Figures

Fig. 1:

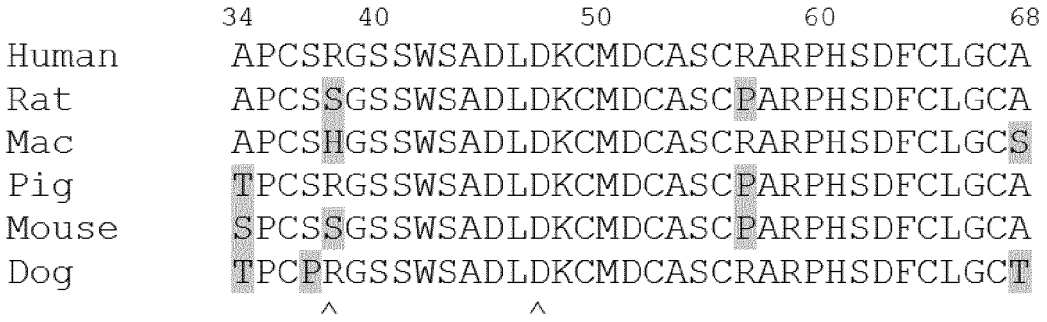


Fig. 2:


A
28
36
67
80
Cysteine rich domain
TM
TPP-2202
TPP-2203
TPP-1984
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWP
APCSSGSSWSADLDKCMDCASCPARPHSDFCLGCA
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCA
FC(hIgG)
FC(hIgG)
HIS
B
28
40
46,47
50
56
60
70
80
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWP

Fig. 3:

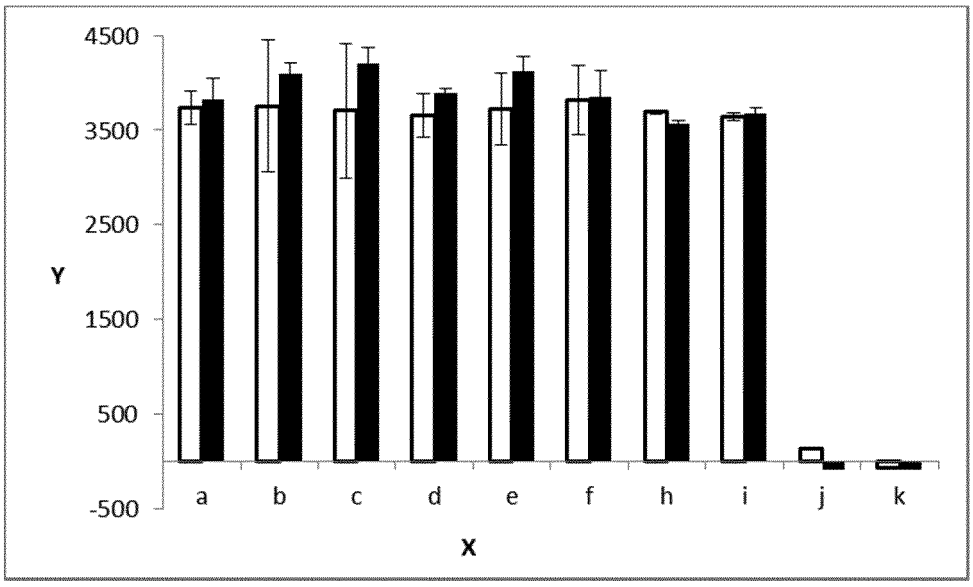


Fig. 4:

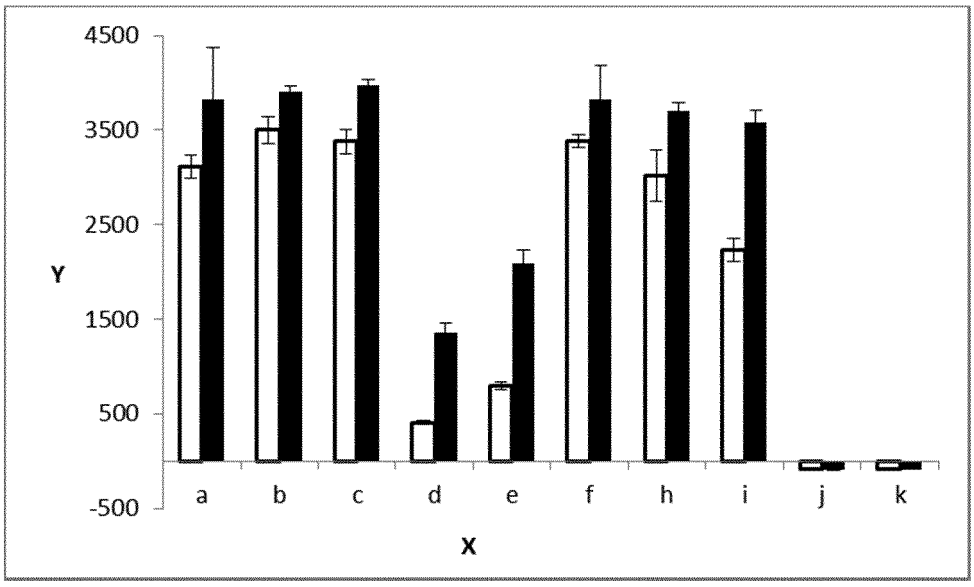


Fig. 5:

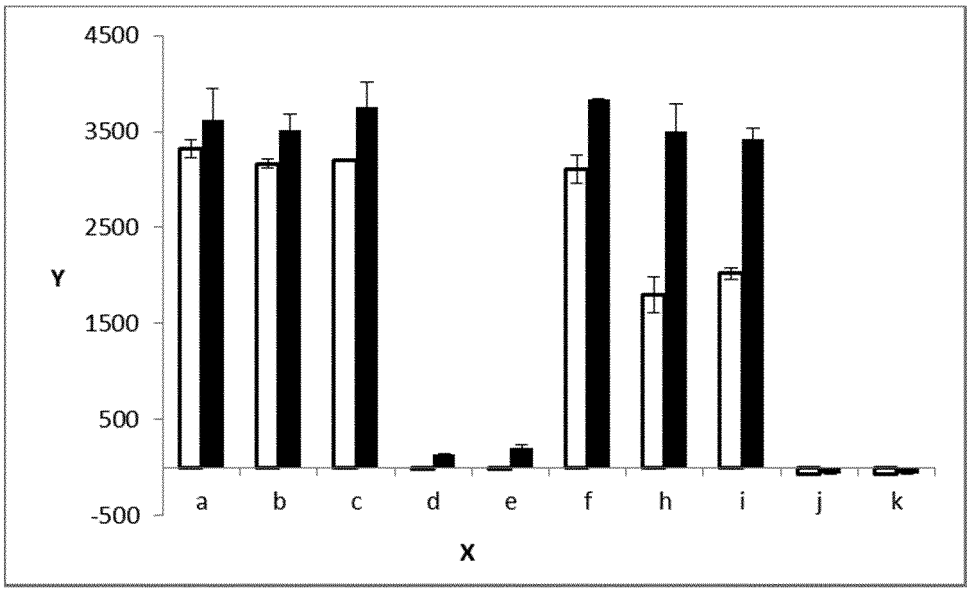
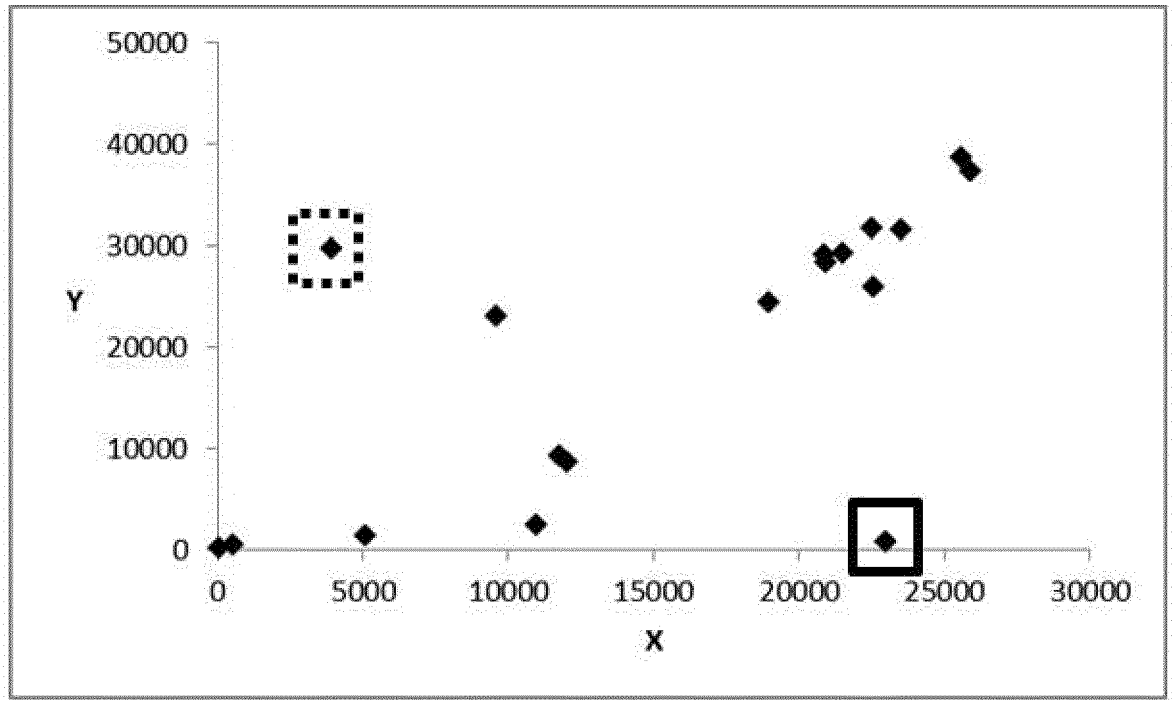
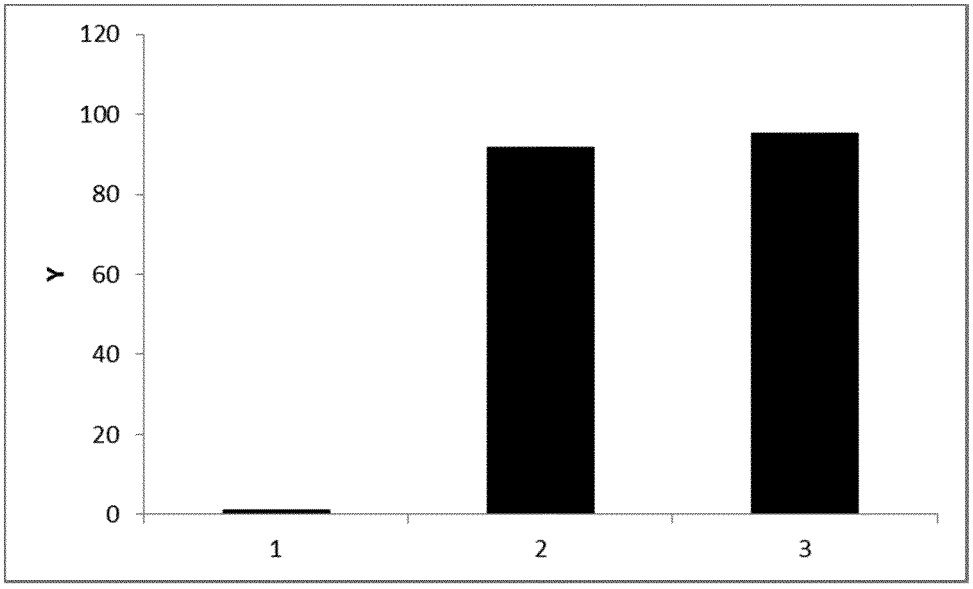


Fig. 6:

A


50000
40000
30000
20000
10000
0
Y
0
5000
10000
15000
20000
25000
30000
X

B


120
100
80
60
40
20
0
Y
1
2
3

C

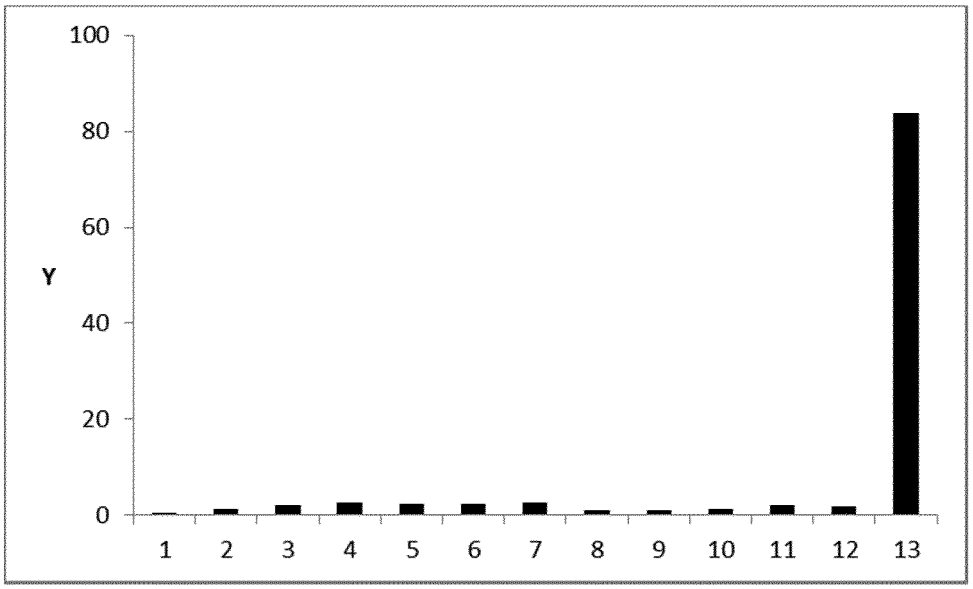


Fig. 7:

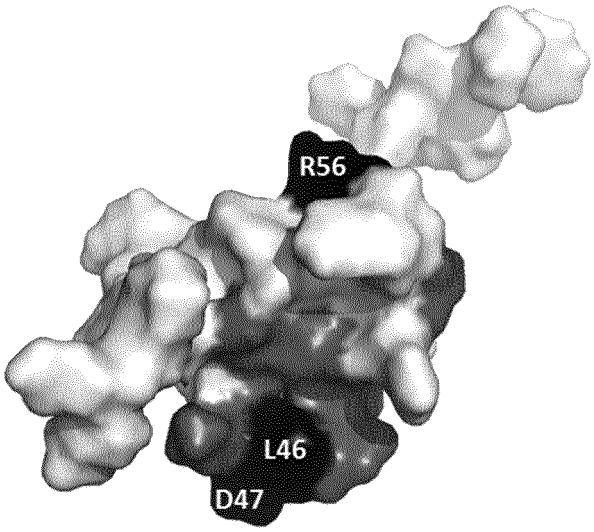


Fig. 8:

	1st antibody (immobilized)									
2nd antibody		P4A8	PDL-192	ITEM-1	ITEM-4	TPP-2084	TPP-2090	18.3.3	136.1	P3G5
	P4A8	-	+	+	+	-	-	+	+	-
	PDL-192	+	-	-	-	-	-	-	-	+
	ITEM-1	+	-	-	-	-	-	-	-	+
	ITEM-4	+	-	-	-	-	-	-	-	+
	TPP-2084	-	-	-	-	-	-	-	-	-
	TPP-2090	-	-	-	-	-	-	-	-	-
	18.3.3	+	-	-	-	-	-	-	-	+
	136.1	+	-	-	-	-	-	-	-	+
	P3G5	-	+	+	+	-	-	+	+	-

Fig. 9:

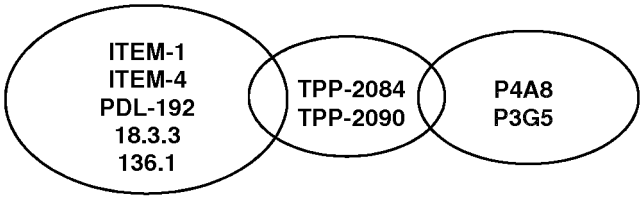


Fig. 10:

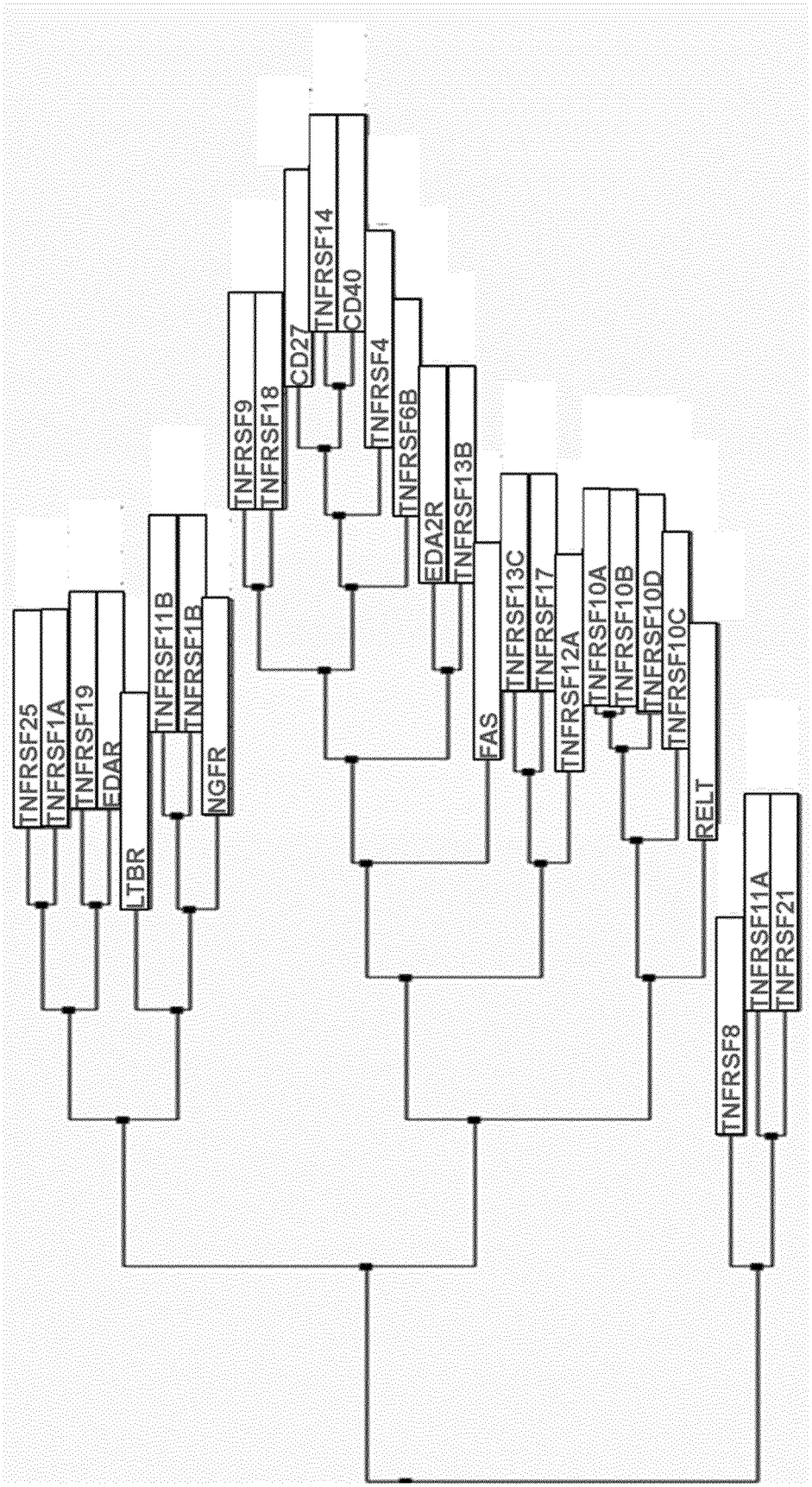

TNFRSF25
TNFRSF1A
TNFRSF19
EDAR
LTBR
TNFRSF11B
TNFRSF1B
NGFR
TNFRSF9
TNFRSF18
CD27
TNFRSF14
CD40
TNFRSF4
TNFRSF6B
EDA2R
TNFRSF13B
FAS
TNFRSF13C
TNFRSF17
TNFRSF12A
TNFRSF10A
TNFRSF10B
TNFRSF10D
TNFRSF10C
RELT
TNFRSF8
TNFRSF11A
TNFRSF21

Fig. 11:

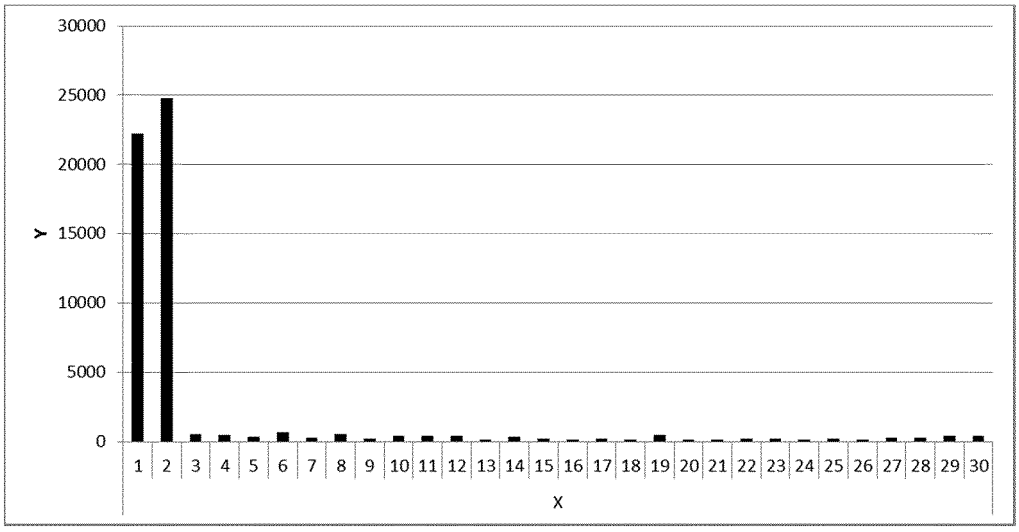

30000
25000
20000
15000
10000
5000
0
Y
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
X

Fig. 12:

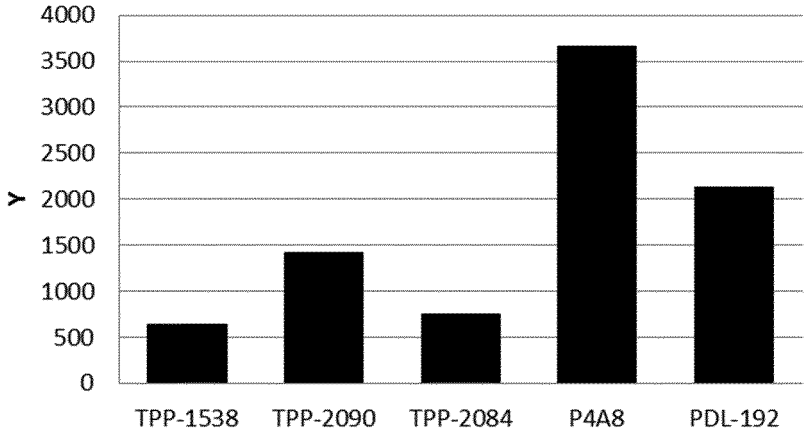

4000
3500
3000
2500
2000
1500
1000
500
0
Y
TPP-1538
TPP-2090
TPP-2084
P4A8
PDL-192

Fig. 13:

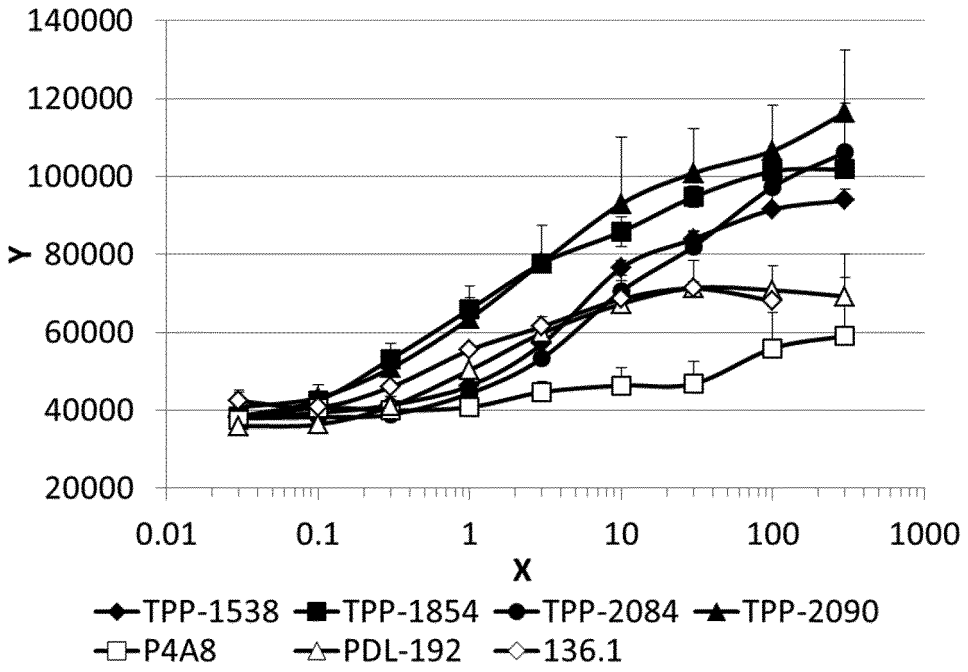
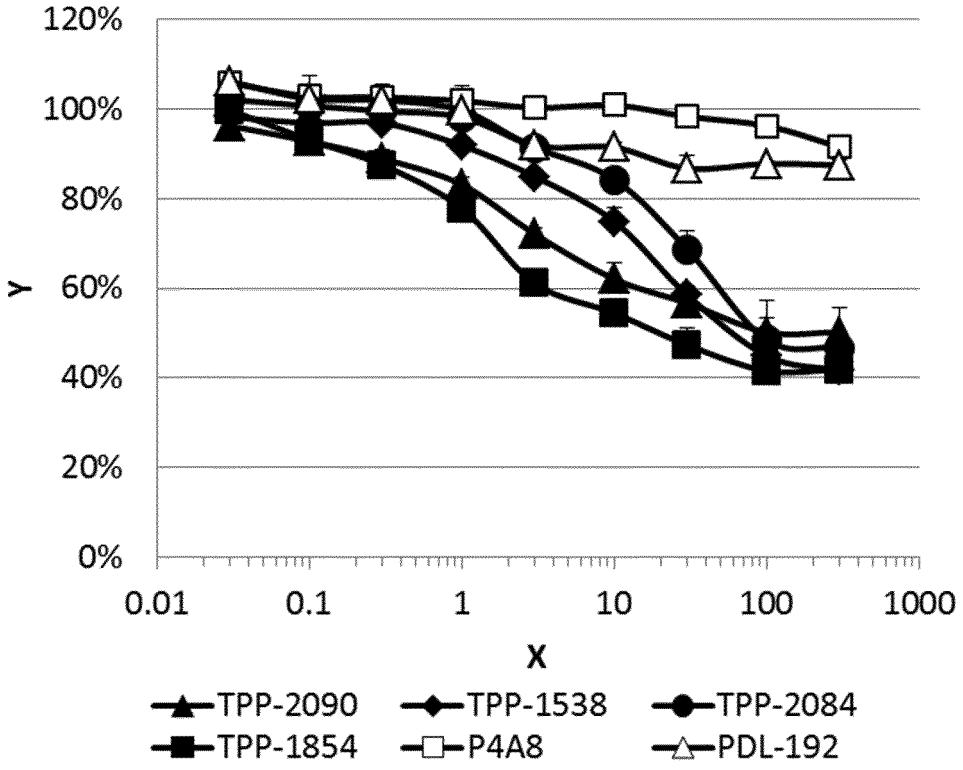

140000
120000
100000
80000
60000
40000
20000
Y
0.01
0.1
1
10
100
1000
X
TPP-1538
TPP-1854
TPP-2084
TPP-2090
P4A8
PDL-192
136.1

Fig. 14:

A


120%
100%
80%
60%
40%
20%
0%
Y
0.01
0.1
1
10
100
1000
X
TPP-2090
TPP-1538
TPP-2084
TPP-1854
P4A8
PDL-192

B

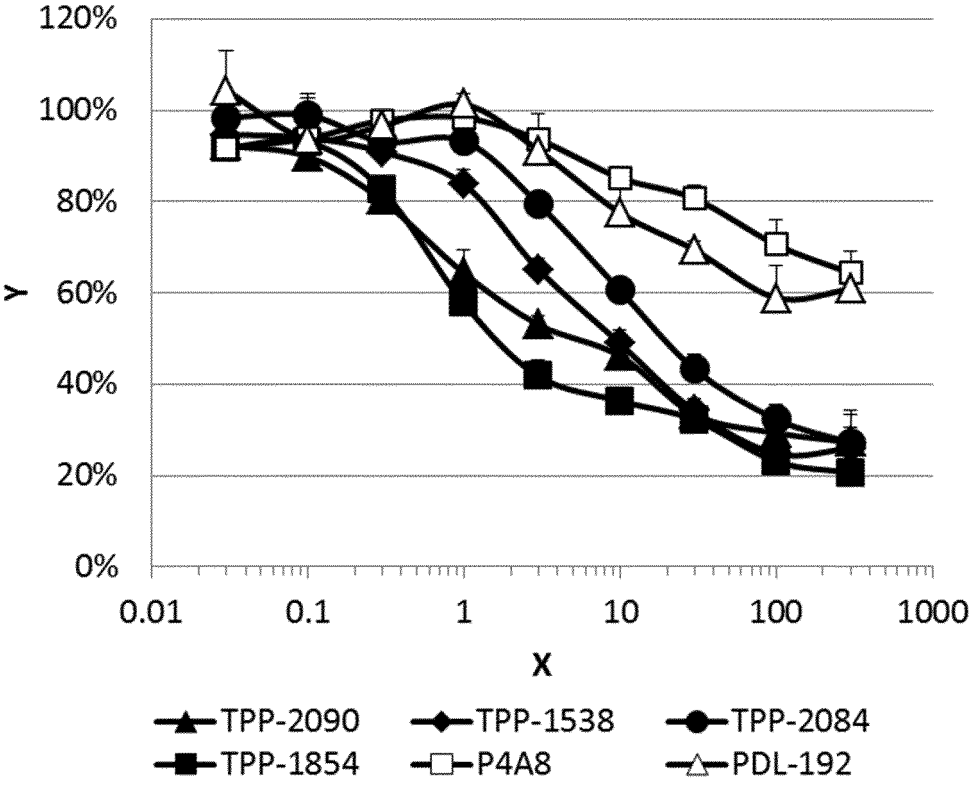

120%
100%
80%
60%
40%
20%
0%
Y
0.01
0.1
1
10
100
1000
X
TPP-2090
TPP-1538
TPP-2084
TPP-1854
P4A8
PDL-192

Fig. 15:

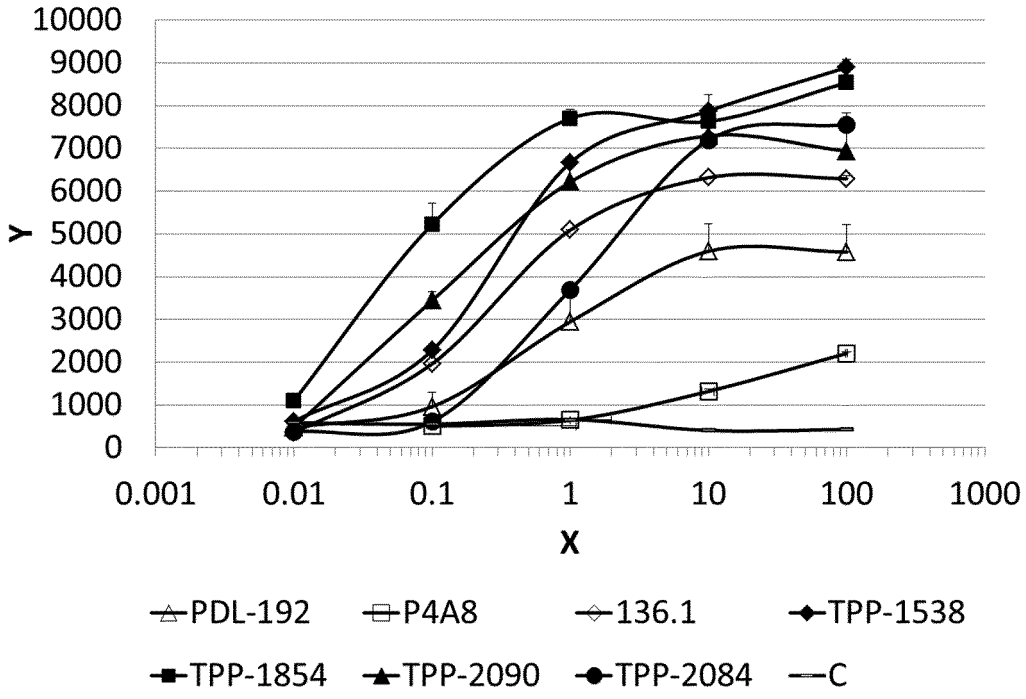

10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Y
0.001
0.01
0.1
1
10
100
1000
X
PDL-192
P4A8
136.1
TPP-1538
TPP-1854
TPP-2090
TPP-2084
C

Fig. 16:

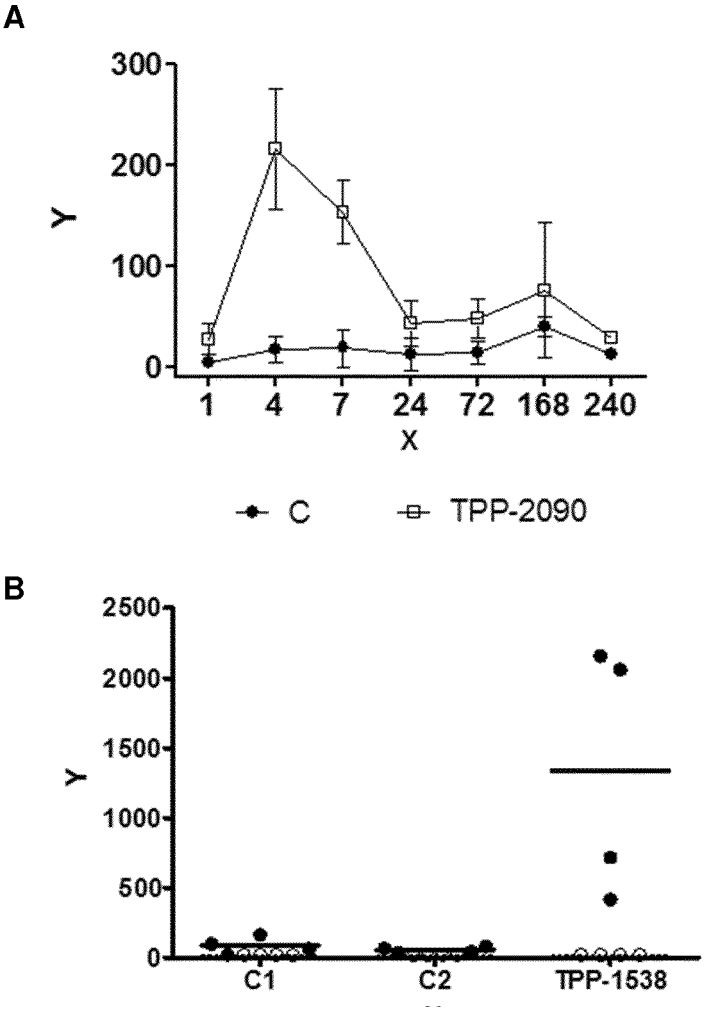

A
300
200
100
0
Y
1
4
7
24
72
168
240
X
C
TPP-2090
B
2500
2000
1500
1000
500
0
Y
C1
C2
TPP-1538

Fig. 17:

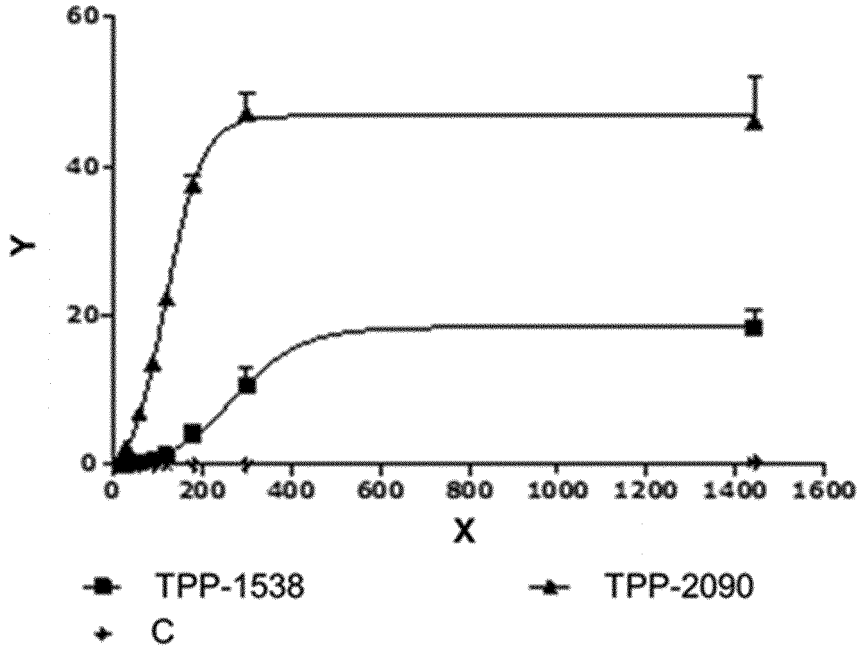

60
40
20
0
Y
0
200
400
600
800
1000
1200
1400
1600
X
TPP-1538
TPP-2090
C

Fig. 18:

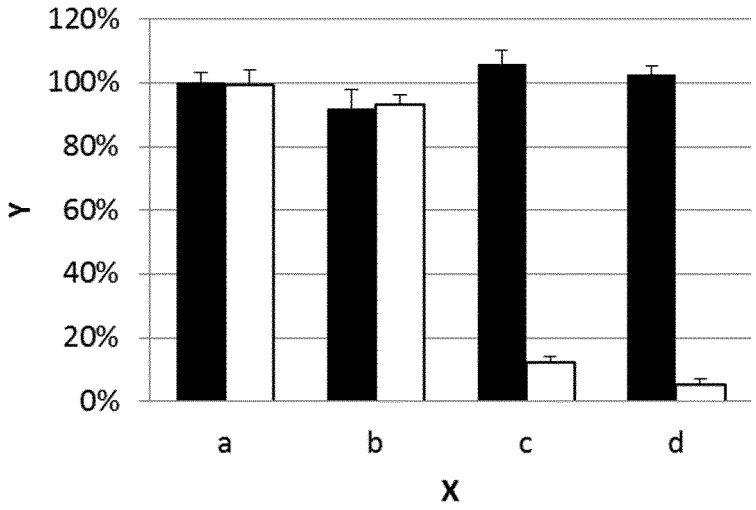


Fig. 19:

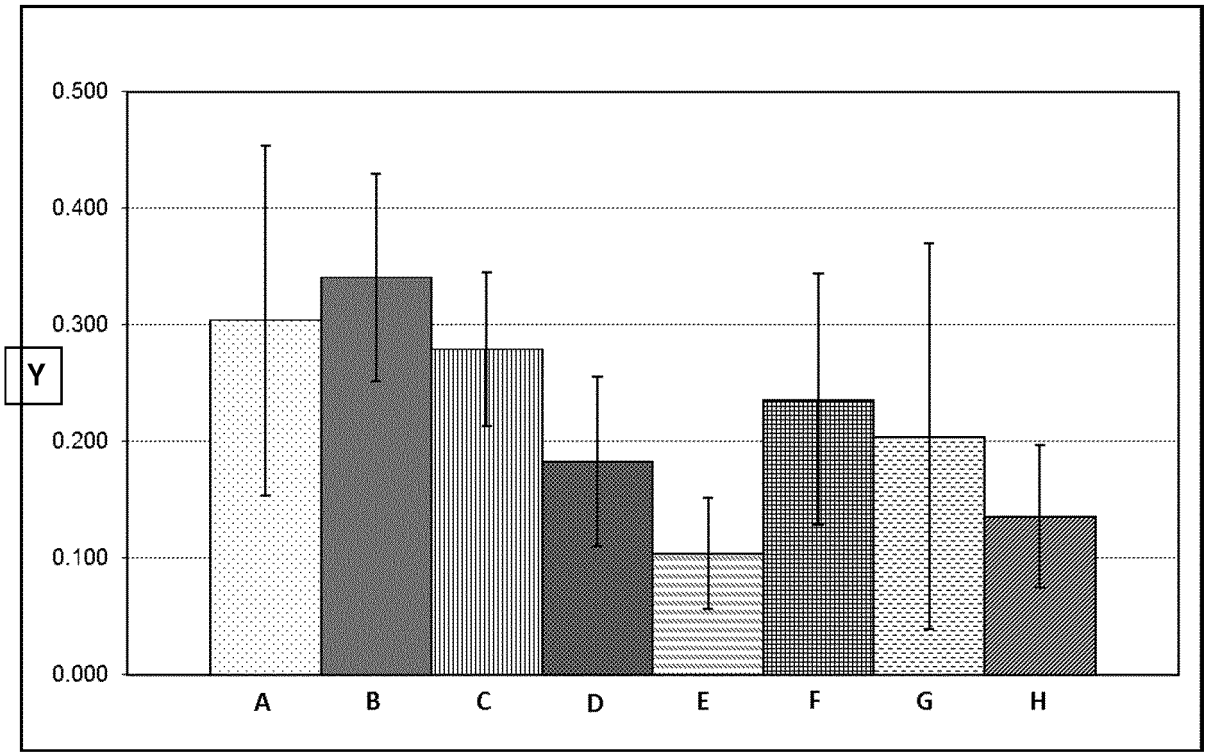


Fig. 20:

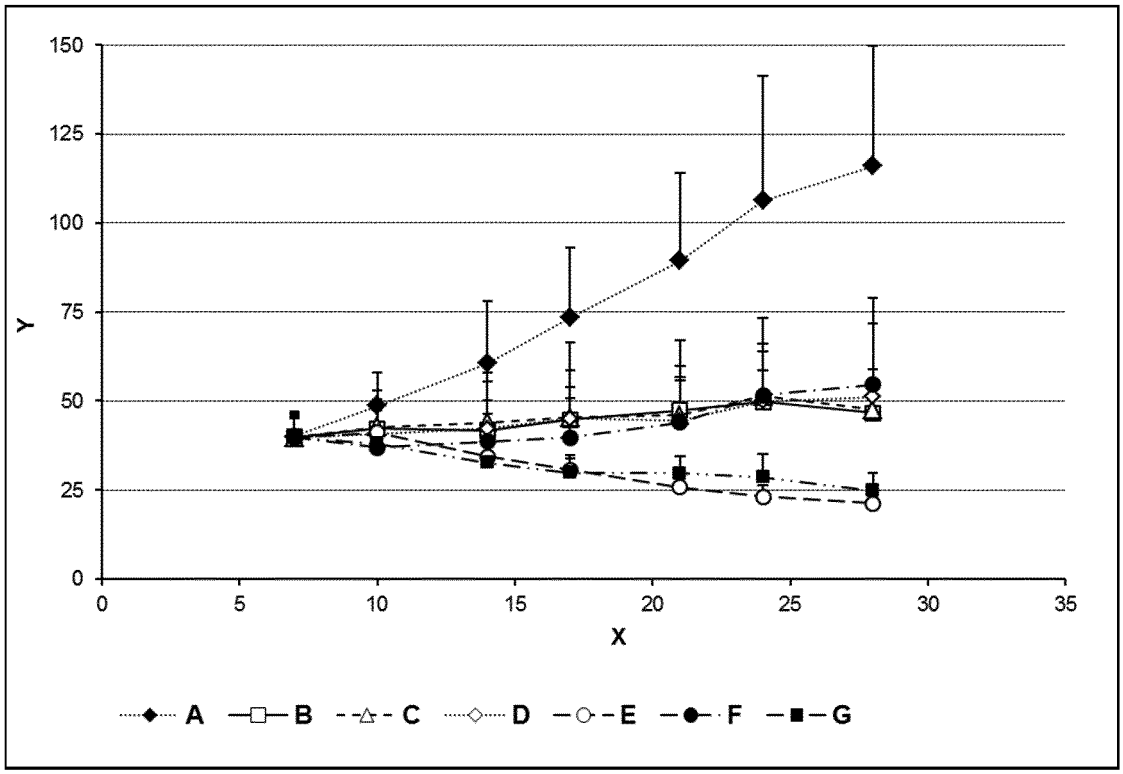


Fig. 21:

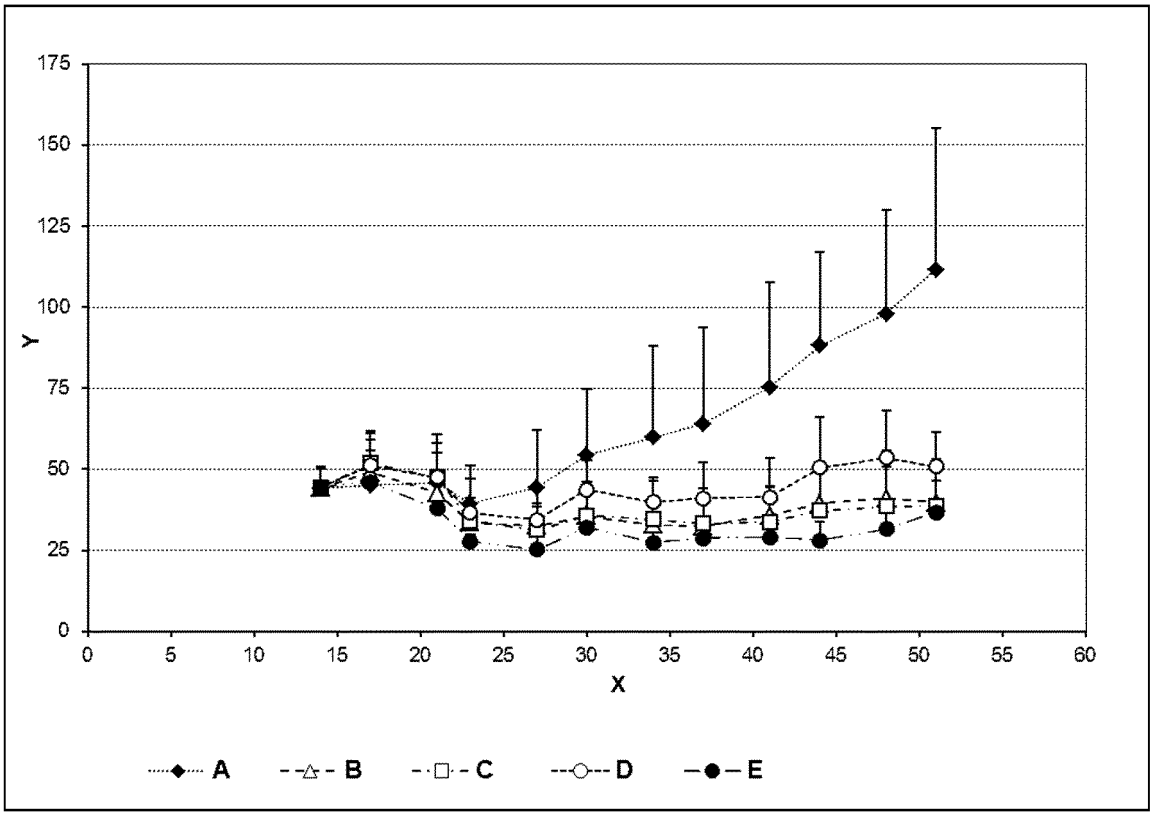

175
150
125
100
75
50
25
0
Y
0
5
10
15
20
25
30
35
40
45
50
55
60
X
A
B
C
D
E

Fig. 22:

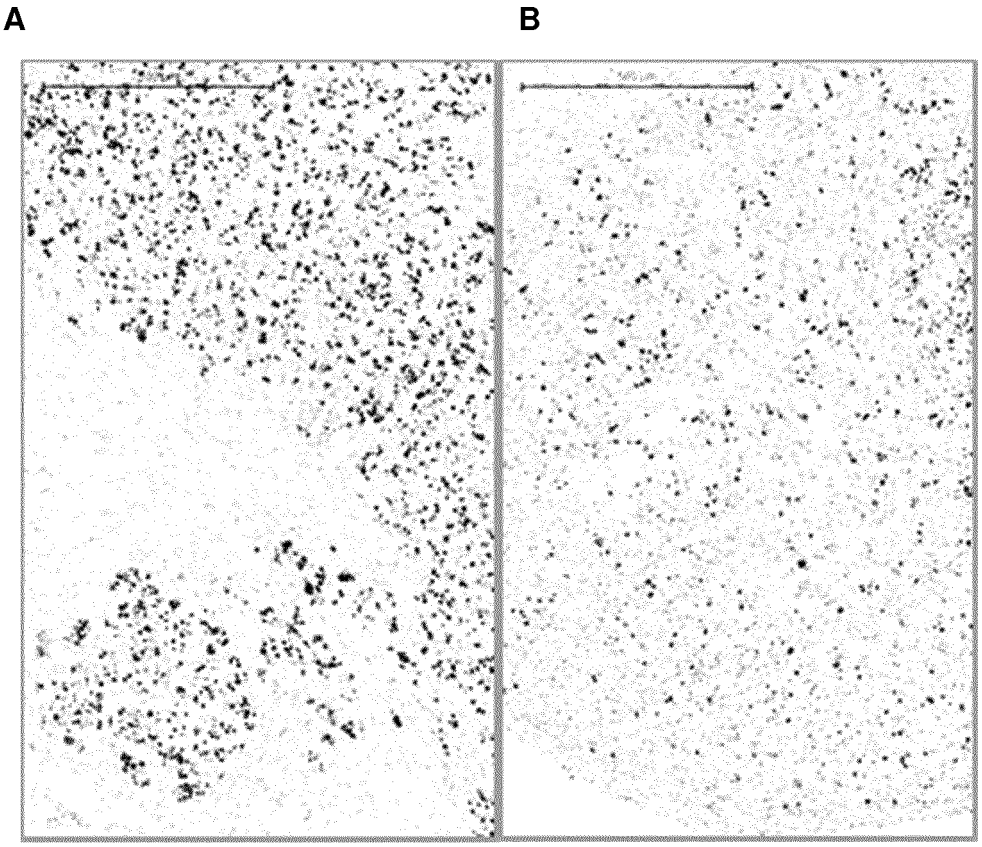


Fig. 23:

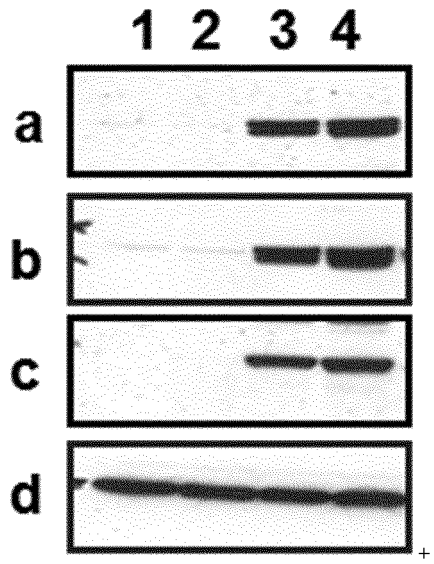


Fig. 24:

	CDR-H1	CDR-H2	CDR-H3
TPP-2090	PYPMI	YISPSGGSTHYADSVKG	GGDTYFDYFDY
TPP-2149	PYPMI	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-2093	PYPM**M**	YISPSGGSTHYADSVKG	GGDTYFDYFDY
TPP-2148	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-2084	PYPM**M**	YISPSGGSTHYADSVKG	GGDTYFDYFDY
TPP-2077	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-1538	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-1854	PYPMI	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-1853	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-1857	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
TPP-1858	PYPM**M**	YISPSGG**K**THYADSVKG	GGDTYFDYFDY
Cons	PYPM**X**	YISPSGG**X**THYADSVKG	GGDTYFDYFDY

	CDR-L1	CDR-L2	CDR-L3
TPP-2090	RASQSIS**G**YLN	QASSLQS	QQSYTSPFIT
TPP-2149	RASQSISSYLN	QASSLQS	QQSYTSPFIT
TPP-2093	RASQSISSYLN	QASSLQS	QQSYTSPFIT
TPP-2148	RASQSISSYLN	QASSLQS	QQSYTSPFIT
TPP-2084	RASQSISSYLN	**A**ASSLQS	QQSYTSPFIT
TPP-2077	RASQSISSYLN	**A**ASSLQS	QQSY**ST**P**G**IT
TPP-1538	RASQSISSYLN	**A**ASSLQS	QQSY**S**SP**G**IT
TPP-1854	RASQSIS**G**YLN	**N**ASSLQS	QQSY**S**SP**G**IT
TPP-1853	RASQSISSYLN	**N**ASSLQS	QQSYTSPFIT
TPP-1857	RASQSIS**G**YLN	**N**ASSLQS	QQSYTSP**G**IT
TPP-1858	RASQSISSYLN	**N**ASSLQS	QQSYTSP**G**IT
Cons	RASQSIS**X**YLN	**X**ASSLQS	QQSY**XX**P**X**IT

Fig. 25:

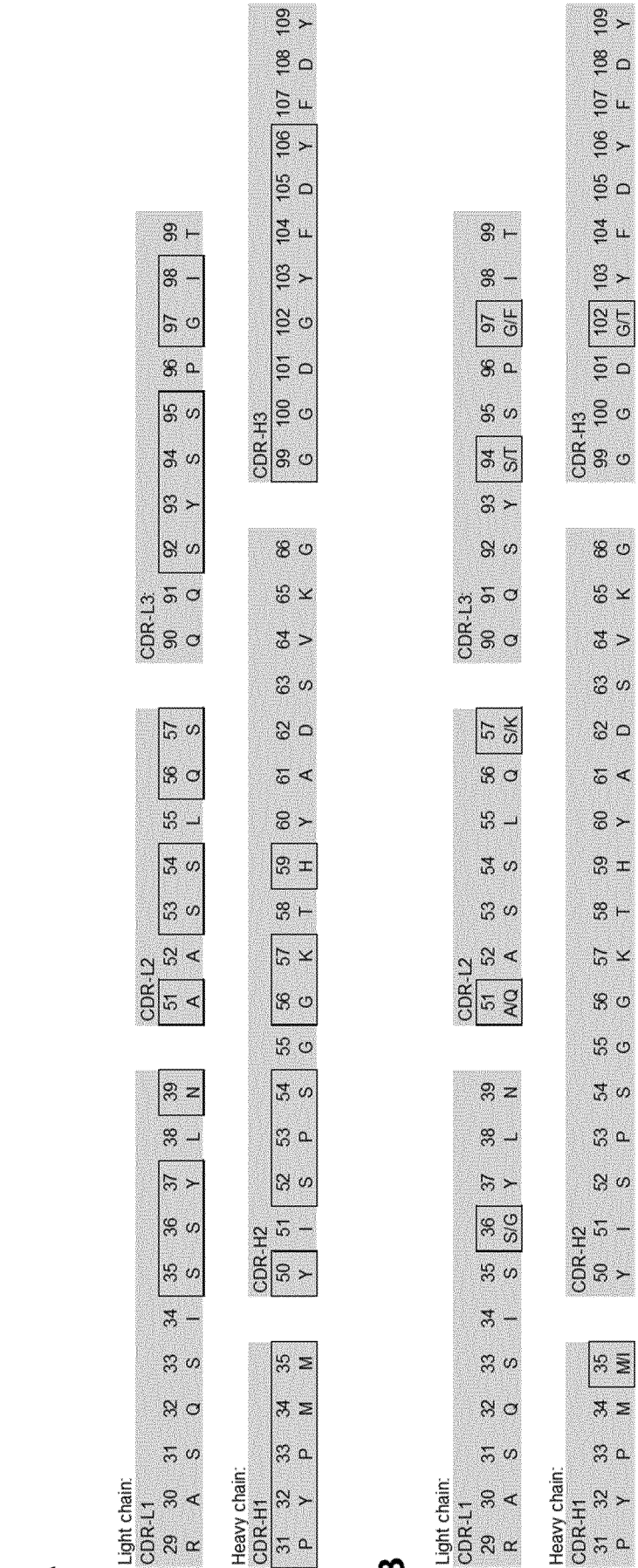

A
Light chain:
CDR-L1
29 30 31 32 33 34 35 36 37 38 39
R A S Q S I S S Y L N
CDR-L2
51 52 53 54 55 56 57
A A S S L Q S
CDR-L3:
90 91 92 93 94 95 96 97 98 99
Q Q S Y S S P G I T
Heavy chain:
CDR-H1
31 32 33 34 35
P Y P M M
CDR-H2
50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66
Y I S P S G G K T H Y A D S V K G
CDR-H3
99 100 101 102 103 104 105 106 107 108 109
G G D G Y F D Y F D Y
B
Light chain:
CDR-L1
29 30 31 32 33 34 35 36 37 38 39
R A S Q S I S S/G Y L N
CDR-L2
51 52 53 54 55 56 57
A/Q A S S L Q S/K
CDR-L3:
90 91 92 93 94 95 96 97 98 99
Q Q S Y S/T S P G/F I T
Heavy chain:
CDR-H1
31 32 33 34 35
P Y P M M/I
CDR-H2
50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66
Y I S P S G G K T H Y A D S V K G
CDR-H3
99 100 101 102 103 104 105 106 107 108 109
G G D G/T Y F D Y F D Y

Fig. 26:

SEQ ID NO:1 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:2 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:3 (polypeptide):
RASQSISGYLN

SEQ ID NO:4 (polypeptide):
QASSLQS

SEQ ID NO:5 (polypeptide):
QQSYTSPFIT

SEQ ID NO:6 (polypeptide):
PYPMI

SEQ ID NO:7 (polypeptide):
YISPSGGSTHYADSVKG

SEQ ID NO:8 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:9 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGQGTKVEIK

SEQ ID NO:10 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:11 (polypeptide):
DIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:12 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:13 (polypeptide):
RASQSISGYLN

SEQ ID NO:14 (polypeptide):
QASSLQS

SEQ ID NO:15 (polypeptide):
QQSYTSPFIT

SEQ ID NO:16 (polypeptide):
PYPMI

SEQ ID NO:17 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:18 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:19 (polypeptide):
DIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIK

SEQ ID NO:20 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:21 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:22 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:23 (polypeptide):
RASQSISSYLN

SEQ ID NO:24 (polypeptide):
QASSLQS

SEQ ID NO:25 (polypeptide):
QQSYTSPFIT

SEQ ID NO:26 (polypeptide):
PYPMM

SEQ ID NO:27 (polypeptide):
YISPSGGSTHYADSVKG

SEQ ID NO:28 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:29 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGQGTKVEIK

SEQ ID NO:30 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:31 (polypeptide):

DIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:32 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:33 (polypeptide):
RASQSISSYLN

SEQ ID NO:34 (polypeptide):
QASSLQS

SEQ ID NO:35 (polypeptide):
QQSYTSPFIT

SEQ ID NO:36 (polypeptide):
PYPMM

SEQ ID NO:37 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:38 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:39 (polypeptide):
DIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYQASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIK

SEQ ID NO:40 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:41 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYSTPGITFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:42 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:43 (polypeptide):
RASQSISSYLN

SEQ ID NO:44 (polypeptide):
AASSLQS

SEQ ID NO:45 (polypeptide):
QQSYSTPGIT

SEQ ID NO:46 (polypeptide):
PYPMM

SEQ ID NO:47 (polypeptide):
YISPSGGSTHYADSVKG

SEQ ID NO:48 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:49 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYSTPGITFGQGTKVEIK

SEQ ID NO:50 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGSTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:51 (polypeptide):
DIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTHQG
LSSPVTKSFNRGEC

SEQ ID NO:52 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:53 (polypeptide):
RASQSISSYLN

SEQ ID NO:54 (polypeptide):
AASSLQS

SEQ ID NO:55 (polypeptide):
QQSYSSPGIT

SEQ ID NO:56 (polypeptide):
PYPMM

SEQ ID NO:57 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:58 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:59 (polypeptide):
DIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGS
GTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIK

SEQ ID NO:60 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:61 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS

VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:62 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:63 (polypeptide):
RASQSISSYLN

SEQ ID NO:64 (polypeptide):
AASSLQS

SEQ ID NO:65 (polypeptide):
QQSYSSPGIT

SEQ ID NO:66 (polypeptide):
PYPMM

SEQ ID NO:67 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:68 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:69 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIK

SEQ ID NO:70 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:71 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS
VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:72 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDGYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:73 (polypeptide):
RASQSISSYLN

SEQ ID NO:74 (polypeptide):
AASSLQS

SEQ ID NO:75 (polypeptide):
QQSYSSPGIT

SEQ ID NO:76 (polypeptide):

PYPMM

SEQ ID NO:77 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:78 (polypeptide):
GGDGYFDYFDY

SEQ ID NO:79 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYSSPGITFGPGTKVEIK

SEQ ID NO:80 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDGYFDYFDYWGQGTLVTVSSA

SEQ ID NO:81 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS
VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:82 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:83 (polypeptide):
RASQSISGYLN

SEQ ID NO:84 (polypeptide):
NASSLQS

SEQ ID NO:85 (polypeptide):
QQSYTSPFIT

SEQ ID NO:86 (polypeptide):
PYPMI

SEQ ID NO:87 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:88 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:89 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIK

SEQ ID NO:90 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:91 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPGITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS
VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:92 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:93 (polypeptide):
RASQSISSYLN

SEQ ID NO:94 (polypeptide):
NASSLQS

SEQ ID NO:95 (polypeptide):
QQSYTSPGIT

SEQ ID NO:96 (polypeptide):
PYPMM

SEQ ID NO:97 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:98 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:99 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPGITFGPGTKVEIK

SEQ ID NO:100 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:101 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPGITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS
VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:102 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:103 (polypeptide):
RASQSISGYLN

SEQ ID NO:104 (polypeptide):
NASSLQS

SEQ ID NO:105 (polypeptide):
QQSYTSPGIT

SEQ ID NO:106 (polypeptide):
PYPMM

SEQ ID NO:107 (polypeptide):

YISPSGGKTHYADSVKG

SEQ ID NO:108 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:109 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISGYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPGITFGPGTKVEIK

SEQ ID NO:110 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:111 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAS
VVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKLYACEVTH
QGLSSPVTKSFNRGEC

SEQ ID NO:112 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSASTKGPSVFPLAPS
SKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTY
ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
SDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:113 (polypeptide):
RASQSISSYLN

SEQ ID NO:114 (polypeptide):
NASSLQS

SEQ ID NO:115 (polypeptide):
QQSYTSPFIT

SEQ ID NO:116 (polypeptide):
PYPMM

SEQ ID NO:117 (polypeptide):
YISPSGGKTHYADSVKG

SEQ ID NO:118 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:119 (polypeptide):
AQDIQMTQSPATLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYNASSLQSGVPSRFSGS
GSGTDFTLTISSLQPEDFATYYCQQSYTSPFITFGPGTKVEIK

SEQ ID NO:120 (polypeptide):
EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMMWVRQAPGKGLEWVSYISPSGGKTHYADSVKGR
FTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSA

SEQ ID NO:121 (polypeptide):
DIVLTQSPASLAVSLGQRATISCRANKSVSTSSYSYMHWYQQKPGQPPKLLIKYASNLES
GVPARFSGSGSGTDFILNIHPVEEEDAATYYCQHSRELPFTFGSGTKLEIKRADAAPTVS
IFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLNSWTDQDSKDSTYSMS
STLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC

SEQ ID NO:122 (polypeptide):

QVQLQQSGPEVVRPGVSVKISCKGSGYTFTDYGIHWVKQSHAKSLEWIGVISTYNGYTNY
NQKFKGKATMTVDKSSSTAYMELARLTSEDSAIYYCARAYYGNLYYAMDYWGQGTSVTVS
SAKTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQS
DLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLLG
GPSVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDY
NSTLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPEE
EMTKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKN
WVERNSYSCSVVHEGLHNHHTTKSFSRTPG

SEQ ID NO:123 (polypeptide):
DIVLTQSPASLTVSLGQRATISCRASQSVSTSSYSYMQWYQQRPGQPPKLLIKYATNLDS
GVPARFSGSGSGTDFTLNIHPVEEEDAATYYCQHSWEIPYTFGGGTKLEIKRADAAPTVS
IFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLNSWTDQDSKDSTYSMS
STLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC

SEQ ID NO:124 (polypeptide):
EVKLEESGGGLVQPGGSMKLSCVASGFTFNNYWMSWVRQSPEKGLEWLAEIRLKSDNYAT
HYAESVKGKFTISRDDSKSRLYLQMNNLRAENTGIYYCTGGFADYFDYWGQGTTLTVSSA
KTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDL
YTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLLGGP
SVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNS
TLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPEEEM
TKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWV
ERNSYSCSVVHEGLHNHHTTKSFSRTPG

SEQ ID NO:125 (polypeptide):
DIVLTQSPASLAVSLGQRATISCRASKSVSTSSYSYMHWYQQKPGQPPKLLIKYASNLES
GVPARFSGSGSGTDFSLNIHPMEEDDTAMYFCQHSRELPFTFGGGTKLEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLS
STLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

SEQ ID NO:126 (polypeptide):
QVQLVQSGAEVKKPGASVKVSCKGSGYTFTDYGMHWVRQAPGQGLEWMGVISTYNGYTNY
NQKFKGRVTMTVDKSTSTAYMELRSLRSDDTAVYYCARAYYGNLYYAMDYWGQGTLVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS
SGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLG
GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD
ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID NO:127 (polypeptide):
DIQMTQSPSSLSASVGDRVTITCRASQSVSTSSYSYMHWYQQKPGKAPKLLIKYASNLES
GVPSRFSGSGSGTDFTLTISSLQPEDFATYYCQHSWEIPYTFGGGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLS
STLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

SEQ ID NO:128 (polypeptide):
QVELVESGGGLVQPGGSLRLSCAASGFTFSSYWMSWVRQAPGKGLEWVAEIRLKSDNYAT
HYAESVKGRFTISRDDSKNSLYLQMNSLRAEDTAVYYCTGYYADAMDYWGQGTLVTVSSA
STKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSG
LYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGP
SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDEL
TKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:129 (polypeptide):
DIVLTQSPASLAVSLGQRATISCKASQSVSTSTYSYMQWYQQRPGQSPKLLIKYASKLDS
GVPARFSGSGSGTDFTLNIHPVEEEDTATYYCQHSWELPYTFGGGTRLEIKRADAAPTVS
IFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLNSWTDQDSKDSTYSMS
STLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC

SEQ ID NO:130 (polypeptide):
EVKLGESGGGLVQPGGSMKLSCVASGFPFTKYWMNWVRQSPEKGLEWVAEIRLKSDNYAT
HYAESAKGRFTISRDDSRSSVYLQMNNLRAEDTAIYYCSPTYADTMDYWGQGTSVTVSSA
KTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDL
YTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLLGGP
SVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNS
TLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPEEEM
TKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWV
ERNSYSCSVVHEGLHNHHTTKSFSRTPG

SEQ ID NO:131 (polypeptide):
DIVLTQSPASLAVSLGQRATISCRASKSVSTSSYSYMHWYQQKPGQPPKLLIKYTSNLES
GVPARFSGSGSGTDFILNIHPVEEEDAATYYCQHSRELPWTFGGGTKLEIKRADAAPTVS
IFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLNSWTDQDSKDSTYSMS
STLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC

SEQ ID NO:132 (polypeptide):
QVSLKESGPGILQPSQTLSLTCSFSGFSLSTSGMGVSWIRQPSGKGLEWLAHIYWDDDKR
YNPSLKSRLTISKDTSRNQVFLKITSVDTADTATYYCARRGPDYYGYYPMDYWGQGTSVT
VSAKTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQ
SDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLL
GGPSVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHRED
YNSTLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPE
EEMTKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKK
NWVERNSYSCSVVHEGLHNHHTTKSFSRTPG

SEQ ID NO:133 (polypeptide):
EQAPGTAPCSHGSSWSADLDKCMDCASCRARPHSDFCLGCSAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:134 (polypeptide):
EQAPGNAPCSSGSSWSADLDKCMDCASCPARPHSDFCLGCAAAPPAHFRMLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:135 (polypeptide):
ERVPGTTPCSRGSSWSADLDKCMDCASCPARPHSDFCLGCAAAPPASFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:136 (polypeptide):
ERVPGTTPCPRGSSWSADLDKCMDCASCRARPHSDFCLGCTAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:137 (polypeptide):
EQAPGTSPCSSGSSWSADLDKCMDCASCPARPHSDFCLGCAAAPPAHFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:138 (polypeptide):

EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:139 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWPIEGRMDP
KSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPV
LDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:140 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:141 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAHHHHHH

SEQ ID NO:142 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCQGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:143 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPKSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:144 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCPARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:145 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCADCASCRARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:146 (polypeptide):
EQAPGTAPCSRGSSASADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:147 (polypeptide):
EQAPGTAPCSRGRSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE

PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:148 (polypeptide):
EQAPGQAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWPRSDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH
NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO:149 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPHSDFCAGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:150 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPHSDACLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:151 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPHSAFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:152 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPHADFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:153 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARPASDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:154 (polypeptide):
APCSRGSSWSADLDKCMDCASCRARAHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:155 (polypeptide):
APCSRGSSWSADLDKCMDCASCRAAPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:156 (polypeptide):
APCSRGSSWSADLDKCMDCASCAARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:157 (polypeptide):
APCSRGSSWSADLDKCMDCAACRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:158 (polypeptide):
APCSRGSSWSADLDKCMACASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:159 (polypeptide):
APCSRGSSWSADLDACMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:160 (polypeptide):
APCSRGSSWSADLAKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:161 (polypeptide):
APCSRGSSWSAALDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:162 (polypeptide):
APCSRGSSWAADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:163 (polypeptide):
APCSRGSSASADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:164 (polypeptide):
APCSRGSAWSADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:165 (polypeptide):
APCSRGASWSADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:166 (polypeptide):
APCSAGSSWSADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:167 (polypeptide):
APCARGSSWSADLDKCMDCASCRARPHSDFCLGCAIEGRMDPKSCDKTHTCPPCPAPELL
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKHHHHHH

SEQ ID NO:168 (polypeptide):
EQAPGTAPCSRGSSWSADLDKCMDCASCRARPHSDFCLGCAAAPPAPFRLLWP

SEQ ID NO:169 (polypeptide):
MARGSLRRLLRLLVLGLWLALLRSVAGEQAPGTAPCSRGSSWSADLDKCMDCASCRARPH
SDFCLGCAAAPPAPFRLLWPILGGALSLTFVLGLLSGFLVWRRCRRREKFTTPIEETGGE
GCPAVALIQ

SEQ ID NO:170 (DNA):
ATGGCTCGGGGCTCGCTGCGCCGGTTGCTGCGGCTCCTCGTGCTGGGGCTCTGGCTGGCGTTGCTGC
GCTCCGTGGCCGGGGAGCAAGCGCCAGGCACCGCCCCCTGCTCCCGCGGCAGCTCCTGGAGCGCGGA
CCTGGACAAGTGCATGGACTGCGCGTCTTGCAGGGCGCGACCGCACAGCGACTTCTGCCTGGGCTGC
GCTGCAGCACCTCCTGCCCCCTTCCGGCTGCTTTGGCCCATCCTTGGGGGCGCTCTGAGCCTGACCT
TCGTGCTGGGGCTGCTTTCTGGCTTTTTGGTCTGGAGACGATGCCGCAGGAGAGAGAAGTTCACCAC
CCCCATAGAGGAGACCGGCGGAGAGGGCTGCCCAGCTGTGGCGCTGATCCAGTGACAATGTGCCCCC
TGCCAGCCGGGGCTCGCCCACTCATCATTCATTCATCCATTCTAGAGCCAGTCTCTGCCTCCCAGAC
GCGGCGGGAGCCAAGCTCCTCCAACCACAAGGGGGGTGGGGGGCGGTGAATCACCTCTGAGGCCTGG
GCCCAGGGTTCAGGGGAACCTTCCAAGGTGTCTGGTTGCCCTGCCTCTGGCTCCAGAACAGAAAGGG
AGCCTCACGCTGGCTCACACAAAACAGCTGACACTGACTAAGGAACTGCAGCATTTGCACAGGGGAG
GGGGGTGCCCTCCTTCCTTAGGACCTGGGGGCCAGGCTGACTTGGGGGGCAGACTTGACACTAGGCC
CCACTCACTCAGATGTCCTGAAATTCCACCACGGGGGTCACCCTGGGGGGGTTAGGGACCTATTTTTA
ACACTAGGGGCTGGCCCACTAGGAGGGCTGGCCCTAAGATACAGACCCCCCCAACTCCCCAAAGCGG
GGAGGAGATATTTATTTTGGGGAGAGTTTGGAGGGGAGGGAGAATTTATTAATAAAAGAATCTTTAA
CTTTAAAAAAAAAAAAAAAAA

SEQ ID NO:171 (polypeptide):
PYPMX

SEQ ID NO:172 (polypeptide):
YISPSGGXTHYADSVKG

SEQ ID NO:173 (polypeptide):
GGDTYFDYFDY

SEQ ID NO:174 (polypeptide):
RASQSISXYLN

SEQ ID NO:175 (polypeptide):
XASSLQS

SEQ ID NO:176 (polypeptide):
QQSYXXPXIT

SEQ ID NO:177 (DNA):
GACATCCAGATGACCCAGAGCCCCAGCAGCCTGAGCGCCTCCGTGGGCGACAGAGTGACCA
TCACCTGTCGGGCCAGCCAGAGCATCAGCGGCTACCTGAACTGGTATCAGCAGAAGCCCGG
CAAGGCCCCCAAGCTGCTGATCTACCAGGCCAGCTCCCTGCAGAGCGGCGTGCCAAGCAGA
TTCAGCGGCAGCGGCTCCGGCACCGACTTCACCCTGACCATCAGCAGCCTGCAGCCCGAGG
ACTTCGCCACCTACTA
CTGCCAGCAGAGCTACACCAGCCCCTTCATCACCTTCGGCCAGGGCACCAAGGTGGAAATC
AAGCGGACCGTGGCCGCTCCCAGCGTGTTCATCTTCCCACCCAGCGACGAGCAGCTGAAGT
CCGGCACA
GCCAGCGTGGTCTGCCTGCTGAACAACTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAGG
TGGACAACGCCCTGCAGTCCGGCAACTCCCAGGAAAGCGTGACCGAGCAGGACAGCAAGGA
CTCCACCTACAGCCTGAGCAGCACCCTGACCCTGAGCAAGGCCGACTACGAGAAGCACAAG
GTGTACGCCTGCGAAGTGACCCACCAGGGCCTGTCCAGCCCCGTGACCAAGAGCTTCAACC
GGGGCGAGTGC

SEQ ID NO:178 (DNA):
GAAGTTCAATTGTTAGAGTCCGGCGGAGGCCTGGTGCAGCCTGGCGGCAGCCTGAGACTGT
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AGGCAAGGGCCTGGAATGGGTGTCCTACATCAGCCCCAGCGGCGGCAGCACCCACTACGCC
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AGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTACTATTGCGCCAGAGGCGGCGACAC
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CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
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ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
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TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
GGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGGGTG
GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
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TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
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CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:179(DNA):
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GAAAGCCCCTAAGCTCCTGATCTATCAGGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGG
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GATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCA
GAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAG
TGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGC

AAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCCTGAGCT
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SEQ ID NO:180(DNA):
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ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
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TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
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TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
CCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAGGTG
TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:181(DNA):
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CAAGGCCCCCAAGCTGCTGATCTACCAGGCCAGCTCCCTGCAGAGCGGCGTGCCAAGCAGA
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ACTTCGCCACCTACTACTGCCAGCAGAGCTACACCAGCCCCTTCATCACCTTCGGCCAGGG
CACCAAGGTGGAAATCAAGCGGACCGTGGCCGCTCCCAGCGTGTTCATCTTCCCACCCAGC
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GCGAGGCCAAGGTGCAGTGGAAGGTGGACAACGCCCTGCAGTCCGGCAACTCCCAGGAAAG
CGTGACCGAGCAGGACAGCAAGGACTCCACCTACAGCCTGAGCAGCACCCTGACCCTGAGC
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SEQIDNO:182(DNA):
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CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
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AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA

ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
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TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
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TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:183(DNA):
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TTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAG
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GACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCT
GATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCA
GAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAG
TGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGC
AAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCCTGAGCT
CGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SE QID NO:184(DNA):
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ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:185(DNA):
GACATCCAGATGACCCAGAGCCCCAGCAGCCTGTCTGCCAGCGTGGGCGACAGAGTGACCA
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CAAGGCCCCCAAGCTGCTGATCTATGCCGCCAGCTCTCTGCAGAGCGGAGTGCCCAGCAGA
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ACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCCCCGGCATCACATTTGGCCAGGG
CACCAAGGTGGAAATCAAGCGGACAGTGGCCGCTCCCAGCGTGTTCATCTTCCCACCTAGC
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GCGAGGCCAAGGTGCAGTGGAAGGTGGACAATGCCCTGCAGTCCGGCAACTCCCAGGAAAG
CGTCACCGAGCAGGACAGCAAGGACTCCACCTACAGCCTGAGCAGCACCCTGACCCTGAGC
AAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAAGTGACCCACCAGGGCCTGTCTA
GCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGT

SEQ ID NO:186(DNA):
GAAGTTCAATTGTTAGAGTCCGGCGGAGGCCTGGTGCAGCCTGGCGGATCTCTGAGACTGA
GCTGTGCCGCCAGCGGCTTCACCTTCAGCCCCTACCCTATGATGTGGGTCCGACAGGCCCC
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CCGGC

SEQ ID NO:187(DNA):
GACATCCAGATGACCCAGTCTCCAGCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCA
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GACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCT
GATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCA
GAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAG
TGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGC
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SEQ ID NO:188(DNA):
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CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
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CCGGC

SEQ ID NO:189(DNA):
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TCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAAC
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CCCTGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCG
CCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCA
GGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACG
CTGAGCAAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCC
TGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:190(DNA):
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TGGTAAAGGTTTGGAGTGGGTTTCTTATATCTCTCCTTCTGGTGGCAAGACTCATTATGCT
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AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATAC
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ACCAAGGGCCCATCGGTCTTCCCGCTAGCACCCAGCAGCAAGAGCACCAGCGGCGGAACAG
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CCGGC

SEQ ID NO:191(DNA):
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SEQIDNO:192(DNA):
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AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATGG
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TGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTGTAC
AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA
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CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
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GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
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TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:193(DNA):

GCACAAGACATCCAGATGACCCAGTCTCCAGCCACCCTGTCTGCATCTGTAGGAGACAGAG
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CTGAAGATTTTGCAACTTACTACTGTCAACAGAGCTACACTAGTCCATTCATCACTTTCGG
CCCTGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCG
CCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCA
GGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACG
CTGAGCAAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCC
TGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:194(DNA):
GAAGTTCAATTGTTAGAGTCTGGTGGCGGTCTTGTTCAGCCTGGTGGTTCTTTACGTCTTT
CTTGCGCTGCTTCCGGATTCACTTTCTCTCCTTACCCTATGATCTGGGTTCGCCAAGCTCC
TGGTAAAGGTTTGGAGTGGGTTTCTTATATCTCTCCTTCTGGTGGCAAGACTCATTATGCT
GACTCCGTTAAAGGTCGCTTCACTATCTCTAGAGACAACTCTAAGAATACTCTCTACTTGC
AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATAC
TTATTTCGACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCAAGCGCCTCC
ACCAAGGGCCCATCGGTCTTCCCGCTAGCACCCAGCAGCAAGAGCACCAGCGGCGGAACAG
CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
TGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTGTAC
AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA
ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
CTGTTCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGAAGTGACCTGCG
TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
GGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGGGTG
GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
CCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAGGTG
TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:195(DNA):
GCACAAGACATCCAGATGACCCAGTCTCCAGCCACCCTGTCTGCATCTGTAGGAGACAGAG
TCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCAGCTATTTAAATTGGTATCAGCAGAA
ACCAGGGAAAGCCCCTAAGCTCCTGATCTATAACGCATCCAGTTTGCAAAGTGGGGTCCCA
TCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAAC
CTGAAGATTTTGCAACTTACTACTGTCAACAGAGCTACACTAGTCCAGGGATCACTTTCGG
CCCTGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCG
CCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCA
GGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACG
CTGAGCAAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCC
TGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:196(DNA):

GAAGTTCAATTGTTAGAGTCTGGTGGCGGTCTTGTTCAGCCTGGTGGTTCTTTACGTCTTT
CTTGCGCTGCTTCCGGATTCACTTTCTCTCCTTACCCTATGATGTGGGTTCGCCAAGCTCC
TGGTAAAGGTTTGGAGTGGGTTTCTTATATCTCTCCTTCTGGTGGCAAGACTCATTATGCT
GACTCCGTTAAAGGTCGCTTCACTATCTCTAGAGACAACTCTAAGAATACTCTCTACTTGC
AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATAC
TTATTTCGACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCAAGCGCCTCC
ACCAAGGGCCCATCGGTCTTCCCGCTAGCACCCAGCAGCAAGAGCACCAGCGGCGGAACAG
CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
TGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTGTAC
AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA
ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
CTGTTCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGAAGTGACCTGCG
TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
GGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGGGTG
GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
CCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAGGTG
TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:197(DNA):
GCACAAGACATCCAGATGACCCAGTCTCCAGCCACCCTGTCTGCATCTGTAGGAGACAGAG
TCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCGGCTATTTAAATTGGTATCAGCAGAA
ACCAGGGAAAGCCCCTAAGCTCCTGATCTATAACGCATCCAGTTTGCAAAGTGGGGTCCCA
TCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAAC
CTGAAGATTTTGCAACTTACTACTGTCAACAGAGCTACACTAGTCCAGGGATCACTTTCGG
CCCTGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCG
CCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCA
GGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACG
CTGAGCAAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCC
TGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:198(DNA):
GAAGTTCAATTGTTAGAGTCTGGTGGCGGTCTTGTTCAGCCTGGTGGTTCTTTACGTCTTT
CTTGCGCTGCTTCCGGATTCACTTTCTCTCCTTACCCTATGATGTGGGTTCGCCAAGCTCC
TGGTAAAGGTTTGGAGTGGGTTTCTTATATCTCTCCTTCTGGTGGCAAGACTCATTATGCT
GACTCCGTTAAAGGTCGCTTCACTATCTCTAGAGACAACTCTAAGAATACTCTCTACTTGC
AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATAC
TTATTTCGACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCAAGCGCCTCC
ACCAAGGGCCCATCGGTCTTCCCGCTAGCACCCAGCAGCAAGAGCACCAGCGGCGGAACAG
CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
TGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTGTAC
AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA
ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
CTGTTCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGAAGTGACCTGCG

TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
GGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGGGTG
GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
CCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAGGTG
TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:199(DNA):
GCACAAGACATCCAGATGACCCAGTCTCCAGCCACCCTGTCTGCATCTGTAGGAGACAGAG
TCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCAGCTATTTAAATTGGTATCAGCAGAA
ACCAGGGAAAGCCCCTAAGCTCCTGATCTATAACGCATCCAGTTTGCAAAGTGGGGTCCCA
TCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAAC
CTGAAGATTTTGCAACTTACTACTGTCAACAGAGCTACACTAGTCCATTCATCACTTTCGG
CCCTGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCG
CCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACTTCT
ATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCA
GGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACG
CTGAGCAAAGCAGACTACGAGAAACACAAACTCTACGCCTGCGAAGTCACCCATCAGGGCC
TGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:200(DNA):
GAAGTTCAATTGTTAGAGTCTGGTGGCGGTCTTGTTCAGCCTGGTGGTTCTTTACGTCTTT
CTTGCGCTGCTTCCGGATTCACTTTCTCTCCTTACCCTATGATGTGGGTTCGCCAAGCTCC
TGGTAAAGGTTTGGAGTGGGTTTCTTATATCTCTCCTTCTGGTGGCAAGACTCATTATGCT
GACTCCGTTAAAGGTCGCTTCACTATCTCTAGAGACAACTCTAAGAATACTCTCTACTTGC
AGATGAACAGCTTAAGGGCTGAGGACACGGCCGTGTATTACTGTGCGAGAGGGGGTGATAC
TTATTTCGACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCAAGCGCCTCC
ACCAAGGGCCCATCGGTCTTCCCGCTAGCACCCAGCAGCAAGAGCACCAGCGGCGGAACAG
CCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAGCCCGTGACCGTGTCCTGGAACTC
TGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTGTAC
AGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCTGCA
ACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTGCGA
CAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTGTTC
CTGTTCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGAAGTGACCTGCG
TGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGGCGT
GGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGGGTG
GTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCC
CCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAGGTG
TCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGAGCA
ACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTCATT
CTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTCAGC
TGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGC

SEQ ID NO:201(DNA):

GATATCGTGCTGACACAGTCTCCCGCCAGCCTGGCCGTGTCTCTCGGCCAGAGAGCCACCA
TCAGCTGCCGGGCCAACAAGAGCGTGTCCACCAGCAGCTACAGCTACATGCACTGGTATCA
GCAGAAGCCCGGCCAGCCCCCCAAGCTGCTGATTAAGTACGCCAGCAACCTGGAAAGCGGC
GTGCCCGCCAGATTCAGCGGCAGCGGCTCTGGCACCGACTTCATCCTGAACATCCACCCCG
TGGAAGAAGAGGACGCCGCCACCTACTACTGCCAGCACAGCAGAGAGCTGCCCTTCACCTT
CGGCAGCGGCACCAAGCTGGAAATCAAGCGGGCCGATGCCGCCCCTACCGTGTCCATCTTC
CCACCCAGCAGCGAGCAGCTGACCAGCGGCGGAGCCAGCGTCGTGTGCTTCCTGAACAACT
TCTACCCCAAGGACATCAACGTGAAGTGGAAGATCGACGGCAGCGAGCGGCAGAACGGCGT
GCTGAACAGCTGGACCGACCAGGACAGCAAGGACTCCACCTACAGCATGAGCAGCACCCTG
ACCCTGACCAAGGACGAGTACGAGCGGCACAACAGCTACACATGCGAGGCCACCCACAAGA
CCAGCACCAGCCCCATCGTGAAGTCCTTCAACCGGAACGAGTGC

SEQ ID NO:202(DNA):
CAGGTGCAGCTGCAGCAGTCTGGCCCTGAAGTCGTGCGGCCTGGCGTGTCCGTGAAGATCA
GCTGCAAGGGCAGCGGCTACACCTTCACCGACTACGGCATCCACTGGGTCAAGCAGAGCCA
CGCCAAGAGCCTGGAATGGATCGGCGTGATCAGCACCTACAACGGCTACACCAACTACAAC
CAGAAGTTCAAGGGCAAGGCCACCATGACCGTGGACAAGAGCAGCAGCACCGCCTACATGG
AACTGGCCCGGCTGACCAGCGAGGACAGCGCCATCTACTACTGCGCCAGAGCCTACTACGG
CAACCTGTACTACGCCATGGACTACTGGGGCCAGGGCACCAGCGTGACCGTGTCCTCTGCC
AAGACCACCGCCCCTAGCGTGTACCCTCTGGCCCCTGTGTGTGGCGACACCACCGGCAGCT
CTGTGACTCTGGGCTGCCTGGTCAAGGGCTACTTCCCCGAGCCCGTGACACTGACCTGGAA
CAGCGGCAGCCTGAGCAGCGGCGTGCACACCTTTCCAGCCGTGCTGCAGAGCGACCTGTAC
ACCCTGAGCAGCTCCGTGACCGTGACAAGCAGCACCTGGCCCAGCCAGAGCATCACCTGTA
ACGTGGCCCACCCCGCCAGCAGCACCAAGGTGGACAAGAAGATCGAGCCCAGAGGCCCCAC
CATCAAGCCCTGCCCCCCTTGCAAGTGCCCAGCCCCCAATCTGCTGGGCGGACCCAGCGTG
TTCATCTTCCCACCCAAGATCAAGGACGTGCTGATGATCAGCCTGAGCCCCATCGTGACCT
GCGTGGTGGTGGACGTGTCCGAGGACGACCCCGACGTGCAGATCAGTTGGTTCGTGAACAA
CGTGGAAGTGCACACCGCCCAGACCCAGACCCACAGAGAGGACTACAACAGCACCCTGCGG
GTGGTGTCCGCCCTGCCCATCCAGCACCAGGACTGGATGAGCGGCAAAGAATTCAAGTGCA
AAGTGAACAACAAGGACCTGCCTGCCCCCATCGAGCGGACCATCAGCAAGCCCAAGGGCAG
CGTGCGGGCTCCCCAGGTGTACGTGCTGCCCCCACCCGAGGAAGAGATGACCAAGAAGCAG
GTCACACTGACCTGCATGGTCACCGACTTCATGCCCGAGGACATCTACGTGGAATGGACCA
ACAACGGCAAGACCGAGCTGAACTACAAGAACACCGAGCCTGTGCTGGACAGCGACGGCAG
CTACTTCATGTACAGCAAGCTGCGGGTGGAAAAGAAAAACTGGGTGGAACGGAACAGCTAC
AGCTGCAGCGTGGTGCACGAGGGCCTGCACAACCACCACACCACCAAGAGCTTCAGCCGGA
CCCCCGGC

SEQ ID NO:203(DNA):
GATATCGTGCTGACACAGAGCCCCGCCAGCCTGACCGTGTCTCTCGGCCAGAGAGCCACCA
TCAGCTGCCGGGCCAGCCAGAGCGTGTCCACCAGCAGCTACAGCTACATGCAGTGGTATCA
GCAGCGGCCTGGCCAGCCCCCCAAGCTGCTGATTAAGTACGCCACCAACCTGGACAGCGGC
GTGCCCGCCAGATTTTCTGGCAGCGGCAGCGGCACAGACTTCACCCTGAACATCCACCCCG
TGGAAGAAGAGGACGCCGCCACCTACTACTGCCAGCACAGCTGGGAGATCCCTTACACCTT
CGGCGGAGGCACCAAGCTGGAAATCAAGCGGGCCGATGCCGCCCCTACCGTGTCCATCTTC
CCACCCAGCAGCGAGCAGCTGACCAGCGGCGGAGCCAGCGTCGTGTGCTTCCTGAACAACT
TCTACCCCAAGGACATCAACGTGAAGTGGAAGATCGACGGCAGCGAGCGGCAGAACGGCGT
GCTGAACAGCTGGACCGACCAGGACAGCAAGGACTCCACCTACAGCATGAGCAGCACCCTG
ACCCTGACCAAGGACGAGTACGAGCGGCACAACAGCTACACATGCGAGGCCACCCACAAGA
CCAGCACCAGCCCCATCGTGAAGTCCTTCAACCGGAACGAGTGC

SEQ ID NO:204(DNA):

GAAGTGAAGCTGGAAGAGTCTGGCGGCGGACTGGTCCAGCCTGGCGGCAGCATGAAGCTGA
GCTGCGTGGCCAGCGGCTTCACCTTCAACAACTACTGGATGAGCTGGGTCCGACAGAGCCC
CGAGAAGGGCCTGGAATGGCTGGCCGAGATCCGGCTGAAGTCCGACAACTACGCCACCCAC
TACGCCGAGAGCGTGAAGGGCAAGTTCACCATCAGCCGGGACGACAGCAAGAGCCGGCTGT
ACCTGCAGATGAACAACCTGCGGGCCGAGAACACCGGCATCTACTACTGCACCGGCGGCTT
CGCCGACTACTTCGACTACTGGGGCCAGGGCACCACCCTGACCGTGTCCTCTGCCAAGACC
ACCGCCCCTAGCGTGTACCCTCTGGCCCCTGTGTGTGGCGACACCACCGGCAGCTCTGTGA
CTCTGGGCTGCCTGGTCAAGGGCTACTTCCCCGAGCCCGTGACACTGACCTGGAACAGCGG
CAGCCTGAGCAGCGGCGTGCACACCTTTCCAGCCGTGCTGCAGAGCGACCTGTACACCCTG
AGCAGCTCCGTGACCGTGACAAGCAGCACCTGGCCCAGCCAGAGCATCACCTGTAACGTGG
CCCACCCCGCCAGCAGCACCAAGGTGGACAAGAAGATCGAGCCCAGAGGCCCCACCATCAA
GCCCTGCCCCCCTTGCAAGTGCCCAGCCCCCAATCTGCTGGGCGGACCCAGCGTGTTCATC
TTCCCACCCAAGATCAAGGACGTGCTGATGATCAGCCTGAGCCCCATCGTGACCTGCGTGG
TGGTGGACGTGTCCGAGGACGACCCCGACGTGCAGATCAGTTGGTTCGTGAACAACGTGGA
AGTGCACACCGCCCAGACCCAGACCCACAGAGAGGACTACAACAGCACCCTGCGGGTGGTG
TCCGCCCTGCCCATCCAGCACCAGGACTGGATGAGCGGCAAAGAATTCAAGTGCAAAGTGA
ACAACAAGGACCTGCCTGCCCCCATCGAGCGGACCATCAGCAAGCCCAAGGGCAGCGTGCG
GGCTCCCCAGGTGTACGTGCTGCCCCCACCCGAGGAAGAGATGACCAAGAAGCAGGTCACA
CTGACCTGCATGGTCACCGACTTCATGCCCGAGGACATCTACGTGGAATGGACCAACAACG
GCAAGACCGAGCTGAACTACAAGAACACCGAGCCTGTGCTGGACAGCGACGGCAGCTACTT
CATGTACAGCAAGCTGCGGGTGGAAAAGAAAAACTGGGTGGAACGGAACAGCTACAGCTGC
AGCGTGGTGCACGAGGGCCTGCACAACCACCACACCACCAAGAGCTTCAGCCGGACCCCCG
GC

SEQ ID NO:205(DNA):
GACATTGTGCTGACACAGTCTCCTGCTTCCCTGGCTGTATCTCTGGGGCAGAGGGCCACCA
TCTCATGCAGGGCCAGCAAAAGTGTCAGTACATCTAGCTATAGTTATATGCACTGGTACCA
ACAGAAACCAGGACAGCCACCCAAACTCCTCATCAAATATGCATCCAACCTAGAATCTGGG
GTCCCTGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCTCCCTCAACATCCATCCCA
TGGAGGAGGACGATACCGCAATGTATTTCTGTCAGCACAGTAGGGAGCTTCCATTCACGTT
CGGCGGAGGGACAAAGTTGGAAATAAAACGTACGGTGGCCGCTCCCAGCGTGTTCATCTTC
CCACCCAGCGACGAGCAGCTGAAGTCCGGCACCGCCAGCGTCGTGTGCCTGCTGAACAACT
TCTACCCCCGCGAGGCCAAGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAG
CCAGGAAAGCGTCACCGAGCAGGACAGCAAGGACTCCACCTACAGCCTGTCCAGCACCCTG
ACCCTGAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAAGTGACCCACCAGG
GCCTGAGCAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGC

SEQ ID NO:206(DNA):
CAGGTCCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTT
CCTGCAAGGGTTCCGGCTACACATTCACTGATTATGGCATGCACTGGGTGCGGCAGGCCCC
TGGACAAGGGCTAGAGTGGATGGGAGTTATTAGTACTTACAATGGTTATACAAACTACAAC
CAGAAGTTTAAGGGCAGAGTCACAATGACTGTAGACAAATCCACGAGCACAGCCTATATGG
AACTTCGGAGCTTGAGATCTGACGATACGGCCGTGTATTACTGTGCAAGAGCCTACTATGG
CAACCTTTACTATGCTATGGACTACTGGGGTCAAGGAACCCTGGTCACCGTCTCCTCAGCT
AGCACCAAAGGCCCGAGCGTGTTTCCGCTGGCCCCGAGCAGCAAGAGCACCAGCGGCGGAA
CAGCCGCCCTGGGCTGCCTGGTGAAAGACTACTTCCCCGAACCGGTGACCGTGTCCTGGAA
CTCTGGCGCCCTGACCAGCGGAGTGCATACCTTCCCCGCCGTGCTGCAGAGCAGCGGCCTG
TACAGCCTGAGCAGCGTGGTGACAGTGCCCAGCAGCAGCCTGGGAACCCAGACCTACATCT
GCAACGTGAACCACAAGCCCAGCAACACCAAGGTGGACAAGAAGGTGGAACCCAAGAGCTG
CGACAAGACCCACACCTGTCCCCCCTGCCCTGCCCCTGAACTGCTGGGCGGACCCAGCGTG
TTCCTGTTCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGAAGTGACCT

GCGTGGTGGTGGACGTGTCCCACGAGGACCCAGAAGTGAAGTTTAATTGGTACGTGGACGG
CGTGGAAGTGCATAACGCCAAGACCAAGCCCAGAGAGGAACAGTACAACAGCACCTACCGG
GTGGTGTCCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCA
AGGTCTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAAGGCCAAGGGCCA
GCCCCGCGAGCCTCAGGTGTACACACTGCCCCCCAGCCGGGATGAGCTGACCAAGAACCAG
GTGTCCCTGACCTGTCTGGTGAAAGGCTTCTACCCCAGCGATATCGCCGTGGAATGGGAGA
GCAACGGCCAGCCCGAGAACAATTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCTC
ATTCTTCCTGTACTCCAAGCTGACCGTGGACAAGAGCCGGTGGCAGCAGGGCAACGTGTTC
AGCTGCAGCGTGATGCACGAGGCCCTGCACAATCACTACACCCAGAAGTCCCTGAGCCTGA
GCCCCGGC

SEQ ID NO:207(DNA):
GATATCCAGATGACCCAGAGCCCCAGCAGCCTGAGCGCCAGCGTGGGCGACAGAGTGACCA
TCACCTGTCGGGCCAGCCAGAGCGTGTCCACCAGCAGCTACAGCTACATGCACTGGTATCA
GCAGAAGCCCGGCAAGGCCCCCAAGCTGCTGATTAAGTACGCCAGCAACCTGGAAAGCGGC
GTGCCCAGCCGGTTTAGCGGCTCTGGCAGCGGCACCGACTTCACCCTGACCATCAGCAGTC
TGCAGCCCGAGGACTTCGCCACCTACTACTGCCAGCACAGCTGGGAGATCCCTTACACCTT
CGGCGGAGGCACCAAGGTGGAAATCAAGCGTACGGTGGCTGCACCATCTGTCTTCATCTTC
CCGCCATCTGATGAGCAGTTGAAATCTGGAACTGCCTCTGTTGTGTGCCTGCTGAATAACT
TCTATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTC
CCAGGAGAGTGTCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTG
ACGCTGTCTAAAGCAGACTACGAGAAACACAAAGTCTACGCCTGCGAAGTCACCCATCAGG
GCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGT

SEQ ID NO:208(DNA):
CAGGTGGAATTGGTGGAAAGCGGCGGAGGCCTGGTGCAGCCTGGCGGAAGCCTGAGACTGA
GCTGTGCCGCCAGCGGCTTCACCTTCAGCAGCTACTGGATGAGCTGGGTCCGACAGGCTCC
AGGCAAGGGCCTGGAATGGGTGGCCGAGATCCGGCTGAAGTCCGACAACTACGCCACCCAC
TACGCCGAGAGCGTGAAGGGCCGGTTCACCATCAGCCGGGACGACAGCAAGAACAGCCTGT
ACCTGCAGATGAACAGCCTGCGGGCCGAGGACACCGCCGTGTACTACTGCACCGGCTACTA
CGCCGACGCCATGGACTACTGGGGCCAGGGCACCCTGGTCACCGTCAGCTCAGCCTCCACC
AAGGGTCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGG
CCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGG
CGCCCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCCTACAGTCCTCAGGACTCTACTCC
CTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACG
TGAATCACAAGCCCAGCAACACCAAGGTGGACAAGCGGGTTGAGCCCAAATCTTGTGACAA
AACTCACACATGCCCACCGTGCCCAGCACCTGAACTCCTGGGGGGACCGTCAGTCTTCCTC
TTCCCCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGG
TGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGA
GGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGGGTGGTC
AGCGTCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCT
CCAACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCG
AGAACCACAGGTGTACACCCTGCCCCCATCCCGGGAAGAGATGACCAAGAACCAGGTCAGC
CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATG
GGCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTT
CCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCTCCGG
GTAAA

SEQ ID NO:209(DNA):

GATATCGTGCTGACACAGTCTCCCGCCAGCCTGGCCGTGTCTCTCGGCCAGAGAGCCACCA
TCAGCTGCAAGGCCAGCCAGAGCGTGTCCACCAGCACCTACAGCTACATGCAGTGGTATCA
GCAGCGGCCTGGACAGAGCCCCAAGCTGCTGATTAAGTACGCCAGCAAGCTGGACAGCGGC
GTGCCCGCCAGATTTTCTGGCAGCGGCAGCGGCACCGACTTCACCCTGAACATCCACCCCG
TGGAAGAAGAGGACACCGCCACCTACTACTGCCAGCACAGCTGGGAGCTGCCCTACACCTT
CGGCGGAGGCACCCGGCTGGAAATCAAGAGGGCCGATGCCGCCCCTACCGTGTCCATCTTC
CCACCCAGCAGCGAGCAGCTGACCAGCGGCGGAGCCAGCGTCGTGTGCTTCCTGAACAACT
TCTACCCCAAGGACATCAACGTGAAGTGGAAGATCGACGGCAGCGAGCGGCAGAACGGCGT
GCTGAACAGCTGGACCGACCAGGACAGCAAGGACTCCACCTACAGCATGAGCAGCACCCTG
ACCCTGACCAAGGACGAGTACGAGCGGCACAACAGCTACACATGCGAGGCCACCCACAAGA
CCAGCACCAGCCCCATCGTGAAGTCCTTCAACCGGAACGAGTGC

SEQ ID NO:210(DNA):
GAAGTGAAGCTGGGAGAGTCTGGCGGCGGACTGGTCCAGCCTGGCGGCAGCATGAAGCTGA
GCTGCGTGGCCAGCGGCTTCCCATTCACCAAATACTGGATGAACTGGGTCCGACAGAGCCC
CGAGAAGGGCCTGGAATGGGTGGCCGAGATCCGGCTGAAGTCCGACAACTACGCCACCCAC
TACGCCGAGAGCGCCAAGGGCCGGTTCACCATCAGCCGGGACGACAGCCGGTCCAGCGTGT
ACCTGCAGATGAACAACCTGCGGGCCGAGGACACCGCCATCTACTACTGCAGCCCCACCTA
TGCCGACACCATGGACTACTGGGGCCAGGGCACCAGCGTGACAGTGTCCAGCGCCAAGACC
ACCGCCCCTAGCGTGTACCCTCTGGCCCCTGTGTGTGGCGACACCACCGGCAGCTCTGTGA
CTCTGGGCTGCCTGGTCAAGGGCTACTTCCCCGAGCCCGTGACACTGACCTGGAACAGCGG
CAGCCTGAGCAGCGGCGTGCACACCTTTCCAGCCGTGCTGCAGAGCGACCTGTACACCCTG
AGCAGCTCCGTGACCGTGACAAGCAGCACCTGGCCCAGCCAGAGCATCACCTGTAACGTGG
CCCACCCCGCCAGCAGCACCAAGGTGGACAAGAAGATCGAGCCCAGAGGCCCCACCATCAA
GCCCTGCCCCCCTTGCAAGTGCCCAGCCCCCAATCTGCTGGGCGGACCCAGCGTGTTCATC
TTCCCACCCAAGATCAAGGACGTGCTGATGATCAGCCTGAGCCCCATCGTGACCTGCGTGG
TGGTGGACGTGTCCGAGGACGACCCCGACGTGCAGATCAGTTGGTTCGTGAACAACGTGGA
AGTGCACACCGCCCAGACCCAGACCCACAGAGAGGACTACAACAGCACCCTGCGGGTGGTG
TCCGCCCTGCCCATCCAGCACCAGGACTGGATGAGCGGCAAAGAATTCAAGTGCAAAGTGA
ACAACAAGGACCTGCCTGCCCCCATCGAGCGGACCATCAGCAAGCCCAAGGGCAGCGTGCG
GGCTCCCCAGGTGTACGTGCTGCCCCCACCCGAGGAAGAGATGACCAAGAAGCAGGTCACA
CTGACCTGCATGGTCACCGACTTCATGCCCGAGGACATCTACGTGGAATGGACCAACAACG
GCAAGACCGAGCTGAACTACAAGAACACCGAGCCTGTGCTGGACAGCGACGGCAGCTACTT
CATGTACAGCAAGCTGCGGGTGGAAAAGAAAAACTGGGTGGAACGGAACAGCTACAGCTGC
AGCGTGGTGCACGAGGGCCTGCACAACCACCACACCACCAAGAGCTTCAGCCGGACCCCCG
GC

SEQ ID NO:211(DNA):
GATATCGTGCTGACACAGTCTCCCGCCAGCCTGGCCGTGTCTCTCGGCCAGAGAGCCACCA
TCAGCTGCCGGGCCAGCAAGAGCGTGTCCACCAGCAGCTACAGCTACATGCACTGGTATCA
GCAGAAGCCCGGCCAGCCCCCCAAGCTGCTGATCAAGTACACCAGCAACCTGGAAAGCGGC
GTGCCCGCCAGATTCAGCGGAAGCGGCTCCGGCACCGACTTCATCCTGAACATCCACCCCG
TGGAAGAAGAGGACGCCGCCACCTACTACTGCCAGCACAGCAGAGAGCTGCCCTGGACCTT
CGGCGGAGGCACCAAGCTGGAAATCAAGCGGGCCGATGCCGCCCCTACCGTGTCCATCTTC
CCACCCAGCAGCGAGCAGCTGACCAGCGGCGGAGCCAGCGTCGTGTGCTTCCTGAACAACT
TCTACCCCAAGGACATCAACGTGAAGTGGAAGATCGACGGCAGCGAGCGGCAGAACGGCGT
GCTGAACAGCTGGACCGACCAGGACAGCAAGGACTCCACCTACAGCATGAGCAGCACCCTG
ACCCTGACCAAGGACGAGTACGAGCGGCACAACAGCTACACATGCGAGGCCACCCACAAGA
CCAGCACCAGCCCCATCGTGAAGTCCTTCAACCGGAACGAGTGC

SEQ ID NO:212(DNA):

CAGGTGTCCCTGAAAGAGAGCGGCCCTGGCATCCTGCAGCCTAGCCAGACCCTGAGCCTGA
CCTGCAGCTTCAGCGGCTTCAGCCTGAGCACCAGCGGCATGGGCGTGTCCTGGATCAGACA
GCCCAGCGGCAAGGGCCTGGAATGGCTGGCCCACATCTACTGGGACGACGACAAGCGGTAC
AACCCCAGCCTGAAGTCCCGGCTGACCATCTCCAAGGACACCAGCCGGAATCAGGTGTTCC
TGAAGATCACCAGCGTGGACACCGCCGATACCGCCACCTACTACTGCGCCAGAAGAGGCCC
CGACTACTACGGCTACTACCCCATGGACTATTGGGGCCAGGGCACCAGCGTGACCGTGTCT
GCCAAGACCACCGCCCCTAGCGTGTACCCTCTGGCCCCTGTGTGTGGCGACACCACCGGCA
GCTCTGTGACTCTGGGCTGCCTGGTCAAGGGCTACTTCCCCGAGCCCGTGACACTGACCTG
GAACAGCGGCAGCCTGAGCAGCGGCGTGCACACCTTTCCAGCCGTGCTGCAGAGCGACCTG
TACACCCTGAGCAGCTCCGTGACCGTGACAAGCAGCACCTGGCCCAGCCAGAGCATCACCT
GTAACGTGGCCCACCCCGCCAGCAGCACCAAGGTGGACAAGAAGATCGAGCCCAGAGGCCC
CACCATCAAGCCCTGCCCCCCTTGCAAGTGCCCAGCCCCCAATCTGCTGGGCGGACCCAGC
GTGTTCATCTTCCCACCCAAGATCAAGGACGTGCTGATGATCAGCCTGAGCCCCATCGTGA
CCTGCGTGGTGGTGGACGTGTCCGAGGACGACCCCGACGTGCAGATCAGTTGGTTCGTGAA
CAACGTGGAAGTGCACACCGCCCAGACCCAGACCCACAGAGAGGACTACAACAGCACCCTG
CGGGTGGTGTCCGCCCTGCCCATCCAGCACCAGGACTGGATGAGCGGCAAAGAATTCAAGT
GCAAAGTGAACAACAAGGACCTGCCTGCCCCCATCGAGCGGACCATCAGCAAGCCCAAGGG
CAGCGTGCGGGCTCCCCAGGTGTACGTGCTGCCCCCACCCGAGGAAGAGATGACCAAGAAG
CAGGTCACACTGACCTGCATGGTCACCGACTTCATGCCCGAGGACATCTACGTGGAATGGA
CCAACAACGGCAAGACCGAGCTGAACTACAAGAACACCGAGCCTGTGCTGGACAGCGACGG
CAGCTACTTCATGTACAGCAAGCTGCGGGTGGAAAAGAAAAACTGGGTGGAACGGAACAGC
TACAGCTGCAGCGTGGTGCACGAGGGCCTGCACAACCACCACACCACCAAGAGCTTCAGCC
GGACCCCCGGC

SEQ ID NO:213 (polypeptide):

EVQLLESGGGLVQPGGSLRLSCAASGFTFSPYPMIWVRQAPGKGLEWVSYISPSGGSTHYA
DSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARGGDTYFDYFDYWGQGTLVTVSSAS
TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY
SLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRV
VSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQV
SLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
CSVMHEALHNHYTQKSLSLSPG