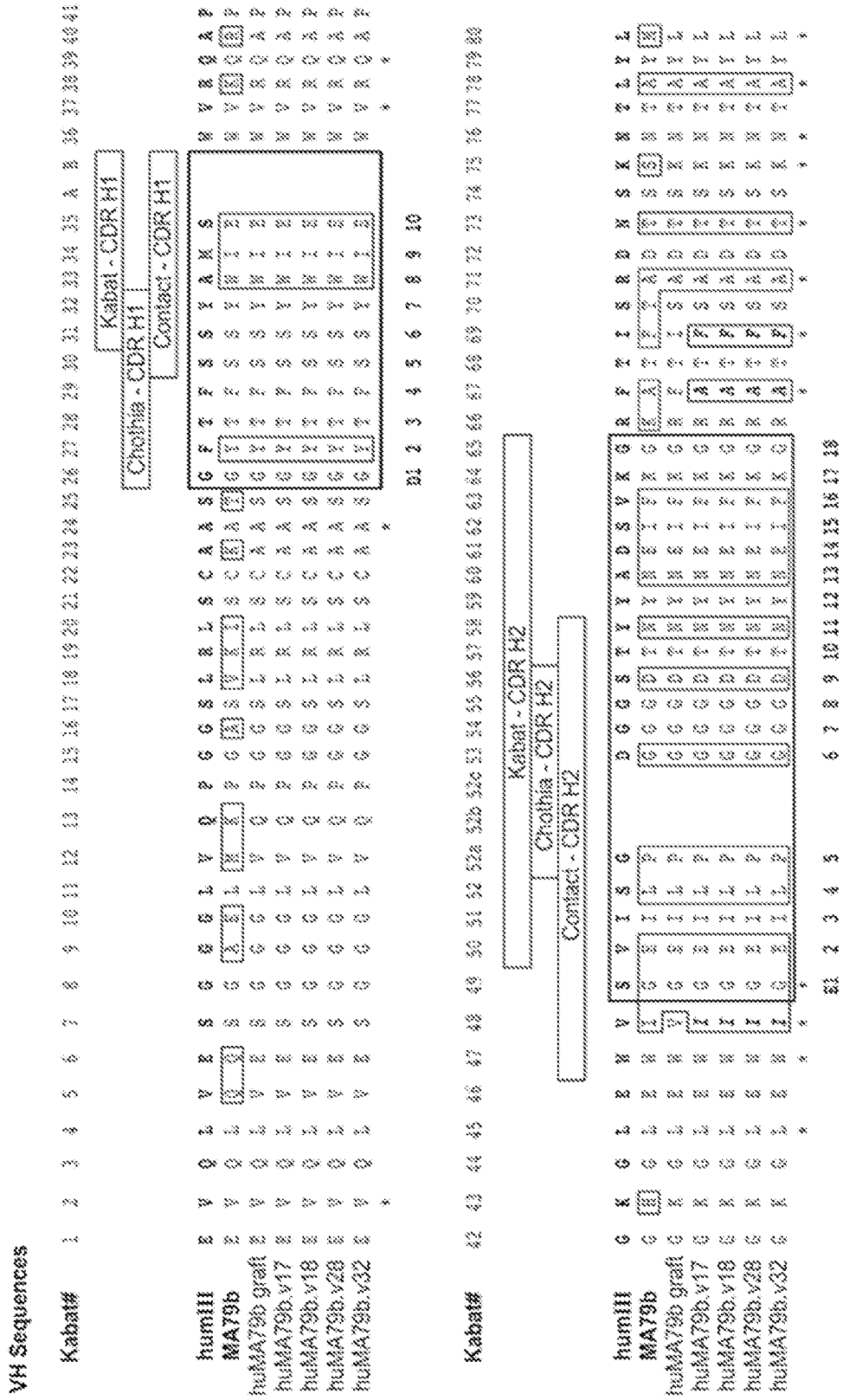

VH Sequences
Kabat - CDR H1
Chothia - CDR H1
Contact - CDR H1
Kabat - CDR H2
Chothia - CDR H2
Contact - CDR H2

FIG. 1A

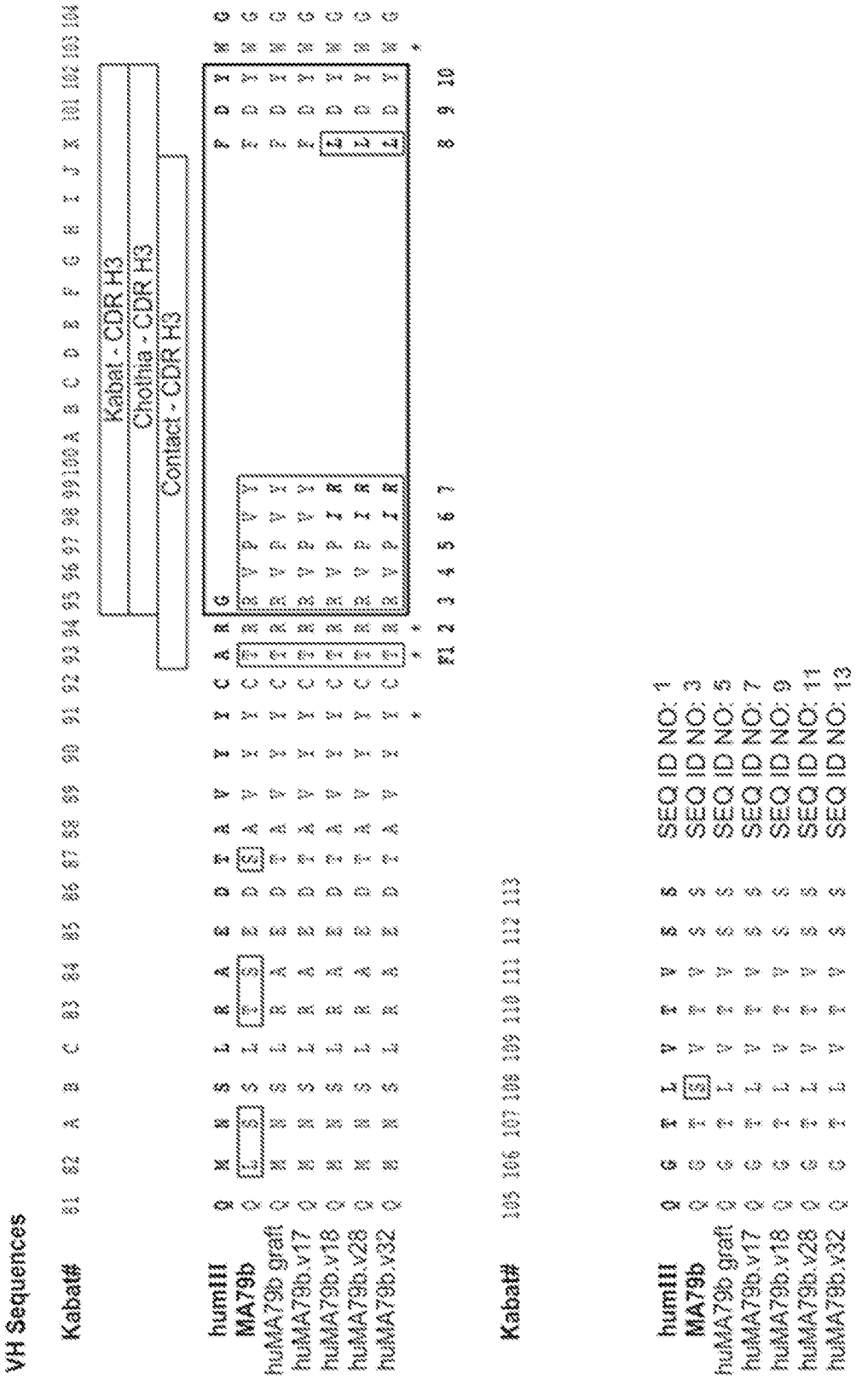

VH Sequences
Kabat - CDR H3
Chothia - CDR H3
Contact - CDR H3
SEQ ID NO: 1
SEQ ID NO: 3
SEQ ID NO: 5
SEQ ID NO: 7
SEQ ID NO: 9
SEQ ID NO: 11
SEQ ID NO: 13

FIG. 1B

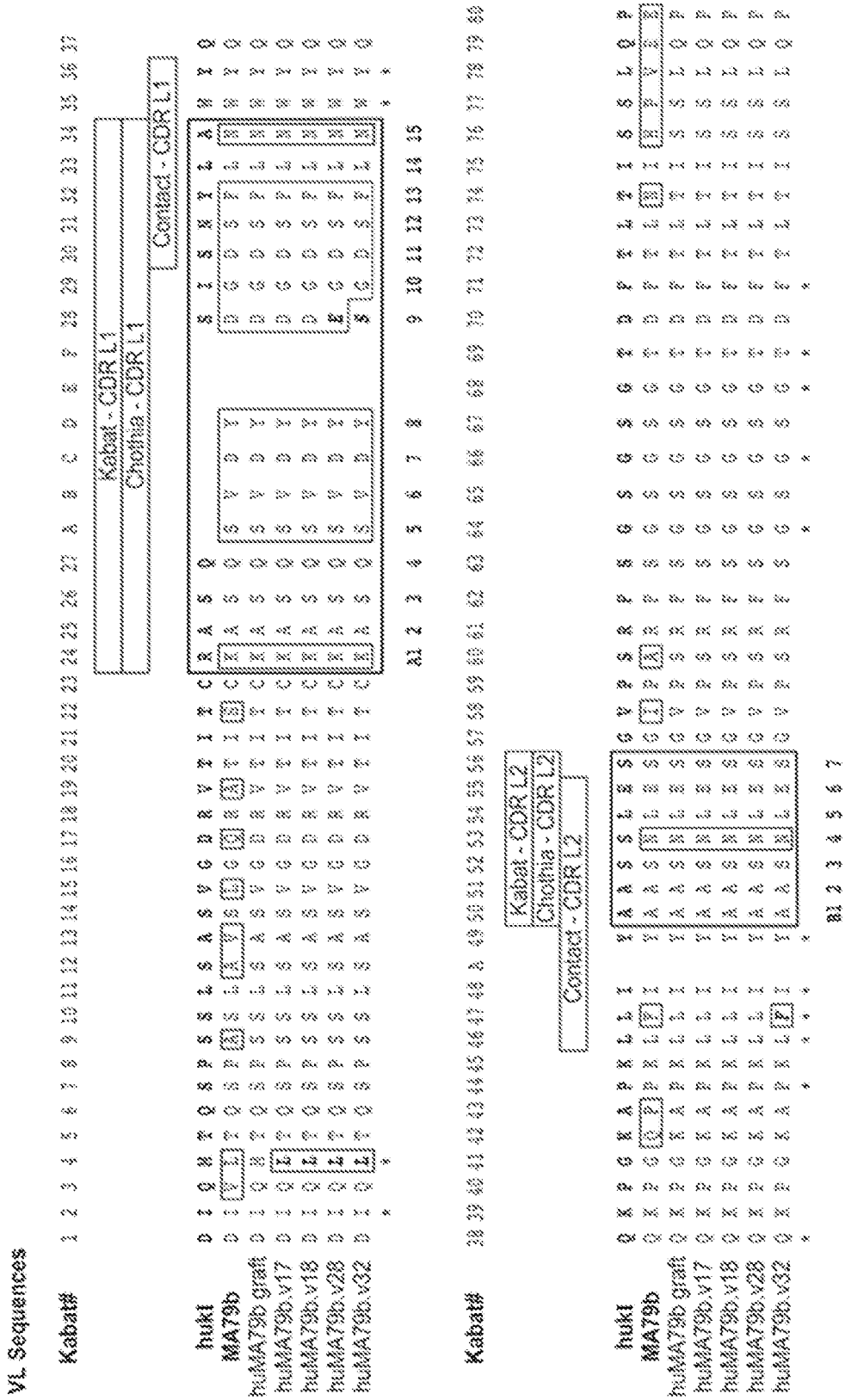

VL Sequences
Kabat - CDR L1
Chothia - CDR L1
Contact - CDR L1
Kabat - CDR L2
Chothia - CDR L2
Contact - CDR L2

FIG. 2A

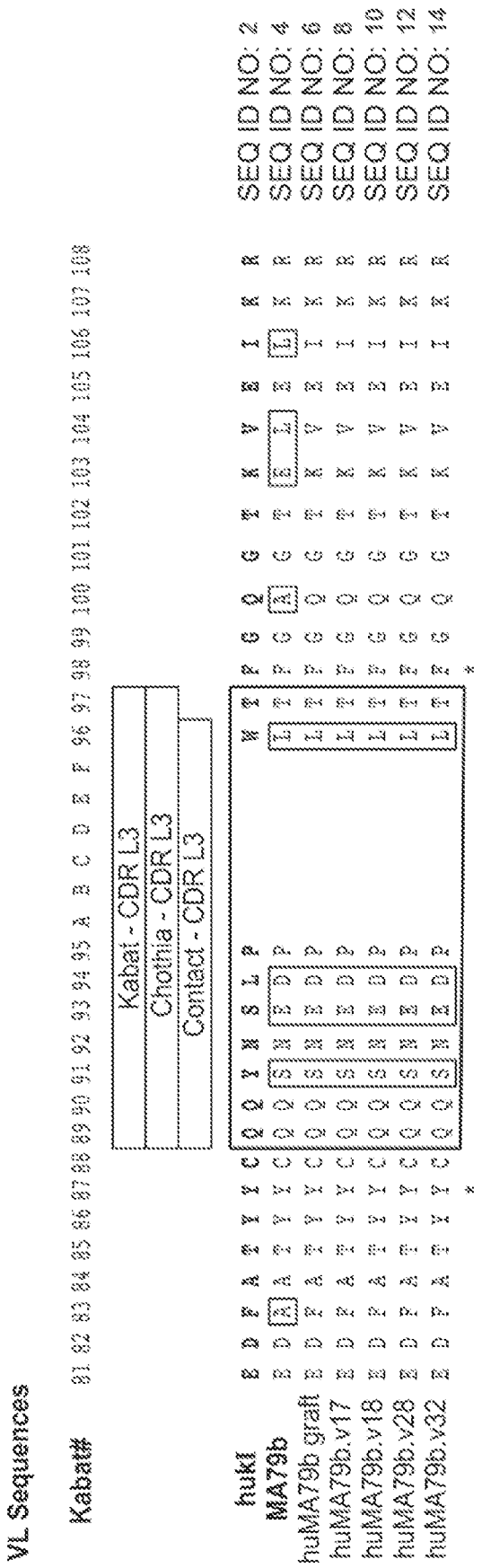

VL Sequences
Kabat - CDR L3
Chothia - CDR L3
Contact - CDR L3
SEQ ID NO: 2
SEQ ID NO: 4
SEQ ID NO: 6
SEQ ID NO: 8
SEQ ID NO: 10
SEQ ID NO: 12
SEQ ID NO: 14

FIG. 2B

huMA79bv28 Light Chain

DIQLTQSPSSLSASVGDRVTITCKASQSVDYEGDSFLNWYQQKPGKAPKLLIYAASNLESGVPSRFSG
SGSGTDFTLTISSLQPEDFATYYCQQSNEDPLTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASV
VCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQG
LSSPVTKSFNRGEC **SEQ ID NO: 37**

huMA79bv28 Heavy Chain

EVQLVESGGGLVQPGGSLRLSCAASGYTFSSYWIEWVRQAPGKGLEWIGEILPGGGDTNYNEIFKGRA
TFSADTSKNTAYLQMNSLRAEDTAVYYCTRRVPIRLDYWGQGTLVTVSSASTKGPSVFPLAPSSKSTS
GGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNH
KPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPE
VKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG **SEQ ID NO: 38**

FIG. 3

Thio-huMA79b.v28-HC-A118C (HC)

EVQLVESGGGLVQPGGSLRLSCAASGYTFSSYWIEWVRQAPGKGLEWIGEILPGGGDTNYNEIFKGRAT
FSADTSKNTAYLQMNSLRAEDTAVYYCTRRVPIRLDYWGQGTLVTVSS**C**STKGPSVFPLAPSSKSTSGG
TAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPS
NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN
WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDK
SRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG **SEQ ID NO: 39**

Thio-huMA79b.v28-LC-V205C (LC)

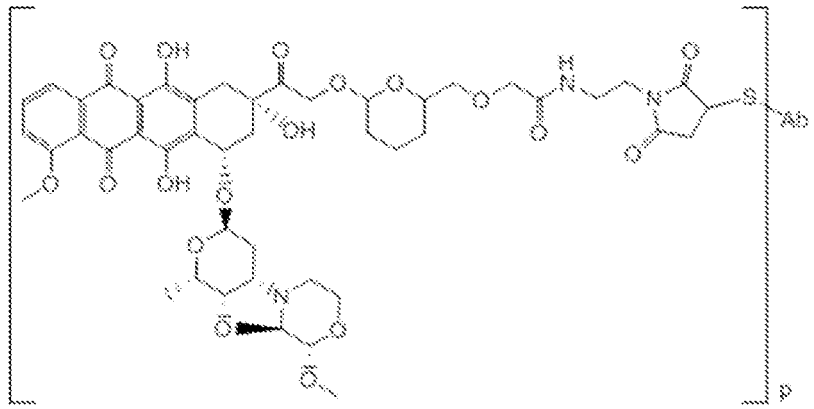
DIQLTQSPSSLSASVGDRVTITCKASQSVDYEGDSFLNWYQQKPGKAPKLLIYAASNLESGVPSRFSGSG
SGTDFTLTISSLQPEDFATYYCQQSNEDPLTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLL
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSP**C**T
KSFNRGEC **SEQ ID NO: 54**

Thio-huMA79b.v28-HC-S400C (HC)

EVQLVESGGGLVQPGGSLRLSCAASGYTFSSYWIEWVRQAPGKGLEWIGEILPGGGDTNYNEIFKGRATF
SADTSKNTAYLQMNSLRAEDTAVYYCTRRVPIRLDYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTA
ALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTK
VDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD
GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYT
LPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD**C**DGSFFLYSKLTVDKSRWQQG
NVFSCSVMHEALHNHYTQKSLSLSPGK **SEQ ID NO: 55**

FIG. 4

A Thio huMA79bv28 HC A118C-MC-acetal-PNU-159682 ("huMA79bv28-PNU-2")



B Thio huMA79bv28 HC A118C-MC-val-cit-PAB-PNU-159682 ("huMA79bv28-PNU-1")

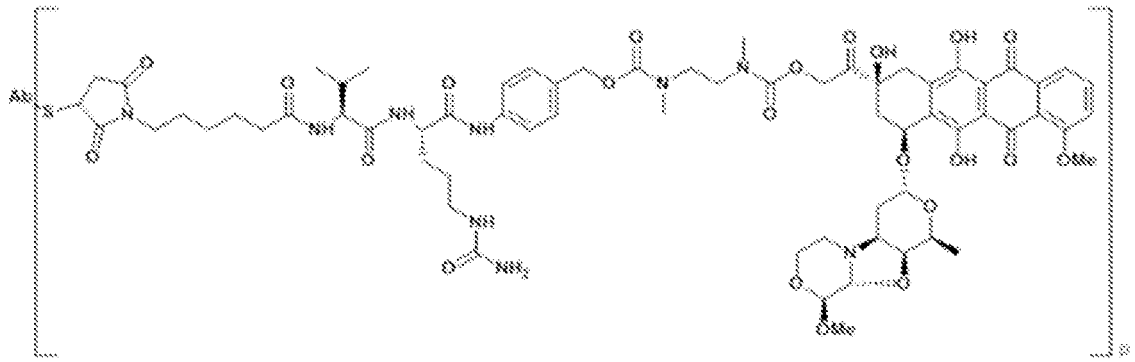


FIG. 5

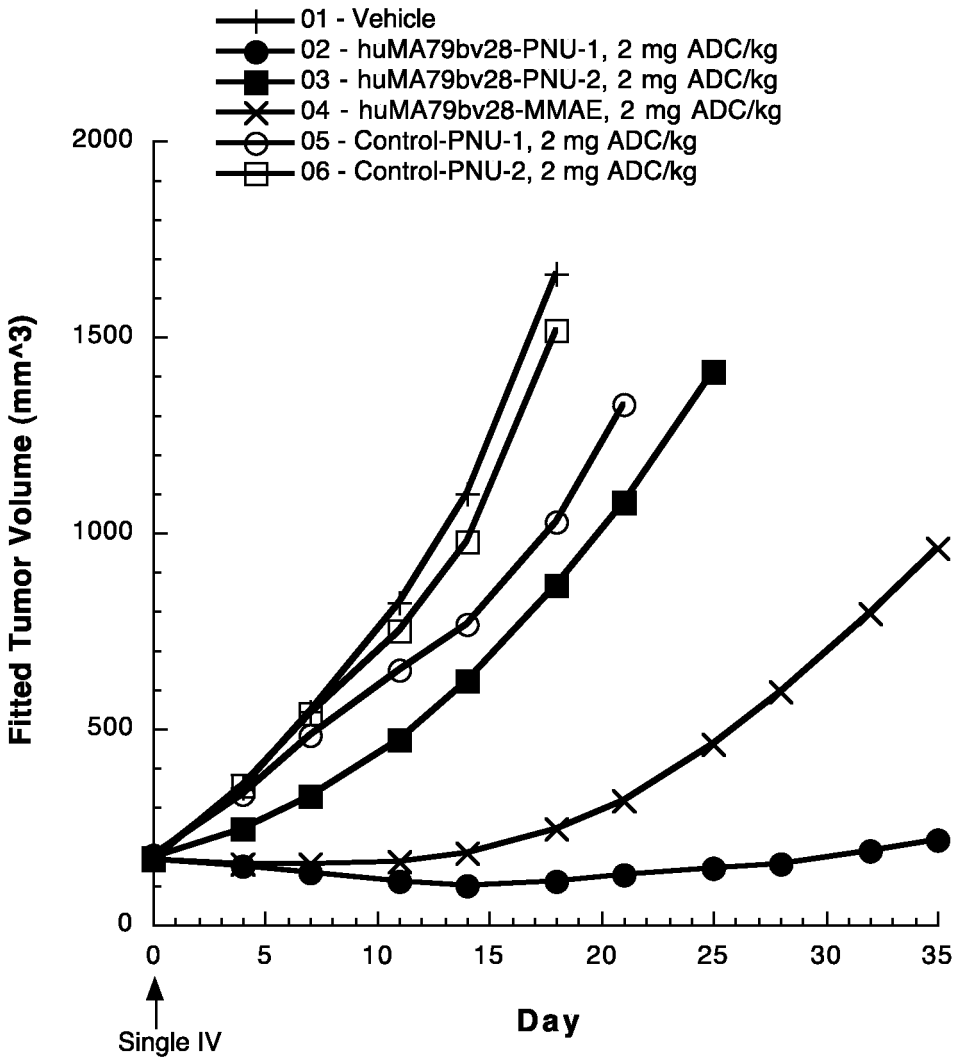

01 - Vehicle
02 - huMA79bv28-PNU-1, 2 mg ADC/kg
03 - huMA79bv28-PNU-2, 2 mg ADC/kg
04 - huMA79bv28-MMAE, 2 mg ADC/kg
05 - Control-PNU-1, 2 mg ADC/kg
06 - Control-PNU-2, 2 mg ADC/kg
Fitted Tumor Volume (mm^3)
2000
1500
1000
500
0
0
5
10
15
20
25
30
35
Day
Single IV

FIG. 6

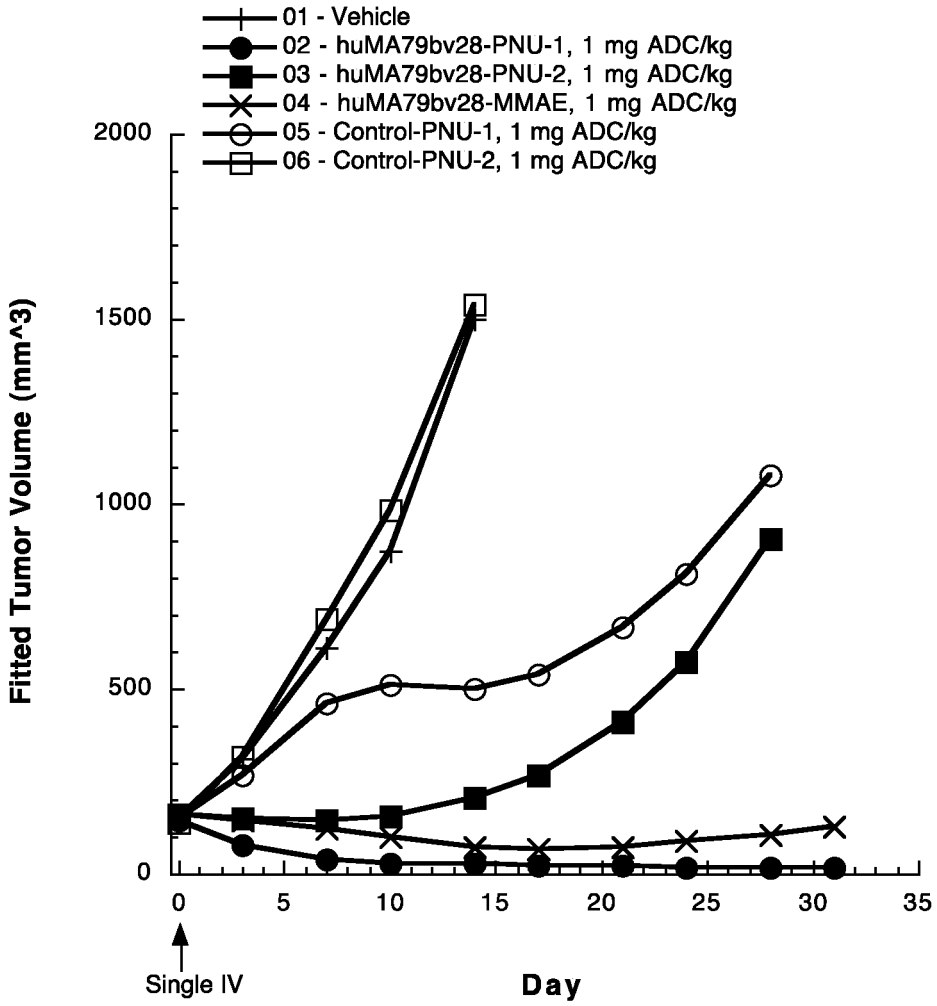

01 - Vehicle
02 - huMA79bv28-PNU-1, 1 mg ADC/kg
03 - huMA79bv28-PNU-2, 1 mg ADC/kg
04 - huMA79bv28-MMAE, 1 mg ADC/kg
05 - Control-PNU-1, 1 mg ADC/kg
06 - Control-PNU-2, 1 mg ADC/kg
Fitted Tumor Volume (mm^3)
2000
1500
1000
500
0
0
5
10
15
20
25
30
35
Single IV
Day

FIG. 7

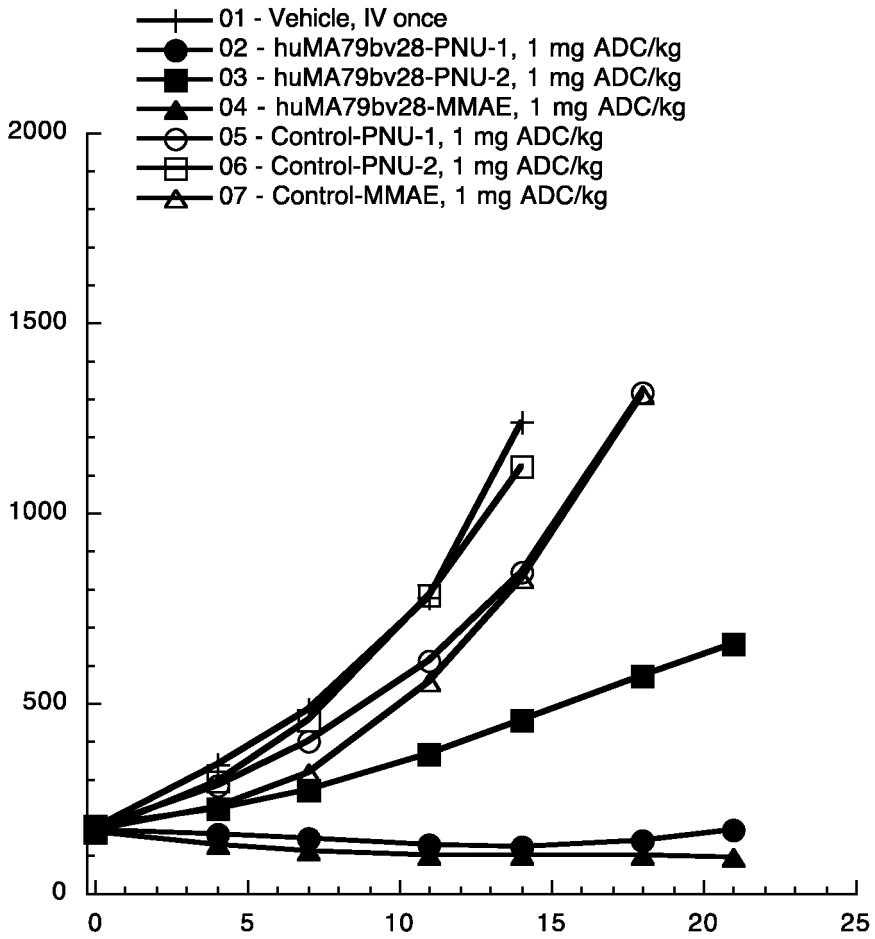

01 - Vehicle, IV once
02 - huMA79bv28-PNU-1, 1 mg ADC/kg
03 - huMA79bv28-PNU-2, 1 mg ADC/kg
04 - huMA79bv28-MMAE, 1 mg ADC/kg
05 - Control-PNU-1, 1 mg ADC/kg
06 - Control-PNU-2, 1 mg ADC/kg
07 - Control-MMAE, 1 mg ADC/kg
2000
1500
1000
500
0
0
5
10
15
20
25

FIG. 8

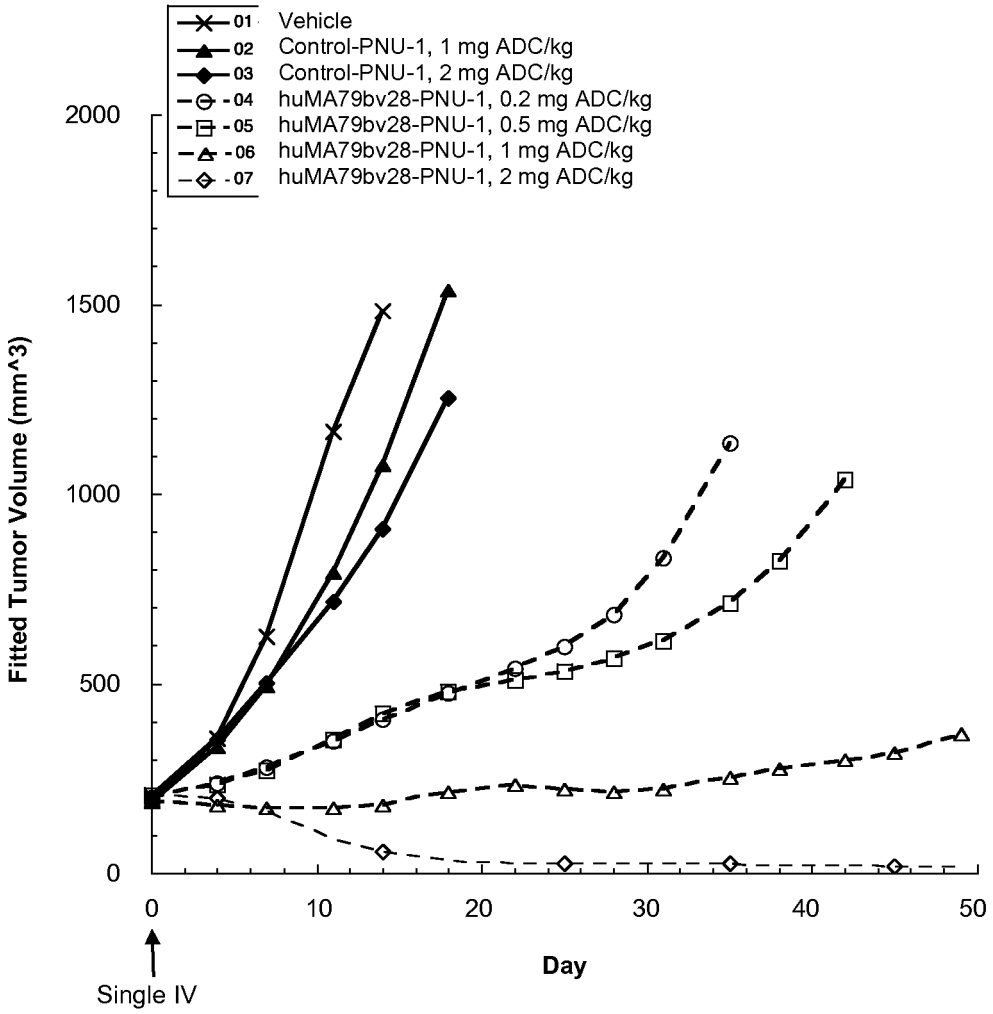

01 Vehicle
02 Control-PNU-1, 1 mg ADC/kg
03 Control-PNU-1, 2 mg ADC/kg
04 huMA79bv28-PNU-1, 0.2 mg ADC/kg
05 huMA79bv28-PNU-1, 0.5 mg ADC/kg
06 huMA79bv28-PNU-1, 1 mg ADC/kg
07 huMA79bv28-PNU-1, 2 mg ADC/kg
Fitted Tumor Volume (mm^3)
2000
1500
1000
500
0
0
10
20
30
40
50
Day
Single IV

FIG. 9

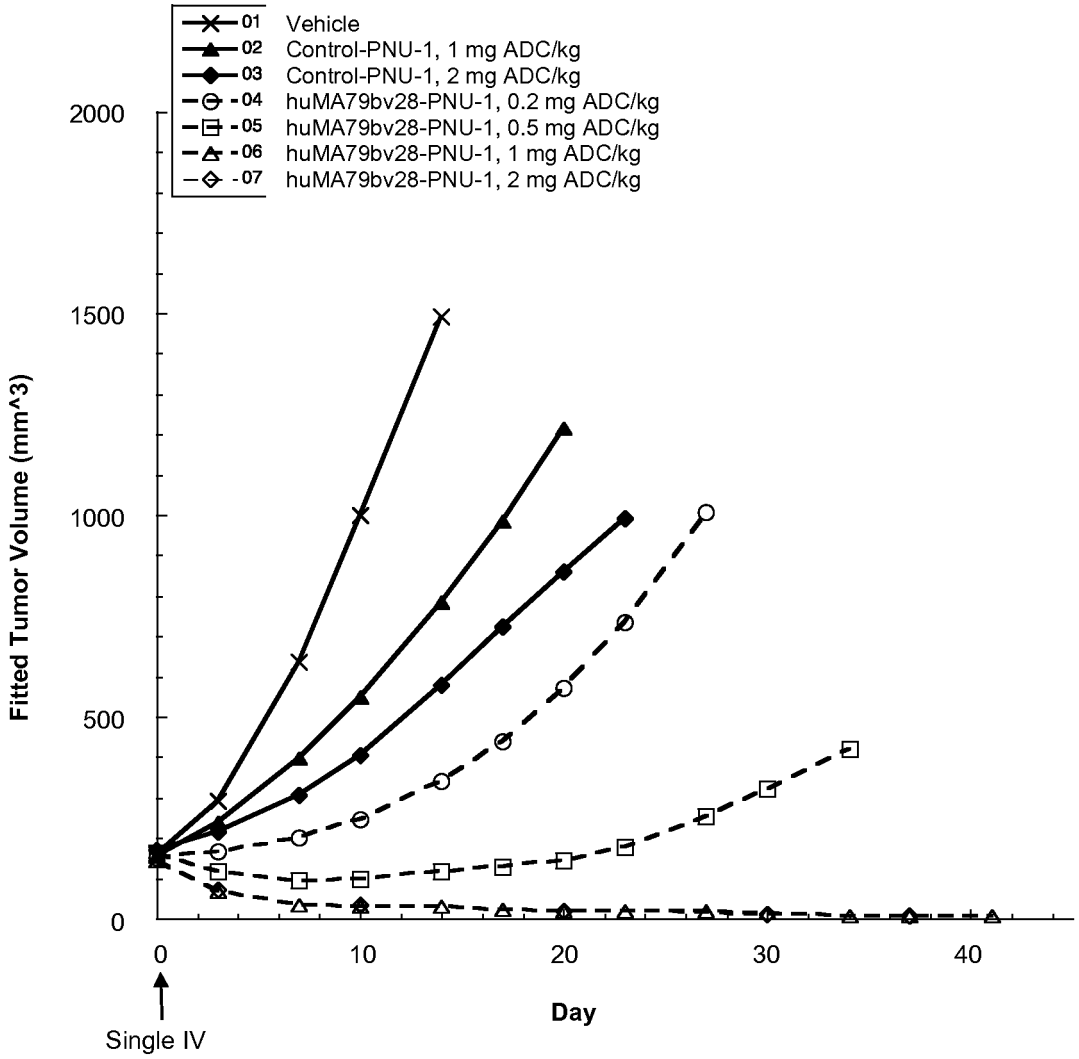

01 Vehicle
02 Control-PNU-1, 1 mg ADC/kg
03 Control-PNU-1, 2 mg ADC/kg
04 huMA79bv28-PNU-1, 0.2 mg ADC/kg
05 huMA79bv28-PNU-1, 0.5 mg ADC/kg
06 huMA79bv28-PNU-1, 1 mg ADC/kg
07 huMA79bv28-PNU-1, 2 mg ADC/kg
Fitted Tumor Volume (mm^3)
2000
1500
1000
500
0
0
10
20
30
40
Day
Single IV

FIG. 10

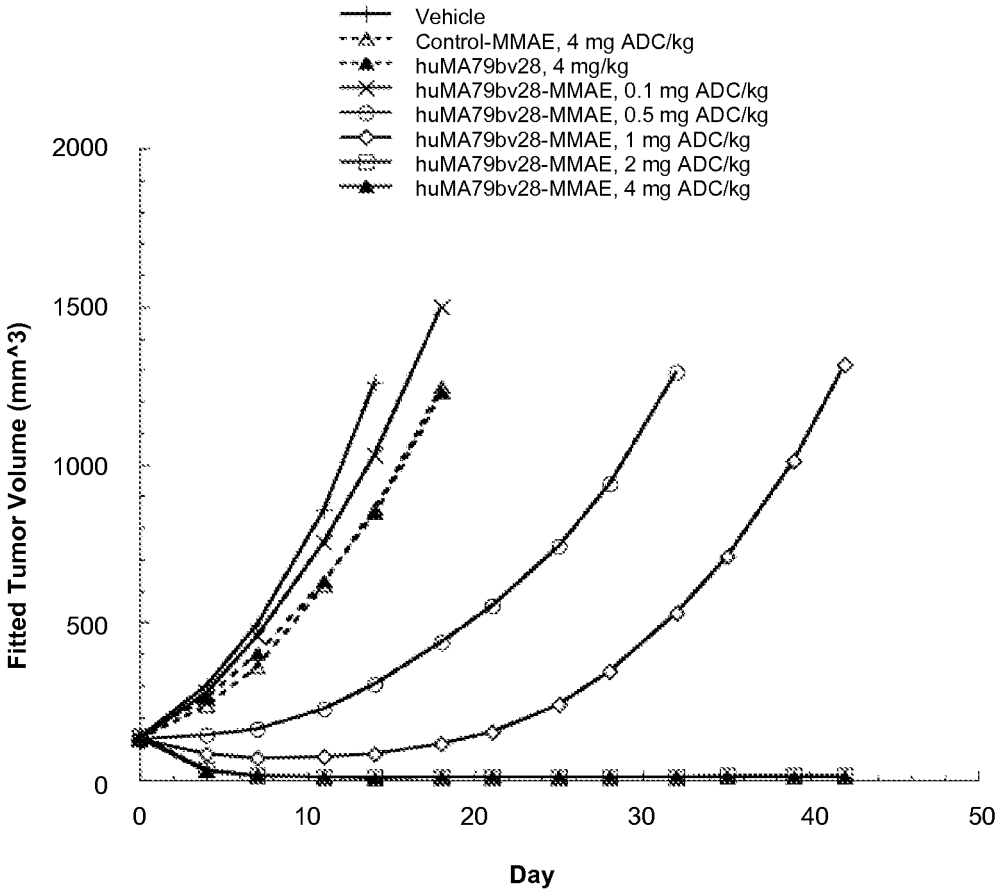

Vehicle
Control-MMAE, 4 mg ADC/kg
huMA79bv28, 4 mg/kg
huMA79bv28-MMAE, 0.1 mg ADC/kg
huMA79bv28-MMAE, 0.5 mg ADC/kg
huMA79bv28-MMAE, 1 mg ADC/kg
huMA79bv28-MMAE, 2 mg ADC/kg
huMA79bv28-MMAE, 4 mg ADC/kg
Fitted Tumor Volume (mm^3)
2000
1500
1000
500
0
0
10
20
30
40
50
Day

FIG. 11

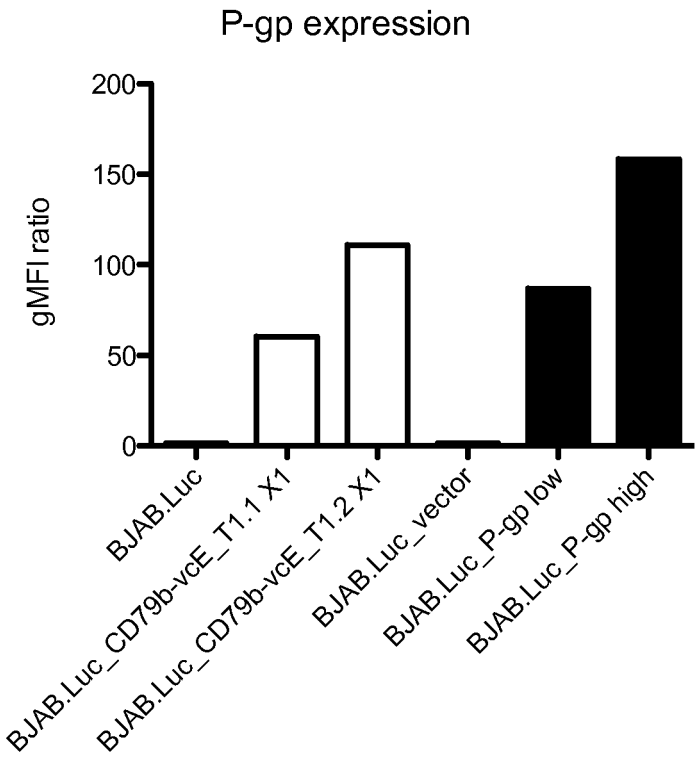

P-gp expression
gMFI ratio
200
150
100
50
0
BJAB.Luc
BJAB.Luc_CD79b-vcE_T1.1 X1
BJAB.Luc_CD79b-vcE_T1.2 X1
BJAB.Luc_vector
BJAB.Luc_P-gp low
BJAB.Luc_P-gp high

FIG. 12

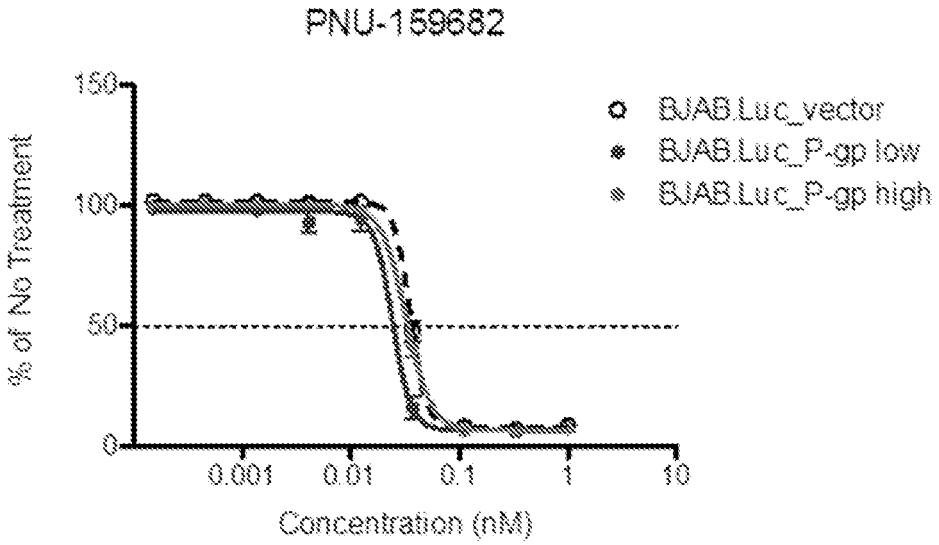

PNU-159682
% of No Treatment
150
100
50
0
0.001
0.01
0.1
1
10
Concentration (nM)
BJAB.Luc_vector
BJAB.Luc_P-gp low
BJAB.Luc_P-gp high

FIG. 13