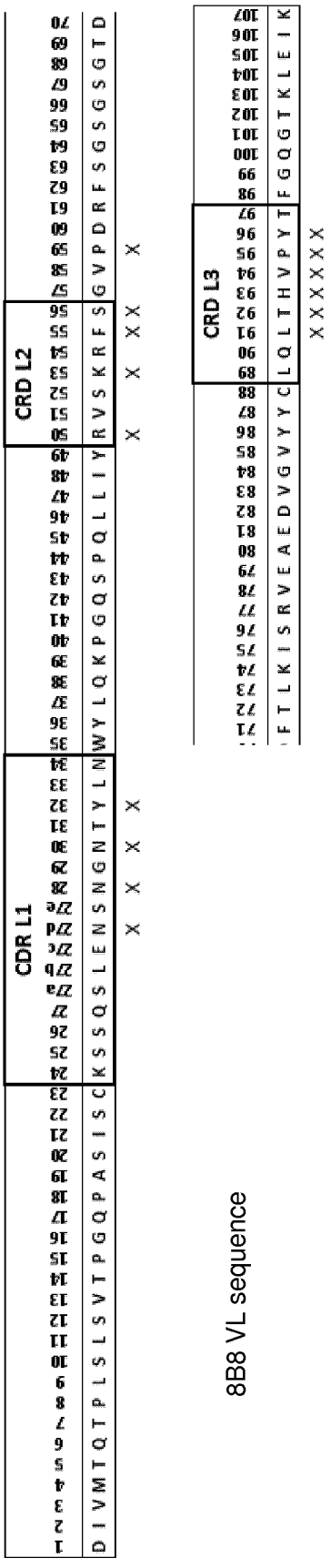
Fig. 1

CDRs according to Kabat numbering



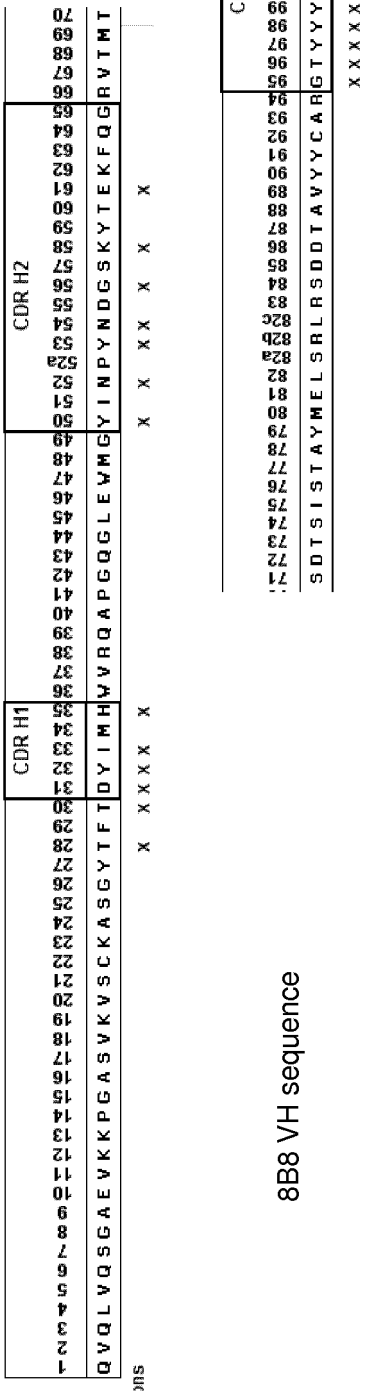

CDR H1
CDR H2
CDR H3
8B8 VH sequence
X X X X X X X X X X X X X X X X

Fig. 2

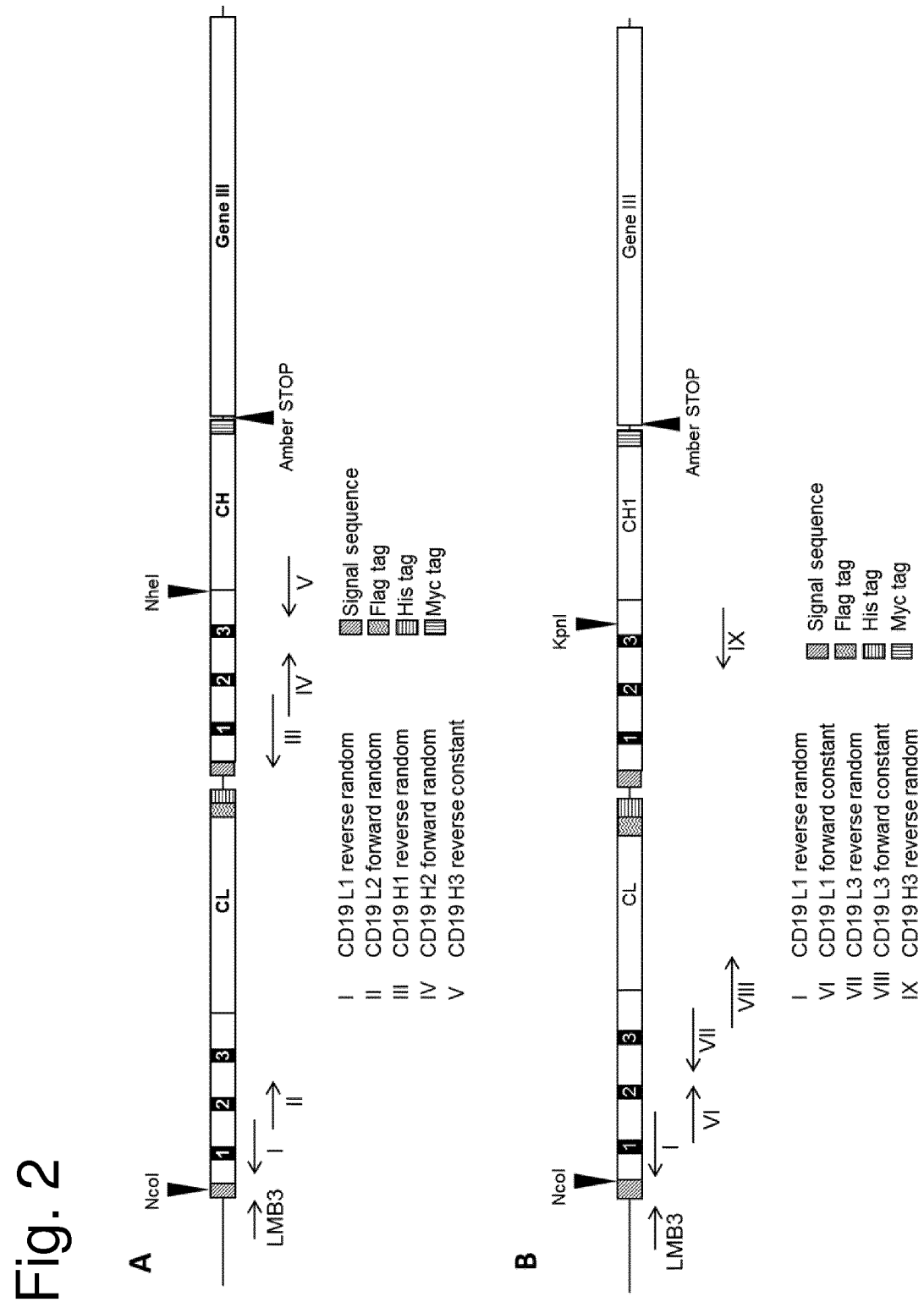
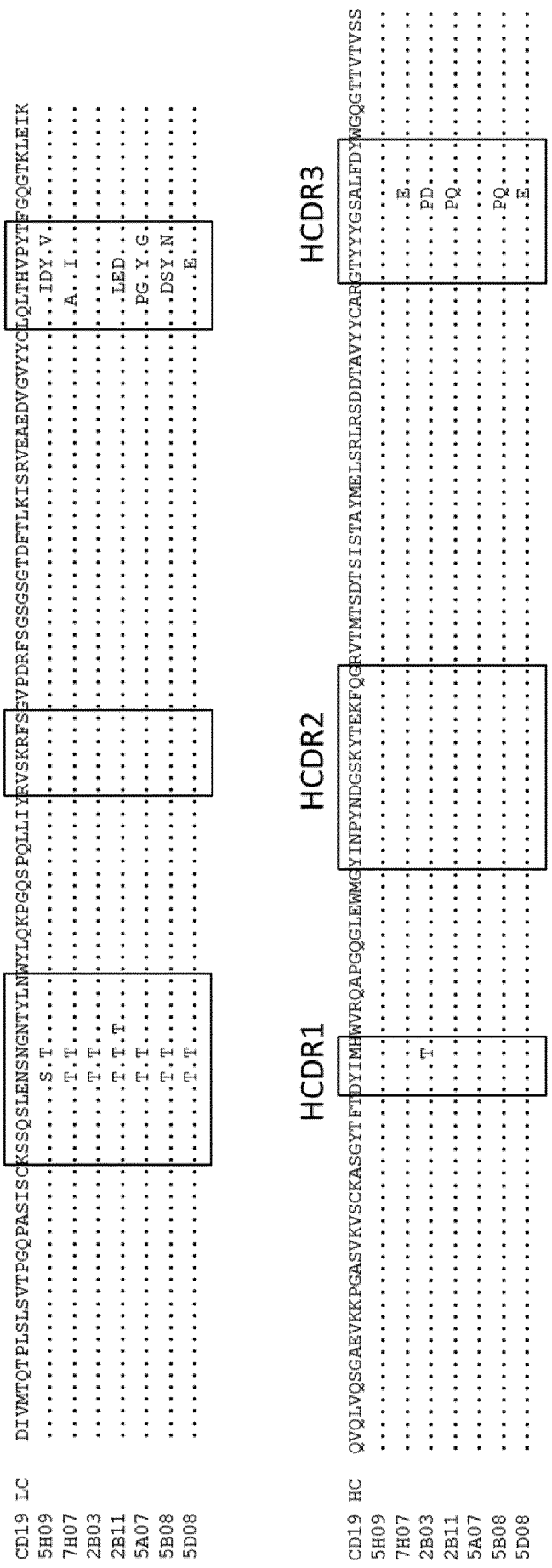

A
NcoI
LMB3
I
II
III
IV
V
NheI
CL
CH
Gene III
Amber STOP
I CD19 L1 reverse random
II CD19 L2 forward random
III CD19 H1 reverse random
IV CD19 H2 forward random
V CD19 H3 reverse constant
Signal sequence
Flag tag
His tag
Myc tag
B
NcoI
LMB3
I
VI
VII
VIII
IX
KpnI
CL
CH1
Gene III
Amber STOP
I CD19 L1 reverse random
VI CD19 L1 forward constant
VII CD19 L3 reverse random
VIII CD19 L3 forward constant
IX CD19 H3 reverse random
Signal sequence
Flag tag
His tag
Myc tag

Fig. 3


LCDR1
LCDR2
LCDR3
HCDR1
HCDR2
HCDR3
CD19 LC DIVMTQTPLSLSVTPGQPASISCKSSQSLENSNGNTYLNWYLQKPGQSPQLLIYKVSKRFSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCLQLTHVPYTFGQGTKLEIK
5H09
7H07
2B03
2B11
5A07
5B08
5D08
CD19 HC QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYIMHWVRQAPGQGLEWMGYINPYNDGSKYTEKFQGRVTMTSDTSISTAYMELSRLRSDDTAVYYCARGTYYYGSALFDYWGQGTTVTVSS
5H09
7H07
2B03
2B11
5A07
5B08
5D08

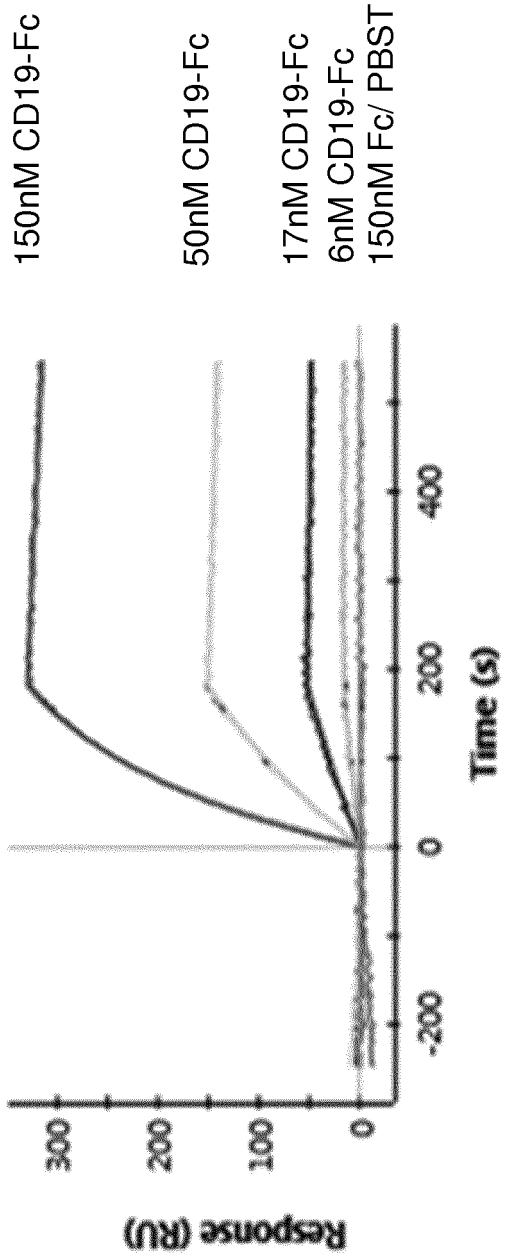


Fig. 4A
parental

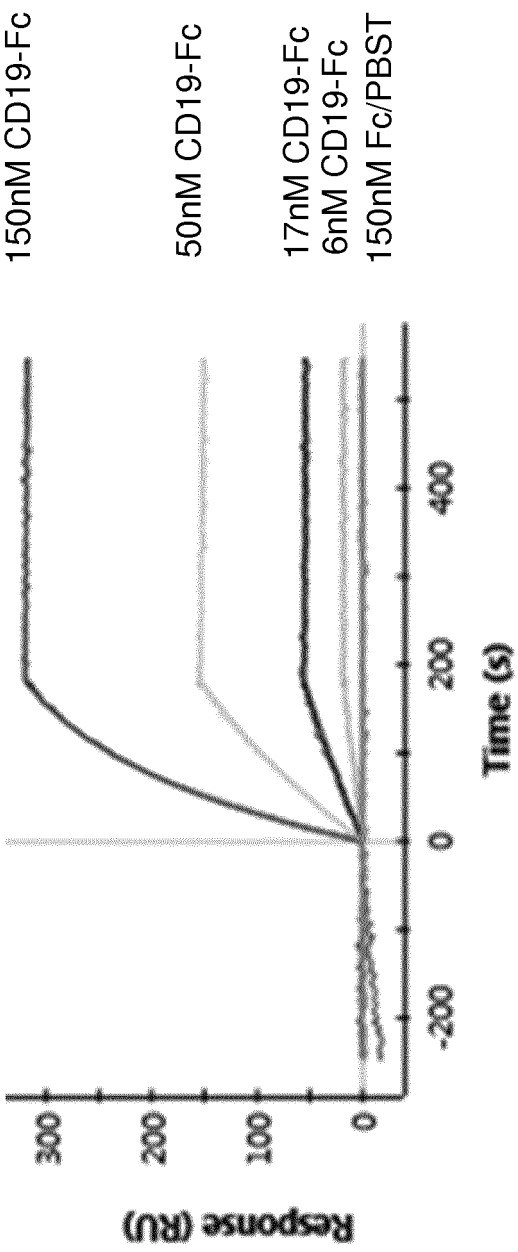


Fig. 4B
2B11

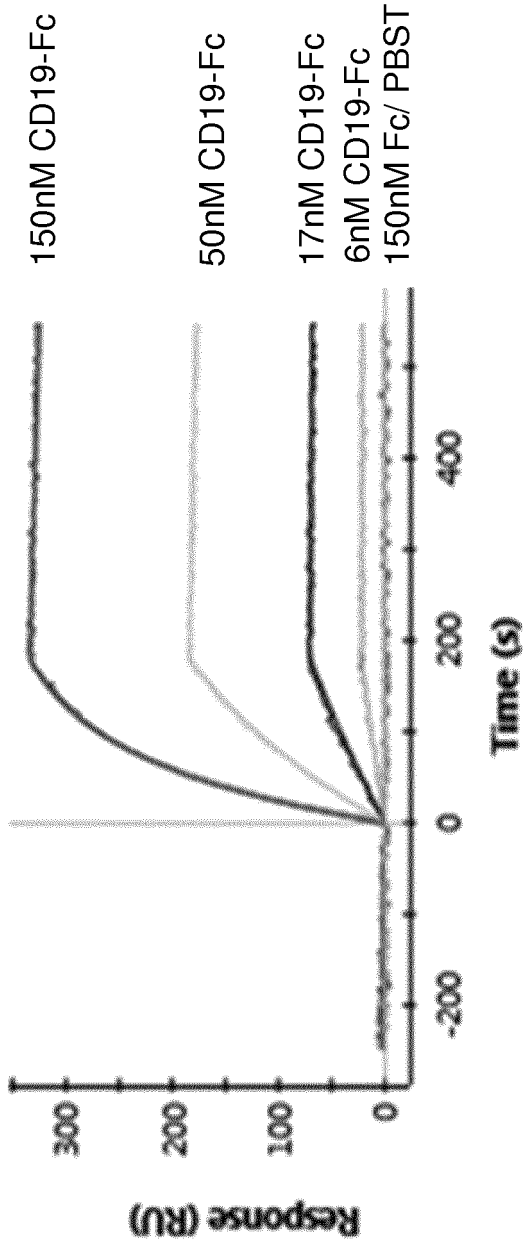


Fig. 4C
5D08

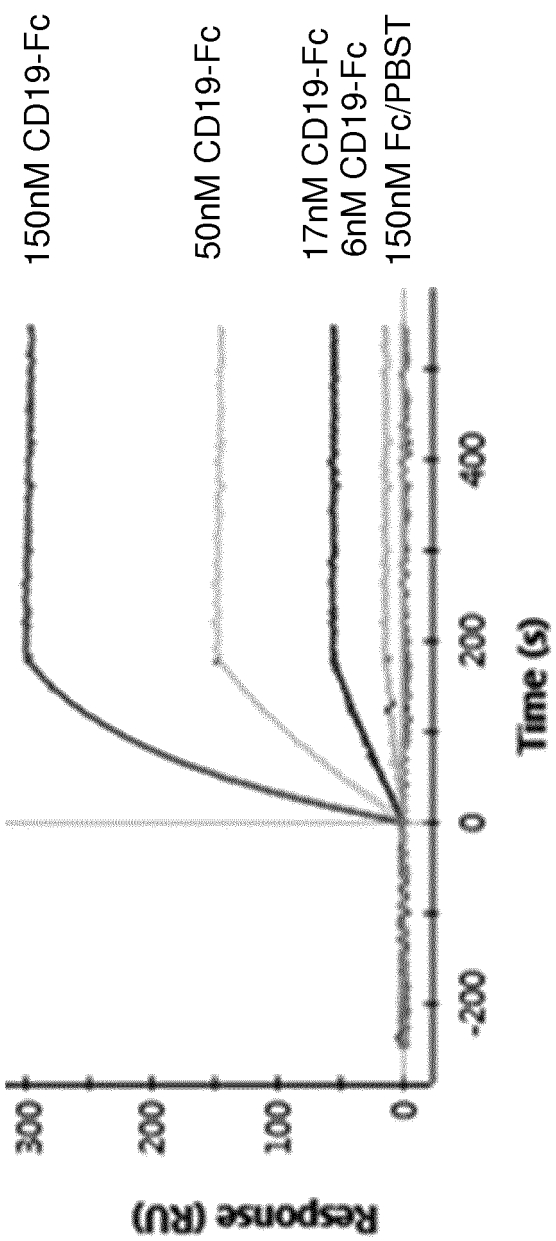


Fig. 4D
5B08

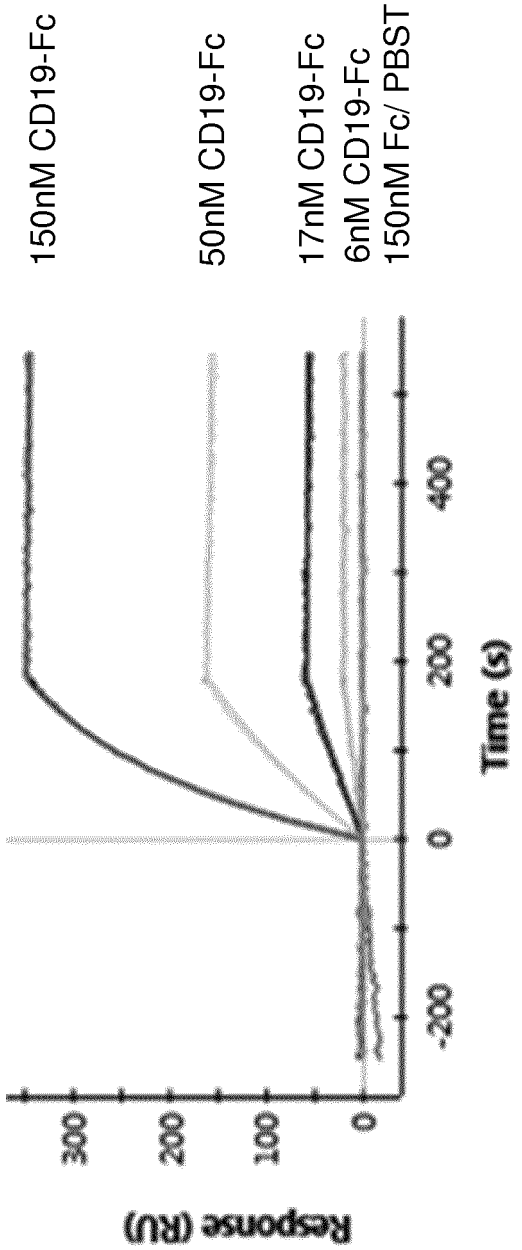


Fig. 4E
2B03

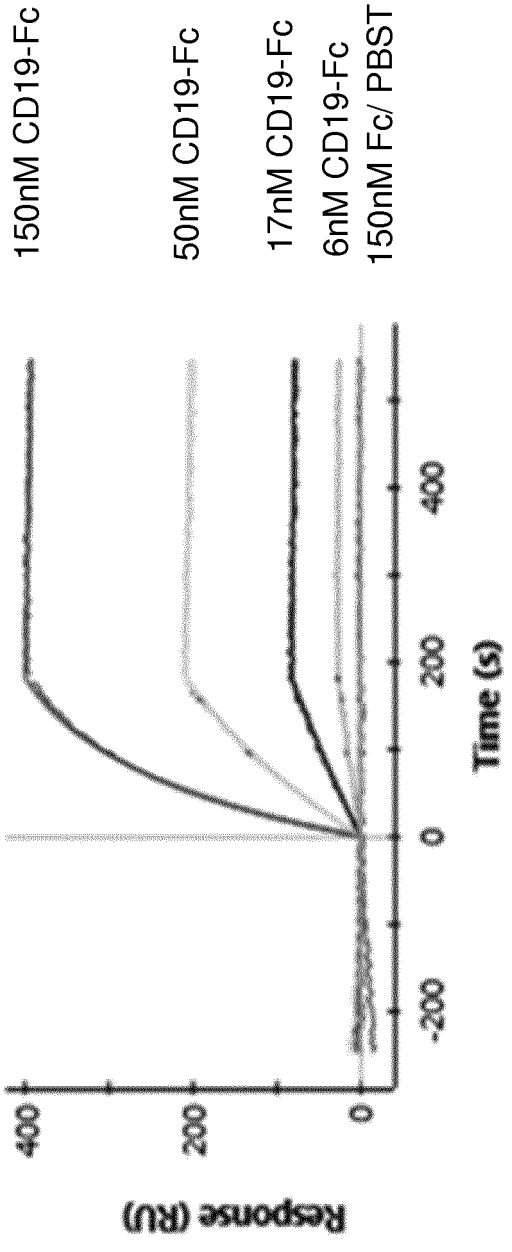


Fig. 4F
7H07

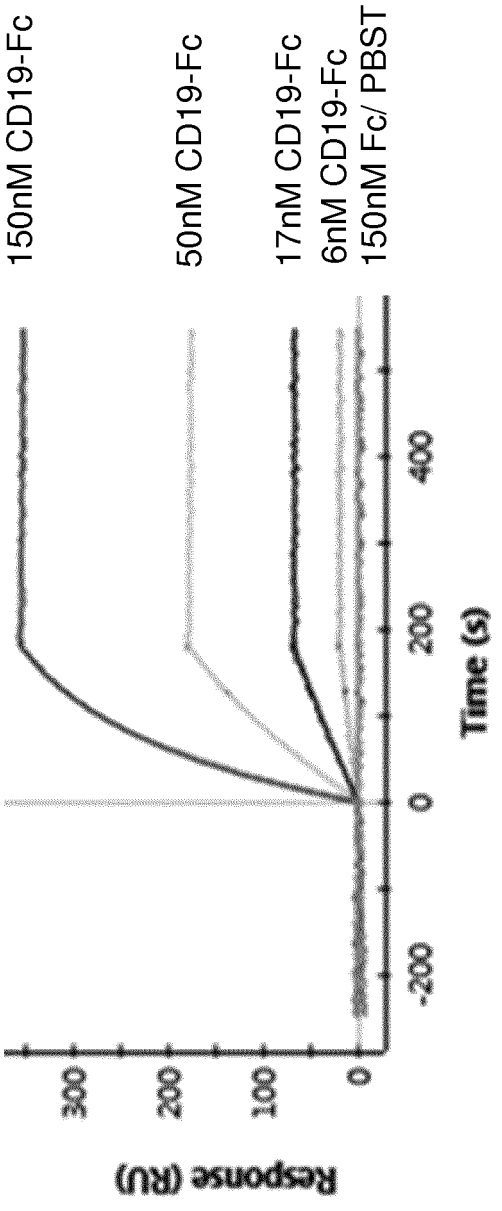


Fig. 4G
5A07

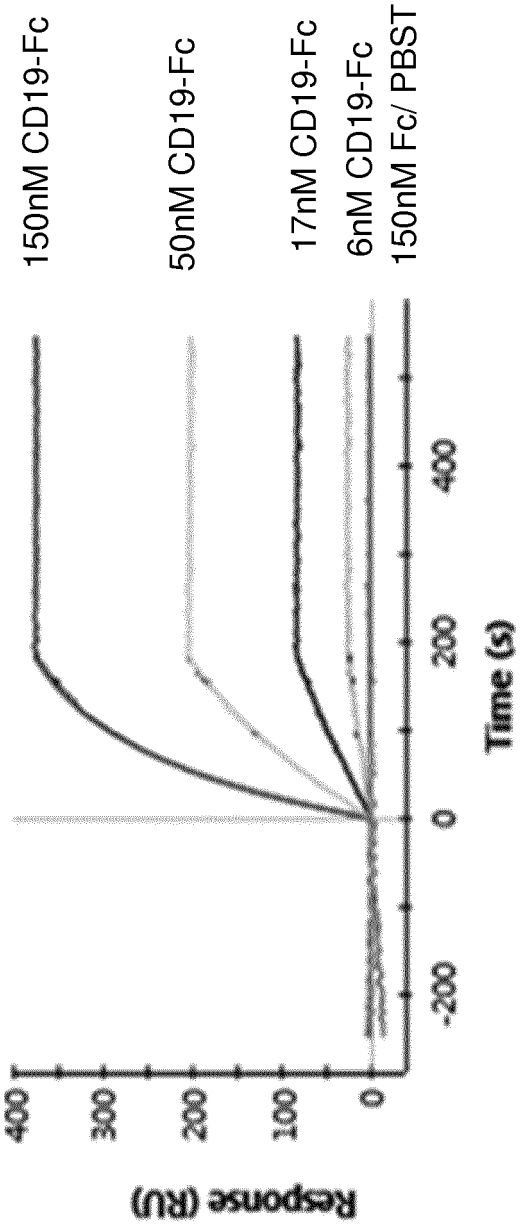
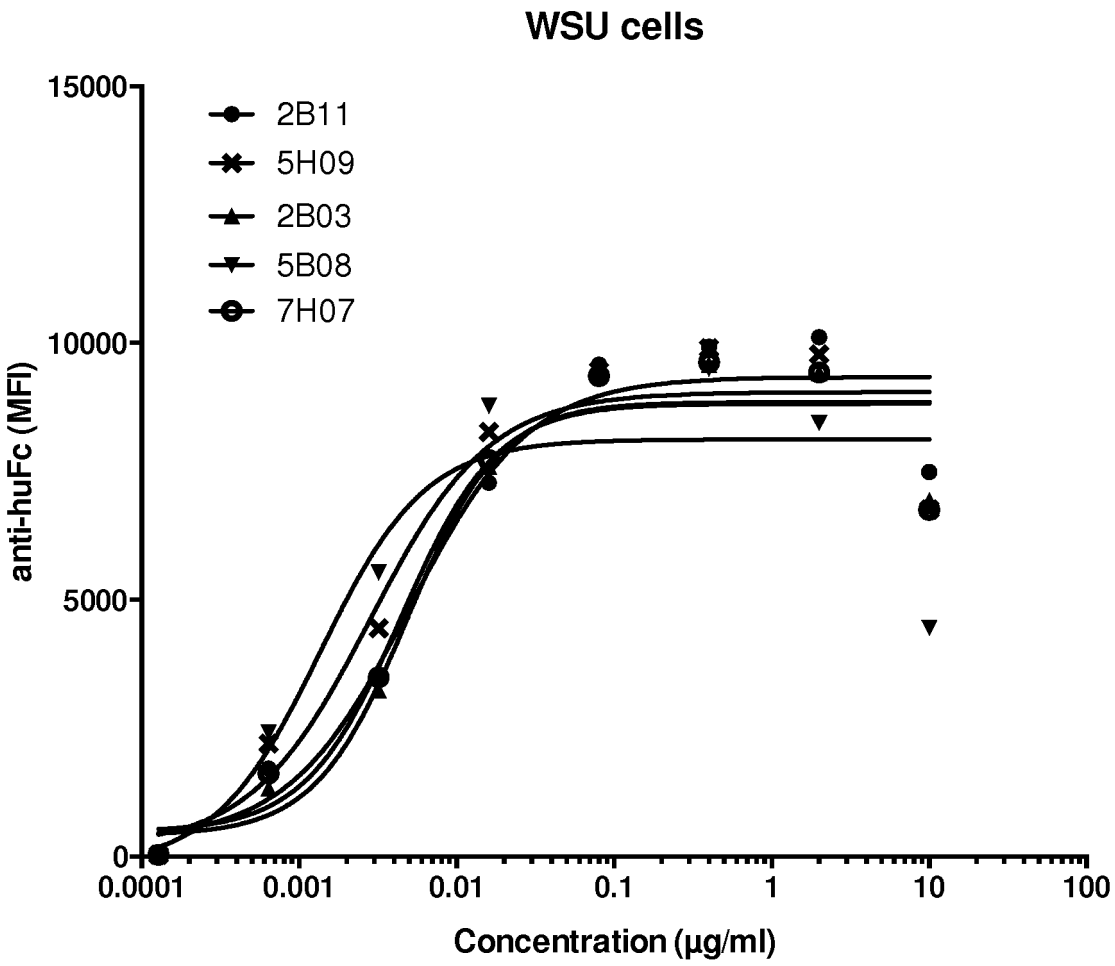


Fig. 4H
5H09

Fig. 5


WSU cells
2B11
5H09
2B03
5B08
7H07
anti-huFc (MFI)
15000
10000
5000
0
0.0001
0.001
0.01
0.1
1
10
100
Concentration (µg/ml)