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(54) 发明名称

包含T细胞接合抗体构建体的低pH药物组合物

(57) 摘要

本披露提供了一种低pH药物组合物,该药物组合物包含(a)抗体构建体,该抗体构建体包含与靶细胞表面抗原结合的第一结构域,与第二抗原结合的第二结构域以及优选地第三结构域,该抗体构建体是特异性Fc模式;(b)至少一种缓冲剂;(c)至少一种糖;和(d)至少一种表面活性剂;并且其中该药物组合物的pH在3.5至6的范围内。

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1. 一种液体药物组合物,该液体药物组合物包含
 - (a) 包含至少三个结构域的抗体构建体,其中:
 - 第一结构域与靶细胞表面抗原结合并且具有在4至9.5的范围内的等电点(pI),其中该靶细胞表面抗原是肿瘤抗原,其中该肿瘤抗原选自:MSLN、DLL3、FLT3、BCMA、PSMA、CD33和CD19;
 - 第二结构域与第二抗原结合,并且具有在8至10的范围内的pI,该第二抗原是人和/或猕猴CD3 ϵ 链的细胞外表位;并且
 - 第三结构域包含两个多肽单体,每个多肽单体包含铰链、CH2结构域和CH3结构域,其中所述两个多肽单体经由肽接头彼此融合,其中该第三结构域的每个所述多肽单体具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO:17-24;
 - (b) 至少一种缓冲剂,其选自:乙酸、谷氨酸、柠檬酸、琥珀酸、酒石酸、马来酸和磷酸、或其组合;
 - (c) 至少一种糖,其选自:蔗糖、海藻糖、甘露醇和山梨醇及其组合;以及
 - (d) 至少一种表面活性剂,其选自:聚山梨醇酯20、聚山梨醇酯40、聚山梨醇酯60、聚山梨醇酯80、泊洛沙姆188、聚氧乙烯、PEG 3350、PEG 4000及其组合;并且其中该药物组合物的pH在4至5的范围内。
2. 如权利要求1所述的液体药物组合物,其中该抗体构建体是单链抗体构建体。
3. 如前述权利要求中任一项所述的液体药物组合物,其中所述第三结构域按氨基至羧基顺序包含:
铰链-CH2结构域-CH3结构域-接头-铰链-CH2结构域-CH3结构域。
4. 如权利要求1或2所述的液体药物组合物,其中该第一结构域具有在4.5至6.5的范围内的pI。
5. 如权利要求1或2所述的液体药物组合物,其中该第二结构域具有在8.5至9.5的范围内的pI。
6. 如权利要求1或2所述的液体药物组合物,其中该第二结构域具有在8.5至9.0的范围内的pI。
7. 如权利要求1或2所述的液体药物组合物,其中该CH2结构域包含结构域内半胱氨酸二硫桥。
8. 如权利要求1或2所述的液体药物组合物,其中该第三结构域具有在5.5至7.5的范围内的pI。
9. 如权利要求8所述的液体药物组合物,其中该第三结构域具有在6.0至7.0的范围内的pI。
10. 如权利要求1或2所述的液体药物组合物,其中
 - (i) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;
 - (ii) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;
 - (iii) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域;或

(iv) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域。

11. 如权利要求1或2所述的液体药物组合物,其中该抗体构建体按氨基至羧基顺序包含:

(a) 第一结构域;

(b) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO:1-3;

(c) 第二结构域;

(d) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO:1、2、3、9、10、11和12;

(e) 第三结构域的第一多肽单体;

(f) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO:5、6、7和8;以及

(g) 第三结构域的第二多肽单体。

12. 如权利要求1所述的液体药物组合物,其中该至少一种缓冲剂以5至200mM的浓度范围存在。

13. 如权利要求12所述的液体药物组合物,其中该至少一种缓冲剂以10至50mM的浓度范围存在。

14. 如权利要求1所述的液体药物组合物,其中该糖为山梨醇。

15. 如权利要求1或2所述的液体药物组合物,其中该至少一种糖以1%至15% (m/V) 的浓度范围内的浓度范围存在。

16. 如权利要求15所述的液体药物组合物,其中该至少一种糖以9%至12% (m/V) 的浓度范围存在。

17. 如权利要求1或2所述的液体药物组合物,其中该至少一种表面活性剂以0.004%至0.5% (m/V) 的浓度范围内的浓度存在。

18. 如权利要求17所述的液体药物组合物,其中该至少一种表面活性剂以0.001%至0.01% (m/V) 的浓度范围内的浓度存在。

19. 如权利要求1或2所述的液体药物组合物,其中该组合物的pH为4.2。

20. 如权利要求1或2所述的液体药物组合物,该液体药物组合物具有在150至500mOsm的浓度范围内的渗透压。

21. 如权利要求1或2所述的液体药物组合物,该液体药物组合物进一步包含选自下组的赋形剂,该组由以下组成:一种或多种多元醇和一种或多种氨基酸。

22. 如权利要求21所述的液体药物组合物,其中所述一种或多种赋形剂以0.1%至15% (w/V) 的浓度范围存在。

23. 如权利要求1或2所述的液体药物组合物,其中该组合物不含无机阴离子。

24. 如权利要求1或2所述的液体药物组合物,其中该组合物包含

(a) 如权利要求1或2所述的抗体构建体,

(b) 10mM谷氨酸盐或乙酸盐,

(c) 9% (m/V) 蔗糖或6% (m/V) 蔗糖和6% (m/V) 羟丙基- β -环糊精,

(d) 0.01% (m/V) 聚山梨醇酯80

并且其中该液体药物组合物的pH为4.2。

25. 如权利要求1或2所述的液体药物组合物,其中该抗体构建体以0.1至8mg/ml的浓度范围存在。

26. 如权利要求25所述的液体药物组合物,其中该抗体构建体以0.2-2.5mg/ml的浓度范围存在。

27. 如权利要求25所述的液体药物组合物,其中该抗体构建体以0.25-1.0mg/ml的浓度范围存在。

28. 一种固体药物组合物,该固体药物组合物通过冻干如权利要求1或2所述的液体药物组合物而获得。

29. 一种液体药物组合物,该液体药物组合物通过用药学上可接受的液体重配如权利要求28所述的固体药物组合物而获得。

30. 如前述权利要求中任一项所述的组合物在制备用于治疗疾病的药物中的用途。

31. 如权利要求30所述的用途,其中所述疾病为增殖性疾病、免疫疾病或病毒性疾病。

32. 如权利要求30所述的用途,其中该组合物经胃肠外给予。

33. 如权利要求32所述的用途,其中该组合物经静脉内输注或静脉内注射给予。

34. 如权利要求32所述的用途,其中该组合物每周给予1、2、3、4、5、6或7次,或每两周给予1、2、3、4、5或6次,或每月1或2次,或每两个月1或2次。

35. 如权利要求34所述的用途,其中该组合物每周给予1次。

包含T细胞接合抗体构建体的低pH药物组合物

背景技术

[0001] 基于蛋白质的药物是临床(前)开发和商业产品中增长最快的治疗剂之一。与小化学药物相比,蛋白质药物在相对低的浓度下具有高特异性和活性,并且典型地提供对高影响疾病的治疗,这些高影响疾病是例如各种癌症、自身免疫疾病、和代谢障碍(Roberts, Trends Biotechnol.[生物技术趋势]2014年7月;32(7):372-80, Wang, Int J Pharm.[国际药理学杂志]1999年8月20日;185(2):129-88)。

[0002] 由于商业规模纯化方法的进步,因此现在可以在首次制造时以高纯度获得基于蛋白质的药物,例如重组蛋白质。然而,蛋白质仅临界稳定(marginally stable)并且极易受到化学和物理降解二者的影响。化学降解是指涉及共价键的修饰,例如脱酰胺化、氧化、裂解或形成新的二硫桥键、水解、异构化或去糖基化。物理降解包括蛋白质去折叠、对表面的不希望的吸附、和聚集。处理这些物理和化学不稳定性是蛋白质药物开发中最具挑战性的任务之一(Chi等人, Pharm Res[药物研究],第20卷,第9期,2003年9月,第1325-1336页, Roberts, Trends Biotechnol.[生物技术趋势]2014年7月;32(7):372-80)。

[0003] 有趣的基于蛋白质的药物包括双特异性分子,例如BiTE[®](双特异性T细胞接合物)抗体构建体,其是由两个柔性连接的抗体衍生的结合结构域制备的重组蛋白质构建体。BiTE[®]抗体构建体的一个结合结构域对靶细胞上选择的肿瘤相关表面抗原是特异性的;第二结合结构域对CD3(T细胞上T细胞受体复合物的亚基)是特异性的。通过其特殊设计,BiTE[®]抗体构建体独特地适合于将T细胞与靶细胞瞬时连接,并且同时强有力地激活T细胞对靶细胞的固有细胞溶解潜力。对作为AMG 103和AMG 110开发到临床中的第一代BiTE[®]抗体构建体(参见WO 99/54440和WO 2005/040220)的重要的进一步开发是提供与CD3 ϵ 链的N末端处的背景独立表位结合的双特异性抗体构建体(WO 2008/119567)。与该选择的表位结合的BiTE[®]抗体构建体不仅显示出对人和绒毛猴(Callithrix jacchus)、绒顶怪柳猴(Saguinus oedipus)或松鼠猴(Saimiri sciureus)CD3 ϵ 链的跨物种特异性,而且由于识别该特异性表位(而不是先前描述的双特异性T细胞接合分子中CD3结合物的表位)而不会非特异性地激活T细胞至与对于前一代T细胞接合抗体所观察到的程度相同的程度。T细胞激活的这种减少与患者中较少或减少的T细胞再分布相关,这被鉴定为副作用的风险。

[0004] WO 2008/119567中描述的抗体构建体可能遭受从身体快速清除;因此,虽然它们能够快速到达身体的大部分部位,并且快速生产并且更容易处理,但是它们的体内应用可能受限于它们在体内的短暂持久性。由于这种小的单链分子的体内半衰期短,因此通过连续静脉内输注的长期给予被用于实现治疗效果。然而,这种连续静脉内输注被分类为对患者不方便,因此,在更方便的可替代治疗方法的情况下,妨碍了对被证明在治疗相应疾病方面更有效的化合物的选择。因此,申请人已经引入了保持类似治疗功效的双特异性治疗剂,该双特异性治疗剂具有易于生产的形式,并且具有有利的药代动力学特性(包括更长的半衰期)。

[0005] 增加的半衰期通常可用于免疫球蛋白、尤其是抗体、最尤其是小尺寸的抗体片段

的体内应用。本领域中描述的用以实现这种效果的方法包括将小双特异性抗体构建体与较大蛋白质融合,其优选不干扰BiTE®抗体构建体的治疗效果。双特异性T细胞接合物的这种进一步发展的实例包括双特异性Fc-分子,例如US 2014/0302037、US 2014/0308285、WO 2014/144722、WO 2014/151910和WO 2015/048272中所述。

[0006] 蛋白质聚集代表蛋白质物理不稳定性的主要事件,并且其发生归因于使溶剂和疏水蛋白质残基之间的热力学上不利的相互作用最小化的固有倾向。这是特别有问题的,因为在重折叠、纯化、灭菌、运输和储存过程中经常遇到。即使在蛋白质天然状态在热力学上高度有利(例如,中性pH和37℃)并且没有应激的溶液条件下也会发生聚集(Chi等人,Pharm Res[药物研究],第20卷,第9期,2003年9月,第1325-1336页,Roberts,Trends Biotechnol.[生物技术趋势]2014年7月;32(7):372-80,Wang,Int J Pharm.[国际药理学杂志]1999年8月20日;185(2):129-88,Mahler J Pharm Sci.[药物科学杂志]2009年9月;98(9):2909-34)。

[0007] 此外,还必须保护半衰期延长的抗体构建体,例如包含半衰期延长模式(例如Fc分子)的双特异性T细胞接合物,以防止蛋白质聚集和/或其他降解事件。蛋白质聚集是有问题的,因为它会损害治疗性蛋白质的生物活性。此外,蛋白质的聚集导致不期望的药物产品外观,并且由于从最终产物中除去聚集体所需的复杂的纯化步骤而降低了产物产率。最近,人们还越来越关注并且有越来越多的证据证明聚集蛋白(甚至是人源化或全人源蛋白质)的存在可以显著增加患者对活性蛋白质单体产生免疫应答的风险,导致形成中和抗体和抗药性,或其他不良副作用(Mahler J Pharm Sci.[药物科学杂志]2009年9月;98(9):2909-34)。

[0008] 总的来说,文献中已经报道了通过若干种机制使蛋白质聚集最小化的若干努力。通过修饰蛋白质的一级结构,可以稳定蛋白质并且因此防止聚集体形成和其他化学变化,从而增加内部疏水性并且降低外部疏水性。然而,蛋白质的基因工程化可以导致功能受损和/或免疫原性增加。另一种方法集中于聚集体的解离(称为“解聚”),以通过使用多种机制(如温度、压力、pH和盐)来恢复功能性天然单体。目前,蛋白质聚集体主要在下游加工的精制步骤中作为杂质被除去。然而,在高水平的高分子量(HMW)的情况下,去除大量的HMW不仅导致显著的产量损失,而且使得设计稳健的下游工艺具有挑战性(Chi等人,Pharm Res[药物研究],第20卷,第9期,2003年9月,第1325-1336页)。

[0009] 在生物学和生物技术应用中保持蛋白质稳定性和活性带来严重挑战。本领域需要优化的药物组合物,其提供治疗性蛋白质的增强的稳定性并减少在配制、填充、运输、储存和给予期间的聚集和变性或降解,从而防止功能丧失和不良免疫原性反应。本发明的目的是满足这种需要,尤其是关于半衰期延长的抗体构建体,如包含半衰期延长模式(如Fc分子)的双特异性T细胞接合物。

发明内容

[0010] 包括同时结合两种(或更多种)不同抗原的双特异性(和/或多特异性)抗体(例如双特异性T细胞接合抗体构建体)的基于蛋白质的药物易于发生蛋白质不稳定。这延伸到包含半衰期延长形式(HLE形式)的那些抗体构建体,这些半衰期延长形式包括单链Fc形式(称为scFc)、异Fc(也称为hetFc或异源二聚体Fc、hFc)形式和人血清白蛋白的融合(也称为HSA或hALB)。蛋白质不稳定性(并且特别是蛋白质聚集)在生物技术工业中是一个日益严峻的

挑战,其中在治疗性蛋白质的整个寿命期间(包括在重折叠、纯化、灭菌、运输和储存过程期间)遇到聚集。因此,本发明的目的是提供稳定的药物组合物,该药物组合物包含抗体构建体、优选半衰期延长形式、进一步优选地T细胞接合抗体构建体。在本发明的上下文中,优选是液体组合物或可以通过冻干获得的固体组合物或可以是重配的液体组合物的药物组合物包含

[0011] (a) 包含至少三个结构域的抗体构建体,其中:

[0012] • 第一结构域与靶细胞表面抗原结合并且具有在4至9.5的范围内的等电点(pI);

[0013] • 第二结构域与第二抗原结合;并且具有在8至10、优选地8.5至9.0的范围内的pI;并且

[0014] • 优选地,第三结构域包含两个多肽单体,每个单体包含铰链、CH2结构域和CH3结构域,其中所述两个多肽单体经由肽接头彼此融合;

[0015] (b) 至少一种缓冲剂;

[0016] (c) 至少一种糖;以及

[0017] (d) 至少一种表面活性剂;

[0018] 并且其中该药物组合物的pH在3.5至6的范围内。

[0019] 在本发明的上下文中设想药物组合物包含抗体构建体,其是单链抗体构建体。

[0020] 在本发明的上下文中进一步设想,所述第三结构域按氨基至羧基顺序包含:铰链-CH2结构域-CH3结构域-接头-铰链-CH2结构域-CH3结构域。

[0021] 在本发明的上下文中尤其设想,根据本发明的抗体构建体包含第三结构域。

[0022] 在本发明的上下文中还设想,第一结构域具有在约4.0至约9.5、优选地约4.5至7.5、或4.5至6.5的范围内的pI。

[0023] 在本发明的上下文中设想,靶细胞表面抗原是肿瘤抗原、对免疫障碍特异的抗原或病毒抗原。

[0024] 在本发明的上下文中进一步设想,肿瘤抗原选自下组,该组由以下组成:CDH19、MSLN、DLL3、FLT3、EGFR、EGFRvIII、BCMA、PSMA、CD33、CD19、CD20和CD70。

[0025] 在本发明的上下文中还设想,第二结构域是CD3人和/或猕猴CD3 ϵ 链的细胞外表位。

[0026] 在本发明的上下文中设想,第二结构域的pI在8.5至9.0的范围内。

[0027] 在本发明的上下文中进一步设想,第三结构域的每个所述多肽单体具有与选自下组的序列具有至少90%同一性的氨基酸序列,该组由以下组成:SEQ ID NO:17-24,或具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO:17-24。

[0028] 在本发明的上下文中还设想,CH2结构域包含结构域内半胱氨酸二硫桥。

[0029] 在本发明的上下文中设想,第三结构域具有在5.5至7.5、优选地6.0至7.0的范围内的pI。

[0030] 在本发明的上下文中进一步设想,

[0031] (i) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;

[0032] (ii) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;

[0033] (iii) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域;或

[0034] (iv) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域。

[0035] 在本发明的上下文中设想,抗体构建体按氨基至羧基顺序优选地包含:

[0036] (a) 第一结构域;

[0037] (b) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 1-3;

[0038] (c) 第二结构域;

[0039] (d) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 1、2、3、9、10、11和12;

[0040] (e) 第三结构域的第一多肽单体;

[0041] (f) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 5、6、7和8;以及

[0042] (g) 第三结构域的第二多肽单体。

[0043] 在本发明的上下文中还设想,至少一种缓冲剂是选自下组的酸,该组由以下组成:乙酸、谷氨酸、柠檬酸、琥珀酸、酒石酸、富马酸、马来酸、组氨酸、磷酸、2-(N-吗啉代)乙磺酸或其组合。

[0044] 在本发明的上下文中进一步设想,至少一种缓冲剂以5至200mM的浓度范围、更优选地以10至50mM的浓度范围存在。

[0045] 在本发明的上下文中设想,至少一种糖下组,该组由以下组成:单糖、二糖、环状多糖、糖醇、线性支链葡聚糖或线性非支链葡聚糖。

[0046] 在本发明的上下文中还设想,二糖选自下组,该组由以下组成:蔗糖、海藻糖和甘露醇、山梨醇及其组合。

[0047] 在本发明的上下文中进一步设想,糖醇为山梨醇。

[0048] 在本发明的上下文中设想,至少一种糖以1%至15% (m/V) 的范围内的浓度、优选地以9%至12% (m/V) 的浓度范围存在。

[0049] 在本发明的上下文中还设想,至少一种表面活性剂选自下组,该组由以下组成:聚山梨醇酯20、聚山梨醇酯40、聚山梨醇酯60、聚山梨醇酯80、泊洛沙姆188、普朗尼克F68、曲拉通X-100、聚氧乙烯(polyoxyethylen)、PEG 3350、PEG 4000及其组合。

[0050] 在本发明的上下文中进一步设想,至少一种表面活性剂以0.004%至0.5% (m/V) 的范围内、优选地以0.001%至0.01% (m/V) 的范围内的浓度存在。

[0051] 在本发明的上下文中设想,该组合物的pH在4.0至5.0的范围内,优选地4.2。

[0052] 在本发明的上下文中还设想,该药物组合物具有在150至500mOsm的范围内的渗透压。

[0053] 在本发明的上下文中进一步设想,该药物组合物进一步包含选自下组的赋形剂,该组由以下组成:一种或多种多元醇和一种或多种氨基酸。

[0054] 在本发明的上下文中设想,所述一种或多种赋形剂以0.1%至15% (w/V) 的浓度范围存在。

- [0055] 在本发明的上下文中还设想,该药物组合物包含
- [0056] (a) 如前述权利要求中任一项所述的抗体构建体,
- [0057] (b) 10mM谷氨酸盐或乙酸盐,
- [0058] (c) 9% (m/V) 蔗糖或6% (m/V) 蔗糖和6% (m/V) 羟丙基- β -环糊精,
- [0059] (d) 0.01% (m/V) 聚山梨醇酯80
- [0060] 并且其中该液体药物组合物的pH为4.2。
- [0061] 在本发明的上下文中进一步设想,该抗体构建体以0.1至8mg/ml、优选地0.2-2.5mg/ml、更优选地0.25-1.0mg/ml的浓度范围存在。
- [0062] 在本发明的上下文中设想,本发明的药物组合物是液体。
- [0063] 在本发明的上下文中还设想,药物组合物是固体药物组合物,其可通过冻干如前述权利要求中任一项所述的液体药物组合物而获得。
- [0064] 在本发明的上下文中进一步设想,药物组合物是液体药物组合物,其可通过用药学上可接受的液体重配可通过冻干获得的固体药物组合物而获得。
- [0065] 在药物组合物的上下文中设想用于在治疗疾病,优选地增殖性疾病、免疫疾病或病毒性疾病中使用。
- [0066] 在本发明的上下文中还设想,组合物经胃肠外给予,优选地静脉内输注或注射。
- [0067] 在本发明的上下文中进一步设想,将组合物每周给予1、2、3、4、5、6或7次,或每两周给予1、2、3、4、5或6次,或每月1或2次,或每两个月1或2次,最优选地每周1次。

附图说明

[0068] 图1:图1a显示了本发明的抗体构建体的一个实施例的图。图1b显示异源二聚体Fc抗体构建体并且1c显示本领域描述的X-体构建体。引入指示的带电对以便实施异源二聚化。图1d显示抗体构建体与人血清白蛋白(HSA或hALB)的融合。

[0069] 图2:在约中性pH下不同地带电并且在较低pH下类似地带正电的抗体构建体结构域的示意图。

[0070] 图3:在pH 4和pH 7下不含HLE的EGFRvIII抗体构建体的DSC热谱图。在pH 4下的T_m比在pH 7下的T_m低5.5℃。

[0071] 图4: (a) 显示相比于pH 6,在pH 4中测量的CDH19 scFc抗体构建体的高分子量物质的百分比。在较低的pH 4.0下可见较低的聚集; (b) 显示在4℃ (时间点T₀、2w、4w)、25℃ (T₀、1w、2w、4w) 和37℃ (T₀、1w、2w、4w) 下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19scFc BiTE的主峰百分比:G4SuT包含10mM谷氨酸、9% (w/v) 蔗糖、0.01% 聚山梨醇酯80,G4TrT包含10mM谷氨酸、9% (w/v) 海藻糖、0.01% 聚山梨醇酯80,G4MSuT包含10mM谷氨酸、4% (w/v) 甘露醇、2% 蔗糖、0.01% 聚山梨醇酯80。在pH 4下证明了稳定性。(c) 显示了在-20℃ (T₀、4w) 下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的主峰百分比。(d) 显示了在4℃ (T₀、2w、4w)、25℃ (T₀、1w、2w、4w) 和37℃ (T₀、1w、2w、4w) 下在三种不同配制品中通过SEC测量的CDH19 scFc BiTE的高分子量(HMW)峰的百分比:G4SuT、G4TrT和G4MSuT。(e) 显示了在-20℃ (T₀、4w) 下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的HMW峰百分比。(f) 显示了在4℃ (T₀、2w、4w)、25℃ (T₀、1w、2w、4w) 和37℃ (T₀、1w、2w、4w) 下在三种不同配制品-G4SuT、G4TrT

和G4MSuT中通过SEC测量的CDH19 scFc BiTE的低分子量峰的百分比。

[0072] 图5:6个月后测量的pH范围4至7的各种缓冲剂中EGFRvIII非scFc抗体构建体的主峰百分比。在pH 4.0下,抗体构建体具有最高的主峰百分比。

[0073] 图6:(a)显示了在4℃下在不同配制品中不同浓度的CD33-scFc抗体构建体的主峰百分比。“ccHFC”代表特异性修饰的cys-夹紧的scFc结构域(cys-clamed scFc domain)。低pH配制品始终具有较高的单体物质。(b)显示了在25℃下在不同配制品中不同浓度的CD33-scFc抗体构建体的主峰百分比。“ccHFC”代表特异性修饰的cys-声称的scFc结构域。低pH配制品始终具有较高的单体物质。

[0074] 图7:如通过SEC测量的典型(非HLE)CD19xCD3 BiTE®抗体构建体在T0、7天、14天和1个月时的聚集百分比作为pH的函数。该图表明,在低pH下,聚集量显著降低。

[0075] 图8:Statistica软件(史丹索特公司(Statsoft))生成的配制品参数函数中预测值和合意性的分布。

[0076] 图9:配制品函数中通过尺寸排阻超高效色谱(SE-UPLC)确定的MSLN-scFc制剂中高分子量物质(HMWS)的含量百分比的概述

[0077] 图10:配制品函数中通过尺寸排阻超高效色谱(SE-UPLC)确定的CD33cc-scFc制剂中高分子量物质(HMWS)的含量百分比的概述。

具体实施方式

[0078] 尽管目前治疗性生物技术产品具有高质量,并且重组人蛋白质和内源性人蛋白质的抗体具有相似性,但蛋白质不稳定性仍然是一个重要问题。除了蛋白质聚集的质量相关后果,如可能的蛋白质活性损失和药物产品的不良美观外,据报道可溶性蛋白质聚集体具有显著的细胞毒性作用,并且重要的是,是发展对蛋白质产品的免疫反应的潜在风险因素。蛋白质聚集可以在蛋白质的整个寿命期间的各个点(包括发酵、重折叠、纯化、填充、运输、储存或给予)发生,并且强烈依赖取决于各种环境因素。本领域迫切需要增加治疗性蛋白质的稳定性并减少聚集;并且优化的药物配制品可以有助于这样做。

[0079] 特定的基于蛋白质的药物(如BiTE®抗体构建体分子)在液体配制品中经较长时间是不稳定的,并且尤其是在升高温度下(例如,制冷温度4℃及以上)不稳定。通过差示扫描量热法对BiTE®抗体构建体(非HLE和HLE变体两者)的初步检查典型地表现出在中性pH值下比在酸性pH值下更高的热稳定性,例如,相对于pH 6或pH 7,在pH 4下显示出较低的稳定性。因此,本领域技术人员会建议此类抗体构建体的溶液稳定性应该降低。因此,本领域技术人员将避免根据本发明的抗体构建体的低pH配制品,因为他或她将假定通常要避免的去稳定的scFv。因此,非常令人惊讶地发现,相反,根据本发明的抗体构建体在具有低pH值的液体药物组合物中甚至是更稳定的。

[0080] 本发明基于的总体概念是发现包含根据本发明的抗体构建体的液体药物组合物的胶体稳定性在低pH下得到改善。本发明的抗体构建体典型地对其第一和第二结构域具有不同的等电点(pI)值。此外,第三结构域的pI典型地也不同于第二结构域的pI。在生理条件下,第一和/或第三结构域通常可带负电荷,因为pI更靠近酸性,例如,pI为约4.0、4.5、5.0、5.5、6.0或6.5。即使第一结构域的pI高于6.5,例如约7.0、7.5、8.0或8.5,此pI典型地低于第二结构域的pI,第二结构域通常具有8.0至10.0、更典型地约8.5至9.5、优选地约9.2的

pI。此外,第三结构域通常具有6.0至7.0的微酸性pI,这意味着即使第一结构域的pI为微碱性,第二结构域和第三结构域之间仍存在pI差异。因此,任何pI差异(其中至少一个结构域具有酸性pI而另一个结构域具有碱性pI)将在生理条件下产生偶极子,因为不同的结构域是不同的,即带相反电荷。所述相反的电荷可以导致nad内分子间静电吸引,这反过来可以导致聚集,并因此导致形成不希望的高分子量(HMW)物质。所述形成可以关键地影响溶液的稳定性或分散体的胶体稳定性。然而,如果降低介质的pH,则所有结构域都会发生质子化并发生静电排斥(参见图2)。

[0081] 例如,发现由于T细胞接合结构域上的正电荷和CD19结构域上的负电荷,因此在pH 7下,包含针对CD19的第一结构域和针对CD3的第二结构域的抗体构建体形成偶极子。这导致吸引力并因此导致聚集,这导致胶体不稳定性。在约pH 4下,两个结构域都带正电,并且电荷排斥提高了胶体稳定性。

[0082] 另外,即使第一和第二结构域的pI分别彼此接近,例如,第一结构域为约8.0并且第二结构域为约8.5或9.0或9.5,两个结构域在低于8的pH值下已经带正电。在甚至更低的pH值,例如约4下,两个结构域(例如,靶和T细胞接合结构域)强烈带正电。这导致甚至增加的电荷-电荷排斥,并且因此导致明显更高的胶体稳定性。在典型地存在具有微酸性范围内的pI并因此就pI而言总是不同于第二结构域的第三结构域的情况下,补充该效果。总之,根据本发明的抗体构建体总是受益于在具有低pH(如6.0或更低、或5.5或更低、或5.0或更低、或4.5或更低,如4.2)的介质中具有通常质子化的结构域。

[0083] 根据本发明的抗体构建体的第一结构域,其通常是肿瘤学靶的scFv结构域,典型地具有与第二结构域不同的pI,第二结构域通常是抗CD3结构域。

[0084] 典型地,第二结构域(例如抗CD3结构域)具有在8至10、优选地约8.5至9.5的范围内、最优选地约9.2的pI。

[0085] 如果第一结构域是抗CD19或抗CD33结构域,则第一结构域可具有约4.9至5.3的pI。如果第一结构域是抗DLL3或抗EGFRvIII结构域,则第一结构域可具有约6至8或约9.0的pI。如果第一结构域是抗CD70结构域,则第一结构域可具有约8.0至8.5的pI。如果第一结构域是抗CDH19结构域,则第一结构域可具有约7.0至7.5的pI。如果第一结构域是抗PSMA结构域,则第一结构域可具有约7.0至7.5的pI。如果第一结构域是抗MSLN结构域,则第一结构域可具有约9.0至9.5的pI。如果第一结构域是抗Flt3结构域,则第一结构域可具有约8.5至9.5的pI。

[0086] 在本发明的上下文中设想,稳定不同pI的结构域的配制品的概念可以应用于任何抗体构建体。在本发明的上下文中,包含如本文所述的第三结构域的双特异性抗体构建体尤其适于通过本文所述的配制品稳定。然而,其他双特异性抗体构建体(例如,不具有这样的第三结构域)也可以根据本发明有效地稳定。例如,设想根据本发明的抗体构建体可以具有包含SEQ ID NO 1954-1956的HCDR和SEQ ID NO 1958-1960的LCDR的第一结构域。还设想,根据本发明的抗体构建体可以具有包含SEQ ID NO 1957的VH和SEQ ID NO 1961的VL的第一结构域。甚至可以设想,根据本发明的抗体构建体的第一结构域可以具有根据SEQ ID NO 1962的第一结构域。还设想,根据本发明的抗体构建体可具有根据SEQ ID NO 1963的序列。

[0087] 然而,在本发明的上下文中,药物组合物的稳定作用不限于具有(结合)不同pI的

结构域的抗体构建体。因此,还设想,本发明的药物组合物为抗体构建体提供稳定配制品,这些抗体构建体具有不同pI的部分,因此可通过本文所述的配制品稳定。这样的部分可以包含掩蔽这些抗体构建体的结合结构域的掩蔽部分,即使结合结构域本身在pI上没有差异,使得它们需要根据本发明上下文中的药物组合物提供的另外的稳定化。典型地,这种包含掩蔽部分的抗体构建体是可激活的抗体构建体。在本发明的上下文中,这种可激活的抗体构建体可以结合任何靶细胞表面抗原如肿瘤抗原,这些抗原优选地选自下组,该组由以下组成:CDH19、MSLN、DLL3、FLT3、EGFR、EGFRvIII、BCMA、PSMA、CD33、CD19、CD20和CD70。

[0088] 这种可激活的抗体构建体可以是抗体或其抗原结合片段,该抗体或其抗原结合片段典型地包含 (i) 至少两个结合结构域,每个结构域包含重链氨基酸序列和轻链氨基酸序列, (ii) 抑制处于未切割状态的每个结合结构域与相应的结合配偶体 (例如靶细胞表面) 的结合的掩蔽部分,和 (iii) 位于 (i) 和 (ii) 之间的可切割部分,其中可切割部分是作为例如蛋白酶的底物起作用的多肽。典型地,处于未切割状态的可激活抗体具有如下从N末端到C末端的结构排列:掩蔽部分-可切割部分-结合结构域或结合结构域-可切割部分-掩蔽部分。根据本发明的药物组合物可尤其有益于向可激活抗体构建体赋予稳定性,其中至少两个结合结构域的至少两个掩蔽部分的pI不同。例如,一个掩蔽部分的pI可以在3至5、优选地3.5至4.5、更优选地3.9至4.5的范围内,而另一个掩蔽部分的pI在5.0至7.0、优选地5.5至6.0的范围内。在这种情况下,典型地发现,在根据本发明的药物组合物中配制这样的抗体构建体,可以显著降低所述抗体构建体的聚集。典型地,由于在低pH下的相同质子化和赋形剂在根据本发明的药物组合物中的补充稳定功能,因此就高分子量 (HMW) 物质百分位数而言的聚集可以显著降低,例如,从约10%降至约6%、5%、4%或甚至低于4%。低于4%的HMW物质百分位数典型地发现于pH为约4.2至4.8的根据本发明的药物组合物中。

[0089] 优选地,根据本发明的药物组合物的(溶液)pH应低于根据本发明的抗体构建体的两个或三个结构域中的任一个的pI,以产生两个结构域的净正电荷以产生结构域间和结构域内排斥。优选的pH值为约4.0至5.5,更优选为4.2至4.8。

[0090] 还令人惊讶地发现,根据本发明的药物组合物能以比预期更高的浓度包含根据本发明的抗体构建体。通常,如本文所述的抗体构建体仅以约1mg/ml的浓度储存和/或用于液体药物组合物中。在较高浓度下,观察到聚集倾向。然而,如本文所解释的,较低的pH有助于静电分子间和分子内排斥,这降低了聚集的风险并且可以允许更高的抗体构建体浓度(如1.5、2.0、2.5、3.0、3.5、4.0、4.5、5.0、5.5、6.0、6.5、7.0、7.5或8.0mg/ml) 而没有(胶体)不稳定性。

[0091] 进一步发现,本发明的药物组合物是优选的,其不含无机阴离子或包含无机阴离子的盐,例如氯化钠。优选通过库存单元 (SKU) 内的非离子赋形剂 (例如蔗糖) 调整本发明药物组合物的张力。不希望受理论束缚,原因是蛋白质配制品可以通过选择与分子的等电点充分不同的配制品pH值来以物理方式稳定,以有利于如本文所述的静电排斥。然而,这些排斥力可以通过与配制品中存在的离子的相互作用而减弱。离子 (特别是无机阴离子) 可以最小化或中和蛋白质表面的电荷,并且由于分子内排斥力的降低而产生疏水相互作用。因此,根据本发明的药物组合物优选不含无机阴离子。所需的缓冲化合物优选地仅包含有机阴离子,如谷氨酸根和/或乙酸根。因此,根据本发明的药物组合物优选地不含无机阴离子,如F⁻、Cl⁻、I⁻和Br⁻。特别地,根据本发明的药物组合物优选地不含NaCl。

[0092] 抗体构建体在根据本发明的液体配制品中增加的稳定性可以有助于节省昂贵和费力的冻干步骤以获得可储存的固体,即干燥的药物组合物。而且,低pH药物组合物可适用于静脉内给予。然而,如果需要例如皮下或肌肉内给予或如果出于其他医学原因低pH是不可接受的,仍然可以从根据本发明的液体药物组合物获得固体药物组合物。由此获得的冻干物可以在适于所需给予形式或个体医学需要的药学上可接受的介质中重配。此外,通过在低pH下使用本发明的药物组合物,可以节省其他稳定剂如**Captisol®**。

[0093] 本文提供的药物组合物使配制的双特异性抗体构建体的稳定性成为可能。配制品参数对不同双特异性抗体构建体的影响的评价显示,配制品可以取决于分子特征进行优化,这些分子特征包括但不限于在靶结合物中存在半衰期延长部分、IEP或cys-钳(cys-clamp)。如本文所述仔细选择最适pH和盐含量是至关重要的。就稳定性而言,可能将加速储存条件下的等温长期稳定性研究与研究的双特异性抗体构建体的稳定性预测方法联系起来,也如之前单克隆抗体所示。如本文所述的双特异性抗体构建体在30℃长期储存期间以及稳定性预测方法期间总体上是稳定的,使得所研究参数的一部分保持相当稳健,使得发现相关性(包括例如,DLS流体动力学半径)具有挑战性。通过改变pH和离子强度的配制品条件,诱导双特异性抗体对储存和温度应力的不同响应来补偿这种现象。然而,存在稳定性预测方法,尤其是温度升高的纳米DSF和温度升高的DLS以及疏水相互作用色谱,其参数显示出与等温稳定性研究期间评估的一些参数(例如亚可见颗粒计数、IF比350nm/330nm和酸性电荷变体的量)相当强且可理解的相关性。然而,由于难以将线性降解动力学应用于长期稳定性,因此不排除具有滞后时间和由冷冻和解冻引起的初级加速降解的随机动力学,从而聚集的预测面临挑战。如本文使用的稳定性预测技术给出了对双特异性抗体构建体在根据本发明的药物组合物中的稳定性的有用预测。

[0094] 在本发明中,术语“稳定性”或“稳定化”涉及药物组合物的整体稳定性,并特别地涉及活性成分(例如双特异性单链抗体构建体)本身的稳定性,特别是在配制、填充、运输、储存和给予期间。在本发明的药物组合物和双特异性单链抗体构建体的上下文中,术语“稳定性”或“稳定的”特别是指减少或防止蛋白质聚集体(HMWS)的形成。具体地,术语“稳定性”还涉及包含在本文所述药物组合物中的双特异性单链抗体构建体的胶体稳定性。“胶体稳定性”是胶体颗粒(例如蛋白质)长时间(数天至数年)保持分散在液体中的能力。

[0095] 本文使用的术语“(蛋白质)聚集体”通常涵盖较高分子量的蛋白质种类,如“低聚物”或“多聚体”,而不是所需的确定种类(例如单体)。该术语在本文中可与术语“高分子量物质”和“HMWS”互换使用。蛋白质聚集体的大小(从小(二聚体)到大组件(亚可见或甚至可见颗粒)以及直径范围从纳米到微米)、形态(近似球形到针状)、蛋白质结构(天然与非天然/变性)、分子间键合的类型(共价相比于非共价)、可逆性和溶解性通常不同。可溶性聚集体覆盖约1至100nm的大小范围,并且蛋白质颗粒覆盖亚可见(约0.1-100.μm)和可见(>100.μm)范围。所有上述类型的蛋白质聚集体通常涵盖在该术语中。因此,术语“(蛋白质)聚集体”是指两种或更多种蛋白质单体的所有种类物理缔合或化学连接的非天然种类。

[0096] 因此,术语“蛋白质聚集”或“非天然聚集”表示蛋白质分子组装成由两种或更多种蛋白质组成的复合物的一个或多个过程,其中各个蛋白质表示为单体。存在多种导致蛋白质聚集的途径,其可以由多种条件诱导,这些条件包括温度、机械应力(如振荡和搅拌、泵送)、冷冻和/或解冻和配制。

[0097] 温度的升高加速了化学反应,如蛋白质的氧化和脱酰胺,这继而可促进聚集。较高的温度也直接影响蛋白质在四级、三级和二级结构水平上的构象,并且可以导致温度诱导的展开,其可以促进聚集。本申请中提到的温度典型地是用于长期储存基于精细蛋白质的药物的深度冷冻温度(-70℃)、常规冷冻温度(-20℃)、冷藏温度(4℃)、室温(25℃)和生理温度(37℃)。

[0098] 由于复杂的物理和化学变化,如新的冰/溶液界面的产生、对容器表面的吸附、蛋白质和溶质的低温浓缩,以及由于缓冲组分的结晶导致的pH变化,因此蛋白质变性和聚集可在冷冻/解冻期间发生。

[0099] 蛋白质浓度的增加也可以增强蛋白质聚集体的形成。在高蛋白质浓度下,发生大分子拥挤,该术语用于描述大分子溶质的高总体积占有率对每个大分子种类在该溶液中的行为的影响。根据这种排除体积理论,可能有利于自组装以及因此的潜在聚集。

[0100] 在蛋白质液体配制品中经常需要抗微生物防腐剂(如苯甲醇和苯酚),以确保其保质期内的无菌性,并且此外在多剂量配制品和某些药物递送系统中需要,例如注射笔、微型泵和局部应用。据报道,许多防腐剂可诱导蛋白质聚集,尽管其潜在机制尚不清楚。已经提出防腐剂结合并填充易于聚集的未折叠蛋白质状态。

[0101] 有利地,设想本发明的药物组合物是稳定的,即,即使在经受应力(特别是热应力、储存、表面诱导的应力(如冷冻/解冻循环、发泡))、浓缩(通过超滤和渗滤)或与有机化合物(如抗微生物防腐剂)混合时保持不含或基本上不含蛋白质聚集体。优选地,与已经在所附实例中评估的具有低pH的组合物相比,药物组合物可具有相似或甚至改善的特征。本发明的药物组合物优选地是基于蛋白质的药物的均相溶液,如分散的和优选地单体双特异性双特异性抗体构建体。

[0102] 在本发明的上下文中设想,提供适用于同时结合两种(或多种)不同抗原的双特异性(和/或多特异性)抗体的配制品。在某些实施例中,双特异性抗体结合第一靶抗原,而第二抗原是存在于效应细胞上的细胞表面分子,即表达一种或多种FcR(例如Fc γ RIII)并执行可归因于抗体的Fc区的一种或多种效应子功能的白细胞。效应子功能的实例包括但不限于C1q结合和补体依赖性细胞毒性(CDC)、Fc受体结合、抗体依赖性细胞介导的细胞毒性(ADCC)、吞噬作用、细胞表面受体的下调和B细胞激活。参与ADCC的效应细胞的实例包括但不限于细胞毒性T细胞、外周血单核细胞(PBMC)、天然杀伤(NK)细胞、单核细胞和嗜中性粒细胞。

[0103] 技术人员将理解,即使药物组合物有效地提供活性成分的稳定化(即减少或抑制双特异性抗体构建体的蛋白质聚集体的形成),但偶尔可形成一些聚集体或构象异构体,然而基本上不会损害药物组合物的总体可用性。在此上下文中,“基本上不含”聚集体意指聚集体的量保持低于10%、9%、8%、7%、6%、5%、4%、3%、2%或1%(w/v),特别是在经受环境应力时,例如在所附实例中所评估的。

[0104] 用于确定可溶性和不溶性蛋白质聚集体的存在的方法尤其已经由Mahler等人,J Pharm Sci.[药物科学杂志]2009年9月;98(9):2909-34综述。可溶性蛋白质聚集体的形成可通过如所附实例中所述的尺寸排阻超高效液相色谱(SE-UPLC)来评估。SEC是用于检测和定量蛋白质聚集体的最常用的分析方法之一。SEC分析允许对聚集体分大小及其量化两者。SEQ-UPLC允许在约5-1000kDa的分子量范围内基于其形状和大小(流体动力学半径)选择性

和快速分离大分子。

[0105] 蛋白质溶液显示出光学特性,称为乳白色或浊度。溶液的光学特性是存在的颗粒散射和吸收光的函数。蛋白质是天然胶体,并且含水配制品的浊度取决于蛋白质浓度、非溶解颗粒的存在、颗粒大小和每体积单位的颗粒数。浊度可以通过UV-Vis光谱测量为340-360nm范围内的光密度,并用于检测可溶性和不溶性聚集体。

[0106] 此外,通过视觉手段检查样品仍然是评估蛋白质聚集体的重要方面。优选地根据Deutscher Arzneimittel Codex (DAC) 测试5进行对可见聚集体的存在或不存在的视觉评估。

[0107] 如本文其他地方所述,设想本发明的药物组合物-最可能通过低pH的作用和任选地包含在其中的其它稳定剂-有利于增加双特异性抗体构建体的胶体稳定性,并且因此表现出降低或甚至没有液-液相分离(LLPS)。LLPS是以热力学方式驱动的事件,其中均相蛋白质溶液随温度降低分离成蛋白质不足的相(通常是顶层)和富含蛋白质的相(通常是底层)。LLPS典型地仅通过混合两相并升高溶液的温度就完全可逆。LLPS的发生已经归因于短程吸引的蛋白质-蛋白质相互作用-使其成为蛋白质-蛋白质吸引力的量度。已发现,与不含 β -环糊精的药物组合物相比,根据本发明的包含 β -环糊精的药物组合物在LLPS蛋白质不足相中包含更高浓度的双特异性抗体构建体。因此,与对照相比,设想本发明的药物组合物表现出降低的LLPS或完全没有LLPS,并且因此促进了本发明的双特异性抗体构建体的增加的胶体稳定性。可以诱导LLPS,并且可以如所附实例中所述检查不同相的蛋白质含量。

[0108] 环境应力也可特别是由于热和/或化学变性而导致构象变化,这反过来可以有利于聚集。令人惊讶的是,诸位发明人发现,通过测量芳香族氨基酸的固有荧光发射强度来评估,双特异性抗体构建体在构象变化方面也是稳定的。因此,本发明的药物组合物优选地还减少或抑制构象异构体(即非天然的、异常折叠的蛋白质种类)的形成。

[0109] 如前所述,本发明的稳定药物组合物包含双特异性抗体构建体,其经由第一结合结构域与靶细胞表面抗原结合,并经由第二结合结构域与T细胞表面抗原CD3结合。

[0110] 术语“抗体构建体”是指其中结构和/或功能基于抗体(例如全长或完整免疫球蛋白分子)的结构和/或功能和/或从抗体或其片段的可变重链(VH)和/或可变轻链(VL)结构域中提取的分子。因此,抗体构建体能够与其特异性靶或抗原结合。此外,根据本发明的抗体构建体的结合结构域包含允许靶结合的抗体的最小结构要求。这种最小要求可以例如通过至少三个轻链CDR(即VL区的CDR1、CDR2和CDR3)和/或三个重链CDR(即VH区的CDR1、CDR2和CDR3)、优选全部六个CDR的存在来定义。定义抗体的最小结构要求的可替代方法是分别定义特异性靶结构内的抗体表位、构成表位区(表位簇)的靶蛋白的蛋白结构域或通过参考与所定义抗体的表位竞争的特异性抗体。根据本发明的构建体所基于的抗体包括例如单克隆抗体、重组抗体、嵌合抗体、去免疫抗体、人源化抗体和人抗体。

[0111] 根据本发明的抗体构建体的结合结构域可以例如包含上文提及的CDR组。优选地,那些CDR包含在抗体轻链可变区(VL)和抗体重链可变区(VH)的框架中;然而,它不一定包含两者。例如,Fd片段具有两个VH区并且通常保留完整抗原结合结构域的一些抗原结合功能。抗体片段、抗体变体或结合结构域的形式另外实例包括(1)Fab片段,一种具有VL、VH、CL和CH1结构域的单价片段;(2)F(ab')₂片段,一种具有由二硫桥在铰链区连接的两个Fab片段的二价片段;(3)具有两个VH和CH1结构域的Fd片段;(4)具有抗体单臂的VL和VH结构域的

Fv片段；(5) 具有VH结构域的dAb片段(Ward等人, (1989) Nature[自然]341:544-546)；(6) 分离的互补决定区(CDR)；和(7) 单链Fv(scFv), 后者是优选的(例如, 衍生自scFv文库)。根据本发明的抗体构建体的实施例的实例例如描述于以下中: WO 00/006605、WO 2005/040220、WO 2008/119567、WO 2010/037838、WO 2013/026837、WO 2013/026833、US 2014/0308285、US 2014/0302037、WO 2014/144722、WO 2014/151910和WO 2015/048272。

[0112] 可替代的双特异性抗原结合形式描述于例如美国专利申请公开号2011/0054151中, 将其通过引用并入本文。例如, 双特异性抗原结合蛋白可以包含mAb-Fv形式, 其中IgG抗体在C末端与Fv片段融合。可替代地, 可以使用mAb-Fab形式, 其中IgG抗体在C末端与Fab融合。mAb-Fab构建体含有CH和CL恒定结构域C末端至C末端Fv融合, 而mAb-Fv不含。参见美国专利申请公开号2011/0054151的图8。任选地, mAb-Fv和mAb-Fab构建体的N末端结合区缺少轻链和CH1结构域(即, 包含单结构域VHH区)。mAb-Fv和mAb-Fab构建体含有三个可变区, 使得它们二价结合第一抗原并单价结合第二抗原。合适的双特异性抗原结合形式还包括美国专利申请公开号2011/0054151中描述的Fab-Fv和Fab-Fab构建体。Fab-Fv和Fab-Fab免疫球蛋白包含结合第一抗原的N末端Fab片段和结合第二抗原的C末端Fv或Fab片段。

[0113] 异源二聚体抗体优选地为IgG类, 其具有若干个亚类, 包括但不限于IgG1、IgG2、IgG3和IgG4, 尽管也考虑了IgM、IgD、IgG、IgA和IgE。应当理解, 抗体还可以包含同种型和/或亚类的杂合体。例如, 如通过引用并入的美国专利公开号2009/0163699中所示的IgG1/G2杂合体的pI工程被考虑为本披露的一部分。

[0114] 另外, 在“结合结构域”或“结合的结构域”的定义内是全长抗体的片段, 如VH、VHH、VL、(s)dAb、Fv、Fd、Fab、Fab'、F(ab')₂或“r IgG”(“半抗体”)。根据本发明的抗体构建体还可以包含抗体的修饰片段(也称为抗体变体), 如scFv、二-scFv或二(s)-scFv、scFv-Fc、scFv-拉链、scFab、Fab₂、Fab₃、双抗体、单链双抗体、串联双抗体(Tandab's)、串联二-scFv、串联三-scFv、“多抗体”(如三抗体或四抗体)、以及单结构域抗体如纳米抗体或仅包含一个可变结构域的单可变结构域抗体, 该可变结构域可以是独立于其他V区或结构域而特异性结合抗原或表位的VHH、VH或VL。

[0115] 如本文使用的, 术语“单链Fv”、“单链抗体”或“scFv”是指单多肽链抗体片段, 这些抗体片段包含来自重链和轻链的可变区, 但缺乏恒定区。一般来讲, 单链抗体在VH与VL结构域之间进一步包含多肽接头, 该多肽接头使得其形成所希望的将允许抗原结合的结构。单链抗体详细论述于以下中: Pluckthun, The Pharmacology of Monoclonal Antibodies[单克隆抗体的药理学]中, 第113卷, Rosenberg和Moore编辑Springer-Verlag[施普林格出版社], 纽约, 第269-315页(1994)。产生单链抗体的各种方法是已知的, 和谐方法包括以下中所描述的那些: 美国专利号4,694,778和5,260,203; 国际专利申请公开号WO 88/01649; Bird(1988)Science[科学]242:423-442; Huston等人(1988)Proc.Nat.Acad.Sci.USA[美国国家科学院院刊]85:5879-5883; Ward等人(1989)Nature[自然]334:54454; Skerra等人(1988)Science[科学]242:1038-1041。在具体的实施例中, 单链抗体还可以是双特异性的、多特异性的、人和/或人源化的和/或合成的。

[0116] 此外, 术语“抗体构建体”的定义包括单价、二价和多价(polyvalent/multivalent)构建体, 并且因此包括仅与两个抗原结构特异性结合的双特异性构建体, 以及通过不同的结合结构域特异性结合超过两个(例如三个、四个或更多个)抗原结构的多特

异性 (polyspecific/multispecific) 构建体。此外,术语“抗体构建体”的定义包括仅由一条多肽链组成的分子以及由超过一条多肽链组成的分子,这些链可以是相同的(同源二聚体、同源三聚体或同源寡聚物)或不同的(异源二聚体、异源三聚体或异源寡聚物)。上文鉴定的抗体及其变体或衍生物的实例尤其描述于以下中:Harlow和Lane, *Antibodies a laboratory manual* [抗体:实验室手册], CSHL Press [冷泉港实验室出版社] (1988) 和 *Using Antibodies: a laboratory manual* [使用抗体:实验室手册], CSHL Press [冷泉港实验室出版社] (1999); Kontermann和Dübel, *Antibody Engineering* [抗体工程], Springer [施普林格], 第2版2010和Little, *Recombinant Antibodies for Immunotherapy* [用于免疫疗法的重组抗体], Cambridge University Press [剑桥大学出版社] 2009。

[0117] 如本文使用的,术语“双特异性”是指“至少双特异性”的抗体构建体,即其至少包含第一结合结构域和第二结合结构域,其中第一结合结构域与一种抗原或靶(此处:靶细胞表面抗原)结合,并且第二结合结构域与另一抗原或靶(例如CD3)结合。因此,根据本发明的抗体构建体包含针对至少两种不同抗原或靶的特异性。例如,第一结构域优选地不与如本文所述的种类中的一种或多种的CD3ε的细胞外表位结合。术语“靶细胞表面抗原”是指由细胞表达并且存在于细胞表面以使得为如本文所述的抗体构建体所接近的抗原结构。其可以是蛋白质,优选地蛋白质的细胞外部分;或碳水化合物结构,优选地蛋白质的碳水化合物结构,如糖蛋白。其优选地是肿瘤抗原。本发明的术语“双特异性抗体构建体”还涵盖多特异性抗体构建体,如三特异性抗体构建体,后者包括三个结合结构域,或具有超过三种(例如四种、五种……)特异性的构建体。

[0118] 如本文所理解的双特异性抗体和/或抗体构建体包括但不限于传统的双特异性免疫球蛋白(例如,BsIgG)、包含附加的抗原结合结构域的IgG(例如,轻链或重链的氨基或羧基末端连接到另外的抗原结合结构域,如单结构域抗体或成对抗体可变结构域(例如,Fv或scFv))、BsAb片段(例如,双特异性单链抗体)、双特异性融合蛋白(例如,与效应子部分融合的抗原结合结构域)和BsAb缀合物。参见,例如,Spiess等人, *Molecular Immunology* [分子免疫学] 67 (2) 部分A: 97-106 (2015), 其描述了各种双特异性形式并通过引用并入文中。双特异性构建体的实例包括但不限于双抗体、单链双抗体、串联scFv、双特异性T细胞接合物(BiTE)形式(由通过接头连接的两个单链可变片段(scFv)组成的融合蛋白)、和Fab2双特异性抗体、以及包含全长抗体的工程化构建体。参见,例如,Chames和Baty, 2009, *mAbs* 1 [6]: 1-9; 和Holliger和Hudson, 2005, *Nature Biotechnology* [自然生物技术] 23 [9]: 1126-1136; Wu等人, 2007, *Nature Biotechnology* [自然生物技术] 25 [11]: 1290-1297; Michaelson等人, 2009, *mAbs* 1 [2]: 128-141; 国际专利公开号2009032782和2006020258; Zuo等人, 2000, *Protein Engineering* [蛋白质工程] 13 [5]: 361-367; 美国专利申请公开号20020103345; Shen等人, 2006, *J Biol Chem* [生物化学杂志] 281 [16]: 10706-10714; Lu等人, 2005, *J Biol Chem* [生物化学杂志] 280 [20]: 19665-19672; 以及Kontermann, 2012 *MAbs* 4 (2): 182, 所有这些都明确地并入本文。

[0119] 鉴于根据本发明的抗体构建体是(至少)双特异性的,它们不是天然存在的并且与天然存在的产物明显不同。因此,“双特异性”抗体构建体或免疫球蛋白是具有至少两个具有不同特异性的不同结合侧端的人工杂交抗体或免疫球蛋白。双特异性抗体构建体可以通过多种方法产生,这些方法包括杂交瘤的融合或Fab'片段的连接。参见,例如Songsivilai

和Lachmann, Clin. Exp. Immunol. [临床实验免疫学] 79:315-321 (1990)。

[0120] 本发明的抗体构建体的至少两个结合结构域和可变结构域(VH/VL)可以包含或不包含肽接头(间隔肽)。根据本发明,术语“肽接头”包含这样的氨基酸序列:通过该氨基酸序列,本发明的抗体构建体的一个(可变和/或结合)结构域和另一(可变和/或结合)结构域的氨基酸序列彼此连接。肽接头也可以用于将第三结构域与本发明的抗体构建体的其他结构域融合。这种肽接头的基本技术特征在于它不包含任何聚合活性。合适的肽接头是在美国专利4,751,180和4,935,233或W0 88/09344中描述的那些。肽接头也可用于将其他结构域或模块或区(如半衰期延长结构域)连接到本发明的抗体构建体。

[0121] 本发明的抗体构建体优选地为“体外产生的抗体构建体”。这个术语是指根据上述定义的抗体构建体,其中在非免疫细胞选择,例如体外噬菌体展示、蛋白质芯片或其中可以测试候选序列与抗原结合的能力的任何其他方法中产生可变区(例如,至少一个CDR)的全部或一部分。因此,这个术语优选地排除仅由动物免疫细胞中的基因组重排产生的序列。“重组抗体”是通过使用重组DNA技术或基因工程制得的抗体。

[0122] 如本文使用的,术语“单克隆抗体”(mAb)或单克隆抗体构建体是指获得自实质上均质的抗体群体的抗体,即除了可能少量存在的可能天然存在的突变和/或翻译后修饰(例如,异构化、酰胺化)外,包含该群体的单独抗体是相同的。与典型地包括针对不同决定簇(或表位)的不同抗体的常规(多克隆)抗体制剂相比,单克隆抗体针对抗原上的单一抗原侧或决定簇具有高度特异性。除了它们的特异性之外,单克隆抗体还在它们通过杂交瘤培养物合成,因此不被其他免疫球蛋白污染方面是有优势的。修饰语“单克隆”指示获得自实质上均质的抗体群体的抗体的特征,并且不应理解为要求通过任何特定方法产生抗体。

[0123] 对于单克隆抗体的制备,可以使用提供由连续细胞系培养物产生的抗体的任何技术。例如,将要使用的单克隆抗体可以通过Koehler等人, Nature [自然], 256:495 (1975) 首次描述的杂交瘤方法,或可以通过重组DNA方法(参见,例如美国专利号4,816,567)制备。用于产生人单克隆抗体的另外技术的实例包括三源杂交瘤技术、人B细胞杂交瘤技术(Kozbor, Immunology Today [今日免疫学] 4 (1983), 72) 和EBV-杂交瘤技术(Cole等人, Monoclonal Antibodies and Cancer Therapy [单克隆抗体和癌症治疗], Alan R. Liss公司(1985), 77-96)。

[0124] 然后可以使用标准方法(如酶联免疫吸附测定(ELISA)和表面等离子体共振(BIACORE™)分析筛选杂交瘤,以鉴定一种或多种产生与指定抗原特异性结合的抗体的杂交瘤。任何形式的相关抗原均可以用作免疫原,例如重组抗原、天然存在形式、其任何变体或片段以及其抗原肽。如在BIAcore系统中采用的表面等离子体共振可以用于增加与靶细胞表面抗原的表位结合的噬菌体抗体的效率(Schier, Human Antibodies Hybridomas [人抗体杂交瘤] 7 (1996), 97-105; Malmberg, J. Immunol. Methods [免疫学方法杂志] 183 (1995), 7-13)。

[0125] 另一种制备单克隆抗体的示例性方法包括筛选蛋白质表达文库,例如噬菌体展示或核糖体展示文库。噬菌体展示例如描述于以下中:Ladner等人,美国专利号5,223,409; Smith (1985) Science [科学] 228:1315-1317; Clackson等人, Nature [自然], 352:624-628 (1991) 和Marks等人, J. Mol. Biol. [分子生物学杂志], 222:581-597 (1991)。

[0126] 除了使用展示文库之外,还可以使用相关抗原来免疫非人动物,例如啮齿动物(如

小鼠、仓鼠、兔或大鼠)。在一个实施例中,非人动物包括人免疫球蛋白基因的至少一部分。例如,可能利用人Ig(免疫球蛋白)基因座的大片段来工程化小鼠抗体产生缺陷的小鼠品系。使用杂交瘤技术,可以产生并选择衍生自具有所希望的特异性的基因的抗原特异性单克隆抗体。参见,例如,XENOMOUSETM、Green等人(1994)Nature Genetics[自然遗传学]7:13-21、US 2003-0070185、WO 96/34096和WO 96/33735。

[0127] 单克隆抗体也可以获得自非人动物,并且然后使用本领域中已知的重组DNA技术进行修饰,例如人源化、去免疫、呈现嵌合等。修饰的抗体构建体的实例包括非人抗体的人源化变体、“亲和力成熟”抗体(参见,例如Hawkins等人J.Mol.Biol.[分子生物学杂志]254, 889-896(1992)和Lowman等人,Biochemistry[生物化学]30,10832-10837(1991))和具有改变的一种或多种效应子功能的抗体突变体(参见,例如美国专利5,648,260;Kontermann和Dübel(2010),上述引文和Little(2009),上述引文)。

[0128] 在免疫学中,亲和力成熟是这样的过程:通过该过程,在免疫应答的过程中B细胞产生与抗原的亲和力增加的抗体。由于反复暴露于相同的抗原,宿主会产生依次更大亲和力的抗体。如天然原型一样,体外亲和力成熟基于突变和选择的原理。体外亲和力成熟已经成功地用于优化抗体、抗体构建体和抗体片段。使用辐射、化学诱变剂或易错PCR在CDR内引入随机突变。此外,遗传多样性可以通过链改组来增加。使用展示方法(如噬菌体展示)进行两轮或三轮突变和选择通常产生具有在低纳摩尔范围内的亲和力的抗体片段。

[0129] 抗体构建体的氨基酸取代变化的优选类型涉及取代亲本抗体(例如人源化或人抗体)的一个或多个高变区残基。一般来讲,选择用于进一步开发的一种或多种所得变体相对于产生它们的亲本抗体将具有改善的生物特性。用于产生此类取代变体的便利方式涉及使用噬菌体展示的亲和力成熟。简而言之,将若干个高变区侧端(例如6-7个侧端)突变以在每个侧端产生所有可能的氨基酸取代。由此产生的抗体变体以单价方式从丝状噬菌体颗粒展示为与每个颗粒内包装的M13的基因III产物的融合物。然后如本文所披露那样筛选噬菌体展示的变体的生物活性(例如结合亲和力)。为了鉴定用于修饰的候选高变区侧端,可以进行丙氨酸扫描诱变以鉴定对抗原结合有显著贡献的高变区残基。可替代地或另外,分析抗原-抗体复合物的晶体结构以鉴定结合结构域与例如人靶细胞表面抗原之间的接触点可能是有利的。根据本文阐述的技术,此类接触残基和相邻残基是用于取代的候选者。一旦产生了此类变体,就如本文所述对这组变体进行筛选,并且可以选择在一种或多种相关测定中具有优异特性的抗体用于进一步的开发。

[0130] 本发明的单克隆抗体和抗体构建体具体地包括“嵌合”抗体(免疫球蛋白),其中重链和/或轻链的一部分与衍生自特定物种或属于特定抗体类别或亚类的抗体中的相应序列一致或同源,而一个或多个链的其余部分与衍生自另一物种或属于另一抗体类别或亚类的抗体中的相应序列一致或同源,以及此类抗体的片段,只要它们展现出所希望的生物活性即可(美国专利号4,816,567;Morrison等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊],81:6851-6855(1984))。本文感兴趣的嵌合抗体包括“灵长类化”抗体,这些抗体包含衍生自非人灵长类动物(例如,旧大陆猴、猿等)的可变结构域抗原结合序列和人恒定区序列。已经描述了多种用于制备嵌合抗体的方法。参见,例如,Morrison等人,Proc.Natl.Acad.Sci U.S.A.[美国国家科学院院刊]81:6851,1985;Takeda等人,Nature[自然]314:452,1985;Cabilly等人,美国专利号4,816,567;Boss等人,美国专利号4,816,

397;Tanaguchi等人,EP 0171496;EP 0173494;和GB 2177096。

[0131] 抗体、抗体构建体、抗体片段或抗体变体还可以通过例如WO 98/52976或WO 00/34317中披露的方法特定地缺失人T细胞表位(称为“去免疫”的方法)来进行修饰。简而言之,可以对与MHC II类结合的肽分析抗体的重链和轻链可变结构域;这些肽代表潜在的T细胞表位(如WO 98/52976和WO 00/34317中所定义)。为了检测潜在T细胞表位,可以应用称为“肽穿线”的计算机建模方法,并且此外针对VH和VL序列中存在的基序,可以搜索人MHC II类结合肽的数据库,如WO 98/52976和WO 00/34317中所述。这些基序与18种主要的MHC II类DR同种异型中的任一种结合,并且因此构成潜在T细胞表位。检测到的潜在T细胞表位可以通过取代可变结构域中的少量氨基酸残基,或者优选地通过单个氨基酸取代来消除。典型地,进行保守取代。通常但不排他地,可以使用人种系抗体序列中的位置共有的氨基酸。人种系序列例如披露于以下中:Tomlinson等人(1992)J.Mol.Biol.[分子生物学杂志]227:776-798;Cook,G.P.等人(1995)Immunol.Today[当代免疫]第16(5)卷:237-242;和Tomlinson等人(1995)EMBO J.[欧洲分子生物学学会杂志]14:14:4628-4638。V BASE目录提供了人免疫球蛋白可变区序列的综合目录(由Tomlinson,LA.等人编辑MRC Centre for Protein Engineering[医学研究理事会蛋白质工程中心],Cambridge,UK[英国剑桥])。这些序列可以用作人序列的来源,例如用于框架区和CDR。也可以使用共有的人框架区,例如如美国专利号6,300,064中所述。

[0132] “人源化”抗体、抗体构建体、其变体或片段(如Fv、Fab、Fab'、F(ab')₂或抗体的其他抗原结合子序列)是主要人序列的抗体或免疫球蛋白,其含有一种或多种衍生自非人免疫球蛋白的最小序列。对于大部分来说,人源化抗体是人免疫球蛋白(受体抗体),其中来自受体的高变区(也称为CDR)的残基被来自非人(例如啮齿动物)物种(供体抗体)(如小鼠、大鼠、仓鼠或兔)的具有所希望的特异性、亲和力和能力的高变区的残基替换。在一些情况下,人免疫球蛋白的Fv框架区(FR)残基被相应的非人类残基替换。此外,如本文使用的,“人源化抗体”还可以包括在受体抗体或供体抗体中均未发现的残基。进行这些修饰以进一步改进和优化抗体性能。人源化抗体还可以包含典型地是人免疫球蛋白的免疫球蛋白恒定区(Fc)的至少一部分。对于更多的细节,参见Jones等人,Nature[自然],321:522-525(1986);Reichmann等人,Nature[自然],332:323-329(1988);以及Presta,Curr.Op.Struct.Biol.[结构生物学新见],2:593-596(1992)。

[0133] 人源化抗体或其片段可以通过用人Fv可变结构域的等效序列替换不直接参与抗原结合的Fv可变结构域的序列来产生。用于产生人源化抗体或其片段的示例性方法由以下提供:Morrison(1985)Science[科学]229:1202-1207;Oi等人(1986)BioTechniques[生物技术]4:214;以及US 5,585,089;US 5,693,761;US 5,693,762;US 5,859,205;和US 6,407,213。那些方法包括分离、操纵和表达编码来自重链或轻链中的至少一者的全部或部分免疫球蛋白Fv可变结构域的核酸序列。此类核酸可以获得自如上所述的产生针对预定靶的抗体的杂交瘤,以及其他来源。然后将编码人源化抗体分子的重组DNA克隆到合适的表达载体中。

[0134] 人源化抗体还可以使用转基因动物(如表达人重链和轻链基因但不能表达内源性小鼠免疫球蛋白重链和轻链基因的小鼠)产生。Winter描述了可用于制备本文所述的人源化抗体的示例性CDR移植方法(美国专利号5,225,539)。特定人抗体的全部CDR可以用至少

一部分非人CDR替换,或者仅一些CDR可以用非人CDR替换。仅需要替换用于将人源化抗体与预定抗原结合所希望的CDR数量。

[0135] 可以通过引入保守取代、共有序列取代、种系取代和/或回复突变来优化人源化抗体。此类改变的免疫球蛋白分子可以通过本领域中已知的若干种技术中的任一种来制得(例如,Teng等人,Proc.Natl.Acad.Sci.U.S.A.[美国国家科学院院刊],80:7308-7312,1983;Kozbor等人,Immunology Today[今日免疫学],4:7279,1983;Olsson等人,Meth.Enzymol.[酶学方法],92:3-16,1982和EP 239 400)。

[0136] 术语“人抗体”、“人抗体构建体”和“人结合结构域”包括具有抗体区的抗体、抗体构建体和结合结构域,这些抗体区如实质上对应于本领域中已知的人种系免疫球蛋白序列的可变和恒定区或结构域,包括例如由Kabat等人(,1991)(上述引文)描述的那些。本发明的人抗体、抗体构建体或结合结构域可以在例如CDR中且特别是CDR3中包含不由人种系免疫球蛋白序列编码的氨基酸残基(例如通过体外随机或侧端特异性诱变或通过体内体细胞突变引入的突变)。人抗体、抗体构建体或结合结构域可以具有至少1个、2个、3个、4个、5个或更多个被不由人种系免疫球蛋白序列编码的氨基酸残基替换的位置。然而,如本文使用的人抗体、抗体构建体和结合结构域的定义还涵盖“完全人抗体”,这些完全人抗体仅包含非人工和/或遗传改变的人抗体序列,如可通过使用如Xenomouse技术或系统衍生的那些。优选地,“完全人抗体”不包含不由人种系免疫球蛋白序列编码的氨基酸残基。

[0137] 在一些实施例中,本发明的抗体构建体是“分离的”或“实质上纯的”抗体构建体。当用于描述本文披露的抗体构建体时,“分离的”或“实质上纯的”意指抗体构建体已从其产生环境的组分中鉴定、分离和/或回收。优选地,抗体构建体不与或实质上不与来自其产生环境的所有其他组分缔合。其产生环境的污染组分,如由重组转染细胞产生的污染组分,是典型地干扰多肽的诊断或治疗用途的物质,并且可以包括酶、激素和其他蛋白质或非蛋白质溶质。抗体构建体可以例如占给定样品中总蛋白质的至少约5重量%或至少约50重量%。应理解,根据情况,分离的蛋白质可以占总蛋白质含量的5重量%至99.9重量%。通过使用诱导型启动子或高表达启动子,能以显著更高的浓度制备多肽,以使得它以增加的浓度水平制备。该定义包括在本领域中已知的多种生物体和/或宿主细胞中产生抗体构建体。在优选的实施例中,抗体构建体(1)通过使用旋杯式序列分析仪纯化至足以获得至少15个N末端或内部氨基酸序列的残基的程度,或(2)可以通过SDS-PAGE在非还原或还原条件下使用考马斯蓝或优选银染色纯化至均质。然而,通常通过至少一个纯化步骤来制备分离的抗体构建体。

[0138] 术语“结合结构域”关于本发明表征了(特异性地)结合/相互作用/识别靶分子(抗原)(例如分别为CD33和CD3)上的给定靶表位或给定靶侧端的结构域。第一结合结构域(识别例如CD33)的结构和功能以及优选还有第二结合结构域(识别CD3)的结构和/或功能是基于抗体,例如全长或完整免疫球蛋白分子的结构和/或功能,和/或是从抗体或其片段的可变重链(VH)和/或可变轻链(VL)结构域中提取。优选地,第一结合结构域的特征在于三个轻链CDR(即VL区的CDR1、CDR2和CDR3)和/或三个重链CDR(即VH区的CDR1、CDR2和CDR3)的存在。第二结合结构域优选还包含允许靶结合的抗体的最小结构要求。更优选地,第二结合结构域包含至少三个轻链CDR(即VL区的CDR1、CDR2和CDR3)和/或三个重链CDR(即VH区的CDR1、CDR2和CDR3)。设想第一结合结构域和/或第二结合结构域是通过噬菌体展示或文库

筛选方法产生或可获得的,而不是通过将来自预先存在的(单克隆)抗体的CDR序列移植到支架中产生或可获得的。

[0139] 根据本发明,结合结构域呈一种或多种多肽的形式。此类多肽可以包括蛋白质部分和非蛋白质部分(例如化学接头或化学交联剂,如戊二醛)。蛋白质(包括其片段、优选生物活性片段和通常具有少于30个氨基酸的肽)包含经由共价肽键彼此偶联的两个或更多个氨基酸(产生氨基酸链)。

[0140] 如本文使用的,术语“多肽”描述了一组分子,这些分子通常由超过30个氨基酸组成。多肽可以进一步形成多聚体,如二聚体、三聚体和更高级的寡聚物,即由多于一个多肽分子组成。形成此类二聚体、三聚体等的多肽分子可以是相同的或不相同的。因此,此类多聚体的相应的更高级结构称为同源二聚体或异源二聚体、同源三聚体或异源三聚体等。异源多聚体的实例是在其天然形式下由两条相同的轻链多肽链和两条相同的重链多肽链组成的抗体分子。术语“肽”、“多肽”和“蛋白质”也是指天然修饰的肽/多肽/蛋白质,其中修饰是例如通过翻译后修饰(如糖基化、乙酰化、磷酸化等)来实现。当在本文中提及时,“肽”、“多肽”或“蛋白质”也可以是化学修饰的,如聚乙二醇化。此类修饰在本领域中是熟知的并且在下文描述。

[0141] 优选地,结合靶细胞表面抗原的结合结构域和/或结合CD3 ϵ 的结合结构域是人结合结构域。包含至少一个人结合结构域的抗体和抗体构建体避免了与具有非人(如啮齿动物(例如鼠、大鼠、仓鼠或兔))可变区和/或恒定区的抗体或抗体构建体相关的一些问题。此类啮齿动物衍生的蛋白质的存在可以导致抗体或抗体构建体的快速清除或可以导致患者产生针对抗体或抗体构建体的免疫应答。为了避免使用啮齿动物衍生的抗体或抗体构建体,可以通过将人抗体功能引入到啮齿动物中以使啮齿动物产生完全人抗体来产生人或完全人抗体/抗体构建体。

[0142] 在YAC中克隆和重配兆碱基大小的人基因座并将它们引入到小鼠种系中的能力为阐明非常大或粗略定位的基因座的功能组分以及产生有用的人疾病模型提供了强有力的方法。此外,使用这种技术将小鼠基因座取代为其人等效物可以提供关于人基因产物在发育过程中的表达和调控、其与其他系统的通信以及其参与疾病诱导和进展的独特见解。

[0143] 这种策略的重要实际应用是小鼠体液免疫系统的“人源化”。将人免疫球蛋白(Ig)基因座引入到其中内源性Ig基因已经失活的小鼠中提供了研究抗体的程序化表达和组装的根本机制以及其在B细胞发育中的作用的机会。此外,这种策略可以为完全人单克隆抗体(mAb)的产生提供理想来源-这是有助于实现抗体疗法在人疾病中的前景的重要里程碑。预期完全人抗体或抗体构建体将小鼠或小鼠衍生的mAb所固有的免疫原性和变应性应答最小化,并且由此增加给予的抗体/抗体构建体的功效和安全性。可以预期使用完全人抗体或抗体构建体在治疗需要重复给予化合物的慢性和复发性人疾病(如炎症、自体免疫和癌症)中提供显著的优势。

[0144] 实现这一目标的一种方法是用人Ig基因座的大片段工程化小鼠抗体产生缺陷的小鼠品系,预期这种小鼠在不产生小鼠抗体的情况下将产生大的人抗体组库。大的人Ig片段将保持大的可变基因多样性以及对抗体产生和表达的适当调控。通过利用小鼠机构实现抗体多样化和选择以及缺乏对人蛋白质的免疫耐受性,在这些小鼠品系中再生的人抗体组库应产生针对任何感兴趣的抗原(包括人抗原)的高亲和力抗体。使用杂交瘤技术,可以容

易地产生和选择具有所希望特异性的抗原特异性人mAb。结合第一种XenoMouse小鼠品系的产生证明了这个一般策略(参见Green等人Nature Genetics[自然遗传学]7:13-21(1994))。XenoMouse品系用分别含有人重链基因座和 κ 轻链基因座的245kb和190kb大小的种系构型片段的酵母人工染色体(YAC)工程化,这些种系构型片段含有核心可变区和恒定区序列。证明含有人Ig的YAC与小鼠系统相容以重排和表达抗体,并且能够取代失活的小鼠Ig基因。这通过其诱导B细胞发育、产生完全人抗体的成人样人组库和产生抗原特异性人mAb的能力来证明。这些结果还表明,引入含有更多数量的V基因、另外的调控元件和人Ig恒定区的更大部分的人Ig基因座可以实质上再现作为对感染和免疫的人体液应答的特征的完整组库。Green等人的工作最近扩展到通过分别引入兆碱基大小的人重链基因座和 κ 轻链基因座的种系构型YAC片段来引入大于约80%的人抗体组库。参见Mendez等人Nature Genetics[自然遗传学]15:146-156(1997)和美国专利申请序列号08/759,620。

[0145] XenoMouse小鼠的产生进一步论述和描绘于以下中:美国专利申请序列号07/466,008、序列号07/610,515、序列号07/919,297、序列号07/922,649、序列号08/031,801、序列号08/112,848、序列号08/234,145、序列号08/376,279、序列号08/430,938、序列号08/464,584、序列号08/464,582、序列号08/463,191、序列号08/462,837、序列号08/486,853、序列号08/486,857、序列号08/486,859、序列号08/462,513、序列号08/724,752和序列号08/759,620;和美国专利号6,162,963;6,150,584;6,114,598;6,075,181和5,939,598以及日本专利号3 068 180 B2、3 068 506 B2、和3 068 507 B2。还参见Mendez等人Nature Genetics[自然遗传学]15:146-156(1997)以及Green和Jakobovits J. Exp. Med. [实验医学杂志]188:483-495(1998)、EP 0 463 151 B1、WO 94/02602、WO 96/34096、WO 98/24893、WO 00/76310和WO 03/47336。

[0146] 在一个可替代的方法中,包括真药物国际公司(GenPharm International, Inc.)的其他公司利用了“微基因座”方法。在微基因座方法中,通过包含来自Ig基因座的碎片(单独的基因)来模拟外源性Ig基因座。因此,将一个或多个VH基因、一个或多个DH基因、一个或多个JH基因、 μ 恒定区和第二恒定区(优选 γ 恒定区)形成为用于插入到动物中的构建体。该方法描述于以下中:Surani等人的美国专利号5,545,807和美国专利号5,545,806;5,625,825;5,625,126;5,633,425;5,661,016;5,770,429;5,789,650;5,814,318;5,877,397;5,874,299;和6,255,458(各自为Lonberg和Kay)、Krimpenfort和Berns的美国专利号5,591,669和6,023,010、Berns等人的美国专利号5,612,205;5,721,367;和5,789,215、以及Choi和Dunn的美国专利号5,643,763、以及真药物(GenPharm)国际美国专利申请序列号07/574,748、序列号07/575,962、序列号07/810,279、序列号07/853,408、序列号07/904,068、序列号07/990,860、序列号08/053,131、序列号08/096,762、序列号08/155,301、序列号08/161,739、序列号08/165,699、序列号08/209,741。还参见EP 0 546 073 B1、WO 92/03918、WO 92/22645、WO 92/22647、WO 92/22670、WO 93/12227、WO 94/00569、WO 94/25585、WO 96/14436、WO 97/13852和WO 98/24884以及美国专利号5,981,175。进一步参见Taylor等人(1992)、Chen等人(1993)、Tuailon等人(1993)、Choi等人(1993)、Lonberg等人(1994)、Taylor等人(1994)、和Tuailon等人(1995)、Fishwild等人(1996)。

[0147] Kirin也展示了从通过微细胞融合引入大段染色体或整个染色体的小鼠产生人抗体。参见欧洲专利申请号773 288和843 961。Xenerex Biosciences正在开发用于人抗体的

潜在产生的技术。在这种技术中,用人淋巴细胞(例如B和/或T细胞)重配SCID小鼠。然后将小鼠用抗原免疫并且可产生针对抗原的免疫应答。参见美国专利号5,476,996;5,698,767;和5,958,765。

[0148] 人抗小鼠抗体(HAMA)应答已经导致该行业制备嵌合或其他人源化抗体。然而,预期特别是在抗体的长期或多剂量利用中会观察到某些人抗嵌合抗体(HACA)应答。因此,期望提供包含针对靶细胞表面抗原的人结合结构域和针对CD3 ϵ 的人结合结构域的抗体构建体,以消除HAMA或HACA应答的问题和/或效应。

[0149] 术语“与……(特异性)结合”、“(特异性)识别”、“(特异性)针对”和“与……(特异性)反应”意指根据本发明,结合结构域与靶分子(抗原)(此处:分别为靶细胞表面抗原和CD3 ϵ)上的给定表位或给定靶侧端相互作用或特异性相互作用。

[0150] 术语“表位”是指结合结构域(如抗体或免疫球蛋白,或抗体或免疫球蛋白的衍生物、片段或变体)特异性结合的抗原上的一侧。“表位”是抗原性的,并且因此术语表位在本文中有时也称为“抗原结构”或“抗原决定簇”。因此,结合结构域是“抗原相互作用侧”。所述结合/相互作用也被理解为定义“特异性识别”。

[0151] “表位”可以通过连续的氨基酸或通过蛋白质的三级折叠并置的非连续氨基酸形成。“线性表位”是这样的表位,其中氨基酸一级序列包含所识别表位。线性表位典型地在独特的序列中包括至少3个或至少4个、且更通常地至少5个或至少6个或至少7个,例如约8个至约10个氨基酸。

[0152] 与线性表位相反,“构象表位”是这样的表位,其中构成表位的氨基酸的一级序列不是所识别表位的唯一限定组分(例如,其中氨基酸的一级序列不一定被结合结构域识别的表位)。典型地,构象表位包含相对于线性表位增加数量的氨基酸。关于构象表位的识别,结合结构域识别抗原、优选肽或蛋白质或其片段的三维结构(在本发明的上下文下,一个结合结构域的抗原结构包括于靶细胞表面抗原蛋白质内)。例如,当蛋白质分子折叠以形成三维结构时,形成构象表位的某些氨基酸和/或多肽骨架并置,使得抗体能够识别表位。确定表位构象的方法包括但不限于x射线晶体学、二维核磁共振(2D-NMR)光谱学和定点自旋标记和电子顺磁共振(EPR)光谱学。

[0153] 以下描述了用于表位定位的方法:当人靶细胞表面抗原蛋白中的区(连续氨基酸拉伸物)用非人和非灵长类动物靶细胞表面抗原(例如,小鼠靶细胞表面抗原,但是其他如鸡、大鼠、仓鼠、兔等也是可能的)的其相应区交换/替换时,预期发生结合结构域结合的降低,除非结合结构域对于所用的非人、非灵长类动物靶细胞表面抗原具有交叉反应性。相比于与人靶细胞表面抗原蛋白中的对应区的结合,所述降低优选地为至少10%、20%、30%、40%或50%;更优选地至少60%、70%或80%,并且最优选地90%、95%或甚至100%,由此将与非人靶细胞表面抗原蛋白中对应区的结合设定为100%。设想上述人靶细胞表面抗原/非人靶细胞表面抗原嵌合体在CHO细胞中表达。还设想人靶细胞表面抗原/非人靶细胞表面抗原嵌合体与不同膜结合蛋白(如EpCAM)的跨膜结构域和/或细胞质结构域融合。

[0154] 在用于表位定位的可替代或另外的方法中,可以产生若干种截短形式的人靶细胞表面抗原细胞外结构域,以确定由结合结构域识别的特定区域。在这些截短形式中,从N末端开始逐步缺失不同的细胞外靶细胞表面抗原结构域/亚结构域或区域。设想截短的靶细胞表面抗原形式可以在CHO细胞中表达。还设想截短的靶细胞表面抗原形式可以与不同膜

结合蛋白(如EpCAM)的跨膜结构域和/或细胞质结构域融合。还设想截短的靶细胞表面抗原形式可在其N末端涵盖信号肽结构域,例如衍生自小鼠IgG重链信号肽的信号肽。进一步设想,截短的靶细胞表面抗原形式可以在其N末端(在信号肽后)涵盖v5结构域,其允许验证它们在细胞表面上的正确表达。预期不再涵盖由结合结构域识别的靶细胞表面抗原区域的那些截短的靶细胞表面抗原形式发生结合的降低或丧失。结合降低优选地为至少10%、20%、30%、40%、50%;更优选地至少60%、70%、80%,并且最优选地90%、95%或甚至100%,由此将与整个人靶细胞表面抗原蛋白(或其细胞外区域或结构域)的结合设定为100。

[0155] 确定靶细胞表面抗原的特定残基对抗体构建体或结合结构域的识别的贡献的另一种方法是丙氨酸扫描(参见,例如Morrison KL和Weiss GA. *Cur Opin Chem Biol*. [化学生物学新见] 2001年6月; 5(3): 302-7),其中待分析的每个残基例如经由定点诱变被丙氨酸替换。丙氨酸的使用是因为其具有非巨大的、化学惰性的甲基官能团,但仍然模仿许多其他氨基酸所具有的二级结构参考。在需要保守突变残基的大小的情形下,有时可以使用巨大的氨基酸(如缬氨酸或亮氨酸)。丙氨酸扫描是一项已经使用了很长一段时间的成熟技术。

[0156] 结合结构域与表位或包含表位的区域之间的相互作用意味着结合结构域对特定蛋白或抗原(此处:分别为靶细胞表面抗原和CD3)上的表位/包含表位的区域表现出可观的亲合力,并且通常与靶细胞表面抗原或CD3以外的蛋白质或抗原不表现出显著反应性。“可观的亲合力”包括以约 10^{-6} M(KD)或更强的亲合力结合。优选地,当结合亲合力为约 10^{-12} 至 10^{-8} M、 10^{-12} 至 10^{-9} M、 10^{-12} 至 10^{-10} M、 10^{-11} 至 10^{-8} M,优选地约 10^{-11} 至 10^{-9} M时,认为结合是特异性的。尤其通过将所述结合结构域与靶蛋白或抗原的反应与所述结合结构域与除靶细胞表面抗原或CD3以外的蛋白质或抗原的反应进行比较,可以容易地测试结合结构域是否与靶特异性反应或结合。优选地,本发明的结合结构域基本上或实质上不结合除靶细胞表面抗原或CD3以外的蛋白质或抗原(即,第一结合结构域不能结合除靶细胞表面抗原以外的蛋白质,并且第二结合结构域不能结合除CD3以外的蛋白质)。设想根据本发明的抗体构建体的特征为与其他HLE形式相比具有优异的亲合力特征。因此,这种优异的亲合力表明体内半衰期延长。根据本发明的抗体构建体的更长的半衰期可以减少典型地有助于改善患者顺应性的给予的持续时间和频率。这是特别重要的,因为本发明的抗体构建体对高度虚弱的或甚至多重性癌症患者特别有益。

[0157] 术语“基本上/实质上不结合”或“不能结合”意指本发明的结合结构域不结合除靶细胞表面抗原或CD3以外的蛋白质或抗原,即与除靶细胞表面抗原或CD3以外的蛋白质或抗原不显示超过30%,优选不超过20%,更优选不超过10%,特别优选不超过9%、8%、7%、6%或5%的反应性,由此将与靶细胞表面抗原或CD3的结合分别设定为100%。

[0158] 据信特异性结合是通过结合结构域和抗原的氨基酸序列中的特定基序实现的。因此,由于其一级、二级和/或三级结构以及所述结构的二次修饰,因此实现了结合。抗原相互作用侧端与其特异性抗原的特异性相互作用可以导致所述侧端与抗原的简单结合。此外,抗原相互作用侧端与其特异性抗原的特异性相互作用可以可替代地或另外地导致信号的引发,例如由于诱导抗原构象的变化、抗原的寡聚化等。

[0159] 术语“可变”是指抗体或免疫球蛋白结构域表现出其序列可变性并且参与确定特定抗体的特异性和结合亲和力的部分(即“一个或多个可变结构域”)。可变重链(VH)和可变轻链(VL)的配对一起形成单个抗原结合侧端。

[0160] 可变性在整个抗体的可变结构域中并不均匀分布;它集中在重链可变区和轻链可变区中的每一个的子结构域中。这些子结构域被称为“高变区”或“互补决定区”(CDR)。可变结构域的更保守的(即非高变)部分被称为“框架”区(FRM或FR),并且为三维空间中的六个CDR提供支架以形成抗原结合表面。天然存在的重链和轻链的可变结构域各自包含四个FRM区域(FR1、FR2、FR3和FR4),这四个FRM区域主要采用 β -折叠构型,通过三个高变区连接,这三个高变区形成连接 β -折叠结构的环,并且在一些情况下形成 β -折叠结构的一部分。每条链中的高变区通过FRM紧密靠近在一起,并与来自另一条链的高变区一起有助于抗原结合侧端的形成(参见Kabat等人,上述引文)。

[0161] 术语“CDR”及其复数“CDRs”是指其中三个构成轻链可变区(CDR-L1、CDR-L2和CDR-L3)的结合特征并且三个构成重链可变区(CDR-H1、CDR-H2和CDR-H3)的结合特征的互补决定区。CDR含有大部分负责抗体与抗原特异性相互作用的残基,并且因此有助于抗体分子的功能活性:它们是抗原特异性的主要决定簇。

[0162] 准确定义的CDR边界和长度受制于不同的分类和编号系统。因此,CDR可以通过Kabat、Chothia、contact或任何其他边界定义(包括本文所述的编号系统)来引用。尽管有不同的边界,但这些系统中的每一者在构成可变序列内所谓的“高变区”的方面具有一定程度的重叠。因此,根据这些系统的CDR定义可以相对于相邻框架区在长度和边界区域方面不同。参见例如Kabat(基于跨物种序列变异性的方法)、Chothia(基于抗原-抗体复合物的晶体学研究的方法)、和/或MacCallum(Kabat等人,上述引文;Chothia等人,J.Mol.Biol[分子生物学杂志],1987,196:901-917;和MacCallum等人,J.Mol.Biol[分子生物学杂志],1996,262:732)。表征抗原结合侧端的又另一标准是由牛津大学分子公司(Oxford Molecular)的AbM抗体建模软件使用的AbM定义。参见例如,Protein Sequence and Structure Analysis of Antibody Variable Domains[抗体可变结构域的蛋白质序列和结构分析]在:Antibody Engineering Lab Manual[抗体工程实验室手册](编辑:Duebel,S.和Kontermann,R.,施普林格出版社(Springer-Verlag),海德堡)。就两种残基鉴定技术定义重叠区而非相同区而言,可以将它们组合以定义杂合CDR。然而,根据所谓的Kabat系统进行编号是优选的。

[0163] 典型地,CDR形成可以分类为规范结构的环结构。术语“规范结构”是指由抗原结合(CDR)环所采用的主链构象。从比较结构研究中,已经发现六个抗原结合环中的五个仅具有有限的可用构象组库。每个规范结构可以通过多肽骨架的扭转角来表征。因此,抗体之间的对应环可具有非常相似的三维结构,但环中大部分具有高氨基酸序列变异性(Chothia和Lesk,J.Mol.Biol.[分子生物学杂志],1987,196:901;Chothia等人,Nature[自然],1989,342:877;Martin和Thornton,J.Mol.Biol[分子生物学杂志],1996,263:800)。此外,所采用的环结构与其周围的氨基酸序列之间存在关系。特定规范类别的构象由环的长度和位于环内以及保守框架内(即,环外)关键位置的氨基酸残基决定。因此,可以基于这些关键氨基酸残基的存在来进行对特定规范类别的分配。

[0164] 术语“规范结构”还可以包括关于抗体的线性序列的考虑因素,例如,如通过Kabat(Kabat等人,上述引文)编目的。Kabat编号方案(系统)是以一致方式对抗体可变结构域的氨基酸残基进行编号的广泛采用的标准,并且是本发明应用的优选方案,也如本文其他地方所提及。另外的结构考虑因素也可以用于确定抗体的规范结构。例如,Kabat编号未完全反映的那些差异可以通过Chothia等人的编号系统来描述,和/或通过其他技术(例如结晶

学和二维或三维计算建模)来揭示。因此,可以将给定的抗体序列置于规范的类别中,该类别尤其允许鉴定适当的基础结构(chassis)序列(例如,基于在文库中包括多种规范结构的期望)。文献中描述了抗体氨基酸序列的Kabat编号和如由Chothia等人,上述引文所述的结构考虑因素以及其对解释抗体结构的规范方面的意义。不同类别的免疫球蛋白的亚单位结构和三维构型在本领域中是熟知的。有关抗体结构的综述,参见Antibodies:A Laboratory Manual[抗体:实验室手册],Cold Spring Harbor Laboratory[冷泉港实验室],Harlow等人编辑,1988。

[0165] 轻链的CDR3以及特别是重链的CDR3可以构成轻链可变区和重链可变区内抗原结合中最重要的决定簇。在一些抗体构建体中,重链CDR3似乎构成抗原与抗体之间主要的接触区域。其中单独改变CDR3的体外选择方案可以用于改变抗体的结合特性或确定哪些残基有助于抗原的结合。因此,CDR3典型地是抗体结合侧端内分子多样性的最大来源。例如,H3可以短至两个氨基酸残基或多于26个氨基酸。

[0166] 在经典的全长抗体或免疫球蛋白中,每条轻(L)链通过一个共价二硫键与重(H)链连接,而两条H链通过一个或多个二硫键彼此连接,这取决于H链同种型。最靠近VH的CH结构域通常命名为CH1。恒定(“C”)结构域不直接参与抗原结合,但表现出各种效应子功能,如抗体依赖性、细胞介导的细胞毒性和补体激活。抗体的Fc区包括在重链恒定结构域内,并且例如能够与位于细胞表面的Fc受体相互作用。

[0167] 组装和体细胞突变后的抗体基因的序列高度改变,并且估计这些改变的基因编码 10^{10} 种不同抗体分子(Immunoglobulin Genes[免疫球蛋白基因],第2版,Jonio等人编辑,Academic Press[学术出版社],San Diego,CA[加利福尼亚州圣地亚哥],1995)。因此,免疫系统提供了免疫球蛋白组库。术语“组库”是指完全或部分衍生自至少一种编码至少一种免疫球蛋白的序列的至少一种核苷酸序列。一种或多种序列可以通过重链的V、D和J区段以及轻链的V和J区段的体内重排来产生。可替代地,一种或多种序列可以响应于发生重排,例如体外刺激而从细胞产生。可替代地,一种或多种序列的一部分或全部可以通过DNA剪接、核苷酸合成、诱变和其他方法获得,参见例如美国专利5,565,332。组库可以仅包括一种序列或可以包括多种序列,包括遗传多样性集合中的序列。

[0168] 术语“Fc部分”或“Fc单体”关于本发明意指包含至少一个具有CH2结构域功能的结构域和至少一个具有免疫球蛋白分子的CH3结构域功能的结构域的多肽。从术语“Fc单体”显而易见,包含那些CH结构域的多肽是“多肽单体”。Fc单体可以是至少包含排除重链的第一恒定区免疫球蛋白结构域(CH1)的免疫球蛋白恒定区的片段,但至少保持一个CH2结构域的功能部分和一个CH3结构域的功能部分的多肽,其中CH2结构域在CH3结构域的氨基末端。在这个定义的优选方面中,Fc单体可以是包含Ig-Fc铰链区、CH2区和CH3区的一部分的多肽恒定区,其中铰链区在CH2结构域的氨基末端。设想本发明的铰链区促进二聚化。例如但不限于,此类Fc多肽分子可以通过木瓜蛋白酶消化免疫球蛋白区(当然产生两个Fc多肽的二聚体)获得。在这个定义的另一方面中,Fc单体可以是包含CH2区和CH3区的一部分的多肽区。例如但不限于,此类Fc多肽分子可以通过胃蛋白酶消化免疫球蛋白分子获得。在一个实施例中,Fc单体的多肽序列基本上类似于以下的Fc多肽序列:IgG₁ Fc区、IgG₂ Fc区、IgG₃ Fc区、IgG₄ Fc区、IgM Fc区、IgA Fc区、IgD Fc区和IgE Fc区。(参见,例如Padlan, Molecular Immunology[分子免疫学],31(3),169-217(1993))。因为免疫球蛋白之间存在

一些变化,并且仅为了清楚起见,所以Fc单体是指IgA、IgD和IgG的最后两个重链恒定区免疫球蛋白结构域,以及IgE和IgM的最后三个重链恒定区免疫球蛋白结构域。如上所提及,Fc单体还可以包括在这些结构域的N末端的柔性铰链。对于IgA和IgM,Fc单体可以包括J链。对于IgG,Fc部分包含免疫球蛋白结构域CH2和CH3以及前两个结构域与CH2之间的铰链。尽管Fc部分的边界可以改变,但包含功能铰链、CH2和CH3结构域的人IgG重链Fc部分的实例可以定义为例如包含残基D231(铰链结构域的残基-对应于下表1中的D234)至CH3结构域的羧基末端的P476,分别地L476(对于IgG4),其中根据Kabat编号。经由肽接头彼此融合的两个Fc部分或Fc单体定义本发明的抗体构建体的第三结构域,该第三结构域也可以被定义为scFc结构域。

[0169] 在本发明的一个实施例中,设想如本文披露的scFc结构域,分别地彼此融合的Fc单体仅包括在抗体构建体的第三结构域中。

[0170] 根据本发明,可以使用表1中列出的Kabat编号通过类推来鉴定IgG铰链区。与上述一致,设想本发明的铰链结构域/区域包含根据Kabat编号的对应于D234至P243的IgG₁序列拉伸物的氨基酸残基。同样设想,本发明的铰链结构域/区域包含或由IgG1铰链序列DKTHTCPPCP(SEQ ID NO:1449)组成(对应于如下表1所示的拉伸物D234至P243-也设想所述序列的变异,只要铰链区仍然促进二聚化)。在本发明的优选的实施例中,通过N314X取代去除抗体构建体的第三结构域中CH2结构域的Kabat位置314处的糖基化位点,其中X是除Q之外的任何氨基酸。所述取代优选为N314G取代。在更优选的实施例中,所述CH2结构域另外包含以下取代(根据Kabat的位置):V321C和R309C(这些取代在Kabat位置309和321处引入结构域内半胱氨酸二硫桥)。

[0171] 还设想本发明的抗体构建体的第三结构域按氨基至羧基顺序包含或由以下组成:DKTHTCPPCP(SEQ ID NO:1449)(即铰链)-CH2-CH3-接头-DKTHTCPPCP(SEQ ID NO:1449)(即铰链)-CH2-CH3。在优选的实施例中,上述抗体构建体的肽接头的特征在于氨基酸序列Gly-Gly-Gly-Gly-Ser,即Gly₄Ser(SEQ ID NO:1),或其聚合物,即(Gly₄Ser)_x,其中x为5或更大的整数(例如5、6、7、8等或更大),优选为6((Gly₄Ser)₆)。所述构建体可以进一步包含上述取代N314X,优选地N314G和/或另外的取代V321C和R309C。在如前文定义的本发明抗体构建体的优选的实施例中,设想第二结构域与人和/或猕猴CD3ε链的细胞外表位结合。

[0172] 表1:铰链区的氨基酸残基的Kabat编号

铰链的 IMGT 编号	IgG ₁ 氨基酸翻 译	Kabat 编号
1	(E)	226
2	P	227
3	K	228
4	S	232
5	C	233
6	D	234
7	K	235
8	T	236
9	H	237
10	T	238
11	C	239
12	P	240
13	P	241
14	C	242
15	P	243

[0174] 在本发明的另外实施例中,铰链结构域/区域包含或由以下组成: IgG2亚型铰链序列ERKCCVECP^{CP} (SEQ ID NO:1450)、IgG3亚型铰链序列ELKTPLDTTHTCPRCP (SEQ ID NO:1451) 或ELKTPLGDTTHTCPRCP (SEQ ID NO:1458) 和/或IgG4亚型铰链序列ESKYGP^{CP}PCSCP (SEQ ID NO:1452)。IgG1亚型铰链序列可以是以下一种EPKSCDKTHTC^{CP}PCP (如表1和SEQ ID NO:1459中所示)。因此,在本发明的上下文中也设想了这些核心铰链区。

[0175] IgG CH2和IgG CD3结构域的位置和序列可以使用表2中列出的Kabat编号通过类推来鉴定:

[0176] 表2: IgG CH2和CH3区域的氨基酸残基的Kabat编号

IgG 亚型	CH2 aa 翻译	CH2 Kabat 编号	CH3 aa 翻译	CH3 Kabat 编号
IgG₁	APE... ...KAK	244... ...360	GQP... ...PGK	361... ...478
IgG₂	APP... ...KTK	244... ...360	GQP... ...PGK	361... ...478
IgG₃	APE... ...KTK	244... ...360	GQP... ...PGK	361... ...478
IgG₄	APE... ...KAK	244... ...360	GQP... ...LGK	361... ...478

[0178] 在本发明的一个实施例中,使第一或两个Fc单体的CH3结构域中粗体强调的氨基酸残基缺失。

[0179] 第三结构域的多肽单体(“Fc部分”或“Fc单体”)彼此融合的肽接头优选包含至少25个氨基酸残基(25、26、27、28、29、30等)。更优选地,这个肽接头包含至少30个氨基酸残基(30、31、32、33、34、35等)。还优选地,接头包含至多40个氨基酸残基、更优选地至多35个氨基酸残基、最优选地恰好30个氨基酸残基。该肽接头的优选的实施例的特征在于氨基酸序列Gly-Gly-Gly-Gly-Ser,即Gly₄Ser (SEQ ID NO:1),或其聚合物,即(Gly₄Ser)_x,其中x为5或更大的整数(例如6、7或8)。优选地,整数为6或7,更优选地整数为6。

[0180] 在使用接头来将第一结构域融合至第二结构域或将第一结构域或第二结构域融合至第三结构域的情况下,该接头优选地具有足以确保第一结构域和第二结构域中的每一者均可以彼此独立地保留其差异结合特异性的长度和序列。对于连接本发明的抗体构建体中的至少两个结合结构域(或两个可变结构域)的肽接头,仅包含少数量的氨基酸残基(例如12个氨基酸残基或更少)的那些肽接头是优选的。因此,12、11、10、9、8、7、6或5个氨基酸残基的肽接头是优选的。设想的具有少于5个氨基酸的肽接头包含4、3、2或1个氨基酸,其中富含Gly的接头是优选的。用于融合第一结构域和第二结构域的肽接头的优选的实施例在SEQ ID NO:1中描绘。用于融合第二结构域和第三结构域的肽接头的优选接头实施例是(Gly)₄-接头,分别为G4-接头。

[0181] 在上述一种“肽接头”的上下文中特别优选的“单一”氨基酸是Gly。因此,所述肽接头可以由单一氨基酸Gly组成。在本发明的优选的实施例中,肽接头的特征在于氨基酸序列Gly-Gly-Gly-Gly-Ser,即Gly₄Ser(SEQ ID NO:1),或其聚合物,即(Gly₄Ser)_x,其中x为1或更大的整数(例如2或3)。优选的接头在SEQ ID NO:1至12中描绘。包括不促进二级结构的所述肽接头的特征是本领域中已知的并且描述于例如Dall'Acqua等人(Biochem.[生物化学](1998) 37, 9266-9273)、Cheadle等人(Mol Immunol[分子免疫学](1992) 29, 21-30)以及Raag和Whitlow(FASEB[美国实验生物学联合会会志](1995) 9(1), 73-80)中。此外不促进任何二级结构的肽接头是优选的。所述结构域彼此的连接可以例如通过基因工程提供,如实施例中所述。用于制备融合的且可操作地连接的双特异性单链构建体并在哺乳动物细胞或细菌中表达它们的方法是本领域中熟知的(例如WO 99/54440或Sambrook等人,Molecular Cloning:A Laboratory Manual[分子克隆:实验室手册],Cold Spring Harbor Laboratory Press[冷泉港实验室出版社],Cold Spring Harbor[冷泉港],纽约,2001)。

[0182] 在本发明的抗体构建体的优选的实施例中,第一结构域和第二结构域以选自下组的形式形成抗体构建体,该组由以下组成:(scFv)₂、scFv-单结构域mAb、双抗体和这些形式中的任一种的寡聚物。

[0183] 根据特别优选的实施例,并如所附实例所记载,本发明抗体构建体的第一结构域和第二结构域是“双特异性单链抗体构建体”、更优选地双特异性“单链Fv”(scFv)。尽管Fv片段的两个结构域VL和VH由独立的基因编码,但使用重组方法可以将他们通过合成接头接合,如上文所述,该合成接头使它们能够制得为单条蛋白质链,其中VL和VH区配对以形成单价分子;参见,例如Huston等人(1988)Proc.Natl.Acad.Sci USA[美国国家科学院院刊] 85: 5879-5883。使用本领域技术人员已知的常规技术获得这些抗体片段,并且按照与完整或全长抗体相同的方式评价片段的功能。因此,单链可变片段(scFv)是免疫球蛋白的重链(VH)和轻链(VL)可变区的融合蛋白,通常利用约10至约25个氨基酸,优选地约15至20个氨基酸的短接头肽连接。接头通常富含甘氨酸以获得柔韧性,以及富含丝氨酸或苏氨酸以获得溶解性,并且可以连接VH的N末端和VL的C-末端,或反之亦然。尽管去除了恒定区并引入了接头,但该蛋白质保留了原始免疫球蛋白的特异性。

[0184] 双特异性单链抗体构建体在本领域中是已知的并描述于以下中:WO 99/54440; Mack, J. Immunol.[免疫学杂志](1997), 158, 3965-3970; Mack, PNAS[美国国家科学院院刊], (1995), 92, 7021-7025; Kufer, Cancer Immunol. Immunother.[癌症免疫学免疫治疗], (1997), 45, 193-197; Löffler, Blood[血液], (2000), 95, 6, 2098-2103; Brühl, Immunol.[免

疫学], (2001), 166, 2420-2426; Kipriyanov, J. Mol. Biol. [分子生物学杂志], (1999), 293, 41-56。描述的用于产生单链抗体的技术(尤其参见美国专利4,946,778; Kontermann和Dübel (2010), 上述引文和Little (2009), 上述引文)可以适用于产生特异性识别一种或多种所选择的靶的单链抗体构建体。

[0185] 二价(bivalent)(也称为双价(divalent))或双特异性单链可变片段(具有形式(scFv)₂的联-scFv或二-scFv)可以通过连接两个scFv分子(例如利用如上文所述的接头)来工程化。如果这两个scFv分子具有相同的结合特异性,则所得(scFv)₂分子将优选称为二价的(即,对于相同的靶表位具有两个价)。如果两个scFv分子具有不同的结合特异性,则所得(scFv)₂分子将优选称为双特异性。连接可以通过产生具有两个VH区和两个VL区的单一肽链从而产生串联scFv来进行(参见,例如Kufer P.等人,(2004) Trends in Biotechnology [生物技术趋势] 22(5):238-244)。另一种可能性是产生具有接头肽的scFv分子,这些接头肽对于两个可变区来说太短以致于不能折叠在一起(例如约五个氨基酸),从而迫使scFv二聚化。这种类型被称为双抗体(参见,例如Hollinger, Philipp等人,(1993年7月) Proceedings of the National Academy of Sciences of the United States of America [美国国家科学院院刊] 90(14):6444-8)。

[0186] 根据本发明,第一结构域、第二结构域或第一结构域和第二结构域可以包含单结构域抗体,分别地单结构域抗体的可变结构域或至少CDR。单结构域抗体仅包含一个(单体)抗体可变结构域,该抗体可变结构域能够独立于其他V区或结构域而选择性结合特定抗原。第一单结构域抗体是从骆驼中发现的重链抗体工程化而来,并且这些被称为V_HH片段。软骨鱼类也具有重链抗体(IgNAR),可以从这些重链抗体中获得称为V_{NAR}片段的单结构域抗体。可替代的方法是将来自常见免疫球蛋白,例如来自人或啮齿动物的二聚体可变结构域分裂成单体,因此获得作为单结构域Ab的VH或VL。尽管对单结构域抗体的大多数研究目前都是基于重链可变结构域,但是也已经显示衍生自轻链的纳米抗体特异性结合靶表位。单结构域抗体的实例是所谓的sdAb、纳米抗体或单一可变结构域抗体。

[0187] 因此,(单结构域mAb)₂是由(至少)两个单结构域单克隆抗体构成的单克隆抗体构建体,该两个单结构域单克隆抗体单独地选自下组,该组由以下组成:V_H、V_L、V_HH和V_{NAR}。接头优选呈肽接头的形式。类似地,“scFv-单结构域mAb”是由至少一个如上所述的单结构域抗体和一个如上所述的scFv分子构成的单克隆抗体构建体。同样,接头优选呈肽接头的形式。

[0188] 抗体构建体是否与另一给定抗体构建体竞争结合可以在竞争测定(如竞争性ELISA或基于细胞的竞争测定)中测量。也可以使用抗生物素蛋白偶联的微粒(珠粒)。与抗生物素蛋白涂覆的ELISA板类似,当与生物素化蛋白质反应时,这些珠粒中的每一个都可用作可在其上进行的测定的底物。将抗原涂覆在珠粒上,并且然后用第一抗体预涂覆。添加第二抗体并且确定任何另外的结合。用于读出的可能手段包括流式细胞术。

[0189] T细胞或T淋巴细胞是在细胞介导的免疫中发挥核心作用的一类淋巴细胞(其本身是一类白细胞)。存在若干个T细胞亚组,每个亚组具有不同的功能。T细胞可以通过细胞表面上存在T细胞受体(TCR)而与其他淋巴细胞(如B细胞和NK细胞)区分开。TCR负责识别与主要组织相容性复合物(MHC)分子结合的抗原,并且由两种不同的蛋白质链构成。在95%的T细胞中,TCR由阿尔法(α)和贝塔(β)链组成。当TCR与抗原肽和MHC(肽/MHC复合物)接合时,T淋巴细胞通过一系列由相关酶、共受体、专门化衔接子分子和激活或释放的转录因子介导

的生物化学事件而被激活。

[0190] CD3受体复合物是一种蛋白质复合物,并且由四条链构成。在哺乳动物中,复合物含有CD3 γ (伽马) 链、CD3 δ (德尔塔) 链和两条CD3 ϵ (伊普西龙) 链。这些链与T细胞受体 (TCR) 和所谓的 ζ (截塔) 链缔合以形成T细胞受体CD3复合物并在T淋巴细胞中生成激活信号。CD3 γ (伽马)、CD3 δ (德尔塔) 和CD3 ϵ (伊普西龙) 链是含有单一细胞外免疫球蛋白结构域的免疫球蛋白超家族的高度相关的细胞表面蛋白。CD3分子的细胞内尾含有对于TCR的信号传导能力所必需的单一保守基序,称为基于免疫受体酪氨酸的激活基序或简称ITAM。CD3 ϵ 分子是一种多肽,该多肽在人中由位于染色体11上的CD3E基因编码。CD3 ϵ 的最优选的表位包括在人CD3 ϵ 细胞外结构域的氨基酸残基1-27内。设想根据本发明的抗体构建体典型地并且有利地显示出更少的非特异性T细胞激活,这在特异性免疫疗法中是不需要的。这意味着副作用的风险降低。

[0191] 经由多特异性 (至少双特异性) 抗体构建体募集T细胞对靶细胞的重定向溶解涉及溶细胞突触形成以及穿孔素和颗粒酶的递送。所接合的T细胞能够连续靶细胞溶解,并且不受干扰肽抗原加工和呈递或克隆T细胞分化的免疫逃逸机制的影响;参见,例如WO 2007/042261。

[0192] 能以各种方式测量由本发明的抗体构建体介导的细胞毒性。效应细胞可以是例如刺激的富集的 (人) CD8阳性T细胞或未刺激的 (人) 外周血单核细胞 (PBMC)。如果靶细胞是猕猴起源的或表达的或用第一结构域结合的猕猴靶细胞表面抗原转染,则效应细胞也应是猕猴起源的,如猕猴T细胞系,例如4119LnPx。靶细胞应表达靶细胞表面抗原 (至少细胞外结构域), 例如人或猕猴靶细胞表面抗原。靶细胞可以用靶细胞表面抗原 (例如人或猕猴靶细胞表面抗原) 稳定或瞬时转染的细胞系 (如CHO)。可替代地,靶细胞可以是靶细胞表面抗原阳性天然表达细胞系。对于在细胞表面上表达较高水平的靶细胞表面抗原的靶细胞系,预期EC₅₀值通常较低。效应细胞与靶细胞 (E:T) 比率通常为约10:1,但也可以改变。靶细胞表面抗原xCD3双特异性抗体构建体的细胞毒活性可以在⁵¹Cr-释放测定 (约18小时的孵育时间) 或在基于FACS的细胞毒性测定 (约48小时的孵育时间) 中测量。也可能对测定孵育时间 (细胞毒性反应) 进行修改。其他测量细胞毒性的方法对本领域技术人员来说是熟知的,并且包括MTT或MTS测定、基于ATP的测定 (包括生物发光测定)、磺基罗丹明B (SRB) 测定、WST测定、克隆生成测定和ECIS技术。

[0193] 优选在基于细胞的细胞毒性测定中测量由本发明的靶细胞表面抗原xCD3双特异性抗体构建体介导的细胞毒活性。其也可以在⁵¹Cr-释放测定中测量。其由EC₅₀值表示,该值对应于半数最大有效浓度 (诱导在基线与最大值之间的中途的细胞毒性应答的抗体构建体的浓度)。优选地,靶细胞表面抗原xCD3双特异性抗体构建体的EC₅₀值 $\leq 5000\text{pM}$ 或 $\leq 4000\text{pM}$ 、更优选 $\leq 3000\text{pM}$ 或 $\leq 2000\text{pM}$ 、甚至更优选 $\leq 1000\text{pM}$ 或 $\leq 500\text{pM}$ 、甚至更优选 $\leq 400\text{pM}$ 或 $\leq 300\text{pM}$ 、甚至更优选 $\leq 200\text{pM}$ 、甚至更优选 $\leq 100\text{pM}$ 、甚至更优选 $\leq 50\text{pM}$ 、甚至更优选 $\leq 20\text{pM}$ 或 $\leq 10\text{pM}$ 、并且最优选 $\leq 5\text{pM}$ 。

[0194] 上述给定的EC₅₀值可以在不同的测定中测量。本领域技术人员知道,当使用刺激/富集的CD8⁺T细胞作为效应细胞时,与未刺激的PBMC相比,可以预期EC₅₀值较低。此外可以预期,与低靶表达大鼠相比,当靶细胞表达大量靶细胞表面抗原时,EC₅₀值较低。例如,当使用刺激/富集的人CD8⁺T细胞作为效应细胞 (并且使用靶细胞表面抗原转染的细胞如CHO细胞

或靶细胞表面抗原阳性人细胞系作为靶细胞)时,靶细胞表面抗原xCD3双特异性抗体构建体的 EC_{50} 值优选 $\leq 1000\text{pM}$ 、更优选 $\leq 500\text{pM}$ 、甚至更优选 $\leq 250\text{pM}$ 、甚至更优选 $\leq 100\text{pM}$ 、甚至更优选 $\leq 50\text{pM}$ 、甚至更优选 $\leq 10\text{pM}$ 、并且最优选 $\leq 5\text{pM}$ 。当使用人PBMC作为效应细胞时,靶细胞表面抗原xCD3双特异性抗体构建体的 EC_{50} 值优选 $\leq 5000\text{pM}$ 或 $\leq 4000\text{pM}$ (特别是当靶细胞是靶细胞表面抗原阳性人细胞系时)、更优选 $\leq 2000\text{pM}$ (特别是当靶细胞是靶细胞表面抗原转染的细胞如CHO细胞时)、更优选 $\leq 1000\text{pM}$ 或 $\leq 500\text{pM}$ 、甚至更优选 $\leq 200\text{pM}$ 、甚至更优选 $\leq 150\text{pM}$ 、甚至更优选 $\leq 100\text{pM}$ 、并且最优选 $\leq 50\text{pM}$ 或更低。当使用猕猴T细胞系如LnPx4119作为效应细胞并且使用猕猴靶细胞表面抗原转染的细胞系如CHO细胞作为靶细胞系时,靶细胞表面抗原xCD3双特异性抗体构建体的 EC_{50} 值优选 $\leq 2000\text{pM}$ 或 $\leq 1500\text{pM}$ 、更优选 $\leq 1000\text{pM}$ 或 $\leq 500\text{pM}$ 、甚至更优选 $\leq 300\text{pM}$ 或 $\leq 250\text{pM}$ 、甚至更优选 $\leq 100\text{pM}$ 、并且最优选 $\leq 50\text{pM}$ 。

[0195] 优选地,本发明的靶细胞表面抗原xCD3双特异性抗体构建体不诱导/介导溶解或基本上不诱导/介导靶细胞表面抗原阴性细胞如CHO细胞的溶解。术语“不诱导溶解”、“基本上不诱导溶解”、“不介导溶解”或“基本不介导溶解”意指本发明的抗体构建体不诱导或介导超过30%,优选不超过20%,更优选不超过10%,特别优选不超过9%、8%、7%、6%或5%的靶细胞表面抗原阴性细胞的溶解,由此将靶细胞表面抗原阳性人细胞系的溶解设定为100%。这通常适用于浓度高达500nM的抗体构建体。本领域技术人员知道如何毫不费力地测量细胞溶解。此外,本说明书教导了如何测量细胞溶解的具体说明。

[0196] 单个的靶细胞表面抗原xCD3双特异性抗体构建体的单体与二聚体同种型之间细胞毒活性的差异称为“效能间隙”。该效能间隙可以例如计算为分子的单体与二聚体形式的 EC_{50} 值之间的比率。本发明的靶细胞表面抗原xCD3双特异性抗体构建体的效能间隙优选 ≤ 5 、更优选 ≤ 4 、甚至更优选 ≤ 3 、甚至更优选 ≤ 2 、并且最优选 ≤ 1 。

[0197] 本发明的抗体构建体的第一结合结构域和/或第二(或任何其他)结合结构域优选对于灵长类哺乳动物目的成员具有跨物种特异性。跨物种特异性CD3结合结构域例如描述于WO 2008/119567中。根据一个实施例,除了分别与人靶细胞表面抗原和人CD3结合之外,第一结合结构域和/或第二结合结构域还将与灵长类动物的靶细胞表面抗原/CD3结合,这些灵长类动物包括(但不限于)新大陆灵长类动物(如绒毛猴、绒顶怪柳猴或松鼠猴)、旧大陆灵长类动物(如狒狒和猕猴)、长臂猿和非人类人亚科。

[0198] 在本发明的抗体构建体的一个实施例中,第一结构域结合人靶细胞表面抗原并进一步结合猕猴靶细胞表面抗原(如食蟹猕猴的靶细胞表面抗原),并且更优选地,结合在表面猕猴细胞上表达的猕猴靶细胞表面抗原。第一结合结构域对猕猴靶细胞表面抗原的亲和力优选 $\leq 15\text{nM}$ 、更优选 $\leq 10\text{nM}$ 、甚至更优选 $\leq 5\text{nM}$ 、甚至更优选 $\leq 1\text{nM}$ 、甚至更优选 $\leq 0.5\text{nM}$ 、甚至更优选 $\leq 0.1\text{nM}$ 、并且最优选 $\leq 0.05\text{nM}$ 或甚至 $\leq 0.01\text{nM}$ 。

[0199] 优选地,根据本发明的抗体构建体对结合猕猴靶细胞表面抗原对人靶细胞表面抗原[ma靶细胞表面抗原:hu靶细胞表面抗原]的亲和力间隙(如例如通过BiaCore或通过Scatchard分析确定) < 100 、优选 < 20 、更优选 < 15 、进一步优选 < 10 、甚至更优选 < 8 、更优选 < 6 并且最优选 < 2 。根据本发明的抗体构建体对结合猕猴靶细胞表面抗原对人靶细胞表面抗原的亲和性间隙的优选范围在0.1与20之间、更优选在0.2与10之间、甚至更优选在0.3与6之间、甚至更优选在0.5与3之间或在0.5与2.5之间、并且最优选在0.5与2之间或在0.6与2之间。

[0200] 本发明的抗体构建体的第二(结合)结构域与人CD3 ϵ 和/或猕猴CD3 ϵ 结合。在优选的实施例中,第二结构域进一步与绒毛猴、绒顶怪柳猴或松鼠猴CD3 ϵ 结合。绒毛猴和绒顶怪柳猴两者均是属于猿亚科(Callitrichidae)的新大陆灵长类动物,而松鼠猴是属于悬猴科(Cebidae)的新大陆灵长类动物。

[0201] 对于本发明的抗体构建体优选的是,与人和/或猕猴CD3的细胞外表位结合的第二结构域包含含有选自以下的CDR-L1、CDR-L2和CDR-L3的VL区:

[0202] (a) 如WO 2008/119567的SEQ ID NO:27中所描绘的CDR-L1,如WO 2008/119567的SEQ ID NO:28中所描绘的CDR-L2以及如WO 2008/119567的SEQ ID NO:29中所描绘的CDR-L3;

[0203] (b) 如WO 2008/119567的SEQ ID NO:117中所描绘的CDR-L1,如WO 2008/119567的SEQ ID NO:118中所描绘的CDR-L2以及如WO 2008/119567的SEQ ID NO:119中所描绘的CDR-L3;以及

[0204] (c) 如WO 2008/119567的SEQ ID NO:153中所描绘的CDR-L1,如WO 2008/119567的SEQ ID NO:154中所描绘的CDR-L2以及如WO 2008/119567的SEQ ID NO:155中所描绘的CDR-L3。

[0205] 在本发明的抗体构建体的同样优选的实施例中,与人和/或猕猴CD3 ϵ 链的细胞外表位结合的第二结构域包含含有选自以下的CDR-H1、CDR-H2和CDR-H3的VH区:

[0206] (a) 如WO 2008/119567的SEQ ID NO:12中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:13中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:14中所描绘的CDR-H3;

[0207] (b) 如WO 2008/119567的SEQ ID NO:30中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:31中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:32中所描绘的CDR-H3;

[0208] (c) 如WO 2008/119567的SEQ ID NO:48中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:49中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:50中所描绘的CDR-H3;

[0209] (d) 如WO 2008/119567的SEQ ID NO:66中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:67中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:68中所描绘的CDR-H3;

[0210] (e) 如WO 2008/119567的SEQ ID NO:84中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:85中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:86中所描绘的CDR-H3;

[0211] (f) 如WO 2008/119567的SEQ ID NO:102中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:103中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:104中所描绘的CDR-H3;

[0212] (g) 如WO 2008/119567的SEQ ID NO:120中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:121中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:122中所描绘的CDR-H3;

[0213] (h) 如WO 2008/119567的SEQ ID NO:138中所描绘的CDR-H1,如WO 2008/119567的

SEQ ID NO:139中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:140中所描绘的CDR-H3;

[0214] (i) 如WO 2008/119567的SEQ ID NO:156中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:157中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:158中所描绘的CDR-H3;以及

[0215] (j) 如WO 2008/119567的SEQ ID NO:174中所描绘的CDR-H1,如WO 2008/119567的SEQ ID NO:175中所描绘的CDR-H2以及如WO 2008/119567的SEQ ID NO:176中所描绘的CDR-H3。

[0216] 在本发明的抗体构建体的优选的实施例中,将上述三组VL CDR与上述十组VH CDR在第二结合结构域内组合以形成(30)组,每组包含CDR-L 1-3和CDR-H 1-3。

[0217] 对于本发明的抗体构建体优选的是,与CD3结合的第二结构域包含选自下组的VL区,该组由以下组成:如WO 2008/119567的SEQ ID NO:17、21、35、39、53、57、71、75、89、93、107、111、125、129、143、147、161、165、179或183中所描绘的或SEQ ID NO:13中所描绘的VL区。

[0218] 同样优选的是,与CD3结合的第二结构域包含选自下组的VH区,该组由以下组成:如WO 2008/119567的SEQ ID NO:15、19、33、37、51、55、69、73、87、91、105、109、123、127、141、145、159、163、177或181中所描绘的或SEQ ID NO:14中所描绘的VH区。

[0219] 最优选地,本发明的抗体构建体的特征在于与CD3结合的第二结构域包含选自下组的VL区和VH区,该组由以下组成:

[0220] (a) 如WO 2008/119567的SEQ ID NO:17或21中所描绘的VL区和如WO 2008/119567的SEQ ID NO:15或19中所描绘的VH区;

[0221] (b) 如WO 2008/119567的SEQ ID NO:35或39中所描绘的VL区和如WO 2008/119567的SEQ ID NO:33或37中所描绘的VH区;

[0222] (c) 如WO 2008/119567的SEQ ID NO:53或57中所描绘的VL区和如WO 2008/119567的SEQ ID NO:51或55中所描绘的VH区;

[0223] (d) 如WO 2008/119567的SEQ ID NO:71或75中所描绘的VL区和如WO 2008/119567的SEQ ID NO:69或73中所描绘的VH区;

[0224] (e) 如WO 2008/119567的SEQ ID NO:89或93中所描绘的VL区和如WO 2008/119567的SEQ ID NO:87或91中所描绘的VH区;

[0225] (f) 如WO 2008/119567的SEQ ID NO:107或111中所描绘的VL区和如WO 2008/119567的SEQ ID NO:105或109中所描绘的VH区;

[0226] (g) 如WO 2008/119567的SEQ ID NO:125或129中所描绘的VL区和如WO 2008/119567的SEQ ID NO:123或127中所描绘的VH区;

[0227] (h) 如WO 2008/119567的SEQ ID NO:143或147中所描绘的VL区和如WO 2008/119567的SEQ ID NO:141或145中所描绘的VH区;

[0228] (i) 如WO 2008/119567的SEQ ID NO:161或165中所描绘的VL区和如WO 2008/119567的SEQ ID NO:159或163中所描绘的VH区;以及

[0229] (j) 如WO 2008/119567的SEQ ID NO:179或183中所描绘的VL区和如WO 2008/119567的SEQ ID NO:177或181中所描绘的VH区。

[0230] 关于本发明的抗体构建体还优选的是,与CD3结合的第二结构域包含如SEQ ID NO:13中所描绘的VL区和如SEQ ID NO:14中所描绘的VH区。

[0231] 根据本发明的抗体构建体的优选的实施例,第一结构域和/或第二结构域具有以下形式:VH区和VL区的对是呈单链抗体(scFv)的形式。VH和VL区以VH-VL或VL-VH的顺序排列。优选的是,VH区位于接头序列的N末端,并且VL区位于接头序列的C末端。

[0232] 本发明的上述抗体构建体的优选的实施例的特征在于结合CD3的第二结构域包含选自下组如SEQ ID NO:15中所描绘的氨基酸序列,该组由以下组成:WO 2008/119567的SEQ ID NO:23、25、41、43、59、61、77、79、95、97、113、115、131、133、149、151、167、169、185或187。

[0233] 抗体构建体的共价修饰也包括在本发明的范围内,并且通常但不总是在翻译后进行。例如,通过使抗体构建体的特定氨基酸残基与能够与选择的侧链或N或C末端残基反应的有机衍生剂反应,将抗体构建体的若干种类型的共价修饰引入到分子中。

[0234] 半胱氨酰残基最常见地与 α -卤代乙酸酯(和相应的胺),如氯乙酸或氯乙酰胺反应,以得到羧甲基或羧酰胺甲基衍生物。半胱氨酰残基还可以通过与溴三氟丙酮、 α -溴- β -(5-咪唑基)丙酸、磷酸氯乙酰胺、N-烷基马来酰亚胺、3-硝基-2-吡啶基二硫化物、甲基2-吡啶基二硫化物、对氯汞苯甲酸酯、2-氯汞-4-硝基苯酚或氯-7-硝基苯并-2-氧杂-1,3-二唑反应来衍生出。

[0235] 组氨酰残基是通过在pH 5.5-7.0下与焦碳酸二乙酯反应衍生出,因为这种制剂对组氨酰侧链具有相对特异性。对溴苯甲酰甲基溴也是有用的;该反应优选在pH 6.0下在0.1M二甲胍酸钠中进行。赖氨酰残基和氨基末端残基与琥珀酸酐或其他羧酸酐反应。用这些药剂衍生化具有逆转赖氨酰残基的电荷的效应。用于衍生含 α -氨基的残基的其他合适试剂包括亚氨酸酯,如甲基吡啶亚胺甲酯;磷酸吡哆醛;吡哆醛;硼氢化氯;三硝基苯磺酸;0-甲基异脲;2,4-戊二酮;以及转氨酶催化的与乙醛酸盐的反应。

[0236] 精氨酰残基通过与一种或若干种常规试剂(其中苯甲酰甲醛、2,3-丁二酮、1,2-环己二酮和茚三酮)反应而被修饰。由于胍官能团的高pKa,因此精氨酸残基的衍生化要求反应在碱性条件下进行。此外,这些试剂可以与赖氨酸基团以及精氨酸 ϵ -氨基基团反应。

[0237] 可以对酪氨酰残基进行特定修饰,特别感兴趣的是通过与芳族重氮化合物或四硝基甲烷反应将光谱标记引入到酪氨酰残基中。最常见地,将N-乙酰基咪唑和四硝基甲烷分别用于形成O-乙酰基酪氨酰物质和3-硝基衍生物。使用 ^{125}I 或 ^{131}I 碘化酪氨酰残基以制备用于放射免疫测定的标记蛋白质,上述氯胺T法是合适的。

[0238] 羧基侧基(天冬氨酰基或谷氨酰基)通过与碳二亚胺($\text{R}'-\text{N}=\text{C}=\text{N}-\text{R}'$)反应而选择性地修饰,其中R和R'任选为不同的烷基,如1-环己基-3-(2-吗啉基-4-乙基)碳二亚胺或1-乙基-3-(4-氮鎓-4,4-二甲基戊基)碳二亚胺。此外,天冬氨酰残基和谷氨酰残基通过与铵离子反应转化为天冬酰胺酰残基和谷氨酰胺酰残基。

[0239] 用双功能剂衍生化可用于将本发明的抗体构建体交联到水不溶性载体基质或表面以用于多种方法中。常用的交联剂包括例如1,1-双(重氮乙酰基)-2-苯基乙烷、戊二醛、N-羟基琥珀酰亚胺酯(例如与4-叠氮基水杨酸的酯)、同双官能亚氨酸酯,包括二琥珀酰亚胺酯,如3,3'-二硫代双(琥珀酰亚胺基丙酸酯)、和双官能马来酰亚胺,如双-N-马来酰亚胺-1,8-辛烷。衍生剂如3-[(对叠氮基苯基)二硫代]丙酰亚胺酸甲酯产生能够在光存在下形成交联的可光活化中间体。可替代地,将如美国专利号3,969,287、3,691,016、4,195,

128、4,247,642、4,229,537和4,330,440中所述的反应性水不溶性基质如溴化氰活化的碳水化合物和反应性底物用于蛋白质固定化。

[0240] 谷氨酰胺酰残基和天冬酰胺酰残基通常分别脱酰胺成相应的谷氨酰残基和天冬氨酰残基。可替代地,这些残基在弱酸性条件下脱酰胺。这些残基的任一形式都属于本发明的范围。

[0241] 其他修饰包括对脯氨酸和赖氨酸的羟基化、对丝氨酸或苏氨酸残基的羟基的磷酸化、对赖氨酸、精氨酸和组氨酸侧链的 α -氨基的甲基化(T.E.Creighton, *Proteins: Structure and Molecular Properties* [蛋白质:结构和分子特性], W.H.Freeman&Co. [W.H.弗里曼公司], San Francisco [旧金山], 1983, 第79-86页)、对N末端胺的乙酰化和对任何C末端羧基的酰胺化。

[0242] 包括在本发明范围内的抗体构建体的另一种类型的共价修饰包括改变蛋白质的糖基化模式。如本领域中已知的,糖基化模式可以取决于蛋白质的序列(例如,下文论述的特定糖基化氨基酸残基的存在或不存在)或其中产生蛋白质的宿主细胞或生物体。下面论述特定的表达系统。

[0243] 多肽的糖基化典型地是N-连接或O-连接的。N-连接是指碳水化合物部分连接至天冬酰胺残基的侧链。三肽序列天冬酰胺-X-丝氨酸和天冬酰胺-X-苏氨酸(其中X为除脯氨酸以外的任何氨基酸)是将碳水化合物部分酶促连接至天冬酰胺侧链的识别序列。因此,在多肽中这些三肽序列中的任一个的存在产生潜在的糖基化位点。O-连接糖基化是指将糖N-乙酰半乳糖胺、半乳糖或木糖中的一种连接至羟基氨基酸,最常见的是丝氨酸或苏氨酸,尽管也可使用5-羟基脯氨酸或5-羟基赖氨酸。

[0244] 通过改变氨基酸序列以使得它含有上述三肽序列中的一者或多者(对于N-连接的糖基化位点),而方便地完成向抗体构建体添加糖基化位点。还可以通过向起始序列(对于O-连接的糖基化位点)添加或取代为一个或多个丝氨酸或苏氨酸残基来作出改变。为了方便起见,抗体构建体的氨基酸序列优选通过DNA水平的变化来改变,特别是通过在预选碱基处突变编码多肽的DNA,以使得产生将翻译成所希望氨基酸的密码子。

[0245] 增加抗体构建体上的碳水化合物部分的数量的一种手段是通过将糖苷化学或酶促偶联至蛋白质。这些程序的有利之处在于它们不需要在具有用于N-和O-连接的糖基化的糖基化能力的宿主细胞中产生蛋白质。取决于所使用的偶联方式,一种或多种糖可连接至(a)精氨酸和组氨酸,(b)游离羧基,(c)游离巯基,如半胱氨酸的那些,(d)游离羟基,如丝氨酸、苏氨酸或羟基脯氨酸的那些,(e)芳香族残基,如苯丙氨酸、酪氨酸或色氨酸的那些,或(f)谷氨酰胺的酰胺基团。这些方法描述于WO 87/05330以及Aplin和Wriston, 1981, *CRC Crit.Rev.Biochem.* [CRC生物化学关键评论], 第259-306页中。

[0246] 存在于起始抗体构建体上的碳水化合物部分的去除可以通过化学或酶促方式完成。化学去糖基化要求将蛋白质暴露于化合物三氟甲磺酸,或等效化合物。该处理导致除连接糖(N-乙酰葡萄糖胺或N-乙酰半乳糖胺)以外的大多数或所有糖裂解,同时使多肽保持完整。化学去糖基化由Hakimuddin等人, 1987, *Arch.Biochem.Biophys.* [生物化学与生物物理学集刊] 259:52和Edge等人, 1981, *Anal.Biochem.* [分析生物化学] 118:131描述。多肽上碳水化合物部分的酶促裂解可以通过使用多种内切糖苷酶和外切糖苷酶实现,如由Thotakura等人, 1987, *Meth.Enzymol.* [酶学方法] 138:350所述的。可以通过使用化合物衣

霉素防止潜在糖基化位点处的糖基化,如由Duskin等人,1982,J.Biol.Chem.[生物化学杂志]257:3105所述的。衣霉素阻断蛋白质-N-糖苷键的形成。

[0247] 本文还考虑抗体构建体的其他修饰。例如,抗体构建体的另一种类型的共价修饰包括以美国专利号4,640,835、4,496,689、4,301,144、4,670,417、4,791,192或4,179,337中示出的方式将抗体构建体连接至各种非蛋白质聚合物,包括但不限于各种多元醇,诸如聚乙二醇、聚丙二醇、聚氧化烯或聚乙二醇和聚丙二醇的共聚物。此外,如本领域中已知的,可以在抗体构建体内的不同位置进行氨基酸取代,例如以有利于添加聚合物如PEG。

[0248] 在一些实施例中,本发明的抗体构建体的共价修饰包括添加一个或多个标记。标记基团可以经由各种长度的间隔臂与抗体构建体偶联以减少潜在的空间位阻。用于标记蛋白质的各种方法在本领域中是已知的并且可以用于进行本发明。术语“标记”或“标记基团”是指任何可检测的标记。一般来讲,标记属于多种类别,这取决于将检测它们的测定-以下实例包括但不限于:

[0249] a) 同位素标记,这些同位素标记可以是放射性同位素或重同位素,如放射性同位素或放射性核素(例如³H、¹⁴C、¹⁵N、³⁵S、⁸⁹Zr、⁹⁰Y、⁹⁹Tc、¹¹¹In、¹²⁵I、¹³¹I)

[0250] b) 磁性标记(例如磁性颗粒)

[0251] c) 氧化还原活性部分

[0252] d) 光学染料(包括但不限于,生色团、磷光体和荧光团),如荧光基团(例如FITC、罗丹明、镧系元素磷光体)、化学发光基团和荧光团,这些荧光团可以是“小分子”荧光剂或蛋白质荧光剂

[0253] e) 酶促基团(例如辣根过氧化物酶、 β -半乳糖苷酶、萤光素酶、碱性磷酸酶)

[0254] f) 生物素化基团

[0255] g) 由第二报道子识别的预定多肽表位(例如,亮氨酸拉链对序列、第二抗体的结合侧、金属结合结构域、表位标签等)

[0256] “荧光标记”意指可以经由其固有的荧光特性检测到的任何分子。合适的荧光标记包括但不限于荧光素、罗丹明、四甲基罗丹明、伊红、赤藓红、香豆素、甲基-香豆素、芘、孔雀石绿、二苯乙烯、荧光黄、瀑布蓝J、德克萨斯红、IAEDANS、EDANS、BODIPY FL、LC红640、Cy5、Cy5.5、LC红705、俄勒冈绿、Alexa-Fluor染料(Alexa Fluor 350、Alexa Fluor 430、Alexa Fluor 488、Alexa Fluor 546、Alexa Fluor 568、Alexa Fluor 594、Alexa Fluor 633、Alexa Fluor 660、Alexa Fluor 680)、瀑布蓝、瀑布黄和R-藻红蛋白(PE)(俄勒冈州尤金市的分子探针公司(Molecular Probes,Eugene,OR))、FITC、罗丹明和德克萨斯红(伊利诺伊州罗克福德的皮尔斯公司(Pierce,Rockford,IL))、Cy5、Cy5.5、Cy7(宾夕法尼亚州匹兹堡市的阿默舍姆生命科学公司(Amersham Life Science,Pittsburgh,PA))。合适的光学染料(包括荧光团)描述于Richard P.Haugland的Molecular Probes Handbook[分子探针手册]中。

[0257] 合适的蛋白质荧光标记还包括但不限于绿色荧光蛋白,包括海肾(Renilla)、海笔(Ptilosarcus)或水母(Aequorea)物种的GFP(Chalfie等人,1994,Science[科学]263:802-805);EGFP(克罗泰克实验室有限公司(Clontech Laboratories,Inc.)),基因库登录号U55762)、蓝色荧光蛋白(BFP,量子生物科技有限公司(Quantum Biotechnologies,Inc.)),加拿大魁北克省蒙特利尔(Montreal,Quebec,Canada)迈松纳夫大道西部(de Maisonneuve

Blvd.West) 1801, 第8层, H3H 1J9); Stauber, 1998, Biotechniques [生物技术] 24: 462-471; Heim等人, 1996, Curr.Biol. [当代生物学] 6: 178-182)、增强型黄色荧光蛋白 (EYFP, 克罗泰克实验室有限公司)、萤光素酶 (Ichiki等人, 1993, J. Immunol. [免疫学杂志] 150: 5408-5417)、 β 半乳糖苷酶 (Nolan等人, 1988, Proc.Natl.Acad.Sci.U.S.A. [美国国家科学院院刊] 85: 2603-2607) 和海肾 (W092/15673、W095/07463、W098/14605、W098/26277、W099/49019、美国专利号5,292,658、5,418,155、5,683,888、5,741,668、5,777,079、5,804,387、5,874,304、5,876,995、5,925,558)。

[0258] 本发明的抗体构建体还可以包含另外的结构域, 这些结构域例如有助于分离分子或涉及分子的适应性药代动力学分布。有助于分离抗体构建体的结构域可以选自肽基序或辅助性地引入的部分, 这些部分可以在分离方法 (例如分离柱) 中捕获。此类另外的结构域的非限制性实施例包括称为Myc-标签、HAT-标签、HA-标签、TAP-标签、GST-标签、几丁质结合结构域 (CBD-标签)、麦芽糖结合蛋白 (MBP-标签)、Flag-标签、Strep-标签以及其变体 (例如StrepII-标签) 和His标签的肽基序。以鉴定的CDR为特征的本文披露的所有抗体构建体都可以包含His-标签结构域, 该His-标签结构域通常称为分子的氨基酸序列中的连续His残基重复序列、优选5个、且更优选6个His残基 (六组氨酸)。His-标签可以位于例如抗体构建体的N或C末端, 优选地它位于C末端。最优选地, 六组氨酸标签 (HHHHHH) (SEQ ID NO:16) 经由肽键连接至根据本发明的抗体构建体的C末端。另外, PLGA-PEG-PLGA的缀合物体系可以与聚组氨酸标签组合用于缓释应用和改善的药代动力学分布。

[0259] 还考虑了本文所述的抗体构建体的氨基酸序列修饰。例如, 可能需要改善抗体构建体的结合亲和力和/或其他生物特性。通过将适当核苷酸变化引入到抗体构建体核酸或通过肽合成来制备抗体构建体的氨基酸序列变体。所有下面描述的氨基酸序列修饰均应产生仍然保留未修饰的亲本分子的所希望生物活性 (与靶细胞表面抗原和CD3结合) 的抗体构建体。

[0260] 术语“氨基酸”或“氨基酸残基”典型地是指具有其本领域公认的定义的氨基酸, 如选自下组的氨基酸, 该组由以下组成: 丙氨酸 (Ala或A); 精氨酸 (Arg或R); 天冬酰胺 (Asn或N); 天冬氨酸 (Asp或D); 半胱氨酸 (Cys或C); 谷氨酰胺 (Gln或Q); 谷氨酸 (Glu或E); 甘氨酸 (Gly或G); 组氨酸 (His或H); 异亮氨酸 (He或I); 亮氨酸 (Leu或L); 赖氨酸 (Lys或K); 蛋氨酸 (Met或M); 苯丙氨酸 (Phe或F); 脯氨酸 (Pro或P); 丝氨酸 (Ser或S); 苏氨酸 (Thr或T); 色氨酸 (Trp或W); 酪氨酸 (Tyr或Y); 以及缬氨酸 (Val或V), 尽管可以根据需要使用修饰的、合成的或稀有的氨基酸。一般来讲, 氨基酸可以分组为具有非极性侧链 (例如Ala、Cys、He、Leu、Met、Phe、Pro、Val); 具有带负电的侧链 (例如Asp、Glu); 具有带正电的侧链 (例如Arg、His、Lys); 或具有不带电的极性侧链 (例如Asn、Cys、Gln、Gly、His、Met、Phe、Ser、Thr、Trp和Tyr)。

[0261] 氨基酸修饰包括例如抗体构建体的氨基酸序列内的残基的缺失和/或插入和/或取代。进行缺失、插入和取代的任何组合以达到最终构建体, 条件是最终的构建体具有所希望的特征。氨基酸变化还可以改变抗体构建体的翻译后过程, 如改变糖基化位点的数目或位置。

[0262] 例如, 可以在每个CDR中插入、取代或缺失1、2、3、4、5或6个氨基酸 (当然, 取决于其长度), 而可以在每个FR中插入、取代或缺失1、2、3、4、5、6、7、8、9、10、11、12、13、14、15、16、

17、18、19、20或25个氨基酸。优选地,氨基酸序列插入到抗体构建体中包括与含有100个或更多个残基的多肽的长度范围为1、2、3、4、5、6、7、8、9或10个残基的氨基和/或羧基末端融合物,以及单个或多个氨基酸残基的序列内插入。也可以在本发明的抗体构建体的第三结构域内进行相应的修饰。本发明的抗体构建体的插入变体包括与酶的抗体构建体的N末端或C末端的融合或与多肽的融合。

[0263] 取代诱变最感兴趣的位点包括(但不限于)重链和/或轻链的CDR,特别是高变区,但也考虑重链和/或轻链的FR改变。取代优选地是如本文所述的保守取代。优选地,可以在CDR中取代1、2、3、4、5、6、7、8、9或10个氨基酸,而可以在框架区(FR)中取代1、2、3、4、5、6、7、8、9、10、11、12、13、14、15、16、17、18、19、20或25个氨基酸,这取决于CDR或FR的长度。例如,如果CDR序列涵盖6个氨基酸,则设想这些氨基酸中的1个、2个或3个被取代。类似地,如果CDR序列涵盖15个氨基酸,则设想这些氨基酸中的1个、2个、3个、4个、5个或6个被取代。

[0264] 用于鉴定作为优选诱变位置的抗体构建体的某些残基或区域的有用方法称为“丙氨酸扫描诱变”,如Cunningham和Wells于Science[科学],244:1081-1085(1989)中所述的。在此,鉴定了抗体构建体内的残基或靶残基组(例如带电残基,如arg、asp、his、lys和glu)并且用中性或带负电的氨基酸(最优选丙氨酸或聚丙氨酸)替换以影响氨基酸与表位的相互作用。

[0265] 然后通过取代位点处或为取代位点引入进一步的或其他变体来精炼那些展示对取代具有功能敏感性的氨基酸位置。因此,虽然用于引入氨基酸序列变化的位点或区域是预定的,但突变本身的性质无需预定。例如,为了分析或优化给定位点处突变的性能,可以在靶密码子或区域处进行丙氨酸扫描或随机诱变,并且筛选所表达的抗体构建体变体以获得所希望活性的最优组合。用于在具有已知序列的DNA中的预定位点进行取代突变的技术是熟知的,例如,M13引物诱变和PCR诱变。使用抗原结合活性(如靶细胞表面抗原或CD3结合)的测定来筛选突变体。

[0266] 一般来讲,如果氨基酸在重链和/或轻链的一个或多个或所有CDR中被取代,则优选的是,之后获得的“取代的”序列与“初始”CDR序列具有至少60%或65%、更优选70%或75%、甚至更优选80%或85%并且特别优选90%或95%同一性。这意指该取代取决于CDR的长度与“取代”序列的相同程度。例如,具有5个氨基酸的CDR优选与其取代序列80%相同,以便取代至少一个氨基酸。因此,抗体构建体的CDR可以与其取代的序列具有不同程度的同一性,例如CDRL1可以具有80%,而CDRL3可以具有90%。

[0267] 优选的取代(或替换)是保守取代。然而,只要抗体构建体保留其经由第一结构域与靶细胞表面抗原结合并且经由第二结构域与CD3,分别地CD3s结合的能力和/或其CDR与之后取代的序列具有同一性(与“原始”CDR序列具有至少60%或65%,更优选70%或75%,甚至更优选80%或85%并且特别优选90%或95%同一性),则设想出任何取代(包括非保守取代或来自下表3中列出的“示例性取代”的一个或多个)。

[0268] 保守取代示于表3中“优选取代”标题之下。如果此类取代导致生物活性变化,则可以将表3中命名为“示例性取代”或如在下文参考氨基酸类别进一步所述的更实质性变化引入,并且筛选产物以获得所希望的特征。

[0269] 表3:氨基酸取代

[0270]	原始的	示例性取代	优选取代
	Ala (A)	val、leu、ile	val
	Arg (R)	lys、gln、asn	lys
	Asn (N)	gln、his、asp、lys、arg	gln
	Asp (D)	glu、asn	glu
[0271]	Cys (C)	ser、ala	ser
	Gln (Q)	asn、glu	asn
	Glu (E)	asp、gln	asp
	Gly (G)	Ala	ala
	His (H)	asn、gln、lys、arg	arg
	Ile (I)	leu、val、met、ala、phe	leu
	Leu (L)	正亮氨酸、ile、val、met、ala	ile
	Lys (K)	arg、gln、asn	arg
	Met (M)	leu、phe、ile	leu
	Phe (F)	leu、val、ile、ala、tyr	tyr
	Pro (P)	Ala	ala
	Ser (S)	Thr	thr
	Thr (T)	Ser	ser
	Trp (W)	tyr、phe	tyr
	Tyr (Y)	trp、phe、thr、ser	phe
	Val (V)	ile、leu、met、phe、ala	leu

[0272] 本发明的抗体构建体的生物特性的实质性修饰是通过选择在保持以下的效应方面显著不同的取代来完成：(a) 取代区域中的多肽骨架的结构，例如呈折叠或螺旋构象，(b) 分子在靶位点的电荷或疏水性，或 (c) 侧链的大部分。基于共同的侧链特性将天然存在的残基分组：(1) 疏水性：正亮氨酸、met、ala、val、leu、ile；(2) 中性亲水性：cys、ser、thr、asn、gln；(3) 酸性：asp、gln；(4) 碱性：his、lys、arg；(5) 影响链取向的残基：gly、pro；以及 (6) 芳香族的：trp、tyr、phe。

[0273] 非保守性取代将需要将这些类别中一类别的成员换成另一类别。任何不参与维持抗体构建体的适当构象的半胱氨酸残基通常可以被丝氨酸取代，以改善分子的氧化稳定性并防止异常交联。相反，可以将一个或多个半胱氨酸键添加至抗体以改善其稳定性（特别是在抗体是抗体片段（如Fv片段）的情况下）。

[0274] 对于氨基酸序列，通过使用本领域已知的标准技术确定序列同一性和/或相似性，包括但不限于，Smith和Waterman, 1981, Adv. Appl. Math. [高级应用数学] 2:482的局部序列同一性算法、Needleman和Wunsch, 1970, J. Mol. Biol. [分子生物学杂志] 48:443的序列同一

性比对算法、Pearson和Lipman,1988,Proc.Nat.Acad.Sci.U.S.A.[美国国家科学院院刊] 85:2444的相似性方法的检索、这些算法的计算机化实现(威斯康星遗传学软件包中的GAP、BESTFIT、FASTA和TFASTA,遗传学计算机集团,575科学大道,麦德逊,威斯康星州(Genetics Computer Group,575 Science Drive,Madison,Wis.))、Devereux等人,1984,Nucl.Acids Res.[核酸研究]12:387-395所述的最佳匹配序列程序,优选地使用默认设置,或通过检查。优选地,通过FastDB基于以下参数计算同一性百分比:错配罚分为1;空位罚分为1;空位大小罚分为0.33;以及连接罚分为30,“Current Methods in Sequence Comparison and Analysis[序列比较和分析的当前方法]”,Macromolecule Sequencing and Synthesis[大分子测序与合成],Selected Methods and Applications[所选择的方法与应用],第127-149页(1988),Alan R.Liss公司。

[0275] 有用的算法的实例是PILEUP。PILEUP使用渐进式成对比对从一组相关序列中创建多序列比对。它还可以绘制显示用于创建比对的聚类关系的树形图。PILEUP使用Feng和Doolittle,1987,J.Mol.Evol.[分子进化杂志]35:351-360的渐进式比对方法的简单化;该方法类似于Higgins和Sharp,1989,CABIOS5:151-153所述的方法。有用的PILEUP参数包括3.00的默认空位权重、0.10的默认空位长度权重和加权末端空位。

[0276] 有用的算法的另一实例是BLAST算法,描述于以下中:Altschul等人,1990,J.Mol.Biol.[分子生物学杂志]215:403-410;Altschul等人,1997,Nucleic Acids Res.[核酸研究]25:3389-3402;和Karin等人,1993,Proc.Natl.Acad.Sci.U.S.A.[美国国家科学院院刊]90:5873-5877。特别有用的BLAST程序是从Altschul等人,1996,Methods in Enzymology[酶学方法]266:460-480获得的WU-BLAST-2程序。WU-BLAST-2使用若干个搜索参数,其中大部分都设定为默认值。将可调整参数设置为以下值:重叠间隔=1,重叠分数=0.125,字阈值(T)=11。HSP S和HSP S2参数是动态值,并且由程序本身根据特定序列的组成和特定数据库的组成来确立,根据该特定数据库来搜索感兴趣的序列;然而,可以调整这些值以提高灵敏度。

[0277] 另外有用的算法是由Altschul等人,1993,Nucl.Acids Res.[核酸研究]25:3389-3402报道的空位BLAST。空位BLAST使用BLOSUM-62取代评分;阈值T参数设定为9;触发非空位扩展的双击方法,对k的空位长度收取10+k的成本;Xu设定为16,并且Xg设定为40(用于数据库搜索阶段)以及67(用于算法的输出阶段)。空位比对由对应于约22比特的评分触发。

[0278] 一般来讲,各个变体CDR或VH/VL序列之间的氨基酸同源性、相似性或同一性与本文描绘的序列是至少60%,并且更典型地具有至少65%或70%,更优选至少75%或80%,甚至更优选至少85%、90%、91%、92%、93%、94%、95%、96%、97%、98%、99%和几乎100%的优选增加的同源性或同一性。以相似的方式,相对于本文中鉴定的结合蛋白的核酸序列的“百分比(%)核酸序列同一性”被定义为候选序列中与抗体构建体的编码序列中的核苷酸残基相同的核苷酸残基的百分比。具体方法利用设定为默认参数的WU-BLAST-2的BLASTN模块,重叠间隔和重叠分数分别设定为1和0.125。

[0279] 一般来讲,编码各个变体CDR或VH/VL序列的核苷酸序列与本文描绘的核苷酸序列之间的核酸序列同源性、相似性或同一性是至少60%,并且更典型地具有至少65%、70%、75%、80%、81%、82%、83%、84%、85%、86%、87%、88%、89%、90%、91%、92%、93%、94%、95%、96%、97%、98%或99%和几乎100%的优选增加的同源性或同一性。因此,“变

体CDR”或“变体VH/VL区”是与本发明的亲本CDR/VH/VL具有指定的同源性、相似性或同一性,并且共享生物功能,包括但不限于亲本CDR或VH/VL的特异性和/或活性的至少60%、65%、70%、75%、80%、81%、82%、83%、84%、85%、86%、87%、88%、89%、90%、91%、92%、93%、94%、95%、96%、97%、98%或99%。

[0280] 在一个实施例中,根据本发明的抗体构建体与人种系的同一性百分比为 $\geq 70\%$ 或 $\geq 75\%$,更优选 $\geq 80\%$ 或 $\geq 85\%$,甚至更优选 $\geq 90\%$,并且最优选 $\geq 91\%$ 、 $\geq 92\%$ 、 $\geq 93\%$ 、 $\geq 94\%$ 、 $\geq 95\%$ 或甚至 $\geq 96\%$ 。与人抗体种系基因产物的同一性被认为是降低治疗期间治疗性蛋白引发患者中针对药物的免疫应答的风险的重要特征。Hwang和Foote (“Immunogenicity of engineered antibodies[工程化抗体的免疫原性]”;Methods[方法]36(2005)3-10)证明了药物抗体构建体的非人部分的减少导致治疗期间患者中诱导抗药物抗体的风险降低。通过比较无数临床评价的抗体药物和对应的免疫原性数据,显示以下趋势:抗体的V区的人源化使得蛋白质免疫原性(平均5.1%的患者)比携带未改变的非人V区的抗体(平均23.59%的患者)更低。因此,呈抗体构建体形式的基于V区的蛋白质治疗剂需要与人序列具有较高度度的同一性。出于确定种系同一性的目的,可以使用Vector NTI软件将VL的V区与人种系V区段和J区段(<http://vbase.mrc-cpe.cam.ac.uk/>)的氨基酸序列进行比对并且通过将相同的氨基酸残基除以VL的氨基酸残基总数计算氨基酸序列(以百分比计)。对于VH区段(<http://vbase.mrc-cpe.cam.ac.uk/>)同样适用的,只是由于VH CDR3的高度多样性和缺少现有人种系VH CDR3比对配偶体,因此可以排除VH CDR3。然后可以使用重组技术来增加与人抗体种系基因的序列同一性。

[0281] 在另一实施例中,本发明的双特异性抗体构建体在标准研究规模条件下,例如在标准的两步纯化过程中表现出高单体产率。优选地,根据本发明的抗体构建体的单体产率为 $\geq 0.25\text{mg/L}$ 上清液、更优选 $\geq 0.5\text{mg/L}$ 、甚至更优选 $\geq 1\text{mg/L}$ 、并且最优选 $\geq 3\text{mg/L}$ 上清液。

[0282] 同样地,可以确定抗体构建体的二聚体抗体构建体同种型的产率,并由此确定单体百分比(即,单体:(单体+二聚体))。单体和二聚体抗体构建体的生产率和计算的单体百分比可以例如在来自在滚瓶中标准化研究规模生产的培养物上清液的SEC纯化步骤中获得。在一个实施例中,抗体构建体的单体百分比为 $\geq 80\%$ 、更优选 $\geq 85\%$ 、甚至更优选 $\geq 90\%$ 、并且最优选 $\geq 95\%$ 。

[0283] 在一个实施例中,抗体构建体的优选血浆稳定性(具有血浆的EC50与无血浆的EC50的比率)为 ≤ 5 或 ≤ 4 、更优选 ≤ 3.5 或 ≤ 3 、甚至更优选 ≤ 2.5 或 ≤ 2 、并且最优选 ≤ 1.5 或 ≤ 1 。抗体构建体的血浆稳定性可以通过将构建体在 37°C 下在人血浆中孵育24小时,之后在 ^{51}Cr 释放细胞毒性测定中确定EC50来测试。细胞毒性测定中的效应细胞可以为刺激的富集的人CD8阳性T细胞。靶细胞可以是例如用人靶细胞表面抗原转染的CHO细胞。效应细胞与靶细胞(E:T)比率可以选择为10:1。用于此目的的人血浆库来源于由EDTA涂覆的注射器收集的健康供体的血液。通过离心去除细胞组分,并且收集上层血浆相并随后汇集。作为对照,在RPMI-1640培养基中的细胞毒性测定之前立即稀释抗体构建体。血浆稳定性计算为EC50(血浆孵育后)与EC50(对照)的比率。

[0284] 此外优选的是,本发明的抗体构建体的单体到二聚体的转化较低。可以在不同条件下测量转化并且通过高性能尺寸排阻色谱进行分析。例如,抗体构建体的单体同种型的孵育可以在 37°C 以及例如 $100\mu\text{g/ml}$ 或 $250\mu\text{g/ml}$ 的浓度下在孵育箱中进行7天。在这些条件

下,优选的是,本发明的抗体构建体显示出 $\leq 5\%$ 、更优选 $\leq 4\%$ 、甚至更优选 $\leq 3\%$ 、甚至更优选 $\leq 2.5\%$ 、甚至更优选 $\leq 2\%$ 、甚至更优选 $\leq 1.5\%$ 并且最优选 $\leq 1\%$ 或 $\leq 0.5\%$ 或甚至 0% 的二聚体百分比。

[0285] 还优选的是,本发明的双特异性抗体构建体在多个冷冻/解冻循环后以非常低的二聚体转化存在。例如,将抗体构建体单体在例如通用配制缓冲剂中调整至浓度为 $250\mu\text{g}/\text{ml}$,并且进行三个冷冻/解冻循环(在 -80°C 下冷冻 30min ,之后在室温下解冻 30min),之后进行高性能SEC以确定已经转化成二聚体抗体构建体的最初单体抗体构建体的百分比。优选地,例如在三个冷冻/解冻循环之后,双特异性抗体构建体的二聚体百分比为 $\leq 5\%$ 、更优选 $\leq 4\%$ 、甚至更优选 $\leq 3\%$ 、甚至更优选 $\leq 2.5\%$ 、甚至更优选 $\leq 2\%$ 、甚至更优选 $\leq 1.5\%$ 、并且最优选 $\leq 1\%$ 或甚至 $\leq 0.5\%$ 。

[0286] 本发明的双特异性抗体构建体优选显示出聚集温度 $\geq 45^{\circ}\text{C}$ 或 $\geq 50^{\circ}\text{C}$ 、更优选 $\geq 52^{\circ}\text{C}$ 或 $\geq 54^{\circ}\text{C}$ 、甚至更优选 $\geq 56^{\circ}\text{C}$ 或 $\geq 57^{\circ}\text{C}$ 、并且最优选 $\geq 58^{\circ}\text{C}$ 或 $\geq 59^{\circ}\text{C}$ 的有利热稳定性。热稳定性参数可以根据抗体聚集温度如下确定:将浓度为 $250\mu\text{g}/\text{ml}$ 的抗体溶液转移到一次性比色杯中并置于动态光散射(DLS)装置中。将样品以 $0.5^{\circ}\text{C}/\text{min}$ 的加热速率从 40°C 加热至 70°C ,恒定获取测量的半径。使用指示蛋白质和聚集物熔融的半径增加来计算抗体的聚集温度。

[0287] 可替代地,可以通过差示扫描量热法(DSC)确定温度熔融曲线以确定抗体构建体的固有生物物理学蛋白质稳定性。这些实验使用微凯尔有限公司(MicroCal LLC)(美国马萨诸塞州的北安普顿(Northampton, MA, U.S.A))VP-DSC装置进行。与仅含有配制缓冲剂的样品相比,从 20°C 至 90°C 记录含有抗体构建体的样品的能量摄取。将抗体构建体例如在SEC运行缓冲剂中调整至 $250\mu\text{g}/\text{ml}$ 的终浓度。为了记录对应的熔融曲线,逐步升高整个样品温度。在每个温度T下,记录样品和配制缓冲剂参考物的能量摄取。将样品的能量摄取 C_p (千卡/摩尔/ $^{\circ}\text{C}$)减去参考物的差针对应的温度作图。熔融温度被定义为第一次最大能量摄取时的温度。

[0288] 还设想本发明的靶细胞表面抗原xCD3双特异性抗体构建体具有 ≤ 0.2 、优选 ≤ 0.15 、更优选 ≤ 0.12 、甚至更优选 ≤ 0.1 并且最优选 ≤ 0.08 的浊度(如在将纯化的单体抗体构建体浓缩至 $2.5\text{mg}/\text{ml}$ 并过夜孵育后通过OD340测量的)。

[0289] 在另一实施例中,根据本发明的抗体构建体在酸性pH值下是稳定的。抗体构建体在非生理pH下表现出的耐受性越强,例如pH5.5(运行例如阳离子交换色谱法所需的pH)或更低(如pH4.0至5.5),从离子交换柱洗脱的抗体构建体相对于加载蛋白质的总量的回收率就越高。在pH 5.5下从离子(例如阳离子)交换柱的抗体构建体的回收率优选为 $\geq 30\%$ 、更优选 $\geq 40\%$ 、更优选 $\geq 50\%$ 、甚至更优选 $\geq 60\%$ 、甚至更优选 $\geq 70\%$ 、甚至更优选 $\geq 80\%$ 、甚至更优选 $\geq 90\%$ 、甚至更优选 $\geq 95\%$ 、并且最优选 $\geq 99\%$ 。

[0290] 此外设想,本发明的双特异性抗体构建体表现出治疗功效或抗肿瘤活性。这可以例如在以下晚期人肿瘤异种移植模型的实例中披露的研究中评估:

[0291] 本领域技术人员知道如何修改或调整该研究的某些参数,如注射的肿瘤细胞的数量、注射位点、移植的人T细胞的数量、要给予的双特异性抗体构建体的量以及时间线,同时仍然获得有意义且可再现的结果。优选地,肿瘤生长抑制 $T/C[\%]$ 为 ≤ 70 或 ≤ 60 、更优选 ≤ 50 或 ≤ 40 、甚至更优选 ≤ 30 或 ≤ 20 并且最优选 ≤ 10 或 ≤ 5 或甚至 ≤ 2.5 。

[0292] 在本发明的抗体构建体的优选的实施例中,抗体构建体是单链抗体构建体。

[0293] 另外,在本发明的抗体构建体的优选的实施例中,所述第三结构域按氨基至羧基顺序包含:

[0294] 铰链-CH₂-CH₃-接头-铰链-CH₂-CH₃。

[0295] 在本发明的一个实施例中,第三结构域的所述多肽单体中的每一个具有与选自下组的序列具有至少90%同一性的氨基酸序列,该组由以下组成:SEQ ID NO:17-24。在本发明的优选的实施例中,所述多肽单体中的每一个具有选自SEQ ID NO:17-24的氨基酸序列。

[0296] 另外,在本发明的一个实施例中,第三结构域的一个或优选每个(两个)多肽单体的CH₂结构域包含结构域内半胱氨酸二硫桥。如本领域所知,术语“半胱氨酸二硫桥”是指具有通式结构R-S-S-R的官能团。该键联也称为SS键或二硫桥,并且通过半胱氨酸残基的两个硫醇基团的偶联来衍生。对于本发明的抗体构建体特别优选的是,将成熟抗体构建体中形成半胱氨酸二硫桥的半胱氨酸引入到对应于309和321(Kabat编号)的CH₂结构域的氨基酸序列中。

[0297] 在本发明的一个实施例中,去除CH₂结构域的Kabat位置314中的糖基化位点。优选的是,通过N314X取代实现糖基化位点的去除,其中X是除Q之外的任何氨基酸。所述取代优选为N314G取代。在更优选的实施例中,所述CH₂结构域另外包含以下取代(根据Kabat的位置):V321C和R309C(这些取代在Kabat位置309和321处引入结构域内半胱氨酸二硫桥)。

[0298] 假定与例如本领域中已知的双特异性异源Fc抗体构建体相比(图1b)本发明的抗体构建体的优选特征可以尤其涉及在CH₂结构域中引入上述修饰。因此,对于本发明的构建体优选的是,本发明的抗体构建体的第三结构域中的CH₂结构域在Kabat位置309和321处包含结构域内半胱氨酸二硫桥和/或Kabat位置314处的糖基化位点通过上述N314X取代去除,优选地通过N314G取代去除。

[0299] 在本发明的另一个优选的实施例中,本发明的抗体构建体的第三结构域中的CH₂结构域在Kabat位置309和321处包含结构域内半胱氨酸二硫桥并且Kabat位置314处的糖基化位点通过N314G取代去除。最优选地,本发明的抗体构建体的第三结构域的多肽单体具有选自下组的氨基酸序列,该组由一下组成:SEQ ID NO:17和18。

[0300] 在一个实施例中,本发明提供了抗体构建体,其中:

[0301] (i) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;

[0302] (ii) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含两个抗体可变结构域;

[0303] (iii) 该第一结构域包含两个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域;或

[0304] (iv) 该第一结构域包含一个抗体可变结构域,并且该第二结构域包含一个抗体可变结构域。

[0305] 因此,第一结构域和第二结构域可以是各自包含两个抗体可变结构域(如VH和VL结构域)的结合结构域。此类包含两个抗体可变结构域的结合结构域的实例在上文进行了描述并且包括例如上文所述的Fv片段、scFv片段或Fab片段。可替代地,这些结合结构域中的一个或两个可以仅包含单一可变结构域。这种单结构域结合结构域的实例在上文进行了

描述并且包括例如纳米抗体或仅包含一个可变结构域的单一可变结构域抗体,该一个可变结构域可以是独立于其他V区或结构域特异性结合抗原或表位的VHH、VH或VL。

[0306] 在本发明的抗体构建体的优选的实施例中,第一结构域和第二结构域经由肽接头与第三结构域融合。优选的肽接头已在上文描述并且特征在于氨基酸序列Gly-Gly-Gly-Gly-Ser,即Gly₄Ser (SEQ ID NO:1),或其聚合物,即(Gly₄Ser)_x,其中x为1或更大的整数(例如2或3)。用于第一结构域和第二结构域与第三结构域融合的特别优选的接头在SEQ ID NO:1中描绘。

[0307] 在优选的实施例中,本发明的抗体构建体的特征在于按氨基至羧基顺序包含:

[0308] (a) 第一结构域;

[0309] (b) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 1-3;

[0310] (c) 第二结构域;

[0311] (d) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 1、2、3、9、10、11和12;

[0312] (e) 第三结构域的第一多肽单体;

[0313] (f) 肽接头,该肽接头具有选自下组的氨基酸序列,该组由以下组成:SEQ ID NO: 5、6、7和8;以及

[0314] (g) 第三结构域的第二多肽单体。

[0315] 在本发明的一个方面中,由第一结构域结合的靶细胞表面抗原是肿瘤抗原、对免疫障碍特异的抗原或病毒抗原。如本文使用的术语“肿瘤抗原”可以理解为呈递在肿瘤细胞上的那些抗原。这些抗原可以呈递在具有细胞外部分的细胞表面上,该细胞外部分通常与分子的跨膜和细胞质部分组合。这些抗原有时只能由肿瘤细胞呈递,而从来不能由正常细胞呈递。与正常细胞相比,肿瘤抗原可以只在肿瘤细胞上表达或者可以代表肿瘤特异性突变。在这种情况下,它们被称为肿瘤特异性抗原。更常见的是由肿瘤细胞和正常细胞呈递的抗原,并且它们被称为肿瘤相关抗原。与正常细胞相比,这些肿瘤相关抗原可以过表达,或者由于肿瘤组织的结构与正常组织相比较不紧密,因此是肿瘤细胞中的抗体结合可接近的。本文使用的肿瘤抗原的非限制性实例是CDH19、MSLN、DLL3、FLT3、EGFRvIII、CD33、CD19、CD20和CD70。

[0316] 在本发明的抗体构建体的优选的实施例中,肿瘤抗原选自下组,该组由以下组成:CDH19、MSLN、DLL3、FLT3、EGFRvIII、CD33、CD19、CD20、CD70、PSMA和BCMA。

[0317] 在本发明的一个方面中,抗体构建体按氨基至羧基顺序包含:

[0318] (a) 第一结构域,该第一结构域具有氨基酸序列,该氨基酸序列选自下组,该组由以下组成SEQ ID NO:52、70、58、76、88、106、124、94、112、130、142、160、178、148、166、184、196、214、232、202、220、238、250、266、282、298、255、271、287、303、322、338、354、370、386、402、418、434、450、466、482、498、514、530、546、327、343、359、375、391、407、423、439、455、471、487、503、519、353、551、592、608、624、640、656、672、688、704、720、736、752、768、784、800、816、832、848、864、880、896、912、928、944、960、976、992、1008、1024、1040、1056、1072、1088、1104、1120、1136、1152、1168、1184、597、613、629、645、661、677、693、709、725、741、757、773、789、805、821、837、853、869、885、901、917、933、949、965、981、997、1013、1029、

1045、1061、1077、1093、1109、1125、1141、1157、1173、1189、1277、1289、1301、1313、1325、1337、1349、1361、1373、1385、1397、1409、1421、1433、1445；并选自包括在以下中的针对BCMA的序列：与PSMA有关的SEQ ID NO：1460至1518；和50、56、68、74、86、92、104、110、122、128、140、146、158、164、176、182、194、200、212、218、230、236、248、254、266、272、284、290、302、308，其中前述SEQ ID No：50至308中每一个必须减去等于41的值，以获得补充序列列表12中的相应数字，以及补充序列列表12中与PSMA有关的SEQ ID No：320、335、350、365、380、395、410、425、440、455和470；

[0319] (b) 肽接头，该肽接头具有选自下组的氨基酸序列，该组由以下组成：SEQ ID NO：1-3；

[0320] (c) 第二结构域，该第二结构域具有氨基酸序列，该氨基酸序列选自下组，该组由以下组成：WO 2008/119567的SEQ ID NO：23、25、41、43、59、61、77、79、95、97、113、115、131、133、149、151、167、169、185或187或SEQ ID NO：15；

[0321] (d) 肽接头，该肽接头具有选自下组的氨基酸序列，该组由以下组成：SEQ ID NO：1、2、3、9、10、11和12；

[0322] (e) 第三结构域的第一多肽单体，该第一多肽单体具有选自下组的多肽序列，该组由以下组成：SEQ ID NO：17-24；

[0323] (f) 肽接头，该肽接头具有选自下组的氨基酸序列，该组由以下组成：SEQ ID NO：5、6、7和8；以及

[0324] (g) 第三结构域的第二多肽单体，该第二多肽单体具有选自下组的多肽序列，该组由以下组成：SEQ ID NO：17-24。

[0325] 与该优选的实施例一致，经由肽接头与单链多肽融合的第一结构域和第二结构域包含选自下组的序列，该组由以下组成：

[0326] (a) SEQ ID NO：53和59；CD33

[0327] (b) SEQ ID NO：71和77；EGFRvIII

[0328] (c) SEQ ID NO：89、107、125、95、113和131；MSLN

[0329] (d) SEQ ID NO：143、161、179、149、167和185；CDH19

[0330] (e) SEQ ID NO：197、215、233、203、221和239；DLL3

[0331] (f) SEQ ID NO：251、267、283、299、256、272、288和304；

[0332] CD19

[0333] (g) SEQ ID NO：323、339、355、371、387、403、419、435、451、467、483、499、515、531、547、328、344、360、376、392、408、424、440、456、472、488、504、520、536和552；FLT3

[0334] (h) SEQ ID NO：593、609、625、641、657、673、689、705、721、737、753、769、785、801、817、833、849、865、881、897、913、929、945、961、977、993、1009、1025、1041、1057、1073、1089、1105、1121、1137、1153、1169、1185、598、614、630、646、662、678、694、710、726、742、758、774、790、806、822、838、854、870、886、902、918、934、950、966、982、998、1014、1030、1046、1062、1078、1094、1110、1126、1142、1158、1174和1190；

[0335] CD70

[0336] (i) SEQ ID NO：1268；以及CD20

[0337] (j) SEQ ID NO：1278、1290、1302、1314、1326、1338、1350、1362、1374、1386、1398、

1410、1422、1434、1446。CD19

[0338] (k) 包含在SEQ ID No:1472、1478、1491、1497、1509、1515中的相应序列BCMA

[0339] (l) SEQ ID NO:1527、1533、1545、1551、1563、1569、1581、1587、1599、1605、1617、1623、1635、1641、1653、1659、1671、1677、1689、1695、1707、1713、1725、1731、1743、1749、1761、1767、1779、1785、1797、1812、1827、1842、1857、1872、1887、1902、1917、1927、1937、1947、1962PSMA

[0340] 在一方面,本发明的抗体构建体的特征在于具有选自下组的氨基酸序列,该组由以下组成:

[0341] (a) SEQ ID NO:54、55、60和61;CD33

[0342] (b) SEQ ID NO:72、73、78和79;EGFRvIII

[0343] (c) SEQ ID NO:90、91、96、97、108、109、114和115;MSLN

[0344] (d) SEQ ID NO:144、145、150、151、162、163、168、169、180、181、186和187;CDH19

[0345] (e) SEQ ID NO:198、199、204、205、216、217、222、223、234、235、240和241;DLL3

[0346] (f) SEQ ID NO:252、306、257、307、268、308、273、309、284、310、289、311、300、312、305和313;CD19

[0347] (g) SEQ ID NO:324、554、329、555、340、556、345、557、356、558、361、559、372、560、377、561、388、562、393、563、404、564、409、565、420、566、425、567、436、568、441、569、452、570、457、571、468、572、473、573、484、574、489、575、500、576、505、577、516、578、521、579、532、580、537、581、548、582、553和583;FLT3

[0348] (h) SEQ ID NO:594、610、626、642、658、674、690、706、722、738、754、77、786、802、818、834、850、866、882、898、914、930、946、962、978、994、1010、1026、1042、1058、1074、1090、1106、1122、1138、1154、1170、1186、599、615、631、647、663、679、695、711、727、743、759、775、791、807、823、839、855、871、887、903、919、935、951、967、983、999、1015、1031、1047、1063、1079、1095、1111、1127、1143、1159、1175、1491和1192-1267;CD70

[0349] (i) SEQ ID NO:43;CD20

[0350] (j) SEQ ID No:1279、1280、1291、1292、1303、1304、1315、1316、1327、1328、1339、1340、1351、1352、1363、1364、1375、1376、1387、1388、1399、1400、1411、1412、1423、1424、1435、1436、1447、1448。CD19

[0351] (k) SEQ ID No:1473、1474、1475、1479、1480、1481、1492、1493、1494、1498、1499、1500、1510、1511、1512、1516、1517、1518BCMA

[0352] (l) 1528、1529、1530、1534、1535、1536、1546、1547、1548、1552、1553、1554、1564、1565、1566、1570、1571、1572、1582、1583、1584、1588、1589、1590、1600、1601、1602、1606、1607、1608、1618、1619、1620、1624、1625、1626、1636、1637、1638、1642、1643、1644、1654、1655、1656、1660、1661、1662、1672、1673、1674、1678、1679、1680、1690、1691、1692、1696、1697、1698、1708、1709、1710、1714、1715、1716、1726、1727、1728、1732、1733、1734、1744、1745、1746、1750、1751、1752、1762、1763、1764、1768、1769、1770、1774、1775、1776、1786、1787、1788、1798、1799、1800、1801、1802、1803、1813、1814、1815、1816、1817、1818、1828、1829、1830、1831、1832、1833、1843、1844、1845、1846、1847、1848、1858、1859、1860、1861、1862、1863、1873、1874、1875、1876、1877、1878、1888、1889、1890、1891、1892、1893、1903、

1904、1905、1906、1907、1908、1918、1919、1920、1921、1922、1923、1933、1934、1935、1936、1937、1938、1948、1949、1950、1951、1952、1953和1963PSAM

[0353] 本发明进一步提供了编码本发明的抗体构建体的多核苷酸/核酸分子。多核苷酸是由共价键合在链中的13个或更多个核苷酸单体构成的生物聚合物。DNA (如cDNA) 和RNA (如mRNA) 是具有不同生物功能的多核苷酸的实例。核苷酸是充当核酸分子如DNA或RNA的单体或亚单位的有机分子。核酸分子或多核苷酸可以为双链和单链的、线性的和圆形的。它优选包含在载体中,该载体优选包含在宿主细胞中。所述宿主细胞例如在用本发明的载体或多核苷酸转化或转染后能够表达抗体构建体。出于此目的,多核苷酸或核酸分子与控制序列可操作地连接。

[0354] 遗传密码是将遗传物质(核酸)内编码的信息翻译成蛋白质的一组规则。活细胞中的生物解码是通过以由mRNA指定的顺序连接氨基酸的核糖体,使用tRNA分子携带氨基酸并一次读出mRNA三个核苷酸来完成。该密码定义了这些核苷酸三联体的序列(称为密码子)如何指定在蛋白质合成期间接下来将添加哪种氨基酸。除了一些例外,核酸序列中的三核苷酸密码子指定单一氨基酸。因为绝大多数基因都使用完全相同的密码进行编码,所以该特定密码通常称为规范或标准遗传密码。虽然遗传密码决定给定编码区的蛋白质序列,但其他基因组区可能会影响这些蛋白质产生的时间和地点。

[0355] 此外,本发明提供了载体,该载体包含本发明的多核苷酸/核酸分子。载体是用作将(外来)遗传物质转移到细胞中的媒介物的核酸分子。术语“载体”涵盖但不限于质粒、病毒、粘粒和人造染色体。一般来讲,工程化载体包含复制起点、多克隆位点和选择性标志物。载体本身通常是核苷酸序列,该核苷酸序列通常是包含插入物(转基因)和充当载体的“骨架”的更大序列的DNA序列。除转基因插入物和骨架外,现代载体可涵盖其他特征:启动子、遗传标记、抗生素抗性、报告基因、靶向序列、蛋白质纯化标签。称为表达载体(表达构建体)的载体尤其用于在靶细胞中表达转基因,并且通常具有控制序列。

[0356] 术语“控制序列”是指在特定宿主生物体中表达可操作连接的编码序列所必需的DNA序列。例如,适用于原核生物的控制序列包括启动子、任选的操纵子序列和核糖体结合侧。已知真核细胞利用启动子、聚腺苷酸化信号和增强子。

[0357] 当核酸与另一核酸序列处于功能关系时,该核酸是“可操作地连接的”。例如,如果将前序列或分泌前导序列的DNA表达为参与多肽分泌的前蛋白,则该前序列或分泌前导序列的DNA可操作地连接至该多肽的DNA;如果启动子或增强子影响编码序列的转录,则该启动子或增强子可操作地连接至该序列;或者如果核糖体结合侧被定位成使得有助于翻译,则该核糖体结合侧可操作地连接至编码序列。一般来讲,“可操作地连接”意指所连接的DNA序列是连续的,并且在分泌性前导序列的情形下是连续的并处于阅读相(reading phase)中。然而,增强子不必是连续的。连接通过在方便的限制性位点进行接合来完成。如果不存在此类位点,则根据常规实践使用合成的寡核苷酸衔接子或接头。

[0358] “转染”是有意将核酸分子或多核苷酸(包括载体)引入到靶细胞中的过程。该术语主要用于真核细胞中的非病毒方法。转导通常用于描述病毒介导的核酸分子或多核苷酸的转移。动物细胞的转染典型地涉及打开细胞膜中的瞬时孔或“洞”,以允许摄取物质。转染可以使用磷酸钙,通过电穿孔,通过细胞挤压或通过将阳离子脂质与物质混合以产生脂质体(这些脂质体与细胞膜融合并将其货物存放在内部)来进行。

[0359] 术语“转化”用于描述核酸分子或多核苷酸(包括载体)向细菌中,以及向非动物真核细胞(包括植物细胞)中的非病毒转移。因此,转化是细菌或非动物真核细胞的基因改变,该基因改变是因通过一个或多个细胞膜从其周围直接摄取并随后并入外源遗传物质(核酸分子)而产生。转化可以通过人为手段来实现。为了使转化发生,细胞或细菌必须处于感受态,这可能作为对如饥饿和细胞密度的环境条件的时间限制应答而发生。

[0360] 此外,本发明提供了宿主细胞,该宿主细胞用本发明的多核苷酸/核酸分子或载体转化或转染。如本文使用的,术语“宿主细胞”或“受体细胞”旨在包括可以是或已经是载体、外源性核酸分子和编码本发明抗体构建体的多核苷酸的受体和/或抗体构建体本身的受体的任何单个细胞或细胞培养物。通过转化、转染等方式将相应物质引入到细胞中。术语“宿主细胞”还旨在包括单细胞的后代或潜在后代。因为某些修饰可能由于天然的、意外的或有意的突变或由于环境影响而在后代中发生,所以这种后代事实上可能与亲本细胞不完全相同(在形态或基因组或全部DNA补体中),但仍包括在本文所用术语的范围内。合适的宿主细胞包括原核细胞或真核细胞,并且还包括但不限于细菌、酵母细胞、真菌细胞、植物细胞和动物细胞,如昆虫细胞和哺乳动物细胞,例如鼠、大鼠、猕猴或人。

[0361] 本发明的抗体构建体可以在细菌中产生。表达后,将本发明的抗体构建体从大肠杆菌细胞糊中以可溶性级分分离,并且可以通过例如亲和色谱法和/或尺寸排除来纯化。最终纯化可以类似于用于纯化例如在CHO细胞中表达的抗体的方法进行。

[0362] 除了原核生物之外,真核微生物(如丝状真菌或酵母)是本发明的抗体构建体的合适的克隆或表达宿主。酿酒酵母(*Saccharomyces cerevisiae*)或普通面包酵母是低等真核宿主微生物中最常用的。然而,许多其他属、物种和菌株通常可获得并且可用于本文中,如粟酒裂殖酵母(*Schizosaccharomyces pombe*)、克鲁维酵母属(*Kluyveromyces*)宿主,如乳酸克鲁维酵母(*K.lactis*)、脆壁克鲁维酵母(*K.fragilis*) (ATCC 12424)、保加利亚克鲁维酵母(*K.bulgaricus*) (ATCC 16045)、威克克鲁维酵母(*K.wickerhamii*) (ATCC 24178)、瓦尔提鲁维酵母(*K.waltii*) (ATCC 56500)、果蝇克鲁维酵母(*K.drosophilum*) (ATCC 36906)、耐热克鲁维酵母(*K.thermotolerans*)和马克斯克鲁维酵母(*K.marxianus*);耶氏酵母属(EP 402 226);毕赤酵母(EP 183 070);假丝酵母属;瑞氏木霉(EP 244 234);粗糙脉孢菌;许旺酵母属(*Schwanniomyces*),如西方许旺酵母(*Schwanniomyces occidentalis*);和丝状真菌,如脉孢菌属(*Neurospora*)、青霉属(*Penicillium*)、弯颈霉属(*Tolypocladium*)和曲霉属(*Aspergillus*)宿主,如构巢曲霉(*A.nidulans*)和黑曲霉(*A.niger*)。

[0363] 用于表达本发明的糖基化抗体构建体的合适的宿主细胞衍生自多细胞生物体。无脊椎动物细胞的实例包括植物细胞和昆虫细胞。已经鉴定了来自如草地贪夜蛾(*Spodoptera frugiperda*) (毛虫)、埃及伊蚊(*Aedes aegypti*) (蚊子)、白纹伊蚊(*Aedes albopictus*) (蚊子)、黑腹果蝇(*Drosophila melanogaster*) (果蝇)和家蚕(*Bombyx mori*)的宿主的许多杆状病毒株和变体以及相应的许可性昆虫宿主细胞。用于转染的多种病毒株是公众可获得的,例如苜蓿银纹夜蛾(*Autographa californica*) NPV的L-1变体和家蚕NPV的Bm-5株,并且根据本发明,此类病毒可以用作本文的病毒,特别是用于转染草地贪夜蛾细胞。

[0364] 棉花、玉米、马铃薯、大豆、矮牵牛、番茄、拟南芥和烟草的植物细胞培养物也可以用作宿主。可用于在植物细胞培养物中产生蛋白质的克隆和表达载体是本领域技术人员已

知的。参见,例如Hiatt等人,Nature[自然](1989)342:76-78;Owen等人(1992)Bio/Technology[生物/技术]10:790-794;Artsaenko等人(1995)The Plant J[植物杂志]8:745-750和Fecker等人(1996)Plant Mol Biol[植物分子生物学]32:979-986。

[0365] 然而,对脊椎动物细胞的兴趣最大,并且脊椎动物细胞在培养物(组织培养物)中的繁殖已成为常规程序。有用的哺乳动物宿主细胞系的实例是由SV40(COS-7,ATCC CRL 1651)转化的猴肾CV1系;人胚胎肾系(293细胞或亚克隆用于在悬浮培养中生长的293细胞,Graham等人,J.Gen Virol.[普通病毒学杂志]36:59(1977));幼仓鼠肾细胞(BHK,ATCC CCL 10);中国仓鼠卵巢细胞/-DHFR(CHO,Urlaub等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊]77:4216(1980));小鼠塞托利细胞(TM4,Mather,Biol.Reprod.[生殖生物学]23:243-251(1980));猴肾细胞(CVI ATCC CCL 70);非洲绿猴肾细胞(VERO-76,ATCC CRL1587);人宫颈癌细胞(HELA,ATCC CCL 2);犬肾细胞(MDCK,ATCC CCL 34);布法罗大鼠肝细胞(BRL 3A,ATCC CRL 1442);人肺细胞(W138,ATCC CCL 75);人肝细胞(Hep G2,1413 8065);小鼠乳房肿瘤(MMT 060562,ATCC CCL5 1);TRI细胞(Mather等人,Annals N.Y Acad.Sci.[纽约科学院年刊](1982)383:44-68);MRC 5细胞;FS4细胞;和人肝癌细胞系(Hep G2)。

[0366] 在另一实施例中,本发明提供了用于产生本发明的抗体构建体的方法,所述方法包括在允许表达本发明的抗体构建体的条件下培养本发明的宿主细胞并且从该培养物中回收所产生的抗体构建体。

[0367] 如本文使用的,术语“培养”是指细胞在合适的条件下在培养基中的体外维持、分化、生长、增殖和/或繁殖。术语“表达”包括涉及产生本发明的抗体构建体的任何步骤,包括但不限于转录、转录后修饰、翻译、翻译后修饰和分泌。

[0368] 当使用重组技术时,抗体构建体可以在周质空间中细胞内产生,或直接分泌到培养基中。如果抗体构建体是在细胞内产生,则作为第一步,例如通过离心或超滤去除宿主细胞或溶解片段的微粒状碎片。Carter等人,Bio/Technology[生物/技术]10:163-167(1992)描述了用于分离分泌到大肠杆菌周质空间的抗体的程序。简而言之,在约30min内,在乙酸钠(pH 3.5)、EDTA和苯甲基磺酰氟(PMSF)存在下使细胞糊解冻。可以通过离心去除细胞碎片。在将抗体分泌到培养基中的情况下,通常首先使用可商购的蛋白质浓缩滤器,例如Amicon或Millipore Pellicon超滤单元对来自此类表达系统的上清液进行浓缩。任何前述步骤中可以包括蛋白酶抑制剂(如PMSF)以抑制蛋白水解,并且可以包括抗生素以防止外来污染物的生长。

[0369] 可以使用例如羟基磷灰石色谱法、凝胶电泳、透析和亲和色谱法回收或纯化从宿主细胞制备的本发明的抗体构建体。取决于要回收的抗体,也可使用其他用于蛋白质纯化的技术,如在离子交换柱上分级分离、乙醇沉淀、反相HPLC、在二氧化硅上进行的色谱法、在肝素SEPHAROSETM上进行的色谱法、在阴离子或阳离子交换树脂(如聚天冬氨酸柱)上进行的色谱法、色谱聚焦、SDS-PAGE、以及硫酸铵沉淀。当本发明的抗体构建体包含CH3结构域时,Bakerbond ABX树脂(美国贝克,菲利普斯堡,新泽西州(J.T.Baker,Phillipsburg,NJ))可用于纯化。

[0370] 亲和色谱法是优选的纯化技术。亲和配体所连接的基质最常为琼脂糖,但其他基质也是可用的。在机械上稳定的基质如可控多孔玻璃或聚(苯乙烯二乙烯基)苯允许比用琼

脂糖可以实现的更快的流速和更短的处理时间。

[0371] 此外,本发明提供了药物组合物,该药物组合物包含本发明的抗体构建体或根据本发明的方法产生的抗体构建体。对于本发明的药物组合物优选的是,抗体构建体的均质性为 $\geq 80\%$,更优选 $\geq 81\%$ 、 $\geq 82\%$ 、 $\geq 83\%$ 、 $\geq 84\%$ 或 $\geq 85\%$,进一步优选 $\geq 86\%$ 、 $\geq 87\%$ 、 $\geq 88\%$ 、 $\geq 89\%$ 或 $\geq 90\%$,还进一步优选 $\geq 91\%$ 、 $\geq 92\%$ 、 $\geq 93\%$ 、 $\geq 94\%$ 或 $\geq 95\%$,并且最优选 $\geq 96\%$ 、 $\geq 97\%$ 、 $\geq 98\%$ 或 $\geq 99\%$ 。

[0372] 如本文使用的,术语“药物组合物”涉及适合给予给患者,优选人患者的组合物。本发明的特别优选的药物组合物包含优选治疗有效量的一种或多种本发明的抗体构建体。优选地,药物组合物进一步包含一种或多种(药学上有效的)载剂、稳定剂、赋形剂、稀释剂、增溶剂、表面活性剂、乳化剂、防腐剂和/或佐剂的合适配制品。组合物的可接受成分优选在所采用的剂量和浓度下是对接受者无毒性的。本发明的药物组合物包括但不限于液体、冷冻和冻干组合物。

[0373] 本发明组合物可以包含药学上可接受的载剂。一般来讲,如本文使用的,“药学上可接受的载剂”意指与药物给予,特别是肠胃外给予相容的任何和所有的水性和非水性溶液、无菌溶液、溶剂、缓冲剂(例如磷酸盐缓冲盐水(PBS)溶液)、水、悬浮液、乳液(如油/水乳液)、各种类型的润湿剂、脂质体、分散介质和包衣。此类介质和药剂在药物组合物中的使用在本领域中是熟知的,并且包含此类载剂的组合物可以通过熟知的常规方法配制。

[0374] 某些实施例提供了药物组合物,这些药物组合物包含本发明的抗体构建体和另外一种或多种赋形剂,如在本部分和本文其他地方说明性描述的那些赋形剂。在这方面,赋形剂在本发明中可用于多种目的,如调整配制品的物理、化学或生物特性,如调整粘度和/或本发明的方法以改善有效性和/或稳定此类配制品和方法,以对抗由于例如在制造、运输、存储、使用前准备、给予和之后过程中发生的压力而导致的降解和腐坏。

[0375] 在某些实施例中,药物组合物可以含有用于改变、保持或保存组合物的以下方面的目的的配制物质:例如pH、渗透压、粘度、透明度、颜色、等渗性、气味、无菌性、稳定性、溶解或释放速率、吸附性或渗透性(参见REMINGTON'S PHARMACEUTICAL SCIENCES[雷明登氏药学全书],第18"版,(A.R.Genrmo编辑),1990,Mack Publishing Company[马克出版公司])。在此类实施例中,合适的配制物质可以包括但不限于:

[0376] • 氨基酸,如甘氨酸、丙氨酸、谷氨酰胺、天冬酰胺、苏氨酸、脯氨酸、2-苯丙氨酸,包括带电荷的氨基酸,优选赖氨酸、乙酸赖氨酸、精氨酸、谷氨酸盐和/或组氨酸

[0377] • 抗微生物剂,如抗细菌剂和抗真菌剂

[0378] • 抗氧化剂,如抗坏血酸、甲硫氨酸、亚硫酸钠或亚硫酸氢钠;

[0379] • 缓冲剂、缓冲系统和缓冲剂,用于将组合物保持在约4.0至6.5、优选地4.2至4.8的酸性pH下;缓冲剂的实例是硼酸盐、柠檬酸盐、磷酸盐或其他有机酸、琥珀酸盐、磷酸盐、组氨酸和乙酸盐;例如约pH 4.0-5.5的乙酸盐缓冲剂;

[0380] • 非水性溶剂,如丙二醇、聚乙二醇、植物油如橄榄油和可注射用有机酯如油酸乙酯;

[0381] • 水性载剂包括水、醇/水性溶液、乳剂或悬浮液,包括盐水和缓冲的介质;

[0382] • 生物可降解聚合物,如聚酯;

[0383] • 膨胀剂,如甘露醇或甘氨酸;

- [0384] • 螯合剂,如乙二胺四乙酸(EDTA);
- [0385] • 等渗剂和吸收延迟剂;
- [0386] • 络合剂(如咖啡因、聚乙烯吡咯烷酮、 β -环糊精或羟丙基- β -环糊精);
- [0387] • 填充剂;
- [0388] • 单糖;二糖;和其他碳水化合物(如葡萄糖、甘露糖或糊精);碳水化合物可以是非还原糖,优选海藻糖、蔗糖、八硫酸盐、山梨醇或木糖醇;
- [0389] • (低分子量)蛋白质、多肽或蛋白质载剂,如人或牛血清白蛋白、明胶或免疫球蛋白,优选是人来源的;
- [0390] • 着色剂和调味剂;
- [0391] • 含硫还原剂,如谷胱甘肽、硫辛酸、巯基乙酸钠、硫代甘油、 $[\alpha]$ -一硫代甘油和硫代硫酸钠
- [0392] • 稀释剂;
- [0393] • 乳化剂;
- [0394] • 亲水性聚合物,如聚乙烯吡咯烷酮;
- [0395] • 成盐抗衡离子,如钠;
- [0396] • 防腐剂,如抗微生物剂、抗氧化剂、螯合剂、惰性气体等;实例是:苯扎氯铵、苯甲酸、水杨酸、硫柳汞、苯乙醇、对羟基苯甲酸甲酯、对羟基苯甲酸丙酯、氯己定、山梨酸或过氧化氢;
- [0397] • 金属复合物,如Zn-蛋白质复合物;
- [0398] • 溶剂和共溶剂(如甘油、丙二醇或聚乙二醇);
- [0399] • 糖和糖醇,如海藻糖、蔗糖、八硫酸盐、甘露醇、山梨醇或木糖醇水苏糖、甘露糖、山梨糖、木糖、核糖、肌糖(myoinisitose)、半乳糖、乳糖醇、核糖醇、肌肉肌醇(myoinisitol)、半乳糖醇、甘油、环多醇(例如肌醇)、聚乙二醇;和多元糖醇;
- [0400] • 悬浮剂;
- [0401] • 表面活性剂或润湿剂(如普朗尼克(pluronic)、PEG、脱水山梨聚糖、聚山梨醇酯(如聚山梨醇酯20、聚山梨醇酯)、氟核、氨丁三醇、卵磷脂、胆固醇、泰洛沙星(tyloxapal));表面活性剂可以是洗涤剂,优选分子量 $>1.2\text{KD}$,和/或聚醚,优选分子量 $>3\text{KD}$;优选洗涤剂的非限制性实例是吐温20、吐温40、吐温60、吐温80和吐温85;优选聚醚的非限制性实例是PEG 3000、PEG 3350、PEG 4000和PEG 5000;
- [0402] • 稳定性增强剂,如蔗糖或山梨醇;
- [0403] • 张力增强剂(如碱金属卤化物,优选氯化钠或氯化钾、甘露醇山梨醇);
- [0404] • 肠胃外递送媒介物,包括氯化钠溶液、林格氏右旋糖、右旋糖和氯化钠、乳酸林格氏液或不挥发性油;
- [0405] • 静脉内递送媒介物,包括流体和营养补充物、电解质补充物(如基于林格氏右旋糖的那些)。
- [0406] 对于本领域技术人员来说明显的是,例如,药物组合物的不同成分(例如,上文列出的那些)可以具有不同的效应,并且氨基酸可以充当缓冲剂、稳定剂和/或抗氧化剂;甘露醇可以充当膨胀剂和/或张力增强剂;氯化钠可以充当递送媒介物和/或张力增强剂;等。
- [0407] 设想除了本文定义的本发明的多肽之外,本发明的组合物可以包含另外的生物活

性剂,这取决于组合物的预期用途。此类药剂可以是作用于胃肠系统的药物、充当细胞抑制剂的药物、预防高尿酸血症的药物、抑制免疫反应的药物(例如皮质类固醇)、调节炎症应答的药物、作用于循环系统的药物和/或本领域中已知的药剂如细胞因子。还设想将本发明的抗体构建体应用于共疗法中,即与另一种抗癌药物组合。

[0408] 在某些实施例中,最佳药物组合物将由本领域技术人员根据例如预期给予途径、递送形式和所希望剂量来确定。参见,例如REMINGTON'S PHARMACEUTICAL SCIENCES[雷明登氏药学全书],同上。在某些实施例中,此类组合物可以影响本发明的抗体构建体的物理状态、稳定性、体内释放速率和体内清除速率。在某些实施例中,药物组合物中的主要媒介物或载剂本质上可以是水性的或非水性的。例如,合适的媒介物或载剂可以是注射用水、生理盐水溶液或人造脑脊液,可能补充有益于肠胃外给予的组合物中常见的其他物质。中性缓冲盐水或与血清白蛋白混合的盐水是另外的示例性媒介物。在某些实施例中,本发明抗体构建体组合物可以通过将具有所希望纯度的选定成分与任选配制品(REMINGTON'S PHARMACEUTICAL SCIENCES[雷明登氏药学全书],同上)以冻干饼或水性溶液的形式混合来制备用于储存。此外,在某些实施例中,可以使用合适的赋形剂(如蔗糖)将本发明的抗体构建体配制成分冻干物。

[0409] 当考虑肠胃外给予时,用于本发明的治疗组合物能以无热原的肠胃外可接受的水性溶液的形式提供,该水性溶液在药学上可接受的媒介物中包含本发明的所希望抗体构建体。用于肠胃外注射的特别合适的媒介物是无菌蒸馏水,其中将本发明的抗体构建体配制成分适当保存的无菌等渗溶液。在某些实施例中,该制备可以涉及用可以提供产物(该产物可以经由储库注射来递送)的受控或持续释放的药剂(如可注射微球体、生物可侵蚀颗粒、聚合物化合物(如聚乳酸或聚乙醇酸)、珠粒或脂质体)配制所希望分子。在某些实施例中,也可以使用透明质酸,该透明质酸具有促进循环持续时间的作用。在某些实施例中,可植入药物递送装置可用于引入所希望的抗体构建体。

[0410] 其他药物组合物对于本领域技术人员来说是显而易见的,包括在持续或控制递送/释放配制品中涉及本发明抗体构建体的配制品。用于配制各种其他持续或控制递送方式的技术(如脂质体载剂、生物可侵蚀微粒或多孔珠粒和储库注射)也是本领域技术人员已知的。参见,例如国际专利申请号PCT/US 93/00829,其描述了用于递送药物组合物的多孔聚合物微粒的控制释放。持续释放制剂可以包括呈成型制品(例如膜或微胶囊)形式的半透性聚合物基质。持续释放基质可以包括聚酯、水凝胶、聚丙交酯(如美国专利号3,773,919和欧洲专利申请公开号EP 058481中所披露)、L-谷氨酸和 γ -L-谷氨酸乙酯的共聚物(Sidman等人,1983,Biopolymers[生物聚合物]2:547-556)、聚(2-羟乙基-甲基丙烯酸酯)(Langer等人,1981,J.Biomed.Mater.Res.[生物医学材料研究杂志]15:167-277和Langer,1982,Chem.Tech.[化学技术]12:98-105)、乙烯乙酸乙烯酯(Langer等人,1981,同上)或聚-D(-)-3-羟基丁酸(欧洲专利申请公开号EP 133,988)。持续释放组合物还可以包括可以通过本领域中已知的若干种方法中的任一种制备的脂质体。参见,例如Eppstein等人,1985,Proc.Natl.Acad.Sci.U.S.A.[美国国家科学院院刊]82:3688-3692;欧洲专利申请公开号EP 036,676;EP 088,046和EP 143,949。

[0411] 也可以将抗体构建体包埋在例如通过凝聚技术或通过界面聚合制备的微胶囊(例如分别为羟甲基纤维素或明胶-微胶囊和聚(甲基丙烯酸甲酯)微胶囊)中,包埋在胶体药物

递送系统(例如脂质体、白蛋白微球、微乳液、纳米颗粒和纳米胶囊)中或包埋在粗滴乳状液中。此类技术披露于Remington's Pharmaceutical Sciences[雷明登氏药学全书],第16版,Oslo,A.编辑,(1980)中。

[0412] 用于体内给予的药物组合物典型地以无菌制剂提供。灭菌可以通过无菌滤膜过滤完成。当将组合物冻干时,可以在冻干和重配之前或之后使用该方法进行灭菌。用于肠胃外给予的组合物能以冻干形式或于溶液中储存。通常将肠胃外组合物置入具有无菌入口的容器(例如具有可由皮下注射针刺穿的塞子的静脉内溶液袋或小瓶)中。

[0413] 本发明的另一方面包括自缓冲的本发明抗体构建体配制品,这些配制品可用作药物组合物,如国际专利申请W0 06138181 A2(PCT/US 2006/022599)中所述。在这方面有用的蛋白质稳定和配制材料和方法,可以获得各种各样的说明,如Arakawa等人,“Solvent interactions in pharmaceutical formulations[药物配制品中的溶剂相互作用],” Pharm Res.[药物研究]8(3):285-91(1991);Kendrick等人,“Physical stabilization of proteins in aqueous solution[水性溶液中蛋白质的物理稳定化]”在RATIONAL DESIGN OF STABLE PROTEIN FORMULATIONS:THEORY AND PRACTICE[稳定蛋白质配制品的合理设计:理论与实践]中,Carpenter和Manning编辑Pharmaceutical Biotechnology[药物生物技术]13:61-84(2002)和Randolph等人,“Surfactant-protein interactions[表面活性剂-蛋白质相互作用],” Pharm Biotechnol.[药物生物技术]13:159-75(2002),特别参见关于根据本发明的自缓冲蛋白质配制品的相关赋形剂和方法的相关部分,尤其是关于用于兽医和/或人医学用途的蛋白质药物产品和方法。

[0414] 根据本发明的某些实施例,可以使用盐以例如调整配制品的离子强度和/或等渗性和/或改善根据本发明的组合物的蛋白质或其他成分的溶解度和/或物理稳定性。众所周知,离子可以通过与蛋白质表面上的带电荷的残基结合并通过屏蔽蛋白质中的带电荷基团和极性基团并降低其静电相互作用、吸引和排斥相互作用的强度来稳定蛋白质的天然状态。离子还可以通过特别地与蛋白质的变性肽键($--CONH$)结合来稳定蛋白质的变性状态。此外,与蛋白质中的带电荷基团和极性基团的离子相互作用还可以减少分子间静电相互作用,并且从而防止或减少蛋白质聚集和不溶解。

[0415] 离子种类对蛋白质的作用显著不同。已经开发了多种对可用于配制根据本发明的药物组合物的离子及其对蛋白质的作用的分类评级。一个实例是Hofmeister系列,该系列通过对溶液中蛋白质的构象稳定性的作用来对离子和极性非离子溶质进行评级。稳定溶质称为“亲液的”。不稳定溶质称为“离液的”。通常使用高浓度的亲液剂(例如, >1 摩尔硫酸铵)以从溶液中沉淀蛋白质(“盐析”)。通常使用离液剂来使蛋白质变性和/或溶解(“盐溶”)。离子对“盐溶”和“盐析”的相对有效性限定了其在Hofmeister系列中的位置。

[0416] 根据本发明的各种实施例,游离氨基酸可在本发明抗体构建体配制品中作为膨胀剂、稳定剂和抗氧化剂以及其他标准用途。赖氨酸、脯氨酸、丝氨酸和丙氨酸可用于稳定配制品中的蛋白质。甘氨酸可用于冻干以确保正确的饼结构和特性。在液体配制品和冻干配制品两者中,精氨酸均可用于抑制蛋白质聚集。蛋氨酸可用作抗氧化剂。

[0417] 多元醇包括糖,例如甘露醇、蔗糖和山梨醇以及多元醇,如例如甘油和丙二醇,并且出于本文论述的目的,包括聚乙二醇(PEG)和相关物质。多元醇是亲液的。它们在液体配制品和冻干配制品两者中是有用的稳定剂,以保护蛋白质免受物理和化学降解过程的影

响。多元醇也可用于调整配制品的张力。在本发明的选择实施例中有用的多元醇是甘露醇,甘露醇通常用于确保在冻干配制品中饼的结构稳定性。它确保了饼的结构稳定性。它通常与冻干保护剂(例如蔗糖)一起使用。山梨醇和蔗糖是用于调整张力且作为稳定剂以防止在运输过程中的冷冻-解冻应力或防止在制造过程中制备团块的优选药剂。还原糖(含有游离醛或酮基团),如葡萄糖和乳糖,可以使表面赖氨酸和精氨酸残基糖基化。因此,它们通常不是根据本发明使用的优选多元醇。此外,在这方面,形成此类反应性物质的糖也不是本发明优选的多元醇,该糖如蔗糖,蔗糖在酸性条件下水解为果糖和葡萄糖并因此产生糖基化。PEG可用于稳定蛋白质并用作冷冻保护剂,并且在这方面可以用于本发明。

[0418] 本发明抗体构建体配制品的实施例进一步包含表面活性剂。蛋白质分子可易于吸附在表面上,并且变性以及随后在空气-液体、固体-液体和液体-液体界面处聚集。这些效应通常与蛋白质浓度成反比。这些有害的相互作用通常与蛋白质浓度成反比,并且典型地因物理振荡(如在产品运输和处理过程中产生的物理振荡)而加剧。常规使用表面活性剂来防止、最小化或减少表面吸附。在这方面,本发明中有用的表面活性剂包括聚山梨醇酯20、聚山梨醇酯80、脱水山梨醇聚乙氧基化物的其他脂肪酸酯、以及泊洛沙姆188。表面活性剂也常用于控制蛋白质构象稳定性。在这方面使用表面活性剂是蛋白质特异性的,因为任何给定的表面活性剂典型地会稳定一些蛋白质并使其他蛋白质不稳定。

[0419] 聚山梨醇酯易于氧化降解,并且通常在供应时含有足够量的过氧化物以引起蛋白质残基侧链,尤其是甲硫氨酸的氧化。因此,应谨慎使用聚山梨醇酯,并且在使用时应以其最低有效浓度使用。在这方面,聚山梨醇酯例示了赋形剂应以其最低有效浓度使用的一般规则。

[0420] 本发明抗体构建体配制品的实施例进一步包含一种或多种抗氧化剂。通过保持适当水平的环境氧气和温度并避免暴露于光下,可以在某种程度上防止药物配制品中蛋白质的有害氧化。也可以使用抗氧化赋形剂来防止蛋白质的氧化降解。在这方面,有用的抗氧化剂是还原剂、氧/自由基清除剂和螯合剂。用于根据本发明的治疗性蛋白质配制品中的抗氧化剂优选是水溶性的并且在整个产品的储存寿命内保持其活性。在这方面,EDTA是根据本发明的优选的抗氧化剂。抗氧化剂可以破坏蛋白质。例如,还原剂,如特别是谷胱甘肽,可以破坏分子内二硫键。因此,选择用于本发明的抗氧化剂尤其用于消除或足够降低其本身破坏配制品中的蛋白质的可能性。

[0421] 根据本发明的配制品可以包含金属离子,这些金属离子是蛋白质辅助因子并且是形成蛋白质配位复合物所必需的,如形成某些胰岛素悬浮液所必需的锌。金属离子也可以抑制降解蛋白质的一些过程。然而,金属离子也催化降解蛋白质的物理和化学过程。镁离子(10-120mM)可用于抑制天冬氨酸异构化为异天冬氨酸。 Ca^{+2} 离子(高达100mM)可以增加人脱氧核糖核酸酶的稳定性。然而, Mg^{+2} 、 Mn^{+2} 和 Zn^{+2} 可以使rhDNase不稳定。类似地, Ca^{+2} 和 Sr^{+2} 可以稳定因子VIII,它可以因 Mg^{+2} 、 Mn^{+2} 和 Zn^{+2} 、 Cu^{+2} 和 Fe^{+2} 去稳定,并且其聚集可以通过 Al^{+3} 离子增加。

[0422] 本发明抗体构建体配制品的实施例进一步包含一种或多种防腐剂。当开发涉及从同一容器提取超过一次的多剂量肠胃外配制品时,防腐剂是必需的。其主要功能是抑制微生物生长并确保在药物产品的整个保质期或使用期限内的产品无菌性。常用的防腐剂包括苯甲醇、苯酚和间甲酚。尽管防腐剂在小分子肠胃外使用方面有着悠久的历史,但包含防腐

剂的蛋白质配制品的开发可能具有挑战性。防腐剂几乎总是对蛋白质具有不稳定效应(聚集),并且这已成为限制其在多剂量蛋白质配制品中使用的主要因素。迄今为止,大部分蛋白质药物仅配制用于一次性使用。然而,当多剂量配制品是可能时,它们具有使患者方便的附加优势和增加的可销售性。一个好的实例是人生长激素(hGH),其中防腐配制品的开发已经导致更方便、多次使用的注射笔展示的商业化。至少四种含有hGH的防腐配制品的此类笔装置目前可在市场上获得。Norditropin(液体,诺和诺德公司(Novo Nordisk))、Nutropin AQ(液体,基因泰克公司(Genentech))和Genotropin(冻干的--双室药筒,法玛西亚普强公司(Pharmacia&Upjohn))含有苯酚,而Somatropin(礼来公司(Eli Lilly))用间-甲酚进行配制。在防腐剂型的配制和开发期间需要考虑若干个方面。必须优化药物产品中有有效的防腐剂浓度。这要以赋予抗微生物有效性而不损害蛋白质稳定性的浓度范围测试剂型中给定的防腐剂。

[0423] 正如可以预期的那样,含有防腐剂的液体配制品的开发比冻干配制品更具挑战性。冷冻干燥的产品可以在没有防腐剂的情况下冻干,并且在使用时用含有防腐剂的稀释剂重配。这缩短了防腐剂与蛋白质接触的时间,从而显著最小化相关的稳定性风险。在液体配制品的情况下,应在整个产品保质期(约18至24个月)内保持防腐剂有效性和稳定性。要指出的重要点是,防腐剂有效性应在含有活性药物和所有赋形剂组分的最终配制品中得到证实。

[0424] 本文披露的抗体构建体也可以配制为免疫脂质体。“脂质体”是由各种类型的脂质、磷脂和/或表面活性剂构成的小囊泡,该小囊泡可用于将药物递送至哺乳动物。脂质体的组分通常以双层形式排列,类似于生物膜的脂质排列。含有抗体构建体的脂质体通过本领域已知的方法制备,如Epstein等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊],82:3688(1985);Hwang等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊],77:4030(1980);美国专利号4,485,045和4,544,545;以及W0 97/38731中所述。具有延长的循环时间的脂质体披露于美国专利号5,013,556中。特别有用的脂质体可以通过反相蒸发方法用包含磷脂酰胆碱、胆固醇和PEG衍生化磷脂酰乙醇胺(PEG-PE)的脂质组合物产生。使脂质体挤出通过具有限定孔径的滤器以产生具有所希望的直径的脂质体。本发明的抗体构建体的Fab'片段可以与脂质体经由二硫键交换反应缀合,如Martin等人J.Biol.Chem.[生物化学杂志]257:286-288(1982)中所述。化学治疗剂任选地包含在脂质体内。参见Gabizon等人J.National Cancer Inst.[国家癌症研究所杂志]81(19)1484(1989)。

[0425] 一旦配制了药物组合物,可以将它作为溶液、悬浮液、凝胶、乳液、固体、晶体或作为脱水或冻干粉末储存在无菌小瓶中。此类配制品能以即用形式或以在给予前重配的形式(例如冻干形式)储存。

[0426] 本文定义的药物组合物的生物活性可以例如通过细胞毒性测定来确定,如以下实例、W0 99/54440或由Schlereth等人(Cancer Immunol.Immunother.[癌症免疫学免疫治疗]20(2005),1-12)所述。如本文使用的,“功效”或“体内功效”是指使用例如标准化NCI应答标准对本发明的药物组合物治疗的应答。使用本发明的药物组合物的疗法成功或体内功效是指组合物对于其预期用途的有效性,即组合物引起其所希望效应,即耗尽病理细胞(例如肿瘤细胞)的能力。体内功效可以通过已建立的对疾病实体的标准方法进行监测,这些方法包括但不限于白细胞计数、差异、荧光激活细胞分选法、骨髓抽吸。另外,可以使用

各种疾病特异性临床化学参数和其他建立的标准方法。此外,可以使用计算机辅助断层摄影术、X射线、核磁共振断层摄影术(例如,用于基于国家癌症研究所标准的应答评估[Cheson BD,Horning SJ,Coiffier B,Shipp MA,Fisher RI,Connors JM,Lister TA,Vose J,Grillo-Lopez A,Hagenbeek A,Cabanillas F,Klippensten D,Hiddemann W,Castellino R,Harris NL,Armitage JO,Carter W,Hoppe R,Canellos GP.Report of an international workshop to standardize response criteria for non-Hodgkin's lymphomas[标准化非霍奇金淋巴瘤应答标准的国际研讨会报告].NCI Sponsored International Working Group[NCI资助的国际工作组].J Clin Oncol.[临床肿瘤学杂志]1999年4月;17(4):1244])、正电子发射断层摄影术扫描、白细胞计数、差异、荧光激活细胞分选法、骨髓抽吸、淋巴结活组织检查/组织学和各种淋巴瘤特异性临床化学参数(例如乳酸盐脱氢酶)和其他已建立的标准方法。

[0427] 开发药物(如本发明的药物组合物)的另一主要挑战是药代动力学特性的可预测调节。为此,可以建立候选药物的药代动力学曲线,即影响特定药物治疗给定病状的能力的药代动力学参数的曲线。影响药物治疗某一疾病实体的能力的药物的动力学参数包括但不限于:半衰期、分布体积、肝脏首过代谢和血清结合的程度。给定药剂的功效可以受到上文提及的每个参数的影响。

[0428] “半衰期”意指50%的给予药物通过生物过程(例如代谢、排泄等)消除的时间。“肝脏首过代谢”意指药物在首次与肝脏接触时,即在首次通过肝脏期间代谢的倾向。“分布体积”意指药物在身体各个隔室(例如细胞内和细胞外空间、组织和器官等)中的滞留程度,以及药物在这些隔室内的分布。“血清结合程度”意指药物与血清蛋白(如白蛋白)相互作用并结合从而导致药物生物活性降低或丧失的倾向。

[0429] 药代动力学参数还包括对于给予的给定量药物的生物利用度、滞后时间(T_{滞后})、T_{max}、吸收速率、起效时间和/或C_{max}。“生物利用度”意指血液隔室中药物的量。“滞后时间”意指药物给予与其在血液或血浆中的检测和可测量性之间的时间延迟。“T_{max}”是药物达到最大血液浓度之后的时间,并且“C_{max}”是用给定药物获得的最大血液浓度。达到其生物效应所需的药物的血液或组织浓度的时间受到所有参数的影响。表现出跨物种特异性的双特异性抗体构建体的药代动力学参数(其可以在如上所概述的非黑猩猩灵长类动物的临床前动物测试中确定)也示于例如Schlereth等人(Cancer Immunol.Immunother.[癌症免疫学免疫治疗]20(2005),1-12)的公开中。

[0430] 在本发明的优选方面中,药物组合物在约-20℃下稳定至少四周。从所附实施例中显而易见的是,可以使用不同的系统测试本发明的抗体构建体的质量相比于相应现有技术抗体构建体的质量。这些测试被理解为符合“ICH Harmonised Tripartite Guideline: Stability Testing of Biotechnological/Biological Products Q5C and Specifications:Test procedures and Acceptance Criteria for Biotech Biotechnological/Biological Products Q6B[ICH三方协调指南:生物技术/生物产品的稳定性测试Q5C和规格:生物技术/生物产品的测试程序和验收准则Q6B]”,并且因此被选择以提供稳定性指示曲线,从而确定检测到产品的属性、纯度和效力的变化。人们普遍接受术语纯度是相对术语。由于糖基化、脱酰胺或其他异质性的效应,因此生物技术/生物产品的绝对纯度典型地应通过超过一种的方法进行评估,并且所导出的纯度值取决于方法。出于

稳定性测试的目的,纯度测试应集中在确定降解产物的方法上。

[0431] 为了评估包含本发明的抗体构建体的药物组合物的质量,可以例如通过分析溶液中可溶性聚集物的含量(根据尺寸排除的HMWS)来分析。优选的是,在约-20℃下稳定至少四周的特征在于小于1.5%HMWS/优选小于1%HMWS的含量。

[0432] 抗体构建体作为药物组合物的优选配制品如上详述。然而,以下确切的配制品可能不太优选,因此不予理睬:

[0433] • 配制品A:

[0434] 20mM磷酸钾、150mM L-精氨酸盐酸盐、6% (w/V) 海藻糖二水合物、0.01% (w/V) 聚山梨醇酯80,在pH 6.0

[0435] • 配制品B:

[0436] 10mM谷氨酸、4% (w/V) 甘露醇、2% (w/V) 蔗糖、0.01% (w/V) 聚山梨醇酯80,在pH4.0

[0437] 在所附实例4-12中提供了用于评估呈药物组合物形式的本发明的抗体构建体的稳定性的其他实例。在那些实例中,关于不同药物配制品中的不同应力条件测试本发明的抗体构建体的实施例,并且将结果与本领域已知的双特异性T细胞接合抗体构建体的其他半衰期延长(HLE)形式进行比较。一般来讲,设想与具有不同HLE形式和不具有任何HLE形式的抗体构建体(即“规范的”抗体构建体)相比,根据本发明的提供有特定FC模式的抗体构建体在宽范围的应力条件(如温度和光应力)下典型地更稳定。所述温度稳定性可以涉及降低的温度(低于室温,包括冷冻)和升高的温度(高于室温,包括高达或高于体温的温度)两者。正如本领域技术人员将会认识到,在临床实践中难以避免的这种关于应力的改善稳定性使得抗体构建体更安全,这是因为在临床实践中会出现较少的降解产物。结果,所述增加的稳定性意味着安全性增加。

[0438] 一个实施例提供了本发明的抗体构建体或根据本发明的方法产生的抗体构建体,其用于预防、治疗或缓解增殖性疾病、肿瘤性疾病、病毒性疾病或免疫性障碍。

[0439] 本文所述的配制品可在有需要的患者中用作治疗、缓解和/或预防如本文所述的病理医学病状的药物组合物。术语“治疗”是指治疗性治疗和预防性(prophylactic或preventative)措施两者。治疗包括将配制品施加或给予至患有疾病/障碍、疾病/障碍的症状或患疾病/障碍的倾向的患者的体内、分离的组织或细胞,目的是治愈、痊愈、缓和、减轻、改变、补救、缓解、改善或影响该疾病,该疾病症状或患该疾病的倾向。

[0440] 如本文使用的,术语“缓解”是指通过将根据本发明的抗体构建体给予至有需要的受试者而对患有如下文所述的肿瘤或癌症或转移性癌症的患者的疾病状态的任何改善。这种改善还可以被视为减缓或停止患者的肿瘤或癌症或转移性癌症的进展。如本文使用的,术语“预防”意指通过将根据本发明的抗体构建体给予至有需要的受试者来避免患有如下文所指定的肿瘤或癌症或转移性癌症的患者发生或复发。

[0441] 术语“疾病”是指将受益于用本文所述的抗体构建体或药物组合物治疗的任何病状。这包括慢性和急性障碍或疾病,包括那些使哺乳动物易患所考虑疾病的病理病状。

[0442] “赘生物”是组织的异常生长,通常但不总是形成肿块。当也形成肿块时,通常称之为“肿瘤”。赘生物或肿瘤可以是良性的、潜在恶性的(癌前)、或恶性的。恶性赘生物通常称为癌症。它们通常侵入并破坏周围组织,并可能形成转移,即它们扩散到身体的其他部位、

组织或器官。因此,术语“转移性癌症”涵盖转移到原始肿瘤的组织或器官除外的其他组织或器官。淋巴瘤和白血病是淋巴赘生物。出于本发明的目的,它们也涵盖在术语“肿瘤”或“癌症”中。

[0443] 术语“病毒性疾病”描述了作为受试者病毒感染的结果的疾病。

[0444] 如本文使用的,术语“免疫学障碍”根据该术语的常见定义描述免疫学障碍,如自体免疫疾病、超敏反应、免疫缺陷。

[0445] 在一个实施例中,本发明提供治疗或缓解增殖性疾病、肿瘤性疾病、病毒性疾病或免疫障碍的方法,该方法包括向有需要的受试者给予本发明的抗体构建体或根据本发明的方法产生的抗体构建体的步骤。

[0446] 术语“有需要的受试者”或“需要治疗的那些”包括已经患有障碍的那些以及要预防障碍的那些。有需要的受试者或“患者”包括接受预防性或治疗性治疗的人和其他哺乳动物受试者。

[0447] 本发明的抗体构建体通常将针对特定给予途径和方法、特定给予剂量和频率、特定疾病的特定治疗、生物利用度和持久性范围等来设计。组合物的物质优选以对于给予位点可接受的浓度配制。

[0448] 因此可以根据本发明设计配制品和组合物以通过任何合适的给予途径递送。在本发明的上下文中,给予途径包括但不限于

[0449] • 局部途径(如表皮、吸入、鼻、眼、耳(auricular/aural)、阴道、黏膜);

[0450] • 肠内途径(如口服、胃肠道、舌下、唇下部、经颊、直肠);以及

[0451] • 肠胃外途径(如静脉内、动脉内、骨内、肌内、脑内、脑室内、硬膜外、鞘内、皮下、腹膜内、羊膜外、关节内、心内、真皮内、病灶内、子宫内、膀胱内、玻璃体内、经皮、鼻内、经黏膜、滑膜内、管腔内)。

[0452] 本发明的药物组合物和抗体构建体可特别用于肠胃外给予,例如皮下或静脉内递送,例如通过注射如弹丸注射,或通过输注如连续输注。药物组合物可以使用医疗装置来给予。用于给予药物组合物的医疗装置的实例描述在美国专利号4,475,196;4,439,196;4,447,224;4,447,233;4,486,194;4,487,603;4,596,556;4,790,824;4,941,880;5,064,413;5,312,335;5,312,335;5,383,851;和5,399,163中。

[0453] 特别地,本发明提供了合适的组合物的不间断给予。作为非限制性实例,可以通过患者佩戴的用于计量治疗剂进入患者体内的流入的小型泵系统来实现不间断或实质上不间断(即连续)的给予。包含本发明的抗体构建体的药物组合物可以通过使用所述泵系统给予。此类泵系统在本领域中通常是已知的,并且通常依赖于含有要输注的治疗剂的药筒的定期更换。当更换这种泵系统中的药筒时,可能导致原本不间断地流入患者体内的治疗剂的暂时中断。在这种情况下,药筒替换之前的给予阶段和药筒替换之后的给予阶段仍将被认为在药物手段的含义内,并且本发明的方法一起构成这种治疗剂的一次“不间断给予”。

[0454] 本发明的抗体构建体的连续或不间断给予可以通过流体递送装置或小型泵系统进行静脉内或皮下给予,该流体递送装置或小型泵系统包括用于将流体驱出储器的流体驱动机构和用于致动驱动机构的致动机构。用于皮下给予的泵系统可以包括用于穿透患者皮肤并将合适的组合物递送到患者体内的针或套管。所述泵系统可以独立于静脉、动脉或血管而直接固定或连接到患者皮肤,从而允许泵系统与患者皮肤直接接触。泵系统可以连接

到患者皮肤24小时至数天。泵系统可能尺寸较小,具有小容积的储器。作为非限制性实例,待给予的合适的药物组合物的储器容积可以为0.1至50ml。

[0455] 连续给予也可以通过佩戴在皮肤上的贴片经皮给予,并且以一定间隔进行更换。本领域技术人员知道适用于该目的的用于药物递送的贴片系统。值得注意的是,经皮给予尤其适合于不间断给予,因为第一用尽的贴片的更换可以有利地与在将新的第二贴片放置在例如紧邻第一用尽的贴片的皮肤表面上的同时并在即将移除第一用尽的贴片之前来完成。不会出现流动中断或电池故障的问题。

[0456] 如果已将药物组合物冻干,则在给予之前首先将冻干物质在适当液体中重配。可以将冻干物质在例如抑菌注射用水(BWFI)、生理盐水、磷酸盐缓冲盐水(PBS)或与冷冻干燥前蛋白质所处的相同配制品中重配。

[0457] 本发明的组合物能以合适的剂量给予至受试者,该剂量可以例如通过向非黑猩猩灵长类动物(例如猕猴)给予增加剂量的表现出本文所述的种间特异性的本发明的抗体构建体通过剂量递增研究来确定。如上所述,表现出本文所述的跨物种特异性的本发明的抗体构建体可以有利地以相同形式用于非黑猩猩灵长类动物的临床前测试并且作为药物用于人类中。剂量方案将由主治医师和临床因素决定。如在医学领域中熟知的,任何一个患者的剂量取决于许多因素,包括患者体型、体表面积、年龄、待给予的具体化合物、性别、给予时间和途径、一般健康状况和同时给予的其他药物。

[0458] 术语“有效剂量(effective dose或effective dosage)”定义为足以实现或至少部分实现所希望效应的量。术语“治疗有效剂量”定义为足以治愈或至少部分阻止已罹患疾病的患者的疾病及其并发症的量。对此用途有效的量或剂量将取决于要治疗的病状(适应症)、递送的抗体构建体、治疗背景和目标、疾病的严重程度、先前疗法、患者的临床病史和对治疗剂的应答、给予途径、患者的体型(体重、体表或器官大小)和/或病状(年龄和一般健康状况)以及患者自体免疫系统的一般状态。可以根据主治医师的判断调整适当的剂量,以使得它可以一次给予至患者或经一系列给予而给予至患者,并且以便获得最佳治疗效应。

[0459] 根据上文提及的因素,典型的剂量范围可以为约0.1 μ g/kg至高达约30mg/kg或更多。在具体的实施例中,剂量范围可以为1.0 μ g/kg至约20mg/kg、任选地10 μ g/kg至约10mg/kg或100 μ g/kg至约5mg/kg。

[0460] 本发明的抗体构建体的治疗有效量优选导致疾病症状严重程度降低、无疾病症状期的频率或持续时间增加或预防由于疾病折磨而产生的损害或残疾。为了治疗表达靶细胞抗原的肿瘤,本发明的抗体构建体的治疗有效量,例如抗靶细胞抗原/抗CD3抗体构建体,相对于未治疗的患者优选地抑制细胞生长或肿瘤生长至少约20%、至少约40%、至少约50%、至少约60%、至少约70%、至少约80%、或至少约90%。可以在预测功效的动物模型中评价化合物抑制肿瘤生长的能力。

[0461] 药物组合物可以作为单独的治疗剂或与另外的疗法(如视需要的抗癌疗法,例如其他蛋白质和非蛋白质药物)组合给予。这些药物可以与包含如本文定义的本发明的抗体构建体的组合物同时给予,或者在给予所述抗体构建体之前或之后以时间限定间隔和剂量分开给予。

[0462] 如本文使用的,术语“有效且无毒的剂量”是指本发明抗体构建体的可耐受剂量,该可耐受剂量足够高以引起病理性细胞消耗、肿瘤消除、肿瘤缩小或疾病稳定,而没有或基

本上没有主要毒性效应。这种有效且无毒的剂量可以例如通过本领域中描述的剂量递增研究来确定,并且应低于诱导严重不良副作用事件的剂量(剂量限制毒性,DLT)。

[0463] 如本文使用的,术语“毒性”是指在不良事件或严重不良事件中表现的药物的毒性效应。这些副作用事件可能是指给予后缺乏系统性药物耐受性和/或缺乏局部耐受性。毒性还可能包括由药物引起的致畸或致癌效应。

[0464] 如本文使用的,术语“安全性”、“体内安全性”或“耐受性”定义了药物的给予而在给予后未立即诱导严重不良事件(局部耐受性)以及在药物的较长给予时段期间未诱导严重不良事件。例如,可以在治疗和随访期期间以例如有规律的间隔评价“安全性”、“体内安全性”或“耐受性”。测量包括临床评价,例如器官表现,以及实验室异常的筛选。可以进行临床评价,并且根据NCI-CTC和/或MedDRA标准记录/编码与正常发现的偏差。器官表现可以包括如过敏/免疫学、血液/骨髓、心律失常、凝血等的标准,如例如不良事件的通用术语标准v3.0(CTCAE)中所述的。可以测试的实验室参数包括例如血液学、临床化学、凝血曲线和尿液分析以及其他体液(如血清、血浆、淋巴或脊髓液、液体等)的检查。因此安全性可以通过例如身体检查、成像技术(即超声波、x射线、CT扫描、磁共振成像(MRI)、其他具有技术装置的措施(即心电图术)、生命体征、通过测量实验室参数和记录不良事件来评估。例如,根据本发明的用途和方法中非黑猩猩灵长类动物中的不良事件可以通过组织病理学和/或组织化学方法进行检查。

[0465] 上述术语也在以下中提及:例如Preclinical safety evaluation of biotechnology-derived pharmaceuticals S6[生物技术衍生药物的临床前安全性评价S6];ICH Harmonised Tripartite Guideline[ICH三方协调指南];ICH Steering Committee meeting on July 16,1997[1997年7月16日的ICH指导委员会会议]。

[0466] 最后,本发明提供了试剂盒,该试剂盒包含本发明的抗体构建体或根据本发明的方法产生的抗体构建体、本发明的药物组合物、本发明的多核苷酸、本发明的载体和/或本发明的宿主细胞。

[0467] 在本发明的上下文中,术语“试剂盒”意指两种或更多种组分(其中一种对应于本发明的抗体构建体、药物组合物、载体或宿主细胞)一起包装在容器、接受器或其他中。因此,试剂盒可以被描述为足以实现某一目标的一组产品和/或器具,其可以作为单一单元销售。

[0468] 试剂盒可以包括一个或多个具有任何适当形状、大小和材料(优选防水的,例如塑料或玻璃)的接受器(如小瓶、安瓿、容器、注射器、小瓶、袋),该一个或多个接收器含有适于给予的剂量的本发明的抗体构建体或药物组合物(参见上文)。试剂盒可以另外含有使用说明(例如呈小册子或说明手册的形式)、用于给予本发明的抗体构建体的手段(如注射器、泵、输注器等)、用于重配本发明的抗体构建体的手段和/或用于稀释本发明的抗体构建体的手段。

[0469] 本发明还提供了用于单剂量给予单元的试剂盒。本发明的试剂盒还可以含有包含干燥/冻干的抗体构建体的第一接受器和包含水性配制品的第二接受器。在本发明的某些实施例中,提供了含有单室和多室预填充注射器(例如液体注射器和冻干注射器)的试剂盒。

[0470] 本发明的药物组合物进一步包含缓冲剂,其可选自下组,该组由以下组成:磷酸钾、乙酸/乙酸钠、柠檬酸/柠檬酸钠、琥珀酸/琥珀酸钠、酒石酸/酒石酸钠、组氨酸/组氨酸HCl、甘氨酸、Tris、谷氨酸、乙酸盐及其混合物,并特别地选自磷酸钾、柠檬酸/柠檬酸钠、琥

珀酸、组氨酸、谷氨酸、乙酸盐及其组合。

[0471] 合适的缓冲剂浓度涵盖约200mM或更低的浓度,例如约190、180、170、160、150、140、130、120、110、100、80、70、60、50、40、30、20、10或5mM。技术人员将能够容易地调整缓冲剂浓度以提供如本文所述的药物组合物的稳定性。本发明药物组合中设想的缓冲剂浓度具体范围从约5至约200mM,优选从约5至约100mM,更优选从约10至约50mM。

[0472] 如本文使用的,术语“药物组合物”涉及适于向有需要的受试者给予的组合物。术语“受试者”或“个体”或“动物”或“患者”在本文中可互换地使用,是指任何希望给予本发明药物组合物的受试者,特别是哺乳动物受试者。哺乳动物受试者包括人、非人灵长类动物、狗、猫、豚鼠、兔、大鼠、小鼠、马、牛、母牛等,优选人。本发明的药物组合物是稳定的和药学上可接受的,即能够引发所希望的治疗效果,而不会在给予药物组合物的受试者中引起任何不希望的局部或全身性作用。本发明的药学上可接受的组合物可以特别是无菌的和/或药学上惰性的。具体地,术语“药学上可接受的”可以意指由管理机构或其他受普遍承认的药典批准在动物中使用,并且更特别地在人中使用。

[0473] 本发明的药物组合物包含一种或多种本文所述的双特异性单链抗体构建体,优选以治疗有效量, β -环糊精和缓冲剂。“治疗有效量”是指所述构建体引发所希望的治疗效果的量。治疗效果和毒性可以通过标准药物方法在细胞培养物或实验性动物中,例如ED50(在50%群体中治疗有效的剂量)和LD50(对50%群体致死的剂量)来确定。治疗和毒性作用之间的剂量比为治疗指数,并且它能以ED50/LD50比表示。通常展现出大治疗指数的药物组合物是优选的。

[0474] 组合物可包含如前所述的 β -环糊精和缓冲剂。药物组合物可任选地包含一种或多种另外的赋形剂,只要它们不降低或消除其如本文所述的有利特性,并特别是其稳定性。

[0475] 赋形剂在本发明中可用于多种目的,如调整配制品的物理、化学或生物特性,如调整粘度和或本发明的方法以进一步改善有效性和或进一步稳定此类配制品和方法,以防止由于例如在制造、运输、存储、使用前准备、给予和之后过程中发生的压力而导致的降解和腐坏。术语“赋形剂”通常包括填充剂、粘合剂、崩解剂、包衣、吸附剂、抗粘附剂、助流剂、防腐剂、抗氧化剂、调味剂、着色剂、甜味剂、溶剂、共溶剂、缓冲剂、螯合剂、粘度赋予剂、表面活性剂、稀释剂、保湿剂、载体、稀释剂、防腐剂、乳化剂、稳定剂和张力调节剂。

[0476] 对于本领域技术人员来说明显的是,例如,药物组合物的不同赋形剂(例如,上文列出的那些)可以具有不同的效应,并且氨基酸可以充当缓冲剂、稳定剂和/或抗氧化剂;甘露醇可以充当膨胀剂和/或张力增强剂;氯化钠可以充当递送媒介物和/或张力增强剂;等。

[0477] 多元醇在液体和冻干配制品中都是有用的稳定剂,以保护蛋白质免受物理和化学降解过程的影响,并且还可用于调整配制品的张力。多元醇包括糖,例如甘露醇、蔗糖和山梨醇以及多元醇,如例如甘油和丙二醇,并且出于本文论述的目的,包括聚乙二醇(PEG)和相关物质。甘露醇通常用于确保在冻干配制品中饼的结构稳定性。它确保了饼的结构稳定性。它通常与冻干保护剂(例如蔗糖)一起使用。山梨醇和蔗糖是用于调整张力且作为稳定剂以防止在运输过程中的冷冻-解冻应力或防止在制造过程中制备团块的常用药剂。PEG可用于稳定蛋白质并作为冷冻保护剂。

[0478] 常规使用表面活性剂来防止、最小化或减少表面吸附。蛋白质分子可易于吸附在表面上,并且变性以及随后在空气-液体、固体-液体和液体-液体界面处聚集。这些效应通常与蛋白质浓度成反比。这些有害的相互作用通常与蛋白质浓度成反比,并且典型地因物

理振荡(如在产品运输和处理过程中产生的物理振荡)而加剧。常用的表面活性剂包括聚山梨醇酯20、聚山梨醇酯80、脱水山梨醇聚乙氧基化物的其他脂肪酸酯、以及泊洛沙姆188。表面活性剂也常用于控制蛋白质构象稳定性。在这方面使用表面活性剂是蛋白质特异性的,因为任何给定的表面活性剂典型地会稳定一些蛋白质并使其他蛋白质不稳定。

[0479] 聚山梨醇酯易于氧化降解,并且通常在供应时含有足够量的过氧化物以引起蛋白质残基侧链,尤其是甲硫氨酸的氧化。因此,应谨慎使用聚山梨醇酯,并且在使用时应以其最低有效浓度使用。

[0480] 通过保持适当水平的环境氧气和温度并避免暴露于光下,抗氧化剂可以在某种程度上防止药物配制品中蛋白质的有害氧化。也可以使用抗氧化赋形剂来防止蛋白质的氧化降解。在这方面,有用的抗氧化剂是还原剂、氧/自由基清除剂和螯合剂。用于治疗性蛋白质配制品中的抗氧化剂优选是水溶性的并且在整个产品的储存寿命内保持其活性。EDTA是有用实例。

[0481] 金属离子可以充当蛋白质辅因子并且能够形成蛋白质配位复合物。金属离子也可以抑制降解蛋白质的一些过程。然而,金属离子也催化降解蛋白质的物理和化学过程。镁离子(10-120mM)可用于抑制天冬氨酸异构化为异天冬氨酸。 Ca^{+2} 离子(高达100mM)可以增加人脱氧核糖核酸酶的稳定性。然而, Mg^{+2} 、 Mn^{+2} 和 Zn^{+2} 可以使rhDNase不稳定。类似地, Ca^{+2} 和 Sr^{+2} 可以稳定因子VIII,它可以因 Mg^{+2} 、 Mn^{+2} 和 Zn^{+2} 、 Cu^{+2} 和 Fe^{+2} 去稳定,并且其聚集可以通过 Al^{+3} 离子增加。

[0482] 防腐剂具有抑制微生物生长和在药物产品的整个保质期或使用期间内确保产品无菌的主要功能,并且特别是多剂量配制品所需的。常用的防腐剂包括苯甲醇、苯酚和间甲酚。尽管防腐剂在小分子肠胃外使用方面有着悠久的历史,但包含防腐剂的蛋白质配制品的开发可能具有挑战性。防腐剂几乎总是对蛋白质具有不稳定效应(聚集),并且这已成为限制其在蛋白质配制品中使用的主要因素。迄今为止,大部分蛋白质药物仅配制用于一次性使用。然而,当多剂量配制品是可能时,它们具有使患者方便的附加优势和增加的可销售性。一个好的实例是人生长激素(hGH),其中防腐配制品的开发已经导致更方便、多次使用的注射笔展示的商业化。

[0483] 正如可以预期的那样,含有防腐剂的液体配制品的开发比冻干配制品更具挑战性。冷冻干燥的产品可以在没有防腐剂的情况下冻干,并且在使用时用含有防腐剂的稀释剂重配。这缩短了防腐剂与蛋白质接触的时间,从而显著最小化相关的稳定性风险。在液体配制品的情况下,应在整个产品保质期(约18至24个月)内保持防腐剂有效性和稳定性。要指出的重要点是,防腐剂有效性应在含有活性药物和所有赋形剂组分的最终配制品中得到证实。

[0484] 根据本发明,可以使用盐以例如调整药物配制品的离子强度和/或等渗性和/或进一步改善抗体构建体或其他成分的溶解度和/或物理稳定性。众所周知,离子可以通过与蛋白质表面上的带电荷的残基结合并通过屏蔽蛋白质中的带电荷基团和极性基团并降低其静电相互作用、吸引和排斥相互作用的强度来稳定蛋白质的天然状态。离子还可以通过特别地与蛋白质的变性肽键($-\text{CONH}$)结合来稳定蛋白质的变性状态。此外,与蛋白质中的带电荷基团和极性基团的离子相互作用还可以减少分子间静电相互作用,并且从而防止或减少蛋白质聚集和不溶解。离子种类对蛋白质的作用不同。已经开发了多种对可用于配制根据本发明的药物组合物的离子及其对蛋白质的作用的分类评级。一个实例是Hofmeister系

列,该系列通过对溶液中蛋白质的构象稳定性的作用来对离子和极性非离子溶质进行评级。稳定溶质称为“亲液的”。不稳定溶质称为“离液的”。通常使用高浓度的亲液剂(例如,>1摩尔硫酸铵)以从溶液中沉淀蛋白质(“盐析”)。通常使用离液剂来使蛋白质变性和/或溶解(“盐溶”)。离子对“盐溶”和“盐析”的相对有效性限定了其在Hofmeister系列中的位置。

[0485] 游离氨基酸可在药物组合物中作为膨胀剂、稳定剂和抗氧化剂以及其他标准用途。赖氨酸、脯氨酸、丝氨酸和丙氨酸可用于稳定配制品中的蛋白质。甘氨酸可用于冻干以确保正确的饼结构和特性。在液体配制品和冻干配制品两者中,精氨酸均可用于抑制蛋白质聚集。蛋氨酸可用作抗氧化剂。

[0486] 用于配制药物组合物的特别有用的赋形剂包括蔗糖、海藻糖、甘露醇、山梨醇、精氨酸、赖氨酸、聚山梨醇酯20、聚山梨醇酯80、泊洛沙姆188、普朗尼克及其组合。所述赋形剂能以不同的浓度存在于药物组合物中,只要该组合物表现出如本文举例说明的所需特性,并特别是促进所含双特异性单链抗体构建体的稳定化。例如,蔗糖能以2% (w/v) 至12% (w/v) 的浓度存在于药物组合物中,即浓度为12% (w/v)、11% (w/v)、10% (w/v)、9% (w/v)、8% (w/v)、7% (w/v)、6% (w/v)、5% (w/v)、4% (w/v)、3% (w/v) 或2% (w/v)。优选的蔗糖浓度范围为4% (w/v) 至10% (w/v)、并且更优选为6% (w/v) 至10% (w/v)。聚山梨醇酯80能以0.001% (w/v) 至0.5% (w/v) 的浓度存在于药物组合物中,即浓度为0.5% (w/v)、0.2% (w/v)、0.1% (w/v)、0.08% (w/v)、0.05% (w/v)、0.02% (w/v)、0.01% (w/v)、0.008% (w/v)、0.005% (w/v)、0.002% (w/v) 或0.001% (w/v)。优选的聚山梨醇酯80浓度范围为0.002% (w/v) 至0.5% (w/v)、并且优选为0.005% (w/v) 至0.02% (w/v)。

[0487] 用于配制药物组合物的有用的防腐剂通常包括抗微生物剂(例如抗细菌剂或抗真菌剂)、抗氧化剂、螯合剂、惰性气体等;实例是:苯扎氯铵、苯甲酸、水杨酸、硫柳汞、苯乙醇、对羟基苯甲酸甲酯、对羟基苯甲酸丙酯、氯己定、山梨酸或过氧化氢。抗微生物防腐剂是用来通过减少微生物繁殖来延长药物保质期的物质。特别适用于配制本发明药物组合物的防腐剂包括苯甲醇、氯丁醇、苯酚、间甲酚、对羟基苯甲酸甲酯、苯氧基乙醇、对羟基苯甲酸丙酯硫柳汞。这些防腐剂的结构和典型使用浓度描述于Meyer等人J Pharm Sci.[药物科学杂志]96(12),3155的表1中。

[0488] 上述防腐剂能以不同的浓度存在于药物组合物中。例如,苯甲醇能以0.2与1.1% (v/v) 之间的浓度范围存在,氯丁醇的浓度范围为0.3-0.5% (v/v),苯酚的浓度范围为0.07与0.5% (v/v) 之间,间甲酚的浓度范围为0.17-0.32% (v/v) 或硫柳汞的浓度范围为0.003-0.01% (v/v)。对羟基苯甲酸甲酯的优选浓度在0.05-0.5% (v/v) 的范围内,苯氧乙醇在0.1-3% (v/v) 的范围内,并且对羟基苯甲酸丙酯在0.05-0.5% (v/v) 的范围内。

[0489] 然而,还可以想到药物组合物不包含任何防腐剂。特别地,本发明尤其提供不含防腐剂的药物组合物,该药物组合物包含浓度为约0.5mg/ml的双特异性单链抗体构建体、浓度为约1% (w/v) 的磺基丁基醚- β -环糊精钠盐、浓度为约10mM的磷酸钾、以及另外的浓度为约8% (w/v) 的蔗糖和浓度为约为0.01% (w/v) 的聚山梨醇酯80,pH为约6.0。

[0490] 本发明的药物组合物能以多种形式配制,例如,以固体、液体、冷冻、气体或冻干形式,并且尤其可以是软膏、乳膏、透皮贴剂、凝胶、粉末、片剂、溶液,气溶胶、颗粒、丸剂、悬浮液、乳液、胶囊、糖浆、液体、酞剂、提取物、酞剂或流体提取物形式。

[0491] 一般来讲,对于本发明的药物组合物,可以想到多种储存和/或剂型,这取决于预

期的给予途径、递送型式和所希望的剂量(参见,例如,Remington's Pharmaceutical Sciences[雷明顿药物科学],第22版,Oslo,A.,编辑,(2012))。技术人员将意识到,特定剂型的这种选择可以例如影响本发明的抗体构建体的物理状态、稳定性、体内释放速率和体内清除速率。

[0492] 例如,药物组合物中的主要媒介物或载体在自然界中可以是水性或非水性的。合适的媒介物或载体可以是注射用水、生理盐水溶液或人造脑脊液,可能补充有组合物中常见的用于肠胃外给予的其他物质。中性缓冲盐水或与血清白蛋白混合的盐水是另外的示例性媒介物。

[0493] 当考虑肠胃外给予时,本发明的治疗组合物能以无热原的、肠胃外可接受的水性溶液的形式提供,该水性溶液在药学上可接受的媒介物中包含所希望的抗体构建体。用于肠胃外注射的特别合适的媒介物是无菌蒸馏水,其中将抗体构建体配制成适当保存的无菌等渗溶液。该制备可以涉及用可以提供产物(该产物可以经由储库注射来递送)的控制或持续释放的药剂(如可注射微球体、生物可侵蚀颗粒、聚合物化合物(如聚乳酸或聚乙醇酸)、珠粒或脂质体)配制所希望分子。也可以使用透明质酸,该透明质酸具有促进循环持续时间的作用。可植入药物递送装置可用于引入所希望的抗体构建体。

[0494] 本文还设想了持续或控制递送/释放配制品。用于配制各种其他持续或控制递送方式的技术(如脂质体载剂、生物可侵蚀微粒或多孔珠粒和储库注射)也是本领域技术人员已知的。参见,例如国际专利申请号PCT/US93/00829,其描述了用于递送药物组合物的多孔聚合物微粒的控制释放。持续释放制剂可以包括呈成型制品(例如膜或微胶囊)形式的半透性聚合物基质。持续释放基质可包括聚酯、水凝胶、聚交酯(如美国专利号3,773,919和欧洲专利申请公开号EP 058481中所披露的)、L-谷氨酸和 γ -谷氨酸乙酯的共聚物(Sidman等人,1983,Biopolymers[生物聚合物]2:547-556)、聚(2-羟乙基-甲基丙烯酸酯)(Langer等人,1981,J.Biomed.Res.[生物医学材料研究]15:167-277和Langer,1982,Chem.Tech.[化学技术]12:98-105)、乙烯乙酸乙烯酯(Langer等人,1981,同上)或聚-D(-)-3-羟基丁酸(欧洲专利申请公开号EP 133,988)。持续释放组合物还可以包括可以通过本领域中已知的若干种方法中的任一种制备的脂质体。参见,例如Eppstein等人,1985,Proc.Natl.Acad.Sci.U.S.A.[美国国家科学院院刊]82:3688-3692;欧洲专利申请公开号EP 036,676;EP 088,046和EP 143,949。也可以将抗体构建体包埋在例如通过凝聚技术或通过界面聚合制备的微胶囊(例如分别为羟甲基纤维素或明胶-微胶囊和聚(甲基丙烯酸甲酯)微胶囊)中,包埋在胶体药物递送系统(例如脂质体、白蛋白微球、微乳液、纳米颗粒和纳米胶囊)中或包埋在粗滴乳状液中。此类技术披露于Remington's Pharmaceutical Sciences[雷明登氏药学全书],第22版,Oslo,A.编辑,(2012)中。

[0495] 用于体内给予的药物组合物典型地以无菌制剂提供。灭菌可以通过无菌滤膜过滤完成。当将组合物冻干时,可以在冻干和重配之前或之后使用该方法进行灭菌。用于肠胃外给予的组合物能以冻干形式或于溶液中储存。通常将肠胃外组合物置入具有无菌进出口的容器(例如具有可由皮下注射针刺穿的塞子的静脉内溶液袋或小瓶)中。

[0496] 本文披露的抗体构建体也可以配制为免疫脂质体。“脂质体”是由各种类型的脂质、磷脂和/或表面活性剂构成的小囊泡,该小囊泡可用于将药物递送至哺乳动物。脂质体的组分通常以双层形式排列,类似于生物膜的脂质排列。含有抗体构建体的脂质体通过本

领域已知的方法制备,如Epstein等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊],82:3688(1985);Hwang等人,Proc.Natl.Acad.Sci.USA[美国国家科学院院刊],77:4030(1980);美国专利号4,485,045和4,544,545;以及W0 97/38731中所述。具有延长的循环时间的脂质体披露于美国专利号5,013,556中。特别有用的脂质体可以通过反相蒸发方法用包含磷脂酰胆碱、胆固醇和PEG衍生化磷脂酰乙醇胺(PEG-PE)的脂质组合物产生。使脂质体挤出通过具有限定孔径的滤器以产生具有所希望的直径的脂质体。本发明的抗体构建体的Fab'片段可以与脂质体经由二硫键交换反应缀合,如Martin等人J.Biol.Chem.[生物化学杂志]257:286-288(1982)中所述。化学治疗剂任选地包含在脂质体内。参见Gabizon等人J.National Cancer Inst.[国家癌症研究所杂志]81(19)1484(1989)。

[0497] 设想除了本文定义的双特异性单链抗体构建体外,本发明的组合物还可以包含另外的生物活性剂,这取决于组合物的预期用途。这些药剂可能特别是作用于肿瘤和/或恶性细胞的药物,但是取决于药物组合物的预期用途,也可以想到其它活性剂,这些用途包括作用于胃肠系统的药剂、抑制免疫反应的药物(例如皮质类固醇)、调节炎症应答的药物、作用于循环系统的药物和/或本领域中已知的药剂如细胞因子。还设想将本发明的药物组合物应用于共疗法中,即与另一种抗癌药物组合。

[0498] 一旦配制了药物组合物,可以将它作为溶液、悬浮液、凝胶、乳液、固体、晶体或作为脱水或冻干粉末储存在无菌小瓶中。此类配制品能以即用形式或以在给予前重配的形式(例如冻干形式)储存。例如,可以将冻干组合物在例如抑菌注射用水(BWFI)、生理盐水、磷酸盐缓冲盐水(PBS)或与冷冻干燥前蛋白质所处的相同配制品中重配。

[0499] 本发明的药物组合物通常可以配制成通过任何合适的给予途径递送。在本发明的上下文中,给予途径包括但不限于局部途径(例如表皮、吸入、鼻、眼、耳(auricular/aural)、阴道、黏膜);肠内途径(例如口服、胃肠、舌下、唇下、颊、直肠);和肠胃外途径(例如静脉内、动脉内、骨内、肌内、脑内、脑室内、硬膜外、鞘内、皮下、腹膜内、羊膜外、关节内、心内、真皮内、病灶内、子宫内、膀胱内、玻璃体内、经皮、鼻内、经黏膜、滑膜内、管腔内)。

[0500] 本文所述的药物组合物可特别用于肠胃外给予,例如皮下或静脉内递送,例如通过注射如弹丸注射,或通过输注如连续输注。药物组合物可以使用医疗装置来给予。用于给予药物组合物的医疗装置的实例描述在美国专利号4,475,196;4,439,196;4,447,224;4,447,233;4,486,194;4,487,603;4,596,556;4,790,824;4,941,880;5,064,413;5,312,335;5,312,335;5,383,851;和5,399,163中。

[0501] 本发明的药物组合物也可以不间断地给予。作为非限制性实例,可以通过患者佩戴的用于计量抗体构建体进入患者体内的流入的小型泵系统来实现不间断或实质上不间断(即连续)的给予。药物组合物可以通过使用所述泵系统给予。此类泵系统在本领域中通常是已知的,并且通常依赖于含有要输注的治疗剂的药筒的定期更换。当更换这种泵系统中的药筒时,可能导致原本不间断地流入患者体内的治疗剂的暂时中断。在这种情况下,药筒替换之前的给予阶段和药筒替换之后的给予阶段仍将被认为在药物手段的含义内,并且本发明的方法一起构成这种治疗剂的一次“不间断给予”。

[0502] 本发明的药物组合物的连续或不间断给予可以通过流体递送装置或小型泵系统进行静脉内或皮下给予,该流体递送装置或小型泵系统包括用于将流体驱出储器的流体驱动机构和用于致动驱动机构的致动机构。用于皮下给予的泵系统可以包括用于穿透患者皮

肤并将合适的组合物递送到患者体内的针或套管。所述泵系统可以独立于静脉、动脉或血管而直接固定或连接到患者皮肤,从而允许泵系统与患者皮肤直接接触。泵系统可以连接到患者皮肤24小时至数天。泵系统可能尺寸较小,具有小容积的储器。作为非限制性实例,待给予的合适的药物组合物的储器容积可以为0.1至50ml。

[0503] 连续给予也可以通过佩戴在皮肤上的贴片经皮给予,并且以一定间隔进行更换来实现。本领域技术人员知道适用于该目的的用于药物递送的贴片系统。值得注意的是,经皮给予尤其适合于不间断给予,因为第一用尽的贴片的更换可以有利地与在将新的第二贴片放置在例如紧邻第一用尽的贴片的皮肤表面上的同时并在即将移除第一用尽的贴片之前来完成。不会出现流动中断或电池故障的问题。

[0504] 技术人员将容易理解,本发明的药物组合物通常可以包含任何上述赋形剂或另外的活性剂,或者能以任何合适的形式提供,只要它是稳定的并且优选表现出与已在所附实例中评估的包含 β -环糊精的药物组合物相同的有利特性。技术人员将能够容易地调整各种组分,以便提供稳定的药物组合物,即优选基本上不含包含在其中的双特异性单链抗体片段的聚集体和/或构象异构体。

[0505] *****

[0506] 必须注意的是,除非上下文另有明确说明,否则如本文使用的,单数形式“一(a)”,“一(an)”和“所述”包括复数个指示物。因此,例如,对“一种试剂”的提及包括此类不同试剂中的一种或多种,并且对“所述方法”的提及包括提及本领域普通技术人员已知的可以修改或取代本文所述的方法的等效步骤和方法。

[0507] 除非另外指明,否则在一系列元素前面的术语“至少”应被理解为指该系列中的每一个元素。本领域技术人员仅使用常规实验就将认识到或能够确定本文所述的本发明的具体实施例的许多等效物。此类等效物旨在涵盖在本发明中。

[0508] 术语“和/或”在本文使用时包括“和”、“或”和“由所述术语连接的元素的全部或任何其他组合”的含义。

[0509] 如本文使用的,术语“约”或“大约”意指在给定值或范围的20%内、优选在10%内、并且更优选在5%内。然而,它也包括明确数字,例如约20包括20。

[0510] 术语“小于”或“大于”包括明确数字。例如,小于20意指小于或等于。类似地,多于或大于分别意指多于或等于/或大于或等于。

[0511] 贯穿本说明书及其后的权利要求书,除非上下文另有要求,否则词语“包含(comprise)”以及变型如“包含(comprises)”或“包含(comprising)”应当被理解成隐含包括所述整数或步骤或者整数或步骤的组,但不排除任何其他整数或步骤或者整数或步骤的组。当在本文中使用时,术语“包含(comprising)”可以用术语“含有(containing)”或“包括(including)”来取代,或者有时在本文中使用时用术语“具有(having)”取代。

[0512] 如本文使用的,“由……组成”排除了在权利要求元素中未指定的任何元素、步骤或成分。如本文使用的,“基本上由……组成”并不排除不实质性地影响权利要求的基本和新颖特征的材料或步骤。

[0513] 在本文的每种情况下,术语“包含”、“基本上由……组成”和“由……组成”中的任一者都可以用另外两个术语中的任一个来替换。

[0514] 应理解,本发明不限于本文所述的特定方法、方案、材料、试剂和物质等,并且因此

可以变化。本文使用的术语仅用于描述特定实施例的目的,而不打算限制仅由权利要求限定的本发明的范围。

[0515] 本说明书全文中引用的所有出版物和专利(包括所有专利、专利申请、科学出版物、制造商的说明书、说明书等),无论是上文还是下文,均通过引用整体并入文中。本文没有任何内容应解释为承认本发明无权由于先前发明而早于这些披露内容。通过引用并入的材料在一定程度上与本说明书发生冲突或不一致时,本说明书将替代任何此类材料。

[0516] 将从以下实例中获得对本发明及其优点的更好理解,这些实例仅用于说明目的。这些实例并不打算以任何方式限制本发明的范围。

[0517] 实例

[0518] 实例1

[0519] Canonical EGFRvIII **BiTE®**抗体构建体分别在pH 7.0或pH 4.0的缓冲溶液中进行并DSC。抗体构建体的DSC熔融温度作为单一熔融事件获得。在pH 7下, T_m 为65℃,而在pH 4下, T_m 为59.5℃,即低于中性介质(参见图3中的热谱图)。一般来讲,较高的 T_m 代表化合物的较高稳定性。

[0520] 实例2

[0521] 将含有分别具有针对CDH19、EGFRvIII、CD33和CD19的第一靶结构域的纯化的典型或scFc提供的BiTE抗体构建体的预配制药物质通过超滤/渗滤使用截留分子量(MWCO)为10kDa的膜进行缓冲剂交换。通过添加浓缩的储备溶液实现最终配制品。每种构建体的所得配制品是K60RTrT和G40MSuT,K60RTrT由20mM磷酸钾、150mM L-精氨酸盐酸盐、6% (w/v) 海藻糖二水合物、0.01% (w/v) 聚山梨醇酯80 (pH 6.0) 组成,G40MSuT由10mM谷氨酸、4% (w/v) 甘露醇、2% (w/v) 蔗糖、0.01% (w/v) 聚山梨醇酯80 (pH 4.0) 组成。蛋白质浓度总计为1.0mg/mL。向1950μL每种测试溶液中加入50μL 1000ppm硅标准溶液(来自阿法埃莎(AlfaAesar)的光谱纯(Specpure),产品编号38717),导致25ppm掺入。将未掺入的测试溶液用作对照样品。将掺入的测试溶液以及对照样品填充到3cc I型玻璃小瓶中,并在37℃下孵育24小时。通过SE-UPLC分析所有样品以量化HMWS的量。结果,图4(a)显示相比于pH6,在pH4中测量的CDH19 scFc抗体构建体的高分子量物质的百分比。在较低的pH 4.0下可见较低的聚集。图4(b)显示在4℃(时间点T0、2w、4w)、25℃(T0、1w、2w、4w)和37℃(T0、1w、2w、4w)下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的主峰百分比:G4SuT包含10mM谷氨酸、9% (w/v) 蔗糖、0.01% 聚山梨醇酯80,G4TrT包含10mM谷氨酸、9% (w/v) 海藻糖、0.01% 聚山梨醇酯80,G4MSuT包含10mM谷氨酸、4% (w/v) 甘露醇、2% 蔗糖、0.01% 聚山梨醇酯80。在pH 4下证明了稳定性。将相应抗体构建体配制品储存在各种条件下以进行稳定性监测。图4(c)显示了在-20℃(T0、4w)下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的主峰百分比。图4(d)显示了在4℃(T0、2w、4w)、25℃(T0、1w、2w、4w)和37℃(T0、1w、2w、4w)下在三种不同配制品中通过SEC测量的CDH19 scFc BiTE的高分子量(HMW)峰的百分比:G4SuT、G4TrT和G4MSuT。图4(e)显示了在-20℃(T0、4w)下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的HMW峰百分比。图4(f)显示了在4℃(T0、2w、4w)、25℃(T0、1w、2w、4w)和37℃(T0、1w、2w、4w)下在三种不同配制品-G4SuT、G4TrT和G4MSuT中通过SEC测量的CDH19 scFc BiTE的低分子量峰的百分比。图5显示了6个月后测量的pH范围4至7的各种缓冲剂中EGFRvIII非scFc抗体

构建体的主峰百分比。在pH 4.0下,抗体构建体具有最高的主峰百分比。图6: (a) 显示了在4℃下在不同配制品中不同浓度的CD33-scFc抗体构建体的主峰百分比。“ccHFC”代表特异性修饰的cys-夹紧的scFc结构域(cys-clamed scFc domain)。低pH配制品始终具有较高的单体物质。(b) 显示了在25℃下在不同配制品中不同浓度的CD33-scFc抗体构建体的主峰百分比。“ccHFC”代表特异性修饰的cys-声称的scFc结构域。低pH配制品始终具有较高的单体物质。图7: 如通过SEC测量的典型(非HLE) CD19xCD3 BiTE®抗体构建体在T0、7天、14天和1个月时的聚集百分比作为pH的函数。该图表明,在低pH下,聚集量显著降低。

[0522] 实例3: EGFRvIII BiTE®抗体构建体使用固定化金属亲和色谱(IMAC), 然后通过尺寸排阻色谱(SEC)进行纯化。SEC洗脱液在pH 5.0下在20mM柠檬酸和2% (w/v) 海藻糖二水合物中含有0.43mg/mL EGFRvIII。将材料分成三个级分。将第一级分保持在pH5.0下。将其其他级分的pH分别调整至6.0和7.0。将所有级分通过孔径0.2μm的过滤器过滤。最后通过添加浓缩的赋形剂储备溶液来配制每个级分。表4提供了最终配制品的概述。每种配制品中的EGFRvIII浓度等于0.1mg/mL。将配制品在2R I型玻璃小瓶中填充至1.0mL, 将该小瓶用丁基橡胶塞和铝翻盖密封件(aluminum flip off seal)封闭。

[0523] 表4: 测试配制品的概述。下面的计划代表了利用2(4-0)种不同配制品的四因素全因子实验设计。标有星号(*)的配制品代表实验设计的中心点, 并且已经一式三份制备。

[0524]

名称	氨基酸 (100 mM)	海藻糖二水合物 [% w/v]	聚山梨醇酯 80 [% w/v]	pH
A1	L-精氨酸HCl	2.0	0.002	5.0
A2	L-精氨酸HCl	10.0	0.002	5.0
A3	L-精氨酸HCl	2.0	0.018	5.0
A4	L-精氨酸HCl	10.0	0.018	5.0
A5	L-精氨酸HCl	2.0	0.002	7.0
A6	L-精氨酸HCl	10.0	0.002	7.0
A7	L-精氨酸HCl	2.0	0.018	7.0
A8	L-精氨酸HCl	10.0	0.018	7.0
A9*	L-精氨酸HCl	6.0	0.010	6.0
A10*	L-精氨酸HCl	6.0	0.010	6.0
A11*	L-精氨酸HCl	6.0	0.010	6.0
L1	L-赖氨酸HCl	2.0	0.002	5.0
L2	L-赖氨酸HCl	10.0	0.002	5.0
L3	L-赖氨酸HCl	2.0	0.018	5.0
L4	L-赖氨酸HCl	10.0	0.018	5.0
L5	L-赖氨酸HCl	2.0	0.002	7.0
L6	L-赖氨酸HCl	10.0	0.002	7.0
L7	L-赖氨酸HCl	2.0	0.018	7.0
L8	L-赖氨酸HCl	10.0	0.018	7.0
L9*	L-赖氨酸HCl	6.0	0.010	6.0
L10*	L-赖氨酸HCl	6.0	0.010	6.0
L11*	L-赖氨酸HCl	6.0	0.010	6.0

[0525] 将配制品在25℃下储存4天,然后通过350nm的光密度测量、尺寸排阻超高效色谱和弱阳离子交换(WCX)色谱进行分析。使用来自Tecan的Tecan Infinite M1000读板仪在96孔板中测量350nm下的光密度。聚集指数(AI)使用以下等式计算:

$$[0526] \quad AI = OD_{350nm} / (OD_{280nm} - OD_{350nm})$$

[0527] 应用SEC来确定每种配制品中高分子量物质(HMWS)的百分比含量和应激后的蛋白质浓度。使用Acquity UPLC BEH200 SEC 150mm柱(沃特斯公司(Waters))在Acquity H-Class UPLC系统(沃特斯公司(Waters))上进行SE-UPLC。将柱温设定为25℃。通过应用流速为0.4mL/min的等度方法实现尺寸变体的分离。流动相由100mM磷酸钠、250mM NaCl (pH 6.8)组成。运行时间总计6.0分钟。将样品在8℃下保持在自动进样器中直至分析。注射总量为3μg的蛋白质。为避免夹带,在每个样品后进行40%ACN的中间注射。检测基于荧光(280nm下激发,325nm下发射),用于HMWS的定量。为了确定蛋白质浓度,通过280nm下的光电二极管阵列(PDA)进行检测。使用Empower®软件进行峰积分。报道了HMWS曲线下的相对面积。

[0528] 使用Protein-Pak Hi Res CM 7μm柱(沃特斯公司(Waters))目录号186004929),在Acquity H-Class UPLC系统(沃特斯公司(Waters))上进行WCX色谱。将柱温设定为30℃。通过使用0.65mL/min的流速应用表5中所描绘的梯度方法来实现带电变体的分离。流动相A和B由20mM磷酸钠(pH 6.5)和20mM磷酸钠组成。

[0529] 表5:用于WCX色谱的梯度

[0530]

时间[min.]	%A	%B
初始	100	0
4.00	100	0
5.01	70	30
10.00	45	55
10.01	0	100
12.50	0	100
12.51	100	0
15.00	100	0

[0531] 将样品在8℃下保持在自动进样器中直至分析。将5μg蛋白质注射到柱上。用流动相A预稀释样品。为避免夹带,在每个样品后进行40%ACN的中间注射。检测基于荧光(Ex 280nm, Ex 325nm)。使用Empower®软件进行峰积分。报道了主峰(天然种类)的曲线下相对面积(AUC)。

[0532] Statistica软件(史丹索特公司(Statsoft))用于在统计上评估上述配制品参数对测量的聚集指数、HMWS的百分比含量、蛋白质浓度和WCX主峰的丰度的影响。图8描绘了预测值和合意性的分布。最佳配制品力求低聚集指数、低HMWS、高蛋白质浓度和高主峰百分比。如图8所示,通过使用L-精氨酸、高PS80浓度并在低pH值下配制,使合意性最大化。

[0533] 实例4

[0534] 使用蛋白质A,阳离子交换(CEX)和羟基磷灰石(HA)色谱纯化间皮素(MSLN)-scFc BiTE抗体构建体。然后使用超滤/渗滤(UFDF)预配制HA洗脱液。通过添加浓缩的赋形剂储备溶液来实现最终配制品。表6提供了测试配制品的概述。

[0535] 表6:测试配制品的概述

名称	配制品组成
G40MSuT-低	10 mM谷氨酸 4% (w/v) 甘露醇、2% (w/v) 蔗糖 0.01% (w/v) PS 80 pH 4.0 1.0 mg/mL MSLN-scFc
G40MSuT-高	10 mM谷氨酸 4% (w/v) 甘露醇、2% (w/v) 蔗糖 0.01% (w/v) PS 80 pH 4.0 5.0 mg/mL MSLN-scFc
K60TrT-低	20 mM磷酸钾 150 mM L-精氨酸HCl 6% (w/v) 海藻糖*2 H ₂ O 0.01% (w/v) PS 80 pH 6.0 1.0 mg/mL MSLN-scFc
K60TrT-高	20 mM磷酸钾 150 mM L-精氨酸HCl 6% (w/v) 海藻糖*2 H ₂ O 0.01% (w/v) PS 80 pH 6.0 5.0 mg/mL MSLN-scFc
K70LTrT-低	20 mM磷酸钾 75mM赖氨酸盐酸盐 4% (w/V) 海藻糖二水合物 0.01% (w/V) PS 80 pH 7.0 1.0 mg/mL MSLN-scFc
K70LTrT-高	20 mM磷酸钾 75mM赖氨酸盐酸盐 4% (w/V) 海藻糖二水合物
	0.01% (w/V) PS 80 pH 7.0 5.0 mg/mL MSLN-scFc

[0538] 将上述配制品在2R I型玻璃小瓶中填充至1.3mL,将该小瓶用丁基橡胶塞和铝翻盖密封件封闭。将配制品在-20℃、25℃和37℃下储存长达四周,在2℃-8℃下储存长达15周。在指定的时间点抽取样品。另外,将样品进行五次连续的冻融循环(20℃->-50℃->20℃,0.3K/min,在目标温度下保持1小时)。通过尺寸排阻超高效色谱(SE-UPLC)和肽作图(仅对于没有应激的样品和在37℃下储存的样品)分析样品。

[0539] 使用Acquity UPLC BEH200 SEC 150mm柱(沃特斯公司(Waters))在Acquity H-

Class UPLC系统(沃特斯公司(Waters))上进行SE-UPLC。将柱温设定为25℃。通过应用流速为0.4mL/min的等度方法实现尺寸变体的分离。流动相由100mM磷酸钠、250mM NaCl (pH 6.8) 组成。运行时间总计6.0分钟。将样品在8℃下保持在自动进样器中直至分析。注射总量为3μg的蛋白质。为避免夹带,在每个样品后进行40%ACN的中间注射。检测基于荧光(280nm下激发,325nm下发射)。使用**Empower®**软件进行峰积分。报道了HMWS曲线下的相对面积(图9)。

[0540] 通过肽作图监测热应激(在37℃下孵育)时的化学修饰的丰度。酶促消化蛋白质样品,并使用反相色谱分离所得肽。将柱洗脱液直接注射至质谱仪的离子源中以鉴定和定量肽。

[0541] 为了实现最大覆盖率,进行了两次单独的酶消化:一次用胰蛋白酶、以及一次用胰凝乳蛋白酶。在每种情况下,将蛋白质用氯化胍变性,然后用二硫苏糖醇(DTT)还原。在DTT中孵育后,通过添加碘乙酸使游离的半胱氨酸残基烷基化。然后将样品缓冲剂交换到50mM Tris pH 7.8中进行消化。将胰蛋白酶和胰凝乳蛋白酶以各1:10(样品:酶)的比率添加到分开的反应管中。将样品在37℃下消化30分钟并通过添加三氟乙酸淬灭反应。

[0542] 将5μg每种消化物的负载分别注射到在0.1% (V/V) 甲酸(FA)中平衡的Zorbax SB-C18(Agilent#859700-902)反相柱上。使用156分钟梯度的高达90%乙腈(含有0.1%FA),以将肽直接洗脱到Q-Exactive Plus质谱仪(赛默飞世尔科技公司(Thermo Scientific))的电喷雾离子源中。使用前12种方法以数据依赖模式收集数据,其中全扫描(分辨率70 000;扫描范围200-2000m/z)之后是12种最丰富离子的高能碰撞解离(HCD)(分辨率17500)。

[0543] 使用内部软件基于精确质量和串联质谱鉴定肽。对鉴定进行手动验证。使用Pinpoint软件(赛默飞世尔科技公司(Thermo Scientific))基于离子丰度计算修饰和未修饰肽的相对量。

[0544] 补体决定区(CDR)和半衰期延长部分的化学修饰百分比由Fehler!Verweisquelle konnte nicht gefunden werden.7给出。

[0545] 如图9所示,将如果与pH 6.0或7.0下的配制品相比,当MSLN-scFc在pH 4.0下配制时,HMWS的丰度显著降低。表7提供了在37℃下储存两周后配制品函数中化学修饰的概述。

[0546] 如表7所示,如果与pH 6.0和7.0相比,当在pH 4.0下配制时,MLSN-scFc更不易于化学修饰。

[0547] 表7:通过肽作图确定的应激的MSLN-scFc配制品中的化学修饰概述[%]

[0548]

结构域	降解类型	降解位点	G40MSuT- 低	K60RTrT- 低	K70LTrT- 低
靶结合物	脱酰胺化	N101	3.2	0.7	0.6
	脱酰胺化	N162	3.3	15.0	14.0
CD3结合物	脱酰胺化	N348	2.9	9.4	24.5
	脱酰胺化	N351	0.8	3.8	10.0
单链Fc	氧化	M530	4.3	4.0	5.4
	氧化	M706	2.5	2.1	3.7
	脱酰胺化	N603	5.6	7.0	7.5
降解总和:			22.6	42.0	65.7

[0549] 实例5

[0550] 使用蛋白质A、阳离子交换 (CEX) 和羟基磷灰石 (HA) 色谱来纯化CD33cc-scFc BiTE 抗体构建体。然后使用超滤/渗滤 (UFDF) 预配制HA洗脱液。通过添加浓缩的赋形剂储备溶液来实现最终配制品。表8提供了测试配制品的概述。

[0551] 表8:测试配制品的概述

[0552]

名称	配制品组成
G40MSuT-低	10 mM谷氨酸 4% (w/v) 甘露醇、2% (w/v) 蔗糖 0.01% (w/v) PS 80 pH 4.0 1.0 mg/mL CD33CC-scFc
G40MSuT-高	10 mM谷氨酸 4% (w/v) 甘露醇、2% (w/v) 蔗糖 0.01% (w/v) PS 80 pH 4.0 5.0 mg/mL CD33CC-scFc
K60TrT-低	20 mM磷酸钾 150 mM L-精氨酸HCl 6% (w/v) 海藻糖*2 H ₂ O 0.01% (w/v) PS 80 pH 6.0 1.0 mg/mL CD33CC-scFc
K60TrT-高	20 mM磷酸钾 150 mM L-精氨酸HCl 6% (w/v) 海藻糖*2 H ₂ O 0.01% (w/v) PS 80 pH 6.0 5.0 mg/mL CD33CC-scFc
K70LTrT-低	20 mM磷酸钾 75mM赖氨酸盐酸盐 4% (w/V) 海藻糖二水合物 0.01% (w/V) PS 80 pH 7.0 1.0 mg/mL CD33CC-scFc
K70LTrT-高	20 mM磷酸钾 75mM赖氨酸盐酸盐 4% (w/V) 海藻糖二水合物 0.01% (w/V) PS 80 pH 7.0 5.0 mg/mL CD33CC-scFc

[0553] 将上述配制品在2R I型玻璃小瓶中填充至1.3mL,将该小瓶用丁基橡胶塞和铝翻盖密封件封闭。将配制品在-20℃、2℃-8℃、25℃和37℃下储存长达四周。在指定的时间点抽取样品。另外,将样品进行五次连续的冻融循环(20℃->-50℃->20℃,0.3K/min,在目标温度下保持1小时)。通过尺寸排阻超高效色谱(SE-UPLC)和肽作图(仅对于没有应激的样品和在37℃下储存的样品)分析样品。

[0554] 使用Acquity UPLC BEH200 SEC 150mm柱(沃特斯公司(Waters))在Acquity H-Class UPLC系统(沃特斯公司(Waters))上进行SE-UPLC。将柱温设定为25℃。通过应用流速

为0.4mL/min的等度方法实现尺寸变体的分离。流动相由100mM磷酸钠、250mM NaCl (pH 6.8) 组成。运行时间总计6.0分钟。将样品在8℃下保持在自动进样器中直至分析。注射总量为3μg的蛋白质。为避免夹带,在每个样品后进行40%ACN的中间注射。检测基于荧光(280nm下激发,325nm下发射)。使用**Empower®**软件进行峰积分。报道了HMWS曲线下的相对面积(图10)。

[0555] 通过肽作图监测热应激(在37℃下孵育)时的化学修饰的丰度。酶促消化蛋白质样品,并使用反相色谱分离所得肽。将柱洗脱液直接注射至质谱仪的离子源中以鉴定和定量肽。

[0556] 为了实现最大覆盖率,进行了两次单独的酶消化:一次用胰蛋白酶、以及一次用胰凝乳蛋白酶。在每种情况下,将蛋白质用氯化胍变性,然后用二硫苏糖醇(DTT)还原。在DTT中孵育后,通过添加碘乙酸使游离的半胱氨酸残基烷基化。然后将样品缓冲剂交换到50mM Tris pH 7.8中进行消化。将胰蛋白酶和胰凝乳蛋白酶以各1:10(样品:酶)的比率添加到分开的反应管中。将样品在37℃下消化30分钟并通过添加三氟乙酸淬灭反应。

[0557] 将5μg每种消化物的负载分别注射到在0.1% (V/V) 甲酸(FA)中平衡的Zorbax SB-C18(Agilent#859700-902)反相柱上。使用156分钟梯度的高达90%乙腈(含有0.1%FA),以将肽直接洗脱到Q-Exactive Plus质谱仪(赛默飞世尔科技公司(Thermo Scientific))的电喷雾离子源中。使用前12种方法以数据依赖模式收集数据,其中全扫描(分辨率70 000;扫描范围200-2000m/z)之后是12种最丰富离子的高能碰撞解离(HCD)(分辨率17 500)。

[0558] 使用内部软件基于精确质量和串联质谱鉴定肽。对鉴定进行手动验证。使用Pinpoint软件(赛默飞世尔科技公司(Thermo Scientific))基于离子丰度计算修饰和未修饰肽的相对量。

[0559] 补体决定区(CDR)和半衰期延长部分的化学修饰百分比由Fehler!Verweisquelle konnte nicht gefunden werden.9给出。

[0560] 如图10所示,如果与pH 6.0或7.0下的配制品相比,当CD33cc-scFc在pH 4.0下配制时,HMWS的丰度显著降低。表7提供了在37℃下储存两周后配制品函数中化学修饰的概述。

[0561] 如表9所示,如果与pH 6.0和7.0相比,当在pH 4.0下配制时,CD33cc-scFc更不易于化学修饰。

[0562] 表9:通过肽作图确定的应激的CD33cc-scFc配制品中的化学修饰概述[%]

[0563]

结构域	降解类型	降解位点	G40MSuT- 低	K60RTrT- 低	K70LTrT- 低
靶结合物	氧化	M34	1.7	1.0	1.6
	异构化	D103	7.3	5.8	6.1
CD3结合物	氧化	M290	1.3	0.8	1.4
	脱酰胺化	N359	0.9	7.0	23.2
	脱酰胺化	N362	0.3	3.1	9.0
单链Fc	异构化	D510	2.3	2.3	1.8
	氧化	M541	4.7	4.2	7.2
	脱酰胺化	N614	4.5	7.4	7.7
	脱酰胺化	N673	0.5	1.1	4.5
	氧化	M717	3.0	2.1	4.5
降解总和:			26.5	34.8	67.0

[0564] 实例6:

[0565] 分别含有纯化的MSLN-hALB、MSLN-hFc和MSLN-scFc的预配制药物质通过超滤/渗滤使用截留分子量(MWCO)为10kDa的膜进行缓冲剂交换。通过添加浓缩的储备溶液实现最终配制品。每种构建体的所得配制品是K60RTrT和G40MSuT, K60RTrT由20mM磷酸钾、150mM L-精氨酸盐酸盐、6% (w/V) 海藻糖二水合物、0.01% (w/V) 聚山梨醇酯80 (pH 6.0) 组成, G40MSuT由10mM谷氨酸、4% (w/V) 甘露醇、2% (w/V) 蔗糖、0.01% (w/V) 聚山梨醇酯80 (pH 4.0) 组成。MSLN-hALB在K60RTrT中配制, MSLN-scFc在K60RTrT和G40MSuT中配制。蛋白质浓度总计为1.0mg/mL。向1950 μ L每种测试溶液中加入50 μ L 1000ppm硅标准溶液(来自阿法埃莎(AlfaAesar)的光谱纯(Specpure), 产品编号38717), 导致25ppm掺入。将未掺入的测试溶液用作对照样品。将掺入的测试溶液以及对照样品填充到3cc I型玻璃小瓶中, 并在37 $^{\circ}$ C下孵育24小时。根据实例4中描述的方法, 通过SE-UPLC分析所有样品, 以量化HMWS的量(表10)。当在K60RTrT中配制时, MSLN-hALB和-scFc在添加硅时显示出HMWS的类似增加。对于scFc构建体, 可以显示出通过将配制品pH降低至4.0可以降低这种增加。根据初步试验, 这种方法对于MSLN-hALB是不可行的, 因为显示在配制品pH值为5.0及以下时会发生片段化。

[0566] 表10: 在加入25ppm硅后通过SE-UPLC确定的MSLN-hALB和-scFc制剂中HMWS含量的概述

[0567]

构建体	hALB	scFc	
配制品	K60RTrT	K60RTrT	G40MSuT
Δ %HMWS (与未掺入的对照相比)			
25 ppm 掺入	1.0	1.0	0.2

[0568] 对于scFc构建体, 可以显示通过将配制品pH降低至4.0可以降低不必要的高分子量物质的增加。根据初步试验, 这种方法对于MSLN-hALB是不可行的, 因为显示在配制品pH值为5.0及以下时会发生片段化。因此, 发现的有益配制品尤其适用于根据本发明的抗体构建体, 例如scFc作为第三结构域。

[0569] 实例7:

[0570] 将靶向不含半衰期延长部分的非HLE (半衰期延长) **BiTE®** 抗体构建体 (**BiTE®A**) 的EGFRvIII在20mM柠檬酸一水合物、100mM L-精氨酸单盐酸盐中在pH4.8下配制。使用4M储备溶液向该溶液的多个级分中加入0、100和200mM氯化钠。将每个级分的浓度调整至0.8mg **BiTE A**/mL。将最终溶液等分至2.5mL即用型10R I型玻璃小瓶中,将该小瓶用丁基橡胶塞和铝翻盖密封件封闭。将这些溶液在30℃下储存12周,并使用不同的分析方法评估稳定性。

[0571] SE-UPLC在ACQUITY UPLC H-Class Bio系统(沃特斯公司(Waters),米尔福德(Milford),马萨诸塞州,美国)上进行以确定蛋白质浓度,该ACQUITY UPLC H-Class Bio系统由生物样品管理器-FTN、生物四元溶剂管理器和光电二极管阵列(PDA)检测器组成。使用Acquity UPLC Protein BEH 200 SEC柱(填充1.7μm,4.6×150mm)(沃特斯公司(Waters),米尔福德(Milford),马萨诸塞州,美国)进行色谱分离。将柱温保持在25℃下。将100μL每种样品溶液填充到具有PTFE/硅树脂隔膜(沃特斯公司(Waters),米尔福德(Milford),马萨诸塞州,美国)的玻璃螺旋颈小瓶中。将自动进样器的温度控制在8℃下。

[0572] 一式两份地测量样品,其中每次运行将3μg/样品加载到柱上,对应于3.8μL的注射体积,蛋白质浓度为约0.8mg/mL。样品洗脱在等度条件下以0.4mL/min的流速进行,使用100mM磷酸钠缓冲剂(pH 6.8)和另外的250mM氯化钠缓冲剂的流动相。运行缓冲剂通过系统与加载到通道A上的500mM磷酸二氢钠、加载到通道B上的500mM磷酸氢二钠、加载到通道C上的1M氯化钠、以及加载到通道D上的HPLC等级水自动预混合。在样品运行之间,注射10μL的40%乙腈。在每次分析的开始,中间和结束时,测量蛋白质标准物以确保系统适用性。将运行时间设定为6分钟。

[0573] 通过手段检测洗脱的样品,在280nm的波长下确定UV吸收。使用Empower软件(沃特斯公司(Waters),米尔福德(Milford),马萨诸塞州,美国)进行色谱图的采集和整合。就曲线下面积(AUC)而言分析色谱图,用于样品的浓度确定。将值以一式三份独立样品的平均值与相应标准偏差给出。

[0574] 使用以下等式计算蛋白质浓度:

$$[0575] \quad c = \frac{\frac{AUC}{1000} * \frac{\text{流速}}{60}}{\varepsilon * \text{流动路径} * \text{注射体积}}$$

[0576] 等式:由曲线下面积(AUC)值(mAU*s)计算样品浓度(mg/mL)。表1中列出参数。

[0577] 表11. 用于计算样品浓度(mg/mL)的SE-UPLC方法的参数。

参数	值
注射体积[mL]	0.0038
流速[mL/min]	0.4
流动路径[cm]	0.5
消光系数 ε [AU mg ⁻¹ cm ⁻¹ mL]	2.0000

[0579] 表12中给出了作为配制品和储存时间的函数的**BiTE®A**配制品的蛋白质浓度。虽然在不存在氯化钠的情况下蛋白质浓度随时间保持恒定,但在含盐制剂中观察到显著的蛋白质损失。蛋白质损失在含有200mM氯化钠的配制品中是最明显的。

[0580] 表12:作为配制品和储存时间的函数的蛋白质浓度

	NaCl [mM]	储存时间	浓度[mg/mL]
	0	T0	0.80 ± 0.01
		T4w	0.78 ± 0.01
		T8w	0.78 ± 0.01
		T12w	0.76 ± 0.02
[0581]	100	T0	0.84 ± 0.01
		T4w	0.80 ± 0.00
		T8w	0.75 ± 0.01
		T12w	0.70 ± 0.00
	200	T0	0.79 ± 0.01
		T4w	0.66 ± 0.01
		T8w	0.55 ± 0.00
		T12w	0.47 ± 0.00

[0582] 应用光阻来测量 **BiTE®A** 制剂中大于10和25 μm 的亚可见颗粒的量。在配备有 HRLD 150传感器的HIAC 9703+液体颗粒计数系统(贝克曼库尔特(Beckmann Coulter),布雷亚(Brea),加利福尼亚州,美国)上进行光阻测量。使用相应的PharmSpec 3软件进行数据采集和分析。在样品分析之前,通过测量EZYTM-Cal粒度标准5 μm (赛默飞世尔科技公司(Thermo Fisher Scientific),沃尔瑟姆(Waltham),马萨诸塞州,美国)和EZYTM-Cal粒度标准15 μm (赛默飞世尔科技公司(Thermo Fisher Scientific),沃尔瑟姆(Waltham),马萨诸塞州,美国)验证系统适用性。

[0583] 对于每个样品,以10mL/min的流速进行四次0.2mL样品体积的测量。当丢弃第一次运行时,将颗粒浓度以最后三次测量的平均值给出。在样品测量之前和之间进行空白测试。确定无颗粒的水的颗粒浓度以保证最大量为10个颗粒/mL $\geq 2\mu\text{m}$ 和1个颗粒/mL $\geq 10\mu\text{m}$ 。将大于10和25 μm 的颗粒的亚可见颗粒浓度以独立三次重复的平均值给出。

[0584] 表13概述了作为配制品和储存时间函数的含有**BiTE®A**的配制品的亚可见颗粒计数。在不存在氯化钠的情况下,亚可见颗粒计数是最低的,并且随着时间的推移仅略微变化。添加氯化钠导致相当的初始颗粒计数。然而,在盐存在下,亚可见颗粒的量随时间显著增加。这表明在不存在氯化钠的情况下,含有制剂的胶体稳定性得到改善。

[0585] 表13:作为配制品和储存时间函数的每毫升的亚可见颗粒计数

	NaCl [mM]	储存时间	$\geq 10 \mu\text{m}$	$\geq 25 \mu\text{m}$
	0	T0	1288	59
		T4w	1466	62
		T8w	1894	108
		T12w	2383	61
[0586]	100	T0	1540	83
		T4w	4708	258
		T8w	6206	550
		T12w	6139	811
	200	T0	1541	53
		T4w	7594	933
		T8w	7778	1133
		T12w	5233	972

[0587] 通过纳米差示扫描量热法(纳米DSF)对含有BiTE®A的制剂进行热分析。使用Prometheus NT.48仪器(诺坦普科技(NanoTemper Technologies),慕尼黑,德国)和相应的PRThermControl软件(诺坦普科技(NanoTemper Technologies),慕尼黑,德国)监测不同配制的BiTE®A制剂的展开和聚集行为。为了分析蛋白质展开温度 T_m 并检测聚集温度 T_{agg} ,通过毛细管力将每个样品10 μL 填充到Prometheus NT.48标准毛细管(诺坦普科技(NanoTemper Technologies),慕尼黑,德国)中并置于仪器中。一式三份测量样品。温度斜坡定义为20 $^{\circ}\text{C}$ 至95 $^{\circ}\text{C}$,加热速率为1 $^{\circ}\text{C}/\text{min}$ 。

[0588] 使用Prometheus PRThermControl软件(诺坦普科技(NanoTemper Technologies),慕尼黑,德国)进行数据分析。在热展开试验的情况下,分别将荧光比(F350nm/F330nm)的一阶导数相对于温度作图。为了检测聚集,分别将散射光强度的一阶导数相对于温度作图。

[0589] 将蛋白质展开温度(T_m)和聚集温度(T_{agg})在表14中以一式三份计算的平均值与标准偏差给出。已证明在不存在氯化钠的情况下,展开(T_m)和蛋白质聚集(T_{agg})在较高温度下发生。这表明不含盐的配制品的构象和胶体稳定性增强。

[0590] 表14:作为配制品函数的用纳米DSF对热展开和聚集行为的表征

	NaCl [mM]	T_m 1 [$^{\circ}\text{C}$]	T_{agg} [$^{\circ}\text{C}$]
[0591]	0	52.9 \pm 0.0	52.5 \pm 0.1
	100	51.7 \pm 0.0	50.6 \pm 0.0
	200	51.0 \pm 0.0	49.3 \pm 0.1

[0592] 实例8:

[0593] 将两个靶向BiTE®抗体构建体(在针对BCMA和在C末端含有单链Fc结构域的结构域中具有(BiTE®F)和不具有(BiTE®E)另外的cys-钳)的BCMA在10mM L-谷氨酸、9% (w/v)蔗糖 (pH4.8) 中配制。使用4M储备溶液向该溶液的级分中加入0、100和200mM氯化钠。将每个级分的浓度调整至0.8mg BiTE®/mL。将最终溶液等分至2.5mL即用型10R I型玻璃小瓶中,将该小瓶用丁基橡胶塞和铝翻盖密封件封闭。将这些溶液在30℃下储存12周,并使用不同的分析方法评估稳定性。

[0594] 如实例7中所述进行SE-UPLC。通过使用280nm的激发波长在325nm下测量荧光发射强度来进行检测。曲线下的相对面积(AUC)可归因于低分子量物质(LMWS)。如表15中所示, LMWS随时间的形成在不存在氯化钠的情况下不太明显,并且表明无盐制剂的改善稳定性。

[0595] 表15:作为配制品和储存时间函数的BiTE®E和BiTE®F制剂中LMWS的百分比含量

	NaCl [mM]	储存时间	LMWS [%]	
			BiTE® E	BiTE® F
[0596]	0	T0	0.0 ± 0.0	0.0 ± 0.0
		T4w	2.5 ± 0.0	2.6 ± 0.0
		T8w	3.1 ± 0.0	3.3 ± 0.1
		T12w	4.0 ± 0.1	4.3 ± 0.1
	100	T0	0.0 ± 0.0	0.0 ± 0.0
		T4w	2.8 ± 0.0	3.0 ± 0.0
		T8w	3.8 ± 0.1	4.0 ± 0.0
	NaCl [mM]	储存时间	LMWS [%]	
			BiTE® E	BiTE® F
[0597]		T12w	5.0 ± 0.0	5.4 ± 0.0
		T0	0.0 ± 0.0	0.0 ± 0.0
	200	T4w	2.9 ± 0.0	3.1 ± 0.1
		T8w	4.1 ± 0.1	4.3 ± 0.0
		T12w	5.4 ± 0.1	5.7 ± 0.0

[0598] 如实例7中所述进行光阻。表16中给出了作为配制品和储存的函数的BiTE®E和BiTE®F制剂中亚可见颗粒的丰度。如果与含盐的制剂相比,在不存在氯化钠的情况下,亚可见颗粒不太明显,与储存时间无关。这表明BiTE®E和BiTE®F在不含盐的配制品中具有改善的胶体稳定性。

[0599] 表16:作为配制品和储存时间函数的每毫升的亚可见颗粒计数

NaCl [mM]	储存时间	$\geq 10 \mu\text{m}$		$\geq 25 \mu\text{m}$	
		BiTE® E	BiTE® F	BiTE® E	BiTE® F
0	T0	19	26	1	3
	T4w	72	74	5	7
	T8w	60	26	6	2
	T12w	101	63	9	8
100	T0	18	25	1	3
	T4w	662	587	38	50
	T8w	150	288	9	20
	T12w	937	699	61	42
200	T0	205	33	19	3
	T4w	735	1971	2137	186
	T8w	266	493	859	48
	T12w	1381	572	3701	45

[0601] 使用实例7中描述的方法,通过纳米差示扫描量热法(纳米DSF)对BiTE®E和BiTE®F制剂进行热分析。将蛋白质展开温度(T_m)和聚集温度(T_{agg})在表17中以一式三份计算的平均值与标准偏差给出。已证明,如果与含有0或100mM氯化钠的制剂相比,在200mM NaCl存在下,展开(T_m)在更高温度下发生。在测试的温度范围内未检测到无盐制剂的蛋白质聚集。相反,观察到含有氯化钠的制剂的蛋白质聚集。聚集温度随盐浓度的增加而降低。上述发现表明不含盐的配制品的构象和胶体稳定性增强。

[0602] 表17:作为配制品函数的用纳米DSF对热展开和聚集行为的表征

NaCl [mM]	T_m [°C]		T_{agg} [°C]	
	BiTE® E	BiTE® F	BiTE® E	BiTE® F
0	58.2 ± 0.1	58.2 ± 0.1	n.d.	n.d.
100	58.2 ± 0.0	58.2 ± 0.0	77.1 ± 0.4	76.9 ± 0.1
200	57.6 ± 0.0	57.6 ± 0.0	68.4 ± 0.6	71.2 ± 0.1

[0604] n.d. = 未检测到

[0605] 表18:序列表

[0606]

SEQ ID NO:	名称	形式/来源	序列
1.	G4S 接头		GGGGS
2.	(G4S)2 接头		GGGGS GGGGS
3.	(G4S)3 接头		GGGGS GGGGS GGGGS
4.	(G4S)4 接头		GGGGS GGGGS GGGGS GGGGS
5.	(G4S)5 接头		GGGGS GGGGS GGGGS GGGGS GGGGS
6.	(G4S)6 接头		GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS
7.	(G4S)7 接头		GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS
8.	(G4S)8 接头		GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS GGGGS
9.	肽接头		PGGGGS
10.	肽接头		PGGDGS
11.	肽接头		SGGGGS
12.	肽接头		GGGG
13.	CD3 ϵ 结合物 VL		QTVVTQEPSTLVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGG GTKLTVL
14.	CD3 ϵ 结合物 VH		EVQLVESGGGLVQPGGSLRLSCAASGFTFNSYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKGRFTISRDDSKNTAYLQMNSLKTEDTAVYYCVRHGNFGNSYVSWWAYWGQGLTVTVSS
15.	CD3 ϵ 结合物 scFv		EVQLVESGGGLVQPGGSLRLSCAASGFTFNSYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKGRFTISRDDSKNTAYLQMNSLKTEDTAVYYCVRHGNFGNSYVSWWAYWGQGLTVTVSSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
16.	六组氨酸标签		HHHHHH
17.	Fc 单体-1 +c/-g		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA

			VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGK
18.	Fc 单体-2 +c/-g/delGK		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKV NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSP
19.	Fc 单体-3 -c/+g		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD AVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGK
20.	Fc 单体-4 -c/+g/delGK		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI AVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSP
21.	Fc 单体-5 -c/-g		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGK
22.	Fc 单体-6 -c/-g/delGK		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSP
23.	Fc 单体-7 +c/+g		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGK
24.	Fc 单体-8 +c/+g/delGK		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSP
25.	scFc-1		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGGS DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGK
26.	scFc-2		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSP
27.	scFc-3		DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV

			KFNWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI AVEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCV MHEALHNHYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGG GSDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCK KVSNAKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPS DIAVEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCV VMHEALHNHYTQKSLSLSPGK
28.	scFc-4		DKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV SNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI AVEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCV MHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGG GSDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSP
29.	scFc-5		DKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVM HEALHNHYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGG GSDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSPGK
30.	scFc-6		DKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVM HEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWWYVDGVEVHNAKTPREEQYGSTYRVVSVLTVLHQDWLNGKEYKCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSP
31.	scFc-7		DKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVM HEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF KFNWYVDGVEVHNAKTPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH HEALHNHYTQKSLSLSPGK
32.	scFc-8		DKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVS NKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVM HEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWWYVDGVEVHNAKTPCEEQYNSTYRCVSVLTVLHQDWLNGKEYKCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSPGK

[0609]

			EALHNHYTQKSLSLSP
33.	MSLN-HLE	异 Fc 链 1	<p>QVQLVESGGGLVKGPGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYIS SSGSTIYYADSVKGRFTISRDNANKSLFLQMNSLRAEDTAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSVSASVGDRTITC RASQGINTWLAWYQQKPKAPKLLIYGASGLQSGVPSRFSGSGSGDFTLTIS SLQPEDFATYYCQAKSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYISWAYWGQ GTLVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSGSTGA VTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGYSTYRCVSVTLVHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSRKEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLKSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG K</p>
34.	MSLN-HLE	异 Fc 链 2	<p>DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWLNGKEYCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYDTTPPVLDSGDSFFLYSDLTVDKSRWQQGNVFCSCVM HEALHNHYTQKSLSLSPGK</p>
35.	MSLN-HLE	hALB 融合	<p>QVQLVESGGGLVKGPGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYIS SSGSTIYYADSVKGRFTISRDNANKSLFLQMNSLRAEDTAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSVSASVGDRTITC RASQGINTWLAWYQQKPKAPKLLIYGASGLQSGVPSRFSGSGSGDFTLTIS SLQPEDFATYYCQAKSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYISWAYWGQ GTLVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSGSTGA VTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLPGGDGSADAHKSEVAHRFDL GEENFKALVLIAFAQYLQQCPFEDHVKLVNEVTEFAKTCVADESAENCDSLH TLFGDKLCTVATLRETYGEMADCCAKQEPERNECFQHKDDNPNLRLVRPE VDVMCTAFHDNEETFLKKLYEIAARRHPYFYAPELFFAKRYKAAFECCQAA DKAACLLPKLDELDEGKASSAKQRLKCSALQKFGERAFAKAWAVARLSQRFP KAFAEVSKLVDLTQVHTECCHGDLLECADRADLAKYICENQDSISSKLKEC CEKPLLEKSHCIAEVENDEMPADLPSLAADFVESKDVCKNYAEAKDVFGLMFL YEARRRHPDYSVLLRLAKTYETTLKCCAAADPHECYAKVDFEFPKPLVEEPQ NLIKQNCLEFQLGEYKFQNALLVRYTKKVPQVSTPTLVEVSRNLGKVGSKCC KHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRVTKCCTESLVNRRPFCFAL EVDETYVPKEFNAETFTFHADICTLSEKERQIKKQALVELVKHKPKATKEQLK AVMDDFAAFVEKCKKADDKETCFAEEGKKLVAASQAALGLHHHHHH</p>
36.	CDH19-HLEa	X 体链 1	<p>EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHG NFGNSIYISWAYWGQGTLLTVSSGGGGSGGGGSSYELTQPPSVSVSPGQTA SITCSGDRLEGEYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNSGNTAT LTISGTQAMDEADYYCQAWESSTVFGGGTKLTVLASTKGPSVFPLAPSSKST SGGTAALGCLVKDYFPEPVTWNSGALTSGVHTFPAVLQSSGLYSLSSVTV PSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEE QYGYSTYRCVSVTLVHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREP QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYDTTPPVL DSGDSFFLYSDLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK</p>
37.	CDH19-HLEb	X 体链 2	<p>QVQLVESGGGVQPGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDNANKSLFLQMNSLRAEDTAVYYCARRAGI IGTIGYYYGMDVWGQGTITVTVSSGGGGSGGGGSGTQVVTQEPSTLTVSPGGT VTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGQPKAAPSRTL</p>

[0610]

			FPPSSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTSPKQSN KYAASSYLSLTPEQWKSRSYSCQVTHEGSTVEKTVAPTECSDKHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTI SKAKGQPREPQVYTLPPSRKEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLKSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
38.	CDH19-HLE	异 Fc 链 1	QVQLVESGGGVVQPGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDNKNTLYLQMNSLRAEDTAVVYCARRAGI IGTIGYYGMDVWGQGTITVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDRLEKEYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS GNTALTISGTQAMDEADYICQAWESSTVVFSGGKTLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVVYCVRHGNFGN SYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSSQTVTQEPSLTVSPGG TVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGKTLTVLGGGDKHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSRKEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLKSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSPGK
39.	CDH19-HLE	异 Fc 链 2	DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKV SNKALPAPIEKTISKAKGQPREPQVYTLPPSRREMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYDTTPVLDSDGSFFLYSDLTVDKSRWQQGNVFCFSVM HEALHNHYTQKSLSPGK
40.	CD33-HLE	异 Fc 链 1	QVQLVQSGAEVKKPGESVKVSKASGYFTFNMGMNWVKQAPGQCLEWM GWINTYTGPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVVYCAR WSWSDGYVYFDYWGQGTSTVTVSSGGGGSGGGSGGGSSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSAWYQQKPGQPPKLLSWASTRES GIPDRFSGSGSGTDFTLTIDSPQPEDSATYTCQSAHFPIFGCGTRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVVYCV RHGNFGNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSSQTVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPG TPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGKTLTVLGG GGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSRKEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLKSDGSFFLYSKLTVDKSRWQQGNVFCFSV MHEALHNHYTQKSLSPGK
41.	CD33-HLE	异 Fc 链 2	DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKV SNKALPAPIEKTISKAKGQPREPQVYTLPPSRREMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYDTTPVLDSDGSFFLYSDLTVDKSRWQQGNVFCFSVM HEALHNHYTQKSLSPGK
42.	CD33-HLE	scFc	QVQLVQSGAEVKKPGESVKVSKASGYFTFNMGMNWVKQAPGQCLEWM GWINTYTGPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVVYCAR WSWSDGYVYFDYWGQGTSTVTVSSGGGGSGGGSGGGSSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSAWYQQKPGQPPKLLSWASTRES GIPDRFSGSGSGTDFTLTIDSPQPEDSATYTCQSAHFPIFGCGTRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVVYCV RHGNFGNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSSQTVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPG TPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGKTLTVLGG GGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP

[0612]

			RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
54.	CD33xI2C-scF c	双特异性 HLE 分子	QVQLVQSGAEVKKPGESVKVSKASGYFTFTNYGMNWWKQAPGQGLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSTVTVSSGGGGSGGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQQKPGQPPKLLLSWASTRES GIPDRFSGSGSGTDFTLTIDSPQPEDSATYYCQSAHFPIFGQGRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRAQPGKGLPW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGG GGDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGG GSDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGK
55.	CD33xI2C-scF c_delGK	双特异性 HLE 分子	QVQLVQSGAEVKKPGESVKVSKASGYFTFTNYGMNWWKQAPGQGLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSTVTVSSGGGGSGGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQQKPGQPPKLLLSWASTRES GIPDRFSGSGSGTDFTLTIDSPQPEDSATYYCQSAHFPIFGQGRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRAQPGKGLPW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGG GGDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSD KHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKKVS N KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSPGK
56.	CD33_CCxI2C -scFc	VH	QVQLVQSGAEVKKPGESVKVSKASGYFTFTNYGMNWWKQAPGQCLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSTVTVSS
57.	CD33_CCxI2C -scFc	VL	DIVMTQSPDSLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQQKPGQPPKLL LSWASTRESGIPDRFSGSGSGTDFTLTIDSPQPEDSATYYCQSAHFPIFGCG TRLEIK
58.	CD33_CCxI2C -scFc	scFv	QVQLVQSGAEVKKPGESVKVSKASGYFTFTNYGMNWWKQAPGQCLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSTVTVSSGGGGSGGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQQKPGQPPKLLLSWASTRES GIPDRFSGSGSGTDFTLTIDSPQPEDSATYYCQSAHFPIFGCGTRLEIK
59.	CD33_CCxI2C	双特异性 分子	QVQLVQSGAEVKKPGESVKVSKASGYFTFTNYGMNWWKQAPGQCLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSTVTVSSGGGGSGGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQQKPGQPPKLLLSWASTRES

[0613]

			GIPDRFSGSGSGTDFLTIDSPQPEDSATYYCQSAHPITFGCGTRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTIVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
60.	CD33_CCxI2C -scFc	双特异性 HLE 分子	QVQLVQSGAEVKKPGESVKVSCASGYFTFNMGNNWVKQAPGQCLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSVTVSSGGGGSGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQKPGQPPKLLLSWASTRES GIPDRFSGSGSGTDFLTIDSPQPEDSATYYCQSAHPITFGCGTRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTIVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGG GGDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGG GSDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGK
61.	CD33_CCxI2C -scFc_delGK	双特异性 HLE 分子	QVQLVQSGAEVKKPGESVKVSCASGYFTFNMGNNWVKQAPGQCLEWM GWINTYTGEPTYADKFQGRVTMTTDTSTSTAYMEIRNLGGDDTAVYYCAR WSWSDGYVYFDYWGQGSVTVSSGGGGSGGGSGGGGSDIVMTQSPD SLTVSLGERTTINCKSSQSVLDSSTNKNLSLAWYQKPGQPPKLLLSWASTRES GIPDRFSGSGSGTDFLTIDSPQPEDSATYYCQSAHPITFGCGTRLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTIVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGG GGDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGG KHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSPGK
62.	EGFRvIIIxCD 3-scFc	VH CDR1	NYGMH
63.	EGFRvIIIxCD 3-scFc	VH CDR2	VIWYDGSCKYADSVRG
64.	EGFRvIIIxCD 3-scFc	VH CDR3	DGYDILTGNPRDFDY
65.	EGFRvIIIxCD 3-scFc	VL CDR1	RSSQSLVHSDGNTYLS
66.	EGFRvIIIxCD 3-scFc	VL CDR2	RISRRFS
67.	EGFRvIIIxCD 3-scFc	VL CDR3	MQSTHVPRT
68.	EGFRvIIIxCD	VH	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKGLEWVA

	3-scFc		VIWYDGSCKYYADSVRGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGT LVTVSS
69.	EGFRvIIIxCD 3-scFc	VL	DTVMTQTPLSSHVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLL IYRISRFRFSGVPDRFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGQ GTKVEIK
70.	EGFRvIIIxCD 3-scFc	scFv	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKGLEWVA VIWYDGSCKYYADSVRGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGT LVTVSSGGGGSGGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLLIYRISRFRFSGVPD RFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGQGTKVEIK
71.	EGFRvIIIxCD 3-scFc	双特异性 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKGLEWVA VIWYDGSCKYYADSVRGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGT LVTVSSGGGGSGGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLLIYRISRFRFSGVPD RFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGQGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGT LVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLT VSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
72.	EGFRvIIIxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKGLEWVA VIWYDGSCKYYADSVRGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGT LVTVSSGGGGSGGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLLIYRISRFRFSGVPD RFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGQGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGT LVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLT VSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVM HEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGG DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVM HEALHNHYTQKSLSLSPGK
73.	EGFRvIIIxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKGLEWVA VIWYDGSCKYYADSVRGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGT LVTVSSGGGGSGGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLLIYRISRFRFSGVPD RFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGQGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGT LVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLT VSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVM HEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKKVS KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV

[0614]

			EWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSPGK
74.	EGFRvIII_CC xCD3-scFc	VH	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSS
75.	EGFRvIII_CC xCD3-scFc	VL	DTVMTQTPLSSHVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPRL IYRISRFRSGVDPDRFSGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGC GTKVEIK
76.	EGFRvIII_CC xCD3-scFc	scFv	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPRLIYRISRFRSGVDP RFGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIK
77.	EGFRvIII_CC xCD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPRLIYRISRFRSGVDP RFGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
78.	EGFRvIII_CC xCD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPRLIYRISRFRSGVDP RFGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKV SKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGG DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKV SKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGK
79.	EGFRvIII_CC xCD3-scFc_del GK	双特异性 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPRLIYRISRFRSGVDP RFGSGAGTDFTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKV SKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGGSDK

[0615]

[0616]

			THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
80.	MS_1xCD3-sc Fc	VH CDR1	DYYMT
81.	MS_1xCD3-sc Fc	VH CDR2	YISSSGSTIYYADSVKG
82.	MS_1xCD3-sc Fc	VH CDR3	DRNSHFDY
83.	MS_1xCD3-sc Fc	VL CDR1	RASQGINTWLA
84.	MS_1xCD3-sc Fc	VL CDR2	GASGLQS
85.	MS_1xCD3-sc Fc	VL CDR3	QQAQSFPR
86.	MS_1xCD3-sc Fc	VH	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYISSSGSTIYYADSVKGRFTISRDNNAKNSLFLQMNSLRAEDTAVYYCARDNRSHFDYWGQGTTLTVSS
87.	MS_1xCD3-sc Fc	VL	DIQMTQSPSSVSASVGDRTITCRASQGINTWLAWYQQKPGKAPKLLIYGASGLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQAQSFPRTFGQGTKEIK
88.	MS_1xCD3-sc Fc	scFv	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYISSSGSTIYYADSVKGRFTISRDNNAKNSLFLQMNSLRAEDTAVYYCARDNRSHFDYWGQGTTLTVSSGGGGSGGGGGSGGSDIQMTQSPSSVSASVGDRTITCRASQGINTWLAWYQQKPGKAPKLLIYGASGLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQAQSFPRTFGQGTKEIK
89.	MS_1xCD3-sc Fc	双特异性分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYISSSGSTIYYADSVKGRFTISRDNNAKNSLFLQMNSLRAEDTAVYYCARDNRSHFDYWGQGTTLTVSSGGGGSGGGGGSGGSDIQMTQSPSSVSASVGDRTITCRASQGINTWLAWYQQKPGKAPKLLIYGASGLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQAQSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGSGTQVVTQEPSTVSPGGTTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAALTLGQVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
90.	MS_1xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYISSSGSTIYYADSVKGRFTISRDNNAKNSLFLQMNSLRAEDTAVYYCARDNRSHFDYWGQGTTLTVSSGGGGSGGGGGSGGSDIQMTQSPSSVSASVGDRTITCRASQGINTWLAWYQQKPGKAPKLLIYGASGLQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQQAQSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGSGTQVVTQEPSTVSPGGTTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAALTLGQVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
91.	MS_1xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWLSYISSSGSTIYYADSVKGRFTISRDNNAKNSLFLQMNSLRAEDTAVYYCARDNRSHFD

[0617]

[0618]

		HLE 分子	SSGSTIYYADSVKGRFTISRDNAKNSLFLQMNSLRAEDAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGGSDIQTQSPSSVSASVGDRTITC RASQGINTWLAWYQQKPGKAPKLLIYGASGLQSGVPSRFSGSGSDFTLTIS SLQPEDFATYYCQQAQSFRTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGGGSGGGGGSDIQTQSPSSVSASVGDRTITC VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCIEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSCVMHEALHNHYTQKSLSLSPG GGGGSGGGSGGGSGGGSGGGGGSGGGGGSDKHTCPPCPAPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT EEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPRE PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSEFFLYSKLTVDKSRWQQGNVFCFSCVMHEALHNHYTQKSLSLSPGK
98.	MS_2xCD3-sc Fc	VH CDR1	DYYMT
99.	MS_2xCD3-sc Fc	VH CDR2	YISSSGSTIYYADSVKG
100.	MS_2xCD3-sc Fc	VH CDR3	DRNSHFDY
101.	MS_2xCD3-sc Fc	VL CDR1	RASQGITRWLA
102.	MS_2xCD3-sc Fc	VL CDR2	AASVLQS
103.	MS_2xCD3-sc Fc	VL CDR3	QQSNSFPRT
104.	MS_2xCD3-sc Fc	VH	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWISYIS SSGSTIYYADSVKGRFTISRDNAKNSLYLQMNSLRAEDAVYYCARDNRSHFD YWGQGTLLTVSS
105.	MS_2xCD3-sc Fc	VL	DIQTQSPSSVSASVGDRTITCRASQGITRWLAWYQQKPGKAPKLLIYAAS VLQSGVPSRFSGSGSDFTLTISLQPEDFATYYCQQSNSFPRTFGQGTKEIK
106.	MS_2xCD3-sc Fc	scFv	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWISYIS SSGSTIYYADSVKGRFTISRDNAKNSLYLQMNSLRAEDAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGGSDIQTQSPSSVSASVGDRTITC RASQGITRWLAWYQQKPGKAPKLLIYAASVLQSGVPSRFSGSGSDFTLTIS SLQPEDFATYYCQQSNSFPRTFGQGTKEIK
107.	MS_2xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWISYIS SSGSTIYYADSVKGRFTISRDNAKNSLYLQMNSLRAEDAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGGSDIQTQSPSSVSASVGDRTITC RASQGITRWLAWYQQKPGKAPKLLIYAASVLQSGVPSRFSGSGSDFTLTIS SLQPEDFATYYCQQSNSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGGGSGGGGGSDIQTQSPSSVSASVGDRTITC VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
108.	MS_2xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDYYMTWIRQAPGKGLEWISYIS SSGSTIYYADSVKGRFTISRDNAKNSLYLQMNSLRAEDAVYYCARDNRSHFD YWGQGTLLTVSSGGGGSGGGSGGGGGSDIQTQSPSSVSASVGDRTITC RASQGITRWLAWYQQKPGKAPKLLIYAASVLQSGVPSRFSGSGSDFTLTIS SLQPEDFATYYCQQSNSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGGGSGGGGGSDIQTQSPSSVSASVGDRTITC VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL

[0619]

[0620]

[0621]

			GSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTLVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
126.	MS_3xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKGLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNLSRAEDTAVYYCARDVGSFHD YWGQGTSLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTLVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG KGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT PCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ REPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
127.	MS_3xCD3-sc Fc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKGLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNLSRAEDTAVYYCARDVGSFHD YWGQGTSLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTLVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG GGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT EEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPRE PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPV LDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
128.	MS_3_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKCLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNLSRAEDTAVYYCARDVGSFHD YWGQGTSLTVSS
129.	MS_3_CCxCD 3-scFc	VL	DIQMTQSPSSVSASVGDRTITCRASQDISRWLAWYQQKPGKAPKLLISAAS RLQSGVPSRFSGSGSDFTLTISLQPEDFAIYYCQAKSFPRTFGCGTKVEIK
130.	MS_3_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKCLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNLSRAEDTAVYYCARDVGSFHD YWGQGTSLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGCGTKVEIK
131.	MS_3_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKCLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNLSRAEDTAVYYCARDVGSFHD YWGQGTSLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG

[0622]

			GSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQ GTLVTSSGGGGSGGGGSGGGGSQTQEPSTVSPGGTTLTLCGSSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
132.	MS_3_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKCLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARDVGSFHD YWGQGTTLVTSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQ GTLVTSSGGGGSGGGGSGGGGSQTQEPSTVSPGGTTLTLCGSSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG KGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPPELLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT PCEEQYGSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISKAKGQ REPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
133.	MS_3_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGGSLRLSCAASGFTFSDHYMSWIRQAPGKCLEWFSYIS SSGGIIYYADSVKGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARDVGSFHD YWGQGTTLVTSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVGDRTITC RASQDISRWLAWYQQKPGKAPKLLISAASRLQSGVPSRFSGSGSDFTLTIS SLQPEDFAIYYCQAKSFPRTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQ GTLVTSSGGGGSGGGGSGGGGSQTQEPSTVSPGGTTLTLCGSSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG GGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT EEQYGSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISKAKGQPRE PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
134.	CH_1xCD3-sc Fc	VH CDR1	SYGMH
135.	CH_1xCD3-sc Fc	VH CDR2	FIWYDGSNKYYADSVKD
136.	CH_1xCD3-sc Fc	VH CDR3	RAGIIGTIGYYYGMDV
137.	CH_1xCD3-sc Fc	VL CDR1	SGDRLGEKYTS
138.	CH_1xCD3-sc Fc	VL CDR2	QDTRKPS
139.	CH_1xCD3-sc Fc	VL CDR3	QAWESSTVV
140.	CH_1xCD3-sc Fc	VH	QVQLVESGGGVQPGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKDRFTISRDNKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQTTTVSS
141.	CH_1xCD3-sc	VL	SYELTQPPSVSVSPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTRK

[0623]

	Fc		PSGIPERFSGSNSGNTATLTISGTQAMDEADYYCQAWESSTVVFGGGKLTVL
142.	CH_1xCD3-sc Fc	scFv	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARRAG IIGTIGYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV SPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFGGGKLTVL
143.	CH_1xCD3-sc Fc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARRAG IIGTIGYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV SPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFGGGKLTVLSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVVYCVRHGNFG NSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV GTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGKLTVL
144.	CH_1xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARRAG IIGTIGYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV SPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFGGGKLTVLSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVVYCVRHGNFG NSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV GTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGKLTVLSSGGGGSEVQL TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGK
145.	CH_1xCD3-sc Fc_deGK	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVVYCARRAG IIGTIGYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV SPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFGGGKLTVLSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVVYCVRHGNFG NSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSSYELTQPPSVSV GTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGKLTVLSSGGGGSEVQL TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
146.	CH_1_CCxCD 3-scFc	VH	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF

[0624]

			IWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGT TVTVSS
147.	CH_1_CCxCD 3-scFc	VL	SYELTQPPSVSVSPGQTASITCSGDR LG EKYTSWYQQRPGQSPLLVIYQDTR PSGIPERFSGSNSGNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTV L
148.	CH_1_CCxCD 3-scFc	scFv	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LG EKYTSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTVL
149.	CH_1_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LG EKYTSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQT VVTQEP SLTVSPGG TVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGT PARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGG GTKLTVL
150.	CH_1_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LG EKYTSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQT VVTQEP SLTVSPGG TVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGT PARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGG GTKLTVLGGGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTP E VTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTP E VTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSPGK
151.	CH_1_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LG EKYTSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQT VVTQEP SLTVSPGG TVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGT PARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGG GTKLTVLGGGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTP E VTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTP E VTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTP E VTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG

[0625]

			QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
152.	CH_2xCD3-sc Fc	VH CDR1	SYGMH
153.	CH_2xCD3-sc Fc	VH CDR2	FIWYDGSNKYYADSVKG
154.	CH_2xCD3-sc Fc	VH CDR3	RAGIIGTIGYYYGMDV
155.	CH_2xCD3-sc Fc	VL CDR1	SGDRLGEKYTS
156.	CH_2xCD3-sc Fc	VL CDR2	QDTRPS
157.	CH_2xCD3-sc Fc	VL CDR3	QAWESSTVV
158.	CH_2xCD3-sc Fc	VH	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQGT TTVTVSS
159.	CH_2xCD3-sc Fc	VL	SYELTQPPSVSVSPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTR PSGIPERFSGSNSGTATLTISGTQAMDEADYYCQAWESSTVVFVGGGKTLV L
160.	CH_2xCD3-sc Fc	scFv	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQGT TTVTVSSGGGGSGGGSGGGSSYELTQPPSVSV SPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFVGGGKTLTVL
161.	CH_2xCD3-sc Fc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQGT TTVTVSSGGGGSGGGSGGGSSYELTQPPSVSV SPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFVGGGKTLTVLGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGGSQT VVTQEP SLTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKTLTVL
162.	CH_2xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQGT TTVTVSSGGGGSGGGSGGGSSYELTQPPSVSV SPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN SGNTATLTISGTQAMDEADYYCQAWESSTVVFVGGGKTLTVLGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGGSQT VVTQEP SLTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKTLTVLGGGGDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGK
163.	CH_2xCD3-sc Fc _{delGK}	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAG IIGTIGYYYGMDVWGQGT TTVTVSSGGGGSGGGSGGGSSYELTQPPSVSV SPGQTASITCSGDRLGEKYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSN

[0626]

			SGNTATLTISGTQAMDEADYYCQAWESSTVVFSGGKTCLTVLSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGTCLTVSSGGGGSGGGSGGGGSQTQVVTQEPSTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGKTCLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
164.	CH_2_CCxCD 3-scFc	VH	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGTITVTVSS
165.	CH_2_CCxCD 3-scFc	VL	SYELTQPPSVSVSPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTR PSGIPERFSGSNSGNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLT L
166.	CH_2_CCxCD 3-scFc	scFv	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLT
167.	CH_2_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLTCLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTCLTVSSGGGGSGGGSGGGSGGGGSQTQVVTQEPSTVSPGG TVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGKTCLTVL
168.	CH_2_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYDGSNKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARRAGII GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLTCLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTCLTVSSGGGGSGGGSGGGSGGGGSQTQVVTQEPSTVSPGG TVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGKTCLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
169.	CH_2_CCxCD 3-scFc_delGK	双特异性	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF

[0627]

		分子	IWYDGSNKYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGI GTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LGEKYTSWYQRP GQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GCGTKLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGG TVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGG TKFLAPGTPARFSGSL LGGKAALT LSGVQPEDEAEYCVLWYSNRWVF GGGTKLTVLGGGGDKHTC PPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNQKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGSDKTHTCPPC PAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNQKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHY TQKSLSLSPGK
170.	CH ₃ CD3-sc Fc	VH CDR1	SYGMH
171.	CH ₃ CD3-sc Fc	VH CDR2	FIWYEGSNKYAESVKD
172.	CH ₃ CD3-sc Fc	VH CDR3	RAGIIGTIGYYYGMDV
173.	CH ₃ CD3-sc Fc	VL CDR1	SGDRLGEKYTS
174.	CH ₃ CD3-sc Fc	VL CDR2	QDTRPS
175.	CH ₃ CD3-sc Fc	VL CDR3	QAWESSTVV
176.	CH ₃ CD3-sc Fc	VH	QVQLVESGGGVVQPGGSLRLS CAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGI IGTIGYYYGMDVWGQGT TVTVSS
177.	CH ₃ CD3-sc Fc	VL	SYELTQPPSVSVSPGQTASITCSGDR LGEKYTSWYQRP GQSPLLVIYQDTRK PSGIPERFSGSNSGNTATLTISGTQAMDEADYYCQAWESSTVVF GGGTKLTV L
178.	CH ₃ CD3-sc Fc	scFv	QVQLVESGGGVVQPGGSLRLS CAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGI IGTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LGEKYTSWYQRP GQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GGGTKLTVL
179.	CH ₃ CD3-sc Fc	双特异性 分子	QVQLVESGGGVVQPGGSLRLS CAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGI IGTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LGEKYTSWYQRP GQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GGGTKLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGG TVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGG TKFLAPGTPARFSGSL LGGKAALT LSGVQPEDEAEYCVLWYSNRWVF GGGTKLTVL
180.	CH ₃ CD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLS CAASGFTFSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARRAGI IGTIGYYYGMDVWGQGT TVTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDR LGEKYTSWYQRP GQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVF GGGTKLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGN

[0628]

			SYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
181.	CH_3xCD3-sc Fc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA FIWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYVCARRAGI IGTIGYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGGKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYVCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKHTHCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
182.	CH_3_CCxCD 3-scFc	VH	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYVCARRAGI GTIGYYYGMDVWGQGTITVTVSS
183.	CH_3_CCxCD 3-scFc	VL	SYELTQPPSVSVSPGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRK PSGIPERFSGSNSGNTATLTISGTQAMDEADYYCQAWESSTVVFSGGKLTVL L
184.	CH_3_CCxCD 3-scFc	scFv	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYVCARRAGI GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGGKLTVL
185.	CH_3_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYVCARRAGI GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGGKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYVCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGQTVVTQEPSTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
186.	CH_3_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAF IWYEGSNKYAESVKDRFTISRDN SKNTLYLQMNSLRAEDTAVYVCARRAGI GTIGYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEKYSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS

[0629]

			GNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGN SYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
187.	CH_3_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQPGGSLRLSAAAGFTSSYGMHWVRQAPGKCLEWVAF IWYEGSNKYAESVKDRFTISRDNKNTLYLQMNSLRAEDAVYYCARRAGII GTIGYYGMDVWGQGTTLTVSSGGGGSGGGSGGGSGGGSSYELTQPPSVSVS PGQTASITCSGDRLEGEYTSWYQQRPGQSPLLVIYQDTRKPSGIPERFSGSNS GNTATLTISGTQAMDEADYYCQAWESSTVVFSGCTKLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGN SYISYWAYWGQGTTLTVSSGGGGSGGGSGGGSGGGGSQTVVTQEPSLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
188.	DL_1xCD3-sc Fc	VH CDR1	SYWWS
189.	DL_1xCD3-sc Fc	VH CDR2	YVYSGTTNYPNPSLKS
190.	DL_1xCD3-sc Fc	VH CDR3	IAVTGFYFDY
191.	DL_1xCD3-sc Fc	VL CDR1	RASQRVNNNYLA
192.	DL_1xCD3-sc Fc	VL CDR2	GASSRAT
193.	DL_1xCD3-sc Fc	VL CDR3	QQYDRSPLT
194.	DL_1xCD3-sc Fc	VH	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADAVYYCASIAVTGFYFDY WGQGTTLTVSS
195.	DL_1xCD3-sc Fc	VL	EIVLTQSPGTLSLSPGERVTLSRASQRVNNNYLAWYQQRPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYDRSPLTFGGGKLEIK
196.	DL_1xCD3-sc Fc	scFv	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADAVYYCASIAVTGFYFDY WGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERVTLSRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISR LEPEDFAVYYCQQYDRSPLTFGGGKLEIK
197.	DL_1xCD3-sc	双特异性	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY

[0630]

	Fc	分子	SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADTAVYYCASIATGIFYFDY WGQGTLLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRL EPEDFAVYYCQYDRSPLTFGGGTKEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGT LVTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSGSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVL
198.	DL_1xCD3-sc Fc	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADTAVYYCASIATGIFYFDY WGQGTLLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRL EPEDFAVYYCQYDRSPLTFGGGTKEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGT LVTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSGSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK GGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
199.	DL_1xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADTAVYYCASIATGIFYFDY WGQGTLLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRL EPEDFAVYYCQYDRSPLTFGGGTKEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGT LVTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSGSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGG GGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCAPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEE QYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPV LDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
200.	DL_1_CCxCD 3-scFc	VH	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADTAVYYCASIATGIFYFDY WGQGTLLTVSS
201.	DL_1_CCxCD 3-scFc	VL	EIVLTQSPGTLSPGERVTLSCRASQRVNNNYLAWYQQRPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYDRSPLTFGCGTKLEIK
202.	DL_1_CCxCD 3-scFc	scFv	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY SGTTNYPNPSLKSRTVISVDTSKNQFSLKLSVTAADTAVYYCASIATGIFYFDY WGQGTLLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRL EPEDFAVYYCQYDRSPLTFGCGTKLEIK
203.	DL_1_CCxCD 3-scFc	双特异性	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKLEWIGYVY

[0631]

		分子	SGTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYVCASIAVTGFYFDY WGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLTISR EPEDFAVYCCQYDRSPLTFGCGTKLEIKSGGGGSEVQLVESGGGLVQP LKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYADSVKD RFTISRDDSKNTAYLQMNMLKTEDTAVYVCVRHGNFNGNSYISYWAYWGQGT LTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVL
204.	DL_1_CCxCD 3-scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKCLEWIGYVY SGTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYVCASIAVTGFYFDY WGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLTISR EPEDFAVYCCQYDRSPLTFGCGTKLEIKSGGGGSEVQLVESGGGLVQP LKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYADSVKD RFTISRDDSKNTAYLQMNMLKTEDTAVYVCVRHGNFNGNSYISYWAYWGQGT LTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK GGGGSGGGSGGGSGGGSGGGSGGGGSDKHTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
205.	DL_1_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQPPGKCLEWIGYVY SGTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYVCASIAVTGFYFDY WGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERVTLSCRAS QRVNNNYLAWYQQRPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLTISR EPEDFAVYCCQYDRSPLTFGCGTKLEIKSGGGGSEVQLVESGGGLVQP LKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYADSVKD RFTISRDDSKNTAYLQMNMLKTEDTAVYVCVRHGNFNGNSYISYWAYWGQGT LTVSSGGGGSGGGSGGGSGGGGQTAVTQEPSTVSPGGTVTLTCSSTGAVT SGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG GGSGGGSGGGSGGGSGGGSGGGSGGGGSDKHTHTCPPCAPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEE QYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVL DSDGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
206.	DL_2xCD3-sc Fc	VH CDR1	SFYWS
207.	DL_2xCD3-sc Fc	VH CDR2	YIYSGTTNYPNPSLKS
208.	DL_2xCD3-sc Fc	VH CDR3	IAVAGFFFDY
209.	DL_2xCD3-sc Fc	VL CDR1	RASQSVNKNYLA
210.	DL_2xCD3-sc Fc	VL CDR2	GASSRAT
211.	DL_2xCD3-sc Fc	VL CDR3	QQYDRSPLT

212.	DL_2xCD3-sc Fc	VH	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKGLEWIGIYYYS GTTNYPNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARIAGVAGFFFDY WGQGTLLTVSS
213.	DL_2xCD3-sc Fc	VL	EIVLTQSPGTLSPGERATLSCRASQSVNKNYLAWYQQKPGQAPRLLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYDRSPLTFGGGKTVEIK
214.	DL_2xCD3-sc Fc	scFv	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKGLEWIGIYYYS GTTNYPNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARIAGVAGFFFDY WGQGTLLTVSSGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGGGKTVEIK
215.	DL_2xCD3-sc Fc	双特异性 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKGLEWIGIYYYS GTTNYPNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARIAGVAGFFFDY WGQGTLLTVSSGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGGGKTVEIKSGGGSEVQLVESGGGLVQPGGG LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGKTCLTVLGGGGDKTHTCPPCPAPPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
216.	DL_2xCD3-sc Fc	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKGLEWIGIYYYS GTTNYPNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARIAGVAGFFFDY WGQGTLLTVSSGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGGGKTVEIKSGGGSEVQLVESGGGLVQPGGG LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGKTCLTVLGGGGDKTHTCPPCPAPPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
217.	DL_2xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKGLEWIGIYYYS GTTNYPNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARIAGVAGFFFDY WGQGTLLTVSSGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGGGKTVEIKSGGGSEVQLVESGGGLVQPGGG LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGKTCLTVLGGGGDKTHTCPPCPAPPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP VLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK GGSGGGSGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEE QYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVL DSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

[0632]

218.	DL_2_CCxCD 3-scFc	VH	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKCLEWIGYIYYS GTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYYCARIIVAGFFFDY WGQGT LTVSS
219.	DL_2_CCxCD 3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVNKNYLAWYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYDRSPLTFGCGTKVEIK
220.	DL_2_CCxCD 3-scFc	scFv	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKCLEWIGYIYYS GTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYYCARIIVAGFFFDY WGQGT LTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGSGGGSGGT VVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVL
221.	DL_2_CCxCD 3-scFc	双特异性 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKCLEWIGYIYYS GTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYYCARIIVAGFFFDY WGQGT LTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGSGGGSGGT VVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP VLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
222.	DL_2_CCxCD 3-scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKCLEWIGYIYYS GTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYYCARIIVAGFFFDY WGQGT LTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGSGGGSGGT VVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP VLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
223.	DL_2_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLQESGPGLVKPSSETLSLTCTVSGASISSFYWSWIRQPPGKCLEWIGYIYYS GTTNYPNPSLKSRVTISVDTSKNQFSLKLSVTAADTAVYYCARIIVAGFFFDY WGQGT LTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATLSCRAS QSVNKNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLE PEDFAVYYCQQYDRSPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGS LKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKD RFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNGNSYISYWAYWGQGT LTVSSGGGSGGGSGGGSGGGSGGT VVTQEPSTLTVSPGGTVTLTCSGSTGAVT SGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQ PEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP VLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK GGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELLGGPSVFL FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEE QYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVL DSGSGFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK

[0633]

[0634]

224.	DL_3xCD3-sc Fc	VH CDR1	NYMH
225.	DL_3xCD3-sc Fc	VH CDR2	IINPSDGSTSYAQKFQG
226.	DL_3xCD3-sc Fc	VH CDR3	GGNSAFYSYYDMDV
227.	DL_3xCD3-sc Fc	VL CDR1	RSSQSLVYRDGNTYLS
228.	DL_3xCD3-sc Fc	VL CDR2	KVSNWQS
229.	DL_3xCD3-sc Fc	VL CDR3	MQGTHWPPT
230.	DL_3xCD3-sc Fc	VH	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYMHVWRQAPGLGLEWMG IINPSDGSTSYAQKFQGRVTMTRDTSTNTVYMDLSSLRSEDAVYYCARGGN SAFYSYYDMDVWGQGTITVSS
231.	DL_3xCD3-sc Fc	VL	DVVMVTQTPLSLPVTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRL IYKVSNNWQSGVPDRFSGGGSGTDFTLKISRVEAEDVGYYCMQGTHWPPTF GQGTKEIK
232.	DL_3xCD3-sc Fc	scFv	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYMHVWRQAPGLGLEWMG IINPSDGSTSYAQKFQGRVTMTRDTSTNTVYMDLSSLRSEDAVYYCARGGN SAFYSYYDMDVWGQGTITVSSGGGGSGGGSGGGSDVVMVTQTPLSLP VTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSNNWQSGVP DRFSGGGSGTDFTLKISRVEAEDVGYYCMQGTHWPPTFQGTKEIK
233.	DL_3xCD3-sc Fc	双特异性 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYMHVWRQAPGLGLEWMG IINPSDGSTSYAQKFQGRVTMTRDTSTNTVYMDLSSLRSEDAVYYCARGGN SAFYSYYDMDVWGQGTITVSSGGGGSGGGSGGGSDVVMVTQTPLSLP VTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSNNWQSGVP DRFSGGGSGTDFTLKISRVEAEDVGYYCMQGTHWPPTFQGTKEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVTVQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
234.	DL_3xCD3-sc Fc	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYMHVWRQAPGLGLEWMG IINPSDGSTSYAQKFQGRVTMTRDTSTNTVYMDLSSLRSEDAVYYCARGGN SAFYSYYDMDVWGQGTITVSSGGGGSGGGSGGGSDVVMVTQTPLSLP VTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSNNWQSGVP DRFSGGGSGTDFTLKISRVEAEDVGYYCMQGTHWPPTFQGTKEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVTVQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPG TPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGG GGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQLDNLNGKEYCK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFV MHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGG GSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQLDNLNGKEYCK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFV MHEALHNHYTQKSLSLSPGK
235.	DL_3xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYMHVWRQAPGLGLEWMG IINPSDGSTSYAQKFQGRVTMTRDTSTNTVYMDLSSLRSEDAVYYCARGGN SAFYSYYDMDVWGQGTITVSSGGGGSGGGSGGGSDVVMVTQTPLSLP VTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSNNWQSGVP DRFSGGGSGTDFTLKISRVEAEDVGYYCMQGTHWPPTFQGTKEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEW

[0635]

			VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPG TPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGG GGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSD KHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSPGK
236.	DL_3_CCxCD 3-scFc	VH	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYYMHVVRQAPGLCLEWMGI INPSDGGSTSYAQKFQGRVTMTTRDTSTNTVYMDLSSLRSEDATAVYVCARGGNS AFYSYYDMDVWGQGTITVTVSS
237.	DL_3_CCxCD 3-scFc	VL	DVVMVTQTPLSLPVTLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRL IYKVSINWQSGVPDRFSGGGSGTDFTLKISRVEAEDVGVYCMQGTHTWPTTF GCGTKVEIK
238.	DL_3_CCxCD 3-scFc	scFv	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYYMHVVRQAPGLCLEWMGI INPSDGGSTSYAQKFQGRVTMTTRDTSTNTVYMDLSSLRSEDATAVYVCARGGNS AFYSYYDMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDVVMVTQTPLSLPV TLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSINWQSGVPD RFSGGGSGTDFTLKISRVEAEDVGVYCMQGTHTWPTTFGCGTKVEIK
239.	DL_3_CCxCD 3-scFc	双特异性 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYYMHVVRQAPGLCLEWMGI INPSDGGSTSYAQKFQGRVTMTTRDTSTNTVYMDLSSLRSEDATAVYVCARGGNS AFYSYYDMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDVVMVTQTPLSLPV TLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSINWQSGVPD RFSGGGSGTDFTLKISRVEAEDVGVYCMQGTHTWPTTFGCGTKVEIKSGGG GSEVQLVESGGGLVQPGGSLKLSKAASGFTFNKYAMNWWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPS LTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGT PARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
240.	DL_3_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYYMHVVRQAPGLCLEWMGI INPSDGGSTSYAQKFQGRVTMTTRDTSTNTVYMDLSSLRSEDATAVYVCARGGNS AFYSYYDMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDVVMVTQTPLSLPV TLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSINWQSGVPD RFSGGGSGTDFTLKISRVEAEDVGVYCMQGTHTWPTTFGCGTKVEIKSGGG GSEVQLVESGGGLVQPGGSLKLSKAASGFTFNKYAMNWWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPS LTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGT PARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGG GGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGG GSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MHEALHNHYTQKSLSLSPGK
241.	DL_3_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNYYMHVVRQAPGLCLEWMGI INPSDGGSTSYAQKFQGRVTMTTRDTSTNTVYMDLSSLRSEDATAVYVCARGGNS AFYSYYDMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDVVMVTQTPLSLPV

[0636]

			TLGQPASISCRSSQSLVYRDGNTYLSWFQQRPGQSPRRLIYKVSNWQSGVDP RFSGGGSGTDFTLKISRVEAEDVGVYCMQGTHWPPTFGCGTKVEIKSGGG GSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFNGSYISYWAYWGQGTLLVTVSSGGGGSGGGGSGGGGSGTQVVTQEPS LTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGT PARFSGSLLGGKAAITLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGG GGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCV MHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSD KHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSPGK
242.	C19_1xCD3-sc Fc	VH CDR1	SYGVS
243.	C19_1xCD3-sc Fc	VH CDR2	YNDPVFGSIYYASWVKG
244.	C19_1xCD3-sc Fc	VH CDR3	DRSYVSSSGYHFNL
245.	C19_1xCD3-sc Fc	VL CDR1	QASETIYSSLA
246.	C19_1xCD3-sc Fc	VL CDR2	GASNLES
247.	C19_1xCD3-sc Fc	VL CDR3	QSGVYSAGLT
248.	C19_1xCD3-sc Fc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYGVSWVRQAPGKLEWIGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAEDTAVYYCAKDRSYVS SSGYHFNLWGQGTLLTVSS
249.	C19_1xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITTCQASETIYSSLAWEYQQKPGKPPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLPEDIATYYCQSGVYSAGLTFGGGTKEIK
250.	C19_1xCD3-sc Fc	scFv	DIQMTQSPSSLSASVGDRTITTCQASETIYSSLAWEYQQKPGKPPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLPEDIATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNLWGQGTLLTVSS
251.	C19_1xCD3-sc Fc	双特异性 分子	DIQMTQSPSSLSASVGDRTITTCQASETIYSSLAWEYQQKPGKPPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLPEDIATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNLWGQGTLLTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGSYISYWA YWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
252.	C19_1xCD3-sc Fc	双特异性 HLE 分子	DIQMTQSPSSLSASVGDRTITTCQASETIYSSLAWEYQQKPGKPPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLPEDIATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNLWGQGTLLTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGSYISYWA YWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAP

[0637]

	Fc		
263.	C19_2xCD3-sc Fc	VL CDR3	QSGVYSAGLT
264.	C19_2xCD3-sc Fc	VH	EVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSWVRQAPGKGLEWIGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRAEDTAVYYCAKDRSYVS SSGYHFNWGGQGLTVTVSS
265.	C19_2xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK
266.	C19_2xCD3-sc Fc	scFv	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGSGGGGSEVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSS
267.	C19_2xCD3-sc Fc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGSGGGGSEVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGGSGGGGSQT VVTQEPSTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
268.	C19_2xCD3-sc Fc	双特异性 HLE 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGSGGGGSEVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGGSGGGGSQT VVTQEPSTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHCTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
269.	C19_2_CCxC D3-scFc	VH	EVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSWVRQAPGKCLEWIGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRAEDTAVYYCAKDRSYVS SSGYHFNWGGQGLTVTVSS
270.	C19_2_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK
271.	C19_2_CCxC D3-scFc	scFv	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGSGGGGSEVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSS
272.	C19_2_CCxC D3-scFc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGSGGGGSEVQLLES GGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL

[0638]

[0639]

			VQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTLCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
273.	C19_2_CCxC D3-scFc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDIATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNWLGQGTTLTVSSGGGSGEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTLCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
274.	C19_3xCD3-sc Fc	VH CDR1	SYGVS
275.	C19_3xCD3-sc Fc	VH CDR2	YNDPVFGSIYYASWVKG
276.	C19_3xCD3-sc Fc	VH CDR3	DRSYVSSSGYHFNL
277.	C19_3xCD3-sc Fc	VL CDR1	QASETIYSSLA
278.	C19_3xCD3-sc Fc	VL CDR2	GASNLES
279.	C19_3xCD3-sc Fc	VL CDR3	QSGVYSAGLT
280.	C19_3xCD3-sc Fc	VH	EVQLLESGLLVQPGGSLRLSCAASGFTFSSYGVSWVRQAPGKGLEWIGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAEDTAVYYCAKDRSYVS SSGYHFNWLGQGTTLTVSS
281.	C19_3xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDIATYYCQSGVYSAGLTFGGGKVEIK
282.	C19_3xCD3-sc Fc	scFv	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNWLGQGTTLTVSS
283.	C19_3xCD3-sc Fc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDIATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNWLGQGTTLTVSSGGGSGEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTLCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
284.	C19_3xCD3-sc Fc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDIATYYCQSGVYSAGLTFGGGKVEIK

			GGGGSGGGGGGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVVYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSQTVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQK SLSLSPGK
285.	C19_3_CCxC D3-scFc	VH	EVQLESGGGLVQPGGSLRLSCAASGFTFSSYGVSWVRQAPGKCLEWIGYN DPVFGSIYASWVKGRFTISSDNSKNTLYLQMNSLRAEDTAVVYCAKDRSYVS SSGYHFNWGGQGLTVTVSS
286.	C19_3_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDATYYCQSGVYSAGLTFGCGTKVEIK
287.	C19_3_CCxC D3-scFc	scFv	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVVYCAKDRSYVSSSGYHFNWGGQGLTVTVSS
288.	C19_3_CCxC D3-scFc	双特异性 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVVYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSQTVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
289.	C19_3_CCxC D3-scFc	双特异性 HLE 分子	DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVVYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSQTVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQK SLSLSPGK

[0641]

290.	C19_4xCD3-sc Fc	VH CDR1	SYGV5
291.	C19_4xCD3-sc Fc	VH CDR2	YNDPVFGSIYYASWVKG
292.	C19_4xCD3-sc Fc	VH CDR3	DRSYVSSSGYHFNL
293.	C19_4xCD3-sc Fc	VL CDR1	QASETIYSSLA
294.	C19_4xCD3-sc Fc	VL CDR2	GASNLES
295.	C19_4xCD3-sc Fc	VL CDR3	QSGVYSAGLT
296.	C19_4xCD3-sc Fc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSYGVSWVRQAPGKGLEWVGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAEDTAVYYCAKDRSYVS SSGYHFNLWGQGLTVTVSS
297.	C19_4xCD3-sc Fc	VL	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGGGTKEIK
298.	C19_4xCD3-sc Fc	scFv	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSYGVSW VRQAPGKGLEWVGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSL AEDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSS
299.	C19_4xCD3-sc Fc	双特异性 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSYGVSW VRQAPGKGLEWVGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSL AEDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGTVTLTCLG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
300.	C19_4xCD3-sc Fc	双特异性 HLE 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGGGTKEIK GGGGSGGGSGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSYGVSW VRQAPGKGLEWVGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSL AEDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGTVTLTCLG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
301.	C19_4_CCxC D3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSYGVSWVRQAPGKCLEWVGYN DPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAEDTAVYYCAKDRSYVS SSGYHFNLWGQGLTVTVSS
302.	C19_4_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGCGTKVEIK
303.	C19_4_CCxC D3-scFc	scFv	DIQMTQSPSSLSASVGRVTITCQASETIYSSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGCGTKVEIKG

[0642]

			GGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSWV RQAPGKCLEWVGYNPVGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWGGGTLTVSS
304.	C19_4_CCxC D3-scFc	双特异性 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPFRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGCGTKVEIKG GGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSWV RQAPGKCLEWVGYNPVGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWGGGTLTVSSGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
305.	C19_4_CCxC D3-scFc	双特异性 HLE 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSLAWYQQKPKGAPKLLIYGASNL ESGVPFRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGCGTKVEIKG GGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSWV RQAPGKCLEWVGYNPVGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWGGGTLTVSSGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
306.	C19_1xCD3-sc Fc_delGK	双特异性 HLE 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSLAWYQQKPKGPPKLLIYGASNL ESGVPFRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGGGKVEIK GGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSW VRQAPGKLEWIGYNPVGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWGGGTLTVSSGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGGTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH AKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSL LSPGK
307.	C19_1_CCxC D3-scFc_delG K	双特异性 HLE 分子	DIQMTQSPSSLSASVGRVTITCQASETIYSSLAWYQQKPKGPPKLLIYGASNL ESGVPFRFSGSGSGTDFTFTISLQPEDATYYCQSGVYSAGLTFGCGTKVEIKG GGGSGGGSGGGGSEVQLLESGGGLVQPGGSLRLSCAASGFTFSSYGVSWV RQAPGKCLEWIGYNPVGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWGGGTLTVSSGGGSEVQLVESGGGLV

			<p>QPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEVH AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK</p>
308.	C19_2xCD3-sc Fc_delGK	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDATYYCQSGVYSAGLTFGGGTKVEIK GGGGSGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQK LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK</p>
309.	C19_2_CCxC D3-scFc_delG K	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSMQPEDATYYCQSGVYSAGLTFGGGTKVEIK GGGGSGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA EDTAVYYCAKDRSYVSSSGYHFNWGGQGLTVTVSSGGGGSEVQLVESGGGI VQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQK LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTP EVT CVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK</p>
310.	C19_3xCD3-sc Fc_delGK	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDATYYCQSGVYSAGLTFGGGTKVEIK GGGGSGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKGLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNLSRA</p>

			<p>EDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSSQT VVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKQPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPCAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLS LSPGK</p>
311.	C19_3_CCxC D3-scFc_delG K	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISGLQPEDIATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKCLEWIGYNDPVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRA EDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSYWA YWGQGLTVTVSSGGGGSGGGGSGGGGSSQT VVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKQPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQK SLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPCAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLS LSPGK</p>
312.	C19_4xCD3-sc Fc_delGK	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLQPEDATYYCQSGVYSAGLTFGGGKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKGLEWVGYNPVGFSIYYASWVKGRFTISSDNSKNTLYLQMNSLR AEDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSYWA YWGQGLTVTVSSGGGGSGGGGSGGGGSSQT VVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKQPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQK SLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPCAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLS LSPGK</p>
313.	C19_4_CCxC D3-scFc_delG K	双特异性 HLE 分子	<p>DIQMTQSPSSLSASVGDRVTITCQASETIYSSLAWYQQKPGKAPKLLIYGASNL ESGVPSRFSGSGSGTDFTFTISSLQPEDATYYCQSGVYSAGLTFGCGTKVEIK GGGGSGGGGSGGGGSEVQLLESGLLVQPGGSLRLSCAASGFTSSYGVSW VRQAPGKGLEWVGYNPVGFSIYYASWVKGRFTISSDNSKNTLYLQMNSLR AEDTAVYYCAKDRSYVSSSGYHFNLWGQGLTVTVSSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSYWA YWGQGLTVTVSSGGGGSGGGGSGGGGSSQT VVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKQPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQK SLSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPCAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLS LSPGK</p>

[0645]

			RQAPGKCLEWVGYNPDVFGSIYYASWVKGRFTISSDNSKNTLYLQMNSLRAE DTAVYYCAKDRSYVSSSGYHFNWLGQGLTVTVSSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
314.	FL_1xCD3-scF c	VH CDR1	NARMGV
315.	FL_1xCD3-scF c	VH CDR2	NIFSDEKSYSTSLKS
316.	FL_1xCD3-scF c	VH CDR3	IVGYGSGWYGYFDY
317.	FL_1xCD3-scF c	VL CDR1	RASQGI RNDLG
318.	FL_1xCD3-scF c	VL CDR2	AASSLQS
319.	FL_1xCD3-scF c	VL CDR3	LQHNSYPLT
320.	FL_1xCD3-scF c	VH	QVTLKESGPALVKPTETLTCTVSGFSLSNARMGVSWIRQPPGKALEWLANI FSNDEKSYSTSLKSRLTISKGTSKSQVLTMTNMDPEDTATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSS
321.	FL_1xCD3-scF c	VL	DIQMTQSPSSLSASVGDRTITCRASQGIRNDLGWYQQKPGKAPQRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIK S
322.	FL_1xCD3-scF c	scFv	QVTLKESGPALVKPTETLTCTVSGFSLSNARMGVSWIRQPPGKALEWLANI FSNDEKSYSTSLKSRLTISKGTSKSQVLTMTNMDPEDTATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQGIRNDLGWYQQKPGKAPQRLIYAASSLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIK
323.	FL_1xCD3-scF c	双特异性 分子	QVTLKESGPALVKPTETLTCTVSGFSLSNARMGVSWIRQPPGKALEWLANI FSNDEKSYSTSLKSRLTISKGTSKSQVLTMTNMDPEDTATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQGIRNDLGWYQQKPGKAPQRLIYAASSLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
324.	FL_1xCD3-scF c	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTVSGFSLSNARMGVSWIRQPPGKALEWLANI FSNDEKSYSTSLKSRLTISKGTSKSQVLTMTNMDPEDTATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQGIRNDLGWYQQKPGKAPQRLIYAASSLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK

334.	FL_2xCD3-scFc	VL CDR2	AASTLQS
335.	FL_2xCD3-scFc	VL CDR3	LQHNSYPLT
336.	FL_2xCD3-scFc	VH	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKALEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSS
337.	FL_2xCD3-scFc	VL	DIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIK
338.	FL_2xCD3-scFc	scFv	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKALEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIKS
339.	FL_2xCD3-scFc	双特异性分子	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKALEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWQGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGKKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
340.	FL_2xCD3-scFc	双特异性HLE分子	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKALEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWQGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGKKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKD TLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVAEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
341.	FL_2_CCxCD3-scFc	VH	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKCLEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSS
342.	FL_2_CCxCD3-scFc	VL	DIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIK
343.	FL_2_CCxCD3-scFc	scFv	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKCLEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIKS
344.	FL_2_CCxCD3-scFc	双特异性分子	QVTLKESGPTLVKPTETLTCTLSGFSLNNARMGVSWIRQPPGKCLEWLAHIFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATATYCARIVGYGSGWYGFFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTKEIKS

[0648]

			TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA YYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
345.	FL_2_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTLSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKRLTISKDSSKTQVVLMTNVDPVDTATYYCARIVGYGSG WYGYFDYWGGQTLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVITICRASQIRNDLWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA YYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCP PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
346.	FL_3xCD3-scF c	VH CDR1	NARMAVS
347.	FL_3xCD3-scF c	VH CDR2	HIFSNDEKSYSTSLKS
348.	FL_3xCD3-scF c	VH CDR3	IVGYGSGWYGYFDY
349.	FL_3xCD3-scF c	VL CDR1	RASQDIRNDLG
350.	FL_3xCD3-scF c	VL CDR2	AASLTQS
351.	FL_3xCD3-scF c	VL CDR3	LQHNSYPLT
352.	FL_3xCD3-scF c	VH	QVTLKESGPALVKPTETLTCTLSGFSLNARMMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKGQVVLMTNMDPVDTATYYCARIVGYGSG WYGYFDYWGGQTLTVSS
353.	FL_3xCD3-scF c	VL	DIQMTQSPSSLSASVGDRVITICRASQDIRNDLWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIK
354.	FL_3xCD3-scF c	scFv	QVTLKESGPALVKPTETLTCTLSGFSLNARMMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKGQVVLMTNMDPVDTATYYCARIVGYGSG WYGYFDYWGGQTLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRNDLWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKS
355.	FL_3xCD3-scF c	双特异性 分子	QVTLKESGPALVKPTETLTCTLSGFSLNARMMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKGQVVLMTNMDPVDTATYYCARIVGYGSG WYGYFDYWGGQTLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRNDLWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA YYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
356.	FL_3xCD3-scF	双特异性	QVTLKESGPALVKPTETLTCTLSGFSLNARMMAVSWIRQPPGKLEWLAHI

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	c	HLE 分子	FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATATYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG DRVITITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
357.	FL_3_CCxCD 3-scFc	VH	QVTLKESGPALVKPTETLTCTLSGFSLNARMASWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATATYCARIVGYGSG WYGYFDYWGGQGLTVTVSS
358.	FL_3_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRASQDIRNDLGWYQQKPGKAPKRLIYAAS LTQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
359.	FL_3_CCxCD 3-scFc	scFv	QVTLKESGPALVKPTETLTCTLSGFSLNARMASWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATATYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG DRVITITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
360.	FL_3_CCxCD 3-scFc	双特异性 分子	QVTLKESGPALVKPTETLTCTLSGFSLNARMASWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATATYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG DRVITITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLG
361.	FL_3_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNARMASWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATATYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG DRVITITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDIQTQSPSSLSASVG CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY

			TQKSLSLSPGK
362.	FL_4xCD3-scF c	VH CDR1	NAKMGV
363.	FL_4xCD3-scF c	VH CDR2	HIFSNDEKSYSTSLKS
364.	FL_4xCD3-scF c	VH CDR3	IVGYGSGWYGYFDY
365.	FL_4xCD3-scF c	VL CDR1	RASQDIRDDL
366.	FL_4xCD3-scF c	VL CDR2	GASTLQS
367.	FL_4xCD3-scF c	VL CDR3	LQHNSYPLT
368.	FL_4xCD3-scF c	VH	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVSS
369.	FL_4xCD3-scF c	VL	DIQMTQSPSSLSASVGDRTVITCRASQDIRDDLGWYQKPGNAPKRLIYGAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDI K
370.	FL_4xCD3-scF c	scFv	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGGDIQMTQSPSSLSASV GDRVTITCRASQDIRDDLGWYQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKS
371.	FL_4xCD3-scF c	双特异性 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGGDIQMTQSPSSLSASV GDRVTITCRASQDIRDDLGWYQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYA YYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTAPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
372.	FL_4xCD3-scF c	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGGDIQMTQSPSSLSASV GDRVTITCRASQDIRDDLGWYQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYA YYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTAPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VFNHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTSKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGDKTHTCPPC PAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTSKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
373.	FL_4_CCxCD 3-scFc	VH	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSS
374.	FL_4_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTVITCRASQDIRDDLGWYQKPGNAPKRLIYGAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDI K

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375.	FL_4_CCxCD3-scFc	scFv	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDDLGWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVDIKS
376.	FL_4_CCxCD3-scFc	双特异性分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDDLGWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGGGSGGGSQTVVTQEPSTLVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
377.	FL_4_CCxCD3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDDLGWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGGGSGGGSQTVVTQEPSTLVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKLSLSLSPGKGGGGSGGGGGSGGGGGSGGGGSDKHTHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKLSLSLSPGK
378.	FL_5xCD3-scFc	VH CDR1	NARMAVS
379.	FL_5xCD3-scFc	VH CDR2	HIFSNDEKSYSTSLKS
380.	FL_5xCD3-scFc	VH CDR3	IVGYGSGWYGYFDY
381.	FL_5xCD3-scFc	VL CDR1	RASQDIRYDLA
382.	FL_5xCD3-scFc	VL CDR2	AASSLQS
383.	FL_5xCD3-scFc	VL CDR3	LQHNFYPLT
384.	FL_5xCD3-scFc	VH	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSS
385.	FL_5xCD3-scFc	VL	DIQMTQSPSSVSASVGDRVITICRASQDIRYDLAWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNFYPLTFGGGKVEIK
386.	FL_5xCD3-scFc	scFv	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGSDIQMTQSPSSVSASVG DRVITICRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGGGKVEIKS
387.	FL_5xCD3-scFc	双特异性分子	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLMTNMDPVDATYYCARIVGYGSG

[0652]

			WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGGGKTVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
388.	FL_5xCD3-scF c	双特异性 HLE 分子	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGGGKTVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFLYSLKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFLYSLKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
389.	FL_5_CCxCD 3-scFc	VH	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSS
390.	FL_5_CCxCD 3-scFc	VL	DIQMTQSPSSVSASVGDRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNFYPLTFGCGTKVEIK
391.	FL_5_CCxCD 3-scFc	scFv	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGCGTKVEIKS
392.	FL_5_CCxCD 3-scFc	双特异性 分子	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
393.	FL_5_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP

			ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
394.	FL_6xCD3-scF c	VH CDR1	NARMGVSV
395.	FL_6xCD3-scF c	VH CDR2	HIFSNDEKSFSTSLKN
396.	FL_6xCD3-scF c	VH CDR3	MVGYGSGWYAYFDY
397.	FL_6xCD3-scF c	VL CDR1	RASQSISSYLN
398.	FL_6xCD3-scF c	VL CDR2	AASSLQS
399.	FL_6xCD3-scF c	VL CDR3	LQHNSYPLT
400.	FL_6xCD3-scF c	VH	QVTLKESGPVLVKPTQTLTLTCTFSGFSLSNARMGVSWIRQPPGKALEWLAHI FSNDEKSFSTSLKNRLTISKDTSKQSVVLTMTNMDPVDATATYTCARMVGYS GWYAYFDYWGGQTQVTVSSGGGGSGGGSGGGSGGGSDI QMTQSPSSLSASV GDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKTKEIKS
401.	FL_6xCD3-scF c	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSL QSGVPSRFSGSGSGTDFLTISSLQPEDFATYYCLQHNSYPLTFGGGKTKEIK
402.	FL_6xCD3-scF c	scFv	QVTLKESGPVLVKPTQTLTLTCTFSGFSLSNARMGVSWIRQPPGKALEWLAHI FSNDEKSFSTSLKNRLTISKDTSKQSVVLTMTNMDPVDATATYTCARMVGYS GWYAYFDYWGGQTQVTVSSGGGGSGGGSGGGSGGGSDI QMTQSPSSLSASV GDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKTKEIKS
403.	FL_6xCD3-scF c	双特异性 分子	QVTLKESGPVLVKPTQTLTLTCTFSGFSLSNARMGVSWIRQPPGKALEWLAHI FSNDEKSFSTSLKNRLTISKDTSKQSVVLTMTNMDPVDATATYTCARMVGYS GWYAYFDYWGGQTQVTVSSGGGGSGGGSGGGSGGGSDI QMTQSPSSLSASV GDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKTKEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSQTVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGKG AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
404.	FL_6xCD3-scF c	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTLTCTFSGFSLSNARMGVSWIRQPPGKALEWLAHI FSNDEKSFSTSLKNRLTISKDTSKQSVVLTMTNMDPVDATATYTCARMVGYS GWYAYFDYWGGQTQVTVSSGGGGSGGGSGGGSGGGSDI QMTQSPSSLSASV GDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKTKEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISY WAYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSQTVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGKG AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC

[0654]

			PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
405.	FL_6_CCxCD 3-scFc	VH	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATYYCARMVGYGS GWYAYFDYWGQGTQVTVSS
406.	FL_6_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGRVTITCRASQSISSYLNWYQKPKGAPKLLIYAASSL QSGVPSRFSGSGSGTDFLTITSLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
407.	FL_6_CCxCD 3-scFc	scFv	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATYYCARMVGYGS GWYAYFDYWGQGTQVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASV GDRVITICRASQSISSYLNWYQKPKGAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTITSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
408.	FL_6_CCxCD 3-scFc	双特异性 分子	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATYYCARMVGYGS GWYAYFDYWGQGTQVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASV GDRVITICRASQSISSYLNWYQKPKGAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTITSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGQGTSLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCTG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
409.	FL_6_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATYYCARMVGYGS GWYAYFDYWGQGTQVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASV GDRVITICRASQSISSYLNWYQKPKGAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTITSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGQGTSLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCTG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHCTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
410.	FL_7xCD3-scF c	VH CDR1	NARMGVS
411.	FL_7xCD3-scF c	VH CDR2	HIFSNDEKSYSTSLKN
412.	FL_7xCD3-scF c	VH CDR3	IVGYGTGWFGFYDY
413.	FL_7xCD3-scF c	VL CDR1	RASQDIRTDLA
414.	FL_7xCD3-scF c	VL CDR2	AASSLQS
415.	FL_7xCD3-scF c	VL CDR3	LQHNRYPILT
416.	FL_7xCD3-scF c	VH	QVTLKESGPTLVKPTETLTCTVSGFSLNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTSLKNRLTISKDSSKTQVLTMTNMDPVDATYYCARIVGYGTG

[0655]

			WFGYFDYWGGGTQVTVSS
417.	FL_7xCD3-scF c	VL	DIQMTQSPSSLSASVGDRTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISSLQPEDFATYYCLQHNRYPPLTFGGGTVKVDIK
418.	FL_7xCD3-scF c	scFv	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISSLQPEDFATYYCLQHNRYPPLTFGGGTVKVDIKS
419.	FL_7xCD3-scF c	双特异性 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISSLQPEDFATYYCLQHNRYPPLTFGGGTVKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISY WAYWGGGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
420.	FL_7xCD3-scF c	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISSLQPEDFATYYCLQHNRYPPLTFGGGTVKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISY WAYWGGGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGGSGGGGSGGGGSDKHTCP PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
421.	FL_7_CCxCD 3-scFc	VH	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSS
422.	FL_7_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISSLQPEDFATYYCLQHNRYPPLTFGCGTKVDIK
423.	FL_7_CCxCD 3-scFc	scFv	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISSLQPEDFATYYCLQHNRYPPLTFGCGTKVDIKS
424.	FL_7_CCxCD 3-scFc	双特异性 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDVPVDATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRTDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISSLQPEDFATYYCLQHNRYPPLTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISY WAYWGGGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLT CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL

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425.	FL_7_CCxCD3-scFc	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVVLTMNVDPVDTATYYCARIVGYGTG WFGYFDYWGGQTQVTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVG DRVITICRASQDIRDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNRYPFTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYISY WAYWGQGTLTVTSSGGGGSGGGSGGGSGQTVVTQEPSTLVSPGGTTLT CGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGK AALTSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
426.	FL_8xCD3-scFc	VH CDR1	NARMAVS
427.	FL_8xCD3-scFc	VH CDR2	HIFSNDEKSYSTSLKS
428.	FL_8xCD3-scFc	VH CDR3	IVGYGTGWYGGFFDY
429.	FL_8xCD3-scFc	VL CDR1	RASQGIRNDLA
430.	FL_8xCD3-scFc	VL CDR2	AASSLQS
431.	FL_8xCD3-scFc	VL CDR3	LQHNSYPLT
432.	FL_8xCD3-scFc	VH	QVTLKESGPALVKPTETLTCTLSGFSLNNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKQVVLTMNMDPEDTATYYCARIVGYGTG WYGGFFDYWGQGILVTVSS
433.	FL_8xCD3-scFc	VL	DIQMTQSPSSLSASVGDRVITICRASQGIRNDLAWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIK
434.	FL_8xCD3-scFc	scFv	QVTLKESGPALVKPTETLTCTLSGFSLNNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKQVVLTMNMDPEDTATYYCARIVGYGTG WYGGFFDYWGQGILVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVGD RVITICRASQGIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKS
435.	FL_8xCD3-scFc	双特异性 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKQVVLTMNMDPEDTATYYCARIVGYGTG WYGGFFDYWGQGILVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVGD RVITICRASQGIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYISYWA YWGQGTLTVTSSGGGGSGGGSGGGSGGGSGQTVVTQEPSTLVSPGGTTLTTCG SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
436.	FL_8xCD3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKQVVLTMNMDPEDTATYYCARIVGYGTG WYGGFFDYWGQGILVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSASVGD RVITICRASQGIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYISYWA

[0657]

			YWGQGT _{LV} TVSSGGGSGGGGSGGGGSGT _{VVT} QEP _{SLT} VS _{PGG} TV _{LT} CG SSTGAVTSGNYPN _{WV} QKPGQAPRGLIGG _{TK} FLAPGTPARFSG _{SL} GGKAA LTLSGVQPEDEAEYCVLWYSNR _{WV} FGGG _{TK} LT _{VL} GGGGDK _{TH} TCPPCPAP ELLGGPSV _{FL} FPPKPKDTLMISRTPEVTCV _{VVD} VSHEDPEVKFNWY _{VD} GV _{EV} HNAKTKPCEEQYGSTYRCV _{SV} LT _{VL} HQDWLNGKEYKCKVSNKALPAPIEK _{TIS} KAKGQPREPQVY _{TL} PPSREEMTKNQV _{SL} TL _{CL} VKGFYPSDIAVEWESNGQPE NNYK _{TT} PPV _{LD} SDGSFFLYSKLTVDKSRWQ _{QGN} VFSCSV _M HEALHNHY _{TQK} SLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSD _{KTH} TCPPCPAP ELLGGPSV _{FL} FPPKPKDTLMISRTPEVTCV _{VVD} VSHEDPEVKFNWY _{VD} GV _{EV} HNAKTKPCEEQYGSTYRCV _{SV} LT _{VL} HQDWLNGKEYKCKVSNKALPAPIEK _{TIS} KAKGQPREPQVY _{TL} PPSREEMTKNQV _{SL} TL _{CL} VKGFYPSDIAVEWESNGQPE NNYK _{TT} PPV _{LD} SDGSFFLYSKLTVDKSRWQ _{QGN} VFSCSV _M HEALHNHY _{TQK} SLSLSPGK
437.	FL_8_CCxCD 3-scFc	VH	QVTLKESGPALVKPTET _{LT} LTCTLSGFS _{LNN} ARMAVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLK _{SRLT} ISK _{DT} SKSQV _{LT} MTNMDPEDTATYCARIVGYGTG WYGFFDYWGQGIL _{VT} VSSGGGSGGGGSGGGGSGGGGSGGGGSD _{KTH} TCPPCPAP WYGFFDYWGQGIL _{VT} VSS
438.	FL_8_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGD _{RV} TITCRASQGI _{RND} LAWYQKPGKAPK _R LIYAAS SLQSGVPSRFSGSGSGTEFT _{LT} ISSLQPEDFATY _{YCL} QHNSYPLTFGCGTKVEIK
439.	FL_8_CCxCD 3-scFc	scFv	QVTLKESGPALVKPTET _{LT} LTCTLSGFS _{LNN} ARMAVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLK _{SRLT} ISK _{DT} SKSQV _{LT} MTNMDPEDTATYCARIVGYGTG WYGFFDYWGQGIL _{VT} VSSGGGSGGGGSGGGGSGGGGSGGGGSDI _{QMT} QSPSSLSASVGD RV _{TIT} CRASQGI _{RND} LAWYQKPGKAPK _R LIYAASLQSGVPSRFSGSGSGTE FT _{LT} ISSLQPEDFATY _{YCL} QHNSYPLTFGCGTKVEIKS
440.	FL_8_CCxCD 3-scFc	双特异性 分子	QVTLKESGPALVKPTET _{LT} LTCTLSGFS _{LNN} ARMAVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLK _{SRLT} ISK _{DT} SKSQV _{LT} MTNMDPEDTATYCARIVGYGTG WYGFFDYWGQGIL _{VT} VSSGGGSGGGGSGGGGSGGGGSGGGGSDI _{QMT} QSPSSLSASVGD RV _{TIT} CRASQGI _{RND} LAWYQKPGKAPK _R LIYAASLQSGVPSRFSGSGSGTE FT _{LT} ISSLQPEDFATY _{YCL} QHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMN _{WVR} QAPGKLEWVARIRSKYNNYATY YADSVKDRFTISR _{DD} SKNTAYLQMNNL _{KTED} AVYVCVRHGNFGNSYISYWA YWGQGT _{LV} TVSSGGGSGGGGSGGGGSGT _{VVT} QEP _{SLT} VS _{PGG} TV _{LT} CG SSTGAVTSGNYPN _{WV} QKPGQAPRGLIGG _{TK} FLAPGTPARFSG _{SL} GGKAA LTLSGVQPEDEAEYCVLWYSNR _{WV} FGGG _{TK} LT _{VL} GGGGDK _{TH} TCPPCPAP
441.	FL_8_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTET _{LT} LTCTLSGFS _{LNN} ARMAVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLK _{SRLT} ISK _{DT} SKSQV _{LT} MTNMDPEDTATYCARIVGYGTG WYGFFDYWGQGIL _{VT} VSSGGGSGGGGSGGGGSGGGGSGGGGSDI _{QMT} QSPSSLSASVGD RV _{TIT} CRASQGI _{RND} LAWYQKPGKAPK _R LIYAASLQSGVPSRFSGSGSGTE FT _{LT} ISSLQPEDFATY _{YCL} QHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMN _{WVR} QAPGKLEWVARIRSKYNNYATY YADSVKDRFTISR _{DD} SKNTAYLQMNNL _{KTED} AVYVCVRHGNFGNSYISYWA YWGQGT _{LV} TVSSGGGSGGGGSGGGGSGT _{VVT} QEP _{SLT} VS _{PGG} TV _{LT} CG SSTGAVTSGNYPN _{WV} QKPGQAPRGLIGG _{TK} FLAPGTPARFSG _{SL} GGKAA LTLSGVQPEDEAEYCVLWYSNR _{WV} FGGG _{TK} LT _{VL} GGGGDK _{TH} TCPPCPAP ELLGGPSV _{FL} FPPKPKDTLMISRTPEVTCV _{VVD} VSHEDPEVKFNWY _{VD} GV _{EV} HNAKTKPCEEQYGSTYRCV _{SV} LT _{VL} HQDWLNGKEYKCKVSNKALPAPIEK _{TIS} KAKGQPREPQVY _{TL} PPSREEMTKNQV _{SL} TL _{CL} VKGFYPSDIAVEWESNGQPE NNYK _{TT} PPV _{LD} SDGSFFLYSKLTVDKSRWQ _{QGN} VFSCSV _M HEALHNHY _{TQK} SLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSD _{KTH} TCPPCPAP ELLGGPSV _{FL} FPPKPKDTLMISRTPEVTCV _{VVD} VSHEDPEVKFNWY _{VD} GV _{EV} HNAKTKPCEEQYGSTYRCV _{SV} LT _{VL} HQDWLNGKEYKCKVSNKALPAPIEK _{TIS} KAKGQPREPQVY _{TL} PPSREEMTKNQV _{SL} TL _{CL} VKGFYPSDIAVEWESNGQPE NNYK _{TT} PPV _{LD} SDGSFFLYSKLTVDKSRWQ _{QGN} VFSCSV _M HEALHNHY _{TQK} SLSLSPGK
442.	FL_9xCD3-scF c	VH CDR1	YARMGV
443.	FL_9xCD3-scF c	VH CDR2	HIFSNDEKSYSTSLKS
444.	FL_9xCD3-scF c	VH CDR3	MPEYSSGWSGAFDI

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445.	FL_9xCD3-scF c	VL CDR1	RASQDIRNDLA
446.	FL_9xCD3-scF c	VL CDR2	AASSLQS
447.	FL_9xCD3-scF c	VL CDR3	LQHNSYPLT
448.	FL_9xCD3-scF c	VH	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSS
449.	FL_9xCD3-scF c	VL	DIQMTQSPSSLSASVGDRTITCRASQDIRNDLAWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTLEIK
450.	FL_9xCD3-scF c	scFv	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTLEIKS
451.	FL_9xCD3-scF c	双特异性 分子	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTLEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGTMTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTTLTTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
452.	FL_9xCD3-scF c	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTLEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGTMTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTTLTTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
453.	FL_9_CCxCD 3-scFc	VH	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSS
454.	FL_9_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRASQDIRNDLAWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKLEIK
455.	FL_9_CCxCD 3-scFc	scFv	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKLEIKS
456.	FL_9_CCxCD 3-scFc	双特异性 分子	QVTLKESGPTLVKPTETLTCTFSGFSLRYARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRITISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVG

[0659]

			DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKLEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGQGTIVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTIVTLTCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
457.	FL_9_CCxCD 3-scFc	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTFSGFSRLRYARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTLSKRLTISKDTSKSQVVLTLTNMDPVDATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSASVG DRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKLEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGQGTIVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTIVTLTCG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
458.	FL_10xCD3-sc Fc	VH CDR1	NARMGVVS
459.	FL_10xCD3-sc Fc	VH CDR2	HIFSNDEKSYSTLSKS
460.	FL_10xCD3-sc Fc	VH CDR3	MPEYSSGWSGAFDI
461.	FL_10xCD3-sc Fc	VL CDR1	RASQDIRDDL
462.	FL_10xCD3-sc Fc	VL CDR2	GASTLQS
463.	FL_10xCD3-sc Fc	VL CDR3	LQHNSYPLT
464.	FL_10xCD3-sc Fc	VH	QVTLKESGPVLVKTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTLSKRLTISKDTSKSQVVLTLTNMDPVDATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSS
465.	FL_10xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCRASQDIRDDLWYQQKPGNAPKRLIYGAS TLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDI K
466.	FL_10xCD3-sc Fc	scFv	QVTLKESGPVLVKTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTLSKRLTISKDTSKSQVVLTLTNMDPVDATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSASVG DRVTITCRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKS
467.	FL_10xCD3-sc Fc	双特异性 分子	QVTLKESGPVLVKTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTLSKRLTISKDTSKSQVVLTLTNMDPVDATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSASVG DRVTITCRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISY

[illegible]

			PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
474.	FL ₁₁ CD3-sc Fc	VH CDR1	NARMGVSV
475.	FL ₁₁ CD3-sc Fc	VH CDR2	HIFSNDEKSYSTSLKS
476.	FL ₁₁ CD3-sc Fc	VH CDR3	MPEYSSGWSGAFDI
477.	FL ₁₁ CD3-sc Fc	VL CDR1	RASQDIGYDLG
478.	FL ₁₁ CD3-sc Fc	VL CDR2	AASTLQS
479.	FL ₁₁ CD3-sc Fc	VL CDR3	LQHNSFPWT
480.	FL ₁₁ CD3-sc Fc	VH	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGGTMTVTS
481.	FL ₁₁ CD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTVITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLISSLQPEDFATYYCLQHNSFPWTFGQGTKEI K
482.	FL ₁₁ CD3-sc Fc	scFv	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGGTMTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGQGTKEIKS
483.	FL ₁₁ CD3-sc Fc	双特异性 分子	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGGTMTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGQGTKEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFGNSYISY WAYWGGQTLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTGPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWWVFGGGTKLTVL
484.	FL ₁₁ CD3-sc Fc	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGGTMTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGQGTKEIKSGGGGSEVQLVESGG GLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFGNSYISY WAYWGGQTLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTGPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
485.	FL ₁₁ CCxC	VH	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKCLEWLAH

[0662]

	D3-scFc		FSNDEKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSS
486.	FL_11_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGTEFTLISSLQPEDFATYYCLQHNSFPWTFGCGTKVEIK
487.	FL_11_CCxC D3-scFc	scFv	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGCGTKVEIKS
488.	FL_11_CCxC D3-scFc	双特异性 分子	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFNGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGGSGTQVTVTQEPSTVSPGGTTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGK AALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
489.	FL_11_CCxC D3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIGYDLGWYQQKPGKAPKRLIYAAS TLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFNGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGGSGTQVTVTQEPSTVSPGGTTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGK AALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG EVHNAKTPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYT QKSLSLSPGKGGGGSGGGSGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
490.	FL_12xCD3-sc Fc	VH CDR1	NARMGV
491.	FL_12xCD3-sc Fc	VH CDR2	HIFSNDEKSYRTSLKS
492.	FL_12xCD3-sc Fc	VH CDR3	IVGYGSGWYAYFDY
493.	FL_12xCD3-sc Fc	VL CDR1	RASQGIRNDLG
494.	FL_12xCD3-sc Fc	VL CDR2	AASSLQS
495.	FL_12xCD3-sc Fc	VL CDR3	LQHNSYPLT
496.	FL_12xCD3-sc Fc	VH	QVTLKESGPALVKPTQTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVVLTMNMDPVDATATYCARIVGYGSG WYAYFDYWGQGTTLTVSS
497.	FL_12xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLISSLQPEDFATYYCLQHNSYPLTFGGGKVEIK
498.	FL_12xCD3-sc Fc	scFv	QVTLKESGPALVKPTQTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVVLTMNMDPVDATATYCARIVGYGSG WYAYFDYWGQGTTLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG

[0663]

			DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTVEIKS
499.	FL_12xCD3-sc Fc	双特异性 分子	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKALEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCTG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
500.	FL_12xCD3-sc Fc	双特异性 HLE 分子	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKALEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGGGKTVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCTG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
501.	FL_12_CCxC D3-scFc	VH	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKCLEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSS
502.	FL_12_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
503.	FL_12_CCxC D3-scFc	scFv	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKCLEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
504.	FL_12_CCxC D3-scFc	双特异性 分子	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKCLEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCTG SSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
505.	FL_12_CCxC D3-scFc	双特异性 HLE 分子	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRPPGKCLEWLAHI FSNDEKSYRTSLKSRLTISKDTSKSQVLTMTNMDPVDATYYCARIVGYGSG WYAYFDYWGGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY

[0664]

			YADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWA YWGQGTTLTVTSVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTLCG SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
506.	FL_13xCD3-sc Fc	VH CDR1	NARMGV5
507.	FL_13xCD3-sc Fc	VH CDR2	LIYWNDKRYSPSLKS
508.	FL_13xCD3-sc Fc	VH CDR3	MVGYGSGWYAYFDY
509.	FL_13xCD3-sc Fc	VL CDR1	RASQGIRNDLG
510.	FL_13xCD3-sc Fc	VL CDR2	AASSLQS
511.	FL_13xCD3-sc Fc	VL CDR3	LQHNSYPLT
512.	FL_13xCD3-sc Fc	VH	QVTLKESGPVLVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVLTMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGTTLTVSS
513.	FL_13xCD3-sc Fc	VL	DIQMTQSPSSLSASVGRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKVEIK
514.	FL_13xCD3-sc Fc	scFv	QVTLKESGPVLVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVLTMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGTTLTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKVEIKS
515.	FL_13xCD3-sc Fc	双特异性 分子	QVTLKESGPVLVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVLTMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGTTLTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNS YISYWAYWGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGT VTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
516.	FL_13xCD3-sc Fc	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVLTMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGTTLTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNS YISYWAYWGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGT VTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES

			NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGK
517.	FL_13_CCxC D3-scFc	VH	QVTLKESGPVLVKPTQTTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLALI YWNDCKRYSPLSKSLRTITKDTSTKNQVVLMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGLTVTVSS
518.	FL_13_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAAS SLQSGVPSRFSGSGSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
519.	FL_13_CCxC D3-scFc	scFv	QVTLKESGPVLVKPTQTTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLALI YWNDCKRYSPLSKSLRTITKDTSTKNQVVLMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
520.	FL_13_CCxC D3-scFc	双特异性 分子	QVTLKESGPVLVKPTQTTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLALI YWNDCKRYSPLSKSLRTITKDTSTKNQVVLMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLTVSPGGT VTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSL GGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
521.	FL_13_CCxC D3-scFc	双特异性 HLE 分子	QVTLKESGPVLVKPTQTTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLALI YWNDCKRYSPLSKSLRTITKDTSTKNQVVLMTNMDPVDATATYTCARMVGY GSGWYAYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIKNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISSLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLTVSPGGT VTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSL GGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGK
522.	FL_14xCD3-sc Fc	VH CDR1	NARMGVSV
523.	FL_14xCD3-sc Fc	VH CDR2	HIFSNDEKSYSTSLKS
524.	FL_14xCD3-sc Fc	VH CDR3	IVGYGTGWYGGFDY
525.	FL_14xCD3-sc Fc	VL CDR1	RTSQGIKNDLG
526.	FL_14xCD3-sc Fc	VL CDR2	AASSLQS
527.	FL_14xCD3-sc Fc	VL CDR3	LQHNSYPLT

528.	FL_14xCD3-scFc	VH	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSS
529.	FL_14xCD3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTKEIK
530.	FL_14xCD3-scFc	scFv	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSSGGGSGGGGSGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGTKEIKS
531.	FL_14xCD3-scFc	双特异性分子	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSSGGGSGGGGSGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGTKEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGQGTSLVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLSPGGTTLTTCG SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
532.	FL_14xCD3-scFc	双特异性HLE分子	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSSGGGSGGGGSGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGTKEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGQGTSLVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLSPGGTTLTTCG SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYQSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYQSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
533.	FL_14_CCxC D3-scFc	VH	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSS
534.	FL_14_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
535.	FL_14_CCxC D3-scFc	scFv	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSSGGGSGGGGSGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
536.	FL_14_CCxC D3-scFc	双特异性分子	QVTLKESGPALVKPTQTLTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQGILVTSSGGGSGGGGSGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWA YWGQGTSLVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLSPGGTTLTTCG

[0666]

[0667]

			SSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
537.	FL_14_CCxC D3-scFc	双特异性 HLE 分子	QVTLKESGPAVKPTQTLTLCTFSGFSLSNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVLTMTDMDPEDTATYYCARIVGYGTG WYGGFFDYWGQILVTVS SGGGSGGGGSGGGGSDIQMTQSPSSLSASVGD RVTTICRTSQGIRNDLGWYQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGCTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSCAASGFTFNKYAMNWWVQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGQGT LVTVS SGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTTLTLCG SSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
538.	FL_15xCD3-sc Fc	VH CDR1	SYGMH
539.	FL_15xCD3-sc Fc	VH CDR2	VISYEGSNEFYAESVKG
540.	FL_15xCD3-sc Fc	VH CDR3	GGEITMVRGVIGYYYYGMDV
541.	FL_15xCD3-sc Fc	VL CDR1	RASQSISSYLN
542.	FL_15xCD3-sc Fc	VL CDR2	AASSLQS
543.	FL_15xCD3-sc Fc	VL CDR3	LQHNSYPLT
544.	FL_15xCD3-sc Fc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGT TTVTVSS
545.	FL_15xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSL QSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTKVEIK
546.	FL_15xCD3-sc Fc	scFv	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGT TTVTVSSGGGSGGGGSGGGGSDIQMTQS PSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTKVEIKS
547.	FL_15xCD3-sc Fc	双特异性 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGT TTVTVSSGGGSGGGGSGGGGSDIQMTQS PSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTKVEIKSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVQAPGKGLEWVARIR SKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGT LVTVS SGGGSGGGGSGGGGSGTQVVTQEPSTLVSP GGTTLTLCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
548.	FL_15xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGT TTVTVSSGGGSGGGGSGGGGSDIQMTQS PSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTKVEIKSGGGGSEV

[0668]

			QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK
549.	FL_15_CCxC D3-scFc	VH	QVQLVESGGGVVQPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAV ISYEGSNEFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGTITVTVSS
550.	FL_15_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQKPGKAPKLLIYAASL QSGVPSRFSFGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIK
551.	FL_15_CCxC D3-scFc	scFv	QVQLVESGGGVVQPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAV ISYEGSNEFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSDIQTQS PSSLSASVGDRVTITCRASQSISSYLNWYQKPGKAPKLLIYAASLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKS
552.	FL_15_CCxC D3-scFc	双特异性 分子	QVQLVESGGGVVQPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAV ISYEGSNEFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSDIQTQS PSSLSASVGDRVTITCRASQSISSYLNWYQKPGKAPKLLIYAASLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
553.	FL_15_CCxC D3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAV ISYEGSNEFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARGGEIT MVRGVIGYYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGGGGSDIQTQS PSSLSASVGDRVTITCRASQSISSYLNWYQKPGKAPKLLIYAASLQSGVPSR FSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSN KALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK
554.	FL_1xCD3-scF c_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTVSGFSLSNARMGVSWIRQPPGKALEWLANI FSNDEKSYSTLSKSLTISKGTSSQVVLTMNMDPEDTATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSASVG

[0669]

			<p>DRVITITCRASQGIRNDLGWYQQKPGKAPQRLIYAASSLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>
555.	FL_1_CCxCD 3-scFc_delGK	双特异性 HLE 分子	<p>QVTLKESGPALVKPTETLTCTVSGFSLNARMGVSWIRPPGKCLEWLANI FSNDEKSYSTSLKRLTISKTSKQVLTMTNMDPEDTATYYCARIVGYGSG WYGYFDYWQGTTLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPQRLIYAASSLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>
556.	FL_2xCD3-scF c_delGK	双特异性 HLE 分子	<p>QVTLKESGPTLVKPTETLTCTLSGFSLNARMGVSWIRPPGKALEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVLTMTNVDVDTATYYCARIVGYGSG WYGFDDYWQGTTLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVG DRVITITCRASQGIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>
557.	FL_2_CCxCD 3-scFc_delGK	双特异性	<p>QVTLKESGPTLVKPTETLTCTLSGFSLNARMGVSWIRPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVLTMTNVDVDTATYYCARIVGYGSG</p>

[0670]

		HLE 分子	<p>WYGFYDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVG DRVTITCRASQGIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>
558.	FL_3xCD3-scF c_delGK	双特异性 HLE 分子	<p>QVTLKESGPALVKPTETLTCTLSGFSLNARMASVIRQPPGKLEWLAHI FSNDEKSYSTSLKSLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGFYDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>
559.	FL_3_CCxCD 3-scFc_delGK	双特异性 HLE 分子	<p>QVTLKESGPALVKPTETLTCTLSGFSLNARMASVIRQPPGKLEWLAHI FSNDEKSYSTSLKSLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGFYDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVG DRVTITCRASQDIRNDLGWYQQKPGKAPKRLIYAASLTQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP CGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDTHTCPPCP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK</p>

[0671]

560.	FL_4xCD3-scF c_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKALEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
561.	FL_4_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNAKMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKGQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
562.	FL_5xCD3-scF c_delGK	双特异性 HLE 分子	QVTLKESGPVLPKPTETLTCTVSGFSLRNARMAVSWIRQPPGKLTLEWLAHI FSNDEKSYSTSLKSRLTISKDTSKSQVVLMTNMDPVDATYYCARIVGYGSG WYGYFDYWGGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSVSASVG DRVITICRASQDIRDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGGGKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSL

[0672]

563.	FL_5_CCxCD 3-scFc_delGK	双特异性 HLE 分子	LSPGK QVTLKESGPVLVKPTETLTCTVSGFSLRNARMAVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSLRTISKDTSKSQVLTMTNMDPVDATATYCARIVGYGSG WYGYFDYWGQGTTLTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSVSASVG DRVITITCRASQDIRYDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNFYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTTCG SSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAP LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSL LSPGK
564.	FL_6xCD3-scF c_delGK	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTCTFSGFSLNARMGVSWIRQPPGKALEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATATYCARMVGYGS GWYAYFDYWGQGTQTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASV GDRVITITCRASQSISSYLWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLT CGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIE TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKT ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
565.	FL_6_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTCTFSGFSLNARMGVSWIRQPPGKCLEWLAHI FSNDEKSFSTSLKNRLTISKDTSKSQVLTMTNMDPVDATATYCARMVGYGS GWYAYFDYWGQGTQTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASV GDRVITITCRASQSISSYLWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT DFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGG LVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLTVSPGGTTLTTCG SSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKT ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAP LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN

[0673]

			YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
566.	FL_7xCD3-scFc_delGK	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDPVDTATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNRYPFTFGGGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISY WAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
567.	FL_7_CCxCD3-scFc_delGK	双特异性 HLE 分子	QVTLKESGPTLVKPTETLTCTVSGFSLNNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKNRLTISKDSSKTQVVLMTNVDPVDTATYYCARIVGYGTG WFGYFDYWGGGTQVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVG DRVITICRASQDIRDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGT EFTLTISLQPEDFATYYCLQHNRYPFTFGCGTKVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISY WAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
568.	FL_8xCD3-scFc_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNNARMAVSWIRQPPGKLEWLAHI FSNDEKSYSTSLKRLTISKDTSKSQVVLMTNMDPEDTATYYCARIVGYGTG WYGFYFDYWGGGILTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGD RVITICRASQGIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGTKEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCG SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTCPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK

[0674]

			KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
569.	FL_8_CCxCD3-scFc_delGK	双特异性HLE 分子	QVTLKESGPALVKPTETLTCTLSGFSLNARMMAVSWIRQPPGKCLEWLAHIFSNDEKSYSTSLKSRLTISKDTSKSQVVLTMNMDPEDTATYTCARIVGYGTGWYGFDDYWGQILVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVGDRTVITCRASQGIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLVSPGGTTLTTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
570.	FL_9xCD3-scFc_delGK	双特异性HLE 分子	QVTLKESGPTLVKPTETLTCTLSGFSRLYARMGVSWIRQPPGKALEWLAHIFSNDEKSYSTSLKSRLTISKDTSKSQVVLTLNMDPVDATYFCARMPEYSSGWSGAFDIWGQGTMTVTSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLVSPGGTTLTTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
571.	FL_9_CCxCD3-scFc_delGK	双特异性HLE 分子	QVTLKESGPTLVKPTETLTCTLSGFSRLYARMGVSWIRQPPGKCLEWLAHIFSNDEKSYSTSLKSRLTISKDTSKSQVVLTLNMDPVDATYFCARMPEYSSGWSGAFDIWGQGTMTVTSSGGGGSGGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCRASQDIRNDLAWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGCGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLVSPGGTTLTTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN

[0675]

			AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNN YKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYTQKSLS LSPGK
572.	FL_10xCD3-sc Fc_delGK	双特异性 HLE 分子	QVTLKESGPVLVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTLSKSLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVG DRVITICRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTQVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYTQK SLSLSPGK
573.	FL_10_CCxC D3-scFc_delG K	双特异性 HLE 分子	QVTLKESGPVLVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTLSKSLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVG DRVITICRASQDIRDDLWYQQKPGNAPKRLIYGASTLQSGVPSRFSGSGSG TEFTLTISLQPEDFATYYCLQHNSYPLTFGGGTQVDIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYTQK SLSLSPGK
574.	FL_11xCD3-sc Fc_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTETLTCTVSGFSFRNARMGVSWIRQPPGKALEWLAH IFSNDEKSYSTLSKSLTISKDTSKSQVVLTLTNMDPVDATATYFCARMPEYSSG WSGAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVG DRVITICRASQDIGYDLGWYQQKPGKAPKRLIYAASTLQSGVPSRFSGSGSGT EFTLISSLQPEDFATYYCLQHNSFPWTFGQGTKEIKSGGGGSEVQLVESGG GLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYA TYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISY WAYWGQGTTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGK AALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCP APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV EVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGQNVFSCSVMHREALHNNHYT QKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAP

[0676]

[0677]

			SLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
578.	FL_13xCD3-sc Fc_delGK	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKALEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVVLMTNMDPVDATYYCARMVGY GSGWYAYFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC VTLTCGSSTGAVTSGNYPNWWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
579.	FL_13_CCxC D3-scFc_delG K	双特异性 HLE 分子	QVTLKESGPVLVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKCLEWLALI YWNDDKRYSPSLKSRLTITKDTSKNQVVLMTNMDPVDATYYCARMVGY GSGWYAYFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCRASQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGS GSGTEFTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC VTLTCGSSTGAVTSGNYPNWWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
580.	FL_14xCD3-sc Fc_delGK	双特异性 HLE 分子	QVTLKESGPALVKPTQTLTLCTFSGFSLNARMGVSWIRQPPGKALEWLALI FSNDEKSYSTSLKSRLTISKDTSKSQVVLMTMDMPEDTATYYCARIVGYGTG WYGGFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGD RVTITCRTSQGIRNDLGWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISLQPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC SSTGAVTSGNYPNWWVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE

[0678]

			<p>NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQK SLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSL LSPGK</p>
581.	FL_14_CCxC D3-scFc_delG K	双特异性 HLE 分子	<p>QVTLKESGPALVKPTQTLTCTFSGFSLSNARMGVSWIRQPPGKCLEWLAHI FSNDEKSYSTSLKSLTISKDTSKQVVLMTDMDPEDTATYYCARIVGYGTG WYGFFDYWGQILVTVSSGGGGSGGGGGSGGGGGSDIQTQSPSSLSASVGD RVTITCRTSQGIRNDLWYQQKPGKAPKRLIYAASSLQSGVPSRFSGSGSGTE FTLTISSLPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWA YWGQGTLTVTSSGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKTHTCPPCPAPEL SSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAA LTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKEEYQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQK SLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSL LSPGK</p>
582.	FL_15xCD3-sc Fc_delGK	双特异性 HLE 分子	<p>QVQLVESGGGVVQPGRSRLSLSAASGFTSSYGMHWVRQAPGKLEWVA VISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCARGGEIT MVRGVI GY YYYGMDVWGQGT TTVTVSSGGGGSGGGGGSGGGGGSDIQTQS PSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTEFTLTISSLPEDFATYYCLQHNSYPLTFGGGKVEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGT LVTVSSGGGGSGGGGGSGGGGGSGGGGGSDIQTQS GGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKEEYQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHE ALHNHYTQKSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKEEYQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEAL HNHYTQKSLSPGK</p>
583.	FL_15_CCxC D3-scFc_delG K	双特异性 HLE 分子	<p>QVQLVESGGGVVQPGRSRLSLSAASGFTSSYGMHWVRQAPGKLEWVA ISYEGSNEFYAESVKGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCARGGEIT MVRGVI GY YYYGMDVWGQGT TTVTVSSGGGGSGGGGGSGGGGGSDIQTQS PSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTEFTLTISSLPEDFATYYCLQHNSYPLTFGCGTKVEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGT LVTVSSGGGGSGGGGGSGGGGGSGGGGGSDIQTQS GGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKEEYQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK</p>

[0679]

			ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHE ALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEAL HNHYTQKSLSLSPGK
584.	CD70_1_CCx CD3-scFc	VH CDR1	SYAMS
585.	CD70_1_CCx CD3-scFc	VH CDR2	VISGSGGRPNYAESVKG
586.	CD70_1_CCx CD3-scFc	VH CDR3	VDYSNYLFFDY
587.	CD70_1_CCx CD3-scFc	VL CDR1	RAGQSVRSSYL
588.	CD70_1_CCx CD3-scFc	VL CDR2	GASSRAT
589.	CD70_1_CCx CD3-scFc	VL CDR3	QQYGYSPT
590.	CD70_1_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSIVS GSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVVYCAKVDYSNY LFFDYWGQGTLLVTVSS
591.	CD70_1_CCx CD3-scFc	VL	EIVLTQSPGTLISLSPGEGATLSCRAGQSVRSSYLGWYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGYSPTFGCGTKLEIK
592.	CD70_1_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSIVS GSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVVYCAKVDYSNY LFFDYWGQGTLLVTVSSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL SCRAGQSVRSSYLGWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPTFGCGTKLEIK
593.	CD70_1_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSIVS GSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVVYCAKVDYSNY LFFDYWGQGTLLVTVSSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL SCRAGQSVRSSYLGWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGSIYSYWAY WGQGTLLVTVSSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAAL TLGVPQPEDEAEYCVLWYSNRWVFGGGTKLTVL
594.	CD70_1_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSIVS GSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVVYCAKVDYSNY LFFDYWGQGTLLVTVSSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL SCRAGQSVRSSYLGWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGSIYSYWAY WGQGTLLVTVSSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAAL TLGVPQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGATL LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS

[0680]

			LSLSPGK
595.	CD70_1xCD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDAVYYCAKVDYSN YLFFDYWGQGLTVTVSS
596.	CD70_1xCD3-scFc	VL	EIVLTQSPGTLSLSPGEGATLSCRAGQSVRSYLGWYQQKPGQAPRLLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGYSPTFGGGTKLEIK
597.	CD70_1xCD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDAVYYCAKVDYSN YLFFDYWGQGLTVTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGEGAT LSCRAGQSVRSYLGWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGYSPTFGGGTKLEIK
598.	CD70_1xCD3-scFc	双特异性分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDAVYYCAKVDYSN YLFFDYWGQGLTVTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGEGAT LSCRAGQSVRSYLGWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGYSPTFGGGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSISYWAY WGQGLTVTVSSGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYCVLWYSNRWVFGGGTKLTVL
599.	CD70_1xCD3-scFc	双特异性HLE分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGRPNYAESVKGRFTISRDNKNTLYLQMNSLRDEDAVYYCAKVDYSN YLFFDYWGQGLTVTVSSGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGEGAT LSCRAGQSVRSYLGWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGYSPTFGGGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSISYWAY WGQGLTVTVSSGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGK
600.	CD70_2_CCx CD3-scFc	VH CDR1	IYAMS
601.	CD70_2_CCx CD3-scFc	VH CDR2	AISGSGGSTFYAESVKG
602.	CD70_2_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
603.	CD70_2_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
604.	CD70_2_CCx CD3-scFc	VL CDR2	GASSRAT
605.	CD70_2_CCx CD3-scFc	VL CDR3	QQYGDLPFT
606.	CD70_2_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDAVYYCAKHDYSNY PYFDYWGQGLTVTVSS
607.	CD70_2_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTKLEIK
608.	CD70_2_CCx	scFv	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS

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	CD3-scFc		GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGCGTKLEIK
609.	CD70_2_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWWQQKPGQAPRLIGGTFKFLAPGTPARFSGSLLGGKAAL TLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
610.	CD70_2_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWWQQKPGQAPRLIGGTFKFLAPGTPARFSGSLLGGKAAL TLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTLTPCPAPE LLGGPSVFLFPPKPKDTLMISRTPETCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPE LLGGPSVFLFPPKPKDTLMISRTPETCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHLDWLNKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
611.	CD70_2xCD3- scFc	VH	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
612.	CD70_2xCD3- scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSSLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIK
613.	CD70_2xCD3- scFc	scFv	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIK
614.	CD70_2xCD3- scFc	双特异性 分子	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWWQQKPGQAPRLIGGTFKFLAPGTPARFSGSLLGGKAAL TLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
615.	CD70_2xCD3- scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLKLSAASGFTFSIYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL

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			TISRLEPEDFAVYYCQQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
616.	CD70_3_CCx CD3-scFc	VH CDR1	SYAMS
617.	CD70_3_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
618.	CD70_3_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
619.	CD70_3_CCx CD3-scFc	VL CDR1	RASQSVRSSYLA
620.	CD70_3_CCx CD3-scFc	VL CDR2	GASSRAT
621.	CD70_3_CCx CD3-scFc	VL CDR3	QQYGSSPFT
622.	CD70_3_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLFLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTLLTVSS
623.	CD70_3_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSSYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGCGTKLEIK
624.	CD70_3_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLFLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPFTFGCGTKLEIK
625.	CD70_3_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLFLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
626.	CD70_3_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLFLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH

			NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
627.	CD70_3xCD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLFLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSS
628.	CD70_3xCD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQGSSPFTFGPGTKLEIK
629.	CD70_3xCD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLFLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQGSSPFTFGPGTKLEIK
630.	CD70_3xCD3-scFc	双特异性分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLFLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQGSSPFTFGPGTKLEIKSGGGGSEIVLQVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGGGSQT VVTQEP SLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
631.	CD70_3xCD3-scFc	双特异性HLE分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLFLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQGSSPFTFGPGTKLEIKSGGGGSEIVLQVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGGGSQT VVTQEP SLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
632.	CD70_4_CCx CD3-scFc	VH CDR1	SYAMS
633.	CD70_4_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
634.	CD70_4_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
635.	CD70_4_CCx CD3-scFc	VL CDR1	RASQSIRSSYLA
636.	CD70_4_CCx CD3-scFc	VL CDR2	GASSRAT

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637.	CD70_4_CCx CD3-scFc	VL CDR3	QQYGDLPFT
638.	CD70_4_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
639.	CD70_4_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSISSYLAWYQQKPGQAPRLLIYGASSR ATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTKLEIK
640.	CD70_4_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSISSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKLEIK
641.	CD70_4_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSISSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTEPSLTVPGGTVTLTCGS STGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
642.	CD70_4_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSISSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTEPSLTVPGGTVTLTCGS STGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK LGLGPPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
643.	CD70_4xCD3- scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
644.	CD70_4xCD3- scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSISSYLAWYQQKPGQAPRLLIYGASSR ATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGPGTKLEIK
645.	CD70_4xCD3- scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSISSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKLEIK
646.	CD70_4xCD3- scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSISSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYA

[0685]

			DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
647.	CD70_4xCD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQYVDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
648.	CD70_5_CCx CD3-scFc	VH CDR1	SYAMS
649.	CD70_5_CCx CD3-scFc	VH CDR2	AISGSGGRTHYAESVKG
650.	CD70_5_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
651.	CD70_5_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
652.	CD70_5_CCx CD3-scFc	VL CDR2	GASSRAT
653.	CD70_5_CCx CD3-scFc	VL CDR3	QQYGSSPFT
654.	CD70_5_CCx CD3-scFc	VH	EVQLLESGGGLVQSGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTHYAESVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN PYFDYWGGTTLTVSS
655.	CD70_5_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSYLAWYQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQYSSPFTFGCGTKLEIK
656.	CD70_5_CCx CD3-scFc	scFv	EVQLLESGGGLVQSGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTHYAESVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN PYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQYSSPFTFGCGTKLEIK
657.	CD70_5_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQSGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTHYAESVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN PYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQYSSPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
658.	CD70_5_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQSGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTHYAESVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN PYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL

[0686]

			SCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARISKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSIYSYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
659.	CD70_5xCD3-scFc	VH	EVQLLESGGGLVQSGGSLRSLCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTHYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGTLLTVSS
660.	CD70_5xCD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGPGTKLEIK
661.	CD70_5xCD3-scFc	scFv	EVQLLESGGGLVQSGGSLRSLCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTHYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSGEIVLTQSPGTLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGPGTKLEIK
662.	CD70_5xCD3-scFc	双特异性分子	EVQLLESGGGLVQSGGSLRSLCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTHYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSGEIVLTQSPGTLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARISKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSIYSYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
663.	CD70_5xCD3-scFc	双特异性HLE分子	EVQLLESGGGLVQSGGSLRSLCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTHYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGTLLTVSSGGGGSGGGGSGGGGSGEIVLTQSPGTLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARISKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNGNSIYSYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
664.	CD70_6_CCx CD3-scFc	VH CDR1	SYAMS

[0687]

665.	CD70_6_CCx CD3-scFc	VH CDR2	LISGSGGRTHYAESVKG
666.	CD70_6_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
667.	CD70_6_CCx CD3-scFc	VL CDR1	RASQSVRSTYLA
668.	CD70_6_CCx CD3-scFc	VL CDR2	DASSRAT
669.	CD70_6_CCx CD3-scFc	VL CDR3	QQYGSSPPT
670.	CD70_6_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
671.	CD70_6_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSTYLA WYQQKPGQAPRLIYDASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGSSPPTFGCGTKLEIK
672.	CD70_6_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLA WYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQQYGSSPPTFGCGTKLEIK
673.	CD70_6_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLA WYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQQYGSSPPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGSGGGGSGGGGSGGGGQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPN WVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
674.	CD70_6_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLA WYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQQYGSSPPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDN SKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGSGGGGSGGGGSGGGGQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPN WVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPETCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKS LSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPETCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKS LSLSPGK
675.	CD70_6xCD3- scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
676.	CD70_6xCD3- scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSTYLA WYQQKPGQAPRLIYDASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGSSPPTFGGGTKLEIK
677.	CD70_6xCD3- scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLA WYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL

[0688]

678.	CD70_6xCD3-scFc	双特异性分子	TISRLEPEDFAVYFCQQYGSSPPTFGGGTKLEIK EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLAWYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQQYGSSPPTFGGGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAY WGQGTSLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
679.	CD70_6xCD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSTYLAWYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQQYGSSPPTFGGGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAY WGQGTSLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
680.	CD70_7_CCx CD3-scFc	VH CDR1	TYAMS
681.	CD70_7_CCx CD3-scFc	VH CDR2	AISGSGGSTFYAESVKG
682.	CD70_7_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
683.	CD70_7_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
684.	CD70_7_CCx CD3-scFc	VL CDR2	GASSRAT
685.	CD70_7_CCx CD3-scFc	VL CDR3	QQYGDLPFT
686.	CD70_7_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLSLQMNSLRAEDTAVYYCAKHDYSNYP YFDYWGGQGLTVTVSS
687.	CD70_7_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGDLPTFGCGTKLEIK
688.	CD70_7_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLSLQMNSLRAEDTAVYYCAKHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLS CRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYFCQQYGDLPTFGCGTKLEIK
689.	CD70_7_CCx CD3-scFc	双特异性分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLSLQMNSLRAEDTAVYYCAKHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLS CRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYFCQQYGDLPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS

[0689]

			VKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWG QGTLVTVSSGGGGSGGGSGGGSGTQVTVTEPSLTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
690.	CD70_7_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKCLEWVSAIS SGSGSTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGSEIVLTQSPGTLSPGERATLS CRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYYCQQYGDLPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ GGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWG QGTLVTVSSGGGGSGGGSGGGSGTQVTVTEPSLTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
691.	CD70_7xCD3- scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKLEWVSAI SGSGSTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
692.	CD70_7xCD3- scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSSLAWYQQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIK
693.	CD70_7xCD3- scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKLEWVSAI SGSGSTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIK
694.	CD70_7xCD3- scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKLEWVSAI SGSGSTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
695.	CD70_7xCD3- scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKLEWVSAI SGSGSTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS

			LSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSPGK
696.	CD70_8_CCx CD3-scFc	VH CDR1	TYAMS
697.	CD70_8_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
698.	CD70_8_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
699.	CD70_8_CCx CD3-scFc	VL CDR1	RASQSVRSTYLA
700.	CD70_8_CCx CD3-scFc	VL CDR2	GASSRAT
701.	CD70_8_CCx CD3-scFc	VL CDR3	QQYGDLPFT
702.	CD70_8_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKH DYSN YPYFDYWGGQGLTVTVSS
703.	CD70_8_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSTYLA WYQQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGDLPFTFGCGTKLEIK
704.	CD70_8_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKH DYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQSVRSTYLA WYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGCGTKLEIK
705.	CD70_8_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKH DYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQSVRSTYLA WYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCGS STGAVTSGNYPN WVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVGGGTKLTVL
706.	CD70_8_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKH DYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQSVRSTYLA WYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCGS STGAVTSGNYPN WVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSPGK
707.	CD70_8xCD3-	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSAI

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	scFc		ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
708.	CD70_8xCD3- scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSTYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGDLPFTFGPGTKLEIK
709.	CD70_8xCD3- scFc	scFv	EVQLLES GGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSTYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGPGTKLEIK
710.	CD70_8xCD3- scFc	双特异性 分子	EVQLLES GGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSTYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTQEPSTLTVSPGGTVTLTCS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
711.	CD70_8xCD3- scFc	双特异性 HLE 分子	EVQLLES GGGMVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSTYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSIYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTQEPSTLTVSPGGTVTLTCS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
712.	CD70_9_CCx CD3-scFc	VH CDR1	SYAMS
713.	CD70_9_CCx CD3-scFc	VH CDR2	AISGSGGYTYAESVKG
714.	CD70_9_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
715.	CD70_9_CCx CD3-scFc	VL CDR1	RASQSVRSNYLA
716.	CD70_9_CCx CD3-scFc	VL CDR2	GASSRAT
717.	CD70_9_CCx CD3-scFc	VL CDR3	QQYGDLPFT
718.	CD70_9_CCx CD3-scFc	VH	EVQLLES GGGVLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGYTYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
719.	CD70_9_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGDLPFTFGCGTKVEIK
720.	CD70_9_CCx CD3-scFc	scFv	EVQLLES GGGVLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGYTYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL

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			SCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIK
721.	CD70_9_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
722.	CD70_9_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
723.	CD70_9xCD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSS
724.	CD70_9xCD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIK
725.	CD70_9xCD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIK
726.	CD70_9xCD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
727.	CD70_9xCD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYY

[0693]

			ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTTLTLCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
728.	CD70_10_CCx CD3-scFc	VH CDR1	SYAMS
729.	CD70_10_CCx CD3-scFc	VH CDR2	AISGSGGSTFYAESVKG
730.	CD70_10_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
731.	CD70_10_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
732.	CD70_10_CCx CD3-scFc	VL CDR2	GASSRAT
733.	CD70_10_CCx CD3-scFc	VL CDR3	QQYGDLPFT
734.	CD70_10_CCx CD3-scFc	VH	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNYP YFDYWGQGTTLTVSS
735.	CD70_10_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSYLA WYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIK
736.	CD70_10_CCx CD3-scFc	scFv	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNYP YFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRSYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIK
737.	CD70_10_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNYP YFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRSYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTTLTLCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
738.	CD70_10_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNYP YFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRSYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLT ISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTTLTLCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAGK QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT

			TPPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTEPVTCTVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPG K
739.	CD70_10xCD3 -scFc	VH	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNY PYFDYWGGQGLTVTVSS
740.	CD70_10xCD3 -scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGGDLPTFTFGPGTKVEIK
741.	CD70_10xCD3 -scFc	scFv	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGGDLPTFTFGPGTKVEIK
742.	CD70_10xCD3 -scFc	双特异性 分子	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNGFNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVGGGKTLTVL
743.	CD70_10xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLAQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYFCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNGFNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVGGGKTLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTEPVTCTVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTPPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTEPVTCTVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTPPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKS LSLSPGK
744.	CD70_11_CCx CD3-scFc	VH CDR1	SYAMS
745.	CD70_11_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
746.	CD70_11_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
747.	CD70_11_CCx CD3-scFc	VL CDR1	RASQSVRSNYLA
748.	CD70_11_CCx CD3-scFc	VL CDR2	GASSRAT
749.	CD70_11_CCx CD3-scFc	VL CDR3	QQYGGDLPT

750.	CD70_11_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
751.	CD70_11_CCx CD3-scFc	VL	EIVLTQSPGTLTSLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIK
752.	CD70_11_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLTSLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIK
753.	CD70_11_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLTSLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
754.	CD70_11_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLTSLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGDLPTFTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
755.	CD70_11xCD3 -scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
756.	CD70_11xCD3 -scFc	VL	EIVLTQSPGTLTSLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIK
757.	CD70_11xCD3 -scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLTSLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIK
758.	CD70_11xCD3 -scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLTSLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGS

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			STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
759.	CD70_11xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI ISGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYGDLPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAY WGQGTGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSG STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
760.	CD70_12_CCx CD3-scFc	VH CDR1	SYAMS
761.	CD70_12_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
762.	CD70_12_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
763.	CD70_12_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
764.	CD70_12_CCx CD3-scFc	VL CDR2	GASSRAT
765.	CD70_12_CCx CD3-scFc	VL CDR3	QQYGSSPFT
766.	CD70_12_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTGLTVTVSS
767.	CD70_12_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSYLA RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQYGSPTFGCGTKVEIK
768.	CD70_12_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSYLA WTQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYGSPTFGCGTKVEIK
769.	CD70_12_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSYLA WTQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYGSPTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAY WGQGTGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSG STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
770.	CD70_12_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGTGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSYLA WTQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYGSPTFGCGTKVEIKSGGGGSEVQLVESGGGLV

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778.	CD70_13_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
779.	CD70_13_CCx CD3-scFc	VL CDR1	RASQSVRGNYLA
780.	CD70_13_CCx CD3-scFc	VL CDR2	GASSRAT
781.	CD70_13_CCx CD3-scFc	VL CDR3	QQYGYSPFT
782.	CD70_13_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNYP YFDYWGGQGLTVTVSS
783.	CD70_13_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRGNYLAWYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIK
784.	CD70_13_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIK
785.	CD70_13_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFNGSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
786.	CD70_13_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFNGSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
787.	CD70_13xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNY PYFDYWGGQGLTVTVSS
788.	CD70_13xCD3 -scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRGNYLAWYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGYSPFTFGPGTKVEIK
789.	CD70_13xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDN SKNTLYLQVNSLRAEDTAVYYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGYSPFTFGPGTKVEIK
790.	CD70_13xCD3	双特异性	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI

[0699]

	-scFc	分子	SGSGGSTFYAESVQGRFTISRDNKNTLYLQVNSLRAEDTAVYYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGSPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
791.	CD70_13xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDNKNTLYLQVNSLRAEDTAVYYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRGNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGSPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
792.	CD70_14_CCx CD3-scFc	VH CDR1	TYAMS
793.	CD70_14_CCx CD3-scFc	VH CDR2	AISGSGGGTFYAESVKG
794.	CD70_14_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
795.	CD70_14_CCx CD3-scFc	VL CDR1	RASQSIRSNYLA
796.	CD70_14_CCx CD3-scFc	VL CDR2	GASSRAT
797.	CD70_14_CCx CD3-scFc	VL CDR3	QQYGSSPFT
798.	CD70_14_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
799.	CD70_14_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSIRSNYLAQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGCGTKVEIK
800.	CD70_14_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLAQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPFTFGCGTKVEIK
801.	CD70_14_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKLEWVSAI SGSGGSTFYAESVQGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLAQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS

[0700]

			STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
802.	CD70_14_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKCLEWVSAIS SGSGGGTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQGS SPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
803.	CD70_14xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKLEWVSAI SGSGGGTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSN YPYFDYWGGQGLTVTVSS
804.	CD70_14xCD3 -scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSIRSNYLA WYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLISRLEPEDFAVYYCQYQGS SPFTFGPGTKVEIK
805.	CD70_14xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKLEWVSAI SGSGGGTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSIRSNYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LISRLEPEDFAVYYCQYQGS SPFTFGPGTKVEIK
806.	CD70_14xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKLEWVSAI SGSGGGTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSIRSNYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LISRLEPEDFAVYYCQYQGS SPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
807.	CD70_14xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKLEWVSAI SGSGGGTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSIRSNYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LISRLEPEDFAVYYCQYQGS SPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH

[0701]

			NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
808.	CD70_15_CCx CD3-scFc	VH CDR1	TYAMS
809.	CD70_15_CCx CD3-scFc	VH CDR2	LISGSGGRITYAESVKG
810.	CD70_15_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
811.	CD70_15_CCx CD3-scFc	VL CDR1	RASQSVRSNYLA
812.	CD70_15_CCx CD3-scFc	VL CDR2	GASNRAT
813.	CD70_15_CCx CD3-scFc	VL CDR3	QQYGISPPT
814.	CD70_15_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSLIS GSGGRITYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
815.	CD70_15_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGAS NRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGISPPTFGCGTKVEIK
816.	CD70_15_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSLIS GSGGRITYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGCGTKVEIK
817.	CD70_15_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSLIS GSGGRITYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGSGGGSGGGGSGGGGQTVVTQEPSTVSPGGTVTLTCSG STGAVTSGNYPN WVRQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
818.	CD70_15_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWVSLIS GSGGRITYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGSGGGSGGGGSGGGGQTVVTQEPSTVSPGGTVTLTCSG STGAVTSGNYPN WVRQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
819.	CD70_15xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKLEWVSLIS GSGGRITYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS

[0702]

820.	CD70_15xCD3 -scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIIYGAS NRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGISPPTFGGGTKVEIK
821.	CD70_15xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRITYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGGGTKVEIK
822.	CD70_15xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRITYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGGGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIETISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIETISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
823.	CD70_15xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRITYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGGGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIETISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
824.	CD70_16_CCx CD3-scFc	VH CDR1	SYAMS
825.	CD70_16_CCx CD3-scFc	VH CDR2	AISGSGGRAQYAESVQG
826.	CD70_16_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
827.	CD70_16_CCx CD3-scFc	VL CDR1	RASQSVSSNLA
828.	CD70_16_CCx CD3-scFc	VL CDR2	GSSSRAT
829.	CD70_16_CCx CD3-scFc	VL CDR3	QQYGSSPPP
830.	CD70_16_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGQGLTVTVSS
831.	CD70_16_CCx CD3-scFc	VL	EIVLTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLIIYGSSSR ATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQQYGSSPPFGCGTKVEIK
832.	CD70_16_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGSSPPFGCGTKVEIK

[0703]

833.	CD70_16_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSPPFPGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
834.	CD70_16_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSPPFPGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKS LSLSPGK
835.	CD70_16xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSS
836.	CD70_16xCD3 -scFc	VL	EIVLTQSPATLSVSPGERATLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSR ATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQYQGSPPFPGGGTKVEIK
837.	CD70_16xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSPPFPGGGTKVEIK
838.	CD70_16xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSPPFPGGGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
839.	CD70_16xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDSYN YPYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSPPFPGGGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS

[0704]

			STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
840.	CD70_17_CCx CD3-scFc	VH CDR1	SYAMS
841.	CD70_17_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
842.	CD70_17_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
843.	CD70_17_CCx CD3-scFc	VL CDR1	RASQGVRS DYLA
844.	CD70_17_CCx CD3-scFc	VL CDR2	GASSRAT
845.	CD70_17_CCx CD3-scFc	VL CDR3	QQYGSTPPT
846.	CD70_17_CCx CD3-scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWGGQGLTVTVSS
847.	CD70_17_CCx CD3-scFc	VL	EIVLTQSPGTLISLSPGERATLSCRASQGVRS DYLA WYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYHCQQYGSTPPTFGCGTKVEI K
848.	CD70_17_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLISLSPGERATL SCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGCGTKVEIK
849.	CD70_17_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLISLSPGERATL SCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
850.	CD70_17_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLISLSPGERATL SCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS

			LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGK
851.	CD70_17xCD3 -scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPYFDYWGGQGLTVTVSS
852.	CD70_17xCD3 -scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQGVRS DYLA WYQQKPGQAPRLIYGAS SRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYHCQQYGSTPPTFGGGTKVEI K
853.	CD70_17xCD3 -scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGGGTKVEIK
854.	CD70_17xCD3 -scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGGGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCYLVWSNRRWVFGGGTKLTVL
855.	CD70_17xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERAT LSCRASQGVRS DYLA WYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQQYGSTPPTFGGGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCG SSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCYLVWSNRRWVFGGGTKLTVLGGGGDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGK
856.	CD70_18_CCx CD3-scFc	VH CDR1	SYAMS
857.	CD70_18_CCx CD3-scFc	VH CDR2	AIGEGGGYTYAESVKG
858.	CD70_18_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
859.	CD70_18_CCx CD3-scFc	VL CDR1	RASQGVRSYFA
860.	CD70_18_CCx CD3-scFc	VL CDR2	GASTRAT
861.	CD70_18_CCx CD3-scFc	VL CDR3	QQYGSSPPT

862.	CD70_18_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVS
863.	CD70_18_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQGVRRSSYFAWYQQKPGQAPRLIYGAS TRATGIPARFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPTFGCGTKVEIK
864.	CD70_18_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRRSSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPPTFGCGTKVEIK
865.	CD70_18_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRRSSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
866.	CD70_18_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRRSSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
867.	CD70_18xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVS
868.	CD70_18xCD3 -scFc	VL	EIVLTQSPGTLSPGERATLSCRASQGVRRSSYFAWYQQKPGQAPRLIYGAS TRATGIPARFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPTFGQGTKEIK
869.	CD70_18xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRRSSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPPTFGQGTKEIK
870.	CD70_18xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSAI GEGGGYTYAESVKGRFTISRDNSKNTLSLLMNSLRAEDTAVVYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRRSSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGSSPPTFGQGTKEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY

[0707]

			WGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
871.	CD70_18xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAI GEGGGYTYAESVKGRFTISRDNKNTLSLLMNSLRAEDTAVYYCARHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSDFTL TISRLEPEDFAVYYCQYGSPPFTFGQGTKVEIKSGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
872.	CD70_19_CCx CD3-scFc	VH CDR1	SYAMS
873.	CD70_19_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
874.	CD70_19_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
875.	CD70_19_CCx CD3-scFc	VL CDR1	RASQSIRSNYLA
876.	CD70_19_CCx CD3-scFc	VL CDR2	GASSRAT
877.	CD70_19_CCx CD3-scFc	VL CDR3	QQYGSSPPS
878.	CD70_19_CCx CD3-scFc	VH	EVQLLESGGGVQPGRLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
879.	CD70_19_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSIRSNYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSDFTLTISRLEPEDFAVYYCQYGSPPSFGCGTKVEIK
880.	CD70_19_CCx CD3-scFc	scFv	EVQLLESGGGVQPGRLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSDFTL TISRLEPEDFAVYYCQYGSPPSFGCGTKVEIKSGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
881.	CD70_19_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGVQPGRLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSDFTL TISRLEPEDFAVYYCQYGSPPSFGCGTKVEIKSGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
882.	CD70_19_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGVQPGRLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSIRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSDFTL

			<p>TISRLEPEDFAVYYCQQYGSSPPSFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPDSIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPDSIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
883.	CD70_19xCD3-scFc	VH	<p>EVQLLESGGGVVQPRSLRLSLSAASGFTFSSYAMSVMWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCAKHDSNYPYFDYWGQGTLLTVSS</p>
884.	CD70_19xCD3-scFc	VL	<p>EIVLTQSPGTLTSLSPGERATLSCRASQSIRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPSFGQGTKEIK</p>
885.	CD70_19xCD3-scFc	scFv	<p>EVQLLESGGGVVQPRSLRLSLSAASGFTFSSYAMSVMWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCAKHDSNYPYFDYWGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLSCRASQSIRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPSFGQGTKEIK</p>
886.	CD70_19xCD3-scFc	双特异性分子	<p>EVQLLESGGGVVQPRSLRLSLSAASGFTFSSYAMSVMWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCAKHDSNYPYFDYWGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLSCRASQSIRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPSFGQGTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL</p>
887.	CD70_19xCD3-scFc	双特异性HLE分子	<p>EVQLLESGGGVVQPRSLRLSLSAASGFTFSSYAMSVMWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNLSRAEDTAVYYCAKHDSNYPYFDYWGQGTLLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLSCRASQSIRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPPSFGQGTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPDSIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
888.	CD70_20_CCx CD3-scFc	VH CDR1	<p>SYAMS</p>

889.	CD70_20_CCx CD3-scFc	VH CDR2	AISGSGGGTFFYAESVEG
890.	CD70_20_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
891.	CD70_20_CCx CD3-scFc	VL CDR1	RASQSVRSSYLA
892.	CD70_20_CCx CD3-scFc	VL CDR2	GASSRAT
893.	CD70_20_CCx CD3-scFc	VL CDR3	QQYGDLPFT
894.	CD70_20_CCx CD3-scFc	VH	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKCLEWVSAIS} GSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS}
895.	CD70_20_CCx CD3-scFc	VL	EIVLTQSPGTL ^{LSLSPGERATL} SCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL ^{TISRLEPEDFAVYSCQYQGDLPFTFGCGTKVEIK}
896.	CD70_20_CCx CD3-scFc	scFv	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKCLEWVSAIS} GSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS} GGGGSGGGGSGGGGSEIVLTQSPGTL ^{LSLSPGERATL} SCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL ^{TISRLEPEDFAVYSCQYQGDLPFTFGCGTKVEIK}
897.	CD70_20_CCx CD3-scFc	双特异性 分子	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKCLEWVSAIS} GSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS} GGGGSGGGGSGGGGSEIVLTQSPGTL ^{LSLSPGERATL} SCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL ^{TISRLEPEDFAVYSCQYQGDLPFTFGCGTKVEIK} SGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMN ^{WVRQAPGKGLEWVARIRSKYNNYATYYA} DSVKDRFTISR ^{DDSKNTAYLQMN} NLKTEDTAVYYCVRHGFNGNSYISYWAY WGQGT ^{LVTVSS} GGGGSGGGGSGGGGSGT ^{VVTQEP} SLTVSPGGTVTLTCGS STGAVTSGNYPN ^{WVQQKPGQAPRGLIGG} TKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNR ^{WVFGGGTKLTVL}
898.	CD70_20_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKCLEWVSAIS} GSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS} GGGGSGGGGSGGGGSEIVLTQSPGTL ^{LSLSPGERATL} SCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL ^{TISRLEPEDFAVYSCQYQGDLPFTFGCGTKVEIK} SGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMN ^{WVRQAPGKGLEWVARIRSKYNNYATYYA} DSVKDRFTISR ^{DDSKNTAYLQMN} NLKTEDTAVYYCVRHGFNGNSYISYWAY WGQGT ^{LVTVSS} GGGGSGGGGSGGGGSGT ^{VVTQEP} SLTVSPGGTVTLTCGS STGAVTSGNYPN ^{WVQQKPGQAPRGLIGG} TKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNR ^{WVFGGGTKLTVLGGGGDKTHTCPPCPAPE} LLGGPSVFLFPPKPKDTLMISRTPEVTCV ^{VVDVSHEDPEVKFNWYVDGVEVH} NAKTKPCEEQYGSTYRCVSVLT ^{VLHQDWLNGKEYCKVSNKALPAPIEKTISK} AKGQPREPQVYTLPPSREEMTKNQVSLTCLV ^{KGFYP} SDIAVEWESNGQPEN NYKTTTPPVLDS ^{DGSFFLYSKLTVDKSRWQQGNV} FSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSD ^{KTHTCPPCPAPE} LLGGPSVFLFPPKPKDTLMISRTPEVTCV ^{VVDVSHEDPEVKFNWYVDGVEVH} NAKTKPCEEQYGSTYRCVSVLT ^{VLHQDWLNGKEYCKVSNKALPAPIEKTISK} AKGQPREPQVYTLPPSREEMTKNQVSLTCLV ^{KGFYP} SDIAVEWESNGQPEN NYKTTTPPVLDS ^{DGSFFLYSKLTVDKSRWQQGNV} FSCVMHEALHNHYTQKS LSLSPGK
899.	CD70_20xCD3 -scFc	VH	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKGLEWVSAI} SGSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS}
900.	CD70_20xCD3 -scFc	VL	EIVLTQSPGTL ^{LSLSPGERATL} SCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL ^{TISRLEPEDFAVYSCQYQGDLPFTFGPGTKVEIK}
901.	CD70_20xCD3 -scFc	scFv	EVQLLESGGGVVQPGRSLRLSCAASGFTFSSYAMS ^{WVRQAPGKGLEWVSAI} SGSGGGTFFYAESVEGRFTISRDN ^{SKNTLYLQMN} SLRAEDTAVYYCARHDYSN ^{YPYFDYWGLGTLTVSS} GGGGSGGGGSGGGGSEIVLTQSPGTL ^{LSLSPGERAT} LSCRASQSVR ^{SSYLAWYQQKPGQAPRLLIYGASS} RATGIPDRFSGSGSGTDFTL

[0710]

902.	CD70_20xCD3-scFc	双特异性分子	LTISRLEPEDFAVYSCQYQYGDLPFTFGPGTKVEIK EVQLLES GGGVVPGRSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGGTFFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARHDYSN YPYFDYWGLGLTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQYQYGDLPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGT LTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
903.	CD70_20xCD3-scFc	双特异性 HLE 分子	EVQLLES GGGVVPGRSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAI SGSGGGTFFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARHDYSN YPYFDYWGLGLTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQYQYGDLPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGT LTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
904.	CD70_21_CCx CD3-scFc	VH CDR1	SYAMS
905.	CD70_21_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
906.	CD70_21_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
907.	CD70_21_CCx CD3-scFc	VL CDR1	RASQSVRSSLA
908.	CD70_21_CCx CD3-scFc	VL CDR2	GASSRAT
909.	CD70_21_CCx CD3-scFc	VL CDR3	QQYGDLPFT
910.	CD70_21_CCx CD3-scFc	VH	EVQLLES GGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWQGT LTVSS
911.	CD70_21_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSSLAWYQQKPGQAPRLLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQYQYGDLPFTFGCGTKVDIK
912.	CD70_21_CCx CD3-scFc	scFv	EVQLLES GGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWQGT LTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYSCQYQYGDLPFTFGCGTKVDIK
913.	CD70_21_CCx CD3-scFc	双特异性分子	EVQLLES GGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSNY PYFDYWQGT LTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYSCQYQYGDLPFTFGCGTKVDIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYA

			DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
914.	CD70_21_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPFDYWGGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKVDIKSGGGGSEIVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
915.	CD70_21xCD3 -scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPFDYWGGQGTTLTVSS
916.	CD70_21xCD3 -scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSSLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGPGTKVDIK
917.	CD70_21xCD3 -scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPFDYWGGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKVDIK
918.	CD70_21xCD3 -scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPFDYWGGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKVDIKSGGGGSEIVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
919.	CD70_21xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPFDYWGGQGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKVDIKSGGGGSEIVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS

[0712]

			LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
920.	CD70_22_CCx CD3-scFc	VH CDR1	TYAMS
921.	CD70_22_CCx CD3-scFc	VH CDR2	LISGSGGRYYAESVKG
922.	CD70_22_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
923.	CD70_22_CCx CD3-scFc	VL CDR1	RASQGVRSYLA
924.	CD70_22_CCx CD3-scFc	VL CDR2	GASSRAT
925.	CD70_22_CCx CD3-scFc	VL CDR3	QQYGSSPPT
926.	CD70_22_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKCLEWVSLIS GSGGRYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
927.	CD70_22_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQGVRSYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIK
928.	CD70_22_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKCLEWVSLIS GSGGRYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIK
929.	CD70_22_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKCLEWVSLIS GSGGRYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
930.	CD70_22_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKCLEWVSLIS GSGGRYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
931.	CD70_22xCD3	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSYAMSWVRQAPGKLEWVSLIS

[0713]

	-scFc		GSGGRTYYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
932.	CD70_22xCD3 -scFc	VL	EIVLTQSPGTL SLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIK
933.	CD70_22xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRTYYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIK
934.	CD70_22xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRTYYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGSGGGSGGGGSGTQVTVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
935.	CD70_22xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKGLEWVSLIS GSGGRTYYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGSGGGSGGGGSGTQVTVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKS LSLSPGKGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKS LSLSPGK
936.	CD70_23_CCx CD3-scFc	VH CDR1	SYAMS
937.	CD70_23_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
938.	CD70_23_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
939.	CD70_23_CCx CD3-scFc	VL CDR1	RASQSVRSNYLA
940.	CD70_23_CCx CD3-scFc	VL CDR2	GASSRAT
941.	CD70_23_CCx CD3-scFc	VL CDR3	QQYGSSPPT
942.	CD70_23_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSS
943.	CD70_23_CCx CD3-scFc	VL	EIVLTQSPGTL SLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIK
944.	CD70_23_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIS GSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGLTVTVSSGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATL

[0714]

			SCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIK
945.	CD70_23_CCx CD3-scFc	双特异性 分子	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
946.	CD70_23_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKCLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
947.	CD70_23xCD3 -scFc	VH	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSS
948.	CD70_23xCD3 -scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIK
949.	CD70_23xCD3 -scFc	scFv	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIK
950.	CD70_23xCD3 -scFc	双特异性 分子	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSPGGTVTLTCGSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
951.	CD70_23xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGVVQPGRLSLRSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTLTINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYY

[0715]

			ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
952.	CD70_24_CCx CD3-scFc	VH CDR1	SYAMS
953.	CD70_24_CCx CD3-scFc	VH CDR2	VISGSGGITDFAESVKG
954.	CD70_24_CCx CD3-scFc	VH CDR3	HDYSNYFFDY
955.	CD70_24_CCx CD3-scFc	VL CDR1	RASQGISNYLA
956.	CD70_24_CCx CD3-scFc	VL CDR2	AASILQS
957.	CD70_24_CCx CD3-scFc	VL CDR3	QQYFAYPIT
958.	CD70_24_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSVIS GSGGITDFAESVKGRTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNYF FFDYWGQGTTLTVSS
959.	CD70_24_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGRVTITCRASQGISNYLAWYQQKPGKVPKLLIYAASIL QSGVPSKFSGSGSGTDFTLTISLQPEDFAIYYCQQYFAYPITFGCGTRLEIK
960.	CD70_24_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSVIS GSGGITDFAESVKGRTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNYF FFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGRVTI TCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTLT ISLQPEDFAIYYCQQYFAYPITFGCGTRLEIK
961.	CD70_24_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSVIS GSGGITDFAESVKGRTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNYF FFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGRVTI TCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTLT ISLQPEDFAIYYCQQYFAYPITFGCGTRLEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCSSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
962.	CD70_24_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSVIS GSGGITDFAESVKGRTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNYF FFDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGRVTI TCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTLT ISLQPEDFAIYYCQQYFAYPITFGCGTRLEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCSSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT

[0716]

			PPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPG KGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGP SVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK PCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQP REPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
963.	CD70_24xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGITDFAESVKGRFTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNY FFFDYWGQGTLLVTVSS
964.	CD70_24xCD3 -scFc	VL	DIQMTPSPSSLSASVGDRTTITCRASQGISNYLAWYQQKPGKVPKLLIYAASIL QSGVPSKFSGSGSGTDFTLTISLQPEDFAIYYCQQYFAYPITFGQGTRLEIK
965.	CD70_24xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGITDFAESVKGRFTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNY FFFDYWGQGTLLVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRT TITCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTL TISLQPEDFAIYYCQQYFAYPITFGQGTRLEIK
966.	CD70_24xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGITDFAESVKGRFTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNY FFFDYWGQGTLLVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRT TITCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTL TISLQPEDFAIYYCQQYFAYPITFGQGTRLEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
967.	CD70_24xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSVI SGSGGITDFAESVKGRFTISRDNRSNTLYLQMNSLRAEDTAVYFCARHDYSNY FFFDYWGQGTLLVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRT TITCRASQGISNYLAWYQQKPGKVPKLLIYAASILQSGVPSKFSGSGSGTDFTL TISLQPEDFAIYYCQQYFAYPITFGQGTRLEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSP GKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPG K
968.	CD70_25_CCx CD3-scFc	VH CDR1	SYAMS
969.	CD70_25_CCx CD3-scFc	VH CDR2	AISGSGGRTFYAESVEG
970.	CD70_25_CCx CD3-scFc	VH CDR3	HDYSNYPYFDY
971.	CD70_25_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
972.	CD70_25_CCx CD3-scFc	VL CDR2	GASSRAT
973.	CD70_25_CCx CD3-scFc	VL CDR3	QQYGSSPPT
974.	CD70_25_CCx	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI

[0717]

	CD3-scFc		SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
975.	CD70_25_CCx CD3-scFc	VL	EIVLTQSPGTL SLSPGERATL SCRA SQSVRS SYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGSSPPTFGCGTRLEIK
976.	CD70_25_CCx CD3-scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERAT LSCRA SQSVRS SYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYFCQQYGSSPPTFGCGTRLEIK
977.	CD70_25_CCx CD3-scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERAT LSCRA SQSVRS SYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYFCQQYGSSPPTFGCGTRLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
978.	CD70_25_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERAT LSCRA SQSVRS SYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYFCQQYGSSPPTFGCGTRLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL TLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGK
979.	CD70_25xCD3 -scFc	VH	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSS
980.	CD70_25xCD3 -scFc	VL	EIVLTQSPGTL SLSPGERATL SCRA SQSVRS SYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGSSPPTFGGGTRLEIK
981.	CD70_25xCD3 -scFc	scFv	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERAT LSCRA SQSVRS SYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYFCQQYGSSPPTFGGGTRLEIK
982.	CD70_25xCD3 -scFc	双特异性 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMN SLRAEDTAVYYCAKHDYSN YPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERAT LSCRA SQSVRS SYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYFCQQYGSSPPTFGGGTRLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMN NLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL

			TLSGVQPEDEAEYCVLWYSNRWVFGGGKLTVL
983.	CD70_25xCD3-scFc	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWWSAIGSGGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWQGGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYFCQQYGSSPPTFGGGTRLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSKAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGT VTLCGSSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TL SGVQPEDEAEYCVLWYSNRWVFGGGKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPKP KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPLVDS DGSFFLYSKLTVDKSRWQQGNV FSCVMHEALHNHYTQKSLSLSPGKGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCP PCPAPELLGGPSVFLFPKP KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPLVDS DGSFFLYSKLTVDKSRWQQGNV FSCVMHEALHNHYTQKSLSLSPGK
984.	CD70_26_CCx CD3-scFc	VH CDR1	IYAMS
985.	CD70_26_CCx CD3-scFc	VH CDR2	AIGSGGSTFYAESVKG
986.	CD70_26_CCx CD3-scFc	VH CDR3	HDYSNPYFDY
987.	CD70_26_CCx CD3-scFc	VL CDR1	RASQSVRSSYA
988.	CD70_26_CCx CD3-scFc	VL CDR2	GASSRAT
989.	CD70_26_CCx CD3-scFc	VL CDR3	QQYGDLPFT
990.	CD70_26_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKC LEWWSAIGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWQGGLTVTVSS
991.	CD70_26_CCx CD3-scFc	VL	EIVLTQSPGTLSLSPGERATLSCRASQSVRSSSYVAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTRLEIK
992.	CD70_26_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKC LEWWSAIGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWQGGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSSYVAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTRLEIK
993.	CD70_26_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKC LEWWSAIGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWQGGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSSYVAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTRLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSKAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGT VTLCGSSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TL SGVQPEDEAEYCVLWYSNRWVFGGGKLTVL
994.	CD70_26_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKC LEWWSAIGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWQGGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSLSPGERATLSCRASQSVRSSSYVAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGDLPFTFGCGTRLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSKAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGT VTLCGSSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TL SGVQPEDEAEYCVLWYSNRWVFGGGKLTVL

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	CD3-scFc		
1003.	CD70_27_CCx CD3-scFc	VL CDR1	RASQSISSYLN
1004.	CD70_27_CCx CD3-scFc	VL CDR2	AASNLS
1005.	CD70_27_CCx CD3-scFc	VL CDR3	QQSFSSPRT
1006.	CD70_27_CCx CD3-scFc	VH	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSS
1007.	CD70_27_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASN LQSGVSSRFSGSGSGTDFTLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIK
1008.	CD70_27_CCx CD3-scFc	scFv	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSGVSSRFSGSGSGTDF TLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIK
1009.	CD70_27_CCx CD3-scFc	双特异性 分子	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSGVSSRFSGSGSGTDF TLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIKSGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1010.	CD70_27_CCx CD3-scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSGVSSRFSGSGSGTDF TLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIKSGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGSGTQVVTQEPSTVSPGGTVTLTCS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGFFLYSKLTVDKSRWQQGNVFCFVMSHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGFFLYSKLTVDKSRWQQGNVFCFVMSHEALHNHYTQKS LSLSPGK
1011.	CD70_27xCD3 -scFc	VH	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSS
1012.	CD70_27xCD3 -scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASN LQSGVSSRFSGSGSGTDFTLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIK
1013.	CD70_27xCD3 -scFc	scFv	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVFDIWGQGTMTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSGVSSRFSGSGSGTDF TLTISLQPEDFATYYCQQSFSSPRTFGCGTKVEIK
1014.	CD70_27xCD3 -scFc	双特异性	QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI YHSGGTYFNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARHYEILTGY

		分子	PVDFDIWGQGTMTVTSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSQSGVSSRFSGSGSGTDF TLTISSLQPEDFATYYCQQSFSPRTFGQGTKEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSIYSYWAY WGQGTLTVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLTPSPGGTTLTCSG STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1015.	CD70_27xCD3 -scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSQTLSTLTCTVSGGSISSSYWGWIRQPPGKLEWIGSI YHSGGTYNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARHYEILTGY PDVDFIWGQGTMTVTSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGD RVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASNLSQSGVSSRFSGSGSGTDF TLTISSLQPEDFATYYCQQSFSPRTFGQGTKEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSIYSYWAY WGQGTLTVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLTPSPGGTTLTCSG STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGKGGSGGGGSGGGGSGGGGSGGGGSGGGGSDIKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGK
1016.	CD70_28_CCx CD3-scFc	VH CDR1	SYSMN
1017.	CD70_28_CCx CD3-scFc	VH CDR2	YISSGGYIYAEVKG
1018.	CD70_28_CCx CD3-scFc	VH CDR3	GDYSNYAYFDY
1019.	CD70_28_CCx CD3-scFc	VL CDR1	RASQGISNYLA
1020.	CD70_28_CCx CD3-scFc	VL CDR2	AASTLQS
1021.	CD70_28_CCx CD3-scFc	VL CDR3	QQYYSTPLT
1022.	CD70_28_CCx CD3-scFc	VH	EVQLVESGGGLVKPGGSLRLSCAASGFTSSYSMNWVRQAPGKCLEWVSYIS SSGGYIYAEVSKGRFTISRDNAKNSLYLQMNSLRAEDAAVYYCSRGDYSNYA YFDYWGGQTLTVTSS
1023.	CD70_28_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGDRTITCRASQGISNYLAWYQQKPGKVPKLLIYAAS TQSGVPSRFSGSGSGTDFTLTISSLQAEDVAVYYCQQYYSTPLTFGCGTKVEIK
1024.	CD70_28_CCx CD3-scFc	scFv	EVQLVESGGGLVKPGGSLRLSCAASGFTSSYSMNWVRQAPGKCLEWVSYIS SSGGYIYAEVSKGRFTISRDNAKNSLYLQMNSLRAEDAAVYYCSRGDYSNYA YFDYWGGQTLTVTSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTIT TCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGTDFLT ISSLQAEDVAVYYCQQYYSTPLTFGCGTKVEIK
1025.	CD70_28_CCx CD3-scFc	双特异性 分子	EVQLVESGGGLVKPGGSLRLSCAASGFTSSYSMNWVRQAPGKCLEWVSYIS SSGGYIYAEVSKGRFTISRDNAKNSLYLQMNSLRAEDAAVYYCSRGDYSNYA YFDYWGGQTLTVTSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRTIT TCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGTDFLT ISSLQAEDVAVYYCQQYYSTPLTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSIYSYWAYWG QGTLTVTSSGGGSGGGGSGGGGSGTQVVTQEPSTLTPSPGGTTLTCSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTL

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			GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1026.	CD70_28_CCx CD3-scFc	双特异性 HLE 分子	EVQLVESGGGLVLPKPGGSLRLSCAASGFTFSSYSMNWVRQAPGKCLEWVSYS SSGGYIYYAESVKGRFTISRDNAKNSLYLQMNSLRAEDAAYVYCSRGDYSNYA YFDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRT ITCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGDTFTLT ISLQAEDVAVYYCQYYSTPLTFGGGKTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGGSDKHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
1027.	CD70_28xCD3 -scFc	VH	EVQLVESGGGLVLPKPGGSLRLSCAASGFTFSSYSMNWVRQAPGKLEWVSYS SSGGYIYYAESVKGRFTISRDNAKNSLYLQMNSLRAEDAAYVYCSRGDYSNYA YFDYWGQGTLLTVSS
1028.	CD70_28xCD3 -scFc	VL	DIQTQSPSSLSASVGDRTITCRASQGISNYLAWYQQKPGKVPKLLIYAAS LTQSGVPSRFSGSGSGDTFTLTISLQAEDVAVYYCQYYSTPLTFGGGKTKVEIK
1029.	CD70_28xCD3 -scFc	scFv	EVQLVESGGGLVLPKPGGSLRLSCAASGFTFSSYSMNWVRQAPGKLEWVSYS SSGGYIYYAESVKGRFTISRDNAKNSLYLQMNSLRAEDAAYVYCSRGDYSNYA YFDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRT ITCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGDTFTLT ISLQAEDVAVYYCQYYSTPLTFGGGKTKVEIK
1030.	CD70_28xCD3 -scFc	双特异性 分子	EVQLVESGGGLVLPKPGGSLRLSCAASGFTFSSYSMNWVRQAPGKLEWVSYS SSGGYIYYAESVKGRFTISRDNAKNSLYLQMNSLRAEDAAYVYCSRGDYSNYA YFDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRT ITCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGDTFTLT ISLQAEDVAVYYCQYYSTPLTFGGGKTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1031.	CD70_28xCD3 -scFc	双特异性 HLE 分子	EVQLVESGGGLVLPKPGGSLRLSCAASGFTFSSYSMNWVRQAPGKLEWVSYS SSGGYIYYAESVKGRFTISRDNAKNSLYLQMNSLRAEDAAYVYCSRGDYSNYA YFDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRT ITCRASQGISNYLAWYQQKPGKVPKLLIYAASLTQSGVPSRFSGSGSGDTFTLT ISLQAEDVAVYYCQYYSTPLTFGGGKTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTL GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGGSDKHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ

[0723]

			PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG K
1032.	CD70_29_CCx CD3-scFc	VH CDR1	VYAMS
1033.	CD70_29_CCx CD3-scFc	VH CDR2	TISGSGGSTFYAESVKG
1034.	CD70_29_CCx CD3-scFc	VH CDR3	HDYSNYAYFDY
1035.	CD70_29_CCx CD3-scFc	VL CDR1	RASQSVRSYLA
1036.	CD70_29_CCx CD3-scFc	VL CDR2	GASSRAT
1037.	CD70_29_CCx CD3-scFc	VL CDR3	QQYGDLPFT
1038.	CD70_29_CCx CD3-scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKCLEWVSTIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNRLRAEDTAVYYCARHDYSNY AYFDYWGGQGLTVSS
1039.	CD70_29_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASS RATGIPDRFSGSGSGTDFTLISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIK
1040.	CD70_29_CCx CD3-scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKCLEWVSTIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNRLRAEDTAVYYCARHDYSNY AYFDYWGGQGLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIK
1041.	CD70_29_CCx CD3-scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKCLEWVSTIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNRLRAEDTAVYYCARHDYSNY AYFDYWGGQGLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNRLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE
1042.	CD70_29_CCx CD3-scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKCLEWVSTIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNRLRAEDTAVYYCARHDYSNY AYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNRLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGK
1043.	CD70_29xCD3 -scFc	VH	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKLEWVSTI SGSGGSTFYAESVKGRFTISRDNKNTLYLQMNRLRAEDTAVYYCARHDYSN YAYFDYWGGQGLTVSS
1044.	CD70_29xCD3	VL	EIVLTQSPGTLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLIYGASS

[0724]

	-scFc		RATGIPDRFSGSGSGTDFLTISRLEPEDFAVYYCQQYGDLPTFGPGTKVEIK
1045.	CD70_29xCD3 -scFc	scFv	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKGLEWVSTI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNRLRAEDTAVYYCARHDYSN YAYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERA TLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDF TLISRLEPEDFAVYYCQQYGDLPTFGPGTKVEIK
1046.	CD70_29xCD3 -scFc	双特异性 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKGLEWVSTI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNRLRAEDTAVYYCARHDYSN YAYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERA TLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDF TLISRLEPEDFAVYYCQQYGDLPTFGPGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNRLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCLG SSTGAVTSGNYPNWWQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1047.	CD70_29xCD3 -scFc	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKGLEWVSTI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNRLRAEDTAVYYCARHDYSN YAYFDYWGGTTLTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERA TLSCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDF TLISRLEPEDFAVYYCQQYGDLPTFGPGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNRLKTEDTAVYYCVRHGNFNGNSYISYWA YWGGTTLTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCLG SSTGAVTSGNYPNWWQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAA LTLGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPAP ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
1048.	CD70_30_CCx CD3-scFc	VH CDR1	SYGMH
1049.	CD70_30_CCx CD3-scFc	VH CDR2	VISYEGSNKYAESVKG
1050.	CD70_30_CCx CD3-scFc	VH CDR3	GRYYGSGNYNHGMDV
1051.	CD70_30_CCx CD3-scFc	VL CDR1	RASQSISSYLN
1052.	CD70_30_CCx CD3-scFc	VL CDR2	AASSLQ5
1053.	CD70_30_CCx CD3-scFc	VL CDR3	QQSYSTPFT
1054.	CD70_30_CCx CD3-scFc	VH	QVQLVESGGGVVQPGRSLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA VISYEGSNKYAESVKGRTISRDN SKNTLYLQMNRLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGTITVSS
1055.	CD70_30_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASL QSGVPSRFSGRSGTDFLTITSLQPEDFATYYCQSYSTPFTFGCGTKVEIK
1056.	CD70_30_CCx CD3-scFc	scFv	QVQLVESGGGVVQPGRSLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA VISYEGSNKYAESVKGRTISRDN SKNTLYLQMNRLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGTITVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASLQSGVPSRFSGR SGTDFLTITSLQPEDFATYYCQSYSTPFTFGCGTKVEIK
1057.	CD70_30_CCx	双特异性	QVQLVESGGGVVQPGRSLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA

[0725]

	CD3-scFc	分子	VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSSGGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGCGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGT LVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGT VTLCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1058.	CD70_30_CCx CD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGSRSLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSSGGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGCGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGT LVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGT VTLCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVMHEALHN HYTQKSLSLSPGK
1059.	CD70_30xCD3 -scFc	VH	QVQLVESGGGVVQPGSRSLRLSCAASGFMFSSYGMHWVRQAPGKLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSS
1060.	CD70_30xCD3 -scFc	VL	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSL QSGVPSRFSGRGS GTDFTLTISLQPEDFATYYCQSYSTPFTFGPGTKVEIK
1061.	CD70_30xCD3 -scFc	scFv	QVQLVESGGGVVQPGSRSLRLSCAASGFMFSSYGMHWVRQAPGKLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSSGGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGPGTKVEIK
1062.	CD70_30xCD3 -scFc	双特异性 分子	QVQLVESGGGVVQPGSRSLRLSCAASGFMFSSYGMHWVRQAPGKLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSSGGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGPGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGT LVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGT VTLCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1063.	CD70_30xCD3 -scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGSRSLRLSCAASGFMFSSYGMHWVRQAPGKLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGT TVTVSSGGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGPGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGT LVTVSSGGGGSGGGSGGGGSQT VVTQEPSTVSPGGT VTLCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL

[0726]

			GGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
1064.	CD70_31_CCx CD3-scFc	VH CDR1	SYGMH
1065.	CD70_31_CCx CD3-scFc	VH CDR2	VTWYDASNKYYGDAVKG
1066.	CD70_31_CCx CD3-scFc	VH CDR3	DLLRGVKGYAMDV
1067.	CD70_31_CCx CD3-scFc	VL CDR1	RASQSLRRIYA
1068.	CD70_31_CCx CD3-scFc	VL CDR2	DVFDRAT
1069.	CD70_31_CCx CD3-scFc	VL CDR3	QQYSESPFT
1070.	CD70_31_CCx CD3-scFc	VH	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV TWYDASNKYYGDAVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCARDLLR GVKGYAMDVWGQGTITVVS
1071.	CD70_31_CCx CD3-scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGSGTDFTLTISRLEPEDFAVYQCQQYSESPFTFGCGTKVDIK
1072.	CD70_31_CCx CD3-scFc	scFv	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV TWYDASNKYYGDAVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCARDLLR GVKGYAMDVWGQGTITVVS GERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGSGTDFTLTISRLEPEDFAVYQCQQYSESPFTFGCGTKVDIK
1073.	CD70_31_CCx CD3-scFc	双特异性 分子	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV TWYDASNKYYGDAVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCARDLLR GVKGYAMDVWGQGTITVVS GERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGSGTDFTLTISRLEPEDFAVYQCQQYSESPFTFGCGTKVDIK GGGGSEVQLVESG GGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYIS YWAYWGQGTITVVS TCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGG KAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1074.	CD70_31_CCx CD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV TWYDASNKYYGDAVKGRTISRDNKNTLYLQMNSLRAEDTAVYYCARDLLR GVKGYAMDVWGQGTITVVS GERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGSGTDFTLTISRLEPEDFAVYQCQQYSESPFTFGCGTKVDIK GGGGSEVQLVESG GGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYIS YWAYWGQGTITVVS TCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGG KAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD

[0727]

			GVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1075.	CD70_31xCD3 -scFc	VH	QVQLVESGGGVVQPGRSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VTWYDASNKYYGDAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDLL RGVKGYAMDVWGQGTITVTVSS
1076.	CD70_31xCD3 -scFc	VL	EIVLTQSPGTLSPGERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGGSGTDFTLTISRLEPEDFAVYYCQQYSESPFTFGPGTKVDIK
1077.	CD70_31xCD3 -scFc	scFv	QVQLVESGGGVVQPGRSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VTWYDASNKYYGDAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDLL RGVKGYAMDVWGQGTITVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGGSGTDFTLTISRLEPEDFAVYYCQQYSESPFTFGPGTKVDIK
1078.	CD70_31xCD3 -scFc	双特异性 分子	QVQLVESGGGVVQPGRSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VTWYDASNKYYGDAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDLL RGVKGYAMDVWGQGTITVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGGSGTDFTLTISRLEPEDFAVYYCQQYSESPFTFGPGTKVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYI SYWAYWGQGTITVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTV TLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLG GKAALTLSGVQPEDEAEYCYLVWSNRWVFGGGTKLTVL
1079.	CD70_31xCD3 -scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGRSLRLSCAASGFTSSYGMHWVRQAPGKGLEWVA VTWYDASNKYYGDAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDLL RGVKGYAMDVWGQGTITVTVSSGGGGSGGGSGGGGSEIVLTQSPGTL SLSPGERATLSCRASQSLRRIYLAWYQQKPGQAPRLIYDVFD RATGIPDRFSGGGSGTDFTLTISRLEPEDFAVYYCQQYSESPFTFGPGTKVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYI SYWAYWGQGTITVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTV TLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLG GKAALTLSGVQPEDEAEYCYLVWSNRWVFGGGTKLTVLGGGGDKTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1080.	CD70_32_CCx CD3-scFc	VH CDR1	SYGIS
1081.	CD70_32_CCx CD3-scFc	VH CDR2	WISAYQGYTHYAQKLQG
1082.	CD70_32_CCx CD3-scFc	VH CDR3	DYGGNDYYGMDV
1083.	CD70_32_CCx CD3-scFc	VL CDR1	SGSSSNIGINYVY
1084.	CD70_32_CCx CD3-scFc	VL CDR2	RSDQRP5
1085.	CD70_32_CCx CD3-scFc	VL CDR3	AAFDESLSGVV
1086.	CD70_32_CCx CD3-scFc	VH	QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSS

[0728]

1087.	CD70_32_CCx CD3-scFc	VL	QSVLTQPPSASGTPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSD QRPSGVPDRFSGSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVL
1088.	CD70_32_CCx CD3-scFc	scFv	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSASG TPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSGVPDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVL
1089.	CD70_32_CCx CD3-scFc	双特异性 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSASG TPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSGVPDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVLSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSP GGTITLTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFVGGGTLTVL
1090.	CD70_32_CCx CD3-scFc	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSASG TPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSGVPDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVLSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSP GGTITLTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFVGGGTLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK
1091.	CD70_32xCD3 -scFc	VH	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSS
1092.	CD70_32xCD3 -scFc	VL	QSVLTQPPSASGTPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSD QRPSGVPDRFSGSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVL
1093.	CD70_32xCD3 -scFc	scFv	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSASG TPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSGVPDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVL
1094.	CD70_32xCD3 -scFc	双特异性 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSASG TPGQRTVITSCSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSGVPDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLSGVVFVGGGTLTVLSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSP GGTITLTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS

[0729]

			GSLLGKKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1095.	CD70_32xCD3-scFc	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSKASGYFTTSYGISWVRQAPGQGLEWMG WISAYQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDY GGNDYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSSQSVLTQPPSASG TPGQRVTISCSGSSNIGINYYVYQQLPGTAPKLLIYRSDQRPSPVDRFSGS KSGTSASLALSLRSEDEADYYCAAFDESLSGVVFGGGTKLTVLSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFS GSLLGKKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYKCKVSNK ALPAPIETKISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYKCKVSN KALPAPIETKISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMH EALHNHYTQKSLSLSPGK
1096.	CD70_33_CCx CD3-scFc	VH CDR1	YGMH
1097.	CD70_33_CCx CD3-scFc	VH CDR2	VIWYDASNKYADAVKG
1098.	CD70_33_CCx CD3-scFc	VH CDR3	DREMGSRGDFDY
1099.	CD70_33_CCx CD3-scFc	VL CDR1	RASQGINNYLA
1100.	CD70_33_CCx CD3-scFc	VL CDR2	AVSILQS
1101.	CD70_33_CCx CD3-scFc	VL CDR3	QQYNFYFPS
1102.	CD70_33_CCx CD3-scFc	VH	QAQLVESGGGVVQPGRLRLSCLASGFTFSYGMHWVRQAPGKCLEWVAV IWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSS
1103.	CD70_33_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSI LQSGVPSKFSGSGSGTDFTLTISNLPEDFATYYCQQYNFYFPSFGCGTKVDIK
1104.	CD70_33_CCx CD3-scFc	scFv	QAQLVESGGGVVQPGRLRLSCLASGFTFSYGMHWVRQAPGKCLEWVAV IWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQQYNFYFPSFGCGTKVDIK
1105.	CD70_33_CCx CD3-scFc	双特异性 HLE 分子	QAQLVESGGGVVQPGRLRLSCLASGFTFSYGMHWVRQAPGKCLEWVAV IWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQQYNFYFPSFGCGTKVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNSYI SYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTV TLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSGSLG GKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1106.	CD70_33_CCx CD3-scFc	双特异性 HLE 分子	QAQLVESGGGVVQPGRLRLSCLASGFTFSYGMHWVRQAPGKCLEWVAV IWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQQYNFYFPSFGCGTKVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNN

[0730]

			YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSPGGTV TLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSGSLLG GKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKTLTVLGGGGDKHTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1107.	CD70_33xCD3 -scFc	VH	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYGMHWVRQAPGKGLEWVA VIWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSS
1108.	CD70_33xCD3 -scFc	VL	DIQMTQSPSSLSASVGRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSI LQSGVPSKFSGSGSGDTFTLTISNLPEDFATYYCQYNYFYPFSFGQGTQVDIK
1109.	CD70_33xCD3 -scFc	scFv	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYGMHWVRQAPGKGLEWVA VIWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQYNYFYPFSFGQGTQVDIK
1110.	CD70_33xCD3 -scFc	双特异性 分子	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYGMHWVRQAPGKGLEWVA VIWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQYNYFYPFSFGQGTQVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSPGGTV TLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSGSLLG GKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKTLTVL
1111.	CD70_33xCD3 -scFc	双特异性 HLE 分子	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYGMHWVRQAPGKGLEWVA VIWYDASNKYADAVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDRE MGSRGDFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSAS VGDRVITTCRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGS GTDFTLTISNLPEDFATYYCQYNYFYPFSFGQGTQVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYI SYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSPGGTV TLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSGSLLG GKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKTLTVLGGGGDKHTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1112.	CD70_34_CCx CD3-scFc	VH CDR1	GFYWS
1113.	CD70_34_CCx CD3-scFc	VH CDR2	EIYHSGHATNNPSLKS
1114.	CD70_34_CCx	VH CDR3	GGNSGYIFDY

[0731]

	CD3-scFc		
1115.	CD70_34_CCx CD3-scFc	VL CDR1	RTSQYIGRYLN
1116.	CD70_34_CCx CD3-scFc	VL CDR2	GASTLQQ
1117.	CD70_34_CCx CD3-scFc	VL CDR3	QQTYSTPRT
1118.	CD70_34_CCx CD3-scFc	VH	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKCLEWIGEY HSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYIF DYWGQGTLLTVSS
1119.	CD70_34_CCx CD3-scFc	VL	DVQMTQSPSSLSASVGDRTITCRTSQYIGRYLNWYQQKPGKAPKVLIGAS TLQQGVPSRFSGSGSGTDFTLTITSLQPEDFASYCQQTYSTPRTFGCGTKVEI K
1120.	CD70_34_CCx CD3-scFc	scFv	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKCLEWIGEY HSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYIF DYWGQGTLLTVSSGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTIT CRTSQYIGRYLNWYQQKPGKAPKVLIGASTLQQGVPSRFSGSGSGTDFTLTIT SLQPEDFASYCQQTYSTPRTFGCGTKVEIK
1121.	CD70_34_CCx CD3-scFc	双特异性 分子	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKCLEWIGEY HSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYIF DYWGQGTLLTVSSGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTIT CRTSQYIGRYLNWYQQKPGKAPKVLIGASTLQQGVPSRFSGSGSGTDFTLTIT SLQPEDFASYCQQTYSTPRTFGCGTKVEIKSGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVSSGGGSGGGSGGGSGTQVTVTEPSLTVPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1122.	CD70_34_CCx CD3-scFc	双特异性 HLE 分子	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKCLEWIGEY HSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYIF DYWGQGTLLTVSSGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTIT CRTSQYIGRYLNWYQQKPGKAPKVLIGASTLQQGVPSRFSGSGSGTDFTLTIT SLQPEDFASYCQQTYSTPRTFGCGTKVEIKSGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVSSGGGSGGGSGGGSGTQVTVTEPSLTVPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
1123.	CD70_34xCD3 -scFc	VH	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKLEWIGEY YHSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYI FDYWGQGTLLTVSS
1124.	CD70_34xCD3 -scFc	VL	DVQMTQSPSSLSASVGDRTITCRTSQYIGRYLNWYQQKPGKAPKVLIGAS TLQQGVPSRFSGSGSGTDFTLTITSLQPEDFASYCQQTYSTPRTFGCGTKVEI K
1125.	CD70_34xCD3 -scFc	scFv	QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKLEWIGEY YHSGHATNNPSLKSRTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYI FDYWGQGTLLTVSSGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTIT TCRTSQYIGRYLNWYQQKPGKAPKVLIGASTLQQGVPSRFSGSGSGTDFTLTIT SLQPEDFASYCQQTYSTPRTFGCGTKVEIK

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1126.	CD70_34xCD3-scFc	双特异性分子	QVQLQQWAGALLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKLEWIGEI YHSGHATNNPSLKSRTISLDTSKNQFSLKLSVTAADTAVYYCARGGNSGYI FDYWGGQGLTVTVSSGGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTI TCRTSQYIGRYLNWYQQKPKAPKVLIIYGASTLQQGVPSRFSGSGSDFTLT ITSLQPEDFASYYCQQTYSTPRTFGQGTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTSLTVSSGGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1127.	CD70_34xCD3-scFc	双特异性HLE分子	QVQLQQWAGALLKPSETLSLTCAVYGGSFSGFYWSWIRQPPGKLEWIGEI YHSGHATNNPSLKSRTISLDTSKNQFSLKLSVTAADTAVYYCARGGNSGYI FDYWGGQGLTVTVSSGGGGSGGGSGGGSDVQMTQSPSSLSASVGDRTI TCRTSQYIGRYLNWYQQKPKAPKVLIIYGASTLQQGVPSRFSGSGSDFTLT ITSLQPEDFASYYCQQTYSTPRTFGQGTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTSLTVSSGGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHCTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGYSTYRCVSLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
1128.	CD70_35_CCx CD3-scFc	VH CDR1	TYGMH
1129.	CD70_35_CCx CD3-scFc	VH CDR2	VIWYEGSNKYGESVKG
1130.	CD70_35_CCx CD3-scFc	VH CDR3	DNSHYYYGMDV
1131.	CD70_35_CCx CD3-scFc	VL CDR1	TGSSSNIGAGYDVN
1132.	CD70_35_CCx CD3-scFc	VL CDR2	VNNNRPS
1133.	CD70_35_CCx CD3-scFc	VL CDR3	QSYDTSLSASV
1134.	CD70_35_CCx CD3-scFc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKCLEWVAV IWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNSH YYYGMDVWVGQGTITVTVSS
1135.	CD70_35_CCx CD3-scFc	VL	QSVLTQPPSVSGAPGQRTISCTGSSSNIGAGYDVNWWYQQFPGTAPKLLIYV NNNRPSGVPDRFSGSTSGTSASLAITGLQAEDEADYYCQSYDTSLSASVFGCG TRLTVL
1136.	CD70_35_CCx CD3-scFc	scFv	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKCLEWVAV IWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNSH YYYGMDVWVGQGTITVTVSSGGGGSGGGSGGGSGSVLTQPPSVSGAPGQ RVTISCTGSSSNIGAGYDVNWWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGST GTSASLAITGLQAEDEADYYCQSYDTSLSASVFGCGTRLTVL
1137.	CD70_35_CCx CD3-scFc	双特异性分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKCLEWVAV IWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNSH YYYGMDVWVGQGTITVTVSSGGGGSGGGSGGGSGSVLTQPPSVSGAPGQ RVTISCTGSSSNIGAGYDVNWWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGST GTSASLAITGLQAEDEADYYCQSYDTSLSASVFGCGTRLTVLSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY

[0733]

			NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1138.	CD70_35_CCx CD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKCLEWVAV IWYEGSNKYGESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDNSH YYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPGQ RVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVDPDRFSGST GTSASLAITGLQAEDEADYYCQSYDTSLSASVFGGTRTLTVLSGGGSGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHN HYTQKSLSLSPGK
1139.	CD70_35xCD3 -scFc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTITVTVSS
1140.	CD70_35xCD3 -scFc	VL	QSVLTQPPSVSGAPGQRVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYV NNNRPSGVDPDRFSGSTSGTSASLAITGLQAEDEADYYCQSYDTSLSASVFGG TRLTVL
1141.	CD70_35xCD3 -scFc	scFv	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPG QRTVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVDPDRFSGS TSGTSASLAITGLQAEDEADYYCQSYDTSLSASVFGGTRTLTVL
1142.	CD70_35xCD3 -scFc	双特异性 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPG QRTVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVDPDRFSGS TSGTSASLAITGLQAEDEADYYCQSYDTSLSASVFGGTRTLTVLSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRS KYNYYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1143.	CD70_35xCD3 -scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPG QRTVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVDPDRFSGS TSGTSASLAITGLQAEDEADYYCQSYDTSLSASVFGGTRTLTVLSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRS KYNYYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVTVQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE

			HYTQKSLSLSPGK
1155.	CD70_36xCD3-scFc	VH	QVQLVESGGGVVQPGRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTLLTVSS
1156.	CD70_36xCD3-scFc	VL	QSVLTQPPSVSGAPGQRVTISCTGSSSNIGAGYDVNWYQQLPGTAPKLLIYV NNNRPSGVPDRFSGSGSGTSASLAITGLQAEDEADYYCQSYETLSASVFGGG TRLTVL
1157.	CD70_36xCD3-scFc	scFv	QVQLVESGGGVVQPGRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTLLTVSSGGGGSGGGSGGGGSQSVLTQPPSVSGAPG QRVTISCTGSSSNIGAGYDVNWYQQLPGTAPKLLIYVNNNRPSGVPDRFSGS KSGTSASLAITGLQAEDEADYYCQSYETLSASVFGGGTRLTVL
1158.	CD70_36xCD3-scFc	双特异性 分子	QVQLVESGGGVVQPGRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTLLTVSSGGGGSGGGSGGGGSQSVLTQPPSVSGAPG QRVTISCTGSSSNIGAGYDVNWYQQLPGTAPKLLIYVNNNRPSGVPDRFSGS KSGTSASLAITGLQAEDEADYYCQSYETLSASVFGGGTRLTVLGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRS KYNMYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1159.	CD70_36xCD3-scFc	双特异性 HLE 分子	QVQLVESGGGVVQPGRLRLSCAASGFTFSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWGQGTLLTVSSGGGGSGGGSGGGGSQSVLTQPPSVSGAPG QRVTISCTGSSSNIGAGYDVNWYQQLPGTAPKLLIYVNNNRPSGVPDRFSGS KSGTSASLAITGLQAEDEADYYCQSYETLSASVFGGGTRLTVLGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRS KYNMYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGSDK THTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK
1160.	CD70_37_CCx CD3-scFc	VH CDR1	SGVYYWS
1161.	CD70_37_CCx CD3-scFc	VH CDR2	YIYSGSTSYNPSLKS
1162.	CD70_37_CCx CD3-scFc	VH CDR3	SGYSYALFDY
1163.	CD70_37_CCx CD3-scFc	VL CDR1	RASQSVDRYFN
1164.	CD70_37_CCx CD3-scFc	VL CDR2	AASSLQS
1165.	CD70_37_CCx CD3-scFc	VL CDR3	QQSYSTPWT
1166.	CD70_37_CCx CD3-scFc	VH	QMQLQESGPGLVKPSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI YYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSVTAADTAVYYCARSYGYALF DYWGQGTLLTVSS
1167.	CD70_37_CCx CD3-scFc	VL	DIQMTQSPSSLSASLGDRVTITCRASQSVDRYFNWYQKPGKAPKVLIFAASS LQSGVPSRFSGSGSGTDFTLTISLQPEDFATYYCQSYSTPWTFCGCTKVEV

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1168.	CD70_37_CCx CD3-scFc	scFv	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI YYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFGCGTKVEVK
1169.	CD70_37_CCx CD3-scFc	双特异性 分子	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI YYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFGCGTKVEVKS GGGGSEVQLVESGGGLVQP GGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1170.	CD70_37_CCx CD3-scFc	双特异性 HLE 分子	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI YYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFGCGTKVEVKS GGGGSEVQLVESGGGLVQP GGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGGGSDKTHTCPPCPAPPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
1171.	CD70_37xCD3 -scFc	VH	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI IYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSS
1172.	CD70_37xCD3 -scFc	VL	DIQMTQSPSSLSASLGDRVTITCRASQSVDRYFNWYQQKPGKAPKVLIFAASS LQSGVPSRFSGSGSGTDFLTISLQPEDFATYYCQSYSTPWTFGQGTKEVE K
1173.	CD70_37xCD3 -scFc	scFv	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI IYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFGQGTKEVEK
1174.	CD70_37xCD3 -scFc	双特异性 分子	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI IYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFGQGTKEVKS GGGGSEVQLVESGGGLVQP GGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1175.	CD70_37xCD3	双特异性	QMQLQESGPGLVKPSSETLSLTCTVSGGSIESGVYYWSWIRQPPGKCLEWIGYI

[0737]

	-scFc	HLE 分子	IYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALF DYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASLGDRVTITC RASQSDRYFNWYQQKPGKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQQSYSTPWTFGQGTKVEVKSGGGGSEVQLVESGGGLVQP GGSLLKSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWG QGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSSTG AVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG K
1176.	CD70_38_CCx CD3-scFc	VH CDR1	SGGYYS
1177.	CD70_38_CCx CD3-scFc	VH CDR2	YIFYSGSTDYNPSLKS
1178.	CD70_38_CCx CD3-scFc	VH CDR3	SGYSYALFDA
1179.	CD70_38_CCx CD3-scFc	VL CDR1	RASQFIGRYFN
1180.	CD70_38_CCx CD3-scFc	VL CDR2	AESSLQS
1181.	CD70_38_CCx CD3-scFc	VL CDR3	QQSYSTPWT
1182.	CD70_38_CCx CD3-scFc	VH	QVQLQESGPGLVKPSQTLSTCTVSGDSIISGGYYWSWIRQPPGKCLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALFD AWGQGLTVTVSS
1183.	CD70_38_CCx CD3-scFc	VL	DIQMTQSPSSLSASVGRVTISCRASQFIGRYFNWYQQKPGKAPKVLIAESS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCQQSYSTPWTFGCGTKVEIK
1184.	CD70_38_CCx CD3-scFc	scFv	QVQLQESGPGLVKPSQTLSTCTVSGDSIISGGYYWSWIRQPPGKCLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALFD AWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGRVTISCR RASQFIGRYFNWYQQKPGKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQQSYSTPWTFGCGTKVEIK
1185.	CD70_38_CCx CD3-scFc	双特异性 分子	QVQLQESGPGLVKPSQTLSTCTVSGDSIISGGYYWSWIRQPPGKCLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALFD AWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGRVTISCR RASQFIGRYFNWYQQKPGKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQQSYSTPWTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQ GTLTVTVSSGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSSTGA VTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1186.	CD70_38_CCx CD3-scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSQTLSTCTVSGDSIISGGYYWSWIRQPPGKCLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALFD AWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSASVGRVTISCR RASQFIGRYFNWYQQKPGKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQQSYSTPWTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNGNSYISYWAYWGQ

[0738]

			GTLVTVSSGGGGSGGGSGGGSGQT VVTQEPLTVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLTG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG KGGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPELLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT PCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ REPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1187.	CD70_38xCD3 -scFc	VH	QVQLQESGPGLVKPSQTLSTCTVSGDSIIISGGYYWSWIRPPGKLEWIGYI FYSGSTDYNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARSGYSYALFD AWGQGT LVT VSS
1188.	CD70_38xCD3 -scFc	VL	DIQMTQSPSSLSASVGDRTVISCRAQFIGNYFNWYQQKPKAPKVLIAESS LQSGVPSRFSGSGSGTEFTLTISLQPEDFATYYCQSYSTPWTFGQGTKEIK
1189.	CD70_38xCD3 -scFc	scFv	QVQLQESGPGLVKPSQTLSTCTVSGDSIIISGGYYWSWIRPPGKLEWIGYI FYSGSTDYNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARSGYSYALFD AWGQGT LVT VSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTVISC RASQFIGRYFNWYQQKPKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQSYSTPWTFGQGTKEIK
1190.	CD70_38xCD3 -scFc	双特异性 分子	QVQLQESGPGLVKPSQTLSTCTVSGDSIIISGGYYWSWIRPPGKLEWIGYI FYSGSTDYNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARSGYSYALFD AWGQGT LVT VSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTVISC RASQFIGRYFNWYQQKPKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQSYSTPWTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLVTVSSGGGGSGGGSGGGSGQT VVTQEPLTVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLTG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1191.	CD70_38xCD3 -scFc	双特异性 HLE 分子	QVQLQESGPGLVKPSQTLSTCTVSGDSIIISGGYYWSWIRPPGKLEWIGYI FYSGSTDYNP SLKSRVTISVDT SKNQFSLKLSVTAADTAVYYCARSGYSYALFD AWGQGT LVT VSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTVISC RASQFIGRYFNWYQQKPKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQSYSTPWTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLVTVSSGGGGSGGGSGGGSGQT VVTQEPLTVSPGGTVTLTCSGSTGA VTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLTG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPG KGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPELLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT PCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQ REPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1192.	CD70_1_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSYAMSWVRQAPGKLEWVSVIS GSGGRPNYAESVKGRFTISRDN SKNTLYLQMNLRDEDTAVYYCAKVDYSNY LFFDYWGQGT LVT VSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGEGATL SCRAGQSVRSYLGWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYGYSPPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY

[illegible]

			DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTlVTVSSGGGGSGGGGSGGGGSGTvvTQEPslTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVH AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK
1196.	CD70_3_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDNskNTLFLQMNSLRAEDTAVYYCAKHdYSNY PYFDYWGQGTlVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQGSFPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTlVTVSSGGGGSGGGGSGGGGSGTvvTQEPslTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK
1197.	CD70_3xCD3- scFc_delGK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDNskNTLFLQMNSLRAEDTAVYYCAKHdYSN YPYFDYWGQGTlVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQGSFPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTlVTVSSGGGGSGGGGSGGGGSGTvvTQEPslTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPeVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLS LSPGK
1198.	CD70_4_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDNskNTLYLQMNSLRAEDTAVYYCAKHdYSN YPYFDYWGQGTlVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQYQGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ

[0741]

			<p>PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK</p>
1199.	CD70_4xCD3- scFc_delGK	双特异性 HLE 分子	<p>EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSA ISGSGGRFTYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGSGGGGSQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK</p>
1200.	CD70_5_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>EVQLLESGGGLVQSGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGS SPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGSGGGSGGGGSQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK</p>
1201.	CD70_5xCD3- scFc_delGK	双特异性 HLE 分子	<p>EVQLLESGGGLVQSGGSLRLSCAASGFTSSYAMSWVRQAPGKLEWVSAIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTTLTVSSGGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL</p>

[0742]

			<p>TISRLEPEDFAVYCCQYGGSPPTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK</p>
1202.	CD70_6_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTTLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATL SCRASQSVRSTYLAWYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQYGGSPPTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK</p>
1203.	CD70_6xCD3- scFc_delGK	双特异性 HLE 分子	<p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKLEWVSLIS GSGGRTHYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGGQGTTLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATL SCRASQSVRSTYLAWYQQKPGQAPRLIYDASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYFCQYGGSPPTFGGGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK</p>
1204.	CD70_7_CCx CD3-scFc_del GK	双特异性 HLE	<p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKLEWVSAIS GSGGSTFYAESVKGRFTISRDN SKNTLSLQMNSLRAEDTAVYYCAKHDYSNYP YFDYWGGQGTTLTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLS</p>

[0743]

		分子	CRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLT ISRLEPEDFAVYYCQYQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLVQ GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWG QGTLVTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1205.	CD70_7xCD3- scFc_delGK	双特异性 HLE 分子	EVQLLESGLLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKGLEWVSAI SGSGGTFYAESVKGRFTISRDNKNTLSLQMNSLRAEDTAVYYCAKHDYSN PYFDYWGGQTLVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLT ISRLEPEDFAVYYCQYQYGDLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
1206.	CD70_8_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGLGMVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQTLVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSVRSTYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLT ISRLEPEDFAVYSCQYQYGDLPFTFGCGTKLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAY WGQGTTLTVSSGGGSGGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
1207.	CD70_8xCD3- scFc_delGK	双特异性 HLE	EVQLLESGLGMVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKGLEWVSAI ISGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGGQTLVTVSSGGGSGGGGSGGGGSEIVLTQSPGTLSPGERAT

[0744]

		分子	LSCRASQSVRSTYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQYQYGLPFTFGPGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1208.	CD70_9_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNSTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWGGQTLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQYQYGLPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1209.	CD70_9xCD3-scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAISGSGGYTYAESVKGRFTISRDNSTLYLQMNSLRAEDTAVYYCAKHDSNYPYFDYWGGQTLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERATLSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTLTISRLEPEDFAVYSCQYQYGLPFTFGPGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1210.	CD70_10_CCx CD3-scFc_del	双特异性 HLE	EVQLLESGGGLAQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAISGSGGSTFYAESVKGRFTISRDNSTLYLQMNSLRAEDTAVYYCAKHDSNYP

[0745]

		分子	<p>YPYFDYWGQGTLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERAT</p> <p>LSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT</p> <p>LTISRLEPEDFAVYYCQQYGDLPTFTGPGTKVEIKSGGGGSEVQLVESGGGLV</p> <p>QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY</p> <p>ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSISYWAY</p> <p>WGQGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK</p> <p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p> <p>NYKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKHTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS</p> <p>LSPGK</p>
1214.	CD70_12_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI</p> <p>SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSYN</p> <p>YPYFDYWGQGTLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERAT</p> <p>LSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT</p> <p>LTISRLEPEDFAVYYCQQYGSSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLV</p> <p>QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY</p> <p>ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSISYWAY</p> <p>WGQGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK</p> <p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p> <p>NYKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKHTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS</p> <p>LSPGK</p>
1215.	CD70_12xCD3 -scFc_delGK	双特异性 HLE 分子	<p>EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA</p> <p>ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSYN</p> <p>YPYFDYWGQGTLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLTSLSPGERAT</p> <p>LSCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT</p> <p>LTISRLEPEDFAVYYCQQYGSSPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV</p> <p>QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY</p> <p>ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSISYWAY</p> <p>WGQGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCGS</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGKAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISK</p> <p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p> <p>NYKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKHTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTTPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS</p> <p>LSPGK</p>

1216.	CD70_13_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWWSAIS SGSGSTFYAESVQGRTISRDN SKNTLYLQVNSLR AEDTAVYYCARHDYSNYP YFDYWGGQGLTVTVSSGGGGSGGGGS GGGGSEIVLTQSPGTLSLSPGERATLS CRASQSVRGNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGS GGGGSQT VVTQEPLTVSPGGTVTLTCGS STGAVTS GNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVG GTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGS GGGGS GGGGS GGGGS GGGGS DKTH TCPCPAPELL GGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKSLS LSPGK
1217.	CD70_13xCD3 -scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWWSAIS SGSGSTFYAESVQGRTISRDN SKNTLYLQVNSLR AEDTAVYYCARHDYSNI PYFDYWGGGLTVTVSSGGGGSGGGGS GGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRGNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGYSPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGS GGGGS QT VVTQEPLTVSPGGTVTLTCGS STGAVTS GNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVG GTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGS GGGGS GGGGS GGGGS GGGGS DKTH TCPCPAPELL GGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKSLS LSPGK
1218.	CD70_14_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSTYAMSWVRQAPGKCLEWWSAIS SGSGGT FYAESVKGRFTISRDN SKNTLYLQMNSLR AEDTAVYYCAKH DYSNY PYFDYWGGGLTVTVSSGGGGSGGGGS GGGGSEIVLTQSPGTLSLSPGERATL SCRASQSIRS NYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLEPEDFAVYYCQQYGYSPFTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYN NYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGGS GGGGS QT VVTQEPLTVSPGGTVTLTCGS STGAVTS GNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYCVLWYSNRWVFVG GTKLTVLGGGGDKHTHTCPPCPAPE LLGGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGS GGGGS GGGGS GGGGS GGGGS DKTH TCPCPAPELL GGPSVFLFPKP KDTLMISRTEPVT CVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLN GKKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTT PPVLDS DGSFFLYSKLTVDKSRWQQGNVFSC SVMHEALHNHYTQKSLS

[0748]

			LSPGK
1219.	CD70_14xCD3-scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSTYAMSWVRQAPGKGLEWVSAI SGSGGGTFFYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDSN YPYFDYWGGTGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERAT LSCRASQSIRSNYLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQQYGGSPFTFGPGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTGLTVTVSSGGGGSGGGSGGGGSGGGGQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
1220.	CD70_15_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSTYAMSWVRQAPGKCLEWVSLIS GSGGRTYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDSNY PYFDYWGGTGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTGLTVTVSSGGGGSGGGSGGGGSGGGGQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK
1221.	CD70_15xCD3-scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFTSTYAMSWVRQAPGKGLEWVSLIS GSGGRTYYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKHDSNY PYFDYWGGTGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLIYGASNRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYSCQQYGISPPTFGGGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTGLTVTVSSGGGGSGGGSGGGGSGGGGQTVVTQEPSTLTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN

[0749]

			YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1222.	CD70_16_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYSSPPFPGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1223.	CD70_16xCD3 -scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSSYAMSWVRQSPGKCLEWVSAIS GSGGRAQYAESVQGRFTVSRDNSKNTLYLQMNSLRAEDTAVYYCAKHDYSN YPYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERA TLSCRASQSVSSNLAWYQQKPGQAPRLIYGSSSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYYCQYQYSSPPFPGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1224.	CD70_17_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDNKNTLYLQMNSLRAEDTAVYYCTKHDYSN YPYFDYWGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPATLSVSPGERATL SCRASQGVRSYDLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFT LTISRLEPEDFAVYHCQYQYGPPTFGCGTKVEIKSGGGGSEVQLVESGGGLV QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCGS STGAVTSGNYPNWVQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAAL TLGVPQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGYSTYRCVSVLTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKA

[0750]

			KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1225.	CD70_17xCD3-scFc_delGK	双特异性HLE分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTKHDSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQGVRSYDLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGGTDFLTISRLEPEDFAVYHCQQYGSTPPTFGGGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1226.	CD70_18_CCx CD3-scFc_delGK	双特异性HLE分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAIGEGGGYTYAESVKGRFTISRDN SKNTLSLLMNSLRAEDTAVYYCARHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQGVRSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGGTDFLTISRLEPEDFAVYYCQQYGSPPTFGCGTKVEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1227.	CD70_18xCD3-scFc_delGK	双特异性HLE分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAIGEGGGYTYAESVKGRFTISRDN SKNTLSLLMNSLRAEDTAVYYCARHDYSNYPYFDYWGGQGLTVTVSSGGGGSGGGSGGGGSEIVLTQSPGTLSPGERATLSCRASQGVRSYFAWYQQKPGQAPRLIYGASTRATGIPARFSGSGGTDFLTISRLEPEDFAVYYCQQYGSPPTFGQGTKEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQEPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGG TKFLAPGTPARFSGSLLGGKAA LTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

[0751]

[0752]

			LSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSKDHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK
1234.	CD70_22_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKCLEWVSLIS GSGGRITYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGT LVT VSSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGT LVT VSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK
1235.	CD70_22xCD3 -scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTSTYAMSWVRQAPGKGLEWVSLIS GSGGRITYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGT LVT VSSGGGGSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQGVRSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGGGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGT LVT VSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK
1236.	CD70_23_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGVVQPGSLRLSCAASGFTSSYAMSWVRQAPGKCLEWVSAIS GSGGRITYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDYSNY PYFDYWGQGT LVT VSSGGGGSGGGGSGGGGSGGGGSEIVLTQSPGTLSPGERATL SCRASQSVRSNYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TINRLEPEDFAVYYCQQYGSSPPTFGCGTKVDIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDS KNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGT LVT VSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK

[illegible]

[0755]

			TPPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP GGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELLGGPS VLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP VLDSGDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1240.	CD70_25_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKCLEWVSAI SGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSY YPYFDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERAT LSCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLPEDEFAVYFCQQYGGSPPTFGCGTRLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPAPE LLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELL GGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSL LSPGK
1241.	CD70_25xCD3 -scFc_delGK	双特异性 HLE 分子	EVQLLESGGGMVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSA ISGSGGRTFYAESVEGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSY YPYFDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERAT LSCRASQSVSRSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFT LTISRLPEDEFAVYFCQQYGGSPPTFGGGTRLEIKSGGGGSEVQLVESGGGLV QPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPAPE LLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELL GGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN YKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSL LSPGK
1242.	CD70_26_CCx CD3-scFc_del GK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKCLEWVSAIG GSGGSTFYAESVKGRTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSY PYFDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERATL SCRASQSVSRSSYVAYWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL TISRLPEDEFAVYYCQQYGDLPFTFGCGTRLEIKSGGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAY WGQGTLLTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTCPCPAPELL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTCPCPAPE LLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN

			<p>NYKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKSL</p> <p>LSPGK</p>
1243.	CD70_26xCD3 -scFc_delGK	双特异性 HLE 分子	<p>EVQLLESQGLVQPGGSLRLSCAASGFTFSIYAMSWVRQAPGKGLEWVSAIG</p> <p>GSGGSTFYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKHDSYNY</p> <p>PYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLVSLSPGERATL</p> <p>SCRASQSVRSYVAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDFTL</p> <p>TISRLEPEDFAVYYCQQYGDLPFTFGPGTRLEIKSGGGGSEVQLVESGGGLVQ</p> <p>PGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA</p> <p>DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSIWAY</p> <p>WGQGLTVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELL</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK</p> <p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p> <p>NYKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKSL</p> <p>LSPGK</p>
1244.	CD70_27_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI</p> <p>YHSGGTYFNPSLKSRTVISVDTSKNQFSLKLSSVTAADTAVYYCARHYEILTGY</p> <p>PVFDIHWGGQTMVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGD</p> <p>RVTITCRASQSISSYLWYQQKPGKAPKLLIYAASNLQSGVSSRFSGSGSGTDF</p> <p>TLTISSLQPEDFATYYCQQSFSSPRTFGCGTKVEIKSGGGGSEVQLVESGGGLV</p> <p>QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY</p> <p>ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSIWAY</p> <p>WGQGLTVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPE</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK</p> <p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p> <p>NYKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKS</p> <p>LSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELL</p> <p>GGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVHN</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA</p> <p>KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN</p> <p>YKTTPPVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNNHYTQKSL</p> <p>LSPGK</p>
1245.	CD70_27xCD3 -scFc_delGK	双特异性 HLE 分子	<p>QVQLQESGPGLVKPSQTLSTCTVSGGSISSSSYYWGWIQPPGKCLEWIGSI</p> <p>YHSGGTYFNPSLKSRTVISVDTSKNQFSLKLSSVTAADTAVYYCARHYEILTGY</p> <p>PVFDIHWGGQTMVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGD</p> <p>RDVTITCRASQSISSYLWYQQKPGKAPKLLIYAASNLQSGVSSRFSGSGSGTDF</p> <p>TLTISSLQPEDFATYYCQQSFSSPRTFGCGTKVEIKSGGGGSEVQLVESGGGLV</p> <p>QPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYY</p> <p>ADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYSIWAY</p> <p>WGQGLTVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPE</p> <p>STGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAPGTPARFSGSLGGAAL</p> <p>TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE</p> <p>LLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK</p>

			<p>AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK</p>
1246.	CD70_28_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>EVQLVESGGGLVKPGGSLRLSCAASGFTFSYSIMNWVRQAPGKCLEWVSYS SSGGYIYYAESVKGRFTISRDNKNSLYLQMNSLRAEDAAVYYCSRGDYSNYA YFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGRVIT ITCRASQGISNYLAWYQQKPGKPKLLIYAASLTQSGVPSRFSGSGSGTDFLT ISSLQAEDVAVYYCQYYSTPLTFGCGTKVEIKSGGGSEVQLVESGGGLVQP GGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAYWG QGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSG AVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPARFSGSLGGKAALTS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSP GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLSDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK</p>
1247.	CD70_28xCD3 -scFc_delGK	双特异性 HLE 分子	<p>EVQLVESGGGLVKPGGSLRLSCAASGFTFSYSIMNWVRQAPGKCLEWVSYS SSGGYIYYAESVKGRFTISRDNKNSLYLQMNSLRAEDAAVYYCSRGDYSNYA YFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSASVGRVIT ITCRASQGISNYLAWYQQKPGKPKLLIYAASLTQSGVPSRFSGSGSGTDFLT ISSLQAEDVAVYYCQYYSTPLTFGGGKVEIKSGGGSEVQLVESGGGLVQP GGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAYWG QGTLLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCSG AVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPARFSGSLGGKAALTS GVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSP GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLSDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK</p>
1248.	CD70_29_CCx CD3-scFc_del GK	双特异性 HLE 分子	<p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKCLEWVSTIS GSGGSTFYAESVKGRFTISRDNKNTLYLQMNNRLRAEDTAVYYCARHDYSNY AYFDYWGGQGLTVTVSSGGGGSGGGGSGGGGSEIVLTQSPGTLSLSPGERATL SCRASQSVRSYSLAWYQQKPGQAPRLIYGASSRATGIPDRFSGSGSGTDFLT TISRLEPEDFAVYYCQYQDLPFTFGCGTKVEIKSGGGSEVQLVESGGGLVQ PGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYA DSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYISWAY WGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLTVSPGGTVTLTCS STGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPARFSGSLGGKAAL TLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN</p>

[0758]

			NYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPPELL GGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK
1249.	CD70_29xCD3 -scFc_delGK	双特异性 HLE 分子	EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYAMSWVRQAPGKGLEWVSTI SGSGGSTFYAESVKGRFTISRDN SKNTLYLQMNLRAEDTAVYYCARHDYSN YAYFDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSEIVLTQSPGTLSPGERA TLSCRASQSVRSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFSGSGSGTDF TLTISRLEPEDFAVYYCQQYGDLPTFTFGPGTKVEIKSGGGGSEVQLVESGGGL VQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYNNYATY YADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWA YWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAP ELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV HNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK SLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPEL LGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN AKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN YKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS LSPGK
1250.	CD70_30_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGCGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPC PAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPC PAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
1251.	CD70_30xCD3 -scFc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLRLSCAASGFMFSSYGMHWVRQAPGKCLEWVA VISYEGSNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARGRY GSGNYNHGMDVWGQGTITVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCRASQSISSYLWYQQKPGKAPKLLIYAASSLQSGVPSRFSGR GSGTDFTLTISLQPEDFATYYCQSYSTPFTFGPGTKVEIKSGGGGSEVQLVE SGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVARIRSKYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNS YISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPC PAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK

[0759]

			PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1252.	CD70_31_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV TWYDASNKYGYDAVKGRFTISRDNSTNTLYQMNSLRAEDTAVYVCARDLLR GVKGYAMDVWGQGTITVSSGGGSGGGGSGGGGSGGGGSEIVLTQSPGTLSP GERATLSRASQSLRRIYLAQYQKPGQAPRLIYDVFDRATGIPDRFSGGG GTDFTLTISRLEPEDFAVYQCQYSESPFTFGCGTKVDIKSGGGGSEVQLVESG GGVLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNGFNSYIS YWAYWGQGTITVSSGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
1253.	CD70_31xCD3 -scFc_delGK	双特异性 HLE 分子	QVQLVESGGGVVQPGRSRLSCAASGFTSSYGMHWVRQAPGKLEWVAV VTWYDASNKYGYDAVKGRFTISRDNSTNTLYQMNSLRAEDTAVYVCARDLL RGVKGYAMDVWGQGTITVSSGGGSGGGGSGGGGSGGGGSEIVLTQSPGTLSP PGERATLSRASQSLRRIYLAQYQKPGQAPRLIYDVFDRATGIPDRFSGGG SGTDFTLTISRLEPEDFAVYQCQYSESPFTFGPGTKVDIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNY YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNGFNSYIS SYWAYWGQGTITVSSGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK
1254.	CD70_32_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLVQSGAEVKKPGASVKVSCKASGYFTSYGISWVRQAPGQCLEWMG WISAYQGYTHYAQLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYVCARDY GGNDYYGMDVWGQGTITVSSGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPC TPGQRTVISCSSGSSNIGINYVYQQLPGTAPKLLIYRSDQRPSPGVDRFSGS KSGTSASLALSGLRSEADYYCAAFDESLGVVFGCGTKLTVLSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRSKYNNY YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNGFNSYIS YWAYWGQGTITVSSGGGSGGGGSGGGGSGGGGSGGGGSDKHTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQK SLSLSPGK

			WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHHTQKSLSLSPGK
1255.	CD70_32xCD3-scFc_delGK	双特异性HLE分子	QVQLVQSGAEVKKPGASVKVCSKASGYFTSYGISWVRQAPGQGLEWMGWISAYQQGYTHYAQKLQGRVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDYGGNDYYGMDVWVGQGTITVTVSSGGGGSGGGSGGGGSQSVLTQPPSASGTPGQRVITISCSGSSNIGINYVWYQQLPGTAPKLLIYRSDQRPSGVPDRFSGSKSGTSASLALSLRSEDEADYYCAAFDESLSGVVFVGGGTKLTVLGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHHTQKSLSLSPGK
1256.	CD70_33_CCxCD3-scFc_delGK	双特异性HLE分子	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYYGMHWVRQAPGKCLEWVAVIWDASNKYYADAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDREMGSRGDFDYWGQGTITVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRVITICRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGSGTDFTLTISNLQPEDFATYYCQQYNFYFSPFSGCGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHHTQKSLSLSPGK
1257.	CD70_33xCD3-scFc_delGK	双特异性HLE分子	QAQLVESGGGVVQPGRSLRLSCAASGFTFSYYGMHWVRQAPGKLEWVAVIWDASNKYYADAVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDREMGSRGDFDYWGQGTITVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRVITICRASQGINNYLAWFQQKPGKAPKSLIYAVSILQSGVPSKFSGSGSGTDFTLTISNLQPEDFATYYCQQYNFYFSPFSGCGTKVDIKSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHHTQKSLSLSPGK

[0761]

			CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD GVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHY TQKSLSLSPGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPA PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVE VHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQK SLSLSPGK
1258.	CD70_34_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLQQWAGALLKPSETLSLTCVYGGSGFSGFYWSWIRQPPGKCLEWIGEY HSGHATNPNPSLKSRVTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYIF DYWGQGTLLTVSSGGGGSGGGGSGGGGSDVQMTQSPSSLSASVGRVITIT CRTSQYIGRYLNWYQQKPKAPKVLIIYGASTLQQGVPSRFSGSGSGTDFTLTI TSLQPEDFASYQCQQTSTPRTFGCGTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSLSP GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSLSPGK
1259.	CD70_34xCD3 -scFc_delGK	双特异性 HLE 分子	QVQLQQWAGALLKPSETLSLTCVYGGSGFSGFYWSWIRQPPGKLEWIGEY YHSGHATNPNPSLKSRVTISLDTSKNQFSLKLNSTAAADTAVYYCARGGNSGYI FDYWGQGTLLTVSSGGGGSGGGGSGGGGSDVQMTQSPSSLSASVGRVITI TCRTSQYIGRYLNWYQQKPKAPKVLIIYGASTLQQGVPSRFSGSGSGTDFTLT ITSLQPEDFASYQCQQTSTPRTFGGQTKVEIKSGGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTG AVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLS GVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSLSP GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSLSPGK
1260.	CD70_35_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGVVQPGSRSLRSLCAASGFTSTYGMHWVRQAPGKCLEWVAV IWEYGSNKYYGESVKGRFTISRDNSTNTLYLQMNSLRADTAVYYCARDNSH YYGMVDVWGQGTITVTVSSGGGGSGGGGSGGGGSGVLTQPPSVSGAPGQ RVTISCTGSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGSTS GTSASLAITGLQAEDEADYYCQSYDTSLSASVFGCGTRLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTLVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV

			DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1261.	CD70_35xCD3-scFc_delGK	双特异性HLE分子	QVQLVESGGGVVQPGRSRLRSCAASGFTFTSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPG QRTVISTCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGS TSGTSASLAITGLQAEDEADYYCQSYDTLSASVFGGGTRLTVLSGGGGSEVQ LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRS KYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPRFS GSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTCLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGK
1262.	CD70_36_CCxCD3-scFc_delGK	双特异性HLE分子	QVQLVESGGGVVQPGRSRLRSCAASGFTFTSTYGMHWVRQAPGKCLEWVA IWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNSH YYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPGQ RVTISCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGSKS GTSASLAITGLQAEDEADYYCQSYETLSASVFGCGTRLTVLSGGGGSEVQLV ESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFNG SYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSPGG TVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPRFSGSL LGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTCLTVLGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
1263.	CD70_36xCD3-scFc_delGK	双特异性HLE分子	QVQLVESGGGVVQPGRSRLRSCAASGFTFTSTYGMHWVRQAPGKGLEWVA VIWYEGSNKYGESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDNS HYYYGMDVWVGQGTITVTVSSGGGGSGGGGSGGGGSGSVLTQPPSVSGAPG QRTVISTCTGSSSNIGAGYDVNWYQQFPGTAPKLLIYVNNNRPSGVPDRFSGS KSGTSASLAITGLQAEDEADYYCQSYETLSASVFGGGTRLTVLSGGGGSEVQ LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRS KYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGGSGGGGSGTQVTVTQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTAPRFS GSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTCLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK

[0763]

			HTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNK ALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTH TCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNKAL PAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSLSPGK
1264.	CD70_37_CCx CD3-scFc_del GK	双特异性 HLE 分子	QMQLQESGPGVLKPSSETLSLTCTVSGGSIESGVYVWSWIRQPPGKCLEWIGYI YSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFCGCTKVEVKS GGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTG AVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTL GVQPEDEAEYCVLWYSNRWVFGGKTLTVLGGGGDKTHTCPPCAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNKALPAIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNKALPAIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1265.	CD70_37xCD3 -scFc_delGK	双特异性 HLE 分子	QMQLQESGPGVLKPSSETLSLTCTVSGGSIESGVYVWSWIRQPPGKGLEWIGYI IYSGSTSYNPSLKSRLTMSVDTSKNQFSLKLSVTAADTAVYYCARSGYSYALF DYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASLGDRVTITC RASQSVDRYFNWYQQKPKAPKVLIFAASSLQSGVPSRFSGSGSGTDFLTIS SLQPEDFATYYCQSYSTPWTFCGCTKVEVKS GGGGSEVQLVESGGGLVQP GGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADS VKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTG AVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTL GVQPEDEAEYCVLWYSNRWVFGGKTLTVLGGGGDKTHTCPPCAPELLG GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK TKPCEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNKALPAIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPCAPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP CEEQYGYSTYRCVSVTLVLHQQDWLNGKEYCKVSNKALPAIEKTISKAKGQPR EPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP VLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1266.	CD70_38_CCx CD3-scFc_del GK	双特异性 HLE 分子	QVQLQESGPGVLKPSQTLSTCTVSGDSIISGGYVWSWIRQPPGKCLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSVTAADTAVYYCARSGYSYALFD AWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTVISC RASQFIGRYFNWYQQKPKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQSYSTPWTFCGCTKVEIKSGGGGSEVQLVESGGGLVQPG GSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQ GTLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTGA VTSGNYPNWVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLG VQPEDEAEYCVLWYSNRWVFGGKTLTVLGGGGDKTHTCPPCAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK

[0764]

			KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG GGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPC EEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPV LDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1267.	CD70_38xCD3 -scFc_delGK	双特异性 HLE 分子	QVQLQESGPGLVKPSQTLSTCTVSGDSIIISGGYYWSWIRQPPGKGLEWIGYI FYSGSTDYNPSLKSRTISVDTSKNQFSLKLSSVTAADTAVYYCARSGYSYALFD AWGQGTLTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTVISC RASQFIGRYFNWYQQKPGKAPKVLIAESSLQSGVPSRFSGSGSGTEFTLTIS LQPEDFATYYCQSYSTPWTFGQGTKEIKSGGGGSEVQLVESGGGLVQPG GSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNNYATYYADSV KDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSIYWAYWGQ GTLTVSSGGGSGGGSGGGSGGGSGTQVTVTQEPSTVSPGGTTLTLCGSSTGA VTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLG VQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGSDKTHTCPPCPAPELLGG PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT KPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT PPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG GGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPCPAPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPC EEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPPV LDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1268.	CD20-HLE	scFc	QVQLVQSGAEVKKPGSSVKVSCASGYAFSYSWINWVRQAPGGLEWMG RIFPGDGDYNGKFKGRVTITADKSTSTAYMELSLRSEDATVYYCARNVFD GYWLVYWGQGLTVSSGGGSGGGSGGGSGGGSDIVMTQTPLSLPTVPGE ASISCRSSKSLHNSGITYLYWYLQKPGQSPQLLIYQMSNLVSGVPRFSGSGS GTDFTLKISRVEAEDVGVYCAQNLELPYTFGGGTKEIKSGGGGSEVQLVES GGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYI SYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSGTQVTVTQEPSTVSPGGTV TLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLG GKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1269.	CD19 9-B7 CC x I2C0-scFc	VH CDR1	NYGMH
1270.	CD19 9-B7 CC x I2C0-scFc	VH CDR2	AIGWEGSNKYAEPVKG
1271.	CD19 9-B7 CC x I2C0-scFc	VH CDR3	DRGTIFGYGMDV
1272.	CD19 9-B7 CC x I2C0-scFc	VL CDR1	RSSQSLHNSRNFNYLD
1273.	CD19 9-B7 CC x I2C0-scFc	VL CDR2	LGSNRAS
1274.	CD19 9-B7 CC x I2C0-scFc	VL CDR3	MQALQTPLT
1275.	CD19 9-B7 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRLRLSCEASGFIVSNYGMHWVRQAPGKCLEWVAA IGWEGSNKYAEPVKGRFTISRDKSKNTLSLQMSSLRADTALYYCARDRTI FGYYGMDVWGQGTITVTVSS
1276.	CD19 9-B7 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEPAISCRSSQSLHNSRNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPLTFACG TKVEIK
1277.	CD19 9-B7 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEPAISCRSSQSLHNSRNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPLTFACG TKVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGRLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAAIGWEGSNKYAEPVKGRFTISRDKSKNTLS

[0765]

			LQMSSLRAEDTALYYCARDRTIFGYGMDVWGQTTVTVSS
1278.	CD19 9-B7 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPASISCRSSQSLHNSRNFNYLDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTLTFAAG TKVEIKGGGGSGGGSGGGGSSQVQLVESGGGVVQPGRLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAAGWEGSNKYAEPVKGRFTISRDKSKNTLS LQMSSLRAEDTALYYCARDRTIFGYGMDVWGQTTVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1279.	CD19 9-B7 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVTGPASISCRSSQSLHNSRNFNYLDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTLTFAAG TKVEIKGGGGSGGGSGGGGSSQVQLVESGGGVVQPGRLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAAGWEGSNKYAEPVKGRFTISRDKSKNTLS LQMSSLRAEDTALYYCARDRTIFGYGMDVWGQTTVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYCKVSNK KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH EALHNHYTQKSLSLSPGK
1280.	CD19 9-B7 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVTGPASISCRSSQSLHNSRNFNYLDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTLTFAAG TKVEIKGGGGSGGGSGGGGSSQVQLVESGGGVVQPGRLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAAGWEGSNKYAEPVKGRFTISRDKSKNTLS LQMSSLRAEDTALYYCARDRTIFGYGMDVWGQTTVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSYRCVSVTLVHLDWLNKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGK
1281.	CD19 8-C2 CC x I2C0-scFc	VH CDR1	SYGIH
1282.	CD19 8-C2 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1283.	CD19 8-C2 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1284.	CD19 8-C2 CC x I2C0-scFc	VL CDR1	RSSQSLHKNAFNLYD

1285.	CD19 8-C2 CC x I2C0-scFc	VL CDR2	LGSNRAS
1286.	CD19 8-C2 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1287.	CD19 8-C2 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTFSYGIHWVRQAPGKCLEWVALT SYEGGKNKYAESVKGRFTISRDNNSKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGM DVWGQGT TTVTVSS
1288.	CD19 8-C2 CC x I2C0-scFc	VL	DIVMTQSPLSLPVTGPGEASISCRSSQSLLHKNAFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIK
1289.	CD19 8-C2 CC x I2C0-scFc	scFv	DIVMTQSPLSLPVTGPGEASISCRSSQSLLHKNAFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGKNKYAESVKGRFTISRDNNSKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TTVTVSS
1290.	CD19 8-C2 CC x I2C0-scFc	双特异性 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLLHKNAFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGKNKYAESVKGRFTISRDNNSKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TTVTVSSGGGSEVQLV ESGGGLVQPGGSLKLSCAASGFTFNKYAMN WVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGSGGGGSGGGGSQT VVTQEP SLTVSPGG TVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1291.	CD19 8-C2 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLLHKNAFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGKNKYAESVKGRFTISRDNNSKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TTVTVSSGGGSEVQLV ESGGGLVQPGGSLKLSCAASGFTFNKYAMN WVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGSGGGGSGGGGSQT VVTQEP SLTVSPGG TVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
1292.	CD19 8-C2 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLLHKNAFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGKNKYAESVKGRFTISRDNNSKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TTVTVSSGGGSEVQLV ESGGGLVQPGGSLKLSCAASGFTFNKYAMN WVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGSGGGGSGGGGSQT VVTQEP SLTVSPGG TVTLT CGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN

[0767]

			HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1293.	CD19 8-C8 CC x I2C0-scFc	VH CDR1	SYGIH
1294.	CD19 8-C8 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1295.	CD19 8-C8 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1296.	CD19 8-C8 CC x I2C0-scFc	VL CDR1	RSSQSLHQNRFNYLD
1297.	CD19 8-C8 CC x I2C0-scFc	VL CDR2	LGSNRAS
1298.	CD19 8-C8 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1299.	CD19 8-C8 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSLRLSCAASGFTSSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGM DVWGQGTITVTVSS
1300.	CD19 8-C8 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEPAISCRSSQSLHQNRFNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGC GTKVEIK
1301.	CD19 8-C8 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEPAISCRSSQSLHQNRFNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGSGVQLVESGGGVVQPGRSLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGTITVTVSS
1302.	CD19 8-C8 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHQNRFNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGSGVQLVESGGGVVQPGRSLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGTITVTVSSGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGTQVTVTQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1303.	CD19 8-C8 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHQNRFNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGSGVQLVESGGGVVQPGRSLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGTQVTVTQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK

[0768]

1304.	CD19 8-C8 CC x I2C0-scFc _{del} GK	双特异性 HLE 分子	DIVMTQSP _{LSL} PVTPGEPASISCRSSQ _{SLH} QNRFN _{YLD} WY _{LQ} KPGQSP _{QLLI} YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSGVQLVESGGGVVQPG _{SLRL} SLCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYA _{ESVK} GRFTISRDN _{SKNT} LYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM _{DVW} GQGT _{TVT} VSSGGGGSEVQ LVESGGGLVQPGGSLK _{LSCA} ASGFTFNKYAMN _{WVR} QAPGKLEWVARIR KYN _{NYAT} YYADSVKDRFTISRDDSKNTAYLQ _{MNN} LKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGT _{VVT} QEP _{SLT} VSP GGTVTLTCSSTGAVTSGNYPN _{WVQ} KPGQAPRGLIGG _T KFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNR _{WV} FGGG _T KLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGS _{TYRC} SVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN _{QV} SLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSG _{SFF} LYSKLTVDKSRWQQGNV _{FSC} VMHEAL ALHNHYTQKSLSLSPGGGGSGGGSGGGGSGGGGSGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGS _{TYRC} SVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKN _{QV} SLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSG _{SFF} LYSKLTVDKSRWQQGNV _{FSC} VMHEAL HNHYTQKSLSLSPGK
1305.	CD19 8-C9 CC x I2C0-scFc	VH CDR1	SYGIH
1306.	CD19 8-C9 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYA _{ESVK} G
1307.	CD19 8-C9 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM _{EV}
1308.	CD19 8-C9 CC x I2C0-scFc	VL CDR1	RSSQ _{SLH} PNKLN _{YLD}
1309.	CD19 8-C9 CC x I2C0-scFc	VL CDR2	LGSNRAS
1310.	CD19 8-C9 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1311.	CD19 8-C9 CC x I2C0-scFc	VH	QVQLVESGGGVVQPG _{SLRL} SLCAASGFTFSSYGIHWVRQAPGKCLEWVALT SYEGGNKYA _{ESVK} GRFTISRDN _{SKNT} LYLQMNSLRAEDTAVYYCAKDRGTIF GDYGM _{EVW} GQGT _{TVT} VSS
1312.	CD19 8-C9 CC x I2C0-scFc	VL	DIVMTQSP _{LSL} PVTPGEPASISCRSSQ _{SLH} PNKLN _{YLD} WY _{MQ} KPGQSP _{QLLI} YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIK
1313.	CD19 8-C9 CC x I2C0-scFc	scFv	DIVMTQSP _{LSL} PVTPGEPASISCRSSQ _{SLH} PNKLN _{YLD} WY _{MQ} KPGQSP _{QLLI} YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSGVQLVESGGGVVQPG _{SLRL} SLCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYA _{ESVK} GRFTISRDN _{SKNT} LYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM _{EVW} GQGT _{TVT} VSS
1314.	CD19 8-C9 CC x I2C0-scFc	双特异性 分子	DIVMTQSP _{LSL} PVTPGEPASISCRSSQ _{SLH} PNKLN _{YLD} WY _{MQ} KPGQSP _{QLLI} YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSGVQLVESGGGVVQPG _{SLRL} SLCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYA _{ESVK} GRFTISRDN _{SKNT} LYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM _{EVW} GQGT _{TVT} VSSGGGGSEVQ LVESGGGLVQPGGSLK _{LSCA} ASGFTFNKYAMN _{WVR} QAPGKLEWVARIR KYN _{NYAT} YYADSVKDRFTISRDDSKNTAYLQ _{MNN} LKTEDTAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGT _{VVT} QEP _{SLT} VSP GGTVTLTCSSTGAVTSGNYPN _{WVQ} KPGQAPRGLIGG _T KFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNR _{WV} FGGG _T KLTVL
1315.	CD19 8-C9 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSP _{LSL} PVTPGEPASISCRSSQ _{SLH} PNKLN _{YLD} WY _{MQ} KPGQSP _{QLLI} YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSGVQLVESGGGVVQPG _{SLRL} SLCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYA _{ESVK} GRFTISRDN _{SKNT} LYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM _{EVW} GQGT _{TVT} VSSGGGGSEVQ LVESGGGLVQPGGSLK _{LSCA} ASGFTFNKYAMN _{WVR} QAPGKLEWVARIRSK

[0769]

			YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPG GTVTLTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGK
1316.	CD19 8-C9 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHPNKLNYLDWYMQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGSGVQLVESGGGVVQPGRLSLRSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGMVWGQGTITVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGQTVVTQEPSLTVSPG GTVTLTCGSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSG SLLGGKAALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
1317.	CD19 8-D1 CC x I2C0-scFc	VH CDR1	SYGIH
1318.	CD19 8-D1 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1319.	CD19 8-D1 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1320.	CD19 8-D1 CC x I2C0-scFc	VL CDR1	RSSQSLHKNRNFNYLD
1321.	CD19 8-D1 CC x I2C0-scFc	VL CDR2	LGSNRAS
1322.	CD19 8-D1 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1323.	CD19 8-D1 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRLSLRSCAASGFTFSSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGM DVWGQGTITVTVSS
1324.	CD19 8-D1 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNRNFNYLDWYVQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIK
1325.	CD19 8-D1 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNRNFNYLDWYVQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGSGVQLVESGGGVVQPGRLSLRSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGTITVTVSS
1326.	CD19 8-D1 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNRNFNYLDWYVQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC

[0770]

			GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTFIFGDYGM DVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRS KYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQT VVTQEP SLTVSP GGTVTLT CGSSTGAVTSGNYPN WVQKPGQAPRGLIGG TKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1327.	CD19 8-D1 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSP LSPVTPGEPASISCRSSQSLHKNRFNYLDWYVQKPGQSPQLLI YLGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTFIFGDYGM DVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRS KYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQT VVTQEP SLTVSP GGTVTLT CGSSTGAVTSGNYPN WVQKPGQAPRGLIGG TKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWLNGKEYCKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVSMHE ALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF N WYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWLNGKEYCKCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVSMH EALHNHYTQKSLSLSPGK
1328.	CD19 8-D1 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSP LSPVTPGEPASISCRSSQSLHKNRFNYLDWYVQKPGQSPQLLI YLGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYL QMNSLRAEDTAVYYCAKDRGTFIFGDYGM DVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRS KYN NYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQT VVTQEP SLTVSP GGTVTLT CGSSTGAVTSGNYPN WVQKPGQAPRGLIGG TKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWLNGKEYCKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVSMHE ALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWLNGKEYCKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVSMHEAL HNHYTQKSLSLSPGK
1329.	CD19 9-A8 CC x I2C0-scFc	VH CDR1	SYGIH
1330.	CD19 9-A8 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1331.	CD19 9-A8 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1332.	CD19 9-A8 CC x I2C0-scFc	VL CDR1	RSSQSLHHRNSWNYLD
1333.	CD19 9-A8 CC x I2C0-scFc	VL CDR2	LGSNRAS
1334.	CD19 9-A8 CC	VL CDR3	MQALQTPFT

	x I2C0-scFc		
1335.	CD19 9-A8 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGIHWVRQAPGKCLEWVVALT SYEGGNKYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGMDEVWGQGTITVTVSS
1336.	CD19 9-A8 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEASISCRSSQSLHNRNSWNYLDWYLQKPGQSPQLLI YLGSNRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIK
1337.	CD19 9-A8 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEASISCRSSQSLHNRNSWNYLDWYLQKPGQSPQLLI YLGSNRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGMDEVWGQGTITVTVSS
1338.	CD19 9-A8 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPGEASISCRSSQSLHNRNSWNYLDWYLQKPGQSPQLLI YLGSNRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGMDEVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1339.	CD19 9-A8 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEASISCRSSQSLHNRNSWNYLDWYLQKPGQSPQLLI YLGSNRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGMDEVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDK THTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK
1340.	CD19 9-A8 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEASISCRSSQSLHNRNSWNYLDWYLQKPGQSPQLLI YLGSNRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYL QMNSLRAEDTAVYYCAKDRGTIFGDYGMDEVWGQGTITVTVSSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRS KYNNTATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNF GNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSP GGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW

[0771]

			YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKKCVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSLSPGK
1341.	CD19 9-C1 CC x I2C0-scFc	VH CDR1	SYGIH
1342.	CD19 9-C1 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1343.	CD19 9-C1 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1344.	CD19 9-C1 CC x I2C0-scFc	VL CDR1	RSSQSLHHPNHFNYLD
1345.	CD19 9-C1 CC x I2C0-scFc	VL CDR2	LGSNRAS
1346.	CD19 9-C1 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1347.	CD19 9-C1 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSRLRSCAASGFTFSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKDRGTF GDYGM DVWGQGT TTVTVSS
1348.	CD19 9-C1 CC x I2C0-scFc	VL	DIVMTQSPLSLPVTGPGEASISCRSSQSLHHPNHFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPFTFGCG TKVEIK
1349.	CD19 9-C1 CC x I2C0-scFc	scFv	DIVMTQSPLSLPVTGPGEASISCRSSQSLHHPNHFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTFS SYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTFGDYGM DVWGQGT TTVTVSS
1350.	CD19 9-C1 CC x I2C0-scFc	双特异性 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLHHPNHFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTFS SYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTFGDYGM DVWGQGT TTVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEP SLTVSPGG TVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGAALTL SGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1351.	CD19 9-C1 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLHHPNHFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRSRLRSCAASGFTFS SYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTFGDYGM DVWGQGT TTVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEP SLTVSPGG TVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGAALTL SGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKKCVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGGSKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKKCVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
1352.	CD19 9-C1 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPLSLPVTGPGEASISCRSSQSLHHPNHFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPFTFGCG

[0773]

			TKVEIKGGGSGGGSGGGSGGGSSQVQLVESGGGVVQPGRSRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQTVVTQEP SLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGG TKFLAPGT PARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVF GGGTKLTVLGGGDKTHTC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHTCPPC PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHY TQKSLSLSPGK
1353.	CD19 0-B6 CC x I2C0-scFc	VH CDR1	SYGIH
1354.	CD19 0-B6 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1355.	CD19 0-B6 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGM DV
1356.	CD19 0-B6 CC x I2C0-scFc	VL CDR1	RSSQSLHKN SFNYLD
1357.	CD19 0-B6 CC x I2C0-scFc	VL CDR2	LGSNRAS
1358.	CD19 0-B6 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1359.	CD19 0-B6 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSRLSCAASGFTFSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGM DVWGQGT TVTVSS
1360.	CD19 0-B6 CC x I2C0-scFc	VL	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKN SFNYLDWYLQKPGQSPQLLIY LGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIK
1361.	CD19 0-B6 CC x I2C0-scFc	scFv	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKN SFNYLDWYLQKPGQSPQLLIY LGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSSQVQLVESGGGVVQPGRSRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TVTVSS
1362.	CD19 0-B6 CC x I2C0-scFc	双特异性 分子	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKN SFNYLDWYLQKPGQSPQLLIY LGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSSQVQLVESGGGVVQPGRSRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQTVVTQEP SLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGG TKFLAPGT PARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVF GGGTKLTVL
1363.	CD19 0-B6 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKN SFNYLDWYLQKPGQSPQLLIY LGSNRASGV PDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSSQVQLVESGGGVVQPGRSRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDN SKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGM DVWGQGT TVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMN WVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGT LTVTVSSGGGGSGGGSGGGSSQTVVTQEP SLTVSPGG

[0774]

			TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGK
1364.	CD19 0-B6 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRASGVDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHC SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWGQGTITVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHC TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTEVTCVVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHY TQKSLSLSPGK
1365.	CD19 0-C12 CC x I2C0-scFc	VH CDR1	SYGIH
1366.	CD19 0-C12 CC x I2C0-scFc	VH CDR2	LTSYEGGNKYAESVKG
1367.	CD19 0-C12 CC x I2C0-scFc	VH CDR3	DRGTIFGDYGMV
1368.	CD19 0-C12 CC x I2C0-scFc	VL CDR1	RSSQSLHKNHFNLYD
1369.	CD19 0-C12 CC x I2C0-scFc	VL CDR2	LGSNRAS
1370.	CD19 0-C12 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1371.	CD19 0-C12 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRLSLRSCAASGFTFSYGIHWVRQAPGKCLEWVALT SYEGGNKYAESVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAKDRGTIF GDYGMVWGQGTITVTVSS
1372.	CD19 0-C12 CC x I2C0-scFc	VL	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRASGVDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVEIK
1373.	CD19 0-C12 CC x I2C0-scFc	scFv	DIVMTQSPLSLPVTPGEPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRASGVDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVEIKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKHTHC SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWGQGTITVTVSS

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			SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWVGQGTTVTVSS
1374.	CD19 0-C12 CC x I2C0-scFc	双特异性 分子	DIVMTQSPLSLPVTGPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWVGQGTTVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1375.	CD19 0-C12 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPLSLPVTGPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWVGQGTTVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGKGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGK
1376.	CD19 0-C12 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPLSLPVTGPASISCRSSQSLHKNHFNLYDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGIHWVRQAPGKCLEWVALTSYEGGNKYAESVKGRFTISRDNKNTLYLQ MNSLRAEDTAVYYCAKDRGTIFGDYGMVWVGQGTTVTVSSGGGGSEVQLV ESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGN SYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGQTVVTQEPSLTVSPGG TVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSL LGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSLSPGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTHTCPPC PAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG VEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHY TQKSLSLSPGK
1377.	CD19 4-C1RE-B10 CC x I2C0-scFc	VH CDR1	NYGMH
1378.	CD19 4-C1RE-B10 CC x	VH CDR2	VMSWEGSNKYAEPVKG

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	I2C0-scFc		
1379.	CD19 4-C1RE-B10 CC x I2C0-scFc	VH CDR3	DRGTIFGYGMDV
1380.	CD19 4-C1RE-B10 CC x I2C0-scFc	VL CDR1	RSSQSLLHKNNFNLYD
1381.	CD19 4-C1RE-B10 CC x I2C0-scFc	VL CDR2	LGSNRAS
1382.	CD19 4-C1RE-B10 CC x I2C0-scFc	VL CDR3	MQALQTPLT
1383.	CD19 4-C1RE-B10 CC x I2C0-scFc	VH	QVQLVESGGGVVQPRSLRLSCEASGFIVSNYGMHWVRQAPGKCLEWVAV MSWEGSNKYAEPVKGRFTISRDKSKNTLSLQMSSLRAEDTALYYCARDRTI FGYYGMDVWGQGTITVTVSS
1384.	CD19 4-C1RE-B10 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEASISCRSSQSLLHKNNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPLTFACG TKVEIK
1385.	CD19 4-C1RE-B10 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEASISCRSSQSLLHKNNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPLTFACG TKVEIKGGGSGGGSGGGSGVQLVESGGGVVQPRSLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAVMSWEGSNKYAEPVKGRFTISRDKSKNTL SLQMSSLRAEDTALYYCARDRTIFGYGMDVWGQGTITVTVSS
1386.	CD19 4-C1RE-B10 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPGEASISCRSSQSLLHKNNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPLTFACG TKVEIKGGGSGGGSGGGSGVQLVESGGGVVQPRSLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAVMSWEGSNKYAEPVKGRFTISRDKSKNTL SLQMSSLRAEDTALYYCARDRTIFGYGMDVWGQGTITVTVSSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGTQVTVQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1387.	CD19 4-C1RE-B10 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEASISCRSSQSLLHKNNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCMQALQTPLTFACG TKVEIKGGGSGGGSGGGSGVQLVESGGGVVQPRSLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAVMSWEGSNKYAEPVKGRFTISRDKSKNTL SLQMSSLRAEDTALYYCARDRTIFGYGMDVWGQGTITVTVSSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGTQVTVQEPSTVSP GGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE ALHNHYTQKSLSLSPGKGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGSDK THTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF NWWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHLDWLNQKEYCKVSN KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMH EALHNHYTQKSLSLSPGK

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1388.	CD19 4-C1RE-B10 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPLSLPVTGPGEPAISCRSSQSLHKNFNLYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQPLTFACG TKVEIKGGGGSGGGSGGGGSGVQLVESGGGVVQPGRLRLSCEASGFIVS NYGMHWVRQAPGKCLEWVAVMSWEGSNKYAEPVKGRFTISRDKSKNTL SLQMSSLRAEDTALYYCARDRTIFGYGMDVWVGQGTITVTVSSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIR SKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSP GGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFS GSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN WYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHE ALHNHYTKQSLSLSPGGGGSGGGSGGGGSGGGGSGGGGSGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEAL HNHYTKQSLSLSPGK
1389.	CD19 97-G1RE CC x I2C0-scFc	VH CDR1	SYGMH
1390.	CD19 97-G1RE CC x I2C0-scFc	VH CDR2	VISYEGSNKYAESVKG
1391.	CD19 97-G1RE CC x I2C0-scFc	VH CDR3	DRGTIFGNYGLEV
1392.	CD19 97-G1RE CC x I2C0-scFc	VL CDR1	RSSQSLHGNRFNYLD
1393.	CD19 97-G1RE CC x I2C0-scFc	VL CDR2	LGSNRAS
1394.	CD19 97-G1RE CC x I2C0-scFc	VL CDR3	MQALQTPFT
1395.	CD19 97-G1RE CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV ISYEGSNKYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVYYCARDRTIF GNYGLEWVGQGTITVTVSS
1396.	CD19 97-G1RE CC x I2C0-scFc	VL	DIVMTQSPLSLPVISGEPASISCRSSQSLHGNRFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSGVQLVESGGGVVQPGRLRLSCEASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTITVTVSS
1397.	CD19 97-G1RE CC x I2C0-scFc	scFv	DIVMTQSPLSLPVISGEPASISCRSSQSLHGNRFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSGVQLVESGGGVVQPGRLRLSCEASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTITVTVSS
1398.	CD19 97-G1RE CC x I2C0-scFc	双特异性 分子	DIVMTQSPLSLPVISGEPASISCRSSQSLHGNRFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSGVQLVESGGGVVQPGRLRLSCEASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTITVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNF GNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTLVSPG GTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL

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1399.	CD19 97-G1RE CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHGNRFNYLDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNVGLVWVGQGTITVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQEPSTLVSPG GTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSG SLLGGKAALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSPGK
1400.	CD19 97-G1RE CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHGNRFNYLDWYLQKPGQSPQLLIY LGSNRRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNVGLVWVGQGTITVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTH GTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLAPGTPARFSG SLLGGKAALTSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHC PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHN HYTQKSLSPGK
1401.	CD19 97-G1RE-C2 CC x I2C0-scFc	VH CDR1	SYGMH
1402.	CD19 97-G1RE-C2 CC x I2C0-scFc	VH CDR2	VISYEGSNKYAESVKG
1403.	CD19 97-G1RE-C2 CC x I2C0-scFc	VH CDR3	DRGTIFGNVGLV
1404.	CD19 97-G1RE-C2 CC x I2C0-scFc	VL CDR1	RSSQSLHKNFNYLD
1405.	CD19 97-G1RE-C2 CC x I2C0-scFc	VL CDR2	LGSNRRAS

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1406.	CD19 97-G1RE-C2 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1407.	CD19 97-G1RE-C2 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRLRLSCAASGFTFSYGMHWVRQAPGKCLEWVAV ISYEGSNKYAESVKGRFTISRDNKNTLYLQMNSLRDEDAVYYCARDRTIF GNYGLEWVGQGTTVTVSS
1408.	CD19 97-G1RE-C2 CC x I2C0-scFc	VL	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYCMQALQTPFTFGCG TKVDIK
1409.	CD19 97-G1RE-C2 CC x I2C0-scFc	scFv	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYCMQALQTPFTFGCG TKVDIKGGGSGGGGSGGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDAVYYCARDRTIFGNYGLEWVGQGTTVTVSS
1410.	CD19 97-G1RE-C2 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYCMQALQTPFTFGCG TKVDIKGGGSGGGGSGGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDAVYYCARDRTIFGNYGLEWVGQGTTVTVSSGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGSGGGGSGGGGSGTQVTVQEPSTLTVSPG GTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1411.	CD19 97-G1RE-C2 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYCMQALQTPFTFGCG TKVDIKGGGSGGGGSGGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDAVYYCARDRTIFGNYGLEWVGQGTTVTVSSGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGSGGGGSGGGGSGTQVTVQEPSTLTVSPG GTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKAL PAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVMHEAL HNHYTQKSLSPGKGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKAL PAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCVMHEAL HNHYTQKSLSPGK
1412.	CD19 97-G1RE-C2 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNYLDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYCMQALQTPFTFGCG TKVDIKGGGSGGGGSGGGGSGVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDAVYYCARDRTIFGNYGLEWVGQGTTVTVSSGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGSGGGGSGGGGSGTQVTVQEPSTLTVSPG GTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKCKVSNKAL

[0780]

			PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNGVFSCSVMEAL HNHYTQKSLSLSPGGGGSGGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKTHC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWLNGKEYCKVKSNKALPA PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNGVFSCSVMEALHN HYTQKSLSLSPGK
1413.	CD19 97-G1RE-B5 CC x I2C0-scFc	VH CDR1	SYGMH
1414.	CD19 97-G1RE-B5 CC x I2C0-scFc	VH CDR2	VISYEGSNKYAESVKG
1415.	CD19 97-G1RE-B5 CC x I2C0-scFc	VH CDR3	DRGTIFGNYGLEV
1416.	CD19 97-G1RE-B5 CC x I2C0-scFc	VL CDR1	RSSQSLHKNKNWNYLD
1417.	CD19 97-G1RE-B5 CC x I2C0-scFc	VL CDR2	LGSNRAS
1418.	CD19 97-G1RE-B5 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1419.	CD19 97-G1RE-B5 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGRSRLRLSCAASGFTSSYGMHWVRQAPGKCLEWVAV ISYEGSNKYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVYYCARDRTIF GNYGLEWVGQGTTVTVSS
1420.	CD19 97-G1RE-B5 CC x I2C0-scFc	VL	DIVMTQSPSLPVISGEPASISCRSSQSLHKNKNWNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVDIK
1421.	CD19 97-G1RE-B5 CC x I2C0-scFc	scFv	DIVMTQSPSLPVISGEPASISCRSSQSLHKNKNWNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVDIKGGGGSGGGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTTVTVSS
1422.	CD19 97-G1RE-B5 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNKNWNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVDIKGGGGSGGGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTTVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNVRQAPGKGLEWVARIRSK YNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGGGSGGGGSQTVTVQEPSTVSPG GTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1423.	CD19 97-G1RE-B5 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNKNWNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALQTPFTFGC GTKVDIKGGGGSGGGGGSGGGGSQVQLVESGGGVVQPGRSRLRLSCAASGFTF SSYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTIFGNYGLEWVGQGTTVTVSSGGGGSEVQL

[0781]

			VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPG GTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKLSLSLSPGK
1424.	CD19 97-G1RE-B5 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLSPVISGEPASISCRSSQSLHKNKNWNYLDWYLQKPGQSPQLLI YLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGYCYMQALQTPFTFGC GTKVDIKGGGGSGGGGSGGGGSGVQLVESGGGVVQPGSRSLRSCAASGFTF SSYGMHWVRQAPGKCLEWVAIVSYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRTGTFGNVGLVWGQGTITVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFG NSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQEPSTVSPG GTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL HNHYTQKLSLSLSPGK
1425.	CD19 97-G1RE-B10 CC x I2C0-scFc	VH CDR1	SYGMH
1426.	CD19 97-G1RE-B10 CC x I2C0-scFc	VH CDR2	VISYEGSNKYAESVKG
1427.	CD19 97-G1RE-B10 CC x I2C0-scFc	VH CDR3	DRGTIFGNVGLV
1428.	CD19 97-G1RE-B10 CC x I2C0-scFc	VL CDR1	RSSQSLHKNFNLYD
1429.	CD19 97-G1RE-B10 CC x I2C0-scFc	VL CDR2	LGSNRAS
1430.	CD19 97-G1RE-B10 CC x I2C0-scFc	VL CDR3	MQALQTPFT
1431.	CD19	VH	QVQLVESGGGVVQPGSRSLRSCAASGFTFSSYGMHWVRQAPGKCLEWVA

[0782]

	97-G1RE-B10 CC x I2C0-scFc		ISYEGSNKYAESVKGRFTISRDNKNTLYLQMNSLRDEDTAVYYCARDRGTF GNYGLEWVGQGTTVTVSS
1432.	CD19 97-G1RE-B10 CC x I2C0-scFc	VL	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNFDWYLDWYQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVDIK
1433.	CD19 97-G1RE-B10 CC x I2C0-scFc	scFv	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNFDWYLDWYQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRGTFGNYGLEWVGQGTTVTVSS
1434.	CD19 97-G1RE-B10 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNFDWYLDWYQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRGTFGNYGLEWVGQGTTVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1435.	CD19 97-G1RE-B10 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNFDWYLDWYQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRGTFGNYGLEWVGQGTTVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSLSPGK
1436.	CD19 97-G1RE-B10 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVISGEPASISCRSSQSLHKNFNFDWYLDWYQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQALQTPFTFGCG TKVDIKGGGGSGGGSGGGGSQVQLVESGGGVVQPGRLRLSCAASGFTFS SYGMHWVRQAPGKCLEWVAVISYEGSNKYAESVKGRFTISRDNKNTLYL QMNSLRDEDTAVYYCARDRGTFGNYGLEWVGQGTTVTVSSGGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFG NSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTVVTQEPSTVSPG GTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIETISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSDKTHC PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV DGVVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPA

[0783]

			PIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHN HYTQKSLSPGK
1437.	CD19 1-C3-B10 CC x I2C0-scFc	VH CDR1	NYGMH
1438.	CD19 1-C3-B10 CC x I2C0-scFc	VH CDR2	AIGWEGSNKYAEPVKG
1439.	CD19 1-C3-B10 CC x I2C0-scFc	VH CDR3	DRGTIFGYGMDV
1440.	CD19 1-C3-B10 CC x I2C0-scFc	VL CDR1	RSSQSLHKNFNLYD
1441.	CD19 1-C3-B10 CC x I2C0-scFc	VL CDR2	LGSNRAS
1442.	CD19 1-C3-B10 CC x I2C0-scFc	VL CDR3	MQALSEPLT
1443.	CD19 1-C3-B10 CC x I2C0-scFc	VH	QVQLVESGGGVVQPGSRSLRSCASGFIVSNYGMHWVRQAPGKCLEWVAA IGWEGSNKYAEPVKGRFTISRDKSKNTLSLQMSSLAEDTALYYCARDRTI FGYYGMDVWGQGTITVSS
1444.	CD19 1-C3-B10 CC x I2C0-scFc	VL	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALSEPLTFACGT KVEIK
1445.	CD19 1-C3-B10 CC x I2C0-scFc	scFv	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALSEPLTFACGT KVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGSRSLRSCASGFIVSN YGMHWVRQAPGKCLEWVAAIGWEGSNKYAEPVKGRFTISRDKSKNTLSL QMSSLAEDTALYYCARDRTIFGYGMDVWGQGTITVSS
1446.	CD19 1-C3-B10 CC x I2C0-scFc	双特异性 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALSEPLTFACGT KVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGSRSLRSCASGFIVSN YGMHWVRQAPGKCLEWVAAIGWEGSNKYAEPVKGRFTISRDKSKNTLSL QMSSLAEDTALYYCARDRTIFGYGMDVWGQGTITVSSGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNHWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFG NSYISYWAYWGQGTITVSSGGGSGGGSGGGSGGGSGVTVTQEPSTVSPG GTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1447.	CD19 1-C3-B10 CC x I2C0-scFc	双特异性 HLE 分子	DIVMTQSPSLPVTGPGEPAISCRSSQSLHKNFNLYDWYLQKPGQSPQLLIY LGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCMQALSEPLTFACGT KVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGSRSLRSCASGFIVSN YGMHWVRQAPGKCLEWVAAIGWEGSNKYAEPVKGRFTISRDKSKNTLSL QMSSLAEDTALYYCARDRTIFGYGMDVWGQGTITVSSGGGSEVQL VESGGGLVQPGGSLKLSAASGFTFNKYAMNHWVRQAPGKLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFG NSYISYWAYWGQGTITVSSGGGSGGGSGGGSGGGSGVTVTQEPSTVSPG GTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTFKFLAPGTPARFSG SLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEAL HNHYTQKSLSPGKGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGGGSGDKTH TCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW YVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKVSNKAL

			PAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1448.	CD19 1-C3-B10 CC x I2C0-scFc_del GK	双特异性 HLE 分子	DIVMTQSPSLPVPTEGEPASISCRSSQSLHKNFNLYLDWYLQKPGQSPQLLIYLGSNRASGVPDRFSGSGSGTDFTLKISRVEAEDGVVYCMQALSEPLTFACGTKVEIKGGGSGGGSGGGSGGGSGVQLVESGGGVVQPGRLSLRSCASGFIVSNYGMHWVRQAPGKCLEWVAIWGGVWEGSNKYAEPVKGRFTISRDKSKNTLSLQMSRLRAEDTALYYCARDRTIFGYGMDVWGQGTITVTVSSGGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGTQVTVTQEPSLTVSPGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHLDWLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKPPCGAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHLDWLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1449.	IgG1 铰链		DKTHTCPPCP
1450.	IgG2 铰链		ERKCCVECP
1451.	IgG3 铰链		ELKTPDLTHTCPRCP
1452.	IgG4 铰链		ESKYGPCCSCP
1453.	EGFRvIIccxI2 C-铰链 -CH2-CH3-接头-铰链 -CH2-CH3 (DF9)	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRSLCAASGFTFRNYGMHWVRQAPGKCLEWVAWIWYDGSDDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGYDILTGNPRDFDYWGQGTITVTVSSGGGGSGGGSGGGGSDVTMTQTPLSSHVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYRISRRFSGVPDRFSGSGAGTDFTLKISRVEAEDGVVYCMQSTHVPRTFGCGTKVEIKSGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGTQVTVTQEPSLTVSPGGTITVTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHLDWLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKPPCGAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHLDWLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1454.	EGFRvIIIccxI2 C-铰链 -CH2-CH3-接头-CH2-CH3 (T2G)	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRSLCAASGFTFRNYGMHWVRQAPGKCLEWVAWIWYDGSDDKYADSVRGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGYDILTGNPRDFDYWGQGTITVTVSSGGGGSGGGSGGGGSDVTMTQTPLSSHVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYRISRRFSGVPDRFSGSGAGTDFTLKISRVEAEDGVVYCMQSTHVPRTFGCGTKVEIKSGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFNSYISYWAYWGQGTITVTVSSGGGGSGGGSGGGSGTQVTVTQEPSLTVSPGGTITVTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVHLDWLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK

[0785]

			KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSLKTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1455.	EGFRvIIIccxI2 C-铰链-CH2- 接头-铰链 -CH2-CH3-接 头-CH3 (D3L)	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSCKYYADSVRGFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYRISRRFSGVPD RFGSGAGTDFLTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPST VSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSLKTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGQPREPQVYTLPPSREEMTKNQVSLTCL VKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSLKTVDKSRWQQ GNVFCFSVMHEALHNHYTQKSLSLSPGK
1456.	EGFRvIIIccxI2 C-铰链-CH2- 接头 -CH2-CH3-接 头-CH3 (T7I)	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSCKYYADSVRGFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYRISRRFSGVPD RFGSGAGTDFLTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPST VSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG DKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEV KFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT TPPVLDSDGSFFLYSLKTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSP GKGGGGSGGGSGGGSGGGSGGGSGGQPREPQVYTLPPSREEMTKNQVSLTCL VKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSLKTVDKSRWQQ GNVFCFSVMHEALHNHYTQKSLSLSPGK
1457.	EGFRvIIIccxI2 C-CH2-接头 -CH2-CH3-接 头-CH3 (K6C)	双特异性 HLE 分子	QVQLVESGGGVVQSGRSLRLSCAASGFTFRNYGMHWVRQAPGKCLEWVA VIWYDGSCKYYADSVRGFTISRDNKNTLYLQMNSLRAEDTAVYYCARDGY DILTGNPRDFDYWGQGLTVTVSSGGGGSGGGSGGGGSDTVMQTPLSSH VTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYRISRRFSGVPD RFGSGAGTDFLTLEISRVEAEDVGYYCMQSTHVPRTFGCGTKVEIKSGGGG SEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPST VSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAPGTPA RFGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGG

[0786]

			APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGV EVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGSGGGGSGGGGSGGGGSAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTIKAKGQPREPQVYTLPPSREEMT KNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTV DKSRLWQGNVFCSCVMHEALHNNHYTQKSLSLSPGKGGGGSGGGGSGGGG SGGGSGGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHY TQKSLSLSPGK
1458.	IgG3 铰链		ELKTPLGDTTHTCPRCP
1459.	IgG1 铰链		EPKSCDKTHTCPPCP
1460	人 BCMA	MLQMAGQCSQNEYFDSLLHACIPQLRCSSTPPLTCQRYCNASVTNSVKGTNAILWTCGL SLIISLAVFVLMFLLRKINSEPLKDEFKNTGSGLLGMANIDLEKRTGDEIILPRGLEYYVEECTCE DCIKSKPKVDSHCFPLPAMEEGATILVTTKTNDYCKSLPAALSATEIEKSISAR	
1461	人 BCMA ECD	MLQMAGQCSQNEYFDSLLHACIPQLRCSSTPPLTCQRYCNASVTNSVKGTNA	
1462	猕猴 BCMA	MLQMARQCSQNEYFDSLLHDCCKPCQLRCSSTPPLTCQRYCNASMTNSVKGMNAILWTCGL LSLIISLAVFVLTFLLRKMSSEPLKDEFKNTGSGLLGMANIDLEKRTGDEIIVLPRGLEYYVEECT CEDCIKNKPKVDSHCFPLPAMEEGATILVTTKTNDYCNSLSAALSATEIEKSISAR	
1463	猕猴 BCMA ECD	MLQMARQCSQNEYFDSLLHDCCKPCQLRCSSTPPLTCQRYCNASMTNSVKGMNA	
1464	VH CDR1 BCMA-08	NHIIH	
1465	VH CDR2 BCMA-08	YINPYPGYHAYNEKFQG	
1466	VH CDR3 BCMA-08	DGYRDTDVLDY	
1467	VL CDR1 BCMA-08	QASQDISNYLN	
1468	VL CDR2 BCMA-08	YTSRLHT	
1469	VL CDR3 BCMA-08	QQGNTLPWT	
1470	VH BCMA-08	QVQLVQSGAEVKKPGASVKVSCKASGYFTNHHHWVRQAPGQGLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTVYMEISSLRSEDVAVYCARDGYRDTDVLDYWGQGLTVTVSS	
1471	VL BCMA-08	DIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPKAPKLLIYYTSRLHTGVPSRFS GSGSGTDFTFITISLEPEDIATYYCQQGNTLPWTFGQGTKLEIK	
1472	scFv BCMA-08	QVQLVQSGAEVKKPGASVKVSCKASGYFTNHHHWVRQAPGQGLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTVYMEISSLRSEDVAVYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPKAPK LLIYYTSRLHTGVPSRFSGSGTDFTFITISLEPEDIATYYCQQGNTLPWTFGQGTKLEIK	
1473	双特异性分 子 BCMA-08 xI2C	QVQLVQSGAEVKKPGASVKVSCKASGYFTNHHHWVRQAPGQGLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTVYMEISSLRSEDVAVYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPKAPK LLIYYTSRLHTGVPSRFSGSGTDFTFITISLEPEDIATYYCQQGNTLPWTFGQGTKLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYVCVRHGNFGNSYISYWAYWGQG TLTVSSGGGSGGGGSGGGGSGTQVTVTEPSLTSPGGTVTLTCSSTGAVTSGNYPNWV QKPKGQAPRGLIGTKFLAPGTPARFSGSLGGKAALTLGVPQPEDEAYYCVLWYSNRWV FGGGKLTVL	
1474	双特异性 scFc 分子 BCMA-08 xI2C-scFc	QVQLVQSGAEVKKPGASVKVSCKASGYFTNHHHWVRQAPGQGLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTVYMEISSLRSEDVAVYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPKAPK LLIYYTSRLHTGVPSRFSGSGTDFTFITISLEPEDIATYYCQQGNTLPWTFGQGTKLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYVCVRHGNFGNSYISYWAYWGQG TLTVSSGGGSGGGGSGGGGSGTQVTVTEPSLTSPGGTVTLTCSSTGAVTSGNYPNWV	

[0787]

		<p>QQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWV FGGGTKLTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHE DPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYK TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGG GGGGSGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT EVTCTVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGK EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLS LSPGK</p>
1475	双特异性 scFc 分子 BCMA-08 xI2C-scFc _delGK	<p>QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNHIIHWVRQAPGQCLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTSTVYMELSSLRSEDAVYYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGKAPK LLIYYTSRLHTGVPSRFSGSGSGTDFTFTISSLEPEDIATYYCQQGNTLPWTFGCGTKLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNGFNSYISYWAYWGQG TLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTTLTCSGSTGAVTSGNYPNWV QQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWV FGGGTKLTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHE DPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYK TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGG GGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEV TCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEY KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLS PGK</p>
1476	VH (CC) BCMA-08_ CC	<p>QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNHIIHWVRQAPGQCLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTSTVYMELSSLRSEDAVYYCARDGYRDTDVLDYWGQGLTVTVSS</p>
1477	VL (CC) BCMA-08_ CC	<p>DIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGKAPKLLIYYTSRLHTGVPSRF SGSGTDFTFTISSLEPEDIATYYCQQGNTLPWTFGCGTKLEIK</p>
1478	scFv (CC) BCMA-08_ CC	<p>QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNHIIHWVRQAPGQCLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTSTVYMELSSLRSEDAVYYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGKAPK LLIYYTSRLHTGVPSRFSGSGSGTDFTFTISSLEPEDIATYYCQQGNTLPWTFGCGTKLEIK</p>
1479	双特异性分 子(CC) BCMA-08_ CCxI2C	<p>QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNHIIHWVRQAPGQCLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTSTVYMELSSLRSEDAVYYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGKAPK LLIYYTSRLHTGVPSRFSGSGSGTDFTFTISSLEPEDIATYYCQQGNTLPWTFGCGTKLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNGFNSYISYWAYWGQG TLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTTLTCSGSTGAVTSGNYPNWV QQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWV FGGGTKLTVL</p>
1480	双特异性 scFc 分子 (CC) BCMA-08_ CC xI2C - scFc	<p>QVQLVQSGAEVKKPGASVKVSCKASGYFTFTNHIIHWVRQAPGQCLEWMGYINPYPGYHAY NEKFQGRATMTSDTSTSTVYMELSSLRSEDAVYYCARDGYRDTDVLDYWGQGLTVTVSS GGGGSGGGSGGGSGGGSDIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGKAPK LLIYYTSRLHTGVPSRFSGSGSGTDFTFTISSLEPEDIATYYCQQGNTLPWTFGCGTKLEIKSGG GGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNHWVRQAPGKLEWVARIRSKYNN YATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNGFNSYISYWAYWGQG TLTVSSGGGGSGGGSGGGSGGGSGTQVVTQEPSTVSPGGTTLTCSGSTGAVTSGNYPNWV QQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWV FGGGTKLTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHE DPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYK TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGG GGGGSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT</p>

[0788]

		EVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1481	双特异性 scFc 分子 (CC) BCMA-08 CC xI2C - scFc_delGK	QVQLVQSGAEVKKPGASVKVSCKASGYTFTHIIHWVRQAPGQCLEWMGYINPYPGYHAYNEKFQGRATMTSDTSTSTVYMESSLRSEDVAVYCARDGYRDTDLVDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGDRTITCQASQDISNYLNWYQQKPKGAPKLLIYYTSRLHTGVPSRFSGSGSGTDFTFTISSLEPEDIATYYCQGGNTLPWTFGCGTKLEIKSGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1482	VH CDR1 BCMA-06	NFDMA
1483	VH CDR2 BCMA-06	SITGGGGDTYYADSVKG
1485	VH CDR3 BCMA-06	HGYDGYHLFDY
1486	VL CDR1 BCMA-06	RANQGISNNLN
1487	VL CDR2 BCMA-06	YTSNLQS
1488	VL CDR3 BCMA-06	QQFTSLPYT
1489	VH BCMA-06	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITGGGGDTYYADSVKGRFTISRDNASTLYLQMDSLRSIEDAVYYCVRHGYDGYHLFDYWGQGLTVTVSSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPKGAPKPLIYYTSNLQSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGQGTLEIK
1490	VL BCMA-06	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITGGGGDTYYADSVKGRFTISRDNASTLYLQMDSLRSIEDAVYYCVRHGYDGYHLFDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPKGAPKPLIYYTSNLQSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGQGTLEIK
1491	scFv BCMA-06	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITGGGGDTYYADSVKGRFTISRDNASTLYLQMDSLRSIEDAVYYCVRHGYDGYHLFDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPKGAPKPLIYYTSNLQSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGQGTLEIK
1492	双特异性分 子 BCMA-06 xI2C	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITGGGGDTYYADSVKGRFTISRDNASTLYLQMDSLRSIEDAVYYCVRHGYDGYHLFDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPKGAPKPLIYYTSNLQSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGQGTLEIKSGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1493	双特异性 scFc 分子 BCMA-06 xI2C -scFc	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITGGGGDTYYADSVKGRFTISRDNASTLYLQMDSLRSIEDAVYYCVRHGYDGYHLFDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPKGAPKPLIYYTSNLQSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGQGTLEIKSGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP

		EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGGGGGG GSGGGGGGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEV TCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEY KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL PGK
1494	双特异性 scFc 分子 BCMA-06 xI2C – scFc_delGK	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKGLVWVSSITTGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDYAVYYCVRHGYDGYHLFDYWGQGLTVTVSSG GGGSGGGGGGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPGKAPK LIYYTSLNLSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGGTGLEIKSGGG GSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDYAVYYCVRHGNFGNSYISYWAYWGQGT LTVSSGGGGGGGGGGGGGGGGGSGTQVTVTEPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQ QKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGAALTLSGVQPEDEAEYYCVLWYSNRWVFG GGTKLTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGGGGGG GGGSGGGGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1495	VH (CC) BCMA-06 – CC	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKCLVWVSSITTGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDYAVYYCVRHGYDGYHLFDYWGQGLTVTVSS
1496	VL (CC) BCMA-06 – CC	DIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPGKAPKLIYYTSLNLSGVPSRF SGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGGTGLEIK
1497	scFv (CC) BCMA-06 – CC	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKCLVWVSSITTGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDYAVYYCVRHGYDGYHLFDYWGQGLTVTVSSG GGGSGGGGGGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPGKAPK LIYYTSLNLSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGGTGLEIK
1498	双特异性分 子(CC) BCMA-06 – CCxI2C	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKCLVWVSSITTGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDYAVYYCVRHGYDGYHLFDYWGQGLTVTVSSG GGGSGGGGGGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPGKAPK LIYYTSLNLSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGGTGLEIKSGGG GSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDYAVYYCVRHGNFGNSYISYWAYWGQGT LTVSSGGGGGGGGGGGGGGGGGSGTQVTVTEPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQ QKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGAALTLSGVQPEDEAEYYCVLWYSNRWVFG GGTKLTVL
1499	双特异性 scFc 分子 (CC) BCMA-06 – CC xI2C – scFc	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKCLVWVSSITTGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDYAVYYCVRHGYDGYHLFDYWGQGLTVTVSSG GGGSGGGGGGGGGSDIQMTQSPSSLSASVGDRTITCRANQGISNNLNWYQQKPGKAPK LIYYTSLNLSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQFTSLPYTFGGGTGLEIKSGGG GSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDYAVYYCVRHGNFGNSYISYWAYWGQGT LTVSSGGGGGGGGGGGGGGGGGSGTQVTVTEPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQ QKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGAALTLSGVQPEDEAEYYCVLWYSNRWVFG GGTKLTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGGGGGG GSGGGGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEV TCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEY KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWES NGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL

[0790]

		PGK
1500	双特异性 scFc 分子 (CC) BCMA-06_ CC xI2C - scFc_deIGK	EVQLVESGGGLVQPGGSLRLSCAASGFTFSNFDMAWVRQAPGKCLVWVSSITGGGDTYY ADSVKGRFTISRDNASTLYLQMDSLRSEDVAVYCVRHGYDGYHLFDYWGQGLTVTVSSG GGGSGGGSGGGGSDIQTSPSSLSASVGDRTITCRANQGISNNLWYQQKPKGKAPK LIYYTSLQSGVPSRFSGSGGTDTLTISLQPEDFATYYCQQTSLPYTFGCGTKLEIKSGGG GSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKYNNY ATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFNGNSYISYWAYWGQGT LTVTVSSGGGSGGGGSGGGGSGQTVVTQEPSTVSPGGTTLTCSSTGAVTSGNYPNVVQ QKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFG GGTKLTVLGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSG GGGSGGGSGGGGSGGGGSDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCK VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG QPENNYKTPPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1501	VH CDR1 BCMA-14	DYYIN
1502	VH CDR2 BCMA-14	WIYFASGNSEYNQKFTG
1503	VH CDR3 BCMA-14	LYDYDWYFDV
1504	VL CDR1 BCMA-14	KSSQSLVHSGNGNTYLH
1505	VL CDR2 BCMA-14	KVSNRFS
1506	VL CDR3 BCMA-14	SQSSIYPWT
1507	VH BCMA-14	QVQLVQSGAEVKKPGASVKVSCASGYSPDYINWVRQAPGQGLEWMGWYFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTVSS
1508	VL BCMA-14	DIVMTQTPLSVTPGQPASISCKSSQSLVHSGNGNTYLHWYQKPGQSPQLLIYKVSNRFSGV PDRFSGSGSGTDFTLKISRVEAEDVGIYYCSQSSIYPWTFGQGTKEIK
1509	scFv BCMA-14	QVQLVQSGAEVKKPGASVKVSCASGYSPDYINWVRQAPGQGLEWMGWYFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTVSSG GGGSGGGSGGGGSDIVMTQTPLSVTPGQPASISCKSSQSLVHSGNGNTYLHWYQKPGQ SPQLLIYKVSNRFSVPDRFSGSGSGTDFTLKISRVEAEDVGIYYCSQSSIYPWTFGQGTKEIK
1510	双特异性分 子 BCMA-14 xI2C	QVQLVQSGAEVKKPGASVKVSCASGYSPDYINWVRQAPGQGLEWMGWYFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTVSSG GGGSGGGSGGGGSDIVMTQTPLSVTPGQPASISCKSSQSLVHSGNGNTYLHWYQKPGQ SPQLLIYKVSNRFSVPDRFSGSGSGTDFTLKISRVEAEDVGIYYCSQSSIYPWTFGQGTKEIK SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFNGNSYISYWAYW GQGLTVTVSSGGGSGGGGSGGGGSGQTVVTQEPSTVSPGGTTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVL
1511	双特异性 scFc 分子 BCMA-14 xI2C -scFc	QVQLVQSGAEVKKPGASVKVSCASGYSPDYINWVRQAPGQGLEWMGWYFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTVSSG GGGSGGGSGGGGSDIVMTQTPLSVTPGQPASISCKSSQSLVHSGNGNTYLHWYQKPGQ SPQLLIYKVSNRFSVPDRFSGSGSGTDFTLKISRVEAEDVGIYYCSQSSIYPWTFGQGTKEIK SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYCVRHGNFNGNSYISYWAYW GQGLTVTVSSGGGSGGGGSGGGGSGQTVVTQEPSTVSPGGTTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVLGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NYKTPPVLDSGGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGG GGGGSGGGGSGGGGSGGGGSGGGGSDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMIS

[0791]

		RTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQ KSLSLSPGK
1512	双特异性 scFc 分子 BCMA-14 xI2C - scFc_delGK	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQGLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS GGSGGGGGGGGGSDIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWY SPQLLIYKVSNRFSGVPRDFSGSGSDTFTLKISRVEAEDVGIYYCSQSSIYPWTFGCGT SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLWVARIRSK YNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYW GQGTLLTVSSGGGGGGGGGGSGGGSQTAVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGGGG GGGGGGGGGGGGGGGGGGGGGGGGSDKTHCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNG KEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKS LSLSPGK
1513	VH (CC) BCMA-14_1 CC	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQCLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS
1514	VL (CC) BCMA-14_1 CC	DIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWY PDRFSGSGSDTFTLKISRVEAEDVGIYYCSQSSIYPWTFGCGTKLEIK
1515	scFv (CC) BCMA-14_1 CC	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQCLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS GGSGGGGGGGGGSDIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWY SPQLLIYKVSNRFSGVPRDFSGSGSDTFTLKISRVEAEDVGIYYCSQSSIYPWTFGCGT SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYW GQGTLLTVSSGGGGGGGGGGSGGGSQTAVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVL
1516	双特异性分 子(CC) BCMA-14_1 CC xI2C	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQCLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS GGSGGGGGGGGGSDIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWY SPQLLIYKVSNRFSGVPRDFSGSGSDTFTLKISRVEAEDVGIYYCSQSSIYPWTFGCGT SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYW GQGTLLTVSSGGGGGGGGGGSGGGSQTAVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVL
1517	双特异性 scFc 分子 (CC) BCMA-14_1 CC xI2C - scFc	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQCLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS GGSGGGGGGGGGSDIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWY SPQLLIYKVSNRFSGVPRDFSGSGSDTFTLKISRVEAEDVGIYYCSQSSIYPWTFGCGT SGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYVCVRHGNFGNSYISYWAYW GQGTLLTVSSGGGGGGGGGGSGGGSQTAVTQEPSTVSPGGTVTLTCSSTGAVTSGNYPN WVQQKPGQAPRGLIGGKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYKCKVSNK ALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGKGGG GSGGGGGGGGGGGGGGGGGGGGGGGGGSDKTHCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQ KSLSLSPGK
1518	双特异性 scFc 分子	QVQLVQSGAEVKKPGASVKVSCKASGYSFPDYINWVRQAPGQCLEWMGWYIFASGNSEY NQKFTGRVTMTRDTSINTAYMELSSLTSEDVAVYFCASLYDYDWYFDVWGQGTMTVTS

[0792]

(CC) BCMA-14_ CC xI2C - scFc_delGK	GGGSGGGSGGGSGDIVMTQTPLSLSVTPGQPASISCKSSQSLVHSNGNTYLHWYQKPGQ SPQLLIYKVSNRFSVDPDRFSGSGSGTDFTLKISRVEAEDVGIYYCSQSSIPWTFGCGTKLEIKS GGGGSEVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARIRSKY NNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWG QGTLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSTVSPGGTVTLTCSGSTGAVTSGNYPN WVQQKPGQAPRGLIGGTFKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNR WVFGGGTKLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYCKCKVSNK ALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGG GGGGSGGGSGGGSGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNG KEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS LSLSPGK
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[0793]

1519.	PM_1xCD3-sc Fc	VH CDR1	DYYMN
1520.	PM_1xCD3-sc Fc	VH CDR2	IISDGGYYTYSDIIGK
1521.	PM_1xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1522.	PM_1xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1523.	PM_1xCD3-sc Fc	VL CDR2	SASYRYS
1524.	PM_1xCD3-sc Fc	VL CDR3	QQYDSYPYT
1525.	PM_1xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSS
1526.	PM_1xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1527.	PM_1xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1528.	PM_1xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQ EPSTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1529.	PM_1xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQ

[0794]

			EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGG GGGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1530.	PM_1xCD3-sc Fc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMNWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGKLEIKSGGGG EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGQTAVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGG GGGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMIS RTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VTVLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1531.	PM_1_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMNWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGLTVTVSS
1532.	PM_1_CCxCD 3-scFc	VL	DIQTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGCGT KLEIK
1533.	PM_1_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMNWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1534.	PM_1_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMNWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGG EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGQTAVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1535.	PM_1_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMNWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR

[0795]

			FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGG GGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRC VSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1536.	PM_1_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRLSAAAGFTSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGGSGGGGSGGGG GGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCV SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1537.	PM_2xCD3-sc Fc	VH CDR1	DYYMY
1538.	PM_2xCD3-sc Fc	VH CDR2	IISDAGGLTYSDIIKG
1539.	PM_2xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1540.	PM_2xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1541.	PM_2xCD3-sc Fc	VL CDR2	SASYRYS
1542.	PM_2xCD3-sc Fc	VL CDR3	QQYDSYPYT
1543.	PM_2xCD3-sc Fc	VH	QQQLVESGGGLVKPGESLRLSAAAGFTSDYYMYWVRQAPGKGLEWV AIISDAGGLTYSDIIKGRFTISRDNKNSLYLQINSLKAEDAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1544.	PM_2xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1545.	PM_2xCD3-sc Fc	scFv	QQQLVESGGGLVKPGESLRLSAAAGFTSDYYMYWVRQAPGKGLEWV AIISDAGGLTYSDIIKGRFTISRDNKNSLYLQINSLKAEDAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIK

[0796]

1546.	PM_2xCD3-sc Fc	双特异性分子	QVQLVESGGGLVQPGESLRLSCAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1547.	PM_2xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRLSCAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK
1548.	PM_2xCD3-sc Fc _{delGK}	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRLSCAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVL VHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK
1549.	PM_2_CCxCD 3-scFc	VH	QVQLVESGGGLVQPGESLRLSCAASGFTFSDDYYMYWVRQAPGKCLEWVA IISDAGGLTYYSIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPL RHGAMDYWGQGLTVTVSS
1550.	PM_2_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGT KLEIK
1551.	PM_2_CCxCD 3-scFc	scFv	QVQLVESGGGLVQPGESLRLSCAASGFTFSDDYYMYWVRQAPGKCLEWVA

[0797]

			IISDAGGLTYYSDIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSAS VGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYASRYSDVPSRFSG SASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1552.	PM_2_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGEISRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYYSDIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSAS VGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYASRYSDVPSRFSG SASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEVQ LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARI RSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGTQVVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV L
1553.	PM_2_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGEISRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYYSDIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSAS VGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYASRYSDVPSRFSG SASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEVQ LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARI RSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGTQVVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSPDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSPDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1554.	PM_2_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGEISRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYYSDIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSAS VGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYASRYSDVPSRFSG SASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEVQ LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWVARI RSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSGTQVVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSPDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGSGGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTL VLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSPDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1555.	PM_3xCD3-sc Fc	VH CDR1	DYYMY
1556.	PM_3xCD3-sc Fc	VH CDR2	IISDAGGLTYYSDIK

[0798]

1557.	PM_3xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1558.	PM_3xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1559.	PM_3xCD3-sc Fc	VL CDR2	SASYRYS
1560.	PM_3xCD3-sc Fc	VL CDR3	QQYDDLRT
1561.	PM_3xCD3-sc Fc	VH	QVQLVESGGGLVQPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNKNSLYLQINSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSS
1562.	PM_3xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGGGT KLEIK
1563.	PM_3xCD3-sc Fc	scFv	QVQLVESGGGLVQPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNKNSLYLQINSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGGGTLEIK
1564.	PM_3xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVQPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNKNSLYLQINSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGGGTLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VL
1565.	PM_3xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNKNSLYLQINSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGGGTLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1566.	PM_3xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGGLTYYSIIKGRFTISRDNKNSLYLQINSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGGGTLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA

[0799]

			PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGGSGGGGGSGG GGGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVL VHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1567.	PM_3_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGESLRSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYSDIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPLL RHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSAS
1568.	PM_3_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGDTFTLTISLQSEDFATYYCQQYDDLRPTFGCGT KLEIK
1569.	PM_3_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGESLRSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYSDIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPLL RHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSAS VGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSG SASGDTFTLTISLQSEDFATYYCQQYDDLRPTFGCGTKLEIK
1570.	PM_3_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYSDIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPLL RHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSAS VGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSG SASGDTFTLTISLQSEDFATYYCQQYDDLRPTFGCGTKLEIKSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARI RSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGGSGGGGQTAVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV L
1571.	PM_3_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYSDIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPLL RHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSAS VGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSG SASGDTFTLTISLQSEDFATYYCQQYDDLRPTFGCGTKLEIKSGGGGSEVQ LVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVARI RSKYNNYATYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRH GNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGGSGGGGQTAVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSGG GGGGGGGGGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1572.	PM_3_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGGLTYSDIIKGRFTISRDNAKNSLYLQINSLKAEDTAVYYCARGFPLL RHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSAS VGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSG SASGDTFTLTISLQSEDFATYYCQQYDDLRPTFGCGTKLEIKSGGGGSEVQ

[0800]

			LVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVARI RSKYNYYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVRH GNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG SGGGSGGGSGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1573.	PM_4xCD3-sc Fc	VH CDR1	DYYMY
1574.	PM_4xCD3-sc Fc	VH CDR2	IISDHYSHTYYSDIKD
1575.	PM_4xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1576.	PM_4xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1577.	PM_4xCD3-sc Fc	VL CDR2	SASYRYS
1578.	PM_4xCD3-sc Fc	VL CDR3	QQYDSYPYT
1579.	PM_4xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDHYSHTYYSDIKDRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSS
1580.	PM_4xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVDPSPRFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1581.	PM_4xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDHYSHTYYSDIKDRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKEIK
1582.	PM_4xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDHYSHTYYSDIKDRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNYYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1583.	PM_4xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDHYSHTYYSDIKDRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNYYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT

[0801]

			VLGGGGDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1584.	PM_4xCD3-scFc _{del} GK	双特异性HLE分子	QVQLVESGGGLVKPGESLRSCAASGFTSDYYMYWVRQAPGKLEWVAIISDHYSHTYSDIIKDRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFGSASGDTFTLTISVQSEDFATYYCQQYDSYPYTFGGGKLEIKSGGGSEVQVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLSKAEDTAVYYCVRHGNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1585.	PM_4_CCD3-scFc	VH	QVQLVESGGGLVKPGESLRSCAASGFTSDYYMYWVRQAPGKLEWVAIISDHYSHTYSDIIKDRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGLTVTVSS
1586.	PM_4_CCD3-scFc	VL	DIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFGSASGDTFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1587.	PM_4_CCD3-scFc	scFv	QVQLVESGGGLVKPGESLRSCAASGFTSDYYMYWVRQAPGKLEWVAIISDHYSHTYSDIIKDRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFGSASGDTFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1588.	PM_4_CCD3-scFc	双特异性分子	QVQLVESGGGLVKPGESLRSCAASGFTSDYYMYWVRQAPGKLEWVAIISDHYSHTYSDIIKDRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFGSASGDTFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGSEVQVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNLSKAEDTAVYYCVRHGNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGKFLAPGTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTVL
1589.	PM_4_CCD3-scFc	双特异性HLE分子	QVQLVESGGGLVKPGESLRSCAASGFTSDYYMYWVRQAPGKLEWVAIISDHYSHTYSDIIKDRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFGSASGDTFTLTISVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGSEVQVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR

[0802]

			IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGG GGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1590.	PM_4_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKCLEWVA IISDHYSHYTSYDIKDRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG GGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTV VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1591.	PM_5xCD3-sc Fc	VH CDR1	DYYMY
1592.	PM_5xCD3-sc Fc	VH CDR2	IISDKRHHTYYSDIKG
1593.	PM_5xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1594.	PM_5xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1595.	PM_5xCD3-sc Fc	VL CDR2	SASYRYS
1596.	PM_5xCD3-sc Fc	VL CDR3	QQYDSYPYT
1597.	PM_5xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSS
1598.	PM_5xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTSSVQSEDFATYYCQYDSYPYTFGGGT KLEIK
1599.	PM_5xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SASVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSR FSGASGTDFTLTSSVQSEDFATYYCQYDSYPYTFGGGTLEIK
1600.	PM_5xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF

[0803]

			<p> PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGQTVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL </p>
1601.	PM_5xCD3-sc Fc	双特异性 HLE 分子	<p> QVQLVESGGGLVQPGESLRLSCAASGFTSDYYMYWVRQAPGKLEWV AIIIDKRHHHTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGQTVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQD WLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGG GSGGGSGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRC VSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK </p>
1602.	PM_5xCD3-sc Fc _{del} GK	双特异性 HLE 分子	<p> QVQLVESGGGLVQPGESLRLSCAASGFTSDYYMYWVRQAPGKLEWV AIIIDKRHHHTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGQTVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQD WLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGGSGGGGSGGGG GGGGSGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVS VLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTPPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK </p>
1603.	PM_5_CCxCD 3-scFc	VH	<p> QVQLVESGGGLVQPGESLRLSCAASGFTSDYYMYWVRQAPGKLEWVA IISDKRHHTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS </p>
1604.	PM_5_CCxCD 3-scFc	VL	<p> DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGCGT KLEIK </p>
1605.	PM_5_CCxCD 3-scFc	scFv	<p> QVQLVESGGGLVQPGESLRLSCAASGFTSDYYMYWVRQAPGKLEWVA IISDKRHHTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSLSA </p>

[0804]

			SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1606.	PM_5_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKGESLRLSCAASGFTSDYYMYWVRQAPGKCLEWVA IISDKRHHTYYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1607.	PM_5_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKGESLRLSCAASGFTSDYYMYWVRQAPGKCLEWVA IISDKRHHTYYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSG GGGGSGGGSGGGSGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1608.	PM_5_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKGESLRLSCAASGFTSDYYMYWVRQAPGKCLEWVA IISDKRHHTYYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGG GGGGSGGGSGGGSGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1609.	PM_6xCD3-sc Fc	VH CDR1	DYYMY
1610.	PM_6xCD3-sc Fc	VH CDR2	IISDKRHHTYYSDIIKG
1611.	PM_6xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY

[0805]

1612.	PM_6xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1613.	PM_6xCD3-sc Fc	VL CDR2	SASYRYS
1614.	PM_6xCD3-sc Fc	VL CDR3	QQYDDL RPT
1615.	PM_6xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLL RHGAMDYWGQGT LVT VSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIK
1616.	PM_6xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIK
1617.	PM_6xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLL RHGAMDYWGQGT LVT VSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIK
1618.	PM_6xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLL RHGAMDYWGQGT LVT VSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGT LVT VSSGGGSGGGGSGGGGSGT VVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLGGAALTL SGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1619.	PM_6xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLL RHGAMDYWGQGT LVT VSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGT LVT VSSGGGSGGGGSGGGGSGT VVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLGGAALTL SGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEYQGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGG GSGGGGSGGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEYQGSTYRC VSVLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1620.	PM_6xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDKRHHTYYSDIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLL RHGAMDYWGQGT LVT VSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYS FSGSASGDTFTLTISSLSQSEDFATYYCQQYDDL RPTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGT LVT VSSGGGSGGGGSGGGGSGT VVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLGGAALTL SGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV

[0806]

			VDSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNQKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGS GGGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNQKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1621.	PM_6_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDKRHHTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGTLLTVSS
1622.	PM_6_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGCGT KLEIK
1623.	PM_6_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDKRHHTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGCGTKLEIK
1624.	PM_6_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDKRHHTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGCGTKLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGQTVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGKT VL
1625.	PM_6_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDKRHHTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGCGTKLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGQTVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGKT VLGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGGSG GGGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNQKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1626.	PM_6_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDKRHHTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISLQSEDFATYYCQQYDDLRTFGCGTKLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCV

[0807]

			HGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGTWTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGG GSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1627.	PM_7xCD3-sc Fc	VH CDR1	DYYMY
1628.	PM_7xCD3-sc Fc	VH CDR2	IISDGGYYTYSDIIGK
1629.	PM_7xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1630.	PM_7xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1631.	PM_7xCD3-sc Fc	VL CDR2	SASYRYS
1632.	PM_7xCD3-sc Fc	VL CDR3	QQYDQQLIT
1633.	PM_7xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSS
1634.	PM_7xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGDTFTLTSSVQSEDFATYYCQQYDQQLITFGGGT KLEIK
1635.	PM_7xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTSSVQSEDFATYYCQQYDQQLITFGGGTKLEIK
1636.	PM_7xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTSSVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGTWTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
1637.	PM_7xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKRTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTSSVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGGSGGGGSGTWTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD

[0808]

			<p>WLNGKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNGKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1638.	PM_7xCD3-sc Fc_delGK	双特异性 HLE 分子	<p>QVQLVESGGGLVKGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWV AIIIDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG EVQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQ EPLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFL APGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNGKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNGKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1639.	PM_7_CCxCD 3-scFc	VH	<p>QVQLVESGGGLVKGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS</p>
1640.	PM_7_CCxCD 3-scFc	VL	<p>DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVVQSEDFATYYCQYDQQLITFGCGT KLEIK</p>
1641.	PM_7_CCxCD 3-scFc	scFv	<p>QVQLVESGGGLVKGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVVQSEDFATYYCQYDQQLITFGCGTKLEIK</p>
1642.	PM_7_CCxCD 3-scFc	双特异性 分子	<p>QVQLVESGGGLVKGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQ EPLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL</p>
1643.	PM_7_CCxCD 3-scFc	双特异性 HLE 分子	<p>QVQLVESGGGLVKGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGGGGGGGGGGGGGSDIQTQ EPLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL</p>

[0809]

			PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSG GGGGSGGGGGSGGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1644.	PM_7_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDNTNVAWYQQKPGQAPKSLIYSASYRSDVPSPRS GSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKSLCAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGGSGGGGGSGGGG SGGGGGSGGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1645.	PM_8xCD3-sc Fc	VH CDR1	DYYMY
1646.	PM_8xCD3-sc Fc	VH CDR2	IISDGGYYTYSDIIKGG
1647.	PM_8xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1648.	PM_8xCD3-sc Fc	VL CDR1	KASQNVDNTNVA
1649.	PM_8xCD3-sc Fc	VL CDR2	SASYRYS
1650.	PM_8xCD3-sc Fc	VL CDR3	QQYDQVRLT
1651.	PM_8xCD3-sc Fc	VH	QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSS
1652.	PM_8xCD3-sc Fc	VL	DIQMTQSPSSLSASVSGDRVTITCKASQNVDNTNVAWYQQKPGQAPKSLIYS ASYRSDVPSPRSFSGSASGTDFTLTISVQSEDFATYYCQYDQVRLTFGGG TKLEIK
1653.	PM_8xCD3-sc Fc	scFv	QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSL SASVSGDRVTITCKASQNVDNTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDQVRLTFGGGTKLEIK
1654.	PM_8xCD3-sc Fc	双特异性 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSL SASVSGDRVTITCKASQNVDNTNVAWYQQKPGQAPKSLIYSASYRSDVPSR

[0810]

			FSGSASGTDFTLTSSVQSEDFATYYCQQYDQVRLTFGGGKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVL
1655.	PM_8xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTSSVQSEDFATYYCQQYDQVRLTFGGGKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQ DWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGG GGSGGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTL MISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTY RCVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTL PPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSD GSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1656.	PM_8xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTSSVQSEDFATYYCQQYDQVRLTFGGGKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQ DWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGG SGGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCV SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPS REEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSF FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1657.	PM_8_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1658.	PM_8_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTSSVQSEDFATYYCQQYDQVRLTFGCG TKLEIK
1659.	PM_8_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQQYDQVRLTFGCGTKLEIK

[0811]

1660.	PM_8_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRISCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDQVRLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1661.	PM_8_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRISCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDQVRLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1662.	PM_8_CCxCD 3-scFc _{delGK}	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRISCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDQVRLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQT VVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVL HQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1663.	PM_9xCD3-sc Fc	VH CDR1	DYYMN
1664.	PM_9xCD3-sc Fc	VH CDR2	IISDGGYYTYSDIIKG
1665.	PM_9xCD3-sc Fc	VH CDR3	GFLLRHGAMDY
1666.	PM_9xCD3-sc Fc	VL CDR1	KASQNVDTNVA

[0812]

1667.	PM_9xCD3-sc Fc	VL CDR2	SASYRYS
1668.	PM_9xCD3-sc Fc	VL CDR3	QQYDDL RPT
1669.	PM_9xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLR LSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYS DIIKGRFTISRDN AKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSS
1670.	PM_9xCD3-sc Fc	VL	DIQMTQSPSSLSASVGD RVTITCKASQNVD TNVAWYQQKPGQAPKSLIYS ASYRYS DVP SR FSGSASGTDFTLTISSLQSEDFATYYCQQYDDL RPTFGGGT KLEIK
1671.	PM_9xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLR LSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYS DIIKGRFTISRDN AKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGD RVTITCKASQNVD TNVAWYQQKPGQAPKSLIYSASYRYS DVP SR FSGSASGTDFTLTISSLQSEDFATYYCQQYDDL RPTFGGGTKLEIK
1672.	PM_9xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLR LSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYS DIIKGRFTISRDN AKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGD RVTITCKASQNVD TNVAWYQQKPGQAPKSLIYSASYRYS DVP SR FSGSASGTDFTLTISSLQSEDFATYYCQQYDDL RPTFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLK LSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
1673.	PM_9xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLR LSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYS DIIKGRFTISRDN AKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGD RVTITCKASQNVD TNVAWYQQKPGQAPKSLIYSASYRYS DVP SR FSGSASGTDFTLTISSLQSEDFATYYCQQYDDL RPTFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLK LSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEYQGSTYRCVSVLTVLHQD WLNQKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGG GSGGGSGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEYQGSTYRC VSVLTVLHQDWLNQKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1674.	PM_9xCD3-sc Fc _{del} GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLR LSCAASGFTFSDYYMNWVRQAPGKGLEWV AIISDGGYYTYS DIIKGRFTISRDN AKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGD RVTITCKASQNVD TNVAWYQQKPGQAPKSLIYSASYRYS DVP SR FSGSASGTDFTLTISSLQSEDFATYYCQQYDDL RPTFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLK LSCAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALT LSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEYQGSTYRCVSVLTVLHQD WLNQKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ

[0813]

			VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSEFFLYSKLTV KSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGGGGSGGGGGSGGGG GGGGSGGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSEFF LYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1675.	PM_9_CCxCD 3-scFc	VH	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSL
1676.	PM_9_CCxCD 3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFLTITSLQSEDFATYYCQQYDDLRTFTGCGT KLEIK
1677.	PM_9_CCxCD 3-scFc	scFv	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFLTITSLQSEDFATYYCQQYDDLRTFTGCGTKLEIK
1678.	PM_9_CCxCD 3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFLTITSLQSEDFATYYCQQYDDLRTFTGCGTKLEIKSGGGG EVQLVESGGGLVQPGGSLKSLCAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQ EPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1679.	PM_9_CCxCD 3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFLTITSLQSEDFATYYCQQYDDLRTFTGCGTKLEIKSGGGG EVQLVESGGGLVQPGGSLKSLCAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQ EPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSEFFLYSKLTV KSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGGGGSGGGGGSGGGG GGGGGGSGGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLM ISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1680.	PM_9_CCxCD 3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFLTITSLQSEDFATYYCQQYDDLRTFTGCGTKLEIKSGGGG EVQLVESGGGLVQPGGSLKSLCAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQMTQ EPSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKL

[0814]

			APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG GGGGSGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1681.	PM_10xCD3-sc Fc	VH CDR1	DYYMY
1682.	PM_10xCD3-sc Fc	VH CDR2	IISDHHHWYYSDIK
1683.	PM_10xCD3-sc Fc	VH CDR3	GFLLRHGAMDY
1684.	PM_10xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1685.	PM_10xCD3-sc Fc	VL CDR2	SASYRS
1686.	PM_10xCD3-sc Fc	VL CDR3	QQYDSYPYT
1687.	PM_10xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDHHHWYYSDIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVVYCARG FPLLRRHGAMDYWGQGTLLTVSS
1688.	PM_10xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1689.	PM_10xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDHHHWYYSDIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVVYCARG FPLLRRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSS LSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPS RFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIK
1690.	PM_10xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDHHHWYYSDIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVVYCARG FPLLRRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSS LSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPS RFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYC VRHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVT QEPSTLVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVL
1691.	PM_10xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDHHHWYYSDIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVVYCARG FPLLRRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSS LSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPS RFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYC VRHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGGSGGGGSGTQVVT QEPSTLVSPGGTVTLTCSGSTGAVTSGNYPNWVQQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQ DWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTV

[0815]

			DKSRWQQGNVFSQSVMEALHNHYTQKSLSPGKGGGGSGGGGGSGGGGGSGGGGGSGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLSPGK
1692.	PM_10xCD3-scFc_delGK	双特异性HLE分子	QVQLVESGGGLVQPGESLRSLCAASGFTSDYYMYWVRQAPGKGLEWVAIISDHHHWYYSYDIIGKRFITSRDIAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFGSGASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSTLVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLSPGKSGGGGGSGGGGGSGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLSPGK
1693.	PM_10_CCxC D3-scFc	VH	QVQLVESGGGLVQPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVAIISDHHHWYYSYDIIGKRFITSRDIAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGTTLTVSS
1694.	PM_10_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFGSGASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1695.	PM_10_CCxC D3-scFc	scFv	QVQLVESGGGLVQPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVAIISDHHHWYYSYDIIGKRFITSRDIAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFGSGASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1696.	PM_10_CCxC D3-scFc	双特异性分子	QVQLVESGGGLVQPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVAIISDHHHWYYSYDIIGKRFITSRDIAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFGSGASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL
1697.	PM_10_CCxC D3-scFc	双特异性HLE分子	QVQLVESGGGLVQPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVAIISDHHHWYYSYDIIGKRFITSRDIAKNSLYLQMNLSKAEDTAVYYCARGFPLLRHGAMDYWGQGTTLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFGSGASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGSEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGGGSGGGGSGTQVVTQEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVL

[0816]

			VLGGGGDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1698.	PM_10_CCxC D3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKCLEWVAIISDHHHTYYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSGSASGDTFTLTSSVQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGSGVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTWVTQEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLAPGTPARFSGSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTVLGGGGDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1699.	PM_11xCD3-sc Fc	VH CDR1	DYYMY
1700.	PM_11xCD3-sc Fc	VH CDR2	IISDGGYYTYYSDIIGK
1701.	PM_11xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1702.	PM_11xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1703.	PM_11xCD3-sc Fc	VL CDR2	SASYRYS
1704.	PM_11xCD3-sc Fc	VL CDR3	QQYDRQPLT
1705.	PM_11xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWVAIISDGGYYTYYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFLLRHGAMDYWGQGLTVTVSS
1706.	PM_11xCD3-sc Fc	VL	DIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSGSASGDTFTLTSSVQSEDFATYYCQQYDRQPLTFGGG TKLEIK
1707.	PM_11xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWVAIISDGGYYTYYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSGSASGDTFTLTSSVQSEDFATYYCQQYDRQPLTFGGG TKLEIK
1708.	PM_11xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKLEWVAIISDGGYYTYYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSDIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFSGSASGDTFTLTSSVQSEDFATYYCQQYDRQPLTFGGG TKLEIKSGGGSGEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWV

[0817]

			ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
1709.	PM_11xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDRQPLTFGGGKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTV KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSG GGGGSGGGSGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMIS SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRC VSVLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1710.	PM_11xCD3-sc Fc_deIGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDRQPLTFGGGKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTV KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSG GGGGSGGGSGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCV VSLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1711.	PM_11_CCxC D3-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1712.	PM_11_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVQSEDFATYYCQQYDRQPLTFGCGT KLEIK
1713.	PM_11_CCxC D3-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGDIQMTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQQYDRQPLTFGCGTKLEIK
1714.	PM_11_CCxC D3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL

[0818]

			LRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVITICKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQVPSRFS GSASGDTFTLTISSVQSEDFATYYCQQYDRQPLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1715.	PM_11_CCxC D3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTSDYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVITICKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQVPSRFS GSASGDTFTLTISSVQSEDFATYYCQQYDRQPLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGG GGGGSGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK
1716.	PM_11_CCxC D3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTSDYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVITICKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQVPSRFS GSASGDTFTLTISSVQSEDFATYYCQQYDRQPLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGGSQTAVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGSGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK
1717.	PM_12xCD3-sc Fc	VH CDR1	DYYMN
1718.	PM_12xCD3-sc Fc	VH CDR2	IISDGGYYTYSDIIKG
1719.	PM_12xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1720.	PM_12xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1721.	PM_12xCD3-sc Fc	VL CDR2	SASYRYS

[0819]

1722.	PM_12xCD3-sc Fc	VL CDR3	QQYDLLLLT
1723.	PM_12xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSS
1724.	PM_12xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGDTFTLTISLQSEDFATYYCQQYDLLLLTFGGGT KLEIK
1725.	PM_12xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTISLQSEDFATYYCQQYDLLLLTFGGGT KLEIK
1726.	PM_12xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTISLQSEDFATYYCQQYDLLLLTFGGGT KLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGT KFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGG GT KLTL
1727.	PM_12xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTISLQSEDFATYYCQQYDLLLLTFGGGT KLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGT KFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGG GT KLTL VLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGKGGGSGGGGSGGGGSGGGGSG GGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK
1728.	PM_12xCD3-sc Fc _{delGK}	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGDTFTLTISLQSEDFATYYCQQYDLLLLTFGGGT KLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGT KFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGG GT KLTL VLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCVMHEALHNHYTQKSLSLSPGGGSGGGGSGGGGSGGGGSGGGG

[0820]

			GSGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1729.	PM_12_CCxC D3-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSS
1730.	PM_12_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGTDFTLTISLQSEDFATYYCQQYDLLLLTFGCGTK LEIK
1731.	PM_12_CCxC D3-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDLLLLTFGCGTKLEIK
1732.	PM_12_CCxC D3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDLLLLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1733.	PM_12_CCxC D3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDLLLLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGGSG GGGGSGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1734.	PM_12_CCxC D3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDLLLLTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV

[0821]

			VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG SGGGGSGGGGSDKHTCPPCPAPELLGPPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1735.	PM_13xCD3-sc Fc	VH CDR1	DYYMY
1736.	PM_13xCD3-sc Fc	VH CDR2	IISDSTLHTYYSDIIG
1737.	PM_13xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1738.	PM_13xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1739.	PM_13xCD3-sc Fc	VL CDR2	SASYRYS
1740.	PM_13xCD3-sc Fc	VL CDR3	QQYDSYPYT
1741.	PM_13xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDSTLHTYYSDIIGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSS
1742.	PM_13xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1743.	PM_13xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDSTLHTYYSDIIGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIK
1744.	PM_13xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDSTLHTYYSDIIGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTAVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1745.	PM_13xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKGLEWV AIISDSTLHTYYSDIIGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDSYPYTFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTAVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTCPPCPAPELLGPPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGG GGGGSGGGGSGGGGSDKHTCPPCPAPELLGPPSVFLFPPKPKDTLMISRT

[0822]

			PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1746.	PM_13xCD3-sc Fc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWV AIIISDSTLHTYYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLS ASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRF SGASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGGSGGGG SGGGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1747.	PM_13_CCxC D3-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDSTLHTYYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1748.	PM_13_CCxC D3-scFc	VL	DIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGT KLEIK
1749.	PM_13_CCxC D3-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDSTLHTYYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIK
1750.	PM_13_CCxC D3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDSTLHTYYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1751.	PM_13_CCxC D3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDSTLHTYYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL

[0823]

			NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSG GGGGSGGGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1752.	PM_13_CCxC D3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRISCAASGFTFSDYYMYWVRQAPGKLEWVA IISDSTLHTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGGGSGGGGGQTVVVTQE PSLTVSPGGTTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFLA PGTPARFSGSLGGAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSGGG GGGGSGGGGGSGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1753.	PM_14xCD3-sc Fc	VH CDR1	DYYMY
1754.	PM_14xCD3-sc Fc	VH CDR2	IISDGGYYTYYSIIKIG
1755.	PM_14xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1756.	PM_14xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1757.	PM_14xCD3-sc Fc	VL CDR2	SASYRYS
1758.	PM_14xCD3-sc Fc	VL CDR3	QQYDAPMG
1759.	PM_14xCD3-sc Fc	VH	QVQLVESGGGLVKPGESLRISCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSS
1760.	PM_14xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGG GTKLEIK
1761.	PM_14xCD3-sc Fc	scFv	QVQLVESGGGLVKPGESLRISCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGGGTKLEIK
1762.	PM_14xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVKPGESLRISCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGGGSGGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYC VRHGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGGGSGGGGGQTVVVT

[0824]

			QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVL
1763.	PM_14xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGGGKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYC VRHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSTVVT QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVLHQ DWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGG GGSGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTL MISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTY RCVSVTLVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTL PPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSD GSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1764.	PM_14xCD3-sc Fc _{delGK}	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGGGKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYC VRHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSTVVT QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVLHQ DWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGG SGGGSGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCV SVTLVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPS REEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSF FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1765.	PM_14_CCxC D3-scFc	VH	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSS
1766.	PM_14_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGCG TKLEIK
1767.	PM_14_CCxC D3-scFc	scFv	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDAPMGTFGCGTKLEIK
1768.	PM_14_CCxC D3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS

[0825]

			GSASGTDFTLTSSVQSEDFATYYCQYDAPMGTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1769.	PM_14_CCxC D3-scFc	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFDYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDAPMGTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSG GGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1770.	PM_14_CCxC D3-scFc_delGK	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFDYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDAPMGTFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWVRQAPGKLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGG GGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVL VHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1771.	PM_15xCD3-sc Fc	VH CDR1	DYYMN
1772.	PM_15xCD3-sc Fc	VH CDR2	IISDNKHQTYSDIIG
1773.	PM_15xCD3-sc Fc	VH CDR3	GFPLLRHGAMDY
1774.	PM_15xCD3-sc Fc	VL CDR1	KASQNVDTNVA
1775.	PM_15xCD3-sc Fc	VL CDR2	SASYRS
1776.	PM_15xCD3-sc Fc	VL CDR3	QQYDSYPYT

1777.	PM_15xCD3-sc Fc	VH	QVQLVESGGGLVLPKGESLRSLCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNLSKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSS
1778.	PM_15xCD3-sc Fc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSQDVPSRFSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1779.	PM_15xCD3-sc Fc	scFv	QVQLVESGGGLVLPKGESLRSLCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNLSKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGTKEIK
1780.	PM_15xCD3-sc Fc	双特异性 分子	QVQLVESGGGLVLPKGESLRSLCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNLSKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSSQTVVTQ EPLSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
1781.	PM_15xCD3-sc Fc	双特异性 HLE 分子	QVQLVESGGGLVLPKGESLRSLCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNLSKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSSQTVVTQ EPLSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNGKEYCKKVSNAKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPDSIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGG GGGGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNGKEYCKKVSNAKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPDSIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVVFSCSVMEALHNHYTQKSLSLSPGK
1782.	PM_15xCD3-sc Fc_delGK	双特异性 HLE 分子	QVQLVESGGGLVLPKGESLRSLCAASGFTFSDDYMNWVRQAPGKGLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNLSKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSQDVPSR FSGSASGTDFTLTISLQSEDFATYYCQQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSSQTVVTQ EPLSLTVSPGGTVTLTCSGSTGAVTSGNYPNWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNGKEYCKKVSNAKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPDSIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVVFSCSVMEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGG GGGGGGGGGGGGGGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR

[0827]

			TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSF LYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1783.	PM_15_CCxC D3-scFc	VH	QVQLVESGGGLVKPGESLRSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSS
1784.	PM_15_CCxC D3-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVDPSPRFSGSASGDTFTLTISLQSEDFATYYCQQYDSYPYTFGCGT KLEIK
1785.	PM_15_CCxC D3-scFc	scFv	QVQLVESGGGLVKPGESLRSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGDTFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIK
1786.	PM_15_CCxC D3-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGDTFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSQTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1787.	PM_15_CCxC D3-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGDTFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSQTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGG SGGGSGGGSGGGSGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1788.	PM_15_CCxC D3-scFc_delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDDYMNWVRQAPGKCLEWV AIISDNKHQTYYSIIKGRFAISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGDTFTLTISLQSEDFATYYCQQYDSYPYTFGCGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSQTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD

[0828]

			WLNKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCVSMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGS GGGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCVSMHEALHNHYTQKSLSLSPGK
1789.	PM 76-B10.02 CC x I2C0-scFc	VH CDR1	DYYMY
1790.	PM 76-B10.02 CC x I2C0-scFc	VH CDR2	IISDAGYYTYYSDIKIG
1791.	PM 76-B10.02 CC x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1792.	PM 76-B10.02 CC x I2C0-scFc	VL CDR1	KASQNVDTNVA
1793.	PM 76-B10.02 CC x I2C0-scFc	VL CDR2	SASYRYS
1794.	PM 76-B10.02 CC x I2C0-scFc	VL CDR3	QQYESPYT
1795.	PM 76-B10.02 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1796.	PM 76-B10.02 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPVSRFSGSASGDTFTLTISVQSEDFATYYCQQYESPYTFGCGT KLEIK
1797.	PM 76-B10.02 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPVSRFS GSASGDTFTLTISVQSEDFATYYCQQYESPYTFGCGTKLEIK
1798.	PM 76-B10.02 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPVSRFS GSASGDTFTLTISVQSEDFATYYCQQYESPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGGTKLT VL
1799.	PM 76-B10.02 CC x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYYTYYSDIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPVSRFS GSASGDTFTLTISVQSEDFATYYCQQYESPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCVSMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSG GGGGSGGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV

[0829]

			LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1800.	PM 76-B10.02 CC x I2C0-scFc_ del GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLTISVVQSEDFATYYCQYQYESYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGGSGGGG SGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1801.	PM 76-B10.02 CC x I2C0 CC (103/43)-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLTISVVQSEDFATYYCQYQYESYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV L
1802.	PM 76-B10.02 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLTISVVQSEDFATYYCQYQYESYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVVYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGGSGGGG GGSGGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1803.	PM 76-B10.02 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVVYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS

[0830]

			GSASGTDFTLTISVQSEDFATYYCQQYESYPYTFGCGTKLEIKSGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTTLTVSSGGGGSGGGSGGGSGQTVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQCPRLIGGTKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GSGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1804.	PM 76-B10.08 x I2C0-scFc	VH CDR1	DYYMY
1805.	PM 76-B10.08 x I2C0-scFc	VH CDR2	IISDGGYYTYSDIIGK
1806.	PM 76-B10.08 x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1807.	PM 76-B10.08 x I2C0-scFc	VL CDR1	KASQNVDTNVA
1808.	PM 76-B10.08 x I2C0-scFc	VL CDR2	SASYRYS
1809.	PM 76-B10.08 x I2C0-scFc	VL CDR3	QQYDQQLIT
1810.	PM 76-B10.08 x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCLASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSS
1811.	PM 76-B10.08 x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVPSRFSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGT KLEIK
1812.	PM 76-B10.08 x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCLASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIK
1813.	PM 76-B10.08 x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCLASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCLASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGSGGGSQTVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1814.	PM 76-B10.08 x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCLASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIGKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVPSR FSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSCLASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGSGGGSQTVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQKPGQAPRLIGGTKFL

[0831]

			APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGG GSGGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLM ISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRC VSVTLVHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGS FFLYSLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1815.	PM 76-B10.08 x I2C0-scFc_del GK	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGG GGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVS VTLVHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1816.	PM 76-B10.08 x I2C0 CC (103/43)-scFc	双特异性分 子	QQQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGGSTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQCPRGLIGGKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKLT VL
1817.	PM 76-B10.08 x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGGSTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQCPRGLIGGKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFVGGGKLT VLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWL NKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSGG GGGSGGGSGGGSGGGSDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV

[0832]

			LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1818.	PM 76-B10.08 x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVQE PSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG SGGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1819.	PM 76-B10.08 CC x I2C0-scFc	VH CDR1	DYYMY
1820.	PM 76-B10.08 CC x I2C0-scFc	VH CDR2	IISDGGYYTYSDIIKG
1821.	PM 76-B10.08 CC x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1822.	PM 76-B10.08 CC x I2C0-scFc	VL CDR1	KASQNVDTNVA
1823.	PM 76-B10.08 CC x I2C0-scFc	VL CDR2	SASYRYS
1824.	PM 76-B10.08 CC x I2C0-scFc	VL CDR3	QQYDQQLIT
1825.	PM 76-B10.08 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1826.	PM 76-B10.08 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGT KLEIK
1827.	PM 76-B10.08 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIK
1828.	PM 76-B10.08 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVTVQE PSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKLA PGTPARFSGSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VL
1829.	PM 76-B10.08 CC x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL

[0833]

			<p>LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESSGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTTCCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGSGGGSGGGSGDKHTTCCPPCAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1830.	PM 76-B10.08 CC x I2C0-scFc_del GK	双特异性 HLE 分子	<p>QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESSGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKHTTCCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVTLVHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GSGGGSGGGSGDKHTTCCPPCAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1831.	PM 76-B10.08 CC x I2C0 CC (103/43)-scFc	双特异性分 子	<p>QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESSGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV L</p>
1832.	PM 76-B10.08 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	<p>QVQLVESGGGLVKPGESLRSLCAASGFTFSYYMYWVRQAPGKLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTSSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESSGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV</p>

			<p>LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSGG GGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1833.	PM 76-B10.08 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	<p>QVQLVESGGGLVPGESLRLSAASGFTFSDDYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVTSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDNTNAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLTVTSSGGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTTLTSGSSTGAVTSGNYPNWVQQKPGQCPRLIGGTFKFLAP GTPARFSGSLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG GSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1834.	PM 76-B10.11 x I2C0-scFc	VH CDR1	DYYMY
1835.	PM 76-B10.11 x I2C0-scFc	VH CDR2	IISDGGYYTYSDIIKG
1836.	PM 76-B10.11 x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1837.	PM 76-B10.11 x I2C0-scFc	VL CDR1	KASQNVDNTNA
1838.	PM 76-B10.11 x I2C0-scFc	VL CDR2	SASYVYW
1839.	PM 76-B10.11 x I2C0-scFc	VL CDR3	QQYDQQLIT
1840.	PM 76-B10.11 x I2C0-scFc	VH	<p>QVQLVESGGGLVPGESLRLSAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSS</p>
1841.	PM 76-B10.11 x I2C0-scFc	VL	<p>DIQMTQSPSSLSASVGDRVTITCKASQNVDNTNAWYQQKPGQAPKSLIYS ASYVYWDVPSRFSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGG TKLEIK</p>
1842.	PM 76-B10.11 x I2C0-scFc	scFv	<p>QVQLVESGGGLVPGESLRLSAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDNTNAWYQQKPGQAPKSLIYSASYVYWDVPS RFSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIK</p>
1843.	PM 76-B10.11 x I2C0-scFc	双特异性分 子	<p>QVQLVESGGGLVPGESLRLSAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGTLLTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDNTNAWYQQKPGQAPKSLIYSASYVYWDVPS RFSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEW</p>

[0834]

[0835]

			VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVL
1844.	PM 76-B10.11 x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PILRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSL SASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYVYWDVPS RFGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVLHQ DWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGG GGSGGGSGGGSGGGSGGGSDKTHCPPCPAPELLGGPSVFLFPPKPKDTL MISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTY RCVSVTLVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTL PPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSD GSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1845.	PM 76-B10.11 x I2C0-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PILRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSL SASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYVYWDVPS RFGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSQTVVT QEPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQAPRGLIGGTK FLAPGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGT KLTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVTLVLHQ DWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGGSGGGG SGGGSGGGSGGGSGGGSDKTHCPPCPAPELLGGPSVFLFPPKPKDTLMIS RTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCV SVTLVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPS REEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSF FLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1846.	PM 76-B10.11 x I2C0 CC (103/43)-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF PILRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSL SASVGDRTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYVYWDVPS RFGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYC VRHGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSQTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWQKPGQCPRLIGIGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
1847.	PM 76-B10.11 x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDDYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGF

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			PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVWVDPVS RFGSGASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYC VRHGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQCPRLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGG GSGGGSGGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1848.	PM 76-B10.11 x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVWVDPVS RFGSGASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGG SEVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEW VARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYC VRHGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQ EPSLTVSPGGTVTLTCGSSTGAVTSGNYPNWVQQKPGQCPRLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGG GGGGSGGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1849.	PM 76-B10.11 CC x I2C0-scFc	VH CDR1	DYYMY
1850.	PM 76-B10.11 CC x I2C0-scFc	VH CDR2	IISDGGYYTYSDIIKG
1851.	PM 76-B10.11 CC x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1852.	PM 76-B10.11 CC x I2C0-scFc	VL CDR1	KASQNVDTNVA
1853.	PM 76-B10.11 CC x I2C0-scFc	VL CDR2	SASYVW
1854.	PM 76-B10.11 CC x I2C0-scFc	VL CDR3	QYDQQLIT
1855.	PM 76-B10.11 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1856.	PM 76-B10.11 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYVWVDPVS RFGSGASGTDFTLTISVQSEDFATYYCQYDQQLITFGCG TKLEIK
1857.	PM 76-B10.11 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSLSA

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			SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIK
1858.	PM 76-B10.11 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1859.	PM 76-B10.11 CC x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSG GGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1860.	PM 76-B10.11 CC x I2C0-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGGSGGGGSGGGGSGGGG GSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1861.	PM 76-B10.11 CC x I2C0 CC (103/43)-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE

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			VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYCGQGTTLTVSSGGGGSGGGSGGGGSQTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQCPRLIGGTKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV L
1862.	PM 76-B10.11 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYCGQGTTLTVSSGGGGSGGGSGGGGSQTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQCPRLIGGTKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGSG GGGGSGGGSGGGGSDKTHTCPPELGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
1863.	PM 76-B10.11 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSLCAASGFTSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSCAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFGNSYISYWAYCGQGTTLTVSSGGGGSGGGSGGGGSQTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQKPGQCPRLIGGTKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFSCSVMEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGG GSGGGSGGGGSDKTHTCPPELGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
1864.	PM 76-B10.14 x I2C0-scFc	VH CDR1	DYYMY
1865.	PM 76-B10.14 x I2C0-scFc	VH CDR2	IISDAGYYTYSDIIKG
1866.	PM 76-B10.14 x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1867.	PM 76-B10.14 x I2C0-scFc	VL CDR1	KASQNV DANVA
1868.	PM 76-B10.14 x I2C0-scFc	VL CDR2	SASYRYS
1869.	PM 76-B10.14 x I2C0-scFc	VL CDR3	QYDQQLIT
1870.	PM 76-B10.14	VH	QVQLVESGGGLVKPGESLRSLCAASGFTSDYYMYWVRQAPGKGLEWV

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	x I2C0-scFc		AIISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSS
1871.	PM 76-B10.14 x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVNDANVAWYQQKPGQAPKSLIY SASYRSDVPSRFSGSASGTDFLTISVQSEDFATYYCQQYDQQLITFGGG TKLEIK
1872.	PM 76-B10.14 x I2C0-scFc	scFv	QVQLVESGGGLVQPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVNDANVAWYQQKPGQAPKSLIYASRYSDVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIK
1873.	PM 76-B10.14 x I2C0-scFc	双特异性分 子	QVQLVESGGGLVQPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVNDANVAWYQQKPGQAPKSLIYASRYSDVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSQTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1874.	PM 76-B10.14 x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVNDANVAWYQQKPGQAPKSLIYASRYSDVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSQTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMEALHNHYTQKSLSLSPGKGGGSGGGSGGGSGGGSG GGGSGGGSGGGSGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
1875.	PM 76-B10.14 x I2C0-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGLVQPGESLRSLCAASGFTFSYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRTITCKASQNVNDANVAWYQQKPGQAPKSLIYASRYSDVPSRF SGSASGTDFLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGSGGGSGGGSGGGSQTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGSGGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT

[0840]

			VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1876.	PM 76-B10.14 x I2C0 CC (103/43)-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQQKPGQCPRLIGGTFKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV L
1877.	PM 76-B10.14 x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQQKPGQCPRLIGGTFKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGSGGGGSG GGGGSGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1878.	PM 76-B10.14 x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGGGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWWVRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGSGGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCGSSTGAVTSGNYPNWWVQQKPGQCPRLIGGTFKFLAP GTPARFSGSLGGAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG SGGGGGSGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1879.	PM 76-B10.14 CC x I2C0-scFc	VH CDR1	DYYMY
1880.	PM 76-B10.14 CC x I2C0-scFc	VH CDR2	IISDAGYYTYSDIIKG
1881.	PM 76-B10.14	VH CDR3	GFPLLRHGAMDY

[0841]

	CC x I2C0-scFc		
1882.	PM 76-B10.14 CC x I2C0-scFc	VL CDR1	KASQNVNDANVA
1883.	PM 76-B10.14 CC x I2C0-scFc	VL CDR2	SASYRYS
1884.	PM 76-B10.14 CC x I2C0-scFc	VL CDR3	QQYDQQLIT
1885.	PM 76-B10.14 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1886.	PM 76-B10.14 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIY SASYRYSVPSRFSGSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGCG TKLEIK
1887.	PM 76-B10.14 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIK
1888.	PM 76-B10.14 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1889.	PM 76-B10.14 CC x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSLKTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGGSG GGGSGGGSGGGGSDKHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1890.	PM 76-B10.14 CC x I2C0-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDAGYITYYSIIKGRFTISRDNNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQMTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYSASYRYSVPSRFS GSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT

[0842]

			VLGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1891.	PM 76-B10.14 CC x I2C0 CC (103/43)-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLISSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQCPRLIGGTKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV L
1892.	PM 76-B10.14 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLISSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQCPRLIGGTKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGG GGGGSGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1893.	PM 76-B10.14 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGDTFTLISSVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQCPRLIGGTKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGSGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE

[0843]

			MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1894.	PM 76-B10.17 x I2C0-scFc	VH CDR1	DYYMY
1895.	PM 76-B10.17 x I2C0-scFc	VH CDR2	IISDAGYYTYSDIIGK
1896.	PM 76-B10.17 x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1897.	PM 76-B10.17 x I2C0-scFc	VL CDR1	KASQNV DANVA
1898.	PM 76-B10.17 x I2C0-scFc	VL CDR2	SASYVYW
1899.	PM 76-B10.17 x I2C0-scFc	VL CDR3	QQYDQQLIT
1900.	PM 76-B10.17 x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGTTLTVSS
1901.	PM 76-B10.17 x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIY SASYVYWDVPSRFSGSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGG GTKLEIK
1902.	PM 76-B10.17 x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYASVYWDVPSR FSGSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIK
1903.	PM 76-B10.17 x I2C0-scFc	双特异性分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYASVYWDVPSR FSGSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFSGGK LTVL
1904.	PM 76-B10.17 x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLS ASVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYASVYWDVPSR FSGSASGDTFTLTISVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTTLTVSSGGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFSGGK LTVLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTV KSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGG GGGGSGGGSGGGSDKTHCPPCPAPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRC VSLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGS FFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK
1905.	PM 76-B10.17 x I2C0-scFc_del	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYYTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFP LLRHGAMDYWGQGTTLTVSSGGGGSGGGSGGGSDIQMTQSPSSLS

[0844]

	GK		ASVGDRTVTICKASQNV DANVAWYQQKPGQAPKSLIYSASYVYWDVPSR FSGSASGTDFTLTISVVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYWGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQ EPLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKL APGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTK LTVLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSG GGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVS VLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1906.	PM 76-B10.17 x I2C0 CC (103/43)-scFc	双特异性 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTVTICKASQNV DANVAWYQQKPGQAPKSLIYSASYVYWDVPSR FSGSASGTDFTLTISVVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYCGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQCPRLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VL
1907. 30.	PM 76-B10.17 x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTVTICKASQNV DANVAWYQQKPGQAPKSLIYSASYVYWDVPSR FSGSASGTDFTLTISVVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYCGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQCPRLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSG GGGGSGGGGSGGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1908. 31.	PM 76-B10.17 x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKGLEWV AIISDAGYITYYSIIKGRFTISRDNKNSLYLQMNSLKAEDAVYYCARGFP LLRHGAMDYWGQGLTVTVSSGGGGSGGGGSGGGGSDIQTQSPSSLS ASVGDRTVTICKASQNV DANVAWYQQKPGQAPKSLIYSASYVYWDVPSR FSGSASGTDFTLTISVVQSEDFATYYCQQYDQQLITFGGGTKLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGNSYISYWAYCGQGLTVTVSSGGGGSGGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQCPRLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD

[0845]

			VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGSDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1909. 32.	PM 76-B10.17 CC x I2C0-scFc	VH CDR1	DYYMY
1910. 33.	PM 76-B10.17 CC x I2C0-scFc	VH CDR2	IISDAGYTTYSDIIGK
1911.	PM 76-B10.17 CC x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1912.	PM 76-B10.17 CC x I2C0-scFc	VL CDR1	KASQNV DANVA
1913.	PM 76-B10.17 CC x I2C0-scFc	VL CDR2	SASYVYW
1914.	PM 76-B10.17 CC x I2C0-scFc	VL CDR3	QQYDQQLIT
1915.	PM 76-B10.17 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYTTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1916.	PM 76-B10.17 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIY SASYVYWDVPSRFSGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGC GTKLEIK
1917.	PM 76-B10.17 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYTTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGGGDIQMTQSPSSLSA SVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYASASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIK
1918.	PM 76-B10.17 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYTTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGGGDIQMTQSPSSLSA SVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYASASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGGGGGGGGGGGGGGQT VVTQE PSLTVSPGGTVTLTSGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL
1919.	PM 76-B10.17 CC x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSYYMYWVRQAPGKCLEWVA IISDAGYTTYSDIIGKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGGGGGGGGGGGGGGGDIQMTQSPSSLSA SVGDRTITCKASQNV DANVAWYQQKPGQAPKSLIYASASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGGGGGGGGGGGGGGQT VVTQE PSLTVSPGGTVTLTSGSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGSDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRT

[0846]

			PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1920.	PM 76-B10.17 CC x I2C0-scFc_del GK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGSDIQTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYASVYVWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGGGGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1921.	PM 76-B10.17 CC x I2C0 CC (103/43)-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGSDIQTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYASVYVWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV L
1922.	PM 76-B10.17 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGSDIQTQSPSSLSA SVGDRVTITCKASQNVNDANVAWYQQKPGQAPKSLIYASVYVWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLAP GTPARFSGSLGGKAALTLGSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGGGGGGGSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1923.	PM 76-B10.17 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSAASGFTFSDDYMYWVRQAPGKCLEWVA IISDAGYYTYSDIIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGSDIQTQSPSSLSA

[0847]

			SVGDRVTITCKASQNV DANVAWYQQKPGQAPKSLIYSASYVYWDVPSRF SGSASGTDFTLTISVQSEDFATYYCQQYDQQLITFGCGTKLEIKSGGGGSE VQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWVA RIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCVR HGNFNGSYISYWAYCGQGT LVTVSSGGGGSGGGGSGGGGSGT VVTQEP SLTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTKFLAP GTPARFSGSLLGGKAALTL SGVQPEDEAEYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGSGGGGSGGGG SGGGGGSGGGGSDKTHTCPPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1924.	PM 76-B10 x I2C0-scFc	VH CDR1	DYYMY
1925.	PM 76-B10 x I2C0-scFc	VH CDR2	IISDGGYYTYSDIHK
1926.	PM 76-B10 x I2C0-scFc	VH CDR3	GFPLLRHGAMDY
1927.	PM 76-B10 x I2C0-scFc	VL CDR1	KASQNVDTNVA
1928.	PM 76-B10 x I2C0-scFc	VL CDR2	SASYRS
1929.	PM 76-B10 x I2C0-scFc	VL CDR3	QQYDSYPYT
1930.	PM 76-B10 x I2C0-scFc	VH	QVQLVESGGGLVKPGESLR LSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIHKGRFTISRDN AKNSLYLQMNSLKAEDAVYYCARGF PLLRHGAMDYWGQGT LVTVSS
1931.	PM 76-B10 x I2C0-scFc	VL	DIQMTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRYSVDPSPRFSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1932.	PM 76-B10 x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLR LSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIHKGRFTISRDN AKNSLYLQMNSLKAEDAVYYCARGF PLLRHGAMDYWGQGT LVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIK
1933.	PM 76-B10 x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLR LSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIHKGRFTISRDN AKNSLYLQMNSLKAEDAVYYCARGF PLLRHGAMDYWGQGT LVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGSYISYWAYWGQGT LVTVSSGGGGSGGGGSGGGGSGT VVTQ EPSTVSPGGTVTLTCSGSTGAVTSGNYPNWWVQQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTL SGVQPEDEAEYCVLWYSNRWVFGGGTK LTVL
1934.	PM 76-B10 x I2C0-scFc	双特异性 HLE 分子	QVQLVESGGGLVKPGESLR LSCAASGFTSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIHKGRFTISRDN AKNSLYLQMNSLKAEDAVYYCARGF PLLRHGAMDYWGQGT LVTVSSGGGGSGGGGSGGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRYSVDPSPR FSGSASGTDFTLTISVQSEDFATYYCQQYDSYPYTFGGGT KLEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDAVYYCV RHGNFNGSYISYWAYWGQGT LVTVSSGGGGSGGGGSGGGGSGT VVTQ

[0848]

			<p>EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGGSGGGG SGGGSGGGSGGGSGGGSDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRC VSVLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP SREEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1935.	PM 76-B10 x I2C0-scFc_del GK	双特异性 HLE 分子	<p>QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYWGQGTLLTVSSGGGGSGGGSGGGSGGGSGTQVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQAPRGLIGGTKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQD WLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ VSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVD KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGSGGGSGGGSGGGG GGGGSGGGSGGGSGGGSDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISR TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVS VLTVLHQDWLNKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR EEMTKNQVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFF LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
1936.	PM 76-B10 x I2C0 CC (103/43)-scFc	双特异性 分子	<p>QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQCPRLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VL</p>
1937.	PM 76-B10 x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	<p>QQQLVESGGGLVKPGESLRSLCAASGFTFSDYYMYWVRQAPGKGLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRRHGAMDYWGQGTLLTVSSGGGGSGGGSGGGSGGGSDIQMTQSPSSL SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGS EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFNGSYISYWAYCGQGTLLTVSSGGGGSGGGSGGGSGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWWVQKPGQCPRLIGGTKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGGGGSG GGGGSGGGSGGGSGGGSDKHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT</p>

[0849]

			PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSV LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFL YSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1938.	PM 76-B10 x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWV AIISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRLHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSL SASVGRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGKLEIKSGGGG EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNGFNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLTVLHQDWL NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSKLTVDKSR WQQGNVFCFSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGGGSGGGGDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGSTYRCVSVLT VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLY SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
1939.	PM 76-B10 CC x I2C0-scFc	VH CDR1	DYYMY
1940.	PM 76-B10 CC x I2C0-scFc	VH CDR2	IISDGGYYTYYSIIKG
1941.	PM 76-B10 CC x I2C0-scFc	VH CDR3	GFPLLRLHGAMDY
1942.	PM 76-B10 CC x I2C0-scFc	VL CDR1	KASQNVDTNVA
1943.	PM 76-B10 CC x I2C0-scFc	VL CDR2	SASYRYS
1944.	PM 76-B10 CC x I2C0-scFc	VL CDR3	QQYDSYPYT
1945.	PM 76-B10 CC x I2C0-scFc	VH	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSS
1946.	PM 76-B10 CC x I2C0-scFc	VL	DIQMTQSPSSLSASVGRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGT KLEIK
1947.	PM 76-B10 CC x I2C0-scFc	scFv	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIK
1948.	PM 76-B10 CC x I2C0-scFc	双特异性分 子	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGSGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKCLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNGFNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGSGGGSTVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VL
1949.	PM 76-B10 CC	双特异性	QVQLVESGGGLVKPGESLRLSCAASGFTFSDYYMYWVRQAPGKCLEWVA

[0850]

	x I2C0-scFc	HLE 分子	IISDGGYYTYYSDIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1950.	PM 76-B10 CC x I2C0-scFc_del GK	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSDIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQE PSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLA PGTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLT VLGGGDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLTVLHQQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGSGGGG GGGGSGGGSGGGSDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSLT VLHQQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1951. 74.	PM 76-B10 CC x I2C0 CC (103/43)-scFc	双特异性 分子	QQQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSDIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYCVLWYSNRWVFGGGTKLTV L
1952. 75.	PM 76-B10 CC x I2C0 CC (103/43)-scFc	双特异性 HLE 分子	QQQLVESGGGLVKPGESLRLSAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYYSDIKGRFTISRDNAKNSLYLQMNLSKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGCGTKLEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWVRQAPGKGLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGSGGGGSGTQVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQKPGQAPRGLIGGTFKFLAP

[0851]

			GTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGGGGGSGGGGGSG GGGGSGGGGGSGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRT PEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSV LTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE EMTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1953. 76.	PM 76-B10 CC x I2C0 CC (103/43)-scFc_ delGK	双特异性 HLE 分子	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKCLEWVA IISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGFPL LRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQTQSPSSLSA SVGDRVTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSRFS GSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGSEV QLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWVAR IRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCVR HGNFGNSYISYWAYCGQGLTVTVSSGGGGSGGGGGSGGGGQTVVTQEP SLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQCPRLIGGTFKFLAP GTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTKLTV LGGGGDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLTVLHQDWL NGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL TCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR WQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGGGSGGGGGSGGGG SGGGGGSGGGGSDKHTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPE VTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPCEEQYGYSTYRCVSVLT VLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE MTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
1954.	PM76B10-HC DR1	人工的	DYYMY
1955.	PM76B10-HC DR2	人工的	IISDGGYYTYSDIIKG
1956.	PM76B10-HC DR3	人工的	GFPLLRHGAMDY
1957.	PM76B10-VH	人工的	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSS
1958.	PM76B10-LCD R1	人工的	KASQNVDTNVA
1959.	PM76B10-LCD R2	人工的	SASYRYS
1960.	PM76B10-LCD R3	人工的	QQYDSYPYT
1961.	PM76B10-VL	人工的	DIQTQSPSSLSASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYS ASYRSDVPSRFSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGT KLEIK
1962.	PM76B10-VH- VL	人工的	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQTQSPSSLSA SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIK
1963.	PM76B10 VH VL x I2C 双特 异性抗体构建 体	人工的	QVQLVESGGGLVKPGESLRSCAASGFTFSDYYMYWVRQAPGKLEWV AIISDGGYYTYSDIIKGRFTISRDNAKNSLYLQMNSLKAEDTAVYYCARGF PLLRHGAMDYWGQGLTVTVSSGGGGSGGGGGSGGGGSDIQTQSPSSLSA SASVGDRTITCKASQNVDTNVAWYQQKPGQAPKSLIYSASYRSDVPSR FSGSASGTDFTLTISVQSEDFATYYCQYDSYPYTFGGGTKEIKSGGGGS

[0852]

			EVQLVESGGGLVQPGGSLKLSAASGFTFNKYAMNWRQAPGKLEWV ARIRSKYNNYATYYADSVKDRFTISRDDSKNTAYLQMNNLKTEDTAVYYCV RHGNFGNSYISYWAYWGQGLTVTVSSGGGGSGGGGGSGGGGQTVVTQ EPSLTVSPGGTVTLTCSSTGAVTSGNYPNWVQQKPGQAPRLIGGTFKFL APGTPARFSGSLLGGKAALTLSGVQPEDEAEYYCVLWYSNRWVFGGGTK LTVL
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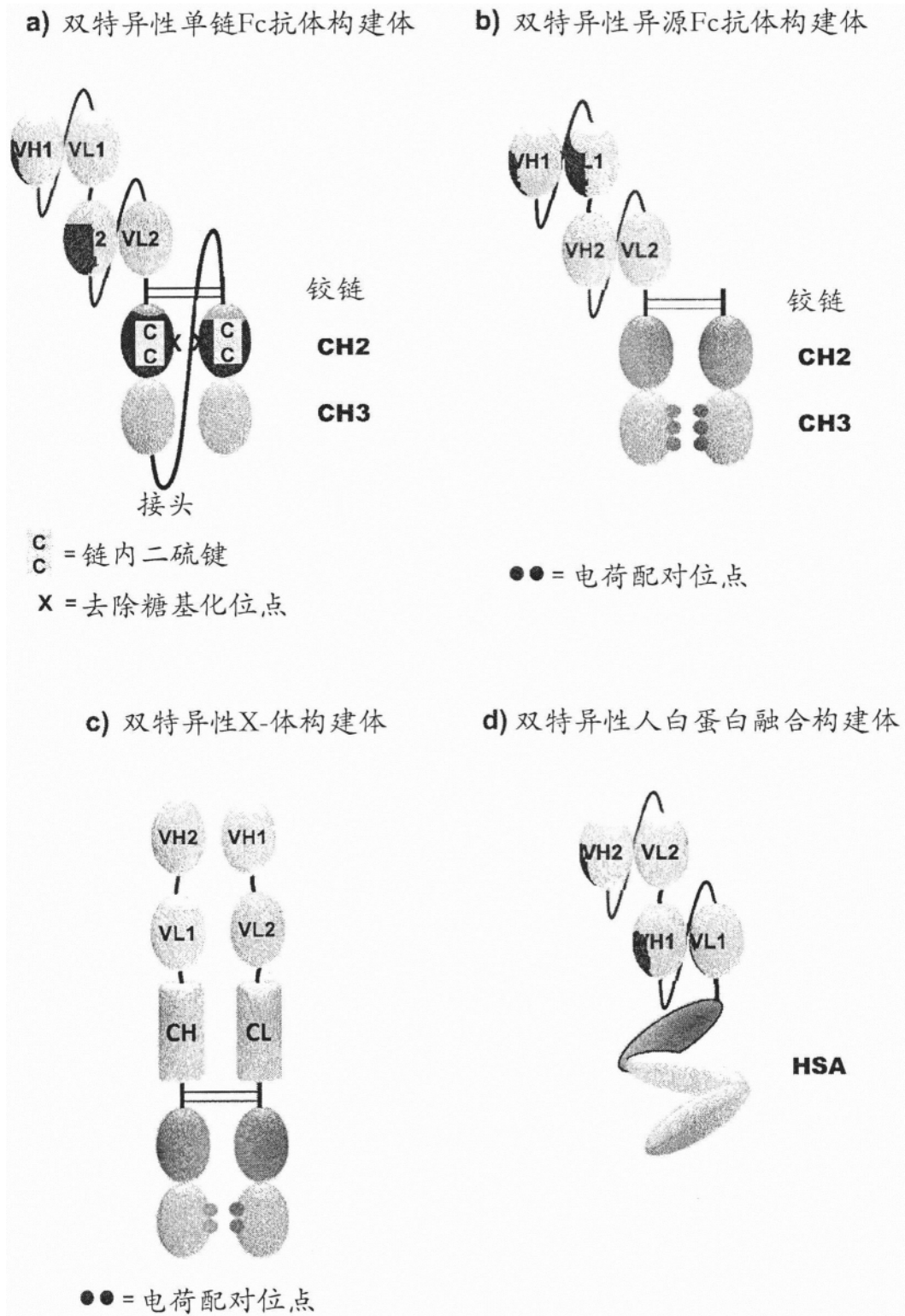


图1

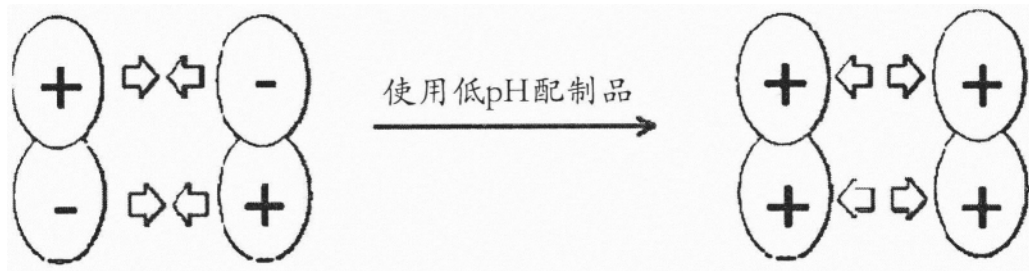


图2

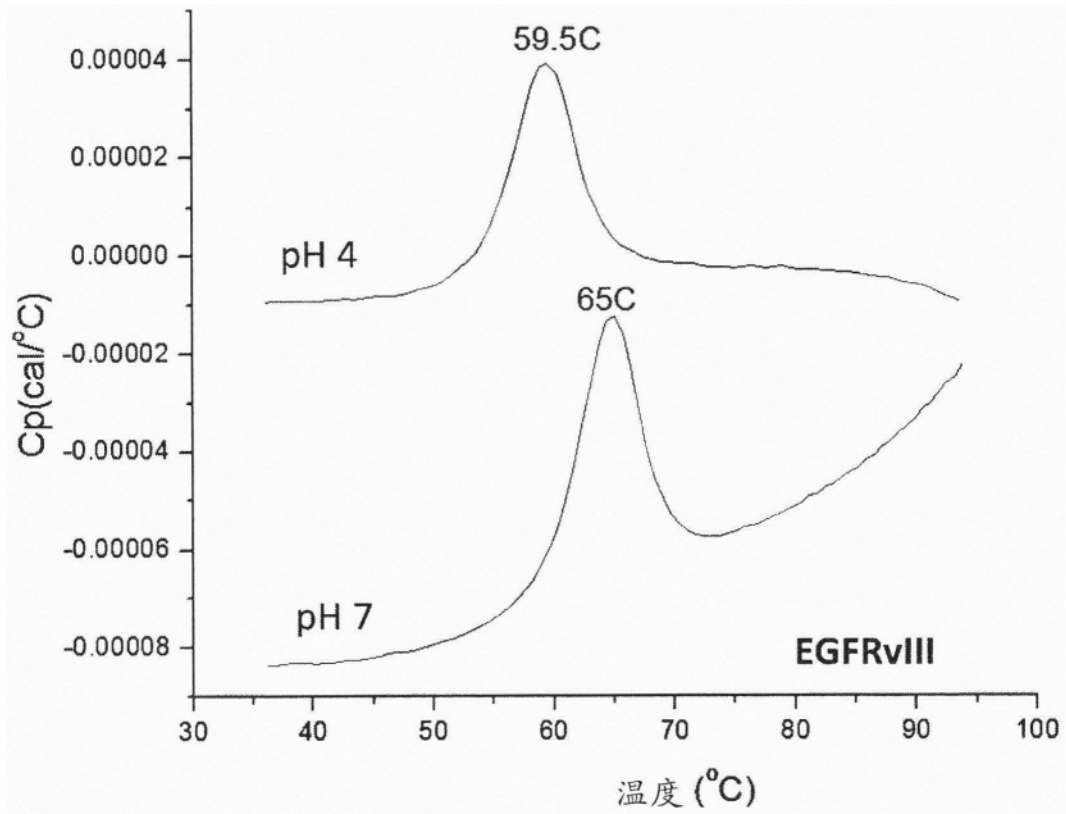


图3

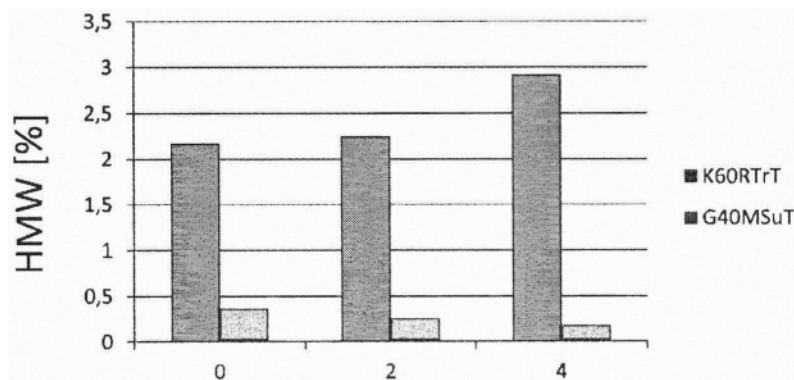


图4(a)

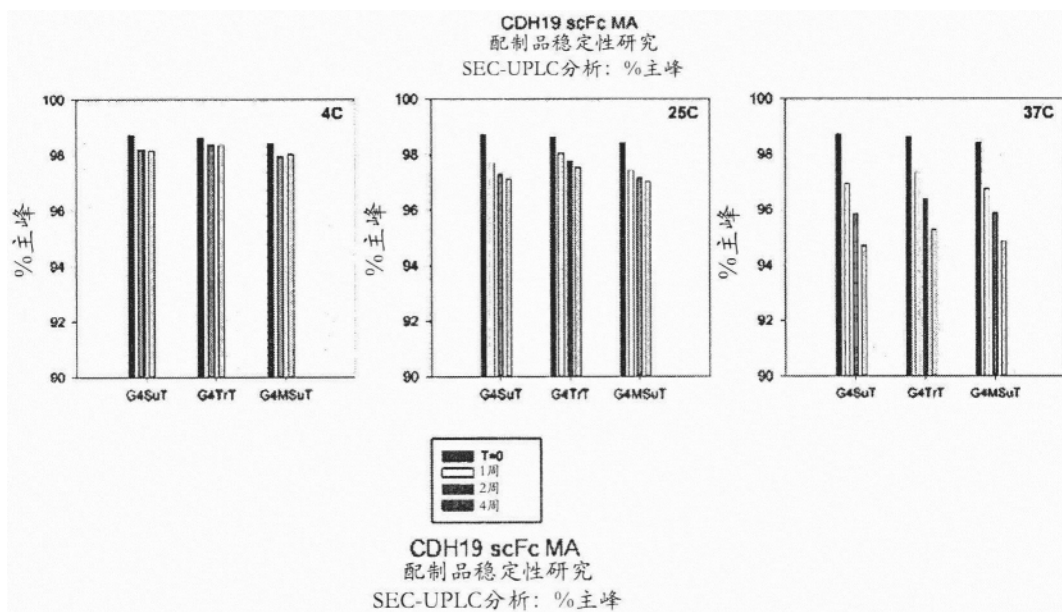


图4(b)

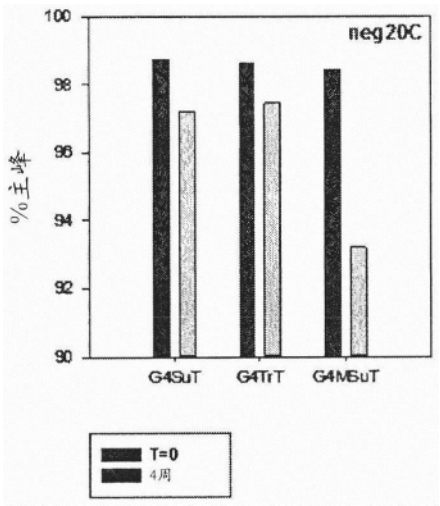


图4(c)

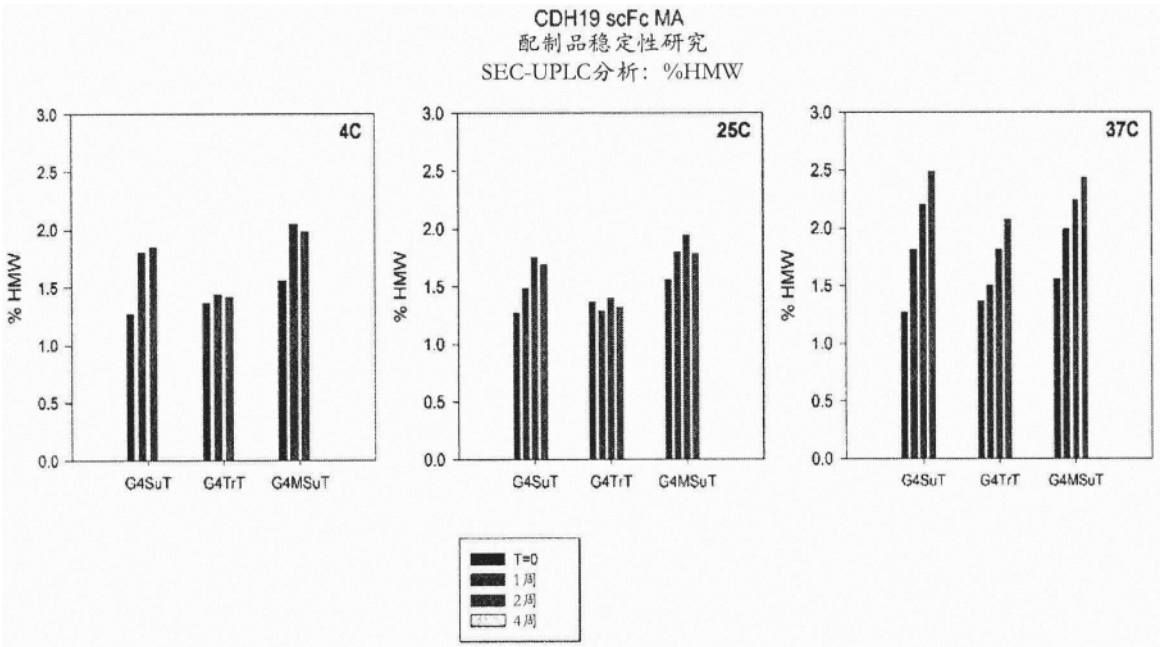


图4(d)

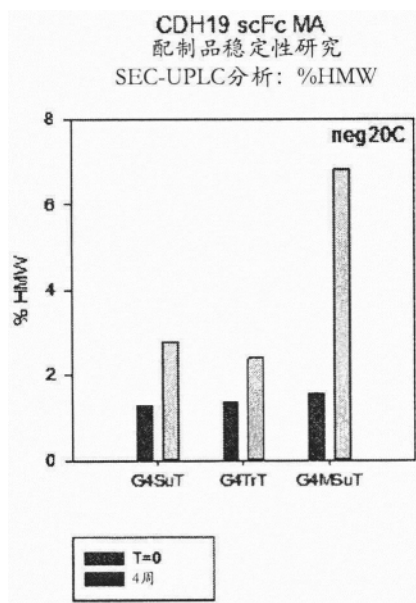


图4(e)

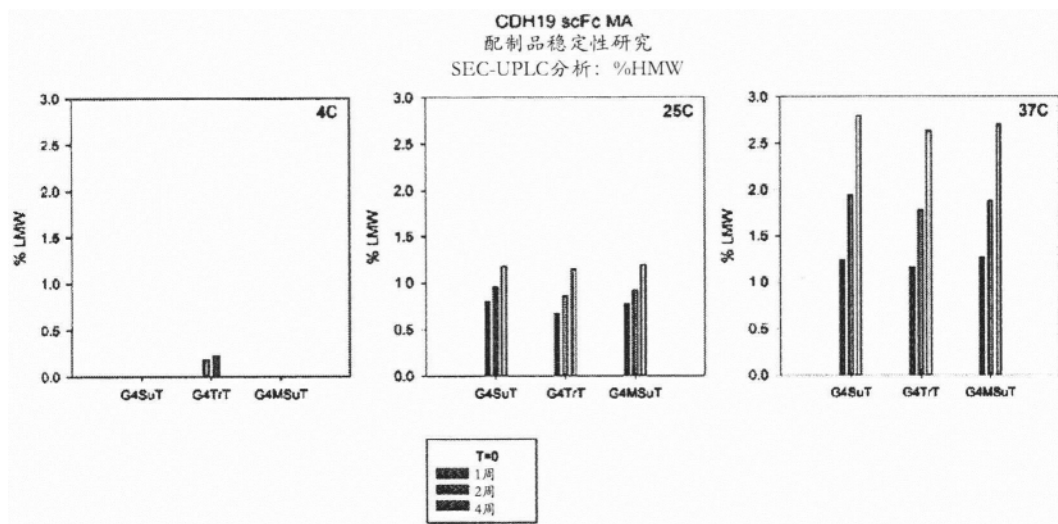


图4(f)

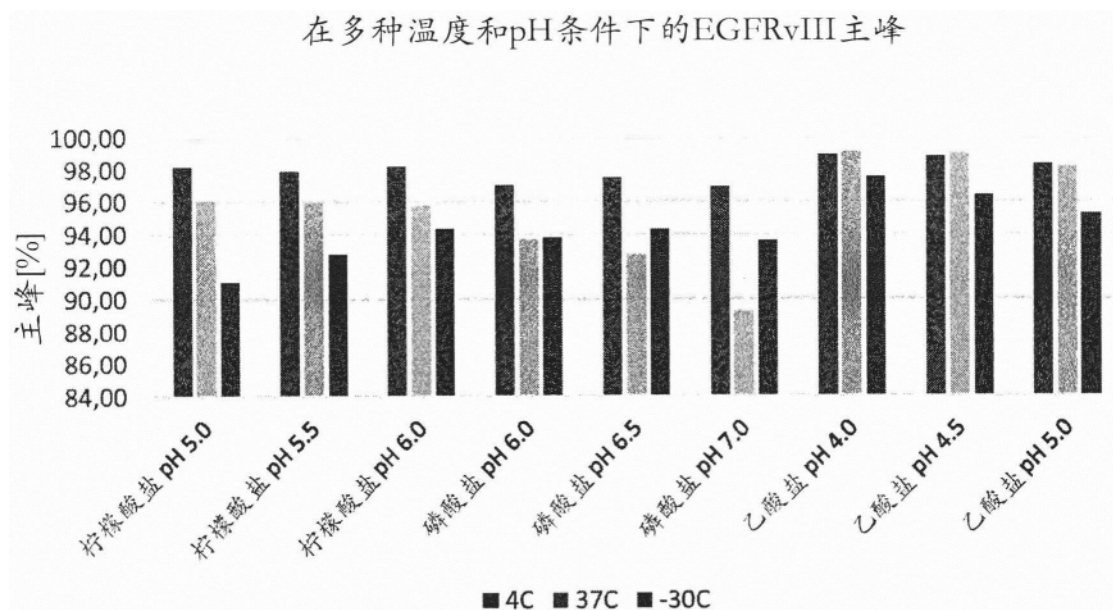


图5

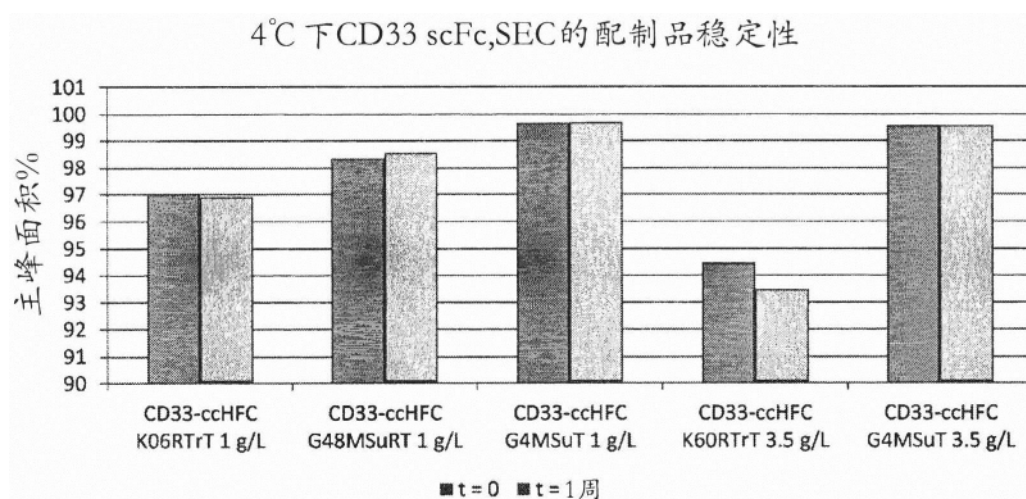


图6(a)

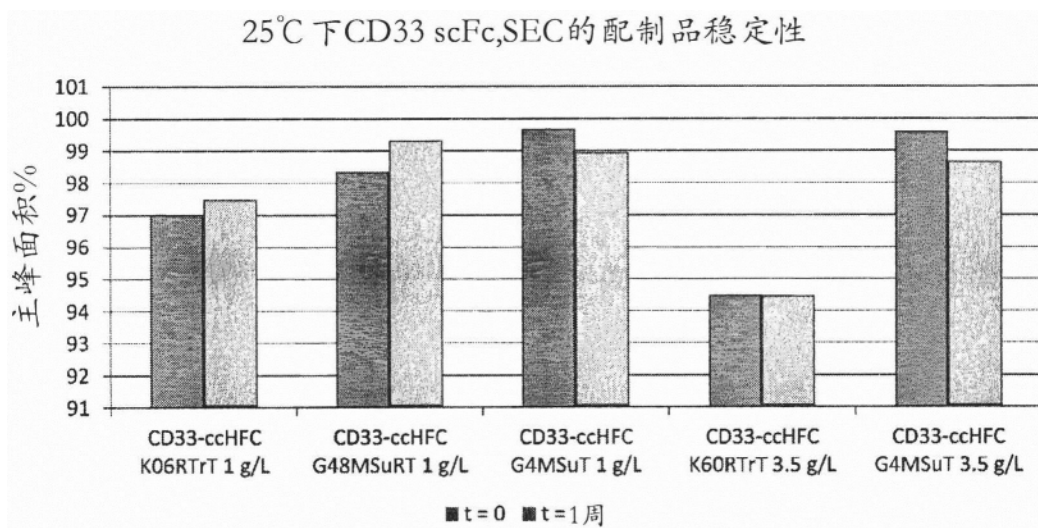


图6(b)

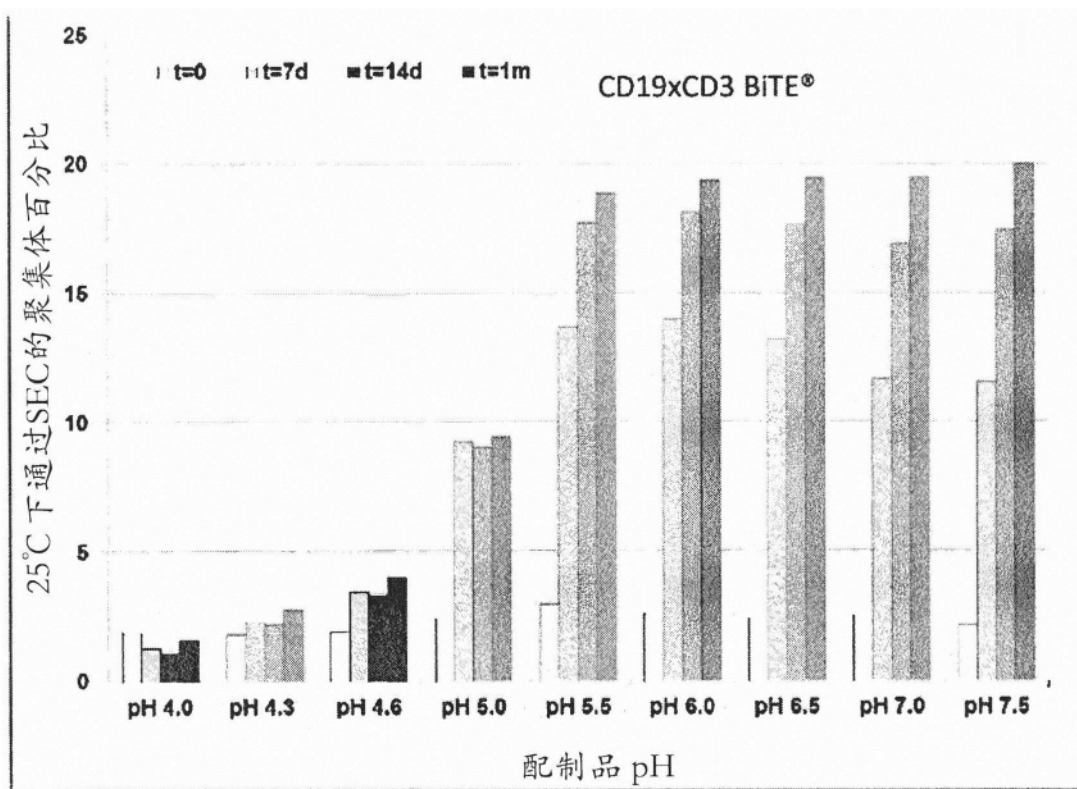


图7

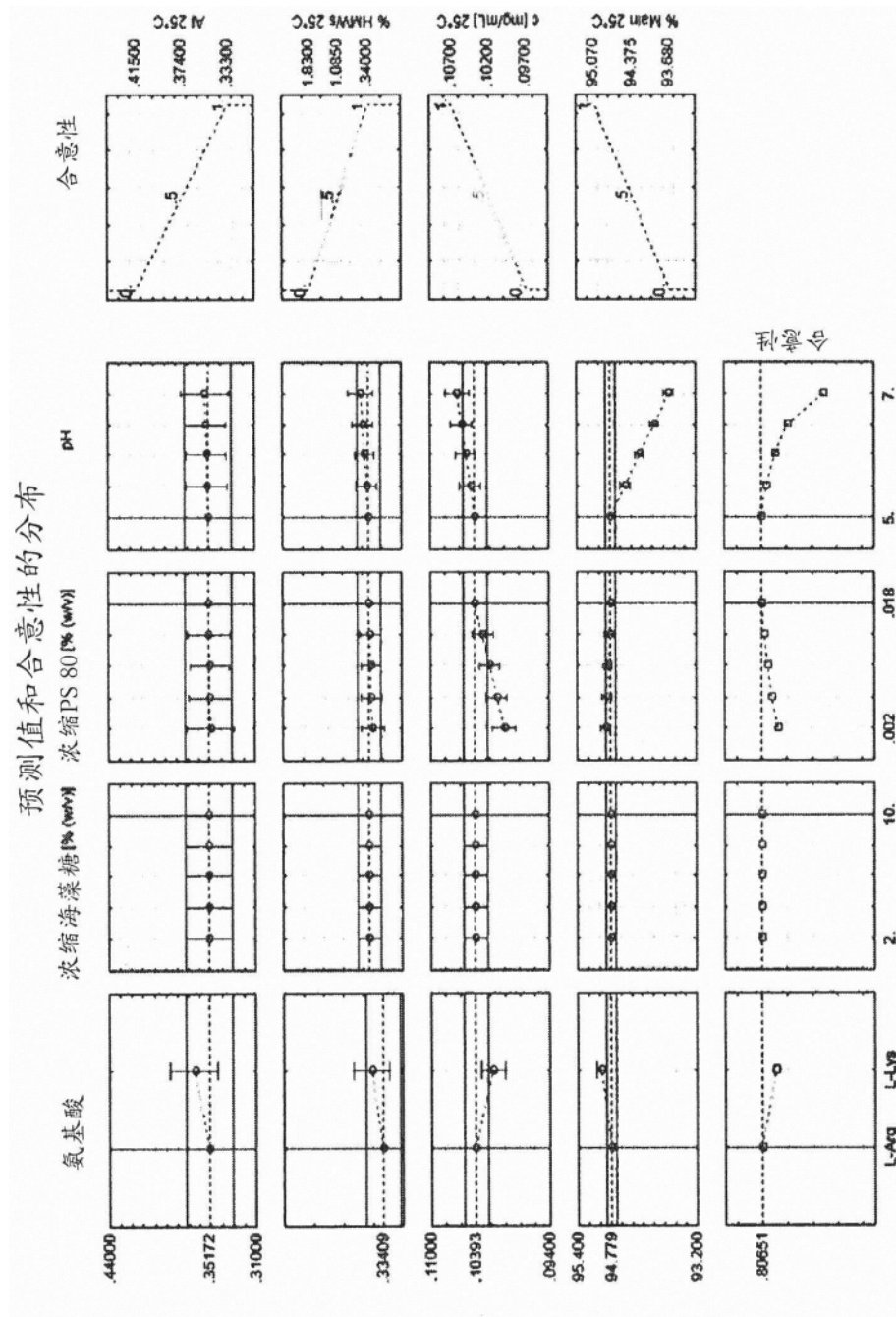


图8

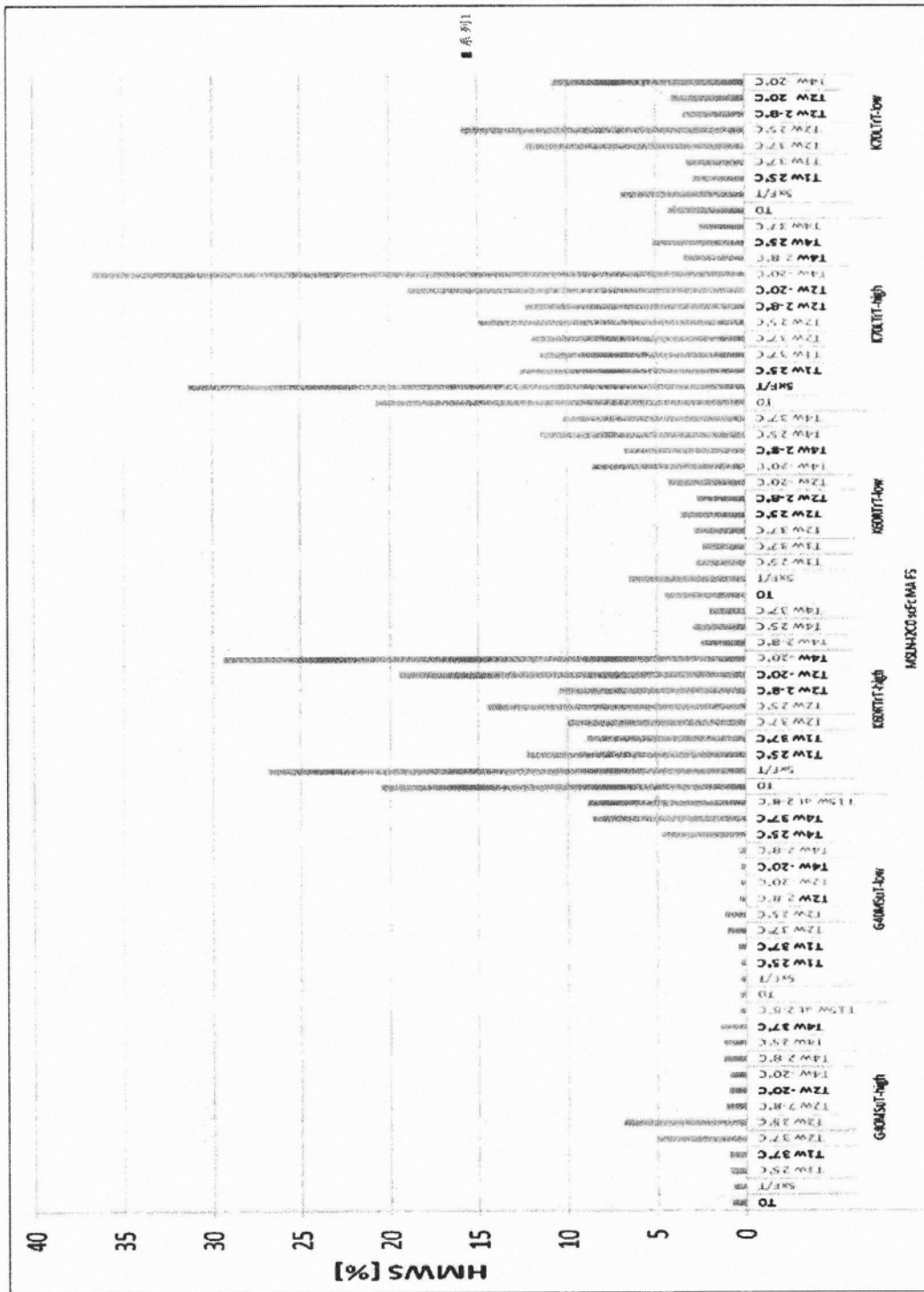


图9

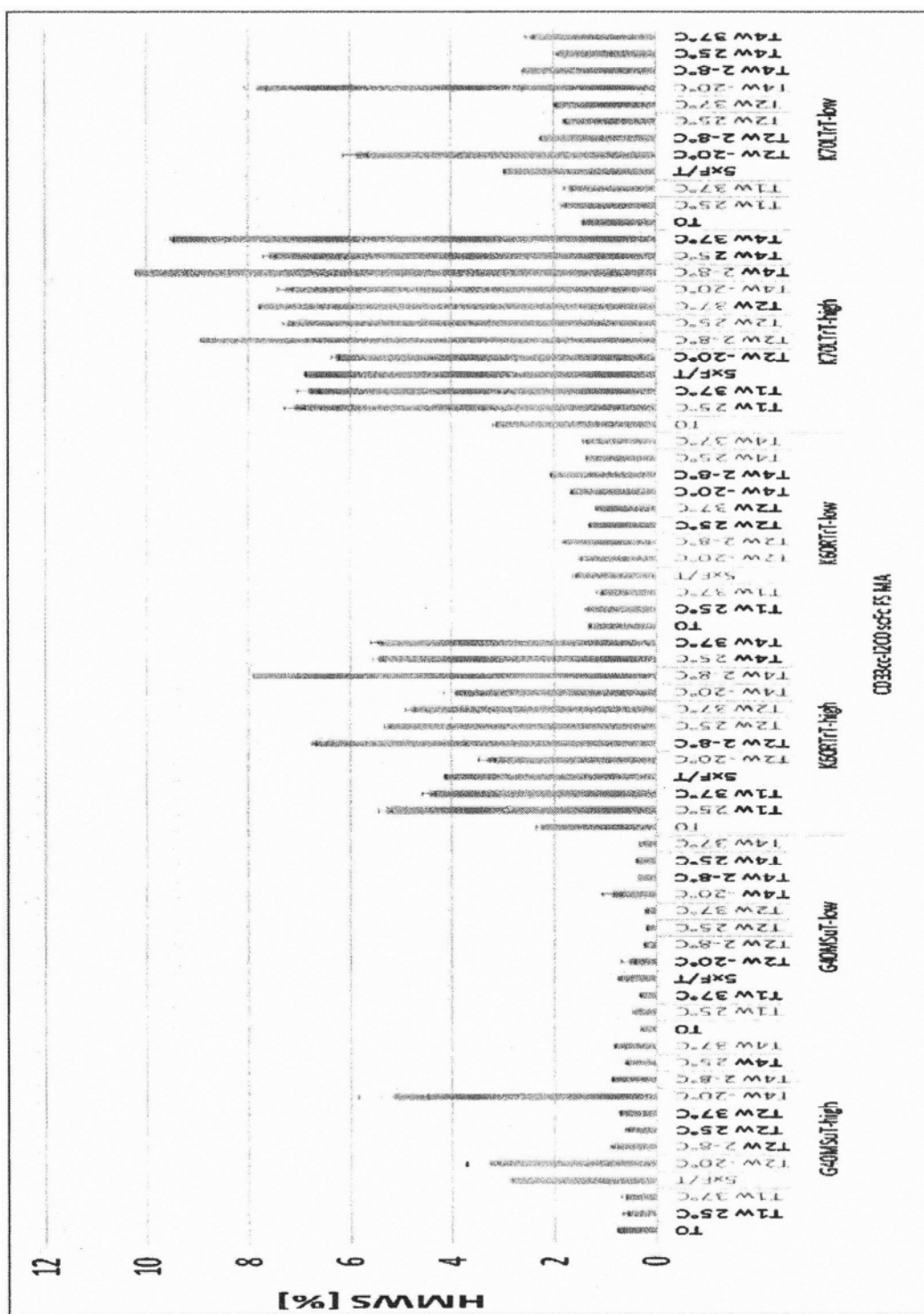


图10