

WHAT IS CLAIMED IS:

1. Use of at least one flat dose of allogeneic chimeric antigen receptor (CAR)-T cells comprising an anti-human BCMA CAR (BCMA CAR-T cells) in the manufacture of a medicament for treating multiple myeloma in a subject, wherein the at least one flat dose is
5 120-360 x 10⁶ cells/dose.
2. The use of claim 1, wherein the multiple myeloma is refractory multiple myeloma.
3. The use of any one of claims 1 to 2, wherein the multiple myeloma is relapsed multiple myeloma.
4. The use of claim 1, wherein the multiple myeloma is refractory and relapsed multiple
10 myeloma.
5. The use of claim 1, wherein the subject is one that has not received any prior therapy for multiple myeloma.
6. The use of claim 1, wherein the subject is one that has received at least one, two, or three prior therapies for multiple myeloma.
- 15 7. The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising an extracellular binding domain comprising a single chain Fv fragment (scFv), wherein the scFv comprises a heavy chain variable (VH) region and a light chain variable (VL) region, wherein the VH region comprises a VH complementary determining region 1 (VH CDR1), a VH complementary determining region 2 (VH CDR2), and a VH
20 complementary determining region 3 (VH CDR3) and the VL region comprises a VL complementary determining region 1 (VL CDR1), a VL complementary determining region 2 (VL CDR2), and a VL complementary determining region 3 (VL CDR3), wherein:

(a) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 150, 151, or 152; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 153 or 154; the VH CDR3
25 comprises the amino acid sequence of SEQ ID NO: 155; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 209; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 221; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 222;

(b) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 150, 151, or 152; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 187 or 188; the VH CDR3
30 comprises the amino acid sequence of SEQ ID NO: 155; the VL CDR1 comprises the amino

acid sequence of SEQ ID NO: 249; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 221; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 225;

(c) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 150, 151, or 152; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 165 or 166; the VH CDR3
5 comprises the amino acid sequence of SEQ ID NO: 155; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 226; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 221; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 227;

(d) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 151, 156, or 157; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 159 or 162; the VH CDR3
10 comprises the amino acid sequence of SEQ ID NO: 161; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 251; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 252; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 253;

(e) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 151, 156, or 157; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 190 or 191; the VH CDR3
15 comprises the amino acid sequence of SEQ ID NO: 161; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 262; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 252; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 263;

(f) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 150, 151, or 152; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 154 or 169; the VH CDR3
20 comprises the amino acid sequence of SEQ ID NO: 155; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 271; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 221; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 272;

(g) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 129, 130, or 131; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 139 or 140; the VH CDR3
25 comprises the amino acid sequence of SEQ ID NO: 134; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 217; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 210; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 216;

(h) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 151, 156, or 157; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 158 or 159; the VH CDR3
30 comprises the amino acid sequence of SEQ ID NO: 155; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 209; the VL CDR2 comprises the amino acid sequence of SEQ

ID NO: 221; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 225; or

(i) the VH CDR1 comprises the amino acid sequence of SEQ ID NO: 129, 130, or 131; the VH CDR2 comprises the amino acid sequence of SEQ ID NO: 132 or 133; the VH CDR3 comprises the amino acid sequence of SEQ ID NO: 137; the VL CDR1 comprises the amino acid sequence of SEQ ID NO: 377; the VL CDR2 comprises the amino acid sequence of SEQ ID NO: 210; and the VL CDR3 comprises the amino acid sequence of SEQ ID NO: 214.

8. The use of claim 7, wherein the VH region comprises a VH CDR1 comprising the amino acid sequence of SEQ ID NO: 150, 151, or 152; a VH CDR2 comprising the amino acid sequence of SEQ ID NO: 153 or 154; and a VH CDR3 comprising the amino acid sequence of SEQ ID NO: 155; and the VL region comprises a VL CDR1 comprising the amino acid sequence of SEQ ID NO: 209; a VL CDR2 comprising the amino acid sequence of SEQ ID NO: 221; and a VL CDR3 comprising the amino acid sequence of SEQ ID NO: 222.

9. The use of claim 7, wherein the VH region comprises a VH CDR1 comprising the amino acid sequence of SEQ ID NO: 151, 156, or 157; a VH CDR2 comprising the amino acid sequence of SEQ ID NO: 158 or 159; and a VH CDR3 comprising the amino acid sequence of SEQ ID NO: 155; and the VL region comprises a VL CDR1 comprising the amino acid sequence of SEQ ID NO: 209; a VL CDR2 comprising the amino acid sequence of SEQ ID NO: 221; and a VL CDR3 comprising the amino acid sequence of SEQ ID NO: 225.

10. The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising an extracellular binding domain comprising a single chain Fv fragment (scFv), wherein the scFv comprises a VH region and a VL region, wherein the combination of VH and VL regions are chosen from the combinations:

Light Chain		Heavy Chain
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI	and	EVQLLESGGGLVQPGGSLRLSCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARVSPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);

Light Chain		Heavy Chain
PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYGSP PSFT FGQGTKVE IK (SEQ ID NO: 1)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYGSP PSFT FGQGTKVE IK (SEQ ID NO: 1)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTL SLSPGERATLSC RASQSLGSFY LAWYQQKPGQAP RLLIYGASSRAT GIPDRFSGSGSG TDFTLTISRLEPE DFAVYYC KHY GWPPSFT FGQ GTKVEIK (SEQ ID NO: 4)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTL SLSPGERATLSCRA SQSLGSFY LAW	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY

Light Chain		Heavy Chain
YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFT FGQGTKV EIK (SEQ ID NO: 5)		WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVGDF YLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFT FGQGTKV EIK (SEQ ID NO: 6)	and	EVQLLESGGGLVQPGGSLRLSCAAS GF TFGS YAMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSLGSF YLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC KH YGW PPSFT FGQGTKV EIK (SEQ ID NO:	and	EVQLLESGGGLVQPGGSLRLSCAAS GF TFGS YAMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARARV SPIAALM DY WGQGTLVTVSS (SEQ ID NO: 7);

Light Chain		Heavy Chain
4)		
EIVLTQSPGTLSL SPGERATLSCRA SQSLGSFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK HYGW PPSFTFG QGTKV EIK (SEQ ID NO: 4)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);
EIVLTQSPGTLSL SPGERATLSCRA SQSLGSFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK HYGW PPSFTFG QGTKV EIK (SEQ ID NO: 4)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSL SPGERATLSCRA SQSLGSFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ iD NO: 9)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSLGSFYLA WYQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 9)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSSL SPGERATLSCRA SQSLGSFYLA WYQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYN PPSFTFGQGTKV EIK (SEQ ID NO: 10)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAALMDY WGQGTLVTVSS (SEQ ID NO: 412);
EIVLTQSPGTLSSL SPGERATLSCRA SQSLGSFYLA WYQQKPGQAPRL	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);

Light Chain		Heavy Chain
LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFTFGQGTKV EIK (SEQ ID NO: 10)		
EIVLTQSPGTL SLSPGERATLSCRA SQSLGSFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFTFGQGTKV EIK (SEQ ID NO: 10)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTL SLSPGERATLSCRA SQSVGDFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC KHYGW PPSFTFGQGTKV EIK (SEQ ID NO: 11)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAALMDY WGQGTLVTVSS (SEQ ID NO: 7);

Light Chain		Heavy Chain
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC KHYGW PPSFTFGQ GTKV EIK (SEQ ID NO: 11)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC KHYGW PPSFTFGQ GTKV EIK (SEQ ID NO: 11)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFY LAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);

Light Chain		Heavy Chain
AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 12)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYN PPSFTFGQGTKV EIK (SEQ ID NO: 13)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAALMDY WGQGTLVTVSS (SEQ ID NO: 7);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYN PPSFTFGQGTKV EIK (SEQ ID NO: 13)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVGDFYLAW	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY

Light Chain		Heavy Chain
YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFT FGQGTKV EIK (SEQ ID NO: 14)		WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC KHYGW PPSFT FGQGTKV EIK (SEQ ID NO: 15)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFT FGQGTKVE IK (SEQ ID NO:	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);

Light Chain		Heavy Chain
16)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QH YNY PPSFT FGQGTKV EIK (SEQ ID NO: 17)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFG SYAMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFT FGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFG SYAMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFG SYAMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);

Light Chain		Heavy Chain
AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY

Light Chain		Heavy Chain
YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPPY PSFTFGQGTKVE IK (SEQ ID NO: 22)		WGQGTLLTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKFYPPY PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GF TFGSYAMTW VRQAPGKGLEWVSAIS GS GGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLLTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYP PPY PSFTFGQGTKVE IK (SEQ ID NO:	and	EVQLLESGGGLVQPGGSLRLSCAAS GF TFGSYAMTW VRQAPGKGLEWVSAIS GS GGNTFYADQQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD Y WGQGTLLTVSS (SEQ ID NO: 24);

Light Chain		Heavy Chain
16)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI DYSGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWQG GTLLVTVSS (SEQ ID NO: 25);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAISI YQGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWQG GTLLVTVSS (SEQ ID NO: 26);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS LTGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQ GTLLVTVSS (SEQ ID NO: 27);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SHAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWQG GTTLVTVSS (SEQ ID NO: 28);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADQLKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQ GTTLVTVSS (SEQ ID NO: 29);
EIVLTQSPGTLSSL SPGERATLSCRA	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR

Light Chain		Heavy Chain
SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)		NSKNTLYLQMNSLRAEDTAVYYCARV SPIYAGMDY WGQGTLVTVSS (SEQ ID NO: 30);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAEMDY WGQGTLVTVSS (SEQ ID NO: 31);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO:	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);

Light Chain		Heavy Chain
16)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCTRV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 16)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 2);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADQQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD Y WGQGTLVTVSS (SEQ ID NO: 24);

Light Chain		Heavy Chain
LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI DYSGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLLTVSS (SEQ ID NO: 25);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS YQGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLLTVSS (SEQ ID NO: 26);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS LTGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLLTVSS (SEQ ID NO: 27);

Light Chain		Heavy Chain
RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SHAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWQGTL VTVSS (SEQ ID NO: 28);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFY ADQLKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQTL VTVSS (SEQ ID NO: 29);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIYAGMDY WGQTL VTVSS (SEQ ID NO: 30);

Light Chain		Heavy Chain
YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYCQHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYCQHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAEMDY WGQGTLLTVSS (SEQ ID NO: 31);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYCQHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLLTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYPSWY	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCTRV SPIAAQMDY

Light Chain		Heavy Chain
QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYPYP SFTFGQGTKVEI K (SEQ ID NO: 18)		WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFYADQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLVTVSS (SEQ ID NO: 24);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAID YSGGNTFYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLVTVSS (SEQ ID NO: 25);

Light Chain		Heavy Chain
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS YQGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGT LVTVSS (SEQ ID NO: 26);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS LTGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGT LVTVSS (SEQ ID NO: 27);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS HAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGT LVTVSS (SEQ ID NO: 28);

Light Chain		Heavy Chain
AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADQLKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLVTVSS (SEQ ID NO: 29);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIYAGMDY WGQGTLVTVSS (SEQ ID NO: 30);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSAHYLAW	and	EVQLLES GGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAEMDY

Light Chain		Heavy Chain
YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)		WGQGTLVTVSS (SEQ ID NO: 31);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 19)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCAR VSPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO:	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCTRV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);

Light Chain		Heavy Chain
19)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFYADQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMD YWGQGT LVTVSS (SEQ ID NO: 24);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIDYSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMDY WGQGT LVTVSS (SEQ ID NO: 25);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS YQGGNTFYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMD YWGQGT LVTVSS (SEQ ID NO: 26);

Light Chain		Heavy Chain
PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SLTGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLLTVSS (SEQ ID NO: 27);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SHAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLLTVSS (SEQ ID NO: 28);
EIVLTQSPGTLSL	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW

Light Chain		Heavy Chain
SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)		VRQAPGKGLEWVSAISGSGGNTFYADQLKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARVSPIASGMDY WGQGTLVTVSS (SEQ ID NO: 29);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARVSPIYAGMDY WGQGTLVTVSS (SEQ ID NO: 30);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYPYP PSFTFGQGTKVE	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARVSPIAAEMDY WGQGTLVTVSS (SEQ ID NO: 31);

Light Chain		Heavy Chain
IK (SEQ ID NO: 20)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSFFLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 20)	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTRV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI	and	EVQLLESGGGLVQPGGSLRLSCAAS SGFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADQQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWQGTLVTVSS (SEQ ID NO: 24);

Light Chain		Heavy Chain
PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SHAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMD YWGQGTLLTVSS (SEQ ID NO: 28);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIAAEMDY WGQGTLLTVSS (SEQ ID NO: 31);;
EIVLTQSPGTL SL	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW

Light Chain		Heavy Chain
SPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)		VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARVSPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSPHYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYPYP PSFTFGQGTKVE IK (SEQ ID NO: 21)	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCTRVSPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPYP PSFTFGQGTKVE	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADQRKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARVSPIASGMD YWGQGTLVTVSS (SEQ ID NO: 24);

Light Chain		Heavy Chain
IK (SEQ ID NO: 22)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPPY PSFTFGQGTKVE IK (SEQ ID NO: 22)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI DYSGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGT LVTVSS (SEQ ID NO: 25);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPPY PSFTFGQGTKVE IK (SEQ ID NO: 22)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS YQGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGT LVTVSS (SEQ ID NO: 26);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS LTGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGT LVTVSS (SEQ ID NO: 27);

Light Chain		Heavy Chain
PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYYPYP PSFTFGQGTKVE IK (SEQ ID NO: 22)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYYPYP PSFTFGQGTKVE IK (SEQ ID NO: 22)	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SHAGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMD YWGQGTLLTVSS (SEQ ID NO: 28);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYYPYP PSFTFGQGTKVE IK (SEQ ID NO: 22)	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADQLKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARV SPIASGMDY WGQGTLLTVSS (SEQ ID NO: 29);
EIVLTQSPGTLSSL	and	EVQLLES GGGLVQP GGSLRLSCAAS GFTFGSYAMTW

Light Chain		Heavy Chain
SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPPY PSFTFGQGTKVE IK (SEQ ID NO: 22)		VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARVSPYIYAGMDY WGQGTLVTVSS (SEQ ID NO: 30);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKYYPPY PSFTFGQGTKVE IK (SEQ ID NO: 22)	and	EVQLLES GGGLVQPGGSLRL SCAASGFTFGSYAMTW VRQAPGKGLEWVSAISGSGGNTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCTRVSPYIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKFYPPY PSFTFGQGTKVE	and	EVQLLES GGGLVQPGGSLRL SCAASGFTFGSYAMTW VRQAPGKGLEWVSAIDYSGGNTFYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARVSPYIASGMD YWGQGTLVTVSS (SEQ ID NO: 25);

Light Chain		Heavy Chain
IK (SEQ ID NO: 23)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK FYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS YQGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMD YWGQGT LVTVSS (SEQ ID NO: 26);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK FYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS LTGGNTFY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMDY WGQGT LVTVSS (SEQ ID NO: 27);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFY ADQLKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMDY

Light Chain		Heavy Chain
LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKFYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)		WGQGTLVTVSS (SEQ ID NO: 29);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKFYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIYAGMDY WGQGTLVTVSS (SEQ ID NO: 30);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCKFYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAIS GSGGNTFYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAEMDY WGQGTLVTVSS (SEQ ID NO: 31);

Light Chain		Heavy Chain
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK FYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 3);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCK FYPYP PSFTFGQGTKVE IK (SEQ ID NO: 23)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSAI SGSGGNTFY ADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCTRV SPIAAQMDY WGQGTLVTVSS (SEQ ID NO: 32);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVSAI SDSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDIWG QGTLVTVSS (SEQ ID NO: 33);

Light Chain		Heavy Chain
AVYYC QQYGS WPLTFGQGTKV EIK (SEQ ID NO: 34)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSVIYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQR WPLTFGQGTKV EIK (SEQ ID NO: 36)	and	EVQLLES GGGLVQPGGSLRLSCAASG FTFSS YAMNW VRQAPGKGLEWVSAIS DSGG SAWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWG QGTLVTVSS (SEQ ID NO: 35);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQGTKV EIK (SEQ ID NO: 38)	and	EVQLLES GGGLVQPGGSLRLSCAASG FTFSS YAMNW VRQAPGKGLEWVSAIS DSGG SMWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWG QGTLVTVSS (SEQ ID NO: 37);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSDIYLAW	and	EVQLLES GGGLVQPGGSLRLSCAASG FTFSS YAMNW VRQAPGKGLEWVSAIS dFGGSTYY ADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPM DI WGQ

Light Chain		Heavy Chain
YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYQT WPLTFGQGTKV EIK (SEQ ID NO: 40)		GTLVTVSS (SEQ ID NO: 39);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSNIYLA WYQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYQG WPLTFGQGTKV EIK (SEQ ID NO: 41)	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFSSYAMNW VRQAPGKGLEWVSAISdSGGSTYYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARYWPMDIWGQ GTLVTVSS (SEQ ID NO: 33);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSAyYLA WYQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYER WPLTFGQGTKV EIK (SEQ ID NO:	and	EVQLLES GGGLVQPGGSLRLSCAASGFTFSSYAMNW VRQAPGKGLEWVSAITaSGGSTYYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWGQ GTLVTVSS (SEQ ID NO: 42);

Light Chain		Heavy Chain
43)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSIY LAWY QQKPGQAPRL MY DASIRAT GIP DRFSGSGSGTDF TLTISRLEPEDFA VYYC QQYQVW PLTFGQ GTKVEI K (SEQ ID NO: 45)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSS YAMNW VRQAPGKGLEWVSA ISdSGGSTYYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARY WPMSLWGQ GTLVTVSS (SEQ ID NO: 44);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSY LAW YQQKPGQAPRL LMY DASIRAT GI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYLD WPLTFGQ GTKV EIK (SEQ ID NO: 47)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSS YAMNW VRQAPGKGLEWVSA ISdSGGSRWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMTPWG QGTLVTVSS (SEQ ID NO: 46);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSY LAW YQQKPGQAPRL LMY DASIRAT GI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSS YAMNW VRQAPGKGLEWVSA VLdSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMTPWG QGTLVTVSS (SEQ ID NO: 48);

Light Chain		Heavy Chain
AVYYC QQYQV WPLTFGQGTKV EIK (SEQ ID NO: 49)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSVIYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYLA WPLTFGQGTKV EIK (SEQ ID NO: 51)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIS dSGGSRWYADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSDWG QGTLVTVSS (SEQ ID NO: 50);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYFT WPLTFGQGTKV EIK (SEQ ID NO: 53)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIS dSGGSKWYADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWG QGTLVTVSS (SEQ ID NO: 52);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSPyYLAW	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIGSGGSLPY ADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMDSWG

Light Chain		Heavy Chain
YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYER WPLTFGQGTKV EIK (SEQ ID NO: 55)		QGTLVTVSS (SEQ ID NO: 54);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSVEYLA W YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYAR WPLTFGQGTKV EIK (SEQ ID NO: 57)	and	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMNW VRQAPGKGLEWVSAISdSGGSGWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWG QGTLVTVSS (SEQ ID NO: 56);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSEIYLA W YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQQYFG WPLTFGQGTKV EIK (SEQ ID NO:	and	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMNW VRQAPGKGLEWVSAVLdSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARYWPMSLWG QGTLVTVSS (SEQ ID NO: 58);

Light Chain		Heavy Chain
59)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVEMSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYAH WPLTFGQGTKV EIK (SEQ ID NO: 61)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIS dSGGSCWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMTPWG QGTLVTVSS (SEQ ID NO: 60);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQR WPLTFGQGTKV EIK (SEQ ID NO: 63)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIF aSGGSTYYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARY WPMTPWGQ GTLVTVSS (SEQ ID NO: 62);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAQYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVSAIS gWGGSLPYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 64);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QQYQR WPLTFGQG TKV EIK (SEQ ID NO: 65)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSAIYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQV WPLTFGQG TKV EIK (SEQ ID NO: 67)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVSAIM sSGGPLY YADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMALWG QGTLVTVSS (SEQ ID NO: 66);
EIVLTQSPGTLSSL SPGERATLSCGP SQSVSSSYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQG TKV EIK (SEQ ID NO: 69)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVSAIL mSGGSTY YADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMSLWG QGTLVTVSS (SEQ ID NO: 68);
EIVLTQSPGTLSSL SPGERATLSCRA	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVSAIS dSGGYRY YADSVKGRFTISR

Light Chain		Heavy Chain
SQSVSSSYWAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYES WPLTFGQG TKV EIK (SEQ ID NO: 71)		DNSKNTLYLQMNSLRAEDTAVYYCARY WPMSLWG QGT ~~LV~~ TVSS (SEQ ID NO: 70);
EIVLTQSPGTL ~~SL~~ SPGERATL SCR G GQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQG TKV EIK (SEQ ID NO: 73)	and	EVQLLES G GGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVS SAILsSGGSTYYADSVKGR FTISR D NSKNTLYLQMNSLRAEDTAVYYCARYWPM DIWGQ GTL ~~LV~~ TVSS (SEQ ID NO: 72);
EIVLTQSPGTL ~~SL~~ SPGERATL SCRA SQSVSFIYLAWY QKPGQAPRLL MYDASIRATGIP DRFSGSGSGTDF TLTISRLEPEDFA VYYC QQYGSW PLTFGQG TKVEI	and	EVQLLES G GGLVQPGGSLRLSCAAS GFTFSSYAMNW VRQAPGKGLEWVS SAILdSGGSTYYADSVKGR FTISR D NSKNTLYLQMNSLRAEDTAVYYCARYWPM SPWG QGT ~~LV~~ TVSS (SEQ ID NO: 74);

Light Chain		Heavy Chain
K (SEQ ID NO: 75)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSTYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSTS PLTFGQGTKVEI K (SEQ ID NO: 77)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGGSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 76);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSPEYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSV WPLTFGQGTKV EIK (SEQ ID NO: 79)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGGSGGSLPYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAIYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGGSGGSLPYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 78);

Light Chain		Heavy Chain
AVYYC QQYSA WPLTFGQGTKV EIK (SEQ ID NO: 317)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSS_vYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYST WPLTFGQGTKV EIK (SEQ ID NO: 414)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSTYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSR WPLTFGQGTKV EIK (SEQ ID NO: 81)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSPIYLAWY	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ

Light Chain		Heavy Chain
QQKPGQAPRLLI YDASSRAPGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYCQQYSAFP LTFGQGGTKVEIK (SEQ ID NO: 82)		GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSSL SPGERATLSCW LSQSVSSTYLA WYQQKPGQAPR LLIY DASSRAPG IPDRFSGSGSGT DFTLTISRLEPED FAVYYC QQYSE WPLTFGQGGTKV EIK (SEQ ID NO: 84)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSAIG gSGGWSYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 83);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSTYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSS WPLTFGQGGTKV EIK (SEQ ID NO: 85)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSAIG gSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);

Light Chain		Heavy Chain
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSIFLAWY QQKPGQAPRLLI YDASSRAPGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QQYSAW PLTFGQGTKVEI K (SEQ ID NO: 86)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSSL SPGERATLSCAC SQSVSSTYLAW YQQKPGQAPRL LI YDASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSA WPLTFGQGTKV EIK (SEQ ID NO: 88)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSAT VgSGGSIGYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 87);
EIVLTQSPGTLSSL SPGERATLSCRA SCDVSSSTYLAW YQQKPGQAPRL LI YDASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYMR	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISRD NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);

Light Chain		Heavy Chain
SPLTFGQG TKV EIK (SEQ ID NO: 89)		
EIVLTQSPGTL SLSPGERATLSCRA SEAVPSTYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSAF PLTFGQG TKVEI K (SEQ ID NO: 90)	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGSGGSLPYADSVKGTISRDN SKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQG TLVTVSS (SEQ ID NO: 413);
EIVLTQSPGTL SLSPGERATLSCCS SQSVSSTYLAW YQQKPGQAPRL LIY DASSRAPGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYSAF PLTFGQG TKVEI K (SEQ ID NO: 91)	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGSGGSLPYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTL SLSPGERATLSCRA SVRVSSTYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYAMNW VRQAPGKGLEWVSA ISdSGGSRWYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCTRY WPMDIWGQ GTLVTVSS (SEQ ID NO: 92);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QQYMK WPLTFGQG TKV EIK (SEQ ID NO: 93)		
EIVLTQSPGTL SLSPGERATLSCRA SQSVSAAYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYMC WPLTFGQG TKV EIK (SEQ ID NO: 94)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGSGGSLPYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTL SLSPGERATLSCRA SQSVSSSYWGW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQC WPLTFGQG TKV EIK (SEQ ID NO: 96)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGSGGSIHYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 95);
EIVLTQSPGTL SLSPGERATLSCRA	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA HIgSGGSTYYADSVKGRFTISR

Light Chain		Heavy Chain
SQSVSSTYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQG TKV EIK (SEQ ID NO: 98)		DNSKNTLYLQMNSLRAEDTAVYYCARY WPMD SWG QGT ~~L~~ VTVSS (SEQ ID NO: 97);
EIVLTQSPGTL ~~SL~~ SPGERATLSCRA SQSVSSpYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQG TKV EIK (SEQ ID NO: 100)	and	EVQLLES GGGLVQPGG SLRLSCAAS GFTFSSYP MSW VRQAPGKGLEWVSA IGgSGGSTYYADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPM DPWG QGT ~~L~~ VTVSS (SEQ ID NO: 99);
EIVLTQSPGTL ~~SL~~ SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPLTFGQG TKV EIK (SEQ ID NO:	and	EVQLLES GGGLVQPGG SLRLSCAAS GFTFSSYP MSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGR FTISR D NS KNTLYLQMNSLRAEDTAVYYCARY WPMD SWGQ GTLVTVSS (SEQ ID NO: 78);

Light Chain		Heavy Chain
38)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVS PIYLAWY QQKPGQAPRL MY DASIR ATGIP DRFSGSGSGTDF TLTISRLEPEDFA VYYC QQYKAW PL TFGQGTKVEI K (SEQ ID NO: 102)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLGYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLLVTVSS (SEQ ID NO: 101);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSY LYLAW YQQKPGQAPRL LMY DASIR ATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYME WPL TFGQGTKV EIK (SEQ ID NO: 103)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSAQY LAW YQQKPGQAPRL LMY DASIR ATGI PDRFSGSGSGTD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IFaSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWGQ GTLVTVSS (SEQ ID NO: 104);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QQYQA WPLTFGQG TKV EIK (SEQ ID NO: 105)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQK WPLTFGQG TKV EIK (SEQ ID NO: 107)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGGSGT w TY YADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMD SWG QGTLVTVSS (SEQ ID NO: 106);
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSA v YLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYRA WPLTFGQG TKV EIK (SEQ ID NO: 108)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGR FTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WPMD SWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTLSSL SPGERATLSCRA	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGR FTISR D

Light Chain		Heavy Chain
SI AVSSTYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQY MV WPL TFGQGTKV EIK (SEQ ID NO: 109)		NSKNTLYLQMNSLRAEDTAVYYCARY WP MDSWGQ GTLVTVSS (SEQ ID NO: 78);
EIVLTQSPGTL SL SPGERATL SCR P RQSVSSSYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQD WPL TFGQGTKV EIK (SEQ ID NO: 111)	and	EVQLLES GG LVQPGGSLRLS CAASGFTF SSYPMSW VRQAPGKGLEWVS ALFgSGGSTYYADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WP MDSWG QGT LV TVSS (SEQ ID NO: 110);
EIVLTQSPGTL SL SPGERATL SCRA SQSVSSSYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQS WPL TFGQGTKV EIK (SEQ ID NO:	and	EVQLLES GG LVQPGGSLRLS CAASGFTF SSYPMSW VRQAPGKGLEWVS AIgSGGSLPYADSVKGR FTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WP MDI WGQ GTLVTVSS (SEQ ID NO: 112);

Light Chain		Heavy Chain
38)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSTYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQE WPLTFGQGTKV EIK (SEQ ID NO: 113)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCARY WPMDIWGQ GTLVTVSS (SEQ ID NO: 112);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSASYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYMS WPLTFGQGTKV EIK (SEQ ID NO: 115)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA ALgSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 114);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSYMYLA WYQQKPGQAPR LLIYDASIRATGI PDRFSGSGSGTD	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA IGgSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 76);

Light Chain		Heavy Chain
FTLTISRLEPEDF AVYYC QQYKS WPLTFGQG TKV EIK (SEQ ID NO: 116)		
EIVLTQSPGTLSSL SPGERATLSCRA SQSVSAIYLAW YQQKPGQAPRL LMY DASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYYG WPLTFGQG TKV EIK (SEQ ID NO: 117)	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYPMSW VRQAPGKGLEWVSAI GgSGGSLPYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WPM DIWGQ GTLVTVSS (SEQ ID NO: 112);
EIVLTQSPGTLSSL SPGERATLSCRA SQPISSSYLAWY QQKPGQAPRLL MY DASIRATGIP DRFSGSGSGTDF TLTISRLEPEDFA VYYC QQYQGW PLTFGQG TKVEI K (SEQ ID NO: 119)	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYPMSW VRQAPGKGLEWVSAI GgSGGSLPYADSVKGRFTISR D NSKNTLYLQMNSLRAEDTAVYYCARY WPM ADWGQ GTLVTVSS (SEQ ID NO: 118);
EIVLTQSPGTLSSL SPGERATLSCRA	and	EVQLLES GGGLVQPGGSLRL SCAAS GFTFSSYAMNW VRQAPGKGLEWVSAI SdSGGFVYYADSVKGRFTISR

Light Chain		Heavy Chain
SQSVSSSYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYEF WPLTFGQG TKV EIK (SEQ ID NO: 121)		DNSKNTLYLQMNSLRAEDTAVYYCARY WP MDSWG QGT ~~L~~ VTVSS (SEQ ID NO: 120);
EIVLTQSPGTL ~~SL~~ SPGERATLSCRA SQSVSSTYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYMS WPLTFGQG TKV EIK (SEQ ID NO: 123)	and	EVQLLES G GGLVQPGGSLRLSCAAS GFTF SSYAMNW VRQAPGKGLEWVSA IGgSGGSTYYADSVKGR FTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WP MSLWG QGT ~~L~~ VTVSS (SEQ ID NO: 122);
EIVLTQSPGTL ~~SL~~ SPGERATLSCRA SQGISSTYLAW YQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYAY WPLTFGQG TKV EIK (SEQ ID NO:	and	EVQLLES G GGLVQPGGSLRLSCAAS GFTF SSYPMSW VRQAPGKGLEWVSA IGgSGGSLPYADSVKGR FTISR D N SKNTLYLQMNSLRAEDTAVYYCARY WP MDIWGQ GTLVTVSS (SEQ ID NO: 112);

Light Chain		Heavy Chain
124)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYQG WPLTFGQGTKV EIK (SEQ ID NO: 126)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSY AMNW VRQAPGKGLEWVS ACLdSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMDSWG QGTLVTVSS (SEQ ID NO: 125);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSVRYLAW YQQKPGQAPRL LMYDASIRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QQYGS WPITFGQGTKV EIK (SEQ ID NO: 128)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFSSYPMSW VRQAPGKGLEWVSA ALGSGGSTYYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCARY WPMSLWG QGTLVTVSS (SEQ ID NO: 127);
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYPSWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSYAMTW VRQAPGKGLEWVSA IDYSGGNTFYADSVKGRFTISR DNSKNTLYLQMNSLRAEDTAVYYCAR VSPIASGMD YWGQGT LVTVSS (SEQ ID NO: 25);

Light Chain		Heavy Chain
LTISRLEPEDFA VYYC QHYPYPP SFTFGQGTKVEI K (SEQ ID NO: 18)		
EIVLTQSPGTLSSL SPGERATLSCRA SQLGSFY LAWY QQKPGQAPRLLI YGASSRATGIPD RFSGSGSGTDFT LTISRLEPEDFA VYYC QHYNYP SFTFGQGTKVEI K (SEQ ID NO: 80)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFGSY AMTW VRQAPGKGLEWVSAI SGSGG NTFYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAR VSP IAAPMDY WGQGTLVTVSS (SEQ ID NO: 8);
EIVLTQSPGTLSSL SPGERATLSC X ₁ X ₂ X ₃ X ₄ X ₅ X ₆ X ₇ X ₈ X ₉ X ₁₀ X ₁₁ X ₁₂ W YQQKPGQAPRL LMYX ₁₃ ASX ₁₄ RA X ₁₅ GIPDRFSGSG SGTDFTLTISRLE PEDFAVYYCX ₁₆ X ₁₇ YX ₁₈ X ₁₉ PPSFT FGQGTKVEIK, wherein X ₁ is R, G, W, A, or C; X ₂ is A, P, G, L, C, or S; X ₃ is S, G, or R; X ₄ is Q, C, E, V, or I; X ₅	and	EVQLLESGGGLVQPGGSLRLSCAASGFTFX ₁ SYX ₂ MX ₃ WVRQAPGKGLEWVSAX ₄ X ₅ X ₆ X ₇ GX ₈ X ₉ X ₁₀ X ₁₁ YADX ₁₂ X ₁₃ KGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAR VSPIX ₁₄ X ₁₅ X ₁₆ MDYWGQGTLVTVSS, wherein X ₁ is G or S, X ₂ is A or P; X ₃ is T, N, or S; X ₄ is I, V, T, H, L, A, or C; X ₅ is S, D, G, T, I, L, F, M, or V; X ₆ is G, Y, L, H, D, A, S, or M; X ₇ is S, Q, T, A, F, or W; X ₈ is G or T; X ₉ is N, S, P, Y, W, or F; X ₁₀ is S, T, I, L, T, A, R, V, K, G, or C; X ₁₁ is F, Y, P, W, H, or G; X ₁₂ is V, R, or L; X ₁₃ is G or T; X ₁₄ is A or Y; X ₁₅ is A or S; and X ₁₆ is G, Q, L, P, or E (SEQ ID NO: 313); or EVQLLESGGGLVQPGGSLRLSCAASGFTFX ₁ SYX ₂ MX ₃ WVRQAPGKGLEWVSAX ₄ X ₅ X ₆ X ₇ GX ₈ X ₉ X ₁₀ X ₁₁ YADX ₁₂ X ₁₃ KGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAR YWPMX ₁₄ X ₁₅ WGQGTLVTVSS, wherein X ₁ is G or S, X ₂ is

Light Chain		Heavy Chain
is S, P, G, A, R, or D; X₆ is V, G, I, or L; X₇ is S, E, D, P, or G; X₈ is S, P, F, A, M, E, V, N, D, or Y; X₉ is I, T, V, E, S, A, M, Q, Y, H, R, or F; X₁₀ is Y or F; X₁₁ is L, W, or P; X₁₂ is A, S, or G, X₁₃ is G or D; X₁₄ is S or I; X₁₅ is T or P; X₁₆ is Q or K; X₁₇ is H or Y; X₁₈ is G, N, or P; and X₁₉ is S, W, or Y (SEQ ID NO: 315); or EIVLTQSPGTLSSL SPGERATLSC X₁X₂X₃X₄X₅X₆X₇ X₈X₉X₁₀X₁₁X₁₂W YQQKPGQAPRL LMYX₁₃ASX₁₄RA X₁₅GIPDRFSGSG SGTDFTLTISRLE PEDFAVYYCQQ YX₁₆X₁₇X₁₈PX₁₉F GQGTVKVEIK, wherein X₁ is R, G, W, A, or C; X₂ is A, P, G, L, C, or S; X₃		A or P; X₃ is T, N, or S; X₄ is I, V, T, H, L, A, or C; X₅ is S, D, G, T, I, L, F, M, or V; X₆ is G, Y, L, H, D, A, S, or M; X₇ is S, Q, T, A, F, or W; X₈ is G or T; X₉ is N, S, P, Y, W, or F; X₁₀ is S, T, I, L, T, A, R, V, K, G, or C; X₁₁ is F, Y, P, W, H, or G; X₁₂ is V, R, or L; X₁₃ is G or T; X₁₄ is D, S, T, or A; and X₁₅ is I, S, L, P, or D (SEQ ID NO: 314);

Light Chain		Heavy Chain
is S, G, or R; X₄ is Q, C, E, V, or I; X₅ is S, L, P, G, A, R, or D; X₆ is V, G, or I; X₇ is S, E, D, or P; X₈ is S, P, F, A, M, E, V, N, D, or Y; X₉ is I, T, V, E, S, A, M, Q, Y, H, or R; X₁₀ is Y or F; X₁₁ is L, W, or P; X₁₂ is A, S, or G, X₁₃ is G or D; X₁₄ is S or I; X₁₅ is T or P; X₁₆ is G, Q, E, L, F, A, S, M, R, K, or Y; X₁₇ is S, R, T, G, R, V, D, A, H, E, K, C, F, or Y; X₁₈ is W, S, or F; and X₁₉ is L or I (SEQ ID NO: 316)		
EIVLTQSPGTLSL SPGERATLSCRA SQSVSSSYLAW YQQKPGQAPRL LIYGASSRAYGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYCQHYGSP	and	EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSW VRQAPGKGLEWVSAISASGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARLSWSGAFDNW GQGTLVTVSS (SEQ ID NO: 378); or

Light Chain		Heavy Chain
PLFTFGQGTKV EIK (SEQ ID NO: 401)		
EIVLTQSPGTLSL SPGERATLSCRA SQNVSSSYLAW YQQKPGQAPRL LIYGASYRATGI PDRFSGSGSGTD FTLTISRLEPEDF AVYYC QHYGSP PSFTFGQGTKVE IK (SEQ ID NO: 379)	and	EVQLLESGGGLVQPGGSLRLSCAAS GFTFRSYAMSW VRQAPGKGLEWVSAIS gSGGSTFYADSVKGRFTISR NSKNTLYLQMNSLRAEDTAVYYCAT VGTSGAFGIW GQGTLVTVSS (SEQ ID NO: 380).

11. The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising an extracellular ligand-binding domain, a first transmembrane domain, and an intracellular signaling domain, wherein the extracellular domain comprises a scFv comprising

5 a sequence: a heavy chain variable (VH) region comprising a sequence shown in SEQ ID NO: 33 and a light chain variable (VL) region comprising a sequence shown in SEQ ID NO: 34, a VH region comprising a sequence shown in SEQ ID NO: 72 and a VL region comprising a sequence shown in SEQ ID NO: 73, a VH region comprising a sequence shown in SEQ ID NO: 39 and a VL region comprising a sequence shown in SEQ ID NO: 40, a VH region

10 comprising a sequence shown in SEQ ID NO: 76 and a VL region comprising a sequence shown in SEQ ID NO: 77, a VH region comprising a sequence shown in SEQ ID NO: 83 and a VL region comprising a sequence shown in SEQ ID NO: 84, a VH region comprising a sequence shown in SEQ ID NO: 92 and a VL region comprising a sequence shown in SEQ ID NO: 93, a VH region comprising a sequence shown in SEQ ID NO: 25 and a VL region

15 comprising a sequence shown in SEQ ID NO: 18, a VH region comprising a sequence shown in SEQ ID NO: 112 and a VL region comprising a sequence shown in SEQ ID NO: 38, or a

VH region comprising a sequence shown in SEQ ID NO: 8 and a VL region comprising a sequence shown in SEQ ID NO: 80; wherein the first transmembrane domain comprises a CD8 α chain transmembrane domain, and wherein the intracellular signaling domain comprises a CD3 ζ signaling domain and/or a 4-1BB signaling domain.

5 **12.** The use of claim 11, wherein the VH comprises SEQ ID NO: 33 and the VL comprises SEQ ID NO: 34.

13. The use of claim 11, wherein the VH comprises SEQ ID NO: 112 and the VL comprises SEQ ID NO: 38.

10 **14.** The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising the amino acid sequence shown in SEQ ID NO: 344.

15. The use of claim 14, wherein the CAR further comprises a CD20 epitope, wherein the CD20 epitope comprises the amino acid sequence shown in SEQ ID NO: 397 or SEQ ID NO: 398.

15 **16.** The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising a CD8 α signal peptide having the sequence of SEQ ID NO: 318; a VH region having the sequence of SEQ ID NO: 112; a GS linker having the sequence of SEQ ID NO: 333; a VL region having the sequence of SEQ ID NO: 38; a CD8 α hinge having the sequence of SEQ ID NO: 320; a CD8 α transmembrane domain having the sequence of SEQ ID NO: 322; a 4-1BB intracellular signaling domain having the sequence of SEQ ID NO: 323; and a
20 CD3 ζ intracellular signaling domain having the sequence of SEQ ID NO: 324.

17. The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising a CD8 α signal peptide having the sequence of SEQ ID NO: 318; a VH region having the sequence of SEQ ID NO: 112; a GS linker having the sequence of SEQ ID NO: 333; a VL region having the sequence of SEQ ID NO: 38; a CD20 epitope having the
25 sequence of SEQ ID NO: 398; a CD8 α hinge having the sequence of SEQ ID NO: 320; a CD8 α transmembrane domain having the sequence of SEQ ID NO: 322; a 4-1BB intracellular signaling domain having the sequence of SEQ ID NO: 323; and a CD3 ζ intracellular signaling domain having the sequence of SEQ ID NO: 324.

30 **18.** The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising a CD8 α signal peptide having the sequence of SEQ ID NO: 318; a VH region having the sequence of SEQ ID NO: 33; a GS linker having the sequence of SEQ ID NO:

333; a VL region having the sequence of SEQ ID NO: 34; a CD8 α hinge having the sequence of SEQ ID NO: 320; a CD8 α transmembrane domain having the sequence of SEQ ID NO: 322; a 4-1BB intracellular signaling domain having the sequence of SEQ ID NO: 323; and a CD3 ζ intracellular signaling domain having the sequence of SEQ ID NO: 324.

5 **19.** The use of any one of claims 1 to 6, wherein the BCMA CAR-T cells comprise a CAR comprising a CD8 α signal peptide having the sequence of SEQ ID NO: 318; a VH region having the sequence of SEQ ID NO: 33; a GS linker having the sequence of SEQ ID NO: 333; a VL region having the sequence of SEQ ID NO: 34; a CD20 epitope having the sequence of SEQ ID NO: 398; a CD8 α hinge having the sequence of SEQ ID NO: 320; a
10 CD8 α transmembrane domain having the sequence of SEQ ID NO: 322; a 4-1BB intracellular signaling domain having the sequence of SEQ ID NO: 323; and a CD3 ζ intracellular signaling domain having the sequence of SEQ ID NO: 324.

20. The use of any one of claims 1 to 19, wherein the CAR-T cells are deficient in CD52.

21. The use of any one of claims 1 to 19, wherein the CAR-T cells are deficient in TCR α
15 and/or TCR β .

22. The use of any one of claims 1 to 21, wherein the genotype of the cells is TCR $\alpha\beta^-$ and CD52 $^{+/-}$.

23. The use of any one of claims 1 to 19, wherein the CAR-T cells do not express a safety switch.

20 **24.** The use of any one of claims 1 to 19, wherein the CAR-T cells express a CD20 epitope, wherein the CD20 epitope comprises the amino acid sequence shown in SEQ ID NO: 397 or SEQ ID NO: 398.

25. The use of any one of claims 1 to 24, wherein a first lymphodepletion regimen is to be administered to the subject prior to administration of the at least one dose.

25 **26.** The use of claim 25, wherein in the first lymphodepletion regimen fludarabine and cyclophosphamide are to be administered.

27. The use of claim 25, wherein in the first lymphodepletion regimen fludarabine, cyclophosphamide, and an anti-CD52 antibody are to be administered.

28. The use of claim 25, wherein in the first lymphodepletion regimen an anti-CD52
30 antibody is to be administered.

29. The use of claim 25, wherein in the first lymphodepletion regimen only an anti-CD52 antibody is to be administered.

30. The use of claim 25, wherein fludarabine is to be administered at a dosage of about 30 mg/m²/day; cyclophosphamide is to be administered at a dosage of about 300 mg/m²/day; and the anti-CD52 antibody is to be administered at a dosage of about 10 to about 13 mg/day.

31. The use of claim 27, wherein fludarabine is to be administered at a dosage of about 30 mg/m²/day; cyclophosphamide is to be administered at a dosage of about 300 mg/m²/day; and the anti-CD52 antibody is to be administered at a dosage of about 13 to about 30 mg/day, about 13 to 20 mg/day, about 13 to 30 mg/day, or about 20 to 30 mg/day.

32. The use of claim 31, wherein the anti-CD52 antibody is to be administered at a dosage of about 13 mg/day, about 20 mg/day or about 30 mg/day.

33. The use of any one of claims 25 to 32, wherein the first lymphodepletion regimen is to be initiated between about 1 to 15 days prior to administration of the at least one dose.

34. The use of any one of claims 25 to 33, wherein the first lymphodepletion regimen is to be administered over the course of 1, 2, 3, 4, or 5 days.

35. The use of any one of claims 23 to 34, wherein the first lymphodepletion regimen is to be administered 5 days prior to administration of the at least one dose in the course of 3 days.

36. The use of any one of claims 1 to 35, wherein a subsequent dose of the CAR-T cells is to be administered to the subject.

37. A formulation comprising BCMA CAR-T cells, wherein the cells are formulated in a solution comprising about 5% dimethyl sulfoxide, wherein the dosage strength of the formulation is 14×10^6 cells /mL, wherein the genotype of the cells is BCMA-CAR+_{TCRαβ}-_{CD52}+/-, and wherein the BCMA CAR-T cells comprise a CAR comprising an extracellular ligand-binding domain, two CD20 epitope domains (SEQ ID NO: 397), a first transmembrane domain, and an intracellular signaling domain, wherein the extracellular domain comprises a scFv comprising a sequence: a heavy chain variable (VH) region comprising a sequence shown in SEQ ID NO: 33 and a light chain variable (VL) region comprising a sequence shown in SEQ ID NO: 34, a VH region comprising a sequence shown in SEQ ID NO: 72 and a VL region comprising a sequence shown in SEQ ID NO: 73, a VH

region comprising a sequence shown in SEQ ID NO: 39 and a VL region comprising a sequence shown in SEQ ID NO: 40, a VH region comprising a sequence shown in SEQ ID NO: 76 and a VL region comprising a sequence shown in SEQ ID NO: 77, a VH region comprising a sequence shown in SEQ ID NO: 83 and a VL region comprising a sequence shown in SEQ ID NO: 84, a VH region comprising a sequence shown in SEQ ID NO: 92 and a VL region comprising a sequence shown in SEQ ID NO: 93, a VH region comprising a sequence shown in SEQ ID NO: 25 and a VL region comprising a sequence shown in SEQ ID NO: 18, a VH region comprising a sequence shown in SEQ ID NO: 112 and a VL region comprising a sequence shown in SEQ ID NO: 38, or a VH region comprising a sequence shown in SEQ ID NO: 8 and a VL region comprising a sequence shown in SEQ ID NO: 80; wherein the first transmembrane domain comprises a CD8 α chain transmembrane domain, and wherein the intracellular signaling domain comprises a CD3 ζ signaling domain and/or a 4-1BB signaling domain.

38. A formulation comprising BCMA CAR-T cells, wherein the cells are formulated in a 1:1 mixture of CryoStor® Basal Solution and CryoStor® CS10 resulting in a 5% final concentration of dimethyl sulfoxide, wherein the dosage strength of the formulation is 14×10^6 cells /mL, wherein the genotype of the cells is BCMA-CAR+_{TCR $\alpha\beta$} -_{CD52}+/-, and wherein the BCMA CAR-T cells comprise a CAR comprising an extracellular ligand-binding domain, two CD20 epitope domains (SEQ ID NO: 397), a first transmembrane domain, and an intracellular signaling domain, wherein the extracellular domain comprises a scFv comprising a sequence: a heavy chain variable (VH) region comprising a sequence shown in SEQ ID NO: 33 and a light chain variable (VL) region comprising a sequence shown in SEQ ID NO: 34, a VH region comprising a sequence shown in SEQ ID NO: 72 and a VL region comprising a sequence shown in SEQ ID NO: 73, a VH region comprising a sequence shown in SEQ ID NO: 39 and a VL region comprising a sequence shown in SEQ ID NO: 40, a VH region comprising a sequence shown in SEQ ID NO: 76 and a VL region comprising a sequence shown in SEQ ID NO: 77, a VH region comprising a sequence shown in SEQ ID NO: 83 and a VL region comprising a sequence shown in SEQ ID NO: 84, a VH region comprising a sequence shown in SEQ ID NO: 92 and a VL region comprising a sequence shown in SEQ ID NO: 93, a VH region comprising a sequence shown in SEQ ID NO: 25 and a VL region comprising a sequence shown in SEQ ID NO: 18, a VH region comprising a sequence shown in SEQ ID NO: 112 and a VL region comprising a sequence shown in SEQ ID NO: 38, or a VH region comprising a sequence shown in SEQ ID NO: 8 and a VL region

comprising a sequence shown in SEQ ID NO: 80; wherein the first transmembrane domain comprises a CD8 α chain transmembrane domain, and wherein the intracellular signaling domain comprises a CD3 ζ signaling domain and/or a 4-1BB signaling domain.

39. The formulation of claim 37 or 38, wherein the two CD20 epitope domains are
5 provided as the amino acid sequence shown in SEQ ID NO: 398.