGGTAGGGTTAG (SEQ ID NO:1587), AGGTTAGGGTTGGTTCCGCTCGGTAGG (SEQ ID NO:1588), TGTTGGTTGAGAAAGCGGTAGGGGATGT (SEQ ID NO:1589), GTTGGTTGAGAAAGCGGTAGGGGATGT (SEQ ID NO:1590), TGTGGTTGAGAAAGCGGTAGGGGATG (SEQ ID NO:1591), CGGGTTTTGTTGGTTGAGAAAGCGGTAGGG (SEQ ID NO:1592), TTTGTTGGTTGAGAAAGCGGTAGGGGA (SEQ ID NO:1593)

Figure 5 (Table 1)

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Target169	chr2:19556691-19556772	CGAGTTTGC GTTGGGGGAGTTTAGTAGT (SEQ ID NO:1594), CGAGTTTGC GTTGGGGGAGTTTAGTAG (SEQ ID NO:1595), TGAGAACGGGAGCGAATTTTACGAGTTTG (SEQ ID NO:1596), TGGTTTATTCGGGGTTAATTGAGCGTGAGT (SEQ ID NO:1597), AGTGGTTTATTCGGGGTTAATTGAGCGTGA (SEQ ID NO:1598), CGGGGGTTCGGACGTTTGTATTATTCGT (SEQ ID NO:1599), CGGGGGTTCGGACGTTTGTATTATTCG (SEQ ID NO:1600), CGGGGGTTCGGACGTTTGTATTATTCGTT (SEQ ID NO:1601), CGGGGGTTCGGACGTTTGTATTATTCGTTGG (SEQ ID NO:1602), CGGGGGTTCGGACGTTTGTATTATTCGTTG (SEQ ID NO:1603)
Target170	chr2:19556789-19556914	CGAGTGGTGATAGGCGTTCGGATTTTCG (SEQ ID NO:1604), CGAGTGGTGATAGGCGTTCGGATTTTCGT (SEQ ID NO:1605), ACGAGTGGTGATAGGCGTTCGGATTTTCGT (SEQ ID NO:1606), ACGAGTGGTGATAGGCGTTCGGATTTTCGT (SEQ ID NO:1607), AGGCGTTCGGATTTTCGTGAAGAGGAT (SEQ ID NO:1608), GCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1609), AGCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1610), AGCGTTGGAGGGGATTAGTAGCGATCG (SEQ ID NO:1611), AAGCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1612), AGAAGCGTTGGAGGGGATTAGTAGCGA (SEQ ID NO:1613)
Target171	chr2:19556981-19556988	GGCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1614), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1615), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCGT (SEQ ID NO:1616), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1617), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCGT (SEQ ID NO:1618), GCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1619), AGCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1620), AGCGTTGGAGGGGATTAGTAGCGATCG (SEQ ID NO:1621), AAGCGTTGGAGGGGATTAGTAGCGATCGG (SEQ ID NO:1622), AGAAGCGTTGGAGGGGATTAGTAGCGA (SEQ ID NO:1623)
Target172	chr2:19556991-19557085	GGCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1624), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1625), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCGT (SEQ ID NO:1626), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCG (SEQ ID NO:1627), GCGGTTATTCGGTTGTATTTAAATGTTTCGTTGCGT (SEQ ID NO:1628), TTTAGGGAAGAGAAGCGTTGGAGGGGA (SEQ ID NO:1629), AGGGAAGAGAAGCGTTGGAGGGGATTA (SEQ ID NO:1630), TAGGGAAGAGAAGCGTTGGAGGGGATT (SEQ ID NO:1631), TTAGGGAAGAGAAGCGTTGGAGGGGAT (SEQ ID NO:1632), GGGGAAGAGAAGCGTTGGAGGGGATTAGT (SEQ ID NO:1633)
Target173	chr2:30453420-30453497	GCGGTAGCGTTGGGTTTCGAGTGAGAT (SEQ ID NO:1634), GCGGTAGCGTTGGGTTTCGAGTGAGATT (SEQ ID NO:1635), GCGGTAGCGTTGGGTTTCGAGTGAGA (SEQ ID NO:1636), TGTGGTTTGGGGGGTTCGCTAGTTTT (SEQ ID NO:1637), ATGTGGTTTGGGGGGTTCGCTAGTTT (SEQ ID NO:1638), GGGCGTTTGTAGGTAGTTAAAGTTGCGT (SEQ ID NO:1639), TGGGCGTTTGTAGGTAGTTAAAGTTGCG (SEQ ID NO:1640), TGGGCGTTTGTAGGTAGTTAAAGTTGCGT (SEQ ID NO:1641), TTGGGCGTTTGTAGGTAGTTAAAGTTGCG (SEQ ID NO:1642), TTGGGCGTTTGTAGGTAGTTAAAGTTGCGT (SEQ ID NO:1643)
Target174	chr2:30453567-30453656	TTTGGGTAGTGTGGGAGGCGTTCGGTT (SEQ ID NO:1644), TTTTGGGTAGTGTGGGAGGCGTTCGGT (SEQ ID NO:1645), GAGTTAAGGATGGGGGCGCGTGTAT (SEQ ID NO:1646), AAGACGTGGGAGTTAAGGATGGGGGGC (SEQ ID NO:1647), TAAGGATGGGGGCGCGTGTATATCG (SEQ ID NO:1648), TTTGTAGCGGGGTAGAAGGTGTGGG (SEQ ID NO:1649), GCGTTGGTTTGAAGGGTTGGTTGT (SEQ ID NO:1650), TTGTAGCGGGGTAGAAGGTGTGGG (SEQ ID NO:1651), GTTTGTAGCGGGGTAGAAGGTGTGGG (SEQ ID NO:1652), GGTTTGTAGCGGGGTAGAAGGTGTGG (SEQ ID NO:1653)
Target175	chr2:30453758-30453913	GGTTGCGGGCGAGGATTTAGAGAGAGG (SEQ ID NO:1654), GGTTGCGGGCGAGGATTTAGAGAGAGGT (SEQ ID NO:1655), TGCGGGCGAGGATTTAGAGAGAGGT (SEQ ID NO:1656), TTGCGGGCGAGGATTTAGAGAGAGGT (SEQ ID NO:1657), AGGTTGCGGGCGAGGATTTAGAGAGA (SEQ ID NO:1658), ATAGTTCGGCGTTGTTTTCGCTCGGG (SEQ ID NO:1659), GAGTGTTCAGGGGCGCGTTGTTTGT (SEQ ID NO:1660), AGAAGCGGTGGGAAGGTGGTAGAGACG (SEQ ID NO:1661), CGAGTGTTCAGGGGCGCGTTGTTT (SEQ ID NO:1662), ATCGAGTGTTCAGGGGCGCGTTGTTT (SEQ ID NO:1663)
Target176	chr2:30453966-30454000	AGAGGGGTTTCGAGGTGGGTTGGGGATA (SEQ ID NO:1664), TAGAGGGGTTTCGAGGTGGGTTGGGGAT (SEQ ID NO:1665), TTAGAGGGGTTTCGAGGTGGGTTGGGGA (SEQ ID NO:1666), AGGGGTTTCGAGGTGGGTTGGGGATAGT (SEQ ID NO:1667), GAGGGGTTTCGAGGTGGGTTGGGGATAG (SEQ ID NO:1668), ATAGTTCGGCGTTGTTTTCGCTCGGG (SEQ ID NO:1669), TTTCAATTTTAGCGCGGCGAGGTGG (SEQ ID NO:1670), GCGGTTGTTTTCGCTCGGGGTAGGGTA (SEQ ID NO:1671), ATTTCAATTTTAGCGCGGCGAGGTGG (SEQ ID NO:1672), CGGTTGTTTTCGCTCGGGGTAGGGTAT (SEQ ID NO:1673)

Figure 5 (Table 1)

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Target177	chr2:31805327-31805336	AGGTGAAGGAAGAAAGGGAAGCGGGGC (SEQ ID NO:1674), GTGAAGGAAGAAAGGGAAGCGGGGCGG (SEQ ID NO:1675), GGTGAAGGAAGAAAGGGAAGCGGGGCG (SEQ ID NO:1676), GTGAAGGAAGAAAGGGAAGCGGGGCG (SEQ ID NO:1677), GGTGAAGGAAGAAAGGGAAGCGGGGC (SEQ ID NO:1678), AGAGAAAGAGGTTTTGCGGGCGGGAGG (SEQ ID NO:1679), GAGAGAAAGAGTTTTGCGGGCGGGAG (SEQ ID NO:1680), CGAGAGAAAGAGGTTTTGCGGGCGGGA (SEQ ID NO:1681), CGAGAGAAAGAGGTTTTGCGGGCGGG (SEQ ID NO:1682), GAGAAAGAGGTTTTGCGGGCGGGAGG (SEQ ID NO:1683)
Target178	chr2:31805451-31805496	GGAGTGAAGGCGGCGTTTGTGTCGTAG (SEQ ID NO:1684), GTTTTGGGGGAGTGAAGGCGGCGTTTG (SEQ ID NO:1685), AGAGCGGATGAGGTTTTGGGGGAGTGA (SEQ ID NO:1686), TGAGAGCGGATGAGGTTTTGGGGGAGT (SEQ ID NO:1687), AGTGAAGGCGGCGTTTGTGTCGTAGTC (SEQ ID NO:1688), AGGAACGCGGAGGTTAGTTGTTTGGC (SEQ ID NO:1689), GAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1690), TGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1691), GTGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1692), TGTGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1693)
Target179	chr2:31805530-31805547	GGAGTGAAGGCGGCGTTTGTGTCGTAG (SEQ ID NO:1694), GTTTTGGGGGAGTGAAGGCGGCGTTTG (SEQ ID NO:1695), AGAGCGGATGAGGTTTTGGGGGAGTGA (SEQ ID NO:1696), TGAGAGCGGATGAGGTTTTGGGGGAGT (SEQ ID NO:1697), AGTGAAGGCGGCGTTTGTGTCGTAGTC (SEQ ID NO:1698), AGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1699), GAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1700), TGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1701), GTGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1702), TGTGAGGAACGCGGAGGTTAGTTTGGT (SEQ ID NO:1703)
Target180	chr2:31805579-31805627	GGAGTGAAGGCGGCGTTTGTGTCGTAG (SEQ ID NO:1704), GTTTTGGGGGAGTGAAGGCGGCGTTTG (SEQ ID NO:1705), AGTGAAGGCGGCGTTTGTGTCGTAGTC (SEQ ID NO:1706), GAGTGAAGGCGGCGTTTGTGTCGTAGT (SEQ ID NO:1707), GGGAGTGAAGGCGGCGTTTGTGTCGTA (SEQ ID NO:1708), TCGGGCGGTTTAGTGTAGCGTATTGTT (SEQ ID NO:1709), TTGCGGGCGTTTAGTGTAGCGTATTGTT (SEQ ID NO:1710), TCGGGCGGTTTAGTGTAGCGTATTGTT (SEQ ID NO:1711), TTGCGGGCGTTTAGTGTAGCGTATTGTT (SEQ ID NO:1712), GCGGGCGTTTAGTGTAGCGTATTGTT (SEQ ID NO:1713)
Target181	chr2:31805639-31805672	GGACGTCGGGAGTAGGGTAGTGCCTTG (SEQ ID NO:1714), TTTGGACGTCGGGAGTAGGGTAGTGC (SEQ ID NO:1715), GACGTCGGGAGTAGGGTAGTGCCTTG (SEQ ID NO:1716), TGGACGTCGGGAGTAGGGTAGTGCCTT (SEQ ID NO:1717), TTGGACGTCGGGAGTAGGGTAGTGCCTT (SEQ ID NO:1718), GGTGTTTCGGGGATTTCGTTTCGTA (SEQ ID NO:1719), GGTGTTTCGGGGATTTCGTTTCGTT (SEQ ID NO:1720), GGTGTTTCGGGGATTTCGTTTCGTT (SEQ ID NO:1721), TGTTCGGGGATTTCGTTTCGTT (SEQ ID NO:1722), CGGTGTTTCGGGGATTTCGTTTCGTT (SEQ ID NO:1723)
Target182	chr2:31805762-31805779	GGAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1724), GGGTAGTGCCTTGTATTGGGCGTTTGT (SEQ ID NO:1725), AGGGTAGTGCCTTGTATTGGGCGTTTGT (SEQ ID NO:1726), GAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1727), GGAGAGGGGTTGTCGGGCGAGGATTT (SEQ ID NO:1728), GCGGTTATTGTTTGTAGTTTCGCTCG (SEQ ID NO:1729), GCGGTTATTGTTTGTAGTTTCGCTCGT (SEQ ID NO:1730), TCGTTTGTAGTTTCGCTCGTTTGGT (SEQ ID NO:1731), TTCGTTTGTAGTTTCGCTCGTTTGGT (SEQ ID NO:1732), CGCTCGTTTGGTTTGTAGGAGTTGT (SEQ ID NO:1733)
Target183	chr2:31805785-31805818	GGAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1734), GAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1735), GGAGAGGGGTTGTCGGGCGAGGATTT (SEQ ID NO:1736), GGAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1737), GAAGAGGAGAGGGGTTGTCGGGCGAG (SEQ ID NO:1738), TGGGGTATTGTTTGTACGTCGCGAA (SEQ ID NO:1739), TTGGGGTATTGTTTGTACGTCGCGA (SEQ ID NO:1740), TGGGGTATTGTTTGTACGTCGCGAAGT (SEQ ID NO:1741), GGGGTATTGTTTGTACGTCGCGAAGT (SEQ ID NO:1742), TGGGGTATTGTTTGTACGTCGCGAAG (SEQ ID NO:1743)
Target184	chr2:31805820-31805872	GGAGAGGGGTTGTCGGGCGAGGATTTT (SEQ ID NO:1744), TAGGAATTAGGCGGCGGGTTGGTAG (SEQ ID NO:1745), TTTGTAGGAATTAGGCGGCGGGTTG (SEQ ID NO:1746), GTAGGAATTAGGCGGCGGGTTGGTA (SEQ ID NO:1747), TTTTGTAGGAATTAGGCGGCGGGTT (SEQ ID NO:1748), TGGGGTATTGTTTGTACGTCGCGAA (SEQ ID NO:1749), TTGGGGTATTGTTTGTACGTCGCGA (SEQ ID NO:1750), CGAGGAATACGCGCGATGTAGGTTTA (SEQ ID NO:1751), TGGGGTATTGTTTGTACGTCGCGAAGT (SEQ ID NO:1752), GGGGTATTGTTTGTACGTCGCGAAGT (SEQ ID NO:1753)
Target185	chr2:31805886-31805916	TAGGAATTAGGCGGCGGGTTGGTAG (SEQ ID NO:1754), TTTGTAGGAATTAGGCGGCGGGTTG (SEQ ID NO:1755), GTAGGAATTAGGCGGCGGGTTGGTA (SEQ ID NO:1756), TTTTGTAGGAATTAGGCGGCGGGTT (SEQ ID NO:1757), TTTTGTAGGAATTAGGCGGCGGGTT (SEQ ID NO:1758), CGAGGAATACGCGCGATGTAGGTTTA (SEQ ID NO:1759), ACGGCGCGATGTAGGTTTGTAGTTAGT (SEQ ID NO:1760), CGAGGAATACGCGCGATGTAGGTTT (SEQ ID NO:1761), CGAGGAATACGCGCGATGTAGGTTT (SEQ ID NO:1762), CGAGGAATACGCGCGATGTAGGTTT (SEQ ID NO:1763)

Figure 5 (Table 1)

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Target186	chr2:38301518-38301736	GCGGTGGATAGGGTGTGTTTGGTTGGCG (SEQ ID NO:1764), GCGGTGGATAGGGTGTGTTTGGTTGGC (SEQ ID NO:1765), GCGGTGGATAGGGTGTGTTTGGTTGG (SEQ ID NO:1766), AGCGCGGTGGATAGGGTGTGTTTGGTTG (SEQ ID NO:1767), GCGGTGGATAGGGTGTGTTTGGTTGGCGT (SEQ ID NO:1768), GCGCGCGTTGGATTGGAGAACGTAT (SEQ ID NO:1769), CGGAAAAGAAGGCGGTGCGGGATTCTG (SEQ ID NO:1770), TTGCGAAAAGAAGGCGGTGCGGGATT (SEQ ID NO:1771), TTTGCGAAAAGAAGGCGGTGCGGGAT (SEQ ID NO:1772), TTTGCGAAAAGAAGGCGGTGCGGGA (SEQ ID NO:1773)
Target187	chr2:38301748-38301774	TGTTGAAGTTGCGGTTGAGTTGTTTGA (SEQ ID NO:1774), TGTTGAAGTTGCGGTTGAGTTGTTTGA (SEQ ID NO:1775), TTGTTGAAGTTGCGGTTGAGTTGTTTGA (SEQ ID NO:1776), GTTGTGAAGTTGCGGTTGAGTTGTTTGA (SEQ ID NO:1777), AGTTGTGAAGTTGCGGTTGAGTTGTTTGA (SEQ ID NO:1778), GCGGGTAGTTTGGTGGACGTGATGTTT (SEQ ID NO:1779), GTACGGTGGGCGCGGGTAGTTTGGTG (SEQ ID NO:1780), GTACGGTGGGCGCGGGTAGTTTGGTG (SEQ ID NO:1781), TACGGTGGGCGCGGGTAGTTTGGTG (SEQ ID NO:1782), GTACGGTGGGCGCGGGTAGTTTGGT (SEQ ID NO:1783)
Target188	chr2:38301867-38301884	CGGTGCGTATCGGGTTGGGGAAGTATT (SEQ ID NO:1784), CGGTGCGTATCGGGTTGGGGAAGTATTG (SEQ ID NO:1785), CGGTGCGTATCGGGTTGGGGAAGTATTG (SEQ ID NO:1786), GGTGCGTATCGGGTTGGGGAAGTATTG (SEQ ID NO:1787), GGTGCGTATCGGGTTGGGGAAGTATTG (SEQ ID NO:1788), GCGAGTTGGTGGCGTTGTTGGTG (SEQ ID NO:1789), GCGAGTTGGTGGCGTTGTTGGTG (SEQ ID NO:1790), CGAGTTGGTGGCGTTGTTGGTG (SEQ ID NO:1791), CGTTATGAGTGTCTGTGTTTGGTTGT (SEQ ID NO:1792), CGTTATGAGTGTCTGTGTTTGGTTGT (SEQ ID NO:1793)
Target189	chr2:38301901-38301923	GGGGTCGTCGTGTTGTAGCGGTAGTC (SEQ ID NO:1794), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1795), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1796), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1797), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1798), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1799), TTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1800), TCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1801), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1802), TTTTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1803)
Target190	chr2:38301931-38301959	GGGGTCGTCGTGTTGTAGCGGTAGTC (SEQ ID NO:1804), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1805), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1806), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1807), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1808), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1809), TTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1810), TCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1811), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1812), TTTTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1813)
Target191	chr2:38301974-38301983	GGGGTCGTCGTGTTGTAGCGGTAGTC (SEQ ID NO:1814), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1815), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1816), CGGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1817), GGGGTCGTCGTGTTGTAGCGGTAGT (SEQ ID NO:1818), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1819), TTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1820), TCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1821), TTCGAGGGTTACGTGTTGAGCGAGGCG (SEQ ID NO:1822), TTTTCGAGGGTTACGTGTTGAGCGAGGC (SEQ ID NO:1823)
Target192	chr2:45029057-45029072	GCGGTCGTTTGGGCGTGATTTTTTGGT (SEQ ID NO:1824), GGTGCGGTCGTTTGGGCGTGATTTTTT (SEQ ID NO:1825), TGCGGTCGTTTGGGCGTGATTTTTTGG (SEQ ID NO:1826), CGGTGCGGTCGTTTGGGCGTGATTTTTT (SEQ ID NO:1827), AGGGGCGTAGAGGGAAGGATTAGCGTT (SEQ ID NO:1828), GGAAAGGGCGGTGGTTGTGGGTAAAGC (SEQ ID NO:1829), GGGCGGTGGTTGTGGGTAAAGCGTTTT (SEQ ID NO:1830), GAAAGGGCGGTGGTTGTGGGTAAAGCG (SEQ ID NO:1831), AGGGGCGGTGGTTGTGGGTAAAGCGTTT (SEQ ID NO:1832), AAGGGCGGTGGTTGTGGGTAAAGCGTT (SEQ ID NO:1833)
Target193	chr2:45029106-45029129	AGGGGCGTAGAGGGAAGGATTAGCGTT (SEQ ID NO:1834), TGTTGGGGTTGTAGGGGGTTCGTTTT (SEQ ID NO:1835), TTGGTTGGGGTTGTAGGGGGTTCGTTTT (SEQ ID NO:1836), TAGGGGCGTAGAGGGAAGGATTAGCGT (SEQ ID NO:1837), TGTTAGGGGGTTCGTTTTTGTAGGGGCGT (SEQ ID NO:1838), GGAAAGGGCGGTGGTTGTGGGTAAAGC (SEQ ID NO:1839), GCGCGGTTTTCTAGGAGAGAAGAGGA (SEQ ID NO:1840), GGGCGGTGGTTGTGGGTAAAGCGTTTT (SEQ ID NO:1841), GAAAGGGCGGTGGTTGTGGGTAAAGCG (SEQ ID NO:1842), AGGGAGAAGAGGAGGAGAGTCGGCGTC (SEQ ID NO:1843)
Target194	chr2:45029176-45029190	AGAGCGAGGTTAAGGTTTGGGGGTAGT (SEQ ID NO:1844), GAGAGCGAGGTTAAGGTTTGGGGGTAGT (SEQ ID NO:1845), GAGAGCGAGGTTAAGGTTTGGGGGTAGT (SEQ ID NO:1846), GAGCGAGGTTAAGGTTTGGGGGTAGT (SEQ ID NO:1847), AGAGCGAGGTTAAGGTTTGGGGGTAGT (SEQ ID NO:1848), GCGCGGTTTTCTAGGAGAGAAGAGGA (SEQ ID NO:1849), CGGCGGTGGTTAGTCGTTGGGTTTCG (SEQ ID NO:1850), AGGGAGAAGAGGAGGAGAGTCGGCGTC (SEQ ID NO:1851), TTTTATAGGATTGGGTTCCGGGCGGCGC (SEQ ID NO:1852), TAGGGAGAAGAGGAGGAGAGTCGGCGT (SEQ ID NO:1853)

Figure 5 (Table 1)

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Target195	chr2:45227645-45227657	GGGTGTCGGTTTGGGGGTTTTGGATTGG (SEQ ID NO:1854), GGTGTCGGTTTGGGGGTTTTGGATTGGT (SEQ ID NO:1855), GGTGTCGGTTTGGGGGTTTTGGATTGG (SEQ ID NO:1856), GGTGTCGGTTTGGGGGTTTTGGATTG (SEQ ID NO:1857), GTGTCGGTTTGGGGGTTTTGGATTGGT (SEQ ID NO:1858), GGGTTTTGAGGTTAGGGGAGCGTGGGA (SEQ ID NO:1859), TTTCGGTTCGTTGAGTCGCGGTTTGG (SEQ ID NO:1860), TGGGTTTTGAGGTTAGGGGAGCGTGGG (SEQ ID NO:1861), TTCGGTTCGTTGAGTCGCGGTTTGGT (SEQ ID NO:1862), TCGGTTTCGTTGAGTCGCGGTTTGGTC (SEQ ID NO:1863)
Target196	chr2:45227701-45227718	GCGTTTTGGGTTTTAGGTTTTTGTTCACGGT (SEQ ID NO:1864), AGCGTTTTGGGTTTTAGGTTTTTGTTCACGGT (SEQ ID NO:1865), GCGTTTTGGGTTTTAGGTTTTTGTTCACGGT (SEQ ID NO:1866), TGGGTTTTAGGTTTTTGTTCACGGTACGGT (SEQ ID NO:1867), AAGCGTTTTGGGTTTTAGGTTTTTGTTCACGG (SEQ ID NO:1868), GGGTTTTGAGGTTAGGGGAGCGTGGGA (SEQ ID NO:1869), TGGGTTTTGAGGTTAGGGGAGCGTGGG (SEQ ID NO:1870), GGCGGGGGCGGTTTTTATAGGAGAGTA (SEQ ID NO:1871), GGGTTTTGAGGTTAGGGGAGCGTGGGAT (SEQ ID NO:1872), GCGGGGGCGGTTTTTATAGGAGAGTAA (SEQ ID NO:1873)
Target197	chr2:45227791-45227834	GGCGGGGGCGGTTTTTATAGGAGAGTA (SEQ ID NO:1874), GCGGGGGCGGTTTTTATAGGAGAGTAA (SEQ ID NO:1875), GGCGGGGGCGGTTTTTATAGGAGAGTAA (SEQ ID NO:1876), GGCGGGGGCGGTTTTTATAGGAGAGT (SEQ ID NO:1877), GCGGGGGCGGTTTTTATAGGAGAGTAAT (SEQ ID NO:1878)
Target198	chr2:45227917-45227934	TTTTGGAGTCGGTTTCCGGTGAGGTCG (SEQ ID NO:1879), TTTTGGAGTCGGTTTCCGGTGAGGTCG (SEQ ID NO:1880), TTTGGAGTCGGTTTCCGGTGAGGTCG (SEQ ID NO:1881), TTCGTCGGGTAAGTGGGAGTTGTTGT (SEQ ID NO:1882), TTTTGGAGTCGGTTTCCGGTGAGGTC (SEQ ID NO:1883), TCGGAGAGGTCGGTATAAAGGCGGATA (SEQ ID NO:1884), TCGGAGAGGTCGGTATAAAGGCGGAT (SEQ ID NO:1885), TCGGAGAGGTCGGTATAAAGGCGGATAT (SEQ ID NO:1886), CGGAGAGGTCGGTATAAAGGCGGATATG (SEQ ID NO:1887), CGGAGAGGTCGGTATAAAGGCGGATATGA (SEQ ID NO:1888)
Target199	chr2:45227960-45228019	GGAGTCGGTTTCCGGTGAGGTCGGTAT (SEQ ID NO:1889), TTTTGGAGTCGGTTTCCGGTGAGGTCG (SEQ ID NO:1890), TTTGGAGTCGGTTTCCGGTGAGGTCGG (SEQ ID NO:1891), GGAGTCGGTTTCCGGTGAGGTCGGTA (SEQ ID NO:1892), TGGAGTCGGTTTCCGGTGAGGTCGGTA (SEQ ID NO:1893), TCGGAGAGGTCGGTATAAAGGCGGATA (SEQ ID NO:1894), TCGGAGAGGTCGGTATAAAGGCGGAT (SEQ ID NO:1895), TCGGAGAGGTCGGTATAAAGGCGGATAT (SEQ ID NO:1896), CGGAGAGGTCGGTATAAAGGCGGATATG (SEQ ID NO:1897), CGGAGAGGTCGGTATAAAGGCGGATATGA (SEQ ID NO:1898)
Target200	chr2:45231539-45231586	GGGGGCGTTGTAGGTTAATTGATAGTTACGG (SEQ ID NO:1899), AGGGGGCGTTGTAGGTTAATTGATAGTTACGG (SEQ ID NO:1900), GGGGGCGTTGTAGGTTAATTGATAGTTACGGA (SEQ ID NO:1901), AGGGGGCGTTGTAGGTTAATTGATAGTTACGGA (SEQ ID NO:1902), AGGGGGCGTTGTAGGTTAATTGATAGTTACG (SEQ ID NO:1903)
Target201	chr2:45231697-45231725	GGTCGTCGGTTCCGGTCGTTTGTAGTTCG (SEQ ID NO:1904), GTCGTCGGTTCCGGTCGTTTGTAGTTCG (SEQ ID NO:1905), GGTGTCGGTTCCGGTCGTTTGTAGTTC (SEQ ID NO:1906), GGTGTCGGTTCCGGTCGTTTGTAGTTC (SEQ ID NO:1907), TCGTCGGTTCCGGTCGTTTGTAGTTCG (SEQ ID NO:1908), AAATCGGATTTAGGGCGGTCGGGTCGG (SEQ ID NO:1909), AATCGGATTTAGGGCGGTCGGGTCGG (SEQ ID NO:1910), TTTCGGTGTTCGTCGTGTGAGTGGAGT (SEQ ID NO:1911), AGTTTCGGTGTTCGTCGTGTGAGTGGGA (SEQ ID NO:1912), GTTTCGGTGTTCGTCGTGTGAGTGGAGT (SEQ ID NO:1913)
Target202	chr2:45231782-45232069	GGTCGTCGGTTCCGGTCGTTTGTAGTTCG (SEQ ID NO:1914), TCGTCGGTTCCGGTCGTTTGTAGTTCGA (SEQ ID NO:1915), GTCGTCGGTTCCGGTCGTTTGTAGTTCG (SEQ ID NO:1916), GGTGTCGGTTCCGGTCGTTTGTAGTTC (SEQ ID NO:1917), GTCGTCGGTTCCGGTCGTTTGTAGTTCGA (SEQ ID NO:1918), TCGTTGTAGAAGCGGGGAGGGGTAGT (SEQ ID NO:1919), TTCGTTGTAGAAGCGGGGAGGGGTAGT (SEQ ID NO:1920), TTTCGGTGTTCGTCGTGTGAGTGGAGT (SEQ ID NO:1921), AGTTTCGGTGTTCGTCGTGTGAGTGGGA (SEQ ID NO:1922), GTTTCGGTGTTCGTCGTGTGAGTGGAGT (SEQ ID NO:1923)
Target203	chr2:45232071-45232426	GCGTCGTTGGTGTGGGGAGGGTAGTAG (SEQ ID NO:1924), CGTCGTTGGTGTGGGGAGGGTAGTAGG (SEQ ID NO:1925), GTCGTTGGTGTGGGGAGGGTAGTAGG (SEQ ID NO:1926), GCGTCGTTGGTGTGGGGAGGGTAGTA (SEQ ID NO:1927), CGCGTCGTTGGTGTGGGGAGGGTAGTA (SEQ ID NO:1928), ATTCGGGTGGGTCGTTTGTGTTGGCG (SEQ ID NO:1929), TTTCGGGTGGGTCGTTTGTGTTGGCGA (SEQ ID NO:1930), GCGGGTCGGAGGTAGTGTGTTTGA (SEQ ID NO:1931), TCGTTGTAGAAGCGGGGAGGGGTAGT (SEQ ID NO:1932), TTCGTTGTAGAAGCGGGGAGGGGTAGT (SEQ ID NO:1933)
Target204	chr2:45232433-45232535	CGGTGTGGCGGGGTTTCGTTAAGAGAG (SEQ ID NO:1934), GCGGTGTGGCGGGGTTTCGTTAAGAGA (SEQ ID NO:1935), GCGGTGTGGCGGGGTTTCGTTAAGAG (SEQ ID NO:1936), CGGTGTGGCGGGGTTTCGTTAAGAGAGA (SEQ ID NO:1937), GGTGTGGCGGGGTTTCGTTAAGAGAGA (SEQ ID NO:1938), TGTGGGTAGTGGGAGTTGTAGGTGTTAGT (SEQ ID NO:1939), CGTTTATGTGGGTTAGTGGGAGTTGTAGGT (SEQ ID NO:1940), TCGTTTATGTGGGTTAGTGGGAGTTGTAGG (SEQ ID NO:1941), TCGTTTATGTGGGTTAGTGGGAGTTGTAGGT (SEQ ID NO:1942), TGTGGGTAGTGGGAGTTGTAGGTGTTAGT (SEQ ID NO:1943)

Figure 5 (Table 1)

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Target205	chr2:45232541-45232569	CGAGGCGGCGTTTAGGGGTTTTGTGG (SEQ ID NO:1944), CGGTGTGGCGGGGTTTCGTTAAGAGAG (SEQ ID NO:1945), GAGGCGGCGTTTAGGGGTTTTGTGGC (SEQ ID NO:1946), GCGGTGTGGCGGGGTTTCGTTAAGAGA (SEQ ID NO:1947), GCGGTGTGGCGGGGTTTCGTTAAGAG (SEQ ID NO:1948), TGTGGGTTAGTGGGAGTTGTAGGTGTAGT (SEQ ID NO:1949), CGTTTATGTGGGTTAGTGGGAGTTGTAGGT (SEQ ID NO:1950), TCGTTTATGTGGGTTAGTGGGAGTTGTAGG (SEQ ID NO:1951), TCGTTTATGTGGGTTAGTGGGAGTTGTAGGT (SEQ ID NO:1952), TGTGGGTTAGTGGGAGTTGTAGGTGTAGTT (SEQ ID NO:1953)
Target206	chr2:47270902-47271041	AGGATGTGGTCGGGTTGAGAAAATTCGT (SEQ ID NO:1954), TGGTCGGGTTGAGAAAATTCGTTTTGGGT (SEQ ID NO:1955), GGTTCGGGTTGAGAAAATTCGTTTTGGG (SEQ ID NO:1956), TGGTCGGGTTGAGAAAATTCGTTTTGGG (SEQ ID NO:1957), GTGGTCGGGTTGAGAAAATTCGTTTTGGG (SEQ ID NO:1958), TGAGGGTCGGAATGGGTTTAGGGTAGA (SEQ ID NO:1959), TTTGAGGGTCGGAATGGGTTTAGGGT (SEQ ID NO:1960), TTGAGGGTCGGAATGGGTTTAGGGTAGA (SEQ ID NO:1961), GGGTCGGAATGGGTTTAGGGTAGATTG (SEQ ID NO:1962), TGAGGGTCGGAATGGGTTTAGGGTAGAT (SEQ ID NO:1963)
Target207	chr2:66666251-66666865	TTGGGTTTGGGGAGGGGAGGAAAAG (SEQ ID NO:1964), TGGATGTAGTGGAGGGGACGAGGGT (SEQ ID NO:1965), AGGGGAATGTGCGTGGAGTTGAGGAGG (SEQ ID NO:1966), AGGGAGGGGAATGTGCGTGGAGTTGAG (SEQ ID NO:1967), CGGTTATTTGGGTTTGGGGAGGGGGA (SEQ ID NO:1968), GTTGGGGAGGGTTGGTTTTGCGGGT (SEQ ID NO:1969), GAGTTGGGGAGGGTTGGTTTTGCGGG (SEQ ID NO:1970), AGGATTCGGTGGAGGAGAAAGGCGTCG (SEQ ID NO:1971), TTCGGGGATTTCGGTGGTAGGCGTTT (SEQ ID NO:1972), TAGGTTGGGGGATTTCGGTGGTAGGC (SEQ ID NO:1973)
Target208	chr2:69026808-69027254	GTCGCGGTGGGAATTTGGGTTGTGGTTT (SEQ ID NO:1974), GATGTCGCGGTGGGAATTTGGGTTGTGG (SEQ ID NO:1975), GGATGTGCGGTGGGAATTTGGGTTGTG (SEQ ID NO:1976), CGAGGGGAAGTGTGGGGGAAGAAGGG (SEQ ID NO:1977), GGTTCGGGAGGGTTGGGGTAGGTGTAGA (SEQ ID NO:1978), TGGGGATGTGAGGTATGTTAGGGTCGA (SEQ ID NO:1979), TTGGGGATGTGAGGTATGTTAGGGTCG (SEQ ID NO:1980), TGGGGATGTGAGGTATGTTAGGGTCGAA (SEQ ID NO:1981), TTGGGGATGTGAGGTATGTTAGGGTCGA (SEQ ID NO:1982), GGGGATGTGAGGTATGTTAGGGTCGAA (SEQ ID NO:1983)
Target209	chr2:71115936-71115963	TATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1984), ATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1985), TTATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1986), TGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1987), ATTATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1988)
Target210	chr2:71115968-71116031	CGCGTGGAGGGTTTCGGTCGGTATTC (SEQ ID NO:1989), TATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1990), ATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1991), TTATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1992), CGCGTGGAGGGTTTCGGTCGGTATT (SEQ ID NO:1993)
Target211	chr2:71116036-71116068	CGCGTGGAGGGTTTCGGTCGGTATTC (SEQ ID NO:1994), TATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1995), GCGGGAGGTTGTATCGGGAAGTTTAA (SEQ ID NO:1996), GCGGGAGGTTGTATCGGGAAGTTTAA (SEQ ID NO:1997), ATGGGTTTTGGTCGGGAGGAATGAGC (SEQ ID NO:1998)
Target212	chr2:71116096-71116227	GCGGTCGTTAGAGGGCGCGTTTATAT (SEQ ID NO:1999), GCGGTCGTTAGAGGGCGCGTTTATATT (SEQ ID NO:2000), CGCGTTTCGGAATTTGGGTTTTTCGGTGT (SEQ ID NO:2001), CGCGTTTCGGAATTTGGGTTTTTCGGTG (SEQ ID NO:2002), GCGGTCGTTAGAGGGCGCGTTTATA (SEQ ID NO:2003), TCGGATTGGGTTTCGGGAAAGGTAGCGG (SEQ ID NO:2004), GGATTGGGTTTCGGGAAAGGTAGCGGGT (SEQ ID NO:2005), GGGTTTCGGGAAAGGTAGCGGGTATTGC (SEQ ID NO:2006), CGGATTGGGTTTCGGGAAAGGTAGCGGG (SEQ ID NO:2007), GGGTTTCGGATTGGGTTTCGGGAAAGGT (SEQ ID NO:2008)
Target213	chr2:71116233-71116330	CGGGGATTTTGATTCGCGCGGATTTC (SEQ ID NO:2009), CGGGGATTTTGATTCGCGCGGATTTC (SEQ ID NO:2010), TGGGTTTTTCGGTGTAGTTTTTCGCGA (SEQ ID NO:2011), CGGGGATTTTGATTCGCGCGGATT (SEQ ID NO:2012), TTGGGTTTTTCGGTGTAGTTTTTCGCGA (SEQ ID NO:2013), GAGGTTTCGCGAGGTTAAGGTTTTTCG (SEQ ID NO:2014), AGGTTTCGCGAGGTTAAGGTTTTTCG (SEQ ID NO:2015), AGGGAGAGTTAAGTAAGGCGACGAGGT (SEQ ID NO:2016), GGGAGAGTTAAGTAAGGCGACGAGGT (SEQ ID NO:2017), AGGGAGAGTTAAGTAAGGCGACGAGGT (SEQ ID NO:2018)
Target214	chr2:71116334-71116353	CGGGGATTTTGATTCGCGCGGATTTC (SEQ ID NO:2019), CGGGGATTTTGATTCGCGCGGATTTC (SEQ ID NO:2020), CGGGGATTTTGATTCGCGCGGATT (SEQ ID NO:2021), CGGGGATTTTGATTCGCGCGGATT (SEQ ID NO:2022), CGGGGATTTTGATTCGCGCGGA (SEQ ID NO:2023), CGGGAAGTTTTATTTGGTTATAGTCGCGCG (SEQ ID NO:2024), CGGGAAGTTTTATTTGGTTATAGTCGCGCGA (SEQ ID NO:2025), GCGGAGAGAGGCGCGGGG (SEQ ID NO:2026), GGGGAAGTTTTATTTGGTTATAGTCGCGCGA (SEQ ID NO:2027), AGGCGGGAAGTTTTATTTGGTTATAGTCGCG (SEQ ID NO:2028)

Figure 5 (Table 1)

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Target215	chr2:71116373-71116394	GCGGTAATTTTCGTTTCGGTTTTGGCGCG (SEQ ID NO:2029), CGCGGTAATTTTCGTTTCGGTTTTGGCGCG (SEQ ID NO:2030), GCGGTAATTTTCGTTTCGGTTTTGGCGCG (SEQ ID NO:2031), CGGTAATTTTCGTTTCGGTTTTGGCGCG (SEQ ID NO:2032), CGCGGTAATTTTCGTTTCGGTTTTGGCGCG (SEQ ID NO:2033), CGGGTTGGGGATAATGCGGGGGTAGTA (SEQ ID NO:2034), CGGGTTGGGGATAATGCGGGGGTAGT (SEQ ID NO:2035), CGGGTTGGGGATAATGCGGGGGTAGTAG (SEQ ID NO:2036), GGGTTGGGGATAATGCGGGGGTAGTAGT (SEQ ID NO:2037), GGGTTGGGGATAATGCGGGGGTAGTAG (SEQ ID NO:2038)
Target216	chr2:71116407-71116485	TCGCGCGGTTGTGATTAGGATAAGGGT (SEQ ID NO:2039), CGTTCGCGCGGTTGTGATTAGGATAAGGG (SEQ ID NO:2040), CGCGCGGTTGTGATTAGGATAAGGGTT (SEQ ID NO:2041), TCGCGCGGTTGTGATTAGGATAAGGGTT (SEQ ID NO:2042), TTCGCGCGGTTGTGATTAGGATAAGGGT (SEQ ID NO:2043), CGGGTTGGGGATAATGCGGGGGTAGTA (SEQ ID NO:2044), TTTGTTGGGTTTTGGGGGTGCGAGCG (SEQ ID NO:2045), ACGTTTTGTTGGGTTTTGGGGGTGCG (SEQ ID NO:2046), TTTGTTGGGTTTTGGGGGTGCGAGC (SEQ ID NO:2047), CGGGTTGGGGATAATGCGGGGGTAGT (SEQ ID NO:2048)
Target217	chr2:71116500-71116531	TCGCGCGGTTGTGATTAGGATAAGGGT (SEQ ID NO:2049), CGTTCGCGCGGTTGTGATTAGGATAAGGG (SEQ ID NO:2050), CGCGCGGTTGTGATTAGGATAAGGGTT (SEQ ID NO:2051), TCGCGCGGTTGTGATTAGGATAAGGGTT (SEQ ID NO:2052), TTCGCGCGGTTGTGATTAGGATAAGGGT (SEQ ID NO:2053), TTTGTTGGGTTTTGGGGGTGCGAGCG (SEQ ID NO:2054), ACGTTTTGTTGGGTTTTGGGGGTGCG (SEQ ID NO:2055), TTTGTTGGGTTTTGGGGGTGCGAGC (SEQ ID NO:2056), ACGTTTTGTTGGGTTTTGGGGGTGCGA (SEQ ID NO:2057), CGTTTTGTTGGGTTTTGGGGGTGCGA (SEQ ID NO:2058)
Target218	chr2:73147283-73147306	GGTTCGAGGAGAGGGCGGGGTC (SEQ ID NO:2059), GGTTCGAGGAGAGGGCGGGGT (SEQ ID NO:2060), GGGTTCGAGGAGAGGGCGGGGTC (SEQ ID NO:2061), CGAGTCGGTATTTTGGGTCGATTTTCGG (SEQ ID NO:2062), CGAGTCGGTATTTTGGGTCGATTTTCGGT (SEQ ID NO:2063), AGGAAGCGCGGTAATTTTAAAGAGGGT (SEQ ID NO:2064), GCGGCGGTAATTTTAAAGAGGGTTTTGCG (SEQ ID NO:2065), AGCGGCGGTAATTTTAAAGAGGGTTTTGCG (SEQ ID NO:2066), GCGGCGGTAATTTTAAAGAGGGTTTTGCGA (SEQ ID NO:2067), AGCGGCGGTAATTTTAAAGAGGGTTTTGCGA (SEQ ID NO:2068)
Target219	chr2:73147350-73147383	AGGGTCGGGGCGTTTTGGAGAGAAATT (SEQ ID NO:2069), GAGGGTCGGGGCGTTTTGGAGAGAAAT (SEQ ID NO:2070), GGGTCGGGGCGTTTTGGAGAGAAATTT (SEQ ID NO:2071), AGGGTCGGGGCGTTTTGGAGAGAAATTT (SEQ ID NO:2072), AGGGTCGGGGCGTTTTGGAGAGAAAT (SEQ ID NO:2073), AGGAAGCGCGGTAATTTTAAAGAGGGT (SEQ ID NO:2074), GCGGCGGTAATTTTAAAGAGGGTTTTGCG (SEQ ID NO:2075), AGCGGCGGTAATTTTAAAGAGGGTTTTGCG (SEQ ID NO:2076), GCGGCGGTAATTTTAAAGAGGGTTTTGCGA (SEQ ID NO:2077), AGCGGCGGTAATTTTAAAGAGGGTTTTGCGA (SEQ ID NO:2078)
Target220	chr2:73147432-73147445	GGGTCGGGGCGTTTTGGAGAGAAATTT (SEQ ID NO:2079), TGAGCGTTTTTAGTTAGGCGAGGCGGA (SEQ ID NO:2080), GGGTCGGGGCGTTTTGGAGAGAAATTT (SEQ ID NO:2081), TTGAGCGTTTTTAGTTAGGCGAGGCGG (SEQ ID NO:2082), GGGTCGGGGCGTTTTGGAGAGAAATTTA (SEQ ID NO:2083), TCGCGTTTAGATTGCGTTTTTGAAGGAAAA (SEQ ID NO:2084), TTCGCGTTTAGATTGCGTTTTTGAAGGAAAA (SEQ ID NO:2085), TTCGCGTTTAGATTGCGTTTTTGAAGGAA (SEQ ID NO:2086), TTTTCGCGTTTAGATTGCGTTTTTGAAGGAA (SEQ ID NO:2087), TTCGCGTTTAGATTGCGTTTTTGAAGGAAAA (SEQ ID NO:2088)
Target221	chr2:73147537-73147621	TGGACGCGGAGATGGAGTTAAGTGTTGGT (SEQ ID NO:2089), GGACGCGGAGATGGAGTTAAGTGTTGGT (SEQ ID NO:2090), TGGACGCGGAGATGGAGTTAAGTGTTGG (SEQ ID NO:2091), GGACGCGGAGATGGAGTTAAGTGTTGGT (SEQ ID NO:2092), TTGGACGCGGAGATGGAGTTAAGTGTTGG (SEQ ID NO:2093), AGGTTTGGTCGGGATTGAGGGCGTAG (SEQ ID NO:2094), GGTTCGTCGGGATTGAGGGCGTAGA (SEQ ID NO:2095), GAGGTTTGGTCGGGATTGAGGGCGTA (SEQ ID NO:2096), GCGGTAGAGTCGTCGGGGAGCGTATTC (SEQ ID NO:2097), TAGAGGTTTGGTCGGGATTGAGGGCG (SEQ ID NO:2098)
Target222	chr2:73147668-73147679	AGGTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2099), GGTTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2100), AGGTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2101), CGGTTAGGTTTTTGGGTTGGGAGTCGA (SEQ ID NO:2102), TCGGTTAGGTTTTTGGGTTGGGAGTCG (SEQ ID NO:2103), TCGTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2104), TTCGTTGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2105), TTCGTTGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2106), CGTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2107), TTTTCGTTGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2108)
Target223	chr2:73147687-73147711	AGGTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2109), GGTTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2110), AGGTTTTTGGGTTGGGAGTCGAGTCGT (SEQ ID NO:2111), CGGTTAGGTTTTTGGGTTGGGAGTCGA (SEQ ID NO:2112), TCGGTTAGGTTTTTGGGTTGGGAGTCG (SEQ ID NO:2113), GCGTCGTTAAGCGTTGCGTAGAGAGC (SEQ ID NO:2114), TCGTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2115), TTCGTTGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2116), TTCGTTGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2117), CGTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2118)

Figure 5 (Table 1)

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Target224	chr2:73147720-73147968	ATCGAGGCGTTGGAAGGGGAAAAGCGA (SEQ ID NO:2119), CGAGGCGTTGGAAGGGGAAAAGCGAAT (SEQ ID NO:2120), AATCGAGGCGTTGGAAGGGGAAAAGCG (SEQ ID NO:2121), TCGAGGCGTTGGAAGGGGAAAAGCGAA (SEQ ID NO:2122), CGAGGCGTTGGAAGGGGAAAAGCGAATG (SEQ ID NO:2123), GCGTCGTTAAGCGTTGCGTAGAGAGC (SEQ ID NO:2124), TCGTTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2125), TTCGTTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2126), TTCGTTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2127), CGTTTCGTGTGGGTTTCGTTTGTGT (SEQ ID NO:2128)
Target225	chr2:73148052-73148084	CGGGTTTAGGAGTAACGTTTGGAGGGGG (SEQ ID NO:2129), CGGGTTTAGGAGTAACGTTTGGAGGGGGT (SEQ ID NO:2130), TCGGGTTTAGGAGTAACGTTTGGAGGGGG (SEQ ID NO:2131), GGGAGGAGTCGACGAAGATTAGGAGTGGG (SEQ ID NO:2132), GGGAGGAGTCGACGAAGATTAGGAGTGG (SEQ ID NO:2133), GTCGGTTAGGGGTTTAGGGTCGGACGG (SEQ ID NO:2134), CGTCGTCGGTTAGGGGTTTAGGGTCGG (SEQ ID NO:2135), AGGAGAGGGAGAGGTAGGATAGGCGGC (SEQ ID NO:2136), GGGAGAGGTAGGATAGGCGGCGGAGAT (SEQ ID NO:2137), ACGGTTGGGCGGAGGGTTTATAGGGTTA (SEQ ID NO:2138)
Target226	chr2:74725894-74726747	TAGAGGGTGTTCGGGGATTATGCGCG (SEQ ID NO:2139), GCGGTTTCGGTTGTTTCGTTGCGTTAGGT (SEQ ID NO:2140), GGGGAGGATTAGGGTGGGTGGTTTGGG (SEQ ID NO:2141), GGGGGATTATGCGCGGGGTTAGGATGT (SEQ ID NO:2142), CGGCGTAGAGGGTGTTCGGGGGATTAT (SEQ ID NO:2143), GAGGTTGGGGGTTTCGGATTGGGAGTCG (SEQ ID NO:2144), CGAGGTTGGGGGTTTCGGATTGGGAGTC (SEQ ID NO:2145), GGTGGGGGCGTAGGAGGAGGGGTATAC (SEQ ID NO:2146), AGGTTGGGGGTTTCGGATTGGGAGTCGA (SEQ ID NO:2147), AGGTGGGGGCGTAGGAGGAGGGGTATA (SEQ ID NO:2148)
Target227	chr2:74726766-74726785	GCGGTTTCGGTTGTTTCGTTGCGTTAGGT (SEQ ID NO:2149), GCGGTTTCGGTTGTTTCGTTGCGTTAGG (SEQ ID NO:2150), GGGCGGTTTCGGTTGTTTCGTTGCGTTAG (SEQ ID NO:2151), GAGTTTATGTCGGTTCGGGTTGGGGCG (SEQ ID NO:2152), GCGGTTTCGGTTGTTTCGTTGCGTTAGGTT (SEQ ID NO:2153), GGTGGGGGCGTAGGAGGAGGGGTATAC (SEQ ID NO:2154), AGGTGGGGGCGTAGGAGGAGGGGTATA (SEQ ID NO:2155), GGTGGGGGCGTAGGAGGAGGGGTATA (SEQ ID NO:2156), GAGGTGGGGGCGTAGGAGGAGGGGTAT (SEQ ID NO:2157), GTGGGGGCGTAGGAGGAGGGGTATAC (SEQ ID NO:2158)
Target228	chr2:74726809-74726893	TCGGGTCGCGGTGGATTGGAGTTTTT (SEQ ID NO:2159), TTCGGGTCGCGGTGGATTGGAGTTTT (SEQ ID NO:2160), TTTCCGGTCGCGGTGGATTGGAGTTT (SEQ ID NO:2161), ATTTCCGGTCGCGGTGGATTGGAGTT (SEQ ID NO:2162), TATTTCCGGTCGCGGTGGATTGGAGT (SEQ ID NO:2163), AGCGTTTGAGGTATGTTTCGTTTGA (SEQ ID NO:2164), TCGGTTTGATTGTGTACGGGTGTAGCGT (SEQ ID NO:2165), CGGTTTGATTGTGTACGGGTGTAGCGTT (SEQ ID NO:2166), GGTTCGGTTTGATTGTGTACGGGTGTAGCG (SEQ ID NO:2167), GGTTCGGTTTGATTGTGTACGGGTGTAGCGT (SEQ ID NO:2168)
Target229	chr2:74726908-74727022	GGTTGGGGTAGGCGCGGAGAGTAGAAG (SEQ ID NO:2169), TAGGTTGGGGTAGGCGCGGAGAGTAGA (SEQ ID NO:2170), AGGTTGGGGTAGGCGCGGAGAGTAGAA (SEQ ID NO:2171), GTTGGGGTAGGCGCGGAGAGTAGAAGT (SEQ ID NO:2172), GCGTTGCGGGGCGTTGTATCGTGTATA (SEQ ID NO:2173), AGCGTTTGAGGTATGTTTCGGTTTGA (SEQ ID NO:2174), TCGGTTTGATTGTGTACGGGTGTAGCGT (SEQ ID NO:2175), CGGTTTGATTGTGTACGGGTGTAGCGTT (SEQ ID NO:2176), GGTTCGGTTTGATTGTGTACGGGTGTAGCG (SEQ ID NO:2177), GGTTCGGTTTGATTGTGTACGGGTGTAGCGT (SEQ ID NO:2178)
Target230	chr2:85811382-85811589	GGGGTCGTTGGTATTGCGGTCGTTTCG (SEQ ID NO:2179), CGGGGTCGTTGGTATTGCGGTCGTTTC (SEQ ID NO:2180), AGGTTTTTGGGGTTCGGAGGGTTCGA (SEQ ID NO:2181), GGGTCGTTGGTATTGCGGTCGTTTCGT (SEQ ID NO:2182), CGGGGTCGTTGGTATTGCGGTCGTTT (SEQ ID NO:2183), TTTTGTTCGTCGTAGGGTTGGTCGGTT (SEQ ID NO:2184), TTTTGTTCGTCGTAGGGTTGGTCGGT (SEQ ID NO:2185), TTCGAGGAAGAGTAGGGGCGGGG (SEQ ID NO:2186), TTCGAGGAAGAGTAGGGGCGGGG (SEQ ID NO:2187), CGTTTTTTGTTTCGTCGTAGGGTTGGTCGG (SEQ ID NO:2188)
Target231	chr2:85811597-85811726	GGGGTCGTTGGTATTGCGGTCGTTTCG (SEQ ID NO:2189), CGGGGTCGTTGGTATTGCGGTCGTTTC (SEQ ID NO:2190), AGTAGCGATGGGTAGGGGTTAGGCGGG (SEQ ID NO:2191), AGTGGCGAGGGTGGGAGAGAGGAGTTT (SEQ ID NO:2192), GTAGCGATGGGTAGGGGTTAGGCGGGG (SEQ ID NO:2193), GCGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2194), GCGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2195), CGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2196), GCGTAGGAGTGGAGGGTTCGTTTCG (SEQ ID NO:2197), GGGAGTGGAGGGTTCGTTTCGTTTGT (SEQ ID NO:2198)
Target232	chr2:85811743-85812024	AGTGCGAGGGTGGGAGAGAGGAGTTT (SEQ ID NO:2199), CGGGGTCGTTAGTTTTGCGACGGGTA (SEQ ID NO:2200), AGTTTTTGCACGGGTAGAGGGCGAGTG (SEQ ID NO:2201), TAGTTTTGCGACGGGTAGAGGGCGAGT (SEQ ID NO:2202), GGTAGTTTTGCGACGGGTAGAGGGCG (SEQ ID NO:2203), GCGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2204), GCGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2205), GACGCGGAAAAGGAGGTTTAGGGAGGT (SEQ ID NO:2206), CGTAGGAGTGGAGGGTTCGTTTCGT (SEQ ID NO:2207), AGACGCGGAAAAGGAGGTTTAGGGAGGT (SEQ ID NO:2208)

Figure 5 (Table 1)

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Target233	chr2:86163587-86163632	TTGGGAGAAGGGTGTGGTTGGGGTTGC (SEQ ID NO:2209), TTTGGGAGAAGGGTGTGGTTGGGGTTG (SEQ ID NO:2210), TTTTGGGAGAAGGGTGTGGTTGGGGTT (SEQ ID NO:2211), TTTTGGGAGAAGGGTGTGGTTGGGGTT (SEQ ID NO:2212), TGGGAGAAGGGTGTGGTTGGGGTTGC (SEQ ID NO:2213), AGGAGGAATTTTGTAGATGGGGTTAGAATAGGGT (SEQ ID NO:2214), GGAGGAATTTTGTAGATGGGGTTAGAATAGGGT (SEQ ID NO:2215), AGGAGGAATTTTGTAGATGGGGTTAGAATAGGGT (SEQ ID NO:2216), TAGGAGGAATTTTGTAGATGGGGTTAGAATAGGGT (SEQ ID NO:2217), AGGAGGAATTTTGTAGATGGGGTTAGAATAGGGT (SEQ ID NO:2218)
Target234	chr2:86163860-86163938	CGGGAAGGGGTAGGAGTGGGAGGTTTT (SEQ ID NO:2219), GCGGGAAGGGGTAGGAGTGGGAGGTTTT (SEQ ID NO:2220), CGGGAAGGGGTAGGAGTGGGAGGTTTT (SEQ ID NO:2221), CGGGAAGGGGTAGGAGTGGGAGGTTTT (SEQ ID NO:2222), GCGGGAAGGGGTAGGAGTGGGAGGTTTT (SEQ ID NO:2223), CGGGAGAATGGGCGTAGTTTTTTGGTT (SEQ ID NO:2224), CGGGAGAATGGGCGTAGTTTTTTGGTT (SEQ ID NO:2225), CGGGAGAATGGGCGTAGTTTTTTGGTT (SEQ ID NO:2226), CGGGAGAATGGGCGTAGTTTTTTGGTT (SEQ ID NO:2227), TGGGCGTAGTTTTTTGGTTTTGTATGGGG (SEQ ID NO:2228)
Target235	chr2:86164076-86164203	TTAGTTTTGGTCGGGGTTGGTAGCGGG (SEQ ID NO:2229), GGGGTACGGGGAGGTGGGAGTTGATTT (SEQ ID NO:2230), GTTGTGTCGGGGTTGGTAGCGGGTAC (SEQ ID NO:2231), GTTAGGTTTTGGTCGGGGTTGGTAGCGG (SEQ ID NO:2232), AGTTAGGTTTTGGTCGGGGTTGGTAGCGG (SEQ ID NO:2233), TGTCGTGGGTTAGGGTTGGGTAAGAGT (SEQ ID NO:2234), TGTCGTGGGTTAGGGTTGGGTAAGAGT (SEQ ID NO:2235), TTGTCGGGTTAGGGTTGGGTAAGAGT (SEQ ID NO:2236), GTCGTGGGTTAGGGTTGGGTAAGAGT (SEQ ID NO:2237), TTGTCGTGGGTTAGGGTTGGGTAAGAG (SEQ ID NO:2238)
Target236	chr2:89064644-89064868	AGGGCGGCGTAGTTTGTGGGGTTTTG (SEQ ID NO:2239), TTTTCGGTTTCGGGTTGTAGGAGGCGTGT (SEQ ID NO:2240), GTTGGTAAGGGCGGCGTAGTTTGTGGG (SEQ ID NO:2241), TGGGTTTCGGTTTCGGGTTGTAGGAGGC (SEQ ID NO:2242), GAGCGTTGGGTATGGGTTTCGGTTTCGG (SEQ ID NO:2243), GGGGTTTCGTACGTTTGGAGGCGTAGTT (SEQ ID NO:2244), GGTGGGGTTGGCGGGGTTTATTTGGG (SEQ ID NO:2245), TTTGGTTCTGTGTTGGTGGCGGTTGT (SEQ ID NO:2246), GGGGTTGGCGGGGTTTATTTGGGATGG (SEQ ID NO:2247), GGTGGAGGCGTAGTTTGGTCGGGGA (SEQ ID NO:2248)
Target237	chr2:89064904-89065163	TTTCGGTTTCGGGTTGTAGGAGGCGTGT (SEQ ID NO:2249), GGAGTCGGTGAAGAGGAGAAGAGCGC (SEQ ID NO:2250), GAGTCGGTGAAGAGGAGAAGAGCGC (SEQ ID NO:2251), GGGAGTCGGTGAAGAGGAGAAGAGCGC (SEQ ID NO:2252), TGGGTTTCGGTTTCGGGTTGTAGGAGGC (SEQ ID NO:2253), AGGCGGAAGGATTGGATTTCGGGGTTGT (SEQ ID NO:2254), CGAGGCGGAAGGATTGGATTTCGGGGTT (SEQ ID NO:2255), GAGGCGGAAGGATTGGATTTCGGGGTTG (SEQ ID NO:2256), GCGGGAAGGATTGGATTTCGGGGTTGT (SEQ ID NO:2257), AGGCGGAAGGATTGGATTTCGGGGTTGT (SEQ ID NO:2258)
Target238	chr2:95401381-95401629	GGGGATATGGGGAGTTGGTTGAAGGCGT (SEQ ID NO:2259), GGGGATATGGGGAGTTGGTTGAAGGCG (SEQ ID NO:2260), CGGGATATGGGGAGTTGGTTGAAGGC (SEQ ID NO:2261), TCGGGATATGGGGAGTTGGTTGAAGGC (SEQ ID NO:2262), GGGAGTTGGTTGAAGGCGTAAAGGAGCG (SEQ ID NO:2263), GCGTGGTGGCGTTGTGTTGGTTGAG (SEQ ID NO:2264), CGGTGGTGGCGGGAAGTTTGTAGTCGT (SEQ ID NO:2265), CGTGGTGGCGTTGTGTTGGTTGAGG (SEQ ID NO:2266), GCGGTGGTGGCGGGAAGTTTGTAGTC (SEQ ID NO:2267), CGTGGTGGCGTTGTGTTGGTTGAGGT (SEQ ID NO:2268)
Target239	chr2:99438970-99439638	GTTGGTTCTTTTACGGGCGGGAGAC (SEQ ID NO:2269), GGGGTTTCGGGGAGATTTGGAGGTCGT (SEQ ID NO:2270), GGTTAGGTTTCGCGTGTGGGGTTTCGG (SEQ ID NO:2271), GGGTTAGGTTTCGCGTGTGGGGTTTCG (SEQ ID NO:2272), TGGGTTTCGGGGAGATTTGGAGGTCG (SEQ ID NO:2273), GCGGAAAGTAGGATGGGGAGGCGTTT (SEQ ID NO:2274), ACGGATAAGGCGAGGAGGTGTTTGT (SEQ ID NO:2275), AGGAGAAGGGGTTTATAGGTCGCGCT (SEQ ID NO:2276), GGTACGGATAAGGCGGAGGAGGTGGT (SEQ ID NO:2277), GCGGAAAGTAGGATGGGGAGGCGTTTT (SEQ ID NO:2278)
Target240	chr2:99439662-99439907	TTTGGTACGGGTTTTTCGGGTGGCGG (SEQ ID NO:2279), TGTTACGGGTTTTTCGGGTGGCGGTA (SEQ ID NO:2280), AGGGCGTCGGTGGTTAGGTTTGGGT (SEQ ID NO:2281), GGTACGGTTTTTCGGGTGGCGGTAA (SEQ ID NO:2282), GCGGTAAGGGCGTCGGTGGTTAGGTT (SEQ ID NO:2283), GTTACGGTTAGCGTGGAGGAGGGGGG (SEQ ID NO:2284), GTTAGCGTGGAGGAGGGGGCGTTTTT (SEQ ID NO:2285), TTTACGGTTAGCGTGGAGGAGGGGGG (SEQ ID NO:2286), TTACGTGGAGGAGGGGGCGTTTTT (SEQ ID NO:2287), TTTACGGTTAGCGTGGAGGAGGGGGG (SEQ ID NO:2288)
Target241	chr2:105459126-105459192	CGAGGAGGGGGTTGGGGTAGAATAAT (SEQ ID NO:2289), CGAGGAGGGGGTTGGGGTAGAATAATT (SEQ ID NO:2290), CGAGGAGGGGGTTGGGGTAGAATAA (SEQ ID NO:2291), TGTTTTGTTTTGTTTTGTTTGCAGCGT (SEQ ID NO:2292), GTTTGTTTTGTTTTGTTTGCAGCGT (SEQ ID NO:2293), GAGGGTAGAGCGGCGGGGAATAGTGTG (SEQ ID NO:2294), TCGGTGAGCGGTTTTAGAGGAGTCGT (SEQ ID NO:2295), GTTGGTTTGGGTCGGGTTGGGTCGTTT (SEQ ID NO:2296), TAGGTTGGTTTGGGTCGGGTTGGGTCG (SEQ ID NO:2297), AGAGGGTAGAGCGGCGGGGAATAGTGT (SEQ ID NO:2298)

Figure 5 (Table 1)

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Target242	chr2:105459219-105459243	TGTTTTGTTTTGTTTTGTTTTGCGCGCGT (SEQ ID NO:2299), GTTTTGTTTTGTTTTGTTTTGCGCGCGT (SEQ ID NO:2300), TGTTTTGTTTTGTTTTGTTTTGCGCGCG (SEQ ID NO:2301), TTGTTTTGTTTTGTTTTGCGCGCG (SEQ ID NO:2302), TTGTTTTGTTTTGTTTTGTTTTGCGCGCGT (SEQ ID NO:2303), GTTGGTTTGGGTCGGGTTGGGTCGTTT (SEQ ID NO:2304), TAGGTTGGTTTGGGTCGGGTTGGGTCG (SEQ ID NO:2305), TTGGTTTGGGTCGGGTTGGGTCGTTTT (SEQ ID NO:2306), GGTGGTTTGGGTCGGGTTGGGTCGTT (SEQ ID NO:2307), GTTGGTTTGGGTCGGGTTGGGTCGTTTT (SEQ ID NO:2308)
Target243	chr2:105459288-105459368	GTTGTTTTGTGGGGAGGTAGCGCGGT (SEQ ID NO:2309), TCGTTGTTTTGTGGGGAGGTAGCGCG (SEQ ID NO:2310), CGTTGTTTTGTGGGGAGGTAGCGCGG (SEQ ID NO:2311), TGTTTTGTGGGGAGGTAGCGCGGTTT (SEQ ID NO:2312), TTGTTTTGTGGGGAGGTAGCGCGGTT (SEQ ID NO:2313), AGCGGGGTGGGTAGTCGCGCTATTTT (SEQ ID NO:2314), AGAGAGGGTTATAGAGGGAGGCGCGGA (SEQ ID NO:2315), GAGCGGGGTGGGTAGTCGCGCTATTTT (SEQ ID NO:2316), GCGGGGTGGGTAGTCGCGCTATTTT (SEQ ID NO:2317), GAGAGGGTTATAGAGGGAGGCGCGGAG (SEQ ID NO:2318)
Target244	chr2:105461030-105461044	TGTAGTGGCGAGAGGAGGGAGTAGCGT (SEQ ID NO:2319), TGGGGGTGGTTGGGGAGAGGGTGATAT (SEQ ID NO:2320), TTGGGGGTGGTTGGGGAGAGGGTGATA (SEQ ID NO:2321), GTAGTGGCGAGAGGAGGGAGTAGCGTT (SEQ ID NO:2322), TTTGGGGGTGGTTGGGGAGAGGGTGAT (SEQ ID NO:2323), GCGCGGGGATAAAGGCGGATATTTTCA (SEQ ID NO:2324), GCGCGGGGATAAAGGCGGATATTTTCGAG (SEQ ID NO:2325), GCGCGGGGATAAAGGCGGATATTTTCAGT (SEQ ID NO:2326), GCGGGGGATAAAGGCGGATATTTTCGAGT (SEQ ID NO:2327), GCGGGGGATAAAGGCGGATATTTTCGAG (SEQ ID NO:2328)
Target245	chr2:105461066-105461169	TGTAGTGGCGAGAGGAGGGAGTAGCGT (SEQ ID NO:2329), GTTATCGGGAGGGGTTTGGGCGAGAG (SEQ ID NO:2330), TGGGTGCGTGAGTGTTGTGTGCGTTC (SEQ ID NO:2331), GGTGCGTGAGTGTTGTGTGCGTTCGT (SEQ ID NO:2332), GTGGGTGCGTGAGTGTTGTGTGCGTT (SEQ ID NO:2333), TTGTTTTCGAGGTGTTTGGGGGTCGCG (SEQ ID NO:2334), CGAGGGTTGTTATCGGTGCGCGTAG (SEQ ID NO:2335), TTTGTTTTCGAGGTGTTTGGGGGTCGCG (SEQ ID NO:2336), TGTTTTCGAGGTGTTTGGGGGTCGCG (SEQ ID NO:2337), GAGGGTTGTTATCGGTGCGCGTAGA (SEQ ID NO:2338)
Target246	chr2:105480207-105480227	TAGGGTTTCGAAATTGAGGTGGGGGGCG (SEQ ID NO:2339), GGGTTTCGAAATTGAGGTGGGGGGCGTA (SEQ ID NO:2340), GGTTCGAAATTGAGGTGGGGGGCGTAT (SEQ ID NO:2341), TTAGGGTTTCGAAATTGAGGTGGGGGGCG (SEQ ID NO:2342), GGGTTTCGAAATTGAGGTGGGGGGCGTAT (SEQ ID NO:2343), GCGAAAGGTTATGGGTTGGAATAAGTTAGCG (SEQ ID NO:2344), GCGAAAGGTTATGGGTTGGAATAAGTTAGCGT (SEQ ID NO:2345), GCGAAAGGTTATGGGTTGGAATAAGTTAGCGTA (SEQ ID NO:2346), GCGAAAGGTTATGGGTTGGAATAAGTTAGCGTAT (SEQ ID NO:2347)
Target247	chr2:105480254-105480273	TAGGGTTTCGAAATTGAGGTGGGGGGCG (SEQ ID NO:2348), GGGTTTCGAAATTGAGGTGGGGGGCGTA (SEQ ID NO:2349), GGTTCGAAATTGAGGTGGGGGGCGTAT (SEQ ID NO:2350), TTAGGGTTTCGAAATTGAGGTGGGGGGCG (SEQ ID NO:2351), GGGTTTCGAAATTGAGGTGGGGGGCGTAT (SEQ ID NO:2352)
Target248	chr2:105480360-105480482	GGGATTGCGGAGTGAGGTAAGGTCGG (SEQ ID NO:2353), TGGGATTGCGGAGTGAGGTAAGGTCG (SEQ ID NO:2354), ATTGCGGAGTGAGGTAAGGTCGGAGG (SEQ ID NO:2355), GGATTGCGGAGTGAGGTAAGGTCGGA (SEQ ID NO:2356), CGTACGGGGCGGTGAGTTTTTGGGTA (SEQ ID NO:2357), GGAGACGGGGTTTGGGGGAGCGATTTT (SEQ ID NO:2358), CGTGGGTTAAGCGTCGGGGGTTGTTA (SEQ ID NO:2359), CGTGGGTTAAGCGTCGGGGGTTGTTT (SEQ ID NO:2360), GCGTGGGTTAAGCGTCGGGGGTTGTTT (SEQ ID NO:2361), GGAGACGGGGTTTGGGGGAGCGATTT (SEQ ID NO:2362)
Target249	chr2:105480604-105480638	GCGGGGAGATTTTGAATCGCGGTGTG (SEQ ID NO:2363), GCGGGGAGATTTTGAATCGCGGTGT (SEQ ID NO:2364), TGTTGTGTTTGGTTTCGGTGAGGGTCGT (SEQ ID NO:2365), GTTTGTGTTTGGTTTCGGTGAGGGTCGT (SEQ ID NO:2366), TGTTGTGTTTGGTTTCGGTGAGGGTCG (SEQ ID NO:2367), TGGCGGGCGGATTGGGTATAGTTTTGT (SEQ ID NO:2368), GGCGGGCGGATTGGGTATAGTTTTGT (SEQ ID NO:2369), TGGCGGGCGGATTGGGTATAGTTTTGT (SEQ ID NO:2370), TTGGCGGGCGGATTGGGTATAGTTTTT (SEQ ID NO:2371), TTTGGCGGGCGGATTGGGTATAGTTTTT (SEQ ID NO:2372)
Target250	chr2:105480675-105480701	GCGGGGAGATTTTGAATCGCGGTGTG (SEQ ID NO:2373), GGGCGTCGGTAGTAGGGTAAGGTAGGG (SEQ ID NO:2374), GGGCGTCGGTAGTAGGGTAAGGTAGGGA (SEQ ID NO:2375), GCGGGGAGATTTTGAATCGCGGTGT (SEQ ID NO:2376), GGGCGTCGGTAGTAGGGTAAGGTAGGGA (SEQ ID NO:2377), TGGGGGGGAAGGGGGAATGGTTTTA (SEQ ID NO:2378), TTGTTAAAGTCGGGGGGAAGGGGGA (SEQ ID NO:2379), TTTGTTAAAGTCGGGGGGAAGGGGGA (SEQ ID NO:2380), TGTTAAAGTCGGGGGGAAGGGGGAAT (SEQ ID NO:2381), TTAAAGTCGGGGGGAAGGGGGAATGG (SEQ ID NO:2382)
Target251	chr2:106681892-106681946	TGGGTTTTAAGGTTAAGGATGTTTGGTTACGGA (SEQ ID NO:2383), TGGGTTTTAAGGTTAAGGATGTTTGGTTACGAG (SEQ ID NO:2384), GGGTTTTAAGGTTAAGGATGTTTGGTTACGAGA (SEQ ID NO:2385), TTGGGTTTTAAGGTTAAGGATGTTTGGTTACGGA (SEQ ID NO:2386), TGGGTTTTAAGGTTAAGGATGTTTGGTTACGAGA (SEQ ID NO:2387)

Figure 5 (Table 1)

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Target252	chr2:106681983-106682004	CGTCGCGCGGTTTTTCGTGGTTAAGTAT (SEQ ID NO:2388), CGTCGCGCGGTTTTTCGTGGTTAAGTATT (SEQ ID NO:2389), CGTCGCGCGGTTTTTCGTGGTTAAGTA (SEQ ID NO:2390), TGGTTTTGGAGTTTAGGGGTTGCGTTTT (SEQ ID NO:2391), TTGGTTTTGGAGTTTAGGGGTTGCGTTT (SEQ ID NO:2392), GGCCTCGCGTTAGAGGGTTAGGGTTA (SEQ ID NO:2393), GGCCTCGCGTTAGAGGGTTAGGGTTAA (SEQ ID NO:2394), GCGTCGCGTTAGAGGGTTAGGGTTAA (SEQ ID NO:2395), GCGTTAGAGGGTTAGGGTTAAGCGGT (SEQ ID NO:2396), GGCCTCGCGTTAGAGGGTTAGGGTT (SEQ ID NO:2397)
Target253	chr2:106682036-106682077	TTCGGTGGTATTCGTTCTGTCGTTGGG (SEQ ID NO:2398), GGGCGGGAGAGAGGATTCGGTGGTAT (SEQ ID NO:2399), GGGCGGGAGAGAGGATTCGGTGGTA (SEQ ID NO:2400), TTTTCGGTGGTATTCGTTCTGTCGTTGGG (SEQ ID NO:2401), GGGCGGGAGAGAGGATTCGGTGGTATT (SEQ ID NO:2402), GGCCTCGCGTTAGAGGGTTAGGGTTA (SEQ ID NO:2403), GGCCTCGCGTTAGAGGGTTAGGGTTAA (SEQ ID NO:2404), GCGTCGCGTTAGAGGGTTAGGGTTAA (SEQ ID NO:2405), GCGTTAGAGGGTTAGGGTTAAGCGGT (SEQ ID NO:2406), GGCCTCGCGTTAGAGGGTTAGGGTT (SEQ ID NO:2407)
Target254	chr2:106682084-106682218	TTGGCGCGCGCTTTATTCGTTGGGTTT (SEQ ID NO:2408), TTTGGCGCGCGCTTTATTCGTTGGGTT (SEQ ID NO:2409), TTTTGGCGCGCGCTTTATTCGTTGGGT (SEQ ID NO:2410), TTCGGTGGTATTCGTTCTGTCGTTGGG (SEQ ID NO:2411), TTTTGGCGCGCGCTTTATTCGTTGGG (SEQ ID NO:2412), GGTTAGGATAGTAGTTCGCGCGGGGGA (SEQ ID NO:2413), AGGGTTAGGATAGTAGTTCGCGCGGGG (SEQ ID NO:2414), GGTTAGGATAGTAGTTCGCGCGGGG (SEQ ID NO:2415), GGGTTAGGATAGTAGTTCGCGCGGGG (SEQ ID NO:2416), TAGGGTTAGGATAGTAGTTCGCGCGGG (SEQ ID NO:2417)
Target255	chr2:106682237-106682271	TCGCGCGGTTTGTGTTTTGGTTTTGA (SEQ ID NO:2418), GCGGTCGCGTTTGTTCGTTCTGATTTT (SEQ ID NO:2419), GCGCGGTTTGTGTTTTGGTTTTGATCGGG (SEQ ID NO:2420), CGCGCGGTTTGTGTTTTGGTTTTGATCGG (SEQ ID NO:2421), TTCGCGCGGTTTGTGTTTTGGTTTTG (SEQ ID NO:2422), AGTTTCGGTTAGGGTTAGGATAGTAGTTCGT (SEQ ID NO:2423), GCGTTAGTTTCGGTTAGGGTTAGGATAGTAGGT (SEQ ID NO:2424), GCGTTAGTTTCGGTTAGGGTTAGGATAGTAGTTCG (SEQ ID NO:2425), GCGTTAGTTTCGGTTAGGGTTAGGATAGTAGTTCGT (SEQ ID NO:2426), GCGTTAGTTTCGGTTAGGGTTAGGATAGTAGTTC (SEQ ID NO:2427)
Target256	chr2:106690422-106690449	GCGTTAGAACGCGTAGTTGTGGGATCGG (SEQ ID NO:2428), GCGTTAGAACGCGTAGTTGTGGGATCGGA (SEQ ID NO:2429), GCGTTAGAACGCGTAGTTGTGGGATCG (SEQ ID NO:2430), CGTTAGAACGCGTAGTTGTGGGATCGG (SEQ ID NO:2431), CGTTAGAACGCGTAGTTGTGGGATCGGA (SEQ ID NO:2432), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2433), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2434), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2435), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGTAA (SEQ ID NO:2436), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGTA (SEQ ID NO:2437)
Target257	chr2:106690493-106690515	GCGTTAGAACGCGTAGTTGTGGGATCGG (SEQ ID NO:2438), GCGTTAGAACGCGTAGTTGTGGGATCGGA (SEQ ID NO:2439), TGGGTTTTGACGAAGCGGTAGGTGTTGT (SEQ ID NO:2440), GGGTTTTGACGAAGCGGTAGGTGTTGT (SEQ ID NO:2441), TGGGTTTTGACGAAGCGGTAGGTGTTG (SEQ ID NO:2442), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2443), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2444), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGT (SEQ ID NO:2445), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGTAA (SEQ ID NO:2446), TTTTGTGGAAGTTAGGTTTGTAGTCGGAGGTA (SEQ ID NO:2447)
Target258	chr2:111876312-111876756	GGGGGCGGCGAGGTTGTAAGGTTGTAT (SEQ ID NO:2448), GGCAGCGGAGAGGTTGTAAGGGTTTT (SEQ ID NO:2449), CGGCGCGGAGAGGTTGTAAGGGTTT (SEQ ID NO:2450), GGGGGCGGCGAGGTTGTAAGGTTGTATA (SEQ ID NO:2451), GGGTTTTGTTTTCGACGCGGTTTGGG (SEQ ID NO:2452), TCGGTTAGAGGTGGCGGGTTATGCGT (SEQ ID NO:2453), AGGAAGTCGGTTAGAGGTGGCGGGTTT (SEQ ID NO:2454), AAGGAAGTCGGTTAGAGGTGGCGGGTT (SEQ ID NO:2455), AAAGGAAGTCGGTTAGAGGTGGCGGGT (SEQ ID NO:2456), AGTCGGGGGAAGTAACGGGTTAAGCGT (SEQ ID NO:2457)
Target259	chr2:111876775-111877077	GCGTTGAGATTTTGGTATGGGGTTGCGT (SEQ ID NO:2458), TGCCTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2459), TGCCTTGAGATTTTGGTATGGGGTTGCGT (SEQ ID NO:2460), GCGTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2461), TGCCTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2462), CGTAGTCGGTAGGGAGAAGGAAGGGGT (SEQ ID NO:2463), TGAGCGAGGTGAAGGAGGTTTTGGGT (SEQ ID NO:2464), TTGAGCGAGGTGAAGGAGGTTTTGGGT (SEQ ID NO:2465), GCGAGGTGAAGGAGGTTTTGGGTTTTCGG (SEQ ID NO:2466), CGTAGTCGGTAGGGAGAAGGAAGGGGT (SEQ ID NO:2467)
Target260	chr2:111877108-111877178	GCGTTGAGATTTTGGTATGGGGTTGCGT (SEQ ID NO:2468), TGCCTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2469), TGCCTTGAGATTTTGGTATGGGGTTGCGT (SEQ ID NO:2470), GCGTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2471), TGCCTTGAGATTTTGGTATGGGGTTGCG (SEQ ID NO:2472), GGTGTGGGAGGTGGATCGGGAAATGGA (SEQ ID NO:2473), TAATTGTAGCGGGGGTGTGGGAGGTGG (SEQ ID NO:2474), GGGTGTGGGAGGTGGATCGGGAAATGG (SEQ ID NO:2475), GGGGTGTGGGAGGTGGATCGGGAAATG (SEQ ID NO:2476), ATTGTAGCGGGGGTGTGGGAGGTGGAT (SEQ ID NO:2477)

Figure 5 (Table 1)

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Target261	chr2:113931398-113931767	GGGGAGTAGGAGGGGTGTGTGTTGTGG (SEQ ID NO:2478), CGGGGAGTAGGAGGGGTGTGTGTTGTG (SEQ ID NO:2479), TGTGGTAGGGGTTGGGGTAGGTGGTA (SEQ ID NO:2480), GGGTATGGGAAAGGGGTTGTAGGCGT (SEQ ID NO:2481), GTGGTAGGGGAGAGGCGAGGGTTTGTG (SEQ ID NO:2482), GAGGAGGGGTAGGTTGAGGGAGGAGGG (SEQ ID NO:2483), GGTGAGGGAGGAGGGGACGGGATAT (SEQ ID NO:2484), TGAGGAGGGGTAGGTTGAGGGAGGAGG (SEQ ID NO:2485), AGGAGGGGTAGGTTGAGGGAGGAGGG (SEQ ID NO:2486), AGGTTGAGGGAGGAGGGGACGGGATA (SEQ ID NO:2487)
Target262	chr2:114034275-114034368	AGCGGTAGAGAGTAAGGGTTAGTTCGGT (SEQ ID NO:2488), TGGGTAGCGGTAGAGAGTAAGGGTTAGT (SEQ ID NO:2489), GCGGTAGAGAGTAAGGGTTAGTTCGGT (SEQ ID NO:2490), AGCGGTAGAGAGTAAGGGTTAGTTCGGT (SEQ ID NO:2491), GGGTAGCGGTAGAGAGTAAGGGTTAGTTCGG (SEQ ID NO:2492), CGGCGGTGGTAGGAGGAGTGAGTGT (SEQ ID NO:2493), TTTGCGCGGTGGTAGGAGGAGTGAGTG (SEQ ID NO:2494), TCGGCGGTGGTAGGAGGAGTGAGTGT (SEQ ID NO:2495), TTCGCGGTGGTAGGAGGAGTGAGTGT (SEQ ID NO:2496), TTTTCGCGGTGGTAGGAGGAGTGAGT (SEQ ID NO:2497)
Target263	chr2:114034478-114034535	CGTCGGAAGGGTTAGGGGAAGGTTAGG (SEQ ID NO:2498), CGTCGGAAGGGTTAGGGGAAGGTTAGGA (SEQ ID NO:2499), TCGTCGGAAGGGTTAGGGGAAGGTTAGG (SEQ ID NO:2500), TCGTCGGAAGGGTTAGGGGAAGGTTAGGA (SEQ ID NO:2501), CGGAAGGGTTAGGGGAAGGTTAGGAGG (SEQ ID NO:2502)
Target264	chr2:131721486-131721513	GCGGTTATAGAGTTCGAGCGGGGGGTC (SEQ ID NO:2503), GCGGTTATAGAGTTCGAGCGGGGGGT (SEQ ID NO:2504), CGGTTATAGAGTTCGAGCGGGGGGTC (SEQ ID NO:2505), GCGGTTATAGAGTTCGAGCGGGGGG (SEQ ID NO:2506), CGGTTATAGAGTTCGAGCGGGGGGT (SEQ ID NO:2507), TATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2508), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2509), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2510), TATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2511), TTATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2512)
Target265	chr2:131721523-131721558	GCGGTTATAGAGTTCGAGCGGGGGGTC (SEQ ID NO:2513), GCGGTTATAGAGTTCGAGCGGGGGGT (SEQ ID NO:2514), CGGTTATAGAGTTCGAGCGGGGGGTC (SEQ ID NO:2515), GCGGTTATAGAGTTCGAGCGGGGGG (SEQ ID NO:2516), CGGTTATAGAGTTCGAGCGGGGGGT (SEQ ID NO:2517), TATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2518), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2519), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2520), TATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2521), TTATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2522)
Target266	chr2:131721562-131721672	GCGTGCGGGCGTAGTAATGTTTTAGCG (SEQ ID NO:2523), GCGTGCGGGCGTAGTAATGTTTTAGCGA (SEQ ID NO:2524), GCGTGCGGGCGTAGTAATGTTTTAGCGAG (SEQ ID NO:2525), CGTGCGGGCGTAGTAATGTTTTAGCGA (SEQ ID NO:2526), TCGAGTTTGTGTTGGAGTTCGGGTTT (SEQ ID NO:2527), TATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2528), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2529), GGAGTTGCGGGATAGTTCGGCGTTGTT (SEQ ID NO:2530), ATAGGTTGCGGGGAAGGTTGGGTCGGG (SEQ ID NO:2531), TCGGGGATAGTTCGCGGTTGTTGTTGTT (SEQ ID NO:2532)
Target267	chr2:131721692-131721867	TCGGATAGTAGCGGCGTGGTGTGTGG (SEQ ID NO:2533), TCGATTGCGATAGTAGCGGCGTGGTGT (SEQ ID NO:2534), CGATTGCGATAGTAGCGGCGTGGTGTG (SEQ ID NO:2535), TCGATTGCGATAGTAGCGGCGTGGTGTG (SEQ ID NO:2536), GCGTGCGGGCGTAGTAATGTTTTAGCG (SEQ ID NO:2537), GAGGGGGGCGGGGGGTTTTAAGAGTAT (SEQ ID NO:2538), AGGAGAAGGAAAGGTAGGAGGGGGGCG (SEQ ID NO:2539), GAGGAGAAGGAAAGGTAGGAGGGGGGCG (SEQ ID NO:2540), TAGGAGGGGGGCGGGGGTTTTAAGAG (SEQ ID NO:2541), GGAGGGGGGCGGGGGTTTTAAGAGTA (SEQ ID NO:2542)
Target268	chr2:131792027-131792037	AGGTTGTAGGTTGTGTGAGTGAGGAGG (SEQ ID NO:2543), AGGTTGTGTGAGTGAGGAGGAGGAGGAA (SEQ ID NO:2544), AAGGTTGTAGGTTGTGTGAGTGAGGAGG (SEQ ID NO:2545), AAGGTTGTAGGTTGTGTGAGTGAGGAGG (SEQ ID NO:2546), GGTGTTGTGAGTGAGGAGGAGGAGGAGG (SEQ ID NO:2547), GCGTAGGAATGTAGGGATGGCGGAGG (SEQ ID NO:2548), GCGTAGGAATGTAGGGATGGCGGAGGTA (SEQ ID NO:2549), AGGAATGTAGGGATGGCGGAGGAGG (SEQ ID NO:2550), GCGTAGGAATGTAGGGATGGCGGAGG (SEQ ID NO:2551), GCGTAGGAATGTAGGGATGGCGGAGGAG (SEQ ID NO:2552)
Target269	chr2:131792397-131792426	AGGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2553), GGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2554), AGGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2555), GGGTTAGGATTGTTGTGTGCGGCGTGGAG (SEQ ID NO:2556), GGGTTAGGATTGTTGTGTGCGGCGTGGAG (SEQ ID NO:2557), AGAGGTTTAGAGGGATCGCGGCGGTT (SEQ ID NO:2558), GAGAGGTTTAGAGGGATCGCGGCGGTT (SEQ ID NO:2559), TTGGAGAGGTTTAGAGGGATCGCGGCG (SEQ ID NO:2560), GTAAATTAAGTCGGTTGTGCGGCGGGG (SEQ ID NO:2561), GGTAAATTAAGTCGGTTGTGCGGCGGGG (SEQ ID NO:2562)
Target270	chr2:131792452-131792468	AGGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2563), GGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2564), AGGGTTAGGATTGTTGTGTGCGGCGTGG (SEQ ID NO:2565), GGGTTAGGATTGTTGTGTGCGGCGTGGAG (SEQ ID NO:2566), GGGTTAGGATTGTTGTGTGCGGCGTGGAG (SEQ ID NO:2567), GTAAATTAAGTCGGTTGTGCGGCGGGG (SEQ ID NO:2568), GGTAAATTAAGTCGGTTGTGCGGCGGGG (SEQ ID NO:2569), TGGTAATTAAGTCGGTTGTGCGGCGGG (SEQ ID NO:2570), TAAATTAAGTCGGTTGTGCGGCGGGG (SEQ ID NO:2571), TTGGTAATTAAGTCGGTTGTGCGGCGGG (SEQ ID NO:2572)

Figure 5 (Table 1)

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Target271	chr2:131792471-131792650	TTTTCGGGCGTTGCGGGTTATCGGTTTC (SEQ ID NO:2573), TGTTAGGGTTTGGGGTTTGGGAGGCGT (SEQ ID NO:2574), TCGGGGTTATCGGTTTCGGTTTGTGCG (SEQ ID NO:2575), GCGGTTGCGGGTTATCGGTTTCGGTTT (SEQ ID NO:2576), TTTTCGGGCGTTGCGGGTTATCGGTT (SEQ ID NO:2577), GTCGGGTTGCGGGTTTTCGTTATGG (SEQ ID NO:2578), TTGCGGGTTTTCGTTATGCGGTTCCGG (SEQ ID NO:2579), GCGGGGTTTTCGTTATGGCGTTCCGGT (SEQ ID NO:2580), CGTCGGGTTGCGGGGTTTTCGTTATG (SEQ ID NO:2581), GGGTTGCGGGGTTTTCGTTATGGCGTT (SEQ ID NO:2582)
Target272	chr2:135464416-135464530	TGGGGATGGGAGGAGGTGAGGTTAGTT (SEQ ID NO:2583), ATGGGGATGGGAGGAGGTGAGGTTAGT (SEQ ID NO:2584), ATGGGGATGGGAGGAGGTGAGGTTAGTT (SEQ ID NO:2585), TGGGGATGGGAGGAGGTGAGGTTAGT (SEQ ID NO:2586), TGGGGATGGGAGGAGGTGAGGTTAGTTA (SEQ ID NO:2587), TCGGAGGTTGTTTTGAGAGGTGGGGA (SEQ ID NO:2588), TGAGAGGTGGGAGGATTAGGAGGGAGGAA (SEQ ID NO:2589), TTGAGAGGTGGGAGGATTAGGAGGGAGGA (SEQ ID NO:2590), TTCGAGGTTGTTTTGAGAGGTGGGG (SEQ ID NO:2591), TTCGAGAGTTGTTTTGAGAGGTGGGGA (SEQ ID NO:2592)
Target273	chr2:135464600-135464731	AGGTAGGGAGAGTTGTCGGAGTAAGGT (SEQ ID NO:2593), AGGTAGGGAGAGTTGTCGGAGTAAGGTT (SEQ ID NO:2594), AAGGTAGGGAGAGTTGTCGGAGTAAGGT (SEQ ID NO:2595), AGGTAGGGAGAGTTGTCGGAGTAAGTTT (SEQ ID NO:2596), AAGGTAGGGAGAGTTGTCGGAGTAAGGTT (SEQ ID NO:2597), ATGGTGTAGGGGTTAGAGGATGTGGGT (SEQ ID NO:2598), TGGTGTAGGGGTTAGAGGATGTGGGTAGG (SEQ ID NO:2599), AGGGGTTAGAGGATGTGGGTAGGAAGT (SEQ ID NO:2600), GGTGTAGGGGTTAGAGGATGTGGGTAGG (SEQ ID NO:2601), TGGTGTAGGGGTTAGAGGATGTGGGTA (SEQ ID NO:2602)
Target274	chr2:162280224-162280264	GGTTTGTGACGTCGGTTAATAATCGGTTGG (SEQ ID NO:2603), TGGTTTGTGACGTCGGTTAATAATCGGTTGG (SEQ ID NO:2604), GGTTTGTGACGTCGGTTAATAATCGGTTGGA (SEQ ID NO:2605), TGGTTTGTGACGTCGGTTAATAATCGGTTGGA (SEQ ID NO:2606), GTTGTTTGTGACGTCGGTTAATAATCGGT (SEQ ID NO:2607), GTATTGCGGGGATTGCGGGCGTTTGA (SEQ ID NO:2608), GGGGGATTGCGGGCGTTTGTAGTCGAC (SEQ ID NO:2609), TATTGCGGGGATTGCGGGCGTTTGTAG (SEQ ID NO:2610), CGTAGTAGTCGAGCGGGCGGTTAGTGT (SEQ ID NO:2611), GCGTAGTAGTCGAGCGGGCGGTTAGTG (SEQ ID NO:2612)
Target275	chr2:162280289-162280369	ATTCGTCGGGTTGGGGCGTTTCGTAGTT (SEQ ID NO:2613), CGGGTTGGGGCGTTTCGTAGTTTTTCGT (SEQ ID NO:2614), CGTCGGGTTGGGGCGTTTCGTAGTTTTT (SEQ ID NO:2615), TCGTCGGGTTGGGGCGTTTCGTAGTTTT (SEQ ID NO:2616), TTCGTCGGGTTGGGGCGTTTCGTAGTTTT (SEQ ID NO:2617), GTATTGCGGGGATTGCGGGCGTTTGA (SEQ ID NO:2618), GGGGGATTGCGGGCGTTTGTAGTCGAC (SEQ ID NO:2619), TATTGCGGGGATTGCGGGCGTTTGTAG (SEQ ID NO:2620), TCGCGGCGTTGTTGGGTTAGTAGGGTA (SEQ ID NO:2621), TAGTATTGCGGGGATTGCGGGCGTTT (SEQ ID NO:2622)
Target276	chr2:162280393-162280421	ATTCGTCGGGTTGGGGCGTTTCGTAGTT (SEQ ID NO:2623), CGGGTTGGGGCGTTTCGTAGTTTTTCGT (SEQ ID NO:2624), CGTCGGGTTGGGGCGTTTCGTAGTTTTT (SEQ ID NO:2625), TCGTCGGGTTGGGGCGTTTCGTAGTTTT (SEQ ID NO:2626), TTCGTCGGGTTGGGGCGTTTCGTAGTTTT (SEQ ID NO:2627), TCGTTTAGGTAGGGATTGGCGTCGGTT (SEQ ID NO:2628), TTCGTTAGGTAGGGATTGGCGTCGGT (SEQ ID NO:2629), TTCGTTAGGTAGGGATTGGCGTCGGT (SEQ ID NO:2630), TTTTCGTTAGGTAGGGATTGGCGTCGGT (SEQ ID NO:2631), TTTTCGTTAGGTAGGGATTGGCGTCGG (SEQ ID NO:2632)
Target277	chr2:162280438-162280460	CGGGTTGGGGCGTTTCGTAGTTTTTCGT (SEQ ID NO:2633), CGTCGGGTTGGGGCGTTTCGTAGTTTTT (SEQ ID NO:2634), TCGGGTTGGGGCGTTTCGTAGTTTTTCG (SEQ ID NO:2635), GTCGGGTTGGGGCGTTTCGTAGTTTTTCG (SEQ ID NO:2636), CGTCGGGTTGGGGCGTTTCGTAGTTTTTC (SEQ ID NO:2637), GGAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2638), TGGAAATCGGATAGGTTTTTGGGTTTGCG (SEQ ID NO:2639), TGGAAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2640), GGAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2641), GAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2642)
Target278	chr2:162280483-162280493	GGCGTTAATTTTTATTGGGCGAGGAGGT (SEQ ID NO:2643), GTTGTTTTGTTGTTTAATAGCGTCGCG (SEQ ID NO:2644), CGGTGTTGTTTTGTTGTTTAATAGCGTCGCG (SEQ ID NO:2645), TGTTGTTTTGTTGTTTAATAGCGTCGCG (SEQ ID NO:2646), CGCGTATGTCGCGGTTAATTTTTATTGGGC (SEQ ID NO:2647), GGAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2648), TGGAAATCGGATAGGTTTTTGGGTTTGCG (SEQ ID NO:2649), TGGAAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2650), GGAATCGGATAGGTTTTTGGGTTTGCG (SEQ ID NO:2651), GAATCGGATAGGTTTTTGGGTTTGCGT (SEQ ID NO:2652)
Target279	chr2:162280519-162280586	GGCGTTAATTTTTATTGGGCGAGGAGGT (SEQ ID NO:2653), CGCGTATGGTCGCGGTTAATTTTTATTGGGC (SEQ ID NO:2654), GGCGTTAATTTTTATTGGGCGAGGAGGTC (SEQ ID NO:2655), GCGTATGGTCGCGGTTAATTTTTATTGGGC (SEQ ID NO:2656), CGCGTATGGTCGCGGTTAATTTTTATTGGGC (SEQ ID NO:2657), TGGGTTAGTATTTTCGTTTTGAGCGGGGAC (SEQ ID NO:2658), TGGGTTAGTATTTTCGTTTTGAGCGGGGAC (SEQ ID NO:2659), GGGTTAGTATTTTCGTTTTGAGCGGGGAC (SEQ ID NO:2660), CGTTGGGTTAGTATTTTCGTTTTGAGCGGGG (SEQ ID NO:2661), TTGGGTTAGTATTTTCGTTTTGAGCGGGG (SEQ ID NO:2662)

Figure 5 (Table 1)

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Target280	chr2:162280604-162280628	CGGGGATTTACGAGTAGGTTAAGCGGA (SEQ ID NO:2663), CGGGGATTTACGAGTAGGTTAAGCGGAGG (SEQ ID NO:2664), CGGGGATTTACGAGTAGGTTAAGCGGAG (SEQ ID NO:2665), GGGGATTTACGAGTAGGTTAAGCGGAGG (SEQ ID NO:2666), GGGTAGGGGCGGTTTAGTTGTGCGAGT (SEQ ID NO:2667), CGGGTAGGGGCGGTTTAGTTGTGCGAG (SEQ ID NO:2668), GGGTAGGGGCGGTTTAGTTGTGCGAGTA (SEQ ID NO:2669), CGGGTAGGGGCGGTTTAGTTGTGCGA (SEQ ID NO:2670), GGTAGGGGCGGTTTAGTTGTGCGAGTA (SEQ ID NO:2671)
Target281	chr2:162280761-162280772	AGCGAGGTGTTGGTTTAGCGGGATTGC (SEQ ID NO:2672), GAGCGAGGTGTTGGTTTAGCGGGATTGC (SEQ ID NO:2673), AGAGCGAGGTGTTGGTTTAGCGGGATT (SEQ ID NO:2674), AAGAGCGAGGTGTTGGTTTAGCGGGAT (SEQ ID NO:2675), GAGCGAGGTGTTGGTTTAGCGGGATTG (SEQ ID NO:2676), AGGCGAGTTGGGGAAGAGTTGTGAGG (SEQ ID NO:2677), GGAGGCGGAGTTGGGGAAGAGTTGTGA (SEQ ID NO:2678), TAAGGAGGAGTGTGGGAGGCGGAGTT (SEQ ID NO:2679), CGGAGTTGGGGAAGAGTTGTGAGGGGT (SEQ ID NO:2680), AGAGTTGTGAGGGGTTGGTTGGGGGTT (SEQ ID NO:2681)
Target282	chr2:166650143-166650508	TATAGGGATTGGCGGGGTATCGTGGG (SEQ ID NO:2682), GGGTCGTTTTATAGGGATTGGCGGGGGT (SEQ ID NO:2683), GGGTCGTTTTATAGGGATTGGCGGGG (SEQ ID NO:2684), GGGGTCGTTTTATAGGGATTGGCGGGG (SEQ ID NO:2685), AGGGTCGTTTTATAGGGATTGGCGGGG (SEQ ID NO:2686), ATTTTGAAGAGGGAGGGTTCGCGCGGAG (SEQ ID NO:2687), GATTTTGAAGAGGGAGGGTTCGCGCGGA (SEQ ID NO:2688), TGGGATTTTGAAGAGGGAGGGTTCGCGC (SEQ ID NO:2689), GGGAGGGTCGTAGCGTGGGGATTTGA (SEQ ID NO:2690), TTGGGTTGCGTAGAGTAGGCGGGAGG (SEQ ID NO:2691)
Target283	chr2:166650529-166651284	TGGGTTAGGCGTTAGGTGTAGGTGCGC (SEQ ID NO:2692), TTCGGTTAAGTTTGTTGTGCGCGCG (SEQ ID NO:2693), TCGGTTTATTTGCGGGGTGGGTAGGGT (SEQ ID NO:2694), CGGGTTAAGTTTGTTGTGCGCGCGTT (SEQ ID NO:2695), GGGTTAGGCGTTAGGTGTAGGTGCGCG (SEQ ID NO:2696), CGAGGAGGAAGGGAGGAATCGTGTGGG (SEQ ID NO:2697), TTGGAGCGTTTAGGTAGGGTTGGGGCG (SEQ ID NO:2698), GAGGAGGAAGGGAGGAATCGTGTGGGG (SEQ ID NO:2699), GAGGAAGGGAGGAATCGTGTGGGGGAA (SEQ ID NO:2700), CGGCGCGGAGGAGGAGTTTATTGAG (SEQ ID NO:2701)
Target284	chr2:171679526-171679830	TTGGAGAGGCGGGGGAAGATTAACGGG (SEQ ID NO:2702), TTTTCGGGTAGAGGTTGGAGAGGCGGG (SEQ ID NO:2703), GGTAGAGGTTGGAGAGGCGGGGGAAGA (SEQ ID NO:2704), GTAGAGGTTGGAGAGGCGGGGGAAGAT (SEQ ID NO:2705), CGTTAGTTTTTGCAGCGGGAGATAGC (SEQ ID NO:2706), CGGCGCGGTTAAGTAGGGAAGGGAGTA (SEQ ID NO:2707), TTTTAGAAATGTAGGGAGGGCGCGCG (SEQ ID NO:2708), CGGCGCGGTTAAGTAGGGAAGGGAGT (SEQ ID NO:2709), CGGCGCGGTTAAGTAGGGAAGGGAGTAG (SEQ ID NO:2710), GTTTTAGAAATGTAGGGAGGGCGCGCG (SEQ ID NO:2711)
Target285	chr2:171679840-171679912	CGTTCGTTCTTTAGTTTCGGAGCGTCG (SEQ ID NO:2712), CGTTCGTTCTTTAGTTTCGGAGCGT (SEQ ID NO:2713), TTCGTTCTTTAGTTTCGGAGCGTCG (SEQ ID NO:2714), CGAGGGCGGTGGTAGTTGTAGTTAGA (SEQ ID NO:2715), GTTCGTTCTTTAGTTTCGGAGCGTCG (SEQ ID NO:2716), CGGCGCGGTTAAGTAGGGAAGGGAGTA (SEQ ID NO:2717), TTTTAGAAATGTAGGGAGGGCGCGCG (SEQ ID NO:2718), GCGCGTAGGGTTGGGTTTCGGTGGA (SEQ ID NO:2719), TTCGCGGTAGGGTTGGGTTTCGGTG (SEQ ID NO:2720), GTTCGCGGTAGGGTTGGGTTTCGGT (SEQ ID NO:2721)
Target286	chr2:171830684-171830708	TGTGTATAAGTTCGGGGCGTCGGGGTG (SEQ ID NO:2722), TTGTGTATAAGTTCGGGGCGTCGGGGT (SEQ ID NO:2723), GGGCGGTTGGGTTTGGGTTAGGTGTT (SEQ ID NO:2724), GTGTATAAGTTCGGGGCGTCGGGGTG (SEQ ID NO:2725), GTTGTGTATAAGTTCGGGGCGTCGGGG (SEQ ID NO:2726)
Target287	chr2:172965364-172965371	GTGATGGTGGTGGTGGTATGCGGTTG (SEQ ID NO:2727), TCGGGGTTTGAAGTGGGGTGTAGTAGC (SEQ ID NO:2728), GGTTTGAGTGGGGTGTAGTAGCGCGT (SEQ ID NO:2729), CGGGGTTTGAAGTGGGGTGTAGTAGCGG (SEQ ID NO:2730), CGTCGTCGTATGGTGGTGGTGGTAT (SEQ ID NO:2731), CGGCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2732), CGGCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2733), GCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2734), CGGCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2735), GCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2736)
Target288	chr2:172965397-172965521	GTGATGGTGGTGGTGGTATGCGGTTG (SEQ ID NO:2737), TCGGGGTTTGAAGTGGGGTGTAGTAGC (SEQ ID NO:2738), GGTTTGAGTGGGGTGTAGTAGCGCGT (SEQ ID NO:2739), CGGGGTTTGAAGTGGGGTGTAGTAGCGG (SEQ ID NO:2740), CGTCGTTGGTTGTAGGTGTAGGCGGA (SEQ ID NO:2741), CGGCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2742), TGGGATTTTGGTGTGTCGTAGCGGATGG (SEQ ID NO:2743), GGGATTTTGGTGTGTCGTAGCGGATGG (SEQ ID NO:2744), CGGCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2745), GCGTCGTTAGTTTCGGGTTTATGTTG (SEQ ID NO:2746)
Target289	chr2:172965544-172965563	TTTAGGAGGTCGGCGTTGAGATTGGC (SEQ ID NO:2747), GTTTTAGGAGGTCGGCGTTGAGATTGGC (SEQ ID NO:2748), AGTTTTAGGAGGTCGGCGTTGAGATTGGC (SEQ ID NO:2749), TTTAGGAGGTCGGCGTTGAGATTGGC (SEQ ID NO:2750), GTTTTAGGAGGTCGGCGTTGAGATTGG (SEQ ID NO:2751), TGGTGAGATTTTTCGGAGTAGTATTTGGGGT (SEQ ID NO:2752), GTGGTGAGATTTTTCGGAGTAGTATTTGGGGT (SEQ ID NO:2753), AGTGGTGAGATTTTTCGGAGTAGTATTTGGGG (SEQ ID NO:2754), AGTGGTGAGATTTTTCGGAGTAGTATTTGGGGT (SEQ ID NO:2755), AGATTTTTCGGAGTAGTATTTGGGGTAGCGT (SEQ ID NO:2756)

Figure 5 (Table 1)

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Target290	chr2:175201775-175201998	TTTCGGGTTGCGGTAAGGTGTACGGGAA (SEQ ID NO:2757), TTTCGGGTTGCGGTAAGGTGTACGGGA (SEQ ID NO:2758), ATTTTCGGGTTGCGGTAAGGTGTACGGG (SEQ ID NO:2759), TTTCGGGTTGCGGTAAGGTGTACGGGAA (SEQ ID NO:2760), ATTTTCGGGTTGCGGTAAGGTGTACGGGA (SEQ ID NO:2761), GGGGCGTTTTAGGTTGTTGGCGTTCG (SEQ ID NO:2762), CGGGCGTTTTAGGTTGTTGGCGTTC (SEQ ID NO:2763), GGGCGTTTTAGGTTGTTGGCGTTCGTG (SEQ ID NO:2764), GGGTCGTTTCGTTGTTGTTAGCGTAGG (SEQ ID NO:2765), CGGGCGTTTTAGGTTGTTGGCGTTCG (SEQ ID NO:2766)
Target291	chr2:175202051-175202065	GTTCGGACGAGTTGTAGCGGTATTTGC (SEQ ID NO:2767), AGCGTTTCGTTTTCGTTGTGTAATAAGC (SEQ ID NO:2768), GGGGCGTTTTAGGTTGTTGGCGTTCG (SEQ ID NO:2769), CGGGCGTTTTAGGTTGTTGGCGTTC (SEQ ID NO:2770), GGGCGTTTTAGGTTGTTGGCGTTCGT (SEQ ID NO:2771), GGGGCGTTTTAGGTTGTTGGCGTTCGT (SEQ ID NO:2772), TGTAGGATGAGGTCGGGGGATTTCGGAA (SEQ ID NO:2773)
Target292	chr2:175202067-175202376	GGAGGCGGGAGGGTAGGGGTTTAGTG (SEQ ID NO:2774), GGCGGGAGGGTAGGGGTTTAGTGACG (SEQ ID NO:2775), TGATTCGGCGTTAGTGTCTTCGGGC (SEQ ID NO:2776), GCGGCGGGGTAAGGAGGTAGCGATA (SEQ ID NO:2777), TATAACGGGGCGGCGGGGGTAAAG (SEQ ID NO:2778), TTTATTCGGGCGCGGAAGGTAGAGGGG (SEQ ID NO:2779), GCGTTAGTTCGGGTTTTGGGGCGGTT (SEQ ID NO:2780), GGGCGCGGAAGGTAGAGGGGAGTTTTT (SEQ ID NO:2781), GCGCGGAAGGTAGAGGGGAGTTTTTCG (SEQ ID NO:2782), GGGGCGTTTTAGGTTGTTGGCGTTCG (SEQ ID NO:2783)
Target293	chr2:175202388-175202400	GGAGGCGGGAGGGTAGGGGTTTAGTG (SEQ ID NO:2784), GGCGGGAGGGTAGGGGTTTAGTGACG (SEQ ID NO:2785), GCGGGAGGGTAGGGGTTTAGTGACGT (SEQ ID NO:2786), GACGTTTTAGGGTTCGGGTTGGGCGC (SEQ ID NO:2787), TGACGTTTTAGGGTTCGGGTTGGGCG (SEQ ID NO:2788), TTTATTCGGGCGCGGAAGGTAGAGGGG (SEQ ID NO:2789), GGGCGCGGAAGGTAGAGGGGAGTTTTT (SEQ ID NO:2790), GCGCGGAAGGTAGAGGGGAGTTTTTCG (SEQ ID NO:2791), TTATTCGGGCGCGGAAGGTAGAGGGGA (SEQ ID NO:2792), GCGCGGAAGGTAGAGGGGAGTTTTTC (SEQ ID NO:2793)
Target294	chr2:175202430-175202523	GGAGGCGGGAGGGTAGGGGTTTAGTG (SEQ ID NO:2794), GGCGGGAGGGTAGGGGTTTAGTGACG (SEQ ID NO:2795), GCGGGAGGGTAGGGGTTTAGTGACGT (SEQ ID NO:2796), GGGTTTTCGGGTTCGGTTCGTTTCGTT (SEQ ID NO:2797), GACGTTTTAGGGTTCGGGTTGGGCGC (SEQ ID NO:2798), TTTATTCGGGCGCGGAAGGTAGAGGGG (SEQ ID NO:2799), GGGCGCGGAAGGTAGAGGGGAGTTTTT (SEQ ID NO:2800), AGTTTGGGCGAGTGGTATGTGTGTGCG (SEQ ID NO:2801), GCGCGGAAGGTAGAGGGGAGTTTTTCG (SEQ ID NO:2802), TTATTCGGGCGCGGAAGGTAGAGGGGA (SEQ ID NO:2803)
Target295	chr2:176945119-176945216	GTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2804), TAGGGTGTAGAGTCGTCGTTGGGGGGC (SEQ ID NO:2805), AGTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2806), AGTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2807), GAGTAGGGTGTAGAGTCGTCGTTGGGGG (SEQ ID NO:2808), TCGGTCGGAGTTGTTGTAGTTTTCGT (SEQ ID NO:2809), CGGTCGGAGTTGTTGTAGTTTTCGTT (SEQ ID NO:2810), TCGGTCGGAGTTGTTGTAGTTTTCGTT (SEQ ID NO:2811), TTCGGTCGGAGTTGTTGTAGTTTTCGT (SEQ ID NO:2812), TTCGGTCGGAGTTGTTGTAGTTTTCG (SEQ ID NO:2813)
Target296	chr2:176945218-176945225	GTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2814), TAGGGTGTAGAGTCGTCGTTGGGGGGC (SEQ ID NO:2815), AGTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2816), AGTAGGGTGTAGAGTCGTCGTTGGGGGG (SEQ ID NO:2817), GAGTAGGGTGTAGAGTCGTCGTTGGGGG (SEQ ID NO:2818), TCGGTCGGAGTTGTTGTAGTTTTCGT (SEQ ID NO:2819), CGGTCGGAGTTGTTGTAGTTTTCGTT (SEQ ID NO:2820), TCGGTCGGAGTTGTTGTAGTTTTCGTT (SEQ ID NO:2821), TTCGGTCGGAGTTGTTGTAGTTTTCGT (SEQ ID NO:2822), TTCGGTCGGAGTTGTTGTAGTTTTCG (SEQ ID NO:2823)
Target297	chr2:176945270-176945337	GCGCGGAAGGTGTTTAGTGGTCGGATG (SEQ ID NO:2824), AGAGGGCGCGGAAGGTGTTTAGTGTC (SEQ ID NO:2825), GAGAGGGCGCGGAAGGTGTTTAGTGGT (SEQ ID NO:2826), CGCGGAAGGTGTTTAGTGGTCGGATGG (SEQ ID NO:2827), TTCGGTCGAGAGTAGGGGTGCGAGAGG (SEQ ID NO:2828), CGGTTGTAGTTTTAGGCGCGGCGGTC (SEQ ID NO:2829), CGGTTGTAGTTTTAGGCGCGGCGGT (SEQ ID NO:2830), GCGGTTGTAGTTTTAGGCGCGGCGGTC (SEQ ID NO:2831), GCGGTTGTAGTTTTAGGCGCGGCGG (SEQ ID NO:2832), GCGGTTGTAGTTTTAGGCGCGGCGGT (SEQ ID NO:2833)
Target298	chr2:176945339-176945352	GCGCGGAAGGTGTTTAGTGGTCGGATG (SEQ ID NO:2834), AGAGGGCGCGGAAGGTGTTTAGTGTC (SEQ ID NO:2835), GAGAGGGCGCGGAAGGTGTTTAGTGGT (SEQ ID NO:2836), CGCGGAAGGTGTTTAGTGGTCGGATGG (SEQ ID NO:2837), TTCGGTCGAGAGTAGGGGTGCGAGAGG (SEQ ID NO:2838), CGGTTGTAGTTTTAGGCGCGGCGGTC (SEQ ID NO:2839), CGGTTGTAGTTTTAGGCGCGGCGGT (SEQ ID NO:2840), GCGGTTGTAGTTTTAGGCGCGGCGGTC (SEQ ID NO:2841), GCGGTTGTAGTTTTAGGCGCGGCGG (SEQ ID NO:2842), GCGGTTGTAGTTTTAGGCGCGGCGGT (SEQ ID NO:2843)
Target299	chr2:176945372-176945459	AAGGGGTAGGGTAGGTTTTCGGTGGCG (SEQ ID NO:2844), GCGCGGAAGGTGTTTAGTGTCGGATG (SEQ ID NO:2845), AGAGGGCGCGGAAGGTGTTTAGTGTC (SEQ ID NO:2846), GAGAGGGCGCGGAAGGTGTTTAGTGGT (SEQ ID NO:2847), CGGTCGTCGCTTTGAGGTTGTAGTCG (SEQ ID NO:2848), TCGTAGGTGTGGTTTTAGAATCGGCGT (SEQ ID NO:2849), GCGGTAGCCTTTGGTTATGTTTGGTCG (SEQ ID NO:2850), GCGGTAGCCTTTGGTTATGTTTGGTCGT (SEQ ID NO:2851), TTCGTAGGTGTGGTTTTAGAATCGGCGT (SEQ ID NO:2852), CGGTAGCCTTTGGTTATGTTTGGTCGT (SEQ ID NO:2853)

Figure 5 (Table 1)

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Target300	chr2:176945462-176945469	AAGGGGTAGGGTAGGTTTTCGGTGGCG (SEQ ID NO:2854), CGGTCGTCGCGTTTGAAGTTGTAGTCG (SEQ ID NO:2855), GGGTAGGGTAGGTTTTCGGTGGCGGTC (SEQ ID NO:2856), GGTAGGGTAGGTTTTCGGTGGCGGTCG (SEQ ID NO:2857), GTGCGAGTGGAAGGGTAGGGTAGGTT (SEQ ID NO:2858), TCGTAGGTGTGGTTTTAGAATCGGCGT (SEQ ID NO:2859), GCGGTAGCGTTTGTTATGTTTTGGTCG (SEQ ID NO:2860), GCGGTAGCGTTTGTTATGTTTTGGTCG (SEQ ID NO:2861), TTCGTAGGTGTGGTTTTAGAATCGGCGT (SEQ ID NO:2862), CGGTAGCGTTTGTTATGTTTTGGTCG (SEQ ID NO:2863)
Target301	chr2:176945532-176945551	AAGGGGTAGGGTAGGTTTTCGGTGGCG (SEQ ID NO:2864), GGGTCGTTGGGTGCGGTAGGATAT (SEQ ID NO:2865), GGGTAGGGTAGGTTTTCGGTGGCGGTC (SEQ ID NO:2866), TGTAGAAGTTGGGGTCGTTGGGTGCG (SEQ ID NO:2867), GGTAGGGTAGGTTTTCGGTGGCGGTCG (SEQ ID NO:2868), TGGGATAGGAGTTGGGAATACGGGGCG (SEQ ID NO:2869), TTGGGATAGGAGTTGGGAATACGGGGCG (SEQ ID NO:2870), AGGTTCCGAAGGGGTAGAGGTTTTGGG (SEQ ID NO:2871), GGTTCCGAAGGGGTAGAGGTTTTGGG (SEQ ID NO:2872), TTGGGATAGGAGTTGGGAATACGGGGC (SEQ ID NO:2873)
Target302	chr2:176945604-176945648	GGGGTCGTTGGGTGCGGTTAGGATAT (SEQ ID NO:2874), TGTAGAAGTTGGGGTCGTTGGGTGCG (SEQ ID NO:2875), GTGTAGAAGTTGGGGTCGTTGGGTGCG (SEQ ID NO:2876), GAAGTTGGGGTCGTTGGGTGCGGTTA (SEQ ID NO:2877), AAGTTGGGGTCGTTGGGTGCGGTTAG (SEQ ID NO:2878), GGGTATTCGGGGTTGGGTTTGGTCGGA (SEQ ID NO:2879), AGGGTATTCGGGGTTGGGTTTGGTCGG (SEQ ID NO:2880), GGTATTCGGGGTTGGGTTTGGTCGGAG (SEQ ID NO:2881), GGTATTCGGGGTTGGGTTTGGTCGGAGA (SEQ ID NO:2882), TAGGGTATTCGGGGTTGGGTTTGGTCGG (SEQ ID NO:2883)
Target303	chr2:176947000-176947053	GTGGTTTCGGGTAGGTTGAGTGTGCGC (SEQ ID NO:2884), GGTGGTTTCGGGTAGGTTGAGTGTGCGC (SEQ ID NO:2885), TGAGTGTGCGGTTAGTTCGTATCGGC (SEQ ID NO:2886), TGGTGGTTTCGGGTAGGTTGAGTGTGCGC (SEQ ID NO:2887), CGGGTAGGTTGAGTGTGCGGTTAGT (SEQ ID NO:2888), GGGTGGTTTCGGTTTTGGCGCGGATTA (SEQ ID NO:2889), CGGCGTCGGGTTAGGTTTCGGAAGTT (SEQ ID NO:2890), GGGTGGTTTCGGTTTTGGCGCGGATTAA (SEQ ID NO:2891), GGTGGTTTCGGTTTTGGCGCGGATTAA (SEQ ID NO:2892), CGGCGTCGGGTTAGGTTTCGGAAGTTT (SEQ ID NO:2893)
Target304	chr2:176947061-176947080	GCGGTTAGTTCGTATCGGCGGGGTC (SEQ ID NO:2894), GCGTTAGAGTCGGAGTTATTTAGCGTCGCG (SEQ ID NO:2895), GCGGTTAGTTCGTATCGGCGGGGT (SEQ ID NO:2896), GCGTTAGAGTCGGAGTTATTTAGCGTCGC (SEQ ID NO:2897), CGTTAGAGTCGGAGTTATTTAGCGTCGCG (SEQ ID NO:2898), CGGCGTCGGGTTAGGTTTCGGAAGTT (SEQ ID NO:2899), CGGCGTCGGGTTAGGTTTCGGAAGTTT (SEQ ID NO:2900), CGGCGTCGGGTTAGGTTTCGGAAGT (SEQ ID NO:2901), CGGCGTCGGGTTAGGTTTCGGAAGTTG (SEQ ID NO:2902), GCGCGTCGGGTTAGGTTTCGGAAGTTT (SEQ ID NO:2903)
Target305	chr2:176947118-176947173	AGAGTCGGAGTTATTTAGCGTCGCGT (SEQ ID NO:2904), GCGTTAGAGTCGGAGTTATTTAGCGTCGCG (SEQ ID NO:2905), GCGTTAGAGTCGGAGTTATTTAGCGTCGCGT (SEQ ID NO:2906), AGAGTCGGAGTTATTTAGCGTCGCGTTT (SEQ ID NO:2907), GCGTTAGAGTCGGAGTTATTTAGCGTCGC (SEQ ID NO:2908), TGTTAGGGTACGTAGAGAGCGGTTTCGG (SEQ ID NO:2909), TTGTTAGGGTACGTAGAGAGCGGTTTCGG (SEQ ID NO:2910), TTGTTAGGGTACGTAGAGAGCGGTTTCG (SEQ ID NO:2911), TCGTTGTTGGTCGTTTGTGTTAGGGT (SEQ ID NO:2912), GCGTTGTTGGTCGTTTGTGTTAGGGT (SEQ ID NO:2913)
Target306	chr2:176947242-176947252	AGTGGTTGTAGGATTAATAGTTCGCGGTTGG (SEQ ID NO:2914), GGTAGTCGAGTCGTTTTTGGCATTGTTGGT (SEQ ID NO:2915), GAGTGGTTGTAGGATTAATAGTTCGCGGTTGG (SEQ ID NO:2916), TGAGTGGTTGTAGGATTAATAGTTCGCGGTT (SEQ ID NO:2917), TGAGTGGTTGTAGGATTAATAGTTCGCGGTTGG (SEQ ID NO:2918)
Target307	chr2:176956535-176956546	CGGGCGGGAGTGGGTGGTGATTGTAAA (SEQ ID NO:2919), ATTTGGTGTGAGAAACGGGCGGGAGTG (SEQ ID NO:2920), TTTGGTGTGAGAAACGGGCGGGAGTG (SEQ ID NO:2921), GGGCGGGAGTGGGTGGTGATTGTAAA (SEQ ID NO:2922), AATTTGGTGTGAGAAACGGGCGGGAGT (SEQ ID NO:2923), CGGCGTCGGGGAGAGAAAGTTATTTAGT (SEQ ID NO:2924), CGGCGTCGGGGAGAGAAAGTTATTTAGT (SEQ ID NO:2925), TCGATTGGGTTTTTTAGTTTTTCGCGGGT (SEQ ID NO:2926), TCGATTGGGTTTTTTAGTTTTTCGCGGGT (SEQ ID NO:2927), TTCGATTGGGTTTTTTAGTTTTTCGCGGGT (SEQ ID NO:2928)
Target308	chr2:176956573-176956707	CGCGGGAGTTGAGAGGTTTAGGTCGGA (SEQ ID NO:2929), TCGCGGGAGTTGAGAGGTTTAGGTCGG (SEQ ID NO:2930), CGGCGGGAGTGGGTGGTGATTGTAAA (SEQ ID NO:2931), ATTTGGTGTGAGAAACGGGCGGGAGTG (SEQ ID NO:2932), TTTGGTGTGAGAAACGGGCGGGAGTG (SEQ ID NO:2933), TGAAGCGTTTTTGGGGTTGGCGGTAGA (SEQ ID NO:2934), AAGCGTTTTTGGGGTTGGCGGTAGAGA (SEQ ID NO:2935), AGCGTTTTTGGGGTTGGCGGTAGAGAT (SEQ ID NO:2936), TGAAGCGTTTTTGGGGTTGGCGGTAGAG (SEQ ID NO:2937), GAAGCGTTTTTGGGGTTGGCGGTAGAG (SEQ ID NO:2938)
Target309	chr2:176964663-176964673	AGAGCGGGTTATGTGGGTTCTTTTTG (SEQ ID NO:2939), GAGCGGGTTATGTGGGTTCTTTTTGA (SEQ ID NO:2940), AGAGCGGGTTATGTGGGTTCTTTTTGA (SEQ ID NO:2941), GAGCGGGTTATGTGGGTTCTTTTTGAA (SEQ ID NO:2942), AGAGCGGGTTATGTGGGTTCTTTTTGAA (SEQ ID NO:2943), GTTGTGGGGTTGTAGGTCGAGAGGT (SEQ ID NO:2944), TGTGTGGGGTTGTAGGTCGAGAGGTT (SEQ ID NO:2945), TTGTGTGGGGTTGTAGGTCGAGAGGTT (SEQ ID NO:2946), GTTGTGGGGTTGTAGGTCGAGAGGTT (SEQ ID NO:2947), GAGAAGTCGTCGAAGGTAGTGGCGTTC (SEQ ID NO:2948)

Figure 5 (Table 1)

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Target310	chr2:176964709-176964740	GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2949), GCGCGTTGTTTTGGGTCGTTACGTTTC (SEQ ID NO:2950), CGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2951), GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2952), GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2953), TTTTGGTTTAGCGGTCGTTTCGGGCGT (SEQ ID NO:2954), TTTGTTTAGCGGTCGTTTCGGGCGTA (SEQ ID NO:2955), TTGGTTTAGCGGTCGTTTCGGGCGTAT (SEQ ID NO:2956), GAAGGTAGTGCGGTCGTAGGTTGCGT (SEQ ID NO:2957), TTTTGGTTTAGCGGTCGTTTCGGGCG (SEQ ID NO:2958)
Target311	chr2:176964769-176964806	GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2959), GCGCGTTGTTTTGGGTCGTTACGTTTC (SEQ ID NO:2960), CGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2961), GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2962), GCGCGTTGTTTTGGGTCGTTACGTTTCG (SEQ ID NO:2963), TTTTGGTTTAGCGGTCGTTTCGGGCGT (SEQ ID NO:2964), TTTGTTTAGCGGTCGTTTCGGGCGTA (SEQ ID NO:2965), TTGGTTTAGCGGTCGTTTCGGGCGTAT (SEQ ID NO:2966), TTTTGGTTTAGCGGTCGTTTCGGGCG (SEQ ID NO:2967), TTTTGGTTTAGCGGTCGTTTCGGGCGT (SEQ ID NO:2968)
Target312	chr2:176964811-176964887	GGTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2969), GGTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2970), GTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2971), GCGTAGTTTGC GGCGTTATTGTTTCGG (SEQ ID NO:2972), GCGTAGTTTGC GGCGTTATTGTTTCGG (SEQ ID NO:2973), TTTTGGTTTAGCGGTCGTTTCGGGCGT (SEQ ID NO:2974), TTTGTTTAGCGGTCGTTTCGGGCGTA (SEQ ID NO:2975), TTGGTTTAGCGGTCGTTTCGGGCGTAT (SEQ ID NO:2976), TTTTGGTTTAGCGGTCGTTTCGGGCG (SEQ ID NO:2977), TTTTGGTTTAGCGGTCGTTTCGGGCGT (SEQ ID NO:2978)
Target313	chr2:176964946-176964970	GGTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2979), GGTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2980), GTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2981), GGTCGTTGGGTTAGAGGAGCGCGG (SEQ ID NO:2982), GTCGTTGGGTTAGAGGAGCGCGGTC (SEQ ID NO:2983), TTTTGGAGTAGGGTCGTGGAGTTCGGC (SEQ ID NO:2984), TTTTGGAGTAGGGTCGTGGAGTTCGGC (SEQ ID NO:2985), GGGGCGTAGGGAGTTTTTTGGAGTAGGGT (SEQ ID NO:2986), GGGGCGTAGGGAGTTTTTTGGAGTAGGG (SEQ ID NO:2987), AGGGGCGTAGGGAGTTTTTTGGAGTAGGG (SEQ ID NO:2988)
Target314	chr2:176965003-176965036	GGGGGTTTTTTGCGTTTTTGGTTTTAAGGACG (SEQ ID NO:2989), AGGGGTTTTTTGCGTTTTTGGTTTTAAGGACG (SEQ ID NO:2990), GGGGGTTTTTTGCGTTTTTGGTTTTAAGGACG (SEQ ID NO:2991), AGGGGTTTTTTGCGTTTTTGGTTTTAAGG (SEQ ID NO:2992), GGGGTTTTTTGCGTTTTTGGTTTTAAGGACG (SEQ ID NO:2993), TCGGTTCCGGGAGTATGGGTATCGTTT (SEQ ID NO:2994), ATCGTTCCGGGAGTATGGGTATCGTT (SEQ ID NO:2995), AATCGTTCCGGGAGTATGGGTATCGT (SEQ ID NO:2996), TCGTCCGGTAGTGAAGGTCGTAGGTAA (SEQ ID NO:2997), AGTTGAGCGGTTTTTGGTGCGTTTT (SEQ ID NO:2998)
Target315	chr2:176969353-176969393	TGGTTGCGTTTCGAAGGTTTGGTGCGT (SEQ ID NO:2999), GCGGTTGGTTGCGTTTCGAAGGTTTGG (SEQ ID NO:3000), GGTTCGTTTCGAAGGTTTGGTGCGT (SEQ ID NO:3001), TTGGTTGCGTTTCGAAGGTTTGGTGCG (SEQ ID NO:3002), TGTTGCGTTTCGAAGGTTTGGTGCGT (SEQ ID NO:3003)
Target316	chr2:176969516-176969530	GGGGGGTAAGGGTTCGCGTTAAGGAGT (SEQ ID NO:3004), AAGCGTTTTGGGTTGTGGAGTGGGTCG (SEQ ID NO:3005), CGGGGGTAAGGGTTCGCGTTAAGGAG (SEQ ID NO:3006), AGCGGGTTGGGATTGGAATGAAAGCGT (SEQ ID NO:3007), CGGGGGTAAGGGTTCGCGTTAAGGA (SEQ ID NO:3008), ATAGGGGAAGGGGGCGGTCGTTTTT (SEQ ID NO:3009), TTGTAGTGCGCGTCGTTGTATAGGGG (SEQ ID NO:3010), GTATAGGGGAAGGGGGCGGTCGTTTTT (SEQ ID NO:3011), GTAGTGCGCGTCGTTGTATAGGGGAA (SEQ ID NO:3012), TAGTGCGCGTCGTTGTATAGGGGAAG (SEQ ID NO:3013)
Target317	chr2:176969563-176969569	GGGGGGTAAGGGTTCGCGTTAAGGAGT (SEQ ID NO:3014), AAGCGTTTTGGGTTGTGGAGTGGGTCG (SEQ ID NO:3015), CGGGGGTAAGGGTTCGCGTTAAGGAG (SEQ ID NO:3016), AGCGGGTTGGGATTGGAATGAAAGCGT (SEQ ID NO:3017), CGGGGGTAAGGGTTCGCGTTAAGGA (SEQ ID NO:3018), GCGATTTGGCGGGGAGGGTGAGTTAT (SEQ ID NO:3019), CGATTTGGCGGGGAGGGTGAGTTATT (SEQ ID NO:3020), GCGATTTGGCGGGGAGGGTGAGTTA (SEQ ID NO:3021), GCGATTTGGCGGGGAGGGTGAGTTATT (SEQ ID NO:3022), TTTGGCGGGGAGGGTGAGTTATTGT (SEQ ID NO:3023)
Target318	chr2:176969603-176969616	GGGGGGTAAGGGTTCGCGTTAAGGAGT (SEQ ID NO:3024), CGGGGGTAAGGGTTCGCGTTAAGGAG (SEQ ID NO:3025), CGGGGGTAAGGGTTCGCGTTAAGGA (SEQ ID NO:3026), GGGGGGTAAAGGGTTCGCGTTAAGGAGTC (SEQ ID NO:3027), CGTTTGGGTTGTGGAGTGGGTCGGG (SEQ ID NO:3028), GGGTGGGTTAGGTAGTTTCGGCGTTT (SEQ ID NO:3029), GTACGGGGTGGGTTAGGTAGTTTCGG (SEQ ID NO:3030), GGTACGGGGTGGGTTAGGTAGTTTCG (SEQ ID NO:3031), TACGGGGTGGGTTAGGTAGTTTCGGC (SEQ ID NO:3032), GGGTGGGTTAGGTAGTTTCGGCGTT (SEQ ID NO:3033)
Target319	chr2:176969624-176969636	GGGGGGTAAGGGTTCGCGTTAAGGAGT (SEQ ID NO:3034), CGGGGGTAAGGGTTCGCGTTAAGGAG (SEQ ID NO:3035), CGGGGGTAAGGGTTCGCGTTAAGGA (SEQ ID NO:3036), GGGGGGTAAAGGGTTCGCGTTAAGGAGTC (SEQ ID NO:3037), GGGGGTAAGGGTTCGCGTTAAGGAGTCG (SEQ ID NO:3038), GGGTGGGTTAGGTAGTTTCGGCGTTT (SEQ ID NO:3039), GTACGGGGTGGGTTAGGTAGTTTCGG (SEQ ID NO:3040), GGTACGGGGTGGGTTAGGTAGTTTCG (SEQ ID NO:3041), TACGGGGTGGGTTAGGTAGTTTCGGC (SEQ ID NO:3042), GGGTGGGTTAGGTAGTTTCGGCGTT (SEQ ID NO:3043)

Figure 5 (Table 1)

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Target320	chr2:176987122-176987205	CGGAAGTTGGAGAGTTAGCGACGGGGT (SEQ ID NO:3044), TCGGAAGTTGGAGAGTTAGCGACGGGG (SEQ ID NO:3045), CGGAAGTTGGAGAGTTAGCGACGGGGT (SEQ ID NO:3046), TTTTCGGGCGTTAGGGGTCGTTTCGA (SEQ ID NO:3047), TTCGAAGTTGGAGAGTTAGCGACGGGG (SEQ ID NO:3048), GCGATCGTATTTAGAGGAGGCGTTGGGG (SEQ ID NO:3049), GCGATCGTATTTAGAGGAGGCGTTGGGGA (SEQ ID NO:3050), GCGATCGTATTTAGAGGAGGCGTTGGG (SEQ ID NO:3051), CGATCGTATTTAGAGGAGGCGTTGGGG (SEQ ID NO:3052), AGGTTTATGTGTTTCGGTTCGGTTCGGT (SEQ ID NO:3053)
Target321	chr2:176987223-176987272	CGGAAGTTGGAGAGTTAGCGACGGGGT (SEQ ID NO:3054), TCGGAAGTTGGAGAGTTAGCGACGGGG (SEQ ID NO:3055), GTTGGGCGGGTTAGGTTAGGTCGGGTC (SEQ ID NO:3056), GCGGTCGCGTTTGTGGTTTTGGTAGTC (SEQ ID NO:3057), CGGAAGTTGGAGAGTTAGCGACGGGGT (SEQ ID NO:3058), AGGTTTATGTGTTTCGGTTCGGTTCGGT (SEQ ID NO:3059), TTATGTGTTTCGGTTCGGTTCGGTTCGA (SEQ ID NO:3060), GGTATGTGTTTCGGTTCGGTTCGGTTCG (SEQ ID NO:3061), TTTATGTGTTTCGGTTCGGTTCGGTTCG (SEQ ID NO:3062), GGTATGTGTTTCGGTTCGGTTCGGTTCG (SEQ ID NO:3063)
Target322	chr2:176987281-176987487	GCGTCGCGGATTAATGTTGGAGGTTG (SEQ ID NO:3064), GTTGGGCGGGTTAGGTTAGGTCGGGTC (SEQ ID NO:3065), TGGGTCGCGGATTAATGTTGGAGGTT (SEQ ID NO:3066), TGGGTTTCGGGTTTTAATTGCGGCGT (SEQ ID NO:3067), GGGTTTCGGGTTTTAATTGCGGCGTT (SEQ ID NO:3068), GGTGTAGTTTTATTATTGTCGCGCGGT (SEQ ID NO:3069), AGGTTGTAGTTTTATTATTGTCGCGCGG (SEQ ID NO:3070), AGGTTGTAGTTTTATTATTGTCGCGCGGT (SEQ ID NO:3071), GGTGTAGTTTTATTATTGTCGCGCGGT (SEQ ID NO:3072), AGGTTGTAGTTTTATTATTGTCGCGCGGT (SEQ ID NO:3073)
Target323	chr2:176987559-176987664	TCGGCGGCGGATAGTGTAATGTTGGGT (SEQ ID NO:3074), GGGAGTTGTTTCGGCGCGGATAGTGTA (SEQ ID NO:3075), CGGCGGCGGATAGTGTAATGTTGGGTG (SEQ ID NO:3076), AGTGTAATGTTGGGTGGGAGTGCGGGA (SEQ ID NO:3077), GCGGCGGATAGTGTAATGTTGGGTGGG (SEQ ID NO:3078), GTTTTCGCGTTTGGTTTCGGCGGTT (SEQ ID NO:3079), AGGTCGTTTTGCGCGTTTGGTTTCGG (SEQ ID NO:3080), GGTGCGTTTTGCGCGTTTGGTTTCGG (SEQ ID NO:3081), TTTTCGCGTTTGGTTTCGGCGGTT (SEQ ID NO:3082), GTTTTCGCGTTTGGTTTCGGCGGTT (SEQ ID NO:3083)
Target324	chr2:176987667-176987686	GCGTAGGGTCGGTTTGTAGGTGTGGTT (SEQ ID NO:3084), GCGTAGGGTCGGTTTGTAGGTGTGGTTG (SEQ ID NO:3085), GCGTAGGGTCGGTTTGTAGGTGTGGTTGA (SEQ ID NO:3086), TGTAGGTGTGGTTGATGGTTCGGTCGT (SEQ ID NO:3087), GGGTCGGTTGTAGGTGTGGTTGATGGT (SEQ ID NO:3088), CGGGGGAACGTACGGGTGGTAGAGGTC (SEQ ID NO:3089), GGGGGAACGTACGGGTGGTAGAGGTC (SEQ ID NO:3090), CGTTGTCGGGGTTGGGAGGGTATCG (SEQ ID NO:3091), CGGGGGAACGTACGGGTGGTAGAGGTC (SEQ ID NO:3092), CGGGGGAACGTACGGGTGGTAGAGG (SEQ ID NO:3093)
Target325	chr2:176987711-176987730	GCGTAGGGTCGGTTTGTAGGTGTGGTT (SEQ ID NO:3094), GCGTAGGGTCGGTTTGTAGGTGTGGTTG (SEQ ID NO:3095), GCGTAGGGTCGGTTTGTAGGTGTGGTTGA (SEQ ID NO:3096), TGTAGGTGTGGTTGATGGTTCGGTCGT (SEQ ID NO:3097), GGGTCGGTTGTAGGTGTGGTTGATGGT (SEQ ID NO:3098), GTTCGGAGGTAGAGGCGGTTAGGGG (SEQ ID NO:3099), CGGGTTCGGAGGTAGAGGCGGTTAGG (SEQ ID NO:3100), GGGTTCGGAGGTAGAGGCGGTTAGGGG (SEQ ID NO:3101), CGGGGGAACGTACGGGTGGTAGAGGTC (SEQ ID NO:3102), GGTTCGGAGGTAGAGGCGGTTAGGGG (SEQ ID NO:3103)
Target326	chr2:176987736-176987862	GCGTAGGGTCGGTTTGTAGGTGTGGTT (SEQ ID NO:3104), GCGTAGGGTCGGTTTGTAGGTGTGGTTG (SEQ ID NO:3105), CGGTCGTTACGTGCGTTTTTGGATGGA (SEQ ID NO:3106), TCGGTCGTTACGTGCGTTTTTGGATGG (SEQ ID NO:3107), GCGTAGGGTCGGTTTGTAGGTGTGGTTGA (SEQ ID NO:3108), TCGTTTCGGGAAGTCGGGTAGCGGTTT (SEQ ID NO:3109), ATCGTTTCGGGAAGTCGGGTAGCGGTTT (SEQ ID NO:3110), GTTGGGTCGTTGGGTTAGGGTTGGGA (SEQ ID NO:3111), TGGGTCGTTGGGTTAGGGTTGGGATC (SEQ ID NO:3112), GTATCGTTTCGGGAAGTCGGGTAGCGGT (SEQ ID NO:3113)
Target327	chr2:176987958-176987971	CGGTTTCGGGTCGCGTTTTAGTTTTGG (SEQ ID NO:3114), CGGTTTCGGGTCGCGTTTTAGTTTTGGT (SEQ ID NO:3115), GGTTCGGGTCGCGTTTTAGTTTTGGT (SEQ ID NO:3116), CGGTTTCGGGTCGCGTTTTAGTTTTGGT (SEQ ID NO:3117), ACGTGCCTTTTGGATGGAGTCGTTGT (SEQ ID NO:3118), GGAAGTGGAGGAGGAGGAGGTGGTGA (SEQ ID NO:3119), AAGTGGAGGAGGAGGAGGTGGTGGAG (SEQ ID NO:3120), AGGAAGTGGAGGAGGAGGAGGTGGTGG (SEQ ID NO:3121), GAAGTGGAGGAGGAGGAGGTGGTGGAG (SEQ ID NO:3122), AAGGAAGTGGAGGAGGAGGAGGTGGTGG (SEQ ID NO:3123)
Target328	chr2:176988078-176988129	GGTTCGGGAGTTTTAGGGGAGTAGCGGT (SEQ ID NO:3124), TGGTTCGGGAGTTTTAGGGGAGTAGCGG (SEQ ID NO:3125), GGTTCGGGAGTTTTAGGGGAGTAGCGG (SEQ ID NO:3126), GTGGTTCGGGAGTTTTAGGGGAGTAGCGG (SEQ ID NO:3127), GTTCGGGAGTTTTAGGGGAGTAGCGGT (SEQ ID NO:3128), TCGGGTGGTCGTTGTAAGTTGAGGGT (SEQ ID NO:3129), GGGATCGGGTGGTCGTTGTAAGTTGAGGG (SEQ ID NO:3130), ATCGGGTGGTCGTTGTAAGTTGAGGGT (SEQ ID NO:3131), TGGGATCGGGTGGTCGTTGTAAGTTGA (SEQ ID NO:3132), GGATCGGGTGGTCGTTGTAAGTTGAGGG (SEQ ID NO:3133)

Figure 5 (Table 1)

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Target338	chr2:177017223-177017375	GGCGGGAGGGAGGAAGTAAGCGAGTTT (SEQ ID NO:3219), TGTTTGAGGAGGTGGGTGGGAGTGAGC (SEQ ID NO:3220), GGTTGTGTTTGAGGAGGTGGGTGGGAGT (SEQ ID NO:3221), TGTGGGTGTGTTTGAGGAGGTGGGTGG (SEQ ID NO:3222), GGGTGTGTTTGAGGAGGTGGGTGGGAG (SEQ ID NO:3223), TTGTGTCGGGTGTAGGTCGTTCCGGGA (SEQ ID NO:3224), TGTTGTCGGGTGTAGGTCGTTCCGGGAT (SEQ ID NO:3225), TTTGTTGTCGGGTGTAGGTCGTTCCGGG (SEQ ID NO:3226), TGTTGTCGGGTGTAGGTCGTTCCGGGATC (SEQ ID NO:3227), GTTGTCCGGGTGTAGGTCGTTCCGGGATC (SEQ ID NO:3228)
Target339	chr2:177017446-177017464	GGGTGTGAGCGATTTTAATTCGACGGT (SEQ ID NO:3229), AGGGTGTGAGCGATTTTAATTCGACGGT (SEQ ID NO:3230), TAGGGTGTGAGCGATTTTAATTCGACGGT (SEQ ID NO:3231), ATAGGGTGTGAGCGATTTTAATTCGACGGT (SEQ ID NO:3232), TATAGGGTGTGAGCGATTTTAATTCGACGGT (SEQ ID NO:3233)
Target340	chr2:177017483-177017516	TGTGTTTGTGCGAGCGTTAGATTAAGATTTGGT (SEQ ID NO:3234), GTGTTTGTGCGAGCGTTAGATTAAGATTTGGT (SEQ ID NO:3235), TTGTGTTTGTGCGAGCGTTAGATTAAGATTTGG (SEQ ID NO:3236), TGTGTTTGTGCGAGCGTTAGATTAAGATTTGGT (SEQ ID NO:3237), TTGTGTTTGTGCGAGCGTTAGATTAAGATTTGGT (SEQ ID NO:3238), TGTTGGTTGGGGGCGATTGAGGAGGAG (SEQ ID NO:3239), GTTGGTTGGGGGCGATTGAGGAGGAGT (SEQ ID NO:3240), ATGTTGGTTGGGGGCGATTGAGGAGGA (SEQ ID NO:3241), TGGTTGGGGGCGATTGAGGAGGAGTAA (SEQ ID NO:3242), TTGGTTGGGGGCGATTGAGGAGGAGTA (SEQ ID NO:3243)
Target341	chr2:177024222-177024286	CGTTTTTGGAGTGGGGATGCGGTGGAT (SEQ ID NO:3244), CGTTTTTGGAGTGGGGATGCGGTGGAT (SEQ ID NO:3245), CGTTTTTGGAGTGGGGATGCGGTGGGA (SEQ ID NO:3246), GTTTTTTGGAGTGGGGATGCGGTGGAT (SEQ ID NO:3247), CGTTTTTGGAGTGGGGATGCGGTGGATTT (SEQ ID NO:3248), GGTGTTGGGAATGATTTTGAATGTGGGAA (SEQ ID NO:3249), AGTAGCGGATTTTTGGTTTGAATGAGCGT (SEQ ID NO:3250), GGTGGTGGGAATGATTTTGAATGTGGGAAA (SEQ ID NO:3251), AGTAGCGGATTTTTGGTTTGAATGAGCGTT (SEQ ID NO:3252), GCGTTAGTAGCGGATTTTTGGTTTGAATGAGCG (SEQ ID NO:3253)
Target342	chr2:177024294-177024328	AGTGTGTTTCGTTGGGGGAGGGTTT (SEQ ID NO:3254), GTGTTTCGTTGGGGGAGGGTTTGG (SEQ ID NO:3255), GAGTGTGTTTCGTTGGGGGAGGGTTT (SEQ ID NO:3256), GTGTGTTTCGTTGGGGGAGGGTTT (SEQ ID NO:3257), TGTGTTTCGTTGGGGGAGGGTTTGG (SEQ ID NO:3258), TGGTTGGTGGGAATGATTTTGAATGTGGG (SEQ ID NO:3259), TGGTTGGTGGGAATGATTTTGAATGTGGGA (SEQ ID NO:3260), GTGGTTGGTGGGAATGATTTTGAATGTGGG (SEQ ID NO:3261), AGTGGTTGGTGGGAATGATTTTGAATGTGGG (SEQ ID NO:3262), GTGGTTGGTGGGAATGATTTTGAATGTGGGA (SEQ ID NO:3263)
Target343	chr2:177024350-177024656	AGTGTGTTTCGTTGGGGGAGGGTTT (SEQ ID NO:3264), GGTTTGGCGTTGTTGGGTTTGTGGGA (SEQ ID NO:3265), GTGGTTTCGTTGGGGGAGGGTTTGG (SEQ ID NO:3266), GCGGTTGTTGGGTTTGTGGGATTGCG (SEQ ID NO:3267), GAGTGTGTTTCGTTGGGGGAGGGTTT (SEQ ID NO:3268), AGGAAGGCGAGGAGGATTGCGTAATGA (SEQ ID NO:3269), GGAAGGCGAGGAGGATTGCGTAATGAGT (SEQ ID NO:3270), GGAAGGCGAGGAGGATTGCGTAATGAG (SEQ ID NO:3271), CGAGGTTTGGAGTCGTTTAGGCGTTGA (SEQ ID NO:3272), AGGAAGGCGAGGAGGATTGCGTAATGAGT (SEQ ID NO:3273)
Target344	chr2:177029880-177029993	AGGGTGTAAGAGCGGGAAAAGTGCGGA (SEQ ID NO:3274), AGAGCGGGAAAAGTGCGGAGTAGGGAA (SEQ ID NO:3275), AAGAGCGGGAAAAGTGCGGAGTAGGGA (SEQ ID NO:3276), GGGTGTAAGAGCGGGAAAAGTGCGGAG (SEQ ID NO:3277), GGTGTAAGAGCGGGAAAAGTGCGGAGT (SEQ ID NO:3278), GCGTTTATAGCGATTAGGGGACGGGGT (SEQ ID NO:3279), GCGTTTATAGCGATTAGGGGACGGGGT (SEQ ID NO:3280), CGGCGGTAGTAAACGTTTCGGTAAGGA (SEQ ID NO:3281), CGTTTATAGCGATTAGGGGACGGGGT (SEQ ID NO:3282), GCGTTTATAGCGATTAGGGGACGGGG (SEQ ID NO:3283)
Target345	chr2:177030040-177030172	ATTAGGGTTCGTTGTTTTGAGGCGT (SEQ ID NO:3284), TAGGGTTCGTTGTTTTGAGGCGTAG (SEQ ID NO:3285), TTAGGGTTCGTTGTTTTGAGGCGTA (SEQ ID NO:3286), AGGGTTCGTTGTTTTGAGGCGTAG (SEQ ID NO:3287), TTAGGGTTCGTTGTTTTGAGGCGTAG (SEQ ID NO:3288), TGTCGGAAGGAAGGTATTTTTGAGCGGT (SEQ ID NO:3289), TGTCGGAAGGAAGGTATTTTTGAGCGGTT (SEQ ID NO:3290), TTGTCGGAAGGAAGGTATTTTTGAGCGGT (SEQ ID NO:3291), GTCGGAAGGAAGGTATTTTTGAGCGGTT (SEQ ID NO:3292), TTGTCGGAAGGAAGGTATTTTTGAGCGG (SEQ ID NO:3293)
Target346	chr2:177030178-177030289	ATTAGGGTTCGTTGTTTTGAGGCGT (SEQ ID NO:3294), TAGGGTTCGTTGTTTTGAGGCGTAG (SEQ ID NO:3295), TTAGGGTTCGTTGTTTTGAGGCGTA (SEQ ID NO:3296), GGTTTTGTATTTTCGGTTTTCGGTTGGG (SEQ ID NO:3297), TGGTTTGTATTTTCGGTTTTCGGTTGGG (SEQ ID NO:3298), GGGTTAAACGGTTTTTGTGCGGAAGGAAGG (SEQ ID NO:3299), GGGTTAAACGGTTTTTGTGCGGAAGGAAGGT (SEQ ID NO:3300), AGGGTTAAACGGTTTTTGTGCGGAAGGAAGG (SEQ ID NO:3301), AGGGTTAAACGGTTTTTGTGCGGAAGGAAGGT (SEQ ID NO:3302), GGTAAACGGTTTTTGTGCGGAAGGAAGGT (SEQ ID NO:3303)

Figure 5 (Table 1)

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Target347	chr2:198650923-198650988	TATTTGGCGGGTGGGGAGAAGCGGATT (SEQ ID NO:3304), TTATTTGGCGGGTGGGGAGAAGCGGAT (SEQ ID NO:3305), GATTGCGTCGTTTCGGGTGGTAGGTGG (SEQ ID NO:3306), GGATTGCGTCGTTTCGGGTGGTAGGTG (SEQ ID NO:3307), GCGGCGAGGGTGGTTGTGGTAGTTGTA (SEQ ID NO:3308), CGTTCGTTTCGTTGTGTCGTGCGTTTT (SEQ ID NO:3309), CGTTCGTTTCGTTGTGTCGTGCGTTTTG (SEQ ID NO:3310), CGTTCGTTTCGTTGTGTCGTGCGTTTTGT (SEQ ID NO:3311), TCGTTTCGTTGTGTCGTGCGTTTTGTT (SEQ ID NO:3312), TTCGTTTCGTTGTGTCGTGCGTTTTGT (SEQ ID NO:3313)
Target348	chr2:198651002-198651144	GTGGTTTTGGGATTTTCGAGTCGGGGCG (SEQ ID NO:3314), TATTTGGCGGGTGGGGAGAAGCGGATT (SEQ ID NO:3315), TTATTTGGCGGGTGGGGAGAAGCGGAT (SEQ ID NO:3316), GGGCGTTTTAGGGGTAGAGCGTACGGT (SEQ ID NO:3317), TCGGGCGTTTTAGGGGTAGAGCGTAC (SEQ ID NO:3318), TGGAGGAGAGGGGAAGGCGTGTATGGA (SEQ ID NO:3319), GTGGAGGAGAGGGGAAGGCGTGTATGG (SEQ ID NO:3320), GGAGGAGAGGGGAAGGCGTGTATGGAG (SEQ ID NO:3321), AGTGGAGGAGAGGGGAAGGCGTGTATG (SEQ ID NO:3322), AGTCGTTTGAGAGAAGGCGAGAGGGGT (SEQ ID NO:3323)
Target349	chr2:200335558-200335593	TGTCGAGTTTTCGTATCGTGCCTTTT (SEQ ID NO:3324), TTGTCGAGTTTTCGTATCGTGCCTTTT (SEQ ID NO:3325), TTTGTCGAGTTTTCGTATCGTGCCTTT (SEQ ID NO:3326), TTTTGTGCGAGTTTTCGTATCGTGCCTT (SEQ ID NO:3327), TTTTGTGCGAGTTTTCGTATCGTGCCTT (SEQ ID NO:3328), CGGGGTCGTTAGTTTTTGAAGGGCGT (SEQ ID NO:3329), TTTTGGGGTGAAAGATTCGGGTGCGAA (SEQ ID NO:3330), TTTTGGGGTGAAAGATTCGGGTGCGA (SEQ ID NO:3331), TTTTGGGGTGAAAGATTCGGGTGCG (SEQ ID NO:3332), TTTTGGGGTGAAAGATTCGGGTGCGAA (SEQ ID NO:3333)
Target350	chr2:200335807-200335821	CGGCGAGTGTAAGTAGTTGCGTTTTG (SEQ ID NO:3334), TCGGCGAGTGTAAGTAGTTGCGTTTTG (SEQ ID NO:3335), ATCGGCGAGTGTAAGTAGTTGCGTTTTG (SEQ ID NO:3336), AGAATCGGCGAGTGTAAGTAGTTGCGT (SEQ ID NO:3337), ATCGGCGAGTGTAAGTAGTTGCGTTTTG (SEQ ID NO:3338), TGTTCCGATTTTGCCTGTTTTGGGT (SEQ ID NO:3339), TCGGTATTTGCGCGTGTGTTTTGGGTAGT (SEQ ID NO:3340), TTGTTCCGATTTTGCCTGTTTTGGGT (SEQ ID NO:3341), TTGTTCCGATTTTGCCTGTTTTGGG (SEQ ID NO:3342), TGTTCCGATTTTGCCTGTTTTGGGTA (SEQ ID NO:3343)
Target351	chr2:209271397-209271466	ATATTGCGAATCGGGGGTGCGGTAGT (SEQ ID NO:3344), ATTGCGAATCGGGGGTGCGGTAGTAG (SEQ ID NO:3345), GAAATATTGCGAATCGGGGGTGCGGT (SEQ ID NO:3346), TATTGCGAATCGGGGGTGCGGTAGTA (SEQ ID NO:3347), AGAAATATTGCGAATCGGGGGTGCGGT (SEQ ID NO:3348), CGGCGCGAGGTTGGTTTTGTTTTCGG (SEQ ID NO:3349), GCGGCGCGAGGTTGGTTTTGTTTTCGG (SEQ ID NO:3350), GCGGCGAGGTTGGTTTTGTTTTCGGA (SEQ ID NO:3351), CGGCGCGAGGTTGGTTTTGTTTTCGGA (SEQ ID NO:3352), GCGGCGAGGTTGGTTTTGTTTTCGGAG (SEQ ID NO:3353)
Target352	chr2:209271483-209271606	GGGATTTAGTGATTTTCGAGGAGGAGCGC (SEQ ID NO:3354), CGGGATTTAGTGATTTTCGAGGAGGAGCGC (SEQ ID NO:3355), GCGGGATTTAGTGATTTTCGAGGAGGAGCGC (SEQ ID NO:3356), TGCGGGATTTAGTGATTTTCGAGGAGGAGCGC (SEQ ID NO:3357), GGGATTTAGTGATTTTCGAGGAGGAGCGCGA (SEQ ID NO:3358), GGGTTATCGGTCGAGGGTGTTGGGGT (SEQ ID NO:3359), CGAGGGTGTTGGGGTTTTGTCGTCGG (SEQ ID NO:3360), CGGTCGAGGGTGTTGGGGTTTTGTCG (SEQ ID NO:3361), TCGGGTTATCGGTCGAGGGTGTTGGG (SEQ ID NO:3362), CGGCGCGAGGTTGGTTTTGTTTTCGG (SEQ ID NO:3363)
Target353	chr2:209271626-209271639	CGGCGATAAGATTTTAAGTATTTTCGTCGCGTGG (SEQ ID NO:3364), TCGGCGATAAGATTTTAAGTATTTTCGTCGCGT (SEQ ID NO:3365), CGGCGATAAGATTTTAAGTATTTTCGTCGCGTGGT (SEQ ID NO:3366), CGGCGATAAGATTTTAAGTATTTTCGTCGCGTGG (SEQ ID NO:3367), TCGGCGATAAGATTTTAAGTATTTTCGTCGCGTGG (SEQ ID NO:3368), CGCGTAGTTGGGGTGTCGGGTTT (SEQ ID NO:3369), CGCGTAGTTGGGGTGTCGGGTT (SEQ ID NO:3370), CGCGTAGTTGGGGTGTCGGGTT (SEQ ID NO:3371), GCGTAGTTGGGGTGTCGGGTTT (SEQ ID NO:3372), GACGCGTAGTTGGGGTGTCGGG (SEQ ID NO:3373)
Target354	chr2:220313171-220313218	TCGTTTAGGTTGGTGCCTGCGTTTTT (SEQ ID NO:3374), TGGAGTAGTTTAAGTCGGAGCGCGGCG (SEQ ID NO:3375), ATCGTTTAGGTTGGTGCCTGCGTTTTT (SEQ ID NO:3376), GGAGTAGTTTAAGTCGGAGCGCGGCGT (SEQ ID NO:3377), CGTTTAGGTTGGTGCCTGCGTTTTT (SEQ ID NO:3378), GAGGTTTCGGGGGTGTTTTACGGTGCG (SEQ ID NO:3379), AGGTTTCGGGGGTGTTTTACGGTGCG (SEQ ID NO:3380), GGTCGTTTTTGTGGAATAGGCGGCGT (SEQ ID NO:3381), GGTCGTTTTTGTGGAATAGGCGGCG (SEQ ID NO:3382), AGGTCGTTTTTGTGGAATAGGCGGCG (SEQ ID NO:3383)
Target355	chr2:220313238-220313493	GTTTTACGTCGCGGAGGAGTTGGTGC (SEQ ID NO:3384), AGTTTAAGTCGGAGCGCGCGTATCGT (SEQ ID NO:3385), CGGCGTATCGTGGGGTATTTTCGGGGT (SEQ ID NO:3386), TGGAGTAGTTTAAGTCGGAGCGCGGCG (SEQ ID NO:3387), GGAGTAGTTTAAGTCGGAGCGCGGCGT (SEQ ID NO:3388), CGATGTTTTGGGGGTGGAGGGTCGAGA (SEQ ID NO:3389), CGAGGTTTGAGGTCGGGTTGCGTTGAC (SEQ ID NO:3390), TGTTCTCGGTTTCGCGGTTTTTGGGTT (SEQ ID NO:3391), CGGGTTTTTCGAGGGGATGGGTACGTT (SEQ ID NO:3392), TACGGTTCGCGATGTTTTGGGGGTGGA (SEQ ID NO:3393)

Figure 5 (Table 1)

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Target356	chr2:220313516-220313601	GGGGGACGAGTTTGGGAGGTTTAGGAGT (SEQ ID NO:3394), GGGGGACGAGTTTGGGAGGTTTAGGAG (SEQ ID NO:3395), GCGGGAGGAGTTGGTGCGTTCTAC (SEQ ID NO:3396), GGGGACGAGTTTGGGAGGTTTAGGAGT (SEQ ID NO:3397), GGGGGACGAGTTTGGGAGGTTTAGGAGTC (SEQ ID NO:3398), TGTTCTCGGTTTCGCGGTTTTTGGGTT (SEQ ID NO:3399), TTGTTCTCGGTTTCGCGGTTTTTGGGT (SEQ ID NO:3400), GTTCGTCGTTTCGCGGTTTTTGGGTTT (SEQ ID NO:3401), TTTGTTCTCGGTTTCGCGGTTTTTGGG (SEQ ID NO:3402), TGTTCTCGGTTTCGCGGTTTTTGGGTTT (SEQ ID NO:3403)
Target357	chr2:220313607-220313723	GCGGGTAGGATAGAGTCGGGGGAAGGT (SEQ ID NO:3404), AGTTTGGGAGGTTTAGGAGTCGCGGGT (SEQ ID NO:3405), GCGGGTAGGATAGAGTCGGGGGAAG (SEQ ID NO:3406), CGGCGGGTAGGATAGAGTCGGGGGAAG (SEQ ID NO:3407), GTTTGGGAGGTTTAGGAGTCGCGGGT (SEQ ID NO:3408), TCGTTTTGTTTTTGGGGGATCGGCGG (SEQ ID NO:3409), GTACGTTTTGCGTCGGGGGTTTTCTGTT (SEQ ID NO:3410), TTCGGCGTGTTTAGGGTAGGAAGCGT (SEQ ID NO:3411), TACGTTTTGCGTCGGGGGTTTTCTGTT (SEQ ID NO:3412), CGGTTTGCCTCGGGGGTTTTCTGTTT (SEQ ID NO:3413)
Target358	chr2:220313761-220313815	GGTCGTGCGTTTTTTGTTTTGGGTTACG (SEQ ID NO:3414), AGGTCGTGCGTTTTTTGTTTTGGGTTACG (SEQ ID NO:3415), GCGCTCGGGATTAATTTCTGTTGATTCTG (SEQ ID NO:3416), AGGCGTCGGGATTAATTTCTGTTGATTCTG (SEQ ID NO:3417), GCGCTCGGGATTAATTTCTGTTGATTCTGA (SEQ ID NO:3418), ACGTTTTGCGTCGGGGGTTTTCTGTTT (SEQ ID NO:3419), GTACGTTTTGCGTCGGGGGTTTTCTGTT (SEQ ID NO:3420), TTCGGCGTGTTTAGGGTAGGAAGCGT (SEQ ID NO:3421), TACGTTTTGCGTCGGGGGTTTTCTGTT (SEQ ID NO:3422), CGGTTTGCCTCGGGGGTTTTCTGTTT (SEQ ID NO:3423)
Target359	chr2:220313830-220313892	ACGTCGGGTTTGGAGGGCGTTGTTGTA (SEQ ID NO:3424), CGTCGGGTTTGGAGGGCGTTGTTGTA (SEQ ID NO:3425), TTTTGGGTTACGTCGGGTTTGGAGGGC (SEQ ID NO:3426), GGGCGGGGTTTGGAGTAGAGAAGAGGT (SEQ ID NO:3427), AGGGCGGGGTTTGGAGTAGAGAAGAGG (SEQ ID NO:3428), CGAGTTTAGGGGAGGTGGGTCGGGTTT (SEQ ID NO:3429), ATCGAGTTTAGGGGAGGTGGGTCGGGTT (SEQ ID NO:3430), TCGAGTTTAGGGGAGGTGGGTCGGGTT (SEQ ID NO:3431), GCGGGTTTTTCGGCGGTTTTAGGGTTT (SEQ ID NO:3432), TCGGCGATTTTGTGTTGTTGCGGGT (SEQ ID NO:3433)
Target360	chr2:223163071-223164036	TTGGAATTCGGGAAAGGGGAGGACGGG (SEQ ID NO:3434), GAATTCGGGAAAGGGGAGGACGGGGAG (SEQ ID NO:3435), TTACGGCGAGTCGGGGAGTTTGGTGAG (SEQ ID NO:3436), GAGTTACGGCGAGTCGGGGAGTTTGGT (SEQ ID NO:3437), AGTTTGGTGAGGTTGGAGCGCGGTTTG (SEQ ID NO:3438), AGGGAGGGTTTTAGCGCGTCGTTTGA (SEQ ID NO:3439), AAGGGAGGGTTTTAGCGCGTCGTTTGG (SEQ ID NO:3440), GGGAGGGTTTTAGCGCGTCGTTTGGAT (SEQ ID NO:3441), GGTAAAGGGAGGGTTTTAGCGCGTCGTT (SEQ ID NO:3442), AGGGAGGGTTTTAGCGCGTCGTTTGGAT (SEQ ID NO:3443)
Target361	chr2:225266080-225266368	GCGAATGTTGGAGAGAGTTTAGGACGC (SEQ ID NO:3444), TGCGCAATGTTGGAGAGAGTTTAGGACG (SEQ ID NO:3445), TTGGGTGGGGTAGTATTGTTATGGCGAA (SEQ ID NO:3446), TTTGGGTGGGGTAGTATTGTTATGGCGA (SEQ ID NO:3447), ATGGCGAATGTTGGAGAGAGTTTAGGACG (SEQ ID NO:3448), TGGGGGGTGAGGTAGGTGATTGTGGT (SEQ ID NO:3449), TGGGGGGTGAGGTAGGTGATTGTGGT (SEQ ID NO:3450), TTGGGGGGTGAGGTAGGTGATTGTGGT (SEQ ID NO:3451), GGGGGGTGAGGTAGGTGATTGTGGT (SEQ ID NO:3452), TTGGGGGGTGAGGTAGGTGATTGTGG (SEQ ID NO:3453)
Target362	chr2:230933210-230933223	TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3454), CGGGGGTTTTTGGGGGTGTAGCGGTTA (SEQ ID NO:3455), TTTTCGGGGGTTTTTGGGGGTGTAGCGG (SEQ ID NO:3456), GGGGGTTTTTGGGGGTGTAGCGGTTAT (SEQ ID NO:3457), TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3458), GGGTTTTCGGGCGGTGAGTATTCGAGGT (SEQ ID NO:3459), GGTTCGGGCGGTGAGTATTCGAGGTC (SEQ ID NO:3460), GGGTTTCGGGCGGTGAGTATTCGAGGTC (SEQ ID NO:3461), GGGTTTCGGGCGGTGAGTATTCGAGG (SEQ ID NO:3462), CGGGTTTGGGGAATGGAGCGACGTC (SEQ ID NO:3463)
Target363	chr2:230933225-230933272	TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3464), CGGGGGTTTTTGGGGGTGTAGCGGTTA (SEQ ID NO:3465), TTTTCGGGGGTTTTTGGGGGTGTAGCGG (SEQ ID NO:3466), GGGGGTTTTTGGGGGTGTAGCGGTTAT (SEQ ID NO:3467), TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3468), GGGTTTCGGGCGGTGAGTATTCGAGGT (SEQ ID NO:3469), GGTTCGGGCGGTGAGTATTCGAGGTC (SEQ ID NO:3470), GGGTTTCGGGCGGTGAGTATTCGAGGTC (SEQ ID NO:3471), GGGTTTCGGGCGGTGAGTATTCGAGG (SEQ ID NO:3472), GGTTCGGGCGGTGAGTATTCGAGGT (SEQ ID NO:3473)
Target364	chr2:230933275-230933303	TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3474), CGGGGGTTTTTGGGGGTGTAGCGGTTA (SEQ ID NO:3475), TTTTCGGGGGTTTTTGGGGGTGTAGCGG (SEQ ID NO:3476), GGGGGTTTTTGGGGGTGTAGCGGTTAT (SEQ ID NO:3477), TTTTCGGGGGTTTTTGGGGGTGTAGCG (SEQ ID NO:3478), GCGGAGAGTTGAGTCGTAGGTATTCGCG (SEQ ID NO:3479), GCGGAGAGTTGAGTCGTAGGTATTCGCGT (SEQ ID NO:3480), GCGGAGAGTTGAGTCGTAGGTATTCGC (SEQ ID NO:3481), TCGGGCGTGAGTCGAGTGAGGTC (SEQ ID NO:3482), CGGAGAGTTGAGTCGTAGGTATTCGCGT (SEQ ID NO:3483)

Figure 5 (Table 1)

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Target365	chr2:230933322-230933414	GGTTCGTTGGGTTGCGGTTTTATTCGGT (SEQ ID NO:3484), GGTTCGTTGGGTTGCGGTTTTATTCGG (SEQ ID NO:3485), AGGTTCGTTGGGTTGCGGTTTTATTCGG (SEQ ID NO:3486), AGGTTCGTTGGGTTGCGGTTTTATTCGGT (SEQ ID NO:3487), GTTCGTTGGGTTGCGGTTTTATTCGGT (SEQ ID NO:3488), TAGAGCGTATCGAGTCGGGCGGAGAGT (SEQ ID NO:3489), GAGCGTATCGAGTCGGGCGGAGAGTTG (SEQ ID NO:3490), GAGTCGGGCGGAGAGTTGAGTCGTAGG (SEQ ID NO:3491), AGTCGGGCGGAGAGTTGAGTCGTAGG (SEQ ID NO:3492), AGAGCGTATCGAGTCGGGCGGAGAGTT (SEQ ID NO:3493)
Target366	chr2:230933430-230933459	CGGTTCGGTGCGTTTTGTGAGGGGTTT (SEQ ID NO:3494), TCGTTCGGTTCGGTGCGTTTTGTGAGG (SEQ ID NO:3495), GTTCGGTTCGGTGCGTTTTGTGAGGGG (SEQ ID NO:3496), CGTTCGGTTCGGTGCGTTTTGTGAGGGG (SEQ ID NO:3497), TCGTTCGGTGCGTTTTGTGAGGGGTT (SEQ ID NO:3498), GAGCGGCGGAAGAGTTCGGGAGTTTTT (SEQ ID NO:3499), AGCGGCGGAAGAGTTCGGGAGTTTTT (SEQ ID NO:3500), GAGCGGCGGAAGAGTTCGGGAGTTTTT (SEQ ID NO:3501), GAGCGGCGGAAGAGTTCGGGAGTTTTT (SEQ ID NO:3502), AGCGGCGGAAGAGTTCGGGAGTTTTT (SEQ ID NO:3503)
Target367	chr2:233924666-233924905	GGAGAGGGTTGGTAAGAGAGTCGCGGT (SEQ ID NO:3504), AGGAGAGGGTTGGTAAGAGAGTCGCGG (SEQ ID NO:3505), AGGAGAGGGTTGGTAAGAGAGTCGCGG (SEQ ID NO:3506), AAGGAGAGGGTTGGTAAGAGAGTCGCGG (SEQ ID NO:3507), TGAGGGAGAGTAGAAGGTTTCGGGGGTT (SEQ ID NO:3508), TGGGTGGAATGATCGGTTTTGGAGACGT (SEQ ID NO:3509), GGGTGGAAATGATCGGTTTTGGAGACGT (SEQ ID NO:3510), TGGGTGGAATGATCGGTTTTGGAGACG (SEQ ID NO:3511), TGGGTGGAATGATCGGTTTTGGAGACGT (SEQ ID NO:3512), TGGGTGGAATGATCGGTTTTGGAGACGT (SEQ ID NO:3513)
Target368	chr2:233924930-233925122	GGGCGGTAGGTTGTAGTGGAGGGGTTT (SEQ ID NO:3514), TAGTCGTGGTAGGGTGTAGGGGACGGT (SEQ ID NO:3515), AGTCGTGGTAGGGTGTAGGGGACGGTG (SEQ ID NO:3516), GGAGAGGGTTGGTAAGAGAGTCGCGGT (SEQ ID NO:3517), GGTAAGTCGTGGTAGGGTGTAGGGGACG (SEQ ID NO:3518), TGGGTTTTTCGGTCGGGTCGGTAGGT (SEQ ID NO:3519), TATGGTGGGCGTGGGTTTTTCGGTCG (SEQ ID NO:3520), CGTGGGTTTTTCGGTCGGGTCGGTAG (SEQ ID NO:3521), GTGGGTTTTTCGGTCGGGTCGGTAGG (SEQ ID NO:3522), AGTAGGGGATTATGGTGGGCGTGGGTT (SEQ ID NO:3523)
Target369	chr2:233925169-233925444	GGGTTTTGGGGGTGTTTTCGGTTCGG (SEQ ID NO:3524), GGGCGGTAGGTTGTAGTGGAGGGGTTT (SEQ ID NO:3525), TTTTCGGTGGTGTGTGGGTTTTGGGGG (SEQ ID NO:3526), GGTGGTGTGGGTTTTGGGGGTGTTT (SEQ ID NO:3527), GGTTTTTGGGGGTGTTTTCGGTTCGGT (SEQ ID NO:3528), AGTAGGGGATTATGGTGGGCGTGGGTT (SEQ ID NO:3529), AGGGGATTATGGTGGGCGTGGGTTTTT (SEQ ID NO:3530), TAGTAGGGGATTATGGTGGGCGTGGGT (SEQ ID NO:3531), GTAGGGGATTATGGTGGGCGTGGGTTT (SEQ ID NO:3532), AGTAGGGGATTATGGTGGGCGTGGGTTT (SEQ ID NO:3533)
Target370	chr2:239755112-239755154	GAGGAAGGAGGGCGGTTAGGTCGGGTG (SEQ ID NO:3534), TGTTGGGTTAGAGGGGTCGTGGGTTTT (SEQ ID NO:3535), TTGTTGGGTTAGAGGGGTCGTGGGTTTT (SEQ ID NO:3536), TTTGTTGGGTTAGAGGGGTCGTGGGTTT (SEQ ID NO:3537), TTTGTTGGGTTAGAGGGGTCGTGGGT (SEQ ID NO:3538), CGGATTCCGGTTTTAGTTCGGTGT (SEQ ID NO:3539), GCGGGTTTTCGTATGTATGTAGTCGGT (SEQ ID NO:3540), GCGGGTTTTCGTATGTATGTAGTCGG (SEQ ID NO:3541), AGCGGGTTTTCGTATGTATGTAGTCGGT (SEQ ID NO:3542), AGCGGGTTTTCGTATGTATGTAGTCGG (SEQ ID NO:3543)
Target371	chr2:239755180-239755194	GTGGGGTTGGGTGCGGTGGTTTTGTAG (SEQ ID NO:3544), TGGGGTTGGGTGCGGTGGTTTTGTAGA (SEQ ID NO:3545), GGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3546), GGTGGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3547), TGGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3548), GCGGGTTTTCGTATGTATGTAGTCGGT (SEQ ID NO:3549), GCGGGTTTTCGTATGTATGTAGTCGG (SEQ ID NO:3550), AGCGGGTTTTCGTATGTATGTAGTCGGT (SEQ ID NO:3551), AGCGGGTTTTCGTATGTATGTAGTCGG (SEQ ID NO:3552), GGAGCGGGTTTTCGTATGTATGTAGTCGG (SEQ ID NO:3553)
Target372	chr2:239755199-239755314	GTGGGGTTGGGTGCGGTGGTTTTGTAG (SEQ ID NO:3554), TGGGGTTGGGTGCGGTGGTTTTGTAGA (SEQ ID NO:3555), GGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3556), GGTGGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3557), TGGGGTTGGGTGCGGTGGTTTTGTAGAA (SEQ ID NO:3558), TGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3559), CGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3560), CGTTGTTTTTCGGTCGGTTAGGCGGGT (SEQ ID NO:3561), TTGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3562), TCGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3563)
Target373	chr2:239755328-239755350	TAGGGTTTTTCGGATAGGGGCGCGAAGG (SEQ ID NO:3564), AGTTAGGGTTTTTCGGATAGGGGCGCGA (SEQ ID NO:3565), GAGTTAGGGTTTTTCGGATAGGGGCGCG (SEQ ID NO:3566), GGAGTTAGGGTTTTTCGGATAGGGGCGCG (SEQ ID NO:3567), TTAGGGTTTTTCGGATAGGGGCGCGAAGG (SEQ ID NO:3568), TGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3569), CGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3570), CGTTGTTTTTCGGTCGGTTAGGCGGGT (SEQ ID NO:3571), TTGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3572), TCGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3573)

Figure 5 (Table 1)

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Target374	chr2:239755377-239755394	TAGGGTTTTTCGGATAGGGGCGCGAAGG (SEQ ID NO:3574), AGTTAGGGTTTTTCGGATAGGGGCGCGA (SEQ ID NO:3575), GAGTTAGGGTTTTTCGGATAGGGGCGCG (SEQ ID NO:3576), GGAGTTAGGGTTTTTCGGATAGGGGCGCG (SEQ ID NO:3577), TTAGGGTTTTTCGGATAGGGGCGCGAAGG (SEQ ID NO:3578), TGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3579), CGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3580), CGTTGTTTTTCGGTCGGTTAGGCGGGT (SEQ ID NO:3581), TTGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3582), TCGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3583)
Target375	chr2:239755407-239755456	TAGGGTTTTTCGGATAGGGGCGCGAAGG (SEQ ID NO:3584), CGGTTGTTTTGTCGGTCGGAGGAGTA (SEQ ID NO:3585), AGTTAGGGTTTTTCGGATAGGGGCGCGA (SEQ ID NO:3586), GAGTTAGGGTTTTTCGGATAGGGGCGCG (SEQ ID NO:3587), GTTCGTTTGGTCGGTCGGAGGAGTAGC (SEQ ID NO:3588), GTTTTTTCGGTCGGTTAGGCGGGTCGT (SEQ ID NO:3589), TGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3590), CGTTGTTTTTCGGTCGGTTAGGCGGG (SEQ ID NO:3591), CGTTGTTTTTCGGTCGGTTAGGCGGGT (SEQ ID NO:3592), TTGTTTTTCGGTCGGTTAGGCGGGTCG (SEQ ID NO:3593)
Target376	chr2:239755491-239755506	CGGTTGTTTTGTCGGTCGGAGGAGTA (SEQ ID NO:3594), GTTCGTTTGGTCGGTCGGAGGAGTAGC (SEQ ID NO:3595), CGGTTGTTTTGTCGGTCGGAGGAGTAG (SEQ ID NO:3596), CGGTTGTTTTGTCGGTCGGAGGAGT (SEQ ID NO:3597), GTTCGTTTGGTCGGTCGGAGGAGTAGC (SEQ ID NO:3598), AGTCGGGTTGTTAGGTAAGTCGCGTGA (SEQ ID NO:3599), TGAGTCGGGTTGTTAGGTAAGTCGCGT (SEQ ID NO:3600), GGTTCGGGTTTGAAGTCGGGTTGTTAGGT (SEQ ID NO:3601), GGTTCGGGTTTGAAGTCGGGTTGTTAGG (SEQ ID NO:3602), AGGTTGCGGTTTGAAGTCGGGTTGTTAGGT (SEQ ID NO:3603)
Target377	chr2:241393792-241393817	AGGAGGTTGTTGGACGTGTCGGAGGAT (SEQ ID NO:3604), GGAGGTTGTTGGACGTGTCGGAGGATGT (SEQ ID NO:3605), GGAGGTTGTTGGACGTGTCGGAGGATG (SEQ ID NO:3606), AGGAGGTTGTTGGACGTGTCGGAGGATG (SEQ ID NO:3607), TAGGAGGTTGTTGGACGTGTCGGAGGA (SEQ ID NO:3608), TTTTCGGATTTAATTAGTTTCGGTGTTGTGGT (SEQ ID NO:3609), GTTTTCGGATTTAATTAGTTTCGGTGTTGTGGT (SEQ ID NO:3610), TGTTTTTCGGATTTAATTAGTTTCGGTGTTGTGG (SEQ ID NO:3611), TGTTTTTCGGATTTAATTAGTTTCGGTGTTGTGGT (SEQ ID NO:3612), TTGTTTTTCGGATTTAATTAGTTTCGGTGTTGTGG (SEQ ID NO:3613)
Target378	chr2:241393833-241393881	AGGAGGTTGTTGGACGTGTCGGAGGAT (SEQ ID NO:3614), GGAGGTTGTTGGACGTGTCGGAGGATGT (SEQ ID NO:3615), GGAGGTTGTTGGACGTGTCGGAGGATG (SEQ ID NO:3616), TGGGTTAGGGGTTGGGTTAGGTTTCGA (SEQ ID NO:3617), AGGAGGTTGTTGGACGTGTCGGAGGATG (SEQ ID NO:3618)
Target379	chr2:242824433-242824450	GCGTGGGTGGTTTTTGGTTGGGGAAGT (SEQ ID NO:3619), AGCGTGGGTGGTTTTTGGTTGGGGAAG (SEQ ID NO:3620), AGGTTGTGGCGTGTGTTGGTGGTGTGT (SEQ ID NO:3621), TGTAAGCGTGGGTGGTTTTTGGTTGGGG (SEQ ID NO:3622), GTAGCGTGGGTGGTTTTTGGTTGGGGA (SEQ ID NO:3623), CGTTACGTGTTTGGAGAGGCGGTGTTA (SEQ ID NO:3624), CGTTACGTGTTTGGAGAGGCGGTGTT (SEQ ID NO:3625), CGTTACGTGTTTGGAGAGGCGGTGTT (SEQ ID NO:3626), CGTTACGTGTTTGGAGAGGCGGTGT (SEQ ID NO:3627), CGTTACGTGTTTGGAGAGGCGGTGTTATT (SEQ ID NO:3628)
Target380	chr2:242824532-242824595	TGGTGAGAGGTGGTTGGGAGGAAGTTT (SEQ ID NO:3629), TTGGTGAGAGGTGGTTGGGAGGAAGTT (SEQ ID NO:3630), TTTGGTGAGAGGTGGTTGGGAGGAAGT (SEQ ID NO:3631), TTGGTGAGAGGTGGTTGGGAGGAAGTTT (SEQ ID NO:3632), TTTGGTGAGAGGTGGTTGGGAGGAAGTT (SEQ ID NO:3633), CGTTTTCGGGGGGTAGAGGAGAGAAGG (SEQ ID NO:3634), TTGCGGGGGGTAGAGGAGAGAAGGAGA (SEQ ID NO:3635), TGCGGGGGGTAGAGGAGAGAAGGAGAT (SEQ ID NO:3636), TTTGCGGGGGGTAGAGGAGAGAAGGAG (SEQ ID NO:3637), TTTGCGGGGGGTAGAGGAGAGAAGGAGA (SEQ ID NO:3638)
Target381	chr3:9177892-9177965	CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3639), GGAGAAGGGCGGTAATGGGGAGTTCGT (SEQ ID NO:3640), AGGAGAAGGGCGGTAATGGGGAGTTCG (SEQ ID NO:3641), AGAAGGGCGGTAATGGGGAGTTCGTGT (SEQ ID NO:3642), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3643)
Target382	chr3:9177983-9178004	CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3644), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3645), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3646), GCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3647), GCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3648)
Target383	chr3:9178006-9178062	TGGAGGTAGTAGATGTCGGGTCGGGGT (SEQ ID NO:3649), TAGATGTCGGGTCGGGGTATGTCGTCG (SEQ ID NO:3650), CGGGGTTGGAGGTAGTAGATGTCGGG (SEQ ID NO:3651), GCGTCGGGGTTGGAGGTAGTAGATGTCG (SEQ ID NO:3652), TGGAGGTAGTAGATGTCGGGTCGGGGT (SEQ ID NO:3653), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3654), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3655), CGCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3656), GCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3657), GCGGCGGTTGATTCGGTTCGGTATT (SEQ ID NO:3658)

Figure 5 (Table 1)

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Target384	chr3:9178096-9178250	AGTAGTCGGGGTGGTTGAAAGCGGGT (SEQ ID NO:3659), TGGAGGTAGTAGATGTCGGGTCGGGGT (SEQ ID NO:3660), AGTCGGGGTGGTTGAAAGCGGGTTTT (SEQ ID NO:3661), TAGTAGTCGGGGTGGTTGAAAGCGGGT (SEQ ID NO:3662), GTAGTCGGGGTGGTTGAAAGCGGGTTT (SEQ ID NO:3663), AGTTATTTTCGGTTGTTGTACGTGGCGC (SEQ ID NO:3664), AGGGTGTAGGAGTTTGTTCGCGTTG (SEQ ID NO:3665), TGGTCGAATATAGGAAGGGGAGAGGGAG (SEQ ID NO:3666), TAGTTATTTTCGGTTGTTGTACGTGGCGC (SEQ ID NO:3667), TGGTCGAATATAGGAAGGGGAGAGGGAGA (SEQ ID NO:3668)
Target385	chr3:52828402-52828911	GTGAGCGAGGGTTTTGTTGTGGAGGT (SEQ ID NO:3669), AGTGAGCGAGGGTTTTGTTGTGGAGGT (SEQ ID NO:3670), AGTGAGCGAGGGTTTTGTTGTGGAGG (SEQ ID NO:3671), GGGTAGTGAGCGAGGGTTTTGTTGTGG (SEQ ID NO:3672), AGGGTAGTGAGCGAGGGTTTTGTTGT (SEQ ID NO:3673), GCGTGGATGATGGAGATGGGGTGTGGA (SEQ ID NO:3674), GGTGGGAGGAGTGGAGGTAGGAAGGGT (SEQ ID NO:3675), TTGGCGTGATGATGGAGATGGGGTGT (SEQ ID NO:3676), GTGATTTGTAGCGGGGTGGGAGGAGT (SEQ ID NO:3677), TGATTTGTAGCGGGGTGGGAGGAGT (SEQ ID NO:3678)
Target386	chr3:62356123-62356237	GGAAGAGCGGCGCTTTTAGGGGTAGT (SEQ ID NO:3679), GTAGAATGGTGGGAGGAAGAGGCGGG (SEQ ID NO:3680), AGGAAGAGGCGGCGCTTTTAGGGGTAG (SEQ ID NO:3681), GAGGAAGAGGCGGCGCTTTTAGGGGTA (SEQ ID NO:3682), GTGGGAGGAAGAGGCGGCGCTTTAG (SEQ ID NO:3683), GAGCGCGGCGGAGGGAAGTTGTATTA (SEQ ID NO:3684), AGCGCGCGGGAGGGAAGTTGTATTAG (SEQ ID NO:3685), GCGCGCGGGAGGGAAGTTGTATTAGT (SEQ ID NO:3686), AGCGCGCGGGAGGGAAGTTGTATTAGT (SEQ ID NO:3687), CCGCGCGGGAGGGAAGTTGTATTAGT (SEQ ID NO:3688)
Target387	chr3:62356280-62356286	CGTAAGCGTTAAGTCGGGTGTTTTTCGA (SEQ ID NO:3689), TCGTTTTTTGTTTTGTTTCGTTATAGAGGTTGGT (SEQ ID NO:3690), GCGTTTTTTGTTTTGTTTCGTTATAGAGGTTGGT (SEQ ID NO:3691), GCGTTTTTTGTTTTGTTTCGTTATAGAGGTTGGT (SEQ ID NO:3692), TCGTTTTTTGTTTTGTTTCGTTATAGAGGTTGGT (SEQ ID NO:3693), GGGTTACGTAAAAGTTTTTCGGTTCGCGG (SEQ ID NO:3694), TGGGTTACGTAAAAGTTTTTCGGTTCGCGG (SEQ ID NO:3695), GGGTTACGTAAAAGTTTTTCGGTTCGCGGA (SEQ ID NO:3696), TGGGTTACGTAAAAGTTTTTCGGTTCGCGGA (SEQ ID NO:3697), TGGGTTACGTAAAAGTTTTTCGGTTCGCGG (SEQ ID NO:3698)
Target388	chr3:62356310-62356329	GCGGGTCGGGAAATTTTTGCGTAGTTT (SEQ ID NO:3699), GCGGGTCGGGAAATTTTTGCGTAGTT (SEQ ID NO:3700), GCGGGTCGGGAAATTTTTGCGTAGTTTA (SEQ ID NO:3701), GCGGGTCGGGAAATTTTTGCGTAGTTTAG (SEQ ID NO:3702), GCGGGTCGGGAAATTTTTGCGTAGTTTAGA (SEQ ID NO:3703), TTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3704), AGTTGGTAGTTGGGGGCGAGAAAGAA (SEQ ID NO:3705), GTTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3706), GTTGGTAGTTGGGGGCGAGAAAGAAG (SEQ ID NO:3707), AGTTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3708)
Target389	chr3:62356353-62356372	GCGGGTCGGGAAATTTTTGCGTAGTTT (SEQ ID NO:3709), GCGGGTCGGGAAATTTTTGCGTAGTT (SEQ ID NO:3710), GCGGGTCGGGAAATTTTTGCGTAGTTTA (SEQ ID NO:3711), GCGGGTCGGGAAATTTTTGCGTAGTTTAG (SEQ ID NO:3712), GCGGGTCGGGAAATTTTTGCGTAGTTTAGA (SEQ ID NO:3713), TTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3714), AGTTGGTAGTTGGGGGCGAGAAAGAA (SEQ ID NO:3715), GTTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3716), GTTGGTAGTTGGGGGCGAGAAAGAAG (SEQ ID NO:3717), AGTTGGTAGTTGGGGGCGAGAAAGAAGT (SEQ ID NO:3718)
Target390	chr3:62362918-62362940	TTTTCGCGCGGTTAGGAAATAGACG (SEQ ID NO:3719), GGTGGGTTTTAAATTTTCGCGCGCGT (SEQ ID NO:3720), ATTTTCGCGCGGTTAGGAAATAGACG (SEQ ID NO:3721), GGTGGGTTTTAAATTTTCGCGCGCGG (SEQ ID NO:3722), TTTTCGCGCGGTTAGGAAATAGACG (SEQ ID NO:3723), GCGTTTTGTTTTTCGCGGTGGGAAGGA (SEQ ID NO:3724), GCGTGGGAAGGATATAGGTCGTCGAGGG (SEQ ID NO:3725), GCGTGGGAAGGATATAGGTCGTCGAGG (SEQ ID NO:3726), CGTGGGAAGGATATAGGTCGTCGAGGG (SEQ ID NO:3727), GCGTGGGAAGGATATAGGTCGTCGAGG (SEQ ID NO:3728)
Target391	chr3:62363001-62363017	TTTCGCGCGGTTAGGAAATAGACGA (SEQ ID NO:3729), TCGCGCGCGGTTAGGAAATAGACGATT (SEQ ID NO:3730), TTCGCGCGGTTAGGAAATAGACGAT (SEQ ID NO:3731), TTTTCGCGCGGTTAGGAAATAGACG (SEQ ID NO:3732), TTTTCGCGCGGTTAGGAAATAGACGA (SEQ ID NO:3733), GTGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3734), AGTGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3735), TGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3736), TGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3737), GGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3738)
Target392	chr3:62363063-62363069	TCGTTGTTTCGCGGGTTGATCGGGG (SEQ ID NO:3739), GTTGATCGGGGCGCGATTTTTGGGA (SEQ ID NO:3740), TGATCGGGGCGCGCATTTTGGGATTC (SEQ ID NO:3741), TTGATCGGGGCGCGCATTTTGGGATT (SEQ ID NO:3742), TTTGATCGGGGCGCGCATTTTGGGAT (SEQ ID NO:3743), GTGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3744), AGTGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3745), TGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3746), TGGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3747), GGTGTGCGGGTTGTTGTTAGGGC (SEQ ID NO:3748)

Figure 5 (Table 1)

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Target393	chr3:62363076-62363082	TCGTTGTTTTGCGGGGTTTGATCGGGG (SEQ ID NO:3749), GTTTGATCGGGGCGGCGATTTTGGGA (SEQ ID NO:3750), TGATCGGGGCGGCGATTTTGGGATTC (SEQ ID NO:3751), TTGATCGGGGCGGCGATTTTGGGATT (SEQ ID NO:3752), TTTGATCGGGGCGGCGATTTTGGGAT (SEQ ID NO:3753), GTGGTGTGCGGGTTGTTGGTTAGGGC (SEQ ID NO:3754), AGTGGTGTGCGGGTTGTTGGTTAGGG (SEQ ID NO:3755), TGGTGTGCGGGTTGTTGGTTAGGGC (SEQ ID NO:3756), TGGTGTGCGGGTTGTTGGTTAGGGC (SEQ ID NO:3757), GGTGTGCGGGTTGTTGGTTAGGGC (SEQ ID NO:3758)
Target394	chr3:62363099-62363166	TCGTTGTTTTGCGGGGTTTGATCGGGG (SEQ ID NO:3759), GTTTGATCGGGGCGGCGATTTTGGGA (SEQ ID NO:3760), TGATCGGGGCGGCGATTTTGGGATTC (SEQ ID NO:3761), TTGATCGGGGCGGCGATTTTGGGATT (SEQ ID NO:3762), TTTGATCGGGGCGGCGATTTTGGGAT (SEQ ID NO:3763), TGGATAGAGGGAAGGGGAGGGAGGAGA (SEQ ID NO:3764), GGATAGAGGGAAGGGGAGGGAGGAGAT (SEQ ID NO:3765), TGGATAGAGGGAAGGGGAGGGAGGAGAG (SEQ ID NO:3766), AGAGGGAAGGGGAGGGAGGAGAGTTTT (SEQ ID NO:3767), TGGATAGAGGGAAGGGGAGGGAGGAGAGT (SEQ ID NO:3768)
Target395	chr3:65693066-65693098	CGTTTTTCGAGTGTTAGGGTAATCGGTTTGA (SEQ ID NO:3769), CGAGTGTTAGGGTAATCGGTTTGAGTTATAGCG (SEQ ID NO:3770), TCGAGTGTTAGGGTAATCGGTTTGAGTTATAGCG (SEQ ID NO:3771), CGTTTTTCGAGTGTTAGGGTAATCGGTTTGA (SEQ ID NO:3772), CGTTTTTCGAGTGTTAGGGTAATCGGTTTGAGT (SEQ ID NO:3773), AGGGAGTCGTTGTGGTTAGGTCGGTT (SEQ ID NO:3774), GGGAGTCGTTGTGGTTAGGTCGGTTG (SEQ ID NO:3775), GGGAGTCGTTGTGGTTAGGTCGGTTG (SEQ ID NO:3776), AGTGTGGGATAGGGAGTCGTTGTGGT (SEQ ID NO:3777), AGGGAGTCGTTGTGGTTAGGTCGGTTG (SEQ ID NO:3778)
Target396	chr3:123535653-123535717	GGTTGAGTTGGGGGAGTAGAATTTGGG (SEQ ID NO:3779), AGGTTGAGTTGGGGGAGTAGAATTTGGG (SEQ ID NO:3780), GGTTGAGTTGGGGGAGTAGAATTTGGGA (SEQ ID NO:3781), AGGTTGAGTTGGGGGAGTAGAATTTGGGA (SEQ ID NO:3782), AGGTTGAGTTGGGGGAGTAGAATTTGG (SEQ ID NO:3783), TGTGGTATCGGAAATGATTGTTGTGGAATGTT (SEQ ID NO:3784), TTTGTGGTATCGGAAATGATTGTTGTGGAATGT (SEQ ID NO:3785), TGTGGTATCGGAAATGATTGTTGTGGAATGTT (SEQ ID NO:3786), TTTGTGGTATCGGAAATGATTGTTGTGGAATGTT (SEQ ID NO:3787), TTTGTGGTATCGGAAATGATTGTTGTGGAATGT (SEQ ID NO:3788)
Target397	chr3:124860376-124860558	GGGTAGGCGGTTGTTAGGGGTTTTGGG (SEQ ID NO:3789), AGGGGTTTTGGGTGGTATTTGCGGTGT (SEQ ID NO:3790), GGCGGTTGTTAGGGGTTTTGGGTGGTA (SEQ ID NO:3791), AGGCGGTTGTTAGGGGTTTTGGGTGGTA (SEQ ID NO:3792), GGTAGGCGGTTGTTAGGGGTTTTGGGT (SEQ ID NO:3793), TTTTTCGCGGTAGGGGGAGGGGATG (SEQ ID NO:3794), GTTTTTCGCGGTAGGGGGAGGGGAT (SEQ ID NO:3795), CGGTCGTTGGTTAGGGGTGGGGGATT (SEQ ID NO:3796), TAGTTTTAGCGCGGTAGGGGGAGGGG (SEQ ID NO:3797), TCGGTCGTTGGTTAGGGGTGGGGGAT (SEQ ID NO:3798)
Target398	chr3:124860570-124861019	CGTCGGGGGAAGTGGTAGGTTTCGAG (SEQ ID NO:3799), TTCGAGGGCGTAGGAAGAGCGGTTTT (SEQ ID NO:3800), TCGGAGGGCGTAGGAAGAGCGGTTTT (SEQ ID NO:3801), GTTCGAGGGCGTAGGAAGAGCGGTTTT (SEQ ID NO:3802), GTCGGGGGAAGTGGTAGGTTTCGAGA (SEQ ID NO:3803), GTGTTTCGCGGAGGATGGGGTTGTTG (SEQ ID NO:3804), TTGAGTGAGTGTTCGGGCGAGGATGGG (SEQ ID NO:3805), CGGTCGTTGGTTAGGGGTGGGGGATT (SEQ ID NO:3806), AGTGTTCGGGCGAGGATGGGGTTGTTT (SEQ ID NO:3807), GGCGAGGATGGGGTTGTTGGGAAGGA (SEQ ID NO:3808)
Target399	chr3:128241361-128241888	GTCGGATGGGAGAGGTTGGACGGGAAG (SEQ ID NO:3809), ACGGATAGTCGGATGGGAGAGGTTGGA (SEQ ID NO:3810), TAGTCGGATGGGAGAGGTTGGACGGGA (SEQ ID NO:3811), TCGGATGGGAGAGGTTGGACGGGAAGA (SEQ ID NO:3812), GTAGTCGGATGGGAGAGGTTGGACGGG (SEQ ID NO:3813), GGAGTTAAGGGCGGAGAGAGGATTGGGG (SEQ ID NO:3814), AGTTAAGGGCGGAGAGAGGATTGGGA (SEQ ID NO:3815), TGTGCGGTTGAAGGAGAGAGTGGTTGGT (SEQ ID NO:3816), GAGTTAAGGGCGGAGAGAGGATTGGGG (SEQ ID NO:3817), GGAGTTAAGGGCGGAGAGAGGATTGGG (SEQ ID NO:3818)
Target400	chr3:129317966-129317992	TGGGGTAGTTTTGGTGTTAGAGGGAAGGT (SEQ ID NO:3819), GGGGTAGTTTTGGTGTTAGAGGGAAGGT (SEQ ID NO:3820), TGGGGTAGTTTTGGTGTTAGAGGGAAGG (SEQ ID NO:3821), TGGGGTAGTTTTGGTGTTAGAGGGAAGGT (SEQ ID NO:3822), GGGGTAGTTTTGGTGTTAGAGGGAAGGT (SEQ ID NO:3823), GCGTGCGGTGATTGGGATAGGAGT (SEQ ID NO:3824), AGTTGGGTTTTATGTTTTGGTTGTTGCTGA (SEQ ID NO:3825), AGTTGGGTTTTATGTTTTGGTTGTTGCTGAA (SEQ ID NO:3826), AGTTGGGTTTTATGTTTTGGTTGTTGCTGAAT (SEQ ID NO:3827), TAGTTGGGTTTTATGTTTTGGTTGTTGCTGAA (SEQ ID NO:3828)

Figure 5 (Table 1)

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Target401	chr3:129318056-129318117	TCGGGAGTTATAGGCGGGTGAATCGGA (SEQ ID NO:3829), GCGGGTGAATCGGATTTGTAGAGGGCG (SEQ ID NO:3830), GGCGGGTGAATCGGATTTGTAGAGGGC (SEQ ID NO:3831), TGGAGATCGGGAGTTATAGGCGGGTGA (SEQ ID NO:3832), GCGGGTGAATCGGATTTGTAGAGGGC (SEQ ID NO:3833), GCGTAGGGAAGATTGGAGTGGTTTGGCG (SEQ ID NO:3834), CGTAGGGAAGATTGGAGTGGTTTGGCGG (SEQ ID NO:3835), CGTAGGGAAGATTGGAGTGGTTTGGCGGT (SEQ ID NO:3836), AGGGAAGATTGGAGTGGTTTGGCGGTA (SEQ ID NO:3837), TAGGGAAGATTGGAGTGGTTTGGCGGT (SEQ ID NO:3838)
Target402	chr3:129693244-129693263	TGCGTTTTATATTGGTTTTGCGGTCGTGT (SEQ ID NO:3839), TGCGTTTTATATTGGTTTTGCGGTCGTGT (SEQ ID NO:3840), TTGCGTTTTATATTGGTTTTGCGGTCGTGT (SEQ ID NO:3841), CGTTTGCCTTTATATTGGTTTTGCGGTCG (SEQ ID NO:3842), CGTTTGCCTTTATATTGGTTTTGCGGTCGT (SEQ ID NO:3843), CGGAGGTATTGGTCGTAGGATGGGGCG (SEQ ID NO:3844), CGCGGAGGTATTGGTCGTAGGATGGGG (SEQ ID NO:3845), GGTATTGGTCGTAGGATGGGGCGTCGG (SEQ ID NO:3846), GCGGAGGTATTGGTCGTAGGATGGGGC (SEQ ID NO:3847), AGGTATTGGTCGTAGGATGGGGCGTCG (SEQ ID NO:3848)
Target403	chr3:129693303-129693314	TTCTGCGCTTTGTGTTTAATCGTGCGT (SEQ ID NO:3849), TTCTGCGCTTTGTGTTTAATCGTGCGT (SEQ ID NO:3850), TTCTGCGCTTTGTGTTTAATCGTGCG (SEQ ID NO:3851), TCTGCGCTTTGTGTTTAATCGTGCGT (SEQ ID NO:3852), TTTCTGCGCTTTGTGTTTAATCGTGCGT (SEQ ID NO:3853), CGGAGGTATTGGTCGTAGGATGGGGCG (SEQ ID NO:3854), CGCGGAGGTATTGGTCGTAGGATGGGG (SEQ ID NO:3855), GGTATTGGTCGTAGGATGGGGCGTCGG (SEQ ID NO:3856), GCGGAGGTATTGGTCGTAGGATGGGGC (SEQ ID NO:3857), AGGTATTGGTCGTAGGATGGGGCGTCG (SEQ ID NO:3858)
Target404	chr3:129693344-129693386	TCGTGCGTTTGTGTTTAATCGTGCGT (SEQ ID NO:3859), TCTGCGCTTTGTGTTTAATCGTGCGT (SEQ ID NO:3860), CGTGCGTTTGTGTTTAATCGTGCGTTT (SEQ ID NO:3861), TCTGCGCTTTGTGTTTAATCGTGCGTTT (SEQ ID NO:3862), TTCGTGCGTTTGTGTTTAATCGTGCGT (SEQ ID NO:3863), CGGAGGTATTGGTCGTAGGATGGGGCG (SEQ ID NO:3864), CGCGGAGGTATTGGTCGTAGGATGGGG (SEQ ID NO:3865), GGTATTGGTCGTAGGATGGGGCGTCGG (SEQ ID NO:3866), GCGGAGGTATTGGTCGTAGGATGGGGC (SEQ ID NO:3867), AGGTATTGGTCGTAGGATGGGGCGTCG (SEQ ID NO:3868)
Target405	chr3:129693390-129693413	CGTCGCGCTTTTATTTTTCGGTTAGTGT (SEQ ID NO:3869), CGTCGCGCTTTTATTTTTCGGTTAGTGT (SEQ ID NO:3870), CGTCGCGCTTTTATTTTTCGGTTAGTGT (SEQ ID NO:3871), CGGCGTTTTATTTTTCGGTTAGTGTTCG (SEQ ID NO:3872), CGTCGCGCTTTTATTTTTCGGTTAGTGT (SEQ ID NO:3873), TTAGGCGCGGTTTCGAGTGAGGTTAGC (SEQ ID NO:3874), TTCGAGTGAGGTTAGCGGGAGGGGTC (SEQ ID NO:3875), GTTAGGCGCGGTTTCGAGTGAGGTTAG (SEQ ID NO:3876), GTTCGAGTGAGGTTAGCGGGAGGGG (SEQ ID NO:3877), GGTTCGAGTGAGGTTAGCGGGAGGGG (SEQ ID NO:3878)
Target406	chr3:129693449-129693458	TAGATTTTCGGAGGAGTAGGCGGGCGG (SEQ ID NO:3879), AGATTTTCGGAGGAGTAGGCGGGCGG (SEQ ID NO:3880), TTAGATTTTCGGAGGAGTAGGCGGGCGG (SEQ ID NO:3881), AGATTTTCGGAGGAGTAGGCGGGCGG (SEQ ID NO:3882), TTAGATTTTCGGAGGAGTAGGCGGGCG (SEQ ID NO:3883), TTAGGCGCGGTTTCGAGTGAGGTTAGC (SEQ ID NO:3884), TTCGAGTGAGGTTAGCGGGAGGGGTC (SEQ ID NO:3885), GTTAGGCGCGGTTTCGAGTGAGGTTAG (SEQ ID NO:3886), GTTCGAGTGAGGTTAGCGGGAGGGG (SEQ ID NO:3887), GGTTCGAGTGAGGTTAGCGGGAGGGG (SEQ ID NO:3888)
Target407	chr3:129693540-129693629	TTGAAGAGGGTTCGGTAGGCGTTTCGGG (SEQ ID NO:3889), TAGATTTTCGGAGGAGTAGGCGGGCGG (SEQ ID NO:3890), CGGTAGGCGTTTCGGGGTTTTAGCGTT (SEQ ID NO:3891), TTCGTAGGCGTTTCGGGGTTTTAGCG (SEQ ID NO:3892), TGAAGAGGGTTCGGTAGGCGTTTCGGG (SEQ ID NO:3893), GGAAGGAGAGGGTTGGGGCGGTTATT (SEQ ID NO:3894), AGGAGAGGGTTGGGGCGGTTATTGT (SEQ ID NO:3895), GGTAGGCGGGTCGAGAGGGTTTTT (SEQ ID NO:3896), GGAAGGAGAGGGTTGGGGCGGTTATT (SEQ ID NO:3897), GGAGAGGGTTGGGGCGGTTATTGT (SEQ ID NO:3898)
Target408	chr3:129693672-129693706	TTGAAGAGGGTTCGGTAGGCGTTTCGGG (SEQ ID NO:3899), AGGGTTCGGTAGGCGTTTCGGGGTTTTT (SEQ ID NO:3900), CGGTAGGCGTTTCGGGGTTTTAGCGTT (SEQ ID NO:3901), GAGGGTTCGGTAGGCGTTTCGGGGTTTTT (SEQ ID NO:3902), TTCGTAGGCGTTTCGGGGTTTTAGCG (SEQ ID NO:3903), GGGGAGGATTCGGGGGTGCGAGTATAG (SEQ ID NO:3904), GGTGAGGGCGGTCGAGAGGGTTTTT (SEQ ID NO:3905), CGGGGAGGATTCGGGGGTGCGAGTATA (SEQ ID NO:3906), AGGTGAGGGCGGGTCGAGAGGGTTTTT (SEQ ID NO:3907), AAGGTGAGGGCGGGTCGAGAGGGTTTTT (SEQ ID NO:3908)
Target409	chr3:133578115-133578515	TTGGGTTGGGGGTGGGTGTTAGGGTTT (SEQ ID NO:3909), TTTGGTTGGGGGTGGGTGTTAGGGTT (SEQ ID NO:3910), TTTTGGGTTGGGGGTGGGTGTTAGGGT (SEQ ID NO:3911), TGGGTTGGGGGTGGGTGTTAGGGTTA (SEQ ID NO:3912), TTTGGTTGGGGGTGGGTGTTAGGGTTT (SEQ ID NO:3913), AGGTGGTTTGGGGGTGGGTGTTAGTTTGGT (SEQ ID NO:3914), GGTGGTTTGGGGGTGGGTGTTAGTTTGGTAGT (SEQ ID NO:3915), AGGTGGTTTGGGGGTGGGTGTTAGTTTGGTAG (SEQ ID NO:3916), AGGTGGTTTGGGGGTGGGTGTTAGTTTGGTAGT (SEQ ID NO:3917), TTAGGTGGTTTGGGGGTGGGTGTTAGTTTGGT (SEQ ID NO:3918)

Figure 5 (Table 1)

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Target410	chr3:137483751-137484225	ATGGTATGGTTTCGGGGTTAGCGGCGT (SEQ ID NO:3919), TGGTATGGTTTCGGGGTTAGCGGCGTA (SEQ ID NO:3920), GGGCGTTGGTTTGTTCGTGGGGGTTTT (SEQ ID NO:3921), TTAAGCGCGTTGGTTTGTTCGTGGGGG (SEQ ID NO:3922), TAAGCGCGTTGGTTTGTTCGTGGGGGT (SEQ ID NO:3923), GTAGTTAGGGTTGGTGGGGACGGGTG (SEQ ID NO:3924), GAGGTCGGCGGTAAGAAGGTTTCGGGTT (SEQ ID NO:3925), ACGGGGGGTTGTAGGGTGGAGGTAGAT (SEQ ID NO:3926), AGGTCGGCGGTAAGAAGGTTTCGGGTTT (SEQ ID NO:3927), GCGGGGTTTAGTAGGGAGTAGGGCGTC (SEQ ID NO:3928)
Target411	chr3:138171444-138171844	TGGGAGGAGGTTTAGTTCTAGTAGGAATGA (SEQ ID NO:3929), TTGGGAGGAGGTTTAGTTCTAGTAGGAATGA (SEQ ID NO:3930), TGGGAGGAGGTTTAGTTCTAGTAGGAATGAT (SEQ ID NO:3931), TGTTTTTGGGAGGAGGTTTAGTTCTAGTAGG (SEQ ID NO:3932), TGTTTTTGGGAGGAGGTTTAGTTCTAGTAGGA (SEQ ID NO:3933), CGGGATTTTTGTTGGGGAGGGTTCGGT (SEQ ID NO:3934), TCGGGATTTTTGTTGGGGAGGGTTCGG (SEQ ID NO:3935), TCGGGATTTTTGTTGGGGAGGGTTCGGT (SEQ ID NO:3936), GTCGGGATTTTTGTTGGGGAGGGTTCGG (SEQ ID NO:3937), CGGGATTTTTGTTGGGGAGGGTTCGGT (SEQ ID NO:3938)
Target412	chr3:138657433-138657454	TGTAGAATCGTGC GTTGATAGGAGAGC (SEQ ID NO:3939), TTGTAGAATCGTGC GTTGATAGGAGAGC (SEQ ID NO:3940), TTTGTAGAATCGTGC GTTGATAGGAGAGC (SEQ ID NO:3941), CGTGGAGATTGGGTTTTATAGCGATTTGGG (SEQ ID NO:3942), CGTGGAGATTGGGTTTTATAGCGATTTGGGT (SEQ ID NO:3943), TGGGTTTCGGTTGGTTCGGTTAGATTCTGA (SEQ ID NO:3944), TGGGTTTCGGTTGGTTCGGTTAGATTCTG (SEQ ID NO:3945), GGGTTTCGGTTGGTTCGGTTAGATTCTGA (SEQ ID NO:3946), GTTGC GTTTTTTAGGGCGTTTTGTGT (SEQ ID NO:3947), AGTTGCGTTTTTAGGGCGTTTTGTGT (SEQ ID NO:3948)
Target413	chr3:138657470-138657527	GAGGTCGGCGTTGGAGGAGTTTCG (SEQ ID NO:3949), AGGTCGGCGTTGGAGGAGTTTCG (SEQ ID NO:3950), CGGTTGATAGGAGAGCGTTGCGTAGAA (SEQ ID NO:3951), GGAGAGCGTTGCGTAGAAAATTCGAGGT (SEQ ID NO:3952), GGAGAGCGTTGCGTAGAAAATTCGAGG (SEQ ID NO:3953), TCGTTGGGTTTCGGTTGGTTCGGTTAGAT (SEQ ID NO:3954), ATCGTTGGGTTTCGGTTGGTTCGGTTAG (SEQ ID NO:3955), TGGGTTTCGGTTGGTTCGGTTAGATTCTGA (SEQ ID NO:3956), GATCGTTGGGTTTCGGTTGGTTCGGTTAG (SEQ ID NO:3957), GATCGTTGGGTTTCGGTTGGTTCGGTTAG (SEQ ID NO:3958)
Target414	chr3:138657564-138657588	GAGGTCGGCGTTGGAGGAGTTTCG (SEQ ID NO:3959), AGAGGCGTTTTGAGAGGCGTAGTTGG (SEQ ID NO:3960), GAGGCGTTTTGAGAGGCGTAGTTGGA (SEQ ID NO:3961), AGAGGCGTTTTGAGAGGCGTAGTTGGA (SEQ ID NO:3962), AGGTCGGCGTTGGAGGAGTTTCG (SEQ ID NO:3963), AGTTTTTGGAGGCGTTAGGGATAGTGGT (SEQ ID NO:3964), AGTTTTTGGAGGCGTTAGGGATAGTGGT (SEQ ID NO:3965), AAGTTTTTGGAGGCGTTAGGGATAGTGGT (SEQ ID NO:3966), AGTTTTTGGAGGCGTTAGGGATAGTGGT (SEQ ID NO:3967), AAGTTTTTGGAGGCGTTAGGGATAGTGGT (SEQ ID NO:3968)
Target415	chr3:138658405-138658430	CGAGTTGGTTTCGCGTCGGGTTTTGT (SEQ ID NO:3969), CGAGTTGGTTTCGCGTCGGGTTTTGTA (SEQ ID NO:3970), GTTGGTTTCGCGTCGGGTTTTGTAGT (SEQ ID NO:3971), CGAGTTGGTTTCGCGTCGGGTTTTG (SEQ ID NO:3972), TGGGGGCGATTAGGGTTTTGCGTTTT (SEQ ID NO:3973), GTGTTTTCGGTTTGTGCGGCGTTG (SEQ ID NO:3974), TCGGTTTGTGCGGCGTTGTAAGTT (SEQ ID NO:3975), TTCGGTTTGTGCGGCGTTGTAAGT (SEQ ID NO:3976), TGTTTTCGGTTTGTGCGGCGTTGT (SEQ ID NO:3977), CGGGTTTGTGCGGCGTTGTAAGTT (SEQ ID NO:3978)
Target416	chr3:138658470-138658532	TGGGGGCGATTAGGGTTTTTGC GTTTT (SEQ ID NO:3979), TTGGGGGCGATTAGGGTTTTTGC GTTTT (SEQ ID NO:3980), TTTGGGGGCGATTAGGGTTTTTGC GTT (SEQ ID NO:3981), TTTTGGGGGCGATTAGGGTTTTTGC GTT (SEQ ID NO:3982), TGGGGGCGATTAGGGTTTTTGC GTTTT (SEQ ID NO:3983), GTGTTTTCGGTTTGTGCGGCGTTG (SEQ ID NO:3984), GGTGGGTTAATTGCGGCGCATCGAGG (SEQ ID NO:3985), GGGTTGGGTTAATTGCGGCGCATCGAG (SEQ ID NO:3986), GGGAGCGAGAGGGGTTAGTAGTCGGGA (SEQ ID NO:3987), TGGGAGCGAGAGGGGTTAGTAGTCGG (SEQ ID NO:3988)
Target417	chr3:138658597-138658676	GGCGTTTTAGGTCGGGTTTTTTCGGT (SEQ ID NO:3989), AGGCGTTTTAGGTCGGGTTTTTTCGGT (SEQ ID NO:3990), AGGCGTTTTAGGTCGGGTTTTTTCGG (SEQ ID NO:3991), CGAGGCGTTTTAGGTCGGGTTTTTTCGG (SEQ ID NO:3992), AGGTCGGGTTTTTTCGGTTGTTGGTT (SEQ ID NO:3993), AGGGGTAAACGTAGGAAGCGGGTTGGG (SEQ ID NO:3994), GGTGGGTTAATTGCGGGCGATCGAGG (SEQ ID NO:3995), GGGTTGGGTTAATTGCGGGCGATCGAG (SEQ ID NO:3996), GGGGTAAACGTAGGAAGCGGGTTGGG (SEQ ID NO:3997), GTTGGGTTAATTGCGGGCGATCGAGG (SEQ ID NO:3998)
Target418	chr3:138658871-138658889	TTAGTCGAGGGAGGCGCGTAGGATTG (SEQ ID NO:3999), ATTAGTCGAGGGAGGCGCGTAGGATT (SEQ ID NO:4000), AATTAGTCGAGGGAGGCGCGTAGGAT (SEQ ID NO:4001), ATTAGTCGAGGGAGGCGCGTAGGATTG (SEQ ID NO:4002), TAATTAGTCGAGGGAGGCGCGTAGGGA (SEQ ID NO:4003), GTGGGCGTTGAGATTCGTTTCGGGTT (SEQ ID NO:4004), TTGGTGGGCGTTGAGATTCGTTTCGGG (SEQ ID NO:4005), TGGGCGTTGAGATTCGTTTCGGGTTT (SEQ ID NO:4006), TGTTGGGCGTTGAGATTCGTTTCGGG (SEQ ID NO:4007), GGTGGGCGTTGAGATTCGTTTCGGG (SEQ ID NO:4008)

Figure 5 (Table 1)

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Target419	chr3:147109865-147109888	TGGAGATCGTGTGTGGGTAGTTGGTT (SEQ ID NO:4009), TTGGAGATCGTGTGTGGGTAGTTGGT (SEQ ID NO:4010), TGGAGATCGTGTGTGGGTAGTTGGTTT (SEQ ID NO:4011), TTGGAGATCGTGTGTGGGTAGTTGGTT (SEQ ID NO:4012), TTTGGAGATCGTGTGTGGGTAGTTGGT (SEQ ID NO:4013), GGTGGGGGTGGTTTGGGTAGATCGGTC (SEQ ID NO:4014), TGGGGGTGGTTTGGGTAGATCGGTCGA (SEQ ID NO:4015), AGGTGGGGGTGGTTTGGGTAGATCGGT (SEQ ID NO:4016), TAGGTGGGGGTGGTTTGGGTAGATCGG (SEQ ID NO:4017), GGTGGGGGTGGTTTGGGTAGATCGGT (SEQ ID NO:4018)
Target420	chr3:147109938-147110023	GGTTGGCGCGGTAGGGTTCGTATAGGT (SEQ ID NO:4019), TTTAAGACGAGGGGTGGCGCGGTAGG (SEQ ID NO:4020), GGGTTGGCGCGGTAGGGTTCGTATAGG (SEQ ID NO:4021), GGGGTTGGCGCGGTAGGGTTCGTATAG (SEQ ID NO:4022), GTTTAAGACGAGGGGTGGCGCGGTA (SEQ ID NO:4023), TCGTTTGGTGGTTTTTCGGGTTCGCGA (SEQ ID NO:4024), AGTCGTAGCGTTAAGGGCGTGGTTGC (SEQ ID NO:4025), GTCGTTGGTGGTTTTTCGGGTTCGCG (SEQ ID NO:4026), CGTTTGGTGGTTTTTCGGGTTCGCGGAG (SEQ ID NO:4027), TCGTTTGGTGGTTTTTCGGGTTCGCGGAG (SEQ ID NO:4028)
Target421	chr3:147110063-147110086	GGTTGGCGCGGTAGGGTTCGTATAGGT (SEQ ID NO:4029), GGGTTGGCGCGGTAGGGTTCGTATAGG (SEQ ID NO:4030), GGGGTTGGCGCGGTAGGGTTCGTATAG (SEQ ID NO:4031), AGGGGTTGGCGCGGTAGGGTTCGTATA (SEQ ID NO:4032), GGTTGGCGCGGTAGGGTTCGTATAGTT (SEQ ID NO:4033), TGTTAGTCGTTTGGTGGTTTTTCGGGTTGT (SEQ ID NO:4034), GTTAGTCGTTTGGTGGTTTTTCGGGTTGT (SEQ ID NO:4035), TGTTAGTCGTTTGGTGGTTTTTCGGGTTG (SEQ ID NO:4036), ATGTTAGTCGTTTGGTGGTTTTTCGGGTTG (SEQ ID NO:4037), ATGTTAGTCGTTTGGTGGTTTTTCGGGTTGT (SEQ ID NO:4038)
Target422	chr3:147110125-147110230	TTGGTATAGGTCGGGGAGGGGTTGGGA (SEQ ID NO:4039), CGGTTGGTATAGGTCGGGGAGGGGTTG (SEQ ID NO:4040), TGGTATAGGTCGGGGAGGGGTTGGGAT (SEQ ID NO:4041), TATAGGTCGGGGAGGGGTTGGGATCGG (SEQ ID NO:4042), GGGTTGGGATCGGTGGTTGCGATGTTT (SEQ ID NO:4043), GGAATTTAGGTTTTCGGGTTTTCGGGGT (SEQ ID NO:4044), AGGAATTTAGGTTTTCGGGTTTTCGGGGT (SEQ ID NO:4045), GGAATTTAGGTTTTCGGGTTTTCGGGGT (SEQ ID NO:4046), AGGAATTTAGGTTTTCGGGTTTTCGGGGT (SEQ ID NO:4047), CGGTAGGAATTTAGGTTTTCGGGTTTTCGGGG (SEQ ID NO:4048)
Target423	chr3:147110251-147110296	TGTTTTGTAGAGTCGAGGGAAGGCGCG (SEQ ID NO:4049), TGTTTTGTAGAGTCGAGGGAAGGCGCGA (SEQ ID NO:4050), GTTTTGTAGAGTCGAGGGAAGGCGCGA (SEQ ID NO:4051), ATGTTTTGTAGAGTCGAGGGAAGGCGCG (SEQ ID NO:4052), ATGTTTTGTAGAGTCGAGGGAAGGCGCGA (SEQ ID NO:4053), GCGTTGGGAGGTAGTTATTTGTTAAAGCGT (SEQ ID NO:4054), AGCGTTGGGAGGTAGTTATTTGTTAAAGCG (SEQ ID NO:4055), GTCGGTTTTTAATTTAGAGCGTTGGGAGGT (SEQ ID NO:4056), AGCGTTGGGAGGTAGTTATTTGTTAAAGCGT (SEQ ID NO:4057), AGTCGTTTTTTAATTTAGAGCGTTGGGAGGT (SEQ ID NO:4058)
Target424	chr3:147110349-147110461	AGTGTTCGGGAAATGGGGGAAGAAGGT (SEQ ID NO:4059), CGGAAATGGGGGAAGAAGGTTTTTGGGCG (SEQ ID NO:4060), GTGTTCCGGAAATGGGGGAAGAAGGT (SEQ ID NO:4061), TGGGGGAAGAAGGTTTTTGGGCGTTT (SEQ ID NO:4062), GCGGAAATGGGGGAAGAAGGTTTTTGGGCG (SEQ ID NO:4063), TTCGGGTTTAGGAGTCGTTGATTGCGT (SEQ ID NO:4064), GGGTTCGGGAATTGGGTTTTGTTGT (SEQ ID NO:4065), AGGGTTCGGGAATTGGGTTTTGTTGT (SEQ ID NO:4066), AGGGTTCGGGAATTGGGTTTTGTTGT (SEQ ID NO:4067), CGGAGATTCGGGTTTAGGAGTCGTTGA (SEQ ID NO:4068)
Target425	chr3:157812170-157812185	AGAGGAGGTAAGGGCGTCGCGAGTTT (SEQ ID NO:4069), AAGAGGAGGTAAGGGCGTCGCGAGTTT (SEQ ID NO:4070), GTAAGAGGAGGTAAGGGCGTCGCGAGT (SEQ ID NO:4071), TAAGAGGAGGTAAGGGCGTCGCGAGTT (SEQ ID NO:4072), AGGAGGTAAGGGCGTCGCGAGTTTTC (SEQ ID NO:4073), AGGTTCCGGAGGTAGTTAGGTTCCGGC (SEQ ID NO:4074), CGGAGAGGTTCCGGAGGTAGTTAGGT (SEQ ID NO:4075), GAGGTTCCGGAGGTAGTTAGGTTCCGGC (SEQ ID NO:4076), GAGGTTCCGGAGGTAGTTAGGTTCCGG (SEQ ID NO:4077), AGAGGTTCCGGAGGTAGTTAGGTTCCGG (SEQ ID NO:4078)
Target426	chr3:157812206-157812227	AGAGGAGGTAAGGGCGTCGCGAGTTT (SEQ ID NO:4079), AAGAGGAGGTAAGGGCGTCGCGAGTTT (SEQ ID NO:4080), GTAAGAGGAGGTAAGGGCGTCGCGAGT (SEQ ID NO:4081), TAAGAGGAGGTAAGGGCGTCGCGAGTT (SEQ ID NO:4082), AGGAGGTAAGGGCGTCGCGAGTTTTC (SEQ ID NO:4083), AGTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4084), CGGAGAGGTTCCGGAGGTAGTTAGGT (SEQ ID NO:4085), AGTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4086), GTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4087), GAGTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4088)
Target427	chr3:157812296-157812438	TCGTCGGATTGGTTGTTTTCCGGGT (SEQ ID NO:4089), TTCGTCGGATTGGTTGTTTTCCGGGT (SEQ ID NO:4090), TTCGTCGGATTGGTTGTTTTCCGGGT (SEQ ID NO:4091), TTCGTCGGATTGGTTGTTTTCCGGGT (SEQ ID NO:4092), CGTCGGATTGGTTGTTTTCCGGGT (SEQ ID NO:4093), TCGATAGGAGTTAGGTGGGTTCCGGC (SEQ ID NO:4094), AGTTCGAGGTTAAAGGAGGCGGTGCGT (SEQ ID NO:4095), AGTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4096), GAGTTAGGTGGGTTCCGGCGGAGATT (SEQ ID NO:4097), GATAGGAGTTAGGTGGGTTCCGGCGG (SEQ ID NO:4098)

Figure 5 (Table 1)

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Target428	chr3:157812457-157812476	TGGAGATTTTGGAGTAGGGGAGATGGTGGT (SEQ ID NO:4099), GGAGATTTTGGAGTAGGGGAGATGGTGGT (SEQ ID NO:4100), TGGAGATTTTGGAGTAGGGGAGATGGTGG (SEQ ID NO:4101), GGAGATTTTGGAGTAGGGGAGATGGTGG (SEQ ID NO:4102), GGAGATTTTGGAGTAGGGGAGATGGTGGT (SEQ ID NO:4103)
Target429	chr3:157812608-157812618	CGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4104), TCGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4105), TCGTGTGGGATTTGGGTTAGGATTAGGG (SEQ ID NO:4106), CGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4107), TTCGTGTGGGATTTGGGTTAGGATTAGGG (SEQ ID NO:4108), TCGTCGTGGTTTTGTGGTTTTTAGCGA (SEQ ID NO:4109), CGTCGTGGTTTTGTGGTTTTAGCGAGT (SEQ ID NO:4110), TCGTCGTGGTTTTGTGGTTTTAGCGAGT (SEQ ID NO:4111), TCGTCGTGGTTTTGTGGTTTTAGCGAG (SEQ ID NO:4112), TTCGTGTGGTTTTGTGGTTTTAGCGA (SEQ ID NO:4113)
Target430	chr3:157812620-157812652	CGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4114), TCGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4115), TCGTGTGGGATTTGGGTTAGGATTAGGG (SEQ ID NO:4116), CGTGTGGGATTTGGGTTAGGATTAGGGT (SEQ ID NO:4117), TTCGTGTGGGATTTGGGTTAGGATTAGGG (SEQ ID NO:4118), TCGTCGTGGTTTTGTGGTTTTAGCGA (SEQ ID NO:4119), CGTCGTGGTTTTGTGGTTTTAGCGAGT (SEQ ID NO:4120), TCGTCGTGGTTTTGTGGTTTTAGCGAGT (SEQ ID NO:4121), TCGTCGTGGTTTTGTGGTTTTAGCGAG (SEQ ID NO:4122), TTCGTGTGGTTTTGTGGTTTTAGCGA (SEQ ID NO:4123)
Target431	chr3:170137078-170137103	TCGGGTAAGGATTCGAGTTTGGCGGCG (SEQ ID NO:4124), CGGGTAAGGATTCGAGTTTGGCGGCG (SEQ ID NO:4125), TCGGGTAAGGATTCGAGTTTGGCGGCG (SEQ ID NO:4126), AGTTGGGTTTTAAGGGGTTGTGGGTCG (SEQ ID NO:4127), GTTGGGTTTTAAGGGGTTGTGGGTCGA (SEQ ID NO:4128), TGGGAGTCGTCGTTAAGTTCGGGTTTT (SEQ ID NO:4129), TTGGGAGTCGTCGTTAAGTTCGGGTTTT (SEQ ID NO:4130), TTTGGGAGTCGTCGTTAAGTTCGGGTT (SEQ ID NO:4131), ATTTGGGAGTCGTCGTTAAGTTCGGGTT (SEQ ID NO:4132), GGATTTGGGAGTCGTCGTTAAGTTCGGGTT (SEQ ID NO:4133)
Target432	chr3:170137305-170137869	TTTCGCGTCGTTGGGTTGGATAGGGAC (SEQ ID NO:4134), GTTCGCGTCGTTGGGTTGGATAGGGGA (SEQ ID NO:4135), TTTATTGGGGAGATACGGAGCGCGTCG (SEQ ID NO:4136), GTTTCGCGTCGTTGGGTTGGATAGGGAC (SEQ ID NO:4137), CGTTGGGTTGGATAGGGACGAGCGGG (SEQ ID NO:4138), ATTCGGGAAGCGGACGGTGGAAGGAT (SEQ ID NO:4139), CGGGGGTAGCGGAGATGGTTTTGGGTA (SEQ ID NO:4140), TATTCGGGAAGCGGACGGTGGAAGGA (SEQ ID NO:4141), CGGAGATGGTTTTGGGTACGTGCGGGA (SEQ ID NO:4142), TTTCGGGAAGCGGACGGTGGAAGGATG (SEQ ID NO:4143)
Target433	chr3:171175787-171176317	TCGTTGCGTAGGGGGTAGTCGGTTTTT (SEQ ID NO:4144), TTCGTTGCGTAGGGGGTAGTCGGTTTTT (SEQ ID NO:4145), TTTCGTTGCGTAGGGGGTAGTCGGTTTTT (SEQ ID NO:4146), ATTCGTTGCGTAGGGGGTAGTCGGTTTTT (SEQ ID NO:4147), CGTTGCGTAGGGGGTAGTCGGTTTTT (SEQ ID NO:4148), CGTAGCGGGGTGGGGTTGGTAATAGGG (SEQ ID NO:4149), GGGGTGGGGTTGGTAATAGGGTGGGTG (SEQ ID NO:4150), ATGGATGGTTTCGATTGGGGGTGGGGT (SEQ ID NO:4151), CGGGAAGTGTAAGGGGGAAGGGGTT (SEQ ID NO:4152), GGGTGGGGTTGGTAATAGGGTGGGTGT (SEQ ID NO:4153)
Target434	chr3:181444205-181444223	AGGATGAGGGTGGTGGTGGTTTTTGGG (SEQ ID NO:4154), GGATGAGGGTGGTGGTGGTTTTTGGGA (SEQ ID NO:4155), AGGATGAGGGTGGTGGTGGTTTTTGGGA (SEQ ID NO:4156), TGAGGGTGGTGGTGGTTTTTGGGAGAA (SEQ ID NO:4157), GGATGAGGGTGGTGGTGGTTTTTGGGAG (SEQ ID NO:4158)
Target435	chr3:181444455-181444464	GTTTTGAAAGGTAGGGTTCGCGGCGGT (SEQ ID NO:4159), AGTTTTGAAAGGTAGGGTTCGCGGCGG (SEQ ID NO:4160), AGTTTTGAAAGGTAGGGTTCGCGGCGGT (SEQ ID NO:4161), TTTTGAAAGGTAGGGTTCGCGGCGGT (SEQ ID NO:4162), TAGTTTTGAAAGGTAGGGTTCGCGGCGG (SEQ ID NO:4163)
Target436	chr3:188012659-188012871	CGTTTAGGAGGTGTCGTTTCGAGTTTTGGT (SEQ ID NO:4164), CGTTTAGGAGGTGTCGTTTCGAGTTTTGG (SEQ ID NO:4165), AGGAGGTGTCGTTTCGAGTTTTGGT (SEQ ID NO:4166), TCGTTTAGGAGGTGTCGTTTCGAGTTTTGG (SEQ ID NO:4167), TCGTTTAGGAGGTGTCGTTTCGAGTTTTGGT (SEQ ID NO:4168), AGGTGGGATAATGATTTTATGGAGGATGGG (SEQ ID NO:4169), GGTGGGATAATGATTTTATGGAGGATGGGA (SEQ ID NO:4170), AGGTGGGATAATGATTTTATGGAGGATGGGA (SEQ ID NO:4171), AAGGTGGGATAATGATTTTATGGAGGATGGG (SEQ ID NO:4172), GGTGGGATAATGATTTTATGGAGGATGGGAA (SEQ ID NO:4173)
Target437	chr3:188012918-188012956	GGTGGACGTGTGTAGAGGTTGAAGGAG (SEQ ID NO:4174), GGTGGACGTGTGTAGAGGTTGAAGGAGA (SEQ ID NO:4175), GGTGGACGTGTGTAGAGGTTGAAGGAGAG (SEQ ID NO:4176), GGTGGACGTGTGTAGAGGTTGAAGGAGAGT (SEQ ID NO:4177), TGGACGTGTGTAGAGGTTGAAGGAGAGT (SEQ ID NO:4178)

Figure 5 (Table 1)

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Target438	chr3:192125830-192125856	CGGGGGTTTCGAGGTGTTTTGAGGAGG (SEQ ID NO:4179), GGGGGTTTCGAGGTGTTTTGAGGAGGG (SEQ ID NO:4180), ACGGGGGTTTCGAGGTGTTTTGAGGAGG (SEQ ID NO:4181), GGGGGTTTCGAGGTGTTTTGAGGAGGGA (SEQ ID NO:4182), ACGGGGGTTTCGAGGTGTTTTGAGGAG (SEQ ID NO:4183), AAGACGGGCGTTTTTGTGCGAGAGGT (SEQ ID NO:4184), AGACGGGCGTTTTTGTGCGAGAGGTA (SEQ ID NO:4185), GACGGGCGTTTTTGTGCGAGAGGTAC (SEQ ID NO:4186), AGACGGGCGTTTTTGTGCGAGAGGTAC (SEQ ID NO:4187), AGACGGGCGTTTTTGTGCGAGAGGT (SEQ ID NO:4188)
Target439	chr3:192125889-192126115	GTTTTTCGGTTTGCCTTCGTCGGGGC (SEQ ID NO:4189), GCGTTCGTTTTTGTGGGGTTGGAGCG (SEQ ID NO:4190), GCGAGGGTAGGATTGGGCGGTTAGGG (SEQ ID NO:4191), GGGGAGGGTAGGATTGGGCGGTTAGG (SEQ ID NO:4192), GGGCGAGGGTAGGATTGGGCGGTTAG (SEQ ID NO:4193), TCGGAGGGCGTAGTAGAGGTTGGGGTT (SEQ ID NO:4194), CGGAGGGCGTAGTAGAGGTTGGGGTTT (SEQ ID NO:4195), AGTCGAGGGCGTAGTAGAGGTTGGGG (SEQ ID NO:4196), GTCGGAGGGCGTAGTAGAGGTTGGGGT (SEQ ID NO:4197), AAGTCGAGGGCGTAGTAGAGGTTGGG (SEQ ID NO:4198)
Target440	chr3:192126116-192126199	GTTTTTCGGTTTGCCTTCGTCGGGGC (SEQ ID NO:4199), GTTAGGGAAAGGGTAGTCGCGGGGAGG (SEQ ID NO:4200), GGTTAGGGAAAGGGTAGTCGCGGGGAG (SEQ ID NO:4201), GGAAAGGGTAGTCGCGGGGAGGTAGTG (SEQ ID NO:4202), TTAGGGAAAGGGTAGTCGCGGGGAGGT (SEQ ID NO:4203), TCGTTTTGGGGTGTAAGTTTGGGGTGT (SEQ ID NO:4204), AGAGGGTTTGGGATCGTTTCGTTTCGT (SEQ ID NO:4205), GAGGGTTTGGGATCGTTTCGTTTCGTT (SEQ ID NO:4206), TTCGTCGTTAGAGGTTGGGGAAGTTT (SEQ ID NO:4207), TTTTCGTCGTTAGAGGTTGGGGAAGTT (SEQ ID NO:4208)
Target441	chr3:192126244-192126266	TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4209), TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4210), TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4211), TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4212), TTTAATTTTGGCGGTCGGGGGGCGGG (SEQ ID NO:4213), TCGTTTTGGGGTGTAAGTTTGGGGTGT (SEQ ID NO:4214), AGAGGGTTTGGGATCGTTTCGTTTCGT (SEQ ID NO:4215), CGATCGTTTGGGGTGTAAGTTTGGGGT (SEQ ID NO:4216), CGATCGTTTGGGGTGTAAGTTTGGGG (SEQ ID NO:4217), TCGATCGTTTGGGGTGTAAGTTTGGGGT (SEQ ID NO:4218)
Target442	chr3:192126283-192126367	TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4219), TCGGCGTTAAGGGGTAGTGGGGAGTT (SEQ ID NO:4220), ATCGGCGTTAAGGGGTAGTGGGGAGT (SEQ ID NO:4221), TTTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4222), TTTAATTTTGGCGGTCGGGGGGCGG (SEQ ID NO:4223), TCGTTTTGGGGTGTAAGTTTGGGGTGT (SEQ ID NO:4224), CGATCGTTTGGGGTGTAAGTTTGGGGT (SEQ ID NO:4225), CGATCGTTTGGGGTGTAAGTTTGGGG (SEQ ID NO:4226), TCGATCGTTTGGGGTGTAAGTTTGGGGT (SEQ ID NO:4227), TCGATCGTTTGGGGTGTAAGTTTGGGG (SEQ ID NO:4228)
Target443	chr3:193894534-193894595	CGTGGAGTTGTTGTTAGAGGTGCGGGA (SEQ ID NO:4229), TCGTGGAGTTGTTGTTAGAGGTGCGGG (SEQ ID NO:4230), TCGTGGAGTTGTTGTTAGAGGTGCGGGA (SEQ ID NO:4231), GTCGGTGTGTTAGGCGGTTGTTGAGT (SEQ ID NO:4232), CGTGGAGTTGTTGTTAGAGGTGCGGGAT (SEQ ID NO:4233), CGGGGGTTCGGTCGTTAGTTGGGGTTG (SEQ ID NO:4234), GGGGGTTCGGTCGTTAGTTGGGGTTGG (SEQ ID NO:4235), GGGGTTTCGGTCGTTAGTTGGGGTTGGT (SEQ ID NO:4236), GGGGGTTCGGTCGTTAGTTGGGGTTGGT (SEQ ID NO:4237), GGGGTTTCGGTCGTTAGTTGGGGTTGGT (SEQ ID NO:4238)
Target444	chr3:193894619-193894705	CGTGGAGTTGTTGTTAGAGGTGCGGGA (SEQ ID NO:4239), TCGTGGAGTTGTTGTTAGAGGTGCGGG (SEQ ID NO:4240), TCGTGGAGTTGTTGTTAGAGGTGCGGGA (SEQ ID NO:4241), TGGGCGGTGCGGATTTTCGTTTGAGTTGT (SEQ ID NO:4242), GGGCGGTGCGGATTTTCGTTTGAGTTGT (SEQ ID NO:4243), AGGGTTGGAAGAGTGTAATAGGATTGCGT (SEQ ID NO:4244), AGGATTGCGTGAGGTTTCGTTTATGTTT (SEQ ID NO:4245), AGGGTTGGAAGAGTGTAATAGGATTGCGTG (SEQ ID NO:4246), GGGTTGGAAGAGTGTAATAGGATTGCGTGA (SEQ ID NO:4247), AGTGTAATAGGATTGCGTGAGGTTTCGTGT (SEQ ID NO:4248)
Target445	chr3:196367455-196367942	GGAGGAGGTCGGATCGGGGGTTTTAGG (SEQ ID NO:4249), GATTGGAGGAGGTCGGATCGGGGGTTT (SEQ ID NO:4250), TCGGATAGGGTTGGTCGGGGTTGTTGT (SEQ ID NO:4251), ATTGGAGGAGGTCGGATCGGGGGTTTT (SEQ ID NO:4252), CGGATAGGGTTGGTCGGGGTTGTTGTG (SEQ ID NO:4253), CGAGGGTTACGGAAGAGCGTTCGAGTT (SEQ ID NO:4254), CGAGGGTTACGGAAGAGCGTTCGAGTTT (SEQ ID NO:4255), CGAGGGTTACGGAAGAGCGTTCGAGT (SEQ ID NO:4256), GAGGGTTACGGAAGAGCGTTCGAGTTT (SEQ ID NO:4257), CGAGGGTTACGGAAGAGCGTTCGAGTTTT (SEQ ID NO:4258)
Target446	chr3:196387459-196387506	GTCGTCGAGGGAGATGGTGGTTTAGTT (SEQ ID NO:4259), GTCGTCGAGGGAGATGGTGGTTTAGTTT (SEQ ID NO:4260), GTCGTCGAGGGAGATGGTGGTTTAGT (SEQ ID NO:4261), TCGTCGAGGGAGATGGTGGTTTAGTTTT (SEQ ID NO:4262), GTCGTCGAGGGAGATGGTGGTTTAGTTTT (SEQ ID NO:4263), TGGTGGAGGTTTAGTGGGAGAGGGAA (SEQ ID NO:4264), TTGGTGGAGGTTTAGTGGGAGAGGGA (SEQ ID NO:4265), GGTGGAGGTTTAGTGGGAGAGGGAAGG (SEQ ID NO:4266), TGGAGGTTTAGTGGGAGAGGGAAGGT (SEQ ID NO:4267), GTGGAGGTTTAGTGGGAGAGGGAAGGT (SEQ ID NO:4268)
Target447	chr3:196387611-196387699	TTAGTTCGGTGAGCGTTTCGGGGGGTTT (SEQ ID NO:4269), TTAGTTCGGTGAGCGTTTCGGGGGGT (SEQ ID NO:4270), GTGAGCGTTTCGGGGGGTTCGTGTTTT (SEQ ID NO:4271), TAGTTCGGTGAGCGTTTCGGGGGGTTC (SEQ ID NO:4272), TGAGCGTTTCGGGGGGTTCGTGTTTTT (SEQ ID NO:4273)

Figure 5 (Table 1)

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Target448	chr3:196387727-196387781	TGGTTTCGGGGTTGGTTAGTTGTTTGGGT (SEQ ID NO:4274), GGTTCGGGGTTGGTTAGTTGTTTGGGT (SEQ ID NO:4275), TGGTTTCGGGGTTGGTTAGTTGTTTGGG (SEQ ID NO:4276), TGTCGGAGTTGTATTTGGTTTCGGGGT (SEQ ID NO:4277), GGTTCGGGGTTGGTTAGTTGTTTGGG (SEQ ID NO:4278), TTGGCGAAGAGGTTAGGGGGACGTTT (SEQ ID NO:4279), ATTGGCGAAGAGGTTAGGGGGACGTT (SEQ ID NO:4280), TGGCGAAGAGGTTAGGGGGACGTTTA (SEQ ID NO:4281), AGGGGGGACGTTAGGAGTTGGTTGGA (SEQ ID NO:4282), TATTGGCGAAGAGGTTAGGGGGACGT (SEQ ID NO:4283)
Target449	chr3:197639602-197639700	GCGTTACGTGTTTTGTAGTGTGGTGA (SEQ ID NO:4284), GCGTTACGTGTTTTGTAGTGTGGTGAA (SEQ ID NO:4285), TGCGGGGAAGACGTATTGGTATTGATTGT (SEQ ID NO:4286), GCGTTACGTGTTTTGTAGTGTGGTGAAT (SEQ ID NO:4287), AGTTTTGCGGGGAAGACGTATTGGTATTG (SEQ ID NO:4288)
Target450	chr3:197639785-197639810	GTGGCGCGGTATTGTGTGGATTGC (SEQ ID NO:4289), AGAGTAGTAGTTCGGTCGGTAGTTGAGGT (SEQ ID NO:4290), GAGAGTAGTAGTTCGGTCGGTAGTTGAGGT (SEQ ID NO:4291), TGAGAGTAGTAGTTCGGTCGGTAGTTGAGG (SEQ ID NO:4292), TGAGAGTAGTAGTTCGGTCGGTAGTTGAGGT (SEQ ID NO:4293), TGGAGCGTCGTTTTGTTTTTAGTGGGT (SEQ ID NO:4294), TTGGAGCGTCGTTTTGTTTTTAGTGGGT (SEQ ID NO:4295), TTTGGAGCGTCGTTTTGTTTTTAGTGGGT (SEQ ID NO:4296), TTGGAGCGTCGTTTTGTTTTTAGTGGGTA (SEQ ID NO:4297), TTTTGGAGCGTCGTTTTGTTTTTAGTGGGT (SEQ ID NO:4298)
Target451	chr3:197639879-197639946	GCGGTATTGTGTGGATTGCGTGTGTTT (SEQ ID NO:4299), GCGGTATTGTGTGGATTGCGTGTGTTT (SEQ ID NO:4300), GCGGTATTGTGTGGATTGCGTGTGTT (SEQ ID NO:4301), AGGGGGATTTCGGAGTGTTAGGAAGAGT (SEQ ID NO:4302), TGTGGGGTTTAAAAAGGGGGATTTCGGA (SEQ ID NO:4303), TGGGTCGTGGAATTTGTGTGTGGGAGG (SEQ ID NO:4304), TGGGTCGTGGAATTTGTGTGTGGGAGGA (SEQ ID NO:4305), GGGTCGTGGAATTTGTGTGTGGGAGGA (SEQ ID NO:4306), TTGGGTCGTGGAATTTGTGTGTGGGAGG (SEQ ID NO:4307), TTGGGTCGTGGAATTTGTGTGTGGGAGGA (SEQ ID NO:4308)
Target452	chr4:2813724-2813793	AGGTGGTTTTGCGGGGAGGTAGTAGGG (SEQ ID NO:4309), GGTGGTTTTGCGGGGAGGTAGTAGGGA (SEQ ID NO:4310), GGTGGTTTTGCGGGGAGGTAGTAGGGAG (SEQ ID NO:4311), GAGGTGGTTTTGCGGGGAGGTAGTAGGG (SEQ ID NO:4312), TGGTTTTGCGGGGAGGTAGTAGGGAGT (SEQ ID NO:4313), GAGGTTTTGAAAGTTGTTTGGGGTTAGGGT (SEQ ID NO:4314), TGAGGTTTTGAAAGTTGTTTGGGGTTAGGG (SEQ ID NO:4315), TGAGGTTTTGAAAGTTGTTTGGGGTTAGGGT (SEQ ID NO:4316), GGTTTTGAAAGTTGTTTGGGGTTAGGGTGT (SEQ ID NO:4317), AGGTTTTGAAAGTTGTTTGGGGTTAGGGTTG (SEQ ID NO:4318)
Target453	chr4:2813941-2814002	GGGAATAGGAAGTTTCGGGTGGGGAGG (SEQ ID NO:4319), AGGGAATAGGAAGTTTCGGGTGGGGAGG (SEQ ID NO:4320), GGGAATAGGAAGTTTCGGGTGGGGAGGA (SEQ ID NO:4321), AGGGAATAGGAAGTTTCGGGTGGGGAGGA (SEQ ID NO:4322), CGGATGGTGGATGAGGGGTAGTTTGGGT (SEQ ID NO:4323), TGTGAGGTTTGACGCGTTTGGTTGTTT (SEQ ID NO:4324), TGTTTTGAGGTTTGTGGTCGTCGGTGT (SEQ ID NO:4325), ATGTGAGTTTGACGCGTTTGGTTGTT (SEQ ID NO:4326), GTTTTTGAGGTTTGTGGTCGTCGGTGT (SEQ ID NO:4327), TGTTTTGAGGTTTGTGGTCGTCGGTG (SEQ ID NO:4328)
Target454	chr4:2814004-2814242	AGTTTCGGGTGGGGAGGAAGTATCGGC (SEQ ID NO:4329), GGGTGGGGAGGAAGTATCGGCGTTAT (SEQ ID NO:4330), GTTTCGGGTGGGGAGGAAGTATCGGCG (SEQ ID NO:4331), TTTCGGGTGGGGAGGAAGTATCGGCG (SEQ ID NO:4332), AAGTTTCGGGTGGGGAGGAAGTATCGGC (SEQ ID NO:4333), CGGGTCGGTGTTTTGGGGTTAGGGA (SEQ ID NO:4334), GGGTCGGTGTTTTGGGGTTAGGGAGG (SEQ ID NO:4335), GGGGTCGGTGTTTTGGGGTTAGGGAG (SEQ ID NO:4336), GGGTCGGTGTTTTGGGGTTAGGGAGGT (SEQ ID NO:4337), GGGGTCGGTGTTTTGGGGTTAGGGAGG (SEQ ID NO:4338)
Target455	chr4:2814283-2814401	ATTGGGGTTTCGGGAGGCGGTATTGGTT (SEQ ID NO:4339), AGGATTGGGGTTTCGGGAGGCGGTATTG (SEQ ID NO:4340), TTGGGGTTTCGGGAGGCGGTATTGGTTT (SEQ ID NO:4341), TTTTAGGATTGGGGTTTCGGGAGGCGGT (SEQ ID NO:4342), GATTGGGGTTTCGGGAGGCGGTATTGGT (SEQ ID NO:4343), TTTTGTGGGTCGTATGTGATGGGGGG (SEQ ID NO:4344), TTTTGTGGGTCGTATGTGATGGGGGG (SEQ ID NO:4345), ACGGTTAGTTTCGAGGAAGGTTGTGGT (SEQ ID NO:4346), TTTTGTGGGTCGTATGTGATGGGGGG (SEQ ID NO:4347), ACGGTTAGTTTCGAGGAAGGTTGTGGT (SEQ ID NO:4348)
Target456	chr4:3311897-3312297	GGGCGGGTAGGTTTATGTTGTTTGGGT (SEQ ID NO:4349), GGGCGGGTAGGTTTATGTTGTTTGGG (SEQ ID NO:4350), AGGGCGGGTAGGTTTATGTTGTTTGGGT (SEQ ID NO:4351), AGGGCGGGTAGGTTTATGTTGTTTGGG (SEQ ID NO:4352), CGTGTGTTGTTGTTTAGGGCGGGTAGGT (SEQ ID NO:4353), TGGGGTGTAGCGTGGATTGGAGATAGT (SEQ ID NO:4354), TTTTGGGGTGTAGCGTGGATTGGAGA (SEQ ID NO:4355), TTTTGGGGTGTAGCGTGGATTGGAGAT (SEQ ID NO:4356), TGGGGTGTAGCGTGGATTGGAGATAGT (SEQ ID NO:4357), TTGGGGTGTAGCGTGGATTGGAGATAGT (SEQ ID NO:4358)

Figure 5 (Table 1)

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Target457	chr4:8582287-8582301	GGTTGGGAGGTTCCGGTTGGAGGTGTGA (SEQ ID NO:4359), GGCCTGGCGAGGGTTGTGTTGTTAGG (SEQ ID NO:4360), AGGCGTGGCGAGGGTTGTGTTGTTAG (SEQ ID NO:4361), GCGTGGCGAGGGTTGTGTTGTTAGGA (SEQ ID NO:4362), TAGGGTTGGGAGGTTCCGGTTGGAGGTG (SEQ ID NO:4363), GCGTGGTAGGATGGGATTTTGC GCGTT (SEQ ID NO:4364), CGTGGCGTGGTAGGATGGGATTTTGC G (SEQ ID NO:4365), TCGTGGCGTGGTAGGATGGGATTTTGC (SEQ ID NO:4366), GCGTGGTAGGATGGGATTTTGC GCGT (SEQ ID NO:4367), TTTTGAGGTTGAAGCGAGGCGTAGGGG (SEQ ID NO:4368)
Target458	chr4:8859601-8859631	GAGTTTCGGGTTTAGTTTAGGAGTCGCG (SEQ ID NO:4369), GGGGATTCGAGGTTTTTGAAGATTTAAATTGTCG (SEQ ID NO:4370), GGGGATTCGAGGTTTTTGAAGATTTAAATTGTCG (SEQ ID NO:4371), AGGGGATTCGAGGTTTTTGAAGATTTAAATTGTCG (SEQ ID NO:4372), GGGATTCGAGGTTTTTGAAGATTTAAATTGTCG (SEQ ID NO:4373), GCGGTTTTTGAATTGGGGTTCGGGGT (SEQ ID NO:4374), ACGCGTTTTTGAATTGGGGTTCGGG (SEQ ID NO:4375), CGCGTTTTTGAATTGGGGTTCGGGG (SEQ ID NO:4376), GACGCGTTTTTGAATTGGGGTTCGG (SEQ ID NO:4377), AGACGCGTTTTTGAATTGGGGTTCGG (SEQ ID NO:4378)
Target459	chr4:8859638-8859725	GGAGGGGTGAAGTCGAGGGGTGTTTT (SEQ ID NO:4379), GAGAGAGTAGGGTTTCGGGCGTTCGGG (SEQ ID NO:4380), TGAGAGAGTAGGGTTTCGGGCGTTCGG (SEQ ID NO:4381), AGGAGGGGTGAAGTCGAGGGGTGTTTT (SEQ ID NO:4382), GAGGAGGGGTGAAGTCGAGGGGTGTTT (SEQ ID NO:4383), GGTTTTGGGGCGGTCGGTTTGTGTTT (SEQ ID NO:4384), GTTTGGGGCGGTCGGTTTGTGTTT (SEQ ID NO:4385), GGTTGGGGCGGTCGGTTTGTGTTT (SEQ ID NO:4386), GGTTGGGGCGGTCGGTTTGTGTTT (SEQ ID NO:4387), TTGGGGCGGTCGGTTTGTGTTT (SEQ ID NO:4388)
Target460	chr4:8859834-8859850	GGGGGAGGGGTAGTAGGTCGATCGTT (SEQ ID NO:4389), GTGGGGGAGGGGTAGTAGGTCGATCG (SEQ ID NO:4390), CGTGGGGGAGGGGTAGTAGGTCGATC (SEQ ID NO:4391), TGGGGGAGGGGTAGTAGGTCGATCG (SEQ ID NO:4392), GGGGGAGGGGTAGTAGGTCGATCGT (SEQ ID NO:4393), ATGGACGGGGTTTCGATCGGTTGGG (SEQ ID NO:4394), AATGGACGGGGTTTCGATCGGTTGG (SEQ ID NO:4395), AAATGGACGGGGTTTCGATCGGTTGG (SEQ ID NO:4396), AATGGACGGGGTTTCGATCGGTTGGG (SEQ ID NO:4397), TGGACGGGGTTTCGATCGGTTGGG (SEQ ID NO:4398)
Target461	chr4:8859927-8859996	GGGGGAGGGGTAGTAGGTCGATCGTT (SEQ ID NO:4399), GAGGTTCCGATGTGTTGACGTTGCGGT (SEQ ID NO:4400), GTGGGGGAGGGGTAGTAGGTCGATCG (SEQ ID NO:4401), CGTGGGGGAGGGGTAGTAGGTCGATC (SEQ ID NO:4402), AGGTTCCGATGTGTTGACGTTGCGGTT (SEQ ID NO:4403)
Target462	chr4:8859998-8860005	GAGGTTCCGATGTGTTGACGTTGCGGT (SEQ ID NO:4404), AGGTTCCGATGTGTTGACGTTGCGGTT (SEQ ID NO:4405), GAGGTTCCGATGTGTTGACGTTGCGGTT (SEQ ID NO:4406), AGGTTCCGATGTGTTGACGTTGCGGT (SEQ ID NO:4407), GGTTCCGATGTGTTGACGTTGCGGTTA (SEQ ID NO:4408)
Target463	chr4:8862980-8863016	GGGTTTTAGCGGGGTAGGTAGGGTTCGG (SEQ ID NO:4409), GGTTTTAGCGGGGTAGGTAGGGTTCGG (SEQ ID NO:4410), GGGTTTTAGCGGGGTAGGTAGGGTTCG (SEQ ID NO:4411), AGGGTTTTAGCGGGGTAGGTAGGGTTCG (SEQ ID NO:4412), GGTTTTAGCGGGGTAGGTAGGGTTCGGA (SEQ ID NO:4413), GTCGTTCCGTCGGGTAGTGGGAAGTCG (SEQ ID NO:4414), GTTCGGTCGGGTAGTGGGAAGTCGGTG (SEQ ID NO:4415), TTCGTCGGGTAGTGGGAAGTCGGTGT (SEQ ID NO:4416), TCGGTCGGGTAGTGGGAAGTCGGTGTC (SEQ ID NO:4417), CGGTCGGGTAGTGGGAAGTCGGTGTC (SEQ ID NO:4418)
Target464	chr4:8863143-8863155	TTTGGGAGGGGCGGGTCCGGATTAGAG (SEQ ID NO:4419), GTTTGGGAGGGGCGGGTCCGGATTAGA (SEQ ID NO:4420), GTTTGGGAGGGGCGGGTCCGGATTAG (SEQ ID NO:4421), TTTGGGAGGGGCGGGTCCGGATTAGA (SEQ ID NO:4422), TTTGGGAGGGGCGGGTCCGGATTAG (SEQ ID NO:4423), GCGCGCGTGATTTGTTTGGTTATCG (SEQ ID NO:4424), GCGCGCGTGATTTGTTTGGTTATCGA (SEQ ID NO:4425), GCGCGCGTGATTTGTTTGGTTATCGAGG (SEQ ID NO:4426), GCGCGCGTGATTTGTTTGGTTATCGAGG (SEQ ID NO:4427), GCGCGCGTGATTTGTTTGGTTATCGAG (SEQ ID NO:4428)
Target465	chr4:8863239-8863244	CGACGGGGGAGTTTCGGTGATTAGGGT (SEQ ID NO:4429), TACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4430), ACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4431), TTACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4432), ATTACGTTCCGGAAAGGGGGTAGGGA (SEQ ID NO:4433), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4434), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4435), GTTTCGGTCGTGTTTCGGGGTTCGT (SEQ ID NO:4436), AGTTTCGGTCGTGTTTCGGGGTTCGT (SEQ ID NO:4437), AGTTTCGGTCGTGTTTCGGGGTTCG (SEQ ID NO:4438)
Target466	chr4:8863260-8863266	CGACGGGGGAGTTTCGGTGATTAGGGT (SEQ ID NO:4439), TACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4440), ACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4441), TTACGTTCCGGAAAGGGGGTAGGGAAC (SEQ ID NO:4442), ATTACGTTCCGGAAAGGGGGTAGGGA (SEQ ID NO:4443), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4444), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4445), GTTTCGGTCGTGTTTCGGGGTTCGT (SEQ ID NO:4446), AGTTTCGGTCGTGTTTCGGGGTTCGT (SEQ ID NO:4447), AGTTTCGGTCGTGTTTCGGGGTTCG (SEQ ID NO:4448)

Figure 5 (Table 1)

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Target467	chr4:8863304-8863317	CGACGGGGGAGTTTCGGTGATTAGGGT (SEQ ID NO:4449), ACGTTCGGGAAAGGGGGGTAGGGAAC (SEQ ID NO:4450), GTTCGGGAAAGGGGGGTAGGGAACGA (SEQ ID NO:4451), CGACGGGGGAGTTTCGGTGATTAGGGTA (SEQ ID NO:4452), CGACGGGGGAGTTTCGGTGATTAGGG (SEQ ID NO:4453), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4454), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4455), AGTTTCGGTCGTGTTTCGGGGTTCG (SEQ ID NO:4456), CGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4457), GCGTAGTTTCGGTCGTGTTTCGGGGT (SEQ ID NO:4458)
Target468	chr4:8863338-8863351	GTAGGCGGAGTTTCGGGGGTACGGTC (SEQ ID NO:4459), GTAGGCGGAGTTTCGGGGGTACGGTCG (SEQ ID NO:4460), CGTAGGCGGAGTTTCGGGGGTACGGTC (SEQ ID NO:4461), GTAGGCGGAGTTTCGGGGGTACGGT (SEQ ID NO:4462), TAGGCGGAGTTTCGGGGGTACGGTC (SEQ ID NO:4463), CGACGGCGTTTATAGTTAGAGTTGTGGG (SEQ ID NO:4464), CGACGGCGTTTATAGTTAGAGTTGTGGG (SEQ ID NO:4465), ACGGCGTTTATAGTTAGAGTTGTGGG (SEQ ID NO:4466), CGACGGCGTTTATAGTTAGAGTTGTGGG (SEQ ID NO:4467), GACGGCGTTTATAGTTAGAGTTGTGGG (SEQ ID NO:4468)
Target469	chr4:8863569-8863591	TGGGTCGGGCGTTGTAGATTAAGTACGT (SEQ ID NO:4469), GGGTCGGGCGTTGTAGATTAAGTACGT (SEQ ID NO:4470), TGGGTCGGGCGTTGTAGATTAAGTACG (SEQ ID NO:4471), GTGGGTCGGGCGTTGTAGATTAAGTACGT (SEQ ID NO:4472), GTGGGTCGGGCGTTGTAGATTAAGTACG (SEQ ID NO:4473), CGTTGTAGTGTGTTGGGAGGTTGCGCGT (SEQ ID NO:4474), TCGTTGTAGTGTGTTGGGAGGTTGCGCG (SEQ ID NO:4475), CGGGTGCCTGTTTGTGTTTCGGGT (SEQ ID NO:4476), TCGGGTGCCTGTTTGTGTTTCGGGT (SEQ ID NO:4477), TCGGGTGCCTGTTTGTGTTTCGGGT (SEQ ID NO:4478)
Target470	chr4:8863629-8863637	TTCGGGATTAAGAGGAGGTCGTTGCGC (SEQ ID NO:4479), ATTCGGGATTAAGAGGAGGTCGTTGCGC (SEQ ID NO:4480), TCGGGATTAAGAGGAGGTCGTTGCGC (SEQ ID NO:4481), ATTCGGGATTAAGAGGAGGTCGTTGCG (SEQ ID NO:4482), TGGGTCGGGCGTTGTAGATTAAGTACGT (SEQ ID NO:4483), CGTTGTAGTGTGTTGGGAGGTTGCGCGT (SEQ ID NO:4484), TCGTTGTAGTGTGTTGGGAGGTTGCGCG (SEQ ID NO:4485), TTCGTTGTAGTGTGTTGGGAGGTTGCGCG (SEQ ID NO:4486), AGGGAGGACGATAAGGGTTGAAGGGT (SEQ ID NO:4487), TGAGTGTGTTGGGAGGTTGCGCGTAGT (SEQ ID NO:4488)
Target471	chr4:13543525-13543536	CGGGAGTTGGAGTTGGGTTTTATTTTAGGTTG (SEQ ID NO:4489), CGGGAGTTGGAGTTGGGTTTTATTTTAGGTTG (SEQ ID NO:4490), CGGGAGTTGGAGTTGGGTTTTATTTTAGGTTG (SEQ ID NO:4491), CGGGAGTTGGAGTTGGGTTTTATTTTAGGTTG (SEQ ID NO:4492), GGGAGTTGGAGTTGGGTTTTATTTTAGGTTG (SEQ ID NO:4493), CGGTTTCGGATCGGCGTTGATAGTTGT (SEQ ID NO:4494), TCGTTTGGGTTGAGGTAGCGAGTGATT (SEQ ID NO:4495), TTCGTTTGGGTTGAGGTAGCGAGTGAT (SEQ ID NO:4496), ATTCGTTTGGGTTGAGGTAGCGAGTGA (SEQ ID NO:4497), CGGTTTCGGATCGGCGTTGATAGTTGA (SEQ ID NO:4498)
Target472	chr4:13543563-13543934	TTTTTGGCGGGGCGTTTCGTGTAGGTT (SEQ ID NO:4499), TTTTTGGCGGGGCGTTTCGTGTAGGTT (SEQ ID NO:4500), GCGGTAGTTGCGTAGGTGGAGAGCGTT (SEQ ID NO:4501), CGGAGTCGGAGCGCGGAATTATTCGT (SEQ ID NO:4502), TTTTGGCGGGGCGTTTCGTGTAGGTTA (SEQ ID NO:4503), AAGGTGGTCGTAAAGGTGTTGGTGC (SEQ ID NO:4504), GGAGGAGGAGTCGGCGCGTTTAAGTT (SEQ ID NO:4505), GAGGAGGAGGAGTCGGCGCGTTTAAG (SEQ ID NO:4506), GAGGAGGAGGAGTCGGCGCGTTTAA (SEQ ID NO:4507), GAAGGTGGTCGTAAAGGTGTTGGTGC (SEQ ID NO:4508)
Target473	chr4:13543948-13544043	CGTTTTTTCGTGGTTTGGGCGTCGTC (SEQ ID NO:4509), CGGGTTCGGATAGGTAGCGTTGGTGGT (SEQ ID NO:4510), CGGGTTCGGATAGGTAGCGTTGGTGGT (SEQ ID NO:4511), CGTTTTTTCGTGGTTTGGGCGTCGTC (SEQ ID NO:4512), GCGTTTTTTCGTGGTTTGGGCGTCGTC (SEQ ID NO:4513), GGAGGAGGAGTCGGCGCGTTTAAGTT (SEQ ID NO:4514), GAGGAGGAGGAGTCGGCGCGTTTAAG (SEQ ID NO:4515), GAGGAGGAGGAGTCGGCGCGTTTAA (SEQ ID NO:4516), AGGAGGAGGAGTCGGCGCGTTTAAG (SEQ ID NO:4517), AGGAGGAGGAGTCGGCGCGTTTAAGT (SEQ ID NO:4518)
Target474	chr4:24801646-24801871	ATCGCGTCGGTTTGGTCGTTTCGTTG (SEQ ID NO:4519), GGTATCGCGTCGGTTTGGTCGTTTCGTTG (SEQ ID NO:4520), AGGTATCGCGTCGGTTTGGTCGTTTCGTTG (SEQ ID NO:4521), CGGTTTCGCGACGTTTTCGAGGTT (SEQ ID NO:4522), TCGCGTCGGTTTGGTCGTTTCGTTG (SEQ ID NO:4523), ACGTTGGTTTGGTTGTCGTCGCGTTT (SEQ ID NO:4524), GGGTTTCGGGGGTTTTTGGTCGTCGTC (SEQ ID NO:4525), AGAGGGGGGTTTTCGGGGTTTTTGGTC (SEQ ID NO:4526), TAGAGGGGGGTTTTCGGGGTTTTTGGT (SEQ ID NO:4527), TACGTTGGTTTGGTTGTCGTCGCGTT (SEQ ID NO:4528)
Target475	chr4:24801881-24801888	CGGGTTCGGGTTTTGGGAGCGTTAGG (SEQ ID NO:4529), GTCGTTTGAAGCGCGTTTTTATTCGGC (SEQ ID NO:4530), TGGTTTGTGCGTGGTGGGCGTTG (SEQ ID NO:4531), TGGTTTGTGCGTGGTGGGCGTTG (SEQ ID NO:4532), GGTGTTGTCGTTGGTGGGCGTTG (SEQ ID NO:4533), ATTTTGGGTTGAGAGGTTGCGGGGA (SEQ ID NO:4534), GGGTTTCGGGGGTTTTTGGTCGTCGTT (SEQ ID NO:4535), AGAGGGGGGTTTTCGGGGTTTTTGGTC (SEQ ID NO:4536), TAGAGGGGGGTTTTCGGGGTTTTTGGT (SEQ ID NO:4537), TTTTGGGTGGAGAGGTTGCGGGGAG (SEQ ID NO:4538)

Figure 5 (Table 1)

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Target476	chr4:24801971-24802055	GCGGTTTTTATTCGGCGGCGGTTAGGG (SEQ ID NO:4539), GCGGCGGTTAGGGATTTTCGAGGTTT (SEQ ID NO:4540), CGGTTTTTATTCGGCGGCGGTTAGGGA (SEQ ID NO:4541), ATTCGGCGGCGGTTAGGGATTTTCGAG (SEQ ID NO:4542), TTCGGCGGCGGTTAGGGATTTTCGAGG (SEQ ID NO:4543), GGGGAAGGAGGGTTTGGGTGGAAGGT (SEQ ID NO:4544), TGGGAAGGAGGGTTTGGGTGGAAGG (SEQ ID NO:4545), ATTTTGGGTGGAGAGGGTTGCGGGGA (SEQ ID NO:4546), ATTGAGTGGGGGGTTTCGAGGGTTGGG (SEQ ID NO:4547), GGGTGGAGAGGGTTGCGGGGAGATTTT (SEQ ID NO:4548)
Target477	chr4:38672865-38673330	TGTTTGGGAGGTGGAAGAGTGGTGTGT (SEQ ID NO:4549), GTTTGGGAGGTGGAAGAGTGGTGTGT (SEQ ID NO:4550), TGTTTGGGAGGTGGAAGAGTGGTGTGT (SEQ ID NO:4551), TTTGGGAGGTGGAAGAGTGGTGTGT (SEQ ID NO:4552), TTGTTGGGAGGTGGAAGAGTGGTGTGT (SEQ ID NO:4553), TCGGAGAAGATAGAACGTGGGGATAGTTTGT (SEQ ID NO:4554), CGGAGAAGATAGAACGTGGGGATAGTTTGT (SEQ ID NO:4555), TCGGAGAAGATAGAACGTGGGGATAGTTTGT (SEQ ID NO:4556), CGGAGAAGATAGAACGTGGGGATAGTTTGT (SEQ ID NO:4557), TCGGAGAAGATAGAACGTGGGGATAGTTTGT (SEQ ID NO:4558)
Target478	chr4:40858832-40859392	CGTTTATTGGTTGTTGGGAGGCGCGT (SEQ ID NO:4559), GTTGGGAGGCGCGTGGTTTCGTTT (SEQ ID NO:4560), AAGTCGGGCGGGGATGTCGTTTATAGGT (SEQ ID NO:4561), TCGGGCGGGGATGTCGTTTATAGGT (SEQ ID NO:4562), CGGTGTCGTCGTTAAGTAGTCGCGCG (SEQ ID NO:4563), GACGGTTGGAAGGGTTGAAGAGGGGGT (SEQ ID NO:4564), TGGACGTTGGAAGGGTTGAAGAGGGGG (SEQ ID NO:4565), AGGAAGGGAGTATGTTGGGGTGGGGGA (SEQ ID NO:4566), AGGTGAGGAAGTTGCGAAGGAACGGT (SEQ ID NO:4567), ACGGTTGGAAGGGTTGAAGAGGGGGT (SEQ ID NO:4568)
Target479	chr4:44449387-44449403	GAGCGGGTTGGGTCGAGAAGGTAAGAT (SEQ ID NO:4569), AGCGGGTTGGGTCGAGAAGGTAAGATT (SEQ ID NO:4570), TTTTGGTATTTGGGAGCGGGTTGGGTC (SEQ ID NO:4571), ATTTTGGTATTTGGGAGCGGGTTGGGT (SEQ ID NO:4572), GAGCGGGTTGGGTCGAGAAGGTAAGATT (SEQ ID NO:4573), GGGGTGTTGCGGGTAGGCGTTGGTTAA (SEQ ID NO:4574), TTGAGTTTCGTTGGAGGTTTCGCGGGG (SEQ ID NO:4575), TTTCGTTGGAGGTTTCGCGGGGGTGT (SEQ ID NO:4576), TGAGTTTCGTTGGAGGTTTCGCGGGGG (SEQ ID NO:4577), GAGTTTCGTTGGAGGTTTCGCGGGGGT (SEQ ID NO:4578)
Target480	chr4:44449486-44449529	GCGTTTGTTCGATATTTTCGCGGGG (SEQ ID NO:4579), GCGTTTGTTCGATATTTTCGCGGGG (SEQ ID NO:4580), GGTTTTTCGCGGGGTTAAATTGGCGGCG (SEQ ID NO:4581), TTTTTCGCGGGGTTAAATTGGCGGCG (SEQ ID NO:4582), GGGTTTTCGCGGGGTTAAATTGGCGGCG (SEQ ID NO:4583), TTGAGTTTCGTTGGAGGTTTCGCGGGG (SEQ ID NO:4584), TTCGTTGGAGGTTTCGCGGGGGTGT (SEQ ID NO:4585), TTTCGTTGGAGGTTTCGCGGGGGTGT (SEQ ID NO:4586), TGAGTTTCGTTGGAGGTTTCGCGGGGG (SEQ ID NO:4587), GAGTTTCGTTGGAGGTTTCGCGGGGGT (SEQ ID NO:4588)
Target481	chr4:44449579-44450217	GTGTTGGGAAACGTCGGGGTTGCGAAT (SEQ ID NO:4589), GTTTAGTAGGGGGCGAGGGGTGTTGGG (SEQ ID NO:4590), GGTTTAGTAGGGGGCGAGGGGTGTTGG (SEQ ID NO:4591), ACGTCGGAATTTGGCGTCGTTTGGTT (SEQ ID NO:4592), AGCGGGTTTAAATTGGCGGGGTTTA (SEQ ID NO:4593), CGAGTTGTTTAGGGATAGTCGGGCGCG (SEQ ID NO:4594), CGCGTTGGTTAAGGAGGTTTCGGGGA (SEQ ID NO:4595), TCGCGTTGGTTAAGGAGGTTTCGGGG (SEQ ID NO:4596), TCGCGTTGGTTAAGGAGGTTTCGGGGA (SEQ ID NO:4597), CGAGTTGTTTAGGGATAGTCGGGCGCGT (SEQ ID NO:4598)
Target482	chr4:57521419-57521450	TGTAGCGTAGTTTTGTAGTTCGGGGG (SEQ ID NO:4599), TGTAGCGTAGTTTTGTAGTTCGGGGGA (SEQ ID NO:4600), TAGCGTAGTTTTGTAGTTCGGGGGAC (SEQ ID NO:4601), GTAGCGTAGTTTTGTAGTTCGGGGGA (SEQ ID NO:4602), GTGTAGCGTAGTTTTGTAGTTCGGGGG (SEQ ID NO:4603), GGGCGTTGTTAGGATGTTAGGAGCGGT (SEQ ID NO:4604), TTAGGAGGTTGAGGTCGGGAGGGAGGG (SEQ ID NO:4605), AGGGCGTTGTTAGGATGGTAGGAGCGG (SEQ ID NO:4606), GTCGGGAGGGAGGGCGTTGTTAGGATG (SEQ ID NO:4607), GGGAGGAGGGCGTTGTTAGGATGTA (SEQ ID NO:4608)
Target483	chr4:57521506-57521734	TCGGGAAGGCGAGATAGGGATAGGCGA (SEQ ID NO:4609), GTCGGGAAGGCGAGATAGGGATAGGCG (SEQ ID NO:4610), CGGGAAGGCGAGATAGGGATAGGCGAG (SEQ ID NO:4611), ATTAGAGGGGATCGAGTCGGGAAGGCG (SEQ ID NO:4612), GGGGACGTTGTAGTGTAGTGTGGTGG (SEQ ID NO:4613), TTAGGAGGTTGAGGTCGGGAGGGAGGG (SEQ ID NO:4614), TGGCGAATTAGGAGGTTGAGGTCGGGA (SEQ ID NO:4615), GCGGGAATGTTAGAGTTGGAAGGCGT (SEQ ID NO:4616), TAGGAGGTTGAGGTCGGGAGGGAGGG (SEQ ID NO:4617), ATTAGGAGGTTGAGGTCGGGAGGGAGGG (SEQ ID NO:4618)
Target484	chr4:57521777-57521797	TCGGGAAGGCGAGATAGGGATAGGCGA (SEQ ID NO:4619), GTCGGGAAGGCGAGATAGGGATAGGCG (SEQ ID NO:4620), AGCGTGATTTTCGGGTTGTCGGGGAGA (SEQ ID NO:4621), CGGGAAGGCGAGATAGGGATAGGCGAG (SEQ ID NO:4622), GCGTGATTTTCGGGTTGTCGGGGAGAG (SEQ ID NO:4623), TCGTTTTATGCGGCTTCGGTTTTTTCGT (SEQ ID NO:4624), TCGTTTTTCGTTTTATGGGCGTTCGGT (SEQ ID NO:4625), CGTTTTATGGGCGTTCGGTTTTTTCGT (SEQ ID NO:4626), CGTTTTTCGTTTTATGGGCGTTCGGT (SEQ ID NO:4627), TCGTTTTATGGGCGTTCGGTTTTTTCGT (SEQ ID NO:4628)

Figure 5 (Table 1)

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Target485	chr4:57521838-57522347	TTTAGTTTAGGTAGGGGTCGGGGCGCG (SEQ ID NO:4629), TCGGGGAATTACGGTTGGATGGGGGTG (SEQ ID NO:4630), AGCGTGGTGAATTCGGGTGTTTGTCC (SEQ ID NO:4631), GCGTGGTGAATTCGGGTGTTTGTCTGA (SEQ ID NO:4632), AGCGTGTATTTCCGGTTGTCGGGGAGA (SEQ ID NO:4633), GCGTGTAGTTATCGGGGATTTGCGCGG (SEQ ID NO:4634), GAGGTTCCGGTGGGGGTAGTCGTAAG (SEQ ID NO:4635), GTTTTGTAAAGGGGTTTCGGGGGGCGC (SEQ ID NO:4636), AGTTTTGTAAAGGGGTTTCGGGGGGCG (SEQ ID NO:4637), GGAGGTTCCGGTGGGGGTAGTCGTAA (SEQ ID NO:4638)
Target486	chr4:74864044-74864329	GGGTCGCGCGGTTGGATAGGAGGTTTA (SEQ ID NO:4639), GGGTCGCGCGGTTGGATAGGAGGTTTAT (SEQ ID NO:4640), GGTGCGCGGTTGGATAGGAGGTTTAT (SEQ ID NO:4641), GGGTCGCGCGGTTGGATAGGAGGTTT (SEQ ID NO:4642), TTGCGCATGGGTTTGGTTGCGTTAGT (SEQ ID NO:4643), TGTGCGCGTTGTTGGTGTGTTGTTGT (SEQ ID NO:4644), TGC CGCTTGTGGTGTGTTGTTGTTGT (SEQ ID NO:4645), TGTGCGCGTTGTTGGTGTGTTGTTGTTGT (SEQ ID NO:4646), TTGTGCGCGTTGTTGGTGTGTTGTTGT (SEQ ID NO:4647), GCGCGTTGTTGGTGTGTTGTTGTTGT (SEQ ID NO:4648)
Target487	chr4:74864368-74864404	CGGTCGCGGGTTTTTGAATTGGGTGGA (SEQ ID NO:4649), GGAGGAGCGGAGATTGGAGGAGCGAAG (SEQ ID NO:4650), GGGTCGCGCGGTTGGATAGGAGGTTTA (SEQ ID NO:4651), GAGGAGCGGAGATTGGAGGAGCGAAGA (SEQ ID NO:4652), TGGAGGAGCGGAGATTGGAGGAGCGAA (SEQ ID NO:4653), TGGGGAGAGATGAGTGTAGATAAAAGGAGTGT (SEQ ID NO:4654), TGAGTTTTTGTAGTGGGGAGAGATGAGTGT (SEQ ID NO:4655), AGTGGGGAGAGATGAGTGTAGATAAAAGGAGT (SEQ ID NO:4656), GTGGGGAGAGATGAGTGTAGATAAAAGGAGTGT (SEQ ID NO:4657), AGTGGGGAGAGATGAGTGTAGATAAAAGGAGTGT (SEQ ID NO:4658)
Target488	chr4:74864587-74864615	GTGAAAGAAGAGGTTGGGGGAGGGGG (SEQ ID NO:4659), GTGGGGAGGGTGGTTAGGAGGAGTTGC (SEQ ID NO:4660), TGGTGGGGAGGGTGGTTAGGAGGAGTT (SEQ ID NO:4661), TTGGTGGGGAGGGTGGTTAGGAGGAGT (SEQ ID NO:4662), GGGAGGGTGGTTAGGAGGAGTTGCGTG (SEQ ID NO:4663), GAGGGTTGCGTGTTTAGAAAAGTCGGT (SEQ ID NO:4664), AGAGGGTTGCGTGTTTAGAAAAGTCGGT (SEQ ID NO:4665), AGAGGGTTGCGTGTTTAGAAAAGTCGGTA (SEQ ID NO:4666), TAGAGGGTTGCGTGTTTAGAAAAGTCGGT (SEQ ID NO:4667), TTAGAGGGTTGCGTGTTTAGAAAAGTCGGT (SEQ ID NO:4668)
Target489	chr4:84035837-84035923	TCGAGTAGGAAATGTTTTGTGGTTTGGGAGA (SEQ ID NO:4669), CGAGTAGGAAATGTTTTGTGGTTTGGGAGAG (SEQ ID NO:4670), CGAGTAGGAAATGTTTTGTGGTTTGGGAGAGA (SEQ ID NO:4671), TCGAGTAGGAAATGTTTTGTGGTTTGGGAGAG (SEQ ID NO:4672), TTCGAGTAGGAAATGTTTTGTGGTTTGGGAGA (SEQ ID NO:4673)
Target490	chr4:94755670-94755872	AGCGTGGGGGTGGTTTGTGTAATGTG (SEQ ID NO:4674), GCGTGGGGGTGGTTTGTGTAATGTGA (SEQ ID NO:4675), AAGCGTGGGGGTGGTTTGTGTAATGT (SEQ ID NO:4676), AGCGTGGGGGTGGTTTGTGTAATGTGA (SEQ ID NO:4677), GGGAGAGGTAGGGGAGGAGAGAAGTCGG (SEQ ID NO:4678), TTAGGAGGTGCGGGAGGGGTGATGAT (SEQ ID NO:4679), AGGAGGAGGTGAGGTTGAGGAGGTCG (SEQ ID NO:4680), TGAGGAGGTGCGGGAGGGGTGATGATG (SEQ ID NO:4681), GGTGCGGGAGGGGTGATGATGTTGTTA (SEQ ID NO:4682), GTTGAGGAGGTGCGGGAGGGGTGATGA (SEQ ID NO:4683)
Target491	chr4:94755903-94755934	AGGTAGTTTTTCGGGGAGTTGTGCGGT (SEQ ID NO:4684), GGTAGTTTTTCGGGGAGTTGTGCGGT (SEQ ID NO:4685), AGGTAGTTTTTCGGGGAGTTGTGCGGT (SEQ ID NO:4686), TAGGTAGTTTTTCGGGGAGTTGTGCGGT (SEQ ID NO:4687), TAGGTAGTTTTTCGGGGAGTTGTGCGG (SEQ ID NO:4688), GCGTAGTTGGGGAGGAGAGGGGTTTC (SEQ ID NO:4689), TAGTTGGGGAGGAGAGGGGTTTCGGT (SEQ ID NO:4690), CGGTTTTTCGTTGCGTAGTTGGGGGAGG (SEQ ID NO:4691), CGTAGTTGGGGAGGAGAGGGGTTTCG (SEQ ID NO:4692), TTCGTTGCGTAGTTGGGGGAGGAGAGG (SEQ ID NO:4693)
Target492	chr4:94755975-94755997	GCGTAGTTGGGGAGGAGAGGGGTTTC (SEQ ID NO:4694), TAGTTGGGGAGGAGAGGGGTTTCGGT (SEQ ID NO:4695), TTGCGTGTGGGTTGGTTGTTGGGAGG (SEQ ID NO:4696), GTTGGGAGGTGAGTGGGTAGTGCGG (SEQ ID NO:4697), CGGTTTTTCGTTGCGTAGTTGGGGGAGG (SEQ ID NO:4698)
Target493	chr4:94756002-94756032	GCGTAGTTGGGGAGGAGAGGGGTTTC (SEQ ID NO:4699), TAGTTGGGGAGGAGAGGGGTTTCGGT (SEQ ID NO:4700), TTGCGTGTGGGTTGGTTGTTGGGAGG (SEQ ID NO:4701), GTTGGGAGGTGAGTGGGTAGTGCGG (SEQ ID NO:4702), CGGTTTTTCGTTGCGTAGTTGGGGGAGG (SEQ ID NO:4703)
Target494	chr4:94756141-94756154	TAAGGGGAGGGGAAGTTGGAGGCGGTA (SEQ ID NO:4704), GTTAAGGGGAGGGGAAGTTGGAGGCGG (SEQ ID NO:4705), TGTAAAGGGGAGGGGAAGTTGGAGGCG (SEQ ID NO:4706), TTAAGGGGAGGGGAAGTTGGAGGCGGT (SEQ ID NO:4707), AAGGGGAGGGGAAGTTGGAGGCGGTAG (SEQ ID NO:4708)
Target495	chr4:101111813-101111928	TCGGGTTATTGGGATCGTAATTCGGGT (SEQ ID NO:4709), CGGGTTATTGGGATCGTAATTCGGGTGT (SEQ ID NO:4710), TCGGGTTATTGGGATCGTAATTCGGGTG (SEQ ID NO:4711), TTCGGGTTATTGGGATCGTAATTCGGGT (SEQ ID NO:4712), GGACGTTTCGGGAGGGGTCGATTGAA (SEQ ID NO:4713), CGGACGTTTCGGGAGGGGTCGATTGA (SEQ ID NO:4715), GGACGTTTCGGGAGGGGTCGATTGAAT (SEQ ID NO:4716), CGGAGTAGTTGAGTGTAAAGCGCG (SEQ ID NO:4717), GGACGTTTCGGGAGGGGTCGATTGA (SEQ ID NO:4718)

Figure 5 (Table 1)

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Target496	chr4:101111950-101111971	TGTTTTCCGGTAGCGGGAAGTTTTAAGCG (SEQ ID NO:4719), TCGGGTTATTGGGATCGTAATTCGGGT (SEQ ID NO:4720), CGGGTTATTGGGATCGTAATTCGGGTGT (SEQ ID NO:4721), TCGGGTTATTGGGATCGTAATTCGGGTGT (SEQ ID NO:4722), TCGGGTTATTGGGATCGTAATTCGGGTG (SEQ ID NO:4723)
Target497	chr4:102712099-102712325	ATTTGGACGTTACGAGGAGGGAGCGCG (SEQ ID NO:4724), TATTTGGACGTTACGAGGAGGGAGCGCG (SEQ ID NO:4725), CGTATTCGGAGGGGTTGACGTCGAGGT (SEQ ID NO:4726), GTTCGGCGGGTAGTAGTCGTAGGTTT (SEQ ID NO:4728), GGATTTTGATTCCGGGTGTGGGGAAAGT (SEQ ID NO:4729), AGGATTTTGATTCCGGGTGTGGGGAAAGT (SEQ ID NO:4730), TGGGTTGTTTGGCGGTAGGATAAAAAGGA (SEQ ID NO:4731), GGATTTTGATTCCGGGTGTGGGGAAAGTT (SEQ ID NO:4732), TGGGTTGTTTGGCGGTAGGATAAAAAGGAG (SEQ ID NO:4733)
Target498	chr4:102712452-102712469	GGGAGTTTGGTTAGCGGTTATTTTAGTGTT (SEQ ID NO:4734), GGGAGTTTGGTTAGCGGTTATTTTAGTGTTT (SEQ ID NO:4735), GGGAGTTTGGTTAGCGGTTATTTTAGTGTTTG (SEQ ID NO:4736), GGGAGTTTGGTTAGCGGTTATTTTAGTGTTTGT (SEQ ID NO:4737), GGAGTTTGGTTAGCGGTTATTTTAGTGTTTGT (SEQ ID NO:4738), AGGTCGGGTAGGTAAATGCGTGACGTT (SEQ ID NO:4739), TAGTCGGGTAGGTAAATGCGTGACGT (SEQ ID NO:4740), AGGTCGGGTAGGTAAATGCGTGACGT (SEQ ID NO:4741), GGTCGGGTAGGTAAATGCGTGACGTTA (SEQ ID NO:4742), AGGTCGGGTAGGTAAATGCGTGACGTTA (SEQ ID NO:4743)
Target499	chr4:102712505-102712661	GGTGAATTGGTAGTTTTGTTTTTGGTAGGTGGT (SEQ ID NO:4744), TGGTGAATTGGTAGTTTTGTTTTTGGTAGGTGG (SEQ ID NO:4745), TGGTGAATTGGTAGTTTTGTTTTTGGTAGGTGGT (SEQ ID NO:4746), GGTGAATTGGTAGTTTTGTTTTTGGTAGGTGGT (SEQ ID NO:4747), TTGGTGAATTGGTAGTTTTGTTTTTGGTAGGTGG (SEQ ID NO:4748), AGGTCGGGTAGGTAAATGCGTGACGTT (SEQ ID NO:4749), TAGTCGGGTAGGTAAATGCGTGACGT (SEQ ID NO:4750), AGTGGAGTAGGGAGGTGGTGTGGTAG (SEQ ID NO:4751), GTGGAGTAGGGAGGTGGTGTGGTAGA (SEQ ID NO:4752), AGGTCGGGTAGGTAAATGCGTGACGT (SEQ ID NO:4753)
Target500	chr4:111533878-111533952	CGGGGTGAAGTTGTCGGGGAGATTGCT (SEQ ID NO:4754), AGCGGGGTGAAGTTGTCGGGGAGATTC (SEQ ID NO:4755), TAGCGGGGTGAAGTTGTCGGGGAGATT (SEQ ID NO:4756), ATAGCGGGGTGAAGTTGTCGGGGAGAT (SEQ ID NO:4757), GCGGGGTGAAGTTGTCGGGGAGATTCG (SEQ ID NO:4758), GGTATTACGGGGAGTGTGCGTGGGGAA (SEQ ID NO:4759), TAGGTATTACGGGGAGTGTGCGTGGGG (SEQ ID NO:4760), AGGTATTACGGGGAGTGTGCGTGGGG (SEQ ID NO:4761), GTATTACGGGGAGTGTGCGTGGGGAA (SEQ ID NO:4762), GTAGGTATTACGGGGAGTGTGCGTGGGG (SEQ ID NO:4763)
Target501	chr4:111534008-111534019	CGAGGGTTGTTGATATAGGTAGAGCGGGG (SEQ ID NO:4764), CGAGGGTTGTTGATATAGGTAGAGCGGGG (SEQ ID NO:4765), TCGAGGGTTGTTGATATAGGTAGAGCGGGG (SEQ ID NO:4766), AGGGTTGTTGATATAGGTAGAGCGGGG (SEQ ID NO:4767), TCGAGGGTTGTTGATATAGGTAGAGCGGGG (SEQ ID NO:4768), GCGGTGGGTAGTTTATTGAATGTGATTGGG (SEQ ID NO:4769), AGCGGTGGGTAGTTTATTGAATGTGATTGGG (SEQ ID NO:4770), GCGGTGGGTAGTTTATTGAATGTGATTGGG (SEQ ID NO:4771), AGCGGTGGGTAGTTTATTGAATGTGATTGGG (SEQ ID NO:4772), AAGCGGTGGGTAGTTTATTGAATGTGATTGGG (SEQ ID NO:4773)
Target502	chr4:111534162-111534195	TGTTTAGGATTGTGTGCGAGGGGGTTT (SEQ ID NO:4774), TTGTTTAGGATTGTGTGCGAGGGGGTT (SEQ ID NO:4775), TTTGTTTAGGATTGTGTGCGAGGGGGT (SEQ ID NO:4776), TGTTTAGGATTGTGTGCGAGGGGGTTT (SEQ ID NO:4777), GTTTAGGATTGTGTGCGAGGGGGTTT (SEQ ID NO:4778), TTTCTTGAGAGTTTGTAGTAGTCCGGG (SEQ ID NO:4779), TCGTTGAGAGTTTGTAGTAGTCCGGG (SEQ ID NO:4780), TTCGTTGAGAGTTTGTAGTAGTCCGGG (SEQ ID NO:4781), AATGGTTCGTTGATGTTGGGATTGACGT (SEQ ID NO:4782), TTTTCGTTGAGAGTTTGTAGTAGTCCGGG (SEQ ID NO:4783)
Target503	chr4:111536316-111536342	GCGTTGAGGTTAGTGAGGTTTGGGCGT (SEQ ID NO:4784), TGCGTTGAGGTTAGTGAGGTTTGGGCG (SEQ ID NO:4785), GTGCGTTGAGGTTAGTGAGGTTTGGGCG (SEQ ID NO:4786), TGCGTTGAGGTTAGTGAGGTTTGGGCGT (SEQ ID NO:4787), GCGTAGTGCGTTGAGGTTAGTGAGG (SEQ ID NO:4788)
Target504	chr4:140656525-140656583	GAAGAATTTAAGTGGGGGAGGGCGCGG (SEQ ID NO:4789), GGAAGAATTTAAGTGGGGGAGGGCGCG (SEQ ID NO:4790), GAATTTAAGTGGGGGAGGGCGCGGGA (SEQ ID NO:4791), AATTTAAGTGGGGGAGGGCGCGGGAAG (SEQ ID NO:4792), AAGAATTTAAGTGGGGGAGGGCGCGG (SEQ ID NO:4793), CGGGTTGTCGGTTTGGGGTTTGGTGT (SEQ ID NO:4794), TCGGGTTGTCGGTTTGGGGTTTGGTG (SEQ ID NO:4795), TTCGGTTGTCGGTTTGGGGTTTGGT (SEQ ID NO:4796), CGGGTTGTCGGTTTGGGGTTTGGTGT (SEQ ID NO:4797), TTCGGTTGTCGGTTTGGGGTTTGGTG (SEQ ID NO:4798)

Figure 5 (Table 1)

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Target505	chr4:140656659-140656990	GTGGAGGGAAACGGAAGGGTTGGGAGT (SEQ ID NO:4799), TGGAGGGAAACGGAAGGGTTGGGAGTG (SEQ ID NO:4800), GTGGGGTAGGGGGGTAGTGGCGATTTT (SEQ ID NO:4801), GTATAAAGTCGGTTTCGGGGAGGGGGCG (SEQ ID NO:4802), AACGGAAGGGTTGGGAGTGGGGTAGG (SEQ ID NO:4803), TCGGGTCGGTTTTGTGTAGTTGGGGTT (SEQ ID NO:4804), TTCGGGTCGGTTTTGTGTAGTTGGGGT (SEQ ID NO:4805), CGGGTCGGTTTTGTGTAGTTGGGGTTT (SEQ ID NO:4806), TCGGGTCGGTTTTGTGTAGTTGGGGTTT (SEQ ID NO:4807), TTCGGGTCGGTTTTGTGTAGTTGGGGTT (SEQ ID NO:4808)
Target506	chr4:140656999-140657058	GGGAGATTCGCGAGGGGTTTTGGAGGT (SEQ ID NO:4809), AGGAAGTTAGGAGTGGGGTTCGTGCGT (SEQ ID NO:4810), GGAGATTCGCGAGGGGTTTTGGAGGT (SEQ ID NO:4811), GGGAGATTCGCGAGGGGTTTTGGAGGT (SEQ ID NO:4812), GGAAGTTAGGAGTGGGGTTCGTGCGT (SEQ ID NO:4813), GATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4814), ATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4815), GATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4816), CGATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4817), CGATGTGGCGGGGTTTGGGAAATGCG (SEQ ID NO:4818)
Target507	chr4:140657066-140657127	GGGAGATTCGCGAGGGGTTTTGGAGGT (SEQ ID NO:4819), AGGGGTTTTGGAGGTTTTCGGTTTCGCG (SEQ ID NO:4820), CGCGAGGGGTTTTGGAGGTTTTCGGTT (SEQ ID NO:4821), TTCGCGAGGGGTTTTGGAGGTTTTCGG (SEQ ID NO:4822), TCGCGAGGGGTTTTGGAGGTTTTCGGT (SEQ ID NO:4823), GATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4824), ATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4825), GATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4826), CGATGTGGCGGGGTTTGGGAAATGCGT (SEQ ID NO:4827), CGATGTGGCGGGGTTTGGGAAATGCG (SEQ ID NO:4828)
Target508	chr4:147560029-147560039	GGCGCGGGGAGAGGGGAGTATAATTCG (SEQ ID NO:4829), GCGTTTTTTGGTAAGGGAGGGCGGAGG (SEQ ID NO:4830), GCGTTTTTTGGTAAGGGAGGGCGGAG (SEQ ID NO:4831), GCGCGGGGAGAGGGGAGTATAATTCG (SEQ ID NO:4832), AGTCGCGTTTTTTGGTAAGGGAGGGC (SEQ ID NO:4833), CGCGTTTTTCGTCGTTTTTTGTTAGTTTGA (SEQ ID NO:4834), CGCGTTTTTCGTCGTTTTTTGTTAGTTTGA (SEQ ID NO:4835), CGCGTTTTTCGTCGTTTTTTGTTAGTTTGAAC (SEQ ID NO:4836)
Target509	chr4:147560073-147560116	GGCGCGGGGAGAGGGGAGTATAATTCG (SEQ ID NO:4837), GCGCGGGGAGAGGGGAGTATAATTCG (SEQ ID NO:4838), AGGCGCGGGGAGAGGGGAGTATAATTC (SEQ ID NO:4839), GCGCGGGGAGAGGGGAGTATAATTCGTC (SEQ ID NO:4840), GTAGGCGCGGGGAGAGGGGAGTATAAT (SEQ ID NO:4841), CGGGTTAGTCGGGGTTGGAGTTGGGAA (SEQ ID NO:4842), AGTCGGGGTTGGAGTTGGGAAGGGTTG (SEQ ID NO:4843), TGTCGGGTTAGTCGGGGTTGGAGTTGG (SEQ ID NO:4844), TCGGGGTTGGAGTTGGGAAGGGTTGTG (SEQ ID NO:4845), GTCGGGGTTGGAGTTGGGAAGGGTTGT (SEQ ID NO:4846)
Target510	chr4:147560126-147560184	GAGGAGCGGGGGTAGTTTCGGGTGTC (SEQ ID NO:4847), AGGAGCGGGGGTAGTTTCGGGTGTC (SEQ ID NO:4848), GAGGAGCGGGGGTAGTTTCGGGTGTC (SEQ ID NO:4849), GCGGCGGGGGTAGTTTAAATTCG (SEQ ID NO:4850), GATTGATAGTAGAGGCGGCAAGGAGC (SEQ ID NO:4851), CGGGTTAGTCGGGGTTGGAGTTGGGAA (SEQ ID NO:4852), AGTCGGGGTTGGAGTTGGGAAGGGTTG (SEQ ID NO:4853), TGTCGGGTTAGTCGGGGTTGGAGTTGG (SEQ ID NO:4854), TCGGGGTTGGAGTTGGGAAGGGTTGTG (SEQ ID NO:4855), GTCGGGGTTGGAGTTGGGAAGGGTTGT (SEQ ID NO:4856)
Target511	chr4:147560209-147560239	GCGGCGGCGGGTGAGTTTAATTCGTA (SEQ ID NO:4857), GCGGCGGCGGGTGAGTTTAATTCGTAT (SEQ ID NO:4858), GCGGCGGCGGGTGAGTTTAATTCGT (SEQ ID NO:4859), CGGCGGCGGGTGAGTTTAATTCGTAT (SEQ ID NO:4860), CGGTTGGTTCCGTATTTTCGGAGGGT (SEQ ID NO:4861), GTTCGTCGGGGCGTTGGTTCTGAGA (SEQ ID NO:4862), TTCTCGGGGCGTTGGTTCTGAGA (SEQ ID NO:4863), GTTCGTCGGGGCGTTGGTTCTGAG (SEQ ID NO:4864), TCGTCGGGGCGTTGGTTCTGAGA (SEQ ID NO:4865), GTTCGTCGGGGCGTTGGTTCTGTA (SEQ ID NO:4866)
Target512	chr4:147560266-147560287	GCGGCGGCGGGTGAGTTTAATTCGTA (SEQ ID NO:4867), GCGGCGGCGGGTGAGTTTAATTCGTAT (SEQ ID NO:4868), GCGGCGGCGGGTGAGTTTAATTCGT (SEQ ID NO:4869), CGGCGGCGGGTGAGTTTAATTCGTAT (SEQ ID NO:4870), CGGTTGGTTCCGTATTTTCGGAGGGT (SEQ ID NO:4871), TCGGCGAGGTGTTGTGTAGTTCGAGT (SEQ ID NO:4872), AGTTCGCGAGGTGTTGTGTAGTGTG (SEQ ID NO:4873), GTTCGCGAGGTGTTGTGTAGTGTG (SEQ ID NO:4874), GGAGTTCGCGAGGTGTTGTGTAGTGT (SEQ ID NO:4875), TTCGCGAGGTGTTGTGTAGTGTGAGT (SEQ ID NO:4876)
Target513	chr4:147560324-147560344	GTTTCGCGGGCGGGAAGATGATGATG (SEQ ID NO:4877), TTCGCGGGCGGGAAGATGATGATGAT (SEQ ID NO:4878), TTTTCGCGGGCGGGAAGATGATGATGA (SEQ ID NO:4879), TCGGCGGGCGGGAAGATGATGATGATG (SEQ ID NO:4880), CGGCGGGCGGGAAGATGATGATGATGT (SEQ ID NO:4881), TCGAGTTGTTGGGGAGTTGGTCGAGG (SEQ ID NO:4882), TCGGCGAGGTGTTGTGTAGTGTGAGT (SEQ ID NO:4883), CGAGTTGTTGGGGAGTTGGTCGAGGG (SEQ ID NO:4884), GAGTTGTTGGGGAGTTGGTCGAGGGC (SEQ ID NO:4885), TGTTTCAGTTGTTGGGGAGTTGGTCG (SEQ ID NO:4886)
Target514	chr4:147560372-147560403	GTTTCGCGGGCGGGAAGATGATGATG (SEQ ID NO:4887), TTCGCGGGCGGGAAGATGATGATGAT (SEQ ID NO:4888), TTTTCGCGGGCGGGAAGATGATGATGA (SEQ ID NO:4889), TCGGCGGGCGGGAAGATGATGATGATG (SEQ ID NO:4890), CGGCGGGCGGGAAGATGATGATGATGT (SEQ ID NO:4891), TCGAGTTGTTGGGGAGTTGGTCGAGG (SEQ ID NO:4892), CGAGTTGTTGGGGAGTTGGTCGAGGG (SEQ ID NO:4893), GAGTTGTTGGGGAGTTGGTCGAGGGC (SEQ ID NO:4894), TGTTTCAGTTGTTGGGGAGTTGGTCG (SEQ ID NO:4895), TGTTTCAGTTGTTGGGGAGTTGGTCGA (SEQ ID NO:4896)

Figure 5 (Table 1)

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Target515	chr4:147560414-147560442	CGTCGGGTTTTTCGGTTTTTATCGCGT (SEQ ID NO:4897), TCGTCGGGTTTTTCGGTTTTTATCGCGT (SEQ ID NO:4898), TCGTCGGGTTTTTCGGTTTTTATCGCG (SEQ ID NO:4899), ACGGCGGTAGTTTGTACGTGGAGTTTA (SEQ ID NO:4900), CGTCGGGTTTTTCGGTTTTTATCGCGTT (SEQ ID NO:4901), GAGTTGTTGGGGGAGTTGGTCGAGGGT (SEQ ID NO:4902), TCGAGTTGTTGGGGGAGTTGGTCGAGG (SEQ ID NO:4903), CGAGTTGTTGGGGGAGTTGGTCGAGGG (SEQ ID NO:4904), TGTTTCGAGTTGTTGGGGGAGTTGGTCG (SEQ ID NO:4905), TGTTTCGAGTTGTTGGGGGAGTTGGTCGA (SEQ ID NO:4906)
Target516	chr4:147560460-147560533	CGTCGGGTTTTTCGGTTTTTATCGCGT (SEQ ID NO:4907), TCGTCGGGTTTTTCGGTTTTTATCGCGT (SEQ ID NO:4908), TCGTCGGGTTTTTCGGTTTTTATCGCG (SEQ ID NO:4909), GAGTAACGTTGGTGGTGCGGCGG (SEQ ID NO:4910), ACGGCGGTAGTTTGTACGTGGAGTTTA (SEQ ID NO:4911), CGTATCGGTGGGGTTGGAAGATAGGTT (SEQ ID NO:4912), CGGTGGGGTTGGAAGATAGGTTTTTCGT (SEQ ID NO:4913), CGGTGGGGTTGGAAGATAGGTTTTTCG (SEQ ID NO:4914), TCGGTGGGGTTGGAAGATAGGTTTTTCGT (SEQ ID NO:4915), TCGGTGGGGTTGGAAGATAGGTTTTTCG (SEQ ID NO:4916)
Target517	chr4:154709576-154709641	CGGTGGTTGGTAGGAGGTGGTCGTTGT (SEQ ID NO:4917), TCGGTGGTTGGTAGGAGGTGGTCGTTG (SEQ ID NO:4918), TTCGGTGGTTGGTAGGAGGTGGTCGTT (SEQ ID NO:4919), TTCGGTGGTTGGTAGGAGGTGGTCGT (SEQ ID NO:4920), TTCGGTGGTTGGTAGGAGGTGGTCGTTG (SEQ ID NO:4921), TGCCTGTAGGTGAAGGATCGTTGCGTT (SEQ ID NO:4922), TTGCGTGTAGGTGAAGGATCGTTGCGT (SEQ ID NO:4923), TGCCTGTAGGTGAAGGATCGTTGCGTTT (SEQ ID NO:4924), TTGCGTGTAGGTGAAGGATCGTTGCGTT (SEQ ID NO:4925), TTGCGTGTAGGTGAAGGATCGTTGCGT (SEQ ID NO:4926)
Target518	chr4:154709675-154709698	AGGTTATCGAGGTAGACGGGGGCGAAG (SEQ ID NO:4927), GGTATCGAGGTAGACGGGGGCGAAGA (SEQ ID NO:4928), AGGTTATCGAGGTAGACGGGGGCGAAGA (SEQ ID NO:4929), GGTATCGAGGTAGACGGGGGCGAAGAG (SEQ ID NO:4930), TAGGTTATCGAGGTAGACGGGGGCGAA (SEQ ID NO:4931), GAAGGAGGTGTTGGAGTAGGTGCGCGT (SEQ ID NO:4932), TGAAGGAGGTGTTGGAGTAGGTGCGCG (SEQ ID NO:4933), AGGTGTTGGAGTAGGTGCGCGTTTGA (SEQ ID NO:4934), AGGAGGTGTTGGAGTAGGTGCGCGTTT (SEQ ID NO:4935), AAGGAGGTGTTGGAGTAGGTGCGCGTT (SEQ ID NO:4936)
Target519	chr4:154709745-154709760	AGGTTATCGAGGTAGACGGGGGCGAAG (SEQ ID NO:4937), GGTATCGAGGTAGACGGGGGCGAAGA (SEQ ID NO:4938), AGGTTATCGAGGTAGACGGGGGCGAAGA (SEQ ID NO:4939), GGTATCGAGGTAGACGGGGGCGAAGAG (SEQ ID NO:4940), TAGGTTATCGAGGTAGACGGGGGCGAA (SEQ ID NO:4941), GAAGGAGGTGTTGGAGTAGGTGCGCGT (SEQ ID NO:4942), TGAAGGAGGTGTTGGAGTAGGTGCGCG (SEQ ID NO:4943), AGGTGTTGGAGTAGGTGCGCGTTTGA (SEQ ID NO:4944), AGGAGGTGTTGGAGTAGGTGCGCGTTT (SEQ ID NO:4945), AAGGAGGTGTTGGAGTAGGTGCGCGTT (SEQ ID NO:4946)
Target520	chr4:154709812-154709968	AGGTAGTAGTGCAGGCGAGGAAGAGT (SEQ ID NO:4947), TCGTTTTGTAGGAGAAGTCGGGTTGGT (SEQ ID NO:4948), TGCAGGCGAGGAAGAGTAGTAGTAGCG (SEQ ID NO:4949), GCGAGGCGAGGAAGAGTAGTAGTAGCG (SEQ ID NO:4950), GGGTTGGTTAAAGAGGAAGAGTTCGCGCG (SEQ ID NO:4951), TCGTATTGTTGTTGGGTTGCGCGCGC (SEQ ID NO:4952), TTCGTATTGTTGTTGGGTTGCGCGCG (SEQ ID NO:4953), GTATTGTTGTTGGGTTGCGCGCGCG (SEQ ID NO:4954), CGTATTGTTGTTGGGTTGCGCGCGC (SEQ ID NO:4955), GTATTGTTGTTGGGTTGCGCGCGCG (SEQ ID NO:4956)
Target521	chr4:155663750-155663883	CGGTGGGGATATCGCGTGTTAAGTTTGGC (SEQ ID NO:4957), GGTGGGGATATCGCGTGTTAAGTTTGGC (SEQ ID NO:4958), CGGTGGGGATATCGCGTGTTAAGTTTGG (SEQ ID NO:4959), TCGGTGGGGATATCGCGTGTTAAGTTTGG (SEQ ID NO:4960), AGCGGTAGTTTGTGGAGT (SEQ ID NO:4961), TAGGGAGTTGTCGGGTGAGGGAGTCGT (SEQ ID NO:4962), GGGAGTTGTCGGGTGAGGGAGTCGTTG (SEQ ID NO:4963), GGAGTTGTCGGGTGAGGGAGTCGTTGA (SEQ ID NO:4964), TCGGGTGAGGGAGTCGTTGAAGCGTTG (SEQ ID NO:4965), TTGTGGGTGAGGGAGTCGTTGAAGCG (SEQ ID NO:4966)
Target522	chr4:155663971-155663991	GGAGGTATTGGAGTCGGGTTGTAGGCGT (SEQ ID NO:4967), GGAGGTATTGGAGTCGGGTTGTAGGCG (SEQ ID NO:4968), AGGAGGTATTGGAGTCGGGTTGTAGGCG (SEQ ID NO:4969), GAGGTATTGGAGTCGGGTTGTAGGCGT (SEQ ID NO:4970), AGGAGGTATTGGAGTCGGGTTGTAGGCGT (SEQ ID NO:4971)
Target523	chr4:155664153-155664191	AGGGAGGCGGATAAAGTTTCGGTGGGT (SEQ ID NO:4972), TTTTGGCGGGCGGTTGGGATTCGTCG (SEQ ID NO:4973), GCGGGCGGTTGGGATTCGTCGTTTTT (SEQ ID NO:4974), GGGAGGCGGATAAAGTTTCGGTGGGTG (SEQ ID NO:4975), GCGGGCGTTGGGATTCGTCGTTTTT (SEQ ID NO:4976), TTTGCGCGTCGTTGATTGAATTCGAG (SEQ ID NO:4977), CGAGTTAGTTTTCGCGTCGTTGAT (SEQ ID NO:4978), TTTGCGCGTCGTTGATTGAATTCGA (SEQ ID NO:4979), TTTGCGCGTCGTTGATTGAATTCGAG (SEQ ID NO:4980), GAGGGTGTGTGTAGGGCGGGGG (SEQ ID NO:4981)
Target524	chr4:155664237-155664243	TTTTGGCGGGCGTTGGGATTCGTCG (SEQ ID NO:4982), GCGGGCGGTTGGGATTCGTCGTTTTT (SEQ ID NO:4983), GCGGGCGTTGGGATTCGTCGTTTTT (SEQ ID NO:4984), TTTTGGCGGGCGGTTGGGATTCGTCG (SEQ ID NO:4985), TGGCGGGCGTTGGGATTCGTCGTTTTT (SEQ ID NO:4986), GAGGGTGTGTGTAGGGCGGGGG (SEQ ID NO:4987), TCGGCGGAGGGTGTGTGTAGG (SEQ ID NO:4988), CGAGGGTGTGTGTAGGGCGGGG (SEQ ID NO:4989), CGCGAGGGTGTGTGTAGGGCG (SEQ ID NO:4990), CGGCGGAGGGTGTGTGTAGG (SEQ ID NO:4991)

Figure 5 (Table 1)

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Target525	chr4:155664309-155664315	AGGTTTCGGGTTTAAATTATCGGCGCG (SEQ ID NO:4992), GGTGTTTAGGAGCGTAGAGAGGTTTCGGG (SEQ ID NO:4993), GGTGTTTAGGAGCGTAGAGAGGTTTCGGG (SEQ ID NO:4994), TGTGTTAGGAGCGTAGAGAGGTTTCGGG (SEQ ID NO:4995), GTTAGGAGCGTAGAGAGGTTTCGGG (SEQ ID NO:4996)
Target526	chr4:158141377-158141450	TTCGGTTGGGTTAGGTGAGGAGGATGA (SEQ ID NO:4997), TGTGTTTCGGTTGGTTAGGTGAGGAGG (SEQ ID NO:4998), AGTAGGGTTTGGTGAGAGGACGTTTCG (SEQ ID NO:4999), TTTTCGGTTGGGTTAGGTGAGGAGGATGA (SEQ ID NO:5000), CGGTTGGGTTAGGTGAGGAGGATGATAGGG (SEQ ID NO:5001), TCGTGCGGTTGTTGTAGTTGTTGCGGA (SEQ ID NO:5002), CGTGCGGTTGTTGTAGTTGTTGCGGAG (SEQ ID NO:5003), CGTGCGGTTGTTGTAGTTGTTGCGGAGA (SEQ ID NO:5004), TCGTGCGGTTGTTGTAGTTGTTGCGGAG (SEQ ID NO:5005), TTCGTGCGGTTGTTGTAGTTGTTGCGG (SEQ ID NO:5006)
Target527	chr4:158141492-158141575	AGTAGGGTTTGGTGAGAGGACGTTTCG (SEQ ID NO:5007), TTCGGTGTGAAAGGTCGAGGCGC (SEQ ID NO:5008), TAGTAGGGTTTGGTGAGAGGACGTTTCG (SEQ ID NO:5009), ATAGTAGGGTTTGGTGAGAGGACGTTTCG (SEQ ID NO:5010), TCGGTGTGAAAGGTCGAGGCGC (SEQ ID NO:5011), GCGCGGCGTTGAGAAAGTATAGTTTCGGG (SEQ ID NO:5012), GAGATTCGGGTTTTCGGGTTGTCGC (SEQ ID NO:5013), GCGGCGGTTGAGAAAGTATAGTTTCGGG (SEQ ID NO:5014), GCGGCGGTTGAGAAAGTATAGTTTCGG (SEQ ID NO:5015), TCGCGGCGGTTGAGAAAGTATAGTTTCGG (SEQ ID NO:5016)
Target528	chr4:158141581-158141718	GTTTACGGTGGTGCGGGGTGTCGG (SEQ ID NO:5017), GTTACGGTGGTGCGGGGTGTCGGG (SEQ ID NO:5018), TTTACGGTGGTGCGGGGTGTCGGG (SEQ ID NO:5019), TTTACGGTGGTGCGGGGTGTCGG (SEQ ID NO:5020), GTTACGGTGGTGCGGGGTGTCGGG (SEQ ID NO:5021), TAGAGAGGGGTAGGTAGTTTCGGGCGC (SEQ ID NO:5022), AGAGAGGGGTAGGTAGTTTCGGGCGC (SEQ ID NO:5023), GCGGCGGTTGAGAAAGTATAGTTTCGGG (SEQ ID NO:5024), GAGAGGGGTAGGTAGTTTCGGGCGC (SEQ ID NO:5025), TAGAGAGGGGTAGGTAGTTTCGGGCGC (SEQ ID NO:5026)
Target529	chr4:170101207-170101387	TGTTGTACGTAGATGTTTGGTTTGGTTGTT (SEQ ID NO:5027), TTGTTGTACGTAGATGTTTGGTTTGGTTGTT (SEQ ID NO:5028), TGTTGTACGTAGATGTTTGGTTTGGTTGTT (SEQ ID NO:5029), TTGTTGTACGTAGATGTTTGGTTTGGTTGTT (SEQ ID NO:5030), TTTGTTGTACGTAGATGTTTGGTTTGGTTGTT (SEQ ID NO:5031)
Target530	chr4:170101458-170101589	CGGAGAGTTTGAGGATTCGTGTTTAAAGTTTCG (SEQ ID NO:5032), CGGAGAGTTTGAGGATTCGTGTTTAAAGTTTCG (SEQ ID NO:5033), TCGGAGAGTTTGAGGATTCGTGTTTAAAGTTTCG (SEQ ID NO:5034), TCGGAGAGTTTGAGGATTCGTGTTTAAAGTTTCG (SEQ ID NO:5035), CGGAGAGTTTGAGGATTCGTGTTTAAAGTTTCG (SEQ ID NO:5036)
Target531	chr4:174429587-174429721	GGTGAGGTTGAGGTTGAAATGTCGAGG (SEQ ID NO:5037), GGTGAGGTTGAGGTTGAAATGTCGAGG (SEQ ID NO:5038), GGAGGTTGAGGTTGAGGTTGAAATGTCG (SEQ ID NO:5039), AGGTGAGGTTGAGGTTGAAATGTCGAGG (SEQ ID NO:5040), AGGAGGTTGAGGTTGAGGTTGAAATGTCG (SEQ ID NO:5041), GGGGCGGGGTTGTGTTTGGTTTAT (SEQ ID NO:5042), TGGGGCGGGGTTGTGTTTGGTTTAA (SEQ ID NO:5043), TTTATGTGTGTTGGCGGTGGTGGGGC (SEQ ID NO:5044), GGGGCGGGGTTGTGTTTGGTTTATT (SEQ ID NO:5045), GGGGCGGGGTTGTGTTTGGTTTAA (SEQ ID NO:5046)
Target532	chr4:174429886-174429939	AGGTGAGGGTAGGGGTTTTTGAAGGT (SEQ ID NO:5047), AGGTGAGGGTAGGGGTTTTTGAAGGTATT (SEQ ID NO:5048), AGGTGAGGGTAGGGGTTTTTGAAGGTATTAG (SEQ ID NO:5049), GGTGAGGGTAGGGGTTTTTGAAGGTATTAGA (SEQ ID NO:5050), AGGTGAGGGTAGGGGTTTTTGAAGGTATTAGA (SEQ ID NO:5051), GGATGCGGAGTGGTTTTTGGTGGTCGT (SEQ ID NO:5052), GGATGCGGAGTGGTTTTTGGTGGTCG (SEQ ID NO:5053), AGGATGCGGAGTGGTTTTTGGTGGTCG (SEQ ID NO:5054), GATGCGGAGTGGTTTTTGGTGGTCGT (SEQ ID NO:5055), AGGATGCGGAGTGGTTTTTGGTGGTC (SEQ ID NO:5056)
Target533	chr4:190861696-190861763	CGTAGGTTAGCGAGGGTAGTTTGAGTCGT (SEQ ID NO:5057), CGTAGGTTAGCGAGGGTAGTTTGAGTCG (SEQ ID NO:5058), GTTGGGTTGTCGGGTGCGTTGTGGAAT (SEQ ID NO:5059), GGTGTGCGGTTGCGTTGTGGAATCGTT (SEQ ID NO:5060), TTGGGTTGTCGGGTGCGTTGTGGAATC (SEQ ID NO:5061), GTTGGGTTGTCGGGTGCGTTGTGGAAT (SEQ ID NO:5062), GGTGTGCGGTTGCGTTGTGGAATCGTT (SEQ ID NO:5063)
Target534	chr4:190861770-190861807	CGTAGGTTAGCGAGGGTAGTTTGAGTCGT (SEQ ID NO:5064), CGTAGGTTAGCGAGGGTAGTTTGAGTCG (SEQ ID NO:5065), CGTCGTTAGTTGTTGTTTGTAGTAGGAGGCG (SEQ ID NO:5066), TCGTCGTTAGTTGTTGTTTGTAGTAGGAGGCG (SEQ ID NO:5067), TCGTCGTTAGTTGTTGTTTGTAGTAGGAGGCG (SEQ ID NO:5068), GTTGGGTTGTCGGGTGCGTTGTGGAAT (SEQ ID NO:5069), GGTGTCGGGTGCGTTGTGGAATCGTT (SEQ ID NO:5070), TTGGGTTGTCGGGTGCGTTGTGGAATC (SEQ ID NO:5071), GTTGGGTTGTCGGGTGCGTTGTGGAAT (SEQ ID NO:5072), GGTGTCGGGTGCGTTGTGGAATCGTT (SEQ ID NO:5073)

Figure 5 (Table 1)

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Target535	chr4:190861849-190861859	CGTAGGTTAGCGAGGGTAGTTTGAGTCGT (SEQ ID NO:5074), CGTAGGTTAGCGAGGGTAGTTTGAGTCG (SEQ ID NO:5075), CGTAGGTTAGCGAGGGTAGTTTGAGTCGTT (SEQ ID NO:5076), AGGTTAGCGAGGGTAGTTTGAGTCGTTTT (SEQ ID NO:5077), GTAGGTTAGCGAGGGTAGTTTGAGTCGTT (SEQ ID NO:5078), TTTCGGGTTTTGTCTGGGGAGTTACGG (SEQ ID NO:5079), TTTCGGGTTTTGTCTGGGGAGTTACGG (SEQ ID NO:5080), GGTATTCGCGCGTAGTTGTTTTTGGC (SEQ ID NO:5081), CGTAGAGGGTTAAAGGTATTCGCGCGT (SEQ ID NO:5082), CGTAGAGGGTTAAAGGTATTCGCGCG (SEQ ID NO:5083)
Target536	chr4:190861931-190861981	AGGGAGTAGTTGCGCGCGGATGTTTT (SEQ ID NO:5084), CGTTAGGGAGTAGTTGCGCGCGGATGT (SEQ ID NO:5085), GTTAGGGAGTAGTTGCGCGCGGATGTTT (SEQ ID NO:5086), TAGGGAGTAGTTGCGCGCGGATGTTTT (SEQ ID NO:5087), TTAGGGAGTAGTTGCGCGCGGATGTTT (SEQ ID NO:5088), CGGGGTAGTATAGGGGCGCGGAGAAAT (SEQ ID NO:5089), CGGGGTAGTATAGGGGCGCGGAGAAA (SEQ ID NO:5090), CGGGGTAGTATAGGGGCGCGGAGAAATA (SEQ ID NO:5091), TTTCGGGTTTTGTCTGGGGAGTTACGG (SEQ ID NO:5092), CGGGGTAGTATAGGGGCGCGGAGAA (SEQ ID NO:5093)
Target537	chr4:190862105-190862129	GTTTGGGTGAAGACGAGGCGGGTTTT (SEQ ID NO:5094), TTTGGGTGAAGACGAGGCGGGTTTTA (SEQ ID NO:5095), GTTTGGGTGAAGACGAGGCGGGTTTT (SEQ ID NO:5096), TTGGGTGAAGACGAGGCGGGTTTTAT (SEQ ID NO:5097), GTTTGGGTGAAGACGAGGCGGGTTTTA (SEQ ID NO:5098), ATTTTTCGCGGAGAGGTTGAGGTCGG (SEQ ID NO:5099), CGCGGAGAGGTTGAGGTCGGTTTTGGA (SEQ ID NO:5100), TTGCGCGGAGAGGTTGAGGTCGGTTTT (SEQ ID NO:5101), TTTCGGGTTTTGTCTGGGGAGTTACGG (SEQ ID NO:5102), TTTTTCGCGGAGAGGTTGAGGTCGGTT (SEQ ID NO:5103)
Target538	chr4:190940267-190940284	TGGTAGGGAATGGAGGTTTCGGGCGTT (SEQ ID NO:5104), TTGGTAGGGAATGGAGGTTTCGGGCGT (SEQ ID NO:5105), TGGTAGGGAATGGAGGTTTCGGGCGTTT (SEQ ID NO:5106), TTGGTAGGGAATGGAGGTTTCGGGCGTT (SEQ ID NO:5107), TTTGGTAGGGAATGGAGGTTTCGGGCGT (SEQ ID NO:5108)
Target539	chr4:190940313-190940328	TGGTAGGGAATGGAGGTTTCGGGCGTT (SEQ ID NO:5109), TTGGTAGGGAATGGAGGTTTCGGGCGT (SEQ ID NO:5110), TGGTAGGGAATGGAGGTTTCGGGCGTTT (SEQ ID NO:5111), TTGGTAGGGAATGGAGGTTTCGGGCGTT (SEQ ID NO:5112), TTTGGTAGGGAATGGAGGTTTCGGGCGT (SEQ ID NO:5113), CGCGAGGTTGGGATTAGGTATTTTCGGA (SEQ ID NO:5114), TCGCGAGGTTGGGATTAGGTATTTTCGG (SEQ ID NO:5115), TCGCGAGGTTGGGATTAGGTATTTTCGGA (SEQ ID NO:5116), CGCGAGGTTGGGATTAGGTATTTTCGGAG (SEQ ID NO:5117), CGCGAGGTTGGGATTAGGTATTTTCGGAGT (SEQ ID NO:5118)
Target540	chr4:190940381-190940432	TAGAGGGGGAGAGTAGTTCGGTCGCGG (SEQ ID NO:5119), ATAGAGGGGGAGAGTAGTTCGGTCGCGG (SEQ ID NO:5120), ATAGAGGGGGAGAGTAGTTCGGTCGCGG (SEQ ID NO:5121), TGGTGTTCGGGCGTATAGAGGGGGAGA (SEQ ID NO:5122), GCGATTGGTGTTGGGCGTATAGAGGGG (SEQ ID NO:5123), GCGGTGGCGTTTGTTGGTTTAAGAGT (SEQ ID NO:5124), GCGGTGGCGTTTGTTGGTTTAAGAGTT (SEQ ID NO:5125), CGGTGGCGTTTGTTGGTTTAAGAGTTTC (SEQ ID NO:5126), GCGGTGGCGTTTGTTGGTTTAAGAGTTTC (SEQ ID NO:5127), CGGTGGCGTTTGTTGGTTTAAGAGTTTCG (SEQ ID NO:5128)
Target541	chr5:1130914-1130995	GTGGTGGGAGGGTGGTAGAAGCGGAAA (SEQ ID NO:5129), GTATAGACGTAGGTGGGCGGGTGGTGG (SEQ ID NO:5130), TGGTGGGAGGGTGGTAGAAGCGGAAAG (SEQ ID NO:5131), GGTGGGAGGGTGGTAGAAGCGGAAAGA (SEQ ID NO:5132), TGGGAGGGTGGTAGAAGCGGAAAGAGG (SEQ ID NO:5133), TGGTCGGAAGGAGATTGTATGGGTTGTGT (SEQ ID NO:5134), GGTTCGGAAGGAGATTGTATGGGTTGTGT (SEQ ID NO:5135), TGGTCGGAAGGAGATTGTATGGGTTGTGT (SEQ ID NO:5136), TTGGTCGGAAGGAGATTGTATGGGTTGT (SEQ ID NO:5137), TGGTCGGAAGGAGATTGTATGGGTTGTGT (SEQ ID NO:5138)
Target542	chr5:1131271-1131326	GGGTGAGGTTTGGGGGAGGGTAGTAAGG (SEQ ID NO:5139), AGGGTGAGGTTTGGGGGAGGGTAGTAA (SEQ ID NO:5140), TTAGGGTGAGGTTTGGGGGAGGGTAGT (SEQ ID NO:5141), AGGGTGAGGTTTGGGGGAGGGTAGTAAGG (SEQ ID NO:5142), GGTGAGGTTTGGGGGAGGGTAGTAAGG (SEQ ID NO:5143), TGGTAAGGAGTAGGACGGTCGGGAGGG (SEQ ID NO:5144), GGTAAAGGAGTAGGACGGTCGGGAGGGA (SEQ ID NO:5145), TTGGTAAGGAGTAGGACGGTCGGGAGGG (SEQ ID NO:5146), TTGGTAAGGAGTAGGACGGTCGGGAGG (SEQ ID NO:5147), TGGTAAGGAGTAGGACGGTCGGGAGGGA (SEQ ID NO:5148)
Target543	chr5:1131364-1131378	GTTTCGGATTTACGGGGATTGTAGGGGTTTATG (SEQ ID NO:5149), TGGTAAGGAGTAGGACGGTCGGGAGGG (SEQ ID NO:5150), GGTAAGGAGTAGGACGGTCGGGAGGGA (SEQ ID NO:5151), TTGGTAAGGAGTAGGACGGTCGGGAGGG (SEQ ID NO:5152), GGTAAGGAGTAGGACGGTCGGGAGGGAT (SEQ ID NO:5153), TTGGTAAGGAGTAGGACGGTCGGGAGG (SEQ ID NO:5154)
Target544	chr5:1876208-1876216	AAAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5155), AAAAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5156), AAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5157), TAAAAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5158), AAAAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5159)

Figure 5 (Table 1)

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Target545	chr5:1876286-1876433	CGTTCGTTAGGTCGGGGGTTTTTCGTCG (SEQ ID NO:5160), GTTCGTTAGGTCGGGGGTTTTTCGTCG (SEQ ID NO:5161), TCGTTCGTTAGGTCGGGGGTTTTTCGTCG (SEQ ID NO:5162), TCGTTCGTTAGGTCGGGGGTTTTTCGTCG (SEQ ID NO:5163), CGTTCGTTAGGTCGGGGGTTTTTCGTCG (SEQ ID NO:5164), AAAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5165), AAAAGGTTGCGGCGGGAGTTTTCGGTT (SEQ ID NO:5166), AAGGTTGCGGCGGGAGTTTTCGGTTT (SEQ ID NO:5167), AGGGTTTGGATCGGGTTTTGAGGGGGA (SEQ ID NO:5168), TAAAAGGTTGCGGCGGGAGTTTTCGGT (SEQ ID NO:5169)
Target546	chr5:1876557-1876571	CGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5170), ACGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5171), CGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5172), TACGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5173), TACGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5174), GAGACGTAGGATTGTTTTGCGGGCGGG (SEQ ID NO:5175), GGAGACGTAGGATTGTTTTGCGGGCGG (SEQ ID NO:5176), GGGCGGGCGGTTTTGGAGGGATTATT (SEQ ID NO:5177), CGGGCGGGCGGTTTTGGAGGGATTAT (SEQ ID NO:5178), AGACGTAGGATTGTTTTGCGGGCGGGC (SEQ ID NO:5179)
Target547	chr5:1876630-1876660	GCGGGGATTTTGGTGGTTAGGGGTT (SEQ ID NO:5180), CGCGGGGATTTTGGTGGTTAGGGGTT (SEQ ID NO:5181), ACGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5182), CGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5183), TACGCGGGGATTTTGGTGGTTAGGGG (SEQ ID NO:5184), GAGACGTAGGATTGTTTTGCGGGCGGG (SEQ ID NO:5185), GGAGACGTAGGATTGTTTTGCGGGCGG (SEQ ID NO:5186), TTAAGGATTACGGGAGCGGTTCCGGGGG (SEQ ID NO:5187), AGACGTAGGATTGTTTTGCGGGCGGGT (SEQ ID NO:5188), TTAAAGGATTACGGGAGCGGTTCCGGGGG (SEQ ID NO:5189)
Target548	chr5:1877909-1877921	GGTTTAGGTTTAGGCGGTGGAGGTTTCGG (SEQ ID NO:5190), TTTAGGTTTAGGCGGTGGAGGTTTCGG (SEQ ID NO:5191), CGGTGGAGGTTTCGGCGTGGTAGC (SEQ ID NO:5192), GCGGTGGAGGTTTCGGCGTGGTAG (SEQ ID NO:5193), AGGTTTAGGTTTAGGCGGTGGAGGTTTCGG (SEQ ID NO:5194), CGGAGAGGGGGTTTTGAATTTGGATTTTGGG (SEQ ID NO:5195), CGGAGAGGGGGTTTTGAATTTGGATTTTGGGA (SEQ ID NO:5196), TCGGAGAGGGGGTTTTGAATTTGGATTTTGGG (SEQ ID NO:5197), CGGAGAGGGGGTTTTGAATTTGGATTTTGG (SEQ ID NO:5198), GGAGAGGGGGTTTTGAATTTGGATTTTGGG (SEQ ID NO:5199)
Target549	chr5:1877967-1878069	GCGTGGTAGCGTCGGGTTTGTTATGT (SEQ ID NO:5200), GCGTGGTAGCGTCGGGTTTGTTATGT (SEQ ID NO:5201), GGTTTAGGTTTAGGCGGTGGAGGTTTCGG (SEQ ID NO:5202), TTTAGGTTTAGGCGGTGGAGGTTTCGG (SEQ ID NO:5203), GCGGTGGAGGTTTCGGCGTGGTAG (SEQ ID NO:5204), TTTTTGCGTTTGAGGCGGGCGGGTTT (SEQ ID NO:5205), TTTTTCGTTTGAGGCGGGCGGGTTTC (SEQ ID NO:5206), TTTTTGCGTTTGAGGCGGGCGGGTTT (SEQ ID NO:5207), TTTTTGCGTTTGAGGCGGGCGGGTTT (SEQ ID NO:5208), TTTTTCGTTTGAGGCGGGCGGGTTTC (SEQ ID NO:5209)
Target550	chr5:1878079-1878210	TTGTCGTCGGTTTTGGGTAGGGCGAGT (SEQ ID NO:5210), GGTTTTCGTCGGTTTTGGGTAGGGCG (SEQ ID NO:5211), GCGTTTGTAGTTGGGGCGTTTTGGGGT (SEQ ID NO:5212), GGGTTTGTGTCGTTTGGGTAGGGC (SEQ ID NO:5213), GGAAAGGCGCGGTTAGGGGTGTAGTT (SEQ ID NO:5214), TTCGGGTTTTGGGACGTTTCGTTGGGG (SEQ ID NO:5215), TCGGGTTTTGGGACGTTTCGTTGGGGG (SEQ ID NO:5216), TTCGGGTTTTGGGACGTTTCGTTGGGG (SEQ ID NO:5217), CGGGTTTTGGGACGTTTCGTTGGGGG (SEQ ID NO:5218), TCGGGTTTTGGGACGTTTCGTTGGGG (SEQ ID NO:5219)
Target551	chr5:1878215-1878266	TTGTCGTCGGTTTTGGGTAGGGCGAGT (SEQ ID NO:5220), GGTTTTCGTCGGTTTTGGGTAGGGCG (SEQ ID NO:5221), GCGTTTGTAGTTGGGGCGTTTTGGGGT (SEQ ID NO:5222), GGGTTTGTGTCGTTTGGGTAGGGC (SEQ ID NO:5223), GGAAAGGCGCGGTTAGGGGTGTAGTT (SEQ ID NO:5224), TTCGGGTTTTGGGACGTTTCGTTGGGG (SEQ ID NO:5225), TCGGGTTTTGGGACGTTTCGTTGGGGG (SEQ ID NO:5226), TTTTCGGTTTTTGGGACGTTTCGTTGGGG (SEQ ID NO:5227), CGGGTTTTTGGGACGTTTCGTTGGGGG (SEQ ID NO:5228), CGGGTTTTTGGGACGTTTCGTTGGGGG (SEQ ID NO:5229)
Target552	chr5:2134732-2135132	TGGGGTATGGAAGTTTGACGGGAAGAGGG (SEQ ID NO:5230), GGGGTATGGAAGTTTGACGGGAAGAGGG (SEQ ID NO:5231), GGGGTATGGAAGTTTGACGGGAAGAGGGA (SEQ ID NO:5232), TGGGGTATGGAAGTTTGACGGGAAGAGGGA (SEQ ID NO:5233), TGGGGTATGGAAGTTTGACGGGAAGAGG (SEQ ID NO:5234), AGTGCGTGCGGTTTTGGTATTGGGGT (SEQ ID NO:5235), GAGTGCGTGCGGTTTTGGTATTGGGGT (SEQ ID NO:5236), GAGTGCGTGCGGTTTTGGTATTGGGG (SEQ ID NO:5237), GGAGTGCGTGCGGTTTTGGTATTGGG (SEQ ID NO:5238), GTGCGTGCGGTTTTGGTATTGGGGT (SEQ ID NO:5239)
Target553	chr5:2149263-2149663	TTTTCGCGGTGGTTTTGCGTGTTGA (SEQ ID NO:5240), GGGTAATGAAGTTGGAGGTAGGCGTGCG (SEQ ID NO:5241), CGGGTAATGAAGTTGGAGGTAGGCGTGCG (SEQ ID NO:5242), TGTCCGGTGGTTTTGCGTGTTGATT (SEQ ID NO:5243), TTGTCGGGTGGTTTTGCGTGTTGATT (SEQ ID NO:5244), GTAGAGCGGTTTCGATGAGGGGTTGTGT (SEQ ID NO:5245), AGTAGAGCGGTTTCGATGAGGGGTTGTGT (SEQ ID NO:5246), AGTAGAGCGGTTTCGATGAGGGGTTGTGT (SEQ ID NO:5247), AGAGCGGTTTCGATGAGGGGTTGTGTTA (SEQ ID NO:5248), TAGAGCGGTTTCGATGAGGGGTTGTGTT (SEQ ID NO:5249)

Figure 5 (Table 1)

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Target554	chr5:3602148-3602161	TAGATGGGTTAGTCGGGATGCGGTGCG (SEQ ID NO:5250), ATAGATGGGTTAGTCGGGATGCGGTGCG (SEQ ID NO:5251), AGATGGGTTAGTCGGGATGCGGTGCG (SEQ ID NO:5252), ATAGATGGGTTAGTCGGGATGCGGTGCG (SEQ ID NO:5253), GATGGGTTAGTCGGGATGCGGTGCG (SEQ ID NO:5254)
Target555	chr5:3602272-3602308	ACGAGGGGTTGAGGTTGTGGTGGGAAG (SEQ ID NO:5255), GGGTTGAGGTTGTGGTGGGAAGCGAGA (SEQ ID NO:5256), GGTGGGAAGCGAGAAAGAGGAGGTGGT (SEQ ID NO:5257), TGGTGGGAAGCGAGAAAGAGGAGGTGG (SEQ ID NO:5258), TTTTCGGTGTGAGGTGTGAACGAGGG (SEQ ID NO:5259), GGTGCGCGCGTTTGAAGGTAAAGGAC (SEQ ID NO:5260), GGTGCGCGCGTTTGAAGGTAAAGGA (SEQ ID NO:5261), CGGTGCGCGCGTTTGAAGGTAAAGGAC (SEQ ID NO:5262), CGGTGCGCGCGTTTGAAGGTAAAGGA (SEQ ID NO:5263), CGGTGCGCGCGTTTGAAGGTAAAGG (SEQ ID NO:5264)
Target556	chr5:3602339-3602483	TATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5265), ATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5266), GCGCGAGTGGGGAAGGTTTAGGAGTT (SEQ ID NO:5267), ATATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5268), AATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5269), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5270), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5271), TTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5272), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5273), TTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5274)
Target557	chr5:3602487-3602497	TATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5275), ATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5276), GCGCGAGTGGGGAAGGTTTAGGAGTT (SEQ ID NO:5277), ATATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5278), AATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5279), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5280), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5281), TTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5282), TTTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5283), TTTGAAGGTGTTTGTTCGGCGCGTG (SEQ ID NO:5284)
Target558	chr5:3602501-3602582	TATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5285), ATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5286), GCGCGAGTGGGGAAGGTTTAGGAGTT (SEQ ID NO:5287), ATATTCGTAGCGGGGTTGGTTTCGGGCG (SEQ ID NO:5288), AATATTCGTAGCGGGGTTGGTTTCGGGC (SEQ ID NO:5289), CGTTTTGAAGGTTCGCGTCGGGTTTC (SEQ ID NO:5290), GTTTTTGAAGGTGTTTGTTCGGCGCT (SEQ ID NO:5291), AGTTTTTTGAAGGTGTTTGTTCGGCGCT (SEQ ID NO:5292), AGTTTTTTGAAGGTGTTTGTTCGGCGCT (SEQ ID NO:5293), AAGTTTTTTGAAGGTGTTTGTTCGGCGCT (SEQ ID NO:5294)
Target559	chr5:3602672-3602707	TGTTAGCGAGGATGTGGGTTGTGGGA (SEQ ID NO:5295), GCGAGGATGTGGGTTGTGGGAAAAACG (SEQ ID NO:5296), TTGTAGCGAGGATGTGGGTTGTGGG (SEQ ID NO:5297), AGCGAGGATGTGGGTTGTGGGAAAAA (SEQ ID NO:5298), CGAGGATGTGGGTTGTGGGAAAAACGG (SEQ ID NO:5299), GTCGGGAAGGGCGGGTTATAGGTTGGG (SEQ ID NO:5300), GGAAGGGCGGGTTATAGGTTGGGGTG (SEQ ID NO:5301), AGTCGGGAAGGGCGGGTTATAGGTTGG (SEQ ID NO:5302), GTTATAGGTTGGGGTGCGAGCGGAGG (SEQ ID NO:5303), GGTATAGGTTGGGGTGCGAGCGGAG (SEQ ID NO:5304)
Target560	chr5:5140383-5140428	CGTCGTCGCGGTTGTTATTTCTTTTC (SEQ ID NO:5305), GTGCGAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5306), TGCAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5307), GTGCGAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5308), GTGCGAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5309), TGCAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5310)
Target561	chr5:5140434-5140492	CGGAGTCGTTGTGGGGAATTTTTCGC (SEQ ID NO:5311), CGTCGTCGCGGTTGTTATTTCTTTTC (SEQ ID NO:5312), CGGAGTTTATGTAATAATTCGCGCGGC (SEQ ID NO:5313), GTGCGAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5314), GGGGTTATCGGAGGGTTTTCGGTCGGT (SEQ ID NO:5315), AGGGGTTATCGGAGGGTTTTCGGTCGG (SEQ ID NO:5316), TCGAGGGGTTAGGGGTTATCGGAGGGT (SEQ ID NO:5317), TGCAGCGGGTAGGGAGGATTCGATT (SEQ ID NO:5318)
Target562	chr5:5140520-5140539	CGGAGTCGTTGTGGGGAATTTTTCGC (SEQ ID NO:5319), ATTTTTTCGCGTTTTGTTGGGTCGGG (SEQ ID NO:5320), GGGAAATTTTTCGCGTTTTGTTGGGTCGGG (SEQ ID NO:5321), AATTTTTTCGCGTTTTGTTGGGTCGGG (SEQ ID NO:5322), CGCGTTTTGTTGGGTCGGGTTTTT (SEQ ID NO:5323), GGGGTTATCGGAGGGTTTTCGGTCGGT (SEQ ID NO:5324), AGGGGTTATCGGAGGGTTTTCGGTCGG (SEQ ID NO:5325), TCGAGGGGTTAGGGGTTATCGGAGGGT (SEQ ID NO:5326), CGAGGGGTTAGGGGTTATCGGAGGGT (SEQ ID NO:5327), GCGTTTCGAGGGGTTAGGGGTTATCGG (SEQ ID NO:5328)
Target563	chr5:5140549-5140879	CGTTGTCGGTCGGGATTTTCGGTGG (SEQ ID NO:5329), GGCCTTGTGGATGTTGTTGGCGTAGGT (SEQ ID NO:5330), GTTTGGCGCGCTTGTGGATGTTGTTGG (SEQ ID NO:5331), GGTGTCGGCGCTTGTGGATGTTGTTGG (SEQ ID NO:5332), CGGTAGCGTTTGGGAGTTCGAGCGTTT (SEQ ID NO:5333), GGAGAGGAGTCGCGGGGATTGTTTT (SEQ ID NO:5334), GCGTTGGTGGGAGCGTTTCGGGATTAT (SEQ ID NO:5335), GGAGAGGAGTCGCGGGGATTGTTTT (SEQ ID NO:5336), AGGAGCGTTTCGAGGGGTTAGGGGTTA (SEQ ID NO:5337), TAGGAGCGTTTCGAGGGGTTAGGGGTT (SEQ ID NO:5338)

Figure 5 (Table 1)

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Target564	chr5:10333225-10333253	TTTCGCGTGTGATGGGGGTTGTTTGGG (SEQ ID NO:5339), AGGTGGGTGAGGAGTTTTAGGCGCGT (SEQ ID NO:5340), GTGATGGGGGTTGTTTGGGTGGGGTTG (SEQ ID NO:5341), TGATGGGGGTTGTTTGGGTGGGGTTGT (SEQ ID NO:5342), TGTGATGGGGGTTGTTTGGGTGGGGTT (SEQ ID NO:5343), TGAGTGTTCGGGGTTTGGGTAGTGTGT (SEQ ID NO:5344), GAGTGTTTCGGGGTTTGGGTAGTGTGT (SEQ ID NO:5345), TGAGTGTTTCGGGGTTTGGGTAGTGTGT (SEQ ID NO:5346), TGGTTGGTATTGGTCGTTTGTAGGCGGT (SEQ ID NO:5347), GGTGGTATTGGTCGTTTGTAGGCGGT (SEQ ID NO:5348)
Target565	chr5:10333262-10333318	TTTCGCGTGTGATGGGGGTTGTTTGGG (SEQ ID NO:5349), AGGTGGGTGAGGAGTTTTAGGCGCGT (SEQ ID NO:5350), GTGATGGGGGTTGTTTGGGTGGGGTTG (SEQ ID NO:5351), TGATGGGGGTTGTTTGGGTGGGGTTGT (SEQ ID NO:5352), TGTGATGGGGGTTGTTTGGGTGGGGTT (SEQ ID NO:5353), ACGGTTGGGGTGTGTTTGGCGTTAAGAGC (SEQ ID NO:5354), CGGTTGGGGTGTGTTTGGCGTTAAGAGC (SEQ ID NO:5355), GGACGGTTGGGGTGTGTTTGGCGTTAAG (SEQ ID NO:5356), GGACGGTTGGGGTGTGTTTGGCGTTAAGA (SEQ ID NO:5357), ACGGTTGGGGTGTGTTTGGCGTTAAGAG (SEQ ID NO:5358)
Target566	chr5:10333439-10333565	GATTTTAGATCGCGGGGTGTGGGGC (SEQ ID NO:5359), ATTTAGATCGCGGGGTGTGGGGC (SEQ ID NO:5360), CGTCGGGGATTGTTATTTGGGTTCCGT (SEQ ID NO:5361), CGTCGGGGATTGTTATTTGGGTTCCG (SEQ ID NO:5362), TCGTCGGGGATTGTTATTTGGGTTCCGT (SEQ ID NO:5363), GCGGTTTGGGCGGCGTTTGTGTTT (SEQ ID NO:5364), GCGGTTTGGGCGGCGTTTGTGTTT (SEQ ID NO:5365), GGTTTAAGGTCGGTAGCGATTGTTGGG (SEQ ID NO:5366), GGTTTAAGGTCGGTAGCGATTGTTGGGA (SEQ ID NO:5367), GCGGTTTGGGCGGCGTTGTTT (SEQ ID NO:5368)
Target567	chr5:10333591-10333637	GTGGGGCGTCGGGGAAGGAGATAGAAG (SEQ ID NO:5369), TATTTGGGGTTCGTTTGGGTGGGGC (SEQ ID NO:5370), TAGGGTCGCGGGGATATTTGGGTTGC (SEQ ID NO:5371), TGTGGGGCGTCGGGGAAGGAGATAGAA (SEQ ID NO:5372), GGGGCGTCGGGGAAGGAGATAGAAGGA (SEQ ID NO:5373), GGTTCGTTAGGGGGAGTTAGGGCGT (SEQ ID NO:5374), GGTTCGTTAGGGGGAGTTAGGGCG (SEQ ID NO:5375), GTTTCGTTAGGGGGAGTTAGGGCGT (SEQ ID NO:5376), GGTTCGTTAGGGGGAGTTAGGGCGTA (SEQ ID NO:5377), TTTTCGTTAGGGGGAGTTAGGGCGTA (SEQ ID NO:5378)
Target568	chr5:16180103-16180184	GGGCGGGTTGGAAGTGGGGGATTTTT (SEQ ID NO:5379), CGGGCGGGTTGGAAGTGGGGGATTTTT (SEQ ID NO:5380), GGGCGGGTTGGAAGTGGGGGATTTTT (SEQ ID NO:5381), GGGCGGGTTGGAAGTGGGGGATTTTTA (SEQ ID NO:5382), CGGGCGGGTTGGAAGTGGGGGATTTTT (SEQ ID NO:5383), AGCGTTGCGTCGTTTGGAGAGGGGTTA (SEQ ID NO:5384), TAGCGTTGCGTCGTTTGGAGAGGGGTT (SEQ ID NO:5385), GCGTTGCGTCGTTTGGAGAGGGGTTAT (SEQ ID NO:5386), GTAGCGTTGCGTCGTTTGGAGAGGGGT (SEQ ID NO:5387), TAGCGTTGCGTCGTTTGGAGAGGGGT (SEQ ID NO:5388)
Target569	chr5:16180231-16180278	GGGAAGTAGGGGTTAGGGGAGAGGTCG (SEQ ID NO:5389), TATTGGATGGGTGCGTGGGATGTGGCG (SEQ ID NO:5390), TGGGAAGTAGGGGTTAGGGGAGAGGTC (SEQ ID NO:5391), CGTGAGTTGGGAAGTAGGGGTTAGGGG (SEQ ID NO:5392), TTGGGAAGTAGGGGTTAGGGGAGAGGT (SEQ ID NO:5393), TGGAAAGTGCGGTTATAGTTTCGGGTT (SEQ ID NO:5394), TGTTTAGTTAGTTTCGGGCGCGTTTAGGG (SEQ ID NO:5395), GTTTAGTTAGTTTCGGGCGCGTTTAGGG (SEQ ID NO:5396), TGGAAAGTGCGGTTATAGTTTCGGGTTT (SEQ ID NO:5397), TTGTTTAGTTAGTTTCGGGCGCGTTTAGGG (SEQ ID NO:5398)
Target570	chr5:16180290-16180342	GGGAAGTAGGGGTTAGGGGAGAGGTCG (SEQ ID NO:5399), TATTGGATGGGTGCGTGGGATGTGGCG (SEQ ID NO:5400), TGGGAAGTAGGGGTTAGGGGAGAGGTC (SEQ ID NO:5401), CGTGAGTTGGGAAGTAGGGGTTAGGGG (SEQ ID NO:5402), TTGGGAAGTAGGGGTTAGGGGAGAGGT (SEQ ID NO:5403), GGAGCGAGGGTTTGGAAAGTGCGGTTA (SEQ ID NO:5404), GAGCGAGGGTTTGGAAAGTGCGGTTAT (SEQ ID NO:5405), GGAGCGAGGGTTTGGAAAGTGCGGTTAT (SEQ ID NO:5406), AGCGAGGGTTTGGAAAGTGCGGTTATA (SEQ ID NO:5407), GAGCGAGGGTTTGGAAAGTGCGGTTA (SEQ ID NO:5408)
Target571	chr5:16180362-16180394	TGTTGAGTAGTGAGCGGGAAAGGGC (SEQ ID NO:5409), GGTGAGTAGTGAGCGGGAAAGGGCG (SEQ ID NO:5410), GTTGAGTAGTGAGCGGGAAAGGGCG (SEQ ID NO:5411), TTGGTTGAGTAGTGAGCGGGAAAGGGC (SEQ ID NO:5412), TTGAGTAGTGAGCGGGAAAGGGCGC (SEQ ID NO:5413), GGAGCGAGGGTTTGGAAAGTGCGGTTA (SEQ ID NO:5414), GAGCGAGGGTTTGGAAAGTGCGGTTAT (SEQ ID NO:5415), GGAGCGAGGGTTTGGAAAGTGCGGTTAT (SEQ ID NO:5416), AGCGAGGGTTTGGAAAGTGCGGTTATA (SEQ ID NO:5417), CGAGGGCGGGATAGATAGGGAGAGGAT (SEQ ID NO:5418)
Target572	chr5:37834738-37834807	TTAGGTTGGTTTGGGGTACGTGCGGGG (SEQ ID NO:5419), ATTAGGTTGGTTTGGGGTACGTGCGGG (SEQ ID NO:5420), GTTGGGTTACGTGCGGGGTTGGTTG (SEQ ID NO:5421), GTTGGTTGGGGTACGTGCGGGGTTG (SEQ ID NO:5422), TAGGTTGGTTTGGGGTACGTGCGGGG (SEQ ID NO:5423), CGTCGGTAAGAGGTTTTTCGAGGCGTT (SEQ ID NO:5424), CGTCGGTAAGAGGTTTTTCGAGGCGTTT (SEQ ID NO:5425), TGGGATGTCGTGTTGTTTGGTGT (SEQ ID NO:5426), GGGATGTCGTGTTGTTTGGTGT (SEQ ID NO:5427), TGGGATGTCGTGTTGTTTGGTGT (SEQ ID NO:5428)

Figure 5 (Table 1)

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Target573	chr5:37834826-37834845	CGGCGGGCGTTTCGGGAGGTTTTTAT (SEQ ID NO:5429), TCGGCGGGCGTTTCGGGAGGTTTTTA (SEQ ID NO:5430), GCGTTTCGGGAGGTTTTTATCGGCGG (SEQ ID NO:5431), GCGTTTCGGGAGGTTTTTATCGGCGG (SEQ ID NO:5432), GCGGGCGTTTCGGGAGGTTTTTATCG (SEQ ID NO:5433), TTTTCGTTTGTTCGCGTAGGTGTCGTCG (SEQ ID NO:5434), TTTTCGTTTGTTCGCGTAGGTGTCGTCG (SEQ ID NO:5435), TTCGTTTGTTCGCGTAGGTGTCGTCG (SEQ ID NO:5436), TGGGATGTCGTGGTTGTTTGGTGT (SEQ ID NO:5437), TTTTCGTTTGTTCGCGTAGGTGTCGTCG (SEQ ID NO:5438)
Target574	chr5:37834848-37835000	CGGCGGGCGTTTCGGGAGGTTTTTAT (SEQ ID NO:5439), TCGGCGGGCGTTTCGGGAGGTTTTTA (SEQ ID NO:5440), GGTAGGCGGGAGGTGGGGAGAGAATC (SEQ ID NO:5441), GCGTTTCGGGAGGTTTTTATCGGCGG (SEQ ID NO:5442), GCGTTTCGGGAGGTTTTTATCGGCGG (SEQ ID NO:5443), GGAGAGGGGCGTAGGGATTCTAGGGA (SEQ ID NO:5444), GAGGTTGGAGAGGGGCGTAGGGATTCTG (SEQ ID NO:5445), CGAGGTTGGAGAGGGGCGTAGGGATTCTG (SEQ ID NO:5446), AGAGGGGCGTAGGGATTCTAGGGAGT (SEQ ID NO:5447), TGGAGAGGGGCGTAGGGATTCTAGGG (SEQ ID NO:5448)
Target575	chr5:37835015-37835110	GGTAGGCGGGAGGTGGGGAGAGAATC (SEQ ID NO:5449), GTAGGCGGGAGGTGGGGAGAGAATC (SEQ ID NO:5450), GGTAGGCGGGAGGTGGGGAGAGAAT (SEQ ID NO:5451), GGGTAGGCGGGAGGTGGGGAGAGAAT (SEQ ID NO:5452), GTAGGCGGGAGGTGGGGAGAGAAT (SEQ ID NO:5453), AGTTGTTTTGGGGCGCGTTGAGGAGG (SEQ ID NO:5454), CGAGTTGTTTTGGGGCGCGTTGAGGA (SEQ ID NO:5455), GTGGTGGGGGTGGGGGTTAATTGGAG (SEQ ID NO:5456), TTTTGGGGCGCGTTGAGGAGGGAGAA (SEQ ID NO:5457), GCGTTGAGGAGGGAGAGAAGCGAATTGGG (SEQ ID NO:5458)
Target576	chr5:40680972-40680986	CGCGAGTTTGAGATTTTGGTGGTCGT (SEQ ID NO:5459), TCGCGAGTTTGAGATTTTGGTGGTCGT (SEQ ID NO:5460), TCGCGAGTTTGAGATTTTGGTGGTCG (SEQ ID NO:5461), ATCGCGAGTTTGAGATTTTGGTGGTCG (SEQ ID NO:5462), ATCGCGAGTTTGAGATTTTGGTGGTCGT (SEQ ID NO:5463), GGTGGCGGTGCGTAGTTTGGAGTGT (SEQ ID NO:5464), GTGGTTGGCGGTGCGTAGTTTGGAGT (SEQ ID NO:5465), TGGTTGGCGGTGCGTAGTTTGGAGTG (SEQ ID NO:5466), AGTGGTTGGCGGTGCGTAGTTTGGAG (SEQ ID NO:5467), GTGGTTGGCGGTGCGTAGTTTGGAGTG (SEQ ID NO:5468)
Target577	chr5:40681015-40681119	AGATTTTGGTGGTCGTAGTTGTAAGTGGT (SEQ ID NO:5469), CGGGCGCGGTTTAATATTTTATAAGTGGT (SEQ ID NO:5470), TCGGGCGCGGTTTAATATTTTATAAGTGGT (SEQ ID NO:5471), GAGATTTTGGTGGTCGTAGTTGTAAGTGGT (SEQ ID NO:5472), AGATTTTGGTGGTCGTAGTTGTAAGTGGT (SEQ ID NO:5473), GGTCGGGGTTAAGGAGGCGGACGAAT (SEQ ID NO:5474), GGTGGCGGTGCGTAGTTTGGAGTGT (SEQ ID NO:5475), GTGGTTGGCGGTGCGTAGTTTGGAGT (SEQ ID NO:5476), TTAGTCGGTCGGGTTAAGGAGGCGG (SEQ ID NO:5477), TGGTTGGCGGTGCGTAGTTTGGAGTG (SEQ ID NO:5478)
Target578	chr5:40681137-40681170	CGATCGGTTGAATAGTTTAGTGATTATTCGGCG (SEQ ID NO:5479), TCGATCGGTTGAATAGTTTAGTGATTATTCGGCG (SEQ ID NO:5480), TTCGATCGGTTGAATAGTTTAGTGATTATTCGGCG (SEQ ID NO:5481), TGTTTTTTCGCGGATTTGTATAGTATTACGATGGT (SEQ ID NO:5482), TGTTTTTTCGCGGATTTGTATAGTATTACGATGGT (SEQ ID NO:5483), TTGTTTTTTCGCGGATTTGTATAGTATTACGATGGT (SEQ ID NO:5484), TCGCGGATTTGTATAGTATTACGATGGTATTAGGT (SEQ ID NO:5485)
Target579	chr5:40681212-40681372	TTGCGGGTGGTGGGTAATTTGGTGGT (SEQ ID NO:5486), GCGCGTGATGTTTATTTTCGGGGTGGTGG (SEQ ID NO:5487), TTTGCGGGTGGTGGGTAATTTGGTGGT (SEQ ID NO:5488), GCGGTGATGTTTATTTTCGGGGTGGTGG (SEQ ID NO:5489), AGGGTTAATGTTTCGGGGTGTAGTCGT (SEQ ID NO:5490), AGCGGTTGGTTTTCGGGTTATTGGTTT (SEQ ID NO:5491), GCGGTAGATGATGTTGAGGTCGGATAGGT (SEQ ID NO:5492), TGGCGTAGATGATGTTGAGGTCGGATAGG (SEQ ID NO:5493), TGGCGTAGATGATGTTGAGGTCGGATAGGT (SEQ ID NO:5494), GCGGTAGATGATGTTGAGGTCGGATAGG (SEQ ID NO:5495)
Target580	chr5:40681410-40681441	AGGGTTAATGTTTCGGGGGTTAGTCGT (SEQ ID NO:5496), TAATGTTTCGGGGGTTAGTCGTTGTC (SEQ ID NO:5497), GGGTTAATGTTTCGGGGGTTAGTCGTT (SEQ ID NO:5498), AGGGTTAATGTTTCGGGGGTTAGTCGTT (SEQ ID NO:5499), AAGGGTTAATGTTTCGGGGGTTAGTCGT (SEQ ID NO:5500), AGGTATGGTTGATGTTAGGTAGCGTTTCG (SEQ ID NO:5501), GGTATGGTTGATGTTAGGTAGCGTTTCA (SEQ ID NO:5502), AGGTATGGTTGATGTTAGGTAGCGTTTCA (SEQ ID NO:5503), GGATGTTGATGTTAGGTAGCGTTTCGAT (SEQ ID NO:5504), AGGTATGGTTGATGTTAGGTAGCGTTTCGAT (SEQ ID NO:5505)
Target581	chr5:40681485-40682018	TCGTTCTGGTGAGTGATCGGGGTTGG (SEQ ID NO:5506), TTGTGTGCGGCGGTTGTTTCGTATGT (SEQ ID NO:5507), GCGGTCTGTTTCGGTTGTTTTTCGGGGT (SEQ ID NO:5508), TGTGTGCGGCGGTTGTTTCGTATGTA (SEQ ID NO:5509), TGTTTGTGTGCGGCGGTTGTTTCGTA (SEQ ID NO:5510), CGGTGCGGTGTTGTTTCGGTTGTTTA (SEQ ID NO:5511), GGTAAGCGGGTGGTTTCGGGAGGTAAT (SEQ ID NO:5512), TAGCGGGGTGGTTTCGGGAGGTAATCG (SEQ ID NO:5513), GGGAAAGTAGGGAGCGGGGAATGGACG (SEQ ID NO:5514), GGACGGTGCGGAGAAAGGAGGAGT (SEQ ID NO:5515)

Figure 5 (Table 1)

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Target582	chr5:50685400-50685513	CGGGCGGGTCGGTAAGCGAGTTTTAG (SEQ ID NO:5516), GGGCGGGTCGGTAAGCGAGTTTTAGT (SEQ ID NO:5517), TGTTTGGAGTATTCGGGCGGGCGAGT (SEQ ID NO:5518), GCGGGCGGGTCGGTAAGCGAGTTTTA (SEQ ID NO:5519), CGGGCGGGTCGGTAAGCGAGTTTTAGT (SEQ ID NO:5520), TGTTTGGCGGAGATGGGTTTCGTTGCG (SEQ ID NO:5521), GTGGGGTCGTAGGGTTGGTTGTTGGC (SEQ ID NO:5522), CGTGAGCGTTGGGTTGGAGGTTCTTT (SEQ ID NO:5523), GATGGGTTTCGTTGCGGGTAAGGAGC (SEQ ID NO:5524), AGGGTTGGTTGTTTGGCGGAGATGGGT (SEQ ID NO:5525)
Target583	chr5:50685534-50685625	CGGGCGGGTCGGTAAGCGAGTTTTAG (SEQ ID NO:5526), GGGCGGGTCGGTAAGCGAGTTTTAGT (SEQ ID NO:5527), GCGGGCGGGTCGGTAAGCGAGTTTTA (SEQ ID NO:5528), CGGGCGGGTCGGTAAGCGAGTTTTAGT (SEQ ID NO:5529), CGGGCGGGTCGGTAAGCGAGTTTTA (SEQ ID NO:5530), GCGGGTTTTCGGCGTAGTAGGTTCTGTA (SEQ ID NO:5531), CGGGTTTTCGGCGTAGTAGGTTCTGTA (SEQ ID NO:5532), CGGGTTTTCGGCGTAGTAGGTTCTGTAAG (SEQ ID NO:5533), GCGGGTTTTCGGCGTAGTAGGTTCTGTA (SEQ ID NO:5534), CGGGTTTTCGGCGTAGTAGGTTCTGTA (SEQ ID NO:5535)
Target584	chr5:50685654-50685699	ACGGGTTTTAGTTTTCGTGTGATTCGGGT (SEQ ID NO:5536), CGGGTTTTAGTTTTCGTGTGATTCGGGT (SEQ ID NO:5537), ACGGGTTTTAGTTTTCGTGTGATTCGGGT (SEQ ID NO:5538), GACGGGTTTTAGTTTTCGTGTGATTCGGGT (SEQ ID NO:5539), GACGGGTTTTAGTTTTCGTGTGATTCGGGT (SEQ ID NO:5540), AGTTTGTATTGGGTTGTTGTTGTTGGAGTTGT (SEQ ID NO:5541), AGTTTGTATTGGGTTGTTGTTGTTGGAGTTGT (SEQ ID NO:5542), TAGTTTGTATTGGGTTGTTGTTGTTGGAGTTGT (SEQ ID NO:5543), TAGTTTGTATTGGGTTGTTGTTGTTGGAGTTGT (SEQ ID NO:5544), GTTTTGTATTGGGTTGTTGTTGTTGGAGTTGT (SEQ ID NO:5545)
Target585	chr5:50685784-50685848	TGTGAGTGGTTTTGGGGTCGGGTAGGG (SEQ ID NO:5546), GGAATGCGAGGGGGAAGGAGACGTAG (SEQ ID NO:5547), GTAGGGAATGCGAGGGGGAAGGAGACG (SEQ ID NO:5548), TTTTGGGGTCGGGTAGGGAATGCGAGG (SEQ ID NO:5549), GGAATGCGAGGGGGAAGGAGACGTAGC (SEQ ID NO:5550), CGGCGTCGGGTAGTTTGTTCGGGG (SEQ ID NO:5551), ATGGGTAGGGGGTAAGGATGAGGGGT (SEQ ID NO:5552), GCGCTCGGGTAGTTTGTTCGGGGT (SEQ ID NO:5553), TTCGGGTATGGGTAGGGGGTAAGGA (SEQ ID NO:5554), TCGGGGTATGGGTAGGGGGTAAGGAT (SEQ ID NO:5555)
Target586	chr5:72594949-72594960	GGCGAGTAGTTTGGTGGTTTGGCGGT (SEQ ID NO:5556), TCGGACGAGGCGAGTAGTTTGGTGGT (SEQ ID NO:5557), TTCGACGAGGCGAGTAGTTTGGTGGT (SEQ ID NO:5558), AGGCGAGTAGTTTGGTGGTTTGGCGG (SEQ ID NO:5559), CGAGGCGAGTAGTTTGGTGGTTTGGCG (SEQ ID NO:5560), GCGGAGTTTACGGCGTACGGTTGTGTC (SEQ ID NO:5561), CGGAGTTTACGGCGTACGGTTGTGTC (SEQ ID NO:5562), TGTGTCGTTCCGGTTTGTTCGGAGC (SEQ ID NO:5563), GTTAGCGGTGGTAGTCGGGAGTTCGT (SEQ ID NO:5564), GCGGAGTTTACGGCGTACGGTTGTGT (SEQ ID NO:5565)
Target587	chr5:72677125-72677162	AGGTATAGAGGAGGTCGTTTTGTTTTGCGA (SEQ ID NO:5566), AAGGTATAGAGGAGGTCGTTTTGTTTTGCGA (SEQ ID NO:5567), AAAGGTATAGAGGAGGTCGTTTTGTTTTGCG (SEQ ID NO:5568), AAAGGTATAGAGGAGGTCGTTTTGTTTTGCGA (SEQ ID NO:5569), TAAAGGTATAGAGGAGGTCGTTTTGTTTTGCGA (SEQ ID NO:5570), GTGGGGGCGGGAGGTGTTTTGTTTTT (SEQ ID NO:5571), GGGGGCGGGAGGTGTTTTGTTTTT (SEQ ID NO:5572), TGGGGGCGGGAGGTGTTTTGTTTTT (SEQ ID NO:5573), GTGGGGGCGGGAGGTGTTTTGTTTT (SEQ ID NO:5574), AACGTTGAATTCGCGCGTTGGAGGC (SEQ ID NO:5575)
Target588	chr5:72677195-72677368	CGTCGGGGTTTAGGCGTTTGTGAAAGA (SEQ ID NO:5576), CGTCGGGGTTTAGGCGTTTGTGAAAGAT (SEQ ID NO:5577), GCGTTAGGTCGGTGTAGGAGGGCG (SEQ ID NO:5578), CGTCGGGGTTTAGGCGTTTGTGAAAG (SEQ ID NO:5579), CGTCGGGGTTTAGGCGTTTGTGAAAGATA (SEQ ID NO:5580), TGTCGGGTAGGGGTGGTAGGTCGAGT (SEQ ID NO:5581), ATGTCGGGTAGGGGTGGTAGGTCGAGT (SEQ ID NO:5582), TGGCGTTGGAGAGAGCGTTCTGGAT (SEQ ID NO:5583), GGTTTGGCGTTGGAGAGAGCGTTCTGTT (SEQ ID NO:5584), TTTGGCGTTGGAGAGAGCGTTCTGG (SEQ ID NO:5585)
Target589	chr5:72677377-72677662	AGGAGGGCGTTGGGTTTCGTTTGTTA (SEQ ID NO:5586), TAGGAGGGCGTTGGGTTTCGTTTGT (SEQ ID NO:5587), GTTAGGTCGGTGTAGGAGGGCGTTGGG (SEQ ID NO:5588), CGTTAGGTCGGTGTAGGAGGGCGTTGG (SEQ ID NO:5589), TGTAGGAGGGCGTTGGGTTTCGTTTGT (SEQ ID NO:5590), CGCGGTTTATTCGTCGGTTTCGGAT (SEQ ID NO:5591), GCGGCGTGGCGTTTTCGTTTCAATG (SEQ ID NO:5592), GATTTTCGTCGGTTTCGGATGGATGGGCG (SEQ ID NO:5593), GTTTGTGGCGCGGTTTATTCGTCG (SEQ ID NO:5594), TTCGAGACGGGTATGCGGAGGAGGAA (SEQ ID NO:5595)
Target590	chr5:72677710-72677737	TGTTGGGTTTCGGGTTTGGTTTAGAGCGT (SEQ ID NO:5596), GTTGGGTTTCGGGTTTGGTTTAGAGCGT (SEQ ID NO:5597), TGTTGGGTTTCGGGTTTGGTTTAGAGCG (SEQ ID NO:5598), CGTATTCGGGCGGGAGGTCGTACG (SEQ ID NO:5599), AGGGTTGTTGGGTTTCGGGTTTGGTTTA (SEQ ID NO:5600), TCGGGAGGTATTTGGTTGTTTCGGAGT (SEQ ID NO:5601), AGTCGGGAGGTATTTGGTTGTTTCGGA (SEQ ID NO:5602), CGGGTTTCGGAGGAGAGGTTTCGGGTG (SEQ ID NO:5603), GGGTTTCGGAGGAGAGGTTTCGGGTG (SEQ ID NO:5604), GGTTTCGGGTTTCGTTAGTCGGGAGG (SEQ ID NO:5605)

Figure 5 (Table 1)

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Target591	chr5:72677755-72677812	TGTTGGGTTCCGGGTTTGGTTTAGAGCGT (SEQ ID NO:5606), GTTGGGTTCCGGGTTTGGTTTAGAGCGT (SEQ ID NO:5607), TGTTGGGTTCCGGGTTTGGTTTAGAGCG (SEQ ID NO:5608), CGTATTCGGGCGGGAGGTCGTACG (SEQ ID NO:5609), AGGGTTGTTGGGTTCCGGGTTTGGTTTA (SEQ ID NO:5610), TCGGGAGGTATTTGGTTGGTTCCGAGT (SEQ ID NO:5611), AGTCGGGAGGTATTTGGTTGGTTCCGA (SEQ ID NO:5612), GGTTCCGGGTTTCGTATTAGTCGGGAGG (SEQ ID NO:5613), GGTTCCGGGTTTCGTATTAGTCGGGAGGT (SEQ ID NO:5614), GTCGGGAGGTATTTGGTTGGTTCCGAGT (SEQ ID NO:5615)
Target592	chr5:72715325-72715334	GGGTAGTGGGGAGGGGGCGTTAAGAGT (SEQ ID NO:5616), ATATTTGGTCGGGTAGTGGGGAGGGGG (SEQ ID NO:5617), TATTTGGTCGGGTAGTGGGGAGGGGGC (SEQ ID NO:5618), GGGTAGTGGGGAGGGGGCGTTAAGAGTA (SEQ ID NO:5619), GGGTAGTGGGGAGGGGGCGTTAAGAG (SEQ ID NO:5620), TCGTGTTAGTTGCGTTCGGTCTGTTT (SEQ ID NO:5621), TTCGTGGTTAGTTGCGTTCGGTCTGTTT (SEQ ID NO:5622), ATTCGTGGTTAGTTGCGTTCGGTCTGTT (SEQ ID NO:5623), CGTGGTTAGTTGCGTTCGGTCTGTTT (SEQ ID NO:5624), TCGTGGTTAGTTGCGTTCGGTCTGTTT (SEQ ID NO:5625)
Target593	chr5:72715408-72715469	TTGTTTGTGTTGGATTGTCGGGTCGGC (SEQ ID NO:5626), GCGGTTTGGTTTGTGTTGGATTGTCGGGT (SEQ ID NO:5627), GCGGTTTGGTTTGTGTTGGATTGTCGGG (SEQ ID NO:5628), AGCGGTTTGGTTTGTGTTGGATTGTCGGG (SEQ ID NO:5629), AGCGGTTTGGTTTGTGTTGGATTGTCGGGT (SEQ ID NO:5630), TTTCCGTGGTTTGGTTTTTCGCGCGG (SEQ ID NO:5631), GTTTCGTGGTTTGGTTTTTCGCGCGG (SEQ ID NO:5632), CGTTTCGTGGTTTGGTTTTTCGCGCG (SEQ ID NO:5633), GTTTCGTGGTTTGGTTTTTCGCGCG (SEQ ID NO:5634), CGTTTCGTGGTTTGGTTTTTCGCGC (SEQ ID NO:5635)
Target594	chr5:72715485-72715515	CGCGGAGGAGTTAGATTATCGGGGCGT (SEQ ID NO:5636), TCGCGGAGGAGTTAGATTATCGGGG (SEQ ID NO:5637), GTCGCGGAGGAGTTAGATTATCGGGG (SEQ ID NO:5638), GTCGCGGAGGAGTTAGATTATCGGG (SEQ ID NO:5639), CGCGGAGGAGTTAGATTATCGGGGCGTA (SEQ ID NO:5640)
Target595	chr5:76249401-76249527	AAGCGGAGTTGGTTGGGAGTAGTCG (SEQ ID NO:5641), GGTTGGGAGTAGTCGTATCGTCGCGT (SEQ ID NO:5642), TGTTGGGAGTAGTCGTATCGTCGCG (SEQ ID NO:5643), GCGGGAGTTGGTTGGGAGTAGTCGTA (SEQ ID NO:5644), TGAAGCGGAGTTGGTTGGGAGTAGT (SEQ ID NO:5645), TGGCGTTGAAGAGTAGGAAAGGATCGT (SEQ ID NO:5646), GGTGGCGTTGAAGAGTAGGAAAGGATCG (SEQ ID NO:5647), GGTGGCGTTGAAGAGTAGGAAAGGATCGT (SEQ ID NO:5648), TTGGCGTTGAAGAGTAGGAAAGGATCGT (SEQ ID NO:5649), AGGTTGGCGTTGAAGAGTAGGAAAGGATCG (SEQ ID NO:5650)
Target596	chr5:76249541-76249811	AGGTGGGATTTTGTGCGGGGGGTAGAG (SEQ ID NO:5651), AGGTTGGAAGTCGGGGCGTTGGGTATT (SEQ ID NO:5652), TTAGGTTGGAAGTCGGGGCGTTGGGT (SEQ ID NO:5653), AAGCGGAGTTGGTTGGGAGTAGTCG (SEQ ID NO:5654), AAGGTGGGATTTGTGCGGGGGGTAGA (SEQ ID NO:5655), CGGTGCGCGGTGAAGGTGAATTGGTTT (SEQ ID NO:5656), TCGGTGCGCGGTGAAGGTGAATTGGTT (SEQ ID NO:5657), TTGCGTAGTGTAGTTGCGGTGCGTGG (SEQ ID NO:5658), GTCGTCGCGCGGTGAAGGTGAATTGGT (SEQ ID NO:5659), GTCGTCGCGCGGTGAAGGTGAATTGG (SEQ ID NO:5660)
Target597	chr5:77140543-77140645	GCGTGGGAGAAATTGGAGCGGTTGTTT (SEQ ID NO:5661), TGGGAGAAATTGGAGCGGTTGTTCCGA (SEQ ID NO:5662), GGTGTGGGAGGTTGGTGTGGGAGTAC (SEQ ID NO:5663), CGTGGGAGAAATTGGAGCGGTTGTTT (SEQ ID NO:5664), GAGGTGGTGTGGGAGTACGGTGGTTGT (SEQ ID NO:5665), CGGGGCGTTCCGGTAGTCGTTTGT (SEQ ID NO:5666), AAAGTATTCGGGATTAGGGCGGGGCG (SEQ ID NO:5667), GAGGGGTTGGGGGTGAGTGGAATA (SEQ ID NO:5668), GTATTCGGGATTAGGGCGGGGCGTTC (SEQ ID NO:5669), AGGGGTTGGGGGTGAGTGGAATAA (SEQ ID NO:5670)
Target598	chr5:77140667-77140698	GCGTGGGAGAAATTGGAGCGGTTGTTT (SEQ ID NO:5671), TGGGAGAAATTGGAGCGGTTGTTCCGA (SEQ ID NO:5672), GGTGTGGGAGGTTGGTGTGGGAGTAC (SEQ ID NO:5673), CGTGGGAGAAATTGGAGCGGTTGTTT (SEQ ID NO:5674), GAGGTGGTGTGGGAGTACGGTGGTTGT (SEQ ID NO:5675), GTTTCGGGAGGGGCGGATGTGTTTTT (SEQ ID NO:5676), TTTCCGGGAGGGGCGGATGTGTTTTT (SEQ ID NO:5677), GAGGGGTTGGGGGTGAGTGGAATA (SEQ ID NO:5678), GTTTGGAATTAGGACGGCGGGAGGGG (SEQ ID NO:5679), GGTTTGAATTAGGACGGCGGGAGGGG (SEQ ID NO:5680)
Target599	chr5:77140757-77140827	AGGTTGTGCGGGAGGGGTATATCGCG (SEQ ID NO:5681), TAGGTTGTGCGGGAGGGGTATATCGC (SEQ ID NO:5682), GGTGTGCGGGAGGGGTATATCGCG (SEQ ID NO:5683), TCGGTTTGGTTGAGTCGCGTGGATGT (SEQ ID NO:5684), TAGGTTGTGCGGGAGGGGTATATCGCG (SEQ ID NO:5685), GACGACGGGTAGTGAGGGATGTTT (SEQ ID NO:5686), GAGGAGACGACGGGTAGTGAGGGAT (SEQ ID NO:5687), AGAGAGTGAAGGAGGAGACGACGGG (SEQ ID NO:5688), GTTTCGGGAGGGGCGGATGTGTTTTT (SEQ ID NO:5689), TTTCCGGGAGGGGCGGATGTGTTTTT (SEQ ID NO:5690)
Target600	chr5:77140834-77140914	TCGTGGGAGCGTTCCGAGTAGGTAGGG (SEQ ID NO:5691), GTGGGAGCGTTCCGAGTAGGTAGGGT (SEQ ID NO:5692), CGTGGGAGCGTTCCGAGTAGGTAGGGT (SEQ ID NO:5693), AGGTTGTGCGGGAGGGGTATATCGCG (SEQ ID NO:5694), CGTGGGAGCGTTCCGAGTAGGTAGGG (SEQ ID NO:5695), GACGACGGGTAGTGAGGGATGTTT (SEQ ID NO:5696), GAGGAGACGACGGGTAGTGAGGGAT (SEQ ID NO:5697), AGAGAGTGAAGGAGGAGACGACGGG (SEQ ID NO:5698), GGAAGGAGGAGACGACGGGTAGTGA (SEQ ID NO:5699), AAGGAGGAGACGACGGGTAGTGAGG (SEQ ID NO:5700)

Figure 5 (Table 1)

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Target601	chr5:115912075-115912099	GGGGCGGTGGGTAGGATTGCGTTTTT (SEQ ID NO:5701), TATAGATTGGGGTAGTGGGGGGCGCG (SEQ ID NO:5702), TAGTTTCGGGAGGGGGTTGGGGAGTGT (SEQ ID NO:5703), GTTAGTTTCGGGAGGGGGTTGGGGAGT (SEQ ID NO:5704), TTAGTTTCGGGAGGGGGTTGGGGAGTG (SEQ ID NO:5705), CGCGGGATTTTGGAGAGACGTTTTGGA (SEQ ID NO:5706), TCGCGGGATTTTGGAGAGACGTTTTGG (SEQ ID NO:5707), TCGCGGGATTTTGGAGAGACGTTTTGGA (SEQ ID NO:5708), CGCGGGATTTTGGAGAGACGTTTTGGAG (SEQ ID NO:5709), CGCGGGATTTTGGAGAGACGTTTTGGAGT (SEQ ID NO:5710)
Target602	chr5:115912143-115912177	GGGGCGGTGGGTAGGATTGCGTTTTT (SEQ ID NO:5711), GCGGGTTAGGAGAAGGATTTGGCGGT (SEQ ID NO:5712), TAGTTTCGGGAGGGGGTTGGGGAGTGT (SEQ ID NO:5713), GTTAGTTTCGGGAGGGGGTTGGGGAGT (SEQ ID NO:5714), TTAGTTTCGGGAGGGGGTTGGGGAGTG (SEQ ID NO:5715), AAGGGGTTGTAGTATCGCGTTTGGGGC (SEQ ID NO:5716), GAAGGGGTTGTAGTATCGCGTTTGGGGC (SEQ ID NO:5717), CGAAGGGGTTGTAGTATCGCGTTTGGGG (SEQ ID NO:5718), TCGAAGGGGTTGTAGTATCGCGTTTGGGG (SEQ ID NO:5719), AGGGGTTGTAGTATCGCGTTTGGGGC (SEQ ID NO:5720)
Target603	chr5:115912257-115912294	GCGGGGTTAGGAGAAGGATTTGGCGGT (SEQ ID NO:5721), CGCGGGGTTAGGAGAAGGATTTGGCGG (SEQ ID NO:5722), TTCGCGGGGTTAGGAGAAGGATTTGGC (SEQ ID NO:5723), CGGGGTTAGGAGAAGGATTTGGCGGT (SEQ ID NO:5724), CGCGGGGTTAGGAGAAGGATTTGGCG (SEQ ID NO:5725), CGGTTGGTGGAGCGCGGGATAAAAAA (SEQ ID NO:5726), AAGGGGTTGTAGTATCGCGTTTGGGGC (SEQ ID NO:5727), CGGTTGGTGGAGCGCGGGATAAAAAAT (SEQ ID NO:5728), CGGTTGGTGGAGCGCGGGATAAAAAA (SEQ ID NO:5729), GAAGGGGTTGTAGTATCGCGTTTGGGGC (SEQ ID NO:5730)
Target604	chr5:115912301-115912318	TTTTGGTTCGTTGCGTTTTAGGCG (SEQ ID NO:5731), AGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5732), TTTTGGTTCGTTGCGTTTTAGGCG (SEQ ID NO:5733), GAGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5734), TGAGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5735), CGGTTGGTGGAGCGCGGGATAAAAAA (SEQ ID NO:5736), CGGTTGGTGGAGCGCGGGATAAAAAAT (SEQ ID NO:5737), CGGTTGGTGGAGCGCGGGATAAAAAA (SEQ ID NO:5738), GGTGGTGGAGCGCGGGATAAAAAAT (SEQ ID NO:5739), CGGTTGGTGGAGCGCGGGATAAAAAAT (SEQ ID NO:5740)
Target605	chr5:115912332-115912348	TTTTGGTTCGTTGCGTTTTAGGCG (SEQ ID NO:5741), AGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5742), TTTTGGTTCGTTGCGTTTTAGGCG (SEQ ID NO:5743), GAGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5744), TGAGTTGGTTTTTGGTTCGTTGCGT (SEQ ID NO:5745), ATTAGTATGTAATCGGCGCGGGGAG (SEQ ID NO:5746), AATTAGTATGTAATCGGCGCGGGGAG (SEQ ID NO:5747), AATTAGTATGTAATCGGCGCGGGGAG (SEQ ID NO:5748), TTAGTATGTAATCGGCGCGGGGAG (SEQ ID NO:5749), ATTAGTATGTAATCGGCGCGGGGAG (SEQ ID NO:5750)
Target606	chr5:134374470-134374498	TGGGGTTTTGTTTTGTGCGGGAGAA (SEQ ID NO:5751), TTGGGGTTTTGTTTTGTGCGGGAGA (SEQ ID NO:5752), CGGTTTTGGGGTTTTGTTTTGTGCGGGG (SEQ ID NO:5753), CGGTTTTGGGGTTTTGTTTTGTGCGGG (SEQ ID NO:5754), GGTTTGGGGTTTTGTTTTGTGCGGGG (SEQ ID NO:5755), GGTTTGGTTGTTGACGTAGGGTTTCGG (SEQ ID NO:5756), TTGGTTGTTGACGTAGGGTTTCGGAGT (SEQ ID NO:5757), AGGTTTGGTTGTTGACGTAGGGTTTCGG (SEQ ID NO:5758), GGTTTGGTTGTTGACGTAGGGTTTCGGA (SEQ ID NO:5759), AGGTTTGGTTGTTGACGTAGGGTTTCGGA (SEQ ID NO:5760)
Target607	chr5:134374533-134374555	GGGAGAAGTCGCGGGAATGTTTTATTGG (SEQ ID NO:5761), GGGAGAAGTCGCGGGAATGTTTTATTGGACG (SEQ ID NO:5762), GGGAGAAGTCGCGGGAATGTTTTATTGGA (SEQ ID NO:5763), AGAAGTCGCGGGAATGTTTTATTGGACG (SEQ ID NO:5764), GGAGAAGTCGCGGGAATGTTTTATTGGACG (SEQ ID NO:5765), CGTTTCGTCGTAGCGTTTCGGAGGTGTT (SEQ ID NO:5766), CGTTTCGTCGTAGCGTTTCGGAGGTGTT (SEQ ID NO:5767), CGTTTCGTCGTAGCGTTTCGGAGGTGT (SEQ ID NO:5768), GTTTCGTCGTAGCGTTTCGGAGGTGTT (SEQ ID NO:5769), CGTTTCGTCGTAGCGTTTCGGAGGTGTTT (SEQ ID NO:5770)
Target608	chr5:134374644-134374672	GGTTGGGGGTATTTTCGAGCGTTGCGG (SEQ ID NO:5771), GGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5772), TGGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5773), GTTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5774), TTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5775), CGTTCGTTTCGTTTCGTTTCGGGTAG (SEQ ID NO:5776), CGTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5777), GTTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5778), CGTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5779), CGTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5780)
Target609	chr5:134374691-134374699	GGTTGGGGGTATTTTCGAGCGTTGCGG (SEQ ID NO:5781), GGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5782), TGGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5783), GTTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5784), TTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5785), CGTTCGTTTCGTTTCGTTTCGGGTAG (SEQ ID NO:5786), CGTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5787), GTTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5788), TGGTTTCGGGATTTTTCGTTTCGTTTCGCG (SEQ ID NO:5789), CGTTCGTTTCGTTTCGTTTCGGGTAGT (SEQ ID NO:5790)

Figure 5 (Table 1)

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Target610	chr5:134374718-134374801	GGTTGGGGGTATTTTCGAGCGTTGCGG (SEQ ID NO:5791), GGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5792), TGGGTTGGGGGTATTTTCGAGCGTTGCG (SEQ ID NO:5793), GTTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5794), TTGGGGGTATTTTCGAGCGTTGCGGC (SEQ ID NO:5795), TGGGTAGGAGAGAGGGTCGTTCTGTT (SEQ ID NO:5796), AGTGGGTAGGAGAGAGGGTCGTTCTGTT (SEQ ID NO:5797), AAGTGGGTAGGAGAGAGGGTCGTTCTGTT (SEQ ID NO:5798), GGAGAAGTGGGTAGGAGAGAGGGTCGTTCTGTT (SEQ ID NO:5799), GTGGGTAGGAGAGAGGGTCGTTCTGTT (SEQ ID NO:5800)
Target611	chr5:134827300-134827319	TGGGGGACGTAATTTGTTTTTCGAGAGGC (SEQ ID NO:5801), GGGGGACGTAATTTGTTTTTCGAGAGGC (SEQ ID NO:5802), TTGGGGGACGTAATTTGTTTTTCGAGAGGC (SEQ ID NO:5803), GGTGGGGGACGTAATTTGTTTTTCGAGAGGC (SEQ ID NO:5804), GTTGGGGGACGTAATTTGTTTTTCGAGAGGC (SEQ ID NO:5805), GCGTTCGTTCTGTTTGTATTTGTTTGAAGGC (SEQ ID NO:5806), CGCGTTCGTTCTGTTTGTATTTGTTTGAAGGC (SEQ ID NO:5807), GCGTTCGTTCTGTTTGTATTTGTTTGAAGGC (SEQ ID NO:5808), GCGTTCGTTCTGTTTGTATTTGTTTGAAGGC (SEQ ID NO:5809), CGTTCGTTCTGTTTGTATTTGTTTGAAGGC (SEQ ID NO:5810)
Target612	chr5:134827338-134827347	TTTAGGTAGGTGTAGGTGCGGGCGGGC (SEQ ID NO:5811), CGTTTTAGGTAGGTGTAGGTGCGGGCGGG (SEQ ID NO:5812), GTTTTAGGTAGGTGTAGGTGCGGGCGGGC (SEQ ID NO:5813), TTTAGGTAGGTGTAGGTGCGGGCGGGC (SEQ ID NO:5814), TTTAGGTAGGTGTAGGTGCGGGCGGGC (SEQ ID NO:5815), AGCGTCGTTTTAGAGATAAATAGATGTGCGGT (SEQ ID NO:5816), AGCGTCGTTTTAGAGATAAATAGATGTGCGGT (SEQ ID NO:5817), TAGCGTCGTTTTAGAGATAAATAGATGTGCGGT (SEQ ID NO:5818), GCGTCGTTTTAGAGATAAATAGATGTGCGGT (SEQ ID NO:5819), AGCGTCGTTTTAGAGATAAATAGATGTGCGGT (SEQ ID NO:5820)
Target613	chr5:134827413-134827494	GGGGCGGGGTAGGGGCGTTATTTTTT (SEQ ID NO:5821), TTTTAGGTAGGTGTAGGTGCGGGCGGGC (SEQ ID NO:5822), TGGGGCGGGGTAGGGGCGTTATTTTT (SEQ ID NO:5823), GGGGGCGGGGTAGGGGCGTTATTTTTGA (SEQ ID NO:5824), GTGGGGCGGGGTAGGGGCGTTATTTTT (SEQ ID NO:5825), TATTTAGACGGAGGAGGGGCGGGAGGT (SEQ ID NO:5826), AGGAGGGGCGGGAGGTTTTGTTTCGA (SEQ ID NO:5827), GAGGAGGGGCGGGAGGTTTTGTTTTCG (SEQ ID NO:5828), GCGTTTTAGGATGGGGTTCGTAGTGGG (SEQ ID NO:5829), TGGGGTGCCTAGTGGGTAGTTAAGCGT (SEQ ID NO:5830)
Target614	chr5:134870741-134870766	AAGGAGAAAATAGGGTCGTCGGGGCGG (SEQ ID NO:5831), AAAATAGGGTCGTCGGGGCGGTAGGTG (SEQ ID NO:5832), GAAAATAGGGTCGTCGGGGCGGTAGGT (SEQ ID NO:5833), AGAAAATAGGGTCGTCGGGGCGGTAGG (SEQ ID NO:5834), GGAGAAAATAGGGTCGTCGGGGCGGTAGG (SEQ ID NO:5835), GCGACGCGGAGTTTTGGGGTTTAGGTG (SEQ ID NO:5836), AGCGACGCGGAGTTTTGGGGTTTAGGT (SEQ ID NO:5837), CGCGGAGTTTTGGGGTTTAGGTGTCGT (SEQ ID NO:5838), ACGCGGAGTTTTGGGGTTTAGGTGTCG (SEQ ID NO:5839), CGACGCGGAGTTTTGGGGTTTAGGTGTT (SEQ ID NO:5840)
Target615	chr5:134870796-134870808	AAGGAGAAAATAGGGTCGTCGGGGCGG (SEQ ID NO:5841), AAAATAGGGTCGTCGGGGCGGTAGGTG (SEQ ID NO:5842), TCGGGGCGGTAGGTGAAGTTTTCGGAG (SEQ ID NO:5843), TTCGGAGGCGGTTGGGTTATTGGGGTT (SEQ ID NO:5844), TTCGGAGGCGGTTGGGTTATTGGGGT (SEQ ID NO:5845), GCGACGCGGAGTTTTGGGGTTTAGGTG (SEQ ID NO:5846), AGCGACGCGGAGTTTTGGGGTTTAGGT (SEQ ID NO:5847), CGGATTAAGGGTTGTTTCGGAGGCGGTG (SEQ ID NO:5848), CGCGGAGTTTTGGGGTTTAGGTGTCGT (SEQ ID NO:5849), ACGCGGAGTTTTGGGGTTTAGGTGTCG (SEQ ID NO:5850)
Target616	chr5:134870832-134870936	AAGGAGAAAATAGGGTCGTCGGGGCGG (SEQ ID NO:5851), AAAATAGGGTCGTCGGGGCGGTAGGTG (SEQ ID NO:5852), TTCGGAGGCGGTTGGGTTATTGGGGT (SEQ ID NO:5853), TTCGGAGGCGGTTGGGTTATTGGGGT (SEQ ID NO:5854), GAAAATAGGGTCGTCGGGGCGGTAGGT (SEQ ID NO:5855), CGGATTAAGGGTTGTTTCGGAGGCGGTG (SEQ ID NO:5856), TTGGCGGATTAAGGGTTGTTTCGGAGGC (SEQ ID NO:5857), TGGCGATTAAGGGTTGTTTCGGAGGCG (SEQ ID NO:5858), GCGGATTAAGGGTTGTTTCGGAGGCGGT (SEQ ID NO:5859), GGTGTTTCGGAGCGTTTTTTGTCGTCG (SEQ ID NO:5860)
Target617	chr5:134870972-134870983	TTTGGGGGATCGGGTAGGTAGGGGACG (SEQ ID NO:5861), TGGGGGATCGGGTAGGTAGGGGACGTA (SEQ ID NO:5862), GGGGGATCGGGTAGGTAGGGGACGTA (SEQ ID NO:5863), TTGGGGGATCGGGTAGGTAGGGGACG (SEQ ID NO:5864), TTGGGGGATCGGGTAGGTAGGGGACGT (SEQ ID NO:5865), TCGTATGTATAATTTGAACGCGTTTTGGACG (SEQ ID NO:5866), ATCGTATGTATAATTTGAACGCGTTTTGGACG (SEQ ID NO:5867), AATCGTATGTATAATTTGAACGCGTTTTGGACG (SEQ ID NO:5868), TAATCGTATGTATAATTTGAACGCGTTTTGGACG (SEQ ID NO:5869), CGTAATCGTATGTATAATTTGAACGCGTTTTGGA (SEQ ID NO:5870)
Target618	chr5:134871011-134871140	TTGGTGAGTTTGGTGTCGTCGGGGAAC (SEQ ID NO:5871), TTTGGTGAGTTTGGTGTCGTCGGGGAAC (SEQ ID NO:5872), TTTGGTGAGTTTGGTGTCGTCGGGGAAC (SEQ ID NO:5873), TTTGGTGAGTTTGGTGTCGTCGGGGAAC (SEQ ID NO:5874), TGGTGAGTTTGGTGTCGTCGGGGAAC (SEQ ID NO:5875), CGTCGGTTCGTAGGGGCGGTTTAATA (SEQ ID NO:5876), TATAGGACGACGAGTAGGAGAGGCGGC (SEQ ID NO:5877), CGTCGGTTCGTAGGGGCGGTTTAAT (SEQ ID NO:5878), GTATAGGACGACGAGTAGGAGAGGCGGC (SEQ ID NO:5879), GTTGTATTCGTTGCGTAGGAGTCGCG (SEQ ID NO:5880)

Figure 5 (Table 1)

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Target619	chr5:134880147-134880156	GGGAGGCGGAGGTTGTAGTGAGTCGAG (SEQ ID NO:5881), TTCGGGAGGCGGAGGTTGTAGTGAGTC (SEQ ID NO:5882), CGTTTGAATTCGGGAGGCGGAGGTTGT (SEQ ID NO:5883), TCGTTTGAATTCGGGAGGCGGAGGTTGT (SEQ ID NO:5884), ATTCGGGAGGCGGAGGTTGTAGTGAGT (SEQ ID NO:5885), GGGGAGGGGCGGGGTTAGAATGTTTT (SEQ ID NO:5886), GGGAGGGGCGGGGTTAGAATGTTTT (SEQ ID NO:5887), GGGGAGGGGCGGGGTTAGAATGTTT (SEQ ID NO:5888), GGGGAGGGGCGGGGTTAGAATGTTTT (SEQ ID NO:5889), CGGGGAGGGGCGGGGTTAGAATGTTT (SEQ ID NO:5890)
Target620	chr5:140800769-140800814	TCGGTTTAGAGTTTGTATGGCGAATCGGT (SEQ ID NO:5891), CGGTTTAGAGTTTGTATGGCGAATCGGTT (SEQ ID NO:5892), CGCGGAATATCGGTTTAGAGTTTGTATGGCG (SEQ ID NO:5893), TCGGTTTAGAGTTTGTATGGCGAATCGGTT (SEQ ID NO:5894), ATCGGTTTAGAGTTTGTATGGCGAATCGGT (SEQ ID NO:5895), CGCGTTGTAGTCGATTGTTATGGTAGGT (SEQ ID NO:5896), TCGCGTTGTAGTCGATTGTTATGGTAGG (SEQ ID NO:5897), TCGCGTTGTAGTCGATTGTTATGGTAGGT (SEQ ID NO:5898), CGCGTTGTAGTCGATTGTTATGGTAGGTT (SEQ ID NO:5899), TCGCGTTGTAGTCGATTGTTATGGTAGGTT (SEQ ID NO:5900)
Target621	chr5:140800815-140800829	TCGGTTTAGAGTTTGTATGGCGAATCGGT (SEQ ID NO:5901), CGGTTTAGAGTTTGTATGGCGAATCGGTT (SEQ ID NO:5902), CGCGGAATATCGGTTTAGAGTTTGTATGGCG (SEQ ID NO:5903), TCGGTTTAGAGTTTGTATGGCGAATCGGTT (SEQ ID NO:5904), ATCGGTTTAGAGTTTGTATGGCGAATCGGT (SEQ ID NO:5905), CGGATTGTTTGGTTCGGAATTTTCGTAGCG (SEQ ID NO:5906), CGGATTGTTTGGTTCGGAATTTTCGTAGCGT (SEQ ID NO:5907), TCGGATTGTTTGGTTCGGAATTTTCGTAGCG (SEQ ID NO:5908), TCGGATTGTTTGGTTCGGAATTTTCGTAGCGT (SEQ ID NO:5909), GGATTGTTTGGTTCGGAATTTTCGTAGCGT (SEQ ID NO:5910)
Target622	chr5:140800862-140800930	CGTTGCGGGGTTTCGGGTTAGGTAGA (SEQ ID NO:5911), GACGTTGCGGGGTTTCGGGTTAGGTA (SEQ ID NO:5912), ACGTTGCGGGGTTTCGGGTTAGGTAG (SEQ ID NO:5913), TTTTGGGGACGTTGCGGGGTTTCG (SEQ ID NO:5914), ACGTTGCGGGGTTTCGGGTTAGGTA (SEQ ID NO:5915), CGCGTTTCGTTAGTTTCGGGGTTTAGT (SEQ ID NO:5916), CGCGTTTCGTTAGTTTCGGGGTTTAGTT (SEQ ID NO:5917), CGCGTTTCGTTAGTTTCGGGGTTTAGTTT (SEQ ID NO:5918), CGCGTTTCGTTAGTTTCGGGGTTTAGTTTT (SEQ ID NO:5919), CGCGTTTCGTTAGTTTCGGGGTTTAGTTTTA (SEQ ID NO:5920)
Target623	chr5:140800981-140800996	CGTTGCGGGGTTTCGGGTTAGGTAGA (SEQ ID NO:5921), GACGTTGCGGGGTTTCGGGTTAGGTA (SEQ ID NO:5922), ACGTTGCGGGGTTTCGGGTTAGGTAG (SEQ ID NO:5923), GGGTTGGAGTTTCGGGAGTTGGCGAAG (SEQ ID NO:5924), TTGGGGTTGGAGTTTCGGGAGTTGGC (SEQ ID NO:5925), ATTTGTTGTCGTGATTAAGTTGTCGTTTCGC (SEQ ID NO:5926), TCGGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5927), TCGGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5928), TTCGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5929), TTTATTTGTTGTCGTGATTAAGTTGTCGTTTCGC (SEQ ID NO:5930)
Target624	chr5:140801033-140801091	GGGTTGGAGTTTCGGGAGTTGGCGAAG (SEQ ID NO:5931), TTGGGGTTGGAGTTTCGGGAGTTGGC (SEQ ID NO:5932), GGGGTTGGAGTTTCGGGAGTTGGCGA (SEQ ID NO:5933), TTGGGGTTGGAGTTTCGGGAGTTGGCG (SEQ ID NO:5934), GGGGTTGGAGTTTCGGGAGTTGGCGA (SEQ ID NO:5935), TCGGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5936), TCGGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5937), TTCGTTTATTTGTTGTCGTGATTAAGTTGTCGT (SEQ ID NO:5938)
Target625	chr5:140892549-140892926	AGGTGGGTGTTGGAAGAAGGGCGGAAT (SEQ ID NO:5939), GGTGGGATTGAGTGCGCGTGTTAG (SEQ ID NO:5940), ATCGGTTGTTGTTGGGGTGGGGATTT (SEQ ID NO:5941), AGGTAGAAGAGGAGATTCGCGCGGG (SEQ ID NO:5942), GAGGTGGGTGTTGGAAGAAGGGCGGAA (SEQ ID NO:5943), GGGGGTGCGGGGGTAAAGGAGAGTTA (SEQ ID NO:5944), AAGTTTTTCGGGGCGTTTCGGGTAGGT (SEQ ID NO:5945), GGGGGTGCGGGGGTAAAGGAGAGTTT (SEQ ID NO:5946), TGGGGGTGCGGGGGTAAAGGAGAGTTT (SEQ ID NO:5947), GGGGGTGCGGGGGTAAAGGAGAGTTTAT (SEQ ID NO:5948)
Target626	chr5:140892953-140893456	GAGTGGGAGGGAATGCGGGAGGTGATT (SEQ ID NO:5949), AGGTAGAAGAGGAGATTCGCGCGGG (SEQ ID NO:5950), AGCGTTTCGGAGGGTTTACGGGAGGA (SEQ ID NO:5951), AGTGGGAGGGAATGCGGGAGGTGATT (SEQ ID NO:5952), GCGTTTCGGAGGGTTTACGGGAGGAG (SEQ ID NO:5953), CGGGGAGATGGGAGAGTAGGCGAGTGA (SEQ ID NO:5954), GGGGGTGCGGGGGTAAAGGAGAGTTA (SEQ ID NO:5955), ATTTTAGGTAGCGGGGGTGGGGGTGC (SEQ ID NO:5956), AGGGAGGGGAGTTGAGTTGCGATGGA (SEQ ID NO:5957), AAGGAGGGGAGGGGAGTTGAGTTGCGA (SEQ ID NO:5958)
Target627	chr5:149979264-149979770	GATGGAGGGCGAGAGGGGATTGGGAG (SEQ ID NO:5959), TGTATTGTGAGTTGGGGTGCGGCGGT (SEQ ID NO:5960), GGAGGGCGAGAGGGGATTGGGAGTTG (SEQ ID NO:5961), GTATTGTGAGTTGGGGTGCGGCGTG (SEQ ID NO:5962), AGATGGAGGGCGAGAGGGATTGGGA (SEQ ID NO:5963), GGGGTGACGTTAGTAGGGTTGGGAATGGG (SEQ ID NO:5964), GGGGTGACGTTAGTAGGGTTGGGAATGGG (SEQ ID NO:5965), GGTGACGTTAGTAGGGTTGGGAATGGG (SEQ ID NO:5966), GGTGACGTTAGTAGGGTTGGGAATGGG (SEQ ID NO:5967), GGGGTGACGTTAGTAGGGTTGGGAATGGG (SEQ ID NO:5968)

Figure 5 (Table 1)

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Target628	chr5:153862183-153862194	GGTTTTTGAAGTTTAGGTCGCGGCGT (SEQ ID NO:5969), AGGTTTTTGAAGTTTAGGTCGCGGCGT (SEQ ID NO:5970), AGGTTTTTGAAGTTTAGGTCGCGGCG (SEQ ID NO:5971), GGTTTTTGAAGTTTAGGTCGCGGCGTT (SEQ ID NO:5972), TGGACGTTTTGTAGTGGTGGGGTTTCGT (SEQ ID NO:5973), GCGGGGATTGTTCTGTGGCGTTAAGGTT (SEQ ID NO:5974), GTGCGGGGATTGTTCTGTGGCGTTAAGG (SEQ ID NO:5975), GGTGCGGGGATTGTTCTGTGGCGTTAAG (SEQ ID NO:5976), TAAGGTTACGGGATTGCGGCGGGAGAA (SEQ ID NO:5977), TTAAGGTTACGGGATTGCGGCGGGAGA (SEQ ID NO:5978)
Target629	chr5:153862230-153862252	GGTTTTTGAAGTTTAGGTCGCGGCGT (SEQ ID NO:5979), AGGTTTTTGAAGTTTAGGTCGCGGCGT (SEQ ID NO:5980), AGGTTTTTGAAGTTTAGGTCGCGGCG (SEQ ID NO:5981), GGTTTTTGAAGTTTAGGTCGCGGCGTT (SEQ ID NO:5982), AGGTTTTTGAAGTTTAGGTCGCGGCGTT (SEQ ID NO:5983), AGATAAGGGGTTCTGTGCGGGGATTGT (SEQ ID NO:5984), TAAGGGGTTCTGTGCGGGGATTGTTCTG (SEQ ID NO:5985), ATAAGGGGTTCTGTGCGGGGATTGTTCT (SEQ ID NO:5986), GATAAGGGGTTCTGTGCGGGGATTGTT (SEQ ID NO:5987), AGATAAGGGGTTCTGTGCGGGGATTGTT (SEQ ID NO:5988)
Target630	chr5:153862357-153862422	TTTCGTTGTTTTGGGGAATCGCGTCGC (SEQ ID NO:5989), TTTTCGTTGTTTTGGGGAATCGCGTCGC (SEQ ID NO:5990), TTCGTTGTTTTGGGGAATCGCGTCGC (SEQ ID NO:5991), TTTTCGTTGTTTTGGGGAATCGCGTCGC (SEQ ID NO:5992), ATTTTCGTTGTTTTGGGGAATCGCGTCGC (SEQ ID NO:5993), GCGTTTAAGTTGCGGGGTAAATGGTTCTG (SEQ ID NO:5994), GGGGTAAATGGTTCTGCGGGGTTGATTATGGC (SEQ ID NO:5995), GGGTAAATGGTTCTGCGGGGTTGATTATGGC (SEQ ID NO:5996), GGGGTAAATGGTTCTGCGGGGTTGATT (SEQ ID NO:5997), GGGGTAAATGGTTCTGCGGGGTTGATTATGG (SEQ ID NO:5998)
Target631	chr5:168307062-168307160	AGGGGAATCGGGGATAGGAGGAGGTGG (SEQ ID NO:5999), GGGGAATCGGGGATAGGAGGAGGTGGT (SEQ ID NO:6000), GGAGGTGGTAGAAGGAAAGGTCGGGGT (SEQ ID NO:6001), GGAAGGGGAATCGGGGATAGGAGGAGGT (SEQ ID NO:6002), TGGAAGGGGAATCGGGGATAGGAGGAGG (SEQ ID NO:6003)
Target632	chr5:172672831-172672843	GGGGTTTTTCGTTCCGGGGTTAGGCGT (SEQ ID NO:6004), TGGGGTTTTTCGTTCCGGGGTTAGGCG (SEQ ID NO:6005), TTGGGGTTTTTCGTTCCGGGGTTAGGCG (SEQ ID NO:6006), TGGGGTTTTTCGTTCCGGGGTTAGGCGT (SEQ ID NO:6007), GGGGGTTTTTCGTTCCGGGGTTAGGCGTA (SEQ ID NO:6008), TTTCCGATTTTAAAGGGGCGGCGGGG (SEQ ID NO:6009), CCGATTTTAAAGGGGCGGCGGGGTTT (SEQ ID NO:6010), TCGGATTTTAAAGGGGCGGCGGGGTT (SEQ ID NO:6011), TTCGATTTTAAAGGGGCGGCGGGGTT (SEQ ID NO:6012), TTTTCGATTTTAAAGGGGCGGCGGGG (SEQ ID NO:6013)
Target633	chr5:172672959-172672971	AGGGTGCGGGGGTTTAGAATTCGAGG (SEQ ID NO:6014), TAGGGGTTCCGGGAGGTTGAGAGAAGG (SEQ ID NO:6015), GAAGGGGCGGGAGTTAGGATGAGGGT (SEQ ID NO:6016), AGAAGGGGCGGGAGTTAGGATGAGGGT (SEQ ID NO:6017), GAGTTAGGATGAGGGTTCGGGGGGTTT (SEQ ID NO:6018)
Target634	chr5:172673096-172673103	AGAGGATAGAGGTTAGGACGGTGGCGA (SEQ ID NO:6019), GAGGATAGAGGTTAGGACGGTGGCGAA (SEQ ID NO:6020), AGAGGATAGAGGTTAGGACGGTGGCGAA (SEQ ID NO:6021), AGGATAGAGGTTAGGACGGTGGCGAAA (SEQ ID NO:6022), GAGGATAGAGGTTAGGACGGTGGCGAAA (SEQ ID NO:6023)
Target635	chr5:177411494-177411511	GGTCGGGTTGAGTCGGGTTGGTTTCGA (SEQ ID NO:6024), TCGGTCGGGTTGAGTCGGGTTGGTTTC (SEQ ID NO:6025), GTCGGTCGGGTTGAGTCGGGTTGGTTT (SEQ ID NO:6026), TCGGTCGGGTTGAGTCGGGTTGGTTT (SEQ ID NO:6027), CGGTCGGGTTGAGTCGGGTTGGTTTCG (SEQ ID NO:6028), AGTCGAGGGTAGGGTTTTGTTGTGCGT (SEQ ID NO:6029), GGAGTCGAGGGTAGGGTTTTGTTGTGCG (SEQ ID NO:6030), GGAGTCGAGGGTAGGGTTTTGTTGTGCGT (SEQ ID NO:6031), GAGTCGAGGGTAGGGTTTTGTTGTGCGT (SEQ ID NO:6032), GAGTCGAGGGTAGGGTTTTGTTGTGCG (SEQ ID NO:6033)
Target636	chr5:177411600-177411615	GGCGCGGAGATGGGTTAGAGTTCGGT (SEQ ID NO:6034), GGTGAGGGGGTAAAGTCGGTTCGGAGT (SEQ ID NO:6035), AGGTGAGGGGGTAAAGTCGGTTCGGAG (SEQ ID NO:6036), GACGGCGCGGAGATGGGTTAGAGTTCG (SEQ ID NO:6037), CGACGGCGCGGAGATGGGTTAGAGTTC (SEQ ID NO:6038), GTCGAGGGTTGTTGGAATTCGCGGGG (SEQ ID NO:6039), CGAGGGTTGTTGGAATTCGCGGGGTT (SEQ ID NO:6040), CGTCGAGGGTTGTTGGAATTCGCGGG (SEQ ID NO:6041), TCGAGGGTTGTTGGAATTCGCGGGGTT (SEQ ID NO:6042), CGAGGGTTGTTGGAATTCGCGGGGTTT (SEQ ID NO:6043)
Target637	chr5:177411654-177411797	AAGTCGGTTCGGAGTTTTCGGGGGTGT (SEQ ID NO:6044), CGGTTCGGAGTTTTCGGGGGTGTAGGA (SEQ ID NO:6045), TCGGTTTCGGAGTTTTCGGGGGTGTAGG (SEQ ID NO:6046), TAGAGGGTTTTCGTTCTGAGGGGCGCG (SEQ ID NO:6047), TTTTCGGGGGTGTAGGAGGGGTTTCGC (SEQ ID NO:6048), TGAGTGTTTCGGTCGGGCGTAGAGTTT (SEQ ID NO:6049), TTGAGTGTTTCGGTCGGGCGTAGAGTT (SEQ ID NO:6050), TTTGAGTGTTTCGGTCGGGCGTAGAGT (SEQ ID NO:6051), GGAGTTTTGAGTGTTTCGGTCGGGCGT (SEQ ID NO:6052), TTCGGTCGGGCGTAGAGTTTATAGGGGA (SEQ ID NO:6053)
Target638	chr5:177411807-177411831	TAGAGGGTTTTCGTTCTGAGGGGCGCG (SEQ ID NO:6054), AGGGTTTTTCGTTCTGAGGGGCGCGTTC (SEQ ID NO:6055), GAGGGTTTTTCGTTCTGAGGGGCGCGT (SEQ ID NO:6056), TTAGAGGGTTTTTCGTTCTGAGGGGCGCG (SEQ ID NO:6057), GGGTTTTTCGTTCTGAGGGGCGCGTTC (SEQ ID NO:6058), TGAGTGTTTCGGTCGGGCGTAGAGTTT (SEQ ID NO:6059), TTGAGTGTTTCGGTCGGGCGTAGAGTT (SEQ ID NO:6060), TTTGAGTGTTTCGGTCGGGCGTAGAGT (SEQ ID NO:6061), ATTTGGAGTTCAAGTGGGTGTGCGGG (SEQ ID NO:6062), GGAGTTTTGAGTGTTTCGGTCGGGCGT (SEQ ID NO:6063)

Figure 5 (Table 1)

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Target639	chr5:178003699-178003824	GGGTCGTGGAGGGTTTCGGGTTGTTTT (SEQ ID NO:6064), GGGGTCGTGGAGGGTTTCGGGTTGTTT (SEQ ID NO:6065), TCGTCGCGTCGGTTTTTCGGGTTTGT (SEQ ID NO:6066), GGGTCGTGGAGGGTTTCGGGTTGTTTT (SEQ ID NO:6067), GGGGTCGTGGAGGGTTTCGGGTTGTT (SEQ ID NO:6068), CGTCGGGGGATTTCGTTGGGGTTTTTCG (SEQ ID NO:6069), GCGGAGGTTTGCGTTTCGGAGGATAG (SEQ ID NO:6070), GGCGGAGGTTTGCGGTTTCGGAGGATA (SEQ ID NO:6071), GTCGGGGGATTTCGTTGGGGTTTTTCGT (SEQ ID NO:6072), GTCGTCGGGGGATTTCGTTGGGGTTTTT (SEQ ID NO:6073)
Target640	chr5:178003825-178004122	CGGGAGGTCGTTTGGGTTCGGTTTTGG (SEQ ID NO:6074), GGGAGGTCGTTTGGGTTCGGTTTTGGA (SEQ ID NO:6075), CGGGAGGTCGTTTGGGTTCGGTTTTGGA (SEQ ID NO:6076), GGGAGGTCGTTTGGGTTCGGTTTTGGAT (SEQ ID NO:6077), GATCGTCGCGTCGGTTTTTCGGTTTTG (SEQ ID NO:6078), CGATAGGGAGGATTTCGGCGGGGAGTT (SEQ ID NO:6079), GGGTTTTGGGAGTTGGGTTGAGCGAGG (SEQ ID NO:6080), TGGTTTTGGGAGTTGGGTTGAGCGAG (SEQ ID NO:6081), GGGGTTTCGGTTTATAGGGCGCGGAGG (SEQ ID NO:6082), GCGGGGTTGATTTCGGTAGAGCGGTTAG (SEQ ID NO:6083)
Target641	chr5:179894247-179894340	AAGGTCGGGGCGGAGTGGGTTGTTTAA (SEQ ID NO:6084), GAAGTTAGAAGGTCGGGGCGGAGTGGG (SEQ ID NO:6085), CGGGAAGTTTTGGGTAGGCGTTCGTGG (SEQ ID NO:6086), GGTGCGGGCGGAGTGGGTTGTTAAGA (SEQ ID NO:6087), GAAGGTCGGGGCGGAGTGGGTTGTTA (SEQ ID NO:6088), ACGGGCGTTTGTATTAGGGTTTTTCGGT (SEQ ID NO:6089), ACGGGCGTTTGTATTAGGGTTTTTCGGT (SEQ ID NO:6090), CGGGCGTTTGTATTAGGGTTTTTCGGT (SEQ ID NO:6091), CGGGCGTTTGTATTAGGGTTTTTCGGT (SEQ ID NO:6092), CGGGCGTTTGTATTAGGGTTTTTCGGT (SEQ ID NO:6093)
Target642	chr5:180486301-180486314	CGGGGTTTAGATCGTTTCGGGCGGGTA (SEQ ID NO:6094), GGAGGTGTCGGAGGATGGTAAGAGCGT (SEQ ID NO:6095), TGGAGGTGTCGGAGGATGGTAAGAGCG (SEQ ID NO:6096), AGGTGTCGGAGGATGGTAAGAGCGTGT (SEQ ID NO:6097), CGGGGTTTAGATCGTTTCGGGCGGGTAT (SEQ ID NO:6098), GAGAATCGTTGCGGGTGGTTAGGCGTC (SEQ ID NO:6099), AGAATCGTTGCGGGTGGTTAGGCGTCG (SEQ ID NO:6100), GAATCGTTGCGGGTGGTTAGGCGTCG (SEQ ID NO:6101), GAATCGTTGCGGGTGGTTAGGCGTCG (SEQ ID NO:6102), AGAATCGTTGCGGGTGGTTAGGCGTCG (SEQ ID NO:6103)
Target643	chr5:180486321-180486452	GGAGGTGTCGGAGGATGGTAAGAGCGT (SEQ ID NO:6104), TGGAGGTGTCGGAGGATGGTAAGAGCG (SEQ ID NO:6105), AGGTGTCGGAGGATGGTAAGAGCGTGT (SEQ ID NO:6106), GGAGGTGTCGGAGGATGGTAAGAGCGTG (SEQ ID NO:6107), TGGAGGTGTCGGAGGATGGTAAGAGCGT (SEQ ID NO:6108), GTAGTCGGTCGTAGGGTTTAGGCGCGT (SEQ ID NO:6109), GTCGGTCGTAGGGTTTAGGCGCGTAGG (SEQ ID NO:6110), AGTCGGTCGTAGGGTTTAGGCGCGTAG (SEQ ID NO:6111), AGTAGTCGGTCGTAGGGTTTAGGCGCG (SEQ ID NO:6112), GAGAATCGTTGCGGGTGGTTAGGCGTC (SEQ ID NO:6113)
Target644	chr5:180486463-180486489	CGTTGAGTTTGAGGCGGTTTTTCGTCGG (SEQ ID NO:6114), GCGTTGAGTTTGAGGCGGTTTTTCGTC (SEQ ID NO:6115), GCGTTGAGTTTGAGGCGGTTTTTCGTCGG (SEQ ID NO:6116), GTTGAGTTTGAGGCGGTTTTTCGTCGG (SEQ ID NO:6117), TCGTTGTTTTGGGCGTTTGTGGT (SEQ ID NO:6118), CGGTCGTAGGGTTTAGGCGCGTAGGTT (SEQ ID NO:6119), GTAGTCGGTCGTAGGGTTTAGGCGCGT (SEQ ID NO:6120), GTCGGTCGTAGGGTTTAGGCGCGTAGG (SEQ ID NO:6121), AGTCGGTCGTAGGGTTTAGGCGCGTAG (SEQ ID NO:6122), AGTAGTCGGTCGTAGGGTTTAGGCGCG (SEQ ID NO:6123)
Target645	chr5:180486501-180486539	GCGGTCGGTTATTGGGTGTTGGGGTTG (SEQ ID NO:6124), TTTGCGGTCGGTTATTGGGTGTTGGGG (SEQ ID NO:6125), TGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6126), TTGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6127), CGGTCGGTTATTGGGTGTTGGGGTTGT (SEQ ID NO:6128), CGTTTAGGCGTCGCGGGGGTAC (SEQ ID NO:6129), GCGGTGCGGGGTTAGGACGAAG (SEQ ID NO:6130), GCGGTGCGGGGTTAGGACGAA (SEQ ID NO:6131), CGTTTAGGCGTCGCGGGGGTA (SEQ ID NO:6132), CGTTTAGGCGTCGCGGGGGT (SEQ ID NO:6133)
Target646	chr5:180486547-180486594	GCGGTCGGTTATTGGGTGTTGGGGTTG (SEQ ID NO:6134), TTTGCGGTCGGTTATTGGGTGTTGGGG (SEQ ID NO:6135), TGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6136), TTGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6137), CGGTCGGTTATTGGGTGTTGGGGTTGT (SEQ ID NO:6138), TGGAAAGGTGAAGATGTGGGAGTCGTCGG (SEQ ID NO:6139), GGAAGGTGAAGATGTGGGAGTCGTCGG (SEQ ID NO:6140), GGAAGGTGAAGATGTGGGAGTCGTCGGA (SEQ ID NO:6141), AGGTGTCGTGGAAGGTGAAGATGTGGG (SEQ ID NO:6142), GGTGTCGTGGAAGGTGAAGATGTGGGA (SEQ ID NO:6143)
Target647	chr5:180486596-180486620	GCGGTCGGTTATTGGGTGTTGGGGTTG (SEQ ID NO:6144), TTTGCGGTCGGTTATTGGGTGTTGGGG (SEQ ID NO:6145), TGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6146), TTGCGGTCGGTTATTGGGTGTTGGGGTT (SEQ ID NO:6147), CGGTCGGTTATTGGGTGTTGGGGTTGT (SEQ ID NO:6148), TGGAAAGGTGAAGATGTGGGAGTCGTCGG (SEQ ID NO:6149), GGAAGGTGAAGATGTGGGAGTCGTCGG (SEQ ID NO:6150), GGAAGGTGAAGATGTGGGAGTCGTCGGA (SEQ ID NO:6151), AGGTGTCGTGGAAGGTGAAGATGTGGG (SEQ ID NO:6152), GGTGTCGTGGAAGGTGAAGATGTGGGA (SEQ ID NO:6153)
Target648	chr5:180486679-180486697	AGCGGGTAGATGGTTAGGGGATTCGGA (SEQ ID NO:6154), TCGGTAGCGGGTAGATGGTTAGGGGAT (SEQ ID NO:6155), ATCGGTAGCGGGTAGATGGTTAGGGGA (SEQ ID NO:6156), CGTCGTCGTGGGTTTTGGGTTTGAAGT (SEQ ID NO:6157), TGGTTAGGGGATTCGGATGTTTCGTCGT (SEQ ID NO:6158)
Target649	chr6:1378623-1378653	GCGGTTGCGTTGTTTGAAGTTTCG (SEQ ID NO:6159)

Figure 5 (Table 1)

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Target650	chr6:1378777-1378828	CGGGGAAGAATTTGGTTAAGGGTCGGA (SEQ ID NO:6160), TCGGGGAAGAATTTGGTTAAGGGTCGG (SEQ ID NO:6161), TCGGGGAAGAATTTGGTTAAGGGTCGGA (SEQ ID NO:6162), TTCGGGAAGAATTTGGTTAAGGGTCGG (SEQ ID NO:6163), CGGGGAAGAATTTGGTTAAGGGTCGGAT (SEQ ID NO:6164), TCGAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6165), TTCGAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6166), TTTTCAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6167), TGTTTCGAATTGTTGGGGGTGCGGAGT (SEQ ID NO:6168), AGGGCGGCGTTTGAAGTTGTAGGTGG (SEQ ID NO:6169)
Target651	chr6:1378846-1378869	CGGGGAAGAATTTGGTTAAGGGTCGGA (SEQ ID NO:6170), TCGGGGAAGAATTTGGTTAAGGGTCGG (SEQ ID NO:6171), TCGGGGAAGAATTTGGTTAAGGGTCGGA (SEQ ID NO:6172), TTCGGGAAGAATTTGGTTAAGGGTCGG (SEQ ID NO:6173), CGGGGAAGAATTTGGTTAAGGGTCGGAT (SEQ ID NO:6174), TCGAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6175), TTCGAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6176), TTTTCAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6177), TGTTTCGAATTGTTGGGGGTGCGGAGT (SEQ ID NO:6178), GTTTTCGAATTGTTGGGGGTGCGGAGTGTT (SEQ ID NO:6179)
Target652	chr6:1378947-1379043	GTAATTCGGGGTATGAGTCGGCGGGG (SEQ ID NO:6180), AGTAATTCGGGGTATGAGTCGGCGGG (SEQ ID NO:6181), CGGTGCGGGTTTGGAGAAGTAGCGTTG (SEQ ID NO:6182), GCGGTGCGGGTTTGGAGAAGTAGCGTT (SEQ ID NO:6183), CGGTGCGGGTTTGGAGAAGTAGCGTTGA (SEQ ID NO:6184), CGGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6185), TTAAAGAGGGGTTTGGTGGGCGGTGTC (SEQ ID NO:6186), TTTAAGAGGGGTTTGGTGGGCGGTGT (SEQ ID NO:6187), TTTAAGAGGGGTTTGGTGGGCGGTGTC (SEQ ID NO:6188), GGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6189)
Target653	chr6:1379049-1379078	CGGTGCGGGTTTGGAGAAGTAGCGTTG (SEQ ID NO:6190), GCGGTGCGGGTTTGGAGAAGTAGCGTT (SEQ ID NO:6191), CGGTGCGGGTTTGGAGAAGTAGCGTTGA (SEQ ID NO:6192), GGTGCGGGTTTGGAGAAGTAGCGTTGA (SEQ ID NO:6193), GCGGTGCGGGTTTGGAGAAGTAGCGT (SEQ ID NO:6194), CGGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6195), GGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6196), CGGAGTCGTGCGTTTAAAGTCGGGAGC (SEQ ID NO:6197), GTTTAAGTCGGGAGCGCGCGGAG (SEQ ID NO:6198), GGTTAAGTCGGGAGCGCGCGGAG (SEQ ID NO:6199)
Target654	chr6:1379098-1379147	GCGTGTATTTGTTTCGTTTCGTCGCGT (SEQ ID NO:6200), TCGGTGTATTTGTTTCGTTTCGTCGC (SEQ ID NO:6201), GCGTGTATTTGTTTCGTTTCGTCGCGTT (SEQ ID NO:6202), TTCGTGTATTTGTTTCGTTTCGTCGC (SEQ ID NO:6203), GTTCGCGTATTTGTTTCGTTTCGTCGC (SEQ ID NO:6204), CGGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6205), GGAGTCGTGCGTTTAAAGTCGGGAGCG (SEQ ID NO:6206), CGGAGTCGTGCGTTTAAAGTCGGGAGC (SEQ ID NO:6207), TGGGGAGAATTGGGTTTTTCGTTTGT (SEQ ID NO:6208), AGTTTGGGGAGAATTGGGTTTTTTCGTT (SEQ ID NO:6209)
Target655	chr6:1379297-1379312	TTGTTGGGGTTGGGATAGGCGTAGGG (SEQ ID NO:6210), GAAAGTCGTAGGGGCGCGTCGTTTAC (SEQ ID NO:6211), GGAAGTCGTAGGGGCGCGTCGTTTGA (SEQ ID NO:6212), GGTGGGGTTGGGATAGGCGTAGGGAT (SEQ ID NO:6213), TGTTGGGGTTGGGATAGGCGTAGGGA (SEQ ID NO:6214), TCGGTTTTGAAATTGACGGGTGAGAGTTTTTGA (SEQ ID NO:6215), TGAAATTGACGGGTGAGAGTTTTTGAATTCGGT (SEQ ID NO:6216), GTCGTTTTGAAATTGACGGGTGAGAGTTTTTGA (SEQ ID NO:6217), GTCGTTTTGAAATTGACGGGTGAGAGTTTTTGA (SEQ ID NO:6218), TCGGTTTTGAAATTGACGGGTGAGAGTTTTTGA (SEQ ID NO:6219)
Target656	chr6:3247668-3247681	TGTTGTGAATTGGGGACGGTTGATTGTGT (SEQ ID NO:6220), GTTGTGAATTGGGGACGGTTGATTGTGT (SEQ ID NO:6221), TGTTGTGAATTGGGGACGGTTGATTGTGT (SEQ ID NO:6222), TTGTGAATTGGGGACGGTTGATTGTGT (SEQ ID NO:6223), GTTGTGAATTGGGGACGGTTGATTGTGT (SEQ ID NO:6224), TGTGTGTTAGGTATTGTTTGAAGTGTGGGAAGA (SEQ ID NO:6225), TTGTGTGTTAGGTATTGTTTGAAGTGTGGGAAG (SEQ ID NO:6226), TTGTGTGTTAGGTATTGTTTGAAGTGTGGGAAGA (SEQ ID NO:6227), TGTGTGTTAGGTATTGTTTGAAGTGTGGGAAGAT (SEQ ID NO:6228), TTGTGTGTTAGGTATTGTTTGAAGTGTGGGAAG (SEQ ID NO:6229)
Target657	chr6:3247767-3247867	CGAGGCGGGGTTATCGTTTTGAAGGG (SEQ ID NO:6230), GAGGCGGGGTTATCGTTTTGAAGGGT (SEQ ID NO:6231), CGAGGCGGGGTTATCGTTTTGAAGGGT (SEQ ID NO:6232), CGAGGCGGGGTTATCGTTTTGAAGGGTA (SEQ ID NO:6233), AGGCGGGGTTATCGTTTTGAAGGGTA (SEQ ID NO:6234), GGGAAATATGTTGTTCCGGAGGGGCGA (SEQ ID NO:6235), TCGGGAATATGTTGTTCCGGAGGGGCG (SEQ ID NO:6236), TGGTTGTTCCGGAGGGGCGATTGTTGT (SEQ ID NO:6237), CGGGAATATGTTGTTCCGGAGGGGCG (SEQ ID NO:6238), GGGAAATATGTTGTTCCGGAGGGGCGAT (SEQ ID NO:6239)
Target658	chr6:6003886-6003983	TAAAAGTTGAGCGCGGGAGGAGGAGG (SEQ ID NO:6240), GCGGGAGGAGGAGGAGGAGGAGGAAAT (SEQ ID NO:6241), AGGGATAAAAGTTGAGCGGCGGGAGGA (SEQ ID NO:6242), GGATAAAAGTTGAGCGCGGGAGGAGG (SEQ ID NO:6243), GGGATAAAAGTTGAGCGCGGGAGGAG (SEQ ID NO:6244), CGGGTTCGTCGTTTGAAGGCGGAAAG (SEQ ID NO:6245), GCGGTTTCGTTGTTTGGGTCGTTAGG (SEQ ID NO:6246), GGGTTCGTCGTTTGAAGGCGGAAAGA (SEQ ID NO:6247), GCGTTCGGGTTGTTTGGGTCGTTAGG (SEQ ID NO:6248), GCGTTCGGGTTGTTTGGGTCGTTAGG (SEQ ID NO:6249)

Figure 5 (Table 1)

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Target659	chr6:6003991-6004033	CGGGCGCGCGGTTGTGGTTATTTTT (SEQ ID NO:6250), GCGGGCGCGCGGTTGTGGTTATTTTT (SEQ ID NO:6251), GAGGCGCGGGATTGGAAGGATAGGTAT (SEQ ID NO:6252), AGGCGCGGGATTGGAAGGATAGGTAT (SEQ ID NO:6253), GCGGGCGCGCGGTTGTGGTTATTTTT (SEQ ID NO:6254), GCGTTCCGGGTTGTTTTGGGTCGTTAGG (SEQ ID NO:6255), GCGTTCCGGGTTGTTTTGGGTCGTTAGG (SEQ ID NO:6256), GCGTTCCGGGTTGTTTTGGGTCGTTAGG (SEQ ID NO:6257), GCGTTCCGGGTTGTTTTGGGTCGTTAG (SEQ ID NO:6258), CGTTCCGGGTTGTTTTGGGTCGTTAGG (SEQ ID NO:6259)
Target660	chr6:6004059-6004161	GCGTTAGGCGGGGAAGAAAGGGTGAA (SEQ ID NO:6260), TGGGCGTCGGTTTGGTTTTCGGTAGTT (SEQ ID NO:6261), TTGGGCGTCGGTTTGGTTTTCGGTAGT (SEQ ID NO:6262), CGTTAGGCGGGGAAGAAAGGGTGAAT (SEQ ID NO:6263), GCGGCGCGCGGTTGTGGTTATTTTT (SEQ ID NO:6264), GGGTCGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6265), GTTGGGGGTCGGGGGATTGAGGTGTTT (SEQ ID NO:6266), GGTGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6267), TTGGGGGTCGGGGGATTGAGGTGTTT (SEQ ID NO:6268), GGGTCGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6269)
Target661	chr6:6004181-6004208	GCGTTAGGCGGGGAAGAAAGGGTGAA (SEQ ID NO:6270), TGGGCGTCGGTTTGGTTTTCGGTAGTT (SEQ ID NO:6271), TTGGGCGTCGGTTTGGTTTTCGGTAGT (SEQ ID NO:6272), CGTTAGGCGGGGAAGAAAGGGTGAAT (SEQ ID NO:6273), GCGTTAGGCGGGGAAGAAAGGGTGA (SEQ ID NO:6274), GGGTCGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6275), GTTGGGGGTCGGGGGATTGAGGTGTTT (SEQ ID NO:6276), GGTGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6277), TTGGGGGTCGGGGGATTGAGGTGTTT (SEQ ID NO:6278), GGGTCGGGGGATTGAGGTGTTCCGTTT (SEQ ID NO:6279)
Target662	chr6:6004217-6004389	GGAAGAGCGAGGCGGGTTTTGCGTTTT (SEQ ID NO:6280), TAGGAAGAGCGAGGCGGGTTTTGCGTT (SEQ ID NO:6281), TTGTAGGAAGAGCGAGGCGGGTTTTGC (SEQ ID NO:6282), TGTAAGGAAGAGCGAGGCGGGTTTTGCG (SEQ ID NO:6283), GTAGGAAGAGCGAGGCGGGTTTTGCGT (SEQ ID NO:6284), TCGTTGAAGGTGAATTCGGAGGTTTGAGA (SEQ ID NO:6285), GGTGAATTCGGAGGTTTGAGAAGGTTTACG (SEQ ID NO:6286), GGTGAATTCGGAGGTTTGAGAAGGTTTACG (SEQ ID NO:6287), TGTAAGGTGAATTCGGAGGTTTGAGAAGGT (SEQ ID NO:6288), AGGTGAATTCGGAGGTTTGAGAAGGTTTACG (SEQ ID NO:6289)
Target663	chr6:10417266-10417517	CGGTTGAATCGGGTTGGAGGTTTGGCG (SEQ ID NO:6290), GGTGAATCGGGTTGGAGGTTTGGCGT (SEQ ID NO:6291), TCGGTTGAATCGGGTTGGAGGTTTGGC (SEQ ID NO:6292), GGTGAATCGGGTTGGAGGTTTGGCGTC (SEQ ID NO:6293), TTCGTTGAATCGGGTTGGAGGTTTGGC (SEQ ID NO:6294), GTGGAACGGGGGTTGAAATGGGGTGG (SEQ ID NO:6295), GGTGGAACGGGGGTTGAAATGGGGTG (SEQ ID NO:6296), AGGTGGAACGGGGGTTGAAATGGGGT (SEQ ID NO:6297), GGGTGGTAGAGGATGGAGGCGGTTTT (SEQ ID NO:6298), ACGGGGGTTGAAATGGGGTGGTAGAGG (SEQ ID NO:6299)
Target664	chr6:10417531-10417544	TGCGGGTTTGAAAGGTCGTTTTTATTTTTG (SEQ ID NO:6300), TTGCGGGTTTGAAAGGTCGTTTTTATTTTTG (SEQ ID NO:6301), TTGCGGGTTTGAAAGGTCGTTTTTATTTTTG (SEQ ID NO:6302), TTTTCGTTTTCGCGTTTAATAGATTTTCGGTTT (SEQ ID NO:6303), CGGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6304), GGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6305), TCGGGGGCGGTAGTTTAGAGTCGGTAG (SEQ ID NO:6306), TCGGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6307), ATCGGGGGCGGTAGTTTAGAGTCGGTA (SEQ ID NO:6308)
Target665	chr6:10417577-10417689	TGTAGGCGTTGATGAAAGGTTTCGGGCG (SEQ ID NO:6309), GTAGGCGTTGATGAAAGGTTTCGGGCGA (SEQ ID NO:6310), TAGGCGTTGATGAAAGGTTTCGGGCGAG (SEQ ID NO:6311), GTGTAGGCGTTGATGAAAGGTTTCGGGCG (SEQ ID NO:6312), CGTTGATGAAAGGTTTCGGGCGAGCGT (SEQ ID NO:6313), CGGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6314), GGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6315), TCGGGGGCGGTAGTTTAGAGTCGGTAG (SEQ ID NO:6316), TCGGGGGCGGTAGTTTAGAGTCGGTAGG (SEQ ID NO:6317), TGGCGTTGTTTTCGGGGTTTGGTT (SEQ ID NO:6318)
Target666	chr6:10417836-10417842	GCGTTAGGTTTGGGGTTGGAGGTCGGA (SEQ ID NO:6319), AGCGTTAGGTTTGGGGTTGGAGGTCGG (SEQ ID NO:6320), ACGTGGGGGTATAAAAGGGCGTCGC (SEQ ID NO:6321), GTGGGGGTATAAAAGGGCGTCGC (SEQ ID NO:6322), CGTGGGGGTATAAAAGGGCGTCGC (SEQ ID NO:6323), GGGTTTGTGGGTTTTCGGTTTTTATTGGG (SEQ ID NO:6324), TGGGTTTGTGGGTTTTCGGTTTTTATTGGG (SEQ ID NO:6325), TGGGTTTGTGGGTTTTCGGTTTTTATTGGG (SEQ ID NO:6326), TTGGGTTTGTGGGTTTTCGGTTTTTATTGGG (SEQ ID NO:6327), TTGGGTTTGTGGGTTTTCGGTTTTTATTGGG (SEQ ID NO:6328)
Target667	chr6:10421386-10421420	TTTAGACGGTGGAATAGGGCGGTGA (SEQ ID NO:6329), AGACGGTGGAATAGGGCGGTGATTAA (SEQ ID NO:6330), TTAGACGGTGGAATAGGGCGGTGATT (SEQ ID NO:6331), TTTAGACGGTGGAATAGGGCGGTGATT (SEQ ID NO:6332), TTTTAGACGGTGGAATAGGGCGGTGA (SEQ ID NO:6333), CGAAGCGGTGGTAGGTTGAAATCGTCGT (SEQ ID NO:6334), CGAAGCGGTGGTAGGTTGAAATCGTCG (SEQ ID NO:6335), GAAGCGGTGGTAGGTTGAAATCGTCGT (SEQ ID NO:6336), CGAAGCGGTGGTAGGTTGAAATCGTCGT (SEQ ID NO:6337), AGCGGTGGTAGGTTGAAATCGTCGT (SEQ ID NO:6338)

Figure 5 (Table 1)

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Target668	chr6:10421442-10421620	ATTTCCGGGTTTAGTCGGACGGGTCGGG (SEQ ID NO:6339), GACGTGTTTTAGGGTTAGGGTGGGGCG (SEQ ID NO:6340), AGACGTGTTTTAGGGTTAGGGTGGGGCG (SEQ ID NO:6341), GATTTCCGGTTTAGTCGGACGGGTCGGG (SEQ ID NO:6342), TTTCCGGTTTAGTCGGACGGGTCGGG (SEQ ID NO:6343), GTTCGGTTCGGTTCGTTCCGTTGGGTT (SEQ ID NO:6344), TTCGGTTCGGTTCGTTCCGTTGGGTT (SEQ ID NO:6345), AGGTTCCGGTTCGTTCCGTTCCGTTGGG (SEQ ID NO:6346), CGGTTCCGGTTCGTTCCGTTGGGTTCA (SEQ ID NO:6347), TCGGTTCCGGTTCGTTCCGTTGGGTTCC (SEQ ID NO:6348)
Target669	chr6:10421628-10422390	TTTTTGGGGTGGGGATTGAGCGTGC (SEQ ID NO:6349), ACGTGTTTAGGGTTAGGGTGGGGCGT (SEQ ID NO:6350), ATTTCCGGTTTAGTCGGACGGGTCGGG (SEQ ID NO:6351), GGGAGAGAGGCGGAGGGAGGTGAAATG (SEQ ID NO:6352), GCGGAGGGAGGTGAAATCGGGAGTTA (SEQ ID NO:6353), GAGGAGGTCGGGGTGGGGAAAGGTTTT (SEQ ID NO:6354), GGAGGTCGGGGTGGGGAAAGGTTTTGA (SEQ ID NO:6355), GGGCGTAGTTTCGTTGGTGCGGAGTTG (SEQ ID NO:6356), AGGAGGTCGGGGTGGGGAAAGGTTTTG (SEQ ID NO:6357), GGCCTAGTTTCGTTGGTGCGGAGTTGC (SEQ ID NO:6358)
Target670	chr6:11785719-11785770	TGGTAGTGAGTTTTTTCGGGGTTTAGGTTGT (SEQ ID NO:6359), TGGTAGTGAGTTTTTTCGGGGTTTAGGTTGT (SEQ ID NO:6360), TTGGTAGTGAGTTTTTTCGGGGTTTAGGTTGT (SEQ ID NO:6361), TGGTAGTGAGTTTTTTCGGGGTTTAGGTTGT (SEQ ID NO:6362), TTGGTAGTGAGTTTTTTCGGGGTTTAGGTTGT (SEQ ID NO:6363)
Target671	chr6:11785994-11786090	GTTGTTGGGTTTGGGGAGGAGGTGGA (SEQ ID NO:6364), AGTTGTTGGGTTTGGGGAGGAGGTGG (SEQ ID NO:6365), TTGTTGGGTTTGGGGAGGAGGTGGA (SEQ ID NO:6366), TGTGGGTTTGGGGAGGAGGTGGAAT (SEQ ID NO:6367), GTTGTGGGTTTGGGGAGGAGGTGGA (SEQ ID NO:6368)
Target672	chr6:16729533-16729698	ACGTTTGGATTGAGAGAGTAAAGAGAAAATGAGTT (SEQ ID NO:6369), AACGTTGGATTGAGAGAGTAAAGAGAAAATGAGT (SEQ ID NO:6370), AACGTTGGATTGAGAGAGTAAAGAGAAAATGAGT (SEQ ID NO:6371)
Target673	chr6:19691747-19691781	GTCGGGGTTTTGGAGTTTTTCGATTGTTGT (SEQ ID NO:6372), AGTCGGGGTTTTGGAGTTTTTCGATTGTTGT (SEQ ID NO:6373), CGGGGTTTTGGAGTTTTTCGATTGTTGT (SEQ ID NO:6374), AGTCGGGGTTTTGGAGTTTTTCGATTGTTGT (SEQ ID NO:6375), CGGGGTTTTGGAGTTTTTCGATTGTTGT (SEQ ID NO:6376), GCGTTTGTATATGATGAAAGCGGGTAGG (SEQ ID NO:6377), GCGTTTGTATATGATGAAAGCGGGTAGGA (SEQ ID NO:6378), GCGTTTGTATATGATGAAAGCGGGTAGGAT (SEQ ID NO:6379), GCGTTTGTATATGATGAAAGCGGGTAGGATT (SEQ ID NO:6380), GCGTTTGTATATGATGAAAGCGGGTAGGATT (SEQ ID NO:6381)
Target674	chr6:19691827-19692233	TTTCGTTATTTGGGTCGCGGGTTGGG (SEQ ID NO:6382), GCGTTAGGAGCGAGGCGTTTTTGGTGA (SEQ ID NO:6383), TTTTGGTAGAGCGGTCGAGGAAGGGG (SEQ ID NO:6384), TATATTTAGGCGGGGGAGGTCGGGGG (SEQ ID NO:6385), AGGAGCGAGGCGTTTTTGGTGATAGCG (SEQ ID NO:6386), GATGGCGGAGTAGTTTCGAGCGGGGAT (SEQ ID NO:6387), TAGATGGCGGAGTAGTTTCGAGCGGGG (SEQ ID NO:6388), TGGCGGAGTAGTTTCGAGCGGGGATAT (SEQ ID NO:6389), ATGGCGGAGTAGTTTCGAGCGGGGATA (SEQ ID NO:6390), AGATGGCGGAGTAGTTTCGAGCGGGG (SEQ ID NO:6391)
Target675	chr6:27173544-27173557	CGGTTAATGTTATTGTCGGACGTTCCGGG (SEQ ID NO:6392), CGGTTAATGTTATTGTCGGACGTTCCGGG (SEQ ID NO:6393), TCGGTTAATGTTATTGTCGGACGTTCCGGG (SEQ ID NO:6394), TCGGTTAATGTTATTGTCGGACGTTCCGGG (SEQ ID NO:6395), TTCGGTTAATGTTATTGTCGGACGTTCCGGG (SEQ ID NO:6396), TTTGGAAGAGTGTAAGAGAAAGGAATCGGGT (SEQ ID NO:6397), TTTTGAAGAGTGTAAGAGAAAGGAATCGGGT (SEQ ID NO:6398), AGGGGTTTTTGAAGAGTGTAAGAGAAAGGAA (SEQ ID NO:6399), AAGGGTTTTTGAAGAGTGTAAGAGAAAGGA (SEQ ID NO:6400), GGGGTTTTTGAAGAGTGTAAGAGAAAGGAATCGGG (SEQ ID NO:6401)
Target676	chr6:27173745-27173857	CGTGGTTGCGAGAGTTTTTTAGGGAGAGT (SEQ ID NO:6402), CGTGGTTGCGAGAGTTTTTTAGGGAGAG (SEQ ID NO:6403), CGTAGAAGTGATAGGGAGAGGGGAAAGT (SEQ ID NO:6404), TCGTAGAAGTGATAGGGAGAGGGGAAAGT (SEQ ID NO:6405), TCGTAGAAGTGATAGGGAGAGGGGAAAG (SEQ ID NO:6406)
Target677	chr6:30131458-30131521	GGAGTGGACGGGTTGGGGAAGGTATCG (SEQ ID NO:6407), CGGAGTGGACGGGTTGGGGAAGGTATC (SEQ ID NO:6408), GAGATCGGAGTGGACGGGTTGGGGAAG (SEQ ID NO:6409), GTGGGTTGAGGAGATCGGAGTGGACGG (SEQ ID NO:6410), TTCGCGTGGGTTGAGGAGATCGGAGTG (SEQ ID NO:6411), CGCGGGGAGGTAGAGTCGGTAGAAGGT (SEQ ID NO:6412), TGGGTTTTATTGGGAGAGCGCGGGG (SEQ ID NO:6413), GAGCGGGGAGGTAGAGTCGGTAGAA (SEQ ID NO:6414), AGCGCGGGGAGGTAGAGTCGGTAGAAG (SEQ ID NO:6415), GCGGGGAGGTAGAGTCGGTAGAAGGTG (SEQ ID NO:6416)
Target678	chr6:30131538-30131587	GGAGTGGACGGGTTGGGGAAGGTATCG (SEQ ID NO:6417), CGGAGTGGACGGGTTGGGGAAGGTATC (SEQ ID NO:6418), GAGATCGGAGTGGACGGGTTGGGGAAG (SEQ ID NO:6419), GTGGGTTGAGGAGATCGGAGTGGACGG (SEQ ID NO:6420), CGTGGGTTGAGGAGATCGGAGTGGACG (SEQ ID NO:6421), CGCGGGGAGGTAGAGTCGGTAGAAGGT (SEQ ID NO:6422), GAGCGGGGAGGTAGAGTCGGTAGAA (SEQ ID NO:6423), AGCGCGGGGAGGTAGAGTCGGTAGAAG (SEQ ID NO:6424), GCGGGGAGGTAGAGTCGGTAGAAGGTG (SEQ ID NO:6425), ATTTGGGAGAGCGCGGGGAGGTAGAGT (SEQ ID NO:6426)

Figure 5 (Table 1)

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Target679	chr6:30131613-30131692	CGGGGTCGTTGGAGGATGCGGTGATTA (SEQ ID NO:6427), CGGGGTCGTTGGAGGATGCGGTGATTAT (SEQ ID NO:6428), GGGGTCGTTGGAGGATGCGGTGATTAT (SEQ ID NO:6429), CGGGGTCGTTGGAGGATGCGGTGATT (SEQ ID NO:6430), CGGGGTCGTTGGAGGATGCGGTGATTATT (SEQ ID NO:6431), AGGAATTTTACGGTGTGCGTTTGGTGC (SEQ ID NO:6432), GCGGGTTTAGGGGTATAGGGGTTATGGG (SEQ ID NO:6433), AGCGGGTTTAGGGGTATAGGGGTTATGGG (SEQ ID NO:6434), GCGGGTTTAGGGGTATAGGGGTTATGGGA (SEQ ID NO:6435), AGCGGGTTTAGGGGTATAGGGGTTATGGGA (SEQ ID NO:6436)
Target680	chr6:32157485-32157591	CGGGGTTTGTGGGTTTGTGTGGGGT (SEQ ID NO:6437), AACGGGTTTGTGGGTTTGTGTGGGG (SEQ ID NO:6438), TTTGTGTGGGGTTTCCGAGTGGGGGTA (SEQ ID NO:6439), TGTGTGGGGTTTCCGAGTGGGGGATT (SEQ ID NO:6440), TTGTGTGGGGTTTCCGAGTGGGGGATT (SEQ ID NO:6441), GGATTGGTGAGTGGGGAGTTTGGGGGT (SEQ ID NO:6442), GGGGTTTGGGATTGGTGAGTGGGGAGT (SEQ ID NO:6443), TGGGATTGGTGAGTGGGGAGTTTGGGG (SEQ ID NO:6444), GTGAGTGGGGAGTTTGGGGGTTTGGC (SEQ ID NO:6445), GGGGAGTTTGGGGGTTTGGCGAGTTT (SEQ ID NO:6446)
Target681	chr6:32157605-32157670	GTTTCGTTTAGGTTTTGGTCGTTGATGGT (SEQ ID NO:6447), ATCGGGAGGTTTCGTTAGGGTTTTTAGGTT (SEQ ID NO:6448), CGTTATCGGGAGGTTTCGTTAGGGTTTTTAGG (SEQ ID NO:6449), CGTTATCGGGAGGTTTCGTTAGGGTTTTTAGG (SEQ ID NO:6450), GTTATCGGGAGGTTTCGTTAGGGTTTTTAGG (SEQ ID NO:6451), GGATTGGTGAGTGGGGAGTTTGGGGGT (SEQ ID NO:6452), GGGGTTTGGGATTGGTGAGTGGGGAGT (SEQ ID NO:6453), TGGGATTGGTGAGTGGGGAGTTTGGGG (SEQ ID NO:6454), GAGAAGTAATTAGCGGGGGAGGGGC (SEQ ID NO:6455), GTTGGGCGGAGGGAGTAGCGGTTTTA (SEQ ID NO:6456)
Target682	chr6:36253000-36253007	GGTGATTTATGATGGGATTTTGAGTATTCGTCGGC (SEQ ID NO:6457), AGGTGATTTATGATGGGATTTTGAGTATTCGTCGGC (SEQ ID NO:6458), AGGTGATTTATGATGGGATTTTGAGTATTCGTCGG (SEQ ID NO:6459), TAGGTGATTTATGATGGGATTTTGAGTATTCGTCGG (SEQ ID NO:6460), AGGGGGCGTAGTAGTTTTTGGGGAGGC (SEQ ID NO:6461), GGGGCGTAGTAGTTTTTGGGGAGGCGT (SEQ ID NO:6462), TTTTATAGAGTAGCGTGCCTGGTGGGCG (SEQ ID NO:6463), GGCGTAGTAGTTTTTGGGGAGGCGTCG (SEQ ID NO:6464), GGGCGTAGTAGTTTTTGGGGAGGCGTC (SEQ ID NO:6465)
Target683	chr6:36253026-36253058	GGTGATTTATGATGGGATTTTGAGTATTCGTCGGC (SEQ ID NO:6466), AGGTGATTTATGATGGGATTTTGAGTATTCGTCGGC (SEQ ID NO:6467), AGGTGATTTATGATGGGATTTTGAGTATTCGTCGG (SEQ ID NO:6468), TAGGTGATTTATGATGGGATTTTGAGTATTCGTCGG (SEQ ID NO:6469), TTTTATAGAGTAGCGTGCCTGGTGGGCG (SEQ ID NO:6470), GTTTTATAGAGTAGCGTGCCTGGTGGGCG (SEQ ID NO:6471), GGGATTGCGGGGTTTATAGTTTAGGGCG (SEQ ID NO:6472), TGTTTTATAGAGTAGCGTGCCTGGTGGGCG (SEQ ID NO:6473), GTTTTATAGAGTAGCGTGCCTGGTGGGCG (SEQ ID NO:6474)
Target684	chr6:36253077-36253113	ACGTTGTTTTGGGAGTAGGGTCGGCGG (SEQ ID NO:6475), GTTGTGTTTTGGGAGTAGGGTCGGCGG (SEQ ID NO:6476), TACGTTGTTTTGGGAGTAGGGTCGGCGG (SEQ ID NO:6477), TACGTTGTTTTGGGAGTAGGGTCGGCGG (SEQ ID NO:6478), CGTTGTTTTGGGAGTAGGGTCGGCGG (SEQ ID NO:6479), GGGATTGCGGGGTTTATAGTTTAGGGCG (SEQ ID NO:6480), GGATTGCGGGGTTTATAGTTTAGGGCGT (SEQ ID NO:6481), GGATTGCGGGGTTTATAGTTTAGGGCG (SEQ ID NO:6482), TGGGATTGCGGGGTTTATAGTTTAGGGCG (SEQ ID NO:6483), GGGATTGCGGGGTTTATAGTTTAGGGCG (SEQ ID NO:6484)
Target685	chr6:38682982-38683256	GGTTGAGTGGTCCGGGTATCGGGGTTT (SEQ ID NO:6485), GGTTGGTGAGTATTTGGTCCGAGCGC (SEQ ID NO:6486), CGGTTGGTGAGTATTTGGTCCGAGCGC (SEQ ID NO:6487), GCGGTTGGTGAGTATTTGGTCCGAGCGC (SEQ ID NO:6488), GTCGGGTATCGGGGTTAGAGAGCGG (SEQ ID NO:6489), AGAAGGAAAGTGGGCGGGGAATTCGGT (SEQ ID NO:6490), GCGTTGTTTCGGGGAGTTGTTTCGGT (SEQ ID NO:6491), TCGGTTGTTTCGGGGAGTTGTTTCGG (SEQ ID NO:6492), CGGTTGCGTTGTTTCGGGGAGTTGTT (SEQ ID NO:6493), TAGGGTTTTTCGGGATAGGGGTCGGGCG (SEQ ID NO:6494)
Target686	chr6:41341524-41341631	GCGGTAGAGAAGTTTTCGTTCCGGGATT (SEQ ID NO:6495), TCGTGGGTTTATAGAGGGTGAAGGGGT (SEQ ID NO:6496), GCGGTAGAGAAGTTTTCGTTCCGGGATT (SEQ ID NO:6497), GGGGTAGTTTATGTTAGTGGGGGTGT (SEQ ID NO:6498), CGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6499), CGAAGTGAAGTTTGGACGCGAATGGGG (SEQ ID NO:6500), TCGAAGTGAAGTTTGGACGCGAATGGGG (SEQ ID NO:6501), TCGAAGTGAAGTTTGGACGCGAATGGG (SEQ ID NO:6502), CGAAGTGAAGTTTGGACGCGAATGGG (SEQ ID NO:6503), GAAGTGAAGTTTGGACGCGAATGGGG (SEQ ID NO:6504)
Target687	chr6:41341646-41341691	GCGGTAGAGAAGTTTTCGTTCCGGGATT (SEQ ID NO:6505), GCGGTAGAGAAGTTTTCGTTCCGGGATT (SEQ ID NO:6506), CGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6507), GCGGTAGAGAAGTTTTCGTTCCGGGATT (SEQ ID NO:6508), TCGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6509)

Figure 5 (Table 1)

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Target688	chr6:41341707-41341716	GCGGTAGAGAAGTTTTCGTTTCGGGATT (SEQ ID NO:6510), GCGGTAGAGAAGTTTTCGTTTCGGGATT (SEQ ID NO:6511), GGGGTAGTTTATGTTGAGTGGGGGTGT (SEQ ID NO:6512), CGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6513), AGGGGTAGTTTATGTTGAGTGGGGGTGT (SEQ ID NO:6514), GGGGTGAGGTTATGGAAGTTTCGAGGT (SEQ ID NO:6515), AGGGGTGAGGTTATGGAAGTTTCGAGGT (SEQ ID NO:6516), AGGGGTGAGGTTATGGAAGTTTCGAGG (SEQ ID NO:6517), GAGGGGTGAGGTTATGGAAGTTTCGAGGT (SEQ ID NO:6518), GAGGGGTGAGGTTATGGAAGTTTCGAGG (SEQ ID NO:6519)
Target689	chr6:41341733-41341747	GCGGTAGAGAAGTTTTCGTTTCGGGATT (SEQ ID NO:6520), GCGGTAGAGAAGTTTTCGTTTCGGGATT (SEQ ID NO:6521), CGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6522), GCGGTAGAGAAGTTTTCGTTTCGGGATT (SEQ ID NO:6523), TCGGGATTAGTAGAGTGAGTCGATCGGC (SEQ ID NO:6524), AGTGGTGGTTTGGAGGACGTTGGTTAC (SEQ ID NO:6525), TTAGTGGTGGTTTGGAGGACGTTGGTT (SEQ ID NO:6526), TTTAGTGGTGGTTTGGAGGACGTTGGT (SEQ ID NO:6527), TTTAGTGGTGGTTTGGAGGACGTTGGTT (SEQ ID NO:6528), TTTAGTGGTGGTTTGGAGGACGTTGGT (SEQ ID NO:6529)
Target690	chr6:41341750-41341762	GAGAGAGTCGCGGTGGTTGTACGT (SEQ ID NO:6530), AGAGAGTCGCGGTGGTTGTACGT (SEQ ID NO:6531), GCGGTGGTTGTACGTGCGTGC (SEQ ID NO:6532)
Target691	chr6:41528224-41528958	ATTTTCGGTTAGGGAGGGGATGGGGCG (SEQ ID NO:6533), AATTGATGAGTTGGTAGGGCGGGCGGT (SEQ ID NO:6534), GCGGCGAGGCGTAGGGGTTTATGGTAA (SEQ ID NO:6535), GGTAGGGAGGGGATGGGGCGGTTTC (SEQ ID NO:6536), TTTTCGGTAGGACGCGCGTTTAGGAGC (SEQ ID NO:6537), GTTCGAGTTTATTCGCGGGGAGGGA (SEQ ID NO:6538), TGTTCCGAGTTTATTCGCGGGGAGGG (SEQ ID NO:6539), AGGGGGGATTTACGGGTTGGGGTGT (SEQ ID NO:6540), AAGGGGGGATTTACGGGTTGGGGTGT (SEQ ID NO:6541), AAAGGGGGGATTTACGGGTTGGGGTGT (SEQ ID NO:6542)
Target692	chr6:42071961-42072043	AGGTTAGGAGGGAGGTTAGGAAGGCGT (SEQ ID NO:6543), GGAGTTGGTGGGGAAAGAGAAGGGAGGT (SEQ ID NO:6544), GGAGTTGGTGGGGAAAGAGAAGGGAGG (SEQ ID NO:6545), GGAGTTAGGAGGGAGGTTAGGAAGGCG (SEQ ID NO:6546), AGGAGTTGGTGGGGAAAGAGAAGGGAGG (SEQ ID NO:6547), GGAGGGGTGGAAAGTTAGGCGAGGGTT (SEQ ID NO:6548), AGGAGGGGTGGAAAGTTAGGCGAGGGT (SEQ ID NO:6549), GGAGGGGTGGAAAGTTAGGCGAGGGT (SEQ ID NO:6550), AGGAGGGGTGGAAAGTTAGGCGAGGG (SEQ ID NO:6551), AGGAGGGGTGGAAAGTTAGGCGAGGGT (SEQ ID NO:6552)
Target693	chr6:42072072-42072628	GTGGGGTAGTTTTGGGTTTCGGTGCGG (SEQ ID NO:6553), GTTGTTCGGGGAGGGGAGTTTTGGCG (SEQ ID NO:6554), TAGGTTGCGGTCGGTGTATCGTGGGG (SEQ ID NO:6555), GCGTTTTGTGTTTGGTTTCGCGGCGT (SEQ ID NO:6556), TTGGGTTTCGGTGCGGTTTTTCGACGT (SEQ ID NO:6557), TCGGAGGTTTGTACGCGTCGAGGTTGT (SEQ ID NO:6558), GGTGCGGGAAGTTAGGAGGGGTGGAAA (SEQ ID NO:6559), TTCGTTGGTGCGGGAAGTTAGGAGGG (SEQ ID NO:6560), GGAGGGGTGGAAAGTTAGGCGAGGGT (SEQ ID NO:6561), GGGTTCGGTTGGTGCGGGAAGTTAGGA (SEQ ID NO:6562)
Target694	chr6:50818149-50818202	TCGGGTTATTTTTTCGGTTTGGGTTTCGT (SEQ ID NO:6563), TCGGGTTATTTTTTCGGTTTGGGTTTCGT (SEQ ID NO:6564), TTCGGGTTTATTTTTTCGGTTTGGGTTTCGT (SEQ ID NO:6565), TTCGGGTTTATTTTTTCGGTTTGGGTTTCGT (SEQ ID NO:6566), TTCGGGTTTATTTTTTCGGTTTGGGTTTCGT (SEQ ID NO:6567), GCGGTTTTGTGTTTCGGAGCGTGTGT (SEQ ID NO:6568), CGGTTTCGTTGGTTTCGCGTTTTTGTGT (SEQ ID NO:6569), TTGGTTCGCGTTTTTGTGTTTCGGAGC (SEQ ID NO:6570), CGTTGGTTCGCGGTTTTTGTGTTTCGGA (SEQ ID NO:6571), TCGTTGGTTCGCGGTTTTTGTGTTTCG (SEQ ID NO:6572)
Target695	chr6:50818209-50818238	GTTGGGAGATTGGGTAATAATACGTTTCGGGT (SEQ ID NO:6573), AGTTGGGAGATTGGGTAATAATACGTTTCGGG (SEQ ID NO:6574), AGTTGGGAGATTGGGTAATAATACGTTTCGGGT (SEQ ID NO:6575), GTTGGGAGATTGGGTAATAATACGTTTCGGGTA (SEQ ID NO:6576), AGTTGGGAGATTGGGTAATAATACGTTTCGGGTA (SEQ ID NO:6577), CGGTTTCGACGTAGGTTGGCGCGG (SEQ ID NO:6578), GGTTTCGACGTAGGTTGGCGCGG (SEQ ID NO:6579), CGGTTTCGACGTAGGTTGGCGCGG (SEQ ID NO:6580), GTTCGACGTAGGTTGGCGCGG (SEQ ID NO:6581), CGGTTTCGACGTAGGTTGGCGCG (SEQ ID NO:6582)
Target696	chr6:50818245-50818261	GTTGGGAGATTGGGTAATAATACGTTTCGGGT (SEQ ID NO:6583), AGTTGGGAGATTGGGTAATAATACGTTTCGGG (SEQ ID NO:6584), AGTTGGGAGATTGGGTAATAATACGTTTCGGGT (SEQ ID NO:6585), GTTGGGAGATTGGGTAATAATACGTTTCGGGTA (SEQ ID NO:6586), AGTTGGGAGATTGGGTAATAATACGTTTCGGGTA (SEQ ID NO:6587), TAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6588), AGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6589), ATAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6590), ATAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6591), GTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6592)
Target697	chr6:50818268-50818397	CGGGCGTAATTTTAGTTTGTGACGGGT (SEQ ID NO:6593), CGGGCGTAATTTTAGTTTGTGACGGG (SEQ ID NO:6594), TCGGGCGTAATTTTAGTTTGTGACGGG (SEQ ID NO:6595), TCGGGCGTAATTTTAGTTTGTGACGGG (SEQ ID NO:6596), TCGGGCGTAATTTTAGTTTGTGACGG (SEQ ID NO:6597), TAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6598), AGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6599), ATAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6600), ATAGTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6601), GTAGTTGGGGTTACGTTTCGGGGCG (SEQ ID NO:6602)

Figure 5 (Table 1)

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Target698	chr6:50818501-50818554	GGGGTTTGAAGGGGTTGTAGCGTGGGA (SEQ ID NO:6603), TGGGGTTTGAAGGGGTTGTAGCGTGGG (SEQ ID NO:6604), TTGGGGTTTGAAGGGGTTGTAGCGTGG (SEQ ID NO:6605), GGGTTTGAAGGGGTTGTAGCGTGGGAA (SEQ ID NO:6606), GGGGGTTTGAAGGGGTTGTAGCGTGGGAA (SEQ ID NO:6607), GGAGGAAAAGCGAAGAGTAGGGTGGGT (SEQ ID NO:6608), AGGAGGAAAAGCGAAGAGTAGGGTGGGT (SEQ ID NO:6609), AGGAGGAAAAGCGAAGAGTAGGGTGGG (SEQ ID NO:6610), GAGGAGGAAAAGCGAAGAGTAGGGTGGGT (SEQ ID NO:6611), GAGGAGGAAAAGCGAAGAGTAGGGTGGG (SEQ ID NO:6612)
Target699	chr6:56716141-56716204	CGTTATGGTTTTTTAGGAGGTAGATGGGCGA (SEQ ID NO:6613), TCGTTATGGTTTTTTAGGAGGTAGATGGGCG (SEQ ID NO:6614), TCGTTATGGTTTTTTAGGAGGTAGATGGGCGA (SEQ ID NO:6615), CGTTATGGTTTTTTAGGAGGTAGATGGGCGAA (SEQ ID NO:6616), TTCGTTATGGTTTTTTAGGAGGTAGATGGGCG (SEQ ID NO:6617), GGGGATGGAGTGGGGGAAGAGAGTTGC (SEQ ID NO:6618), GGATGGAGTGGGGGAAGAGAGTTGCG (SEQ ID NO:6619), GGGATGGAGTGGGGGAAGAGAGTTGCG (SEQ ID NO:6620), GGGAAGGGGATGGAGTGGGGGAAGAGA (SEQ ID NO:6621), GATGGAGTGGGGGAAGAGAGTTGCGGA (SEQ ID NO:6622)
Target700	chr6:56716301-56716537	AGGTGTTTTTCGGAGTTGGGGATGCGG (SEQ ID NO:6623), GGTGTTTTTCGGAGTTGGGGATGCGGA (SEQ ID NO:6624), AGGTGTTTTTCGGAGTTGGGGATGCGGA (SEQ ID NO:6625), GGTGTTTTTCGGAGTTGGGGATGCGGAG (SEQ ID NO:6626), TGTGTTTTTCGGAGTTGGGGATGCGGAGT (SEQ ID NO:6627), ATTTAGTTTGGGGTAGGGAGGCGGC (SEQ ID NO:6628), GCGGTGTTGGTGGGGGAGATGTTTA (SEQ ID NO:6629), GCGGTGTTGGTGGGGGAGATGTTTAA (SEQ ID NO:6630), TTTAGTTTGGGGTAGGGAGGCGGC (SEQ ID NO:6631), GATTAGTTTGGGGTAGGGAGGCGGC (SEQ ID NO:6632)
Target701	chr6:75918081-75918119	TCGGAGTTGAGTAGTTATTTTCGGGGATTAAAGA (SEQ ID NO:6633), TGGAGAGGGTAATGTGTACGTTTTTGGGG (SEQ ID NO:6634), TGGAGAGGGTAATGTGTACGTTTTTGGGGA (SEQ ID NO:6635), GGAGAGGGTAATGTGTACGTTTTTGGGGA (SEQ ID NO:6636), TCGGTGTTTTAGTCGTAGGAAAGGGAAGT (SEQ ID NO:6637), AGTCGTAGGAAAGGGAAGTTCGTGATTGT (SEQ ID NO:6638)
Target702	chr6:85475878-85475883	AGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6639), GGTGTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6640), AGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6641), TAGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6642), TAGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6643)
Target703	chr6:85475908-85475954	ACGCGCGGTTTTTGGAGGTCGGATATT (SEQ ID NO:6644), ACGCGCGGTTTTTGGAGGTCGGATAT (SEQ ID NO:6645), ACGCGCGGTTTTTGGAGGTCGGATATTA (SEQ ID NO:6646), CGCGCGGTTTTTGGAGGTCGGATATTA (SEQ ID NO:6647), AGCGGGAGTAGGAATTTGGTAGGCGAT (SEQ ID NO:6648), AGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6649), GGTGTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6650), AGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6651), TAGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6652), TAGGTTTGGTTGGGCGGTTTGTTCTGT (SEQ ID NO:6653)
Target704	chr6:85476171-85476211	GGTTTTGCGATCGGTTTAGAGTTGTGTGG (SEQ ID NO:6654), GGTGTTTTGCGATCGGTTTAGAGTTGTGTGGT (SEQ ID NO:6655), AGGTTTTGCGATCGGTTTAGAGTTGTGTGG (SEQ ID NO:6656), AGGTTTTGCGATCGGTTTAGAGTTGTGTGGT (SEQ ID NO:6657), GTTTTGCATCGGTTTAGAGTTGTGTGGT (SEQ ID NO:6658), TGGGGCGGGGATTTTAGTTGAACGGA (SEQ ID NO:6659), TTGGGGCGGGGATTTTAGTTGAACGG (SEQ ID NO:6660), TGGGGCGGGGATTTTAGTTGAACGGAA (SEQ ID NO:6661), TTGGGGCGGGGATTTTAGTTGAACGGA (SEQ ID NO:6662), GGGGCGGGGATTTTAGTTGAACGGAA (SEQ ID NO:6663)
Target705	chr6:85476373-85476389	GAGTGGGAGTGGGATAAGGCGGGAGT (SEQ ID NO:6664), GGAGTGGGAGTGGGATAAGGCGGGAGT (SEQ ID NO:6665), GGAGTGGGAGTGGGATAAGGCGGGAG (SEQ ID NO:6666), GGGAGTGGGAGTGGGATAAGGCGGGAG (SEQ ID NO:6667), AGTGGGAGTGGGATAAGGCGGGAGTTA (SEQ ID NO:6668)
Target706	chr6:85476905-85476922	AGGGCGTCGAGGATAGGATAAGGCGTT (SEQ ID NO:6669), TAGGGCTCGAGGATAGGATAAGGCGT (SEQ ID NO:6670), GGGCGTCGAGGATAGGATAAGGCGTTT (SEQ ID NO:6671), AGGGCGTCGAGGATAGGATAAGGCGTTT (SEQ ID NO:6672), AGTGTAGTAGGGCGTCGAGGATAGGA (SEQ ID NO:6673), GGAGTCGAGGTTGGAGTGGGTTGTAGT (SEQ ID NO:6674), AGGAGTCGAGGTTGGAGTGGGTTGTAGT (SEQ ID NO:6675), AGGAGTCGAGGTTGGAGTGGGTTGTAG (SEQ ID NO:6676), TTAGGAGTCGAGGTTGGAGTGGGTTGT (SEQ ID NO:6677), GGAGTCGAGGTTGGAGTGGGTTGTAGT (SEQ ID NO:6678)
Target707	chr6:85477151-85477187	TCGAGTTGGTTGGGCGGAGTGGTAGTT (SEQ ID NO:6679), TTCGAGTTGGTTGGGCGGAGTGGTAGT (SEQ ID NO:6680), CGAGTTGGTTGGGCGGAGTGGTAGTTT (SEQ ID NO:6681), TCGAGTTGGTTGGGCGGAGTGGTAGTTT (SEQ ID NO:6682), TTCGAGTTGGTTGGGCGGAGTGGTAGTT (SEQ ID NO:6683), TGATTTGTAAAGTGCAGGGTTTGGCGT (SEQ ID NO:6684), GATTTGTAAAGTGCAGGGTTTGGCGT (SEQ ID NO:6685), TGATTTGTAAAGTGCAGGGTTTGGCG (SEQ ID NO:6686), TGTAAAGTGCAGGGTTTGGCGTTTTT (SEQ ID NO:6687), TTGTAAAGTGCAGGGTTTGGCGTTTT (SEQ ID NO:6688)
Target708	chr6:85477236-85477254	AGTAAAGAAAGCGGGATAGGGCGCGT (SEQ ID NO:6689), GAGTAAAGAAAGCGGGATAGGGCGCG (SEQ ID NO:6690), AAGAAAGCGGGATAGGGCGCGTAATC (SEQ ID NO:6691), AGAGTAAAGAAAGCGGGATAGGGCGCG (SEQ ID NO:6692), GAGTAAAGAAAGCGGGATAGGGCGCGT (SEQ ID NO:6693)

Figure 5 (Table 1)

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Target709	chr6:99295742-99295866	GTGGCGTTGCGGTGAAAGTCGGTGTTT (SEQ ID NO:6694), TGGCGTTGCGGTGAAAGTCGGTGTTT (SEQ ID NO:6695), ATTTTGGAGTCGTCGGGAGTGCGTTG (SEQ ID NO:6696), TGGCGTTGCGGTGAAAGTCGGTGTTT (SEQ ID NO:6697), GTGGCGTTGCGGTGAAAGTCGGTGTTT (SEQ ID NO:6698), GCGTCGGTAGAATGGTTTTGGGGAGGT (SEQ ID NO:6699), TCGTCGGTAGAATGGTTTTGGGGAGG (SEQ ID NO:6700), TCGTCGGTAGAATGGTTTTGGGGAGGT (SEQ ID NO:6701), GCGTCGGTAGAATGGTTTTGGGGAGG (SEQ ID NO:6702), TGGTTGGCGCTTTAGGGGTTTTTCGT (SEQ ID NO:6703)
Target710	chr6:99295933-99296103	GTTTGGCGTTTGGGGAGTCGGGGTTTT (SEQ ID NO:6704), TTGCGTTTGGGGAGTCGGGGTTTTG (SEQ ID NO:6705), GCGTTTGGGGAGTCGGGGTTTTGTGT (SEQ ID NO:6706), TTGGGTGAGAGCGGAGGGTTTTGGGA (SEQ ID NO:6707), GGAGTCGGGGTTTTGTGTGTGTCTGGG (SEQ ID NO:6708), TATGCGGTAAGAGGGAGGTCTGGGAGGG (SEQ ID NO:6709), TTATGCGGTAAGAGGGAGGTCTGGGAGG (SEQ ID NO:6710), GTAAGAGGGAGGTCTGGGAGGGCGGAAG (SEQ ID NO:6711), TTATGCGGTAAGAGGGAGGTCTGGGAGGG (SEQ ID NO:6712), TAAGAGGGAGGTCTGGGAGGGCGGAAG (SEQ ID NO:6713)
Target711	chr6:99296148-99296200	CGGTTTCGTTGCGGGAGGTTAGAGGGT (SEQ ID NO:6714), GTTTCGGGAGGTTAGAGGGTTGCGTTT (SEQ ID NO:6715), TTCGTTGCGGGAGGTTAGAGGGTTGCG (SEQ ID NO:6716), TCGGGAGGTTAGAGGGTTGCGTTTTC (SEQ ID NO:6717), TTTTCGTTGCGGGAGGTTAGAGGGTTGCG (SEQ ID NO:6718), TTTGGGTTTTGAAAGGTGGCGGGGTGG (SEQ ID NO:6719), TGGTTTGGGTTTTGAAAGGTGGCGGGG (SEQ ID NO:6720), GGTTCGGGTTTTGAAAGGTGGCGGGGT (SEQ ID NO:6721), GTTTGGGTTTTGAAAGGTGGCGGGGTG (SEQ ID NO:6722), TTGGTTTGGGTTTTGAAAGGTGGCGGGG (SEQ ID NO:6723)
Target712	chr6:99296227-99296254	GAGTAGTGGGGTTTCGGGGAGTAGCGG (SEQ ID NO:6724), GGAGTAGTGGGGTTTCGGGGAGTAGCG (SEQ ID NO:6725), AGAGGGGAGTAGTGGGGTTTCGGGGAG (SEQ ID NO:6726), AGGGGAGTAGTGGGGTTTCGGGGAGTA (SEQ ID NO:6727), GGGAGTAGTGGGGTTTCGGGGAGTAGC (SEQ ID NO:6728), TTTGGGTTTTGAAAGGTGGCGGGGTGG (SEQ ID NO:6729), TGGTTTGGGTTTTGAAAGGTGGCGGGG (SEQ ID NO:6730), GGTTCGGGTTTTGAAAGGTGGCGGGGT (SEQ ID NO:6731), GGTTCGGGTCGTTTGGGGAGGGGATTA (SEQ ID NO:6732), GTTTGGGTTTTGAAAGGTGGCGGGGTG (SEQ ID NO:6733)
Target713	chr6:99296263-99296330	GAGTAGTGGGGTTTCGGGGAGTAGCGG (SEQ ID NO:6734), GGAGTAGTGGGGTTTCGGGGAGTAGCG (SEQ ID NO:6735), AGAGGGGAGTAGTGGGGTTTCGGGGAG (SEQ ID NO:6736), AGGGGAGTAGTGGGGTTTCGGGGAGTA (SEQ ID NO:6737), GGGAGTAGTGGGGTTTCGGGGAGTAGC (SEQ ID NO:6738), TTTGGGTTTTGAAAGGTGGCGGGGTGG (SEQ ID NO:6739), TGGTTTGGGTTTTGAAAGGTGGCGGGG (SEQ ID NO:6740), GGTTCGGGTTTTGAAAGGTGGCGGGGT (SEQ ID NO:6741), GGTTCGGGTCGTTTGGGGAGGGGATTA (SEQ ID NO:6742), TTGGGTTTTGAAAGGTGGCGGGGTGGT (SEQ ID NO:6743)
Target714	chr6:100050797-100050813	TGCGGGTTTATTCGGTAGCGGTCGGTA (SEQ ID NO:6744), AGTTCGGGTTTATTCGGTAGCGGTCGG (SEQ ID NO:6745), GAGTTCGGGTTTATTCGGTAGCGGTCG (SEQ ID NO:6746), GTGCGGGTTTATTCGGTAGCGGTCGGT (SEQ ID NO:6747), GCGGGTTTATTCGGTAGCGGTCGGTAG (SEQ ID NO:6748), GCGAGCGTGTGTTGAATTGTAATGTTTCGGG (SEQ ID NO:6749), GCGTGTGTTGAATTGTAATGTTTCGGGGT (SEQ ID NO:6750), GCGTGTGTTGAATTGTAATGTTTCGGGG (SEQ ID NO:6751), AGCGTGTGTTGAATTGTAATGTTTCGGGG (SEQ ID NO:6752), AGCGTGTGTTGAATTGTAATGTTTCGGGGT (SEQ ID NO:6753)
Target715	chr6:100051019-100051034	TGGAGAATTCGGTTAAAGGTAATTTGAGAGGGA (SEQ ID NO:6754), TTGGAGAATTCGGTTAAAGGTAATTTGAGAGGGA (SEQ ID NO:6755), TGGAGAATTCGGTTAAAGGTAATTTGAGAGGGAT (SEQ ID NO:6756), GTTGGAGAATTCGGTTAAAGGTAATTTGAGAGGG (SEQ ID NO:6757), GGCGGCGATGGGTTTTGGGAACGTTAT (SEQ ID NO:6758), TAATTGTATGGTCGGTGGATGCGCGGC (SEQ ID NO:6759), GGCGGCGATGGGTTTTGGGAACGTTAT (SEQ ID NO:6760), AATTGTATGGTCGGTGGATGCGCGGC (SEQ ID NO:6761), GGCGGCGATGGGTTTTGGGAACGTTA (SEQ ID NO:6762)
Target716	chr6:100051064-100051132	GGCGTTCGGGTTGCGTTTTGGTTGTTA (SEQ ID NO:6763), GGCGTTCGGGTTGCGTTTTGGTTGTT (SEQ ID NO:6764), GGCGTTCGGGTTGCGTTTTGGTTGTTAT (SEQ ID NO:6765), GCGTTCGGGTTGCGTTTTGGTTGTTAT (SEQ ID NO:6766), GGCGTTCGGGTTGCGTTTTGGTTGT (SEQ ID NO:6767), GGCGGCGATGGGTTTTGGGAACGTTAT (SEQ ID NO:6768), TAAGTTCGGGTTTGAATAGGGCGGCGG (SEQ ID NO:6769), TCGGGCGGGCGGGTTAGTTTGATTAG (SEQ ID NO:6770), GCGCGGGTGGGATATTAAGGTCGGGTT (SEQ ID NO:6771), GAGGCGCGGGTGGGATATTAAGGTCGG (SEQ ID NO:6772)
Target717	chr6:100051147-100051154	GGCGTGTATTGTTGGTGGCGTTTTAGAGT (SEQ ID NO:6773), TCGGGTTGCGTTTTGGTTGTTATTTTGGGA (SEQ ID NO:6774), CGGGTTGCGTTTTGGTTGTTATTTTGGAG (SEQ ID NO:6775), TCGGGTTGCGTTTTGGTTGTTATTTTGGAG (SEQ ID NO:6776), TCGGGTTGCGTTTTGGTTGTTATTTTGGAG (SEQ ID NO:6777), TAAGGTCGGGTTTGAATAGGGCGGCGG (SEQ ID NO:6778), TCGGGCGGGCGGGTTAGTTTGATTAG (SEQ ID NO:6779), GCGCGGGTGGGATATTAAGGTCGGGTT (SEQ ID NO:6780), GAGGCGCGGGTGGGATATTAAGGTCGG (SEQ ID NO:6781), GTCGGGCGGGCGGGTTAGTTTGATTAG (SEQ ID NO:6782)

Figure 5 (Table 1)

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Target718	chr6:100051186-100051194	GGCGTGTATTGTTGGTGGCGTTTTAGAGT (SEQ ID NO:6783), GGCGTGTATTGTTGGTGGCGTTTTAGAGTT (SEQ ID NO:6784), TTGGTGCGGTTTTTAGAGTTATCGTCGTC (SEQ ID NO:6785), TTTGGTGGCGTTTTAGAGTTATCGTCGTC (SEQ ID NO:6786), GGCGTGTATTGTTGGTGGCGTTTTAGAGTTA (SEQ ID NO:6787), TCGGGCGGGCGGGTTAGTTTGGATTAG (SEQ ID NO:6788), GTCGGGCGGGCGGGTTAGTTTGGATTAG (SEQ ID NO:6789), CGGGCGGGCGGGTTAGTTTGGATTAGT (SEQ ID NO:6790), GGGCGGGCGGGTTAGTTTGGATTAGT (SEQ ID NO:6791), GGGCGGGCGGGTTAGTTTGGATTAGTTG (SEQ ID NO:6792)
Target719	chr6:106429346-106429563	TCGTTGGGGAAATTCGTAGGGGTGCGG (SEQ ID NO:6793), CGTTGGGGAAATTCGTAGGGGTGCGGT (SEQ ID NO:6794), GTTGGGGAAATTCGTAGGGGTGCGGTT (SEQ ID NO:6795), TGGGGAAATTCGTAGGGGTGCGGTTG (SEQ ID NO:6796), TTCGTTGGGGAAATTCGTAGGGGTGCG (SEQ ID NO:6797), GGTTCGGAAGGCGAGGAGGAGCGA (SEQ ID NO:6798), GTTTCGGAAGGCGAGGAGGAGCGAG (SEQ ID NO:6799), TTTTCGGAAGGCGAGGAGGAGCGAGC (SEQ ID NO:6800), CGTAGGCGTGTCTGTGAGTTTTGCGT (SEQ ID NO:6801), CGTAGGCGTGTCTGTGAGTTTTGCGT (SEQ ID NO:6802)
Target720	chr6:106429659-106429674	GGTTTCGCGGGTTTTTGGGGCGTATT (SEQ ID NO:6803), TGGGGAAATTCGTAGGGGTGCGGTTG (SEQ ID NO:6804), GTTTCGCGGGTTTTTGGGGCGTATT (SEQ ID NO:6805), GGTTTCGCGGGTTTTTGGGGCGTAT (SEQ ID NO:6806), GGTTTCGCGGGTTTTTGGGGCGTATT (SEQ ID NO:6807), TCGTGTGTTTTCTCGTAGTGGAGTT (SEQ ID NO:6808), TTCGTGTGTTTTCTCGTAGTGGAGT (SEQ ID NO:6809), CGTGTGTTTTCTCGTAGTGGAGTTG (SEQ ID NO:6810), CGTGTGTTTTCTCGTAGTGGAGTTG (SEQ ID NO:6811), TCGTGTGTTTTCTCGTAGTGGAGTTG (SEQ ID NO:6812)
Target721	chr6:106433873-106434266	TGGACGCGGGTTTTAGTTCGAGGT (SEQ ID NO:6813), TGGGTAGGGCGTCGGGTTTTCGGATT (SEQ ID NO:6814), TTGGGTAGGGCGTCGGGTTTTCGGATT (SEQ ID NO:6815), TTTGGGTAGGGCGTCGGGTTTTCGGAT (SEQ ID NO:6816), TTGTTTTGGGGTTTGGGTAGGGCGTCG (SEQ ID NO:6817), GTTTCGCGGGAGAGGAAGCGTTTTG (SEQ ID NO:6818), TGGGTAGAAGTCGCGCGTGTGTTGAG (SEQ ID NO:6819), TTTTCGCGGGAGAGGAAGCGTTTTGGT (SEQ ID NO:6820), GTGGGTAGAAGTCGCGCGTGTGTTGAG (SEQ ID NO:6821), TTTTCGCGGGAGAGGAAGCGTTTTGGTC (SEQ ID NO:6822)
Target722	chr6:106434387-106434393	CGGGGCGAGTAAAAGTAGGATTTGCGT (SEQ ID NO:6823), TCGGGGCGAGTAAAAGTAGGATTTGCGT (SEQ ID NO:6824), TCGGGGCGAGTAAAAGTAGGATTTGCG (SEQ ID NO:6825), CGGGGCGAGTAAAAGTAGGATTTGCGTTCG (SEQ ID NO:6826), CGGGGCGAGTAAAAGTAGGATTTGCGTT (SEQ ID NO:6827)
Target723	chr6:137814512-137814524	CGGGTTCGTTTCGTTTATTTAGTAAGTTTTTG (SEQ ID NO:6828), CGGGTTCGTTTCGTTTATTTAGTAAGTTTTTG (SEQ ID NO:6829), GGGTTCGTTTCGTTTATTTAGTAAGTTTTTGA (SEQ ID NO:6830), CGTTGTTTATTTAGTAAGTTTTTGGATTGCGTCA (SEQ ID NO:6831), TCGTTGTTTATTTAGTAAGTTTTTGGATTGCGTCG (SEQ ID NO:6832), TGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6833), TGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6834), TTGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6835), GTTGGGTAGCGGTTTTAGTATTGGGTTGG (SEQ ID NO:6836), GTTGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6837)
Target724	chr6:137814558-137814568	TTGGTTGTGGAGAGAGCGGATAGGTGC (SEQ ID NO:6838), CGGGTTATGTTGGTTGTGGAGAGAGCGG (SEQ ID NO:6839), GTTGGTTGTGGAGAGAGCGGATAGGTGC (SEQ ID NO:6840), TGTGGTTGTGGAGAGAGCGGATAGGTGC (SEQ ID NO:6841), CGGGTTATGTTGGTTGTGGAGAGAGCGGA (SEQ ID NO:6842), TGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6843), TGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6844), TTGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6845), GTTGGGTAGCGGTTTTAGTATTGGGTTGG (SEQ ID NO:6846), GTTGGGTAGCGGTTTTAGTATTGGGTTGGT (SEQ ID NO:6847)
Target725	chr6:137814636-137814655	GCGGCGGCGGTATTTGGTAGATGGTG (SEQ ID NO:6848), GCGGCGGCGGTATTTGGTAGATGGTGT (SEQ ID NO:6849), CGGCGGCGGTATTTGGTAGATGGTGTA (SEQ ID NO:6850), GCGGCGGCGGTATTTGGTAGATGGTGTA (SEQ ID NO:6851), TTGGTTGTGGAGAGAGCGGATAGGTGC (SEQ ID NO:6852), CGGTGTATTTATTTGGGCGGCGGT (SEQ ID NO:6853), TCGGTGTATTTATTTGGGCGGCGCG (SEQ ID NO:6854), TCGGTGTATTTATTTGGGCGGCGCGT (SEQ ID NO:6855), CGGTGTATTTATTTGGGCGGCGCGT (SEQ ID NO:6856), TTCGTGTATTTATTTGGGCGGCGCG (SEQ ID NO:6857)
Target726	chr6:137814666-137814690	GAGGGCGTTTGTAGTAGCGAGTGGGGA (SEQ ID NO:6858), AGGGCGTTTGTAGTAGCGAGTGGGGAG (SEQ ID NO:6859), TGGAGGGCGTTTGTAGTAGCGAGTGGG (SEQ ID NO:6860), GGCGTTTGTAGTAGCGAGTGGGGAGGT (SEQ ID NO:6861), CGTGAGGGCGTTTGTAGTAGCGAGTG (SEQ ID NO:6862), CGGTGTATTTATTTGGGCGGCGCGT (SEQ ID NO:6863), TCGGTGTATTTATTTGGGCGGCGCG (SEQ ID NO:6864), TCGGTGTATTTATTTGGGCGGCGCGT (SEQ ID NO:6865), CGGTGTATTTATTTGGGCGGCGCGT (SEQ ID NO:6866), TTCGTGTATTTATTTGGGCGGCGCG (SEQ ID NO:6867)

Figure 5 (Table 1)

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Target727	chr6:137814707-137814747	GAGGGCGTTTTGAGTAGCGAGTGGGGA (SEQ ID NO:6868), AGGGCGTTTTGAGTAGCGAGTGGGAG (SEQ ID NO:6869), TGGAGGGCGTTTTGAGTAGCGAGTGGG (SEQ ID NO:6870), GGGCGTTTTGAGTAGCGAGTGGGAGGT (SEQ ID NO:6871), CGTGGAGGGCGTTTTGAGTAGCGAGTG (SEQ ID NO:6872), CGGTGTATTTATTTTGGGCGGCGCGT (SEQ ID NO:6873), TCGGTGTATTTATTTTGGGCGGCGCG (SEQ ID NO:6874), TCGGTGTATTTATTTTGGGCGGCGCGT (SEQ ID NO:6875), AGGTTGGTTGGCGAGATTATGGGGGT (SEQ ID NO:6876), CGGTGTATTTATTTTGGGCGGCGCGTT (SEQ ID NO:6877)
Target728	chr6:137814768-137814793	GAGGGCGTTTTGAGTAGCGAGTGGGGA (SEQ ID NO:6878), AGGGCGTTTTGAGTAGCGAGTGGGAG (SEQ ID NO:6879), TGGAGGGCGTTTTGAGTAGCGAGTGGG (SEQ ID NO:6880), GGGCGTTTTGAGTAGCGAGTGGGAGGT (SEQ ID NO:6881), CGTGGAGGGCGTTTTGAGTAGCGAGTG (SEQ ID NO:6882), TGGAGGAGATGAAGAGGTTGGTTGGCG (SEQ ID NO:6883), AGGTTGGTTGGCGAGATTATGGGGGT (SEQ ID NO:6884), TGGAGGAGATGAAGAGGTTGGTTGGCGA (SEQ ID NO:6885), GGAGGAGATGAAGAGGTTGGTTGGCGA (SEQ ID NO:6886), GAGGTTGGTTGGCGAGATTATGGGGGT (SEQ ID NO:6887)
Target729	chr6:143234817-143234970	TCGATTGTAGGGGGTGTGAATGTGGT (SEQ ID NO:6888), GTCGATTGTAGGGGGTGTGAATGTGGT (SEQ ID NO:6889), AGTCGATTGTAGGGGGTGTGAATGTGGT (SEQ ID NO:6890), AGTCGATTGTAGGGGGTGTGAATGTGGT (SEQ ID NO:6891), TCGATTGTAGGGGGTGTGAATGTGGT (SEQ ID NO:6892), GGGCGTGGAGGTGAGGATGGGGTAAGAG (SEQ ID NO:6893), AGATGGCGTGGAGGTGAGGATGGGGTA (SEQ ID NO:6894), ATGGCGTGGAGGTGAGGATGGGGTAAG (SEQ ID NO:6895), GATGGCGTGGAGGTGAGGATGGGGTAA (SEQ ID NO:6896), TGGCGTGGAGGTGAGGATGGGGTAAGA (SEQ ID NO:6897)
Target730	chr6:143235035-143235091	TGCGGTATATTGTGGTGGGAGAGATACGT (SEQ ID NO:6898), GCGGTATATTGTGGTGGGAGAGATACGT (SEQ ID NO:6899), TGCGGTATATTGTGGTGGGAGAGATACG (SEQ ID NO:6900), GCGGTATATTGTGGTGGGAGAGATACGTG (SEQ ID NO:6901), GCGGTATATTGTGGTGGGAGAGATACGTGT (SEQ ID NO:6902)
Target731	chr6:151004537-151004727	GTGTGTGTGTGTGGAAGGGTGCGTTG (SEQ ID NO:6903), GTACGTGTGTGTGTGTGGAAGGGTGCG (SEQ ID NO:6904), GTGTGTGTGTGTGGAAGGGTGCGTTGAT (SEQ ID NO:6905), TGTGTGTGTGTGGAAGGGTGCGTTGA (SEQ ID NO:6906), TACGTGTGTGTGTGTGGAAGGGTGCGG (SEQ ID NO:6907), GGGTAATGTTTTGTTTGGGAGGTTAGCGT (SEQ ID NO:6908), AGGGTAATGTTTTGTTTGGGAGGTTAGCGT (SEQ ID NO:6909), GGGTAATGTTTTGTTTGGGAGGTTAGCGTT (SEQ ID NO:6910), AAGGGTAATGTTTTGTTTGGGAGGTTAGCG (SEQ ID NO:6911), AGGGTAATGTTTTGTTTGGGAGGTTAGCGTT (SEQ ID NO:6912)
Target732	chr6:163817821-163817885	TGCGTGTTTGGTTTTTGTGTGCGGTG (SEQ ID NO:6913), TGGGAATTGTTTGGTGAGTGTGGAAGGA (SEQ ID NO:6914), GGGGAATTGTTTGGTGAGTGTGGAAGGAGG (SEQ ID NO:6915), TGGGAATTGTTTGGTGAGTGTGGAAGGAGG (SEQ ID NO:6916), GCGTGTTTGGTTTTTGTGTGCGGTG (SEQ ID NO:6917), CGGGTTTTTGTATGCGTTTTTGTGGATGT (SEQ ID NO:6918), TCGGGTTTTGATGCGTTTTTGTGGATGT (SEQ ID NO:6919), CGGGTTTTTGTATGCGTTTTTGTGGATGT (SEQ ID NO:6920), TTCGGTTTTTGTATGCGTTTTTGTGGATG (SEQ ID NO:6921), TCGGGTTTTTGTATGCGTTTTTGTGGATGT (SEQ ID NO:6922)
Target733	chr6:163817972-163818242	GGGTGCGTGTGTTTTGTTTGTGCGGT (SEQ ID NO:6923), AGGGTGCGTGTGTTTTGTTTGTGCGGT (SEQ ID NO:6924), AGGGTGCGTGTGTTTTGTTTGTGCGG (SEQ ID NO:6925), AAGGGTGCGTGTGTTTTGTTTGTGCGG (SEQ ID NO:6926), AAGGGTGCGTGTGTTTTGTTTGTGCGGT (SEQ ID NO:6927), GCGTAGAAGGAAGTTAGGTCGCGAGGA (SEQ ID NO:6928), GCGTAGAAGGAAGTTAGGTCGCGAGGAT (SEQ ID NO:6929), GCGTAGAAGGAAGTTAGGTCGCGAGGATG (SEQ ID NO:6930), GCGTAGAAGGAAGTTAGGTCGCGAGGATGT (SEQ ID NO:6931), AGAAGGAAGTTAGGTCGCGAGGATGTC (SEQ ID NO:6932)
Target734	chr6:170494224-170494368	AGTTTGCGGGGTGGGGTAAAGGTGATT (SEQ ID NO:6933), AAGTTTGCGGGGTGGGGTAAAGGTGATT (SEQ ID NO:6934), TAAGTTTGCGGGGTGGGGTAAAGGTGA (SEQ ID NO:6935), AAGTTTGCGGGGTGGGGTAAAGGTGATT (SEQ ID NO:6936), AAGTTTGCGGGGTGGGGTAAAGGTGA (SEQ ID NO:6937), TGTGGGAAGCGTGCGTTGTTGATTTT (SEQ ID NO:6938), ATGTGGGAAGCGTGCGTTGTTGATTTT (SEQ ID NO:6939), AGCGTGCGTTGTTGATTTTAGGGTGT (SEQ ID NO:6940), GGGGAAGCGTGCGTTGTTGATTTTAGGGT (SEQ ID NO:6941), TGGGAAGCGTGCGTTGTTGATTTTAGGG (SEQ ID NO:6942)
Target735	chr6:170494381-170494476	GGCGGCGTTTGAATAGTATTTTGGGATTAGGT (SEQ ID NO:6943), GCGGCGTTTGAATAGTATTTTGGGATTAGGT (SEQ ID NO:6944), GCGGCGTTTGAATAGTATTTTGGGATTAGGTAGCG (SEQ ID NO:6945), GCGGCGTTTGAATAGTATTTTGGGATTAGGTA (SEQ ID NO:6946), ACGGTGTTAGGTATGGAATTGATACGTGATGT (SEQ ID NO:6947), TGTGGGAAGCGTGCGTTGTTGATTTT (SEQ ID NO:6948), ATGTGGGAAGCGTGCGTTGTTGATTTT (SEQ ID NO:6949), AGCGTGCGTTGTTGATTTTAGGGTGT (SEQ ID NO:6950), GGGGAAGCGTGCGTTGTTGATTTTAGGGT (SEQ ID NO:6951), TGGGAAGCGTGCGTTGTTGATTTTAGGG (SEQ ID NO:6952)

Figure 5 (Table 1)

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Target736	chr7:391221-391545	AGAGGAAGTCGGCGGGGTTAAAGCGTT (SEQ ID NO:6953), TTGGTGGGGTTGTAGAGGAAGTCGGC (SEQ ID NO:6954), CGGGTTGGTGGGGTTGTAGAGGAAGT (SEQ ID NO:6955), GGGTTGTAGAGGAAGTCGGCGGGGTTA (SEQ ID NO:6956), TCGGGTTGGTGGGGTTGTAGAGGAAG (SEQ ID NO:6957), TTCGGTTGTTTTAACGCGCGTGTGAG (SEQ ID NO:6958), TGTTTCGGTTGTTTTAACGCGCGTGT (SEQ ID NO:6959), TTTTCGGTTGTTTTAACGCGCGTGTGA (SEQ ID NO:6960), TGTTTCGGTTGTTTTAACGCGCGTGTG (SEQ ID NO:6961), GTTTCGGTTGTTTTAACGCGCGTGTG (SEQ ID NO:6962)
Target737	chr7:641200-641348	GTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6963), AGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6964), AAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6965), AAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6966), TGAAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6967), GGTTAGGGGTGGGCGTTAGGGAGTGTTC (SEQ ID NO:6968), CGGGGTGGGCGTAGGAGTTGTTGTA (SEQ ID NO:6969), TTAGGGTAGGGGTGGGCGTTAGGGAGT (SEQ ID NO:6970), AGTTAGGGTAGGGGTGGGCGTTAGGGA (SEQ ID NO:6971), GTAGGGGTGGGCGTTAGGGAGTGTTCG (SEQ ID NO:6972)
Target738	chr7:641360-641449	GTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6973), AGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6974), AAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6975), AAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6976), TGAAGTTGATGGAGGTGTTTGGTGTTCGTGT (SEQ ID NO:6977), GTGGGATGGTGGGTTTTTTCGGGAA (SEQ ID NO:6978), TACGTGGGATGGTGGGTTTTTTCGGG (SEQ ID NO:6979), TGGGATGGTGGGTTTTTTCGGGAAT (SEQ ID NO:6980), ACGTGGGATGGTGGGTTTTTTCGGG (SEQ ID NO:6981), GTGGGATGGTGGGTTTTTTCGGGAAT (SEQ ID NO:6982)
Target739	chr7:1263851-1263861	AAGTGTTTCGGGTGGTGGTTCGAGTTC (SEQ ID NO:6983), GAAAGTGTTTCGGGTGGTGGTTCGAGT (SEQ ID NO:6984), AAAGTGTTTCGGGTGGTGGTTCGAGTTC (SEQ ID NO:6985), AAAGTGTTTCGGGTGGTGGTTCGAGTTC (SEQ ID NO:6986), GAAAGTGTTTCGGGTGGTGGTTCGAGTTC (SEQ ID NO:6987)
Target740	chr7:1275046-1275070	AGATAGGTGTGGAGGGCGGTTGTGGTT (SEQ ID NO:6988), AAGATAGGTGTGGAGGGCGGTTGTGGT (SEQ ID NO:6989), TCGAAGATAGGTGTGGAGGGCGGTTGT (SEQ ID NO:6990), AGGTGTGGAGGGCGGTTGTGGTTTATG (SEQ ID NO:6991), CGAAGATAGGTGTGGAGGGCGGTTGTG (SEQ ID NO:6992), GACGGAGAGCGTCGGGTTTTTGGTTCG (SEQ ID NO:6993), AGAGCGTCGGGTTTTTGGTTCGGAGGT (SEQ ID NO:6994), GAGAGCGTCGGGTTTTTGGTTCGGAGG (SEQ ID NO:6995), GGAGAGCGTCGGGTTTTTGGTTCGGAG (SEQ ID NO:6996), GAGCGTCGGGTTTTTGGTTCGGAGGT (SEQ ID NO:6997)
Target741	chr7:1275258-1275268	AGGGGCGGTTTTTAGGTTTTTCGAGGTG (SEQ ID NO:6998), GGGGCGGTTTTTAGGTTTTTCGAGGTGA (SEQ ID NO:6999), AGGGGCGGTTTTTAGGTTTTTCGAGGTGA (SEQ ID NO:7000), AAGGGGCGGTTTTTAGGTTTTTCGAGGT (SEQ ID NO:7001), GGGGCGGTTTTTAGGTTTTTCGAGGTGAG (SEQ ID NO:7002), CGTTTCGGTCGGGTTAGGAGTGAAGTCG (SEQ ID NO:7003), GTTCGGTCGGGTTAGGAGTGAAGTCG (SEQ ID NO:7004), CGGTTCGAGCGGTTTTGAGTTGGGTTT (SEQ ID NO:7005), TCGTTTCGGTCGGGTTAGGAGTGAAGTC (SEQ ID NO:7006), TTCGTTTCGGTCGGGTTAGGAGTGAAGT (SEQ ID NO:7007)
Target742	chr7:1275593-1275598	GTTTATGGATTCGGAGGAGATCGCGC (SEQ ID NO:7008), AGTTTATGGATTCGGAGGAGATCGCGC (SEQ ID NO:7009), GAGTTTATGGATTCGGAGGAGATCGCGC (SEQ ID NO:7010), CGAGTTTATGGATTCGGAGGAGATCGCGC (SEQ ID NO:7011), TCGTCGGGTTAAGTGAGGAAGAAGGA (SEQ ID NO:7012), GTTGTGGAGTTGGGCGCGTTGTGTAG (SEQ ID NO:7013), AGTTGGGCGCGTTGTGTAGGGATAGGT (SEQ ID NO:7014), CGCGTTGTGTAGGGATAGGTCGTCGGG (SEQ ID NO:7015), TTGGGCGCGTTGTGTAGGGATAGGTCG (SEQ ID NO:7016), CGGAGTTGGGCGCGTTGTGTAGGGATA (SEQ ID NO:7017)
Target743	chr7:1275704-1275723	GGAGTTGGAGAAGATGGAGAAGAAGAAGCG (SEQ ID NO:7018), GGAGTTGGAGAAGATGGAGAAGAAGAAGCGT (SEQ ID NO:7019), AGGAGTTGGAGAAGATGGAGAAGAAGAAGCG (SEQ ID NO:7020), AGGAGTTGGAGAAGATGGAGAAGAAGAAGCGT (SEQ ID NO:7021), GAGTTGGAGAAGATGGAGAAGAAGAAGCGT (SEQ ID NO:7022), CGAGGCGTGCCTTCGGGGTTTTTGG (SEQ ID NO:7023), CGAGGCGTGCCTTCGGGGTTTTTGG (SEQ ID NO:7024), GAGGCGTGCCTTCGGGGTTTTTGGC (SEQ ID NO:7025), GAGGCGTGCCTTCGGGGTTTTTGGC (SEQ ID NO:7026), GAGGCGTGCCTTCGGGGTTTTTGGCG (SEQ ID NO:7027)
Target744	chr7:1275734-1275749	CGAGAAGAAGTTGTTGAAGAGTTAGGGTCGT (SEQ ID NO:7028), ACGAGAAGAAGTTGTTGAAGAGTTAGGGTCG (SEQ ID NO:7029), ACGAGAAGAAGTTGTTGAAGAGTTAGGGTCGT (SEQ ID NO:7030), GAGTTAGGGTCGTTATTTGTATTGTTTCGGC (SEQ ID NO:7031), AGAGTTAGGGTCGTTATTTGTATTGTTTCGGC (SEQ ID NO:7032), GTAGGTGTCGGGTGTAGGCGGTTTCGT (SEQ ID NO:7033), GTCGTAGGTGTCGGGTGTAGGCGGTTTC (SEQ ID NO:7034), GTAGGTGTCGGGTGTAGGCGGTTTCGT (SEQ ID NO:7035), GTCGTAGGTGTCGGGTGTAGGCGGTT (SEQ ID NO:7036), TAGGTGTCGGGTGTAGGCGGTTTCGT (SEQ ID NO:7037)

Figure 5 (Table 1)

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Target745	chr7:1594934-1595023	CGTTTCGGGTTAGTGC GGAGGTGAGGA (SEQ ID NO:7038), GTGCGGAGGTGAGGAAGAGTTAGGGGG (SEQ ID NO:7039), TCGCGAGGTGAGGAAGAGTTAGGGGGT (SEQ ID NO:7040), GGAGGTTTCGGGGGCGGAAGGGTTTATT (SEQ ID NO:7041), ACGTTTCGGGTTAGTGC GGAGGTGAGG (SEQ ID NO:7042), TGTTTTAGGGATTTTGGAGATAGTCGGCGT (SEQ ID NO:7043), TGTTTTAGGGATTTTGGAGATAGTCGGCGTT (SEQ ID NO:7044), ATGTTTTAGGGATTTTGGAGATAGTCGGCGT (SEQ ID NO:7045), TGTTTTAGGGATTTTGGAGATAGTCGGCGTTT (SEQ ID NO:7046), ATGTTTTAGGGATTTTGGAGATAGTCGGCGTT (SEQ ID NO:7047)
Target746	chr7:4859441-4859485	GTCGGGAGGTTGACGGGGTTTTGTTTT (SEQ ID NO:7048), TCGGGAGGTTGACGGGGTTTTGTTTT (SEQ ID NO:7049), GTCGGGAGGTTGACGGGGTTTTGTTTT (SEQ ID NO:7050), CGGGAGGTTGACGGGGTTTTGTTTTTCG (SEQ ID NO:7051), CGGGAGGTTGACGGGGTTTTGTTTTTCGG (SEQ ID NO:7052), TGTTTGTTTCGGCGATGGGAGTTAGGGT (SEQ ID NO:7053), GTTTGGTTTCGGCGATGGGAGTTAGGGT (SEQ ID NO:7054), TGTTTGTTTCGGCGATGGGAGTTAGGG (SEQ ID NO:7055), TCGGCGATGGGAGTTAGGGTTAGGGA (SEQ ID NO:7056), GTGTTTGTTTCGGCGATGGGAGTTAGGG (SEQ ID NO:7057)
Target747	chr7:4859645-4859668	CGGGGATTATATGGGATTTAGTTGTTTTCGG (SEQ ID NO:7058), CGGGGATTATATGGGATTTAGTTGTTTTCGGT (SEQ ID NO:7059), ACGGGGATTATATGGGATTTAGTTGTTTTCGG (SEQ ID NO:7060), ACGGGGATTATATGGGATTTAGTTGTTTTCGGT (SEQ ID NO:7061), CGGGGATTATATGGGATTTAGTTGTTTTCGGT (SEQ ID NO:7062), TCGTGTGATAGGGGACGGGGTTAGTT (SEQ ID NO:7063), TTCGTGTGATAGGGGACGGGGTTAGT (SEQ ID NO:7064), GGTTTTTTCGTGTGATAGGGGACGGGG (SEQ ID NO:7065), TTTTCGTGTGATAGGGGACGGGGT (SEQ ID NO:7066), TTTTCGTGTGATAGGGGACGGGGT (SEQ ID NO:7067)
Target748	chr7:4859824-4859837	TGTGGGGGTCGGAATAAAGGGGTTTT (SEQ ID NO:7068), TTGTGGGGTCGGAATAAAGGGGTTT (SEQ ID NO:7069), TTTGTGGGGTCGGAATAAAGGGGTT (SEQ ID NO:7070), TTTGTGGGGTCGGAATAAAGGGGTT (SEQ ID NO:7071), TTGTGGGGTCGGAATAAAGGGGTTTT (SEQ ID NO:7072), GTCGGTAGGTGGTTTTGGGATGGAGGT (SEQ ID NO:7073), AGTCGGTAGGTGGTTTTGGGATGGAGGT (SEQ ID NO:7074), AGTCGGTAGGTGGTTTTGGGATGGAGG (SEQ ID NO:7075), GGGATGGAGGTAATTCGGAGTTGCGGT (SEQ ID NO:7076), TGGGATGGAGTAATTCGGAGTTGCGG (SEQ ID NO:7077)
Target749	chr7:4859918-4859926	GTTAGGTTTGTAGGGAGAGGCGACGGG (SEQ ID NO:7078), AGTTAGGTTTGTAGGGAGAGGCGACGGG (SEQ ID NO:7079), AGTTAGGTTTGTAGGGAGAGGCGACGG (SEQ ID NO:7080), GAGTTAGGTTTGTAGGGAGAGGCGACGGG (SEQ ID NO:7081), GAGTTAGGTTTGTAGGGAGAGGCGACGG (SEQ ID NO:7082), GGGGTTTTGGGTTTTTCGGGATTATAGCGT (SEQ ID NO:7083), TGGGGTTTTGGGTTTTTCGGGATTATAGCG (SEQ ID NO:7084), GGGGTTTTGGGTTTTTCGGGATTATAGCG (SEQ ID NO:7085), TGGGGTTTTGGGTTTTTCGGGATTATAGCGT (SEQ ID NO:7086), GGGTTTTGGGTTTTTCGGGATTATAGCGT (SEQ ID NO:7087)
Target750	chr7:27196023-27196321	CGTAGGAGGCGTAGGGTAGGTTGTCGT (SEQ ID NO:7088), TGTCGTAGGAGGCGTAGGGTAGGTTGT (SEQ ID NO:7089), GGTCTAGGAGGCGTAGGGTAGGTTGT (SEQ ID NO:7090), TGTCGTAGGAGGCGTAGGGTAGGTTG (SEQ ID NO:7091), TCGTAGGAGGCGTAGGGTAGGTTGTCGT (SEQ ID NO:7092), CGGAGGCGGTTATGTGGGCGGTTAC (SEQ ID NO:7093), GCGGAGGCGGTTATGTGGGCGGTTAC (SEQ ID NO:7094), TGGGGTTTGGTGTAATTTGGGGTGT (SEQ ID NO:7095), TGTGAGGATTGTTGAGATTGGCGGAGG (SEQ ID NO:7096), GCGGAGGCGGTTATGTGGGCGGTTA (SEQ ID NO:7097)
Target751	chr7:27196351-27196515	GCGGAAAAAGATTTGGAGGTTTCGCGGG (SEQ ID NO:7098), GCGGAAAAAGATTTGGAGGTTTCGCGGGA (SEQ ID NO:7099), GCGGAAAAAGATTTGGAGGTTTCGCGG (SEQ ID NO:7100), CGGAAAAAGATTTGGAGGTTTCGCGGG (SEQ ID NO:7101), CGGAAAAAGATTTGGAGGTTTCGCGGGA (SEQ ID NO:7102), TGGGTAGGCGGATAGGAGAGGGATGGG (SEQ ID NO:7103), GGCGGATAGGAGAGGGATGGGGAGGAT (SEQ ID NO:7104), GGTAGGCGGATAGGAGAGGGATGGGGA (SEQ ID NO:7105), TAGGCGGATAGGAGAGGGATGGGGAGG (SEQ ID NO:7106), GGGTTTGGGTAGGCGGATAGGAGAGGG (SEQ ID NO:7107)
Target752	chr7:27196518-27196556	TCGTATTGGGGTTTTCGGGACGTTAGGC (SEQ ID NO:7108), TTCGTATTGGGGTTTTCGGGACGTTAGGC (SEQ ID NO:7109), GCGGAAAAAGATTTGGAGGTTTCGCGGG (SEQ ID NO:7110), GCGGAAAAAGATTTGGAGGTTTCGCGGGA (SEQ ID NO:7111), GCGGAAAAAGATTTGGAGGTTTCGCGG (SEQ ID NO:7112), CGGGGTAGGTTGTTTCGGGGATAGAG (SEQ ID NO:7113), TGGGTAGGCGGATAGGAGAGGGATGGG (SEQ ID NO:7114), GGCGGATAGGAGAGGGATGGGGAGGAT (SEQ ID NO:7115), GGTAGGCGGATAGGAGAGGGATGGGGA (SEQ ID NO:7116), TAGGCGGATAGGAGAGGGATGGGGAGG (SEQ ID NO:7117)
Target753	chr7:27196751-27196772	TGTTTCGGCGTGGTTTTGTGGGTAGGA (SEQ ID NO:7118), AGTTTGTTTCGGCGTGGTTTTGTGGGT (SEQ ID NO:7119), TTGTTTCGGCGTGGTTTTGTGGGTAGG (SEQ ID NO:7120), TTGTTTCGGCGTGGTTTTGTGGGTAGG (SEQ ID NO:7121), TGTTTCGGCGTGGTTTTGTGGGTAGGAT (SEQ ID NO:7122), TCGATTAAGGAAAGGAAGTTGGGAGACGTT (SEQ ID NO:7123), TTCGATTAAGGAAAGGAAGTTGGGAGACGTT (SEQ ID NO:7124), CGATTAAGGAAAGGAAGTTGGGAGACGTTGA (SEQ ID NO:7125), TCGATTAAGGAAAGGAAGTTGGGAGACGTTG (SEQ ID NO:7126), TCGATTAAGGAAAGGAAGTTGGGAGACGTTGA (SEQ ID NO:7127)

Figure 5 (Table 1)

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Target754	chr7:27204751-27204835	GGGTGTACGTAGGGGTGGTGGTGATGG (SEQ ID NO:7128), GGGGTGTACGTAGGGGTGGTGGTGATG (SEQ ID NO:7129), TCGGGCGTGGGTTTTAGTTAGGAGCGT (SEQ ID NO:7130), GTTTGGGGGTGTACGTAGGGGTGGTGG (SEQ ID NO:7131), AGGTCGGTTGGAGGGTAAGTTCGCGAA (SEQ ID NO:7132), GCGACGGTGTTCGGCTTCGTGGAAT (SEQ ID NO:7133), CGACGGTGTTCGGCTTCGTGGAATT (SEQ ID NO:7134), GCGACGGTGTTCGGCTTCGTGGAATT (SEQ ID NO:7135), GCGACGGTGTTCGGCTTCGTGGAAT (SEQ ID NO:7136), AAGGCGACGGTGTTCGGCTTCGTG (SEQ ID NO:7137)
Target755	chr7:27204848-27204864	GGGTGTACGTAGGGGTGGTGGTGATGG (SEQ ID NO:7138), GGGGTGTACGTAGGGGTGGTGGTGATG (SEQ ID NO:7139), TCGGGCGTGGGTTTTAGTTAGGAGCGT (SEQ ID NO:7140), GTTTGGGGGTGTACGTAGGGGTGGTGG (SEQ ID NO:7141), GTACGTAGGGGTGGTGGTGATGGTGGT (SEQ ID NO:7142), GCGACGGTGTTCGGCTTCGTGGAAT (SEQ ID NO:7143), CGACGGTGTTCGGCTTCGTGGAATT (SEQ ID NO:7144), TGGGTTAGTTTTTCGGTAGGCGGCGA (SEQ ID NO:7145), GCGACGGTGTTCGGCTTCGTGGAATT (SEQ ID NO:7146), GCGACGGTGTTCGGCTTCGTGGAAT (SEQ ID NO:7147)
Target756	chr7:27204879-27205108	GGGTGTACGTAGGGGTGGTGGTGATGG (SEQ ID NO:7148), GGGGTGTACGTAGGGGTGGTGGTGATG (SEQ ID NO:7149), ACGGGTTGAAGTCGGGGTTCGGTTA (SEQ ID NO:7150), TACGGGTGAAGTCGGGGTTCGGTT (SEQ ID NO:7151), TGTACGGGTGAAGTCGGGGTTCGG (SEQ ID NO:7152), TGGGTTAGTTTTTCGGTAGGCGGCGA (SEQ ID NO:7153), CGTGGAATTCGTTTTGTTGGGCGTCGA (SEQ ID NO:7154), TGGGTTAGTTTTTCGGTAGGCGGCGAC (SEQ ID NO:7155), GGGTTAGTTTTTCGGTAGGCGGCGAC (SEQ ID NO:7156), CGTGGAATTCGTTTTGTTGGGCGTCGAC (SEQ ID NO:7157)
Target757	chr7:27205114-27205214	ATCGTGTTTAGCGTTTGGTTCGTTCCG (SEQ ID NO:7158), TCGTGTTTAGCGTTTGGTTCGTTCCG (SEQ ID NO:7159), TATCGTGTTTAGCGTTTGGTTCGTTCCG (SEQ ID NO:7160), TTATCGTGTTTAGCGTTTGGTTCGTTCCG (SEQ ID NO:7161), ATTATCGTGTTTAGCGTTTGGTTCGTTCCG (SEQ ID NO:7162), CGTACGGTTAATGGGGGCGCGGG (SEQ ID NO:7163), CGTACGGTTAATGGGGGCGCGG (SEQ ID NO:7164), GTACGGTTAATGGGGGCGCGGG (SEQ ID NO:7165), GTGATTACGCGTTATTGTTTTGTTGGACGG (SEQ ID NO:7166), AGTGATTACGCGTTATTGTTTTGTTGGACGG (SEQ ID NO:7167)
Target758	chr7:27205338-27205351	GGGGGGAGACGGGAGAGTATAGAGATAAGG (SEQ ID NO:7168), GGGGGGAGACGGGAGAGTATAGAGATAAGG (SEQ ID NO:7169), GGGGGGAGACGGGAGAGTATAGAGATAAGG (SEQ ID NO:7170), GGGGGGAGACGGGAGAGTATAGAGATAAGG (SEQ ID NO:7171), GGGGGGAGACGGGAGAGTATAGAGATAAG (SEQ ID NO:7172)
Target759	chr7:27205810-27205823	GGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7173), AGGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7174), AGGTTAGATTGTTGTGTTGGTGGCGAG (SEQ ID NO:7175), GGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7176), AAGGTTAGATTGTTGTGTTGGTGGCGAG (SEQ ID NO:7177), TTTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7178), TTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7179), TGTTTTGGTAGGGTCGGCGGCGGTTTC (SEQ ID NO:7180), GTTTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7181), GTTTGGTAGGGTCGGCGGCGGTTTC (SEQ ID NO:7182)
Target760	chr7:27205848-27205864	GGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7183), AGGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7184), AGGTTAGATTGTTGTGTTGGTGGCGAG (SEQ ID NO:7185), GGTTAGATTGTTGTGTTGGTGGCGAGT (SEQ ID NO:7186), AAGGTTAGATTGTTGTGTTGGTGGCGAG (SEQ ID NO:7187), TTTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7188), TTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7189), TGTTTTGGTAGGGTCGGCGGCGGTTTC (SEQ ID NO:7190), GTTTGGAGTGTGTTGGTAGGGTCGGCGG (SEQ ID NO:7191), GTTTGGTAGGGTCGGCGGCGGTTTC (SEQ ID NO:7192)
Target761	chr7:27205943-27205964	AGGTAGGGATCGGTCGTTTAGGGAGT (SEQ ID NO:7193), TTAGGTAGGGATCGGTCGTTTAGGGAGT (SEQ ID NO:7194), AGGTAGGGATCGGTCGTTTAGGGAGTAT (SEQ ID NO:7195), AGGTAGGGATCGGTCGTTTAGGGAGTATC (SEQ ID NO:7196), TTAGGTAGGGATCGGTCGTTTAGGGAGT (SEQ ID NO:7197), TCGTTTTGGTGGCGGTTGGTCGTTTT (SEQ ID NO:7198), TTCGTTTTGGTGGCGGTTGGTCGTTTT (SEQ ID NO:7199), TTCGTTTTGGTGGCGGTTGGTCGTTT (SEQ ID NO:7200), TTTTCGTTTTGGTGGCGGTTGGTCGTT (SEQ ID NO:7201), ATTTTCGTTTTGGTGGCGGTTGGTCGTT (SEQ ID NO:7202)
Target762	chr7:27206025-27206045	GGAGGAGTTGGTTAGGAGGGAGCGGT (SEQ ID NO:7203), CGGAGGAGTTGGTTAGGAGGGAGCGGT (SEQ ID NO:7204), ACGGAGGAGTTGGTTAGGAGGGAGCGG (SEQ ID NO:7205), CGGAGGAGTTGGTTAGGAGGGAGCGG (SEQ ID NO:7206), TACGAGGAGTTGGTTAGGAGGGAGCG (SEQ ID NO:7207), TTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7208), GTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7209), TGTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7210), TAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7211), TTGTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7212)
Target763	chr7:27206073-27206083	TTTGAGGGTTTGGTTGGTTGTGCGCGG (SEQ ID NO:7213), GGAGGAGTTGGTTAGGAGGGAGCGGT (SEQ ID NO:7214), CGGAGGAGTTGGTTAGGAGGGAGCGGT (SEQ ID NO:7215), ACGGAGGAGTTGGTTAGGAGGGAGCGG (SEQ ID NO:7216), TTTGAGGAGTTGGTTGGTTGTGCGGC (SEQ ID NO:7217), TTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7218), GTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7219), TGTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7220), TGAGGTTGAGTATAGGGTTGGGTCGT (SEQ ID NO:7221), TAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7222)

Figure 5 (Table 1)

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Target764	chr7:27206104-27206166	TTTGAGGGTTTGGTTGGTTGTGCGGCG (SEQ ID NO:7223), GGAGGAGTTGGTTAGGAGGGAGCGGTT (SEQ ID NO:7224), CGGAGGAGTTGGTTAGGAGGGAGCGGT (SEQ ID NO:7225), ACGGAGGAGTTGGTTAGGAGGGAGCGG (SEQ ID NO:7226), TTTGAGGGTTTGGTTGGTTGTGCGGCG (SEQ ID NO:7227), TTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7228), GTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7229), TGTTAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7230), TGAGGTTGAGTATAGGGTTGGGTCGT (SEQ ID NO:7231), TAGTTGATGAGAAAGCGGGTTGGGC (SEQ ID NO:7232)
Target765	chr7:27206311-27206378	AGCGTTGTAAGTTTGGTTGCGTTTCGT (SEQ ID NO:7233), TCGTATCGATGTGGTTTGTTCGGGGT (SEQ ID NO:7234), GCGTTGTAAGTTTGGTTGCGTTTCGTG (SEQ ID NO:7235), AGCGTTGTAAGTTTGGTTGCGTTTCGTG (SEQ ID NO:7236), GCGTTGTAAGTTTGGTTGCGTTTCGTGA (SEQ ID NO:7237), CGGGTTTTTATAGTTTCGGAGTTGCGGGG (SEQ ID NO:7238), GCGGGTTTTTATAGTTTCGGAGTTGCGG (SEQ ID NO:7239), CGGTGCGGGTTTTTATAGTTTCGGAGT (SEQ ID NO:7240), TCGGGTTTTTATAGTTTCGGAGTTGCGG (SEQ ID NO:7241), TCGGTGCGGGTTTTTATAGTTTCGGAGT (SEQ ID NO:7242)
Target766	chr7:27225123-27225128	TATGTTGGTTGGGGGTTTTTCGGCGC (SEQ ID NO:7243), TTATGTTGGTTGGGGGTTTTTCGGCGC (SEQ ID NO:7244), ATGTTGGTTGGGGGTTTTTCGGCGC (SEQ ID NO:7245), TTATGTTGGTTGGGGGTTTTTCGGCGC (SEQ ID NO:7246), TTTATGTTGGTTGGGGGTTTTTCGGCGC (SEQ ID NO:7247), ATTCGGGGAGTTGCGGGTGGGAGGTG (SEQ ID NO:7248), ATTCGGGGAGTTGCGGGTGGGAGG (SEQ ID NO:7249), ATTCGGGGAGTTGCGGGTGGGAGGTGG (SEQ ID NO:7250), GTTGCGGGTGGGAGGTGGGGACGAGAG (SEQ ID NO:7251), GAGTTGCGGGTGGGAGGTGGGGACGAG (SEQ ID NO:7252)
Target767	chr7:27225418-27225629	CGTCGTTGTGTGGTTTGTGGTTTCGGA (SEQ ID NO:7253), TCGTCGTTGTGTGGTTTGTGGTTTCGG (SEQ ID NO:7254), TCGTCGTTGTGTGGTTTGTGGTTTCGGA (SEQ ID NO:7255), CGTCGTTGTGTGGTTTGTGGTTTCGGAG (SEQ ID NO:7256), CGTCGTTGTGTGGTTTGTGGTTTCGGAGT (SEQ ID NO:7257), GGTTGTTGCGGGTTTAGGGACGGAAGG (SEQ ID NO:7258), GTTGTGCGGGTTTAGGGACGGAAGGT (SEQ ID NO:7259), TGGTTGTTGCGGGTTTAGGGACGGAAG (SEQ ID NO:7260), TCGCGGGGAGAAAGTCGTTTGGTTGTT (SEQ ID NO:7261), GGGGAGAAGTCGTTTGGTTGTTGGCGG (SEQ ID NO:7262)
Target768	chr7:27244531-27244538	TGCGTTAGTTTATAGGAGTTCGGGCGT (SEQ ID NO:7263), TTGCGTTAGTTTATAGGAGTTCGGGCGT (SEQ ID NO:7264), TTGCGTTAGTTTATAGGAGTTCGGGCG (SEQ ID NO:7265), TTTGCGTTAGTTTATAGGAGTTCGGGCG (SEQ ID NO:7266), TTTGCGTTAGTTTATAGGAGTTCGGGCGT (SEQ ID NO:7267)
Target769	chr7:27244603-27244632	CGCGTTTCGGATTTTTATAGATTGGCGT (SEQ ID NO:7268), CGCGTTTCGGATTTTTATAGATTGGCGTA (SEQ ID NO:7269), CGCGTTTCGGATTTTTATAGATTGGCGTAA (SEQ ID NO:7270), CGCGTTTCGGATTTTTATAGATTGGCGTAAA (SEQ ID NO:7271), CGCGTTTCGGATTTTTATAGATTGGCGTAAAT (SEQ ID NO:7272), TGAAGAGCGATTAGTGGTATTGTCGGGG (SEQ ID NO:7273), TGAAGAGCGATTAGTGGTATTGTCGGGGA (SEQ ID NO:7274), GAAGAGCGATTAGTGGTATTGTCGGGGA (SEQ ID NO:7275), GTGAAGAGCGATTAGTGGTATTGTCGGGG (SEQ ID NO:7276), AGTGAAGAGCGATTAGTGGTATTGTCGGGG (SEQ ID NO:7277)
Target770	chr7:27244755-27244811	AGGGAGTTTGGTGAAGGGTTCGGTTGG (SEQ ID NO:7278), GGGAGTTTGGTGAAGGGTTCGGTTGGA (SEQ ID NO:7279), AGGGAGTTTGGTGAAGGGTTCGGTTGGA (SEQ ID NO:7280), GAGGGAGTTTGGTGAAGGGTTCGGTTGG (SEQ ID NO:7281), AGAGGGAGTTTGGTGAAGGGTTCGGTTGG (SEQ ID NO:7282), AAGTCGGTGTTCGCGGGTTCGGTGG (SEQ ID NO:7283), AGTCGGTGTTCGCGGGTTCGGTGG (SEQ ID NO:7284), TAAGTCGGTGTTCGCGGGTTCGGTGG (SEQ ID NO:7285), GTAAGTCGGTGTTCGCGGGTTCGGTGG (SEQ ID NO:7286), AGTAAGTCGGTGTTCGCGGGTTCGGTGG (SEQ ID NO:7287)
Target771	chr7:27244856-27244875	AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7288), GTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7289), AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7290), AGGGAGTTTGGTGAAGGGTTCGGTTGG (SEQ ID NO:7291), GGGAGTTTGGTGAAGGGTTCGGTTGG (SEQ ID NO:7292), TTTTGGGTTAGTGGTAGCGTCGGGT (SEQ ID NO:7293), TGGGTTAGTGGTAGCGTCGGGTATAGA (SEQ ID NO:7294), TTTTGGGTTAGTGGTAGCGTCGGGTA (SEQ ID NO:7295), TTTTGGGTTAGTGGTAGCGTCGGGTAT (SEQ ID NO:7296), TGGGTTAGTGGTAGCGTCGGGTATAGAG (SEQ ID NO:7297)
Target772	chr7:27244885-27244898	TTGCGGGTTATTTAGTCGGGGCGTTGG (SEQ ID NO:7298), TGCGGGTTATTTAGTCGGGGCGTTGGG (SEQ ID NO:7299), AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7300), GTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7301), AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7302), TTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7303), ATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7304), TAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7305), ATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7306), TATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7307)
Target773	chr7:27244907-27244918	TTGCGGGTTATTTAGTCGGGGCGTTGG (SEQ ID NO:7308), TGCGGGTTATTTAGTCGGGGCGTTGGG (SEQ ID NO:7309), AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7310), GTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7311), AGTTCGCGGGGATATCGGTTTGTGG (SEQ ID NO:7312), TTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7313), ATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7314), TAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7315), ATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7316), TATTAAGTTAGGGTGGGGTGGGCGTTTCGC (SEQ ID NO:7317)

Figure 5 (Table 1)

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Target774	chr7:27260168-27260259	TAGTTTTACGGAGGAGGTCGGGTCGCG (SEQ ID NO:7318), GTTGGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7319), TTGGCGGGGATTTGTAGGTCGGGTCG (SEQ ID NO:7320), GGTGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7321), GGGTTGGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7322), TTCGTGGGGTTGTGGTTTTTCGGGTC (SEQ ID NO:7323), TTCGTGGGGTTGTGGTTTTTCGGGTC (SEQ ID NO:7324), TTTTCGGGTAAGTCGGGTAGGCGGGAG (SEQ ID NO:7325), GGTAAGTCGGGTAGGCGGGAGGTTGTT (SEQ ID NO:7326), ATTTTCGGGTAAGTCGGGTAGGCGGGGA (SEQ ID NO:7327)
Target775	chr7:27260274-27260311	TAGTTTTACGGAGGAGGTCGGGTCGCG (SEQ ID NO:7328), GTTGGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7329), TTGGCGGGGATTTGTAGGTCGGGTCG (SEQ ID NO:7330), GGTGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7331), GGGTTGGCGGGGATTTGTAGGTCGGGTC (SEQ ID NO:7332), AGTCGGGTAGGCGGGAGGTTGTTTGT (SEQ ID NO:7333), TTTTCGGGTAAGTCGGGTAGGCGGGAG (SEQ ID NO:7334), GGTAAGTCGGGTAGGCGGGAGGTTGTT (SEQ ID NO:7335), ATTTTCGGGTAAGTCGGGTAGGCGGGGA (SEQ ID NO:7336), AAGTCGGGTAGGCGGGAGGTTGTTTGT (SEQ ID NO:7337)
Target776	chr7:27260366-27260397	TCGGTTTGTTCGGGGATGTGGGTGGAT (SEQ ID NO:7338), TTCGGTTTGTTCGGGGATGTGGGTGGGA (SEQ ID NO:7339), GTTCGGTTTGTTCGGGGATGTGGGTGG (SEQ ID NO:7340), TGTTTCGGTTTGTTCGGGGATGTGGGTGG (SEQ ID NO:7341), CGGTTTGTTCGGGGATGTGGGTGGATT (SEQ ID NO:7342), GCGAGGGTTACGTTGTTGTTAGGGGC (SEQ ID NO:7343), CGAGGGTTACGTTGTTGTTAGGGGCG (SEQ ID NO:7344), TCGAGGGTTACGTTGTTGTTAGGGG (SEQ ID NO:7345), TCGAGGGTTACGTTGTTGTTAGGGGC (SEQ ID NO:7346), TTGCGAGGGTTACGTTGTTGTTAGGGG (SEQ ID NO:7347)
Target777	chr7:27260417-27260467	TCGGTTTGTTCGGGGATGTGGGTGGAT (SEQ ID NO:7348), TTCGGTTTGTTCGGGGATGTGGGTGGGA (SEQ ID NO:7349), TCGTTTCGGTGGGAGGAATTCGGGGTTT (SEQ ID NO:7350), TTCGTTTCGGTGGGAGGAATTCGGGGTT (SEQ ID NO:7351), TTCGTTTCGGTGGGAGGAATTCGGGGT (SEQ ID NO:7352), GCGAGGGTTACGTTGTTGTTAGGGGC (SEQ ID NO:7353), CGAGGGTTACGTTGTTGTTAGGGGCG (SEQ ID NO:7354), TCGAGGGTTACGTTGTTGTTAGGGG (SEQ ID NO:7355), TCGAGGGTTACGTTGTTGTTAGGGGC (SEQ ID NO:7356), TTGCGAGGGTTACGTTGTTGTTAGGGG (SEQ ID NO:7357)
Target778	chr7:27283367-27283410	GTGTTTTGAGTGCGGGGTGTGAGGGG (SEQ ID NO:7358), GGGGTGTTGAGGGGGCGGATGTAAGTT (SEQ ID NO:7359), AGTGTTTTGAGTGCGGGGTGTGAGGG (SEQ ID NO:7360), TGTTTTGAGTGCGGGGTGTGAGGGGG (SEQ ID NO:7361), GTTTTGAGTGCGGGGTGTGAGGGGG (SEQ ID NO:7362), CGGCGTTTGATTTGTTTTCGTTGGGG (SEQ ID NO:7363), TCGGATCGGCGTTTGATTTGTTTTCGT (SEQ ID NO:7364), CGGCGTTTGATTTGTTTTCGTTGGGGGA (SEQ ID NO:7365), TCGGCGTTTGATTTGTTTTCGTTGGGG (SEQ ID NO:7366), TCGGCGTTTGATTTGTTTTCGTTGGGGGA (SEQ ID NO:7367)
Target779	chr7:27283425-27283434	GGCGGATGTAAGTTTGGATTGGGGGG (SEQ ID NO:7368), GGCGGATGTAAGTTTGGATTGGGGGA (SEQ ID NO:7369), GGCGGATGTAAGTTTGGATTGGGGGGAT (SEQ ID NO:7370), GGCGGATGTAAGTTTGGATTGGGGGGATT (SEQ ID NO:7371), GGCGGATGTAAGTTTGGATTGGGGGGATTG (SEQ ID NO:7372), TGGTCGGAGGGTTGTAGTATTCGGGTT (SEQ ID NO:7373), TTGGTCGGAGGGTTGTAGTATTCGGGTT (SEQ ID NO:7374), TGGTCGGAGGGTTGTAGTATTCGGGTTGT (SEQ ID NO:7375), GGTCGGAGGGTTGTAGTATTCGGGTTGT (SEQ ID NO:7376), TGGTTCGGAGGGTTGTAGTATTCGGGTTG (SEQ ID NO:7377)
Target780	chr7:27283528-27283562	GGGTGTAAGAGGTATGGAGGCGCGGAA (SEQ ID NO:7378), AGGGTGTAAGAGGTATGGAGGCGCGGA (SEQ ID NO:7379), TAGGGTGTAAGAGGTATGGAGGCGCGG (SEQ ID NO:7380), TAGGGTGTAAGAGGTATGGAGGCGCGGA (SEQ ID NO:7381), AGGTATGGAGGCGCGGAAGTTAGGAGT (SEQ ID NO:7382), ACGTGTAATTTGGTCGGAGGGTTGAGT (SEQ ID NO:7383), GACGTGTAATTTGGTCGGAGGGTTGAGT (SEQ ID NO:7384), GACGTGTAATTTGGTCGGAGGGTTGAGTA (SEQ ID NO:7385), GACGTGTAATTTGGTCGGAGGGTTGAGTAT (SEQ ID NO:7386), ACGTGTAATTTGGTCGGAGGGTTGAGTATT (SEQ ID NO:7387)
Target781	chr7:27283600-27283614	TGCGGTTTATTTGGGTAGTTCGGGTGT (SEQ ID NO:7388), TGCGGTTTATTTGGGTAGTTCGGGTGTT (SEQ ID NO:7389), TTGCGGTTTATTTGGGTAGTTCGGGTGT (SEQ ID NO:7390), GCGGTTTATTTGGGTAGTTCGGGTGTTGT (SEQ ID NO:7391), TGCGGTTTATTTGGGTAGTTCGGGTGTTG (SEQ ID NO:7392), AGGAAGGAAAGGGGAAGGGGGGAGGAT (SEQ ID NO:7393), AGGAAGGAAAGGGGGAGGATTCGA (SEQ ID NO:7394), TAGGAAGGAAAGGGGAAGGGGGGAGGA (SEQ ID NO:7395), AAGGAAGGGGAAGGGGGGAGGATTG (SEQ ID NO:7396), GGAAAGGGGAAGGGGGGAGGATTCGAT (SEQ ID NO:7397)
Target782	chr7:29603009-29603473	CGCGATGGGGTTAAGGGATAGTTGTTGCG (SEQ ID NO:7398), GCGATGGGGTTAAGGGATAGTTGTTGCGG (SEQ ID NO:7399), GCGATGGGGTTAAGGGATAGTTGTTGCG (SEQ ID NO:7400), CGCGATGGGGTTAAGGGATAGTTGTTGCG (SEQ ID NO:7401), AGGGGGAAAAATAATCGCGATGGGGT (SEQ ID NO:7402), ACGGCGGAGATTGAGATTCGGAGGTT (SEQ ID NO:7403), AACGCGGAGATTGAGATTCGGAGGTT (SEQ ID NO:7404), TGAGGTTGTAGGTGGGTTTCGTTGGGT (SEQ ID NO:7405), CGGAGGTTGAGGTTGTAGGTGGGTTTCG (SEQ ID NO:7406), CGGAGGTTGAGGTTGTAGGTGGGTTTCGT (SEQ ID NO:7407)

Figure 5 (Table 1)

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Target783	chr7:29605642-29605961	GTGGTAAGTCGGGGAAGGGGTGGAGTG (SEQ ID NO:7408), GTGTGGTAAGTCGGGGAAGGGGTGGAG (SEQ ID NO:7409), TGGTAAGTCGGGGAAGGGGTGGAGTGA (SEQ ID NO:7410), TGTGGTAAGTCGGGGAAGGGGTGGAGT (SEQ ID NO:7411), TAAGTCGGGGAAGGGGTGGAGTGAACG (SEQ ID NO:7412), ATACGTGGGTTGCGGGGTGGATGTTGA (SEQ ID NO:7413), TGGGTTGCGGGGTGGATGTTGAGGTAG (SEQ ID NO:7414), GTGGGTTGCGGGGTGGATGTTGAGGTA (SEQ ID NO:7415), TACGTGGGTTGCGGGGTGGATGTTGAG (SEQ ID NO:7416), TGGTCGGAGGGTTTAGGGGTTTTCGGT (SEQ ID NO:7417)
Target784	chr7:29605992-29606278	CGATAGCGGCGATGTTGGTAGTTTCGGT (SEQ ID NO:7418), CGATAGCGGCGATGTTGGTAGTTTCGG (SEQ ID NO:7419), CGGAGATTACGTGGAGAAAGGGGTCTG (SEQ ID NO:7420), AGGAAGTCGTAGTGGGGGTGTCGTTTT (SEQ ID NO:7421), AAGGAAGTCGTAGTGGGGGTGTCGTTTT (SEQ ID NO:7422), TTGTTGGTTTAGTTGCGGTTGGGCGGC (SEQ ID NO:7423), TTGTTGGTTTGGGGGTTCTGTCGGC (SEQ ID NO:7424), TCGGGTTTGAATTGGGGGTTTGGGGT (SEQ ID NO:7425), GGGGGTTTGGGGTAGTGTGGGTAGGT (SEQ ID NO:7426), TGGGGGTTTGGGGTAGTGTGGGTAGG (SEQ ID NO:7427)
Target785	chr7:29606320-29606352	TTTCGGAGGCGGGTAGGTTTTCGGAGG (SEQ ID NO:7428), GCGGGTAGGTTTTCGGAGGAGGTAGG (SEQ ID NO:7429), GCGTTACGTTGTTTTCGGAGGCGGGTA (SEQ ID NO:7430), GCGGGTAGGTTTTCGGAGGAGGTAGGT (SEQ ID NO:7431), TTCGGAGGCGGGTAGGTTTTCGGAGGA (SEQ ID NO:7432), TAAGGGGCGGGGTTTGAAGTTTCGGGT (SEQ ID NO:7433), CGTAAGGGGCGGGGTTTGAAGTTTCGG (SEQ ID NO:7434), GGGCGGGTTTGAAGTTTCGGGTTTGA (SEQ ID NO:7435), GTAAGGGGCGGGGTTTGAAGTTTCGGG (SEQ ID NO:7436), TCGGGTTTGAATTGGGGGTTTGGGGT (SEQ ID NO:7437)
Target786	chr7:35293506-35293532	CGTTTCGGGGCGTTTCGGTAGGACG (SEQ ID NO:7438), AGGGTTTATCGAGTATTACGGCGGGTG (SEQ ID NO:7439), GAGGGTTTATCGAGTATTACGGCGGGT (SEQ ID NO:7440), AGAGGGTTTATCGAGTATTACGGCGGGT (SEQ ID NO:7441), AGAGGGTTTATCGAGTATTACGGCGGG (SEQ ID NO:7442), GTTTTAGAGGGAGGAAGGACGCGGAGG (SEQ ID NO:7443), AGTTTATAGAGGGAGGAAGGACGCGGAGG (SEQ ID NO:7444), AGTTTATAGAGGGAGGAAGGACGCGGAG (SEQ ID NO:7445), TAGTTTATAGAGGGAGGAAGGACGCGGA (SEQ ID NO:7446), TTTTAGAGGGAGGAAGGACGCGGAGG (SEQ ID NO:7447)
Target787	chr7:35293652-35293659	TGGGGTTGGGGATAGTCGGGATGTTTT (SEQ ID NO:7448), TTGGGGTTGGGGATAGTCGGGATGTTT (SEQ ID NO:7449), TTTGGGGTTGGGGATAGTCGGGATGTT (SEQ ID NO:7450), TTTTGGGGTTGGGGATAGTCGGGATGT (SEQ ID NO:7451), TTGGGGTTGGGGATAGTCGGGATGTTTT (SEQ ID NO:7452), GCGTAGGGTAGCGAGCGTTAGGGTTT (SEQ ID NO:7453), GCGTGATTGGTTGCGGGTTTTCGGGA (SEQ ID NO:7454), AGCGTAGGGTAGCGAGCGTTAGGGTT (SEQ ID NO:7455), GCGTAGGGTAGCGAGCGTTAGGGTT (SEQ ID NO:7456), GCGTTGATTGGTTGCGGGTTTTCGGG (SEQ ID NO:7457)
Target788	chr7:35293670-35293797	GCGGCGCGGAATTACGGATAGTGAGTT (SEQ ID NO:7458), GCGGCGCGGAATTACGGATAGTGAGTTT (SEQ ID NO:7459), GCGGCGCGGAATTACGGATAGTGAGT (SEQ ID NO:7460), TGGGGTTGGGGATAGTCGGGATGTTTT (SEQ ID NO:7461), TTGGGGTTGGGGATAGTCGGGATGTTT (SEQ ID NO:7462), AGACGGCGTTGATTGGTTGCGGGTTTT (SEQ ID NO:7463), GCGTAGGGTAGCGAGCGTTAGGGTTT (SEQ ID NO:7464), GAGACGGCGTTGATTGGTTGCGGGTTTT (SEQ ID NO:7465), GCGTTGATTGGTTGCGGGTTTTCGGGA (SEQ ID NO:7466), GTTTTCGGCGCGGAATTAGGAAGCGG (SEQ ID NO:7467)
Target789	chr7:35293979-35293999	C CGCTGGTTTGTCTTTCCGTTGTTTCG (SEQ ID NO:7468), GCGTGGTTTGTCTTTCCGTTGTTTCGG (SEQ ID NO:7469), GTTCGCTGGTTTGTCTTTCCGTTGTT (SEQ ID NO:7470), TCGCTGGTTTGTCTTTCCGTTGTTTCG (SEQ ID NO:7471), GCGTGGTTTGTCTTTCCGTTGTTTCGGT (SEQ ID NO:7472)
Target790	chr7:35294157-35294186	AGGGAAGCGTTTAGTAGAATTCGGCGT (SEQ ID NO:7473), AGGGAAGCGTTTAGTAGAATTCGGCGTT (SEQ ID NO:7474), TAGGGAAGCGTTTAGTAGAATTCGGCGT (SEQ ID NO:7475), GGGGAAGCGTTTAGTAGAATTCGGCGTTT (SEQ ID NO:7476), AGGGAAGCGTTTAGTAGAATTCGGCGTTT (SEQ ID NO:7477), CGAGTATGGATTGGTTAGTTGGCGTCGG (SEQ ID NO:7478), CGAGTATGGATTGGTTAGTTGGCGTCGGT (SEQ ID NO:7479), AGTATGGATTGGTTAGTTGGCGTCGGT (SEQ ID NO:7480), TCGAGTATGGATTGGTTAGTTGGCGTCGG (SEQ ID NO:7481), TCGAGTATGGATTGGTTAGTTGGCGTCGGT (SEQ ID NO:7482)
Target791	chr7:35297344-35297475	AGTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7483), GAGTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7484), GTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7485), CGAGTCGGGAGGGCGGGTTTGAAGTTT (SEQ ID NO:7486), TCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7487), TGGTGCGGAGGTTTTTGGGTCGGTTC (SEQ ID NO:7488), GTGCGGAGGTTTTTGGGTCGGTTCGA (SEQ ID NO:7489), GGTGCGGAGGTTTTTGGGTCGGTTCG (SEQ ID NO:7490), TGGTGCGGAGGTTTTTGGGTCGGT (SEQ ID NO:7491), TCGGAGGTTTTTGGGTCGGTTCGA (SEQ ID NO:7492)
Target792	chr7:35297483-35297501	AGTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7493), GAGTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7494), GTCGGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7495), CGAGTCGGGAGGGCGGGTTTGAAGTTT (SEQ ID NO:7496), TCGGAGGGCGGGTTTGAAGTTTGT (SEQ ID NO:7497), TGGTGCGGAGGTTTTTGGGTCGGTTC (SEQ ID NO:7498), GTGCGGAGGTTTTTGGGTCGGTTCGA (SEQ ID NO:7499), GGTGCGGAGGTTTTTGGGTCGGTTCG (SEQ ID NO:7500), TTGGTGCGGAGGTTTTTGGGTCGGT (SEQ ID NO:7501), TTTGGTGCGGAGGTTTTTGGGTCGGT (SEQ ID NO:7502)

Figure 5 (Table 1)

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Target793	chr7:35297516-35297533	AGTCGGGAGGGCGGGTTTGAGTTTTGT (SEQ ID NO:7503), GAGTCGGGAGGGCGGGTTTGAGTTTTG (SEQ ID NO:7504), GTCGGGAGGGCGGGTTTGAGTTTTGTT (SEQ ID NO:7505), CGAGTCGGGAGGGCGGGTTTGAGTTTT (SEQ ID NO:7506), TCGGGAGGGCGGGTTTGAGTTTTGTTT (SEQ ID NO:7507), TGGTGCGGAGGTTTTTTGGGTCGGTTC (SEQ ID NO:7508), GTGCGGAGGTTTTTTGGGTCGGTTCGA (SEQ ID NO:7509), GGTGCGGAGGTTTTTTGGGTCGGTTCG (SEQ ID NO:7510), TTGGTGCGGAGGTTTTTTGGGTCGGTT (SEQ ID NO:7511), TTTGGTGCGGAGGTTTTTTGGGTCGGT (SEQ ID NO:7512)
Target794	chr7:35297556-35297579	CGGGAGGGCGGGTTTGAGTTTTGTTTT (SEQ ID NO:7513), CGGGAGGGCGGGTTTGAGTTTTGTTTT (SEQ ID NO:7514), CGGGAGGGCGGGTTTGAGTTTTGTTTT (SEQ ID NO:7515), GGGAGGGCGGGTTTGAGTTTTGTTTT (SEQ ID NO:7516), CGGGAGGGCGGGTTTGAGTTTTGTTTT (SEQ ID NO:7517), TGGTGCGGAGGTTTTTTGGGTCGGTTC (SEQ ID NO:7518), GTGCGGAGGTTTTTTGGGTCGGTTCGA (SEQ ID NO:7519), GGTGCGGAGGTTTTTTGGGTCGGTTCG (SEQ ID NO:7520), TTGGTGCGGAGGTTTTTTGGGTCGGTT (SEQ ID NO:7521), TTTGGTGCGGAGGTTTTTTGGGTCGGT (SEQ ID NO:7522)
Target795	chr7:35297699-35297709	AGTTTTTGGATGGGGTGTGAGTGCGCG (SEQ ID NO:7523), GTTTTTGGATGGGGTGTGAGTGCGCGC (SEQ ID NO:7524), AAGTTTTTGGATGGGGTGTGAGTGCGCG (SEQ ID NO:7525), TTTTTGGATGGGGTGTGAGTGCGCGC (SEQ ID NO:7526), AAGTTTTTGGATGGGGTGTGAGTGCGCG (SEQ ID NO:7527), TCGGTTTTGGAGATGGGCGCGAAG (SEQ ID NO:7528), TCGGTTTTATAGTTGGGCGAGATTGAGGT (SEQ ID NO:7529), CGGTTTTGGAGATGGGCGCGAAG (SEQ ID NO:7530), CGGTTTTATAGTTGGGCGAGATTGAGTTTC (SEQ ID NO:7531), CGGTTTTGGAGATGGGCGCGAA (SEQ ID NO:7532)
Target796	chr7:55242342-55242742	GTTGTAGGGTTGCGGGGGCGTTATAGT (SEQ ID NO:7533), AGTTGTAGGGTTGCGGGGGCGTTATAGT (SEQ ID NO:7534), AGTTGTAGGGTTGCGGGGGCGTTATAG (SEQ ID NO:7535), TGTAGGGTTGCGGGGGCGTTATAGTTT (SEQ ID NO:7536), TTGTAGGGTTGCGGGGGCGTTATAGTT (SEQ ID NO:7537), GGGAGAGGTTAGTGTGTTTTTAAGGGGAGGG (SEQ ID NO:7538), TGGGAGAGGTTAGTGTGTTTTTAAGGGGAGGG (SEQ ID NO:7539), GGGAGAGGTTAGTGTGTTTTTAAGGGGAGGGA (SEQ ID NO:7540), GGAGAGGTTAGTGTGTTTTTAAGGGGAGGG (SEQ ID NO:7541), GGGAGAGGTTAGTGTGTTTTTAAGGGGAGG (SEQ ID NO:7542)
Target797	chr7:55249057-55249088	GGAGGTAGTCGAAGGGTATGAGTTGCGT (SEQ ID NO:7543), GGAGGTAGTCGAAGGGTATGAGTTGCG (SEQ ID NO:7544), AGGAGGTAGTCGAAGGGTATGAGTTGCGT (SEQ ID NO:7545), AGGAGGTAGTCGAAGGGTATGAGTTGCG (SEQ ID NO:7546), AGGTAGTCGAAGGGTATGAGTTGCGTG (SEQ ID NO:7547)
Target798	chr7:55259233-55259800	TGGGTTGGTTAAATTGTTGGGTGCGGA (SEQ ID NO:7548), TTGGGTTGGTTAAATTGTTGGGTGCGG (SEQ ID NO:7549), TGGGTTGGTTAAATTGTTGGGTGCGGAA (SEQ ID NO:7550), TTGGGTTGGTTAAATTGTTGGGTGCGGA (SEQ ID NO:7551), GGGTTGGTTAAATTGTTGGGTGCGGAA (SEQ ID NO:7552), ACGTTTTTGGTTGTTAGGTCGCGGTGT (SEQ ID NO:7553), ACGTTTTTGGTTGTTAGGTCGCGGTGTA (SEQ ID NO:7554), TACGTTTTTGGTTGTTAGGTCGCGGTGT (SEQ ID NO:7555), GTACGTTTTTGGTTGTTAGGTCGCGGT (SEQ ID NO:7556), CGTTTTTGGTTGTTAGGTCGCGGTGTA (SEQ ID NO:7557)
Target799	chr7:67016016-67016255	TGGGGGTACGGTTGGTTTTGTTATAGTCGT (SEQ ID NO:7558), GGGGGTACGGTTGGTTTTGTTATAGTCGT (SEQ ID NO:7559), TGGGGGTACGGTTGGTTTTGTTATAGTCG (SEQ ID NO:7560), GGTTTATTTGGGGGTACGGTTGGTTTTGT (SEQ ID NO:7561), AGGTTTATTTGGGGGTACGGTTGGTTTTGT (SEQ ID NO:7562), AGATGGAAAGTTGTTTCGGGTAGCGTCG (SEQ ID NO:7563), GATGGAAAGTTGTTTCGGGTAGCGTCGA (SEQ ID NO:7564), ACGGGAAGTTACGGTTGCGGTTGTAAT (SEQ ID NO:7565), AGATGGAAAGTTGTTTCGGGTAGCGTCGA (SEQ ID NO:7566), GAGATGGAAAGTTGTTTCGGGTAGCGTCG (SEQ ID NO:7567)
Target800	chr7:70111632-70111709	TGGGGATGAGTTAGTTCGTTGGAGGGG (SEQ ID NO:7568), TGGGGATGAGTTAGTTCGTTGGAGGGGA (SEQ ID NO:7569), GGGGATGAGTTAGTTCGTTGGAGGGG (SEQ ID NO:7570), GGGGATGAGTTAGTTCGTTGGAGGGGAGT (SEQ ID NO:7571), TGGGGATGAGTTAGTTCGTTGGAGGGGAG (SEQ ID NO:7572), GCGGGTTTTGAGTAGTCGTTTTGTATGGT (SEQ ID NO:7573), AGCGGGTTTTGAGTAGTCGTTTTGTATGGT (SEQ ID NO:7574), AGGGTTTTCGTATTAGAGCGGGTTTTGAGT (SEQ ID NO:7575), GAGCGGGTTTTGAGTAGTCGTTTTGTATGG (SEQ ID NO:7576), GAGCGGGTTTTGAGTAGTCGTTTTGTATGGT (SEQ ID NO:7577)
Target801	chr7:70111742-70111820	AGTGCGAGGGTTTTGGTTAGGGTAGT (SEQ ID NO:7578), GCGAGGGTTTTGGTTAGGGTAGTAGGGT (SEQ ID NO:7579), TGCGAGGGTTTTGGTTAGGGTAGTAGGG (SEQ ID NO:7580), GCGAGGGTTTTGGTTAGGGTAGTAGGG (SEQ ID NO:7581), GCGAGGGTTTTGGTTAGGGTAGTAGGG (SEQ ID NO:7582), AGGGTTTTCGTATTAGAGCGGGTTTTGAGT (SEQ ID NO:7583), AGGGTTTTCGTATTAGAGCGGGTTTTGAGTA (SEQ ID NO:7584), TAGGGTTTTCGTATTAGAGCGGGTTTTGAGT (SEQ ID NO:7585), TGAGTTAGGGTTTTCGTATTAGAGCGGGTTTT (SEQ ID NO:7586), TTGAGTTAGGGTTTTCGTATTAGAGCGGGTT (SEQ ID NO:7587)

Figure 5 (Table 1)

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Target802	chr7:70574860-70575061	GGAGGTATTGTTTTGGGAGTTGTTTTGGTGT (SEQ ID NO:7588), AGGAGGTATTGTTTTGGGAGTTGTTTTGGTGT (SEQ ID NO:7589), AGGAGGTATTGTTTTGGGAGTTGTTTTGGTGT (SEQ ID NO:7590), GGAGGTATTGTTTTGGGAGTTGTTTTGGTGT (SEQ ID NO:7591), AAGGAGGTATTGTTTTGGGAGTTGTTTTGGTGT (SEQ ID NO:7592), TGAGGTATTAGGTATGTTGTTAAGGGGGTTAGG (SEQ ID NO:7593), AGGTTTTAGGTATGTTGTTAAGGGGGTTAGGAT (SEQ ID NO:7594), AGTATTGAGGTTTTAGGTATGTTGTTAAGGGGGT (SEQ ID NO:7595)
Target803	chr7:71801500-71802283	GTTGCGGGGGTGGGTGTTTAGTGTCG (SEQ ID NO:7596), AAGGTGGTCGGCGCGGTTTTAGTTCG (SEQ ID NO:7597), CGAGGGAAGAAGAAAAGAGAGCGCGCG (SEQ ID NO:7598), CGGTTTTAGTTCGCGGGGTGGGTGTT (SEQ ID NO:7599), GGTAAAGTTAGGGAGTCGGCGGCGGTAT (SEQ ID NO:7600), TTGGGGGATTGTTGGGGAGGAGTTGG (SEQ ID NO:7601), GTGTTGTCGGCGGTAAGGTTTTGGGGG (SEQ ID NO:7602), GGTGTTGTCGGCGGTAAGGTTTTGGGG (SEQ ID NO:7603), TAGAGCGAGGAGTGTGGTGTGTCGGC (SEQ ID NO:7604), GGATTCGTTGGGGAGGAGTTGGGGAGG (SEQ ID NO:7605)
Target804	chr7:71802362-71802405	TCGGGTTTTGGGTTCGTTTTGGTCGT (SEQ ID NO:7606), GTCGGGTTTTGGGTTCGTTTTGGTCGT (SEQ ID NO:7607), GTCGGGTTTTGGGTTCGTTTTGGTCGT (SEQ ID NO:7608), GCGTTTAGGAGTCGGGTTTTGGGTTCG (SEQ ID NO:7609), GCGTTTAGGAGTCGGGTTTTGGGTTCGT (SEQ ID NO:7610), CGTGTATGTGTATGCGTGTGTGTGTGT (SEQ ID NO:7611), TCGTGTATGTGTATGCGTGTGTGTGTGT (SEQ ID NO:7612), TGTCGTGTATGTGTATGCGTGTGTGTGT (SEQ ID NO:7613), TGTGTCGTGTATGTGTATGCGTGTGTGT (SEQ ID NO:7614), TGTGTGTCGTGTATGTGTATGCGTGTGT (SEQ ID NO:7615)
Target805	chr7:97361421-97361463	CGTGGGGAGAATGTTACGTGGGTTTGG (SEQ ID NO:7616), CGTGGGGAGAATGTTACGTGGGTTTGG (SEQ ID NO:7617), TGGGGAGAATGTTACGTGGGTTTGGAGGT (SEQ ID NO:7618), GGGGAGAATGTTACGTGGGTTTGGAGGT (SEQ ID NO:7619), TGGGGAGAATGTTACGTGGGTTTGGAGG (SEQ ID NO:7620), CGACGATAGTTTCGCGGGGTGTTGAG (SEQ ID NO:7621), GATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7622), GGATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7623), GATAGATGCGGGGCGGGGTGATTCCGG (SEQ ID NO:7624), GGATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7625)
Target806	chr7:97361489-97361578	TCGTCGTAGTAAGTGTTCCGCGCGTGT (SEQ ID NO:7626), CGTAGTAAGTGTTCCGCGCGTGTGTGT (SEQ ID NO:7627), CGTCGTAGTAAGTGTTCCGCGCGTGTGT (SEQ ID NO:7628), TAGTAAGTGTTCCGCGCGTGTGTGTGT (SEQ ID NO:7629), TCGTAGTAAGTGTTCCGCGCGTGTGTGT (SEQ ID NO:7630), GATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7631), GGATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7632), GATAGATGCGGGGCGGGGTGATTCCGG (SEQ ID NO:7633), GGATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7634), GATAGATGCGGGGCGGGGTGATTCCG (SEQ ID NO:7635)
Target807	chr7:97361586-97361598	TCGTCGTAGTAAGTGTTCCGCGCGTGT (SEQ ID NO:7636), CGTAGTAAGTGTTCCGCGCGTGTGTGT (SEQ ID NO:7637), CGTCGTAGTAAGTGTTCCGCGCGTGTGT (SEQ ID NO:7638), TAGTAAGTGTTCCGCGCGTGTGTGTGT (SEQ ID NO:7639), TCGTAGTAAGTGTTCCGCGCGTGTGTGT (SEQ ID NO:7640), TAGGTGGAAGATAAAGAGGGGCGTTGG (SEQ ID NO:7641), TGTAGGTGGAAGATAAAGAGGGGCGTTGG (SEQ ID NO:7642), GTAGGTGGAAGATAAAGAGGGGCGTTGG (SEQ ID NO:7643), AGGTGGAAGATAAAGAGGGGCGTTGG (SEQ ID NO:7644), TGTAGGTGGAAGATAAAGAGGGGCGTTG (SEQ ID NO:7645)
Target808	chr7:98739441-98739878	GCGTTATTAAGTCGTAGGTTCCGCGTAGAGC (SEQ ID NO:7646), TGAGAGTGAGAAAGGGAAGACGAGGATGT (SEQ ID NO:7647), GCGTTATTAAGTCGTAGGTTCCGCGTAGA (SEQ ID NO:7648), GCGGTAGAGCGTTGCGTTATTTTGAAGG (SEQ ID NO:7649), TGGTTAGAAATTTTGGAGTTCGGGGGGA (SEQ ID NO:7650), CGATTTGGTGCGCGGATGTGATGTT (SEQ ID NO:7651), CGATTTGGTGCGCGGATGTGATGTT (SEQ ID NO:7652), CGATTTGGTGCGCGGATGTGATGTTAA (SEQ ID NO:7653), TGGTGCGCGGATGTGATGTTAATTTGT (SEQ ID NO:7654), GGTGCGCGGATGTGATGTTAATTTGT (SEQ ID NO:7655)
Target809	chr7:121950250-121950507	TCGCGTCGATTGTTGGTTTTGGTCGT (SEQ ID NO:7656), CGCGTCGATTGTTGGTTTTGGTCGT (SEQ ID NO:7657), TCGCGTCGATTGTTGGTTTTGGTCGT (SEQ ID NO:7658), CGCGTCGATTGTTGGTTTTGGTCGT (SEQ ID NO:7659), TCGCGTCGATTGTTGGTTTTGGTCGT (SEQ ID NO:7660), TTTTTTGGGTAGTCGGGGGTAGGGGGC (SEQ ID NO:7661), TAGTCGGGGGTAGGGGGCGTTAAGGTC (SEQ ID NO:7662), GCGGGGTATTTTCGGGTCGAGTGGTT (SEQ ID NO:7663), GTAGTCGGGGGTAGGGGGCGTTAAGGT (SEQ ID NO:7664), GCGGGGTATTTTCGGGTCGAGTGGTTA (SEQ ID NO:7665)
Target810	chr7:121950519-121950555	GGAGTTTCGTTTTATTTAGGATTCGGTGGTTAGC (SEQ ID NO:7666), AGGAGTTTCGTTTTATTTAGGATTCGGTGGTTAGC (SEQ ID NO:7667), CGGTTGGGTTTTATTTTCGTTTTTGTACGA (SEQ ID NO:7668), TCGGTTGGGTTTTATTTTCGTTTTTGTACG (SEQ ID NO:7669), GGGAGTTTATGTTCCGTAGCGGCGTTC (SEQ ID NO:7670), GGGAGTTTATGTTCCGTAGCGGCGTTC (SEQ ID NO:7671), GGAGTTTATGTTCCGTAGCGGCGTTC (SEQ ID NO:7672), GGGAGTTTATGTTCCGTAGCGGCGTTC (SEQ ID NO:7673), AGTTCCGTGGTTTTTCGTTTTTGTAACTG (SEQ ID NO:7674)

Figure 5 (Table 1)

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Target820	chr7:150329236-150329322	TGTTTGTGAGTTGGTGTAGAGGTAAGTTTGAGT (SEQ ID NO:7765), TTGTTTGTGAGTTGGTGTAGAGGTAAGTTTGAGT (SEQ ID NO:7766), TTTGTTTGTGAGTTGGTGTAGAGGTAAGTTTGAGT (SEQ ID NO:7767), TTGTTTGTGAGTTGGTGTAGAGGTAAGTTTGAGT (SEQ ID NO:7768), TTTTGTTTGTGAGTTGGTGTAGAGGTAAGTTTGAGT (SEQ ID NO:7769)
Target821	chr7:150329374-150329487	CGTTGGAGATGGAGGAATAGGAAGTGGGT (SEQ ID NO:7770), CGTTGGAGATGGAGGAATAGGAAGTGGG (SEQ ID NO:7771), TCGTTGGAGATGGAGGAATAGGAAGTGGGT (SEQ ID NO:7772), TCGTTGGAGATGGAGGAATAGGAAGTGGG (SEQ ID NO:7773), TGGAGATGGAGGAATAGGAAGTGGGTAGG (SEQ ID NO:7774)
Target822	chr7:150655169-150655189	TAGTAGAAGAAGCGTGGGTTGGGGCGG (SEQ ID NO:7775), TAGAAGAAGCGTGGGTTGGGGCGGAAC (SEQ ID NO:7776), GTAGAAGAAGCGTGGGTTGGGGCGGAA (SEQ ID NO:7777), TTTCGCGGCGTTTTATCGGTGTTGGC (SEQ ID NO:7778), TAGAAGAAGCGTGGGTTGGGGCGGAA (SEQ ID NO:7779), GAGGTTATGCGCGTCGGGGTGTGTTT (SEQ ID NO:7780), AGGTTATGCGCGTCGGGGTGTGTTT (SEQ ID NO:7781), GAGGTTATGCGCGTCGGGGTGTGTTT (SEQ ID NO:7782), GGTTATGCGCGTCGGGGTGTGTTT (SEQ ID NO:7783), GAGGTTATGCGCGTCGGGGTGTGTTT (SEQ ID NO:7784)
Target823	chr7:150655204-150655212	TAGTAGAAGAAGCGTGGGTTGGGGCGG (SEQ ID NO:7785), CGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7786), TAGAAGAAGCGTGGGTTGGGGCGGAAC (SEQ ID NO:7787), GTAGAAGAAGCGTGGGTTGGGGCGGAA (SEQ ID NO:7788), TTTCGCGCGTTTTATCGGTGTTGGC (SEQ ID NO:7789), AGTTGTAGTTTGGTTCGGACGCGTTTT (SEQ ID NO:7790), GCGTTCGGTTAGTTTTATCGTTTCGGGCG (SEQ ID NO:7791), CGCGTTCGGTTAGTTTTATCGTTTCGGGC (SEQ ID NO:7792), GCGTTCGGTTAGTTTTATCGTTTCGGGCGT (SEQ ID NO:7793), CGCGTTCGGTTAGTTTTATCGTTTCGGGCG (SEQ ID NO:7794)
Target824	chr7:150655214-150655222	TAGTAGAAGAAGCGTGGGTTGGGGCGG (SEQ ID NO:7795), CGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7796), TAGAAGAAGCGTGGGTTGGGGCGGAAC (SEQ ID NO:7797), GTAGAAGAAGCGTGGGTTGGGGCGGAA (SEQ ID NO:7798), TTTCGCGCGTTTTATCGGTGTTGGC (SEQ ID NO:7799), AGTTGTAGTTTGGTTCGGACGCGTTTT (SEQ ID NO:7800), GCGTTCGGTTAGTTTTATCGTTTCGGGCG (SEQ ID NO:7801), CGCGTTCGGTTAGTTTTATCGTTTCGGGC (SEQ ID NO:7802), GCGTTCGGTTAGTTTTATCGTTTCGGGCGT (SEQ ID NO:7803), CGCGTTCGGTTAGTTTTATCGTTTCGGGCG (SEQ ID NO:7804)
Target825	chr7:150655234-150655258	CGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7805), TTTCGCGCGTTTTATCGGTGTTGGC (SEQ ID NO:7806), GCGGGGGTAGTATTCGCGCGTATGG (SEQ ID NO:7807), GGGTTTCGCGCGTTTTATCGGTGTT (SEQ ID NO:7808), GCGTTTTATCGGTGTTGGCGTGGCG (SEQ ID NO:7809), GCGTGGTGGTGGGTTTCGGTTTTTC (SEQ ID NO:7810), CGTGCCTGGTGGGTTTCGGTTTTTCG (SEQ ID NO:7811), GCGTGCCTGGTGGGTTTCGGTTTTT (SEQ ID NO:7812), GTGCGTTGGTGGGTTTCGGTTTTTCG (SEQ ID NO:7813), TGCCTTGGTGGGTTTCGGTTTTTCGTT (SEQ ID NO:7814)
Target826	chr7:150655285-150655344	CGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7815), GCGGGGGTAGTATTCGCGCGTATGG (SEQ ID NO:7816), CGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7817), GGGGGGTAGTATTCGCGCGTATGGT (SEQ ID NO:7818), GCGGGGGTAGTATTCGCGCGTATG (SEQ ID NO:7819), GCGTGCCTGGTGGGTTTCGGTTTTTC (SEQ ID NO:7820), CGTGCCTGGTGGGTTTCGGTTTTTCG (SEQ ID NO:7821), GCGTGCCTGGTGGGTTTCGGTTTTT (SEQ ID NO:7822), GTGCGTTGGTGGGTTTCGGTTTTTCGTT (SEQ ID NO:7823), TGCCTTGGTGGGTTTCGGTTTTTCGTT (SEQ ID NO:7824)
Target827	chr7:150655351-150655380	TTGCGGGGCGGAGAGTCGGGATTTATT (SEQ ID NO:7825), GTTGCGGGGCGGAGAGTCGGGATTTAT (SEQ ID NO:7826), TGCGGGGCGGAGAGTCGGGATTTATTA (SEQ ID NO:7827), TGCGGGGCGGAGAGTCGGGATTTATT (SEQ ID NO:7828), TTGCGGGGCGGAGAGTCGGGATTTAT (SEQ ID NO:7829), GCGGCGTGCCTGGTGGGTTTT (SEQ ID NO:7830), TGGATAATTACGTGGTAGGGTTTCGGGTTTC (SEQ ID NO:7831), GCGGCGTGCCTGGTGGGTTTT (SEQ ID NO:7832), CGTGGTGGTGGACGTGGATTTGAC (SEQ ID NO:7833), ATGGATAATTACGTGGTAGGGTTTCGGGTTTC (SEQ ID NO:7834)
Target828	chr7:150655454-150655472	TTGCGGGGCGGAGAGTCGGGATTTATT (SEQ ID NO:7835), GTTGCGGGGCGGAGAGTCGGGATTTAT (SEQ ID NO:7836), TGCGGGGCGGAGAGTCGGGATTTATTA (SEQ ID NO:7837), TGCGGGGCGGAGAGTCGGGATTTATT (SEQ ID NO:7838), TTGCGGGGCGGAGAGTCGGGATTTAT (SEQ ID NO:7839), CGGGAGTCGTCGGTGCGGTCG (SEQ ID NO:7840), GGAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7841), GGGAGTCGTCGGTGCGGTCGG (SEQ ID NO:7842), GAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7843), GGGAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7844)
Target829	chr7:150655495-150655502	GGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7845), AGGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7846), AGGGTTAGCGATTCTGTTGTTGGGTGTC (SEQ ID NO:7847), CGATTCTGTTGTTGGGTGTCGCGGGC (SEQ ID NO:7848), TAGGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7849), CGGGAGTCGTCGGTGCGGTCG (SEQ ID NO:7850), GGAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7851), GGGAGTCGTCGGTGCGGTCGG (SEQ ID NO:7852), GAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7853), GGGAGTCGTCGGTGCGGTCGGG (SEQ ID NO:7854)

Figure 5 (Table 1)

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Target830	chr7:150655541-150655557	GGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7855), AGGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7856), AGGGTTAGCGATTCTGTTGTTGGGTGTC (SEQ ID NO:7857), CGATTCTGTTGTTGGGTGTCGCGGGC (SEQ ID NO:7858), TAGGGTTAGCGATTCTGTTGTTGGGTGTCG (SEQ ID NO:7859), AGCGGTTGGGGGTTTATTTTTAGGTTTTGT (SEQ ID NO:7860), GCGGTTGGGGGTTTATTTTTAGGTTTTGTCG (SEQ ID NO:7861), GCGGTTGGGGGTTTATTTTTAGGTTTTGTCGT (SEQ ID NO:7862), AGCGGTTGGGGGTTTATTTTTAGGTTTTGTT (SEQ ID NO:7863), AGCGGTTGGGGGTTTATTTTTAGGTTTTGTCG (SEQ ID NO:7864)
Target831	chr7:150655572-150655595	TTTAGGCGGAAGGTTTTGGCGCGGTTT (SEQ ID NO:7865), TTTTAGGCGGAAGGTTTTGGCGCGGTT (SEQ ID NO:7866), AGTTTTAGGCGGAAGGTTTTGGCGCGG (SEQ ID NO:7867), TTAGGCGGAAGGTTTTGGCGCGGTTT (SEQ ID NO:7868), GTTTTAGGCGGAAGGTTTTGGCGCGGT (SEQ ID NO:7869), GGAAGTGGGGATGGGGGTTGTTTCGT (SEQ ID NO:7870), GAAGTGGGGATGGGGGTTGTTTCGT (SEQ ID NO:7871), AGTGGGGATGGGGGTTGTTTCGT (SEQ ID NO:7872), AAGTGGGGATGGGGGTTGTTTCGT (SEQ ID NO:7873), GGAAGTGGGGATGGGGGTTGTTTCGT (SEQ ID NO:7874)
Target832	chr7:154409589-154409878	AGGTTATCGGAGGCGTCGTGTTTTT (SEQ ID NO:7875), TAGGTTATCGGAGGCGTCGTGTTTTT (SEQ ID NO:7876), TTAGGTTATCGGAGGCGTCGTGTTTTT (SEQ ID NO:7877), TTAGGTTATCGGAGGCGTCGTGTTTTT (SEQ ID NO:7878), TTTTAGGTTATCGGAGGCGTCGTGTTTTT (SEQ ID NO:7879), GGGGAAAGTTTGTGTGAGTAGATAGTATTGTGGG (SEQ ID NO:7880), GGGGAAAGTTTGTGTGAGTAGATAGTATTGTGGG (SEQ ID NO:7881), GGGGAAAGTTTGTGTGAGTAGATAGTATTGTGG (SEQ ID NO:7882), AGGGGAAAGTTTGTGTGAGTAGATAGTATTGTGGG (SEQ ID NO:7883), GGGGAAAGTTTGTGTGAGTAGATAGTATTGTGGG (SEQ ID NO:7884)
Target833	chr7:155302254-155302259	CGCGTAGTTAAGGGTAGTTTCGGGGAGGG (SEQ ID NO:7885), CGCGTAGTTAAGGGTAGTTTCGGGGAGG (SEQ ID NO:7886), GCGTAGTTAAGGGTAGTTTCGGGGAGGG (SEQ ID NO:7887), GCGTAGTTAAGGGTAGTTTCGGGGAGGG (SEQ ID NO:7888), AGGGGATTGAAGTTAGTTGAGCGCGT (SEQ ID NO:7889)
Target834	chr7:155302342-155302375	CGAGAGAGAGAGCGCGCTTTAGTTGG (SEQ ID NO:7890), TCGGGGTTGTTTTGTTGCGCGTTTTT (SEQ ID NO:7891), TTCGGGGTTGTTTTGTTGCGCGTTTTT (SEQ ID NO:7892), TTTTCGGGGTTGTTTTGTTGCGCGTTTTT (SEQ ID NO:7893), TTTTCGGGGTTGTTTTGTTGCGCGTTTTT (SEQ ID NO:7894), GTTTGGGAGATGGGGCGTTTCGTTTCGTG (SEQ ID NO:7895), AGGAGTTCTTTGGGAGATGGGGCGTT (SEQ ID NO:7896), GAGGAGTTCTTTGGGAGATGGGGCGT (SEQ ID NO:7897), TTTGGGAGATGGGGCGTTTCGTTTCGTGA (SEQ ID NO:7898), AGTTCTTTGGGAGATGGGGCGTTTCGT (SEQ ID NO:7899)
Target835	chr7:156400350-156400882	GTTACGGAGGAGAAGTTGGGGGTTGGGG (SEQ ID NO:7900), GAGTTAGGTAGAGGAGGCGCGGTTTCG (SEQ ID NO:7901), GGAGTTAGGTAGAGGAGGCGCGGTTTC (SEQ ID NO:7902), TTTTCGAACGAGGCGGGTAGGGAGAGG (SEQ ID NO:7903), TGGGGGTGGGGGATTAGGAATTGCGG (SEQ ID NO:7904), AGCGGCGTTTGAAGTTTCGGATGTTTCGG (SEQ ID NO:7905), CGGAGCGGCGTTTGAAGTTTCGGATGTTT (SEQ ID NO:7906), TTTTCGTTTGAAGTTTCGGATGTTTCGG (SEQ ID NO:7907), CGCGGGGTGTTTTGTTGTTGGAGGGT (SEQ ID NO:7908), CGTAGTGGGAGGAACGTTTGGAGGGG (SEQ ID NO:7909)
Target836	chr7:156400926-156401053	TTTTGTAGTTCTGTTGGGTTTCGCGCGG (SEQ ID NO:7910), GTAGTTCTGTTGGGTTTCGCGCGTTTTT (SEQ ID NO:7911), AGTTCTGTTGGGTTTCGCGCGTTTTT (SEQ ID NO:7912), TAGTTCTGTTGGGTTTCGCGCGTTTTT (SEQ ID NO:7913), CGGTGGGTTTCGCGCGTTTTTATTTCG (SEQ ID NO:7914), GAGGGGCGGATGGGTTTATAGGTAGGGG (SEQ ID NO:7915), GGGGCGGATGGGTTTATAGGTAGGGGTT (SEQ ID NO:7916), CGTAGTGGGAGGAACGTTTGGAGGGG (SEQ ID NO:7917), AGTGGGAGGAACGTTTGGAGGGGAAG (SEQ ID NO:7918), GGAAGGAGTTTGGTTGGACGTTGCGGT (SEQ ID NO:7919)
Target837	chr7:156796576-156796588	CGCGTTTTGAGGTAGAGGAGTGTTGCG (SEQ ID NO:7920), GCGTTTTGAGGTAGAGGAGTGTTGCGT (SEQ ID NO:7921), GCGTTTTGAGGTAGAGGAGTGTTGCG (SEQ ID NO:7922), CGCGTTTTGAGGTAGAGGAGTGTTGCG (SEQ ID NO:7923), TCGCGTTTTGAGGTAGAGGAGTGTTGCG (SEQ ID NO:7924), GCGTTTTATTTGGGTGATTATCGCGGGG (SEQ ID NO:7925), CGTTTTATTTGGGTGATTATCGCGGGG (SEQ ID NO:7926), GCGTTTTATTTGGGTGATTATCGCGGGG (SEQ ID NO:7927), AGAAGGGTTTGGCGTTTTATTGGGTGATT (SEQ ID NO:7928), AGGGTTTGGCGTTTTATTGGGTGATTATCG (SEQ ID NO:7929)
Target838	chr7:156796810-156797036	ATGGCGTTGGGTTTGGTTGCGGTGATT (SEQ ID NO:7930), GGTGATTGATGGCGCGGTTGTAGAGG (SEQ ID NO:7931), CGGGAGAAAGGATAGGAGCGCGGTTTTT (SEQ ID NO:7932), CGGTGATTGATGGCGCGGTTGTAGAG (SEQ ID NO:7933), TGGGTTTGGTTGCGGTGATTGATGGCG (SEQ ID NO:7934), GCGAGGATAGCGCGGATTGTAGTAGC (SEQ ID NO:7935), CGAGGATAGCGCGGATTGTAGTAGCG (SEQ ID NO:7936), CGAGGATAGCGCGGATTGTAGTAGCGT (SEQ ID NO:7937), GCGAGGATAGCGCGGATTGTAGTAGCG (SEQ ID NO:7938), GAGGATAGCGCGGATTGTAGTAGCGT (SEQ ID NO:7939)

Figure 5 (Table 1)

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Target839	chr7:156797102-156797184	GGGGTCGAGGAGAGAGAGAAGTATCGCG (SEQ ID NO:7940), GGGGTCGAGGAGAGAGAGAAGTATCGCGT (SEQ ID NO:7941), GGGTCGAGGAGAGAGAGAAGTATCGCGT (SEQ ID NO:7942), GGGTCGAGGAGAGAGAGAAGTATCGCG (SEQ ID NO:7943), GGGGTCGAGGAGAGAGAGAAGTATCGC (SEQ ID NO:7944), ACGTGTTTTTCGGAAGCGGAGTTGTGG (SEQ ID NO:7945), ACGTGTTTTTCGGAAGCGGAGTTGTGGA (SEQ ID NO:7946), CGTGTTTTTCGGAAGCGGAGTTGTGGA (SEQ ID NO:7947), CGTGTTTTTCGGAAGCGGAGTTGTGGAT (SEQ ID NO:7948), ACGTGTTTTTCGGAAGCGGAGTTGTGGAT (SEQ ID NO:7949)
Target840	chr7:156798051-156798785	TTTTATTGGGGCGCGGGTTGGTGGT (SEQ ID NO:7950), TTTTATTGGGGCGCGGGTTGGTGGTTG (SEQ ID NO:7951), GTTTTATTGGGGCGCGGGTTGGTGGT (SEQ ID NO:7952), GCGGGTATAAGCGGGCGTGAGAAATCG (SEQ ID NO:7953), TGTTGGGTCGCGGGTTTTATTGGGG (SEQ ID NO:7954), CGGAGGGCGCGGGTAGAAAAGTTTCG (SEQ ID NO:7955), AGACGGAGGGCGCGGGTAGAAAAGTTT (SEQ ID NO:7956), GTAGACGGAGGGCGCGGGTAGAAAAGT (SEQ ID NO:7957), GGGAGTCGAGGAGTTGTTGGGGTCGTT (SEQ ID NO:7958), GGGTTGCGGGGAGGAGGAAGTTACGAG (SEQ ID NO:7959)
Target841	chr7:156811175-156811212	GTGTTAGGAGCGTGCGTTTTGGGTGCG (SEQ ID NO:7960), CGTGTTAGGAGCGTGCGTTTTGGGTGC (SEQ ID NO:7961), TGTTAGGAGCGTGCGTTTTGGGTGCG (SEQ ID NO:7962), GTGTTAGGAGCGTGCGTTTTGGGTGC (SEQ ID NO:7963), GTTAGGAGCGTGCGTTTTGGGTGCG (SEQ ID NO:7964), GGTGTTGTTTCGCGTTTGGGTGGTGC (SEQ ID NO:7965), GTTGTTGTTTCGCGTTTGGGTGGTGC (SEQ ID NO:7966), AGTTTGGTTTCGCGTTTGGGTGGTGC (SEQ ID NO:7967), GGTGTTGTTTCGCGTTTGGGTGGTGC (SEQ ID NO:7968), AGTTTGGTTTCGCGTTTGGGTGGTGC (SEQ ID NO:7969)
Target842	chr7:157478003-157478100	TTATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7970), ATTATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7971), TATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7972), TATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7973), ATTATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7974), CGCGGGGTAGGAAGGTTTCGGAAGTTT (SEQ ID NO:7975), GTTTTACGGCGCGGGTAGGAAGGTTT (SEQ ID NO:7976), TTTTACGGCGCGGGTAGGAAGGTTT (SEQ ID NO:7977), GGTTTTACGGCGCGGGTAGGAAGGTT (SEQ ID NO:7978), GTGGGTTTTACGGCGCGGGTAGGAAG (SEQ ID NO:7979)
Target843	chr7:157478112-157478280	GTATTTAGGTTGTGCGCGGGTGTGT (SEQ ID NO:7980), TTATTTGGTTTTGAGGGGGCGCGGG (SEQ ID NO:7981), GGGGGTCGAGGAGGAGGTTTGGTTG (SEQ ID NO:7982), GGTATTTAGGTTGTGCGCGGGTGTG (SEQ ID NO:7983), GTGGTATTTAGGTTGTGCGCGGGTGTG (SEQ ID NO:7984), TCGCGGTTTTTTGTTTTATTTGGTTTCA (SEQ ID NO:7985), CGCGCGTTTTTTGTTTTATTTGGTTTCA (SEQ ID NO:7986), TCGCGGTTTTTTGTTTTATTTGGTTTCA (SEQ ID NO:7987), TCGCGGTTTTTTGTTTTATTTGGTTTCA (SEQ ID NO:7988), CGGTTTTTCGCGGTTTTTTGTTTTATTTGG (SEQ ID NO:7989)
Target844	chr7:157478337-157478374	GCGGTAGGAGGGATTCGGGGTAGTCG (SEQ ID NO:7990), GCGGTAGGAGGGATTCGGGGTAGTC (SEQ ID NO:7991), GGGGGTCGAGGAGGAGGTTTGGTTG (SEQ ID NO:7992), TTTGTTTTCGCGCGGTAGGAGGGATT (SEQ ID NO:7993), TTGGTTTCGCGGTAGGAGGGATT (SEQ ID NO:7994), AGCGGGGATTCGGGAGGAGAGTTAGGA (SEQ ID NO:7995), GCGGGGATTCGGGAGGAGAGTTAGGAG (SEQ ID NO:7996), AGCGGGGATTCGGGAGGAGAGTTAGGAG (SEQ ID NO:7997), GCGGGGATTCGGGAGGAGAGTTAGGAGT (SEQ ID NO:7998), TAGCGGGGATTCGGGAGGAGAGTTAGG (SEQ ID NO:7999)
Target845	chr7:157478406-157478452	CGGGGTTAGTCGAGGTTGTTTTAGGGA (SEQ ID NO:8000), TCGGGGTTAGTCGAGGTTGTTTTAGGG (SEQ ID NO:8001), CGGGGTTAGTCGAGGTTGTTTTAGGGAGG (SEQ ID NO:8002), TCGGGGTTAGTCGAGGTTGTTTTAGGGA (SEQ ID NO:8003), CGGGGTTAGTCGAGGTTGTTTTAGGGAGGT (SEQ ID NO:8004), AGCGGGGATTCGGGAGGAGAGTTAGGA (SEQ ID NO:8005), GAGTCGGGCGAGGTTGGTGGAGATAGG (SEQ ID NO:8006), GGAGTCGGGCGAGGTTGGTGGAGATAG (SEQ ID NO:8007), AGTCGGGCGAGGTTGGTGGAGATAGGA (SEQ ID NO:8008), TGGGATTTAGCGGGGATTCGGGAGGAG (SEQ ID NO:8009)
Target846	chr7:157478562-157478640	AGAGGAGGGGTGGGAGTCGTTTTAGGT (SEQ ID NO:8010), CGCGTTGTTTTAGTAGAGGAGGGGTGGG (SEQ ID NO:8011), GAGGAGGGGTGGGAGTCGTTTTAGGT (SEQ ID NO:8012), AGAGGAGGGGTGGGAGTCGTTTTAGGT (SEQ ID NO:8013), CGCGTTGTTTTAGTAGAGGAGGGGTGGGA (SEQ ID NO:8014), GCGCGGTTTTAGGTAGTAGGGAGTCGG (SEQ ID NO:8015), CGCGGTTTTAGGTAGTAGGGAGTCGG (SEQ ID NO:8016), AGCGCGGTTTTAGGTAGTAGGGAGTCG (SEQ ID NO:8017), GGGAGGTGGGTTTGGGGCGGTTTTAT (SEQ ID NO:8018), GGGGAGGTGGGTTTGGGGCGGTTTTTA (SEQ ID NO:8019)
Target847	chr7:157478642-157478801	CGGGGTTAGGGCGAGGAGGGTTTTAT (SEQ ID NO:8020), GCGGATTTGGATAGTCGGGGAGTCGT (SEQ ID NO:8021), GTCGCGGATTTGGATAGTCGGGGAGT (SEQ ID NO:8022), AATTTGGGAGAGGTCGGGGAGGTTTCG (SEQ ID NO:8023), GGTGCGGGATTTGGATAGTCGGGGAG (SEQ ID NO:8024), CGGGCGGGTAGGAAGCGGTTTTTTAG (SEQ ID NO:8025), GCGGGCGGGTAGGAAGCGGTTTTTTAG (SEQ ID NO:8026), GGGCGGGTAGGAAGCGGTTTTTTAGTC (SEQ ID NO:8027), CGGGCGGGTAGGAAGCGGTTTTTTAGTC (SEQ ID NO:8028), CGGGTAGGAAGCGGTTTTTTAGTCGGG (SEQ ID NO:8029)

Figure 5 (Table 1)

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Target848	chr8:686860-686887	TGGGGTTGAGAGATTGTTAGGGTCGGT (SEQ ID NO:8030), GGGGTTGAGAGATTGTTAGGGTCGGT (SEQ ID NO:8031), TGGGGTTGAGAGATTGTTAGGGTCGG (SEQ ID NO:8032), GGGGTTGAGAGATTGTTAGGGTCGGTG (SEQ ID NO:8033), TGGGGTTGAGAGATTGTTAGGGTCGGTG (SEQ ID NO:8034), TCGGGAAGATTAGTTATTTGGTTACGTGTGGA (SEQ ID NO:8035), CGGGAAGATTAGTTATTTGGTTACGTGTGGAC (SEQ ID NO:8036), GTCGGGAAGATTAGTTATTTGGTTACGTGTGG (SEQ ID NO:8037), AGTCGGGAAGATTAGTTATTTGGTTACGTGTGG (SEQ ID NO:8038), TCGGGAAGATTAGTTATTTGGTTACGTGTGGAC (SEQ ID NO:8039)
Target849	chr8:686919-686987	TGGGGTTGAGAGATTGTTAGGGTCGGT (SEQ ID NO:8040), GGGGTTGAGAGATTGTTAGGGTCGGT (SEQ ID NO:8041), TGGGGTTGAGAGATTGTTAGGGTCGG (SEQ ID NO:8042), ACGTGGTTAGGGTGGTTGATTTTTCGGT (SEQ ID NO:8043), CGTGGTTAGGGTGGTTGATTTTTCGGT (SEQ ID NO:8044), CGGGGGCGTTTCGAGAATTTGGGTTT (SEQ ID NO:8045), TTCGAGGGGGTTCGTCGTTTGGGTTT (SEQ ID NO:8046), TTCGAGGGGGTTCGTCGTTTGGGTT (SEQ ID NO:8047), TTTTCGAGGGGGTTCGTCGTTTGGGTT (SEQ ID NO:8048), GTTTCGAGGGGGTTCGTCGTTTGGG (SEQ ID NO:8049)
Target850	chr8:687020-687057	ACGTGGTTAGGGTGGTTGATTTTTCGGT (SEQ ID NO:8050), CGTGGTTAGGGTGGTTGATTTTTCGGT (SEQ ID NO:8051), ACGTGGTTAGGGTGGTTGATTTTTCGG (SEQ ID NO:8052), ACGTGGTTAGGGTGGTTGATTTTTCGGTT (SEQ ID NO:8053), CGTGGTTAGGGTGGTTGATTTTTCGGTT (SEQ ID NO:8054), CGGGGGCGTTTCGAGAATTTGGGTTT (SEQ ID NO:8055), TTCGAGGGGGTTCGTCGTTTGGGTTT (SEQ ID NO:8056), TTCGAGGGGGTTCGTCGTTTGGGTT (SEQ ID NO:8057), TTTTCGAGGGGGTTCGTCGTTTGGGTT (SEQ ID NO:8058), GTTTCGAGGGGGTTCGTCGTTTGGG (SEQ ID NO:8059)
Target851	chr8:687062-687076	ACGTTATTTATAGTAAATTTAGCGCGCGGGTTTTT (SEQ ID NO:8060), CGGGGGCGTTTCGAGAATTTGGGTTT (SEQ ID NO:8061), TCGGGGGCGTTTCGAGAATTTGGGTT (SEQ ID NO:8062), CGGTCGTCGTTTGGGTTTGGAGGTAG (SEQ ID NO:8063), CGGTCGTCGTTTGGGTTTGGAGGTAG (SEQ ID NO:8064), CGGGGGCGTTTCGAGAATTTGGGTT (SEQ ID NO:8065)
Target852	chr8:687101-687736	GCGTTCGATTAGGTTTTCGGGGCGT (SEQ ID NO:8066), TCGTTCGATTAGGTTTTCGGGGCG (SEQ ID NO:8067), AAGGTTGATTTTTCGCGGGGCGACGG (SEQ ID NO:8068), GTTGATTTGTTTCGGGGGCGACGGGTG (SEQ ID NO:8069), GCGTCGCGGTGGAGGTCGTTGTTTTT (SEQ ID NO:8070), TCGCGGGTTGGGGTTAGTACGTTTCGTT (SEQ ID NO:8071), TTCGCGGGTTGGGGTTAGTACGTTTCGTT (SEQ ID NO:8072), TTTTCGGGTTTGTAGGTGCGGGGCGAT (SEQ ID NO:8073), CGCGGTTGTATTTGGGAAGGGTTCGG (SEQ ID NO:8074), GCGCGGTTGTATTTGGGAAGGGTTCG (SEQ ID NO:8075)
Target853	chr8:687745-687830	GTCGGTTTGAGGAGGGGTCGTTTCGTT (SEQ ID NO:8076), TCGGTTTGAGGAGGGGTCGTTTCGTTA (SEQ ID NO:8077), GTCGGTTTGAGGAGGGGTCGTTTCGT (SEQ ID NO:8078), TGAGGAGGGGTCGTTTCGTTATGTCGT (SEQ ID NO:8079), GTCGGTTTGAGGAGGGGTCGTTTCGTTA (SEQ ID NO:8080), TTTTCGGGTTTGTAGGTGCGGGGCGAT (SEQ ID NO:8081), GTTTCGGGTTTGTAGGTGCGGGGCGA (SEQ ID NO:8082), TTCGGGTTTGTAGGTGCGGGGCGATA (SEQ ID NO:8083), ACGTTTCGGGTTTGTAGGTGCGGGGCG (SEQ ID NO:8084), TCGGGTTTGTAGGTGCGGGGCGATAT (SEQ ID NO:8085)
Target854	chr8:687837-687903	GTCGGTTTGAGGAGGGGTCGTTTCGTT (SEQ ID NO:8086), TCGGTTTGAGGAGGGGTCGTTTCGTTA (SEQ ID NO:8087), GTCGGTTTGAGGAGGGGTCGTTTCGT (SEQ ID NO:8088), GAGTCGTCGGGGTTGTCGGGAGTC (SEQ ID NO:8089), TGAGGAGGGGTCGTTTCGTTATGTCGT (SEQ ID NO:8090), GGTGTTTTTGGGGTTTTAGCGTTTCGG (SEQ ID NO:8091), AGGTTGTTTTTGGGGTTTTAGCGTTTCGG (SEQ ID NO:8092), TAGGTTGTTTTTGGGGTTTTAGCGTTTCGG (SEQ ID NO:8093), ATAGGTTGTTTTTGGGGTTTTAGCGTTTCGG (SEQ ID NO:8094), CGAGTATAGGTTGTTTTTGGGGTTTTAGCGT (SEQ ID NO:8095)
Target855	chr8:3549555-3549670	GGAGAGGTTTGGGGAAGTTATTGTATTCGGG (SEQ ID NO:8096), GGAGAGGTTTGGGGAAGTTATTGTATTCGGGT (SEQ ID NO:8097), TGGAGAGGTTTGGGGAAGTTATTGTATTCGGG (SEQ ID NO:8098), TGGAGAGGTTTGGGGAAGTTATTGTATTCGGGT (SEQ ID NO:8099), GAGAGGTTTGGGGAAGTTATTGTATTCGGGT (SEQ ID NO:8100), AGCGGTTGGGATAGGAGATTCGGATGT (SEQ ID NO:8101), GCGGTTGGGATAGGAGATTCGGATGTA (SEQ ID NO:8102), AGCGGTTGGGATAGGAGATTCGGATGTA (SEQ ID NO:8103), TAGCGGTTGGGATAGGAGATTCGGATGT (SEQ ID NO:8104), GCGGTTGGGATAGGAGATTCGGATGTAGT (SEQ ID NO:8105)
Target856	chr8:10001048-10001097	CGGGGAAAATGATAGGGAGCGATTTCGGG (SEQ ID NO:8106), ACGGGGAAAATGATAGGGAGCGATTTCGGG (SEQ ID NO:8107), GGGGAAAATGATAGGGAGCGATTTCGGGG (SEQ ID NO:8108), GGGGAAAATGATAGGGAGCGATTTCGGGGT (SEQ ID NO:8109), CGGGGAAAATGATAGGGAGCGATTTCGGGG (SEQ ID NO:8110)

Figure 5 (Table 1)

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Target857	chr8:10588729-10588834	CGTCGTTTTGGTTTTAGGAGGGCGA (SEQ ID NO:8111), TCGTCGTTTTGGTTTTAGGAGGGCG (SEQ ID NO:8112), CGTCGTTTTGGTTTTAGGAGGGCGAGG (SEQ ID NO:8113), CGTCGTTTTGGTTTTAGGAGGGCGAGGT (SEQ ID NO:8114), CGTTTTGGTTTTAGGAGGGCGAGGT (SEQ ID NO:8115), TGAGGGAGTTGGAGGTTTGGATTCGGA (SEQ ID NO:8116), TGAGGGAAATTGGGGGAGTTCGTAGGT (SEQ ID NO:8117), AGGGAGTTGGAGGTTTGGATTCGGAGA (SEQ ID NO:8118), GTGAGGGAGTTGGAGGTTTGGATTCGG (SEQ ID NO:8119), AGTGAGGGAGTTGGAGGTTTGGATTCGG (SEQ ID NO:8120)
Target858	chr8:10588851-10589077	TGGGGATTGTAGGTTGGGAGTTTACGGT (SEQ ID NO:8121), GGGGATTGTAGGTTGGGAGTTTACGGT (SEQ ID NO:8122), TGGGGATTGTAGGTTGGGAGTTTACGG (SEQ ID NO:8123), ACGTGTAGTTTGGGATTGTAGGTTGGG (SEQ ID NO:8124), TGGGGATTGTAGGTTGGGAGTTTACGGTT (SEQ ID NO:8125), GTCGGGTGATAGGGGAGTTGCGGTGAG (SEQ ID NO:8126), TAGGGGGTCGGGTGATAGGGGAGTTGC (SEQ ID NO:8127), GTCGGGTGATAGGGGAGTTGCGGTGA (SEQ ID NO:8128), GGTGCGGTGATAGGGGAGTTGCGGTGA (SEQ ID NO:8129), TCGGGTGATAGGGGAGTTGCGGTGAG (SEQ ID NO:8130)
Target859	chr8:10589254-10589273	TTGGAAGGAGGTAGCGTTGTGGGGGTG (SEQ ID NO:8131), TTTGGAAGGAGGTAGCGTTGTGGGGGT (SEQ ID NO:8132), TGGGAAGGAGGTAGCGTTGTGGGGGTG (SEQ ID NO:8133), TTTGGAAGGAGGTAGCGTTGTGGGGGTG (SEQ ID NO:8134), TTTTGAAGGAGGTAGCGTTGTGGGGGT (SEQ ID NO:8135), GAGATGTGATTGTGTTAGAGTCGCGCGT (SEQ ID NO:8136), AGAGATGTGATTGTGTTAGAGTCGCGCGT (SEQ ID NO:8137), GAGAGATGTGATTGTGTTAGAGTCGCGCG (SEQ ID NO:8138), GAGAGATGTGATTGTGTTAGAGTCGCGCGT (SEQ ID NO:8139), GAGATGTGATTGTGTTAGAGTCGCGCGT (SEQ ID NO:8140)
Target860	chr8:20375422-20375453	GTGGAGCGGAGAAAAGGAGGGAGATGA (SEQ ID NO:8141), TGGAGCGGAGAAAAGGAGGGAGATGAA (SEQ ID NO:8142), GTGGAGCGGAGAAAAGGAGGGAGATGAA (SEQ ID NO:8143), TGGAGCGGAGAAAAGGAGGGAGATGAAA (SEQ ID NO:8144), GGAGCGGAGAAAAGGAGGGAGATGAAA (SEQ ID NO:8145)
Target861	chr8:20375505-20375607	TAGATTATCGGGGTGGCGGAGGGTTG (SEQ ID NO:8146), GGGGGTGGCGGAGGGTTGGTAAAGTTT (SEQ ID NO:8147), ATTATCGGGGTGGCGGAGGGTTGGTA (SEQ ID NO:8148), AAAGGGTGTGGTAAGAGGAGGAGCGGT (SEQ ID NO:8149), TATCGGGGTGGCGGAGGGTTGGTAAA (SEQ ID NO:8150), AGTTATTTTCGGCGGAGTGTTCGAGTTTTT (SEQ ID NO:8151), AAGTTATTTTCGGCGGAGTGTTCGAGTTTTT (SEQ ID NO:8152), AAAGTTATTTTCGGCGGAGTGTTCGAGTTTT (SEQ ID NO:8153), AGTTATTTTCGGCGGAGTGTTCGAGTTTTT (SEQ ID NO:8154), AAGTTATTTTCGGCGGAGTGTTCGAGTTTTT (SEQ ID NO:8155)
Target862	chr8:20375713-20375784	GATTTTTTCGGAATAGAAGCGATGTTGAAATGCG (SEQ ID NO:8156), AGATTTTTTCGGAATAGAAGCGATGTTGAAATGCG (SEQ ID NO:8157), AAGATTTTTTCGGAATAGAAGCGATGTTGAAATGCG (SEQ ID NO:8158), AAAGATTTTTTCGGAATAGAAGCGATGTTGAAATGCG (SEQ ID NO:8159), TGGGGATTGTAGATTATGAATAGACGGAAGAGGAAGA (SEQ ID NO:8160)
Target863	chr8:22438004-22438261	TGGGGGGAAGTGAATCGGGTTGAGGG (SEQ ID NO:8161), GGGTGGGGGGAAGTGAATCGGGTTGA (SEQ ID NO:8162), AGGGTGGGGGGAAGTGAATCGGGTTG (SEQ ID NO:8163), GGGGGGAAGTGAATCGGGTTGAGGGA (SEQ ID NO:8164), GGATGTGGTCGGGTAGCGTTTTGGGG (SEQ ID NO:8165), CGGAAGTTTTAGGGCGTTGTTTCGGTT (SEQ ID NO:8166), CGGAAGTTTTAGGGCGTTGTTTCGGT (SEQ ID NO:8167), TGTGTAGAGTGGGGTGAATAGGGTCGA (SEQ ID NO:8168), CGGAAGTTTTAGGGCGTTGTTTCGGTTA (SEQ ID NO:8169), TTGTGTAGAGTGGGGTGAATAGGGTCGA (SEQ ID NO:8170)
Target864	chr8:22875782-22875898	AGAAGGAAGTAGGAATGAGTGTACGGCG (SEQ ID NO:8171), GAAGGAAGTAGGAATGAGTGTACGGCGA (SEQ ID NO:8172), GGAGAAGGAAGTAGGAATGAGTGTACGGCG (SEQ ID NO:8173), AGAAGGAAGTAGGAATGAGTGTACGGCGA (SEQ ID NO:8174), TGGAGAAGGAAGTAGGAATGAGTGTACGGCG (SEQ ID NO:8175), GGGGAGGGTTTTGAGGAGTACGGGGTC (SEQ ID NO:8176), AGGGGAGGGTTTTGAGGAGTACGGGGT (SEQ ID NO:8177), TAGGGGAGGGTTTTGAGGAGTACGGGGT (SEQ ID NO:8178), TAGGGGAGGGTTTTGAGGAGTACGGGG (SEQ ID NO:8179), AGGGGAGGGTTTTGAGGAGTACGGGGTC (SEQ ID NO:8180)
Target865	chr8:22876026-22876179	GAGGGTTGGTGATTGAGGGGTTCCGGT (SEQ ID NO:8181), TGATTGAGGGGTTCCGGTTGGCGGTAA (SEQ ID NO:8182), TGAGGGGTTCCGGTTGGCGGTAAAGAG (SEQ ID NO:8183), TTGAGGGGTTCCGGTTGGCGGTAAAGA (SEQ ID NO:8184), GTTGGTGATTGAGGGGTTCCGGTTGGC (SEQ ID NO:8185), CGGAGTTAGTTGGTAGGGTTAGGGTTTTTCG (SEQ ID NO:8186), TCGGAGTTAGTTGGTAGGGTTAGGGTTTTTCG (SEQ ID NO:8187), TGTGTTGTTTTTCGAGTTAGTTGGTAGGGT (SEQ ID NO:8188), TGTTTTTCGAGTTAGTTGGTAGGGTTAGGGT (SEQ ID NO:8189), GTTTTCGAGTTAGTTGGTAGGGTTAGGGT (SEQ ID NO:8190)
Target866	chr8:23563902-23563929	GCGGCGGCGGTGATAGAAAGTTGGATG (SEQ ID NO:8191), CGGCGGCGGTGATAGAAAGTTGGATGG (SEQ ID NO:8192), AGAGGTTTATAACGTTGGTGCGCGCGG (SEQ ID NO:8193), GCGGCGGCGGTGATAGAAAGTTGGATGGT (SEQ ID NO:8194), GCGGCGGCGGTGATAGAAAGTTGGAT (SEQ ID NO:8195)

Figure 5 (Table 1)

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Target867	chr8:23563960-23564121	GAAGGGGGTGGAGGTGACGGGGTTTAG (SEQ ID NO:8196), AGGGGGTGGAGGTGACGGGGTTTAGTA (SEQ ID NO:8197), GGGGGTGGAGGTGACGGGGTTTAGTAG (SEQ ID NO:8198), AGAAGGGGGTGGAGGTGACGGGGTTTA (SEQ ID NO:8199), TTGATCGAGAAGGGGGTGGAGGTGACG (SEQ ID NO:8200), TGCGGGGTTTGTAGCGATAAGACGGGA (SEQ ID NO:8201), TGGGTTTGTTCGGGGTTTGTAGCGA (SEQ ID NO:8202), TTGCGGGGTTTGTAGCGATAAGACGGG (SEQ ID NO:8203), TGCGGGGTTTGTAGCGATAAGACGGGAA (SEQ ID NO:8204), TTGCGGGGTTTGTAGCGATAAGACGGGA (SEQ ID NO:8205)
Target868	chr8:23564145-23564241	GAAGGGGGTGGAGGTGACGGGGTTTAG (SEQ ID NO:8206), AGGGGGTGGAGGTGACGGGGTTTAGTA (SEQ ID NO:8207), GGGGGTGGAGGTGACGGGGTTTAGTAG (SEQ ID NO:8208), AGAAGGGGGTGGAGGTGACGGGGTTTA (SEQ ID NO:8209), TTGATCGAGAAGGGGGTGGAGGTGACG (SEQ ID NO:8210), GGAAGAAAGCGTTGGGGGAGGAAGGT (SEQ ID NO:8211), TGCGGGGTTTGTAGCGATAAGACGGGA (SEQ ID NO:8212), TGGGTTTGTTCGGGGTTTGTAGCGA (SEQ ID NO:8213), GGAAGAAAGCGTTGGGGGAGGAAGGTG (SEQ ID NO:8214), CGGGAAGAAAGCGTTGGGGGAGGAAGG (SEQ ID NO:8215)
Target869	chr8:23564354-23564375	TGGTAGGTTGCGGGTTTAGGGTCGGGTG (SEQ ID NO:8216), GGTAGGTTGCGGGTTTAGGGTCGGGTGA (SEQ ID NO:8217), TTGGTAGGTTGCGGGTTTAGGGTCGGGT (SEQ ID NO:8218), TGGTAGGTTGCGGGTTTAGGGTCGGGTGA (SEQ ID NO:8219), GTTGTAGGTTGCGGGTTTAGGGTCGGGT (SEQ ID NO:8220), TTGGGGATTGGAGAGGATTTCACGGGC (SEQ ID NO:8221), ATTGGGATTGGAGAGGATTTCACGGGC (SEQ ID NO:8222), AGGAAGCGATTGGGGATTGGAGAGGA (SEQ ID NO:8223), TGGGGATTGGAGAGGATTTCACGGGC (SEQ ID NO:8224), AGGCGATTGGGGATTGGAGAGGATTTCG (SEQ ID NO:8225)
Target870	chr8:23564418-23564470	CGTGGAGAGATAGTGTTCGCGCGC (SEQ ID NO:8226), AAGAAAACGTGGAGAGATAGTGTTCGCGC (SEQ ID NO:8227), AAAGAAAACGTGGAGAGATAGTGTTCGCGC (SEQ ID NO:8228), GTGGAGAGATAGTGTTCGCGCGC (SEQ ID NO:8229), CGTGGAGAGATAGTGTTCGCGCGC (SEQ ID NO:8230), ACGGAGATTTAAGTCGCGCGTAGTATTGT (SEQ ID NO:8231), ACGGAGATTTAAGTCGCGCGTAGTATTGTT (SEQ ID NO:8232), ACGGAGATTTAAGTCGCGCGTAGTATTGTTT (SEQ ID NO:8233), CGGAGATTTAAGTCGCGCGTAGTATTGTTT (SEQ ID NO:8234), ACGGAGATTTAAGTCGCGCGTAGTATTGTTT (SEQ ID NO:8235)
Target871	chr8:25907747-25907758	AGTCGGTAGGGGAAAGTTCGAGGGATT (SEQ ID NO:8236), TTAGTCGGTAGGGGAAAGTTCGAGGGGA (SEQ ID NO:8237), TAGTCGGTAGGGGAAAGTTCGAGGGAT (SEQ ID NO:8238), GTTAGTCGGTAGGGGAAAGTTCGAGGG (SEQ ID NO:8239), GTCGGTAGGGGAAAGTTCGAGGGATTT (SEQ ID NO:8240), AGTGTACGTGTGAAATGTGGCGGCGTC (SEQ ID NO:8241), TAGTGTACGTGTGAAATGTGGCGGCGT (SEQ ID NO:8242), AGTGTACGTGTGAAATGTGGCGGCGT (SEQ ID NO:8243), TAGTGTACGTGTGAAATGTGGCGGCGTC (SEQ ID NO:8244), TTAGTGTACGTGTGAAATGTGGCGGCGT (SEQ ID NO:8245)
Target872	chr8:25907796-25907867	GGCGGAGGTGTGAGCGATGTGTTGATT (SEQ ID NO:8246), TTTTTCGGATCGCGCGGAGGTGTGA (SEQ ID NO:8247), CGCGGAGGTGTGAGCGATGTGTTGATT (SEQ ID NO:8248), TTTTTCGGATCGCGCGGAGGTGTG (SEQ ID NO:8249), TTTTTCGGATCGCGCGGAGGTGTGAG (SEQ ID NO:8250), GAAAAGGTAGTCGGGTTGGGGGTGGGT (SEQ ID NO:8251), GGGGTGGGTAGGTAGTAGTGAGCGGGA (SEQ ID NO:8252), AGGAAAAGGTAGTCGGGTTGGGGGTGG (SEQ ID NO:8253), AGTGTACGTGTGAAATGTGGCGGCGTC (SEQ ID NO:8254), TGGGGGTGGGTAGGTAGTAGTGAGCGG (SEQ ID NO:8255)
Target873	chr8:25907880-25907894	GCGGAGGTGTGAGCGATGTGTTGATT (SEQ ID NO:8256), GCGGAGGTGTGAGCGATGTGTTGATT (SEQ ID NO:8257), GCGGAGGTGTGAGCGATGTGTTGATTAT (SEQ ID NO:8258), GCGGAGGTGTGAGCGATGTGTTGATT (SEQ ID NO:8259), GCGGAGGTGTGAGCGATGTGTTGATTATT (SEQ ID NO:8260), GAAAAGGTAGTCGGGTTGGGGGTGGGT (SEQ ID NO:8261), GGGGTGGGTAGGTAGTAGTGAGCGGGA (SEQ ID NO:8262), AGGAAAAGGTAGTCGGGTTGGGGGTGG (SEQ ID NO:8263), TGGGGGTGGGTAGGTAGTAGTGAGCGG (SEQ ID NO:8264), GGTAGTCGGGTTGGGGGTGGGTAGGTA (SEQ ID NO:8265)
Target874	chr8:25907900-25907907	GAAAAGGTAGTCGGGTTGGGGGTGGGT (SEQ ID NO:8266), GGGGTGGGTAGGTAGTAGTGAGCGGGA (SEQ ID NO:8267), AGGAAAAGGTAGTCGGGTTGGGGGTGG (SEQ ID NO:8268), TGGGGGTGGGTAGGTAGTAGTGAGCGG (SEQ ID NO:8269), GGTAGTCGGGTTGGGGGTGGGTAGGTA (SEQ ID NO:8270)
Target875	chr8:25908055-25908102	TTTGAGGATGGGGGAGATTTTGCGGC (SEQ ID NO:8271), TTGAGGATGGGGGAGATTTTGCGGC (SEQ ID NO:8272), ATTTGAGGATGGGGGAGATTTTGCGGC (SEQ ID NO:8273), TTGAGGATGGGGGAGATTTTGCGGC (SEQ ID NO:8274), TGAGGATGGGGGAGATTTTGCGGC (SEQ ID NO:8275), TGCGTGTGTGTGTTGGAGGAGGAGTT (SEQ ID NO:8276), AGTGCGTGTGTGTGTTGGAGGAGGAGG (SEQ ID NO:8277), AGGTGGAGGTATCGTGATGTTGTGCG (SEQ ID NO:8278), CGAGTGCGTGTGTGTGTTGGAGGAGGA (SEQ ID NO:8279), GTGCGTGTGTGTGTTGGAGGAGGAGGT (SEQ ID NO:8280)
Target876	chr8:38757667-38758053	TGCGGCGTGGATTAAATGAGATAGCGT (SEQ ID NO:8281), GGTTCGCGCGTGGATTAAATGAGATAGCG (SEQ ID NO:8282), TTGCGCGTGGATTAAATGAGATAGCGT (SEQ ID NO:8283), GGTTCGCGCGTGGATTAAATGAGATAGCGT (SEQ ID NO:8284), TTGCGCGTGGATTAAATGAGATAGCG (SEQ ID NO:8285), AAATGTAGAAGATTCGCGCGGTTTGC (SEQ ID NO:8286), CGTTGGGATTTTTCGGTGTGATGCGA (SEQ ID NO:8287), TCGTTGGGATTTTTCGGTGTGATGCG (SEQ ID NO:8288), GGAATTAAGAGAGTTGTTGTGCGCGGT (SEQ ID NO:8289), TCGTTGGGATTTTTCGGTGTGATGCGA (SEQ ID NO:8290)

Figure 5 (Table 1)

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Target877	chr8:38758076-38758134	GGGTACGGTGTAGGCGTTTGTGGTTTT (SEQ ID NO:8291), ATTCGGGAGGTTGGGGTAGAAGGATCG (SEQ ID NO:8292), GGGTACGGTGTAGGCGTTTGTGGTTTT (SEQ ID NO:8293), TTCGGGAGGTTGGGGTAGAAGGATCG (SEQ ID NO:8294), GGGTACGGTGTAGGCGTTTGTGGTTTTA (SEQ ID NO:8295), TTTGTCGTTTAGGTTGGAGTGCGGTGG (SEQ ID NO:8296), GGTTCGTCGTTTAGGTTGGAGTGCGGT (SEQ ID NO:8297), TGGTTTTGTCGTTTAGGTTGGAGTGCGGT (SEQ ID NO:8298), TTTTTCGTCGTTTAGGTTGGAGTGCGGTGG (SEQ ID NO:8299), TGGTTTTGTCGTTTAGGTTGGAGTGCGGT (SEQ ID NO:8300)
Target878	chr8:55370650-55371091	GCGGTGATGTCGGGTTGGGTTTTTGT (SEQ ID NO:8301), GGGAGCGGGGTAGGTTTGGAGCGTTAT (SEQ ID NO:8302), GGGATATGAAGGTGAAGGGCGAGGCGT (SEQ ID NO:8303), GTTGAGGGGAGCGGGGTAGGTTTGGAG (SEQ ID NO:8304), GCGATAGGTTAGAATACGGGCGGCGGT (SEQ ID NO:8305), AGCGCGTTTTGGGTTTGGTTTTGGTCG (SEQ ID NO:8306), AAAGTTGTTTTGGAGGGTCGGAGGGCG (SEQ ID NO:8307), AGGCGGAAAGTTGTTTTGGAGGGTCGG (SEQ ID NO:8308), GGCAGAAAGTTGTTTTGGAGGGTCGGA (SEQ ID NO:8309), AAGTTGTTTTGGAGGGTCGGAGGGCGG (SEQ ID NO:8310)
Target879	chr8:55371122-55371160	TGACGTTTAAATTAGGGGTGTGTAGCGGT (SEQ ID NO:8311), TGACGTTTAAATTAGGGGTGTGTAGCGGTT (SEQ ID NO:8312), TTGACGTTTAAATTAGGGGTGTGTAGCGGT (SEQ ID NO:8313), GCGAGTTTGACGTTTAAATTAGGGGTGTGT (SEQ ID NO:8314), TGCGAGTTTGACGTTTAAATTAGGGGTGTG (SEQ ID NO:8315), GTCGTTTCGGAGGTGTGCGGAAGTCGTT (SEQ ID NO:8316), TCGTTCGGAGGTGTGCGGAAGTCGTTT (SEQ ID NO:8317), AAAGTTGTTTTGGAGGGTCGGAGGGCG (SEQ ID NO:8318), AGGCGGAAAGTTGTTTTGGAGGGTCGG (SEQ ID NO:8319), GGCAGAAAGTTGTTTTGGAGGGTCGGA (SEQ ID NO:8320)
Target880	chr8:55371173-55371214	TGACGTTTAAATTAGGGGTGTGTAGCGGT (SEQ ID NO:8321), TGACGTTTAAATTAGGGGTGTGTAGCGGTT (SEQ ID NO:8322), TTGACGTTTAAATTAGGGGTGTGTAGCGGT (SEQ ID NO:8323), GCGAGTTTGACGTTTAAATTAGGGGTGTGT (SEQ ID NO:8324), TGCGAGTTTGACGTTTAAATTAGGGGTGTG (SEQ ID NO:8325), GTCGTTTCGGAGGTGTGCGGAAGTCGTT (SEQ ID NO:8326), TCGTTCGGAGGTGTGCGGAAGTCGTTT (SEQ ID NO:8327), CGTTCGGAGGTGTGCGGAAGTCGTTTT (SEQ ID NO:8328), GTCGTTTCGGAGGTGTGCGGAAGTCGT (SEQ ID NO:8329), TCGTTCGGAGGTGTGCGGAAGTCGTTTT (SEQ ID NO:8330)
Target881	chr8:55379448-55379488	CGTTGTCGGGTAGGGATCGGGCGA (SEQ ID NO:8331), CGTTGTCGGGTAGGGATCGGGCG (SEQ ID NO:8332), GCGTTAAGGTTTCGGAAGTTTTAGCGGG (SEQ ID NO:8333), GCGTTAAGGTTTCGGAAGTTTTAGCGGA (SEQ ID NO:8334), AGGGAAGAGGAGGGGATTTGTGTTTTGT (SEQ ID NO:8335)
Target882	chr8:55379496-55379518	TTTTTCGTCGTTGAGGTGGAGTTCGGC (SEQ ID NO:8336), GTTTTTTCGTCGTTGAGGTGGAGTTCGGC (SEQ ID NO:8337), AGTTTTTCGTCGTTGAGGTGGAGTTCGGC (SEQ ID NO:8338), TTTTCGTCGTTGAGGTGGAGTTCGGC (SEQ ID NO:8339), CGTTGTCGGGTAGGGATCGGGCGA (SEQ ID NO:8340), TCGGGTTAGTTTTAGTTTACGGCGTGGT (SEQ ID NO:8341), TCGGGTTAGTTTTAGTTTACGGCGTGGT (SEQ ID NO:8342), TTCGGTTAGTTTTAGTTTACGGCGTGGT (SEQ ID NO:8343), TTCGGTTAGTTTTAGTTTACGGCGTGGT (SEQ ID NO:8344), TTTTCGGTTAGTTTTAGTTTACGGCGTGGT (SEQ ID NO:8345)
Target883	chr8:55379566-55379574	TGGAGTTCGGCGGCGGGAGTTAGATT (SEQ ID NO:8346), GTGGAGTTCGGCGGCGGGAGTTAGAT (SEQ ID NO:8347), GGAGTTCGGCGGCGGGAGTTAGATT (SEQ ID NO:8348), TGGAGTTCGGCGGCGGGAGTTAGATT (SEQ ID NO:8349), TGGAGTTCGGCGGCGGGAGTTAGAT (SEQ ID NO:8350), AGATGTTTCGACGTTGCGCGGGTTTT (SEQ ID NO:8351), GAGATGTTTCGACGTTGCGCGGGTTT (SEQ ID NO:8352), GATGTTTCGACGTTGCGCGGGTTTT (SEQ ID NO:8353), ATGTTTCGACGTTGCGCGGGTTTT (SEQ ID NO:8354), GAGATGTTTCGACGTTGCGCGGGTT (SEQ ID NO:8355)
Target884	chr8:55379583-55379839	TGGAGTTCGGCGGCGGGAGTTAGATT (SEQ ID NO:8356), CGTCGTGGGTTGGGATTGGTTTCGGAAC (SEQ ID NO:8357), ACGTCGTGGGTTGGGATTGGTTTCGGA (SEQ ID NO:8358), CGGGGTAGGTTTGGAGCGTCGTGAGTA (SEQ ID NO:8359), TACGTCGTGGGTTGGGATTGGTTTCGGA (SEQ ID NO:8360), AGATGTTTCGACGTTGCGCGGGTTTT (SEQ ID NO:8361), GAGATGTTTCGACGTTGCGCGGGTTT (SEQ ID NO:8362), GACGCGGAGGAAAAGAAGGTGGTGAGC (SEQ ID NO:8363), CGGACGCGGAGGAAAAGAAGGTGGTGA (SEQ ID NO:8364), TCGGACGCGGAGGAAAAGAAGGTGGTG (SEQ ID NO:8365)
Target885	chr8:55382674-55382690	GAGGTGGGCGTAGGAGGAGGAGTTGTT (SEQ ID NO:8366), CGAGGTGGGCGTAGGAGGAGGAGTTGT (SEQ ID NO:8367), AGGTGGGCGTAGGAGGAGGAGTTGTTT (SEQ ID NO:8368), CGAGGTGGGCGTAGGAGGAGGAGTTG (SEQ ID NO:8369), GAGGTGGGCGTAGGAGGAGGAGTTGTTT (SEQ ID NO:8370), TTTGCGCGGGAAGGGTAGGTTAGGT (SEQ ID NO:8371), CGCGGGGAAGGGTAGGTTAGGTCGTT (SEQ ID NO:8372), GGAAAGTTTTGCGCGGGGAAGGGTAGG (SEQ ID NO:8373), GGGAAAGTTTTGCGCGGGGAAGGGTAG (SEQ ID NO:8374), TTGCGCGGGGAAGGGTAGGTTAGGTC (SEQ ID NO:8375)

Figure 5 (Table 1)

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Target886	chr8:55382691-55382762	GAGGTGGGCGTAGGAGGAGGAGTTGTT (SEQ ID NO:8376), CGAGGTGGGCGTAGGAGGAGGAGTTGT (SEQ ID NO:8377), AGGTGGGCGTAGGAGGAGGAGTTGTTT (SEQ ID NO:8378), CGAGGTGGGCGTAGGAGGAGGAGTTG (SEQ ID NO:8379), GAGGTGGGCGTAGGAGGAGGAGTTGTTT (SEQ ID NO:8380), TAGGGCGTGGGTAGTGGTGGTAGTGGA (SEQ ID NO:8381), TTGCGCGGGGAAGGGTAGGTTTAGGT (SEQ ID NO:8382), CGCGGGGAAGGGTAGGTTTAGGTCGTT (SEQ ID NO:8383), GGAAGTTTTGCGCGGGGAAGGGTAGG (SEQ ID NO:8384), GGGAAAGTTTTGCGCGGGGAAGGGTAG (SEQ ID NO:8385)
Target887	chr8:55382784-55382817	GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8386), GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8387), GCGGGGATTTTGGGCGGATTAGGTTAGA (SEQ ID NO:8388), GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8389), CGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8390), TAGGGCGTGGGTAGTGGTGGTAGTGGA (SEQ ID NO:8391), GTAGGGCGTGGGTAGTGGTGGTAGTGG (SEQ ID NO:8392), CGGGGTAGCGATCGGTAGGAGGGAAAG (SEQ ID NO:8393), TGGGTAGTGGTGGTAGTGGAGCGGGAG (SEQ ID NO:8394), GGGTAGTGGTGGTAGTGGAGCGGGAGT (SEQ ID NO:8395)
Target888	chr8:55382870-55382887	GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8396), GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8397), GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8398), CGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8399), GCGTAGTTTTGGGCGGTTTGGGTTTGT (SEQ ID NO:8400), TAGGTTTAGCGATGAGGGGTTGCGGG (SEQ ID NO:8401), TTGTTGGTGGGGGTAGGTTTGGGGTA (SEQ ID NO:8402), TGTGGTGGCGGGGTAGGTTTGGGGTAG (SEQ ID NO:8403), TAGCGATGAGGGGTTGCGGGTTTGT (SEQ ID NO:8404), TTAGCGATGAGGGGTTGCGGGTTTGT (SEQ ID NO:8405)
Target889	chr8:55382910-55382918	GTTTTGTTGATCGCGTGGAGTCGGA (SEQ ID NO:8406), TCGTTTGATCGCGTGGAGTCGGATTTC (SEQ ID NO:8407), TTCGTTTGATCGCGTGGAGTCGGATT (SEQ ID NO:8408), TTTGTTTGATCGCGTGGAGTCGGATT (SEQ ID NO:8409), TTTGTTTGATCGCGTGGAGTCGGAT (SEQ ID NO:8410), TAGGTTTAGCGATGAGGGGTTGCGGG (SEQ ID NO:8411), TTGTTGGTGGGGGTAGGTTTGGGGTA (SEQ ID NO:8412), TGTGGTGGCGGGGTAGGTTTGGGGTAG (SEQ ID NO:8413), TAGCGATGAGGGGTTGCGGGTTTGT (SEQ ID NO:8414), TTAGCGATGAGGGGTTGCGGGTTTGT (SEQ ID NO:8415)
Target890	chr8:55382987-55383035	GTTTTGTTGATCGCGTGGAGTCGGA (SEQ ID NO:8416), TCGTTTGATCGCGTGGAGTCGGATTTC (SEQ ID NO:8417), TTCGTTTGATCGCGTGGAGTCGGATT (SEQ ID NO:8418), TTTGTTTGATCGCGTGGAGTCGGATT (SEQ ID NO:8419), TTTGTTTGATCGCGTGGAGTCGGAT (SEQ ID NO:8420), TTTGTTGGTTGCGTGGGGTTAGCGTC (SEQ ID NO:8421), GTTGGTTGCGTGGGGTTAGCGTCGTTT (SEQ ID NO:8422), ATTTGTTGGTTGCGTGGGGTTAGCGT (SEQ ID NO:8423), GGTGCGTGGGGTTAGCGTCGTTTAGT (SEQ ID NO:8424), TGGTTGCGTGGGGTTAGCGTCGTTTAG (SEQ ID NO:8425)
Target891	chr8:56901515-56901792	GAGTTTGCCTTCGGGTGGGAGAGAGT (SEQ ID NO:8426), GCGTTTCGGGTGGGAGAGAGTTTGTGG (SEQ ID NO:8427), TGCCTTCGGGTGGGAGAGAGTTTGT (SEQ ID NO:8428), TTGCGTTTCGGGTGGGAGAGAGTTTGT (SEQ ID NO:8429), AGAGTTTCGGGTTCGGGTGGGAGAGAGT (SEQ ID NO:8430)
Target892	chr8:67873476-67873541	AGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8431), GAGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8432), AGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8433), GAGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8434), AGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8435), TTTTCGGGTGAGGCGGGAAGTCGATCG (SEQ ID NO:8436), CGCGGGGTTGGGGTCGAGATTAGGATA (SEQ ID NO:8437), TCGCGGGGTTGGGGTCGAGATTAGGAT (SEQ ID NO:8438), TTTTCGGGTGAGGCGGGAAGTCGATC (SEQ ID NO:8439), CGCGGGGTTGGGGTCGAGATTAGGAT (SEQ ID NO:8440)
Target893	chr8:67873588-67873596	TTGTTTCGTTTTAGTTTCGCGGTGC (SEQ ID NO:8441), TTTGTTTCGTTTTAGTTTCGCGGTGC (SEQ ID NO:8442), AGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8443), TGGTTTCGTTTTAGTTTCGCGGTGC (SEQ ID NO:8444), GAGGTCGTTTTTTCGGTCGGTTTTTCGT (SEQ ID NO:8445), TGCGCGCGATGGTTATTTGTATTCGGT (SEQ ID NO:8446), GCGCGCGATGGTTATTTGTATTCGGT (SEQ ID NO:8447), TGCGCGCGATGGTTATTTGTATTCGG (SEQ ID NO:8448), GCGCGCGATGGTTATTTGTATTCGGT (SEQ ID NO:8449), TTGCGCGCGATGGTTATTTGTATTCGG (SEQ ID NO:8450)
Target894	chr8:67873600-67874082	GGCGTCGTTTTGTAGGTTGCGGGTGAG (SEQ ID NO:8451), AAAGGATCGAAGGTGCGGTGAGGTCGG (SEQ ID NO:8452), GTTGGCGTTGAGGGGTTGTTTCGTTGG (SEQ ID NO:8453), GGTGAGATGCGCGATGATGTTGGTGGT (SEQ ID NO:8454), GCGTCGTTTTGTAGGTTGCGGGTGAGA (SEQ ID NO:8455), CGTACGGGGAGAATTAGGGGTTGCGT (SEQ ID NO:8456), TTTGTTGGGTTGTTGGTGGGCGTACG (SEQ ID NO:8457), TTGGTGGGCGTACGGGGAGAATTAGGG (SEQ ID NO:8458), GGGCGTACGGGGAGAATTAGGGGTTG (SEQ ID NO:8459), GGTGTTGGTGGGCGTACGGGGAGAAT (SEQ ID NO:8460)
Target895	chr8:70946939-70946971	AAGCGGTTTCGAGTTGTAGGAAGGGCG (SEQ ID NO:8461), GGTTCGAGTTGTAGGAAGGGCGTCGG (SEQ ID NO:8462), CGGTTTCGAGTTGTAGGAAGGGCGTCG (SEQ ID NO:8463), GAAGCGGTTTCGAGTTGTAGGAAGGGCG (SEQ ID NO:8464), GCGGTTTCGAGTTGTAGGAAGGGCGTC (SEQ ID NO:8465), CGTAGTCGGTATTTTTCGCGCGCG (SEQ ID NO:8466)

Figure 5 (Table 1)

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Target896	chr8:70947164-70947176	AGATTTAGAGGCGGGTTGGGGACGTGA (SEQ ID NO:8467), GATTTAGAGGCGGGTTGGGGACGTGAG (SEQ ID NO:8468), AGATTTAGAGGCGGGTTGGGGACGTGAG (SEQ ID NO:8469), GGGGCGGGGTTTGGCGTTTATAGATTT (SEQ ID NO:8470), TAGATTTAGAGGCGGGTTGGGGACGTG (SEQ ID NO:8471), GAGGGGACGTTTAAGGTTATCGCGCG (SEQ ID NO:8472), GGAGGGGACGTTTAAGGTTATCGCGGC (SEQ ID NO:8473), GGGAGGGGACGTTTAAGGTTATCGCGG (SEQ ID NO:8474), GGGGAGGGGACGTTTAAGGTTATCGCG (SEQ ID NO:8475), CGGGGAGGGGACGTTTAAGGTTATCGC (SEQ ID NO:8476)
Target897	chr8:70981730-70981761	TCGTAGGGGGCGGTGGAATTAAGTGTT (SEQ ID NO:8477), CGTAGGGGGCGGTGGAATTAAGTGTT (SEQ ID NO:8478), TCGTAGGGGGCGGTGGAATTAAGTGTT (SEQ ID NO:8479), TTCGTAGGGGGCGGTGGAATTAAGTGTT (SEQ ID NO:8480), GGGGGCGGTGGAATTAAGTGTTAGGT (SEQ ID NO:8481), TGAGTTCGGGTTTGGGTTTATAGAGGGAGT (SEQ ID NO:8482), TGTGAGTTCGGGTTTGGGTTTATAGAGGG (SEQ ID NO:8483), GTTGAGTTCGGGTTTGGGTTTATAGAGGGA (SEQ ID NO:8484), TGTGAGTTCGGGTTTGGGTTTATAGAGGGA (SEQ ID NO:8485), TGAGTTCGGGTTTGGGTTTATAGAGGGAGTT (SEQ ID NO:8486)
Target898	chr8:70981881-70981917	GAAGGGGGGTATGGCGGGGGTAGTAGA (SEQ ID NO:8487), AAGGGGGGTATGGCGGGGGTAGTAGAC (SEQ ID NO:8488), TATTCGGAAGGGGAAGGGGGGTATGGC (SEQ ID NO:8489), GGAAGGGGGGTATGGCGGGGGTAGTAG (SEQ ID NO:8490), AAGGGGGGTATGGCGGGGGTAGTAGA (SEQ ID NO:8491), TGGAGGTCGTAGCGTTTGTGTTTCGT (SEQ ID NO:8492), GGAGGTCGTAGCGTTTGTGTTTCGT (SEQ ID NO:8493), TGGAGGTCGTAGCGTTTGTGTTTCGT (SEQ ID NO:8494), GGTAGTTGAGGTCGTAGCGTTTGTGTT (SEQ ID NO:8495), TGGAGGTCGTAGCGTTTGTGTTTCGT (SEQ ID NO:8496)
Target899	chr8:70982012-70982028	GGGGTATGGCGGGGGTAGTAGACGTTG (SEQ ID NO:8497), GAAGGGGGGTATGGCGGGGGTAGTAGA (SEQ ID NO:8498), GGGTATGGCGGGGGTAGTAGACGTTGC (SEQ ID NO:8499), GTATGGCGGGGGTAGTAGACGTTGCGG (SEQ ID NO:8500), GGTATGGCGGGGGTAGTAGACGTTGCG (SEQ ID NO:8501), CGGGATGGTTTTATTTTCGGTTAAGTGAGGTCG (SEQ ID NO:8502), CGGGATGGTTTTATTTTCGGTTAAGTGAGGTCG (SEQ ID NO:8503), TCGGGATGGTTTTATTTTCGGTTAAGTGAGGT (SEQ ID NO:8504), TCGGGATGGTTTTATTTTCGGTTAAGTGAGGTCG (SEQ ID NO:8505), CGGTTTCGGGATGGTTTTATTTTCGGTTAAGT (SEQ ID NO:8506)
Target900	chr8:70982082-70982109	TTTGCGGGTTGTTTTTCGGCGGGTAGT (SEQ ID NO:8507), AGGTTTTGCGGGTTGTTTTTCGGCGGG (SEQ ID NO:8508), TTGCGGGTTGTTTTTCGGCGGGTAGTA (SEQ ID NO:8509), GGTTTTGCGGGTTGTTTTTCGGCGGGT (SEQ ID NO:8510), GTTTTGCGGGTTGTTTTTCGGCGGGTA (SEQ ID NO:8511), GGATTGCGGGTTGGTTGGGGTGAGGA (SEQ ID NO:8512), ATTTGGGGTTGGTTGGGGTGAGGAGG (SEQ ID NO:8513), TGGATTGCGGGTTGGTTGGGGTGAGG (SEQ ID NO:8514), GTTGGTTGGGGTGAGGAGGTTGGTG (SEQ ID NO:8515), GGTGTTGGGGTGAGGAGGTTGGTG (SEQ ID NO:8516)
Target901	chr8:70982112-70982155	TTTGCGGGTTGTTTTTCGGCGGGTAGT (SEQ ID NO:8517), AGGTTTTGCGGGTTGTTTTTCGGCGGG (SEQ ID NO:8518), TTGCGGGTTGTTTTTCGGCGGGTAGTA (SEQ ID NO:8519), GGTTTTGCGGGTTGTTTTTCGGCGGGT (SEQ ID NO:8520), GTTTTGCGGGTTGTTTTTCGGCGGGTA (SEQ ID NO:8521), GGATTGCGGGTTGGTTGGGGTGAGGA (SEQ ID NO:8522), ATTTGGGGTTGGTTGGGGTGAGGAGG (SEQ ID NO:8523), TGGATTGCGGGTTGGTTGGGGTGAGG (SEQ ID NO:8524), GTTGGTTGGGGTGAGGAGGTTGGTG (SEQ ID NO:8525), GGTGTTGGGGTGAGGAGGTTGGTG (SEQ ID NO:8526)
Target902	chr8:70984131-70984156	CGGGTGGTCGTTTTGTTTTTCGGGGG (SEQ ID NO:8527), CGGGTGGTCGTTTTGTTTTTCGGGGG (SEQ ID NO:8528), TCGGGTGGTCGTTTTGTTTTTCGGGGG (SEQ ID NO:8529), GGGTGGTCGTTTTGTTTTTCGGGGG (SEQ ID NO:8530), TCGGGTGGTCGTTTTGTTTTTCGGGG (SEQ ID NO:8531), ATGCGTTTTTGGGCGTTTCGGTATGGG (SEQ ID NO:8532), GCGGTTTTTGGGCGTTTCGGTATGGGTT (SEQ ID NO:8533), TCGGTTTTTGGGCGTTTCGGTATGGG (SEQ ID NO:8534), GCGGTTTTTGGGCGTTTCGGTATGGGTT (SEQ ID NO:8535), TCGGTTTTTGGGCGTTTCGGTATGGGTT (SEQ ID NO:8536)
Target903	chr8:70984158-70984365	AGAAAGAAGCGTCGAGGGTGGGGGAAA (SEQ ID NO:8537), GAAGCGTCGAGGGTGGGGGAAACGTAG (SEQ ID NO:8538), GAAAGAAGCGTCGAGGGTGGGGGAAAC (SEQ ID NO:8539), AAAGAAGCGTCGAGGGTGGGGGAAACG (SEQ ID NO:8540), TAGAAAGAAGCGTCGAGGGTGGGGGAA (SEQ ID NO:8541), ATGCGTTTTTGGGCGTTTCGGTATGGG (SEQ ID NO:8542), GGTGCGGGGGTAGGCGAGGAATTTGTT (SEQ ID NO:8543), GCGGTTTTTGGGCGTTTCGGTATGGGTT (SEQ ID NO:8544), AAGAGGAAGTAGCGGTCGGGGGGTAGG (SEQ ID NO:8545), TCGTTGTTAGGTCGGGGGTGAGGTTGT (SEQ ID NO:8546)
Target904	chr8:70984378-70984394	AGAAAGAAGCGTCGAGGGTGGGGGAAA (SEQ ID NO:8547), GAAGCGTCGAGGGTGGGGGAAACGTAG (SEQ ID NO:8548), GAAAGAAGCGTCGAGGGTGGGGGAAAC (SEQ ID NO:8549), AAAGAAGCGTCGAGGGTGGGGGAAACG (SEQ ID NO:8550), TAGAAAGAAGCGTCGAGGGTGGGGGAA (SEQ ID NO:8551), AAGAGGAAGTAGCGGTCGGGGGGTAGG (SEQ ID NO:8552), TCGTTGTTAGGTCGGGGGTGAGGTTGT (SEQ ID NO:8553), GTTAAGAGGAAGTAGCGGTCGGGGGGT (SEQ ID NO:8554), AGTCGTTGTTAGGTCGGGGGTGAGGTT (SEQ ID NO:8555), AAGTCGTTGTTAGGTCGGGGGTGAGGTT (SEQ ID NO:8556)

Figure 5 (Table 1)

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Target905	chr8:70984421-70984445	AGAAAGAAGCGTCGAGGGTGGGGGAAA (SEQ ID NO:8557), GAAGCGTCGAGGGTGGGGGAAACGTAG (SEQ ID NO:8558), GAAAGAAGCGTCGAGGGTGGGGGAAAC (SEQ ID NO:8559), AAAGAAGCGTCGAGGGTGGGGGAAACG (SEQ ID NO:8560), TAGAAAGAAGCGTCGAGGGTGGGGGAA (SEQ ID NO:8561), TCGTTGTTAGGTCGGGGGTGAGGTTGT (SEQ ID NO:8562), AGTCGTTGTTAGGTCGGGGGTGAGGTT (SEQ ID NO:8563), AAGTCGTTGTTAGGTCGGGGGTGAGGT (SEQ ID NO:8564), GTCGTTGTTAGGTCGGGGGTGAGGTTGT (SEQ ID NO:8565), GTCGTTGTTAGGTCGGGGGTGAGGTTG (SEQ ID NO:8566)
Target906	chr8:70984535-70984567	GCGGTTTGGAAGAGAGAGGGAAAGGAGG (SEQ ID NO:8567), AGCGGTTTGGAAGAGAGAGGGAAAGGA (SEQ ID NO:8568), AGCGGTTTGGAAGAGAGAGGGAAAGGAGG (SEQ ID NO:8569), GCGGTTTGGAAGAGAGAGGGAAAGGAGGA (SEQ ID NO:8570), TGGTAGCGGTTTGGAAGAGAGAGGGAA (SEQ ID NO:8571), GGTTCGCGGCGTTTGAAGATTCGGA (SEQ ID NO:8572), TCGGTTGCGGGCGTTTGAAGATTCGG (SEQ ID NO:8573), GGAGTTTGAAGTTCGGTTGCGGGCGT (SEQ ID NO:8574), CGGTTGCGGGCGTTTGAAGATTCGGG (SEQ ID NO:8575), AGGAGTTTGAAGTTCGGTTGCGGGCG (SEQ ID NO:8576)
Target907	chr8:92606987-92607479	GCGGTTGATGTGAGGGCGATTGTTGTT (SEQ ID NO:8577), GGTAGGCGGTTGGATGTGAGGGCGATT (SEQ ID NO:8578), ATTGGTAGGCGGTTGGATGTGAGGGCG (SEQ ID NO:8579), AATTGGTAGGCGGTTGGATGTGAGGGCG (SEQ ID NO:8580), GTAGGCGGTTGGATGTGAGGGCGATT (SEQ ID NO:8581), TGGAGTAGTGAGGTAGGAAGGGGATATTCGT (SEQ ID NO:8582), GGAGTAGTGAGGTAGGAAGGGGATATTCGT (SEQ ID NO:8583), TGGAGTAGTGAGGTAGGAAGGGGATATTCG (SEQ ID NO:8584), TGGTTGGTGAGGAAGTTGAAGGTTAAGGAA (SEQ ID NO:8585), ATGGTTGGTGAGGAAGTTGAAGGTTAAGGA (SEQ ID NO:8586)
Target908	chr8:97171868-97171902	CGTGTGAGGTTTCGGAGTAGTCGGGA (SEQ ID NO:8587), TCGTGTGAGGTTTCGGAGTAGTCGGG (SEQ ID NO:8588), TCGTGTGAGGTTTCGGAGTAGTCGGGA (SEQ ID NO:8589), CGTGTGAGGTTTCGGAGTAGTCGGGAG (SEQ ID NO:8590), CGTGTGAGGTTTCGGAGTAGTCGGGAGT (SEQ ID NO:8591), GGGTGGGATGTTAGTCGGGTTGGAGT (SEQ ID NO:8592), TGGGTGGGATGTTAGTCGGGTTGGAG (SEQ ID NO:8593), TTGCGTTGGGTGGGATGTTAGTCGGG (SEQ ID NO:8594), GCGTTGGGTGGGATGTTAGTCGGGTT (SEQ ID NO:8595), TTGGGTGGGATGTTAGTCGGGTTGGA (SEQ ID NO:8596)
Target909	chr8:97171960-97172022	GCGGCGTTAGGATTAGGGGGTTGTTG (SEQ ID NO:8597), CGCGGCGTTAGGATTAGGGGGTTGTTG (SEQ ID NO:8598), TCGGAGGGCGTAGGGTTTATGTTGTTG (SEQ ID NO:8599), GCGCGGCGTTAGGATTAGGGGGTTGTT (SEQ ID NO:8600), GTCGAGGGCGTAGGGTTTATGTTGTTG (SEQ ID NO:8601), TCGCGCGGGTTTTTCGTTGTTGTTGTTG (SEQ ID NO:8602), GTCGCGCGGGTTTTTCGTTGTTGTTGTTG (SEQ ID NO:8603), GTCGCGCGGGTTTTTCGTTGTTGTTGTTG (SEQ ID NO:8604), CGGGTAGTTTTTGGTTTTGGCGTCGCG (SEQ ID NO:8605), GCGCGCGGGTAGTTTTTGGTTTTGGCG (SEQ ID NO:8606)
Target910	chr8:97172128-97172151	GTGGGATTTTTAGTGTCGGTTTTGTTAGGGT (SEQ ID NO:8607), TGTGGGATTTTTAGTGTCGGTTTTGTTAGGG (SEQ ID NO:8608), TGTGGGATTTTTAGTGTCGGTTTTGTTAGGGT (SEQ ID NO:8609), GTGGGATTTTTAGTGTCGGTTTTGTTAGGGT (SEQ ID NO:8610), TTGTGGGATTTTTAGTGTCGGTTTTGTTAGGG (SEQ ID NO:8611), AGGCGATGAATTCGGTTGGAGAGGGG (SEQ ID NO:8612), GTTGGAGAGGGGTCGGGATGGGGATTG (SEQ ID NO:8613), GGAGGACGGGAGGTAGTAGGCGGATGA (SEQ ID NO:8614), AATTCGTTGGAGAGGGGTCGGGATGG (SEQ ID NO:8615), AGAGGGGTCGGGATGGGGATTGATGGA (SEQ ID NO:8616)
Target911	chr8:99960237-99960958	TAGTCGGGGGTTGGGAGGAGAGTTCGT (SEQ ID NO:8617), AGGTTAGTGCGGGCGAGGTGAGTTTT (SEQ ID NO:8618), ATTTTCGAGGTTAGTGCGGGGCGAGGT (SEQ ID NO:8619), AGTTCGTGGATAGGAGGAGGGGCGAT (SEQ ID NO:8620), GGTTGGGTTGGGTTGGGTGTTGTTGCG (SEQ ID NO:8621), TTAGGTTTTAGGGGTTGGGTTGGGGG (SEQ ID NO:8622), CGGATGGTAAGTCGGCGTGAAGAGCG (SEQ ID NO:8623), CGTTGTCGTCGCGTTTTGTGGTCGTTT (SEQ ID NO:8624), CGGATGGTAAGTCGGCGTGAAGAGCGA (SEQ ID NO:8625), TCGGATGGTAAGTCGGCGTGAAGAGCG (SEQ ID NO:8626)
Target912	chr8:99960991-99961662	CGGGTGGGGAGGGAGATTAGGTGTGG (SEQ ID NO:8627), GTTTTCGGGGGGTTTTGGAGTCGGGTG (SEQ ID NO:8628), GTTTTGGAGTCGGGTGGGGAGGGAGAT (SEQ ID NO:8629), TTTTCGGGGGGTTTTGGAGTCGGGTGG (SEQ ID NO:8630), GGTTCGGGGGGTTTTGGAGTCGGGT (SEQ ID NO:8631), AAAAGGTAGGGTCGGGAAGGGGAAGCG (SEQ ID NO:8632), TCGTGATGGTGGAGCGGGTATTTCGT (SEQ ID NO:8633), CGTGATGGTGAGCGGGTATTTCGTG (SEQ ID NO:8634), ATTAGAGGTCGGAGGGCGTGGGTTTC (SEQ ID NO:8635), GAATTAGAGGTCGGAGGGCGTGGGTTT (SEQ ID NO:8636)
Target913	chr8:99986368-99986430	TCGTTAGTGTTTTAGGGAGGTTGCGGA (SEQ ID NO:8637), TCGTTAGTGTTTTAGGGAGGTTGCGGAA (SEQ ID NO:8638), ATCGTTAGTGTTTTAGGGAGGTTGCGGA (SEQ ID NO:8639), AGGGAGGTTGCGGAAAAGTAGAGGTAATG (SEQ ID NO:8640), GGGAGGTTGCGGAAAAGTAGAGGTAATGA (SEQ ID NO:8641), GGGTTTGTGGGGAGGGTCGAGTTGGAT (SEQ ID NO:8642), TTGGGTTTGTGGGGAGGGTCGAGTTGG (SEQ ID NO:8643), GGGTTTGTGGGGAGGGTCGAGTTGGATG (SEQ ID NO:8644), GGGTTTGTGGGGAGGGTCGAGTTGGGA (SEQ ID NO:8645), GGGTTTGTGGGGAGGGTCGAGTTGGATG (SEQ ID NO:8646)

Figure 5 (Table 1)

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Target914	chr8:99986453-99986707	GCGGGGTTGGGTTTCGGTCGGTATAAGT (SEQ ID NO:8647), TCGGTGAGGCGTTTCGGTATGGATTGGG (SEQ ID NO:8648), ATTCGAGACGGAGCGGGGTTATACGG (SEQ ID NO:8649), CGGTGAGGCGTTTCGGTATGGATTGGG (SEQ ID NO:8650), GGAGCGGTTTGGGCGATGGGTTTGAC (SEQ ID NO:8651), CGGAAGGCGGAAAATGCGAGTGGTT (SEQ ID NO:8652), CGGAAGGCGGAAAATGCGAGTGGTT (SEQ ID NO:8653), CGGAAGGCGGAAAATGCGAGTGGTTTT (SEQ ID NO:8654), TCGTAGGGTTTTGGGTTGTCGCGGA (SEQ ID NO:8655), GGAAGGCGGAAAATGCGAGTGGTTTT (SEQ ID NO:8656)
Target915	chr8:99986725-99986813	ATTCGAGACGGAGCGGGGTTATACGG (SEQ ID NO:8657), TTCGGTGCGGGGATAGGTCGTCGAGTT (SEQ ID NO:8658), TTTTCGGGTGGGGGATAGGTCGTCGAGT (SEQ ID NO:8659), TTTTCGGGTGGGGGATAGGTCGTCGAG (SEQ ID NO:8660), TCGGTGGGGGATAGGTCGTCGAGTTC (SEQ ID NO:8661), CGGAAGGCGGAAAATGCGAGTGGTT (SEQ ID NO:8662), GCGTAGGGAAGGGCGGATTTTCGGGAT (SEQ ID NO:8663), CGGAAGGCGGAAAATGCGAGTGGTT (SEQ ID NO:8664), CGGAAGGCGGAAAATGCGAGTGGTTTT (SEQ ID NO:8665), TCGTAGGGTTTTGGGTTGTCGCGGA (SEQ ID NO:8666)
Target916	chr8:99986839-99987001	TTTTGCGGGAGGAGGAGAGGGTTTCGG (SEQ ID NO:8667), GGGTTTTGCGGGAGGAGGAGAGGGTTT (SEQ ID NO:8668), TTCGGGTGGGGGATAGGTCGTCGAGTT (SEQ ID NO:8669), TTTTCGGGTGGGGGATAGGTCGTCGAGT (SEQ ID NO:8670), TTTTCGGGTGGGGGATAGGTCGTCGAG (SEQ ID NO:8671), TAATAGGGGAGGGAGGCGGTGGAGGAG (SEQ ID NO:8672), TTAATAGGGGAGGGAGGCGGTGGAGGA (SEQ ID NO:8673), GGGAGGGAGGCGGTGGAGGAGATTTTA (SEQ ID NO:8674), TTAATAGGGGAGGGAGGCGGTGGAGG (SEQ ID NO:8675), TTAATAGGGGAGGGAGGCGGTGGAGGAG (SEQ ID NO:8676)
Target917	chr8:102504296-102504696	TCGGAGAAGGGTTTTATTGAGCGCGT (SEQ ID NO:8677), CGGAGAAGGGTTTTATTGAGCGCGT (SEQ ID NO:8678), TCGGAGAAGGGTTTTATTGAGCGCGT (SEQ ID NO:8679), CGGAGAAGGGTTTTATTGAGCGCGT (SEQ ID NO:8680), TCGGAGAAGGGTTTTATTGAGCGCG (SEQ ID NO:8681), CGAGTTGCGCGATGATTGGTTGGGGAG (SEQ ID NO:8682), AGGGATTGTGGGTCGAGCGGAAGAGTT (SEQ ID NO:8683), GAGTTGCGCGATGATTGGTTGGGGAGT (SEQ ID NO:8684), AGTTGCGCGATGATTGGTTGGGGAGT (SEQ ID NO:8685), GAGTAGAAAAGTGGCGGATTTGGGCGGT (SEQ ID NO:8686)
Target918	chr8:104384375-104384474	GGTGGGAGGGATAGGGCGGTAGTGAGA (SEQ ID NO:8687), TTTTGGGAAGGGTGGGAGGGATAGGGC (SEQ ID NO:8688), GAAGGGTGGGAGGGATAGGGCGGTAGT (SEQ ID NO:8689), TGGGAGGGATAGGGCGGTAGTGAGAGT (SEQ ID NO:8690), AAGGGTGGGAGGGATAGGGCGGTAGTG (SEQ ID NO:8691), AGAGTTGGACGGATGTTTTGTGGGGGT (SEQ ID NO:8692), GTTGGACGGATGTTTTGTGGGGTTGT (SEQ ID NO:8693), AGTTGGACGGATGTTTTGTGGGGTTGT (SEQ ID NO:8694), AGTTGGACGGATGTTTTGTGGGGTTG (SEQ ID NO:8695), GAGTTGGACGGATGTTTTGTGGGGTT (SEQ ID NO:8696)
Target919	chr8:104384518-104384585	GGATTTGGGTTTGGGTTAGGGCGGTGT (SEQ ID NO:8697), TGGATTTGGGTTTGGGTTAGGGCGGTG (SEQ ID NO:8698), TGGATTTGGGTTTGGGTTAGGGCGGTGT (SEQ ID NO:8699), ATGGATTTGGGTTTGGGTTAGGGCGGT (SEQ ID NO:8700), TGGGTTGGTGGTTACGTTTGTTCG (SEQ ID NO:8701), AGAGTTGGACGGATGTTTTGTGGGGGT (SEQ ID NO:8702), GTTGGACGGATGTTTTGTGGGGTTGT (SEQ ID NO:8703), AGTTGGACGGATGTTTTGTGGGGTTGT (SEQ ID NO:8704), AGTTGGACGGATGTTTTGTGGGGTTG (SEQ ID NO:8705), GAGTTGGACGGATGTTTTGTGGGGTT (SEQ ID NO:8706)
Target920	chr8:104384675-104384817	CGGAAAGGGAAATGAAGGGGTTCCGGC (SEQ ID NO:8707), GGAAGGGAAATGAAGGGGTTCCGGC (SEQ ID NO:8708), TCGGAAAGGGAAATGAAGGGGTTCCGGC (SEQ ID NO:8709), GTCGAAAGGGAAATGAAGGGGTTCCGGC (SEQ ID NO:8710), TCGGAAAGGGAAATGAAGGGGTTCCGGC (SEQ ID NO:8711), AGGTTTTAGAGGGTTAGCGTCGGGTT (SEQ ID NO:8712), AGGTTTTAGAGGGTTAGCGTCGGGTTT (SEQ ID NO:8713), AGGTTTTAGAGGGTTAGCGTCGGGTTTT (SEQ ID NO:8714), TAGGTTTTAGAGGGTTAGCGTCGGGTTT (SEQ ID NO:8715), AGGTTTTAGAGGGTTAGCGTCGGGTTTT (SEQ ID NO:8716)
Target921	chr8:104384851-104384941	GGAAATGAACGGTTCGAGTGTTCGAGGG (SEQ ID NO:8717), GGAAATGAACGGTTCGAGTGTTCGAGGGT (SEQ ID NO:8718), TGGAAATGAACGGTTCGAGTGTTCGAGGG (SEQ ID NO:8719), TGGAAATGAACGGTTCGAGTGTTCGAGGGT (SEQ ID NO:8720), GAAATGAACGGTTCGAGTGTTCGAGGGT (SEQ ID NO:8721)
Target922	chr8:105478778-105478799	TCGTCGAGAAGGGCGGTTTGAAGGGA (SEQ ID NO:8722), GTCGTCGAGAAGGGCGGTTTGAAGGG (SEQ ID NO:8723), GGTGTGTCGTCGAGAAGGGCGGTTTGA (SEQ ID NO:8724), CGGTGTGTCGTCGAGAAGGGCGGTTTGA (SEQ ID NO:8725), TGTGTCGAGAAGGGCGGTTTGAAGG (SEQ ID NO:8726), TTTTCGGGTATTTACGGAGGTTTCGGG (SEQ ID NO:8727), CGCGGTATTTACGGAGGTTTCGGGAGT (SEQ ID NO:8728), TCGCGGTATTTACGGAGGTTTCGGGAGT (SEQ ID NO:8729), TCGCGGTATTTACGGAGGTTTCGGGAGT (SEQ ID NO:8730), GTTTCGCGGTATTTACGGAGGTTTCGGG (SEQ ID NO:8731)
Target923	chr8:105478816-105479009	GCGGGGCGGGTATTTTGGTGTTCGGT (SEQ ID NO:8732), GCGGGGCGGGTATTTTGGTGTTCGG (SEQ ID NO:8733), CGCGGGGCGGGTATTTTGGTGTTCGGT (SEQ ID NO:8734), CGGGGCGGGTATTTTGGTGTTCGGT (SEQ ID NO:8735), GCGAGGCGGGTATTTTGGTGTTCGGT (SEQ ID NO:8736), GAGGTGGTCGACGTGTTGGTGGAGGAC (SEQ ID NO:8737), GAGGTGGTCGACGTGTTGGTGGAGGA (SEQ ID NO:8738), AGGTGGTCGACGTGTTGGTGGAGGAC (SEQ ID NO:8739), GGAGGTGGTCGACGTGTTGGTGGAGGA (SEQ ID NO:8740), TCGGAGGTGGTCGACGTGTTGGTGGAG (SEQ ID NO:8741)

Figure 5 (Table 1)

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Target924	chr8:105479061-105479141	TGTATGTGCGTGTGTGTGTCGATGTTTT (SEQ ID NO:8742), TGTATGTGCGTGTGTGTGTCGATGTTTTTC (SEQ ID NO:8743), AGTTCGGGGGTTGTCGGTGGGGATTTT (SEQ ID NO:8744), GAGGTGGTCGACGTGTTGGTGGAGGAT (SEQ ID NO:8745), GTTCGGGGTGTGCGGTGGGGATTTTG (SEQ ID NO:8746), TCGGGGGTGTGCGGTGGGGATTTTGTA (SEQ ID NO:8747), TTCGGGGGTTGTGCGGTGGGGATTTTGT (SEQ ID NO:8748)
Target925	chr8:105479283-105479327	CGGGGTTTTATTCGGTTCGGGTTGCGC (SEQ ID NO:8749), GCGGGGTTTTATTCGGTTCGGGTTGCG (SEQ ID NO:8750), CGCGGGGTTTTATTCGGTTCGGGTTGC (SEQ ID NO:8751), GCGCGGGGTTTTATTCGGTTCGGGTTG (SEQ ID NO:8752), GCGCGGGGTTTTATTCGGTTCGGGTT (SEQ ID NO:8753), TCGGGGGGAGGAGTCGTATATGCGGTT (SEQ ID NO:8754), TTCGGGGGAGGAGTCGTATATGCGGT (SEQ ID NO:8755), TTTGGGGGAGGAGTCGTATATGCGG (SEQ ID NO:8756), CGGGGGAGGAGTCGTATATGCGGTTA (SEQ ID NO:8757), TCGGGGGAGGAGTCGTATATGCGGTTA (SEQ ID NO:8758)
Target926	chr8:116679514-116680058	TTGAGGCGGGTGTATTAAGGGATGCGA (SEQ ID NO:8759), TGAGGCGGGTGTATTAAGGGATGCGAT (SEQ ID NO:8760), TGTTTTGAGTCGTTTTGAGGCGGGTGT (SEQ ID NO:8761), TTTGAGGCGGGTGTATTAAGGGATGCG (SEQ ID NO:8762), TTTGAGGCGGGTGTATTAAGGGATGCGA (SEQ ID NO:8763), GGGGTTCTGTGATAAGCGGGCGTAGAT (SEQ ID NO:8764), CGCGGGTTAGGGGATATTGGTCGTGA (SEQ ID NO:8765), TCGGGAGGGTCGGGAGGGTTTTAGAGA (SEQ ID NO:8766), TGTCGCGCGGTTAGGGGATTTGGTC (SEQ ID NO:8767), AGGGTCGGGAGGGTTTTAGAGACGGGT (SEQ ID NO:8768)
Target927	chr8:116680083-116680187	CGAGTTTTTAGAAAATTTGTAGTGCGGCGG (SEQ ID NO:8769), ACGAGTTTTTAGAAAATTTGTAGTGCGGCGG (SEQ ID NO:8770), ACGAGTTTTTAGAAAATTTGTAGTGCGGCGG (SEQ ID NO:8771), TACGAGTTTTTAGAAAATTTGTAGTGCGGCGG (SEQ ID NO:8772), TACGAGTTTTTAGAAAATTTGTAGTGCGGCGG (SEQ ID NO:8773), GGGGTTCTGTGATAAGCGGGCGTAGAT (SEQ ID NO:8774), TTGGAGGTGGTTGGATTCGAGGGGTCG (SEQ ID NO:8775), GGAGGTGGTTGGATTCGAGGGGTCGTC (SEQ ID NO:8776), CGTAGCGGAGGAGTTGGAGGTGGTTGG (SEQ ID NO:8777), TTTTGGGGGTTCGTGATAAGCGGGG (SEQ ID NO:8778)
Target928	chr8:142696266-142696666	ACGGAGGTTCCGGGAAGGGGTTTTAGGA (SEQ ID NO:8779), AACGGAGTTCCGGGAAGGGGTTTTAGG (SEQ ID NO:8780), AACGGAGGTTCCGGGAAGGGGTTTTAGGA (SEQ ID NO:8781), ACGGAGGTTCCGGGAAGGGGTTTTAGGAT (SEQ ID NO:8782), CGGAGGTTCCGGGAAGGGGTTTTAGGAT (SEQ ID NO:8783), GTAGGTCGGGGCGGGGGAAAATGTAT (SEQ ID NO:8784), GTTTATAGTGTAGGTCGGGGCGGGGG (SEQ ID NO:8785), TATAGTGTAGGTCGGGGCGGGGGAAA (SEQ ID NO:8786), TTATAGTGTAGGTCGGGGCGGGGGAA (SEQ ID NO:8787), TTTATAGTGTAGGTCGGGGCGGGGGGA (SEQ ID NO:8788)
Target929	chr8:142850598-142850645	GGCGAGGTTGGTAGGTATATGCGTGGG (SEQ ID NO:8789), GCGGAGGTTGGTAGGTATATGCGTGGG (SEQ ID NO:8790), AGGCGAGGTTGGTAGGTATATGCGTGGG (SEQ ID NO:8791), GCGAGGTTGGTAGGTATATGCGTGGG (SEQ ID NO:8792), AGGCGAGGTTGGTAGGTATATGCGTGG (SEQ ID NO:8793), GGGAGGTTTGTGTGGGGAGGATAGGGT (SEQ ID NO:8794), GGGAGGTTTGTGTGGGGAGGATAGGGTT (SEQ ID NO:8795), GGGAGGTTTGTGTGGGGAGGATAGGGTTG (SEQ ID NO:8796), GGAGGTTTGTGTGGGGAGGATAGGGTT (SEQ ID NO:8797), AGGTTTGTGTGGGGAGGATAGGGTTGT (SEQ ID NO:8798)
Target930	chr8:143667621-143667639	AGAAGTTGGTCGGGTGTAGGTTGCGGG (SEQ ID NO:8799), GTTGGTCGGGTGTAGGTTGCGGGGTAG (SEQ ID NO:8800), AGGTTGCGGGGTAGGTATGAGGGGAGG (SEQ ID NO:8801), GTCGGGTGTAGGTTGCGGGGTAGGTAT (SEQ ID NO:8802), CGGGTGTAGGTTGCGGGGTAGGTATGA (SEQ ID NO:8803)
Target931	chr8:144105681-144105731	GCGGGAGGGAGTTCGGGTTGTGTTTTG (SEQ ID NO:8804), GTAGCGGGAGGGAGTTCGGGTTGTGT (SEQ ID NO:8805), GAGTAGCGGGAGGGAGTTCGGGTTGTG (SEQ ID NO:8806), TAGGAGTAGCGGGAGGGAGTTCGGGTT (SEQ ID NO:8807), TTAGGAGTAGCGGGAGGGAGTTCGGGT (SEQ ID NO:8808), GGGGTTTAGTTTCGGGTCGGTGTGA (SEQ ID NO:8809), GGAGGGGTTTAGTTTCGGGTCGGTGTG (SEQ ID NO:8810), AGGGGGTTTAGTTTCGGGTCGGTGTGG (SEQ ID NO:8811), GCGGAGAGGAGGGGTTTAGTTTCGGG (SEQ ID NO:8812), GGGTTGCGGAGAGGAGGGGTTTAGTT (SEQ ID NO:8813)
Target932	chr8:144105767-144105871	GCGGATGAGTTTTTGAGGATGGGCGG (SEQ ID NO:8814), CGCGGATGAGTTTTTGAGGATGGGCG (SEQ ID NO:8815), TCGCGGATGAGTTTTTGAGGATGGGCG (SEQ ID NO:8816), CGGATGAGTTTTTGAGGATGGGCGGT (SEQ ID NO:8817), TGGGGGAGGGAGAGGAAGAGAGTTTCGT (SEQ ID NO:8818), TTTATAGGGTTGAGCGGTGGGGGTG (SEQ ID NO:8819), GCGGGGTTGTTAAGGGGTAGAGGTTG (SEQ ID NO:8820), GGGTTGCGGAGAGGAGGGGTTTAGTT (SEQ ID NO:8821), GAAGTGGGGTTGATGGGTTGCGGAGA (SEQ ID NO:8822), ATGGGTTGCGGAGAGGAGGGGTTTAG (SEQ ID NO:8823)
Target933	chr8:144105875-144105903	GCGGATGAGTTTTTGAGGATGGGCGG (SEQ ID NO:8824), CGCGGATGAGTTTTTGAGGATGGGCG (SEQ ID NO:8825), TTTTGAGGATGGGCGGTTTCGGTTCGG (SEQ ID NO:8826), TCGCGGATGAGTTTTTGAGGATGGGCG (SEQ ID NO:8827), CGGATGAGTTTTTGAGGATGGGCGGT (SEQ ID NO:8828), AAGGGGTTAGAGGTTGTGGATGGGGGA (SEQ ID NO:8829), TTTATAGGGTTGAGCGGTGGGGGTG (SEQ ID NO:8830), GCGGGGTTGTTAAGGGGTAGAGGTTG (SEQ ID NO:8831), TAGAGGCGGGGTTTAAAGGGGTAG (SEQ ID NO:8832), GTAGAGGCGGGGTTTAAAGGGGTA (SEQ ID NO:8833)

Figure 5 (Table 1)

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Target934	chr8:144105994-144106052	AGGAGTCGTTAGTTTGTGGGTTCCGGGA (SEQ ID NO:8834), GGAGTCGTTAGTTTGTGGGTTCCGGGAT (SEQ ID NO:8835), AGGAGTCGTTAGTTTGTGGGTTCCGGGAT (SEQ ID NO:8836), TAGGAGTCGTTAGTTTGTGGGTTCCGGG (SEQ ID NO:8837), TAGGAGTCGTTAGTTTGTGGGTTCCGGGA (SEQ ID NO:8838), GTTGACGGAGGGGTGGAGGTATCGTGG (SEQ ID NO:8839), GGTTGACGGAGGGGTGGAGGTATCGTG (SEQ ID NO:8840), AGATTTGTTGGGGTTGACGGAGGGGT (SEQ ID NO:8841), GATTTGTTGGGGTTGACGGAGGGGTG (SEQ ID NO:8842), ATTTGTTGGGGTTGACGGAGGGGTGG (SEQ ID NO:8843)
Target935	chr8:145104273-145105390	GGGCGGCGTTGTTGTTGTTGTTGTTGG (SEQ ID NO:8844), TTCGTGTTGTTGTAGGCGAGGTTGGGT (SEQ ID NO:8845), AGTCGTTCTGTTGTTGTAGGCGAGGT (SEQ ID NO:8846), TGGAGTCGTTCTGTTGTTGTAGGCGA (SEQ ID NO:8847), TAGGCGAGGTTGGGTAGTTTGGACGGG (SEQ ID NO:8848), ATGTTTCGGTCGGTCGTTGTTGTGC (SEQ ID NO:8849), GGC GG GTGTAGGCGAATGTAGGGATT (SEQ ID NO:8850), GGTGTTGTTGTGCGGTAGGTTGTG (SEQ ID NO:8851), CGGTGTTGTTGTGCGGTAGGTTGTC (SEQ ID NO:8852), GTCGGTCGTTGTTGTGCGGTAGGTTG (SEQ ID NO:8853)
Target936	chr8:145105404-145106067	GGTGTGTTGGGTTTTCGGTATTGGGACG (SEQ ID NO:8854), ATCGGAGCGGGAAGTGATTGGGGAG (SEQ ID NO:8855), GAGTTTTCCGGTGGTTGGTTTTCGGT (SEQ ID NO:8856), GGGTGGTTGGTTTTCGGTATTGGGAC (SEQ ID NO:8857), TTTAGGGGGAGGGTATCGGAGCGGGAA (SEQ ID NO:8858), TTTAGCGCGTTTTCGGGGATTCCGGG (SEQ ID NO:8859), GGGAAAGGTCGGTTAGGTAGAGGTGGCG (SEQ ID NO:8860), CGGGAAGGTCGGTTAGGTAGAGGTGGC (SEQ ID NO:8861), GGAGGTGTTAGCGCGTTTTCGGGGG (SEQ ID NO:8862), TGGTGGAGTACGGAGGTGTTTAGCGCG (SEQ ID NO:8863)
Target937	chr8:145106087-145106384	GGTAAGTATAGATGAGGGGCGCGCGGT (SEQ ID NO:8864), GGTGGGGCGGGGTTTTTCGGGTTTTTA (SEQ ID NO:8865), AGGTAAGTATAGATGAGGGGCGCGCGG (SEQ ID NO:8866), AAGTATAGATGAGGGGCGCGCGTTGG (SEQ ID NO:8867), GGAAGGTTAGTGTTCGGGGGCGAT (SEQ ID NO:8868), GCGGTGTTATGGGGATTCCGGAGGAT (SEQ ID NO:8869), GGTTCGTTGTTATGGGGCGGGTG (SEQ ID NO:8870), TTGTTGTTGGGGAGGGGATTGCGTAG (SEQ ID NO:8871), TTATGGGGCGGGTGATGGACGTTGT (SEQ ID NO:8872), TTTATGGGGCGGGTGATGGACGTTGT (SEQ ID NO:8873)
Target938	chr9:1042442-1042462	GGAAGGTTTGATACGGAATTTGATTAAGGTTGG (SEQ ID NO:8874), TGGAAGGTTTGATACGGAATTTGATTAAGGTTGG (SEQ ID NO:8875), GGAAGGTTTGATACGGAATTTGATTAAGGTTGGA (SEQ ID NO:8876), TGGAAGGTTTGATACGGAATTTGATTAAGGTTGGA (SEQ ID NO:8877), AGTTGGAAGGTTTGATACGGAATTTGATTAAGGTT (SEQ ID NO:8878), TCGGAGGGTTTTGCGTTTTTGGGGTT (SEQ ID NO:8879), TTCGAGGGTTTTTTCGTTTTTGGGGT (SEQ ID NO:8880), GTTCGGAGGGTTTTTTCGTTTTTGGGGT (SEQ ID NO:8881), GTTCGGAGGGTTTTTTCGTTTTTGGGG (SEQ ID NO:8882), AGTTTCGAGGGTTTTTTCGTTTTTGGGG (SEQ ID NO:8883)
Target939	chr9:1042502-1042523	CGGAGTAGTCGTTTGAGGGTTGGAAGG (SEQ ID NO:8884), CGGAGTAGTCGTTTGAGGGTTGGAAGGA (SEQ ID NO:8885), TCGGAGTAGTCGTTTGAGGGTTGGAAGG (SEQ ID NO:8886), TCGGAGTAGTCGTTTGAGGGTTGGAAGGA (SEQ ID NO:8887), TCGGAGTAGTCGTTTGAGGGTTGGAAG (SEQ ID NO:8888), GCGGTCGGGGGAGGATAGTGATC (SEQ ID NO:8889), GCGGTCGGGGGAGGATAGTGAT (SEQ ID NO:8890), GCGGTCGGGGGAGGATAGTGA (SEQ ID NO:8891), GCGGTCGGGGGAGGATAGTGATC (SEQ ID NO:8892), GCGGTCGGGGGAGGATAGTG (SEQ ID NO:8893)
Target940	chr9:1042552-1042664	GGGGGCGTTGGGTTTTAGGTTCCGATG (SEQ ID NO:8894), GGAAGTCGGGGGCGTTGGGTTTTAGGT (SEQ ID NO:8895), AGTCGGGGGCGTTGGGTTTTAGGTTCCG (SEQ ID NO:8896), GGGGCGTTGGGTTTTAGGTTCCGATGT (SEQ ID NO:8897), CGGGGCGTTGGGTTTTAGGTTCCGAT (SEQ ID NO:8898), AAACGTTAGGGTTATTCGCGCGGGTC (SEQ ID NO:8899), AACGTTAGGGTTATTCGCGCGGGTCG (SEQ ID NO:8900), CGTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8901), TAAACGTTAGGGTTATTCGCGCGGGT (SEQ ID NO:8902), GTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8903)
Target941	chr9:1042682-1042693	GGGGGCGTTGGGTTTTAGGTTCCGATG (SEQ ID NO:8904), GGAAGTCGGGGGCGTTGGGTTTTAGGT (SEQ ID NO:8905), AGTCGGGGGCGTTGGGTTTTAGGTTCCG (SEQ ID NO:8906), GGGGCGTTGGGTTTTAGGTTCCGATGT (SEQ ID NO:8907), CGGGGCGTTGGGTTTTAGGTTCCGAT (SEQ ID NO:8908), AAACGTTAGGGTTATTCGCGCGGGTC (SEQ ID NO:8909), AACGTTAGGGTTATTCGCGCGGGTCG (SEQ ID NO:8910), CGTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8911), TAAACGTTAGGGTTATTCGCGCGGGT (SEQ ID NO:8912), GTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8913)
Target942	chr9:1042703-1042744	GGGGGCGTTGGGTTTTAGGTTCCGATG (SEQ ID NO:8914), GGAAGTCGGGGGCGTTGGGTTTTAGGT (SEQ ID NO:8915), AGTCGGGGGCGTTGGGTTTTAGGTTCCG (SEQ ID NO:8916), GGGGCGTTGGGTTTTAGGTTCCGATGT (SEQ ID NO:8917), CGGGGCGTTGGGTTTTAGGTTCCGAT (SEQ ID NO:8918), AAACGTTAGGGTTATTCGCGCGGGTC (SEQ ID NO:8919), AACGTTAGGGTTATTCGCGCGGGTCG (SEQ ID NO:8920), CGTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8921), TAAACGTTAGGGTTATTCGCGCGGGT (SEQ ID NO:8922), GTTAGGGTTATTCGCGCGGGTCGTC (SEQ ID NO:8923)

Figure 5 (Table 1)

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Target943	chr9:1042753-1042760	GGGTTTTAGGTTCCGATGTTGAGCGCG (SEQ ID NO:8924), TGGGTTTTAGGTTCCGATGTTGAGCGCG (SEQ ID NO:8925), GGTTTTAGGTTCCGATGTTGAGCGCG (SEQ ID NO:8926), GGGTTTTAGGTTCCGATGTTGAGCGCG (SEQ ID NO:8927), GGTTTTAGGTTCCGATGTTGAGCGCGGA (SEQ ID NO:8928), GTCGAAAATTTATTGACGCGGCGAGGT (SEQ ID NO:8929), TCGAAAATTTATTGACGCGGCGAGGTT (SEQ ID NO:8930), GTCGAAAATTTATTGACGCGGCGAGGTT (SEQ ID NO:8931), TCGAAAATTTATTGACGCGGCGAGGT (SEQ ID NO:8932), CGAAAATTTATTGACGCGGCGAGGTTAGG (SEQ ID NO:8933)
Target944	chr9:1042852-1042870	AGTGTGTTAGTTTGGTTTCGTCGCGT (SEQ ID NO:8934), AGGATCGTTAGAGTTGGGGGAGATTAAAGT (SEQ ID NO:8935), AGTGTGTTAGTTTGGTTTCGTCGCGTTAAT (SEQ ID NO:8936), GAGGATCGTTAGAGTTGGGGGAGATTAAAG (SEQ ID NO:8937), TTTGGTTTCGTCGCGTTAATAAATTTTCGGC (SEQ ID NO:8938)
Target945	chr9:13323162-13323186	GGTCGTTTTGTGGTGATTTTCGTCGTGG (SEQ ID NO:8939), GGTCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8940), TGGTCGTTTTGTGGTGATTTTCGTCGTGG (SEQ ID NO:8941), TGGTCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8942), TCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8943), TCGGGGAAGAATGATAATTACGTAGGGAG (SEQ ID NO:8944), TCGGGGAAGAATGATAATTACGTAGGGAGA (SEQ ID NO:8945), ATCGGGGAAGAATGATAATTACGTAGGGAG (SEQ ID NO:8946), GCGGGGAAGAATGATAATTACGTAGGGAGAA (SEQ ID NO:8947), TCGGGGAAGAATGATAATTACGTAGGGAGAA (SEQ ID NO:8948)
Target946	chr9:13323204-13323239	GGTCGTTTTGTGGTGATTTTCGTCGTGG (SEQ ID NO:8949), GGTCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8950), TGGTCGTTTTGTGGTGATTTTCGTCGTGG (SEQ ID NO:8951), TGGTCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8952), TCGTTTTGTGGTGATTTTCGTCGTGGT (SEQ ID NO:8953), CGACGAAGGAGTTGGTGGAGAGTAGGA (SEQ ID NO:8954), ACGAAGGAGTTGGTGGAGAGTAGGATCGG (SEQ ID NO:8955), CGAAGGAGTTGGTGGAGAGTAGGATCGG (SEQ ID NO:8956), CGAAGGAGTTGGTGGAGAGTAGGATCGGA (SEQ ID NO:8957), ACGAAGGAGTTGGTGGAGAGTAGGATCGGA (SEQ ID NO:8958)
Target947	chr9:13323300-13323322	TGGTTGTTGTTAAGGAGTTCCGGCAG (SEQ ID NO:8959), TTGGTTGTTGTTAAGGAGTTCCGGCAG (SEQ ID NO:8960), TTGGTTGTTGTTAAGGAGTTCCGGCAG (SEQ ID NO:8961), TGGTTGTTGTTAAGGAGTTCCGGCAGAT (SEQ ID NO:8962), TTTGGTTGTTGTTAAGGAGTTCCGGCAG (SEQ ID NO:8963), TCGGAGTTAGGAGTTGGGCGTTGAGAA (SEQ ID NO:8964), TTCGAGTTAGGAGTTGGGCGTTGAGA (SEQ ID NO:8965), CGACGAAGGAGTTGGTGGAGAGTAGGA (SEQ ID NO:8966), CGGAGTTAGGAGTTGGGCGTTGAGAAG (SEQ ID NO:8967), CGGAGTTAGGAGTTGGGCGTTGAGAAGA (SEQ ID NO:8968)
Target948	chr9:14346424-14346730	ACGTGTGATAGGAGTCGTTTGTTAAGTGG (SEQ ID NO:8969), CGTGTGATAGGAGTCGTTTGTTAAGTGG (SEQ ID NO:8970), ACGTGTGATAGGAGTCGTTTGTTAAGTGG (SEQ ID NO:8971), CGTGTGATAGGAGTCGTTTGTTAAGTGGAA (SEQ ID NO:8972), ACGTGTGATAGGAGTCGTTTGTTAAGTGGAA (SEQ ID NO:8973), GCGTGGATTGTTGGGTTTGGGACGTT (SEQ ID NO:8974), GACGGTGTGGCGTGGATTGTTGGGTTT (SEQ ID NO:8975), ACGGTGTGGCGTGGATTGTTGGGTTT (SEQ ID NO:8976), GTGGCGTGGATTGTTGGGTTTGGGAC (SEQ ID NO:8977), GGATTGTTGGGTTTGGGACGTTGGG (SEQ ID NO:8978)
Target949	chr9:14346914-14347026	GTTTCGGGTGAGGGTGGGGTAAGAGGT (SEQ ID NO:8979), AGTTTCGGGTGAGGGTGGGGTAAGAGG (SEQ ID NO:8980), AGTTTCGGGTGAGGGTGGGGTAAGAGGT (SEQ ID NO:8981), TTTCGGGTGAGGGTGGGGTAAGAGGTA (SEQ ID NO:8982), TCGGGTGAAGGGTGGGGTAAGAGGTATT (SEQ ID NO:8983), GTGGGGTTAGGGGTTTTTGGTCGCG (SEQ ID NO:8984), TGGGGTTAGGGGTTTTTGGTCGCGA (SEQ ID NO:8985), GGCGGTTGTTTTTCAGTGCGGGTTA (SEQ ID NO:8986), GGGGGTTAGGGGTTTTTGGTCGCGAT (SEQ ID NO:8987), AGTGGGGTTAGGGGTTTTTGGTCGCG (SEQ ID NO:8988)
Target950	chr9:14347063-14347101	GCGAAGGGTGCGTTTTTGGAGTTTACGT (SEQ ID NO:8989), GCGAAGGGTGCGTTTTTGGAGTTTACG (SEQ ID NO:8990), GCGAAGGGTGCGTTTTTGGAGTTTACGTCG (SEQ ID NO:8991), GCGAAGGGTGCGTTTTTGGAGTTTACGTC (SEQ ID NO:8992), CGAAGGGTGCGTTTTTGGAGTTTACGTCG (SEQ ID NO:8993), CGGCGGGGAATTGCGGGTTGTAGTTT (SEQ ID NO:8994), CGGCGGGGAATTGCGGGTTGTAGTT (SEQ ID NO:8995), CGGCGGGGAATTGCGGGTTGTAGTTA (SEQ ID NO:8996), CGGCGGGGAATTGCGGGTTGTAGT (SEQ ID NO:8997), CGGCGGGGAATTGCGGGTTGTAGTTT (SEQ ID NO:8998)
Target951	chr9:14347122-14347127	GGGAGTTGGAAGGTAGGTAGACGCGC (SEQ ID NO:8999), CGGGAGTTGGAAGGTAGGTAGACGCGC (SEQ ID NO:9000), TCGGGAGTTGGAAGGTAGGTAGACGCGC (SEQ ID NO:9001), GTCGGGAGTTGGAAGGTAGGTAGACGCGC (SEQ ID NO:9002), GTCGGGAGTTGGAAGGTAGGTAGACGCGC (SEQ ID NO:9003), CGGCGGGGAATTGCGGGTTGTAGTTT (SEQ ID NO:9004), CGGCGGGGAATTGCGGGTTGTAGTT (SEQ ID NO:9005), CGGCGGGGAATTGCGGGTTGTAGTTA (SEQ ID NO:9006), CGGCGGGGAATTGCGGGTTGTAGT (SEQ ID NO:9007), CGGCGGGGAATTGCGGGTTGTAGTTT (SEQ ID NO:9008)

Figure 5 (Table 1)

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Target952	chr9:14347212-14347232	GGTAGGTAGACGCGCAGGTTTGGGAA (SEQ ID NO:9009), TAGGTAGACGCGCAGGTTTGGGAAGG (SEQ ID NO:9010), AAGGTAGGTAGACGCGCAGGTTTGGG (SEQ ID NO:9011), GTTGAAGGTAGGTAGACGCGCAGGTTT (SEQ ID NO:9012), AGTTGAAGGTAGGTAGACGCGCAGG (SEQ ID NO:9013), GCGCGGTGGTGGAGTTTTCGAAGGTAT (SEQ ID NO:9014), CCGCGGTGGTGGAGTTTTCGAAGGTA (SEQ ID NO:9015), GCGCGGTGGTGGAGTTTTCGAAGGTATT (SEQ ID NO:9016), GCGCGGTGGTGGAGTTTTCGAAGGTA (SEQ ID NO:9017), CCGCGGTGGTGGAGTTTTCGAAGGTAT (SEQ ID NO:9018)
Target953	chr9:19788625-19788640	TGTAGGTGGTTGGGAATGGAAGCGTT (SEQ ID NO:9019), TTGTAGGTGGTTGGGAATGGAAGCGT (SEQ ID NO:9020), CGTTTGTAGGTGGTTGGGAATGGAAGCG (SEQ ID NO:9021), AGGTGGTTGGGAATGGAAGCGTTTTT (SEQ ID NO:9022), TGTAGGTGGTTGGGAATGGAAGCGTTT (SEQ ID NO:9023), TGTTTTTGGTTTGGGATGGGGGGCGTG (SEQ ID NO:9024), TTGTTTTGGTTTGGGATGGGGGGCGT (SEQ ID NO:9025), GTTTTTGGTTTGGGATGGGGGGCGTGG (SEQ ID NO:9026), TCGGGGCGTGGATTGGAGTTTCGTT (SEQ ID NO:9027), TGTGTTTCGGGGCGTGGATTGGAGTT (SEQ ID NO:9028)
Target954	chr9:19788803-19788819	AAGGGTAGGAGAGGCGGGGGTTTTAA (SEQ ID NO:9029), AAGGGTAGGAGAGGCGGGGGTTTTAAAT (SEQ ID NO:9030), TGGTTAATTTTAGCGGGGTTTGGGGCGT (SEQ ID NO:9031), GGTAAATTTTAGCGGGGTTTGGGGCGT (SEQ ID NO:9032), TGGTTAATTTTAGCGGGGTTTGGGGCGG (SEQ ID NO:9033), TGTCGTTGTAGTCGTTGTGGCGGTCGT (SEQ ID NO:9034), GTCGTTGTAGTCGTTGTGGCGGTCGT (SEQ ID NO:9035), TTGTCGTTGTAGTCGTTGTGGCGGTCG (SEQ ID NO:9036), TCGTTGTAGTCGTTGTGGCGGTCGTT (SEQ ID NO:9037), TGTCGTTGTAGTCGTTGTGGCGGTCGTT (SEQ ID NO:9038)
Target955	chr9:19788835-19788913	TGGTTAATTTTAGCGGGGTTTGGGGCGT (SEQ ID NO:9039), GGTAAATTTTAGCGGGGTTTGGGGCGT (SEQ ID NO:9040), TGGTTAATTTTAGCGGGGTTTGGGGCGG (SEQ ID NO:9041), GGTAAATTTTAGCGGGGTTTGGGGCGG (SEQ ID NO:9042), GTTAATTTTAGCGGGGTTTGGGGCGT (SEQ ID NO:9043), AGAGTTCCGGGTTTATAGAGCGGTTAGGC (SEQ ID NO:9044), TAGAGTTCCGGGTTTATAGAGCGGTTAGGC (SEQ ID NO:9045), GAGTTCCGGGTTTATAGAGCGGTTAGGC (SEQ ID NO:9046), GCGTTCCGGGGTTTCGTCGTGTC (SEQ ID NO:9047), TTAGAGTTCCGGGTTTATAGAGCGGTTAGGC (SEQ ID NO:9048)
Target956	chr9:19788925-19788946	GTATACGCGGGGTTTTTCGAGCG (SEQ ID NO:9049), CGTATTTATTAGGATAAGATGGGAGGACGCGT (SEQ ID NO:9050), TCGTATTTATTAGGATAAGATGGGAGGACGCGT (SEQ ID NO:9051), TTCGTATTTATTAGGATAAGATGGGAGGACGCG (SEQ ID NO:9052), CGTTCGTATTTATTAGGATAAGATGGGAGGACGCG (SEQ ID NO:9053), GATTCGAGCGTCGGGTTTATAGCGGT (SEQ ID NO:9054), TTCGAGCGTCGGGTTTATAGCGGTTT (SEQ ID NO:9055), AGATTCGAGCGTCGGGTTTATAGCGGT (SEQ ID NO:9056), AGATTCGAGCGTCGGGTTTATAGCGG (SEQ ID NO:9057), ATTCGAGCGTCGGGTTTATAGCGGTT (SEQ ID NO:9058)
Target957	chr9:19788948-19788965	GTATACGCGGGGTTTTTCGAGCG (SEQ ID NO:9059), CGTATTTATTAGGATAAGATGGGAGGACGCGT (SEQ ID NO:9060), TCGTATTTATTAGGATAAGATGGGAGGACGCGT (SEQ ID NO:9061), TTCGTATTTATTAGGATAAGATGGGAGGACGCG (SEQ ID NO:9062), CGTTCGTATTTATTAGGATAAGATGGGAGGACGCG (SEQ ID NO:9063), GGTAGCGTTAGATTCGGAGCGTCGGGT (SEQ ID NO:9064), GGTCCGGTAGCGTTAGATTCGGAGCGT (SEQ ID NO:9065), TCGGGTAGCGTTAGATTCGGAGCGTCG (SEQ ID NO:9066), GGGGGTCGGGTAGCGTTAGATTCGGAG (SEQ ID NO:9067), GGGGTCCGGTAGCGTTAGATTCGGAGC (SEQ ID NO:9068)
Target958	chr9:19789000-19789041	CGGGTTGGGTTCCGGAGGAGATTGAGT (SEQ ID NO:9069), AGTCGGGTTGGGTTCCGGAGGAGATTG (SEQ ID NO:9070), GTCGGGTTGGGTTCCGGAGGAGATTGA (SEQ ID NO:9071), TCGGGTTGGGTTCCGGAGGAGATTGAG (SEQ ID NO:9072), GTTAGTCGGGTTGGGTTCCGGAGGAGA (SEQ ID NO:9073), GGTAGCGTTAGATTCGGAGCGTCGGT (SEQ ID NO:9074), GGTCCGGTAGCGTTAGATTCGGAGCGT (SEQ ID NO:9075), TCGGGTAGCGTTAGATTCGGAGCGTCG (SEQ ID NO:9076), GGGGTCGGGTAGCGTTAGATTCGGAG (SEQ ID NO:9077), GGGGTCCGGTAGCGTTAGATTCGGAGC (SEQ ID NO:9078)
Target959	chr9:19789051-19789060	CGGGTTGGGTTCCGGAGGAGATTGAGT (SEQ ID NO:9079), AGTCGGGTTGGGTTCCGGAGGAGATTG (SEQ ID NO:9080), GTCGGGTTGGGTTCCGGAGGAGATTGA (SEQ ID NO:9081), TCGGGTTGGGTTCCGGAGGAGATTGAG (SEQ ID NO:9082), GTTAGTCGGGTTGGGTTCCGGAGGAGA (SEQ ID NO:9083), GGTCCGGTAGCGTTAGATTCGGAGCGT (SEQ ID NO:9084), GGGGTCGGGTAGCGTTAGATTCGGAG (SEQ ID NO:9085), GGGGTCCGGTAGCGTTAGATTCGGAGC (SEQ ID NO:9086), GGGTCGGGTAGCGTTAGATTCGGAGCG (SEQ ID NO:9087), ATAGTTTAGAGGGAGGGTCCGGCGGGG (SEQ ID NO:9088)
Target960	chr9:19789107-19789137	CGGGTTGGGTTCCGGAGGAGATTGAGT (SEQ ID NO:9089), AGTCGGGTTGGGTTCCGGAGGAGATTG (SEQ ID NO:9090), GTCGGGTTGGGTTCCGGAGGAGATTGA (SEQ ID NO:9091), TCGGGTTGGGTTCCGGAGGAGATTGAG (SEQ ID NO:9092), GTTAGTCGGGTTGGGTTCCGGAGGAGA (SEQ ID NO:9093), AGGAGCGTGGAGTAAAGGATTCGGGA (SEQ ID NO:9094), GGAGCGTGGAGTAAAGGATTCGGGAGT (SEQ ID NO:9095), GGAGCGTGGAGTAAAGGATTCGGGAG (SEQ ID NO:9096), AGGAGCGTGGAGTAAAGGATTCGGGAG (SEQ ID NO:9097), GAGGCGTGGAGTAAAGGATTCGGGAGT (SEQ ID NO:9098)

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Target961	chr9:19789174-19789196	GGCCTTTCAGATTGGCGTTGTC (SEQ ID NO:9099), AGCGCGTTTAGTTTTCGAGTTTTGTTTTACG (SEQ ID NO:9100), TAGCGCGTTTAGTTTTCGAGTTTTTGTGTTTACG (SEQ ID NO:9101), GTAGCGCGTTTAGTTTTCGAGTTTTTGTGTTTACG (SEQ ID NO:9102), TGCGGAGAAATTTTTTAAGAGACGTTGTTAGC (SEQ ID NO:9103), TTGCGGAGAAATTTTTTAAGAGACGTTGTTAGC (SEQ ID NO:9104), ATTGCGGAGAAATTTTTTAAGAGACGTTGTTAGC (SEQ ID NO:9105), TATTGCGGAGAAATTTTTTAAGAGACGTTGTTAGC (SEQ ID NO:9106)
Target962	chr9:27690403-27690589	AGGAGTTATCGGGGAGGAGTTAAGATGGT (SEQ ID NO:9107), AGGAGTTATCGGGGAGGAGTTAAGATGGT (SEQ ID NO:9108), AAGGAGTTATCGGGGAGGAGTTAAGATGGT (SEQ ID NO:9109), AAGGAGTTATCGGGGAGGAGTTAAGATGGT (SEQ ID NO:9110), AAAGGAGTTATCGGGGAGGAGTTAAGATGGT (SEQ ID NO:9111), ACGTTGGGAGTTGTAGATCGGAGTTGTT (SEQ ID NO:9112), ACGTTGGGAGTTGTAGATCGGAGTTGTTT (SEQ ID NO:9113), ACGTTGGGAGTTGTAGATCGGAGTTGTTT (SEQ ID NO:9114), TACGTTGGGAGTTGTAGATCGGAGTTGTTT (SEQ ID NO:9115), TTACGTTGGGAGTTGTAGATCGGAGTTGTT (SEQ ID NO:9116)
Target963	chr9:36986037-36986057	GGAAGAAAGAGTGGTAGTCGATTTAGGAGGATTTG (SEQ ID NO:9117), AGAGTGGTAGTCGATTTAGGAGGATTTGTTGTTT (SEQ ID NO:9118), AAGAGTGGTAGTCGATTTAGGAGGATTTGTTGTT (SEQ ID NO:9119), AAAGAGTGGTAGTCGATTTAGGAGGATTTGTTGTT (SEQ ID NO:9120), GTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9121), TGTTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9122), GGTAGTCGGGAGTTGGGTAGCGGAGTA (SEQ ID NO:9123), TTAGTTTTTCGGGGTTTCGGGGGGCGC (SEQ ID NO:9124), TTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9125)
Target964	chr9:36986101-36986118	TTTTCGTTTCGGCGCGTATTATTTGTTTCG (SEQ ID NO:9126), GTTTTCGTTTCGGCGCGTATTATTTGTTTCG (SEQ ID NO:9127), GTTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9128), TGTTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9129), GGTAGTCGGGAGTTGGGTAGCGGAGTA (SEQ ID NO:9130), TTAGTTTTTCGGGGTTTCGGGGGGCGC (SEQ ID NO:9131), TTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9132)
Target965	chr9:36986131-36986144	TCGTTTCGGCGCGTATTATTTGTTTCGT (SEQ ID NO:9133), TCGTTTCGGCGCGTATTATTTGTTTCGT (SEQ ID NO:9134), TTCGTTTCGGCGCGTATTATTTGTTTCGT (SEQ ID NO:9135), CGTTTCGGCGCGTATTATTTGTTTCGTG (SEQ ID NO:9136), CGTTTCGGCGCGTATTATTTGTTTCGTG (SEQ ID NO:9137), GTTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9138), GTTCGCGCGGTTAGGAGAGGTTTCGTA (SEQ ID NO:9139), TGTTAGTTTTTCGGGGTTTCGGGGGGCG (SEQ ID NO:9140), TTAGTTTTTCGGGGTTTCGGGGGGCGC (SEQ ID NO:9141), TTCGCGCGGTTAGGAGAGGTTTCGTA (SEQ ID NO:9142)
Target966	chr9:36986179-36986243	TCGGGGTTTCGGAAAGTTGGTATTCGT (SEQ ID NO:9143), TCGGGGTTTCGGAAAGTTGGTATTCGT (SEQ ID NO:9144), CGGGGTTTCGGAAAGTTGGTATTCGTG (SEQ ID NO:9145), CGGGGTTTCGGAAAGTTGGTATTCGTG (SEQ ID NO:9146), TCGGGGTTTCGGAAAGTTGGTATTCGTG (SEQ ID NO:9147), GTTCGCGCGGTTAGGAGAGGTTTCGTA (SEQ ID NO:9148), TTCGGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9149), GTTCGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9150), GTGGTTTCGTTGATTGTCGCGCG (SEQ ID NO:9151), TTCGGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9152)
Target967	chr9:36986257-36986324	TCGGGGTTTCGGAAAGTTGGTATTCGT (SEQ ID NO:9153), TCGGGGTTTCGGAAAGTTGGTATTCGT (SEQ ID NO:9154), CGTTGGGATTTGTAGGGCGCGTCG (SEQ ID NO:9155), CGGGGTTTCGGAAAGTTGGTATTCGTG (SEQ ID NO:9156), CGGGGTTTCGGAAAGTTGGTATTCGTG (SEQ ID NO:9157), TTCGGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9158), GTTCGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9159), GTGGTTTCGTTGATTGTCGCGCG (SEQ ID NO:9160), TTCGGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9161), TCGGTTTCGTTGATTGTCGCGCGGTT (SEQ ID NO:9162)
Target968	chr9:36986334-36986514	CGTTGGGATTTGTAGGGCGCGTCGTC (SEQ ID NO:9163), CGTTGGGATTTGTAGGGCGCGTCGTC (SEQ ID NO:9164), GTTGGGATTTGTAGGGCGCGTCGTC (SEQ ID NO:9165), CGTTGGGATTTGTAGGGCGCGTCGTC (SEQ ID NO:9166), GTTGGGATTTGTAGGGCGCGTCGTC (SEQ ID NO:9167), GTCGGGGCGGAGGTAGACGATTTTT (SEQ ID NO:9168), GAGGAGTTTTAGGGTCGGGGGCGGAG (SEQ ID NO:9169), GTTTTTAGGGTCGGGGGCGGAGGTTAG (SEQ ID NO:9170), CGTAAAGAGAAGTTGAGCGCGCGTT (SEQ ID NO:9171), TTTTATAGGGTCGGGGGCGGAGGGTAGA (SEQ ID NO:9172)
Target969	chr9:36986536-36986617	CGCGTAGGAAATTTAGGTGATTTTTTGAAGTCG (SEQ ID NO:9173), CGCGTAGGAAATTTAGGTGATTTTTTGAAGTCG (SEQ ID NO:9174), TCGCGTAGGAAATTTAGGTGATTTTTTGAAGTCG (SEQ ID NO:9175), TCGCGTAGGAAATTTAGGTGATTTTTTGAAGTCG (SEQ ID NO:9176), GCGTAGGAAATTTAGGTGATTTTTTGAAGTCG (SEQ ID NO:9177), GTCGGGGGCGGAGGGTAGACGATTTTT (SEQ ID NO:9178), GAGGAGTTTTAGGGTCGGGGGCGGAG (SEQ ID NO:9179), GTTTTTAGGGTCGGGGGCGGAGGGTAG (SEQ ID NO:9180), CGGTTTCGGGCGTTTCGTTGGTTTATGTT (SEQ ID NO:9181), GACGGAGGAGTTTTTATAGGTCGGGGGCG (SEQ ID NO:9182)

Figure 5 (Table 1)

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Target970	chr9:36986640-36986658	CGGTTTTGGGGATTTTTTCGTCGGAGT (SEQ ID NO:9183), TCGGTTTTGGGGATTTTTTCGTCGGAGT (SEQ ID NO:9184), TCGGTTTTGGGGATTTTTTCGTCGGAG (SEQ ID NO:9185), CGGTTTTGGGGATTTTTTCGTCGGAGTT (SEQ ID NO:9186), TCGGTTTTGGGGATTTTTTCGTCGGAGTT (SEQ ID NO:9187), AGAGAGGTCGAGGTTTTTGC GGGGAGG (SEQ ID NO:9188), AGAGGTCGAGGTTTTTGC GGGGAGGTC (SEQ ID NO:9189), GAGAGGTCGAGGTTTTTGC GGGGAGGT (SEQ ID NO:9190), CGAGGTTTTTGC GGGGAGGTCGGTTTT (SEQ ID NO:9191), CGGTCGGGCGTTTCGTGGGTTAGTT (SEQ ID NO:9192)
Target971	chr9:36986702-36986710	GGATTTTCGGTCGGTGGGCGGGAGTTA (SEQ ID NO:9193), ATTTTCGGTCGGTGGGCGGGAGTTAGG (SEQ ID NO:9194), GTCGGTGGGCGGGAGTTAGGTTTACGG (SEQ ID NO:9195), GGTTCGGTGGGCGGGAGTTAGGTTTACG (SEQ ID NO:9196), CGGTCGGTGGGCGGGAGTTAGGTTTAC (SEQ ID NO:9197), AGAGAGGTCGAGGTTTTTGC GGGGAGG (SEQ ID NO:9198), AGAGGTCGAGGTTTTTGC GGGGAGGTC (SEQ ID NO:9199), GAGAGGTCGAGGTTTTTGC GGGGAGGT (SEQ ID NO:9200), CGAGGTTTTTGC GGGGAGGTCGGTTTT (SEQ ID NO:9201), TCGAGGTTTTTGC GGGGAGGTCGGTTTT (SEQ ID NO:9202)
Target972	chr9:36986762-36986789	GGATTTTCGGTCGGTGGGCGGGAGTTA (SEQ ID NO:9203), ATTTTCGGTCGGTGGGCGGGAGTTAGG (SEQ ID NO:9204), GTCGGTGGGCGGGAGTTAGGTTTACGG (SEQ ID NO:9205), GGTTCGGTGGGCGGGAGTTAGGTTTACG (SEQ ID NO:9206), CGGTCGGTGGGCGGGAGTTAGGTTTAC (SEQ ID NO:9207), TGAAGGAGGTTTAGGGATTCGCGGTGT (SEQ ID NO:9208), TGAAGGAGGTTTAGGGATTCGCGGTGT (SEQ ID NO:9209), TTGAAGGAGGTTTAGGGATTCGCGGTGT (SEQ ID NO:9210), GAAGGAGGTTTAGGGATTCGCGGTGT (SEQ ID NO:9211), TTGAAGGAGGTTTAGGGATTCGCGGTGT (SEQ ID NO:9212)
Target973	chr9:36986828-36986849	CGAGGAGGAAGGGATCGGTTTTTCGT (SEQ ID NO:9213), GGAGGAAGGGATCGGTTTTTCGTAGGG (SEQ ID NO:9214), AGGAGGAAGGGATCGGTTTTTCGTAGGG (SEQ ID NO:9215), GGAGGAAGGGATCGGTTTTTCGTAGGGA (SEQ ID NO:9216), CGAGGAGGAAGGGATCGGTTTTTCGTAGGG (SEQ ID NO:9217), TGGGTATGGGTTGGACGGGATTTCCGT (SEQ ID NO:9218), TGGGTATGGGTTGGACGGGATTTCCGT (SEQ ID NO:9219), TTGGGTATGGGTTGGACGGGATTTCCGT (SEQ ID NO:9220), GGGTATGGGTTGGACGGGATTTCCGT (SEQ ID NO:9221), TTGGGTATGGGTTGGACGGGATTTCCGT (SEQ ID NO:9222)
Target974	chr9:36987001-36987017	GGTTCGAAGGAGATGGTGGTGGGGTT (SEQ ID NO:9223), CGAAGGAGATGGTGGTGGGGTTTCGT (SEQ ID NO:9224), AGGTTTCGAAGGAGATGGTGGTGGGGT (SEQ ID NO:9225), TAGGTTTCGAAGGAGATGGTGGTGGGG (SEQ ID NO:9226), GGTTCGAAGGAGATGGTGGTGGGGTTT (SEQ ID NO:9227), TTTGTTTCGAGGGTTGTGGGGGAAGATT (SEQ ID NO:9228), TGTTTCGAGGGTTGTGGGGGAAGATT (SEQ ID NO:9229), TTGTTTCGAGGGTTGTGGGGGAAGATT (SEQ ID NO:9230), ATTTGTTTCGAGGGTTGTGGGGGAAGATT (SEQ ID NO:9231), TTGTTTCGAGGGTTGTGGGGGAAGATT (SEQ ID NO:9232)
Target975	chr9:82188645-82188755	GGGTAAGTGTTTGTGTATTGTTCGGGG (SEQ ID NO:9233), AGGGTAAGTGTTTGTGTATTGTTCGGGG (SEQ ID NO:9234), GGGTAAGTGTTTGTGTATTGTTCGGGGA (SEQ ID NO:9235), AGGGTAAGTGTTTGTGTATTGTTCGGGGA (SEQ ID NO:9236), GGAGGGTAAGTGTTTGTGTATTGTTCGGGG (SEQ ID NO:9237)
Target976	chr9:82188897-82188984	CGAAATTGGGGAGATTTGGAAAACGTTGAGG (SEQ ID NO:9238), CGAAATTGGGGAGATTTGGAAAACGTTGAGGT (SEQ ID NO:9239), GAAATTGGGGAGATTTGGAAAACGTTGAGGT (SEQ ID NO:9240), AAATTGGGGAGATTTGGAAAACGTTGAGGT (SEQ ID NO:9241), CGAAATTGGGGAGATTTGGAAAACGTTGAGGT (SEQ ID NO:9242)
Target977	chr9:82189045-82189118	CGGGAGAATGAAAGGTTGGGAAGATTTGGGG (SEQ ID NO:9243), CGGGAGAATGAAAGGTTGGGAAGATTTGGGGT (SEQ ID NO:9244), CGGGAGAATGAAAGGTTGGGAAGATTTGGG (SEQ ID NO:9245), GGGAGAATGAAAGGTTGGGAAGATTTGGGG (SEQ ID NO:9246), GGGAGAATGAAAGGTTGGGAAGATTTGGGGT (SEQ ID NO:9247)
Target978	chr9:100616347-100616704	GGTCGGGGTTTTAGGGGAGGTTACGGG (SEQ ID NO:9248), GGGTCGGGGTTTTAGGGGAGGTTACGG (SEQ ID NO:9249), GGGGTCGGGGTTTTAGGGGAGGTTACG (SEQ ID NO:9250), AGTAGGGGTCGGGGTTTTAGGGGAGGT (SEQ ID NO:9251), CGGGGTTTTAGGGGAGGTTACGGGTCG (SEQ ID NO:9252), CGGTTTCGCGCGGGATTTGAGGAAGT (SEQ ID NO:9253), AGTCGTTGAGTGTGAGGTTGTGGCGGA (SEQ ID NO:9254), TTGGGGTTGTGCGGCTAGAAGGGGAAG (SEQ ID NO:9255), TTTGGGGTTGTGCGGCTAGAAGGGGA (SEQ ID NO:9256), TTTTGGGGTTGTGCGGCTAGAAGGGGA (SEQ ID NO:9257)
Target979	chr9:100616709-100616748	GGTAGTAGATTGGAGGCGGCGCGTTA (SEQ ID NO:9258), CGACGTCGCGGGGTAGTAGATTGGAGG (SEQ ID NO:9259), GACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9260), CGACGCGGCGCGTAGTTTGTATAGAC (SEQ ID NO:9261), ACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9262)
Target980	chr9:100616754-100616762	GGTAGTAGATTGGAGGCGGCGCGTTA (SEQ ID NO:9263), CGACGTCGCGGGGTAGTAGATTGGAGG (SEQ ID NO:9264), GACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9265), CGACGCGGCGCGTAGTTTGTATAGAC (SEQ ID NO:9266), ACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9267)

Figure 5 (Table 1)

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Target981	chr9:100616774-100616782	GGTAGTAGATTGGAGGCGGCGCGGTTA (SEQ ID NO:9268), CGACGTCGCGGGGTAGTAGATTGGAGG (SEQ ID NO:9269), GACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9270), CGACGCGGCGCGCTAGTTTGTATAGAC (SEQ ID NO:9271), ACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9272)
Target982	chr9:100616796-100616817	GGTAGTAGATTGGAGGCGGCGCGGTTA (SEQ ID NO:9273), CGACGTCGCGGGGTAGTAGATTGGAGG (SEQ ID NO:9274), GACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9275), TCGACGGTGCGGGTTTGTAGTTTGGGT (SEQ ID NO:9276), ACGTCGCGGGGTAGTAGATTGGAGGC (SEQ ID NO:9277)
Target983	chr9:100616838-100616863	CGTTGGTCGCGCTGTTTTAGTTTATTATTTTCGC (SEQ ID NO:9278), GTTGGTCGCGCTGTTTTAGTTTATTATTTTCGC (SEQ ID NO:9279), TCGACGGTGCGGGTTTTAGTTTGGGT (SEQ ID NO:9280), TCGGGGTTGGTAGTCGGTGGTGGTAG (SEQ ID NO:9281), TGCGGGTTTTAGTTTTGGGTTGAGCGGT (SEQ ID NO:9282), GCGGGTTTTAGTTTTGGGTTGAGCGGT (SEQ ID NO:9283), TCGGGGTTTTAGTTTTGGGTTGAGCGG (SEQ ID NO:9284)
Target984	chr9:112810205-112810273	TGGTGGAGGAGGGGATGAGAGATTGAA (SEQ ID NO:9285), ATGGTGGAGGAGGGGATGAGAGATTGA (SEQ ID NO:9286), TGGTGGAGGAGGGGATGAGAGATTGAAA (SEQ ID NO:9287), ATGGTGGAGGAGGGGATGAGAGATTGAA (SEQ ID NO:9288), TGGTGGAGGAGGGGATGAGAGATTGA (SEQ ID NO:9289), TCGTGTAGTGGTAGTCGGTGGTTCGGT (SEQ ID NO:9290), CGTGTAGTGGTAGTCGGTGGTTCGGTGT (SEQ ID NO:9291), CGTGTAGTGGTAGTCGGTGGTTCGGTG (SEQ ID NO:9292), TCGTGTAGTGGTAGTCGGTGGTTCGGTG (SEQ ID NO:9293), GCGGAGGGGAAGGAGGTAGTTGATTTCGT (SEQ ID NO:9294)
Target985	chr9:112810283-112810306	CGTTGGTTTTGTAGTATACGCGTTTTGATATCGG (SEQ ID NO:9295), TCGTTGGTTTTGTAGTATACGCGTTTTGATATCGG (SEQ ID NO:9296), TCGTTGGTTTTGTAGTATACGCGTTTTGATATCG (SEQ ID NO:9297), TTCGTTGGTTTTGTAGTATACGCGTTTTGATATCG (SEQ ID NO:9298), CGATGGGGTTTAGAGGTTGAGGTGTGG (SEQ ID NO:9299), CGATGGGGTTTAGAGGTTGAGGTGTGGA (SEQ ID NO:9300), TCGATGGGGTTTAGAGGTTGAGGTGTGG (SEQ ID NO:9301), TCGATGGGGTTTAGAGGTTGAGGTGTGGA (SEQ ID NO:9302), CGCGTGTGTTGAGGATTTTTTCGATGGGGT (SEQ ID NO:9303)
Target986	chr9:112810400-112810743	CGTGGTGTAGGTAAGGGACGAGGGGT (SEQ ID NO:9304), TCGTGGTGTAGGTAAGGGACGAGGGG (SEQ ID NO:9305), TCGTGGTGTAGGTAAGGGACGAGGGGT (SEQ ID NO:9306), CGTGGTGTAGGTAAGGGACGAGGGGT (SEQ ID NO:9307), ACGGAGGGTAGTAGGAAGGTTTTGGCG (SEQ ID NO:9308), GGGGTGGCGTGTCTGTGTGTGTATG (SEQ ID NO:9309), GGAGGGATGGATGGGGCGGGTAAAGTT (SEQ ID NO:9310), GAGGGAAAGACGGAGGGATGGATGGGG (SEQ ID NO:9311), GGGTGGCGTGTCTGTGTGTGTATGT (SEQ ID NO:9312), AGGGATGGATGGGGCGGGTAAAGTTGA (SEQ ID NO:9313)
Target987	chr9:120507235-120507278	GCGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9314), CGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9315), GCGGGGTTGTTTAGATTTTGCGGGCG (SEQ ID NO:9316), GCGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9317), CGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9318)
Target988	chr9:120507296-120507309	GGAGACGTCGGGGTTTTCGGTTTTGAGT (SEQ ID NO:9319), GGAGACGTCGGGGTTTTCGGTTTTGAG (SEQ ID NO:9320), GAGACGTCGGGGTTTTCGGTTTTGAGT (SEQ ID NO:9321), AGACGTCGGGGTTTTCGGTTTTGAGTT (SEQ ID NO:9322), TCGGTTTTGAGTTTTTGGAGCGTTCGC (SEQ ID NO:9323), GCGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9324), CGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9325), GCGGGGTTGTTTAGATTTTGCGGGCG (SEQ ID NO:9326), GCGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9327), CGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9328)
Target989	chr9:120507342-120507366	GGAGACGTCGGGGTTTTCGGTTTTGAGT (SEQ ID NO:9329), GGAGACGTCGGGGTTTTCGGTTTTGAG (SEQ ID NO:9330), GAGACGTCGGGGTTTTCGGTTTTGAGT (SEQ ID NO:9331), AGACGTCGGGGTTTTCGGTTTTGAGTT (SEQ ID NO:9332), TCGGTTTTGAGTTTTTGGAGCGTTCGC (SEQ ID NO:9333), GCGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9334), CGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9335), GCGGGGTTGTTTAGATTTTGCGGGCG (SEQ ID NO:9336), GCGGGGTTGTTTAGATTTTGCGGGCGAG (SEQ ID NO:9337), CGGGGTTGTTTAGATTTTGCGGGCGA (SEQ ID NO:9338)
Target990	chr9:120507384-120507395	CGCGTTCGTTTCGTAGGATTGGG (SEQ ID NO:9339), CGCGTTCGTTTCGTAGGATTGGGT (SEQ ID NO:9340), CGTAGGATTGGGTAGTTTCGCGGGGA (SEQ ID NO:9341), TCGTAGGATTGGGTAGTTTCGCGGGG (SEQ ID NO:9342), TCGTAGGATTGGGTAGTTTCGCGGGGA (SEQ ID NO:9343), TGTATAATGGGTTGCGGTAGAGTCGG (SEQ ID NO:9344), AGTAGTCGCGGTTTGAAGGAGGTTT (SEQ ID NO:9345), AAGTAGTCGCGGTTTGAAGGAGGTT (SEQ ID NO:9346), AAAGTAGTCGCGGTTTGAAGGAGGTT (SEQ ID NO:9347), GCGTTAGTTGTATAATGGGTTGCGCGT (SEQ ID NO:9348)
Target991	chr9:120507402-120507434	GGGTAGTTTCGCGGGGATTTCGTTTTGC (SEQ ID NO:9349), TGGGTAGTTTCGCGGGGATTTCGTTTT (SEQ ID NO:9350), TTGGGTAGTTTCGCGGGGATTTCGTTTT (SEQ ID NO:9351), TTTGGGTAGTTTCGCGGGGATTTCGTTTT (SEQ ID NO:9352), GGTAGTTTCGCGGGGATTTCGTTTTGC (SEQ ID NO:9353), AGTAGTCGCGGTTTGAAGGAGGTTT (SEQ ID NO:9354), AAGTAGTCGCGGTTTGAAGGAGGTT (SEQ ID NO:9355), AAAGTAGTCGCGGTTTGAAGGAGGTT (SEQ ID NO:9356), AGTCGGCGGTTTGAAGGAGGTTTGA (SEQ ID NO:9357), TGAAGTAGTCGGCGTTTGAAGGAGGTT (SEQ ID NO:9358)

Figure 5 (Table 1)

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Target992	chr9:126776105-126776130	GGAGTTCGGTTTGGGTTCTGTTGGC (SEQ ID NO:9359), GTGGGGGAAGCGCTCGTATGTTTTG (SEQ ID NO:9360), AATGGGTTTTTGGGGTGGGGGAAGC (SEQ ID NO:9361), GAGTTCGGTTTGGGTTCTGTTGGC (SEQ ID NO:9362), TGGCGAGGGTTGCGTAGGTAGGTTTGG (SEQ ID NO:9363), ACGGTATGGTTTGCAGAGGGAGGGAGG (SEQ ID NO:9364), GGACGGTATGGTTTGCAGAGGGAGGGA (SEQ ID NO:9365), AGGGAGGGAGGCGGAAGATAGTAGCGT (SEQ ID NO:9366), TGGACGGTATGGTTTGCAGAGGGAGGG (SEQ ID NO:9367), TTGCGAAGGGAGGGAGGCGGAAGATAG (SEQ ID NO:9368)
Target993	chr9:126776169-126776209	GTGGGGGAAGCGCTCGTATGTTTTG (SEQ ID NO:9369), AATGGTTTTTGGGGTGGGGGAAGC (SEQ ID NO:9370), TGGAAATGGGTTTTTGGGGTGGGGGA (SEQ ID NO:9371), GGAATGGGTTTTTGGGGTGGGGGA (SEQ ID NO:9372), GGGGAAGCGCTCGTATGTTTTGGTA (SEQ ID NO:9373), ACGGTATGGTTTGCAGAGGGAGGGAGG (SEQ ID NO:9374), GGACGGTATGGTTTGCAGAGGGAGGGA (SEQ ID NO:9375), AGGGAGGGAGGCGGAAGATAGTAGCGT (SEQ ID NO:9376), TGGACGGTATGGTTTGCAGAGGGAGGG (SEQ ID NO:9377), TTGCGAAGGGAGGGAGGCGGAAGATAG (SEQ ID NO:9378)
Target994	chr9:126776235-126776288	AGGGAGTTGTGGGTGTCGGTTTTTCGG (SEQ ID NO:9379), GAGGGAGTTGTGGGTGTCGGTTTTTCGG (SEQ ID NO:9380), GAGGGAGTTGTGGGTGTCGGTTTTTCG (SEQ ID NO:9381), AGAGGGAGTTGTGGGTGTCGGTTTTTCGG (SEQ ID NO:9382), AGAGGGAGTTGTGGGTGTCGGTTTTTCG (SEQ ID NO:9383), CGGCGCGTTATTGTTGATGGACGTA (SEQ ID NO:9384), CGGCGCGTTATTGTTGATGGACGGT (SEQ ID NO:9385), CGGCGCGTTATTGTTGATGGACGGTAT (SEQ ID NO:9386), GCGGCGCGTTATTGTTGATGGACGGT (SEQ ID NO:9387), GCGGCGCGTTATTGTTGATGGACGG (SEQ ID NO:9388)
Target995	chr9:126776345-126776386	CGGTTGCGGGGTAAGATTTTCGGATCG (SEQ ID NO:9389), CGTCGGTTGCGGGGTAAGATTTTCGGA (SEQ ID NO:9390), GGTTCGCGGGGTAAGATTTTCGGATCGT (SEQ ID NO:9391), GTCGGTTGCGGGGTAAGATTTTCGGAT (SEQ ID NO:9392), GCGTCGGTTGCGGGGTAAGATTTTCG (SEQ ID NO:9393), GGGGAGGGGTTTTGAGGGGTAGTTGGG (SEQ ID NO:9394), GGGGAGGGGTTTTGAGGGGTAGTTGG (SEQ ID NO:9395), GGGGAGGGGTTTTGAGGGGTAGTTG (SEQ ID NO:9396), GAGATTGGGGGAGGGGTTTTGAGGGG (SEQ ID NO:9397), AGGGGTTTTGAGGGGTAGTTGGGTGGG (SEQ ID NO:9398)
Target996	chr9:126778240-126778255	GGGTCGGAATTGGGGTAGCGAAGGAA (SEQ ID NO:9399), GTTGAGGGTCGGAATTGGGGTAGCGA (SEQ ID NO:9400), CGAGGTAGGGCGGCGAGGGTTTAAGA (SEQ ID NO:9401), AACGAGGTAGGGCGGCGAGGGTTTAA (SEQ ID NO:9402), GAACGAGGTAGGGCGGCGAGGGTTTAA (SEQ ID NO:9403)
Target997	chr9:126778345-126778398	AAGGGCGTAGGTTTGGGGAATTCGGG (SEQ ID NO:9404), GGGCGTAGGTTTGGGGAATTCGGGTT (SEQ ID NO:9405), GGGCGTAGGTTTGGGGAATTCGGGTTT (SEQ ID NO:9406), TAAGGGCGTAGGTTTGGGGAATTCGGG (SEQ ID NO:9407), GCGGTAGGTTTGGGGAATTCGGGTTTGG (SEQ ID NO:9408), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9409), TCGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9410), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9411), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9412), TCGGCGGAGGTTAGGTTTGTTCGG (SEQ ID NO:9413)
Target998	chr9:126778411-126778443	TTTTGGCGTTTGTGGGGTAGGGGTCG (SEQ ID NO:9414), AAGGGCGTAGGTTTGGGGAATTCGGG (SEQ ID NO:9415), GGGCGTAGGTTTGGGGAATTCGGGTT (SEQ ID NO:9416), GGGCGTAGGTTTGGGGAATTCGGGTTT (SEQ ID NO:9417), TTTTGGCGTTTGTGGGGTAGGGGTCG (SEQ ID NO:9418), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9419), TCGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9420), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9421), CGGCGGAGGTTAGGTTTGTTCGGT (SEQ ID NO:9422), TCGGCGGAGGTTAGGTTTGTTCGG (SEQ ID NO:9423)
Target999	chr9:126778642-126778685	GGTGGGGGTTTGGTTCGGATTTTCGG (SEQ ID NO:9424), GGTGAGGTGGGGGTTTGGTTCGGATT (SEQ ID NO:9425), GTGGGGGTTTGGTTCGGATTTTCGGT (SEQ ID NO:9426), AGGTGGGGGTTTGGTTCGGATTTTCG (SEQ ID NO:9427), GTGAGGTGGGGGTTTGGTTCGGATT (SEQ ID NO:9428), CGGGTTTTGTAGATTTCCGGTAGATGTTGACGG (SEQ ID NO:9429), CGGGTTTTGTAGATTTCCGGTAGATGTTGACGGT (SEQ ID NO:9430), CGGGTTTTGTAGATTTCCGGTAGATGTTGACG (SEQ ID NO:9431), TCGGGTTTTGTAGATTTCCGGTAGATGTTGACGG (SEQ ID NO:9432), GGGTTTTGTAGATTTCCGGTAGATGTTGACGG (SEQ ID NO:9433)
Target1000	chr9:127265555-127265560	TCGTGCGTTTGAAGAAGTTTTCGGGA (SEQ ID NO:9434), TCGGGAGTTGAGAGTTAGCGAGGTTT (SEQ ID NO:9435), TTGCGGGAGTTGAGAGTTAGCGAGGTT (SEQ ID NO:9436), TTGCGGGAGTTGAGAGTTAGCGAGGTT (SEQ ID NO:9437), CGTGGTTTGAAGAAGTTTTCGGGAGT (SEQ ID NO:9438), CGTGTGAGAGTTGTAAGGTGAGCGGCG (SEQ ID NO:9439), ACGTGTGAGAGTTGTAAGGTGAGCGGCG (SEQ ID NO:9440), CGTGTGCGGGGATAAGGTGTTTCGGTTA (SEQ ID NO:9441), CGTGTGAGAGTTGTAAGGTGAGCGGCGA (SEQ ID NO:9442), GTGTGAGAGTTGTAAGGTGAGCGGCGA (SEQ ID NO:9443)

Figure 5 (Table 1)

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Target1001	chr9:127265656-127265664	CGGGGTATAGTTCGTTTAGGTTTTCGTCGT (SEQ ID NO:9444), CGGGGTATAGTTCGTTTAGGTTTTCGTCGTA (SEQ ID NO:9445), CGGGGTATAGTTCGTTTAGGTTTTCGTCGTAC (SEQ ID NO:9446), CGTGAGTAGTTTCGTAGTGGTAGTCGGATATTTTG (SEQ ID NO:9447), AGTTCGTAGTGGTAGTCGGATATTTGTTTTCGT (SEQ ID NO:9448), CGGTCGCGGGGATTTTAGGTTGTCGGT (SEQ ID NO:9449), GGTTCGCGGGGATTTTAGGTTGTCGGT (SEQ ID NO:9450), GCGGTCGCGGGGATTTTAGGTTGTCG (SEQ ID NO:9451), CGGTCGCGGGGATTTTAGGTTGTCGG (SEQ ID NO:9452), CGGACGTCGCGGGTATGGATTATTCGT (SEQ ID NO:9453)
Target1002	chr9:127265764-127265817	GTTTCGCGAGGGATAGCGGGTTAGGGA (SEQ ID NO:9454), TTTGCGGAGGGATAGCGGGTTAGGGAG (SEQ ID NO:9455), ATCGGTAGTTTGGGGTTTTCGCGGTCG (SEQ ID NO:9456), CGTTTTCGCGAGGGATAGCGGGTTAGGG (SEQ ID NO:9457), GAGGGATAGCGGGTTAGGGAGGGTCGG (SEQ ID NO:9458), TCGGGCGCGGGGATTGTATCGGATTTA (SEQ ID NO:9459), GAGCGTGGGGTTTGGTAGGGGAAGGTC (SEQ ID NO:9460), GTCGGGCGCGGGGATTGTATCGGATT (SEQ ID NO:9461), CGGGCGCGGGGATTGTATCGGATTAT (SEQ ID NO:9462), AGCGTGGGGTTTGGTAGGGGAAGGTC (SEQ ID NO:9463)
Target1003	chr9:127265835-127265843	ATCGGTAGTTTGGGGTTTTCGCGGTCG (SEQ ID NO:9464), GATCGGTAGTTTGGGGTTTTCGCGGTCG (SEQ ID NO:9465), AGATCGGTAGTTTGGGGTTTTCGCGGT (SEQ ID NO:9466), TCGGTAGTTTGGGGTTTTCGCGGTCG (SEQ ID NO:9467), GGAGATCGGTAGTTTGGGGTTTTCGCGG (SEQ ID NO:9468), TCGGGCGCGGGGATTGTATCGGATTTA (SEQ ID NO:9469), GAGCGTGGGGTTTGGTAGGGGAAGGTC (SEQ ID NO:9470), GTCGGGCGCGGGGATTGTATCGGATT (SEQ ID NO:9471), CGGGCGCGGGGATTGTATCGGATTAT (SEQ ID NO:9472), GTTTTAGATCGGGCGCGACGGGGTTC (SEQ ID NO:9473)
Target1004	chr9:127265928-127265933	TAGCGTTTCGGGGTGGGTTCCGGTGTAG (SEQ ID NO:9474), GTAGCGTTTCGGGGTGGGTTCCGGTGTAG (SEQ ID NO:9475), GGGTGGGTTCCGGTGTAGTTTTCGCGT (SEQ ID NO:9476), TCGGGTGGGTTCCGGTGTAGTTTTCG (SEQ ID NO:9477), GGGTGGGTTCCGGTGTAGTTTTCGCGT (SEQ ID NO:9478), GTTTTAGATCGGGCGCGACGGGGTTC (SEQ ID NO:9479), GGTTTAGATCGGGCGCGACGGGGTTC (SEQ ID NO:9480), GGTTTAGATCGGGCGCGACGGGGT (SEQ ID NO:9481), CGAGGGTTTATAGATCGGGCGCGACG (SEQ ID NO:9482), GAGGGTTTATAGATCGGGCGCGACGGG (SEQ ID NO:9483)
Target1005	chr9:132650532-132651124	CGTTGGCGGGGAGTTTATTGTGGAGT (SEQ ID NO:9484), AGTTGTTTCGGAAGGGTGGTGTGTGGT (SEQ ID NO:9485), GCGGGGAGTTTATTGTGGAGTTGTGGG (SEQ ID NO:9486), GGCGGGGAGTTTATTGTGGAGTTGTGG (SEQ ID NO:9487), TGGCGGGGAGTTTATTGTGGAGTTGT (SEQ ID NO:9488), GGGGGGATTGTAAATCGTTTAGGGTTGCGG (SEQ ID NO:9489), GGGGGATTGTAAATCGTTTAGGGTTGCGG (SEQ ID NO:9490), GGGGGGATTGTAAATCGTTTAGGGTTGCGG (SEQ ID NO:9491), GGGGGATTGTAAATCGTTTAGGGTTGCGGT (SEQ ID NO:9492), GGGGGGATTGTAAATCGTTTAGGGTTGCGGT (SEQ ID NO:9493)
Target1006	chr9:133771616-133771649	TCGGAGAGGATATGGGGTGGGTGGATA (SEQ ID NO:9494), TCGGAGAGGATATGGGGTGGGTGGAT (SEQ ID NO:9495), CGGAGAGGATATGGGGTGGGTGGATAT (SEQ ID NO:9496), TCGGAGAGGATATGGGGTGGGTGGATAT (SEQ ID NO:9497), TCGGAGAGGATATGGGGTGGGTGGGA (SEQ ID NO:9498), TTAGGGTATGCGGTGGGAGGGGTTGG (SEQ ID NO:9499), CGGTGGGAGGGGTTGGGGTTATAGGT (SEQ ID NO:9500), ATGCGGTGGGAGGGGTTGGGGTTATA (SEQ ID NO:9501), TATGCGGTGGGAGGGGTTGGGGTTAT (SEQ ID NO:9502), CGGTGGGAGGGGTTGGGGTTATAGG (SEQ ID NO:9503)
Target1007	chr9:135462376-135462397	GGTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9504), AGGTTGGGTTTCGTTTTATCGTCGCGG (SEQ ID NO:9505), GGTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9506), AGGTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9507), GTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9508), CGAGAATTTTAGTTTTTCGTCGCTTCG (SEQ ID NO:9509), CGAAGTTGCGGAGAATTTTAGTTTTTCGTCG (SEQ ID NO:9510), CGTTTTGTTCGCTTTTTTGGAGGGATAAAC (SEQ ID NO:9511), GAAGTTGGCGAGAATTTAGTTTTTCGTCG (SEQ ID NO:9512), CGAAGTTGCGGAGAATTTAGTTTTTCGTCG (SEQ ID NO:9513)
Target1008	chr9:135462433-135462439	GGTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9514), AGGTTGGGTTTCGTTTTATCGTCGCGG (SEQ ID NO:9515), GGTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9516), AGGTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9517), GTTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9518), AATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9519), ATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9520), GAATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9521), AATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9522), TTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9523)
Target1009	chr9:135462465-135462491	GAGCGCGCGGTAGGGATTGAGTTTTTC (SEQ ID NO:9524), CGCGCGTAGGGATTGAGTTTTTCGTT (SEQ ID NO:9525), GGTGGGTTTCGTTTTATCGTCGCGGT (SEQ ID NO:9526), AGGTTGGGTTTCGTTTTATCGTCGCGG (SEQ ID NO:9527), AGCGCGCGGTAGGGATTGAGTTTTTCG (SEQ ID NO:9528), AATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9529), ATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9530), GAATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9531), AATTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9532), TTTTGAGGGGAATAGGACGCGCGCG (SEQ ID NO:9533)

Figure 5 (Table 1)

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Target1010	chr9:135462510-135462574	GAGCGCGCGTAGGAGTTGGAGTTTTC (SEQ ID NO:9534), TCGGAGTTGTTCCGGGGGGTTTCGGTTT (SEQ ID NO:9535), TTCGGAGTTGTTCCGGGGGGTTTCGGTT (SEQ ID NO:9536), TTCGGAGTTGTTCCGGGGGGTTTCGGTT (SEQ ID NO:9537), CGGAGTTGTTCCGGGGGGTTTCGGTTTTC (SEQ ID NO:9538), AATTTTGAGGGGAATAGGACGGCGGCG (SEQ ID NO:9539), ATTTTGAGGGGAATAGGACGGCGGCGG (SEQ ID NO:9540), GAATTTTGAGGGGAATAGGACGGCGGCG (SEQ ID NO:9541), AATTTTGAGGGGAATAGGACGGCGGCGG (SEQ ID NO:9542), TTTTGAGGGGAATAGGACGGCGGCGG (SEQ ID NO:9543)
Target1011	chr9:135462583-135462593	TCGGAGTTGTTCCGGGGGGTTTCGGTTT (SEQ ID NO:9544), TTCGGAGTTGTTCCGGGGGGTTTCGGTT (SEQ ID NO:9545), TTCGGAGTTGTTCCGGGGGGTTTCGGTT (SEQ ID NO:9546), CGGAGTTGTTCCGGGGGGTTTCGGTTTTC (SEQ ID NO:9547), TTTTCGGAGTTGTTCCGGGGGGTTTCGGTT (SEQ ID NO:9548), TGTTTCGTGGCGTTTGTGTAATTCGGT (SEQ ID NO:9549), CGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9550), CGGTGTTTTTCGTTTTTGTTCGTGGCGT (SEQ ID NO:9551), TCGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9552), CGTCGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9553)
Target1012	chr9:135462605-135462617	GGAGTTGTTCCGGGGGGTTTCGGTTTTC (SEQ ID NO:9554), GGAGTTGTTCCGGGGGGTTTCGGTTT (SEQ ID NO:9555), CGAGTTTGGGTGTCGCGGAATTATCG (SEQ ID NO:9556), CGGGGTTTTAGAGGTTTCGTTTGAGAGC (SEQ ID NO:9557), TCGGGGTTTTAGAGGTTTCGTTTGAGAGC (SEQ ID NO:9558), TGTTTCGTGGCGTTTGTGTAATTCGGT (SEQ ID NO:9559), CGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9560), CGGTGTTTTTCGTTTTTGTTCGTGGCGT (SEQ ID NO:9561), TCGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9562), CGTCGGTGTTTTTCGTTTTTGTTCGTGGCG (SEQ ID NO:9563)
Target1013	chr9:135462629-135462703	ACGTTACGGGTAGGAGCGGGAGGGTAT (SEQ ID NO:9564), AACGTTACGGGTAGGAGCGGGAGGGTA (SEQ ID NO:9565), TTACGGGTAGGAGCGGGAGGGTATCGG (SEQ ID NO:9566), GTTACGGGTAGGAGCGGGAGGGTATCG (SEQ ID NO:9567), CGTTACGGGTAGGAGCGGGAGGGTATC (SEQ ID NO:9568), AGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9569), GTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9570), TAGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9571), TAGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9572), AGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9573)
Target1014	chr9:135462711-135462765	ACGTTACGGGTAGGAGCGGGAGGGTAT (SEQ ID NO:9574), AACGTTACGGGTAGGAGCGGGAGGGTA (SEQ ID NO:9575), TTACGGGTAGGAGCGGGAGGGTATCGG (SEQ ID NO:9576), GTTACGGGTAGGAGCGGGAGGGTATCG (SEQ ID NO:9577), CGTTACGGGTAGGAGCGGGAGGGTATC (SEQ ID NO:9578), AGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9579), GTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9580), TAGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9581), GAGGCGGCGAGTTTTATGCGGTTTTGT (SEQ ID NO:9582), TAGTTGATGGTCGGTGAAGGTCGTGCGC (SEQ ID NO:9583)
Target1015	chr9:135462791-135462798	TCGTAGTGAAGGAGGAGGGCGATCG (SEQ ID NO:9584), GGTCGGGTTTTGATATGTCGTTGTGTTTCG (SEQ ID NO:9585), GGTCGGGTTTTGATATGTCGTTGTGTTTCG (SEQ ID NO:9586), AGGTCGGGTTTTGATATGTCGTTGTGTTTCG (SEQ ID NO:9587), AGGTCGGGTTTTGATATGTCGTTGTGTTTCG (SEQ ID NO:9588), AGTTGATGGTCGGTGAAGGTCGTGCGT (SEQ ID NO:9589), GCGAGGCGGCGAGTTTTATGCGGTTTT (SEQ ID NO:9590), CGAGGCGGCGAGTTTTATGCGGTTTTG (SEQ ID NO:9591), CGAGGCGGCGAGTTTTATGCGGTTTTGT (SEQ ID NO:9592), TAGTTGATGGTCGGTGAAGGTCGTGCGT (SEQ ID NO:9593)
Target1016	chr9:135462890-135462909	TGGCGTAGTTGGAGCGTAGTTTCGAGC (SEQ ID NO:9594), TTGGCGTAGTTGGAGCGTAGTTTCGAGC (SEQ ID NO:9595), GTTGCGTAGTTGGAGCGTAGTTTCGAGC (SEQ ID NO:9596), AGTTGGCGTAGTTGGAGCGTAGTTTCG (SEQ ID NO:9597), GTTGCGTAGTTGGAGCGTAGTTTCGA (SEQ ID NO:9598), AGGTTTTGATTGCGTGTCGGTGAGGT (SEQ ID NO:9599), TTGATTGCGTGTCGGTGAGGTTGAGT (SEQ ID NO:9600), GGTTTTGATTGCGTGTCGGTGAGGTT (SEQ ID NO:9601), AGGTTTTGATTGCGTGTCGGTGAGGTT (SEQ ID NO:9602), GGTTTTGATTGCGTGTCGGTGAGGTTG (SEQ ID NO:9603)
Target1017	chr9:139428277-139428322	TGATCGTTTGGGTTGTGGGGGAGTTTGT (SEQ ID NO:9604), GATCGTTTGGGTTGTGGGGGAGTTTGT (SEQ ID NO:9605), TGATCGTTTGGGTTGTGGGGGAGTTTGT (SEQ ID NO:9606), TCGTTTGGGTTGTGGGGGAGTTTGT (SEQ ID NO:9607), ATCGTTTGGGTTGTGGGGGAGTTTGT (SEQ ID NO:9608), AGGGAGTTACGGCGGGGAGATTGGTT (SEQ ID NO:9609), TAGGGAGTTACGGCGGGGAGATTGGT (SEQ ID NO:9610), GGAGTTACGGCGGGGAGATTGGTTT (SEQ ID NO:9611), AGGGAGTTACGGCGGGGAGATTGGTTT (SEQ ID NO:9612), AGGGAGTTACGGCGGGGAGATTGGT (SEQ ID NO:9613)
Target1018	chr9:139428353-139428527	GGGCGGGTGTGTTGTGGTTTCGGGTTATG (SEQ ID NO:9614), TCGTCGTGTTTTTTGGGCGGGTGT (SEQ ID NO:9615), TTCGTCGTGTTTTTTGGGCGGGTGT (SEQ ID NO:9616), TTCGTCGTGTTTTTTGGGCGGGTGT (SEQ ID NO:9617), TTTTGGGCGGGTGTGTTGTTTCGGG (SEQ ID NO:9618), AGGGAGTTACGGCGGGGAGATTGGTT (SEQ ID NO:9619), TAGGGAGTTACGGCGGGGAGATTGGT (SEQ ID NO:9620), GGGAGTTACGGCGGGGAGATTGGTTT (SEQ ID NO:9621), AGGGAGTTACGGCGGGGAGATTGGTTT (SEQ ID NO:9622), AGGGAGTTACGGCGGGGAGATTGGT (SEQ ID NO:9623)
Target1019	chr10:555435-555454	TGGGTTGTGTGAGTTTTCTGTCGG (SEQ ID NO:9624), TGGGTTGTGTGAGTTTTCTGTCGGA (SEQ ID NO:9625), GGGTTGTGTGAGTTTTCTGTCGGA (SEQ ID NO:9626), ATGGGTTGTGTGAGTTTTCTGTCGG (SEQ ID NO:9627), GGGTTGTGTGAGTTTTCTGTCGGA (SEQ ID NO:9628)

Figure 5 (Table 1)

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Target1020	chr10:3514496-3514575	TGGGGATAGAGAGGGGGAAGGATGGTT (SEQ ID NO:9629), TTGGGGATAGAGAGGGGGAAGGATGGT (SEQ ID NO:9630), TGTTGGGGATAGAGAGGGGGAAGGATGGT (SEQ ID NO:9631), GTTGGGGATAGAGAGGGGGAAGGATGGT (SEQ ID NO:9632), TGTTGGGGATAGAGAGGGGGAAGGATGG (SEQ ID NO:9633)
Target1021	chr10:3514707-3514967	GGTCGGTAGGTTCCGGGAAGTTTTTCGT (SEQ ID NO:9634), GGTCGGTAGGTTCCGGGAAGTTTTTCG (SEQ ID NO:9635), AGGTCGGTAGGTTCCGGGAAGTTTTTCGT (SEQ ID NO:9636), AGGTCGGTAGGTTCCGGGAAGTTTTTCG (SEQ ID NO:9637), AAGTCGGTAGGTTCCGGGAAGTTTTTCG (SEQ ID NO:9638), TGAATTTTACGTGGGATGGGTTTTGTTAGAGAGA (SEQ ID NO:9639), TTGAATTTACGTGGGATGGGTTTTGTTAGAGAGA (SEQ ID NO:9640), TGAATTTTACGTGGGATGGGTTTTGTTAGAGAGAT (SEQ ID NO:9641), TTTGAATTTTACGTGGGATGGGTTTTGTTAGAGAGA (SEQ ID NO:9642), TGAATTTTACGTGGGATGGGTTTTGTTAGAGAGATT (SEQ ID NO:9643)
Target1022	chr10:6183284-6183576	CGTCGTATGGATTTGTAGAGGTAGTCGTTTTGT (SEQ ID NO:9644), TCGTATGGATTTGTAGAGGTAGTCGTTTTGTGTCG (SEQ ID NO:9645), TCGTCGTATGGATTTGTAGAGGTAGTCGTTTTG (SEQ ID NO:9646), TCGTCGTATGGATTTGTAGAGGTAGTCGTTTTGT (SEQ ID NO:9647), CGTCGTATGGATTTGTAGAGGTAGTCGTTTTGTGTCG (SEQ ID NO:9648), AGGGCGGAGGGGGTTGGATTTGTTGAG (SEQ ID NO:9649), TAGGGCGGAGGGGGTTGGATTTGTTGA (SEQ ID NO:9650), GGGCGGAGGGGGTTGGATTTGTTGAGT (SEQ ID NO:9651), GGGCGGAGGGGGTTGGATTTGTTGAGT (SEQ ID NO:9652), TAGGGCGGAGGGGGTTGGATTTGTTGAG (SEQ ID NO:9653)
Target1023	chr10:6183594-6183800	TGGTTGATTTGGTTGGTGGTGAGAGGA (SEQ ID NO:9654), TGTAGAGGTAGTCGTTTTGTGCGGGTGG (SEQ ID NO:9655), CGTTTTTGTGCGGGTGGATTTGTTTTTCGCG (SEQ ID NO:9656), TGTAGAGGTAGTCGTTTTGTGCGGGTGGGA (SEQ ID NO:9657), GTAGAGGTAGTCGTTTTGTGCGGGTGGGA (SEQ ID NO:9658), TGGAGAGTTGGGAGAATTGGTTTTCGGT (SEQ ID NO:9659), TGGTGTGTTGGAGAGTTGGGAGAATTGGT (SEQ ID NO:9660), TGGAGAGTTGGGAGAATTGGTTTTCGGTGT (SEQ ID NO:9661), GGAGAGTTGGGAGAATTGGTTTTCGGTGT (SEQ ID NO:9662), TGGAGAGTTGGGAGAATTGGTTTTCGGTG (SEQ ID NO:9663)
Target1024	chr10:7449679-7449756	GGTTTTTACGCGTCGTTTCGGGATTTTCGG (SEQ ID NO:9664), CGGGCGGTCGATCGTTAGGGTTAC (SEQ ID NO:9665), AGGTTTTTACGCGTCGTTTCGGGATTTTCGG (SEQ ID NO:9666), TTTTTTACGCGTCGTTTCGGGATTTTCGGA (SEQ ID NO:9667), GGTTTTTACGCGTCGTTTCGGGATTTTCGGA (SEQ ID NO:9668), CGTGGTTGATGGCGTTTGTTGGTGTTCG (SEQ ID NO:9669), CGGTGTTGTTGTTGATGGCGTTTGTG (SEQ ID NO:9670), GGTGTTGTTGTTGATGGCGTTTGTGG (SEQ ID NO:9671), GGTGTTGTTGTTGATGGCGTTTGTGGT (SEQ ID NO:9672), CGTGGTTGATGGCGTTTGTGGTGTTCGA (SEQ ID NO:9673)
Target1025	chr10:7449774-7449898	TGCGTTTCGAGTTTTAGGTGTTAGAGCG (SEQ ID NO:9674), TTTTTTACGCGTCGTTTCGGGATTTTCGGA (SEQ ID NO:9675), GGTTTTTTACGCGTCGTTTCGGGATTTTCGGA (SEQ ID NO:9676), GGTGCGTTTCGAGTTTTTAGGTGTTAGAGCG (SEQ ID NO:9677), TGGTGCCTTCGAGTTTTTAGGTGTTAGAGCG (SEQ ID NO:9678), TGGGGAGGAGGGAGGAGTCGAGATTGG (SEQ ID NO:9679), GGGAGGAGGGAGGAGTCGAGATTGGGT (SEQ ID NO:9680), GGTGGGAGGAGGGAGGAGTCGAGATT (SEQ ID NO:9681), TTTTGGTGGGAGGAGGGAGGAGTCGA (SEQ ID NO:9682), TTTGTTGGGAGGAGGGAGGAGTCGAG (SEQ ID NO:9683)
Target1026	chr10:7450019-7450043	GGTGGTCGGTCGGGTTTTGTTAGTT (SEQ ID NO:9684), GGTCGGTCGGGTTTTGTTAGTTTCGGT (SEQ ID NO:9685), TGGTGCGTCGGGTTTTGTTAGTTTCGG (SEQ ID NO:9686), GGTCGGTCGGGTTTTGTTAGTTTCGG (SEQ ID NO:9687), TGGTGCGTCGGGTTTTGTTAGTTTCGGT (SEQ ID NO:9688), CGCGAGGTGGGAGTAGTTTAAATGGT (SEQ ID NO:9689), CGCGAGGTGGGAGTAGTTTAAATGGTT (SEQ ID NO:9690), CGCGAGGTGGGAGTAGTTTAAATGGTTT (SEQ ID NO:9691), TGGTTTTGTGTTGCGAAGTTGATTTTTAGTCG (SEQ ID NO:9692), ATGGTTTTGTGTTGCGAAGTTGATTTTTAGTCG (SEQ ID NO:9693)
Target1027	chr10:7450049-7450202	GCGACGTTAGGAGGATAAGGGGAGGGG (SEQ ID NO:9694), GCGACGTTAGGAGGATAAGGGGAGGGG (SEQ ID NO:9695), TCGCGGGGTTTATGGGAAAGTCGGTTT (SEQ ID NO:9696), GCGACGTTAGGAGGATAAGGGGAGGGGT (SEQ ID NO:9697), CGACGTTAGGAGGATAAGGGGAGGGGT (SEQ ID NO:9698), TGGGTTTCGCGAGGTGGGAGTAGTTT (SEQ ID NO:9699), ATGGGTTTCGCGAGGTGGGAGTAGTT (SEQ ID NO:9700), TATGGGTTTCGCGAGGTGGGAGTAGT (SEQ ID NO:9701), ATGGGTTTCGCGAGGTGGGAGTAGTTT (SEQ ID NO:9702), TGGGTTTCGCGAGGTGGGAGTAGTT (SEQ ID NO:9703)
Target1028	chr10:7454983-7454990	ATAGCGGGGTTTGTGGAAGGGAGGGG (SEQ ID NO:9704), GGGTTTGTGGAAGGGAGGGGTCGAGA (SEQ ID NO:9705), GGGGTTTGTGGAAGGGAGGGGTCGAG (SEQ ID NO:9706), GGGTTTGTGGAAGGGAGGGGTCGAGAG (SEQ ID NO:9707), GGGGTTTGTGGAAGGGAGGGGTCGA (SEQ ID NO:9708), GCGCGGGTTAAGAGTGGGAGGTTTAGG (SEQ ID NO:9709), AGCGCGGGTTAAGAGTGGGAGGTTTAGG (SEQ ID NO:9710), CGCGGGTTAAGAGTGGGAGGTTTAGGGT (SEQ ID NO:9711), CGCGGGTTAAGAGTGGGAGGTTTAGGG (SEQ ID NO:9712), GTAGCGCGGGTTAAGAGTGGGAGGTTT (SEQ ID NO:9713)

Figure 5 (Table 1)

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Target1029	chr10:7455034-7455064	ATAGCGGGGTTTGTGAAAGGGAGGGG (SEQ ID NO:9714), GGGTTTGTGAAAGGGAGGGGTCGAGA (SEQ ID NO:9715), GGGGTTTGTGAAAGGGAGGGGTCGAG (SEQ ID NO:9716), GGGTTTGTGAAAGGGAGGGGTCGAGAG (SEQ ID NO:9717), GGGGTTTGTGAAAGGGAGGGGTCGA (SEQ ID NO:9718), TGCGGGGTTAGGGTTATTGGGTAGGCG (SEQ ID NO:9719), GCGGGGTTAGGGTTATTGGGTAGGCGT (SEQ ID NO:9720), CGCGGTTTGGGACGTAAATGGGAGGGA (SEQ ID NO:9721), GCGGTTTGGGACGTAAATGGGAGGGAG (SEQ ID NO:9722), GCGCGGGTTAAGAGTGGGAGGTTTAGG (SEQ ID NO:9723)
Target1030	chr10:7455069-7455179	ATAGCGGGGTTTGTGAAAGGGAGGGG (SEQ ID NO:9724), GGGTTTGTGAAAGGGAGGGGTCGAGA (SEQ ID NO:9725), GGGGTTTGTGAAAGGGAGGGGTCGAG (SEQ ID NO:9726), GGGTTTGTGAAAGGGAGGGGTCGAGAG (SEQ ID NO:9727), GGGGTTTGTGAAAGGGAGGGGTCGA (SEQ ID NO:9728), TGCGGGGTTAGGGTTATTGGGTAGGCG (SEQ ID NO:9729), GCGGGGTTAGGGTTATTGGGTAGGCGT (SEQ ID NO:9730), CGCGGTTTGGGACGTAAATGGGAGGGA (SEQ ID NO:9731), GCGGTTTGGGACGTAAATGGGAGGGAG (SEQ ID NO:9732), GCGCGGGTTAAGAGTGGGAGGTTTAGG (SEQ ID NO:9733)
Target1031	chr10:7455186-7455205	GCGTTGCGTTTATTAGTGGTTTTGTTTCG (SEQ ID NO:9734), GCGTTGCGTTTATTAGTGGTTTTGGTTTCGT (SEQ ID NO:9735), GCGTTTATTAGTGGTTTTGGTTTCGTAGGGC (SEQ ID NO:9736), TGCGTTTATTAGTGGTTTTGGTTTCGTAGGGC (SEQ ID NO:9737), TGCGTTTATTAGTGGTTTTGGTTTCGTAGGG (SEQ ID NO:9738), TCGGGAAGTTTTCGTTGGTATTAGGGT (SEQ ID NO:9739), TTCGGGAAGTTTTCGTTGGTATTAGGGT (SEQ ID NO:9740), CGGGAAGTTTTCGTTGGTATTAGGGTAAGCG (SEQ ID NO:9741), TCGGGAAGTTTTCGTTGGTATTAGGGTA (SEQ ID NO:9742), TTTTCGGGAAGTTTTCGTTGGTATTAGGGT (SEQ ID NO:9743)
Target1032	chr10:8094268-8094297	GGTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9744), TGAGGAGGTTTTTCGGTGTAAGGGCGT (SEQ ID NO:9745), GTGAGGAGGTTTTTCGGTGTAAGGGCGT (SEQ ID NO:9746), GTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9747), TGGTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9748)
Target1033	chr10:8094328-8094348	GGTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9749), TGAGGAGGTTTTTCGGTGTAAGGGCGT (SEQ ID NO:9750), GTGAGGAGGTTTTTCGGTGTAAGGGCGT (SEQ ID NO:9751), GTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9752), TGGTGAGGAGGTTTTTCGGTGTAAGGGCG (SEQ ID NO:9753)
Target1034	chr10:8094431-8094448	GCGGATAGGCGTTTTTGTATCGGAAGGT (SEQ ID NO:9754), GCGGATAGGCGTTTTTGTATCGGAAGG (SEQ ID NO:9755), GCGGATAGGCGTTTTTGTATCGGAAGGTT (SEQ ID NO:9756), GCGGATAGGCGTTTTTGTATCGGAAGGTTT (SEQ ID NO:9757), GCGGATAGGCGTTTTTGTATCGGAAGGTTTT (SEQ ID NO:9758), AGTTGTTATGGGTTTTGCGCGCGGAGA (SEQ ID NO:9759), AAGTTGTTATGGGTTTTGCGCGCGGAG (SEQ ID NO:9760), GTTGTTATGGGTTTTGCGCGCGGAGAT (SEQ ID NO:9761), AAGTTGTTATGGGTTTTGCGCGCGGAGA (SEQ ID NO:9762), AATCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9763)
Target1035	chr10:8094463-8094483	TTTTTCGGTTTTTGAGGTTTTTCGCGCG (SEQ ID NO:9764), TTTTTCGTTTTTGAGGTTTTTCGCGCG (SEQ ID NO:9765), TTTTCGGTTTTTGAGGTTTTTCGCGCG (SEQ ID NO:9766), AGTTGTTATGGGTTTTGCGCGCGGAGA (SEQ ID NO:9767), AAGTTGTTATGGGTTTTGCGCGCGGAG (SEQ ID NO:9768), GTTGTTATGGGTTTTGCGCGCGGAGAT (SEQ ID NO:9769), AAGTTGTTATGGGTTTTGCGCGCGGAGA (SEQ ID NO:9770), AATCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9771)
Target1036	chr10:8094513-8094540	ACGCGTGGTTGTGAGTTGGGTTTACGT (SEQ ID NO:9772), ACGCGTGGTTGTGAGTTGGGTTTACGT (SEQ ID NO:9773), CGCGTGGTTGTGAGTTGGGTTTACGT (SEQ ID NO:9774), TGGTTTTACGCGTGGTTGTGAGTTGGG (SEQ ID NO:9775), GGTTTTACGCGTGGTTGTGAGTTGGG (SEQ ID NO:9776), AATCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9777), ATCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9778), TAATCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9779), GTTAATCGAGGGGTGGATGCGTTACGT (SEQ ID NO:9780), TCGAGGGGTGGATGCGTTACGTAGC (SEQ ID NO:9781)
Target1037	chr10:8529520-8529624	TGATAGTTTTTCGGGAGGATTGTTTGGTTTTGTT (SEQ ID NO:9782), TTGATAGTTTTTCGGGAGGATTGTTTGGTTTTGTT (SEQ ID NO:9783), TGATAGTTTTTCGGGAGGATTGTTTGGTTTTGTTT (SEQ ID NO:9784), TTGATAGTTTTTCGGGAGGATTGTTTGGTTTTGTT (SEQ ID NO:9785), ATTGATAGTTTTTCGGGAGGATTGTTTGGTTTTGTT (SEQ ID NO:9786)
Target1038	chr10:23480706-23480716	AGTTTTTAGTAGAATTTAGGTCGGAGTTTCGCGT (SEQ ID NO:9787), CGTAGTGGGAGTGGGTTTCGGATTATTTTTTAATG (SEQ ID NO:9788), CGTAGTGGGAGTGGGTTTCGGATTATTTTTTAATGA (SEQ ID NO:9789), AAGTTTTTAGTAGAATTTAGGTCGGAGTTTCGCGT (SEQ ID NO:9790), GAAGTTTTTAGTAGAATTTAGGTCGGAGTTTCGCG (SEQ ID NO:9791), TCGCGTAGTTTGGGTAATTTAAGGGTGT (SEQ ID NO:9792), AGGGTGTGTTTTTAGGGATTAGGTGGGT (SEQ ID NO:9793), GGGTGTGTTTTTAGGGATTAGGTGGGTGT (SEQ ID NO:9794), AGGGTGTGTTTTTAGGGATTAGGTGGGTGT (SEQ ID NO:9795), AGGGTGTGTTTTTAGGGATTAGGTGGGTGT (SEQ ID NO:9796)

Figure 5 (Table 1)

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Target1039	chr10:23480784-23480815	ATTCGGATAAGGGGGTGGCGGAATGT (SEQ ID NO:9797), TTTCGGATAAGGGGGTGGCGGAATGTA (SEQ ID NO:9798), TCGGATAAGGGGGTGGCGGAATGTATT (SEQ ID NO:9799), TTCGGATAAGGGGGTGGCGGAATGTAT (SEQ ID NO:9800), TTTCGGATAAGGGGGTGGCGGAATGT (SEQ ID NO:9801), TTTAGGGGTGCGCGTCGGTGGTTTGA (SEQ ID NO:9802), GTTTTATAGGGGTGCGCGTCGGTGGTTT (SEQ ID NO:9803), GAAGTTTTTATAGGGGTGCGCGTCGGTGG (SEQ ID NO:9804), AGAAGTTTTATAGGGGTGCGCGTCGGTGG (SEQ ID NO:9805), TTAGGGGTGCGCGTCGGTGGTTAGAC (SEQ ID NO:9806)
Target1040	chr10:23480820-23481032	GGCGCGCGGTTGTTTTAGTTTATAGGTC (SEQ ID NO:9807), CGCGCGCGGTTGTTTTAGTTTATAGG (SEQ ID NO:9808), ATTCGGATAAGGGGGTGGCGGAATGT (SEQ ID NO:9809), CGGCGCGCGGTTGTTTTAGTTTATAGGTC (SEQ ID NO:9810), TTTCGGATAAGGGGGTGGCGGAATGTA (SEQ ID NO:9811), TTTAGGGGTGCGCGTCGGTGGTTTGA (SEQ ID NO:9812), GTTTTATAGGGGTGCGCGTCGGTGGTTT (SEQ ID NO:9813), GAAGTTTTTATAGGGGTGCGCGTCGGTGG (SEQ ID NO:9814), GAGTTTTTGGGGCGAGGAAAAGGCGGG (SEQ ID NO:9815), GGAGTTTTTGGGGCGAGGAAAAGGCGGG (SEQ ID NO:9816)
Target1041	chr10:23481051-23481062	AGGGAAGAGAGCGGTGCGAGGAGTTTC (SEQ ID NO:9817), GAGGGAAGAGAGCGGTGCGAGGAGTTT (SEQ ID NO:9818), TAGAGGAGAGGGAAGAGAGCGGTGCGA (SEQ ID NO:9819), GTAGAGGAGAGGGAAGAGAGCGGTGCG (SEQ ID NO:9820), AGAGGGAAGAGAGCGGTGCGAGGAGTT (SEQ ID NO:9821), GAGTTTTTGGGGCGAGGAAAAGGCGGG (SEQ ID NO:9822), GGAGTTTTTGGGGCGAGGAAAAGGCGGG (SEQ ID NO:9823), GGGAGTTTTTGGGGCGAGGAAAAGGCGG (SEQ ID NO:9824), TGGGAGTTTTTGGGGCGAGGAAAAGGCGG (SEQ ID NO:9825), AGTTTTTGGGGCGAGGAAAAGGCGGG (SEQ ID NO:9826)
Target1042	chr10:23481124-23481143	AGGGAAGAGAGCGGTGCGAGGAGTTTC (SEQ ID NO:9827), GAGGGAAGAGAGCGGTGCGAGGAGTTT (SEQ ID NO:9828), TAGAGGAGAGGGAAGAGAGCGGTGCGA (SEQ ID NO:9829), GTAGAGGAGAGGGAAGAGAGCGGTGCG (SEQ ID NO:9830), AGAGGGAAGAGAGCGGTGCGAGGAGTT (SEQ ID NO:9831), TGGGGAGGGTTGTGGCGGATTTTTGG (SEQ ID NO:9832), GGGGAGGGTTGTGGCGGATTTTTGGA (SEQ ID NO:9833), GGGGAGGGTTGTGGCGGATTTTTGGA (SEQ ID NO:9834), TTGGGAGGGTTGTGGCGGATTTTTGG (SEQ ID NO:9835), TGGGGAGGGTTGTGGCGGATTTTTGGA (SEQ ID NO:9836)
Target1043	chr10:23481145-23481230	TGGTTGGCGCGATGGGTTTTTGGTACG (SEQ ID NO:9837), CGTTTTGATTGGTTGGCGCGATGGGTT (SEQ ID NO:9838), TGATTGGTTGGCGCGATGGGTTTTTGGT (SEQ ID NO:9839), GATTGGTTGGCGCGATGGGTTTTTGGT (SEQ ID NO:9840), TGATTGGTTGGCGCGATGGGTTTTTGG (SEQ ID NO:9841), CGTTGGGGAGGGTTGTGGCGGATTTTT (SEQ ID NO:9842), TGGGGAGGGTTGTGGCGGATTTTTTGG (SEQ ID NO:9843), GGGGAGGGTTGTGGCGGATTTTTTGA (SEQ ID NO:9844), CGTTGGGGAGGGTTGTGGCGGATTTTTT (SEQ ID NO:9845), GGGGAGGGTTGTGGCGGATTTTTTGGAG (SEQ ID NO:9846)
Target1044	chr10:28034313-28034373	CGTAAGGGGTTCCGGGGCGTGTGAATT (SEQ ID NO:9847), CGTAAGGGGTTCCGGGGCGTGTGAATTA (SEQ ID NO:9848), GTAAGGGGTTCCGGGGCGTGTGAATTA (SEQ ID NO:9849), CGTAAGGGGTTCCGGGGCGTGTGAAT (SEQ ID NO:9850), GTAAGGGGTTCCGGGGCGTGTGAATT (SEQ ID NO:9851), AGTATTGTTGAGAAGAGGCGCGGGTGGT (SEQ ID NO:9852), TCGGCGTTGGGGAGGGGATATTTTT (SEQ ID NO:9853), GTCGCGTTGGGGAGGGGATATTTTT (SEQ ID NO:9854), GTGATTGTTGAGAAGAGGCGCGGGTGGTC (SEQ ID NO:9855), CGGCGTTGGGGAGGGGATATTTTTG (SEQ ID NO:9856)
Target1045	chr10:28034442-28034470	AGTAAAGGAGGCGCGGTTAGGTGGGTT (SEQ ID NO:9857), AAGTAAAGGAGGCGCGGTTAGGTGGGT (SEQ ID NO:9858), AAAGGAGGCGCGGTTAGGTGGGTTTT (SEQ ID NO:9859), GTAAAGGAGGCGCGGTTAGGTGGGTTT (SEQ ID NO:9860), AGTAAAGGAGGCGCGGTTAGGTGGGTTT (SEQ ID NO:9861), AGGTTTGGTGGAGAGGCGTTCCGGTAG (SEQ ID NO:9862), AAGGTTTGGTGGAGAGGCGTTCCGGTA (SEQ ID NO:9863), TAAGGTTTGGTGGAGAGGCGTTCCGGT (SEQ ID NO:9864), GGTTTTTGCCTTTTGGGCGTCGGTGTT (SEQ ID NO:9865), TTGGTTTTTGCCTTTTGGGCGTCGGTG (SEQ ID NO:9866)
Target1046	chr10:28034494-28034506	AGTAAAGGAGGCGCGGTTAGGTGGGTT (SEQ ID NO:9867), AAGTAAAGGAGGCGCGGTTAGGTGGGT (SEQ ID NO:9868), AAAGGAGGCGCGGTTAGGTGGGTTTT (SEQ ID NO:9869), GTAAAGGAGGCGCGGTTAGGTGGGTTT (SEQ ID NO:9870), AGTAAAGGAGGCGCGGTTAGGTGGGTTT (SEQ ID NO:9871), GGTTTGGTGGAGAGGCGTTCCGGTAGT (SEQ ID NO:9872), AGGTTTGGTGGAGAGGCGTTCCGGTAG (SEQ ID NO:9873), AAGGTTTGGTGGAGAGGCGTTCCGGTA (SEQ ID NO:9874), TAAGGTTTGGTGGAGAGGCGTTCCGGT (SEQ ID NO:9875), GGTTTTTGCGTTTTGGGCGTCGGTGTT (SEQ ID NO:9876)
Target1047	chr10:28034545-28034560	AGTAAAGGAGGCGCGGTTAGGTGGGTT (SEQ ID NO:9877), AAGTAAAGGAGGCGCGGTTAGGTGGGT (SEQ ID NO:9878), AAGTTGGGGGAAGGGCGGGAGAGTATC (SEQ ID NO:9879), GAAGTTGGGGGAAGGGCGGGAGAGTAT (SEQ ID NO:9880), TTTTGGAGGGAAGTTGGGGGAAGGGCG (SEQ ID NO:9881), GGTTTTTGCGTTTTGGGCGTCGGTGTT (SEQ ID NO:9882), TTGGTTTTTGCCTTTTGGGCGTCGGTG (SEQ ID NO:9883), TGGTTTTTGCCTTTTGGGCGTCGGTG (SEQ ID NO:9884), TTTGTTTTTGCCTTTTGGGCGTCGGT (SEQ ID NO:9885), GGTTTTTTGCCTTTTGGGCGTCGGTGTT (SEQ ID NO:9886)

Figure 5 (Table 1)

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Target1048	chr10:28034568-28034683	GCGTTTAGGGCGTAGGGGTTAGAGCGA (SEQ ID NO:9887), GGGGGTTGTATTTGTGGTTGCGGGGTC (SEQ ID NO:9888), AGGGCGTAGGGGTTAGAGCGAGTTTGG (SEQ ID NO:9889), CGGTCGGTTGTAGGGCGGTTGTTTTT (SEQ ID NO:9890), AAGTTGGGGGAAGGGCGGGAGAGTATC (SEQ ID NO:9891), GCGGGGATGGGAGTGCCTTTAGTTTCG (SEQ ID NO:9892), GGGCGGGATGGGAGTGCCTTTAGTTTC (SEQ ID NO:9893), GGGAGTGCCTTTAGTTTCGAGGCGGGA (SEQ ID NO:9894), GGAGAATATGCGGCGGGGATGGGAGTG (SEQ ID NO:9895), GTGGAGAATATGCGGCGGGGATGGGAG (SEQ ID NO:9896)
Target1049	chr10:28034697-28034798	GGGGGTTGTATTTGTGGTTGCGGGGTC (SEQ ID NO:9897), CGGTCGGTTGTAGGCGGTTGGTTTTT (SEQ ID NO:9898), CGACGCGGGGTTGTATTTGTGGTTGC (SEQ ID NO:9899), GCGACGCGGGGTTGTATTTGTGGTTG (SEQ ID NO:9900), ACGGTCGGTTGTAGGCGGTTGGTTTTT (SEQ ID NO:9901), GAGAATATGCGGCGGGGATGGGAGTGT (SEQ ID NO:9902), CGCGTTCTAGGATGTTCTCGGTTGG (SEQ ID NO:9903), GCGTTCTAGGATGTTCTCGGTTGGG (SEQ ID NO:9904), GGAGAATATGCGGCGGGGATGGGAGTG (SEQ ID NO:9905), GTGGAGAATATGCGGCGGGGATGGGAG (SEQ ID NO:9906)
Target1050	chr10:28034801-28034966	CGTTCTCGTCGCGGGGTTGTTGTTAAT (SEQ ID NO:9907), TCGTTCTCGTCGCGGGGTTGTTGTTAA (SEQ ID NO:9908), TTCGTTCTCGTCGCGGGGTTGTTGTTA (SEQ ID NO:9909), CGTTCTCGTCGCGGGGTTGTTGTTAATT (SEQ ID NO:9910), CGTTCTCGTCGCGGGGTTGTTGTTAA (SEQ ID NO:9911), CGCGTTCTAGGATGTTCTCGGTTGG (SEQ ID NO:9912), GGGTTCTGGGTTTTCTCGTAGCGGTTT (SEQ ID NO:9913), GCGTTCTAGGATGTTCTCGGTTGGG (SEQ ID NO:9914), CGGGTTCTGGGTTTTCTCGTAGCGGTT (SEQ ID NO:9915), CGTAGGATGTTCTCGGTTGGGATCGGT (SEQ ID NO:9916)
Target1051	chr10:72320491-72320526	TGTTAGTTAGGTCGGAGGTTTGAGATGTTTCG (SEQ ID NO:9917), CGATGTTAGTTAGGTCGGAGGTTTGAGATGT (SEQ ID NO:9918), GTTAGTTAGGTCGGAGGTTTGAGATGTTTCA (SEQ ID NO:9919), TGTTAGTTAGGTCGGAGGTTTGAGATGTTTCA (SEQ ID NO:9920), ATGTTAGTTAGGTCGGAGGTTTGAGATGTTTCG (SEQ ID NO:9921), AAGAGGGTTAGGAGAGGTGGTCGGGGT (SEQ ID NO:9922), AGAGGGTTAGGAGAGGTGGTCGGGGTA (SEQ ID NO:9923), GAAGAGGGTTAGGAGAGGTGGTCGGGG (SEQ ID NO:9924), AGAAGAGGGTTAGGAGAGGTGGTCGGGG (SEQ ID NO:9925), GAAGAGGGTTAGGAGAGGTGGTCGGGGT (SEQ ID NO:9926)
Target1052	chr10:74078124-74078156	TGGTAAGTGTGGGTATGTGGAGATGAGGA (SEQ ID NO:9927), TTGGTAAGTGTGGGTATGTGGAGATGAGG (SEQ ID NO:9928), TGGTAAGTGTGGGTATGTGGAGATGAGGAA (SEQ ID NO:9929), TTGGTAAGTGTGGGTATGTGGAGATGAGGA (SEQ ID NO:9930), TTTGGTAAGTGTGGGTATGTGGAGATGAGG (SEQ ID NO:9931)
Target1053	chr10:74210030-74210236	TGGGGTGAGAGGTTGGTGAAGTAGGAA (SEQ ID NO:9932), TTGGGGTGAGAGGTTGGTGAAGTAGGA (SEQ ID NO:9933), TTTGGGGTGAGAGGTTGGTGAAGTAGG (SEQ ID NO:9934), TGGGGTGAGAGGTTGGTGAAGTAGGAAA (SEQ ID NO:9935), TTGGGGTGAGAGGTTGGTGAAGTAGGAA (SEQ ID NO:9936)
Target1054	chr10:77156031-77156160	TGGAGACGCGCGGAGTTAGAGTTTT (SEQ ID NO:9937), TTTCGCGGGGATTAGAGTGGGATCGGG (SEQ ID NO:9938), GTGGAGACGCGCGGAGTTAGAGTTT (SEQ ID NO:9939), GGCGGGATTAGAGTGGGATCGGGGTC (SEQ ID NO:9940), TGGAGACGCGCGGAGTTAGAGTTTTT (SEQ ID NO:9941), TGGCGTCGAGGAGGATTTTGGTTCGT (SEQ ID NO:9942), CGGAGTTGGCTCGAGGAGGATTTTGG (SEQ ID NO:9943), CGGAGTTGGCTCGAGGAGGATTTTGG (SEQ ID NO:9944), GGAGTTGGCTCGAGGAGGATTTTGGT (SEQ ID NO:9945), GGAGTTGGCTCGAGGAGGATTTTGG (SEQ ID NO:9946)
Target1055	chr10:77156166-77156928	TGTAGTCGTGAGGTTGGCGTTGGGAGG (SEQ ID NO:9947), TTCGGGTTTTGGTCGGGCGGGTTTTT (SEQ ID NO:9948), GTAGTCGTGAGGTTGGCGTTGGGAGGA (SEQ ID NO:9949), TGGAGACGCGCGGAGTTAGAGTTTT (SEQ ID NO:9950), TTCGTAGTGTTCGGGAGGTCGTTGGGG (SEQ ID NO:9951), TTTTGTAGAAGCGCGCGGAGTTTGG (SEQ ID NO:9952), TTTCGTTTTGTAGAAGCGCGCGGGGA (SEQ ID NO:9953), GTTCGTTTTGTAGAAGCGCGCGGGA (SEQ ID NO:9954), TGGGTTCTGGGCGTAGTTTTTGTGGCG (SEQ ID NO:9955), CGTTTTGTAGAAGCGCGCGGAGTTT (SEQ ID NO:9956)
Target1056	chr10:88516504-88516592	GAGGAGGTAGGAGCGAGGAGGAGGAG (SEQ ID NO:9957), TGTCGGGTTTGCGGAAGGAGAAGGGAG (SEQ ID NO:9958), AGGAGGGTTAAGGCGGGTAGGAAGGT (SEQ ID NO:9959), AGGAGCGAGGAGGAGGAGGTTAAGG (SEQ ID NO:9960), TTGTCGGGTTTGCGGAAGGAGAAGGGA (SEQ ID NO:9961), GGGAACGTATTTTTAGTTTTTCGGCGCGG (SEQ ID NO:9962), AGGGAACGTATTTTTAGTTTTTCGGCGCGG (SEQ ID NO:9963), GGGAACGTATTTTTAGTTTTTCGGCGCGGA (SEQ ID NO:9964), GGAACGTATTTTTAGTTTTTCGGCGCGG (SEQ ID NO:9965), GGGAACGTATTTTTAGTTTTTCGGCGCGG (SEQ ID NO:9966)
Target1057	chr10:88516608-88516675	GGGTAGGAAGGTTTAGGTTCTGGCGCGT (SEQ ID NO:9967), CGGGTAGGAAGGTTTAGGTTCTGGCGCG (SEQ ID NO:9968), AGGGTTGGAGGATGCGTTTTTGGGGT (SEQ ID NO:9969), CGAGGGTTGGAGGATGCGTTTTTGGGG (SEQ ID NO:9970), GGTAGGAAGGTTTAGGTTCTGGCGCGTT (SEQ ID NO:9971), TCGGGTCGGGTAGTTTTTGGTTTCGGT (SEQ ID NO:9972), CGGGTCGGGTAGTTTTTGGTTTCGGT (SEQ ID NO:9973), TCGGGTCGGGTAGTTTTTGGTTTCGGT (SEQ ID NO:9974), CGGGTCGGGTAGTTTTTGGTTTCGGT (SEQ ID NO:9975), TCGGGTCGGGTAGTTTTTGGTTTCGG (SEQ ID NO:9976)

Figure 5 (Table 1)

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Target1058	chr10:94451783-94451828	GAGTTATTGGGGAAGAGGGTCGTGGT (SEQ ID NO:9977), CGAGAGTTATTGGGGAAGAGGGTCGTGG (SEQ ID NO:9978), CGAGAGTTATTGGGGAAGAGGGTCGTGGT (SEQ ID NO:9979), AGAGTTATTGGGGAAGAGGGTCGTGGT (SEQ ID NO:9980), CGAGAGTTATTGGGGAAGAGGGTCGT (SEQ ID NO:9981)
Target1059	chr10:94451965-94451993	TGTGTGTCGGTGGGAACGTGTTAGGTT (SEQ ID NO:9982), TTGTGTGTCGGTGGGAACGTGTTAGGT (SEQ ID NO:9983), GGGTATGTTTGTGTGTCGGTGGGAACGT (SEQ ID NO:9984), TGGGTATGTTTGTGTGTCGGTGGGAACG (SEQ ID NO:9985), TGGGTATGTTTGTGTGTCGGTGGGAACGT (SEQ ID NO:9986), GCGGGAAGAGCGGCGTTTATTATTGT (SEQ ID NO:9987), GCGGGAAGAGCGGCGTTTATTATTGT (SEQ ID NO:9988), GCGGCGTTTATTATTGTTTGGAGCGGT (SEQ ID NO:9989), GCGGCGTTTATTATTGTTTGGAGCGG (SEQ ID NO:9990), AGCGGCGTTTATTATTGTTTGGAGCGG (SEQ ID NO:9991)
Target1060	chr10:94452236-94452295	AGGAAAGCGGTTAGGTGAGATTTTAAACGA (SEQ ID NO:9992), AAGGAAAGCGGTTAGGTGAGATTTTAAACG (SEQ ID NO:9993), AAGGAAAGCGGTTAGGTGAGATTTTAAACGA (SEQ ID NO:9994), AGGAAAGCGGTTAGGTGAGATTTTAAACGAT (SEQ ID NO:9995), AAAGGAAAGCGGTTAGGTGAGATTTTAAACG (SEQ ID NO:9996), GGGACGTGTTAGAGGGTAGGGTGGTTT (SEQ ID NO:9997), GGGACGTGTTAGAGGGTAGGGTGGTTT (SEQ ID NO:9998), GGGACGTGTTAGAGGGTAGGGTGGTTT (SEQ ID NO:9999), GGACGTGTTAGAGGGTAGGGTGGTTT (SEQ ID NO:10000), GGGACGTGTTAGAGGGTAGGGTGGTTT (SEQ ID NO:10001)
Target1061	chr10:94822093-94822882	TTGTAGGGGCGTTCGGTATGAGGT (SEQ ID NO:10002), GGTAATTAGCGGGTGGTTTGGGCGGG (SEQ ID NO:10003), AATTAGCGGGTGGTTTGGGCGGGTTC (SEQ ID NO:10004), TGGGTAGGTGCGGGTTTCGGTGTGG (SEQ ID NO:10005), CGTTTGTAGGGGCGGTTCGGTATGAG (SEQ ID NO:10006), GAGGGCGTTTCGTTTGGGTTTGGGAGG (SEQ ID NO:10007), GGGCGTTTCGTTTGGGTTTGGGAGGT (SEQ ID NO:10008), AGTTTGGAGTCGGGGCGGTCTATTT (SEQ ID NO:10009), AAGTTTGGAGTCGGGGCGGTCTATT (SEQ ID NO:10010), GAAGTTTGGAGTCGGGGCGGTCTAT (SEQ ID NO:10011)
Target1062	chr10:94828119-94828197	ACGTTGCGGTGTATCGTAGTTTTTCG (SEQ ID NO:10012), GACGTTGCGGTGTATCGTAGTTTTTCG (SEQ ID NO:10013), GGGTTGGAGCGTGATGTATAGTATTCGGG (SEQ ID NO:10014), AGACGTTGCGGTGTATCGTAGTTTTTCG (SEQ ID NO:10015), AGGGTTGGAGCGTGATGTATAGTATTCGGG (SEQ ID NO:10016), GAAGCGTTGGAGGCGTTTCGGGAATT (SEQ ID NO:10017), AGCGTTGGAGGCGTTTCGGGAATTT (SEQ ID NO:10018), AAGCGTTGGAGGCGTTTCGGGAATTT (SEQ ID NO:10019), GGGATGTAATGGAAGCGGTTGGAGGCG (SEQ ID NO:10020), CGGGATGTAATGGAAGCGGTTGGAGGCG (SEQ ID NO:10021)
Target1063	chr10:94828206-94828691	GGTTTGGTCGGTGTTATGGCGCGTAC (SEQ ID NO:10022), ATACGTTTGGTCGGTGTTATGGCGC (SEQ ID NO:10023), GGATTCGAGGAAGGAGGAGGCGAGTT (SEQ ID NO:10024), CGGTGCGCGTAGTTGTTTCGGTTAGGA (SEQ ID NO:10025), CGGTTTGGTCGGTGTTATGGCGCGTA (SEQ ID NO:10026), ATAATGGGAGCGGTAGATGGGTGGCG (SEQ ID NO:10027), AGGCGGGTGTTAGTTTTCGTCGCG (SEQ ID NO:10028), AGGCGTGAGGGGTGAAAAAGAGTCG (SEQ ID NO:10029), TGTGAACGAGTGAAAGAGTGCGCGCG (SEQ ID NO:10030), GGGATGTAATGGAAGCGGTTGGAGGCG (SEQ ID NO:10031)
Target1064	chr10:99080800-99080816	AATGGTGGTGAAGGTTAGAGAGGCGC (SEQ ID NO:10032), GGGGAAGGTTGTACGATACGGGTGGGG (SEQ ID NO:10033), GGGGGAAGGTTGTACGATACGGGTGGG (SEQ ID NO:10034), GGGCGGGGAGTATTGAATGGTGGTGA (SEQ ID NO:10035), GAAAGGAGGTGGGGCGGGAGTATTG (SEQ ID NO:10036), GTGATTTGAATCGAGGAGAGGCGGGT (SEQ ID NO:10037), AGTGATTTGAATCGAGGAGAGGCGGGT (SEQ ID NO:10038), AGTGATTTGAATCGAGGAGAGGCGGG (SEQ ID NO:10039), TGATTTGAATCGAGGAGAGGCGGGT (SEQ ID NO:10040), GTGATTTGAATCGAGGAGAGGCGGGT (SEQ ID NO:10041)
Target1065	chr10:99080878-99081075	CGTGTGGGCGGTTGTGTTTCGGTAGG (SEQ ID NO:10042), ACGTGTGGGCGGTTGTGTTTCGGTAG (SEQ ID NO:10043), GACGTGTGGGCGGTTGTGTTTCGGTA (SEQ ID NO:10044), GTGTGTGGGCGGTTGTGTTTCGGTAGGC (SEQ ID NO:10045), TGGCGGTTGTGTTTCGGTAGGCGATT (SEQ ID NO:10046), CGTGAAAGTTCGAGCGCGGTTAGGG (SEQ ID NO:10047), GTGAAAGTTCGAGCGCGGTTAGGGG (SEQ ID NO:10048), CGTGAAAGTTCGAGCGCGGTTAGGGG (SEQ ID NO:10049), TGAAAGTTCGAGCGCGGTTAGGGG (SEQ ID NO:10050), CGTGAAAGTTCGAGCGCGGTTAGG (SEQ ID NO:10051)
Target1066	chr10:102587099-102587148	TGGTCGTTCAAGGTTTTGCGTCGTTT (SEQ ID NO:10052), TTGGTCGTTCAAGGTTTTGCGTCGTT (SEQ ID NO:10053), TTGGTCGTTCAAGGTTTTGCGTCGTT (SEQ ID NO:10054), TTGGTCGTTCAAGGTTTTGCGTCGTTT (SEQ ID NO:10055), TTGGTCGTTCAAGGTTTTGCGTCGTTT (SEQ ID NO:10056), GGGATTCGATTGGGAGATTTTGGTTGGG (SEQ ID NO:10057), GGGATTCGATTGGGAGATTTTGGTTGGG (SEQ ID NO:10058), CGGATTGGGAGATTTTGGTTGGGAGTGG (SEQ ID NO:10059), GGATTCGATTGGGAGATTTTGGTTGGG (SEQ ID NO:10060), CGGATTGGGAGATTTTGGTTGGGAGTGG (SEQ ID NO:10061)

Figure 5 (Table 1)

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Target1067	chr10:102587188-102587330	CGTAGTCGGGCGTTATTAGATCGGGTT (SEQ ID NO:10062), CGTAGTCGGGCGTTATTAGATCGGGTTT (SEQ ID NO:10063), CGTAGTCGGGCGTTATTAGATCGGGT (SEQ ID NO:10064), TTTCGGATTTTGGAGGGTGCCTAGTC (SEQ ID NO:10065), CGTAGTCGGGCGTTATTAGATCGGGTTTT (SEQ ID NO:10066), GGCGGAGTTTCGGGGGGCGGTATTATA (SEQ ID NO:10067), TTTTCGGGGTGGGGTTAGACGGGGAC (SEQ ID NO:10068), GGCGGAGTTTCGGGGGGCGGTATTATAA (SEQ ID NO:10069), TTTTCGGGGTGGGGTTAGACGGGGAC (SEQ ID NO:10070), TTTTCGGGGTGGGGTTAGACGGGGA (SEQ ID NO:10071)
Target1068	chr10:102587337-102587435	CGGGGTTTCGTTTTTGTCTGTTGTTGTCG (SEQ ID NO:10072), CGGGGTTTCGTTTTTGTCTGTTGTTGTCG (SEQ ID NO:10073), TCGGGGTTTCGTTTTTGTCTGTTGTTGTCG (SEQ ID NO:10074), TCGGGGTTTCGTTTTTGTCTGTTGTTGTCG (SEQ ID NO:10075), TCGGGGTTTCGTTTTTGTCTGTTGTTGT (SEQ ID NO:10076), TTTTCGGGGTGGGGTTAGACGGGGAC (SEQ ID NO:10077), TTTTCGGGGTGGGGTTAGACGGGGA (SEQ ID NO:10078), TTCGAGGGGGGTGATGTGAAGGGTTGC (SEQ ID NO:10079), TTTTCGGGGTGGGGTTAGACGGGGAC (SEQ ID NO:10080), TTTTCGGGGTGGGGTTAGACGGGGAC (SEQ ID NO:10081)
Target1069	chr10:102587465-102587493	CGTTTGATTTATTTTCGGAGGGAGGGAGGA (SEQ ID NO:10082), TCGTTTGATTTATTTTCGGAGGGAGGGAGG (SEQ ID NO:10083), TCGTTTGATTTATTTTCGGAGGGAGGGAGG (SEQ ID NO:10084), TTCGTTTGATTTATTTTCGGAGGGAGGGAGG (SEQ ID NO:10085), CGTTTGATTTATTTTCGGAGGGAGGGAGGAT (SEQ ID NO:10086), TTCGAGGGGGGTGATGTGAAGGGTTGC (SEQ ID NO:10087), TCGAGGGGGGTGATGTGAAGGGTTGC (SEQ ID NO:10088), TTTCGAGGGGGGTGATGTGAAGGGTTGC (SEQ ID NO:10089), TTTCGAGGGGGGTGATGTGAAGGGTTG (SEQ ID NO:10090), TTTTCGAGGGGGGTGATGTGAAGGGTT (SEQ ID NO:10091)
Target1070	chr10:102587602-102587622	CGTGGGCGGGATTTTATAGGTTTCGGGTT (SEQ ID NO:10092), CGTGGGCGGGATTTTATAGTTTCGGGTTT (SEQ ID NO:10093), CGTGGGCGGGATTTTATAGTTTCGGGT (SEQ ID NO:10094), GTGGGCGGGATTTTATAGTTTCGGGTTT (SEQ ID NO:10095), GTGGGCGGGATTTTATAGTTTCGGGTT (SEQ ID NO:10096), GTTTCGGGGTTGGTTTGGTGGAGGTCG (SEQ ID NO:10097), GGTTCGGGGTTGGTTTGGTGGAGGTC (SEQ ID NO:10098), AGTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10099), GAGTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10100), TTTTCGGGGTTGGTTTGGTGGAGGTCGG (SEQ ID NO:10101)
Target1071	chr10:102587631-102587906	TCGGGCGTTAGGAGGTTTCGTTGGAGG (SEQ ID NO:10102), GGCCTTAGGAGGTTTCGTTGGAGGGG (SEQ ID NO:10103), GGCCTCGTAGGGGGGATTCGTTTGT (SEQ ID NO:10104), CGTTTCGGGCGTTAGGAGGTTTCGTTGG (SEQ ID NO:10105), AGGAGGTTTCGTTGGAGGGGTTGGGTT (SEQ ID NO:10106), AGTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10107), GAGTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10108), TTTTCGGGGTTGGTTTGGTGGAGGTCGG (SEQ ID NO:10109), AGTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10110), GTTCGGTAGGGTGGTTGGCGGGTTT (SEQ ID NO:10111)
Target1072	chr10:102588069-102588175	GGGGGTGTGGGGTTTCGTTTATAGGAA (SEQ ID NO:10112), ATGGGGGTGTGGGGTTTCGTTTATAGG (SEQ ID NO:10113), CGTTTTAGGAACGGGTTTGGGGGCG (SEQ ID NO:10114), AAGATGGAATGGGGGTGTGGGGTTTCG (SEQ ID NO:10115), TAGGAACGGGTTTGGGGGCGTTAGGT (SEQ ID NO:10116), GTTCGATCGGTGCGGGTTGTTGGGTTT (SEQ ID NO:10117), GCGAGTTAGGGAGGAGGATGTAGGGCG (SEQ ID NO:10118), TCGATCGGTGCGGGTTGTTGGGTTTT (SEQ ID NO:10119), TTCGATCGGTGCGGGTTGTTGGGTTTT (SEQ ID NO:10120), GGGGTTGCGAGTTAGGGAGGAGGATGT (SEQ ID NO:10121)
Target1073	chr10:102821357-102821367	GTTTCGGTTTTGGTGGGGTAGTTGGGT (SEQ ID NO:10122), TTCGCGTTTTGGTGGGGTAGTTGGGTG (SEQ ID NO:10123), TGTTTCGTTTTGGTGGGGTAGTTGGG (SEQ ID NO:10124), GGGGTAGTTGGGTGGGTAAGTTTGGCG (SEQ ID NO:10125), TCGCGTTTTGGTGGGGTAGTTGGGTGG (SEQ ID NO:10126), AAGGGGAGGCGGTAGGAGTTTGGTG (SEQ ID NO:10127), GGGGGAGGCGGTAGGAGTTTGGTGTT (SEQ ID NO:10128), AGGGGGAGGCGGTAGGAGTTTGGTGT (SEQ ID NO:10129), GGGGAGGCGGTAGGAGTTTGGTGT (SEQ ID NO:10130), AGGGGGAGGCGGTAGGAGTTTGGTG (SEQ ID NO:10131)
Target1074	chr10:102821421-102821428	GGGGAGACGAAGGTGGTTGTTTGT (SEQ ID NO:10132), GGAATTAGTTTTGGGTTGCGGGGAGACG (SEQ ID NO:10133), GGGGAGACGAAGGTGGTTGTTTGT (SEQ ID NO:10134), GAATTAGTTTTGGGTTGCGGGGAGACG (SEQ ID NO:10135), GGGGAGACGAAGGTGGTTGTTTGT (SEQ ID NO:10136), GGGAGTGGGGTAGGAGTTTGGTTGGG (SEQ ID NO:10137), GGGGAGTGGGGTAGGAGTTTGGTTGG (SEQ ID NO:10138), CGGGGAGTGGGGTAGGAGTTTGGTTG (SEQ ID NO:10139), GGTGGGAGAGAGGAAGGGGGTGAGGA (SEQ ID NO:10140), AGGTTGGGAGAGAGGAAGGGGGTGAGG (SEQ ID NO:10141)
Target1075	chr10:102821552-102821579	GGGATTGTAAATTAGATGGGATAGGGTTAGTCG (SEQ ID NO:10142)
Target1076	chr10:102821630-102821679	GAAATGATTCGGGAGGGTTTATGCGGTT (SEQ ID NO:10143), CGTATTGTGATTTGGGTTAGGTTGGGGG (SEQ ID NO:10144), CGTATTGTGATTTGGGTTAGGTTGGGGG (SEQ ID NO:10145), TCGTATTGTGATTTGGGTTAGGTTGGGGG (SEQ ID NO:10146), TCGTATTGTGATTTGGGTTAGGTTGGGGG (SEQ ID NO:10147)

Figure 5 (Table 1)

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Target1077	chr10:102899883-102899935	TCGCGGAGAGTATATGTAGGTCGGAGT (SEQ ID NO:10148), TCGCGGAGAGTATATGTAGGTCGGAGT (SEQ ID NO:10149), ATCGCGGAGAGTATATGTAGGTCGGAGT (SEQ ID NO:10150), TCGCGGAGAGTATATGTAGGTCGGAGT (SEQ ID NO:10151), ATCGCGGAGAGTATATGTAGGTCGGAGT (SEQ ID NO:10152), AGTTTCGGGAGTAGGCGAGCGGTATTC (SEQ ID NO:10153), GAATAGTTTCGGGAGTAGGCGAGCGGT (SEQ ID NO:10154), TAGTTTCGGGAGTAGGCGAGCGGTATT (SEQ ID NO:10155), AATAGTTTCGGGAGTAGGCGAGCGGTA (SEQ ID NO:10156), ATAGTTTCGGGAGTAGGCGAGCGGTAT (SEQ ID NO:10157)
Target1078	chr10:102899949-102899961	TTTACGTTGGGGTTTGGGGCGTTTCG (SEQ ID NO:10158), TTTACGTTGGGGTTTGGGGCGTTTCG (SEQ ID NO:10159), ATTTAGCGTTGGGGTTTGGGGCGTTTCG (SEQ ID NO:10160), ATTTAGCGTTGGGGTTTGGGGCGTTTCG (SEQ ID NO:10161), TTTAGCGTTGGGGTTTGGGGCGTTTCG (SEQ ID NO:10162), AGTTTCGGGAGTAGGCGAGCGGTATTC (SEQ ID NO:10163), GAATAGTTTCGGGAGTAGGCGAGCGGT (SEQ ID NO:10164), TAGTTTCGGGAGTAGGCGAGCGGTATT (SEQ ID NO:10165), AATAGTTTCGGGAGTAGGCGAGCGGTA (SEQ ID NO:10166), ATAGTTTCGGGAGTAGGCGAGCGGTAT (SEQ ID NO:10167)
Target1079	chr10:102900103-102900169	ATTTTGGGGACGTTGGGATTCGCGGC (SEQ ID NO:10168), GGTCTCGGTTGTCGGGTCGTGTATT (SEQ ID NO:10169), GATTTTGGGGACGTTGGGATTCGCGG (SEQ ID NO:10170), TTTTGGGGACGTTGGGATTCGCGGC (SEQ ID NO:10171), AGATTTTGGGGACGTTGGGATTCGCGG (SEQ ID NO:10172), CGGAGAGCGCGGAGTTTGCCTGTTTC (SEQ ID NO:10173), CGGAGAGCGCGGAGTTTGCCTGTTT (SEQ ID NO:10174), GCGGAGAGCGCGGAGTTTGCCTGTTT (SEQ ID NO:10175), CGGAGAGCGCGGAGTTTGCCTGTTT (SEQ ID NO:10176), GGAGAGCGCGGAGTTTGCCTGTTT (SEQ ID NO:10177)
Target1080	chr10:102983415-102983447	CGCGGTTTTAATAGAGTTGTCGGTTGGGT (SEQ ID NO:10178), CGCGGTTTTAATAGAGTTGTCGGTTGGG (SEQ ID NO:10179), TCGCGTTTTAATAGAGTTGTCGGTTGGG (SEQ ID NO:10180), TCGCGTTTTAATAGAGTTGTCGGTTGGGT (SEQ ID NO:10181), CGCGTTTTAATAGAGTTGTCGGTTGGGT (SEQ ID NO:10182), TCGGGTGGGTTTTCGGAGTTTAGTCGA (SEQ ID NO:10183), TTCGGTGGGTTTTCGGAGTTTAGTCG (SEQ ID NO:10184), TTCGGTGGGTTTTCGGAGTTTAGTCGA (SEQ ID NO:10185), AGGTTTCGGGTGGGTTTTCGGAGTTTA (SEQ ID NO:10186), TAGGTTTCGGGTGGGTTTTCGGAGTTT (SEQ ID NO:10187)
Target1081	chr10:102983547-102983563	AGAGTTGTCGGTTGGGTTTCGGAAGTT (SEQ ID NO:10188), TAGAGTTGTCGGTTGGGTTTCGGAAGT (SEQ ID NO:10189), GAGTTGTCGGTTGGGTTTCGGAAGTTT (SEQ ID NO:10190), AGAGTTGTCGGTTGGGTTTCGGAAGTTT (SEQ ID NO:10191), TCGGTTGGGTTTCGGAAGTTTATTCGGA (SEQ ID NO:10192), GAAGGATTAGAGTTGCGGCGGGGGGAA (SEQ ID NO:10193), AAGGATTAGAGTTGCGGCGGGGGGAA (SEQ ID NO:10194), AAGGAAGGATTAGAGTTGCGGCGGGGG (SEQ ID NO:10195), GAAGGAAGGATTAGAGTTGCGGCGGGG (SEQ ID NO:10196), GGAAGGAAGGATTAGAGTTGCGGCGGG (SEQ ID NO:10197)
Target1082	chr10:102983588-102983609	AGAGTAGAGGATATTGCGGAGAGGTTTCGA (SEQ ID NO:10198), AGAGTAGAGGATATTGCGGAGAGGTTTCGAA (SEQ ID NO:10199), AGAGTAGAGGATATTGCGGAGAGGTTTCGAAT (SEQ ID NO:10200), TAGAGTAGAGGATATTGCGGAGAGGTTTCGAA (SEQ ID NO:10201), TTAGAGTAGAGGATATTGCGGAGAGGTTTCGA (SEQ ID NO:10202), GAAGGATTAGAGTTGCGGCGGGGGGAA (SEQ ID NO:10203), AAGGATTAGAGTTGCGGCGGGGGGAA (SEQ ID NO:10204), AAGGAAGGATTAGAGTTGCGGCGGGGG (SEQ ID NO:10205), GAAGGAAGGATTAGAGTTGCGGCGGGG (SEQ ID NO:10206), GGAAGGAAGGATTAGAGTTGCGGCGGG (SEQ ID NO:10207)
Target1083	chr10:103043997-103044034	GGGGGAGGGGCGTTTGTTCGCTATAG (SEQ ID NO:10208), CGGGGAGGGGCGTTTGTTCGCTATA (SEQ ID NO:10209), GGGGAGGGGCGTTTGTTCGCTATAGT (SEQ ID NO:10210), GGGGAGGGGCGTTTGTTCGCTATAGT (SEQ ID NO:10211), GGGGAGGGGCGTTTGTTCGCTATA (SEQ ID NO:10212), GCGGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10213), CGCGGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10214), CGGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10215), GCGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10216), CGCGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10217)
Target1084	chr10:103044083-103044140	GCGTAGTTGGAGTTTCGGCGAGAGGGTC (SEQ ID NO:10218), TGAGGAGTTGGAGTCGAGTCGGGGATC (SEQ ID NO:10219), GCGTAGTTGGAGTTTCGGCGAGAGGGT (SEQ ID NO:10220), TTGAGGAGTTGGAGTCGAGTCGGGGAT (SEQ ID NO:10221), ATTGAGGAGTTGGAGTCGAGTCGGGGA (SEQ ID NO:10222), GGTTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10223), CGCGGTTTTTCGTCGGGTTTGTTCGCT (SEQ ID NO:10224)
Target1085	chr10:103044150-103044247	GAGGGGATTGCGCGGTTGGGTTTGTTCG (SEQ ID NO:10225), TATTGCGCGGTTGGGTTTGTTCG (SEQ ID NO:10226), GCGGTTGGGTTTGTTCGCGGTTTGTTCG (SEQ ID NO:10227), AGGGGATTGCGCGGTTGGGTTTGTTCG (SEQ ID NO:10228), GCGTAGTTGGAGTTTCGGCGAGAGGGTC (SEQ ID NO:10229), GGGTTGGAGGCGAGGTAGGTACGTTGG (SEQ ID NO:10230), CGGGTTGGAGGCGAGGTAGGTACGTTGG (SEQ ID NO:10231), TTTGGGTTGGAGGCGAGGTAGGTACG (SEQ ID NO:10232), GGTGGAGGCGAGGTAGGTACGTTGGT (SEQ ID NO:10233), TCGGGTTGGAGGCGAGGTAGGTACGTT (SEQ ID NO:10234)

Figure 5 (Table 1)

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Target1086	chr10:105344152-105344448	TTATTCGGGATTGTAACGGTGCGCGCG (SEQ ID NO:10235), TATTCGGGATTGTAACGGTGCGCGCG (SEQ ID NO:10236), GTTATTCGGGATTGTAACGGTGCGCGCG (SEQ ID NO:10237), GTTATTCGGGATTGTAACGGTGCGCGCG (SEQ ID NO:10238), GGGATTGTAACGGTGCGCGCGTAGG (SEQ ID NO:10239), TGATTCGTAGGGTTTTCGGGAGGCGGT (SEQ ID NO:10240), TGAGTTTTCGGGATGGGGTAGTCGCG (SEQ ID NO:10241), GTGAGTTTTCGGGATGGGGTAGTCGCG (SEQ ID NO:10242), GTGTTACGTAGGGTTTTCGGGAGGCGG (SEQ ID NO:10243), AGTGTACGTAGGGTTTTCGGGAGGCGG (SEQ ID NO:10244)
Target1087	chr10:105344464-105344748	GAGTAGACGGTGCGCGCGTGGAGTAC (SEQ ID NO:10245), GAGTAGACGGTGCGCGCGTGGAGTA (SEQ ID NO:10246), AGTAGACGGTGCGCGCGTGGAGTAC (SEQ ID NO:10247), GTAGACGGTGCGCGCGTGGAGTAC (SEQ ID NO:10248), CGAGTAGACGGTGCGCGCGTGGAGTA (SEQ ID NO:10249), ATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10250), TGTCTGCTGTTGTAGGGGTTTCGGGT (SEQ ID NO:10251), GATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10252), GATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10253), GGATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10254)
Target1088	chr10:105344798-105344808	GGTACGTTGCGGTCGGTCGATTGTTT (SEQ ID NO:10255), GGTACGTTGCGGTCGGTCGATTGTTT (SEQ ID NO:10256), GGTACGTTGCGGTCGGTCGATTGTTT (SEQ ID NO:10257), ACGTTGCGGTCGGTCGATTGTTT (SEQ ID NO:10258), GTACGTTGCGGTCGGTCGATTGTTT (SEQ ID NO:10259), GCGGTCGCTTATTGTGGTTGAGGTGT (SEQ ID NO:10260), ATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10261), TGTCTGCTGTTGTAGGGGTTTCGGGT (SEQ ID NO:10262), GATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10263), GATGTCGTCGTTGTAGGGGTTTCGGGT (SEQ ID NO:10264)
Target1089	chr10:108923824-108923845	GGTTTGGTTGTGTGTTGAGTTTTTCGTTAGC (SEQ ID NO:10265), TGGTTTGGTTGTGTGTTGAGTTTTTCGTTAGC (SEQ ID NO:10266), ATGTTTGGTTGTGTGTTGAGTTTTTCGTTAGC (SEQ ID NO:10267), AGTGGATTATGGTTTGGTTGTGTGTTGAGTTTT (SEQ ID NO:10268), GGATTATGTTTGGTTGTGTGTTGAGTTTTTCGTT (SEQ ID NO:10269), AGGAGTTTGGGATTTCGGGAGCGGGATT (SEQ ID NO:10270), AGTAGAGTTTGGGATTTCGGGAGCGGG (SEQ ID NO:10271), GTAGGAGTTTGGGATTTCGGGAGCGGGA (SEQ ID NO:10272), AGGAGAAGGTAGAACGGGAGAGGGCG (SEQ ID NO:10273), GGAGTTTGGGATTTCGGGAGCGGGATTTC (SEQ ID NO:10274)
Target1090	chr10:108923899-108923916	AGCGGGTGGTTTTGTTTCGGGTTTC (SEQ ID NO:10275), GCGGTTGTTGTACGTTTCGGTCGGAGG (SEQ ID NO:10276), GCGGTTGTTGTACGTTTCGGTCGGAG (SEQ ID NO:10277), ATGGCGGTTGTTGTACGTTTCGGTCGG (SEQ ID NO:10278), AGGAGAAGGTAGAACGGGAGAGGGCG (SEQ ID NO:10279), TGGCGGTTGTTGTACGTTTCGGTCGGGA (SEQ ID NO:10280)
Target1091	chr10:108923926-108923970	AGCGGGTGGTTTTGTTTCGGGTTTC (SEQ ID NO:10281), GCGGTTGTTGTACGTTTCGGTCGGAGG (SEQ ID NO:10282), GCGGTTGTTGTACGTTTCGGTCGGAG (SEQ ID NO:10283), ATGGCGGTTGTTGTACGTTTCGGTCGG (SEQ ID NO:10284), TGGCGGTTGTTGTACGTTTCGGTCGGGA (SEQ ID NO:10285), CGGTTGTTGTACGTTTCGGTCGGAGGA (SEQ ID NO:10286)
Target1092	chr10:108924027-108924039	GGTCGGAGCGGTAGTAATCGTTATGGA (SEQ ID NO:10287), GGTCGGAGCGGTAGTAATCGTTATGGA (SEQ ID NO:10288), GGTCGGAGCGGTAGTAATCGTTATGGA (SEQ ID NO:10289), GGTCGGAGCGGTAGTAATCGTTATGGA (SEQ ID NO:10290), GTCGGAGCGGTAGTAATCGTTATGGA (SEQ ID NO:10291), GGGGCGGTTAGGTAGGGTTTTGTTACGT (SEQ ID NO:10292), GGGGCGGTTAGGTAGGGTTTTGTTACG (SEQ ID NO:10293), AGGGGCGGTTAGGTAGGGTTTTGTTACG (SEQ ID NO:10294), AGGGGCGGTTAGGTAGGGTTTTGTTACG (SEQ ID NO:10295), GGGGCGGTTAGGTAGGGTTTTGTTACG (SEQ ID NO:10296)
Target1093	chr10:108924149-108924166	GGGGTAGGGCGTGGTAGGAGTTTTGT (SEQ ID NO:10297), AGGGGTAGGGCGTGGTAGGAGTTTTG (SEQ ID NO:10298), GAGGGGTAGGGCGTGGTAGGAGTTTT (SEQ ID NO:10299), CGAGGGGTAGGGCGTGGTAGGAGTTTT (SEQ ID NO:10300), GAGGGGTAGGGCGTGGTAGGAGTTTTG (SEQ ID NO:10301), CGTCGGCGCGGTTTTTAAGTTTCGGTT (SEQ ID NO:10302), TCGGCGGCGGTTTTTAAGTTTCGGTTGA (SEQ ID NO:10303), GCGGCGGTTTTTAAGTTTCGGTTGAGCG (SEQ ID NO:10304), GCGGCGGTTTTTAAGTTTCGGTTGAGC (SEQ ID NO:10305), GTCGGCGGCGGTTTTTAAGTTTCGGTTG (SEQ ID NO:10306)
Target1094	chr10:108924185-108924347	GGGGTAGGGCGTGGTAGGAGTTTTGT (SEQ ID NO:10307), AGGGGTAGGGCGTGGTAGGAGTTTTG (SEQ ID NO:10308), GCGTTTAGTCGGGTTTGGGAGTCGTCG (SEQ ID NO:10309), GAGGGGTAGGGCGTGGTAGGAGTTTT (SEQ ID NO:10310), CGAGGGGTAGGGCGTGGTAGGAGTTTT (SEQ ID NO:10311), CGCGCGTAATTTGGATGGAGTTGGGG (SEQ ID NO:10312), CGTCGGCGCGGTTTTTAAGTTTCGGTT (SEQ ID NO:10313), GGATGGAGTTGGGGTTTTGAGCGTCGG (SEQ ID NO:10314), GCGGCGTAATTTGGATGGAGTTGGGGT (SEQ ID NO:10315), TCGGCGGCGGTTTTTAAGTTTCGGTTGA (SEQ ID NO:10316)
Target1095	chr10:110671872-110671904	GTAGGAGTTTCGGCGTAGGTGGTGGGTT (SEQ ID NO:10317), AGGAGTTTCGGCGTAGGTGGTGGGTTA (SEQ ID NO:10318), TAGGAGTTTCGGCGTAGGTGGTGGGTTT (SEQ ID NO:10319), GTAGGAGTTTCGGCGTAGGTGGTGGGTTT (SEQ ID NO:10320), CGTAGGAGTTTCGGCGTAGGTGGTGGG (SEQ ID NO:10321), TGGGAAAGGTTGGTAGATAGCGCGTT (SEQ ID NO:10322), TTGGGAAAGGTTGGTAGATAGCGGCGT (SEQ ID NO:10323), GTTGGGAAAGGTTGGTAGATAGCGGCGT (SEQ ID NO:10324), GTTGGGAAAGGTTGGTAGATAGCGGCG (SEQ ID NO:10325), AGTTGGGAAAGGTTGGTAGATAGCGGCG (SEQ ID NO:10326)

Figure 5 (Table 1)

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Target1096	chr10:110672060-110672089	GCGAAGATAGTTTTAGGGTGGGCGGCG (SEQ ID NO:10327), CGAAGATAGTTTTAGGGTGGGCGGCGG (SEQ ID NO:10328), AGCGAAGATAGTTTTAGGGTGGGCGGCG (SEQ ID NO:10329), CGAAGATAGTTTTAGGGTGGGCGGCGGT (SEQ ID NO:10330), AAGATAGTTTTAGGGTGGGCGGCGGTC (SEQ ID NO:10331), CGGTGGTTGTGGTTTTGTTTTGTTAGCGG (SEQ ID NO:10332), CGGTGGTTGTGGTTTTGTTTTGTTAGCGGT (SEQ ID NO:10333), TCGGTGGTTGTGGTTTTGTTTTGTTAGCGG (SEQ ID NO:10334), TCGGTGGTTGTGGTTTTGTTTTGTTAGCGGT (SEQ ID NO:10335), CGGTGGTTGTGGTTTTGTTTTGTTAGCGG (SEQ ID NO:10336)
Target1097	chr10:110672251-110672267	GGGGTTGCGGGTTGGTTGTTGGGTAG (SEQ ID NO:10337), TAGTCGTTGTGGGGATTTCGGTTGCGC (SEQ ID NO:10338), GGTTGCGGGTTGGTTGTTGGGTAGT (SEQ ID NO:10339), AGTCGTTGTGGGGATTTCGGTTGCGC (SEQ ID NO:10340), GGGGGTTGCGGGTTGGTTGTTGGGTA (SEQ ID NO:10341), AATGTGGGGTTGGTGCGGGATTAGGT (SEQ ID NO:10342), GGGCGGTTAGTGGGGATAGTGGCGTAG (SEQ ID NO:10343), AGAGAAATGTGGGGTTGGGTGCGGGA (SEQ ID NO:10344), ATGTGGGGTTGGGTGCGGGATTAGGTG (SEQ ID NO:10345), TTGGTAAATTCGGCGGGCGGTTAGTG (SEQ ID NO:10346)
Target1098	chr10:118892211-118892219	ATGTGGGTGGTCGTGGTTGTAGGGACG (SEQ ID NO:10347), AGGGTAAGGAAAGAGGGTGTGCGGTT (SEQ ID NO:10348), CGTAGGGTAAGGAAAGAGGGTGTGCGCG (SEQ ID NO:10349), GGGTAAGGAAAGAGGGTGTGCGGTTT (SEQ ID NO:10350), TGTGGGTGGTCGTGGTTGTAGGGACG (SEQ ID NO:10351), AGTAGTTTCGGAGTTTAGATAGCGTTTTGTGTGA (SEQ ID NO:10352), AGTTTCGAGTTTAGATAGCGTTTTGTGTGATTG (SEQ ID NO:10353), GTTTCGAGTTTAGATAGCGTTTTGTGTGATTGA (SEQ ID NO:10354), AGTTTCGAGTTTAGATAGCGTTTTGTGTGATTGA (SEQ ID NO:10355), CGGAGTTTAGATAGCGTTTTGTGTGATTGATAGGA (SEQ ID NO:10356)
Target1099	chr10:118892390-118892424	AGAGGAGGTTTCGATTATTAGCGGCGT (SEQ ID NO:10357), AGAGGAGGTTTCGATTATTAGCGGCGTT (SEQ ID NO:10358), TGC GTGTAGGAAGGGTTTTGTGAATTCG (SEQ ID NO:10359), AGAGGAGGTTTCGATTATTAGCGGCGTTT (SEQ ID NO:10360), TTGCGTGTAGGAAGGGTTTTGTGAATTCG (SEQ ID NO:10361), GGTTGTCGGCGGTAGTTTGCCTAGTC (SEQ ID NO:10362), TACGGTTTTTAGGCGCGTAGTTTCGG (SEQ ID NO:10363), ACGGTTTTTAGGCGCGTAGTTTCGG (SEQ ID NO:10364), GGTTGTCGGCGGTAGTTTGCCTAGT (SEQ ID NO:10365), TTACGGTTTTTAGGCGCGTAGTTTCGG (SEQ ID NO:10366)
Target1100	chr10:118892484-118892495	TGAATTCGGGTGTTTGGGAGAGGAGGT (SEQ ID NO:10367), TGTGAATTCGGGTGTTTGGGAGAGGAGGT (SEQ ID NO:10368), GTGAATTCGGGTGTTTGGGAGAGGAGGT (SEQ ID NO:10369), TGTGAATTCGGGTGTTTGGGAGAGGAGG (SEQ ID NO:10370), GTGAATTCGGGTGTTTGGGAGAGGAGG (SEQ ID NO:10371), GGTTGTCGGCGGTAGTTTGCCTAGTC (SEQ ID NO:10372), GGTGTCGGCGGTAGTTTGCCTAGT (SEQ ID NO:10373), GTTGTGCGCGGTAGTTTGCCTAGTC (SEQ ID NO:10374), GGTTGTCGCGGTAGTTTGCCTAG (SEQ ID NO:10375), GAGTTGTTCGGGCGGTTGTC (SEQ ID NO:10376)
Target1101	chr10:118892537-118892548	TTTGGGAGGTCGTAGGGTGAAGCGTCG (SEQ ID NO:10377), CGTTTGGGAGGTCGTAGGGTGAAGCGT (SEQ ID NO:10378), ACGCGTTTGGGAGGTCGTAGGGTGAAG (SEQ ID NO:10379), GGAGGTCGTAGGGTGAAGCGTCGGTTG (SEQ ID NO:10380), GCGTCGGTTGCGTAGGTTATCGTCGGT (SEQ ID NO:10381), GAGTTTGTTCGGGCGGTGGTC (SEQ ID NO:10382)
Target1102	chr10:118892581-118892604	TTTGGGAGGTCGTAGGGTGAAGCGTCG (SEQ ID NO:10383), CGTTTGGGAGGTCGTAGGGTGAAGCGT (SEQ ID NO:10384), ACGCGTTTGGGAGGTCGTAGGGTGAAG (SEQ ID NO:10385), GGAGGTCGTAGGGTGAAGCGTCGGTTG (SEQ ID NO:10386), GCGTCGGTTGCGTAGGTTATCGTCGGT (SEQ ID NO:10387), GAGTTTGTTCGGGCGGTGGTT (SEQ ID NO:10388)
Target1103	chr10:119292293-119292301	TTTTAGTTGCGGGTAGGGACGGGCGG (SEQ ID NO:10389), GCGAGTTGGGGTAGAGGATTGCGGGA (SEQ ID NO:10390), GCGGTCGCGAGTTGGGGTAGAGGATT (SEQ ID NO:10391), GGTGCGAGTTGGGGTAGAGGATTGTC (SEQ ID NO:10392), CGGTGCGAGTTGGGGTAGAGGATTG (SEQ ID NO:10393), TAGTTTGGGTGTTTCGATGCGGAGGGGT (SEQ ID NO:10394), TTCGATGCGGAGGGGTTGGTAGAGCG (SEQ ID NO:10395), GGGTGTTCGATGCGGAGGGGTTGGTA (SEQ ID NO:10396), TTTGGGTGTTTCGATGCGGAGGGGTTG (SEQ ID NO:10397), GATGCGGAGGGGTTGGTAGAGCGGAG (SEQ ID NO:10398)
Target1104	chr10:119295770-119295809	TTTGAGAGTGTGGTTTTTGGGACGTTAGC (SEQ ID NO:10399), TTTTGAGAGTGTGGTTTTTGGGACGTTAGC (SEQ ID NO:10400), AGTTTTTGAGAGTGTGGTTTTTGGGACGTT (SEQ ID NO:10401), AAGTTTTTGAGAGTGTGGTTTTTGGGACGT (SEQ ID NO:10402), TTTTGAGAGTGTGGTTTTTGGGACGTTAGC (SEQ ID NO:10403), TGTAAGGCGTTATTTGGGTTTGTAGCGTT (SEQ ID NO:10404), ATGTAAGGCGTTATTTGGGTTTGTAGCGTT (SEQ ID NO:10405), AATGTAAGGCGTTATTTGGGTTTGTAGCGT (SEQ ID NO:10406), AGCGTTTTTGGTTTTTCGTGTTTGAAGTTT (SEQ ID NO:10407), TGTAGCGTTTTTGGTTTTTCGTGTTTGAAGT (SEQ ID NO:10408)

Figure 5 (Table 1)

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Target1105	chr10:119295840-119295872	AGTAGCGTTTTATATTGTCGGGCGAGGA (SEQ ID NO:10409), AAGTAGCGTTTTATATTGTCGGGCGAGGA (SEQ ID NO:10410), AGTAGCGTTTTATATTGTCGGGCGAGGAT (SEQ ID NO:10411), TTTGAGAGTGTGGTTTTTGGGACGTTAGC (SEQ ID NO:10412), AGTAGCGTTTTATATTGTCGGGCGAGGATT (SEQ ID NO:10413), AGCGTTTTTGGTTTTTCGTGTTTGAGGTTT (SEQ ID NO:10414), TGTAGCGTTTTTGGTTTTTCGTGTTTGAGGT (SEQ ID NO:10415), AGCGTTTTTGGTTTTTCGTGTTTGAGGTTT (SEQ ID NO:10416), AGTTCGGTCGGTTTTTAATTTGGAGTTTGGT (SEQ ID NO:10417), GTAGCGTTTTTGGTTTTTCGTGTTTGAGGTT (SEQ ID NO:10418)
Target1106	chr10:119295925-119295948	GCGTTGTAGAGGCGTGGAAGGTGCG (SEQ ID NO:10419), GCGTTGTAGAGGCGTGGAAGGTGCG (SEQ ID NO:10420), AGTAGCGTTTTATATTGTCGGGCGAGGA (SEQ ID NO:10421), AGGTCCGGTCGGGTTATTAGTGGTAGAGA (SEQ ID NO:10422), CGTTGTAGAGGCGTGGAAGGTGCG (SEQ ID NO:10423), AGGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10424), GAGGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10425), GGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10426), AGGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10427), GAGGGTGGGTGGGAGCGTGGTAAGTT (SEQ ID NO:10428)
Target1107	chr10:119295992-119296096	TGTAGAGGCGTGGAAGGTGCGTTTCGT (SEQ ID NO:10429), AGAGGCGTGGAAGGTGCGTTTCGTTC (SEQ ID NO:10430), GCGTGGAAGGTGCGTTTCGTTCGTTC (SEQ ID NO:10431), CGTTGTAGAGGCGTGGAAGGTGCGTTTC (SEQ ID NO:10432), GAGGCGTGGAAGGTGCGTTTCGTTCG (SEQ ID NO:10433), TTTTTCGGGATGGAGGGTGGGTGGGAG (SEQ ID NO:10434), AGGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10435), GAGGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10436), TTTTTCGGGATGGAGGGTGGGTGGGAG (SEQ ID NO:10437), GGGTGGGTGGGAGCGTGGTAAGTTTT (SEQ ID NO:10438)
Target1108	chr10:119296118-119296131	TGGGGGCGATGGGAAGGATTTGTTACGT (SEQ ID NO:10439), GGGGGCGATGGGAAGGATTTGTTACGT (SEQ ID NO:10440), TGGGGGCGATGGGAAGGATTTGTTACG (SEQ ID NO:10441), GGGGGGCGATGGGAAGGATTTGTTACGTT (SEQ ID NO:10442), TTGGGGGCGATGGGAAGGATTTGTTACG (SEQ ID NO:10443), AGACGGTGGTGTAGGAGTTAGGGAAGA (SEQ ID NO:10444), ACGGTGGTGTAGGAGTTAGGGAAGAAGT (SEQ ID NO:10445), AGACGGTGGTGTAGGAGTTAGGGAAGAA (SEQ ID NO:10446), GACGGTGGTGTAGGAGTTAGGGAAGAAGT (SEQ ID NO:10447), GACGGTGGTGTAGGAGTTAGGGAAGAAG (SEQ ID NO:10448)
Target1109	chr10:119296170-119296211	CGGGTTGGCGTTTCAATTAGAGAGTGT (SEQ ID NO:10449), TCGGGTTGGCGTTTCAATTAGAGAGTGT (SEQ ID NO:10450), TCGGGTTGGCGTTTCAATTAGAGAGTG (SEQ ID NO:10451), CGGGTTGGCGTTTCAATTAGAGAGTGTA (SEQ ID NO:10452), TCGGGTTGGCGTTTCAATTAGAGAGTGTA (SEQ ID NO:10453), AGTTTAGGATCGAGTAAGGATTGGGAGGGA (SEQ ID NO:10454), AAGTTTAGGATCGAGTAAGGATTGGGAGGGA (SEQ ID NO:10455), CGAGTAAGGATTGGGAGGGATAGATAGACGT (SEQ ID NO:10456), AGTTTAGGATCGAGTAAGGATTGGGAGGGAT (SEQ ID NO:10457), TCGAGTAAGGATTGGGAGGGATAGATAGACG (SEQ ID NO:10458)
Target1110	chr10:119296327-119296362	TAGCGTGTGTGTGGTGAGGGAGTGACG (SEQ ID NO:10459), CGTGTGTGTGGTGAGGGAGTGACGAGT (SEQ ID NO:10460), GCGTGTGTGTGGTGAGGGAGTGACGAG (SEQ ID NO:10461), CGTGTGTGTGTGGTGAGGGAGTGACGAGTT (SEQ ID NO:10462), TCGAGATAGCGTGTGTGTGGTGAGGGA (SEQ ID NO:10463), GCGGGTGGTTGTAGGGGCGTTGTTTT (SEQ ID NO:10464), GCGGGTGGTTGTAGGGGCGTTGTTTT (SEQ ID NO:10465), GCGGGTGGTTGTAGGGGCGTTGTTTT (SEQ ID NO:10466), CGGGTGGTTGTAGGGGCGTTGTTTT (SEQ ID NO:10467), GCGGGTGGTTGTAGGGGCGTTGTTT (SEQ ID NO:10468)
Target1111	chr10:119296414-119296468	TAGCGTGTGTGTGGTGAGGGAGTGACG (SEQ ID NO:10469), CGTGTGTGTGGTGAGGGAGTGACGAGT (SEQ ID NO:10470), GGAGACGTAGAGGTTTCGCGCGGATGTT (SEQ ID NO:10471), AGGTTTCGCGCGGATGTTTAGAGGAGGA (SEQ ID NO:10472), GCGTGTGTGTGGTGAGGGAGTGACGAG (SEQ ID NO:10473), TTGTTTTGGGTTTCGCGGGTGGTTGT (SEQ ID NO:10474), GCGGGTGGTTGTAGGGGCGTTGTTTT (SEQ ID NO:10475), TTTTGGGTTTCGCGGGTGGTTGTAGGG (SEQ ID NO:10476), TGGTTTTGGGTTTCGCGGGTGGTTGTA (SEQ ID NO:10477), TTTGGGTTTCGCGGGTGGTTGTAGGGG (SEQ ID NO:10478)
Target1112	chr10:119296552-119296567	AGGTTTCGCGCGGATGTTTAGAGGAGGA (SEQ ID NO:10479), GAGGTTTCGCGCGGATGTTTAGAGGAGG (SEQ ID NO:10480), GAGACGTAGAGGTTTCGCGCGGATGTTT (SEQ ID NO:10481), AGAGGTTTCGCGCGGATGTTTAGAGGAGG (SEQ ID NO:10482), GAGGTTTCGCGCGGATGTTTAGAGGAGGA (SEQ ID NO:10483), TCGGTGATGTGGGTCGTGGAATTCGT (SEQ ID NO:10484), CGGTGATGTGGGTCGTGGAATTCGT (SEQ ID NO:10485), TCGGTGATGTGGGTCGTGGAATTCGT (SEQ ID NO:10486), TTCGGTGTGTGGGTCGTGGAATTCGT (SEQ ID NO:10487), TTCGGTGTGTGGGTCGTGGAATTCG (SEQ ID NO:10488)
Target1113	chr10:123922876-123923563	GCGTTGGGGTTGTTTCGGCGATGATGAT (SEQ ID NO:10489), GGTCGGGGTAGAGGGAGGGTTTTCTGTT (SEQ ID NO:10490), AGGGGTCGGGGTAGAGGGAGGGTTTTCT (SEQ ID NO:10491), GAGGGGTCGGGGTAGAGGGAGGGTTTTCT (SEQ ID NO:10492), TACGTCGGTTATATTCGGGCGCGCGTC (SEQ ID NO:10493), AGGGGAGTAGTTTCGGGATTCGTGGC (SEQ ID NO:10494), CGGGGCGGTTTCGGGCGGAGTATTATA (SEQ ID NO:10495), GTTTTGTTCGGGCGTGGGATGAG (SEQ ID NO:10496), GGTTGGGGTGGGAGGGCGAAGATTTT (SEQ ID NO:10497), GTTGGGGTGGGAGGGCGAAGATTTT (SEQ ID NO:10498)

Figure 5 (Table 1)

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Target1114	chr10:123923578-123923871	TTCGGGGAGGAGGAGAGGATGTTCCGGG (SEQ ID NO:10499), CGGGGAGGAGGAGAGGATGTTCCGGGTT (SEQ ID NO:10500), GGGGAGGAGGAGAGGATGTTCCGGGTTT (SEQ ID NO:10501), TTTCCGGGAGGAGGAGAGGATGTTCCGG (SEQ ID NO:10502), TCGGGGAGGAGGAGAGGATGTTCCGGG (SEQ ID NO:10503), CGGGGGTGTAGAGGAAAGATGTTGACGG (SEQ ID NO:10504), CGGGGGTGTAGAGGAAAGATGTTGACGGT (SEQ ID NO:10505), TCGGGGGTGTAGAGGAAAGATGTTGACGG (SEQ ID NO:10506), TGTGTCCGGGGTGTAGAGGAAAGATGT (SEQ ID NO:10507), CGGGGGTGTAGAGGAAAGATGTTGACG (SEQ ID NO:10508)
Target1115	chr10:123923887-123924221	GCGTTTGTGGTTGGGTAGATGGCGTGG (SEQ ID NO:10509), TCGTTTGTGGTTGGGTAGATGGCGTG (SEQ ID NO:10510), CGTTTGTGGTTGGGTAGATGGCGTGGT (SEQ ID NO:10511), TTGCGTTTGTGGTTGGGTAGATGGCGT (SEQ ID NO:10512), TTCGGGTAGTTGCGTTTGTGGTTGGGT (SEQ ID NO:10513), AGTGGGGTAGGTGAGGTTGGGAGGT (SEQ ID NO:10514), AAGTGGGGTAGGTGAGGTTGGGAGGT (SEQ ID NO:10515), GTGGGGTAGGTGAGGTTGGGAGGTTT (SEQ ID NO:10516), AAAGTGGGGTAGGTGAGGTTGGGAGG (SEQ ID NO:10517), AGTGGGGTAGGTGAGGTTGGGAGGT (SEQ ID NO:10518)
Target1116	chr10:124905635-124905831	GTTGCGACGTGTTTAGGAGTTTGCCT (SEQ ID NO:10519), AGCGGGGTGGTTGGTATTGTTTTTCGA (SEQ ID NO:10520), GCGGGGTGGTTGGTATTGTTTTTCGAGT (SEQ ID NO:10521), GCGGGGTGGTTGGTATTGTTTTTCGAG (SEQ ID NO:10522), AGCGGGGTGGTTGGTATTGTTTTTCGAGT (SEQ ID NO:10523), TTCGGGAGGTTAGCGAGGGGTAGGTGT (SEQ ID NO:10524), GTTCGGGAGGTTAGCGAGGGGTAGGTG (SEQ ID NO:10525), TCGGGAGGTTAGCGAGGGGTAGGTGTC (SEQ ID NO:10526), TCGGGAGGTTAGCGAGGGGTAGGTGT (SEQ ID NO:10527), CGGGAGGTTAGCGAGGGGTAGGTGTC (SEQ ID NO:10528)
Target1117	chr10:124905914-124905953	GTCGTTGAGTTTTGAAGAGGTTAATGCGGT (SEQ ID NO:10529), TCGTTGAGTTTTGAAGAGGTTAATGCGGTG (SEQ ID NO:10530), TGTCGTTGAGTTTTGAAGAGGTTAATGCGG (SEQ ID NO:10531), TGTCGTTGAGTTTTGAAGAGGTTAATGCGGT (SEQ ID NO:10532), CGTTGAGTTTTGAAGAGGTTAATGCGGTGAC (SEQ ID NO:10533), TTCGGGAGGTTAGCGAGGGGTAGGTGT (SEQ ID NO:10534), GTTCGGGAGGTTAGCGAGGGGTAGGTG (SEQ ID NO:10535), TCGGGAGGTTAGCGAGGGGTAGGTGTC (SEQ ID NO:10536), GGTTCGGGAGGTTAGCGAGGGGTAGGT (SEQ ID NO:10537), TCGGGAGGTTAGCGAGGGGTAGGTGT (SEQ ID NO:10538)
Target1118	chr10:124905957-124905981	TTTCGTTGGTTTTTCGGGTCGTTGCGC (SEQ ID NO:10539), TTTTCGTTGGTTTTTCGGGTCGTTGCGC (SEQ ID NO:10540), TTCGTTGGTTTTTCGGGTCGTTGCGC (SEQ ID NO:10541), TTTTCGTTGGTTTTTCGGGTCGTTGCGC (SEQ ID NO:10542), TTTTCGTTGGTTTTTCGGGTCGTTGCGC (SEQ ID NO:10543), GTAGTCGGGGTAGGGGTAGGCGAGGG (SEQ ID NO:10544), CGTAGTCGGGGTAGGGGTAGGCGAGG (SEQ ID NO:10545), TAGTCGGGGTAGGGGTAGGCGAGGG (SEQ ID NO:10546), GTAGTCGGGGTAGGGGTAGGCGAGGG (SEQ ID NO:10547), CGTAGTCGGGGTAGGGGTAGGCGAGGG (SEQ ID NO:10548)
Target1119	chr10:124906003-124906042	CGTTTGTTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10549), GTTTGTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10550), GTTTGTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10551), TTTGTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10552), TTGTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10553), TGGGTTAATTGATTAGGAGTCGGTCGCGT (SEQ ID NO:10554), GGGTTAATTGATTAGGAGTCGGTCGCGT (SEQ ID NO:10555), TGGGTTAATTGATTAGGAGTCGGTCGCG (SEQ ID NO:10556), ATGGGTTAATTGATTAGGAGTCGGTCGCG (SEQ ID NO:10557), ATGGGTTAATTGATTAGGAGTCGGTCGCGT (SEQ ID NO:10558)
Target1120	chr10:124906109-124906152	CGTTTGTTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10559), TCGTTTGTTTTTGTTTCGTTGCGCGG (SEQ ID NO:10560), TCGTTTGTTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10561), CGTTTGTTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10562), TCGTTTGTTTTTGTTTCGTTGCGCGGTC (SEQ ID NO:10563), AGGGTGTTTTTTAAGTGTAGTTAAGGGTGAGTGG (SEQ ID NO:10564), GGGTGTTTTTTAAGTGTAGTTAAGGGTGAGTGGA (SEQ ID NO:10565), AGGGTGTTTTTTAAGTGTAGTTAAGGGTGAGTGGA (SEQ ID NO:10566), GGGTGTTTTTTAAGTGTAGTTAAGGGTGAGTGGA (SEQ ID NO:10567), AGGGTGTTTTTTAAGTGTAGTTAAGGGTGAGTGGA (SEQ ID NO:10568)
Target1121	chr10:124910456-124910790	AGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10569), GAGGGAATTGGGCGCGGTGAGGTAGTT (SEQ ID NO:10570), GAGAGGGAATTGGGCGCGGTGAGGTAG (SEQ ID NO:10571), GGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10572), GGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10573), TTGGAGAGGAAGTGC CGGTATAGGGT (SEQ ID NO:10574), TGGAGAGGAAGTGC CGGTATAGGGT (SEQ ID NO:10575), TTTGTTATCGGTCGGGTAGTTGGGCGT (SEQ ID NO:10576), TTTGGAGAGGAAGTGC CGGTATAGGGT (SEQ ID NO:10577), TTTGGAGAGGAAGTGC CGGTATAGGGT (SEQ ID NO:10578)
Target1122	chr10:124910846-124910976	AGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10579), GAGGGAATTGGGCGCGGTGAGGTAGTT (SEQ ID NO:10580), GAGAGGGAATTGGGCGCGGTGAGGTAG (SEQ ID NO:10581), GGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10582), GGGGAATTGGGCGCGGTGAGGTAGTTT (SEQ ID NO:10583), GCGGTCGTAGGTGTTAGGGCGAGGAAG (SEQ ID NO:10584), CGGTCGTAGGTGTTAGGGCGAGGAAGT (SEQ ID NO:10585), GCGGTCGTAGGTGTTAGGGCGAGGAAGT (SEQ ID NO:10586), CGGTCGTAGGTGTTAGGGCGAGGAAGT (SEQ ID NO:10587), GCGGTCGTAGGTGTTAGGTGATTAGT (SEQ ID NO:10588)

Figure 5 (Table 1)

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Target1123	chr10:124910989-124911104	GGGGTTGGGAGGGCGTTGTATCGAGAG (SEQ ID NO:10589), CGTAGGGGTTGGGAGGGCGTTGTATCG (SEQ ID NO:10590), GTAGGGGTTGGGAGGGCGTTGTATCGA (SEQ ID NO:10591), TAGGGGTTGGGAGGGCGTTGTATCGAG (SEQ ID NO:10592), GCGTAGGGGTTGGGAGGGCGTTGTATC (SEQ ID NO:10593), AGGTCGGAGGAGTTCGTTTGTAGGTGGT (SEQ ID NO:10594), GGTGCGAGGAGTTCGTTTGTAGGTGGTGT (SEQ ID NO:10595), GGTGCGAGGAGTTCGTTTGTAGGTGGTGT (SEQ ID NO:10596), AGGTCGGAGGAGTTCGTTTGTAGGTGGTGT (SEQ ID NO:10597), AGGTCGGAGGAGTTCGTTTGTAGGTGGTGT (SEQ ID NO:10598)
Target1124	chr10:126135810-126135833	TTTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10599), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10600), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10601), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10602), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10603)
Target1125	chr10:126135868-126135881	AGATTTTGTATTTTGGTGGTTCGCGAGGA (SEQ ID NO:10604), CGGTAGATTTTGTATTTTGGTGGTTCGCG (SEQ ID NO:10605), ACGGTAGATTTTGTATTTTGGTGGTTCGCG (SEQ ID NO:10606), CGGTAGATTTTGTATTTTGGTGGTTCGCGA (SEQ ID NO:10607), ACGGTAGATTTTGTATTTTGGTGGTTCGCGA (SEQ ID NO:10608), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10609), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10610), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10611), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10612), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10613)
Target1126	chr10:126135895-126135908	CGGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10614), GCGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10615), GCGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10616), CGGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10617), GCGCGGGTAGGGGTGCGTTGATATT (SEQ ID NO:10618), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10619), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10620), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10621), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10622), TTTTATCGGGGGGTAGGTGCGCGG (SEQ ID NO:10623)
Target1127	chr10:126135933-126135947	CGGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10624), GCGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10625), GCGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10626), CGGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10627), GCGCGGGTAGGGGTGCGTTGATATT (SEQ ID NO:10628), TCGCGGGATTACGAGGGATTGGTATC (SEQ ID NO:10629), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10630), GGGAGTTTTTCGCGTCGTTTTTGGG (SEQ ID NO:10631), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10632), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10633)
Target1128	chr10:126135960-126135972	CGGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10634), GCGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10635), GCGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10636), CGGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10637), GCGCGGGTAGGGGTGCGTTGATATT (SEQ ID NO:10638), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10639), GGGAGTTTTTCGCGTCGTTTTTGGG (SEQ ID NO:10640), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10641), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10642), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10643)
Target1129	chr10:126135993-126136008	CGGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10644), GCGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10645), TTCGCGAAGAGGGGTTAGGGGGTTTC (SEQ ID NO:10646), GCGCGGGTAGGGGTGCGTTGATATTCG (SEQ ID NO:10647), CGGCGGGTAGGGGTGCGTTGATATTC (SEQ ID NO:10648), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10649), GGGAGTTTTTCGCGTCGTTTTTGGG (SEQ ID NO:10650), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10651), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10652), GGGAGTTTTTCGCGTCGTTTTTGGGT (SEQ ID NO:10653)
Target1130	chr10:126136046-126136052	CGGGGCGTAGAAGGGGGTTAGGTAGGA (SEQ ID NO:10654), GGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10655), GCGGGGCGTAGAAGGGGGTTAGGTAG (SEQ ID NO:10656), GGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10657), AGGGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10658)
Target1131	chr10:126136069-126136119	CGGGGCGTAGAAGGGGGTTAGGTAGGA (SEQ ID NO:10659), GGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10660), GCGGGGCGTAGAAGGGGGTTAGGTAG (SEQ ID NO:10661), GGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10662), AGGGGGTTTCGGATTATAGACGCGGGG (SEQ ID NO:10663), TAGGTGGGGGGTGGCGGTTTTAGTTA (SEQ ID NO:10664), GCGGTTTCGGGGGGTAGTTTTGGTTTT (SEQ ID NO:10665), AGGTGGGGGGTGGCGGTTTTAGTTAG (SEQ ID NO:10666), GTAGGTGGGGGGTGGCGGTTTTAGTT (SEQ ID NO:10667), TAGGTGGGGGGTGGCGGTTTTAGTTAG (SEQ ID NO:10668)
Target1132	chr10:126136120-126136163	CGGGGCGTAGAAGGGGGTTAGGTAGGA (SEQ ID NO:10669), GCGGACGGGAAGAGGATTTGGTGGC (SEQ ID NO:10670), TGGTCGCGGAGTAGAGGGGAAAGTTT (SEQ ID NO:10671), TTGGTCGCGGAGTAGGAGGGGAAAGTT (SEQ ID NO:10672), ATTGGTCGCGGAGTAGGAGGGGAAAGT (SEQ ID NO:10673), TAGGTGGGGGGTGGCGGTTTTAGTTA (SEQ ID NO:10674), GCGGTTTCGGGGGGTAGTTTTGGTTTT (SEQ ID NO:10675), AGGTGGGGGGTGGCGGTTTTAGTTAG (SEQ ID NO:10676), GTAGGTGGGGGGTGGCGGTTTTAGTT (SEQ ID NO:10677), TAGGTGGGGGGTGGCGGTTTTAGTTAG (SEQ ID NO:10678)

Figure 5 (Table 1)

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Target1133	chr10:126136184-126136209	GGCGGACGGGAAGAGGATATTGGTCGC (SEQ ID NO:10679), TGGTCGCGGAGTAGGAGGGGAAAGTTT (SEQ ID NO:10680), TTGGTCGCGGAGTAGGAGGGGAAAGTT (SEQ ID NO:10681), ATTGGTCGCGGAGTAGGAGGGGAAAGT (SEQ ID NO:10682), TCGCGGAGTAGGAGGGGAAAGTTTGA (SEQ ID NO:10683), TAGGTGGGGGGTGGCGCGTTTATAGTTA (SEQ ID NO:10684), AGGTGGGGGGTGGCGCGTTTATAGTTAG (SEQ ID NO:10685), GTAGGTGGGGGGTGGCGCGTTTATAGTT (SEQ ID NO:10686), TAGGTGGGGGGTGGCGCGTTTATAGTTAG (SEQ ID NO:10687), GTAGGTGGGGGGTGGCGCGTTTATAGTTA (SEQ ID NO:10688)
Target1134	chr10:126136211-126136229	TTTTTCGTCGTTTTTGGTTGGGGCGCG (SEQ ID NO:10689), GGCGGACGGGAAGAGGATATTGGTCGC (SEQ ID NO:10690), TGGTCGCGGAGTAGGAGGGGAAAGTTT (SEQ ID NO:10691), TTGGTCGCGGAGTAGGAGGGGAAAGTT (SEQ ID NO:10692), ATTGGTCGCGGAGTAGGAGGGGAAAGT (SEQ ID NO:10693), TAGGTGGGGGGTGGCGCGTTTATAGTTA (SEQ ID NO:10694), AGGTGGGGGGTGGCGCGTTTATAGTTAG (SEQ ID NO:10695), GTAGGTGGGGGGTGGCGCGTTTATAGTT (SEQ ID NO:10696), TAGGTGGGGGGTGGCGCGTTTATAGTTAG (SEQ ID NO:10697), GTAGGTGGGGGGTGGCGCGTTTATAGTTA (SEQ ID NO:10698)
Target1135	chr10:126136244-126136256	TCGTCGTTTTTGGTTGGGGCGCGTTA (SEQ ID NO:10699), TCGTCGTTTTTGGTTGGGGCGCGTTAT (SEQ ID NO:10700), TTTTCGTCGTTTTTGGTTGGGGCGCG (SEQ ID NO:10701), TTTTCGTCGTTTTTGGTTGGGGCGCGTT (SEQ ID NO:10702), TTTTCGTCGTTTTTGGTTGGGGCGCGT (SEQ ID NO:10703), GCGTTATTTGTTAGTGTGCGAGCGTTTG (SEQ ID NO:10704), GCGTTATTTGTTAGTGTGCGAGCGTTTGA (SEQ ID NO:10705), GCGTTATTTGTTAGTGTGCGAGCGTTTGAA (SEQ ID NO:10706), GCGTTATTTGTTAGTGTGCGAGCGTTTGAAT (SEQ ID NO:10707), GCGTTATTTGTTAGTGTGCGAGCGTTTGAATT (SEQ ID NO:10708)
Target1136	chr10:126136316-126136358	TCGTCGTTTTTGGTTGGGGCGCGTTA (SEQ ID NO:10709), TCGTCGTTTTTGGTTGGGGCGCGTTAT (SEQ ID NO:10710), TTTTCGTCGTTTTTGGTTGGGGCGCG (SEQ ID NO:10711), TTTTCGTCGTTTTTGGTTGGGGCGCGTT (SEQ ID NO:10712), TTTTCGTCGTTTTTGGTTGGGGCGCGT (SEQ ID NO:10713), CGTCGGCGTTTGGAGTTTAATTGCGTT (SEQ ID NO:10714), CGTCGGCGTTTGGAGTTTAATTGCGT (SEQ ID NO:10715), CGTCGGCGTTTGGAGTTTAATTGCGTTA (SEQ ID NO:10716), GCGTTATTTGTTAGTGTGCGAGCGTTTG (SEQ ID NO:10717), CGTCGGCGTTTGGAGTTTAATTGCGTTAA (SEQ ID NO:10718)
Target1137	chr10:129534514-129534541	TTATAGCGCGGGGAGTAGGGGAGGTCG (SEQ ID NO:10719), TTTATAGCGCGGGGAGTAGGGGAGGTC (SEQ ID NO:10720), GCGGGGAGTAGGGGAGGTCGAAAGTC (SEQ ID NO:10721), TTTTATAGCGCGGGGAGTAGGGGAGGT (SEQ ID NO:10722), TATAGCGCGGGGAGTAGGGGAGGTCGA (SEQ ID NO:10723), TGTCGTTGCGGGTTGTTGTTAGTTCGGGT (SEQ ID NO:10724), GTCGTTGCGGGTTGTTGTTAGTTCGGGT (SEQ ID NO:10725), TGTCGTTGCGGGTTGTTGTTAGTTCGGG (SEQ ID NO:10726), TCGTTGCGGGTTGTTGTTAGTTCGGGT (SEQ ID NO:10727), GTCGTTGCGGGTTGTTGTTAGTTCGGGT (SEQ ID NO:10728)
Target1138	chr10:129534613-129534710	AGTCGGGTAGTTTGGGGGGTCGGGATA (SEQ ID NO:10729), TTGGGGGGTCGGGATAATTCGGGTTGT (SEQ ID NO:10730), TTATAGCGCGGGGAGTAGGGGAGGTCG (SEQ ID NO:10731), AGTTTGGGGGGTCGGGATAATTCGGGT (SEQ ID NO:10732), GTCGGGTAGTTTGGGGGGTCGGGATAA (SEQ ID NO:10733), GTCGGGGAGTTTCGGGGTTTCGTTAGGT (SEQ ID NO:10734), AGTCGGGGAGTTTCGGGGTTTCGTTAGG (SEQ ID NO:10735), TCGGGGAGTTTCGGGGTTTCGTTAGGTT (SEQ ID NO:10736), GTCGGGGAGTTTCGGGGTTTCGTTAGGTT (SEQ ID NO:10737), AAGTCGGGGAGTTTCGGGGTTTCGTTAGG (SEQ ID NO:10738)
Target1139	chr10:129534807-129534867	TGGCGGGGTTTCGGATTTTCGGTTTG (SEQ ID NO:10739), TTGGCGGGGTTTCGGATTTTCGGTTT (SEQ ID NO:10740), TTTGGCGGGGTTTCGGATTTTCGGTT (SEQ ID NO:10741), TTCGTTGTTTTTCGGGTTGAGGGAGCG (SEQ ID NO:10742), TTGGCGGGGTTTCGGATTTTCGGTTTG (SEQ ID NO:10743), GCGGGGTTGGGTTTGATAGCGGTTTT (SEQ ID NO:10744), GGGTTTGATAGCGGTTTTGGGGTCG (SEQ ID NO:10745), TGGGTTTGATAGCGGTTTTGGGGTCG (SEQ ID NO:10746), CGGGGTTGGGTTTGATAGCGGTTTTGG (SEQ ID NO:10747), GGGTTGGGTTTGATAGCGGTTTTGGGG (SEQ ID NO:10748)
Target1140	chr10:129534960-129534983	CGTTGTTTTTCGGGTTGAGGGAGCGAGG (SEQ ID NO:10749), TCGTTGTTTTTCGGGTTGAGGGAGCGA (SEQ ID NO:10750), TTGTTTTTCGGGTTGAGGGAGCGAGG (SEQ ID NO:10751), CGTTGTTTTTCGGGTTGAGGGAGCGAG (SEQ ID NO:10752), TGTTTTTCGGGTTGAGGGAGCGAGGAT (SEQ ID NO:10753), GGGATTCGGGTTAGGGATAGAGGGCG (SEQ ID NO:10754), GGATTCGGGTTAGGGATAGAGGGCGA (SEQ ID NO:10755), GGGATTCGGGTTAGGGATAGAGGGCGA (SEQ ID NO:10756), TCGTCGGGTTTTTGGGTTATTCGGGA (SEQ ID NO:10757), GGATTCGGGTTAGGGATAGAGGGCGAT (SEQ ID NO:10758)
Target1141	chr10:129535075-129535091	GGGTAATTTAGGGTTTCGGCGAGGCG (SEQ ID NO:10759), CGGGTAATTTAGGGGTTTCGGCGAGGC (SEQ ID NO:10760), TAGGGGTTTCGGCGAGGCGAGTTTTT (SEQ ID NO:10761), TTAGGGGTTTCGGCGAGGCGAGTTTTT (SEQ ID NO:10762), TTTAGGGGTTTCGGCGAGGCGAGTTTTT (SEQ ID NO:10763), GGTTTGGGAGTTTCGTTAATGCGCGG (SEQ ID NO:10764), TGGTTTGGGAGTTTCGTTAATGCGCGG (SEQ ID NO:10765), TGGTTTGGGAGTTTCGTTAATGCGCGG (SEQ ID NO:10766), GGTTTGGGAGTTTCGTTAATGCGCGG (SEQ ID NO:10767), GTGGTTTGGGAGTTTCGTTAATGCGCGG (SEQ ID NO:10768)

Figure 5 (Table 1)

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Target1142	chr10:130085065-130085094	CGTAGGGTGTAAATTCGGACGCGTTTTTC (SEQ ID NO:10769), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10770), GTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10771), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10772), TTGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10773), ATGGGGTGGGCGTTAGTGTAGGTTGGG (SEQ ID NO:10774), GTGTAGGTTGGGGGTGTGGTTGTTGCG (SEQ ID NO:10775), TGGGCGTTAGTGTAGGTTGGGGGTGTG (SEQ ID NO:10776), GGCCTTAGTGTAGGTTGGGGGTGTGTT (SEQ ID NO:10777), GTGGGCGTTAGTGTAGGTTGGGGGTGT (SEQ ID NO:10778)
Target1143	chr10:130085140-130085149	CGTAGGGTGTAAATTCGGACGCGTTTTTC (SEQ ID NO:10779), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10780), GTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10781), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10782), TTGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10783), TAGGGAGGGCGTTTTTGGTCGGGTTGT (SEQ ID NO:10784), GTAGGGAGGGCGTTTTTGGTCGGGTTG (SEQ ID NO:10785), GGTAGGGAGGGCGTTTTTGGTCGGGTT (SEQ ID NO:10786), CGTTTTTGGTCGGGTTGTGCGTTGGTC (SEQ ID NO:10787), GCGTTTTTGGTCGGGTTGTGCGTTGGT (SEQ ID NO:10788)
Target1144	chr10:130085154-130085179	CGTAGGGTGTAAATTCGGACGCGTTTTTC (SEQ ID NO:10789), GGGTAGGGAGCGCGTTTTTATCG (SEQ ID NO:10790), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10791), GTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10792), TGTTATTTTCGGGGAAGGTTACGTAGGGTGT (SEQ ID NO:10793), TAGGGAGGGCGTTTTTGGTCGGGTTGT (SEQ ID NO:10794), GTAGGGAGGGCGTTTTTGGTCGGGTTG (SEQ ID NO:10795), GATTAAGGGTCGGCGCGGTAGGGAG (SEQ ID NO:10796), GGTAGGGAGGGCGTTTTTGGTCGGGTT (SEQ ID NO:10797), CGTTTTTGGTCGGGTTGTGCGTTGGTC (SEQ ID NO:10798)
Target1145	chr10:130085199-130085219	GGTAGGGAGCGCGTTTTTATCGGTT (SEQ ID NO:10799), GGGTAGGGAGCGCGTTTTTATCGGT (SEQ ID NO:10800), GGGTAGGGAGCGCGTTTTTATCGG (SEQ ID NO:10801), TAGGGAGCGCGTTTTTATCGTTGA (SEQ ID NO:10802), GGTAGGGAGCGCGTTTTTATCGGTTG (SEQ ID NO:10803), ATAGCGTTGGTTGTGGTTGCGGGTCG (SEQ ID NO:10804), TAGGGAGGGCGTTTTTGGTCGGGTTGT (SEQ ID NO:10805), GTAGGGAGGGCGTTTTTGGTCGGGTTG (SEQ ID NO:10806), GATTAAGGGTCGGCGCGGTAGGGAG (SEQ ID NO:10807), GGTAGGGAGGGCGTTTTTGGTCGGGTT (SEQ ID NO:10808)
Target1146	chr10:130085262-130085296	GGTAGGGAGCGCGTTTTTATCGGTT (SEQ ID NO:10809), GGGTAGGGAGCGCGTTTTTATCGGT (SEQ ID NO:10810), GGGTAGGGAGCGCGTTTTTATCGG (SEQ ID NO:10811), TAGGGAGCGCGTTTTTATCGTTGA (SEQ ID NO:10812), GGTAGGGAGCGCGTTTTTATCGGTTG (SEQ ID NO:10813), ATAGCGTTGGTTGTGGTTGCGGGTCG (SEQ ID NO:10814), TAGCGTTGGTTGTGGTTGCGGGTCG (SEQ ID NO:10815), GTCGGTCGGTCGGTTTTGATGTGCG (SEQ ID NO:10816), TATAGCGTTGGTTGTGGTTGCGGGTCG (SEQ ID NO:10817), GCGGTTTCGGGATTTCGTCGTTGAG (SEQ ID NO:10818)
Target1147	chr10:130085311-130085357	GTTAGCGTTGTGTTGGGTAGGTGGCGG (SEQ ID NO:10819), TTAGCGTTGTGTTGGGTAGGTGGCGGT (SEQ ID NO:10820), TAGCGTTGTGTTGGGTAGGTGGCGGTA (SEQ ID NO:10821), AGCGTTGTGTTGGGTAGGTGGCGGTAG (SEQ ID NO:10822), TAGCGTTGTGTTGGGTAGGTGGCGGTAG (SEQ ID NO:10823), GTCGGTCGGTCGGTTTTGATGTGCG (SEQ ID NO:10824), GCGGTTTCGGGATTTCGTCGTTGAG (SEQ ID NO:10825), GTCGGTCGGTCGGTTTTGATGTGCGG (SEQ ID NO:10826), GCGGTTTCGGGATTTCGTCGTTGA (SEQ ID NO:10827), TCGGTCGGTCGGTTTTGATGTGCGG (SEQ ID NO:10828)
Target1148	chr10:130085373-130085381	GTTAGCGTTGTGTTGGGTAGGTGGCGG (SEQ ID NO:10829), TTAGCGTTGTGTTGGGTAGGTGGCGGT (SEQ ID NO:10830), TAGCGTTGTGTTGGGTAGGTGGCGGTA (SEQ ID NO:10831), AGCGTTGTGTTGGGTAGGTGGCGGTAG (SEQ ID NO:10832), AGTTAGCGTTGTGTTGGGTAGGTGGCG (SEQ ID NO:10833), GTCGGTCGGTCGGTTTTGATGTGCG (SEQ ID NO:10834), GTCGGTCGGTCGGTTTTGATGTGCGG (SEQ ID NO:10835), TCGGTCGGTCGGTTTTGATGTGCGG (SEQ ID NO:10836), TCGGTCGGTCGGTTTTGATGTGCGG (SEQ ID NO:10837), GTCGGTCGGTTTTGATGTGCGGCGTG (SEQ ID NO:10838)
Target1149	chr10:130732658-130732844	GTGTTTTTGGTTTTTGTGACGTTGGTTGAGA (SEQ ID NO:10839), TGTGTTTTTGGTTTTTGTGACGTTGGTTGAGA (SEQ ID NO:10840), GGATTGTGTTTTTGGTTTTTGTGACGTTGGTT (SEQ ID NO:10841), TGGATTGTGTTTTTGGTTTTTGTGACGTTGGTT (SEQ ID NO:10842), TGTTTTTGGTTTTTGTGACGTTGGTTGAGAAA (SEQ ID NO:10843), GAGTGTATGTGGGTCGTGGAGGGGGA (SEQ ID NO:10844), GGAGTGTATGTGGGTCGTGGAGGGGGA (SEQ ID NO:10845), AGGAGTGTATGTGGGTCGTGGAGGGGG (SEQ ID NO:10846), AGTGTATGTGGTCGTGGAGGGGAAA (SEQ ID NO:10847), GGAGTGTATGTGGGTCGTGGAGGGGG (SEQ ID NO:10848)
Target1150	chr10:131213563-131213642	AGGTTAACGTCGGGAAAAGTTCGGGGT (SEQ ID NO:10849), GGTTAACGTCGGGAAAAGTTCGGGGT (SEQ ID NO:10850), AGGTTAACGTCGGGAAAAGTTCGGGGT (SEQ ID NO:10851), AAGGTTAACGTCGGGAAAAGTTCGGGGT (SEQ ID NO:10852), AAGGTTAACGTCGGGAAAAGTTCGGGGT (SEQ ID NO:10853), TTGGAGTGAATTTCGGGAGGTTTCGGA (SEQ ID NO:10854), TGGAGTGAATTTCGGGAGGTTTCGGA (SEQ ID NO:10855), ATTGAGTGAATTTCGGGAGGTTTCGG (SEQ ID NO:10856), TTGGAGTGAATTTCGGGAGGTTTCGGA (SEQ ID NO:10857), ATTGAGTGAATTTCGGGAGGTTTCGGA (SEQ ID NO:10858)

Figure 5 (Table 1)

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Target1151	chr10:131223363-131223405	TGGAAGGGTTGGGTTGTAGGAGGGGTT (SEQ ID NO:10859), TTGGAAGGGTTGGGTTGTAGGAGGGGT (SEQ ID NO:10860), TTGGAAGGGTTGGGTTGTAGGAGGGGTT (SEQ ID NO:10861), TTTGGAAGGGTTGGGTTGTAGGAGGGGT (SEQ ID NO:10862), TTTGGAAGGGTTGGGTTGTAGGAGGGG (SEQ ID NO:10863), CGAGGGCGTTGATAGGTAGAGGAAGTTTCG (SEQ ID NO:10864), AGGGCGTTGATAGGTAGAGGAAGTTTCG (SEQ ID NO:10865), CGAGGGCGTTGATAGGTAGAGGAAGTTT (SEQ ID NO:10866), GGGCGTTGATAGGTAGAGGAAGTTTCGA (SEQ ID NO:10867), AGGGCGTTGATAGGTAGAGGAAGTTTCGA (SEQ ID NO:10868)
Target1152	chr10:131223459-131223546	TCGAAGAGTTGGCGGAGAGAAGCGGTT (SEQ ID NO:10869), CGAAGAGTTGGCGGAGAGAAGCGGTTT (SEQ ID NO:10870), TCGAAGAGTTGGCGGAGAGAAGCGGTT (SEQ ID NO:10871), TCGAAGAGTTGGCGGAGAGAAGCGGT (SEQ ID NO:10872), CGAAGAGTTGGCGGAGAGAAGCGGTTT (SEQ ID NO:10873), TGGAGTGTTGTTGTGGAGGTTTTCGG (SEQ ID NO:10874), TGGAGTGTTGTTGTGGAGGTTTTCGGA (SEQ ID NO:10875), GGAGTGTTGTTGTGGAGGTTTTCGGA (SEQ ID NO:10876), TGGAGTGTTGTTGTGGAGGTTTTCGGAG (SEQ ID NO:10877), GGAGTGTTGTTGTGGAGGTTTTCGGAG (SEQ ID NO:10878)
Target1153	chr10:131756715-131756728	AGCGCGCGTGTATGTGAGAATTGGATT (SEQ ID NO:10879), GCGCGCGTGTATGTGAGAATTGGATTGT (SEQ ID NO:10880), GCGCGCGTGTATGTGAGAATTGGATTG (SEQ ID NO:10881), AGCGCGCGTGTATGTGAGAATTGGATTG (SEQ ID NO:10882), AGCGCGCGTGTATGTGAGAATTGGATTGT (SEQ ID NO:10883)
Target1154	chr10:131756883-131756961	AGGATGCGAGCGTTTGAGAAGGAAGTA (SEQ ID NO:10884), TAGGATGCGAGCGTTTGAGAAGGAAGT (SEQ ID NO:10885), GGATGCGAGCGTTTGAGAAGGAAGTAGT (SEQ ID NO:10886), AGGATGCGAGCGTTTGAGAAGGAAGTAGT (SEQ ID NO:10887), AGGATGCGAGCGTTTGAGAAGGAAGTAG (SEQ ID NO:10888), AGCGGATTAATATGTGGGTCGTGTCGT (SEQ ID NO:10889), TGTGGGTCGTGTCGTGTTAGTGTAGTT (SEQ ID NO:10890), GAGCGGATTAATATGTGGGTCGTGTCGT (SEQ ID NO:10891), AGAGCGGATTAATATGTGGGTCGTGTCGT (SEQ ID NO:10892), AGAGCGGATTAATATGTGGGTCGTGTCG (SEQ ID NO:10893)
Target1155	chr10:131756982-131757005	AGGCGTCGTTATTTCTTTAGTTTCGGG (SEQ ID NO:10894), GCGTCGTTATTTCTTTAGTTTCGGGA (SEQ ID NO:10895), AGGCGTCGTTATTTCTTTAGTTTCGGGA (SEQ ID NO:10896), CGTCGGTCGCGGAGGATTCG (SEQ ID NO:10897), GCGTCGTTATTTCTTTAGTTTCGGGAAGGG (SEQ ID NO:10898)
Target1156	chr10:131757011-131757071	TTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10899), GTTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10900), TTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10901), GGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10902), TGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10903), GCGGGTTGTTTCGGCGTTAGTTGCGTT (SEQ ID NO:10904), CGGGTTGTTTCGGCGTTAGTTGCGTTT (SEQ ID NO:10905), GCGGGTTGTTTCGGCGTTAGTTGCGT (SEQ ID NO:10906), GCGGGTTGTTTCGGCGTTAGTTGCGTTT (SEQ ID NO:10907), CGGGTTGTTTCGGCGTTAGTTGCGTT (SEQ ID NO:10908)
Target1157	chr10:131757107-131757192	TTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10909), GTTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10910), TTGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10911), GGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10912), TGGGGGGAAGGAGCGCGGTTTTTC (SEQ ID NO:10913), GCGGGTTGTTTCGGCGTTAGTTGCGTT (SEQ ID NO:10914), CGGGTTGTTTCGGCGTTAGTTGCGTTT (SEQ ID NO:10915), ACGAGATTATGTGTAGGTGAGCGGCGGG (SEQ ID NO:10916), CGAGATTATGTGTAGGTGAGCGGCGGG (SEQ ID NO:10917), ACGAGATTATGTGTAGGTGAGCGGCGG (SEQ ID NO:10918)
Target1158	chr10:134977981-134978016	TCGTGGGGTTTTCTGGGTTGTTGGTA (SEQ ID NO:10919), GTAGATAGGTGCGTAGGAGGCGGCGTT (SEQ ID NO:10920), TAGATAGGTGCGTAGGAGGCGGCGTTG (SEQ ID NO:10921), TTGTCTGGGGTTTTCTGGGTTGTTGG (SEQ ID NO:10922), CGTGGGGTTTTCTGGGTTGTTGGTAG (SEQ ID NO:10923), GTTAGTCGGGTTGCGGGTTGTCGAG (SEQ ID NO:10924), TTTAGTCGGGTTGCGGGTTGTCGAGG (SEQ ID NO:10925), CGTTTAGTCGGGTTGCGGGTTGTCGA (SEQ ID NO:10926), CGTTTAGTCGGGTTGCGGGTTGTCG (SEQ ID NO:10927), GGTGCGGGTTGTCGAGGTTGTTTC (SEQ ID NO:10928)
Target1159	chr11:280838-280845	TTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10929), ATTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10930), TTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10931), TTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10932), CGAGGTGCGCGGTTTTTCGATAAGGA (SEQ ID NO:10933), GGTTTCGATCGAGTTTGTGTTGCGT (SEQ ID NO:10934), AGGTTTCGATCGAGTTTGTGTTGCG (SEQ ID NO:10935), AGGTTTCGATCGAGTTTGTGTTGCGT (SEQ ID NO:10936), GGTTTCGATCGAGTTTGTGTTGCGTA (SEQ ID NO:10937), AGGTTTCGATCGAGTTTGTGTTGCGTA (SEQ ID NO:10938)
Target1160	chr11:280851-280883	TTTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10939), ATTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10940), TTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10941), TTTTCGGGATGAGAGGAGGTCGAGCG (SEQ ID NO:10942), CGAGGTGCGCGGTTTTTCGATAAGGA (SEQ ID NO:10943), GGTTTCGATCGAGTTTGTGTTGCGT (SEQ ID NO:10944), AGGTTTCGATCGAGTTTGTGTTGCG (SEQ ID NO:10945), AGGTTTCGATCGAGTTTGTGTTGCGT (SEQ ID NO:10946), GGTTTCGATCGAGTTTGTGTTGCGTA (SEQ ID NO:10947), CGTGGTGTTTTGACGTGCGC (SEQ ID NO:10948)

Figure 5 (Table 1)

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Target1161	chr11:281054-281074	AGTTGGAGTTCGGTCGGGATTTGTCGC (SEQ ID NO:10949), TAGTTGGAGTTCGGTCGGGATTTGTCGC (SEQ ID NO:10950), GTTGGAGTTCGGTCGGGATTTGTCGC (SEQ ID NO:10951), GTAGTTGGAGTTCGGTCGGGATTTGTCGC (SEQ ID NO:10952), AGTAGTTGGAGTTCGGTCGGGATTTGTCGC (SEQ ID NO:10953), GCGGGTTAGCGGTATAGATTGCGTAGG (SEQ ID NO:10954), GCGGGTTAGCGGTATAGATTGCGTAGG (SEQ ID NO:10955), GCGGGTTAGCGGTATAGATTGCGTAG (SEQ ID NO:10956), CGGGTTAGCGGTATAGATTGCGTAGG (SEQ ID NO:10957), GCGGGTTAGCGGTATAGATTGCGTAGGTT (SEQ ID NO:10958)
Target1162	chr11:281082-281091	GCGTAATTTGTGTCGTTTGGTTCCGCA (SEQ ID NO:10959), GCGTAATTTGTGTCGTTTGGTTCCGCG (SEQ ID NO:10960)
Target1163	chr11:281325-281342	TTGGAGGACGCGCGGGTGTTTAGGATC (SEQ ID NO:10961), CGGCGTTGGGATATTTTTCGCTGGGGA (SEQ ID NO:10962), GTTGGAGGACGCGCGGGTGTTTAGGAT (SEQ ID NO:10963), GGTGGCGCGCGTTGGGATATTTTTCG (SEQ ID NO:10964), CGGTTGGCGCGCGTTGGGATATTTTTCG (SEQ ID NO:10965), TCGAAGAGGAAGCGCGTGGTGAGTATT (SEQ ID NO:10966), CGCGTGGTGAGTATTAAGTGGTTGTGCGG (SEQ ID NO:10967), GCGCGTGGTGAGTATTAAGTGGTTGTGCG (SEQ ID NO:10968), AGCGCGTGGTGAGTATTAAGTGGTTGTGCG (SEQ ID NO:10969), CGCGTGGTGAGTATTAAGTGGTTGTGCG (SEQ ID NO:10970)
Target1164	chr11:281365-281443	TTGGAGGACGCGCGGGTGTTTAGGATC (SEQ ID NO:10971), CGGCGTTGGGATATTTTTCGCTGGGGA (SEQ ID NO:10972), GTTGGAGGACGCGCGGGTGTTTAGGAT (SEQ ID NO:10973), GGTGGCGCGCGTTGGGATATTTTTCG (SEQ ID NO:10974), CGGTTGGCGCGCGTTGGGATATTTTTCG (SEQ ID NO:10975), CGGTGTTTTCGAGTTTTTGGTTTTTTCGGT (SEQ ID NO:10976), ACGTTTTGAAATTATGTAGTCGAAGTGGCGTT (SEQ ID NO:10977), ACGTTTTGAAATTATGTAGTCGAAGTGGCGTTC (SEQ ID NO:10978), CGGTGTTTTCGAGTTTTTGGTTTTTTCGGTTA (SEQ ID NO:10979), TACGTTTTGAAATTATGTAGTCGAAGTGGCGTTC (SEQ ID NO:10980)
Target1165	chr11:636907-637007	CGGGGGAGGCGCGGTAGAGTTTGAGTTT (SEQ ID NO:10981), GGTGGATTAGGGTGAGCGTTTCGAGGGT (SEQ ID NO:10982), AGGTGGATTAGGGTGAGCGTTTCGAGGG (SEQ ID NO:10983), CGCGCGTTTTCGAGGTTTGGTTGGTTCG (SEQ ID NO:10984), GGTGGATTAGGGTGAGCGTTTCGAGGGTTC (SEQ ID NO:10985), AGAGACGGGAATGAAGCGAGGTGGTGG (SEQ ID NO:10986), AGACGGGAATGAAGCGAGGTGGTGGT (SEQ ID NO:10987), GAGACGGGAATGAAGCGAGGTGGTGGT (SEQ ID NO:10988), ATTCGGTTTCGTCGTCGTTTCGGTTT (SEQ ID NO:10989), TATTCGGTTTCGTCGTCGTTTCGGTTT (SEQ ID NO:10990)
Target1166	chr11:637019-637358	TTGCGGCGCGTTATGGGGAATCGTAGT (SEQ ID NO:10991), GTTCGTTTCGCGCGCTTATGGGGAATC (SEQ ID NO:10992), GTTCGCGCGCGTTATGGGGAATCGTAG (SEQ ID NO:10993), CGCGCGTTTTCGAGGTTTGGTTGGTTCG (SEQ ID NO:10994), TCGGCGCGCTTATGGGGAATCGTAGTA (SEQ ID NO:10995), AGAGACGGGAATGAAGCGAGGTGGTGG (SEQ ID NO:10996), AGACGGGAATGAAGCGAGGTGGTGGT (SEQ ID NO:10997), GAGACGGGAATGAAGCGAGGTGGTGGT (SEQ ID NO:10998), CGTTTCGTTTTCGAGGGGTTTTCGCGG (SEQ ID NO:10999), GGTTCGAGGGGGGTTTTTCGCGCGCTTTT (SEQ ID NO:11000)
Target1167	chr11:1331584-1331601	CGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11001), CGTTGGTTGTATTTTTCGAGTTCGGGCG (SEQ ID NO:11002), TCGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11003), TCGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11004), CGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11005), CGGGATTAAAGTTTCGGGTTTGTTCGT (SEQ ID NO:11006), TCGGGATTAAAGTTTCGGGTTTGTTCGT (SEQ ID NO:11007), TCGGGATTAAAGTTTCGGGTTTGTTCGT (SEQ ID NO:11008), ATCGGGATTAAAGTTTCGGGTTTGTTCGT (SEQ ID NO:11009), ATCGGGATTAAAGTTTCGGGTTTGTTCGT (SEQ ID NO:11010)
Target1168	chr11:1331624-1331657	CGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11011), CGTTGGTTGTATTTTTCGAGTTCGGGCG (SEQ ID NO:11012), TCGTTGGTTGTATTTTTCGAGTTCGGGCG (SEQ ID NO:11013), TCGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11014), CGTTGGTTGTATTTTTCGAGTTCGGGCGT (SEQ ID NO:11015)
Target1169	chr11:1331696-1331858	AGATGTTTTCGCGAGGATAGGCGTTATGT (SEQ ID NO:11016), AGATGTTTTCGCGAGGATAGGCGTTATGTA (SEQ ID NO:11017), TAGATGTTTTCGCGAGGATAGGCGTTATGT (SEQ ID NO:11018), GCGGAGGATAGGCGTTATGTAAGATTGGT (SEQ ID NO:11019), TGCGGAGGATAGGCGTTATGTAAGATTGG (SEQ ID NO:11020), CGGGGGAGACGTGTTGTATTATTTGGGT (SEQ ID NO:11021), CGGGGGAGACGTGTTGTATTATTTGGGT (SEQ ID NO:11022), CGGGGGAGACGTGTTGTATTATTTGGGTTCG (SEQ ID NO:11023), CGGGGGAGACGTGTTGTATTATTTGGGTTCG (SEQ ID NO:11024), GGGGGAGACGTGTTGTATTATTTGGGTTCG (SEQ ID NO:11025)
Target1170	chr11:1332089-1332115	TGGTGTTTTCGATGGGGAGTGAAGAAAGT (SEQ ID NO:11026), ATGGTGTTTTCGATGGGGAGTGAAGAAAGT (SEQ ID NO:11027), TGGTGTTTTCGATGGGGAGTGAAGAAAGT (SEQ ID NO:11028), TGGTGTTTTCGATGGGGAGTGAAGAAAGT (SEQ ID NO:11029), ATGGTGTTTTCGATGGGGAGTGAAGAAAGT (SEQ ID NO:11030)

Figure 5 (Table 1)

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Target1171	chr11:1682929-1682964	AGAGGTGGGGATTTTGTACGGTGGGT (SEQ ID NO:11031), GAGGTGGGGATTTTGTACGGTGGGT (SEQ ID NO:11032), AGAGGTGGGGATTTTGTACGGTGGGT (SEQ ID NO:11033), AGGTGGGGATTTTGTACGGTGGGT (SEQ ID NO:11034), TAGAGGTGGGGATTTTGTACGGTGGGT (SEQ ID NO:11035), TCGGGGAGGGGAGGGTTTTTCGTTGA (SEQ ID NO:11036), TTCGGGGAGGGGAGGGTTTTTCGTTG (SEQ ID NO:11037), TCGGGTGGGTGTAGGTTATTCGGGGA (SEQ ID NO:11038), CGGGGAGGGGAGGGTTTTTCGTTGAT (SEQ ID NO:11039), TTCGGGGAGGGGAGGGTTTTTCGTTGA (SEQ ID NO:11040)
Target1172	chr11:1683135-1683182	GGATAGGTAGGGTGTTCGTTCTGTGGT (SEQ ID NO:11041), AGGATAGGTAGGGTGTTCGTTCTGTGGT (SEQ ID NO:11042), AGGATAGGTAGGGTGTTCGTTCTGTGG (SEQ ID NO:11043), GGATAGGTAGGGTGTTCGTTCTGTGGT (SEQ ID NO:11044), AGGTAGGGTGTTCGTTCTGTGGTTTT (SEQ ID NO:11045), GGGTTAGGTGTGGGCGAGGTTTGGGAT (SEQ ID NO:11046), ATAGTTCGGGTTAGGTGTGGGCGAGG (SEQ ID NO:11047), TTCGGGTTAGGTGTGGGCGAGGTTG (SEQ ID NO:11048), GTTCGGGTTAGGTGTGGGCGAGGTTT (SEQ ID NO:11049), TAGTTCGGGTTAGGTGTGGGCGAGGT (SEQ ID NO:11050)
Target1173	chr11:2114366-2114498	CGGGGAGGAGGTTGTTTGGTAGGTTGG (SEQ ID NO:11051), TCGGGGAGGAGGTTGTTTGGTAGGTTGG (SEQ ID NO:11052), TTGGGGAGGTTGGGAGGTTTTTGGT (SEQ ID NO:11053), TTTGGGGAGGTTGGGAGGTTTTTGGT (SEQ ID NO:11054), TCGGGGAGGAGGTTGTTTGGTAGGTTG (SEQ ID NO:11055), GGCGGCGGTTTTATAGGGAGGTTGGT (SEQ ID NO:11056), AGGCGGCGGTTTTATAGGGAGGTTGGT (SEQ ID NO:11057), AGGCGGCGGTTTTATAGGGAGGTTGG (SEQ ID NO:11058), AGGAGGGTTAGGTGGGACGTGTTGTA (SEQ ID NO:11059), TAGGAGGGGTTAGGTGGGACGTGTTGT (SEQ ID NO:11060)
Target1174	chr11:17497522-17497534	GGGGGGATTTTAGTGAGAGGTACGTACG (SEQ ID NO:11061), GGGGGGATTTTAGTGAGAGGTACGTACGA (SEQ ID NO:11062), GGGGGATTTTAGTGAGAGGTACGTACG (SEQ ID NO:11063), GGGGGATTTTAGTGAGAGGTACGTACGA (SEQ ID NO:11064), GGGGGGATTTTAGTGAGAGGTACGTACGAT (SEQ ID NO:11065), GGCGAGGAGAGGCGAGAGTTAGGGATT (SEQ ID NO:11066), GGCGAGGAGAGGCGAGAGTTAGGGAT (SEQ ID NO:11067), GGCGAGGAGAGGCGAGAGTTAGGGAT (SEQ ID NO:11068), GCGAGGAGAGGCGAGAGTTAGGGATTGG (SEQ ID NO:11069), GGCGAGGAGAGGCGAGAGTTAGGGATTG (SEQ ID NO:11070)
Target1175	chr11:17497671-17497694	AGGGCGCGGGTTTGGGATTGTTAGAGA (SEQ ID NO:11071), CGTTTAGGGCGCGGGTTTGGGATTGTT (SEQ ID NO:11072), TTCGTTTAGGGCGCGGGTTTGGGATTG (SEQ ID NO:11073), AGATATATGTTGCGGTGGGTGGCGGG (SEQ ID NO:11074), TGGGGTGGCGGGGAAGGGAATTTAAG (SEQ ID NO:11075), AGTCGTAGTTGGGTTTAGGGAAGAGGGA (SEQ ID NO:11076), TCGTAGTTGGGTTAGGGAAGAGGGAAGT (SEQ ID NO:11077), AGTCGTAGTTGGGTTAGGGAAGAGGGA (SEQ ID NO:11078), AGGGAAGAGGGAAGTTTGTGTTTGGAGT (SEQ ID NO:11079), GTCGTAGTTGGGTTAGGGAAGAGGGAAGT (SEQ ID NO:11080)
Target1176	chr11:31819945-31820075	AGGGGGTTAGGGAGGGAGGGGGATTTT (SEQ ID NO:11081), AAGGGGGTTAGGGAGGGAGGGGGATTT (SEQ ID NO:11082), AAAGGGGGTTAGGGAGGGAGGGGGATTT (SEQ ID NO:11083), GAAAGGGGGTTAGGGAGGGAGGGGGAT (SEQ ID NO:11084), GTTGGGAAAGGGGGTTAGGGAGGGAGG (SEQ ID NO:11085), TATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11086), GTATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11087), ATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11088), CGAAGTATAGAGTTGTCGGCGTGGGGGT (SEQ ID NO:11089), CGAAGTATAGAGTTGTCGGCGTGGGGG (SEQ ID NO:11090)
Target1177	chr11:31820087-31820149	AGGGGGTTAGGGAGGGAGGGGGATTTT (SEQ ID NO:11091), AAGGGGGTTAGGGAGGGAGGGGGATTT (SEQ ID NO:11092), AAAGGGGGTTAGGGAGGGAGGGGGATTT (SEQ ID NO:11093), GAAAGGGGGTTAGGGAGGGAGGGGGAT (SEQ ID NO:11094), GTTGGGAAAGGGGGTTAGGGAGGGAGG (SEQ ID NO:11095), TATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11096), GTATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11097), ATAGAGTTGTCGGCGTGGGGGTAGCG (SEQ ID NO:11098), CGAAGTATAGAGTTGTCGGCGTGGGGGT (SEQ ID NO:11099), CGAAGTATAGAGTTGTCGGCGTGGGGG (SEQ ID NO:11100)
Target1178	chr11:31820160-31820485	AGGGGCGACGGTTTTGTGTTGAGGTG (SEQ ID NO:11101), GGGGCGACGGTTTTGTGTTGAGGTGA (SEQ ID NO:11102), GGGGCGACGGTTTTGTGTTGAGGTGAT (SEQ ID NO:11103), TAGGGGCGACGGTTTTGTGTTGAGGT (SEQ ID NO:11104), AGGGGCGACGGTTTTGTGTTGAGGTGA (SEQ ID NO:11105), CGTCGGTAGTTTGAGGGCGGGAAGTGA (SEQ ID NO:11106), TCGTCGGTAGTTTGAGGGCGGGAAGTGA (SEQ ID NO:11107), GTCGTCGGTAGTTTGAGGGCGGGAAGT (SEQ ID NO:11108), GTGATGTTGGGGTCGGAGGTGGAGT (SEQ ID NO:11109), TTGTGATGTTGGGGTCGGAGGTGGAG (SEQ ID NO:11110)
Target1179	chr11:31820646-31820666	TTTAGATTGTTGGGGGCGGAGGGGTGG (SEQ ID NO:11111), TTAGATTGTTGGGGGCGGAGGGGTGGA (SEQ ID NO:11112), TTAGATTGTTGGGGGCGGAGGGGTGG (SEQ ID NO:11113), TTTTAGATTGTTGGGGGCGGAGGGGTG (SEQ ID NO:11114), TTTTAGATTGTTGGGGGCGGAGGGGTGG (SEQ ID NO:11115)

Figure 5 (Table 1)

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Target1180	chr11:31837359-31837370	AGGCGGTAGTTAGGGATTAAGTCGGG (SEQ ID NO:11116), GGCAGGTAGTTAGGGATTAAGTCGGGA (SEQ ID NO:11117), AGGCGGTAGTTAGGGATTAAGTCGGGA (SEQ ID NO:11118), GAGGCGGTAGTTAGGGATTAAGTCGGG (SEQ ID NO:11119), AGAGGCGGTAGTTAGGGATTAAGTCGGG (SEQ ID NO:11120), GTGAGATTGGGTTAGGAAGTGACGAAAAGC (SEQ ID NO:11121), TGTGAGATTGGGTTAGGAAGTGACGAAAAGC (SEQ ID NO:11122), TTGTGAGATTGGGTTAGGAAGTGACGAAAAGC (SEQ ID NO:11123), TTTGTGAGATTGGGTTAGGAAGTGACGAAAAGC (SEQ ID NO:11124), TTTTGTGAGATTGGGTTAGGAAGTGACGAAAAGC (SEQ ID NO:11125)
Target1181	chr11:31837419-31837437	AGAGGGTGATTTTAAATTTGGTTAGCGGGGA (SEQ ID NO:11126), GAGGGTGATTTTAAATTTGGTTAGCGGGGA (SEQ ID NO:11127), AGAGGGTGATTTTAAATTTGGTTAGCGGGGA (SEQ ID NO:11128), TAGAGGGTGATTTTAAATTTGGTTAGCGGGGA (SEQ ID NO:11129), GAGGGTGATTTTAAATTTGGTTAGCGGGGA (SEQ ID NO:11130), TGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11131), CGTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11132), GTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11133), CGTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11134), GGGTCGCGGGGTTGAGAATTTTAA (SEQ ID NO:11135)
Target1182	chr11:31837478-31837489	AGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11136), GAGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11137), GAGGGGTTGATAGGAATTGCGGGTTGG (SEQ ID NO:11138), GGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11139), AGAGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11140), TGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11141), CGTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11142), GTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11143), CGTGAGGAATTAGAGGTATCGGGTCGCGC (SEQ ID NO:11144), GGGTCGCGGGGTTGAGAATTTTAA (SEQ ID NO:11145)
Target1183	chr11:31837514-31837524	AGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11146), GAGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11147), GAGGGGTTGATAGGAATTGCGGGTTGG (SEQ ID NO:11148), GGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11149), AGAGGGGTTGATAGGAATTGCGGGTTGGT (SEQ ID NO:11150), TCGCGTTAGAGTCGGGTTGAGGAGC (SEQ ID NO:11151), AGAGTCGGGTTGAGGAGCGGGGTTG (SEQ ID NO:11152), GTTAGAGTCGGGTTGAGGAGCGGGG (SEQ ID NO:11153), CGTTAGAGTCGGGTTGAGGAGCGGGG (SEQ ID NO:11154), GCGTTAGAGTCGGGTTGAGGAGCGGG (SEQ ID NO:11155)
Target1184	chr11:31837640-31837651	TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11156), TTAGGTTTCGGTTTTGGCGTCGGGTGGC (SEQ ID NO:11157), TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11158), TTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11159), TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11160), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11161), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11162), CGTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11163), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11164), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11165)
Target1185	chr11:31837672-31837682	TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11166), TTAGGTTTCGGTTTTGGCGTCGGGTGGC (SEQ ID NO:11167), TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11168), TTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11169), GGCCTCGGGTGGCGTTTGTAGTTTTGTA (SEQ ID NO:11170), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11171), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11172), CGTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11173), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11174), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11175)
Target1186	chr11:31837723-31837728	TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11176), TTAGGTTTCGGTTTTGGCGTCGGGTGGC (SEQ ID NO:11177), TTTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11178), TTAGGTTTCGGTTTTGGCGTCGGGTGG (SEQ ID NO:11179), GGCCTCGGGTGGCGTTTGTAGTTTTGTA (SEQ ID NO:11180), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11181), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11182), CGTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11183), TTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11184), GTTTTTTCGGGTTAGAGGGGGTAGCGC (SEQ ID NO:11185)
Target1187	chr11:32462725-32462749	TATTAGCGGTGGAAGACGAGGAAAGCG (SEQ ID NO:11186), ATTAGCGGTGGAAGACGAGGAAAGCG (SEQ ID NO:11187), TTATTAGCGGTGGAAGACGAGGAAAGCG (SEQ ID NO:11188), TTAGCGGTGGAAGACGAGGAAAGCG (SEQ ID NO:11189), TTTATTAGCGGTGGAAGACGAGGAAAGCG (SEQ ID NO:11190)
Target1188	chr11:44326260-44326265	CGGAGGATTTTGGTTTTTAAGATTAGTTGGGCG (SEQ ID NO:11191), CGGAGGATTTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11192), TCGGAGGATTTTGGTTTTTAAGATTAGTTGGGCG (SEQ ID NO:11193), TCGGAGGATTTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11194), GGAGGATTTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11195)

Figure 5 (Table 1)

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Target1189	chr11:44326304-44326321	GCGGTTGAGGGTAGGAAGGCGTTGAGA (SEQ ID NO:11196), TAAAGTTGCGCGCGGTTGAGGGTAGGA (SEQ ID NO:11197), ATAAAGTTGCGCGCGGTTGAGGGTAGG (SEQ ID NO:11198), AAAGTTGCGCGCGGTTGAGGGTAGGAA (SEQ ID NO:11199), GCGGTTGAGGGTAGGAAGGCGTTGAGAT (SEQ ID NO:11200), CGGAGGATTTGGTTTTTAAGATTAGTTGGGCG (SEQ ID NO:11201), CGGAGGATTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11202), TCGGAGGATTTGGTTTTTAAGATTAGTTGGGCG (SEQ ID NO:11203), TCGGAGGATTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11204), GGAGGATTTTGGTTTTTAAGATTAGTTGGGCGT (SEQ ID NO:11205)
Target1190	chr11:58672874-58672973	CGTAGACGCGGGTGTAGTTTGTTCG (SEQ ID NO:11206), TGTGTTGTGCGTTGGATTTCTTTGGATGT (SEQ ID NO:11207), TTGTTGTTGTGCGTTGGATTTCTTTGGATGT (SEQ ID NO:11208), TTTGTTGTTGTGCGTTGGATTTCTTTGGATGT (SEQ ID NO:11209), TGTGTTGTGCGTTGGATTTCTTTGGATGTAC (SEQ ID NO:11210), CGAGTGGGAGTAGCGCGTTGAGGAGAG (SEQ ID NO:11211), TCGGGTGGGTATGGGAGATGTTTGGCG (SEQ ID NO:11212), GGGTGGGTATGGGAGATGTTTGGCGGT (SEQ ID NO:11213), TGGAAGTTAAGGAGGGGTTGCGCGTA (SEQ ID NO:11214), GAGTGGGAGTAGCGCGTTGAGGAGAGT (SEQ ID NO:11215)
Target1191	chr11:58672974-58673012	CGTCGATTTATTAGCGGTAGAAAGGGTAGTAATGG (SEQ ID NO:11216), CGTCGATTTATTAGCGGTAGAAAGGGTAGTAATGGT (SEQ ID NO:11217), TCGTCGATTTATTAGCGGTAGAAAGGGTAGTAATGG (SEQ ID NO:11218), TCGTCGATTTATTAGCGGTAGAAAGGGTAGTAATGGT (SEQ ID NO:11219), GTCGTCGATTTATTAGCGGTAGAAAGGGTAGTAATGG (SEQ ID NO:11220), TCGGGTGGGTATGGGAGATGTTTGGCG (SEQ ID NO:11221), GGGTGGGTATGGGAGATGTTTGGCGGT (SEQ ID NO:11222), TGGAAGTTAAGGAGGGGTTGCGCGTA (SEQ ID NO:11223), AGTGGAAGTTAAGGAGGGGTTGCGCGG (SEQ ID NO:11224), GTGGAAGTTAAGGAGGGGTTGCGCGGT (SEQ ID NO:11225)
Target1192	chr11:58673048-58673091	TGGTTTTTATTGGGAGATAGGGGACGTCG (SEQ ID NO:11226), TTGGTTTTTATTGGGAGATAGGGGACGTCG (SEQ ID NO:11227), TTTGGTTTTTATTGGGAGATAGGGGACGTCG (SEQ ID NO:11228), TTTTGGTTTTTATTGGGAGATAGGGGACGTCG (SEQ ID NO:11229), TTTTGGTTTTTATTGGGAGATAGGGGACGTCG (SEQ ID NO:11230), TTTAGTGGAAGTTAAGGAGGGGTTGCGT (SEQ ID NO:11231), TTTAGTGGAAGTTAAGGAGGGGTTGCGT (SEQ ID NO:11232), AGTGGAAGTTAAGGAGGGGTTGCGT (SEQ ID NO:11233), TTTTAGTGGAAGTTAAGGAGGGGTTGCGT (SEQ ID NO:11234), TTTTTAGTGGAAGTTAAGGAGGGGTTGCGT (SEQ ID NO:11235)
Target1193	chr11:58673138-58673159	TGGTACGCGGGAATTGGTTGTGGATCG (SEQ ID NO:11236), TTGGTACGCGGGAATTGGTTGTGGATCG (SEQ ID NO:11237), TTGGTACGCGGGAATTGGTTGTGGATC (SEQ ID NO:11238), TTTTGGTACGCGGGAATTGGTTGTGGA (SEQ ID NO:11239), TTTGGTACGCGGGAATTGGTTGTGGATCG (SEQ ID NO:11240), GGTGAGGGGATTGCGCGTTTATTCGT (SEQ ID NO:11241), AGGTCGAGGGGATTGCGCGTTTATTCG (SEQ ID NO:11242), CGGTTAGGTCGAGGGGATTGCGCGTTT (SEQ ID NO:11243), GGTTAGGTCGAGGGGATTGCGCGTTTA (SEQ ID NO:11244), AGGTCGAGGGGATTGCGCGTTTATTCGT (SEQ ID NO:11245)
Target1194	chr11:58673273-58673280	GATAAATAGGGAGGGTGGGCGGGTGGG (SEQ ID NO:11246), GGATAAATAGGGAGGGTGGGCGGGTGG (SEQ ID NO:11247), TGGATAAATAGGGAGGGTGGGCGGGTG (SEQ ID NO:11248), GGTGGGCGCGTAGTTTTTCGGTTTGG (SEQ ID NO:11249), GGGTGGGCGCGTAGTTTTTCGGTTTG (SEQ ID NO:11250), GGAAAAGGGATGAGAGTGTACGTTTGGGC (SEQ ID NO:11251), AGGAAAAGGGATGAGAGTGTACGTTTGGGC (SEQ ID NO:11252), GAAAAGGGATGAGAGTGTACGTTTGGGC (SEQ ID NO:11253), GAGGAAAAGGGATGAGAGTGTACGTTTGGGC (SEQ ID NO:11254), AGGAAAAGGGATGAGAGTGTACGTTTGGG (SEQ ID NO:11255)
Target1195	chr11:61537177-61537202	GGGGAAGGTCGTGGGTGTAGTTGGGT (SEQ ID NO:11256), TGGGGAAGGTCGTGGGTGTAGTTGGG (SEQ ID NO:11257), TAAGTGGGTGGTTGGGGAAGGTCGTGG (SEQ ID NO:11258), GTGGTTGGGGAAGGTCGTGGGTGTAGT (SEQ ID NO:11259), GGTGGTTGGGGAAGGTCGTGGGTGTAG (SEQ ID NO:11260), TTCGATTGCGGGGAGTTTGTTCGT (SEQ ID NO:11261), ATTCGATTGCGGGGAGTTTGTTCGT (SEQ ID NO:11262), ATTCGATTGCGGGGAGTTTGTTCGT (SEQ ID NO:11263), TCGGATTGCGGGGAGTTTGTTCGT (SEQ ID NO:11264), AATTCGATTGCGGGGAGTTTGTTCGT (SEQ ID NO:11265)
Target1196	chr11:62211752-62211919	TGGGGGGATTGTTTTATGGGTTGGGA (SEQ ID NO:11266), TTGGGGGATTGTTTTATGGGTTGGGA (SEQ ID NO:11267), TGGGGGGATTGTTTTATGGGTTGGGAT (SEQ ID NO:11268), TTTGGGGGGATTGTTTTATGGGTTGGG (SEQ ID NO:11269), TTTGGGGGGATTGTTTTATGGGTTGGGA (SEQ ID NO:11270), GGTGCGGTATTATAGGGTCGGTGGTG (SEQ ID NO:11271), GGTGCGGTATTATAGGGTCGGTGGTG (SEQ ID NO:11272), AGGTGCGGTATTATAGGGTCGGTGGTG (SEQ ID NO:11273), TTTTACGGCGCGGATTTTGGAGGG (SEQ ID NO:11274), AGGTGCGGTATTATAGGGTCGGTGGTG (SEQ ID NO:11275)

Figure 5 (Table 1)

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Target1197	chr11:62211990-62212002	AGGAGATTAGGTAGGGTTGGTTGATAGCGT (SEQ ID NO:11276), GGAGATTAGGTAGGGTTGGTTGATAGCGTG (SEQ ID NO:11277), GGAGATTAGGTAGGGTTGGTTGATAGCGTGT (SEQ ID NO:11278), AGGAGATTAGGTAGGGTTGGTTGATAGCGTG (SEQ ID NO:11279), AGGAGATTAGGTAGGGTTGGTTGATAGCGTGT (SEQ ID NO:11280), TTTTACGGCGCGGATATTTGGAGGG (SEQ ID NO:11281), GCGGATATTTGGAGGGCGAGTAGTTGT (SEQ ID NO:11282), TTTTTACGGCGCGGATATTTGGAGGG (SEQ ID NO:11283), GCGGATATTTGGAGGGCGAGTAGTTGTC (SEQ ID NO:11284), TTTTACGGCGCGGATATTTGGAGGG (SEQ ID NO:11285)
Target1198	chr11:62212028-62212034	AGGAGATTAGGTAGGGTTGGTTGATAGCGT (SEQ ID NO:11286), GGAGATTAGGTAGGGTTGGTTGATAGCGTG (SEQ ID NO:11287), GGAGATTAGGTAGGGTTGGTTGATAGCGTGT (SEQ ID NO:11288), AGGAGATTAGGTAGGGTTGGTTGATAGCGTG (SEQ ID NO:11289), AGGAGATTAGGTAGGGTTGGTTGATAGCGTGT (SEQ ID NO:11290), TGGGAAAGGGCGTTAGATGTGATTTTGT (SEQ ID NO:11291), TGGGAAAGGGCGTTAGATGTGATTTTGT (SEQ ID NO:11292), GGGAAAGGGCGTTAGATGTGATTTTGT (SEQ ID NO:11293), ATGGGAAAGGGCGTTAGATGTGATTTTGT (SEQ ID NO:11294), GGGAAAGGGCGTTAGATGTGATTTTGT (SEQ ID NO:11295)
Target1199	chr11:62212114-62212196	GGGGAAGCGGGGTTTCGTTGGTTTTT (SEQ ID NO:11296), TGGGGAAGCGGGGTTTCGTTGGTTTT (SEQ ID NO:11297), GGGGAAGCGGGGTTTCGTTGGTTTTT (SEQ ID NO:11298), GGGGAAGCGGGGTTTCGTTGGTTTTT (SEQ ID NO:11299), GTGGGGAAGCGGGGTTTCGTTGGTTTT (SEQ ID NO:11300), GCGTGTGTGTTTTATGGGAAAGGGGCG (SEQ ID NO:11301), GCGTGTGTGTTTTATGGGAAAGGGGCGT (SEQ ID NO:11302), TGC GTGTGTGTTTTATGGGAAAGGGGCG (SEQ ID NO:11303), TGC GTGTGTGTTTTATGGGAAAGGGGCG (SEQ ID NO:11304), GCGTGTGTGTTTTATGGGAAAGGGGCG (SEQ ID NO:11305)
Target1200	chr11:63686935-63686949	TTTTTGTGTTTCGGGGTTGCGGGGC (SEQ ID NO:11306), TTTTTGTGTTTCGGGGTTGCGGGGC (SEQ ID NO:11307), AGGATAAGGGGTTTCGGTCGGTTTGGT (SEQ ID NO:11308), TTTTTGTGTTTCGGGGTTGCGGGGC (SEQ ID NO:11309), TTTTTGTGTTTCGGGGTTGCGGGGCG (SEQ ID NO:11310), AGTGGAGTTAGGGAAAGGTGGGTGGGA (SEQ ID NO:11311), AAGTGGAGTTAGGGAAAGGTGGGTGGG (SEQ ID NO:11312), AAGTGGAGTTAGGGAAAGGTGGGTGGGA (SEQ ID NO:11313), GTGGAGTTAGGGAAAGGTGGGTGGGAT (SEQ ID NO:11314), AGTGGAGTTAGGGAAAGGTGGGTGGGAT (SEQ ID NO:11315)
Target1201	chr11:63687154-63687161	AGGGGAGGGAAGGAGAGGTAGTTCGGG (SEQ ID NO:11316), GGGAGGGAAGGAGAGGTAGTTCGGGGA (SEQ ID NO:11317), GTGTGGGAGGGGAGGGAAGGAGAGGTA (SEQ ID NO:11318), AGGGGTTAAGGAAGTTGGGTAGCGCGG (SEQ ID NO:11319), AATATGGGGGTGTGGGAGGGGAGGGAA (SEQ ID NO:11320), AGGTGAGGGTTTCGGGTTTCGGTTCGT (SEQ ID NO:11321), TGGCGGGGAGGGTATTTTCGGGAGTTT (SEQ ID NO:11322), ATGCGGGGAGGGTATTTTCGGGAGTT (SEQ ID NO:11323), AATGCGGGGAGGGTATTTTCGGGAGT (SEQ ID NO:11324), TCGGAGGTAGTTCGGGTAGGTGAGGGT (SEQ ID NO:11325)
Target1202	chr11:63687205-63687213	AGGGGTTAAGGAAGTTGGGTAGCGCGG (SEQ ID NO:11326), GGGGTTAAGGAAGTTGGGTAGCGCGGT (SEQ ID NO:11327), GGGTTAAGGAAGTTGGGTAGCGCGGTC (SEQ ID NO:11328), AAGGGGTTAAGGAAGTTGGGTAGCGCG (SEQ ID NO:11329), AAGGGGTTAAGGAAGTTGGGTAGCGCGG (SEQ ID NO:11330), TGGCGGGGAGGGTATTTTCGGGAGTTT (SEQ ID NO:11331), ATGCGGGGAGGGTATTTTCGGGAGTTT (SEQ ID NO:11332), AATGCGGGGAGGGTATTTTCGGGAGT (SEQ ID NO:11333), TGGCGGGGAGGGTATTTTCGGGAGTTT (SEQ ID NO:11334), GGCGGGGAGGGTATTTTCGGGAGTTT (SEQ ID NO:11335)
Target1203	chr11:63687238-63687283	AGGGGTTAAGGAAGTTGGGTAGCGCGG (SEQ ID NO:11336), GGGGTTAAGGAAGTTGGGTAGCGCGGT (SEQ ID NO:11337), GGGTTAAGGAAGTTGGGTAGCGCGGTC (SEQ ID NO:11338), GCGAGTCGGAGGGTTTTCGGGAATGTT (SEQ ID NO:11339), AAGGGGTTAAGGAAGTTGGGTAGCGCG (SEQ ID NO:11340), GCGGTTTCGCTTTTGGTTTGTAGTTTTCG (SEQ ID NO:11341), GCGGTTTCGCTTTTGGTTTGTAGTTTTCGA (SEQ ID NO:11342), TGTGTTTTAGTGGAAGGGTGAGTTTTCGA (SEQ ID NO:11343), TCGTTTTAGTGGAAGGGTGAGTTTCGAGT (SEQ ID NO:11344), CGTTGTCGTTTTAGTGGAAGGGTGAGTTTCG (SEQ ID NO:11345)
Target1204	chr11:63687288-63687319	GCGAGTCGGAGGGTTTTCGGGAATGTT (SEQ ID NO:11346), GCGAGTCGGAGGGTTTTCGGGAATGTTT (SEQ ID NO:11347), GCGAGTCGGAGGGTTTTCGGGAATGT (SEQ ID NO:11348), GCGAGTCGGAGGGTTTTCGGGAATGTTT (SEQ ID NO:11349), CGAGTCGGAGGGTTTTCGGGAATGTTT (SEQ ID NO:11350), TGGCGGAGGTTTGTGTAGGGGTTGTGT (SEQ ID NO:11351), TTGGCGGAGGTTTGTGTAGGGGTTGTGT (SEQ ID NO:11352), TTGGCGGAGGTTTGTGTAGGGGTTGTGT (SEQ ID NO:11353), TTTGGCGGAGGTTTGTGTAGGGGTTGTGT (SEQ ID NO:11354), TGGCGGAGGTTTGTGTAGGGGTTGTGT (SEQ ID NO:11355)

Figure 5 (Table 1)

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Target1205	chr11:70211242-70211649	TGTTTTGGATGTGGTTGGTGTATTGGGGT (SEQ ID NO:11356), TGTTTTGGATGTGGTTGGTGTATTGGGGT (SEQ ID NO:11357), TTGTTTTGGATGTGGTTGGTGTATTGGGGT (SEQ ID NO:11358), GTTTTGGATGTGGTTGGTGTATTGGGGT (SEQ ID NO:11359), TTGTTTTGGATGTGGTTGGTGTATTGGGG (SEQ ID NO:11360), ACGCGTTGGGAGGAGTGTAGGTTGTGG (SEQ ID NO:11361), GGAGGAGTGTAGGTTGTGGGGCGTGAT (SEQ ID NO:11362), GTTGGGAGGAGTGTAGGTTGTGGGGCG (SEQ ID NO:11363), CGTTGGGAGGAGTGTAGGTTGTGGGGC (SEQ ID NO:11364), GCGTTGGGAGGAGTGTAGGTTGTGGGG (SEQ ID NO:11365)
Target1206	chr11:76032999-76033014	GAGGGTTTGGGGGCGCGGTATTGAC (SEQ ID NO:11366), GAGGGTTTGGGGGCGCGGTATTGACG (SEQ ID NO:11367), CGAGGGTTTGGGGGCGCGGTATTGACG (SEQ ID NO:11368), GAGGGTTTGGGGGCGCGGTATTGACGG (SEQ ID NO:11369), CGAGGGTTTGGGGGCGCGGTATTGA (SEQ ID NO:11370), GAGGTTTCGGAGGGGGTAGAAAACGTTT (SEQ ID NO:11371), AGGTTTCGGAGGGGGTAGAAAACGTTT (SEQ ID NO:11372), GAGGTTTCGGAGGGGGTAGAAAACGTTT (SEQ ID NO:11373), AGGTTTCGGAGGGGGTAGAAAACGTTT (SEQ ID NO:11374), GAGGTTTCGGAGGGGGTAGAAAACGTT (SEQ ID NO:11375)
Target1207	chr11:76033028-76033044	CGCGTAGAAAAGGTGGGTCGGGGTTAGA (SEQ ID NO:11376), GCGCGTAGAAAAGGTGGGTCGGGGTTAG (SEQ ID NO:11377), CGCGTAGAAAAGGTGGGTCGGGGTTAGAA (SEQ ID NO:11378), GCGCGTAGAAAAGGTGGGTCGGGGTTA (SEQ ID NO:11379), GCGTAGAAAAGGTGGGTCGGGGTTAGAA (SEQ ID NO:11380), CGAGTGC CGGGGTTTTTCGTTCTC (SEQ ID NO:11381), CGAGTGC CGGGGTTTTTCGTTCTC (SEQ ID NO:11382), GAGTGC CGGGGTTTTTCGTTCTC (SEQ ID NO:11383), GAGGTTTCGAGGGGGTAGAAAACGTTT (SEQ ID NO:11384), CGAGTGC CGGGGTTTTTCGTTCTC (SEQ ID NO:11385)
Target1208	chr11:76033147-76033172	CGGGAATATTTGTGGGTTGTCGCGGGG (SEQ ID NO:11386), GGAATATTTGTGGGTTGTCGCGGGG (SEQ ID NO:11387), TATTTGTGGGTTGTCGCGGGGTTAGG (SEQ ID NO:11388), GGAATATTTGTGGGTTGTCGCGGGG (SEQ ID NO:11389), TCGGGAATATTTGTGGGTTGTCGCGGG (SEQ ID NO:11390), CGAGGTTGGGGGTTTCGGGTCGTTTTT (SEQ ID NO:11391), TTTTCGTTGCGGACGGGTCGAGGT (SEQ ID NO:11392), TTTTTCGTTGCGGACGGGTCGAGGT (SEQ ID NO:11393), TTTTTCGTTGCGGACGGGTCGAGG (SEQ ID NO:11394), TTTTCGTTGCGGACGGGTCGAGGTTG (SEQ ID NO:11395)
Target1209	chr11:76033181-76033191	GAGGTTGTTTCGGCGGGCGGGAAGTTTC (SEQ ID NO:11396), GGAATATTTGTGGGTTGTCGCGGGGTA (SEQ ID NO:11397), GGAATATTTGTGGGTTGTCGCGGGGTA (SEQ ID NO:11398), AGGTTGTTTCGGCGGGCGGGAAGTTTC (SEQ ID NO:11399), GAGGTTGTTTCGGCGGGCGGGAAGTTT (SEQ ID NO:11400), CGAGGTTGGGGGTTTCGGGTCGTTTTT (SEQ ID NO:11401), TTTTTCGTTGCGGACGGGTCGAGGT (SEQ ID NO:11402), TTTTTCGTTGCGGACGGGTCGAGGT (SEQ ID NO:11403), TTTTTCGTTGCGGACGGGTCGAGG (SEQ ID NO:11404), TTTTCGTTGCGGACGGGTCGAGGTTG (SEQ ID NO:11405)
Target1210	chr11:76033292-76033340	GGACGGAGAAGGGAGGGAGTTTGGGAG (SEQ ID NO:11406), GGGACGGAGAAGGGAGGGAGTTTGGGA (SEQ ID NO:11407), GGGAGTTTGGGAGAGACGTAGGTGTGGC (SEQ ID NO:11408), GGGACGGAGAAGGGAGGGAGTTTGGG (SEQ ID NO:11409), ACGGAGAAGGGAGGGAGTTTGGGAGAG (SEQ ID NO:11410), AGATTTTCGAGGGGTTACGTTTCGTTGT (SEQ ID NO:11411), GAGATTTTCGAGGGGTTACGTTTCGTTG (SEQ ID NO:11412), GAGATTTTCGAGGGGTTACGTTTCGTTGT (SEQ ID NO:11413), GATTTTCGAGGGGTTACGTTTCGTTGT (SEQ ID NO:11414), AGATTTTCGAGGGGTTACGTTTCGTTGT (SEQ ID NO:11415)
Target1211	chr11:76033355-76033373	TAGGTGTGGCGTTTCGTTTGTGTTGGC (SEQ ID NO:11416), CGTTCTTTGTGTTGGCGGGGTGGTAG (SEQ ID NO:11417), GGACGGAGAAGGGAGGGAGTTTGGGAG (SEQ ID NO:11418), GTTCGTTTGTGTTGGCGGGGTGGTAGT (SEQ ID NO:11419), TTCGTTTGTGTTGGCGGGGTGGTAGT (SEQ ID NO:11420), TGAAGGACGTTGTGAGTAGCGGGGTT (SEQ ID NO:11421), TTGAAGGACGTTGTGAGTAGCGGGGTT (SEQ ID NO:11422), GTTGAAGGACGTTGTGAGTAGCGGGG (SEQ ID NO:11423), TGTGAAGGACGTTGTGAGTAGCGGGG (SEQ ID NO:11424), GTTGAAGGACGTTGTGAGTAGCGGGGTT (SEQ ID NO:11425)
Target1212	chr11:76750769-76750781	CGCGGGAGGAGAGGTTTTCTAGGAGG (SEQ ID NO:11426), TCGCGGGAGGAGAGGTTTTCTAGGAG (SEQ ID NO:11427), GGTTCGCGGGAGGAGAGGTTTTCTG (SEQ ID NO:11428), GCGGGAGGAGAGGTTTTCTAGGAGGA (SEQ ID NO:11429), TTCGCGGGAGGAGAGGTTTTCTAGGA (SEQ ID NO:11430), GGAAGTTTGGATGCGCGCGGGTAGTT (SEQ ID NO:11431), ATCGTAGGAAGTTTTGGATGCGCGCGG (SEQ ID NO:11432), GATGCGCGCGGGTAGTTGTTTCAAGTC (SEQ ID NO:11433), AGTTTTGGATGCGCGCGGGTAGTTGTT (SEQ ID NO:11434), AAGTTTTGGATGCGCGCGGGTAGTTGT (SEQ ID NO:11435)
Target1213	chr11:76750805-76751075	CGCGGGAGGAGAGGTTTTCTAGGAGG (SEQ ID NO:11436), TCGCGGGAGGAGAGGTTTTCTAGGAG (SEQ ID NO:11437), GGTTCGCGGGAGGAGAGGTTTTCTG (SEQ ID NO:11438), GCGGGAGGAGAGGTTTTCTAGGAGGA (SEQ ID NO:11439), TTCGCGGGAGGAGAGGTTTTCTAGGA (SEQ ID NO:11440), GGAAGTTTGGATGCGCGCGGGTAGTT (SEQ ID NO:11441), ATCGTAGGAAGTTTTGGATGCGCGCGG (SEQ ID NO:11442), GATGCGCGCGGGTAGTTGTTTCAAGTC (SEQ ID NO:11443), AGTTTTGGATGCGCGCGGGTAGTTGTT (SEQ ID NO:11444), AAGTTTTGGATGCGCGCGGGTAGTTGT (SEQ ID NO:11445)

Figure 5 (Table 1)

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Target1214	chr11:94600469-94600953	AGGTTTGGGAGTCGGAGGATTTGTTTGA (SEQ ID NO:11446), TGGGAGTCGGAGGATTTGTTTGAAGGAA (SEQ ID NO:11447), TTGGGAGTCGGAGGATTTGTTTGAAGGA (SEQ ID NO:11448), GGTTTTGAAGGAGGTGGAGGTGATAGT (SEQ ID NO:11449), TGATAGGTTTGGAGGAGGTGGAGGTG (SEQ ID NO:11450), TTTAGTTGGGGTGGGAGTTAAATGTTTTTGGG (SEQ ID NO:11451), TGTAGGATGTTTTCGTAGGGAGTGATAGGTTGA (SEQ ID NO:11452), TTTTAGTTGGGGTGGGAGTTAAATGTTTTTGGG (SEQ ID NO:11453), GTTTGTAGGATGTTTTCGTAGGGAGTGATAGGT (SEQ ID NO:11454), TTGTAGGATGTTTTCGTAGGGAGTGATAGGTTG (SEQ ID NO:11455)
Target1215	chr11:125036180-125036207	AGGTCGGAGTTGGGGGTTGGAGGAAC (SEQ ID NO:11456), TGGGGAGGGTAGTACGAGGGGTTTTGT (SEQ ID NO:11457), TTGGAGGAACGGGTGGCGTTTTTAGGA (SEQ ID NO:11458), TGGAGGAACGGGTGGCGTTTTTAGGAT (SEQ ID NO:11459), GTTGGAGGAACGGGTGGCGTTTTTAGG (SEQ ID NO:11460)
Target1216	chr11:125036311-125036721	ATTCGGTTTTTGGTGCGTTCGGGGGAG (SEQ ID NO:11461), TTTTGGTGCGTTCGGGGGAGGAGGAA (SEQ ID NO:11462), CGTTGGGGGAGGAGGAAGTTTGAGT (SEQ ID NO:11463), AGTGGGTCGAGGAGTTGGGTTGTGGT (SEQ ID NO:11464), AATTCGGTTTTTGGTGCGTTCGGGGGA (SEQ ID NO:11465), TTGTGGGTTTTTAGTTCGGCGCGGGT (SEQ ID NO:11466), TGTGGGTTTTTAGTTCGGCGCGGGTA (SEQ ID NO:11467), TTTGTGGGTTTTTAGTTCGGCGCGGGT (SEQ ID NO:11468), TTTGTGGGTTTTTAGTTCGGCGCGGG (SEQ ID NO:11469), TGTGGGTTTTTAGTTCGGCGCGGGT (SEQ ID NO:11470)
Target1217	chr11:128168780-128169479	TGATGGGTGGGAAAAGATCGGTGAAGT (SEQ ID NO:11471), TGGTTATTGGGGAATGGTTGGTTAGCGT (SEQ ID NO:11472), TGAGAGAAGGGTAGGGAGGTGTTACGT (SEQ ID NO:11473), TTGATGGGTGGGAAAAGATCGGTGAAGT (SEQ ID NO:11474), ATGGTTATTGGGGAATGGTTGGTTAGCGT (SEQ ID NO:11475), TGGAGTTGGGTTAAGAAGGTAGAGAAGAGT (SEQ ID NO:11476), GGGATTGGATTATGATGTTGTTTGAACGTGG (SEQ ID NO:11477), ATGGAGGTTGGGTTAAGAAGGTAGAGAAGAGT (SEQ ID NO:11478), AGGGATTGGATTATGATGTTGTTTGAACGTGG (SEQ ID NO:11479), GGGATTGGATTATGATGTTGTTTGAACGTGGA (SEQ ID NO:11480)
Target1218	chr11:129242486-129242689	GTGGTCGAGTGGAAGCGGAGAGGAGTG (SEQ ID NO:11481), GAGTGGAAGCGGAGAGGAGTGAGAGCG (SEQ ID NO:11482), CGAGTGGAAGCGGAGAGGAGTGAGAGC (SEQ ID NO:11483), GTGGAAGCGGAGAGGAGTGAGAGCGTT (SEQ ID NO:11484), TGGGAAGCGGAGAGGAGTGAGAGCGTTG (SEQ ID NO:11485), CGGTTTCGTTTTGGTTGGTTCGCGTCGT (SEQ ID NO:11486), TGGTCGCGGTGTTGTTTTCGGAAGGT (SEQ ID NO:11487), GGTTCGTTTTGGTTGGTTCGCGTCGT (SEQ ID NO:11488), TGGTCGCGGTGTTGTTTTTCGGAAGGT (SEQ ID NO:11489), TTGGTCGCGGTGTTGTTTTTCGGAAGGT (SEQ ID NO:11490)
Target1219	chr11:129242959-129243195	GGAGTTAGTGGCGGTGGAAGGAAGGGG (SEQ ID NO:11491), GGCCTTCGGGTGAGATCGTTCTGAAG (SEQ ID NO:11492), GGGCGTCGGGTTTTGGTGTGTGCTTT (SEQ ID NO:11493), AGTGGCGGTGGAAGGAAGGGGAAGAAT (SEQ ID NO:11494), AGGAGTTAGTGGCGGTGGAAGGAAGGG (SEQ ID NO:11495), TAATGTCGGGCGGGGAGTTTTAGCGGT (SEQ ID NO:11496), GTCGAGTCGGGGTTGGGTTTTAGGGGT (SEQ ID NO:11497), GTTACGACGAGGGGTTTTTCGGGC (SEQ ID NO:11498), CGGGGTAATGTCGGGCGGGGAGTTTTA (SEQ ID NO:11499), ACGAGGCGGTTTTGGAGTTGGGGATTA (SEQ ID NO:11500)
Target1220	chr11:129243209-129243493	AGTAGGGGGCGCGTTTGGGGTTAGTTT (SEQ ID NO:11501), AAGTAGGGGGCGCGTTTGGGGTTAGTT (SEQ ID NO:11502), GGGGGCGCGTTTGGGGTTAGTTTGTAG (SEQ ID NO:11503), GTAGGGGGCGCGTTTGGGGTTAGTTTGTAG (SEQ ID NO:11504), GCGGTTGCGGGTGAGATCGTTCTGAAG (SEQ ID NO:11505), TTCGCGGCGGGATTTTGAAGTTGGTTC (SEQ ID NO:11506), CGGGGGTTTTGTCGTCGATTGTTGGGG (SEQ ID NO:11507), GTCGAGTCGGGGTTGGGTTTTAGGGGT (SEQ ID NO:11508), GTTACGACGAGGGGGTTTTTCGGGC (SEQ ID NO:11509), TTTTCGCGCGGGATTTTGAAGTTGGTT (SEQ ID NO:11510)
Target1221	chr11:133994800-133994973	GGGGATCGGGTATTGAAGTTCGGCGGT (SEQ ID NO:11511), GGATCGGGTATTGAAGTTCGGCGGTGG (SEQ ID NO:11512), GGGATCGGGTATTGAAGTTCGGCGGTG (SEQ ID NO:11513), CGGGTATTGAAGTTCGGCGGTGGTAGG (SEQ ID NO:11514), CGGGTATTGAAGTTCGGCGGTGGTAGGA (SEQ ID NO:11515), GCGGTCGTGTATTTCCGGAGGCGATA (SEQ ID NO:11516), TTCGGGAGCGGTTGGAGTAGTAGTGGC (SEQ ID NO:11517), GCGGTCGTGTATTTCCGGAGGCGATAT (SEQ ID NO:11518), GTTCGGGAGCGGTTGGAGTAGTAGTGGC (SEQ ID NO:11519), TCGGGAGCGGTTGGAGTAGTAGTGGC (SEQ ID NO:11520)
Target1222	chr11:133994988-133995005	AGTCGTCGTTGTTTTGTGGTGTGCTTT (SEQ ID NO:11521), TGTAGTCGTCGTTGTTTTGTGGTGTGCT (SEQ ID NO:11522), GTAGTCGTCGTTGTTTTGTGGTGTGCT (SEQ ID NO:11523), TGTAGTCGTCGTTGTTTTGTGGTGTGCT (SEQ ID NO:11524), AGTCGTCGTTGTTTTGTGGTGTGCTTTT (SEQ ID NO:11525), AGAGAGAGAAGAGGGGGCGGGAGTTGT (SEQ ID NO:11526), TGAGAGAGAGAAGAGGGGGCGGGAGTT (SEQ ID NO:11527), TTCGGGAGCGGTTGGAGTAGTAGTGGC (SEQ ID NO:11528), GAGGGGGCGGGAGTTGTTTTGTTGT (SEQ ID NO:11529), AGAGGGGGCGGGAGTTGTTTTGTTGT (SEQ ID NO:11530)

Figure 5 (Table 1)

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Target1223	chr11:133995029-133995090	TGTTTTGTAGTCGTCGTTGTTTTGTGGTGT (SEQ ID NO:11531), TGTTTTGTAGTCGTCGTTGTTTTGTGGTGT (SEQ ID NO:11532), TTGTTTTGTAGTCGTCGTTGTTTTGTGGTGT (SEQ ID NO:11533), TGTTGTTTTGTAGTCGTCGTTGTTTTGTGGT (SEQ ID NO:11534), GATATTCGTTGCGTGCGCGCGG (SEQ ID NO:11535), AGAGAGAGAAGAGGGGGCGGGAGTTGT (SEQ ID NO:11536), TGAGAGAGAGAAGAGGGGGCGGGAGTT (SEQ ID NO:11537), TTGAGAGAGAGAAGAGGGGGCGGGAGT (SEQ ID NO:11538), AGTTGAGAGAGAGAAGAGGGGGCGGGGA (SEQ ID NO:11539), GAGGGGGCGGGAGTTGTTTTGTTGT (SEQ ID NO:11540)
Target1224	chr12:2282206-2282237	AGAGTTGGTGAGGAGTTGGGAGGGGGA (SEQ ID NO:11541), GAGTTGGTGAGGAGTTGGGAGGGGAT (SEQ ID NO:11542), AGAGTTGGTGAGGAGTTGGGAGGGGAT (SEQ ID NO:11543), AGTTGGTGAGGAGTTGGGAGGGGATT (SEQ ID NO:11544), TAGAGTTGGTGAGGAGTTGGGAGGGGG (SEQ ID NO:11545), GGGTAGTGAAGTGGATTGGGTTAGGGT (SEQ ID NO:11546), AGGGTAGTGAAGTGGATTGGGTTAGGGT (SEQ ID NO:11547), GGGTAGTGAAGTGGATTGGGTTAGGGTT (SEQ ID NO:11548), AGGGTAGTGAAGTGGATTGGGTTAGGGTT (SEQ ID NO:11549), TAGGGTAGTGAAGTGGATTGGGTTAGGGT (SEQ ID NO:11550)
Target1225	chr12:6184230-6184282	TGAGGGAAGTTAGGGGGCGTTAGGGGA (SEQ ID NO:11551), GAGGGAAGTTAGGGGGCGTTAGGGGAG (SEQ ID NO:11552), AGGGAAGTTAGGGGGCGTTAGGGGAGG (SEQ ID NO:11553), TTGAGGGAAGTTAGGGGGCGTTAGGGG (SEQ ID NO:11554), TTGAGGGAAGTTAGGGGGCGTTAGGGGA (SEQ ID NO:11555)
Target1226	chr12:6184402-6184468	TTGGTTGGTTGGGTGTGGTAAAGTCGT (SEQ ID NO:11556), TGTTGGTTGGGTGTGGTAAAGTCGTA (SEQ ID NO:11557), ATTGGTTGGTTGGGTGTGGTAAAGTCGT (SEQ ID NO:11558), TGGTTGGTTGGGTGTGGTAAAGTCGT (SEQ ID NO:11559), TTGGTTGGTTGGGTGTGGTAAAGTCGTA (SEQ ID NO:11560), AGGAGGGAATGGTGTGTACGGTTGGA (SEQ ID NO:11561), GGGTGGGTGTTTTAGGGTGTTTCGGGGT (SEQ ID NO:11562), TGGGTGGGTGTTTTAGGGTGTTTCGGGG (SEQ ID NO:11563), GGGTGGGTGTTTTAGGGTGTTTCGGGG (SEQ ID NO:11564), AGGGAATGGTGTGTACGGTTGGATCG (SEQ ID NO:11565)
Target1227	chr12:6184505-6184562	TTTCGGTAGGGTAGGACGGGGTAGGGG (SEQ ID NO:11566), GGGTAGGACGGGGTAGGGGGTCGATT (SEQ ID NO:11567), TAGGGTAGGACGGGGTAGGGGGTCGAT (SEQ ID NO:11568), TTCGGTAGGGTAGGACGGGGTAGGGG (SEQ ID NO:11569), GGGTAGGACGGGGTAGGGGGTCGATT (SEQ ID NO:11570), GTGTTGGGGGGTTGGAGTGCGTTTGT (SEQ ID NO:11571), TGTGTAGTGTGTTGGGGGGTTGGAGT (SEQ ID NO:11572), GTGTGTTGGGGGGTTGGAGTGCGTTTG (SEQ ID NO:11573), TGGGGGGTTGGAGTGCGTTTGT (SEQ ID NO:11574), TGTGGGGGGTTGGAGTGCGTTTGT (SEQ ID NO:11575)
Target1228	chr12:6184734-6184753	CGGGGTTTATTAGAGGGTGGTAGCGGGT (SEQ ID NO:11576), CGGGGTTTATTAGAGGGTGGTAGCGGG (SEQ ID NO:11577), TCGGGGTTTATTAGAGGGTGGTAGCGGG (SEQ ID NO:11578), TCGGGGTTTATTAGAGGGTGGTAGCGGGT (SEQ ID NO:11579), GGGGTTTATTAGAGGGTGGTAGCGGGT (SEQ ID NO:11580), TGGTGTAGTTGTTTATAGGTGTTGAGGGAGT (SEQ ID NO:11581), TGGTGTAGTTGTTTATAGGTGTTGAGGGAGT (SEQ ID NO:11582), TTGGTGTAGTTGTTTATAGGTGTTGAGGGAGT (SEQ ID NO:11583), GTTTGTTTATAGGTGTTGAGGGAGTTGTTTGGT (SEQ ID NO:11584), AGTTTGTTTATAGGTGTTGAGGGAGTTGTTTGG (SEQ ID NO:11585)
Target1229	chr12:6664109-6665508	AGATGGTGTGCGGGTATGAAGCGGGTCG (SEQ ID NO:11586), GATGGTGTGCGGGTATGAAGCGGGTCGA (SEQ ID NO:11587), ATAGCGGTGCGGTGCGGGCTTATGTTGT (SEQ ID NO:11588), TTGTAGATAGCGGTGCGGTGCGGGCTT (SEQ ID NO:11589), GGGCGGGTGCAGGGGAAGTTAATGAT (SEQ ID NO:11590), TGTCGTGGGTGATTGCGATGGGGTGG (SEQ ID NO:11591), GGTGCGAGTTGGTGTGGGTTTCAAG (SEQ ID NO:11592), GGGCGTTCGGTGGTGTGTTGTAG (SEQ ID NO:11593), TCGGGGGAGGAGATTTGTTTCGGCGT (SEQ ID NO:11594), GAGGGTAAGTAGGGTCGGCGGGGTTTG (SEQ ID NO:11595)
Target1230	chr12:6665529-6665547	TCGTTTGGATTTAGTCGGGGTGGCGT (SEQ ID NO:11596), CGTTTGGATTTAGTCGGGGTGGCGTA (SEQ ID NO:11597), TCGTTTGGATTTAGTCGGGGTGGCGTA (SEQ ID NO:11598), CGTTTGGATTTAGTCGGGGTGGCGT (SEQ ID NO:11599), TCGTTTGGATTTAGTCGGGGTGGCG (SEQ ID NO:11600), CGGGTGTGGTGGCGGGTGTGTAATT (SEQ ID NO:11601), ATTAGTCGGGTGTGGTGGCGGGTGT (SEQ ID NO:11602), AATTAGTCGGGTGTGGTGGCGGGTGT (SEQ ID NO:11603), TCGGGTGTGGTGGCGGGTGTGTAAT (SEQ ID NO:11604), TTAGTCGGGTGTGGTGGCGGGTGTGTTG (SEQ ID NO:11605)
Target1231	chr12:6756182-6756196	TGGGTTGCGGTAGGTGTTAGAGGTAGG (SEQ ID NO:11606), TGGGTTGCGGTAGGTGTTAGAGGTAGGA (SEQ ID NO:11607), GGGTTGCGGTAGGTGTTAGAGGTAGGA (SEQ ID NO:11608), AGTCGAATTTGGGTTGCGGTAGGTGT (SEQ ID NO:11609), AGAGAGAGGGTTGTTGGAGTGGAGGT (SEQ ID NO:11610), CGGAGCGGGTTTGGGGTTCGGTTTTT (SEQ ID NO:11611), TTGGTTTCGAGCGGGTTTTGGGGTTC (SEQ ID NO:11612), TTTGGTTTCGAGCGGGTTTTGGGGTTC (SEQ ID NO:11613), TTTTGGTTTCGAGCGGGTTTTGGGGTTC (SEQ ID NO:11614), GTTTGGTTTCGAGCGGGTTTTGGGGTTC (SEQ ID NO:11615)

Figure 5 (Table 1)

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Target1232	chr12:6756211-6756231	CGGGCGCAACGGATGATGGAAGGATCGA (SEQ ID NO:11616), AGCGGGCGCAACGGATGATGGAAGGATC (SEQ ID NO:11617), GAGCGGGCGCAACGGATGATGGAAGGAT (SEQ ID NO:11618), AGCGGGCGCAACGGATGATGGAAGGAT (SEQ ID NO:11619), GCGGGCGCAACGGATGATGGAAGGATCG (SEQ ID NO:11620), TTGGTTTCGGAGCGGGTTTTGGGGTTT (SEQ ID NO:11621), TTGGTTTCGGAGCGGGTTTTGGGGTTT (SEQ ID NO:11622), TTGGTTTCGGAGCGGGTTTTGGGGT (SEQ ID NO:11623), GTTTTGGTTTCGGAGCGGGTTTTGGGG (SEQ ID NO:11624), TGTTTTGGTTTCGGAGCGGGTTTTGGGG (SEQ ID NO:11625)
Target1233	chr12:6756300-6756378	CGGGCGCAACGGATGATGGAAGGATCGA (SEQ ID NO:11626), AGCGGGCGCAACGGATGATGGAAGGATC (SEQ ID NO:11627), GAGCGGGCGCAACGGATGATGGAAGGAT (SEQ ID NO:11628), CGGGCGGGGGGAGATGGGAGTATTTTA (SEQ ID NO:11629), CGGGCGGGGGGAGATGGGAGTATTTT (SEQ ID NO:11630), ATGGTGGTCGCGTTGGGTCGGTTTTT (SEQ ID NO:11631), TGGTGGTCGCGTTGGGTCGGTTTTTA (SEQ ID NO:11632), TATGGTGGTCGCGTTGGGTCGGTTTTT (SEQ ID NO:11633), TTATGGTGGTCGCGTTGGGTCGGTTTT (SEQ ID NO:11634), TTTATGGTGGTCGCGTTGGGTCGGTTTT (SEQ ID NO:11635)
Target1234	chr12:6756385-6756679	CGGGCGGGGGGAGATGGGAGTATTTTA (SEQ ID NO:11636), TCGGGAGGGGAGAGGATTAGTTCGGGGGA (SEQ ID NO:11637), CGGGAGGGGAGAGGATTAGTTCGGGGAG (SEQ ID NO:11638), CGGGCGGGGGGAGATGGGAGTATTTT (SEQ ID NO:11639), GATAGAGTTAAAGGTTCCGTCGCGGGC (SEQ ID NO:11640), TGCGGTTTGGTTTCGTTAGAGGCGGTTT (SEQ ID NO:11641), TTGCGGTTTGGTTTCGTTAGAGGCGGTT (SEQ ID NO:11642), TTTGCGGTTTGGTTTCGTTAGAGGCGGTT (SEQ ID NO:11643), GCGGTTTGGTTTCGTTAGAGGCGGTTTG (SEQ ID NO:11644), GCGGTTTGGTTTCGTTAGAGGCGGTTTG (SEQ ID NO:11645)
Target1235	chr12:7072338-7072466	GCGGAGAAGGAAGGAGGAAGAGCGGAG (SEQ ID NO:11646), AGTTTGCCTTGGTTGTTCCGTAGGCGG (SEQ ID NO:11647), CGGAGGTTAGGGCGGGTTTTAGGTCGT (SEQ ID NO:11648), GTTTCGCTTGGTTGTTCCGTAGGCGGA (SEQ ID NO:11649), TTGGCTTGGGAGGGAAGGGGTTAAGG (SEQ ID NO:11650), GAGAGTGGGTGTTGGGGAGACGAAGGG (SEQ ID NO:11651), TGGGTGTTGGGGAGACGAAGGGGTTTT (SEQ ID NO:11652), GTGGGTGTTGGGGAGACGAAGGGGTTT (SEQ ID NO:11653), AGAGAGTGGGTGTTGGGGAGACGAAGG (SEQ ID NO:11654), AGTGGGTGTTGGGGAGACGAAGGGGTT (SEQ ID NO:11655)
Target1236	chr12:7072582-7072643	GGAAGGTTGTCGGGGGTAGGGGAAGG (SEQ ID NO:11656), GGAAGGTTGTCGGGGGTAGGGGAAG (SEQ ID NO:11657), GTTGTGGGGGTAGGGGAAGGTGTTT (SEQ ID NO:11658), TGGGGGTAGGTGGGTTCCGTGATAGGT (SEQ ID NO:11659), GGGGGATAGGGGTGGGTAATCGGTG (SEQ ID NO:11660), TGGGGATATTTTTGTTGAGTTTTGTTGTTTCGT (SEQ ID NO:11661), TGGGGATATTTTTGTTGAGTTTTGTTGTTTCGT (SEQ ID NO:11662), TTGGGGATATTTTTGTTGAGTTTTGTTGTTTCGT (SEQ ID NO:11663), TTGGGGATATTTTTGTTGAGTTTTGTTGTTTCGT (SEQ ID NO:11664), TTTGGGGATATTTTTGTTGAGTTTTGTTGTTTCGT (SEQ ID NO:11665)
Target1237	chr12:7072705-7072848	GGAAGGTTGTCGGGGGTAGGGGAAGG (SEQ ID NO:11666), GGAAGGTTGTCGGGGGTAGGGGAAG (SEQ ID NO:11667), GTTGTGGGGGTAGGGGAAGGTGTTT (SEQ ID NO:11668), GTGTGTTTGGTGGCGGTTAGTAGGTT (SEQ ID NO:11669), GGGTAGGGGAAGGTGGTTTAGAGGCGG (SEQ ID NO:11670), TGGGATTTGAGGCGATGGATGTTGTT (SEQ ID NO:11671), TTGGGGATTTGAGGCGATGGATGTTGTT (SEQ ID NO:11672), TGGGGATTTGAGGCGATGGATGTTGTTG (SEQ ID NO:11673), GGGGATTTGAGGCGATGGATGTTGTTG (SEQ ID NO:11674), TGGGGATTTGAGGCGATGGATGTTGTTGA (SEQ ID NO:11675)
Target1238	chr12:25055421-25055858	AGGGATGCGGGGAAGGGAAGACGTTTC (SEQ ID NO:11676), GTAGGGATGCGGGGAAGGGAAGACGTT (SEQ ID NO:11677), TCGTTGGAGGCGGAATGGAGGGTAAGG (SEQ ID NO:11678), AGATTTGCGGTAGGGATGCGGGGAAGG (SEQ ID NO:11679), GATTTGCGGTAGGGATGCGGGGAAGGG (SEQ ID NO:11680), GGATTCGTTTTGAGGGAGGAGGCGGGA (SEQ ID NO:11681), GTTTCGGTAGTTCGCGGTTTGTCGG (SEQ ID NO:11682), GGTTCGGTAGTTCGCGGTTTGTCGG (SEQ ID NO:11683), CGTTTTGAGGGAGGAGGCGGGAGTTGA (SEQ ID NO:11684), TCGTTTTGAGGGAGGAGGCGGGAGTTG (SEQ ID NO:11685)
Target1239	chr12:25055863-25055874	TCGTTGGAGGCGGAATGGAGGGTAAGG (SEQ ID NO:11686), GCGGAATGGAGGGTAAGGCGAAGGAGG (SEQ ID NO:11687), GGCGGAATGGAGGGTAAGGCGAAGGAG (SEQ ID NO:11688), GAGGCGGAATGGAGGGTAAGGCGAAGG (SEQ ID NO:11689), GGAGGCGGAATGGAGGGTAAGGCGAAG (SEQ ID NO:11690), TGGTTAGTTCGTTTCGTTTCGTTGCGGT (SEQ ID NO:11691), GGTTAGTTCGTTTCGTTTCGTTGCGGT (SEQ ID NO:11692), TGGTTAGTTCGTTTCGTTTCGTTGCGG (SEQ ID NO:11693), CGTTTGTTTTCGTTTTAGTCGCGCGT (SEQ ID NO:11694), TCGTTTGTTTTCGTTTTAGTCGCGCGT (SEQ ID NO:11695)
Target1240	chr12:25055885-25056352	ATTTGGCGGGTAAGGGTCGTAGCGGAG (SEQ ID NO:11696), GATTTGGGGTCGCGCGTTAGGGTTAGG (SEQ ID NO:11697), TATTTGGCGGGTAAGGGTCGTAGCGGA (SEQ ID NO:11698), TCGAGGTATTTGGCGGGTAAGGGTCGT (SEQ ID NO:11699), GCGGGGTTGTAGAGAGCGGTAGTGGTA (SEQ ID NO:11700), CGTTTGTTTTGGCGCGCGGTTTTAGG (SEQ ID NO:11701), AAGGGATGTTGGAGGGGTTGCGTCGTA (SEQ ID NO:11702), TAAGGGATGTTGGAGGGGTTGCGTCGT (SEQ ID NO:11703), AGGGATGTTGGAGGGGTTGCGTCGTAT (SEQ ID NO:11704), GTTTGGTTTTGGCGCGCGGTTTTAGGT (SEQ ID NO:11705)

Figure 5 (Table 1)

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Target1241	chr12:25056390-25056447	TTTGTTCGAGAGTTTGC GG GCGGGG (SEQ ID NO:11706), TTGCGGGCGGGGATTGATATTGTGCG (SEQ ID NO:11707), GTTTCGAGAGTTTGC GG GCGGGGATT (SEQ ID NO:11708), GCGGGCGGGGATTGATATTGTGCGTT (SEQ ID NO:11709), TTTTCGAGAGTTTGC GG GCGGGGATTG (SEQ ID NO:11710), TCGGTTTGGGTAGGTGGCGTAGGGAAA (SEQ ID NO:11711), TTCGTTTGGGTAGGTGGCGTAGGGAA (SEQ ID NO:11712), ATTCGTTTGGGTAGGTGGCGTAGGGGA (SEQ ID NO:11713), CGGTTTGGGTAGGTGGCGTAGGGAAAT (SEQ ID NO:11714), AATTCGTTTGGGTAGGTGGCGTAGGG (SEQ ID NO:11715)
Target1242	chr12:33592228-33592320	AGGAAGGAGCGAGGTAGGAAAGCGTGG (SEQ ID NO:11716), GGAGTTTGTAGTTTAGCGCGCGGGTT (SEQ ID NO:11717), TTCGAGTTTGTAGTTTAGCGCGCGGG (SEQ ID NO:11718), GGAAGGAGCGAGGTAGGAAAGCGTGGC (SEQ ID NO:11719), TCGGAGTTTGTAGTTTAGCGCGCGGGG (SEQ ID NO:11720), CGCGCTTAGGTTGTAAGTTTCGGGGT (SEQ ID NO:11721), TCGCGCTTAGGTTGTAAGTTTCGGGG (SEQ ID NO:11722), CGGGATAGGGGTAGTTAGGGCGGAAGT (SEQ ID NO:11723), TCGCGCTTAGGTTGTAAGTTTCGGGGT (SEQ ID NO:11724), CGCGCTTAGGTTGTAAGTTTCGGGGT (SEQ ID NO:11725)
Target1243	chr12:33592379-33592401	TGTTTTCGTTTTGGTTGTTTTGTTTCGAGGG (SEQ ID NO:11726), GTTTTCGTTTTGGTTGTTTTGTTTCGAGGGA (SEQ ID NO:11727), TGTTTTCGTTTTGGTTGTTTTGTTTCGAGGGA (SEQ ID NO:11728), GCGGAGTTTTTCGGTTATTTGTGTTGTTTTCG (SEQ ID NO:11729), GCGGAGTTTTTCGGTTATTTGTGTTGTTTTCGT (SEQ ID NO:11730), AGAGGTACGGGAAGAGGAAAGACGGT (SEQ ID NO:11731), GAGGTACGGGAAGAGGAAAGACGGT (SEQ ID NO:11732), AGAGGTACGGGAAGAGGAAAGACGGT (SEQ ID NO:11733), TAGAGGTACGGGAAGAGGAAAGACGGT (SEQ ID NO:11734), ACGGGAAGAGGAAAGACGGTTAATTGGG (SEQ ID NO:11735)
Target1244	chr12:33592516-33592595	GCGGTGATTTTGGTTGGAGATTGCGTCG (SEQ ID NO:11736), GCGGTGATTTTGGTTGGAGATTGCGTCG (SEQ ID NO:11737), TGGTTGGAGATTGCGTCGTTGAGAGTCG (SEQ ID NO:11738), GGTGGAGATTGCGTCGTTGAGAGTCG (SEQ ID NO:11739), GCGGTGATTTTGGTTGGAGATTGCGTC (SEQ ID NO:11740), GCGGGCGGATTATGTTTAGGGCGTTA (SEQ ID NO:11741), GCGGGCGGATTATGTTTAGGGCGTT (SEQ ID NO:11742), GCGGGCGGATTATGTTTAGGGCGTTAG (SEQ ID NO:11743), GCGGGCGGATTATGTTTAGGGCGTTAGA (SEQ ID NO:11744), CGGGCGGATTATGTTTAGGGCGTTAG (SEQ ID NO:11745)
Target1245	chr12:33592629-33592675	GGTTGGAGATTGCGTCGTTGAGAGTCGG (SEQ ID NO:11746), TTGGAGATTGCGTCGTTGAGAGTCGGT (SEQ ID NO:11747), GCGGTGATTTTGGTTGGAGATTGCGTCG (SEQ ID NO:11748), GCGGTGATTTTGGTTGGAGATTGCGTCG (SEQ ID NO:11749), GTTGGAGATTGCGTCGTTGAGAGTCGGT (SEQ ID NO:11750), CGGTAGTCGTAGTTTTTCGCGCGTTT (SEQ ID NO:11751), CGGTAGTCGTAGTTTTTCGCGCGTTT (SEQ ID NO:11752), CGGTAGTCGTAGTTTTTCGCGCGTT (SEQ ID NO:11753), CGGTAGTCGTAGTTTTTCGCGCGTTT (SEQ ID NO:11754), GCGGGGAGAGTTGGCGTAAATTCG (SEQ ID NO:11755)
Target1246	chr12:33592683-33592728	GGTTGGAGATTGCGTCGTTGAGAGTCGG (SEQ ID NO:11756), TTGGAGATTGCGTCGTTGAGAGTCGGT (SEQ ID NO:11757), GTTGGAGATTGCGTCGTTGAGAGTCGGT (SEQ ID NO:11758), TGGTTGGAGATTGCGTCGTTGAGAGTCG (SEQ ID NO:11759), TGGTTGGAGATTGCGTCGTTGAGAGTCGG (SEQ ID NO:11760), TATTAGTCGTTGGGGAGAGGAGGGGG (SEQ ID NO:11761), ATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11762), GCGTGTTCGAGTCGAGGGTTTGT (SEQ ID NO:11763), TATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11764), ATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11765)
Target1247	chr12:33592774-33592804	AGTGTGAGGGGAGGGGGAGTCGTAA (SEQ ID NO:11766), GAGTGTGAGGGGAGGGGGAGTCGTA (SEQ ID NO:11767), TATGGAGTGTGAGGGGAGGGGGAGT (SEQ ID NO:11768), GGTATGGAGTGTGAGGGGAGGGGGGA (SEQ ID NO:11769), TCGGTATGGAGTGTGAGGGGAGGGGG (SEQ ID NO:11770), TATTAGTCGTTGGGGAGAGGAGGGGG (SEQ ID NO:11771), ATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11772), GCGTGTTCGAGTCGAGGGTTTGT (SEQ ID NO:11773), TATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11774), ATTAGTCGTTGGGGAGAGGAGGGGGG (SEQ ID NO:11775)
Target1248	chr12:33592831-33592892	AGTGTGAGGGGAGGGGGAGTCGTAA (SEQ ID NO:11776), GAGTGTGAGGGGAGGGGGAGTCGTA (SEQ ID NO:11777), TATGGAGTGTGAGGGGAGGGGGAGT (SEQ ID NO:11778), GGTATGGAGTGTGAGGGGAGGGGGGA (SEQ ID NO:11779), ATGGTGTTCGCGGGTGTTCGCG (SEQ ID NO:11780), GTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11781), GGTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11782), GTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11783), GTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11784), GGTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11785)
Target1249	chr12:33592905-33592916	ATTGGTGTTCGCGGGGTGTTGGCG (SEQ ID NO:11786), TTGGTGTTCGCGGGGTGTTGGCGG (SEQ ID NO:11787), TTGGTGTTCGCGGGGTGTTGGCG (SEQ ID NO:11788), AGCGTATGGTGTTCGCGGGGTGTT (SEQ ID NO:11789), ATTGGTGTTCGCGGGGTGTTGGCGG (SEQ ID NO:11790), GTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11791), GGTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11792), GTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11793), GGTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11794), GGTAGGGGCGTCGGGTCGTTCTTTTT (SEQ ID NO:11795)

Figure 5 (Table 1)

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Target1250	chr12:43945543-43945566	CGGTTGATTGGTTCGGGAGTTTCGGGA (SEQ ID NO:11796), TCGGTTGATTGGTTCGGGAGTTTCGGG (SEQ ID NO:11797), TCGGTTGATTGGTTCGGGAGTTTCGGGA (SEQ ID NO:11798), TTTTGGGAGTGCATGCGTTTTAGGCG (SEQ ID NO:11799), TGTGGTTTTGGGAGTGCATGCGTTTT (SEQ ID NO:11800), ACGTTTTAGCGGTTAAGTGGGGGCGC (SEQ ID NO:11801), TCGAGTGGGATATGTAGGTCGCGGGGA (SEQ ID NO:11802), GTTTTTAGCGGTTAAGTGGGGGCGCG (SEQ ID NO:11803), TTCGAGTGGGATATGTAGGTCGCGGGG (SEQ ID NO:11804), CGTTTTAGCGGTTAAGTGGGGGCGCG (SEQ ID NO:11805)
Target1251	chr12:43945592-43945623	CGGTTGATTGGTTCGGGAGTTTCGGGA (SEQ ID NO:11806), TCGGTTGATTGGTTCGGGAGTTTCGGG (SEQ ID NO:11807), TCGGTTGATTGGTTCGGGAGTTTCGGGA (SEQ ID NO:11808), CGGTTGATTGGTTCGGGAGTTTCGGGAG (SEQ ID NO:11809), TTCGTTGATTGGTTCGGGAGTTTCGGG (SEQ ID NO:11810), GCGAGACGTTTTTAGCGGTTAAGTGGGGG (SEQ ID NO:11811), GCGAGACGTTTTTAGCGGTTAAGTGGGG (SEQ ID NO:11812), CGAGACGTTTTTAGCGGTTAAGTGGGGG (SEQ ID NO:11813), CGAGACGTTTTTAGCGGTTAAGTGGGGGT (SEQ ID NO:11814), GCGAGACGTTTTTAGCGGTTAAGTGGG (SEQ ID NO:11815)
Target1252	chr12:43945748-43945800	TCGGGGAGGTTTATTAGAGTCGTCGGT (SEQ ID NO:11816), TTTTGGGATTTTCGATCGGGGAGGTTT (SEQ ID NO:11817), ATTTTGGGATTTTCGATCGGGGAGGTT (SEQ ID NO:11818), TTTGGGATTTTCGATCGGGGAGGTTTA (SEQ ID NO:11819), CGATCGGGGAGGTTTATTAGAGTCGTCGG (SEQ ID NO:11820), GAGCGAGATAGGCGGTGTGTTGGAT (SEQ ID NO:11821), TGGTTGTCGGCGGTTTTGGTGGGTTT (SEQ ID NO:11822), TTGGTTGTCGGCGGTTTTGGTGGGTTT (SEQ ID NO:11823), TTTGGTTGTCGGCGGTTTTGGTGGGTT (SEQ ID NO:11824), AGCGGAGATAGGCGGTGTGTTGGATT (SEQ ID NO:11825)
Target1253	chr12:43945818-43945926	CGCGGGTTTTGGGTCGGTTGGTTAGT (SEQ ID NO:11826), GGAATAGTAGCGCGGTTTTGGGTCGG (SEQ ID NO:11827), GGGAATAGTAGCGCGGTTTTGGGTCG (SEQ ID NO:11828), GCGCGGTTTTGGGTCGGTTGGTTAG (SEQ ID NO:11829), TAGTAGCGCGGTTTTGGGTCGGTTGG (SEQ ID NO:11830), GAGCGAGATAGGCGGTGTGTTGGAT (SEQ ID NO:11831), AGCGGAGATAGGCGGTGTGTTGGATT (SEQ ID NO:11832), GCGGTAGGAAGGGGGTGAGGTTGTAG (SEQ ID NO:11833), GGAAGGGGGGTGAGGTTGTAGTGCGAT (SEQ ID NO:11834), AGGAAGGGGGGTGAGGTTGTAGTGCGA (SEQ ID NO:11835)
Target1254	chr12:43945952-43945959	CGCGGGTTTTGGGTCGGTTGGTTAGT (SEQ ID NO:11836), GGAATAGTAGCGCGGTTTTGGGTCGG (SEQ ID NO:11837), GGGAATAGTAGCGCGGTTTTGGGTCG (SEQ ID NO:11838), GCGCGGTTTTGGGTCGGTTGGTTAG (SEQ ID NO:11839), TAGTAGCGCGGTTTTGGGTCGGTTGG (SEQ ID NO:11840), TCGTCGGTTGCGGGTGTTATATTGGT (SEQ ID NO:11841), TAGAGAGTTTTGAGGGTAGCGCGGGT (SEQ ID NO:11842), GTAGAGAGTTTTGAGGGTAGCGCGGGT (SEQ ID NO:11843), GTAGAGAGTTTTGAGGGTAGCGCGGG (SEQ ID NO:11844), AGAGAGTTTTGAGGGTAGCGCGGGT (SEQ ID NO:11845)
Target1255	chr12:43945993-43945999	TCGTTTGTTCGTTTCGTTGAGTCGTTGT (SEQ ID NO:11846), TCGTTTGTTCGTTTCGTTGAGTCGTTGT (SEQ ID NO:11847), ATCGTTTGTTCGTTTCGTTGAGTCGTTGT (SEQ ID NO:11848), CGTTTGTTCGTTTCGTTGAGTCGTTGT (SEQ ID NO:11849), TCGTTTGTTCGTTTCGTTGAGTCGTTGT (SEQ ID NO:11850), TGGTCGGGAATAGTTTATAGGGGCGGGT (SEQ ID NO:11851), TCGTCGGTTGCGGGTGTTATATTGGT (SEQ ID NO:11852), GGTTCGGGAATAGTTTATAGGGGCGGGT (SEQ ID NO:11853), TGGTCGGGAATAGTTTATAGGGGCGGG (SEQ ID NO:11854), TTCGTCGGTTGCGGGTGTTATATTGGT (SEQ ID NO:11855)
Target1256	chr12:43946045-43946058	AGTTCGCGCGGGGAAGTAATTCGATT (SEQ ID NO:11856), TGTTTAGGTTTAGTTCGCGCGGGGAA (SEQ ID NO:11857), TTGTTTAGGTTTAGTTCGCGCGGGGA (SEQ ID NO:11858), TTTAGGTTTAGTTCGCGCGGGGAAGT (SEQ ID NO:11859), TAGTTCGCGCGGGGAAGTAATTCGAT (SEQ ID NO:11860), TTTGCGTTGAGTGAGAGAAGGGAGGGG (SEQ ID NO:11861), CGGTTGAGTGAGAGAAGGGAGGGGTTG (SEQ ID NO:11862), GGTGAGTGAGAGAAGGGAGGGGGTTGC (SEQ ID NO:11863), GTTGAGTGAGAGAAGGGAGGGGGTTGCG (SEQ ID NO:11864), TTGAGTGAGAGAAGGGAGGGGGTTGCG (SEQ ID NO:11865)
Target1257	chr12:43946060-43946134	AGTTCGCGCGGGGAAGTAATTCGATT (SEQ ID NO:11866), TGTTTAGGTTTAGTTCGCGCGGGGAA (SEQ ID NO:11867), TTGTTTAGGTTTAGTTCGCGCGGGGA (SEQ ID NO:11868), TTLAGGTTTAGTTCGCGCGGGGAAGT (SEQ ID NO:11869), GCGTCGCGAGAGTTCGTTTTATGGG (SEQ ID NO:11870), TTTGCGTTGAGTGAGAGAAGGGAGGGG (SEQ ID NO:11871), CGGTTGAGTGAGAGAAGGGAGGGGTTG (SEQ ID NO:11872), GGTGAGTGAGAGAAGGGAGGGGGTTGC (SEQ ID NO:11873), GTTGAGTGAGAGAAGGGAGGGGGTTGCG (SEQ ID NO:11874), TTGAGTGAGAGAAGGGAGGGGGTTGCG (SEQ ID NO:11875)
Target1258	chr12:54427638-54427666	TGAAGGGTGAGGAGCGCGGGTTTTA (SEQ ID NO:11876), GAAGGGTGAGGAGCGCGGGTTTTAGA (SEQ ID NO:11877), AAGGGTGAGGAGCGCGGGTTTTAGAG (SEQ ID NO:11878), AGAGGGATTTGAAGGGTGAGGAGCGCG (SEQ ID NO:11879), TGAAGGGTGAGGAGCGCGGGTTTTAG (SEQ ID NO:11880), GGAGTCGCGGGGGGATTTTCGTTTTG (SEQ ID NO:11881), GGGAGTCGCGGGGGGATTTTCGTTTTG (SEQ ID NO:11882), GTTTCGTAGGGGAGGGAGGGAGGGAGT (SEQ ID NO:11883), TTTCTAGGGGAGGGAGGGAGGGAGTC (SEQ ID NO:11884), AGGGAGTCGCGGGGGGATTTTCGTTTT (SEQ ID NO:11885)

Figure 5 (Table 1)

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Target1259	chr12:54427688-54427701	TTGAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11886), GAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11887), AAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11888), AGAGGGATTGAAGGGTGAGGAGCGCG (SEQ ID NO:11889), TGAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11890), GGGTTGGGGGAAGAGGGAGATTAGGT (SEQ ID NO:11891), TGGGGGAAGAGGGAGATTAGGTTCCG (SEQ ID NO:11892), GGGTTGGGGGAAGAGGGAGATTAGG (SEQ ID NO:11893), GGGGGGAAGAGGGAGATTAGGTTCCG (SEQ ID NO:11894), TGGGGGAAGAGGGAGATTAGGTTCCG (SEQ ID NO:11895)
Target1260	chr12:54427706-54427732	TTGAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11896), GAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11897), AAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11898), AGAGGGATTGAAGGGTGAGGAGCGCG (SEQ ID NO:11899), TGAAGGGTGAGGAGCGCGGGGTTTAA (SEQ ID NO:11900), TTTGTAGTCGAGGGGTTAGGGGGG (SEQ ID NO:11901), GGGGGTTGGGGGAAGAGGGAGATTAA (SEQ ID NO:11902), GGGGGTTGGGGGAAGAGGGAGATT (SEQ ID NO:11903), GGGGGTTGGGGGAAGAGGGAGATT (SEQ ID NO:11904), ATTTGTAGTCGAGGGGTTAGGGGGG (SEQ ID NO:11905)
Target1261	chr12:54428065-54428083	TTTTTCGGTCGCGGGTGGGGGTTTGG (SEQ ID NO:11906), TTTTCGGTCGCGGGTGGGGGTTTGG (SEQ ID NO:11907), TTTTCGGTCGCGGGTGGGGGTTTGGG (SEQ ID NO:11908), TGTTTATAGAGACGGACGTAAGCGGT (SEQ ID NO:11909), TTTTCGGTCGCGGGTGGGGGTTTGG (SEQ ID NO:11910), CGGCGAGTGAGGTAGCGGTTAAAGTGG (SEQ ID NO:11911), CGGCGAGTGAGGTAGCGGTTAAAGTGG (SEQ ID NO:11912), GCGAGTGAGGTAGCGGTTAAAGTGG (SEQ ID NO:11913), CGGCGAGTGAGGTAGCGGTTAAAGTGG (SEQ ID NO:11914), GCGAGTGAGGTAGCGGTTAAAGTGG (SEQ ID NO:11915)
Target1262	chr12:54428139-54428224	TGTTTATAGAGACGGACGTAAGCGGT (SEQ ID NO:11916), ATGTTTATAGAGACGGACGTAAGCGGT (SEQ ID NO:11917), GGGGTGGGGTTTATGTTTATAGAGACGGACGG (SEQ ID NO:11918), TGTTTATAGAGACGGACGTAAGCGGT (SEQ ID NO:11919), GGGTGGGGTTTATGTTTATAGAGACGGACGG (SEQ ID NO:11920), GGAAAGGCGAAAAGGAAAGGCGTAGGG (SEQ ID NO:11921), GGAAAGGCGAAAAGGAAAGGCGTAGGG (SEQ ID NO:11922), ATAGGAATCGGTTAGGGGCGCGTTTGG (SEQ ID NO:11923), GAAAGGCGAAAAGGAAAGGCGTAGGG (SEQ ID NO:11924), GCGGAAAAGGAAAGGCGTAGGGATAGG (SEQ ID NO:11925)
Target1263	chr12:54428283-54428342	TTAGAGGTAGCGGGGAGGTTCTGTAGA (SEQ ID NO:11926), TTTTATAGAGGTAGCGGGGAGGTTCTGT (SEQ ID NO:11927), AGGTTTTTATAGAGGTAGCGGGGAGGT (SEQ ID NO:11928), TTTAGAGGTAGCGGGGAGGTTCTGTAG (SEQ ID NO:11929), TTTAGAGGTAGCGGGGAGGTTCTGTAGA (SEQ ID NO:11930), TTCGCGGAATTTGGGTCGGTAGGGA (SEQ ID NO:11931), TCGCGGAATTTGGGTCGGTAGGGAT (SEQ ID NO:11932), GCGGAATTTGGGTCGGTAGGGATGC (SEQ ID NO:11933), CGGGAATTTGGGTCGGTAGGGATGCG (SEQ ID NO:11934), CGCGGAATTTGGGTCGGTAGGGATG (SEQ ID NO:11935)
Target1264	chr12:54428361-54428554	TCGGGTCGGGGTAGGTGTTGGAGTAT (SEQ ID NO:11936), TTCGGGTCGGGGTAGGTGTTGGAGTA (SEQ ID NO:11937), ATTTTCGGGTCGGGGTAGGTGTTGGAG (SEQ ID NO:11938), CGGGTCGGGGTAGGTGTTGGAGTAT (SEQ ID NO:11939), TTTTCGGGTCGGGGTAGGTGTTGGAGT (SEQ ID NO:11940), TTCGCGGAATTTGGGTCGGTAGGGA (SEQ ID NO:11941), TCGCGGAATTTGGGTCGGTAGGGAT (SEQ ID NO:11942), GAGTTAGGGGAGATGGGGTAGCGTCG (SEQ ID NO:11943), CGAGTTAGGGGAGATGGGGTAGCGTC (SEQ ID NO:11944), GTCGAGTTAGGGGAGATGGGGTAGCG (SEQ ID NO:11945)
Target1265	chr12:54428556-54428593	GGAGGGTTGCGGCGTATAGGTTGGC (SEQ ID NO:11946), GCGGGTTGTCGCGGTTGTTTATTTT (SEQ ID NO:11947), GCGGGTTGTCGCGGTTGTTTATTTT (SEQ ID NO:11948), GCGGGTTGTCGCGGTTGTTTATTTT (SEQ ID NO:11949), GCGGGTTGTCGCGGTTGTTTATTTT (SEQ ID NO:11950), CGAGGTTAGAGGTTTCGCGAGGGTTT (SEQ ID NO:11951), AGGAGAGGGCGAGGTTAGAGGGTTCCG (SEQ ID NO:11952), TAGAGGTTTCGCGAGGGTTTGTGGC (SEQ ID NO:11953), AAGGAGAGGGCGAGGTTAGAGGGTTCC (SEQ ID NO:11954), CGAGGTTAGAGGGTTTCGCGAGGGTTT (SEQ ID NO:11955)
Target1266	chr12:54428600-54428619	GGAGGGTTGCGGCGTATAGGTTGGC (SEQ ID NO:11956), GAGGGTTGCGGCGTATAGGTTGGC (SEQ ID NO:11957), GGAGGGTTGCGGCGTATAGGTTGG (SEQ ID NO:11958), AGTTTCGTAGGATTTTTTCGAGGGTTGC (SEQ ID NO:11959), AGGGTTGCGGCGTATAGGTTGGC (SEQ ID NO:11960), CGAGGTTAGAGGTTTCGCGAGGGTTT (SEQ ID NO:11961), AGGAGAGGGCGAGGTTAGAGGGTTCCG (SEQ ID NO:11962), TAGAGGTTTCGCGAGGGTTTGTGGC (SEQ ID NO:11963), AAGGAGAGGGCGAGGTTAGAGGGTTCC (SEQ ID NO:11964), CGAGGTTAGAGGGTTTCGCGAGGGTTT (SEQ ID NO:11965)
Target1267	chr12:54441100-54441186	CGGGGTCGTTGTAGAGTCGGTTTTTCG (SEQ ID NO:11966), CGGGGAGGAGAAAAGTATAGGATCGCGG (SEQ ID NO:11967), CGGGGAGGAGAAAAGTATAGGATCGCG (SEQ ID NO:11968), GGGGGAGGAGAAAAGTATAGGATCGCG (SEQ ID NO:11969), TCGGGGAGGAGAAAAGTATAGGATCGCG (SEQ ID NO:11970), GCGGCGCGGATTTTAGGTTGTGGTT (SEQ ID NO:11971), CGGCGCGGATTTTAGGTTGTGGTTT (SEQ ID NO:11972), GCGGCGCGGATTTTAGGTTGTGGT (SEQ ID NO:11973), GCGGCGCGGATTTTAGGTTGTGGTTT (SEQ ID NO:11974), CGGCGCGGATTTTAGGTTGTGGTTT (SEQ ID NO:11975)

Figure 5 (Table 1)

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Target1268	chr12:54441200-54441393	TAGTCGGAGGTAGAGGCGTTTCGAGGC (SEQ ID NO:11976), AGTCGGAGGTAGAGGCGTTTCGAGGC (SEQ ID NO:11977), ATAGTCGGAGGTAGAGGCGTTTCGAGGC (SEQ ID NO:11978), CGGGGTCGTTGTAGAGTCGGTTTTTCG (SEQ ID NO:11979), GTTCGTTTCGATTAGGTCGCGAGGT (SEQ ID NO:11980), GCGTTTTGGTTTTGGCGGGCGAGTTAC (SEQ ID NO:11981), GCGTTTTGGTTTTGGCGGGCGAGTTA (SEQ ID NO:11982), GCGTTTTGGTTTTGGCGGGCGAGTT (SEQ ID NO:11983), CGTTTTGGTTTTGGCGGGCGAGTTAC (SEQ ID NO:11984), GCGTTTTGGTTTTGGCGGGCGAGT (SEQ ID NO:11985)
Target1269	chr12:54441420-54441497	CGGAGGAGGCGGTTAAGGTGTAGGTCG (SEQ ID NO:11986), GGGTTCGGAGGAGCGGTTAAGGTGTA (SEQ ID NO:11987), GGAGGCGGTTAAGGTGTAGGTCGAGGT (SEQ ID NO:11988), TAGTCGGAGGTAGAGGCGTTTCGAGGC (SEQ ID NO:11989), GCGGTTAAGGTGTAGGTCGAGGTTGGC (SEQ ID NO:11990), GCGTTTTGGTTTTGGCGGGCGAGTTAC (SEQ ID NO:11991), GCGTTTTGGTTTTGGCGGGCGAGTTA (SEQ ID NO:11992), GCGTTTTGGTTTTGGCGGGCGAGTT (SEQ ID NO:11993), AGTTTTTCGCGCGTTTTGGTTTTGGC (SEQ ID NO:11994), CGTTTTGGTTTTGGCGGGCGAGTTAC (SEQ ID NO:11995)
Target1270	chr12:54441529-54441644	CGGAGGAGGCGGTTAAGGTGTAGGTCG (SEQ ID NO:11996), GGGTTCGGAGGAGCGGTTAAGGTGTA (SEQ ID NO:11997), GGAGGCGGTTAAGGTGTAGGTCGAGGT (SEQ ID NO:11998), GTTCGTTAGGATTAGAGCGCGCGAGG (SEQ ID NO:11999), GCGGTTAAGGTGTAGGTCGAGGTTGGC (SEQ ID NO:12000), CGTGGTATTAGTGGGATTGGGGAGCGG (SEQ ID NO:12001), CGTGGTATTAGTGGGATTGGGGAGCGGT (SEQ ID NO:12002), TCGTGGTATTAGTGGGATTGGGGAGCGG (SEQ ID NO:12003), TGGTATTAGTGGGATTGGGGAGCGGT (SEQ ID NO:12004), CGTGGTATTAGTGGGATTGGGGAGCG (SEQ ID NO:12005)
Target1271	chr12:58013414-58013637	GCGTGGCGTTTGTGTTGGTTCGTTG (SEQ ID NO:12006), TAGGGGCGTGGCGTTTGTGTTGGTTC (SEQ ID NO:12007), GTTTTCGGGTTGTGGAGGTTGCGGGT (SEQ ID NO:12008), GATAGGGGCGTGCGCTTTGTTGTTGGT (SEQ ID NO:12009), GGATAGGGGCGTGCGCTTTGTTGTTGG (SEQ ID NO:12010), GGGGTAGTTAGTGTAGCGCGGGTAGTCG (SEQ ID NO:12011), GGGTAGTTAGTGTAGCGCGGGTAGTCG (SEQ ID NO:12012), GGGTAGTTAGTGTAGCGCGGGTAGTCGA (SEQ ID NO:12013), CGCGGGTAGTCGAGTTAGTAGTAGGCGT (SEQ ID NO:12014), GGGGTAGTTAGTGTAGCGCGGGTAGTC (SEQ ID NO:12015)
Target1272	chr12:58013651-58013714	GCGTGGCGTTTGTGTTGGTTCGTTG (SEQ ID NO:12016), TAGGGGCGTGGCGTTTGTGTTGGTTC (SEQ ID NO:12017), GATAGGGGCGTGCGCTTTGTTGTTGGT (SEQ ID NO:12018), GGATAGGGGCGTGCGCTTTGTTGTTGG (SEQ ID NO:12019), GGGATAGGGGCGTGCGCTTTGTTGTTG (SEQ ID NO:12020), AGAGTTTGTGTTTTCGATAGGTTGTTGTTAGGGT (SEQ ID NO:12021), GAGTTTGTGTTTTCGATAGGTTGTTGTTAGGGT (SEQ ID NO:12022), AGAGTTTGTGTTTTCGATAGGTTGTTGTTAGGGT (SEQ ID NO:12023), TAGAGTTTGTGTTTTCGATAGGTTGTTGTTAGGGT (SEQ ID NO:12024), GAGTTTGTGTTTTCGATAGGTTGTTGTTAGGGT (SEQ ID NO:12025)
Target1273	chr12:58130751-58131225	ATTCGAGTTGGTGGGAGGGTTAGCGG (SEQ ID NO:12026), GGGTTCGGGAAGGGGTTCCGAGTTAGG (SEQ ID NO:12027), GGGGTTCCGGGAAGGGGTTCCGAGTTAG (SEQ ID NO:12028), GGTTGGATTCCGAGTTGGTGGGAGGGT (SEQ ID NO:12029), TGTTGGATTCCGAGTTGGTGGGAGGG (SEQ ID NO:12030), TAGCGGGTTAGGGAGTTGTTGGGCGT (SEQ ID NO:12031), CGGGTTAGGGAGTTGTTGGGCGTGA (SEQ ID NO:12032), GTAGCGGGTTAGGGAGTTGTTGGGCG (SEQ ID NO:12033), TTCGATTTTGGTGGGTCGGGTTGG (SEQ ID NO:12034), ATTTTGGTGGGGTCGGGTTGGGGT (SEQ ID NO:12035)
Target1274	chr12:58131312-58132106	GGGGTTTCGAGGGACGTTTAGAGGG (SEQ ID NO:12036), GGGGTTTCGAGGGACGTTTAGAGG (SEQ ID NO:12037), GAGTCGGGATAGGTTGGGGGTTTCG (SEQ ID NO:12038), AGTTCGGGTTGTTGAGTAGGGGCGTC (SEQ ID NO:12039), GGTGGGGGCGTTTTAGGTTTGGGGTC (SEQ ID NO:12040), GGGGAGGGGCGTTTTATGTGATGGGA (SEQ ID NO:12041), AGGGGCGTTTTATGTGATGGGAGGG (SEQ ID NO:12042), AGGGCGCGGGTAGTCGTTTGTATGGT (SEQ ID NO:12043), GCGGAGGAGTCGGTAAGAAGCGGTAC (SEQ ID NO:12044), TTTTCGGGTTTTATGAGTCGGGGCGCG (SEQ ID NO:12045)
Target1275	chr12:63544123-63544297	GGCGCGCGGTTGTTGTAGAGTTTGA (SEQ ID NO:12046), CGCGCGCGGGTTGTTGTAGAGTTTG (SEQ ID NO:12047), CGCGCGGGTTGTTGTAGAGTTTGA (SEQ ID NO:12048), GCGCGCGGGTTGTTGTAGAGTTTGA (SEQ ID NO:12049), GGCGCGCGGGTTGTTGTAGAGTTTGA (SEQ ID NO:12050), CGATTGTTGTGTCGCGTGGTGAAGTA (SEQ ID NO:12051), AGGTGTTCCGTATGTTGCGTCGTTT (SEQ ID NO:12052), TGAGGTGTTCCGTATGTTGCGTCGGT (SEQ ID NO:12053), GTAGGTGTTCCGTATGTTGCGTCGGT (SEQ ID NO:12054), TGTAGGTGTTCCGTATGTTGCGTCGG (SEQ ID NO:12055)
Target1276	chr12:63544328-63544500	AGGTCGGTTAGGTTGAGGTGTCGGATG (SEQ ID NO:12056), GGTCGGTTAGGTTGAGGTGTCGGATGA (SEQ ID NO:12057), CGGTTAGGTCGGTTAGGTTGAGGTGTCGG (SEQ ID NO:12058), AGGTCGGTTAGGTTGAGGTGTCGGATGA (SEQ ID NO:12059), CGGTTAGGTCGGTTAGGTTGAGGTGTCG (SEQ ID NO:12060), TGGAGATCGTCGTGTTGGCGGTGATTT (SEQ ID NO:12061), TTGGAGATCGTCGTGTTGGCGGTGATT (SEQ ID NO:12062), AATTGGAGATCGTCGTGTTGGCGGTGA (SEQ ID NO:12063), ATTGGAGATCGTCGTGTTGGCGGTGAT (SEQ ID NO:12064), AAATTGGAGATCGTCGTGTTGGCGGTG (SEQ ID NO:12065)

Figure 5 (Table 1)

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Target1277	chr12:63544511-63544529	CGGCGATTTTGTAGTTTGGTTAGTTTTCGTTGCG (SEQ ID NO:12066), CGGCGATTTTGTAGTTTGGTTAGTTTTCGTTGCGT (SEQ ID NO:12067), ACGGCGATTTTGTAGTTTGGTTAGTTTTCGTTGCG (SEQ ID NO:12068), GGCGATTTTGTAGTTTGGTTAGTTTTCGTTGCG (SEQ ID NO:12069), CGGCGATTTTGTAGTTTGGTTAGTTTTCGTTGCG (SEQ ID NO:12070), TGGTGGTTTTGTATCGGCGTTGGT (SEQ ID NO:12071), ATGGTGGTTTTGTATCGGCGTTGGT (SEQ ID NO:12072), ATGGTGGTTTTGTATCGGCGTTGG (SEQ ID NO:12073), CGGCGTTGGTAATAAGTCGGGAGGTCG (SEQ ID NO:12074), CGGCGTTGGTAATAAGTCGGGAGGT (SEQ ID NO:12075)
Target1278	chr12:63544544-63544591	CGGTTTGTGTTTAGCGTCGGTGGTT (SEQ ID NO:12076), CGGTTTGTGTTTAGCGTCGGTGGT (SEQ ID NO:12077), TGTGTTGTAGCGTCGGTGGTTAGAGGT (SEQ ID NO:12078), GTGTTGTAGCGTCGGTGGTTAGAGGT (SEQ ID NO:12079), TGTGTTGTAGCGTCGGTGGTTAGAGG (SEQ ID NO:12080), TTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12081), AAGTTTTTCGAGACGGGGAGGGAGCGG (SEQ ID NO:12082), GTTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12083), TTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12084), TAAGTTTTTCGAGACGGGGAGGGAGCGG (SEQ ID NO:12085)
Target1279	chr12:63544648-63544687	CGGTTTGTGTTTAGCGTCGGTGGTT (SEQ ID NO:12086), CGGTTTGTGTTTAGCGTCGGTGGT (SEQ ID NO:12087), TGTGTTGTAGCGTCGGTGGTTAGAGGT (SEQ ID NO:12088), GTGTTGTAGCGTCGGTGGTTAGAGGT (SEQ ID NO:12089), TGTGTTGTAGCGTCGGTGGTTAGAGG (SEQ ID NO:12090), TTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12091), AAGTTTTTCGAGACGGGGAGGGAGCGG (SEQ ID NO:12092), GTTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12093), TTTTCGAGACGGGGAGGGAGCGGTT (SEQ ID NO:12094), TAAGTTTTTCGAGACGGGGAGGGAGCGG (SEQ ID NO:12095)
Target1280	chr12:63544708-63544789	CGCGTTCTAGTTTGTCTGGGTTTTCGCG (SEQ ID NO:12096), GCGTTCGTAGTTTGTCTGGGTTTTCGCGA (SEQ ID NO:12097), GCGTTCGTAGTTTGTCTGGGTTTTCGCGAT (SEQ ID NO:12098), TTGGGTTTTCTGTTCAAGCGTAGGGT (SEQ ID NO:12099), GCGTTCGTAGTTTGTCTGGGTTTTCGCG (SEQ ID NO:12100), TGAGAGTTGTTAGTGGGTAGGCGGGAC (SEQ ID NO:12101), TGAGAGTTGTTAGTGGGTAGGCGGGAC (SEQ ID NO:12102), GAGAGTTGTTAGTGGGTAGGCGGGAC (SEQ ID NO:12103), TTGAGAGTTGTTAGTGGGTAGGCGGG (SEQ ID NO:12104), TTGAGAGTTGTTAGTGGGTAGGCGGG (SEQ ID NO:12105)
Target1281	chr12:63544889-63544967	GAGGTCGGGAAGGTGAGTTTCGAGTTT (SEQ ID NO:12106), AGGTCGGGAAGGTGAGTTTCGAGTTT (SEQ ID NO:12107), AGGTCGGGAAGGTGAGTTTCGAGTTTTC (SEQ ID NO:12108), GAGGTCGGGAAGGTGAGTTTCGAGTTT (SEQ ID NO:12109), GAGGTCGGGAAGGTGAGTTTCGAGTT (SEQ ID NO:12110), TTTTCGTAATAGGGCGGGAGGGAGCG (SEQ ID NO:12111), TTTCGTAATAGGGCGGGAGGGAGCG (SEQ ID NO:12112), TTTTCGTAATAGGGCGGGAGGGAGCG (SEQ ID NO:12113), TTTTCGTAATAGGGCGGGAGGGAGC (SEQ ID NO:12114), GTTTTTCGTAATAGGGCGGGAGGGAGC (SEQ ID NO:12115)
Target1282	chr12:66122895-66122975	CGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12116), TCGGTAGGAGGTATTTTCGGGGAGCGG (SEQ ID NO:12117), CGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12118), TCGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12119), TTCGGTAGGAGGTATTTTCGGGGAGCGG (SEQ ID NO:12120), ATCGGGGATTGAGGAAGGAGGAGTGCG (SEQ ID NO:12121), CGTTTTAGGGTAGCGCGGGAGTTTCG (SEQ ID NO:12122), GGGATTGAGGAAGGAGGAGTGCGGGAT (SEQ ID NO:12123), GAGGTCGTTTGGAGATGCGTCGGT (SEQ ID NO:12124), GGGGATTGAGGAAGGAGGAGTGCGGGA (SEQ ID NO:12125)
Target1283	chr12:66123010-66123091	CGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12126), TCGGTAGGAGGTATTTTCGGGGAGCGG (SEQ ID NO:12127), CGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12128), TCGGTAGGAGGTATTTTCGGGGAGCGGT (SEQ ID NO:12129), TTCGGTAGGAGGTATTTTCGGGGAGCGG (SEQ ID NO:12130), TTCGTCGTTTGGAGCGGAAAGTTGCG (SEQ ID NO:12131), GTTTTTCGAGGTTTGGGCGCGTAGGAGG (SEQ ID NO:12132), TTTTCGAGGTTTGGGCGCGTAGGAGGT (SEQ ID NO:12133), GTTCGGGGTTTTCGTCGTTTGGAGCGG (SEQ ID NO:12134), GGTTCGGGGTTTTCGTCGTTTGGAGCG (SEQ ID NO:12135)
Target1284	chr12:66123110-66123128	GTTTTAGGCGGCGGGGATTTCGAGTCG (SEQ ID NO:12136), CGTTTTAGGCGGCGGGGATTTCGAGTC (SEQ ID NO:12137), TCGTTTTAGGCGGCGGGGATTTCGAGT (SEQ ID NO:12138), TTCGTTTTAGGCGGCGGGGATTTCGAG (SEQ ID NO:12139), TTTTCGTTTTAGGCGGCGGGGATTTCGA (SEQ ID NO:12140), GTTTTTCGAGGTTTGGGCGCGTAGGAGG (SEQ ID NO:12141), TTTTTCGAGGTTTGGGCGCGTAGGAGGT (SEQ ID NO:12142), TTTTCGAGGTTTGGGCGCGTAGGAGGTA (SEQ ID NO:12143), TTCGAGGTTTGGGCGCGTAGGAGGTAT (SEQ ID NO:12144), CGAGGTTTGGGCGCGTAGGAGGTATAGG (SEQ ID NO:12145)
Target1285	chr12:66123168-66123214	GTTTTAGGCGGCGGGGATTTCGAGTCG (SEQ ID NO:12146), CGTTTTAGGCGGCGGGGATTTCGAGTC (SEQ ID NO:12147), CGGCGGGGATTTCGAGTCGAGTTTTCG (SEQ ID NO:12148), TCGTTTTAGGCGGCGGGGATTTCGAGT (SEQ ID NO:12149), GCGGGGATTTCGAGTCGAGTTTTCG (SEQ ID NO:12150), GTAGAGCGGGGCGTTAAGGGTTGTTTCG (SEQ ID NO:12151), CGAGTTTTATGTCGGGCGGGCGTAGAG (SEQ ID NO:12152), TAGAGCGGGGCGTTAAGGGTTGTTTCG (SEQ ID NO:12153), GTTAGGCGGAGGGTCGAAACGTTACG (SEQ ID NO:12154), CGTTAAGGGTTGTTTCGGGGGTGATT (SEQ ID NO:12155)

Figure 5 (Table 1)

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Target1286	chr12:66123273-66123286	GCGGGTAGTTTTTGGCGTTTCGTTTTGC (SEQ ID NO:12156), TGGTGGATTAGAGGTGTATTCGCGGGT (SEQ ID NO:12157), GGTGGATTAGAGGTGTATTCGCGGGT (SEQ ID NO:12158), TGGTGGATTAGAGGTGTATTCGCGGG (SEQ ID NO:12159), CGGGTAGTTTTTGGCGTTTCGTTTTGC (SEQ ID NO:12160), CGAGTTTTATGTCGCGGGCGTAGAG (SEQ ID NO:12161), GTTTAGGCGGAGGGTCGAAACGTTACG (SEQ ID NO:12162), CGAGTTTTATGTCGCGGGCGTAGA (SEQ ID NO:12163), TTTAGCGGAGGGTCGAAACGTTACG (SEQ ID NO:12164), GAGTTTTATGTCGCGGGCGTAGAG (SEQ ID NO:12165)
Target1287	chr12:66123289-66123381	TCGGTATGAGGATTCGTGCGTGGCGTT (SEQ ID NO:12166), CGGTATGAGGATTCGTGCGTGGCGTT (SEQ ID NO:12167), TGAGGATTCGTGCGTGGCGTTTCGATT (SEQ ID NO:12168), GTCGGTATGAGGATTCGTGCGTGGCGT (SEQ ID NO:12169), ATGAGGATTCGTGCGTGGCGTTTCGAT (SEQ ID NO:12170), TTTGCGGGTGGGTGGAGGTTGTAGGTT (SEQ ID NO:12171), TGTTTGGCGGTGGGTGGAGGTTGTAGG (SEQ ID NO:12172), GTTTGCGGGTGGGTGGAGGTTGTAGGT (SEQ ID NO:12173), TTGCGGGTGGGTGGAGGTTGTAGGTTA (SEQ ID NO:12174), TGCGGGTGGGTGGAGGTTGTAGGTTAT (SEQ ID NO:12175)
Target1288	chr12:66275403-66276260	GGGAGGGAGGGAGGGAGGGAGAAAGAG (SEQ ID NO:12176), GAGGGAGGGAGGGAGGGAGGGAGAAAG (SEQ ID NO:12177), TCGGGTTCGTTGTTAGGGTTGCGTTT (SEQ ID NO:12178), TTCGGGTTGCGTTGTTAGGGTTGCGTT (SEQ ID NO:12179), TTTGCGGGTTCGTTGTTAGGGTTGCGT (SEQ ID NO:12180), TTTGCGGTAGTTTTTGGGGCGGGCGG (SEQ ID NO:12181), CGGTAGTTTTTGGGGCGGGCGGGTTG (SEQ ID NO:12182), GGTAGTTTTTGGGGCGGGCGGGTTGT (SEQ ID NO:12183), GTTTCGGTAGTTTTTGGGGCGGGCGG (SEQ ID NO:12184), TTGCGGTAGTTTTTGGGGCGGGCGG (SEQ ID NO:12185)
Target1289	chr12:66897000-66897016	TGGTTTTAATAGGGTTTTAGAAATTGGGCGAGTG (SEQ ID NO:12186), GGTTTTTAATAGGGTTTTAGAAATTGGGCGAGTGA (SEQ ID NO:12187), TGGTTTTAATAGGGTTTTAGAAATTGGGCGAGTGA (SEQ ID NO:12188), TTGGTTTTAATAGGGTTTTAGAAATTGGGCGAGTG (SEQ ID NO:12189), GGTTTTAATAGGGTTTTAGAAATTGGGCGAGTGAA (SEQ ID NO:12190), TGGGAAGTGAGTATGTGTAGTGTGTTAGGAAGT (SEQ ID NO:12191), TGTTGGGAAGTGAGTATGTGTAGTGTGTTAGG (SEQ ID NO:12192), GTTTGGGAAGTGAGTATGTGTAGTGTGTTAGGA (SEQ ID NO:12193), TGTTTGGGAAGTGAGTATGTGTAGTGTGTTAGGA (SEQ ID NO:12194), GGGAAAGTGAGTATGTGTAGTGTGTTAGGAAGTT (SEQ ID NO:12195)
Target1290	chr12:70051601-70051609	TTGGTTGAATGTTTTGGGACGGCGTTC (SEQ ID NO:12196), ATTGGTTGAATGTTTTGGGACGGCGTT (SEQ ID NO:12197), AATTGGTTGAATGTTTTGGGACGGCGT (SEQ ID NO:12198), ATTGGTTGAATGTTTTGGGACGGCGTTC (SEQ ID NO:12199), TGGTTGAATGTTTTGGGACGGCGTTC (SEQ ID NO:12200), GTGGAGGGTGGGTTAGAAGGTTATTTGGT (SEQ ID NO:12201), AGTGGAGGGTGGGTTAGAAGGTTATTTGGT (SEQ ID NO:12202), AGTGGAGGGTGGGTTAGAAGGTTATTTGG (SEQ ID NO:12203), TGGAGGGTGGGTTAGAAGGTTATTTGGTAGT (SEQ ID NO:12204), AGTGGAGGGTGGGTTAGAAGGTTATTTGGTA (SEQ ID NO:12205)
Target1291	chr12:81312705-81313105	CGTTAAGGAATGTATGTCGGTAGTTGTTGAGATGT (SEQ ID NO:12206), TCGTTAAGGAATGTATGTCGGTAGTTGTTGAGATG (SEQ ID NO:12207), TCGTTAAGGAATGTATGTCGGTAGTTGTTGAGATGT (SEQ ID NO:12208), ATCGTTAAGGAATGTATGTCGGTAGTTGTTGAGATG (SEQ ID NO:12209), CGTTAAGGAATGTATGTCGGTAGTTGTTGAGATGTA (SEQ ID NO:12210)
Target1292	chr12:104193695-104193807	AGGAGGGGTGGAGGAGTAGGTGTTTTT (SEQ ID NO:12211), TAGGAGGGGTGGAGGAGTAGGTGTTTTT (SEQ ID NO:12212), GGAGGGGTGGAGGAGTAGGTGTTTTT (SEQ ID NO:12213), AGGAGGGGTGGAGGAGTAGGTGTTTTT (SEQ ID NO:12214), ATAGGAGGGGTGGAGGAGTAGGTGTTTTT (SEQ ID NO:12215)
Target1293	chr12:104193912-104193975	GGGTGATGGAGACGGGAGGAAAGAGGT (SEQ ID NO:12216), TGGGTGATGGAGACGGGAGGAAAGAGG (SEQ ID NO:12217), TGGGTGATGGAGACGGGAGGAAAGAGGT (SEQ ID NO:12218), TGTGGGTGATGGAGACGGGAGGAAAGA (SEQ ID NO:12219), GTGGGTGATGGAGACGGGAGGAAAGAGG (SEQ ID NO:12220)
Target1294	chr12:108169003-108169090	TTGGGCGTTTCGGGGATTTGTTTCGGA (SEQ ID NO:12221), TGGGCGTTTCGGGGATTTGTTTCGAT (SEQ ID NO:12222), TTTGGGCGTTTCGGGGATTTGTTTCGG (SEQ ID NO:12223), TTTGGGCGTTTCGGGGATTTGTTTCGGA (SEQ ID NO:12224), GCGTTTTTGGGCGTTTCGGGGATTTGT (SEQ ID NO:12225), GCGGGAGTTCGGGTAGGGTTTTTCGGA (SEQ ID NO:12226), TTGAGGGGGTTTTTCGCGGGAGTTTCG (SEQ ID NO:12227), TGAGGGGGTTTTTCGCGGGAGTTTCGG (SEQ ID NO:12228), GAGGGGGTTTTTCGCGGGAGTTTCGG (SEQ ID NO:12229), GCGGGAGTTCGGGTAGGGTTTTTCGGA (SEQ ID NO:12230)
Target1295	chr12:108169116-108169315	TTGGGCGTTTCGGGGATTTGTTTCGGA (SEQ ID NO:12231), TGGGCGTTTCGGGGATTTGTTTCGAT (SEQ ID NO:12232), GCGGTTTCGCTACGGGATGGTAGTATT (SEQ ID NO:12233), TTTGGGCGTTTCGGGGATTTGTTTCGG (SEQ ID NO:12234), TTTGGGCGTTTCGGGGATTTGTTTCGGA (SEQ ID NO:12235), GGGTAGGTGGTTTTTCGAGGCGCGTATA (SEQ ID NO:12236), GGGTAGGTGGTTTTTCGAGGCGCGTAT (SEQ ID NO:12237), GGTAGGTGGTTTTTCGAGGCGCGTATAGT (SEQ ID NO:12238), AGGTGGTTTCGAGGCGCGTATAGTTT (SEQ ID NO:12239), GGGGTAGGTGGTTTTTCGAGGCGCGTAT (SEQ ID NO:12240)

Figure 5 (Table 1)

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Target1296	chr12:108169333-108169452	TGGAGCGTTAGGTTTGGGGGTTTCGAGG (SEQ ID NO:12241), GGAGCGTTAGGTTTGGGGGTTTCGAGGG (SEQ ID NO:12242), TGTTGGAGCGTTAGGTTTGGGGGTTTCG (SEQ ID NO:12243), GAGCGTTAGGTTTGGGGGTTTCGAGGGC (SEQ ID NO:12244), TGTTGGAGCGTTAGGTTTGGGGGTTTCGA (SEQ ID NO:12245), GGGGGTTTGGTTAGTTTCGGGCGTTTCG (SEQ ID NO:12246), CGGGGGTTTTGGTTAGTTTCGGGCGTTTC (SEQ ID NO:12247), GGGGTTTTGGTTAGTTTCGGGCGTTTCGT (SEQ ID NO:12248), CGGGGGTTTTGGTTAGTTTCGGGCGTT (SEQ ID NO:12249), GGGGTTTTGGTTAGTTTCGGGCGTTTCGT (SEQ ID NO:12250)
Target1297	chr12:108169471-108169491	GGGCGGAATGTAATAGCGACGGGGAGT (SEQ ID NO:12251), TGGAGCGTTAGGTTTGGGGGTTTCGAGG (SEQ ID NO:12252), AGGGCGGAATGTAATAGCGACGGGGAG (SEQ ID NO:12253), GGAGCGTTAGGTTTGGGGGTTTCGAGGG (SEQ ID NO:12254), TGTTGGAGCGTTAGGTTTGGGGGTTTCG (SEQ ID NO:12255), GGGGGTTTTGGTTAGTTTCGGGCGTTTCG (SEQ ID NO:12256), CGGGGGTTTTGGTTAGTTTCGGGCGTTTC (SEQ ID NO:12257), GGGGTTTTGGTTAGTTTCGGGCGTTTCGT (SEQ ID NO:12258), CGGGGGTTTTGGTTAGTTTCGGGCGTT (SEQ ID NO:12259), GGGGTTTTGGTTAGTTTCGGGCGTTTCGT (SEQ ID NO:12260)
Target1298	chr12:108169515-108169524	GGGCGGAATGTAATAGCGACGGGGAGT (SEQ ID NO:12261), AGGGCGGAATGTAATAGCGACGGGGAG (SEQ ID NO:12262), GAGGAGGGGGGTAGTTAGCGAGCGTTC (SEQ ID NO:12263), GTTCGAGGAGGGGGGTAGTTAGCGAGC (SEQ ID NO:12264), TTCGAGGAGGGGGGTAGTTAGCGAGCG (SEQ ID NO:12265), CGGGGGTTTTGGTTAGTTTCGGGCGTTT (SEQ ID NO:12266), CGGGGGTTTTGGTTAGTTTCGGGCGTT (SEQ ID NO:12267), GCGGGGGTTTTGGTTAGTTTCGGGCGTT (SEQ ID NO:12268), CGGGGGTTTTGGTTAGTTTCGGGCGT (SEQ ID NO:12269), GCGGGGGTTTTGGTTAGTTTCGGGCG (SEQ ID NO:12270)
Target1299	chr12:108169547-108169566	GGGCGGAATGTAATAGCGACGGGGAGT (SEQ ID NO:12271), AGGGCGGAATGTAATAGCGACGGGGAG (SEQ ID NO:12272), GAGGAGGGGGGTAGTTAGCGAGCGTTC (SEQ ID NO:12273), GTTCGAGGAGGGGGGTAGTTAGCGAGC (SEQ ID NO:12274), TTCGAGGAGGGGGGTAGTTAGCGAGCG (SEQ ID NO:12275), AGGATTTTAGGTTGAGCGTTCGGTTGC (SEQ ID NO:12276), GAGGATTTTAGGTTGAGCGTTCGGTTGC (SEQ ID NO:12277), AGAGGATTTTAGGTTGAGCGTTCGGTTGC (SEQ ID NO:12278), CGAAGAGGATTTTAGGTTGAGCGTTCGGT (SEQ ID NO:12279), CGAAGAGGATTTTAGGTTGAGCGTTCGG (SEQ ID NO:12280)
Target1300	chr12:109273766-109273781	AGGTAATTTTATAGGGATTGGGAGCGAGGT (SEQ ID NO:12281), AGGTAATTTTATAGGGATTGGGAGCGAGGT (SEQ ID NO:12282), AGGTAATTTTATAGGGATTGGGAGCGAGGTTT (SEQ ID NO:12283), TAGGTAATTTTATAGGGATTGGGAGCGAGGT (SEQ ID NO:12284), TTAGGTAATTTTATAGGGATTGGGAGCGAGGT (SEQ ID NO:12285), ACGGTTTGAGGGGTGGGGTTCGGTATT (SEQ ID NO:12286), GTACGGTTTGAGGGGTGGGGTTCGGTA (SEQ ID NO:12287), GGATAGGGTACGGTTTGAGGGGTGGGG (SEQ ID NO:12288), TAGGGTACGGTTTGAGGGGTGGGGTTC (SEQ ID NO:12289), CGGTTTGAGGGGTGGGGTTCGGTATTG (SEQ ID NO:12290)
Target1301	chr12:109273835-109273888	CGGTCGGGTTTGGGTTTATGTTTTGTGGG (SEQ ID NO:12291), CGGTCGGGTTTGGGTTTATGTTTTGTGGG (SEQ ID NO:12292), TCGGTCGGGTTTGGGTTTATGTTTTGTGGG (SEQ ID NO:12293), CGGTCGGGTTTGGGTTTATGTTTTGTGG (SEQ ID NO:12294), TCGGTCGGGTTTGGGTTTATGTTTTGTGGG (SEQ ID NO:12295), TGTTGTTAGTTTCGGATTGGAGTGATGGG (SEQ ID NO:12296), GTTCGTTAGTTTCGGATTGGAGTGATGGG (SEQ ID NO:12297), TGTTGTTAGTTTCGGATTGGAGTGATGGG (SEQ ID NO:12298), GTTCGTTAGTTTCGGATTGGAGTGATGGG (SEQ ID NO:12299), TTGTTGTTAGTTTCGGATTGGAGTGATGGG (SEQ ID NO:12300)
Target1302	chr12:109628113-109628536	AGTTGTGTGGAAGGTGAGAGGGTGGA (SEQ ID NO:12301), TAGTTGTGTGGAAGGTGAGAGGGTGGA (SEQ ID NO:12302), TGTGTTGGGAGAGGTAGTTATGGGG (SEQ ID NO:12303), GTAGTTGTGTGGAAGGTGAGAGGGTGGA (SEQ ID NO:12304), GTAGTTGTGTGGAAGGTGAGAGGGTGGA (SEQ ID NO:12305), TTGTTTTGTTGGTGTTGTGGGGTG (SEQ ID NO:12306), AGTTGTTTGTGGTGTTGTGGGGT (SEQ ID NO:12307), GTTGTTTTGTTGGTGTTGTGGGGTG (SEQ ID NO:12308), AGTTGTTTGTGGTGTTGTGGGGTG (SEQ ID NO:12309), AGTTGTTTGTGGTGTTGTGGGGTG (SEQ ID NO:12310)
Target1303	chr12:113901279-113901325	GTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12311), AGGAAGTTGGAGTCGGTCGGGGATTGC (SEQ ID NO:12312), AGTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12313), AAGTTGGAGTCGGTCGGGGATTGCGTT (SEQ ID NO:12314), GAAGTTGGAGTCGGTCGGGGATTGCGT (SEQ ID NO:12315)
Target1304	chr12:113901337-113901352	GTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12316), AGGAAGTTGGAGTCGGTCGGGGATTGC (SEQ ID NO:12317), AGTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12318), AAGTTGGAGTCGGTCGGGGATTGCGTT (SEQ ID NO:12319), GAAGTTGGAGTCGGTCGGGGATTGCGT (SEQ ID NO:12320)
Target1305	chr12:113901393-113901409	GTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12321), GTTTTGGTAGTTTTCGGAGGGGGAGCG (SEQ ID NO:12322), CGTTTTGGTAGTTTTCGGAGGGGGAGC (SEQ ID NO:12323), AGTTGGAGTCGGTCGGGGATTGCGTTT (SEQ ID NO:12324), AAGTTGGAGTCGGTCGGGGATTGCGTT (SEQ ID NO:12325)
Target1306	chr12:113901467-113901478	GTTTTGGTAGTTTTCGGAGGGGGAGCG (SEQ ID NO:12326), CGTTTTGGTAGTTTTCGGAGGGGGAGC (SEQ ID NO:12327), GGAAGGAGATAGGGCGCGGTGAGAGAA (SEQ ID NO:12328), TTTTGGTAGTTTTCGGAGGGGGAGCGG (SEQ ID NO:12329), AGTCGTTTTGGTAGTTTTCGGAGGGGG (SEQ ID NO:12330)

Figure 5 (Table 1)

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Target1307	chr12:113901793-113901814	GGGTCGGTGAGAGATATAGAGATGCGGG (SEQ ID NO:12331), AGGGTCGGTGAGAGATATAGAGATGCGGG (SEQ ID NO:12332), GGGTCGGTGAGAGATATAGAGATGCGGGA (SEQ ID NO:12333), AGGGTCGGTGAGAGATATAGAGATGCGGGA (SEQ ID NO:12334), AGGGTCGGTGAGAGATATAGAGATGCGG (SEQ ID NO:12335)
Target1308	chr12:113901855-113901867	CGGTAGAGGGGTAGAGAGAAAGGCGGA (SEQ ID NO:12336), TCGGTAGAGGGGTAGAGAGAAAGGCGG (SEQ ID NO:12337), TCGGTAGAGGGGTAGAGAGAAAGGCGGA (SEQ ID NO:12338), CGGTAGAGGGGTAGAGAGAAAGGCGGAA (SEQ ID NO:12339), ATCGGTAGAGGGGTAGAGAGAAAGGCGG (SEQ ID NO:12340), TGTTTCGGGTTTTTCGGGTTTAGTCGC (SEQ ID NO:12341), ATGTTTCGGGTTTTTCGGGTTTAGTCGC (SEQ ID NO:12342), GATGTTTCGGGTTTTTCGGGTTTAGTCGC (SEQ ID NO:12343)
Target1309	chr12:113901937-113901976	GATATCGGAGGGTCGCGGAGGAGTCGA (SEQ ID NO:12344), AGATATCGGAGGGTCGCGGAGGAGTCG (SEQ ID NO:12345), CGTAGAGAGAGGAAAGACGGTCGCGGT (SEQ ID NO:12346), GAGATATCGGAGGGTCGCGGAGGAGTC (SEQ ID NO:12347), ATATCGGAGGGTCGCGGAGGAGTCGA (SEQ ID NO:12348)
Target1310	chr12:113902019-113902036	CGTAGAGAGAGGAAAGACGGTCGCGGT (SEQ ID NO:12349), GCGGTAGCGAGGGAGTTAGGAGTGAGT (SEQ ID NO:12350), CGTAGAGAGAGGAAAGACGGTCGCGGT (SEQ ID NO:12351), GCGGTAGCGAGGGAGTTAGGAGTGAGTT (SEQ ID NO:12352), GTAGAGAGAGGAAAGACGGTCGCGGT (SEQ ID NO:12353), TCGCGTTTTGTTTTGTTTCGTTGGTTTGT (SEQ ID NO:12354), TTCGCGTTTTGTTTTGTTTCGTTGGTTTGT (SEQ ID NO:12355), TGTTTTGTTTCGTTGGTTTTGTTTTGTTTCGTT (SEQ ID NO:12356), TTGTTTTGTTTCGTTGGTTTGTTTTTGTTTCGTT (SEQ ID NO:12357), TTGTTTTGTTTCGTTGGTTTTGTTTTGTTTCGTT (SEQ ID NO:12358)
Target1311	chr12:113902128-113902145	GCGGAGGTTGATAGTTTCGGGGAGAGG (SEQ ID NO:12359), GGTTCCGGGAGAGGAATCGGGTAGGGA (SEQ ID NO:12360), AGGTTCCGGGAGAGGAATCGGGTAGGG (SEQ ID NO:12361), TAGGTTCCGGGAGAGGAATCGGGTAGGG (SEQ ID NO:12362), GTTCCGGGAGAGGAATCGGGTAGGGAT (SEQ ID NO:12363), GGGCGTAGGGATCGAGTTTAGGGCGTT (SEQ ID NO:12364), AGGGCGTAGGGATCGAGTTTAGGGCGT (SEQ ID NO:12365), TAGGGCGTAGGGATCGAGTTTAGGGCG (SEQ ID NO:12366), GGGCGTAGGGATCGAGTTTAGGGCGT (SEQ ID NO:12367), AGGGCGTTAAGGTCGTTTCGTTTCGTT (SEQ ID NO:12368)
Target1312	chr12:113917518-113917544	CGGTGCGTAGGGTTGGGGAGTATAGGT (SEQ ID NO:12369), CGGTGCGTAGGGTTGGGGAGTATAGGT (SEQ ID NO:12370), GGTGCGTAGGGTTGGGGAGTATAGGT (SEQ ID NO:12371), CGGTGCGTAGGGTTGGGGAGTATAGTTT (SEQ ID NO:12372), CGGTGCGTAGGGTTGGGGAGTATAGG (SEQ ID NO:12373)
Target1313	chr12:113917702-113917732	TGCGGGTTTTGGGGCAGGTTTAGTTG (SEQ ID NO:12374), GCGGGTTTTGGGGCAGGTTTAGTTG (SEQ ID NO:12375), GCGGAGGCGTTGTTTGGGGATAGATCG (SEQ ID NO:12376), TGGGGCAGGTTTAGTTGTTTGGGGG (SEQ ID NO:12377), GGGGCGAGGTTTAGTTGTTTGGGGG (SEQ ID NO:12378), TGTTTGGGGTGGGTGTTGGAGGGTAGG (SEQ ID NO:12379), GGTGTTTGGGGTGGGTGTTGGAGGGTA (SEQ ID NO:12380), TTGGGGTGGGTGTTGGAGGGTAGGAGA (SEQ ID NO:12381), GTTTGGGGTGGGTGTTGGAGGGTAGGA (SEQ ID NO:12382), TACGGTGTGTTGGGGTGGGTGTTGGAGG (SEQ ID NO:12383)
Target1314	chr12:113917733-113917750	GGCGAGGCGTTGTTTGGGGATAGATCG (SEQ ID NO:12384), AGGCGAGGCGTTGTTTGGGGATAGATCG (SEQ ID NO:12385), AGGCGAGGCGTTGTTTGGGGATAGATC (SEQ ID NO:12386), AGGCGAGGCGTTGTTTGGGGATAGAT (SEQ ID NO:12387), GCGAGGCGTTGTTTGGGGATAGATCG (SEQ ID NO:12388), TGTTTGGGGTGGGTGTTGGAGGGTAGG (SEQ ID NO:12389), GGTGTTTGGGGTGGGTGTTGGAGGGTA (SEQ ID NO:12390), TTGGGGTGGGTGTTGGAGGGTAGGAGA (SEQ ID NO:12391), GTTTGGGGTGGGTGTTGGAGGGTAGGA (SEQ ID NO:12392), TACGGTGTGTTGGGGTGGGTGTTGGAGG (SEQ ID NO:12393)
Target1315	chr12:114075881-114076058	TCGGTCGTTTCGATTATTTGGGCGCGTAGA (SEQ ID NO:12394), GTCGGTCGTTTCGATTATTTGGGCGCGTAG (SEQ ID NO:12395), CGGTGCTTCGATTATTTGGGCGCGTAGAG (SEQ ID NO:12396), GTCGTTTCGATTATTTGGGTCGCGTT (SEQ ID NO:12397), GGTGCTTCGATTATTTGGGCGCGTAGAGG (SEQ ID NO:12398), GTGATAATGGCGGGGTGACGGGGGTTA (SEQ ID NO:12399), TGATAATGGCGGGGTGACGGGGGTTAA (SEQ ID NO:12400), AATGGCGGGGTGACGGGGGTTAATTCG (SEQ ID NO:12401), TGAGGGCGGTTATTGTGCGTTGTGA (SEQ ID NO:12402), GCGTTTTTGAGGGCGGTTATTGTGCGT (SEQ ID NO:12403)
Target1316	chr12:114833945-114833953	GATCGAGTGGAGGTAGTTGGGGGAGGC (SEQ ID NO:12404), CGATCGAGTGGAGGTAGTTGGGGGAGG (SEQ ID NO:12405), AGTGGAGGTAGTTGGGGGAGGCGAGTC (SEQ ID NO:12406), GAGTGGAGGTAGTTGGGGGAGGCGAGT (SEQ ID NO:12407), ATCGAGTGGAGGTAGTTGGGGGAGGCG (SEQ ID NO:12408), TTATCGGTCGGGGAGGCGGTCGGGTTA (SEQ ID NO:12409), TATCGGTCGGGGAGGCGGTCGGGTTAC (SEQ ID NO:12410), TATCGGTCGGGGAGGCGGTCGGGTTA (SEQ ID NO:12411), GTTATCGGTCGGGGAGGCGGTCGGGTT (SEQ ID NO:12412), TTATCGGTCGGGGAGGCGGTCGGGTTAC (SEQ ID NO:12413)
Target1317	chr12:114833956-114833974	GATCGAGTGGAGGTAGTTGGGGGAGGC (SEQ ID NO:12414), CGATCGAGTGGAGGTAGTTGGGGGAGG (SEQ ID NO:12415), AGTGGAGGTAGTTGGGGGAGGCGAGTC (SEQ ID NO:12416), GAGTGGAGGTAGTTGGGGGAGGCGAGT (SEQ ID NO:12417), ATCGAGTGGAGGTAGTTGGGGGAGGCG (SEQ ID NO:12418), TTATCGGTCGGGGAGGCGGTCGGGTTA (SEQ ID NO:12419), TATCGGTCGGGGAGGCGGTCGGGTTAC (SEQ ID NO:12420), TATCGGTCGGGGAGGCGGTCGGGTTA (SEQ ID NO:12421), GTTATCGGTCGGGGAGGCGGTCGGGTT (SEQ ID NO:12422), TTATCGGTCGGGGAGGCGGTCGGGTTAC (SEQ ID NO:12423)

Figure 5 (Table 1)

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Target1318	chr12:114833991-114834066	GATCGAGTGGAGGTAGTTGGGGGAGGC (SEQ ID NO:12424), CGATCGAGTGGAGGTAGTTGGGGGAGG (SEQ ID NO:12425), AGTGAGGTAGTTGGGGGAGGCGAGTC (SEQ ID NO:12426), GAGTGGAGGTAGTTGGGGGAGGCGAGT (SEQ ID NO:12427), ATCGAGTGGAGGTAGTTGGGGGAGGCG (SEQ ID NO:12428), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12429), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12430), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12431), TTATCGGTCGGGGAGGCGGTCGGGTTA (SEQ ID NO:12432), GGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12433)
Target1319	chr12:114834075-114834139	GGGTCGCGCGTTTTTAATTTTCGGTCGT (SEQ ID NO:12434), GGGTCGCGCGTTTTTAATTTTCGGTCGT (SEQ ID NO:12435), GGTGCGCGTTTTTAATTTTCGGTCGT (SEQ ID NO:12436), GGGTCGCGCGTTTTTAATTTTCGGTCGT (SEQ ID NO:12437), GGTGCGCGTTTTTAATTTTCGGTCGT (SEQ ID NO:12438), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12439), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12440), CGGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12441), GGTTAGCGGGGTTTCGTTGCGTTTTT (SEQ ID NO:12442), GTCGTCGGGGATTGTGGCGGTTAG (SEQ ID NO:12443)
Target1320	chr12:114834201-114834210	GTTTTCGGTCGCGGGGTTATCGGTTT (SEQ ID NO:12444), TCGGCGGGGTTATCGGTTTCGGTTAGT (SEQ ID NO:12445), TAGTTTTCGGTCGCGGGGTTATCGGT (SEQ ID NO:12446), AGTTTTCGGTCGCGGGGTTATCGGTT (SEQ ID NO:12447), GGTGCGCGGGGTTATCGGTTTCGGTTA (SEQ ID NO:12448), AGTTGGGGAGAGGGGTTTCGAGTTGTT (SEQ ID NO:12449), TAGTTGGGGAGAGGGGTTTCGAGTTGT (SEQ ID NO:12450), GTTGGGGAGAGGGGTTTCGAGTTGTTT (SEQ ID NO:12451), AGTTGGGGAGAGGGGTTTCGAGTTGTTT (SEQ ID NO:12452), AGTTGGGGAGAGGGGTTTCGAGTTGT (SEQ ID NO:12453)
Target1321	chr12:114840863-114840896	GCGTTTAGTGCCTTTTGGGTTTTGGGCG (SEQ ID NO:12454), GCGTTTAGTGCCTTTTGGGTTTTGGGC (SEQ ID NO:12455), AGTGCCTTTTGGGTTTTGGGCGTAGAG (SEQ ID NO:12456), CGTTTAGTGCCTTTTGGGTTTTGGGCGT (SEQ ID NO:12457), CGTTTAGTGCCTTTTGGGTTTTGGGCG (SEQ ID NO:12458), TGGCGCTTATTATCGGTCGTTGGGAG (SEQ ID NO:12459), GGTGGCGCGTTATTATCGGTCGTTGGG (SEQ ID NO:12460), TTGGCGCTTATTATCGGTCGTTGGGA (SEQ ID NO:12461), GTTGGCGCTTATTATCGGTCGTTGGG (SEQ ID NO:12462), GGTGGCGCGTTATTATCGGTCGTTGG (SEQ ID NO:12463)
Target1322	chr12:114840967-114841026	TAGCGGTCGGTGATGGCGCGTTAGTTA (SEQ ID NO:12464), GTTTTTAGCGGTCGGTGATGGCGCGTT (SEQ ID NO:12465), TTTTAGCGGTCGGTGATGGCGCGTTAG (SEQ ID NO:12466), TTAGCGGTCGGTGATGGCGCGTTAGTT (SEQ ID NO:12467), TTTAGCGGTCGGTGATGGCGCGTTAGT (SEQ ID NO:12468), TGTTTTGCGGTCGGGTTTGGTTGGT (SEQ ID NO:12469), TTGTTTTGCGGTCGGGTTTGGTTGGT (SEQ ID NO:12470), TTTTGCCTCGGGTTTGGTTGGTTGG (SEQ ID NO:12471), CGGGGTTTGGTTGGTTGGCGCGTTATT (SEQ ID NO:12472), GTTTTGCCTCGGGTTTGGTTGGTTG (SEQ ID NO:12473)
Target1323	chr12:114841029-114841071	TAGCGGTCGGTGATGGCGCGTTAGTTA (SEQ ID NO:12474), GTTTTTAGCGGTCGGTGATGGCGCGTT (SEQ ID NO:12475), TTTTAGCGGTCGGTGATGGCGCGTTAG (SEQ ID NO:12476), TTAGCGGTCGGTGATGGCGCGTTAGTT (SEQ ID NO:12477), TTTAGCGGTCGGTGATGGCGCGTTAGT (SEQ ID NO:12478), AAGGGTTAGGTTAGCGGTCGATTAGGTC (SEQ ID NO:12479), AATAAGGGTTAGGTTAGCGGTCGATTAGGTC (SEQ ID NO:12480), TTTAATAAGGGTTAGGTTAGCGGTCGATTAGGTC (SEQ ID NO:12481), TTTAATAAGGGTTAGGTTAGCGGTCGATTAGGTC (SEQ ID NO:12482)
Target1324	chr12:114841155-114841170	GTAGGAGGAGGTAGGAGGAGGCGGGAG (SEQ ID NO:12483), GAGGTAGGAGGAGGTAGGAGGAGGCGG (SEQ ID NO:12484), GGAGGTAGGAGGAGGTAGGAGGAGGCG (SEQ ID NO:12485), GCGGAGGAGGTAGGAGGAGGTAGGAGG (SEQ ID NO:12486), CGCGGAGGAGGTAGGAGGAGGTAGGAG (SEQ ID NO:12487), TCGGTCGTTTGGGGTTAGTTAATAATGGTTTAGA (SEQ ID NO:12488), TTCGGTCGTTTGGGGTTAGTTAATAATGGTTTAGA (SEQ ID NO:12489), TCGGTCGTTTGGGGTTAGTTAATAATGGTTTAGAT (SEQ ID NO:12490), TTCGGTCGTTTGGGGTTAGTTAATAATGGTTTAGAT (SEQ ID NO:12491), ATTCGGTCGTTTGGGGTTAGTTAATAATGGTTTAGA (SEQ ID NO:12492)
Target1325	chr12:114886355-114886374	TGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12493), GGTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12494), TGGTTGTGGGTGGATGGATGAAGAAGG (SEQ ID NO:12495), TGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12496), TTGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12497), TTGATGGAGTAGTTCGCGTCGTGGTGC (SEQ ID NO:12498), TTTGATGGAGTAGTTCGCGTCGTGGTGC (SEQ ID NO:12499), TGATGGAGTAGTTCGCGTCGTGGTGC (SEQ ID NO:12500), GGAAACGCGGTTGGAGGTTAGTGGATG (SEQ ID NO:12501), GGAAACGCGGTTGGAGGTTAGTGGATG (SEQ ID NO:12502)
Target1326	chr12:114886408-114886417	TGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12503), GGTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12504), TGGTTGTGGGTGGATGGATGAAGAAGG (SEQ ID NO:12505), TGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12506), TTGGTTGTGGGTGGATGGATGAAGAAGGT (SEQ ID NO:12507), CGGGTTTATTTGGGGGCGTTAGTGT (SEQ ID NO:12508), TCGGGTTTATTTGGGGGCGTTAGTGT (SEQ ID NO:12509), TCGGGTTTATTTGGGGGCGTTAGTG (SEQ ID NO:12510), CGGGTTTATTTGGGGGCGTTAGTGT (SEQ ID NO:12511), TCGGGTTTATTTGGGGGCGTTAGTGT (SEQ ID NO:12512)

Figure 5 (Table 1)

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Target1327	chr12:114886449-114886466	TTTATTTGGAGTTTAAGTTTTGGCGCGCG (SEQ ID NO:12513), TTTTATTTGGAGTTTAAGTTTTGGCGCGCG (SEQ ID NO:12514), CGGTTGTAGTATTGGGCGGTTTTAGAGTGG (SEQ ID NO:12515), CGGTTGTAGTATTGGGCGTTTTAGAGTGGGA (SEQ ID NO:12516), TCGGTTGTAGTATTGGGCGTTTTAGAGTGG (SEQ ID NO:12517), GCGGTCGTTGGTAGGTAGTCGGATCGG (SEQ ID NO:12518), CGGTCGTTGGTAGGTAGTCGGATCGGG (SEQ ID NO:12519), AGCGGTCGTTGGTAGGTAGTCGGATCG (SEQ ID NO:12520), TTGAGCGGTCGTTGGTAGGTAGTCGGA (SEQ ID NO:12521), GGTGTCGTTGGTAGGTAGTCGGATCGGGA (SEQ ID NO:12522)
Target1328	chr12:114886504-114886517	GCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12523), AGCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12524), GCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12525), AGCGGCGAGTTAGGGTATTTCCGGATCG (SEQ ID NO:12526), TAAGTTATCGGCGCGGTTTAGGAGGGG (SEQ ID NO:12527), AGGCGGAATGTAGGTCGGTGTGTGAGG (SEQ ID NO:12528), GGAGGCGGAATGTAGGTCGGTGTGTGA (SEQ ID NO:12529), GCGGGAATGTAGGTCGGTGTGTGAGGT (SEQ ID NO:12530), GCGGTCGTTGGTAGGTAGTCGGATCGG (SEQ ID NO:12531), CGGTCGTTGGTAGGTAGTCGGATCGGG (SEQ ID NO:12532)
Target1329	chr12:114886523-114886562	GCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12533), AGCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12534), GCGGCGAGTTAGGGTATTTCCGGATCGG (SEQ ID NO:12535), AGCGGCGAGTTAGGGTATTTCCGGATCG (SEQ ID NO:12536), TAAGTTATCGGCGCGGTTTAGGAGGGG (SEQ ID NO:12537), AGGCGGAATGTAGGTCGGTGTGTGAGG (SEQ ID NO:12538), GGAGGCGGAATGTAGGTCGGTGTGTGA (SEQ ID NO:12539), GCGGGAATGTAGGTCGGTGTGTGAGGT (SEQ ID NO:12540), GATGGGGGTTGGGAGGCGGAATGTAG (SEQ ID NO:12541), TTCGTGTAAGGATGGGGGTTGGGGAG (SEQ ID NO:12542)
Target1330	chr12:115103612-115104184	ATAAGAGGGTTGGTCGGGGAGGGGGAT (SEQ ID NO:12543), TCGCGGGAGAGGGAAATTTCCGGCTTA (SEQ ID NO:12544), CGGATTGCGTTCCGGTTTGGCGTTTGG (SEQ ID NO:12545), GGTGTTGTCGGGGAGGGGGATGTTGAAA (SEQ ID NO:12546), GGACGCGGGGGAGGATTTGAGGTTAGT (SEQ ID NO:12547), TTCGGGGATTGTAGGTGGAGACGTCGT (SEQ ID NO:12548), GTTCGGGGATTGTAGGTGGAGACGTCGT (SEQ ID NO:12549), GTTCGGGGATTGTAGGTGGAGACGTCG (SEQ ID NO:12550), GAGGGAAATCGCGGGGAGAGGAAATT (SEQ ID NO:12551), CGGGGATTGTAGGTGGAGACGTCGTAGG (SEQ ID NO:12552)
Target1331	chr12:122473392-122473522	GGGTTGGGTAGGGTTCGGCGGTTTTTG (SEQ ID NO:12553), AGGGTTGGGTAGGGTTCGGCGGTTTTT (SEQ ID NO:12554), AGGGGTAGGAGGGTTGGGTAGGGTTCG (SEQ ID NO:12555), GGTGTTGGGTAGGGTTCGGCGGTTTTTGT (SEQ ID NO:12556), GAGGGTTGGGTAGGGTTCGGCGGTTTTT (SEQ ID NO:12557), TGCGGGGTTTTGTTTTTGGGTGAGGAG (SEQ ID NO:12559), GCGGGGTTTTGTTTTTGGGTGAGGAG (SEQ ID NO:12560), TTGCGGGTTTTGTTTTTGGGTGAGG (SEQ ID NO:12561), TGCGGGGTTTTGTTTTTGGGTGAGGAGA (SEQ ID NO:12562)
Target1332	chr12:124941570-124941724	ACGTCGTTTGGGTAGCGTTTGGTAATAGA (SEQ ID NO:12563), ACGTCGTTTGGGTAGCGTTTGGTAATAGAT (SEQ ID NO:12564), CGTCGTTTGGGTAGCGTTTGGTAATAGATG (SEQ ID NO:12565), ACGTCGTTTGGGTAGCGTTTGGTAATAGATG (SEQ ID NO:12566), CGTCGTTTGGGTAGCGTTTGGTAATAGATGA (SEQ ID NO:12567), TAGGGTTAGGGGTTTAGGGGAGGGCGG (SEQ ID NO:12568), GGGTGGTTGGAGAGGTGGGTAGGGAGG (SEQ ID NO:12569), GGGGTGGTTGGAGAGGTGGGTAGGGAG (SEQ ID NO:12570), GTGGTTGGAGAGGTGGGTAGGGAGGC (SEQ ID NO:12571), ATAGGGTTAGGGGTTTAGGGGAGGGCG (SEQ ID NO:12572)
Target1333	chr12:124941781-124941952	GGGGGAGGGAGGTTCCGGGTTTTTGT (SEQ ID NO:12573), TTTAGTACGGGGGAGGGAGGTTCCGGG (SEQ ID NO:12574), TTTTAGTACGGGGGAGGGAGGTTCCGGG (SEQ ID NO:12575), TACGGGGGAGGGAGGTTCCGGGTTTTT (SEQ ID NO:12576), CGGGGGAGGGAGGTTCCGGGTTTTTGT (SEQ ID NO:12577), GGGAGGGTTTGTAGGGGTTTCCGGGTT (SEQ ID NO:12578), TGGTTTGTGGGGTCGTTGTGGGGTA (SEQ ID NO:12579), GTTGGTTTGTGGGGTCGTTGTGGGGG (SEQ ID NO:12580), GGTGGTTTGTGGGGTCGTTGTGGGG (SEQ ID NO:12581), TTTAGCGTGGGGAGGGTTTGTAGGGG (SEQ ID NO:12582)
Target1334	chr12:124941977-124942177	GGAGGAGGGAGGGTGAGATAGAGGCGT (SEQ ID NO:12583), CGAGGGAAGGAGGAGGAGGAGGAGGAGG (SEQ ID NO:12584), AGGAGGAGGGAGGGTGAGATAGAGGCG (SEQ ID NO:12585), GAAGGAGGAGGAGGAGGAGGAGGGAGG (SEQ ID NO:12586), GGAAGGAGGAGGAGGAGGAGGAGGGAGG (SEQ ID NO:12587), TTTAGTTGTGAGTGGGGAGGAGGCGGG (SEQ ID NO:12588), TTGGTAGTGTGCGTTGGGTTGGTGGGG (SEQ ID NO:12589), GGTAGTGTGCGTTGGGTTGGTGGGGAG (SEQ ID NO:12590), AGGGTTGGTAGTGTGCGTTGGGTTGGT (SEQ ID NO:12591), AGGCGGGGAGGTTTCCGGGTAGTTAG (SEQ ID NO:12592)
Target1335	chr12:132258427-132258452	CGGTTTCCGGGATTTGGGGTTTAGGCG (SEQ ID NO:12593), GGTTCGGGATTTGGGGTTTAGGCG (SEQ ID NO:12594), CGGTTTCCGGGATTTGGGGTTTAGGC (SEQ ID NO:12595), GGATAGTATAGTTAGGAGGAGAGTGCGGT (SEQ ID NO:12596), AGGATAGTATAGTTAGGAGGAGAGTGCGGT (SEQ ID NO:12597), GGGTTTTTGGTTTTCTGGGTTTTTATTATTTGGT (SEQ ID NO:12598), TGGGTTTTTGGTTTTCTGGGTTTTTATTATTTGG (SEQ ID NO:12599), TTTTAAGGTTTCGTTTGTAGTTTGGGTTTCCGAGTT (SEQ ID NO:12600), TTTTAAGGTTTCGTTTGTAGTTTGGGTTTCCGAGT (SEQ ID NO:12601)

Figure 5 (Table 1)

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Target1336	chr12:132258560-132258668	TGGGGTTTAGGCGAGGTTTTGAGGAGT (SEQ ID NO:12602), TGGGGTTTAGGCGAGGTTTTGAGGAGT (SEQ ID NO:12603), TTGGGGTTTAGGCGAGGTTTTGAGGAGT (SEQ ID NO:12604), GGGGTTTAGGCGAGGTTTTGAGGAGT (SEQ ID NO:12605), TTGGGGTTTAGGCGAGGTTTTGAGGAGT (SEQ ID NO:12606), GCGGAAATGCGGTTTTATTTTGTCTGGTT (SEQ ID NO:12607), GCGGAAATGCGGTTTTATTTTGTCTGGTT (SEQ ID NO:12608), GCGGAAATGCGGTTTTATTTTGTCTGGTTT (SEQ ID NO:12609), GCGGAAATGCGGTTTTATTTTGTCTGGTTT (SEQ ID NO:12610), GCGGAAATGCGGTTTTATTTTGTCTGGTTTTCTG (SEQ ID NO:12611)
Target1337	chr12:133481384-133481393	CGGTTTGGGGATGATTTGAGGTCGCGT (SEQ ID NO:12612), TCGGTTTGGGGATGATTTGAGGTCGCG (SEQ ID NO:12613), TCGGTTTGGGGATGATTTGAGGTCGCGT (SEQ ID NO:12614), CGGTTTGGGGATGATTTGAGGTCGCGT (SEQ ID NO:12615), TTCGTTTGGGGATGATTTGAGGTCGCG (SEQ ID NO:12616)
Target1338	chr12:133481463-133481558	GGGCGCGTTTTGTCTGGTTATTAGGGGT (SEQ ID NO:12617), TGGGCGCGTTTTGTCTGGTTATTAGGGG (SEQ ID NO:12618), TGGGCGCGTTTTGTCTGGTTATTAGGGGT (SEQ ID NO:12619), TTGGGCGCGTTTTGTCTGGTTATTAGGGG (SEQ ID NO:12620), GGGTTGGGCGCGTTTTGTCTGGTTATTA (SEQ ID NO:12621), TCGGTTGTTTTTGGTGGTCTGGTAGGGC (SEQ ID NO:12622), GTTTTTGGTGGTCTGGTAGGGCGCGTTT (SEQ ID NO:12623), GTTGTTTTTGGTGGTCTGGTAGGGCGCG (SEQ ID NO:12624), CGTTGTTTTTGGTGGTCTGGTAGGGCGC (SEQ ID NO:12625), GCGTTGTTTTTGGTGGTCTGGTAGGGCG (SEQ ID NO:12626)
Target1339	chr12:133481570-133481590	GGGCGCGTTTTGTCTGGTTATTAGGGGT (SEQ ID NO:12627), TGGGCGCGTTTTGTCTGGTTATTAGGGG (SEQ ID NO:12628), TGGGCGCGTTTTGTCTGGTTATTAGGGGT (SEQ ID NO:12629), TTGGGCGCGTTTTGTCTGGTTATTAGGGG (SEQ ID NO:12630), GGGTTGGGCGCGTTTTGTCTGGTTATTA (SEQ ID NO:12631)
Target1340	chr13:21520242-21520564	GGATGGAGAAACGGTGGAGAGACGGG (SEQ ID NO:12632), GGGATGGAGAAACGGTGGAGAGACGGG (SEQ ID NO:12633), GGGGATGGAGAAACGGTGGAGAGACGG (SEQ ID NO:12634), GGGGGATGGAGAAACGGTGGAGAGACG (SEQ ID NO:12635), TTTCGGGGGATGGAGAAACGGTGGAG (SEQ ID NO:12636), CGGGGCGTATTAGTTTTTTAGGCGTCGGG (SEQ ID NO:12637), TCGTTAATTGCGGGGATTTCTTCGT (SEQ ID NO:12638), ATTAGGAGATTTCTGGTGGCGAGTTC (SEQ ID NO:12639), CGGGGCGTATTAGTTTTTTAGGCGTCGG (SEQ ID NO:12640), GGGGCGTATTAGTTTTTTAGGCGTCGGG (SEQ ID NO:12641)
Target1341	chr13:25320032-25320080	TGTAGCGGGCGGTTTGTAGGGTGAGT (SEQ ID NO:12642), TTGTAGCGGGCGGTTTGTAGGGTGAGT (SEQ ID NO:12643), AGCGGGCGGTTTGTAGGGTGAGTTACG (SEQ ID NO:12644), GTTGTAGCGGGCGGTTTGTAGGGTGAG (SEQ ID NO:12645), CGTTGTAGCGGGCGGTTTGTAGGGTGA (SEQ ID NO:12646), GTAGTTCGTGGTTGCGCGGGAAAGTCG (SEQ ID NO:12647), GTGGCGGTAGTGTAGTTCGTGGTTGCG (SEQ ID NO:12648), CGTGGCGGTAGTGTAGTTCGTGGTTGC (SEQ ID NO:12649), GCGTGGCGGTAGTGTAGTTCGTGGTTG (SEQ ID NO:12650), GTGTAGTTCGTGGTTGCGCGGGAAAGT (SEQ ID NO:12651)
Target1342	chr13:25320106-25320227	TGTAGCGGGCGGTTTGTAGGGTGAGT (SEQ ID NO:12652), TTGTAGCGGGCGGTTTGTAGGGTGAGT (SEQ ID NO:12653), AGCGGGCGGTTTGTAGGGTGAGTTACG (SEQ ID NO:12654), GTTGTAGCGGGCGGTTTGTAGGGTGAG (SEQ ID NO:12655), TGTTCGTGGGTTATTTCTGGCGGTAGG (SEQ ID NO:12656), GTTGGAGTTTTTGTCTGGCGTGGCGTA (SEQ ID NO:12657), GTAGTTCGTGGTTGCGCGGGAAAGTCG (SEQ ID NO:12658), GGAGTTTTTGTCTGGCGGTGGCGGTAGT (SEQ ID NO:12659), GCGTAGGAAGGGGAGGTTTCGGGAAG (SEQ ID NO:12660), GCGTAGGAAGGGGAGGTTTCGGGAAGT (SEQ ID NO:12661)
Target1343	chr13:25320247-25320389	AGGTTTCGGTTCTAGTTTCGCGCGTT (SEQ ID NO:12662), TAGGTTTCGGTTCTAGTTTCGCGCGT (SEQ ID NO:12663), GGTTTCGGTTCTAGTTTCGCGCGTTT (SEQ ID NO:12664), AGGTTTCGGTTCTAGTTTCGCGCGTTT (SEQ ID NO:12665), AGGTTTCGGTTCTAGTTTCGCGCGT (SEQ ID NO:12666), GCGTAGGAAGGGGAGGTTTCGGGAAG (SEQ ID NO:12667), GCGTAGGAAGGGGAGGTTTCGGGAAGT (SEQ ID NO:12668), GGTGGTGGCGTAGGAAGGGGAGGTTTC (SEQ ID NO:12669), GTGGTGCGTAGGAAGGGGAGGTTTCG (SEQ ID NO:12670), GCGGGTCGGGTTTGGTTTCGGTTTTT (SEQ ID NO:12671)
Target1344	chr13:25320541-25320560	GGGTGCGTAGGGAGAAATGGGTTGTGGT (SEQ ID NO:12672), GAGGTGTGGGGGTGCGTAGGGAGAAATG (SEQ ID NO:12673), TTAGAGAGGTTTGGCGAGGTGTGGGGG (SEQ ID NO:12674), TCGTAGGGAGAAATGGGTTGTGGTCTG (SEQ ID NO:12675), GGGGTGCGTAGGGAGAAATGGGTTGTGG (SEQ ID NO:12676), TCGTCGGTTTTTAAGGAGAACGCGGT (SEQ ID NO:12677), CGTCGGTTTTTAAGGAGAACGCGGTG (SEQ ID NO:12678), CGTCGGTTTTTAAGGAGAACGCGGTGA (SEQ ID NO:12679), TCGTCGGTTTTTAAGGAGAACGCGGTG (SEQ ID NO:12680), TCGTCGGTTTTTAAGGAGAACGCGGTGA (SEQ ID NO:12681)
Target1345	chr13:25320608-25320617	TGGTGCCTGTTGGTTTTGTGGAGATGG (SEQ ID NO:12682), TGGTGCCTGTTGGTTTTGTGGAGATGGA (SEQ ID NO:12683), GGTGCGTGTGGTTTTGTGGAGATGGA (SEQ ID NO:12684), ATGGTGCCTGTTGGTTTTGTGGAGATGG (SEQ ID NO:12685), TGGTGCCTGTTGGTTTTGTGGAGATGGAT (SEQ ID NO:12686), TCGTCGGTTTTTAAGGAGAACGCGGT (SEQ ID NO:12687), CGTCGGTTTTTAAGGAGAACGCGGTG (SEQ ID NO:12688), CGTCGGTTTTTAAGGAGAACGCGGTGA (SEQ ID NO:12689), TCGTCGGTTTTTAAGGAGAACGCGGTG (SEQ ID NO:12690), TCGTCGGTTTTTAAGGAGAACGCGGTGA (SEQ ID NO:12691)

Figure 5 (Table 1)

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Target1346	chr13:25320665-25320698	CGAAGGTGGTGGGGATTGTCGTGAGGA (SEQ ID NO:12692), TTGGCGAAGGTGGTGGGGATTGTCGTG (SEQ ID NO:12693), GTTGGCGAAGGTGGTGGGGATTGTCGT (SEQ ID NO:12694), GCGAAGGTGGTGGGGATTGTCGTGAGG (SEQ ID NO:12695), GGCGAAGGTGGTGGGGATTGTCGTGAG (SEQ ID NO:12696), GCGGGTGGAGCGTAGTTTTTGGGAGA (SEQ ID NO:12697), GCGGGTGGAGCGTAGTTTTTGGGAGAG (SEQ ID NO:12698), CGGGTGGAGCGTAGTTTTTGGGAGAGT (SEQ ID NO:12699), CGGGTGGAGCGTAGTTTTTGGGAGAG (SEQ ID NO:12700), GCGGGTGGAGCGTAGTTTTTGGGAGAGT (SEQ ID NO:12701)
Target1347	chr13:25320780-25320804	GCGCGGTAGTGGTTTCGAGTTTTGGGT (SEQ ID NO:12702), GCGCGGTAGTGGTTTCGAGTTTTGGG (SEQ ID NO:12703), GCGCGGTAGTGGTTTCGAGTTTTGG (SEQ ID NO:12704), GCGCGGTAGTGGTTTCGAGTTTTG (SEQ ID NO:12705), GCGCGGTAGTGGTTTCGAGTTTTGGGT (SEQ ID NO:12706), CGTGGTAGGGGCGTTTAGGGGTTAGGT (SEQ ID NO:12707), CGTGGTAGGGGCGTTTAGGGGTTAGG (SEQ ID NO:12708), TGAAGAGGTTAGTGTGGGACGGGGG (SEQ ID NO:12709), GTGGTAGGGGCGTTAGGGGTTAGGT (SEQ ID NO:12710), TGAAGAGGTTAGTGTGGGACGGGGG (SEQ ID NO:12711)
Target1348	chr13:51417461-51417509	TGGGTTAGGGGTAGGGTTCGCGGTTT (SEQ ID NO:12712), TTGGGTTAGGGGTAGGGTTCGCGGTT (SEQ ID NO:12713), TTTGGGTTAGGGGTAGGGTTCGCGGT (SEQ ID NO:12714), TCGGGGGAAGGGTAGTAATTCGCGGTT (SEQ ID NO:12715), TTCGGGGGAAGGGTAGTAATTCGCGGT (SEQ ID NO:12716), GAGGAGGAGGTAGTGCAGGCGGTTAG (SEQ ID NO:12717), AGAGGAGGAGGTAGTGCAGGCGGTTGA (SEQ ID NO:12718), GTTGAGGGGGGCGTCGAGTTGTTGTTT (SEQ ID NO:12719), TAGAGGAGGAGGTAGTGCAGGCGGTTG (SEQ ID NO:12720), TGAGGGGGGCGTCGAGTTGTTGTTTT (SEQ ID NO:12721)
Target1349	chr13:51417538-51417648	TGGGTTAGGGGTAGGGTTCGCGGTTT (SEQ ID NO:12722), TTGGGTTAGGGGTAGGGTTCGCGGTT (SEQ ID NO:12723), TTTGGGTTAGGGGTAGGGTTCGCGGT (SEQ ID NO:12724), TCGGGGGAAGGGTAGTAATTCGCGGTT (SEQ ID NO:12725), TTCGGGGGAAGGGTAGTAATTCGCGGT (SEQ ID NO:12726), TAGGAGTGGGGTTGGGGGGACGGTTTA (SEQ ID NO:12727), TGTTAGTAGGAGTGGGGTTGGGGGGACG (SEQ ID NO:12728), TGTTAGTAGGAGTGGGGTTGGGGGGG (SEQ ID NO:12729), GTAGTAGGAGTGGGGTTGGGGGGACG (SEQ ID NO:12730), TGTTAGTAGGAGTGGGGTTGGGGGGG (SEQ ID NO:12731)
Target1350	chr13:51417661-51417687	CGTGGTTTGGGTTTCGCGGTTTTCG (SEQ ID NO:12732), GCGGGTTTTCGGGGGCGATTGGATC (SEQ ID NO:12733), GCGGGTTTTCGGGGGCGATTGGAT (SEQ ID NO:12734), GGTTTGAGCGACGGGTTGGAGCGG (SEQ ID NO:12735), GGGTTTTCGCGACGGGTTGGAGCG (SEQ ID NO:12736), TAGGAGTGGGGTTGGGGGGACGGTTTA (SEQ ID NO:12737), TGTTAGTAGGAGTGGGGTTGGGGGGACG (SEQ ID NO:12738), TGTTAGTAGGAGTGGGGTTGGGGGGG (SEQ ID NO:12739), GTAGTAGGAGTGGGGTTGGGGGGACG (SEQ ID NO:12740), TGTTAGTAGGAGTGGGGTTGGGGGGG (SEQ ID NO:12741)
Target1351	chr13:51417768-51417796	CGTGGTTTGGGTTTCGCGGTTTTCG (SEQ ID NO:12742), CGTGGTTTGGGTTTCGCGGTTTTCG (SEQ ID NO:12743), GTGGTTTGGGTTTCGCGGTTTTCG (SEQ ID NO:12744), GCGGGTTTTCGGGGGCGATTGGATC (SEQ ID NO:12745), GCGGGTTTTCGGGGGCGATTGGAT (SEQ ID NO:12746), GAGCGGTCGGGTCGTTAGC (SEQ ID NO:12747), TCGATTATACGTTGTGAGATTTAGAGGTCGAGGA (SEQ ID NO:12748), GTCGATTATACGTTGTGAGATTTAGAGGTCGAGG (SEQ ID NO:12749), GGTGATTATACGTTGTGAGATTTAGAGGTCGAG (SEQ ID NO:12750)
Target1352	chr13:51417803-51417813	TGGAGGTTATTAAGGGCGTAGGGTTGGT (SEQ ID NO:12751), GGAGGTTATTAAGGGCGTAGGGTTGGT (SEQ ID NO:12752), TGGAGGTTATTAAGGGCGTAGGGTTGG (SEQ ID NO:12753), TGTTGGTTGATGGAGGTTATTAAGGGCGT (SEQ ID NO:12754), GGTGGTTGATGGAGGTTATTAAGGGCGT (SEQ ID NO:12755), TTAGAGTCGGGGGCGGGGTC (SEQ ID NO:12756), GGGGTCGATTATACGTTGTGAGATTTAGAGGTCG (SEQ ID NO:12757), GGGTCGATTATACGTTGTGAGATTTAGAGGTCG (SEQ ID NO:12758), GGGGTCGATTATACGTTGTGAGATTTAGAGGTC (SEQ ID NO:12759), GGGTCGATTATACGTTGTGAGATTTAGAGGTCGA (SEQ ID NO:12760)
Target1353	chr13:51417831-51417847	GCGTGTAGGTGGAGTAGTAGCGAGGGA (SEQ ID NO:12761), TGTTAGGTGGAGTAGTAGCGAGGGAGGC (SEQ ID NO:12762), GCGTGTAGGTGGAGTAGTAGCGAGGGAG (SEQ ID NO:12763), GTGTAGGTGGAGTAGTAGCGAGGGAGGC (SEQ ID NO:12764), CGTGTAGGTGGAGTAGTAGCGAGGGAGG (SEQ ID NO:12765), AGGCGAAGGTAGAGGTTAGTACGGGTT (SEQ ID NO:12766), TAGGCGAAGGTAGAGGTTAGTACGGGT (SEQ ID NO:12767), AGGCGAAGGTAGAGGTTAGTACGGGT (SEQ ID NO:12768), AGGCGAAGGTAGAGGTTAGTACGGGTTA (SEQ ID NO:12769), TAGGCGAAGGTAGAGGTTAGTACGGGTT (SEQ ID NO:12770)
Target1354	chr13:51417855-51417881	CGGGGGCGTTGGGGTCGTTAAGGTTAT (SEQ ID NO:12771), CGGGGGCGTTGGGGTCGTTAAGGTTATA (SEQ ID NO:12772), GCGTGTAGGTGGAGTAGTAGCGAGGGA (SEQ ID NO:12773), CGGGGGCGTTGGGGTCGTTAAGGTTA (SEQ ID NO:12774), TGTTAGGTGGAGTAGTAGCGAGGGAGGC (SEQ ID NO:12775), AGGCGAAGGTAGAGGTTAGTACGGGTT (SEQ ID NO:12776), TAGGCGAAGGTAGAGGTTAGTACGGGT (SEQ ID NO:12777), AGGCGAAGGTAGAGGTTAGTACGGGT (SEQ ID NO:12778), AGGCGAAGGTAGAGGTTAGTACGGGTTA (SEQ ID NO:12779), TAGGCGAAGGTAGAGGTTAGTACGGGTT (SEQ ID NO:12780)

Figure 5 (Table 1)

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Target1355	chr13:53313143-53313336	TAGTCGCGCGGGGTTGGAGGGTTTTAT (SEQ ID NO:12781), GGGGAGTTTACGTTGGGTTTCGAGGGGT (SEQ ID NO:12782), AGGGGAGTTTACGTTGGGTTTCGAGGGG (SEQ ID NO:12783), GTAGTCGCGCGGGGTTGGAGGGTTTTA (SEQ ID NO:12784), TTTTGAGTAGTCGCGCGGGGTTGGAGG (SEQ ID NO:12785), GCGCGGTTGTTAAGGTGGGAGTCGTG (SEQ ID NO:12786), GTTGGGGGTCGTAGGTGTTGGCGGTAT (SEQ ID NO:12787), CGCGGTTGTTAAGGTGGGAGTCGTGG (SEQ ID NO:12788), TTTTGGGGGTTATCGCGTGGGGTTCG (SEQ ID NO:12789), GGGGTATTCTAGGAGTTCGGGCGAGT (SEQ ID NO:12790)
Target1356	chr13:53313337-53313459	TAGTCGCGCGGGGTTGGAGGGTTTTAT (SEQ ID NO:12791), AGTTTTAGGGAGTGGGGAGTCGGGCG (SEQ ID NO:12792), AGTGGGGAGTCGGGCGGAAATAGTTC (SEQ ID NO:12793), GAGTGGGGAGTCGGGCGGAAATAGTT (SEQ ID NO:12794), GTAGTCGCGCGGGGTTGGAGGGTTTTA (SEQ ID NO:12795), GTTGGGGGTCGTAGGTGTTGGCGGTAT (SEQ ID NO:12796), CGGTAGAGGGTGTAGGTTTTGGGGCGA (SEQ ID NO:12797), TCGGTAGAGGGTGTAGGTTTTGGGGCG (SEQ ID NO:12798), GGCGAAGGTTTTGTGTTGCGGGGTTTG (SEQ ID NO:12799), TTTTGGGGGTTATCGCGTGGGGTTCG (SEQ ID NO:12800)
Target1357	chr13:53313529-53313622	GTAGTCGGGCGTGAAGTGGGATGAGT (SEQ ID NO:12801), TGTAGTCGGGCGTGAAGTGGGATGAG (SEQ ID NO:12802), TTGTAGTCGGGCGTGAAGTGGGATGA (SEQ ID NO:12803), AGTCGGGCGTGAAGTGGGATGAGTAA (SEQ ID NO:12804), CGAGGGTTTTTTGTAGTCGGGCGTGGA (SEQ ID NO:12805), GTTATCGAATGGGTGTGTTGGCGGGGG (SEQ ID NO:12806), CGAATGGGTGTGTTGGCGGGGGGATAA (SEQ ID NO:12807), TTATCGAATGGGTGTGTTGGCGGGGGG (SEQ ID NO:12808), TGTTATCGAATGGGTGTGTTGGCGGGG (SEQ ID NO:12809), GAATGGGTGTGTTGGCGGGGGGATAAA (SEQ ID NO:12810)
Target1358	chr13:53421357-53421510	GAAGGGTGAGGTTGTCGCGCGTTTTG (SEQ ID NO:12811), GAAGGGTGAGGTTGTCGCGCGTTTTG (SEQ ID NO:12812), GAAGGGTGAGGTTGTCGCGCGTTTT (SEQ ID NO:12813), CGAAGGGTGAGGTTGTCGCGCGTTTTG (SEQ ID NO:12814), GTAGCGCGGAAGGGTGAGGTTGTCGG (SEQ ID NO:12815), GTCGTTGATTTCGGGGGAGCGGACGTT (SEQ ID NO:12816), TCGTTGATTTCGGGGGAGCGGACGTTA (SEQ ID NO:12817), GTCGTCGTTGATTTCGGGGGAGCGGAC (SEQ ID NO:12818), CGTTGATTTCGGGGGAGCGGACGTTAG (SEQ ID NO:12819), CGTTGATTTCGGGGGAGCGGACGTTAGT (SEQ ID NO:12820)
Target1359	chr13:53421578-53421587	TGATTTGTAGGTGGTAGCGCGGGGTT (SEQ ID NO:12821), GAAGGGTGAGGTTGTCGCGCGTTTTG (SEQ ID NO:12822), CGATGATTTGTAGGTGGTAGCGCGGGG (SEQ ID NO:12823), ATGATTTGTAGGTGGTAGCGCGGGGTT (SEQ ID NO:12824), GAAGGGTGAGGTTGTCGCGCGTTTTG (SEQ ID NO:12825)
Target1360	chr13:53421602-53421670	GGGTTTCGGTTAGGGTGAGGCGGTTTGA (SEQ ID NO:12826), CGGGTTCGGTTAGGGTGAGGCGGTTTG (SEQ ID NO:12827), GGTTCGGTTAGGGTGAGGCGGTTTGAT (SEQ ID NO:12828), TTCGGTTAGGGTGAGGCGGTTTGATCG (SEQ ID NO:12829), GGGTTCGGTTAGGGTGAGGCGGTTTGAT (SEQ ID NO:12830), CGTGGTGTTCGTATTTGGCGTTCGTAT (SEQ ID NO:12831), CGTGGTGTTCGTATTTGGCGTTCGTATT (SEQ ID NO:12832), CGTGGTGTTCGTATTTGGCGTTCGTA (SEQ ID NO:12833), CGTGGTGTTCGTATTTGGCGTTCGTATT (SEQ ID NO:12834), CGTGGTGTTCGTATTTGGCGTTCGT (SEQ ID NO:12835)
Target1361	chr13:53421688-53421694	GGGTTTCGGTTAGGGTGAGGCGGTTTGA (SEQ ID NO:12836), CGGGTTCGGTTAGGGTGAGGCGGTTTG (SEQ ID NO:12837), GGTTCGGTTAGGGTGAGGCGGTTTGAT (SEQ ID NO:12838), TTCGGTTAGGGTGAGGCGGTTTGATCG (SEQ ID NO:12839), GGGTTCGGTTAGGGTGAGGCGGTTTGAT (SEQ ID NO:12840), CGTGGTGTTCGTATTTGGCGTTCGTAT (SEQ ID NO:12841), CGCGTTCGTGGGTTTTTTGTTTTTCGA (SEQ ID NO:12842), CGTGGTGTTCGTATTTGGCGTTCGTATT (SEQ ID NO:12843), CGCGTTCGTGGGTTTTTTGTTTTTCGAT (SEQ ID NO:12844), CGTGGTGTTCGTATTTGGCGTTCGTA (SEQ ID NO:12845)
Target1362	chr13:53421731-53421738	CGGGGTGCGGGCGTTAAATGCGAATAT (SEQ ID NO:12846), GGGTTCGGTTAGGGTGAGGCGGTTTGA (SEQ ID NO:12847), CGGGGTGCGGGCGTTAAATGCGAATA (SEQ ID NO:12848), CGGGGTGCGGGCGTTAAATGCGAATATT (SEQ ID NO:12849), CGGGTTCGGTTAGGGTGAGGCGGTTTG (SEQ ID NO:12850), GTGGTCAAGTGAGTTGGCGGAAGA (SEQ ID NO:12851), CGCGTTCGTGGGTTTTTTGTTTTTCGA (SEQ ID NO:12852), TGGTCAAGTGAGTTGGCGGAAGA (SEQ ID NO:12853), GTGGTCAAGTGAGTTGGCGGAAG (SEQ ID NO:12854), CGCGTTCGTGGGTTTTTTGTTTTTCGAT (SEQ ID NO:12855)
Target1363	chr13:100608123-100608186	GTCGGGGTAAGGACGTAGGGGC (SEQ ID NO:12856), GCGTTTTTATGTTGGAAGGATTTTATGTTGGAGC (SEQ ID NO:12857), CGTTTTTATGTTGGAAGGATTTTATGTTGGAGCG (SEQ ID NO:12858), TTTTATGTTGGAAGGATTTTATGTTGGAGCGGAAA (SEQ ID NO:12859), TTTTATGTTGGAAGGATTTTATGTTGGAGCGGAA (SEQ ID NO:12860), GCGGTTAGTCGGGTTAGAAACGTGGGC (SEQ ID NO:12861), TGCGGTTAGTCGGGTTAGAAACGTGGG (SEQ ID NO:12862), TGCGGTTAGTCGGGTTAGAAACGTGGGC (SEQ ID NO:12863), TTGCGGTTAGTCGGGTTAGAAACGTGGG (SEQ ID NO:12864), TTGCGGTTAGTCGGGTTAGAAACGTGGGC (SEQ ID NO:12865)

DEMANDE OU BREVET VOLUMINEUX

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Figure 4

Python Code:

```
from sklearn import linear_model

filter_matrix = data_matrix >= 0.1
methylation_sums = data_matrix[filter_matrix].sum()

clf = linear_model.LogisticRegression(C=5)

# Fit to training set
X = np.array([methylation_sums.loc[healthy_plasma[:10]+cancer_plasma[:6]+cancer_plasma[:6]].values]).T
y = [0]*len(healthy_plasma[:10]) + [1]*len(cancer_plasma[:6]+cancer_plasma[:6])
clf.fit(X, y)

# Predict on test set
print "Sample\tP(Cancer)\tCall"
for i, methylation_sum in enumerate(methylation_sums.loc[healthy_plasma[10:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Healthy Sample %s\t%s\t%s" % (i+1, probability_cancer, call)

for i, methylation_sum in enumerate(methylation_sums.loc[cancer_plasma[6:]]):
    probability_cancer = min(1, max(0, model(float(clf.coef_)*methylation_sum + float(clf.intercept_))))
    if probability_cancer > 0.5:
        call = 'Cancer'
    else:
        call = 'Healthy'
    print "Cancer Sample %s\t%s\t%s" % (i+1, probability_cancer, call)
```

Code Results:

Sample	P(Cancer)	Call
Healthy Sample 1	0.48991419229	Healthy
Healthy Sample 2	0.402222997727	Healthy
Healthy Sample 3	0.362647868404	Healthy
Healthy Sample 4	0.291360093105	Healthy
Healthy Sample 5	0.666083361246	Cancer
Healthy Sample 6	0.444135105722	Healthy
Healthy Sample 7	0.404667407834	Healthy
Healthy Sample 8	0.674616468424	Cancer
Healthy Sample 9	0.248090390611	Healthy
Healthy Sample 10	0.270796583956	Healthy
Cancer Sample 1	0.860345212988	Cancer
Cancer Sample 2	0.613016848532	Cancer
Cancer Sample 3	0.682635445446	Cancer
Cancer Sample 4	0.59569270394	Cancer
Cancer Sample 5	0.562216154423	Cancer
Cancer Sample 6	0.475035178964	Healthy
Cancer Sample 7	0.966879847323	Cancer