FIG. 1

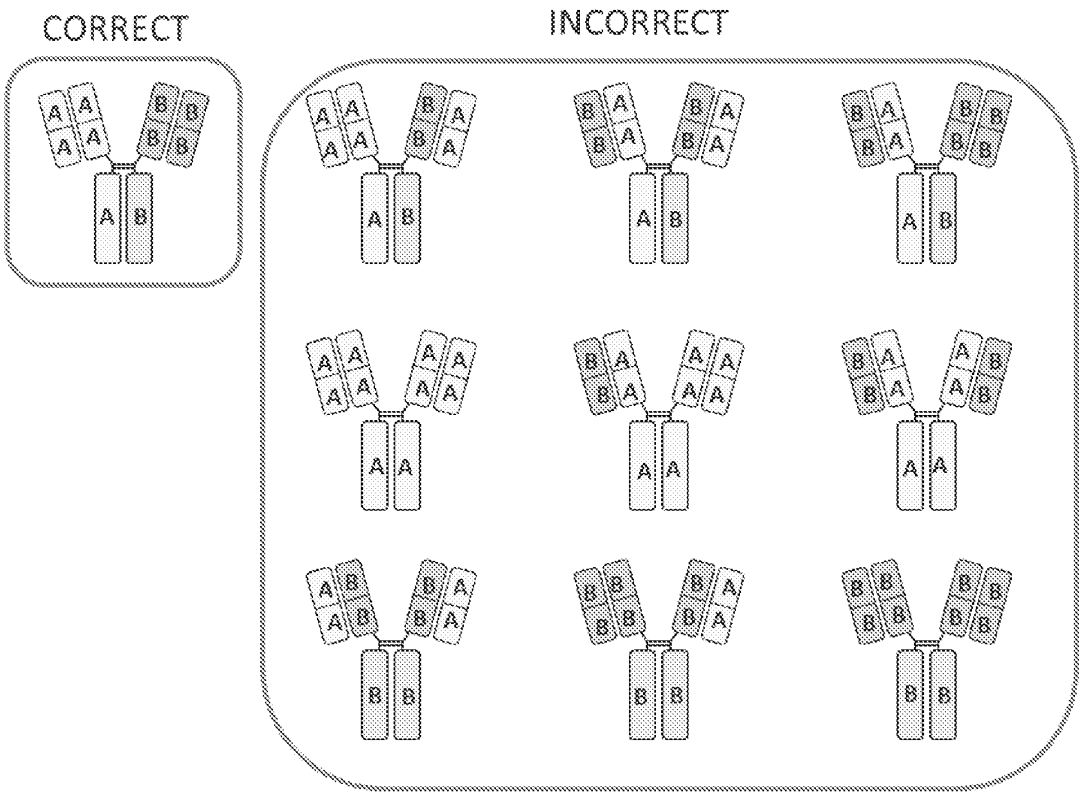


FIG. 2

Fig. 2A

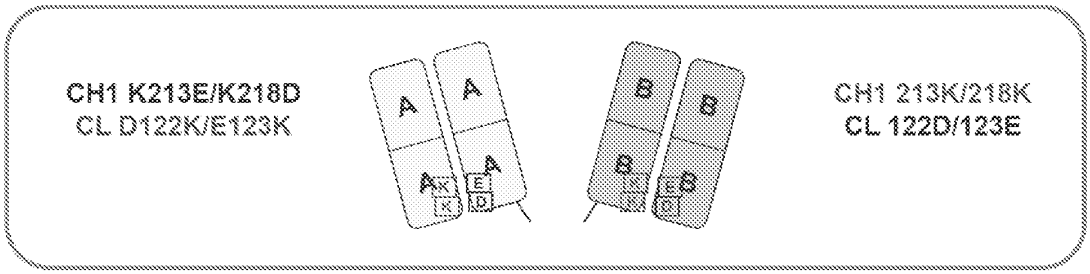


Fig. 2B

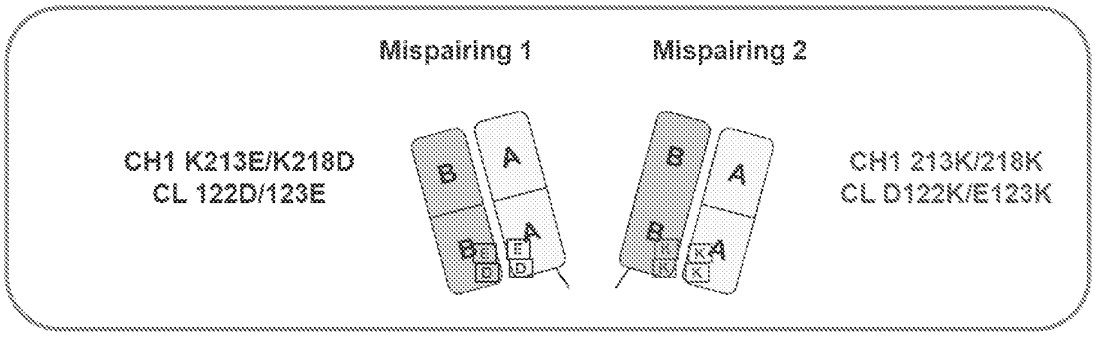


FIG. 3

Fab A		Fab B	
CH1	CL	CH1	CL
K213E/K218D	D122K/E123K	WT	WT
K213E/K218E	D122K/E123K	WT	WT
K213D/K218E	D122K/E123K	WT	WT
K213D/K218D	D122K/E123K	WT	WT
K213E/K218D	D122K/E123R	WT	WT
K213E/K218E	D122K/E123R	WT	WT
K213D/K218E	D122K/E123R	WT	WT
K213D/K218D	D122K/E123R	WT	WT
K213E/K218D	D122R/E123K	WT	WT
K213E/K218E	D122R/E123K	WT	WT
K213D/K218E	D122R/E123K	WT	WT
K213D/K218D	D122R/E123K	WT	WT
K213E/K218D	D122R/E123R	WT	WT
K213E/K218E	D122R/E123R	WT	WT
K213D/K218E	D122R/E123R	WT	WT
K213D/K218D	D122R/E123R	WT	WT
WT	WT	K213E/K218D	D122K/E123K
WT	WT	K213E/K218E	D122K/E123K
WT	WT	K213D/K218E	D122K/E123K
WT	WT	K213D/K218D	D122K/E123K
WT	WT	K213E/K218D	D122K/E123R
WT	WT	K213E/K218E	D122K/E123R
WT	WT	K213D/K218E	D122K/E123R
WT	WT	K213D/K218D	D122K/E123R
WT	WT	K213E/K218D	D122R/E123K
WT	WT	K213E/K218E	D122R/E123K
WT	WT	K213D/K218E	D122R/E123K
WT	WT	K213D/K218D	D122R/E123K
WT	WT	K213E/K218D	D122R/E123R
WT	WT	K213E/K218E	D122R/E123R
WT	WT	K213D/K218E	D122R/E123R
WT	WT	K213D/K218D	D122R/E123R

FIG. 4

Fig. 4A

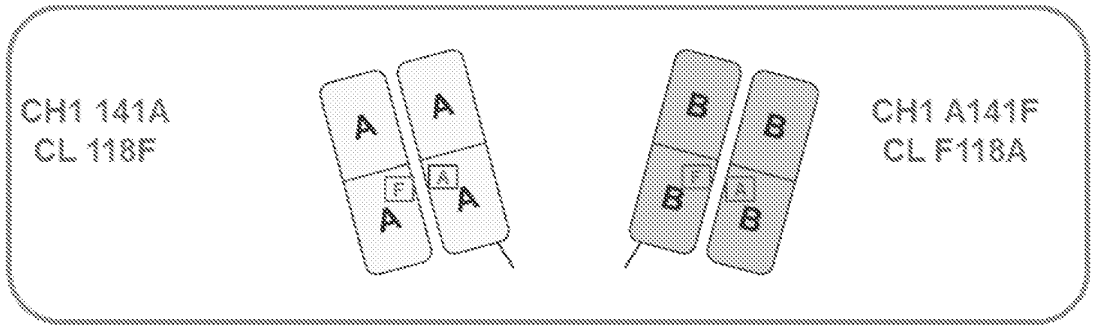


Fig. 4B

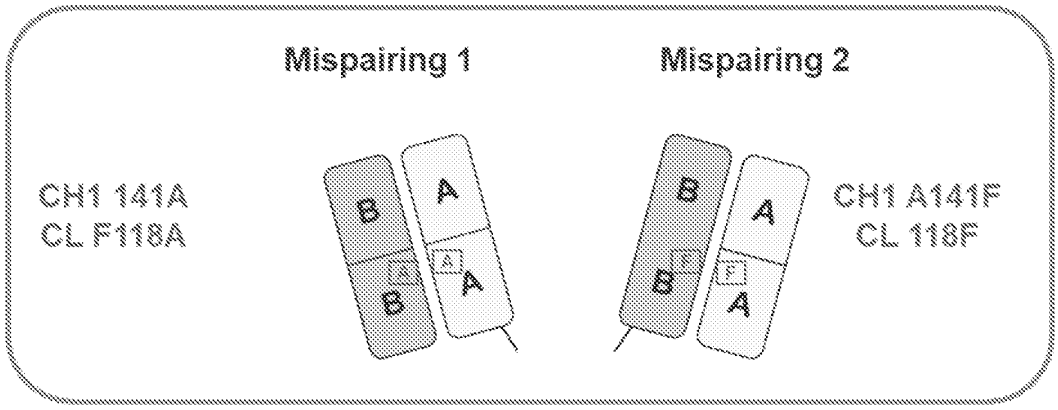


FIG. 5

Fab A		Fab B	
CH1	**CL**	**CH1**	**CL**
WT	WT	A141F	F116A
A141F	F116A	WT	WT
WT	WT	A141F	F118A
A141F	F118A	WT	WT
WT	WT	K147S	S131K
K147S	S131K	WT	WT

FIG. 6

Fig. 6A

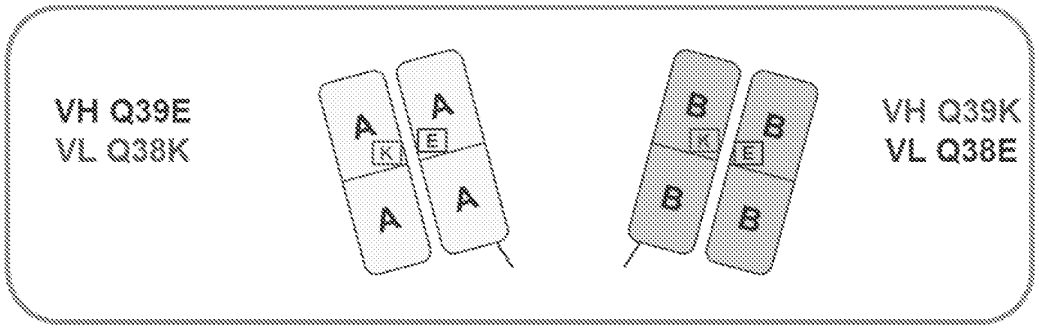


Fig. 6B

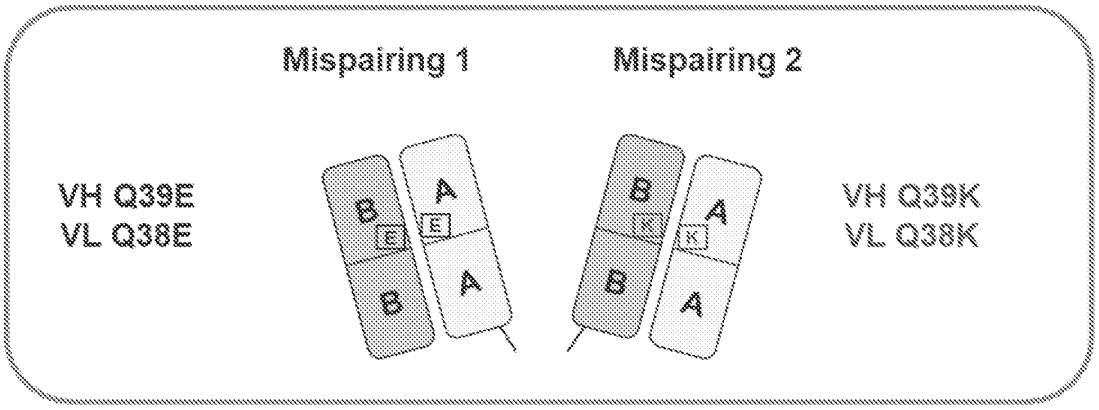


FIG. 7

FIG. 7A

Fab A		Fab B	
VH	VL	VH	VL
Q39E	Q38K	Q39K	Q38E
Q39E	Q38K	Q39K	Q38D
Q39E	Q38K	Q39R	Q38E
Q39E	Q38K	Q39R	Q38D
Q39E	Q38K	Q39E	Q38K
Q39E	Q38K	Q39E	Q38R
Q39E	Q38K	Q39D	Q38K
Q39E	Q38K	Q39D	Q38R
Q39E	Q38R	Q39K	Q38E
Q39E	Q38R	Q39K	Q38D
Q39E	Q38R	Q39R	Q38E
Q39E	Q38R	Q39R	Q38D
Q39E	Q38R	Q39E	Q38K
Q39E	Q38R	Q39E	Q38R
Q39E	Q38R	Q39D	Q38K
Q39E	Q38R	Q39D	Q38R
Q39D	Q38K	Q39K	Q38E
Q39D	Q38K	Q39K	Q38D
Q39D	Q38K	Q39R	Q38E
Q39D	Q38K	Q39R	Q38D
Q39D	Q38K	Q39E	Q38K
Q39D	Q38K	Q39E	Q38R
Q39D	Q38K	Q39D	Q38K
Q39D	Q38K	Q39D	Q38R
Q39D	Q38R	Q39K	Q38E
Q39D	Q38R	Q39K	Q38D
Q39D	Q38R	Q39R	Q38E
Q39D	Q38R	Q39R	Q38D
Q39D	Q38R	Q39E	Q38K
Q39D	Q38R	Q39E	Q38R
Q39D	Q38R	Q39D	Q38K
Q39D	Q38R	Q39D	Q38R
Q39K	Q38E	Q39K	Q38E
Q39K	Q38E	Q39K	Q38D
Q39K	Q38E	Q39R	Q38E
Q39K	Q38E	Q39R	Q38D
Q39K	Q38E	Q39E	Q38K
Q39K	Q38E	Q39E	Q38R
Q39K	Q38E	Q39D	Q38K
Q39K	Q38E	Q39D	Q38R
Q39R	Q38E	Q39K	Q38E

FIG. 7B

Fab A		Fab B	
VH	VL	VH	VL
Q39R	Q38E	Q39K	Q38D
Q39R	Q38E	Q39R	Q38E
Q39R	Q38E	Q39R	Q38D
Q39R	Q38E	Q39E	Q38K
Q39R	Q38E	Q39E	Q38R
Q39R	Q38E	Q39D	Q38K
Q39R	Q38E	Q39D	Q38R
Q39K	Q38D	Q39K	Q38E
Q39K	Q38D	Q39K	Q38D
Q39K	Q38D	Q39R	Q38E
Q39K	Q38D	Q39R	Q38D
Q39K	Q38D	Q39E	Q38K
Q39K	Q38D	Q39E	Q38R
Q39K	Q38D	Q39D	Q38K
Q39K	Q38D	Q39D	Q38R
Q39R	Q38D	Q39K	Q38E
Q39R	Q38D	Q39K	Q38D
Q39R	Q38D	Q39R	Q38E
Q39R	Q38D	Q39R	Q38D
Q39R	Q38D	Q39E	Q38K
Q39R	Q38D	Q39E	Q38R
Q39R	Q38D	Q39D	Q38K
Q39R	Q38D	Q39D	Q38R

FIG. 8

Fig. 8A

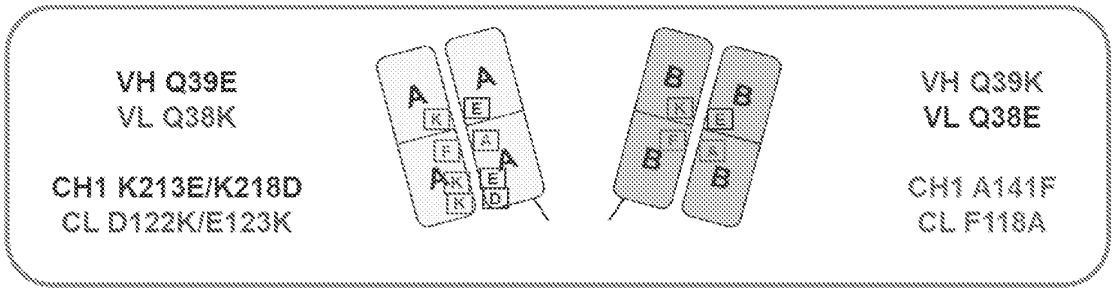


Fig. 8B

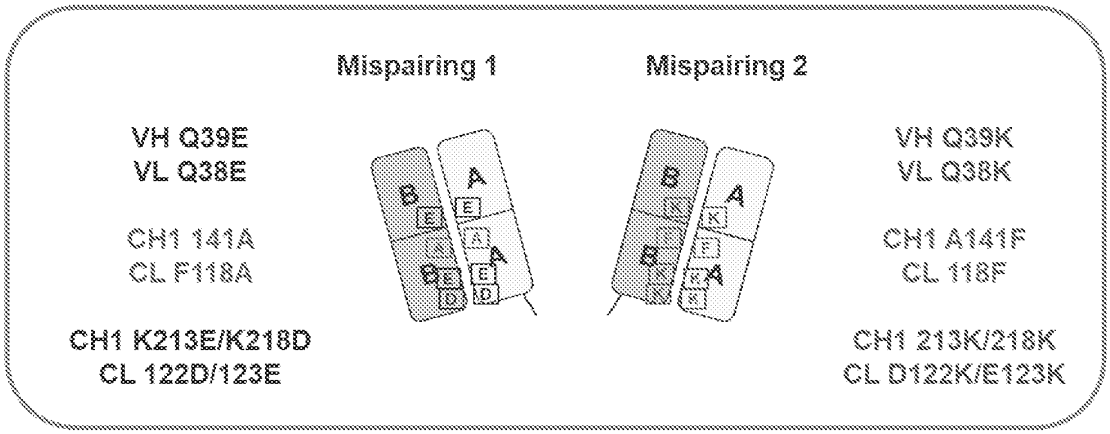


FIG. 9

FIG. 9A

>XENP40710_1A7[CD28]_H1.14_L1.71_Q39E/K213E/K218D_Q38K/D122K/E123K-2G4[PD-L1]_H1.12_L1.14_Q39K/A141F_Q38E/F116A-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del-IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del

Chain 1 – 1A7[CD28]_H1.14_Q39E/K213E/K218D_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del (SEQ ID NO: 1)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVREAPGKGLEWVSTISESGDSTYYADSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCAKSGPGLRQVGFDYWGQGTLVTVSSASTKGPSVFPLAPSS
KSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYIC
NVNHKPSDTKVDEKVEPDSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHE
DPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
KAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPG

Chain 2 – 1A7[CD28]_L1.71_Q38K/D122K/E123K (SEQ ID NO: 2)

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQKKPGKAPKLLIYAASSLQSGVPSRFSGSGSG
TDFTLTISSLQPEDFATYYCQQVYSTPFTFGQGTKLEIKRTVAAPSVFIFPPSKKQLKSGTASVVCLL
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSP
VTKSFNRGEC

Chain 3 – 2G4[PD-L1]_H1.12_Q39K/A141F_IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del (SEQ ID NO: 3)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYDMSWVRKAPGKRLEWVSTISSGGSFTHYPDSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCVRRSLDWYFDVWGAGTTVTVSSASTKGPSVFPLAPSSKST
SGGTAFLGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVN
HKPSNTKVDKKVEPKSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPE
VKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Chain 4 – 2G4[PD-L1]_L1.14_Q38E/F116A (SEQ ID NO: 4)

EIVLTQSPGTLSLSPGERATLSCRVSSSIQSSNLHWYQEKPGQSPRPLIYGTSNLASGVPVRFSGSGS
GTDYTLTISRLEPEDFAVYYCQQWSSYPLYTFGGGTKVEIKRTVAAPSVAIFPPSDEQLKSGTASVVC
LLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLS
SPVTKSFNRGEC

FIG. 9B

>XENP40711_1A7[CD28]_H1.14_L1.71_Q39E/K213E/K218D_Q38K/D122K/E123K-2G4[PD-L1]_H1.12_L1.14_Q39K/A141F_Q38E/F118A-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del-IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del

Chain 1 – 1A7[CD28]_H1.14_Q39E/K213E/K218D_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del (SEQ ID NO: 5)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVREAPGKGLEWVSTISESGDSTYYADSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCAKSGPGLRQVGFDYWGQGTLVTVSSASTKGPSVFPLAPSS
KSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYIC
NVNHKPSDTKVDEKVEPDSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHE
DPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
KAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPG

Chain 2 – 1A7[CD28]_L1.71_Q38K/D122K/E123K (SEQ ID NO: 6)

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQKKPGKAPKLLIYAASSLQSGVPSRFSGSGSG
TDFTLTISSLQPEDFATYYCQQVYSTPFTFGQGTKLEIKRTVAAPSVFIFPPSKKQLKSGTASVVCLL
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSP
VTKSFNRGEC

Chain 3 – 2G4[PD-L1]_H1.12_Q39K/A141F_IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del (SEQ ID NO: 7)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYDMSWVRKAPGKRLEWVSTISSGGSFTHYPDSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCVRRSLDWYFDVWGAGTTVTVSSASTKGPSVFPLAPSSKST
SGGTAFLGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVN
HKPSNTKVDKKVEPKSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPE
VKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Chain 4 – 2G4[PD-L1]_L1.14_Q38E/F118A (SEQ ID NO: 8)

EIVLTQSPGTLSLSPGERATLSCRVSSSIQSSNLHWYQEKPGQSPRPLIYGTSNLASGVPVRFSGSGS
GTDYTLTISRLEPEDFAVYYCQQWSSYPLYTFGGGTKVEIKRTVAAPSVFIAPPSDEQLKSGTASVVC
LLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLS
SPVTKSFNRGEC

FIG. 9C

>XENP40712_1A7[CD28]_H1.14_L1.71_Q39E/K213E/K218D_Q38K/D122K/E123K-2G4[PD-L1]_H1.12_L1.14_Q39K/K147S_Q38E/S131K-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del-IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del

Chain 1 – 1A7[CD28]_H1.14_Q39E/K213E/K218D_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S/M428L/N434S/K447del (SEQ ID NO: 9)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVREAPGKGLEWVSTISESGDSTYYADSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCAKSGPGLRQVGFDYWGQGTLVTVSSASTKGPSVFPLAPSS
KSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYIC
NVNHKPSDTKVDEKVEPDSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHE
DPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
KAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFF
LYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPG

Chain 2 – 1A7[CD28]_L1.71_Q38K/D122K/E123K (SEQ ID NO: 10)

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQKKPGKAPKLLIYAASSLQSGVPSRFSGSGSG
TDFTLTISSLQPEDFATYYCQQVYSTPFTFGQGTKLEIKRTVAAPSVFIFPPSKKQLKSGTASVVCLL
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSP
VTKSFNRGEC

Chain 3 – 2G4[PD-L1]_H1.12_Q39K/K147S_IgG1_PVA_/S267K/S364K/E357Q/M428L/N434S/K447del (SEQ ID NO: 11)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSVYDMSWVRKAPGKRLEWVSTISSGGSFTHYPDSVKGRF
TISRDNSKNTLYLQMNSLRAEDTAVYYCVRRSLDWYFDVWGAGTTVTVSSASTKGPSVFPLAPSSKST
SGGTAALGCLVSDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVN
HKPSNTKVDKKVEPKSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPE
VKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Chain 4 – 2G4[PD-L1]_L1.14_Q38E/S131K (SEQ ID NO: 12)

EIVLTQSPGTLSLSPGERATLSCRVSSSIQSSNLHWYQEKPGQSPRPLIYGTSNLASGVPVRFSGSGS
GTDYTLTISRLEPEDFAVYYCQQWSSYPLYTFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTAKVVC
LLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLS
SPVTKSFNRGEC

FIG. 10

Fig. 10A

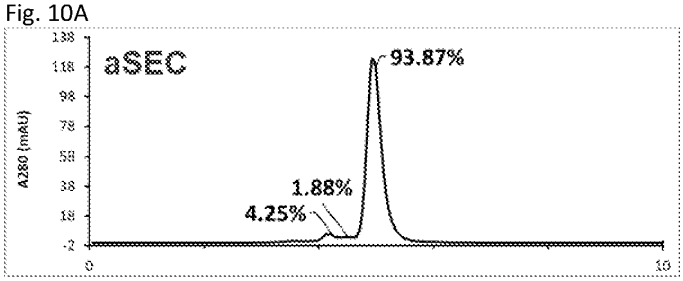


Fig. 10B

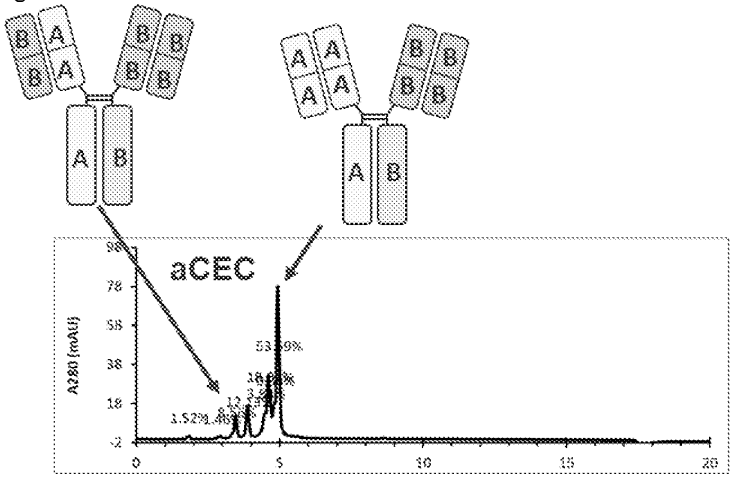


Fig. 10C

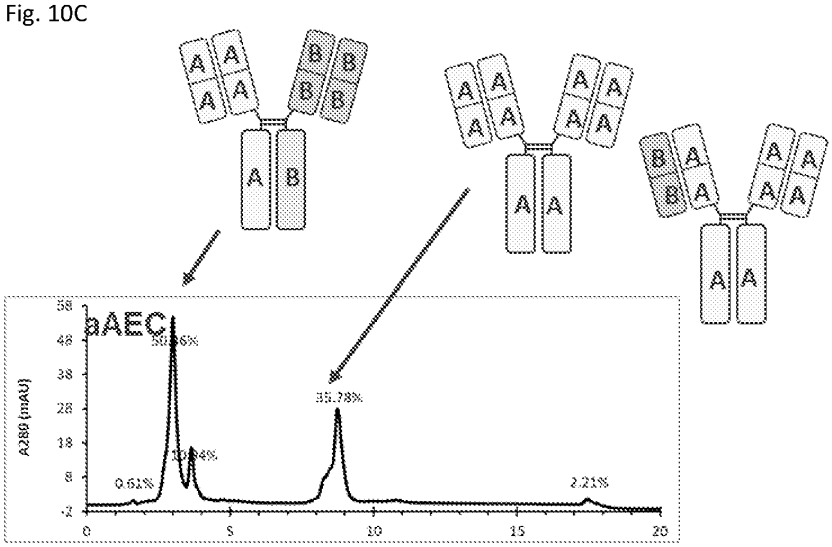


FIG. 11

Fig. 11A

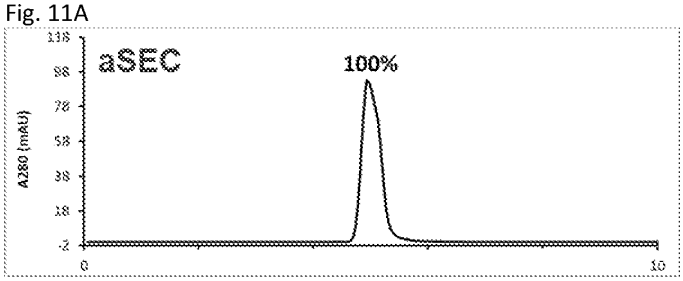


Fig. 11B

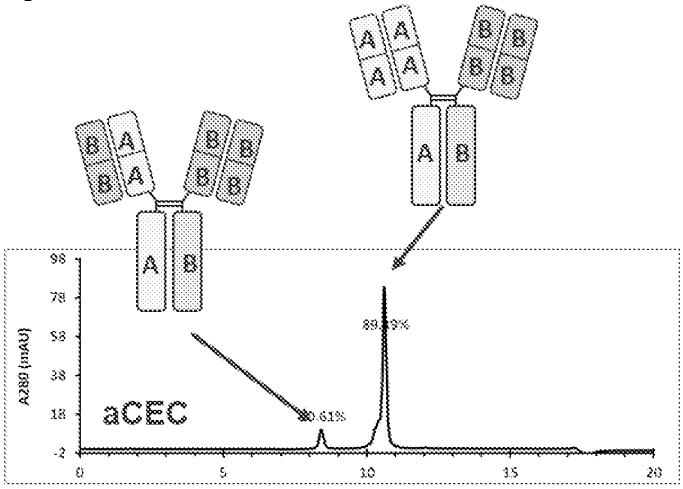


Fig. 11C

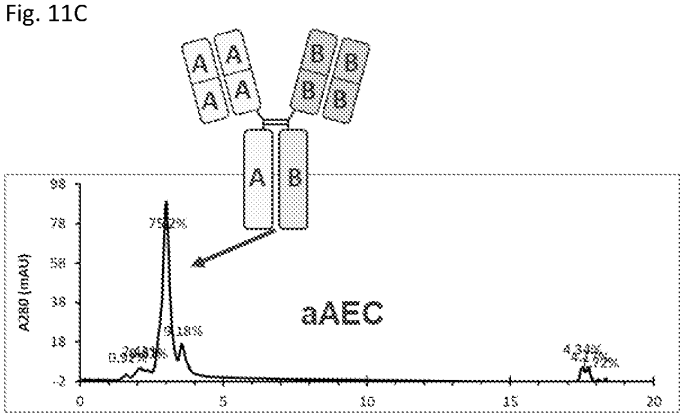


FIG. 12

Fig. 12A

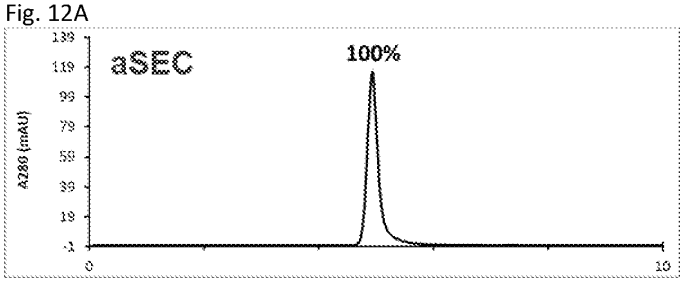


Fig. 12B

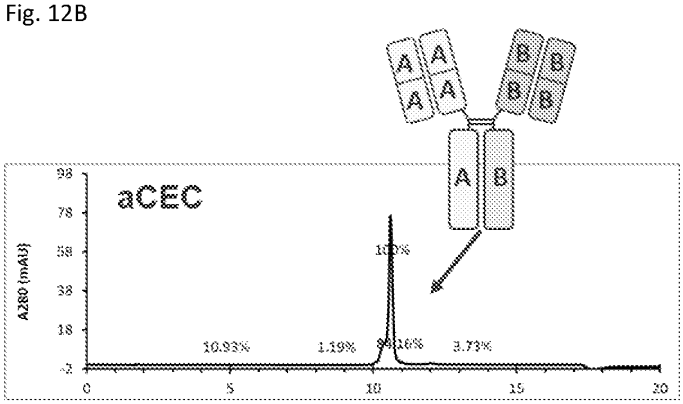


Fig. 12C

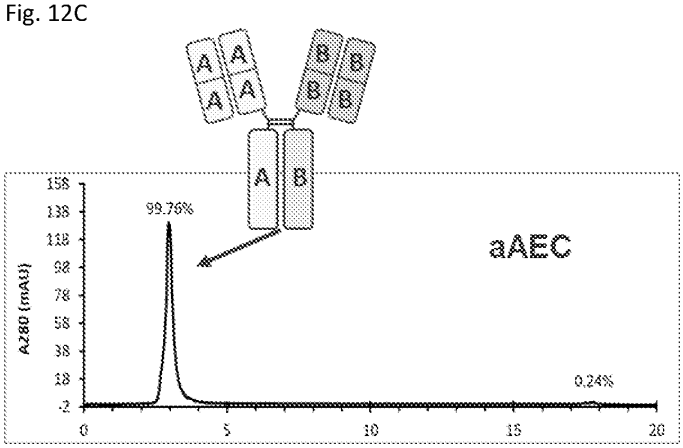


FIG. 13

FIG. 13A

Monomer 1	Monomer 2
F405A	T394F
S364D	Y349K
S364E	L368K
S364E	Y349K
S364F	K370G
S364H	Y349K
S364H	Y349T
S364Y	K370G
T411K	K370E
V397S/F405A	T394F
K370R/T411K	K370E/T411E
L351E/S364D	Y349K/L351K
L351E/S364E	Y349K/L351K
L351E/T366D	L351K/T366K
P395T/V397S/F405A	T394F
S364D/K370G	S364Y/K370R
S364D/T394F	Y349K/F405A
S364E/F405A	Y349K/T394F
S364E/F405S	Y349K/T394Y
S364E/T411E	Y349K/D401K
S364H/D401K	Y349T/T411E
S364H/F405A	Y349T/T394F
S364H/T394F	Y349T/F405A
Y349C/S364E	Y349K/S354C
L351E/S364D/F405A	Y349K/L351K/T394F
L351K/S364H/D401K	Y349T/L351E/T411E
S364E/T411E/F405A	Y349K/T394F/D401K
S364H/D401K/F405A	Y349T/T394F/T411E
S364H/F405A/T411E	Y349T/T394F/D401K

FIG. 13B

Monomer 1	Monomer 2
K370E/T411D	T411K
L368E/K409E	L368K
Y349T/T394F/S354C	S364H/F405A/Y349C
T411E	D401K
T411E	D401R/T411R
Q347E/K360E	Q347R
L368E	S364K
L368E/K370S	S364K
L368E/K370T	S364K
L368E/D401R	S364K
L368E/D401N	S364K
L368E	E357S/S364K
L368E	S364K/K409E
L368E	S364K/K409V
L368D	S364K
L368D/K370S	S364K
L368D/K370S	S364K/E357L
L368D/K370S	S364K/E357Q
T411E/K360E/Q362E	D401K
K370S	S364K
L368E/K370S	S364K/E357Q
K370S	S364K/E357Q
T411E/K360D	D401K
T411E/K360E	D401K
T411E/Q362E	D401K
T411E/N390D	D401K
T411E	D401K/Q347K
T411E	D401K/Q347R
T411E/K360D/Q362E	D401K

FIG. 13C

Monomer 1	Monomer 2
T411E/K360E/N390D	D401K
T411E/Q362E/N390D	D401K
T411E/Q347R	D401K/K360D
T411E/Q347R	D401K/K360E
T411E/K360D	D401K/Q347K
T411E/K360D	D401K/Q347R
T411E/K360E	D401K/Q347K
T411E/K360E	D401K/Q347R
T411E/S364K	D401K/K370S
T411E/K370S	D401K/S364K
Q347E	E357Q
Q347E	E357Q/Q362K
K360D/Q362E	Q347R
K360D/Q362E	D401K
K360D/Q362E	Q347R/D401K
K360E/Q362E	Q347R
K360E/Q362E	D401K
K360E/Q362E	Q347R/D401K
Q362E/N390D	D401K
Q347E/K360D	D401N
K360D	Q347R/N390K
K360D	N390K/D401N
K360E	Y349H
K370S/Q347E	S364K
K370S/E357L	S364K
K370S/E357Q	S364K
K370S/Q347E/E357L	S364K
K370S/Q347E/E357Q	S364K

FIG. 13D

Monomer 1	Monomer 2
L368D/K370S/Q347E	S364K
L368D/K370S/E357L	S364K
L368D/K370S/E357Q	S364K
L368D/K370S/Q347E/E357L	S364K
L368D/K370S/Q347E/E357Q	S364K
L368E/K370S/Q347E	S364K
L368E/K370S/E357L	S364K
L368E/K370S/E357Q	S364K
L368E/K370S/Q347E/E357L	S364K
L368E/K370S/Q347E/E357Q	S364K
L368D/K370T/Q347E	S364K
L368D/K370T/E357L	S364K
L368D/K370T/E357Q	S364K
L368D/K370T/Q347E/E357L	S364K
L368D/K370T/Q347E/E357Q	S364K
L368E/K370T/Q347E	S364K
L368E/K370T/E357L	S364K
L368E/K370T/E357Q	S364K
L368E/K370T/Q347E/E357L	S364K
L368E/K370T/Q347E/E357Q	S364K
T411E/Q362E	D401K/T411K
T411E/N390D	D401K/T411K
T411E/Q362E	D401R/T411R
T411E/N390D	D401R/T411R
Y407T	T366Y
F405A	T394W
T366Y/F405A	T394W/Y407T
Y407A	T366W
T366S/L368A/Y407V	T366W
T366S/L368A/Y407V/Y349C	T366W/S354C

FIG. 13E

Monomer 1	Monomer 2
T366S/L368A/Y407V/S354C	T366W/Y349C
K392D/K409D	E356K/D399K
K370D/K392D/K409D	E356K/E357K/D399K
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	P217R/P228R/N276K
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	N276K
N384S/K392N/V397M/Q419E	N276K
D221E/P228E/L368E	D221R/P228R/K409R
C220E/P228E/L368E	C220R/E224R/P228R/K409R
F405L	K409R
T366I/K392M/T394W	F405A/Y407V
T366V/K409F	L351Y/Y407A
T366A/K392E/K409F/T411E	D399R/S400R/Y407A
L351K	L351E
K274Q/R355Q/Q419E/K447_	P217R/P228R/N276K
K274Q/R355Q/Q419E/K447_	N276K
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	Q196K/I199T/P217R/P228R/N276K
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	Q196K/I199T/N276K
I199T/N203D/K274Q/R355Q/Q419E/K447_	Q196K/I199T/P217R/P228R/N276K
I199T/N203D/K274Q/R355Q/Q419E/K447_	Q196K/I199T/N276K
S354C	Y349C

FIG. 13F

Monomer 1	Monomer 2
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	
N208D/Q295E/N384D/Q418E/N421D	
N208D/Q295E/Q418E/N421D	
Q196K/I199T/P217R/P228R/N276K	
Q196K/I199T/N276K	
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	
Q295E/N384D/Q418E/N421D	
Q295E/Q418E/N421D	
P217R/P228R/N276K	
N276K	
E269Q/E272Q/E283Q/E357Q	
E269Q/E272Q/E283Q	
E269Q/E272Q	
E269Q/E283Q	
E272Q/E283Q	
E269Q	
L309D/Q311H/N434S	
Q311R	
Q311R/M428L	

FIG. 14

Variant constant region	Substitutions
pI-ISO(-)	I199T/N203D/K274Q/R355Q/N384S/K392N/N397M/Q418E/K447_
pI_ISO(-)-Fc only	K274Q/R355Q/N384S/K392N/V397M/Q418E/K447_
pI_(-)_isosteric_A	N208D/Q295E/N384D/Q418E/N421D
pI_(-)_isosteric A-Fc only	Q295E/N384D/Q418E/N421D
pI_(-)_isosteric_B	N208D/Q295E/Q418E/N421D
pI_(-)_isosteric_B-Fc only	Q295E/Q418E/N421D
pI_ISO(+RR)	Q196K/I199T/P217R/P228R/N276K
pI_ISO(+RR)-Fc only	P217R/P228R/N276K
pI_ISO(+)	Q196K/I199T/N276K
pI_ISO(+)-Fc only	N276K
pI_(+)_isosteric_A	E269Q/E272Q/E283Q/E357Q
pI_(+)_isosteric_B	E269Q/E272Q/E283Q
pI_(+)_isosteric_E269Q/E272Q	E269Q/E272Q
pI_(+)_isosteric_E269Q/E283Q	E269Q/E283Q
pI_(+)_isosteric_E272Q/E283Q	E272Q/E283Q
pI_(+)_isosteric_E269Q	E269Q

FIG. 15

Ablation Variants			
G236R	299R	P329H	G236R/L328R
S239G	299K	P329K	E233P/L234V/L235A/G236_/S239K
S239K	K322A	A330L	E233P/L234V/L235A/G236_/S267K
S239Q	A327G	A330S/P331S	E233P/L234V/L235A/G236_/S239K/A327G
S239R	A327L	I332K	E233P/L234V/L235A/G236_/S267K/A327G
V266D	A327N	I332R	E233P/L234V/L235A/G236_
S267K	A327Q	V266D/A327Q	S239K/S267K
S267R	L328E	V266D/P329K	267K/P329K
H268K	L328R	S267R/A327Q	
E269R	P329A	S267R/P329K	

FIG. 16

ADCC Variants

236A
239D
239E
332E
332D
239D/332E
236A/332E
239D/332E/330L
332E/330L
243L
298A
299T
333A
334A
S298A/E333A
S298A/E333A/K334A

FIG. 17

Monomer 1 (-)	**Monomer 2 (+)**
Heterodimer skew variants L368D/K370S	Heterodimer skew variants S364K/E357Q
Isosteric pI variant Q295E/N384D/Q418E/N421D ± N208D	
FcKO E233P/L234V/L235A/G236_/S267K	FcKO E233P/L234V/L235A/G236_/S267K
±M428L/N434S for FcRn	±M428L/N434S for FcRn

Monomer 1 (-)	**Monomer 2 (+)**
Heterodimer skew variants L368D/K370S	Heterodimer skew variants S364K/E357Q
Isosteric pI variant Q295E/N384D/Q418E/N421D ± N208D	
±S239D ±I332E	±S239D ±I332E
±M428L/N434S for FcRn	±M428L/N434S for FcRn

FIG. 18

FIG. 18A

Heterodimeric Fc Backbone 1

>FcKO Heterodimeric Fc Backbone 1 monomer 1 (-) (SEQ ID NO: 13)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 1 monomer 2 (+) (SEQ ID NO: 14)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 2

>FcKO Heterodimeric Fc Backbone 2 monomer 1 (-) (SEQ ID NO: 15)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone monomer 2 (+) (SEQ ID NO: 16)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 3

>FcKO Heterodimeric Fc Backbone 3 monomer 1 (-) (SEQ ID NO: 17)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCEVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 3 monomer 2 (+) (SEQ ID NO: 18)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 4

>FcKO Heterodimeric Fc Backbone 4 monomer 1 (-) (SEQ ID NO: 19)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTENEVSLTCLVKGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLEVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 4 monomer 2 (+) (SEQ ID NO: 20)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSKGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIG. 18B

Heterodimeric Fc Backbone 5

>FcKO Heterodimeric Fc Backbone 5 monomer 1 (-) (SEQ ID NO: 21)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 5 monomer 2 (+) (SEQ ID NO: 22)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 6

>FcKO Heterodimeric Fc Backbone 6 monomer 1 (-) (SEQ ID NO: 23)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYASTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 6 monomer 2 (+) (SEQ ID NO: 24)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 7

>FcKO Heterodimeric Fc Backbone 7 monomer 1 (-) (SEQ ID NO: 25)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYSSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 7 monomer 2 (+) (SEQ ID NO: 26)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYSSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 8

>FcKO Heterodimeric Fc Backbone 8 monomer 1 (-) (SEQ ID NO: 27)

APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWEEGDVFSCSVMHEALHNHYTQKSLSLSLGK

>FcKO Heterodimeric Fc Backbone 8 monomer 2 (+) (SEQ ID NO: 28)

APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK

FIG. 18C

Heterodimeric Fc Backbone 9

>FcKO Heterodimeric Fc Backbone 9 monomer 1 (-) (SEQ ID NO: 29)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 9 monomer 2 (+) (SEQ ID NO: 30)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 10

>FcKO Heterodimeric Fc Backbone 10 monomer 1 (-) (SEQ ID NO: 31)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 10 monomer 2 (+) (SEQ ID NO: 32)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 11

>FcKO Heterodimeric Fc Backbone 11 monomer 1 (-) (SEQ ID NO: 33)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 11 monomer 2 (+) (SEQ ID NO: 34)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Heterodimeric Fc Backbone 12

>FcKO Heterodimeric Fc Backbone 12 monomer 1 (-) (SEQ ID NO: 35)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFKWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 12 monomer 2 (+) (SEQ ID NO: 36)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 13

>FcKO Heterodimeric Fc Backbone 13 monomer 1 (SEQ ID NO: 37)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 13 monomer 2 (SEQ ID NO: 38)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FIG. 18D

Heterodimeric Fc Backbone 14

>FcKO Heterodimeric Fc Backbone 14 monomer 1 (SEQ ID NO: 39)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 14 monomer 2 (SEQ ID NO: 40)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Heterodimeric Fc Backbone 15

>FcKO Heterodimeric Fc Backbone 15 monomer 1 (SEQ ID NO: 41)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>FcKO Heterodimeric Fc Backbone 15 monomer 2 (SEQ ID NO: 42)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

FIG. 19
FIG. 19A

Heterodimeric Fc Backbone 1

>Heterodimeric Fc Backbone 1 monomer 1 (-) (SEQ ID NO: 43)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 1 monomer 2 (+) (SEQ ID NO: 44)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 2

>Heterodimeric Fc Backbone 2 monomer 1 (-) (SEQ ID NO: 45)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone monomer 2 (+) (SEQ ID NO: 46)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 3

>Heterodimeric Fc Backbone 3 monomer 1 (-) (SEQ ID NO: 47)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCEVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 3 monomer 2 (+) (SEQ ID NO: 48)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 4

>Heterodimeric Fc Backbone 4 monomer 1 (-) (SEQ ID NO: 49)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTENEVSLTCLVKGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLEVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 4 monomer 2 (+) (SEQ ID NO: 50)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSKGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIG. 19B

Heterodimeric Fc Backbone 5

>Heterodimeric Fc Backbone 5 monomer 1 (-) (SEQ ID NO: 51)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 5 monomer 2 (+) (SEQ ID NO: 52)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 6

>Heterodimeric Fc Backbone 6 monomer 1 (-) (SEQ ID NO: 53)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYASTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 6 monomer 2 (+) (SEQ ID NO: 54)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 7

>Heterodimeric Fc Backbone 7 monomer 1 (-) (SEQ ID NO: 55)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYSSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 7 monomer 2 (+) (SEQ ID NO: 56)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYSSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 8

>Heterodimeric Fc Backbone 8 monomer 1 (-) (SEQ ID NO: 57)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 8 monomer 2 (+) (SEQ ID NO: 58)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FIG. 19C

Heterodimeric Fc Backbone 9

>Heterodimeric Fc Backbone 9 monomer 1 (SEQ ID NO: 59)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 9 monomer 2 (SEQ ID NO: 60)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Heterodimeric Fc Backbone 10

>Heterodimeric Fc Backbone 10 monomer 1 (SEQ ID NO: 61)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 10 monomer 2 (SEQ ID NO: 62)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Heterodimeric Fc Backbone 11

>Heterodimeric Fc Backbone 11 monomer 1 (SEQ ID NO: 63)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 11 monomer 2 (SEQ ID NO: 64)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

FIG. 20
FIG. 20A

S239D/I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 1 monomer 1 (-) (SEQ ID NO: 65)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 1 monomer 2 (+) (SEQ ID NO: 66)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : S239D

ADCC-enhanced Heterodimeric Backbone 2 monomer 1 (-) (SEQ ID NO: 67)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 2 monomer 2 (+) (SEQ ID NO: 68)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : I332E

ADCC-enhanced Heterodimeric Backbone 3 monomer 1 (-) (SEQ ID NO: 69)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 3 monomer 2 (+) (SEQ ID NO: 70)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

WT : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 4 monomer 1 (-) (SEQ ID NO: 71)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 4 monomer 2 (+) (SEQ ID NO: 72)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

WT : S239D

ADCC-enhanced Heterodimeric Backbone 5 monomer 1 (-) (SEQ ID NO: 73)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 5 monomer 2 (+) (SEQ ID NO: 74)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIG. 20B

WT : I332E

ADCC-enhanced Heterodimeric Backbone 6 monomer 1 (-) (SEQ ID NO: 75)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 6 monomer 2 (+) (SEQ ID NO: 76)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D/I332E : WT

ADCC-enhanced Heterodimeric Backbone 7 monomer 1 (-) (SEQ ID NO: 77)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 7 monomer 2 (+) (SEQ ID NO: 78)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : WT

ADCC-enhanced Heterodimeric Backbone 8 monomer 1 (-) (SEQ ID NO: 79)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 8 monomer 2 (+) (SEQ ID NO: 80)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : WT

ADCC-enhanced Heterodimeric Backbone 9 monomer 1 (-) (SEQ ID NO: 81)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 9 monomer 2 (+) (SEQ ID NO: 82)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D/I332E : S239D

ADCC-enhanced Heterodimeric Backbone 10 monomer 1 (-) (SEQ ID NO: 83)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 10 monomer 2 (+) (SEQ ID NO: 84)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIG. 20C

S239D/I332E : I332E

ADCC-enhanced Heterodimeric Backbone 11 monomer 1 (-) (SEQ ID NO: 85)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 11 monomer 2 (+) (SEQ ID NO: 86)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 12 monomer 1 (-) (SEQ ID NO: 87)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 12 monomer 2 (+) (SEQ ID NO: 88)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 13 monomer 1 (-) (SEQ ID NO: 89)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 13 monomer 2 (+) (SEQ ID NO: 90)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : I332E

ADCC-enhanced Heterodimeric Backbone 14 monomer 1 (-) (SEQ ID NO: 91)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 14 monomer 2 (+) (SEQ ID NO: 92)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : S239D

ADCC-enhanced Heterodimeric Backbone 15 monomer 1 (-) (SEQ ID NO: 93)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 15 monomer 2 (+) (SEQ ID NO: 94)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIG. 21
FIG. 21A

S239D/I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 1 (-) (SEQ ID NO: 95)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 2 (+) (SEQ ID NO: 96)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : S239D

ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 1 (-) (SEQ ID NO: 97)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 2 (+) (SEQ ID NO: 98)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : I332E

ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 1 (-) (SEQ ID NO: 99)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 2 (+) (SEQ ID NO: 100)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

WT : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 1 (-) (SEQ ID NO: 101)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 2 (+) (SEQ ID NO: 102)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

WT : S239D

ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 1 (-) (SEQ ID NO: 103)
APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 2 (+) (SEQ ID NO: 104)
APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FIG. 21B

WT : I332E

ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 1 (-) (SEQ ID NO: 105)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 2 (+) (SEQ ID NO: 106)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D/I332E : WT

ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 1 (-) (SEQ ID NO: 107)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 2 (+) (SEQ ID NO: 108)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : WT

ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 1 (-) (SEQ ID NO: 109)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 2 (+) (SEQ ID NO: 110)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : WT

ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 1 (-) (SEQ ID NO: 111)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 2 (+) (SEQ ID NO: 112)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D/I332E : S239D

ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 1 (-) (SEQ ID NO: 113)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 2 (+) (SEQ ID NO: 114)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FIG. 21C

S239D/I332E : I332E

ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 1 (-) (SEQ ID NO: 115)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 2 (+) (SEQ ID NO: 116)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 1 (-) (SEQ ID NO: 117)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 2 (+) (SEQ ID NO: 118)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 1 (-) (SEQ ID NO: 119)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 2 (+) (SEQ ID NO: 120)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : I332E

ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 1 (-) (SEQ ID NO: 121)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 2 (+) (SEQ ID NO: 122)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : S239D

ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 1 (-) (SEQ ID NO: 123)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 2 (+) (SEQ ID NO: 124)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FIG. 22

FIG. 22A

S239D/I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 1 (-) (SEQ ID NO: 125)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 2 (+) (SEQ ID NO: 126)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D : S239D

ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 1 (-) (SEQ ID NO: 127)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 2 (+) (SEQ ID NO: 128)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

I332E : I332E

ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 1 (-) (SEQ ID NO: 129)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 2 (+) (SEQ ID NO: 130)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

WT : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 1 (-) (SEQ ID NO: 131)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 2 (+) (SEQ ID NO: 132)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

WT : S239D

ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 1 (-) (SEQ ID NO: 133)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 2 (+) (SEQ ID NO: 134)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

FIG. 22B

WT : I332E

ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 1 (-) (SEQ ID NO: 135)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 2 (+) (SEQ ID NO: 136)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D/I332E : WT

ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 1 (-) (SEQ ID NO: 137)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 2 (+) (SEQ ID NO: 138)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D : WT

ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 1 (-) (SEQ ID NO: 139)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 2 (+) (SEQ ID NO: 140)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

I332E : WT

ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 1 (-) (SEQ ID NO: 141)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 2 (+) (SEQ ID NO: 142)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D/I332E : S239D

ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 1 (-) (SEQ ID NO: 143)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 2 (+) (SEQ ID NO: 144)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

FIG. 22C

S239D/I332E : I332E

ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 1 (-) (SEQ ID NO: 145)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 2 (+) (SEQ ID NO: 146)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 1 (-) (SEQ ID NO: 147)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 2 (+) (SEQ ID NO: 148)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

I332E : S239D/I332E

ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 1 (-) (SEQ ID NO: 149)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 2 (+) (SEQ ID NO: 150)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

S239D : I332E

ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 1 (-) (SEQ ID NO: 151)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 2 (+) (SEQ ID NO: 152)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

I332E : S239D

ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 1 (-) (SEQ ID NO: 153)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 2 (+) (SEQ ID NO: 154)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

FIG. 23

IgG1 CH1(+) (SEQ ID NO: 155)
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTQTYICNVNHKPSNTKVDKKV

IgG1 CH1(-) (SEQ ID NO: 156)
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTQTYICNVNHKPSDTKVDKKV

IgG2 CH1(+) (SEQ ID NO: 157)
ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSN
FGTQTYTCNVDHKPSNTKVDKTV

IgG2 CH1(-) (SEQ ID NO: 158)
ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSN
FGTQTYTCNVDHKPSDTKVDKTV

IgG4 CH1(+) (SEQ ID NO: 159)
ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTKTYTCNVDHKPSNTKVDKRV

IgG4 CH1(-) (SEQ ID NO: 160)
ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTKTYTCNVDHKPSDTKVDKRV

FIG. 24

IgG1 hinge (SEQ ID NO: 161)
EPKSCDKTHTCPPCP

IgG2 hinge (SEQ ID NO: 162)
ERKCCVECPPCP

IgG4 hinge (SEQ ID NO: 163)
ESKYGPPCPSCP

FIG. 25

Light Chain Constant Domain – Kappa (SEQ ID NO: 164)
RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLS
KADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

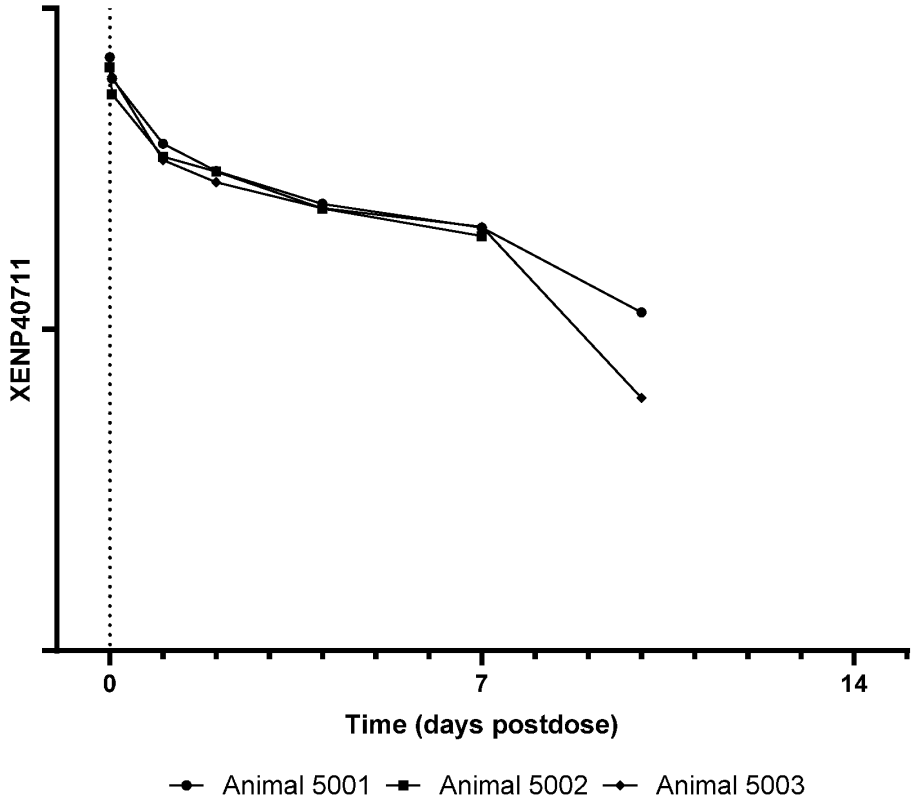
Light Chain Constant Domain – Lambda (SEQ ID NO: 165)
GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLT
PEQWKSHRSYSCQVTHEGSTVEKTVAPTECS

FIG. 26

Domain Linkers

Name	Sequence	SEQ ID NO:
$(GGGGS)_1$ or GGGGS	GGGGS	166
$(GGGGS)_2$	GGGGSGGGGS	167
$(GGGGS)_3$	GGGGSGGGGSGGGGS	168
$(GGGGS)_4$	GGGGSGGGGSGGGGSGGGGS	169
$(GGGGS)_5$	GGGGSGGGGSGGGGSGGGGSGGGGS	170
$(GGGGS)_6$	GGGGSGGGGSGGGGSGGGGSGGGGSGGGGS	171
$(GGGGS)_7$	GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGS	172
$(GGGGA)_1$ or GGGGA	GGGGA	173
$(GGGGA)_2$	GGGGAGGGGA	174
$(GGGGA)_3$	GGGGAGGGGAGGGGA	175
$(GGGGA)_4$	GGGGAGGGGAGGGGAGGGGA	176
$(GGGGA)_5$	GGGGAGGGGAGGGGAGGGGAGGGGA	177
$(GGGGA)_6$	GGGGAGGGGAGGGGAGGGGAGGGGAGGGGA	178
$(GGGGA)_7$	GGGGAGGGGAGGGGAGGGGAGGGGAGGGGAGGGGA	179
30AA-linker	DPALVHQRPAPPGGGGSGGGGSGGGGSGGG	180
$(GKPGS)_1$ or GKPGS	GKPGS	181
$(GKPGS)_5$	GKPGSGKPGSGKPGSGKPGSGKPGS	182
$(GKPGS)_6$	GKPGSGKPGSGKPGSGKPGSGKPGSGKPGS	183
$(GGGES)_1$ or GGGES	GGGES	184
“lower half hinge”	KTHTCPPCP	185
“full hinge C220S variant”	EPKSSDKTHTCPPCP	186
“flex lower half hinge”	GGGGSGGGGSKTHTCPPCP	187
“charged lower half hinge1”	GKPGSGKPGSKTHTCPPCP	188
“charged lower half hinge2”	GKPGSKTHTCPPCP	189
“upper half hinge”	EPKSC	190
“flex upper half hinge”	EPKSCGGGGSGGGGS	191
“charged upper half hinge1”	EPKSCGKPGSGKPGS	192
“charged upper half hinge2”	EPKSCGKPGS	193

FIG. 27


XENP40711
0
7
14
Time (days postdose)
Animal 5001
Animal 5002
Animal 5003