

SP-008701 Sequence listing in English
SEQUENCE LISTING

<110> Hefei TG ImmunoPharma Co., Ltd.
<120> ANTI-PVRIG PROTEIN ANTIBODY OR ANTIBODY FRAGMENT AND USE THEREOF
<130> HI5210020P
<160> 51
<170> PatentIn version 3.5
<210> 1
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain variable region

<400> 1
QVQLQSGAE LVKPGASVKI SCKATGYTFS SFSIEWVKQR 40
PGHGLAWIGE ILPGSNSTNY NEKFKGKATF TADTSSNTAY 80
MQLSSLTSED SAVYYCSSYW FAYWGQGLTV TVSA 114

<210> 2
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> light chain variable region

<400> 2
DIVMTQSPSS LSVSAGEKVT MSCKSSQSLL NSGNQKNYLA 40
WYQQKPGQPP KLLIYGASTR ESGVPDRFTG SGSGTDFTLT 80
ISSVQAEDLA VYYCQNAHSY PPTFAAGTKL ELK 113

<210> 3
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain variable region

<400> 3
EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA 40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY 80

<210> 4
<211> 441
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain

<400> 4

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA 40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY 80
MELSSLRSED TAVYYCARYW FAYWGQGLTV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

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441

<210> 5
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> a nucleic acid sequence encoding the heavy chain

<400> 5
gaggtgcagc tgggtgcagtc cggcgctgag gtgaagaagc ccggctcctc cgtgaagggtg 60
agctgcaagg cttccggcgg caccttttcc agcttctcca tcgagtgggt gaggcaggcc 120
cccggccagg gattggagtg gatgggagcag atcctgcctg gctccaacag caccaactac 180
aatgagaagt ttaagggcag ggtgaccatc accgctgacg agtccacctc caccgcctac 240
atggagctgt cctccctgcg gtccgaggat accgctgtgt actattgtgc caggtattgg 300
ttcgcttatt ggggcccaggg caccctggtg accgtgtcct ccgcctccac caagggcccc 360
tccgtgttcc ccctggctcc ctgtagccgg tccaccagcg agtccaccgc tgccctgggc 420
tgtctggtga aggactatth ccccgagccc gtgaccgtga gctggaatag cggcgccctg 480

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acctccggcg tgcacacatt ccctgctgtg ctgcagagct ccggcctgta tagcctgtcc	540
tccgtggtga ccgtgccctc ctcctccctg ggcaccaaga cctatacctg caatgtggac	600
cacaagccca gcaacaccaa ggtggacaag aggggtggaga gcaagtacgg ccctccttgc	660
cctccttgcc ccgctccaga gttcctgggc ggcccaagcg tgtttctgtt tcctcccaag	720
cctaaggaca ccctgatgat ctccaggacc cctgaggtga cctgcgtggt ggtggatgtg	780
tcccaggagg accctgaggt gcagttcaac tggtagctgg atggcgtgga ggtgcacaac	840
gccaagacca agccccggga ggagcagttc aacagcacct accgggtggt gagcgtgctg	900
accgtgctgc accaggattg gctgaatggc aaggagtaca agtgcaaggt gtccaacaag	960
ggcctgccta gcagcatcga gaagaccatc tccaaggcca agggccagcc cagggagcct	1020
cagggtgtata ccctgcccc tagccaggag gagatgacca agaaccaggt gagcctgacc	1080
tgctgtgga agggctttta tcctagcgat atcgtgtgg agtgggagtc caacggccag	1140
cccgagaaca actacaagac caccctccc gtgctggata gcgacggctc cttctttctg	1200
tactcccggc tgaccgtgga taagtccagg tggcaggagg gcaatgtgtt cagctgctcc	1260
gtgatgcacg aggcctgca caatcactat acccagaagt ccctgtccct gtccctcggc	1320
aag	1323

<210> 6
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region

<400> 6	
EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLV TVSS	114

<210> 7
 <211> 441
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain

<400> 7	
EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY	80

SP-008701 Sequence listing in English

MELSSLRSED TAVYYCSSYW FAYWQGTLV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

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441

<210> 8
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain encoding nucleic acid

<400> 8
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agctgcaagg cctccggcgg caccttctcc agcttttcca tcgagtgggt gaggcaggcc 120
cctggccagg gactggagtg gatgggagcag atcctgcctg gcagcaattc caccaactat 180
aatgagaagt tcaagggccg ggtgaccatc accgctgacg agagcacctc caccgcttac 240
atggagctgt ccagcctgag gtccgaggac accgctgtgt actactgtag ctctatttgg 300
ttcgcttact ggggcccagg caccctgggt accgtgtcct ccgccagcac caagggccct 360
agcgtgttcc ccctggctcc ctgcagccgg agcacctctg agtccaccgc cgccctgggc 420
tgtctggtga aggattactt tcctgagccc gtgaccgtga gctggaatag cggcgctctg 480
accagcggcg tgcacacctt tcctgccgtg ctgcagagca gcggcctgta cagcctgtcc 540
tccgtggtga ccgtgcctag ctccagcctg ggcaccaaga cctatacctg taatgtggat 600
cacaagccta gcaataccaa ggtggacaag cgggtggagt ccaagtacgg cccccctgc 660
cctccctgcc cagctcctga atttctgggc ggccccagcg tgtttctggt tcctcccaag 720
cctaaggata ccctgatgat ctccaggacc cccgaggtga cctgtgtggt ggtggacgtg 780
tcccaggagg atcccagggt gcagtttaac tggtagctgg acggcggtga ggtgcacaat 840
gccaagacca agcctagggg ggagcagttc aatagcacct acaggggtgg gagcgtgctg 900
accgtgctgc accaggattg gctgaatggc aaggagtata agtgcaagggt gtccaacaag 960
ggcctgccct ccagcatcga gaagaccatc agcaaggcca agggccagcc ccgggagcct 1020
caggtttata ccctgcccc tagccaggag gagatgacca agaaccagggt gtccctgacc 1080

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tgtctggtga aaggcttcta tccttccgat atcgccgtgg agtgggagtc caatggccag	1140
cccgagaaca attataagac caccctccc gtgctggatt cgcacggcag ctttttcctg	1200
tactcccggc tgaccgtgga taagagccgg tggcaggagg gcaatgtgtt tagctgcagc	1260
gtgatgcacg aggctctgca caaccactac acccagaagt ccctgagcct gtccttgggc	1320
aag	1323

<210> 9
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region

<400> 9

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS	114

<210> 10
 <211> 441
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain

<400> 10

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP	120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL	160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD	200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK	240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN	280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK	320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT	360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL	400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG	440

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 441

SP-008701 Sequence listing in English

<210> 11
 <211> 1323
 <212> DNA
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain encoding nucleic acid

<400> 11
 gaggtgcagc tggtgcagag cggcgctgag gtgaagaagc ctggctccag cgtgaagggtg 60
 agctgtaagg ccagcggcgg caccttctcc tccttttcca tcgagtgggt gaggcaggcc 120
 cccggccagg gattggagtg gatgggcgag atcctgcccc gcagcaattc caccaattat 180
 aatgagaagt ttaagggccg ggtgaccttt accgccgacg agtccacctc caccgcctat 240
 atggagctga gtcacctgag gagcgaggac accgccgtgt actattgcag ctctatttgg 300
 tttgcttatt ggggccaggg caccctggtg accgtgtcca gcgccagcac caagggcccc 360
 tccgtgtttc ccctggctcc ctgtagccgg agcaccagcg agtccaccgc tgctctgggc 420
 tgtctgggtga aggattactt tcccagcccc gtgaccgtgt cttggaatag cggcgccctg 480
 accagcggcg tgcacacatt tcccgtgtg ctgcagagct cgggcctgta ctccctgtcc 540
 tccgtgggtga ccgtgccttc cagctccctg ggcaccaaga cctatacctg caacgtggat 600
 cacaagccta gcaacaccaa ggtggacaag cgggtggaga gcaagtacgg cccccctgc 660
 cccccctgtc ctgctcctga gttcctgggc ggcccttccg tgtttctgtt tcctcccaag 720
 cccaaggata ccctgatgat cagcaggacc cctgagggtga cctgtgtggt ggtggacgtg 780
 tcccaggagg atcctgaggt gcagttcaat tggtatgtgg acggcgtgga ggtgcacaac 840
 gccaagacca agccccggga ggagcagttc aattccacct atcgggtggt gagcgtgctg 900
 accgtgctgc accaggactg gctgaacggc aaggagtaca agtgcaagggt gagcaataag 960
 ggctgccta gctccatcga gaagaccatc tccaaggcca agggccagcc tcgggagccc 1020
 caggtttata ccctgcccc ctcccaggag gagatgacca agaaccaggt gagcctgacc 1080
 tgtctgggtga aaggcttcta cccagcgat atcgctgtgg agtgggagtc caacggccag 1140
 cccgagaata actataagac cccccccct gtgctggata gcgatggcag cttcttcctg 1200
 tactccaggc tgaccgtgga caagtccagg tggcaggagg gcaatgtgtt ctctgcagc 1260
 gtgatgcacg aggccctgca caatcactat acccagaagt ccctgtccct gagcctgggc 1320
 aag 1323

<210> 12
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>

SP-008701 Sequence listing in English

<223> heavy chain variable region

<400> 12

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS	114

<210> 13

<211> 441

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain

<400> 13

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP	120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL	160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD	200
HKPSNTKVDK RVESKYGPPC PPCAPEFLG GPSVFLFPPK	240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN	280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK	320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT	360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGGSFFL	400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG	440

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<210> 14

<211> 1323

<212> DNA

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain encoding nucleic acid

<400> 14

gaggtgcagc tggtgcagtc cggcgccgag gtgaagaagc ccggctcctc cgtgaagggtg	60
agctgtaagg ccagcggcgg caccttctcc tccttttcca tcgagtgggt gaggcaggcc	120
cctggccagg gactggagtg gatcggcgag atcctgccc gctccaatag caccaattac	180
aacgagaagt ttaagggccg ggtgaccttt accgccgacg agtccacctc caccgcctat	240

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atggagctga gctccctgag gagcgaggac accgctgtgt attactgttc ctcctactgg	300
tttgcttact ggggccaggg caccctggtg accgtgtcct ccgcttccac caagggcccc	360
agcgtgtttc ccctggctcc ttgcagccgg agcacctccg agtccaccgc tgctctgggc	420
tgcttggtga aggattatth ccctgagcct gtgaccgtga gctggaacag cggcgctctg	480
acctccggcg tgcacacctt ccctgccgtg ctgcagtcca gcggcctgta tagcctgtcc	540
tccgtggtga ccgtgcccag ctccagcctg ggcaccaaga cctatacctg caacgtggat	600
cacaagcctt ccaataccaa ggtggacaag cgggtggaga gcaagtatgg cccccctgt	660
cctccttgcc ctgctcctga gttcctgggc ggccccagcg tcttcctgtt tccccctaag	720
cccaaggaca ccctgatgat cagcaggacc cctgaggtga cctgcgtggt ggtggatgtg	780
tcccaggagg atcctgaggt gcagtttaac tggatatgtg atggcgtgga ggtgcacaac	840
gccaagacca agccccggga ggagcagttt aacagcacct ataggggtgg gagcgtgctg	900
accgtgctgc accaggattg gctgaacggc aaggagtata agtgtaaggt gagcaataag	960
ggcctgccta gctccatcga gaagaccatc agcaaggcca agggccagcc tagggagcct	1020
caggtgtaca ccctgcctcc ctcccaggag gagatgacca agaatcaggt gagcctgacc	1080
tgtctggtga agggctttta cccctccgat atcgccgtgg agtgggagtc caatggccag	1140
cctgagaaca attataagac ccccccccc gtgctggact ccgatggcag ctttttcctg	1200
tacagcaggc tgaccgtgga taagagccgg tggcaggagg gcaatgtgtt tagctgcagc	1260
gtgatgcacg aggccctgca caaccactat acccagaaga gcctgagcct gagcctcggc	1320
aag	1323

<210> 15
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region

<400> 15

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADTSTNTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS	114

<210> 16
 <211> 441
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain

SP-008701 Sequence listing in English

<400> 16

EVQLVQSGAE	VKKPGSSVKV	SCKASGGTFS	SFSIEWVRQA	40
PGQGLEWIGE	ILPGSNSTNY	NEKFKGRVTF	TADTSTNTAY	80
MELSSLRSED	TAVYYCSSYW	FAYWGQGLTV	TVSSASTKGP	120
SVFPLAPCSR	STSESTAALG	CLVKDYFPEP	VTVSWNSGAL	160
TSGVHTFPAV	LQSSGLYSLS	SVVTPSSSL	GTKTYTCNVD	200
HKPSNTKVDK	RVESKYGPPC	PPCPAPEFLG	GPSVFLFPPK	240
PKDTLMISRT	PEVTCVVVDV	SQEDPEVQFN	WYVDGVEVHN	280
AKTKPREEQF	NSTYRVVSVL	TVLHQDWLNG	KEYKCKVSNK	320
GLPSSIEKTI	SKAKGQPREP	QVYTLPPSQE	EMTKNQVSLT	360
CLVKGFYPSD	IAVEWESNGQ	PENNYKTPP	VLDSGGSFFL	400
YSRLTVDKSR	WQEGNVFSCS	VMHEALHNHY	TQKSLSLSLG	440

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<210> 17

<211> 1323

<212> DNA

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain encoding nucleic acid

<400> 17

gaggtgcagc	tggtgcagtc	cggcgctgag	gtgaagaagc	ctggctcctc	cgtgaagggtg	60
agctgcaagg	cttccggcgg	caccttttcc	agcttttagca	tcgagtgggt	gaggcaggct	120
cctggccagg	gcctggagtg	gatcggcgag	atcctgcctg	gctccaacag	caccaactac	180
aatgagaagt	ttaagggccg	ggtgaccttc	accgctgaca	cctccaccaa	caccgcttat	240
atggagctga	gctccctgcg	gagcgaggat	accgctgtgt	actattgcag	cagctattgg	300
ttcgcttact	ggggccaggg	caccctggtg	accgtgtcct	ccgccagcac	caagggtccc	360
tccgtgttcc	ccctggcccc	ttgtagccgg	tccacctccg	agagcaccgc	cgctctgggc	420
tgtctggtga	aggattactt	ccccgagcct	gtgaccgtgt	cttggaactc	cggcgccctg	480
acctccggcg	tgcacacatt	ccctgctgtg	ctgcagagct	ccggcctgta	ctccctgagc	540
agcgtggtga	ccgtgccctc	ctccagcctg	ggcaccaaga	cctacacctg	taatgtggac	600
cacaagccct	ccaataccaa	ggtggacaag	agggtggagt	ccaagtacgg	ccctccctgt	660
cctccttgcc	ctgcccctga	gtttctgggc	ggccctagcg	tgttcctgtt	ccctcctaag	720
cctaaggaca	ccctgatgat	cagccggacc	cccagagtga	cctgtgtggt	ggtggatgtg	780
tcccaggagg	atcccagagt	gcagttcaat	tggtacgtgg	atggcgtgga	ggtgcacaac	840
gccaagacca	agcctagggg	ggagcagttt	aactccacct	acagggtggt	gtccgtgctg	900

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accgtgctgc accaggactg gctgaatggc aaggagtaca agtgtaaggt gagcaacaag	960
ggcctgcctt ccagcatcga gaagaccatc tccaaggcta agggccagcc tcgggagcct	1020
caggtgtaca ccctgcccc tagccaggag gagatgacca agaaccaggt gtcctgacc	1080
tgcctggatga agggctttta tccctccgac atcgccgtgg agtgggagag caatggccag	1140
cctgagaaca attataagac caccctcct gtgctggaca gcgatggctc cttctttctg	1200
tactcccggc tgaccgtgga caagagcagg tggcaggagg gcaatgtgtt ctcctgtagc	1260
gtgatgcacg aggcctgca caaccactac acccagaagt ccctgtcct gtcctcggc	1320
aag	1323

<210> 18
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region

<400> 18

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGKATF TADTSTNTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS	114

<210> 19
 <211> 441
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain

<400> 19

EVQLVQSGAE VKKPGSSVKV SCKASGGTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGKATF TADTSTNTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP	120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL	160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD	200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK	240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN	280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK	320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT	360

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CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGGSFFL 400

YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

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441

<210> 20
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain encoding nucleic acid

<400> 20
gaggtgcagc tggtgcagtc cggcgccgag gtgaagaagc ctggcagctc cgtgaagggtg 60
tcctgtgaagg cttccggcgg caccttctcc tccttttcca tcgagtgggt gaggcaggcc 120
cccggccagg gattggagtg gatcggcgag atcctgcctg gcagcaactc caccaattat 180
aatgagaagt ttaagggcaa ggctaccttc accgctgaca ccagcaccaa taccgcctat 240
atggagctgt cctccctgcg gagcgaggac accgccgtgt attattgtag cagctattgg 300
ttcgcctact ggggccaggg caccctggtg accgtgagca gcgctagcac caagggccct 360
agcgtgtttc ctctggctcc ttgttccagg tccaccagcg agagcaccgc tgccctgggc 420
tgccctgggtga aggattactt tcctgagcct gtgaccgtgt cttggaacag cggcgctctg 480
accagcggcg tgcacacctt tcccgtgtg ctgcagtcca gcggcctgta ttccctgtcc 540
agcgtgggtga ccgtgcccag ctccctccctg ggcaccaaga cctataacctg caacgtggat 600
cacaagccct ccaataccaa ggtggacaag aggggtggaga gcaagtacgg ccctccttgc 660
cctccctgtc ctgctcctga gttcctgggc ggcccttccg tgtttctgtt tccccctaag 720
cccaaggata ccctgatgat cagccggacc cccgaggtga cctgcgtggt ggtggatgtg 780
tcccaggagg accccgaggt gcagtttaat tggtatgtgg atggcgtgga ggtgcacaac 840
gctaagacca agcctagga ggagcagttt aacagcacct atcgggtggt gagcgtgctg 900
accgtgctgc accaggactg gctgaacggc aaggagtaca agtgcaagggt gtccaataag 960
ggcctgccta gctccatcga gaagaccatc agcaaggcca agggccagcc tagggagccc 1020
caggtgtata ccctgcccc ttcccaggag gagatgacca agaatacagg gagcctgacc 1080
tgtctgggtga agggctttta tcctagcgac atcgtgtgtg agtgggagag caatggccag 1140
cctgagaata attacaagac cccccccct gtgctggatt ccgatggcag ctttttccctg 1200
tattcccggc tgaccgtgga taagtcccgg tggcaggagg gcaacgtgtt tagctgctcc 1260
gtgatgcacg aggctctgca caatcactac acccagaagt ccctgagcct gtccctgggc 1320
aag 1323

<210> 21
<211> 114

SP-008701 Sequence listing in English

<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain variable region

<400> 21

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS 114

<210> 22
<211> 441
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain

<400> 22

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTI TADESTSTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN280
AKTKPREEQF NSTYRVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

K
441

<210> 23
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain encoding nucleic acid

<400> 23
gaggtgcagc tgggtgcagtc cggcgctgag gtgaagaagc ctggcagcag cgtgaagggtg 60

SP-008701 Sequence listing in English

agctgcaagg cttccggcta caccttttcc agcttcagca tcgagtgggt gcggcaggct	120
cccggccagg gattggagtg gatgggcgag atcctgcctg gcagcaactc caccaattac	180
aatgagaagt tcaagggcag ggtgaccatc accgctgacg agagcacctc caccgcttac	240
atggagctga gcagcctgag gtccgaggat accgccgtgt attactgcag cagctattgg	300
tttgcctact gggggccaggg caccctggtg accgtgagct ccgccagcac caagggcccc	360
agcgtgtttc ccctggctcc ttgcagcagg tccaccagcg agagcacctc cgctctgggc	420
tgtctggatga aggactactt ccccagacct gtgaccgtgt cttggaatag cggcgctctg	480
accagcggcg tgcacacctt tcctgctgtg ctgcagtcct ccggcctgta ctccctgtcc	540
agcgtggatga ccgtgccctc ctccctccctg ggcaccaaga cctatacctg caatgtggat	600
cacaagccta gcaataccaa ggtggacaag aggggtggaga gcaagtacgg ccccccttgc	660
cctccttgcc ccgctcctga gttcctgggc ggcccttccg tgttcctgtt tccccctaag	720
cccaaggaca ccctgatgat ctcccggacc cccgaggtga cctgtgtggt ggtggatgtg	780
agccaggagg accctgaggt gcagttcaat tggtagctgg atggcgtgga ggtgcacaac	840
gccaagacca agcctagga ggagcagttc aacagcacct accgggtggt gtccgtgctg	900
accgtgctgc accaggactg gctgaatggc aaggagtaca agtgcaagggt gtccaataag	960
ggcctgcctt cctccatcga gaagaccatc agcaaggcca agggccagcc tcgggagcct	1020
caggtgtata ccctgcctcc cagccaggag gagatgacca agaaccaggt gtccctgacc	1080
tgcttggtga agggctttta cccttccgat atcgccgtgg agtgggagag caatggccag	1140
cctgagaata attacaagac caccctcct gtgctggata gcgacggcag ctttttcctg	1200
tacagccggc tgaccgtgga taagagccgg tggcaggagg gcaacgtgtt cagctgcagc	1260
gtgatgcacg aggctctgca caaccactat acccagaaga gcctgtccct gagcctgggc	1320
aag	1323

<210> 24
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region

<400> 24

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40

PGQGLEWMGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY 80

MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS 114

<210> 25
 <211> 441

SP-008701 Sequence listing in English

<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain

<400> 25

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWMGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGTLV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

K
441

<210> 26
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain encoding nucleic acid

<400> 26
gaggtgcagc tggtgcagag cggcgctgag gtgaagaagc ccggctccag cgtgaagggtg 60
tcctgcaagg cttccggcta taccttctcc agcttttagca tcgagtgggt gaggcaggct 120
cctggccagg gcctggagtg gatgggagc atcctgcctg gcagcaattc caccaactat 180
aacgagaagt tcaagggccg ggtgaccttc accgccgatg agtccacctc caccgcctac 240
atggagctga gtcctctgcg gtccgaggat accgccgtgt actattgcag cagctattgg 300
ttcgcttatt ggggccaggg caccctggtg accgtgagct ccgcttccac caagggccct 360
tccgtgtttc ccctggcccc ctgctcccgg tccacctccg aatccaccgc cgccctgggc 420
tgcctggtga aggactactt ccctgagccc gtgaccgtgt cctggaactc cggcgccctg 480
accagcggcg tgcacacatt tcccgtgtg ctgcagtcct ccggcctgta tagcctgtcc 540
agcgtggtga ccgtgcctag ctccagcctg ggcaccaaga cctacacctg taatgtggat 600
cacaagccca gcaataccaa ggtggataag aggggtggagt ccaagtacgg ccccccttgt 660

SP-008701 Sequence listing in English

cctccttgtc ccgccccaga gttcctgggc ggcccatctg tgtttctgtt tccccccaag	720
cctaaggaca ccctgatgat ctcccggacc cctgaggtga cctgtgtggt ggtggacgtg	780
tcccaggagg atcctgaggt gcagttcaat tggatatgtg acggcgtgga ggtgcacaac	840
gccaagacca agcccagga ggagcagttt aacagcacct atcgggtggt gtccgtgctg	900
accgtgctgc accaggactg gctgaatggc aaggagtata agtgcaaggt gagcaataag	960
ggcctgccct ccagcatcga gaagaccatc tccaaggcta agggccagcc ccgggagcct	1020
caggtgtaca ccctgcctcc cagccaggag gagatgacca agaaccaggt gtccctgacc	1080
tgtctggtga agggctttta tcccagcgac atcgccgtgg agtgggagtc caacggccag	1140
cctgagaaca actacaagac caccctccc gtgctggact ccgatggctc ctttttcctg	1200
tattccaggc tgaccgtgga taagagcagg tggcaggagg gcaacgtgtt tagctgctcc	1260
gtgatgcacg aggccctgca caatcactat acccagaagt ccctgagcct gagcctgggc	1320
aag	1323

<210> 27
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain variable region
 <400> 27

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS	114

<210> 28
 <211> 441
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain
 <400> 28

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA	40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADESTSTAY	80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP	120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL	160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD	200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK	240

SP-008701 Sequence listing in English

PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
 AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
 GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
 CLVKGFYPSD IAVEWESNGQ PENNYKTPPP VLDSGDSFFL 400
 YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

K
 441

<210> 29
 <211> 1323
 <212> DNA
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> heavy chain encoding nucleic acid

<400> 29
 gaggtgcagc tgggtgcagag cggcgccgag gtgaagaagc ccggctccag cgtgaagggtg 60
 tcctgcaagg cttccggcta taccttctcc agcttcagca tcgagtgggt gaggcaggcc 120
 cccggccagg gattggagtg gatcggcgag atcctgcctg gcagcaatag caccaactat 180
 aatgagaagt tcaagggcag ggtgaccttc accgccgatg agagcacctc caccgcttac 240
 atggagctga gcagcctgag gagcgaggat accgctgtgt attattgtag cagctattgg 300
 tttgcctact ggggccaggg caccctggtg accgtgtcca gcgccagcac caagggcccc 360
 agcgtgttcc ctctggcccc ttgttcccg tccacctccg agagcaccgc cgctctgggc 420
 tgcttggtga aggactatct ccctgagccc gtgacctga gctggaactc cggcgctctg 480
 accagcggcg tgcacacctt ccctgccgtg ctgcagtcca gcggcctgta ctccctgtcc 540
 agcgtggtga ccgtgcccag ctccagcctg ggcaccaaga cctacacctg caacgtggat 600
 cacaagccct ccaataccaa ggtggacaag aggggtggaga gcaagtatgg ccctccctgt 660
 cccccctgcc ctgcccctga atttctgggc ggcccctccg tgtttctgtt tcctcctaag 720
 cctaaggata ccctgatgat ctcccgacc cctgaggtga cctgtgtggt ggtggatgtg 780
 agccaggagg accccgaggt gcagtttaac tggtagctgg acggcgtgga ggtgcacaat 840
 gctaagacca agccccggga ggagcagttc aatagcacct atagggtggt gagcgtgctg 900
 accgtgctgc accaggactg gctgaacggc aaggagtata agtgcaaggt gagcaataag 960
 ggcctgccct cctccatcga gaagaccatc tccaaggcta agggccagcc ccgggagcct 1020
 cagggtgtaca ccctgcccc tagccaggag gagatgacca agaatacagg gtccctgacc 1080
 tgcttggtga aaggctttta cccctccgat atcgccgtgg agtgggagtc caatggccag 1140
 cctgagaaca attacaagac caccctccc gtgctggatt ccgacggcag cttctttctg 1200
 tattccaggc tgaccgtgga taagtcccgg tggcaggagg gcaacgtgtt tagctgcagc 1260

SP-008701 Sequence listing in English

gtgatgcacg aggccctgca caatcactac acccagaagt ccctgagcct gtccttgggc 1320
aag 1323

<210> 30
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain variable region

<400> 30

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADTSTNTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSS 114

<210> 31
<211> 441
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain

<400> 31

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWIGE ILPGSNSTNY NEKFKGRVTF TADTSTNTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGLTV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGDSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

K
441

<210> 32
<211> 1323
<212> DNA
<213> Artificial Sequence

SP-008701 Sequence listing in English

<220>

<221>

<222>

<223> heavy chain encoding nucleic acid

<400> 32

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gaggtgcagc tgggtgcagag cggcgctgag gtgaagaagc ctggcagcag cgtgaagggtg      60
agctgcaagg cttccggcta caccttttcc agcttcagca tcgagtgggt gaggcaggcc      120
cctggccagg gactggagtg gatcggcgag atcctgcctg gcagcaatag caccaattac      180
aacgagaagt tcaagggccg ggtgaccttc accgccgaca ccagcaccaa taccgcctat      240
atggagctga gctccctgag gtccgaggac accgctgtgt attattgctc cagctattgg      300
ttcgctactt gggggccaggg caccctggtg accgtgtcct ccgccagcac caagggcccc      360
agcgtgtttc ctctggcccc ttgcagcagg tccaccagcg agagcaccgc cgctctgggc      420
tgcctgggtg aggattactt ccctgagcct gtgaccgtgt cttggaacag cggcgccctg      480
acctccggcg tgcacacatt tcctgctgtg ctgcagagca gcggcctgta tagcctgagc      540
agcgtgggtg ccgtgcctag cagcagcctg ggcaccaaga cctacacctg caatgtggat      600
cacaagccct ccaacaccaa ggtggacaag cgggtggaga gcaagtacgg ccctccctgc      660
ccccctgtc ctgctcctga gtttctgggc ggccctagcg tgttcctgtt ccctcctaag      720
cccaaggaca ccctgatgat cagcaggacc cctgaggtga cctgcgtggt ggtggacgtg      780
tcccaggagg atcccgaggt gcagttcaac tggtagctgg acggcgtgga ggtgcacaat      840
gccaagacca agcctagga ggagcagttt aacagcacct ataggggtgg gagcgtgctg      900
accgtgctgc accaggactg gctgaacggc aaggagtata agtgaagggt gtccaacaag      960
ggcctgcctt cctccatcga gaagaccatc tccaaggcta agggccagcc tagggagcct     1020
caggtgtata ccctgcctcc ctcccaggag gagatgacca agaatacagg gtccctgacc     1080
tgcctgggtg aaggctttta ccccagcgac atcgtgtggt agtgggagag caacggccag     1140
cccgagaata attacaagac cccccccct gtgctggatt ccgacggcag cttctttctg     1200
tactccaggc tgaccgtgga caagtccagg tggcaggagg gcaacgtgtt cagctgcagc     1260
gtgatgcacg aggctctgca caaccactac acccagaagt ccctgtccct gagcctcggc     1320
aag                                                                    1323

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<210> 33

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain variable region

<400> 33

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EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWIGE ILPGSNSTNY NEKFKGKATF TADTSTNTAY 80

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SP-008701 Sequence listing in English

MELSSLRSED TAVYYCSSYW FAYWGQGLV TVSS 114

<210> 34
<211> 441
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain

<400> 34

EVQLVQSGAE VKKPGSSVKV SCKASGYTFS SFSIEWVRQA 40
PGQGLEWIGE ILPGSNSTNY NEKFKGKATF TADTSTNTAY 80
MELSSLRSED TAVYYCSSYW FAYWGQGLV TVSSASTKGP 120
SVFPLAPCSR STSESTAALG CLVKDYFPEP VTVSWNSGAL 160
TSGVHTFPAV LQSSGLYSLS SVVTPSSSL GTKTYTCNVD 200
HKPSNTKVDK RVESKYGPPC PPCPAPEFLG GPSVFLFPPK 240
PKDTLMISRT PEVTCVVVDV SQEDPEVQFN WYVDGVEVHN 280
AKTKPREEQF NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK 320
GLPSSIEKTI SKAKGQPREP QVYTLPPSQE EMTKNQVSLT 360
CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDSGGSFFL 400
YSRLTVDKSR WQEGNVFSCS VMHEALHNHY TQKSLSLSLG 440

K
441

<210> 35
<211> 1323
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain encoding nucleic acid

<400> 35
gaggtgcagc tggtgcagtc cggcgccgag gtgaagaagc ccggcagcag cgtgaagggtg 60
agctgcaagg cttccggcta taccttcagc tccttcagca tcgagtgggt gcggcaggct 120
cctggccagg gactggagtg gatcggcgag atcctgcccg gcagcaattc caccaactat 180
aatgagaagt tcaagggcaa ggctaccttc accgccgaca cctccaccaa taccgcctat 240
atggagctgt ccagcctgag gagcgaggac accgctgtgt actactgctc cagctactgg 300
tttgcctatt ggggccaggg caccctggtg accgtgagca gcgcttccac caagggcccc 360
tccgtgttcc ctctggcccc ctgtagcagg agcacctccg agtccaccgc tgccctgggc 420

SP-008701 Sequence listing in English

tgccctggtga aggactat	ccctgagcct gtgaccgtgt cctggaacag cggcgctctg	480
acctccggcg tgcacacctt	ccccgctgtg ctgcagtcct ccggcctgta cagcctgagc	540
tccgtggtga ccgtgcctag	cagcagcctg ggcaccaaga cctatacctg caacgtggat	600
cacaagccta gcaacaccaa	ggtggacaag cgggtggagt ccaagtacgg ccctccctgt	660
cccccttgcc ccgctcctga	gtttctgggc ggcccttccg tgtttctgtt cccccctaag	720
cccaaggata ccctgatgat	cagccggacc cccgaggtga cctgcgtggt ggtggatgtg	780
tcccaggagg accccgaggt	gcagttcaac tggtagctgg acggcgtgga ggtgcacaat	840
gccaagacca agcctcggga	ggagcagttt aacagcacct atcgggtggt gagcgtgctg	900
accgtgctgc accaggattg	gctgaacggc aaggagtata agtgcaaggt gtccaataag	960
ggcctgccta gcagcatcga	gaagaccatc agcaaggcta agggccagcc ccgggagccc	1020
caggtttaca ccctgcccc	tagccaggag gagatgacca agaatacaggt gtccctgacc	1080
tgccctggtga aaggcttcta	tccctccgac atcgtgtggt agtgggagtc caatggccag	1140
cccgagaaca actacaagac	caccctccc gtgctggata gcgacggcag cttctttctg	1200
tactccaggc tgaccgtgga	caagagccgg tggcaggagg gcaatgtgtt ctctgtttcc	1260
gtgatgcacg aggccctgca	caatcactac acccagaagt ccctgtccct gagcctcggc	1320
aag		1323

<210> 36
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> light chain variable region

<400> 36

DIVMTQSPDS LAVSLGERAT INCKSSQSLL NSGNQKNYLA 40

WYQQKPGQPP KLLIYGASTR ESGVPDRFSG SGSGTDFTLT 80

ISSLQAEDVA VYYCQNAHSY PPTFGQGTKL EIK 113

<210> 37
 <211> 220
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> light chain

<400> 37

DIVMTQSPDS LAVSLGERAT INCKSSQSLL NSGNQKNYLA 40

WYQQKPGQPP KLLIYGASTR ESGVPDRFSG SGSGTDFTLT 80

SP-008701 Sequence listing in English

ISSLQAEDVA VYYCQNAHSY PPTFGQGTKL EIKRTVAAPS 120

VFIFPPSDEQ LKSGTASVVC LLNNFYPREA KVQWKVDNAL 160

QSGNSQESVT EQDSKDSTYS LSSTLTLSKA DYEKHKVYAC 200

EVTHQGLSSP VTKSFNRGEC

220

<210> 38
<211> 660
<212> DNA
<213> Artificial Sequence

<220>
<221>
<222>
<223> light chain encoding nucleic acid

<400> 38
gacatcgtga tgaccagag ccccgattcc ctggccgtgt ccctgggcga gagggctacc 60
atcaattgca agtctccca gagcctgctg aatagcggca accagaagaa ctacctggcc 120
tggtaccagc agaagcccgg ccagcctcct aagctgctga tctacggcgc ctccaccgg 180
gagagcggcg ttcctgacag gtttagcggc tccggcagcg gcaccgattt caccctgacc 240
atctccagcc tgcaggccga ggacgtggcc gtgtattatt gccagaatgc ccactcctat 300
ccccccacct ttggccaggg caccaagctg gagatcaagc ggaccgtggc cgccccttcc 360
gtgtttatct tccccctc cgacgagcag ctgaagtccg gcaccgccag cgtggtgtgt 420
ctgctgaaca acttctaccc caggaggct aagggtgcagt ggaagggtgga taacgccctg 480
cagtccggca acagccagga gagcgtgacc gagcaggact ccaaggactc cacctactcc 540
ctgtcctcca ccctgaccct gtccaaggcc gattatgaga agcacaaggt gtacgcctgc 600
gaggtgaccc accagggcct gagctcccc gtgaccaagt ccttcaatag gggcgagtgc 660

<210> 39
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> heavy chain variable region

<400> 39

QVQLQQSGAE LMKPGASVKI SCKATGYTFS TFAIDWIKQR 40

PGPGLAWIGE ILPGINNTNY NEKFKGKATF TADTSSNTAY 80

MHLSSLTSED SAVYYCSTYW FAYWGQGLTV TVSA 114

<210> 40
<211> 113
<212> PRT
<213> Artificial Sequence

SP-008701 Sequence listing in English

<220>

<221>

<222>

<223> light chain variable region

<400> 40

DIVMTQSPSS LSVSAGEKVT MTCKSSQSLL NSGNQKNYLA 40

WYQQKPGQPP KLLMYGASTR ESGVPDRFTG SGSGTDFTLT 80

ISSVQAEDLA VYYCQNAHSY PPTFGAGTKL ELK 113

<210> 41

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain variable region

<400> 41

QVQLQSGAE LTKPGASVKI SCKATGYTFS TFAIDWIKQR 40

PGHGLAWIGE ILPGGNNTNY NEKFKGKATF TADTSSNTAY 80

MHLSSLTSED SAVYYCSTYW FAYWGQGLTV TVSA 114

<210> 42

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> light chain variable region

<400> 42

DIVMTQSPSS LSVSAGEKVT MSCKSSQSLL NSGNQKNYLA 40

WYQQKPGQPP KLLMYGASTR ESGVPDRFTG SGSGTDFTLT 80

ISSVQAEDLA VYYCQNAHSY PPAFGAGTKL ELK 113

<210> 43

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> heavy chain variable region

<400> 43

EVQLQSGPE LVKPGASMKI SCKASGYSFT AYT MNWVKQS 40

SP-008701 Sequence listing in English

HGKNLEWIGL INPYNGGTSY NQKFKGKATL TGDKSSSTAY 80

MELLSVTSED SAVYFCAREG NYYGSRGDFD YWGQGTTLTV 120

SS
122

<210> 44
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> light chain variable region

<400> 44

DILLTQSPAI LSVSPGERVS FSCRASQTIV TNILWYQRT 40

NGSPRLLIRY ASESISGIPS RFSGSGSGTD FTLSINSVES 80

EDIAHYCQQ SHSWPFTFGS GTKLEIK 107

<210> 45
<211> 326
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> human PVRIG full length amino acid

<400> 45

MRTEAQVPAL QPPEPGLEGA MGHRTLVLWP VLLTLCVTAG 40

TPEVWVQVRM EATELSSFTI RCGFLGSGSI SLVTVSWGGP 80

NGAGGTTLAV LHPERGIRQW APARQARWET QSSISLILEG 120

SGASSPCANT TFCCKFASFP EGSWEACGSL PPSSDPGLSA 160

PPTPAPILRA DLAGILGVSG VLLFGCVYLL HLLRRHKHRP 200

APRLQPSRTS PQAPRARAWA PSQASQAALH VPYATINTSC 240

RPATLDTAHP HGGPSWWASL PTHAAHRPQG PAAWASTPIP 280

ARGSFVSVEN GLYAQAGERP PHTGPGLTLF PDPRGPRAE 320

GPLGVR
326

<210> 46
<211> 132
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>

SP-008701 Sequence listing in English

<223> human PVRIG extracellular segment amino acid

<400> 46

TPEVWVQVRM EATELSSFTI RCGFLGSGSI SLVTVSWGGP 40
 NGAGGTTLAV LHPERGIRQW APARQARWET QSSISLILEG 80
 SGASSPCANT TFCKKFASFP EGSWEACGSL PPSSDPGLSA 120
 PPTPAPILRA DL
 132

<210> 47

<211> 330

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> human IgG1 constant region amino acid

<400> 47

ASTKGPSVFP LAPSSKSTSG GTAALGCLVK DYFPEPVTVS 40
 WNSGALTSGV HTFPAVLQSS GLYSLSSVVT VPSSSLGTQT 80
 YICNVNHKPS NTKVDKKVEP KSCDKTHTCP PCPAPELLGG 120
 PSVFLFPPKP KDTLMISRTP EVTCVVVDVS HEDPEVKFNW 160
 YVDGVEVHNA KTKPREEQYN STYRVVSVLT VLHQDWLNGK 200
 EYKCKVSNKA LPAPIEKTIS KAKGQPREPQ VYTLPPSRDE 240
 LTKNQVSLTC LVKGFYPSDI AVEWESNGQP ENNYKTTTPV 280
 LDSDGSEFFLY SKLTVDKSRW QQGNVFSCSV MHEALHNHYT 320
 QKSLSLSPGK
 330

<210> 48

<211> 538

<212> PRT

<213> Artificial Sequence

<220>

<221>

<222>

<223> human CD112 full length amino acid

<400> 48

MARAAALLPS RSPPTPLLWP LLLLLLLETG AQDVRVQVLP 40
 EVRGQLGGTV ELPCHLLPPV PGLYISLVTW QRPDAPANHQ 80
 NVAAFHPKMG PSFPSPKPGS ERLSFVSAKQ STGQDTEAEL 120
 QDATLALHGL TVEDEGNYTC EFATFPKGSV RGMTWLRVIA 160
 KPKNQAEAQK VTFSQDPTTV ALCISKEGRP PARISWLSSL 200

SP-008701 Sequence listing in English

DWEAKETQVS GTLAGTVTVT SRFTLVPSGR ADGVTVTCKV 240
 EHESFEERAL IPVTLVRYPP PEVSISGYDD NWYLGRTDAT 280
 LSCDVRSNPE PTGYDWSTTS GTFPTSAVAQ GSQLVIHAVD 320
 SLFNTTFVCT VTNAVGMGRA EQVIFVRETP NTAGAGATGG 360
 IIGGIIAAII ATAVAATGIL ICRQQRKEQT LQGAEEDEDL 400
 EGPPSYKPPT PKAKLEAQEM PSQFLTLGAS EHSPLKTPYF 440
 DAGASCTEQE MPRYHELPTL EERSGPLHPG ATSLGSPPIV 480
 PPGPPAVEDV SLDLEDEEGE EEEEYLDKIN PIYDALSYSS 520
 PSDSYQGKGF VMSRAMYV

538

<210> 49
 <211> 329
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> human CD112 extracellular segment amino acid

<400> 49

QDVRVQVLPE VRGQLGGTVE LPCHLLPPVP GLYISLVTWQ 40
 RPDAPANHQN VAAFHPPKMGF SFPSPKPGSE RLSFVSAKQS 80
 TGQDTEAELQ DATLALHGLT VEDEGNYTCE FATFPKGSVR 120
 GMTWLRVIAK PKNQAEAQKV TFSQDPTTVA LCISKEGRPP 160
 ARISWLSSLD WEAKETQVSG TLAGTVTVTS RFTLVPSGRA 200
 DGVTVTCKVE HESFEERALI PVTLSVRYPP EVSISGYDDN 240
 WYLGRTDATL SCDVRSNPEP TGYDWSTTSG TFPTSAVAQG 280
 SQLVIHAVDS LFNTTFVCTV TNAVGMGRAE QVIFVRETPN 320
 TAGAGATGG

329

<210> 50
 <211> 322
 <212> PRT
 <213> Artificial Sequence

<220>
 <221>
 <222>
 <223> Macaca fascicularis PVRIG amino acid

<400> 50

MRTEAQVLAL QSPEPGLEGA MGRRTLALPW VLLTLCVTAG 40
 TPEVWVQVQM EATELSSFTV HCGFLGPGSI SLVTVSWGGP 80
 DGAGGTKLAV LHPGLGTRQW APARQARWET QSSISLALED 120

SP-008701 Sequence listing in English

SGASSPFANT TFCCKFASFP EGSWESCGSL PPSSDPGLSA 160
PPTPVPIIRA DLAGILGLSG VLLFGCGYLL HLLRRQKHRP 200
TPRLQPSHTN SQALTAQAWA PSQASQAALH DPYATINTSF 240
CPATLDTAHP NGWASLPHTA AHQPQGAAS ASTPILARGS 280
FVSVENGLYT QAGERPPHTG PGLTLFPDCR GPRALEGRFG 320
VR 322

<210> 51
<211> 133
<212> PRT
<213> Artificial Sequence

<220>
<221>
<222>
<223> Macaca fascicularis PVRIG extracellular segment

<400> 51

AGTPEVWVQV QMEATELSSF TVHCGFLGPG SISLVTVSWG 40
GPDGAGGTKL AVLHPELGTR QWAPARQARW ETQSSISLAL 80
EDSGASSPFA NTTFCCKFAS FPEGSWESCG SLPPSSDPGL 120
SAPPTPVPII RAD
133