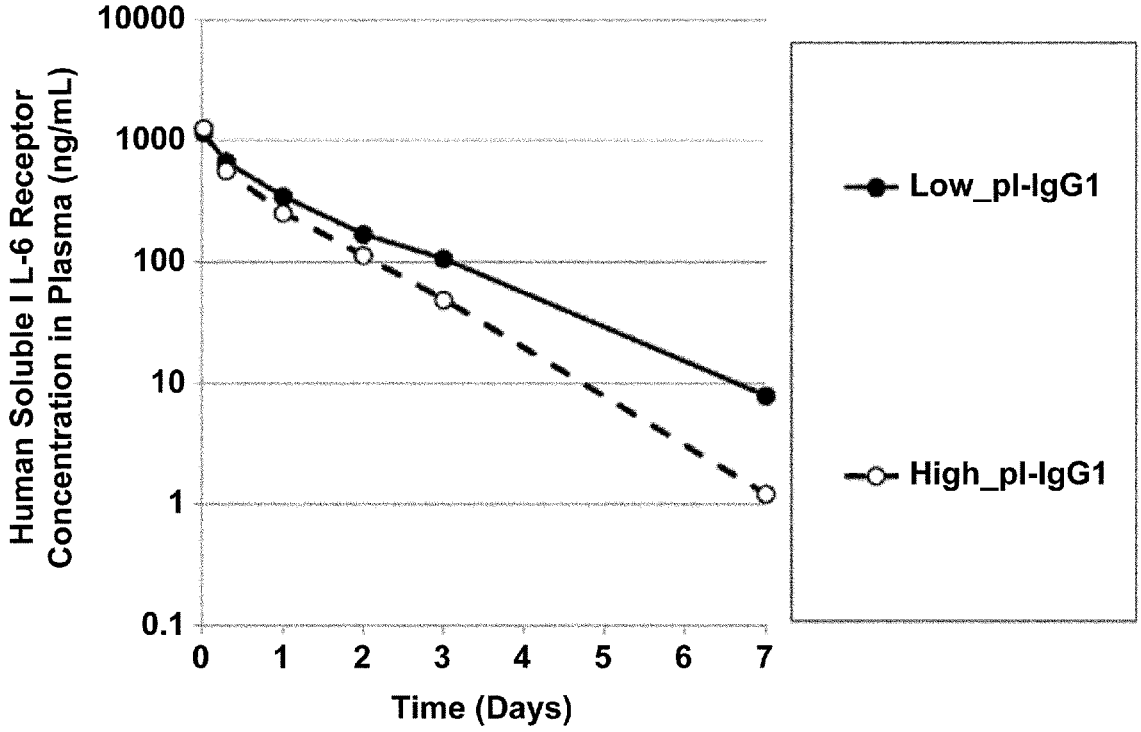
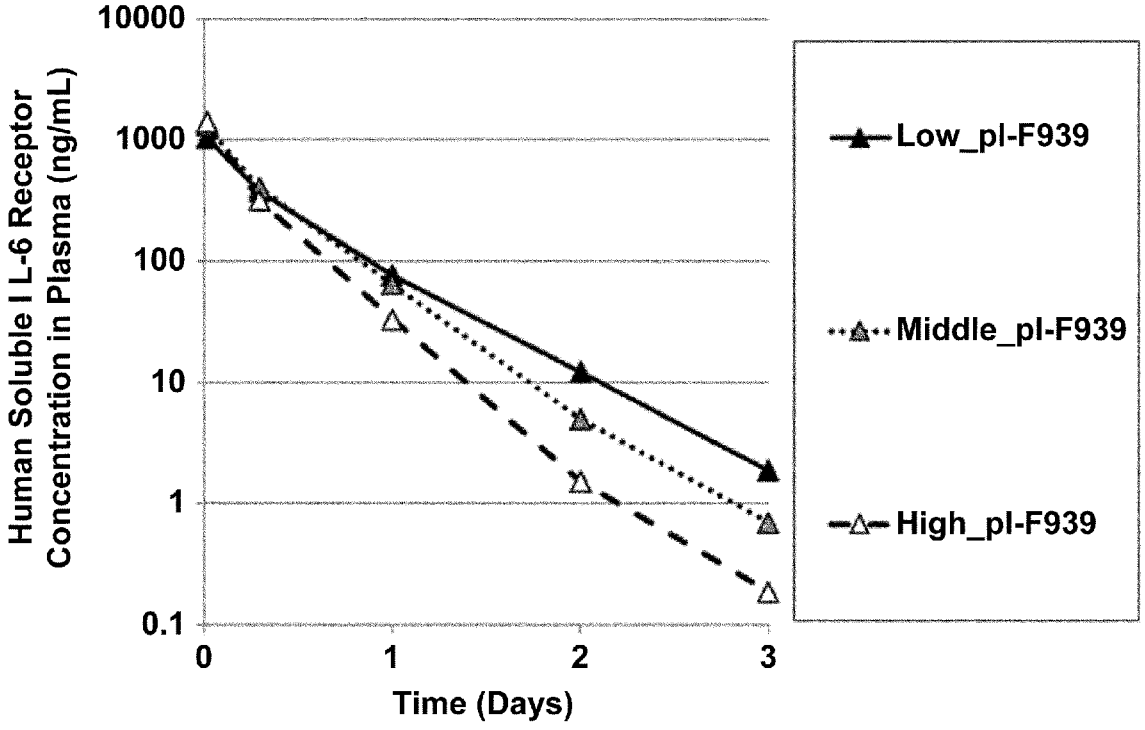
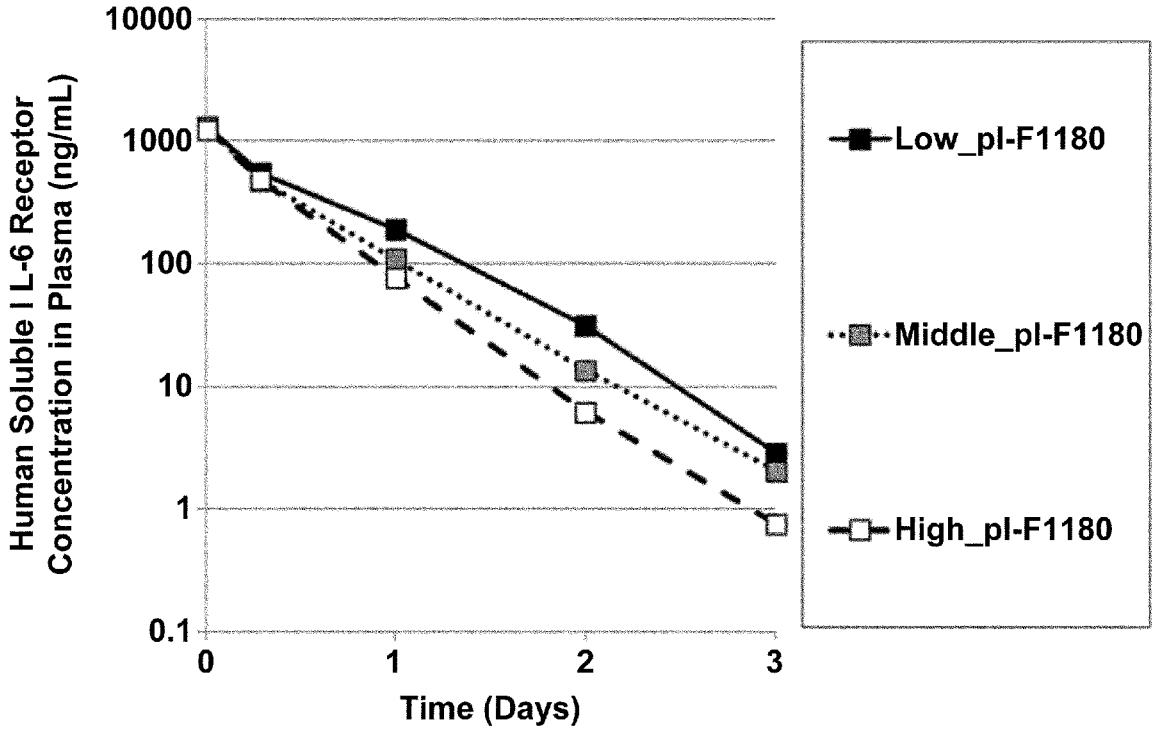
[Fig. 1]


10000
1000
100
10
1
0.1
Human Soluble I L-6 Receptor Concentration in Plasma (ng/mL)
0
1
2
3
4
5
6
7
Time (Days)
Low_pI-IgG1
High_pI-IgG1

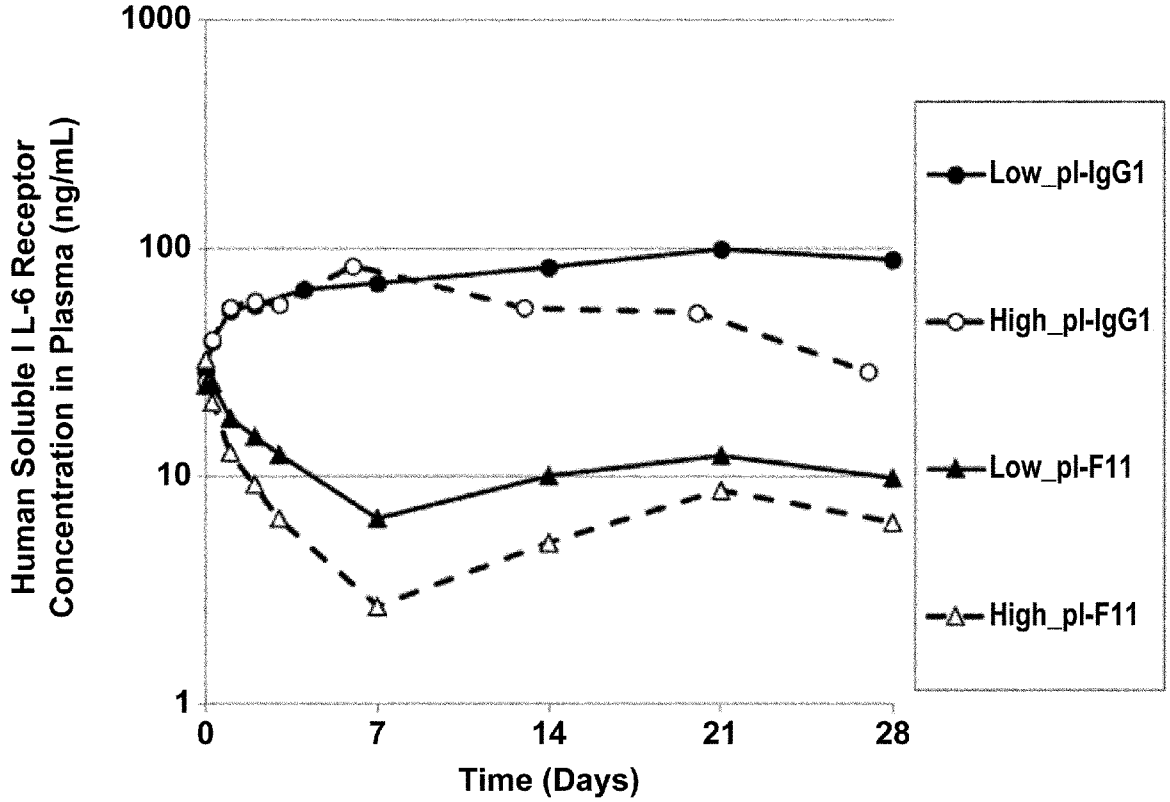
[Fig. 2]


10000
1000
100
10
1
0.1
Human Soluble I L-6 Receptor Concentration in Plasma (ng/mL)
0
1
2
3
Time (Days)
Low_pI-F939
Middle_pI-F939
High_pI-F939

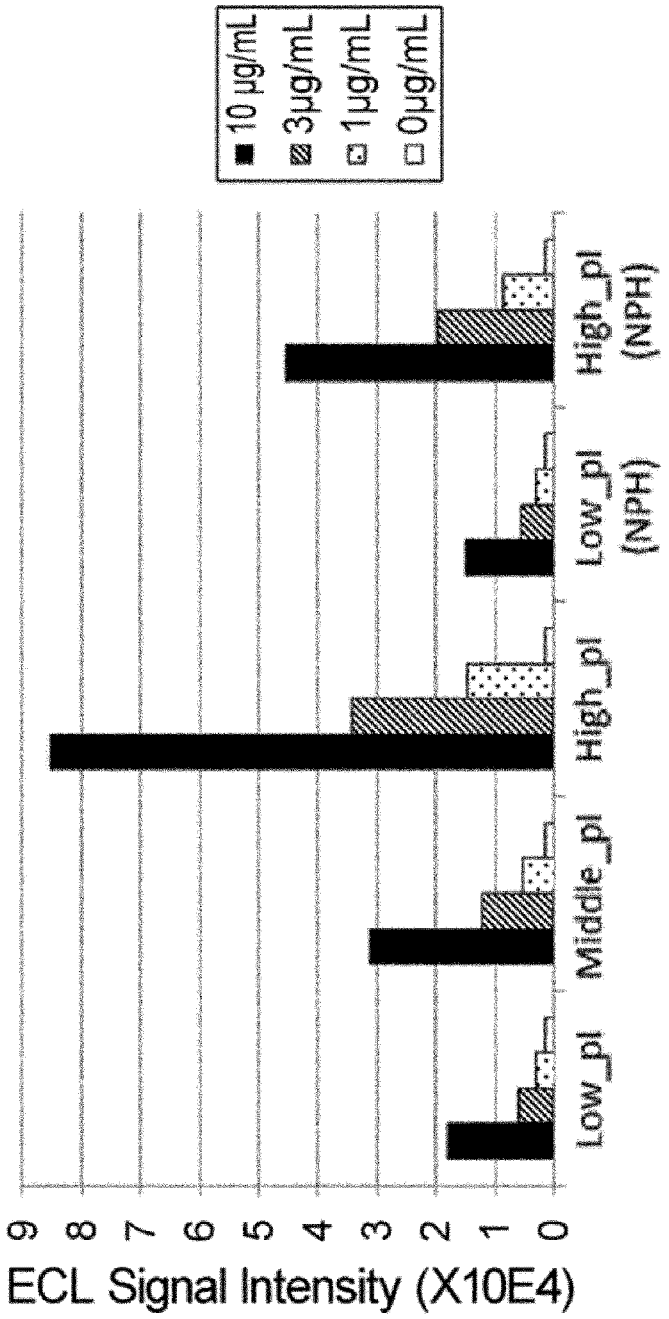
[Fig. 3]


10000
1000
100
10
1
0.1
0
1
2
3
Time (Days)
Human Soluble I L-6 Receptor Concentration in Plasma (ng/mL)
Low_pI-F1180
Middle_pI-F1180
High_pI-F1180

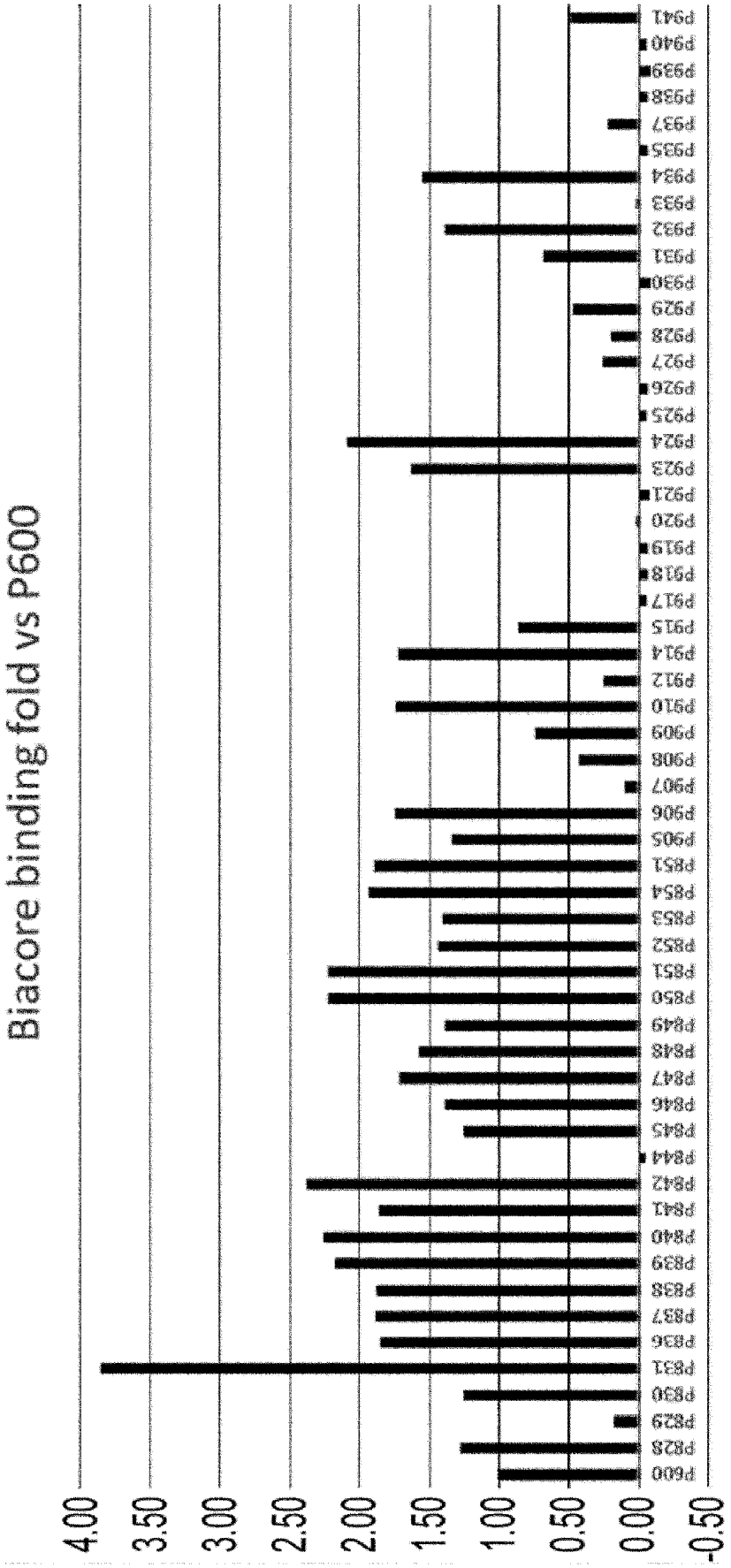
[Fig. 4]


1000
100
10
1
0
7
14
21
28
Time (Days)
Human Soluble I L-6 Receptor Concentration in Plasma (ng/mL)
Low_pI-IgG1
High_pI-IgG1
Low_pI-F11
High_pI-F11

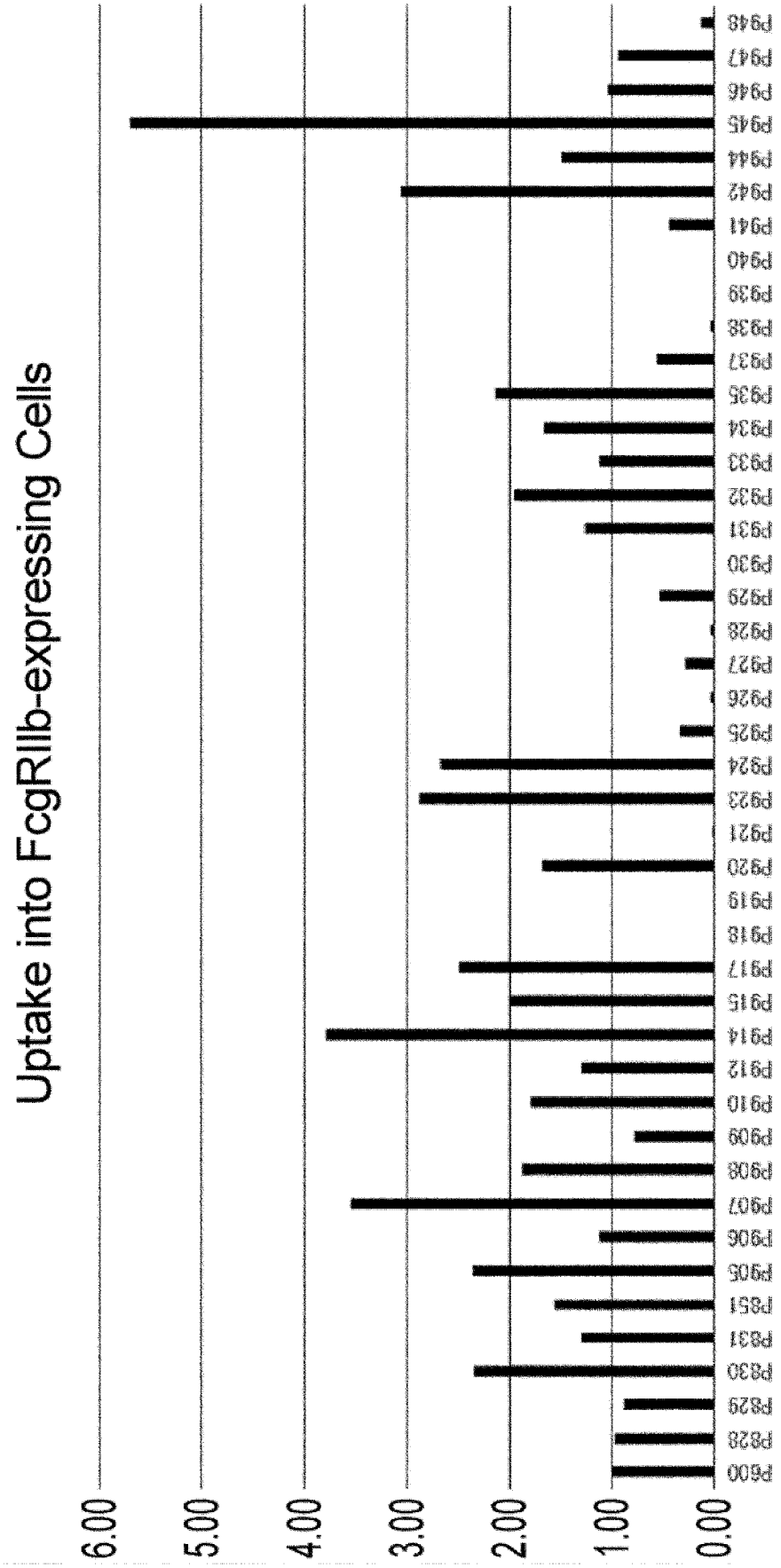
[Fig. 5]


10 µg/mL
3µg/mL
1µg/mL
0µg/mL
High_pI (NPH)
Low_pI (NPH)
High_pI
Middle_pI
Low_pI
9
8
7
6
5
4
3
2
1
0
ECL Signal Intensity (X10E4)

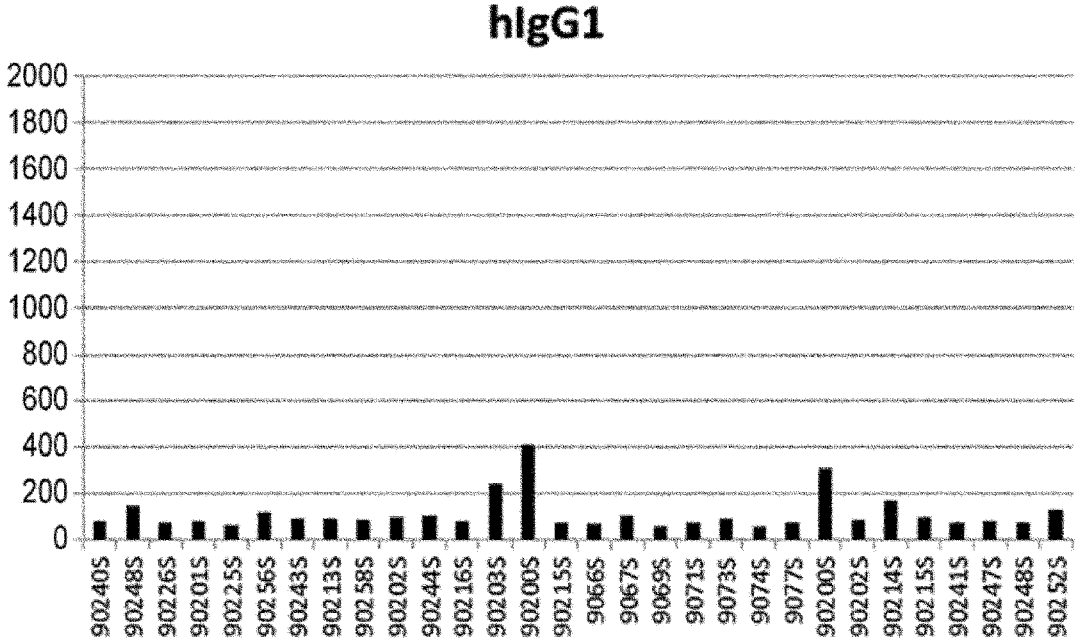
[Fig. 6]


Biacore binding fold vs P600
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
P941
P940
P939
P938
P937
P935
P934
P933
P932
P931
P930
P929
P928
P927
P926
P925
P924
P923
P921
P920
P919
P918
P917
P915
P914
P912
P910
P909
P908
P907
P906
P905
P851
P854
P853
P852
P851
P850
P849
P848
P847
P846
P845
P844
P842
P841
P840
P839
P838
P837
P836
P831
P830
P829
P828
P600

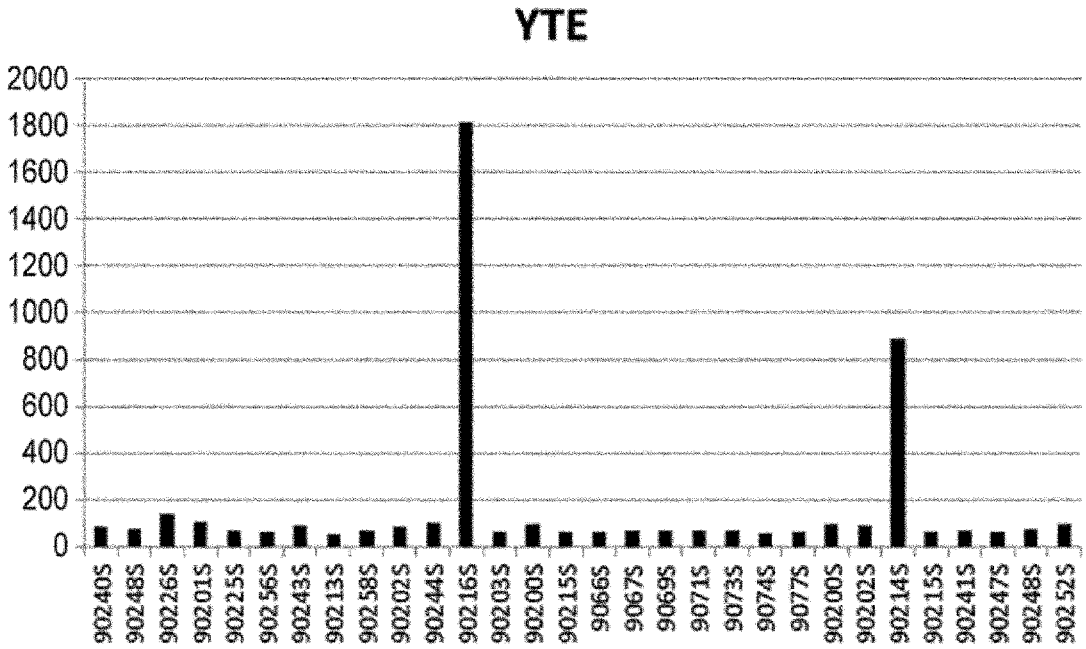
[Fig. 7]


Uptake into FcgRIIb-expressing Cells
6.00
5.00
4.00
3.00
2.00
1.00
0.00
P948
P947
P946
P945
P944
P942
P941
P940
P939
P938
P937
P935
P934
P933
P932
P931
P930
P929
P928
P927
P926
P925
P924
P923
P921
P920
P919
P918
P917
P915
P914
P912
P910
P909
P908
P907
P906
P905
P851
P831
P830
P829
P828
P600

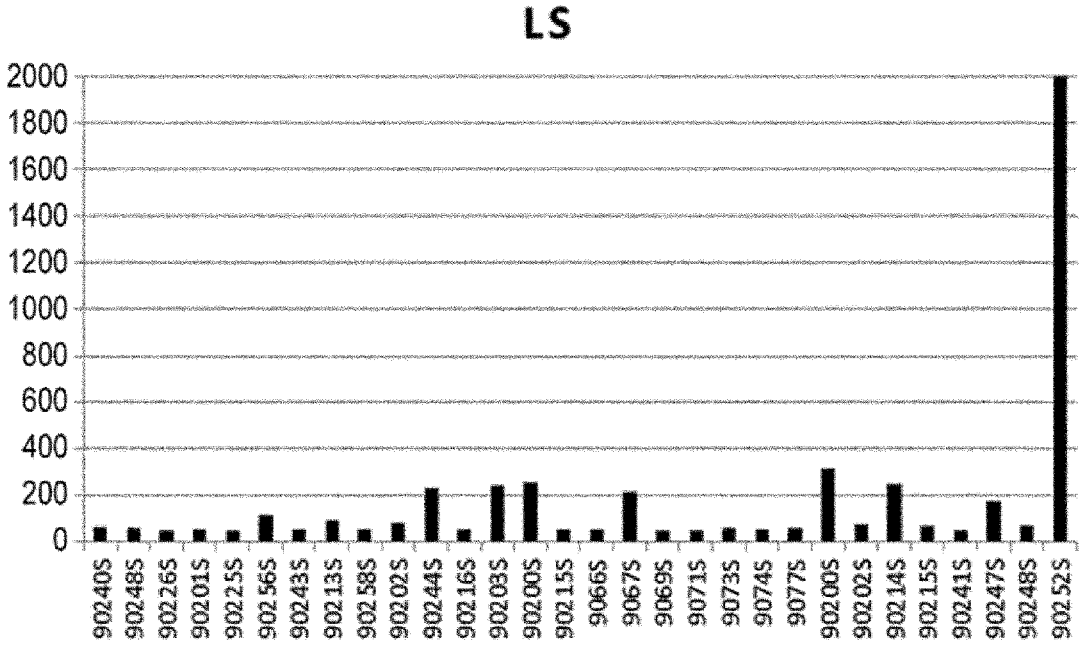
[Fig. 8]


hIgG1
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

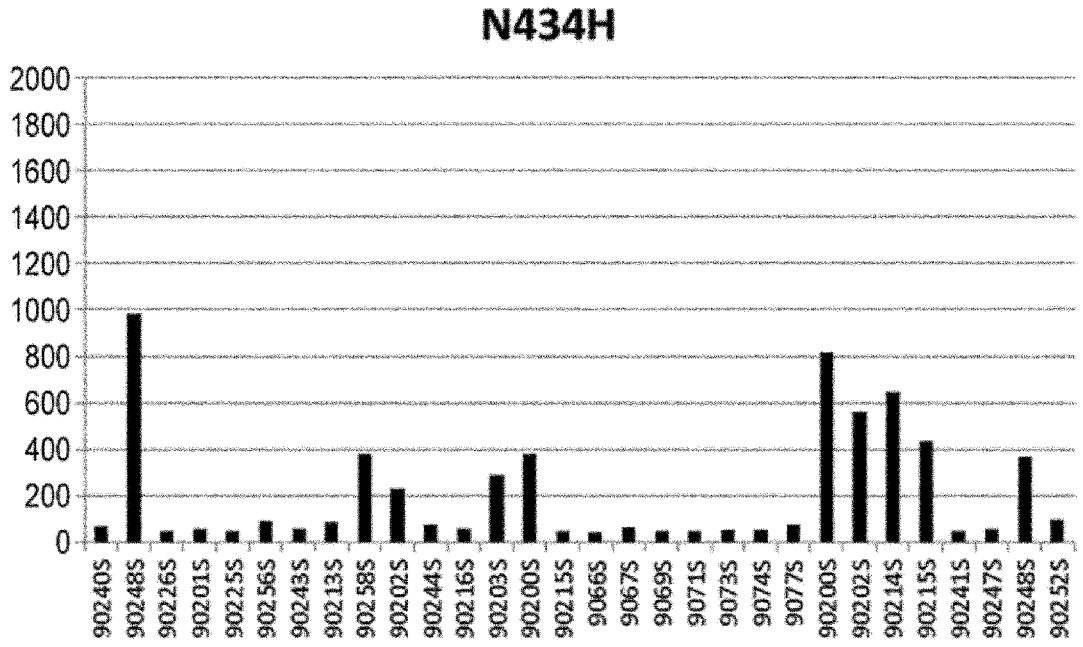
[Fig. 9]


YTE
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

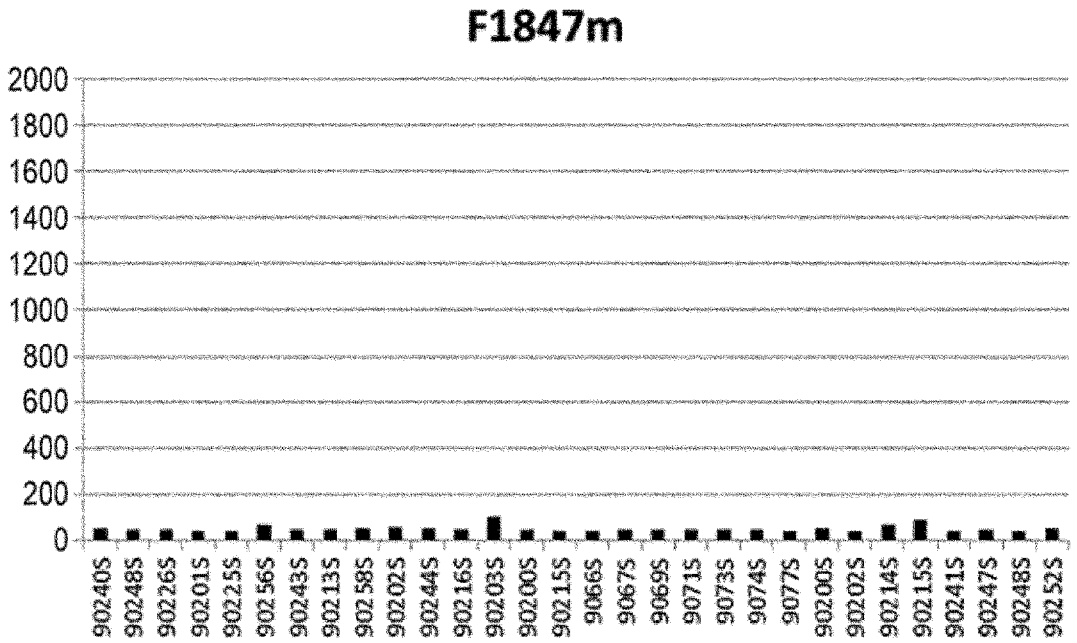
[Fig. 10]


LS
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

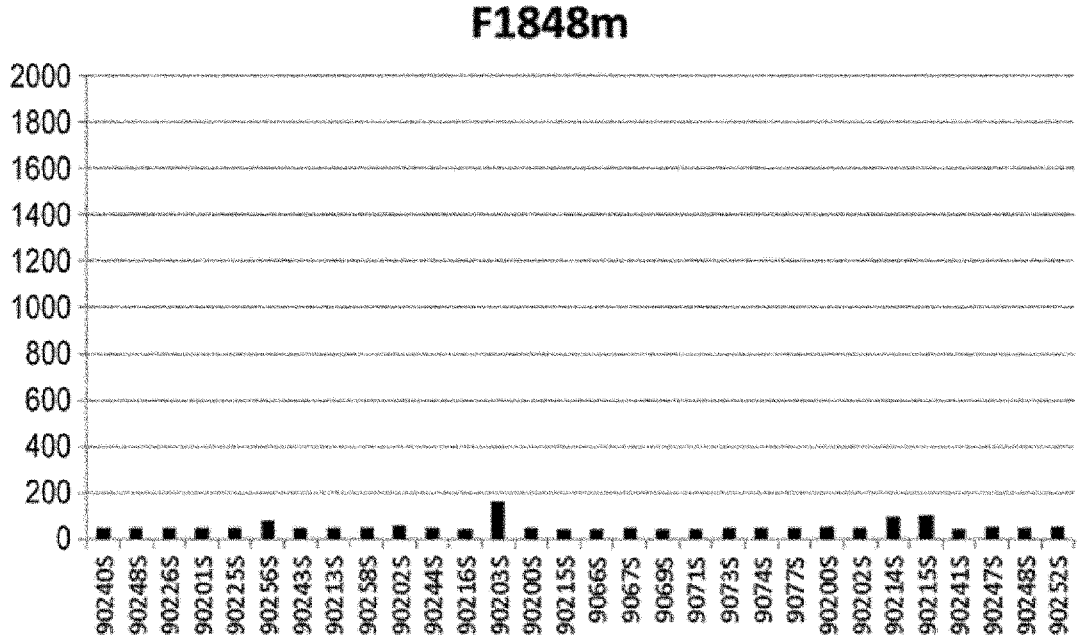
[Fig. 11]


N434H
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

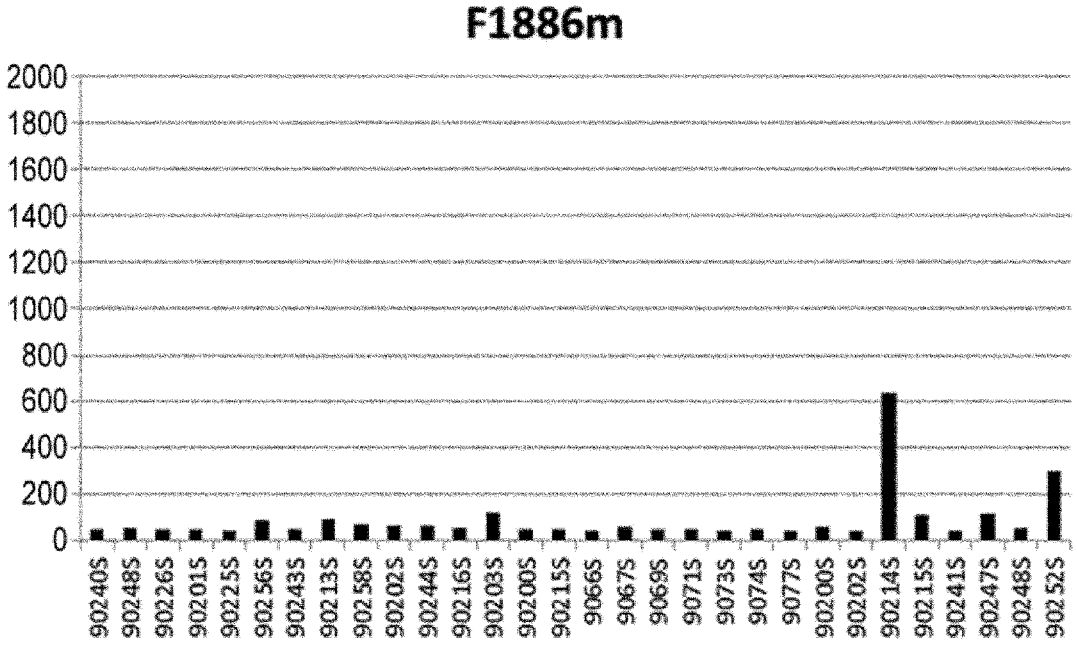
[Fig. 12]


F1847m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

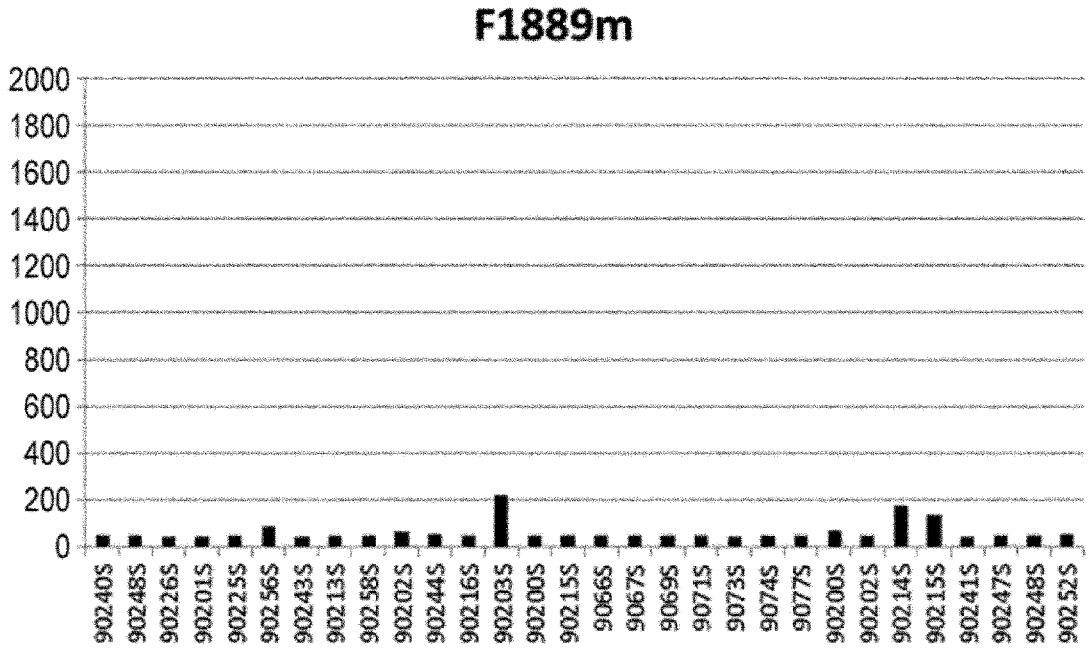
[Fig. 13]


F1848m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

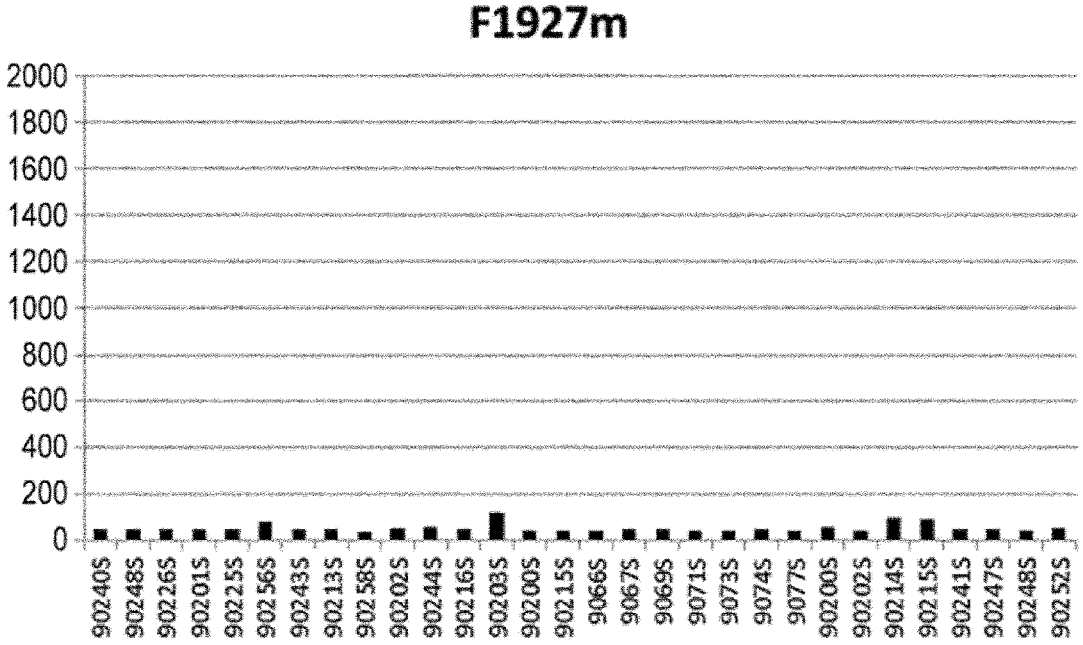
[Fig. 14]


F1886m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
9066S
9067S
9069S
9071S
9073S
9074S
9077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

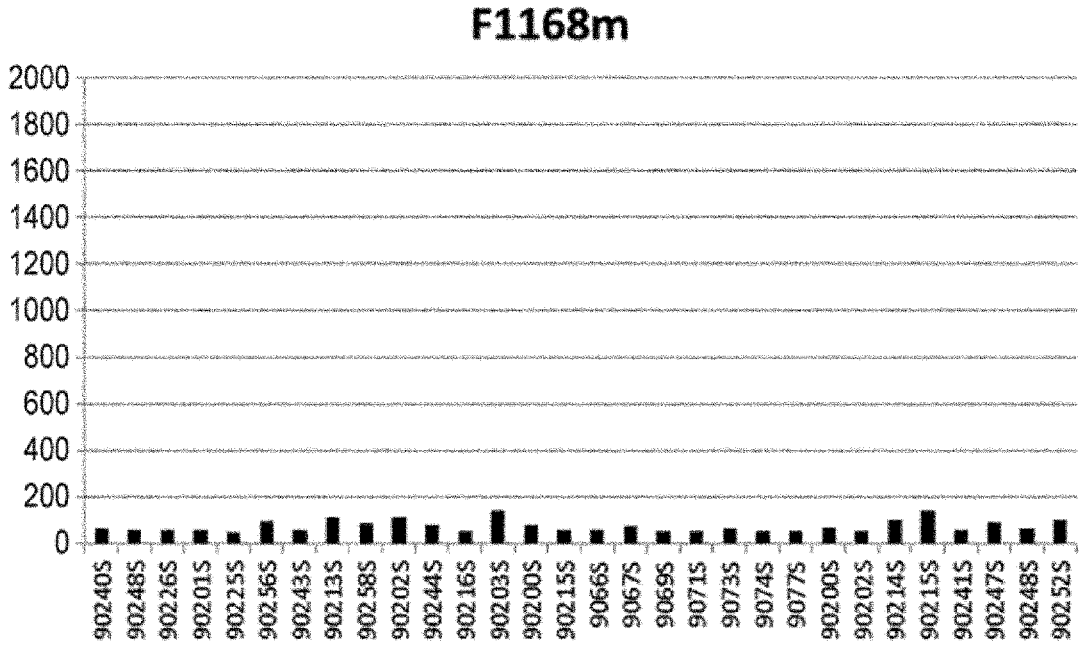
[Fig. 15]


F1889m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
9066S
9067S
9069S
9071S
9073S
9074S
9077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

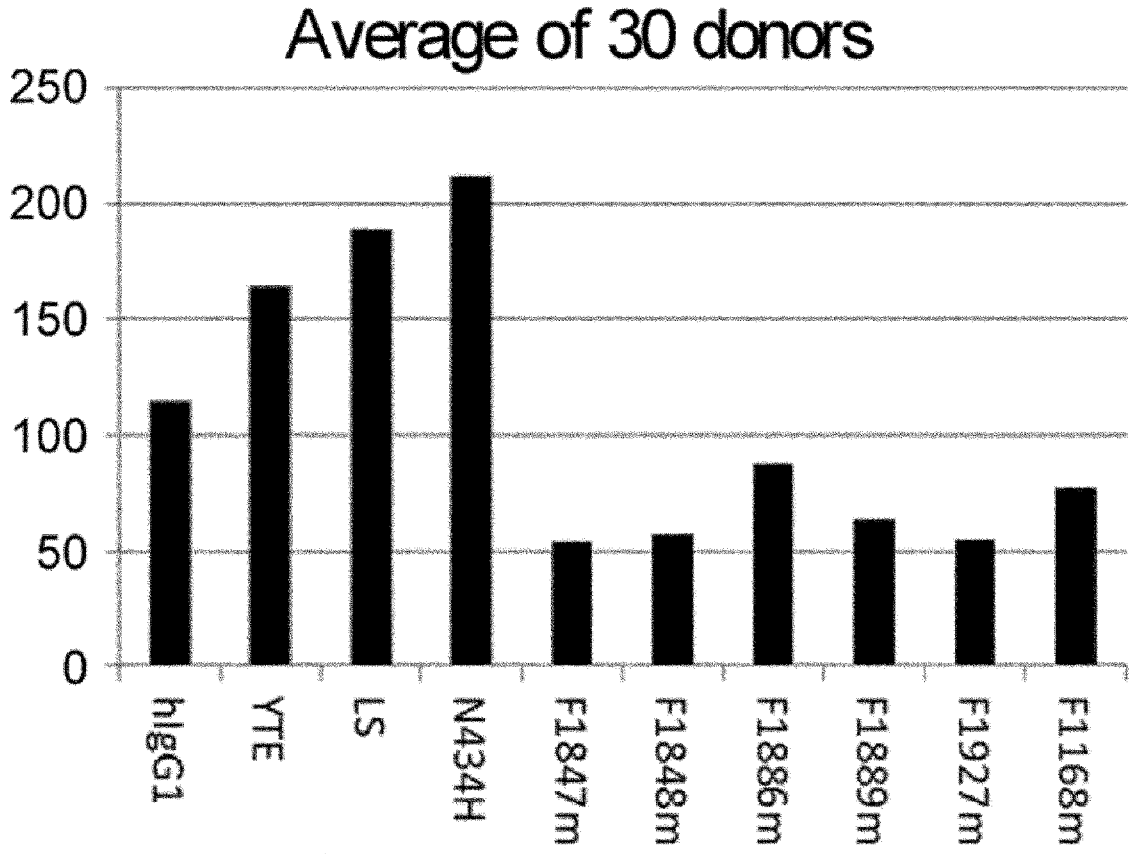
[Fig. 16]


F1927m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

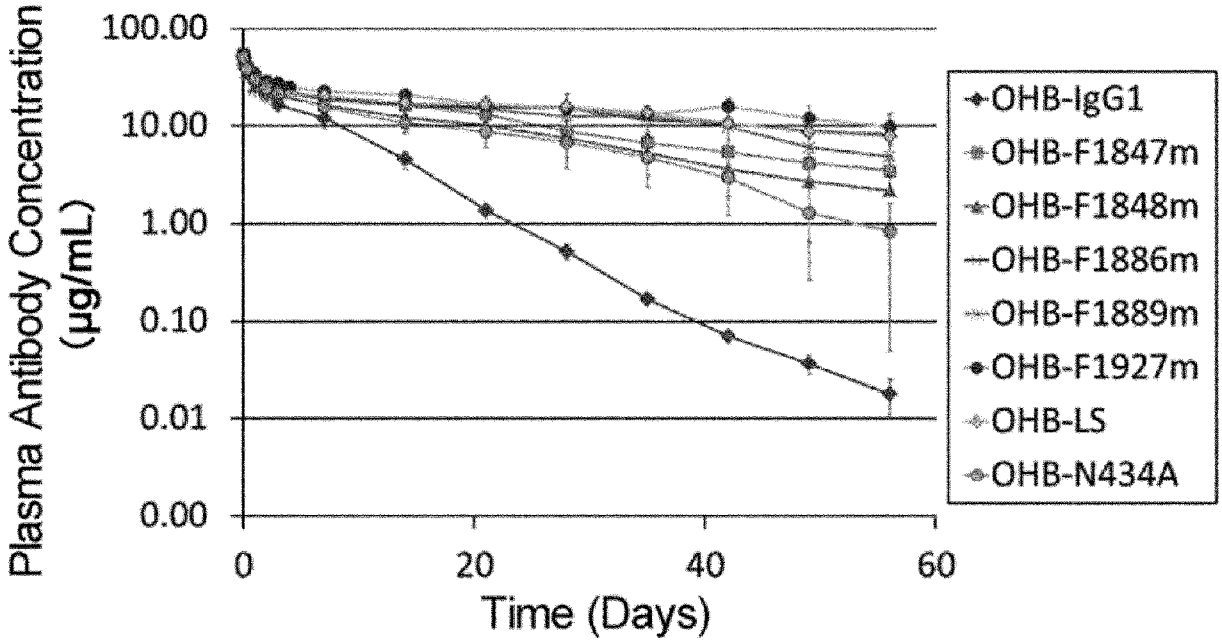
[Fig. 17]


F1168m
2000
1800
1600
1400
1200
1000
800
600
400
200
0
90240S
90248S
90226S
90201S
90225S
90256S
90243S
90213S
90258S
90202S
90244S
90216S
90203S
90200S
90215S
90066S
90067S
90069S
90071S
90073S
90074S
90077S
90200S
90202S
90214S
90215S
90241S
90247S
90248S
90252S

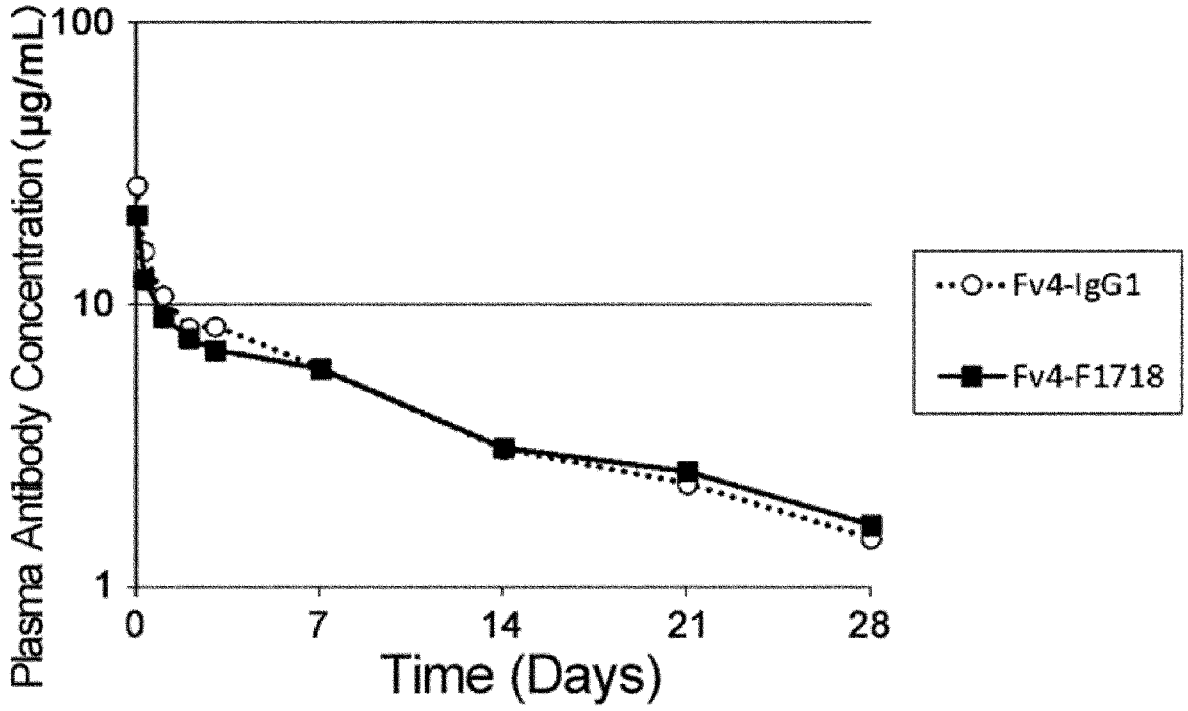
[Fig. 18]


Average of 30 donors
250
200
150
100
50
0
hIgG1
YTE
LS
N434H
F1847m
F1848m
F1886m
F1889m
F1927m
F1168m

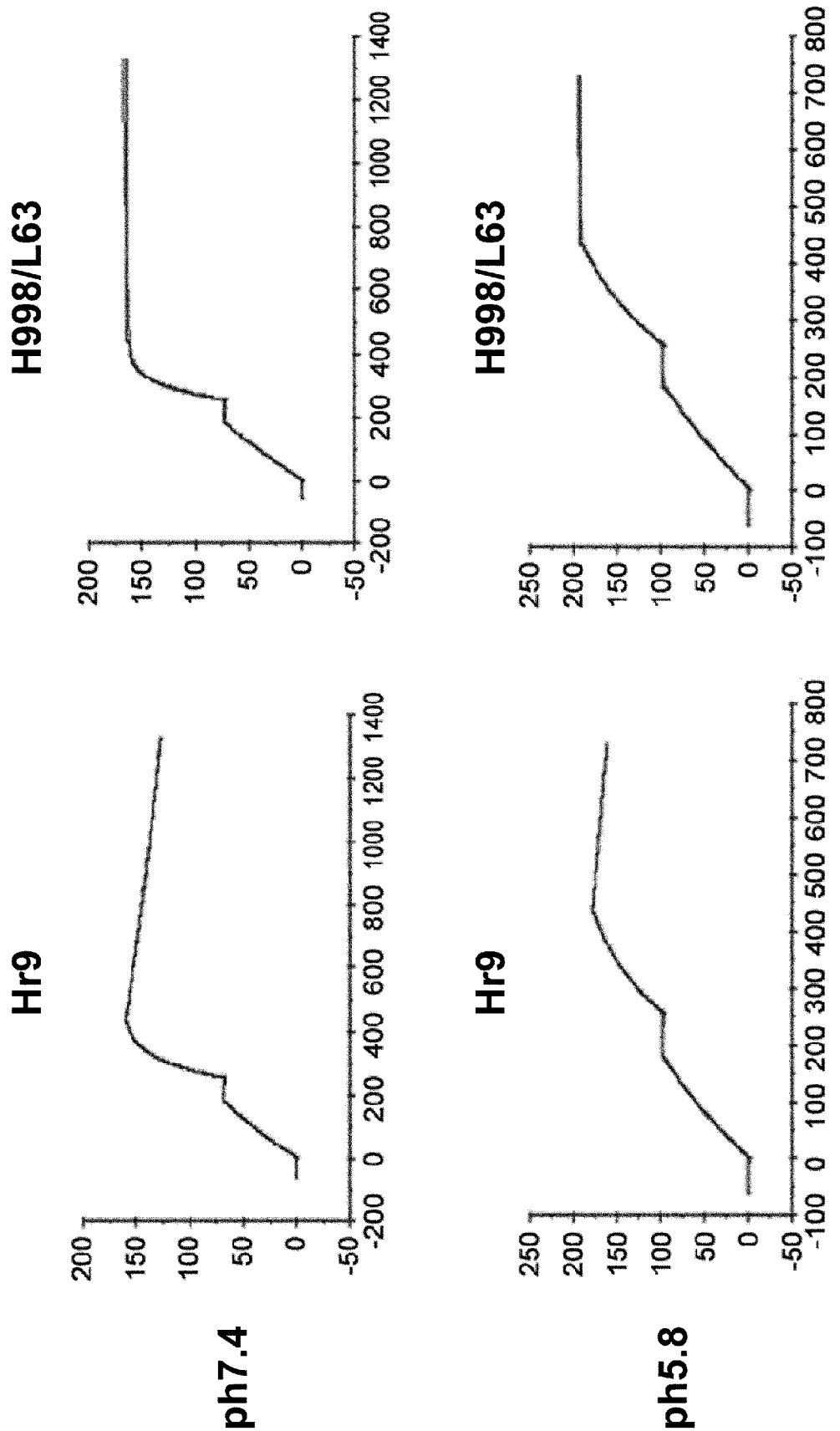
[Fig. 19]


Plasma Antibody Concentration (μg/mL)
100.00
10.00
1.00
0.10
0.01
0.00
0
20
40
60
Time (Days)
OHB-IgG1
OHB-F1847m
OHB-F1848m
OHB-F1886m
OHB-F1889m
OHB-F1927m
OHB-LS
OHB-N434A

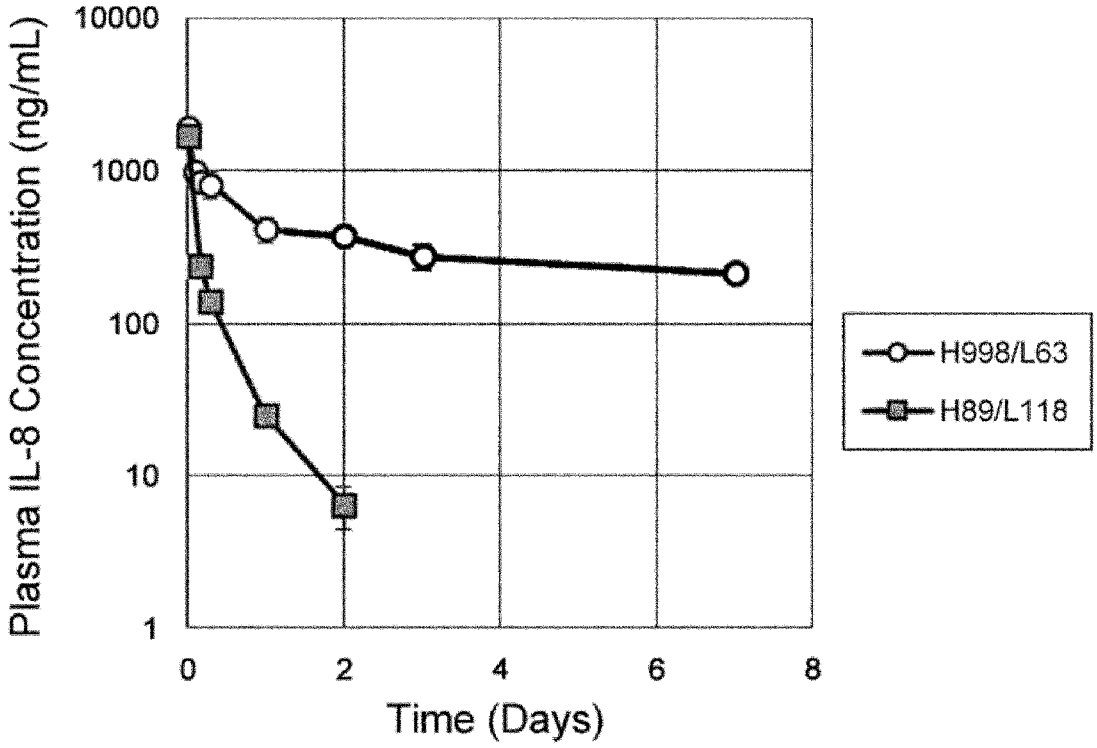
[Fig. 20]


Plasma Antibody Concentration (μg/mL)
100
10
1
0
7
14
21
28
Time (Days)
Fv4-IgG1
Fv4-F1718

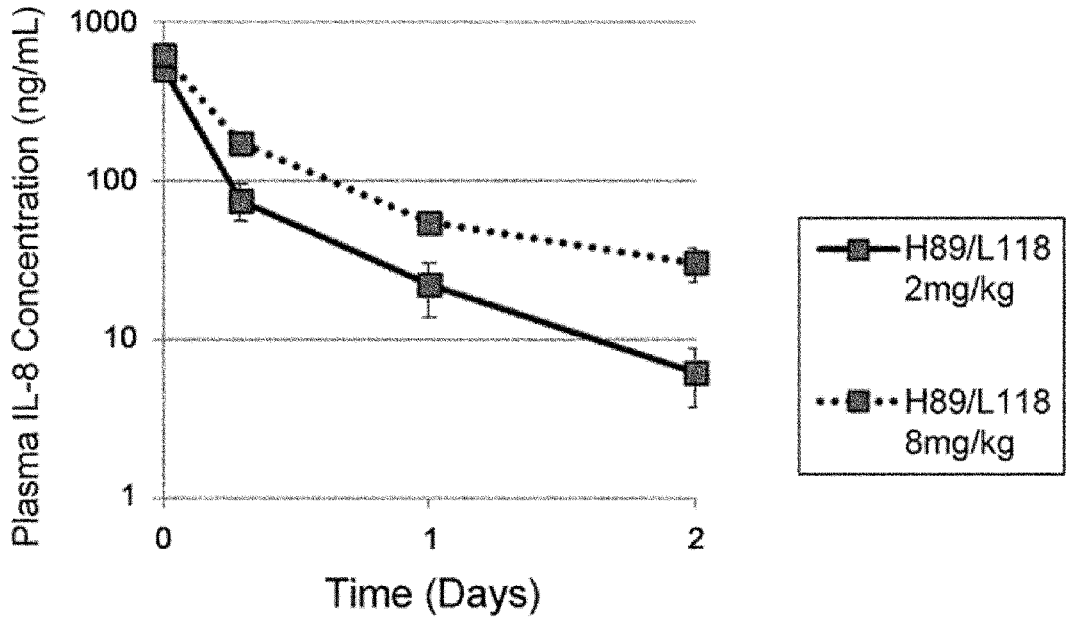
[Fig. 21]


H998/L63
H998/L63
Hr9
Hr9
ph7.4
ph5.8
200
150
100
50
0
-50
-200
0
200
400
600
800
1000
1200
1400
250
-100
100
300
500
700

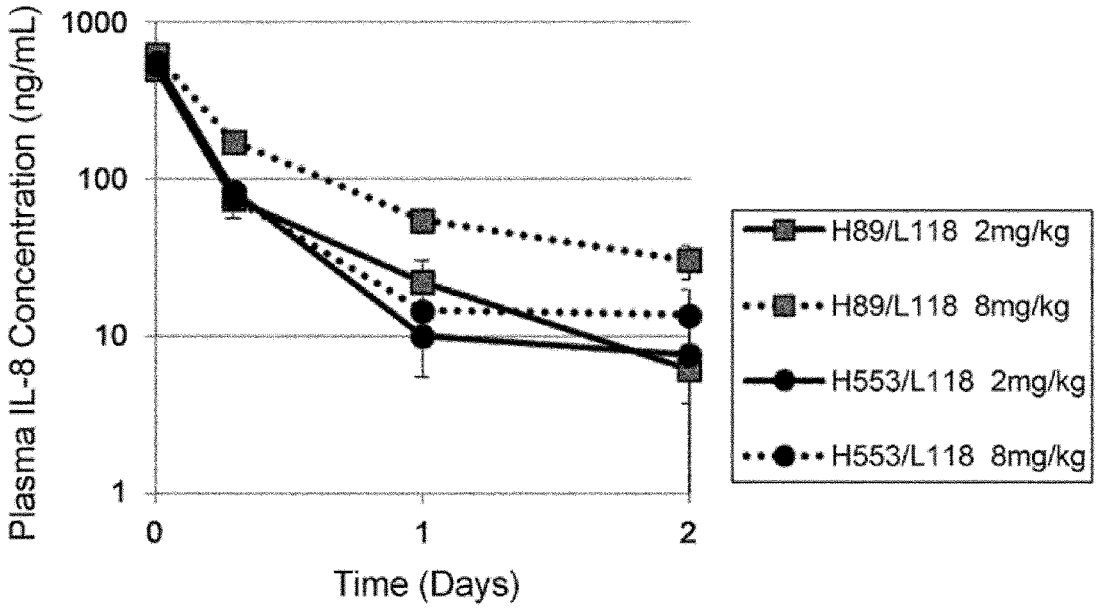
[Fig. 22]


Plasma IL-8 Concentration (ng/mL)
10000
1000
100
10
1
0
2
4
6
8
Time (Days)
H998/L63
H89/L118

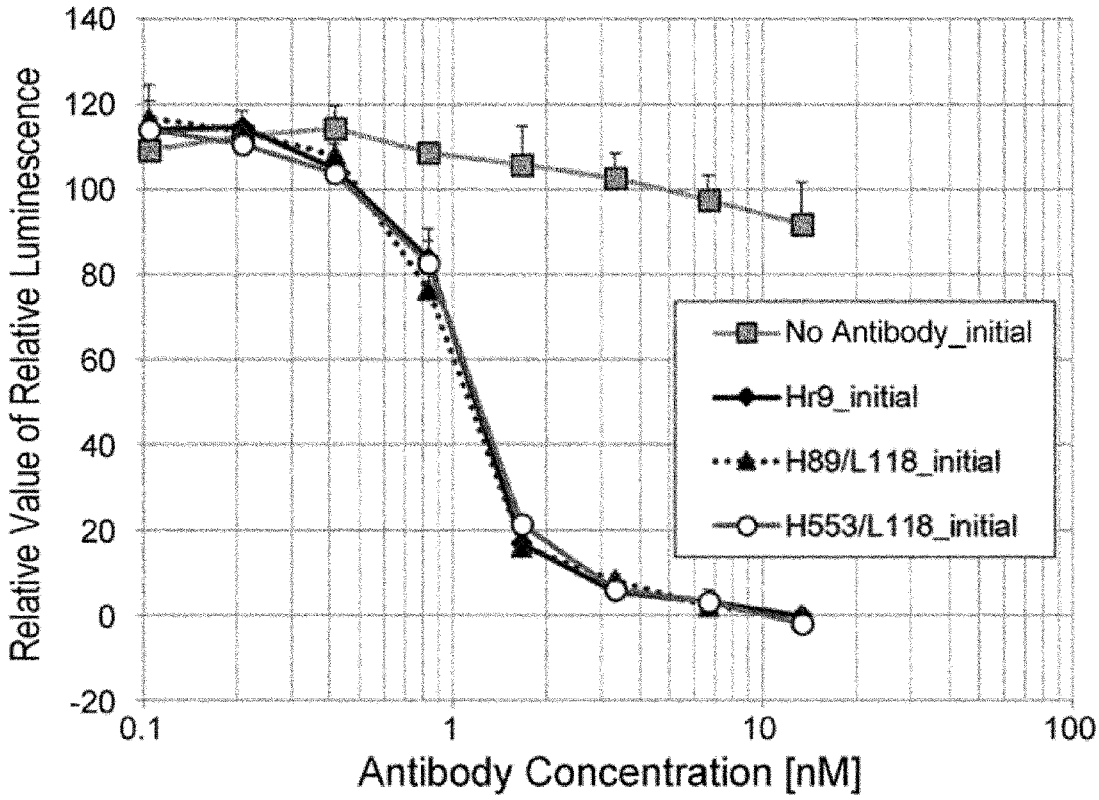
[Fig. 23]


Plasma IL-8 Concentration (ng/mL)
1000
100
10
1
0
1
2
Time (Days)
H89/L118
2mg/kg
H89/L118
8mg/kg

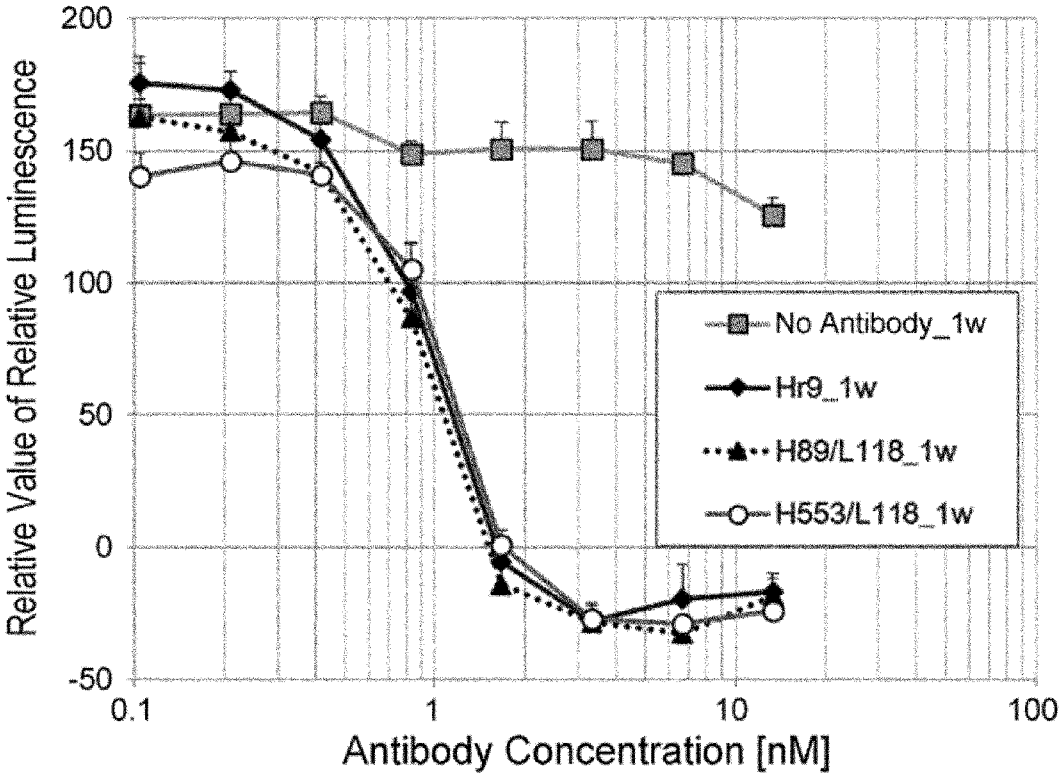
[Fig. 24]



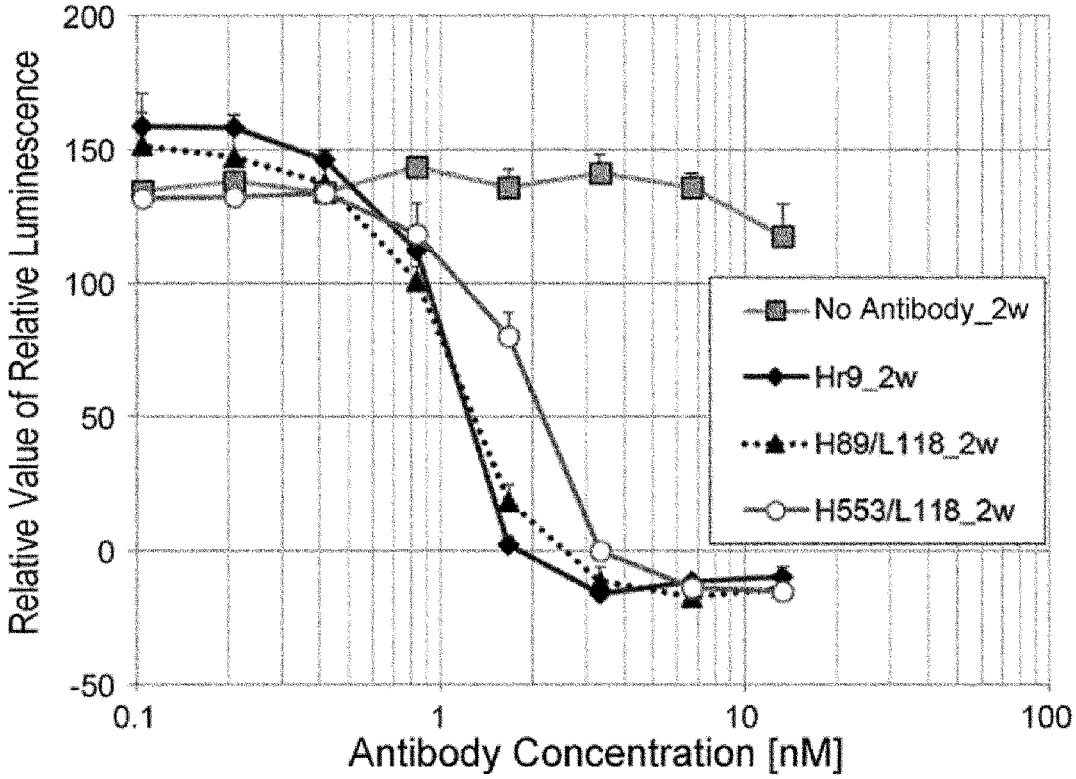
[Fig. 25A]



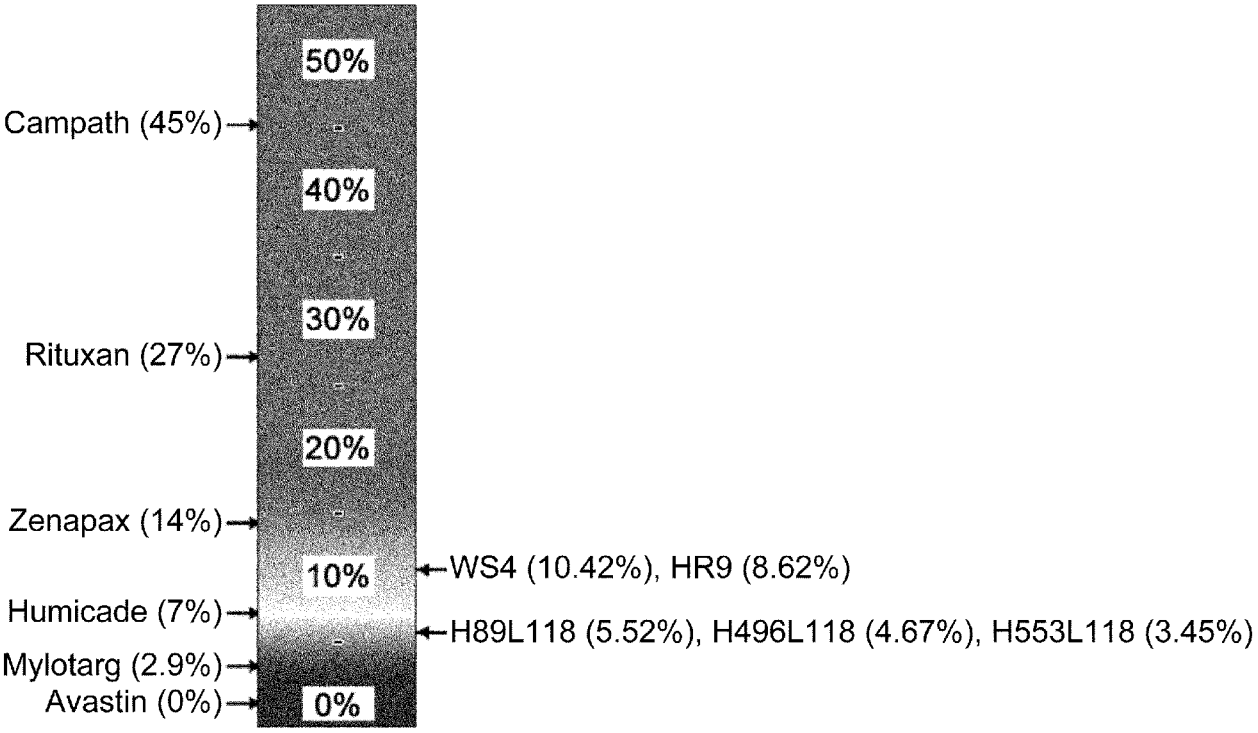
[Fig. 25B]



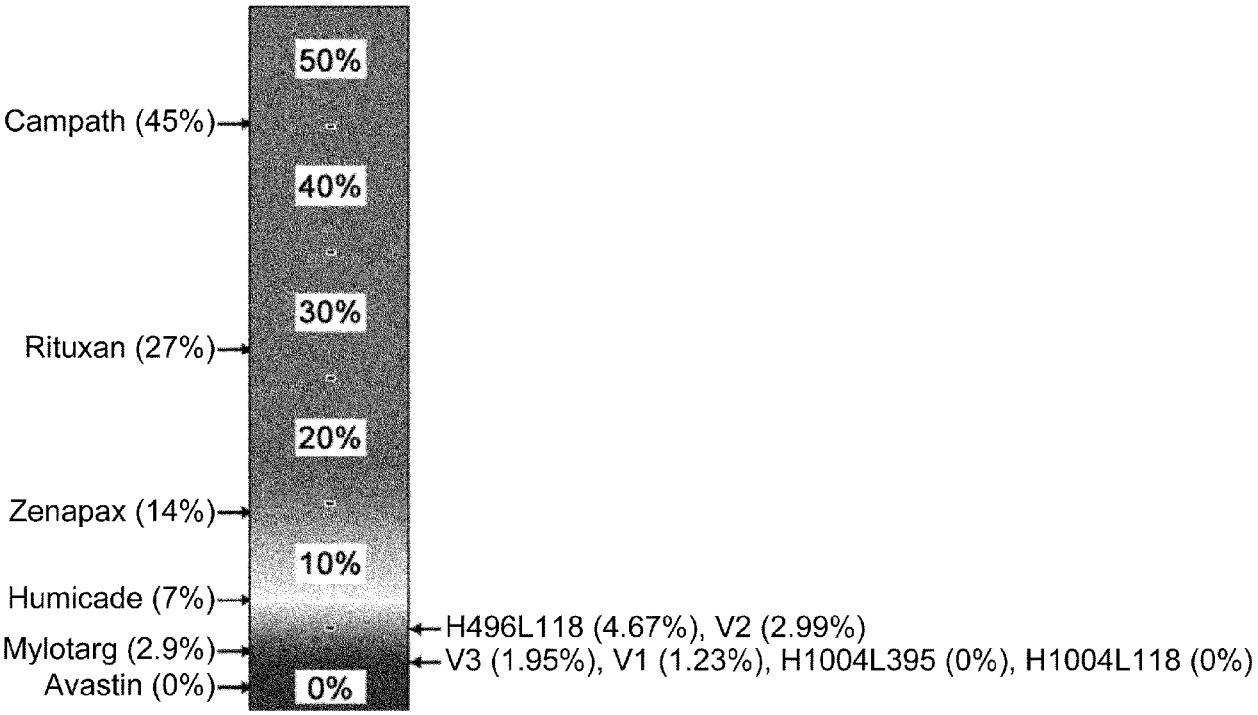
[Fig. 25C]



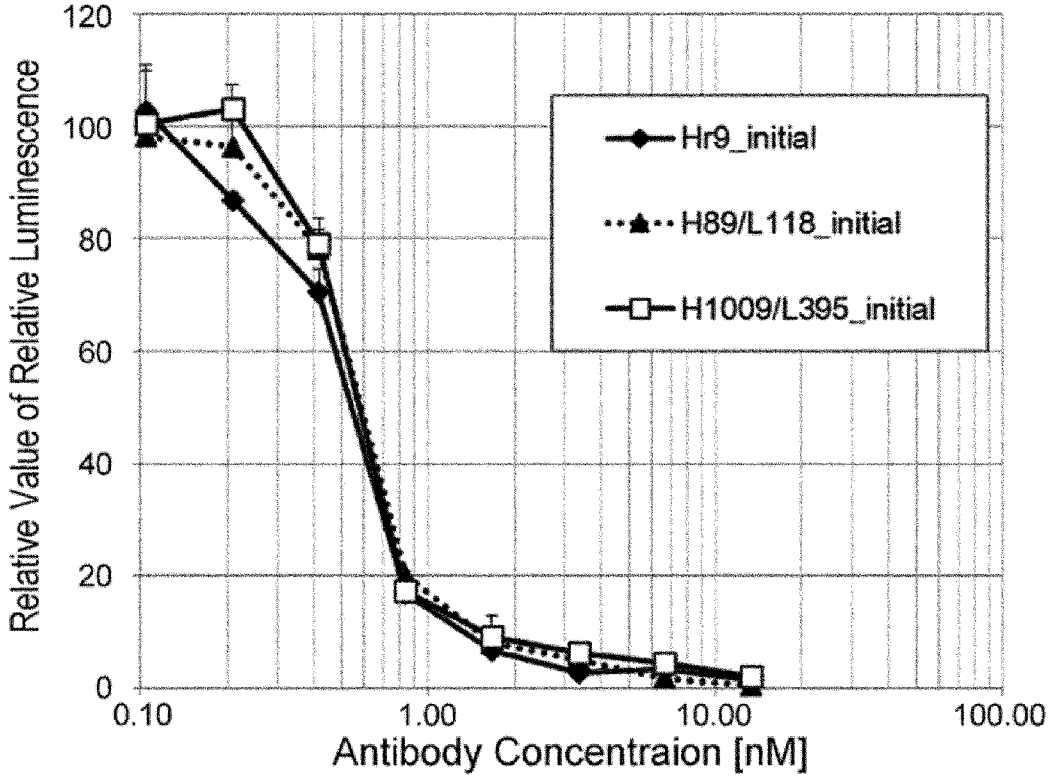
[Fig. 26]


50%
40%
30%
20%
10%
0%
Campath (45%)
Rituxan (27%)
Zenapax (14%)
Humicade (7%)
Mylotarg (2.9%)
Avastin (0%)
WS4 (10.42%), HR9 (8.62%)
H89L118 (5.52%), H496L118 (4.67%), H553L118 (3.45%)

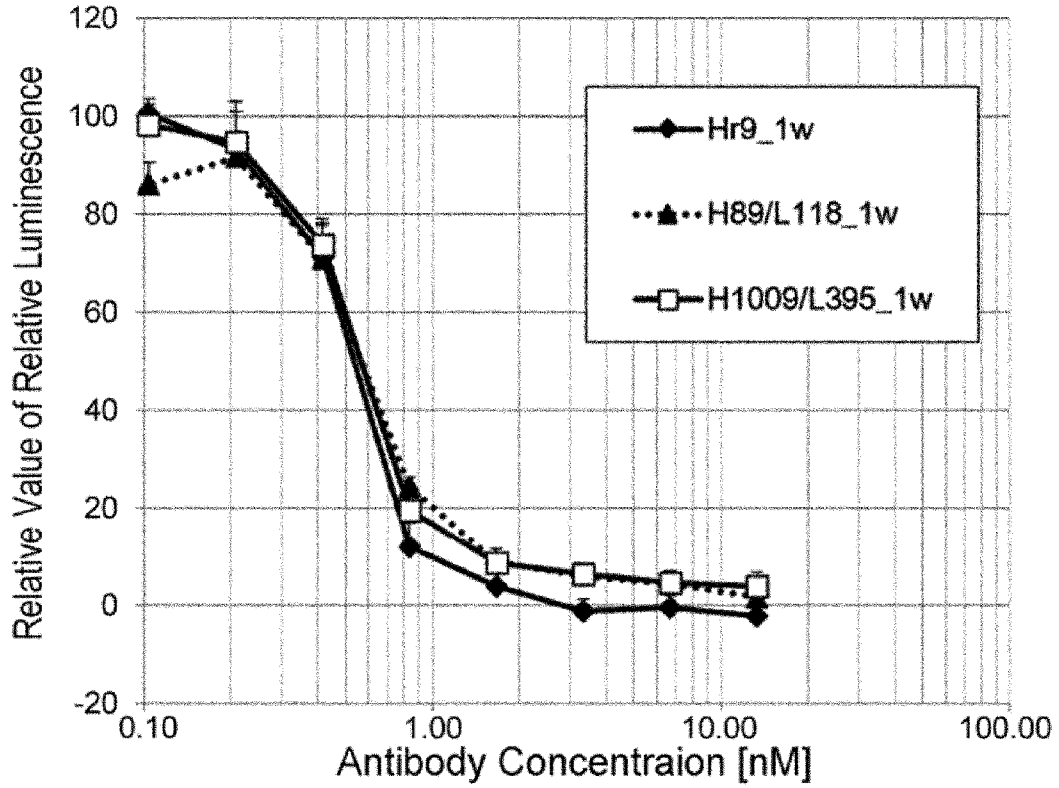
[Fig. 27]


50%
40%
30%
20%
10%
0%
Campath (45%)
Rituxan (27%)
Zenapax (14%)
Humicade (7%)
Mylotarg (2.9%)
Avastin (0%)
H496L118 (4.67%), V2 (2.99%)
V3 (1.95%), V1 (1.23%), H1004L395 (0%), H1004L118 (0%)

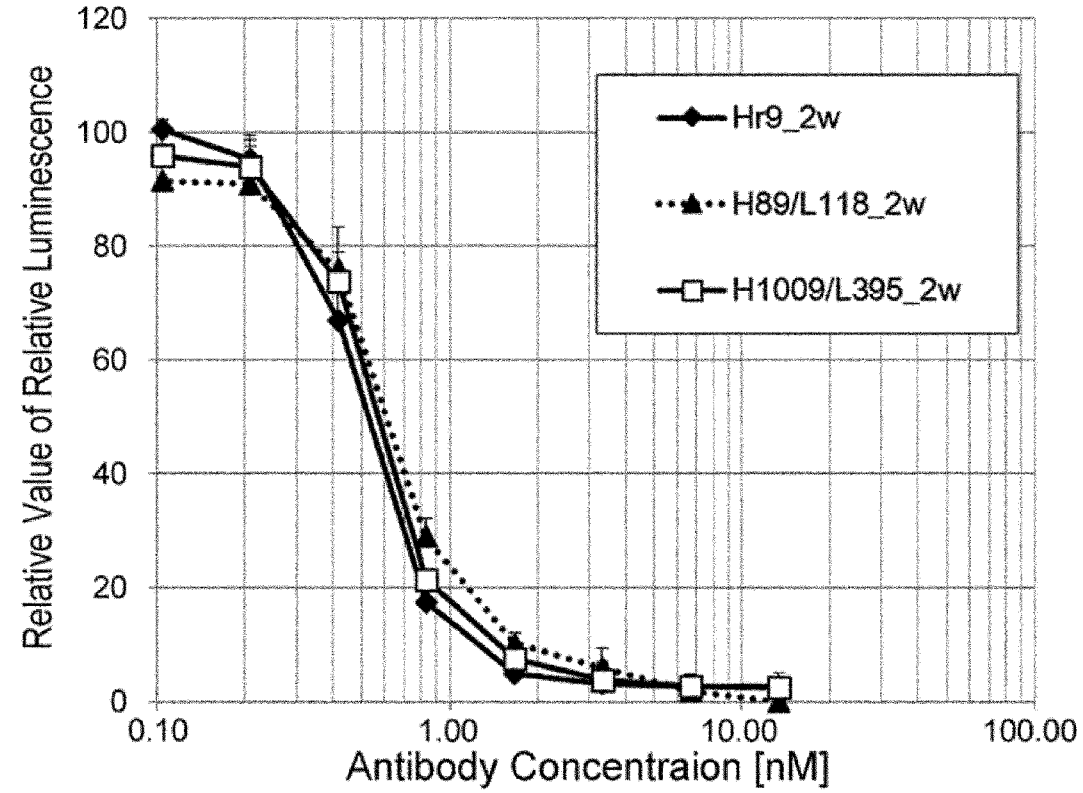
[Fig. 28A]



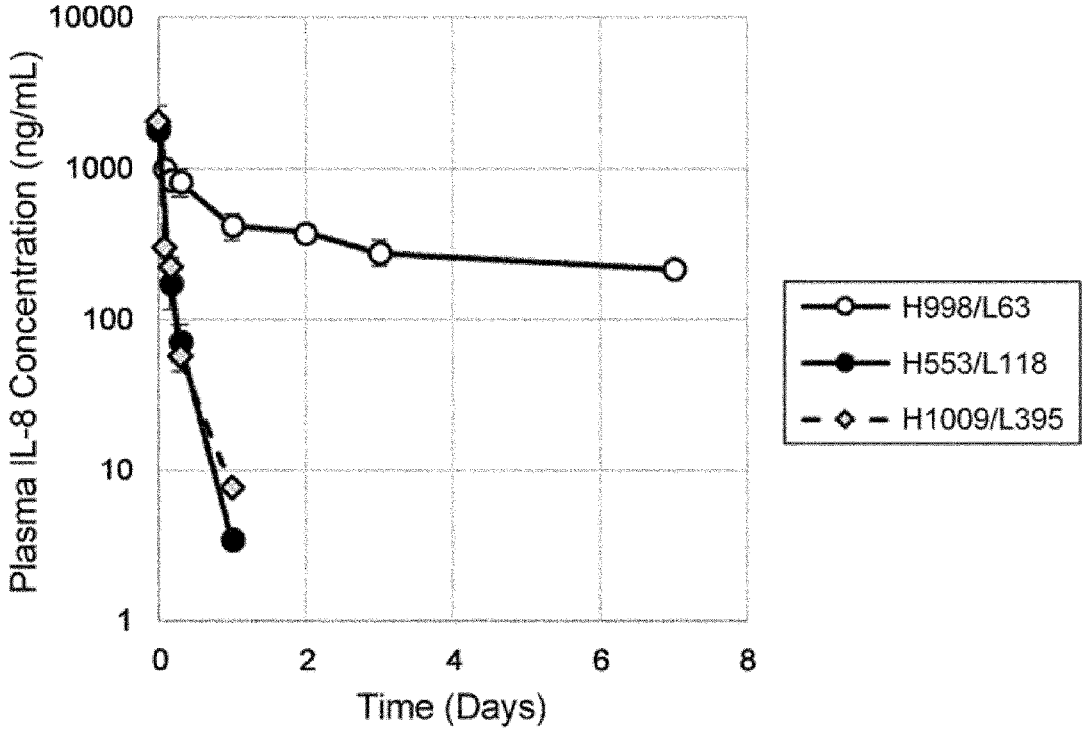
[Fig. 28B]



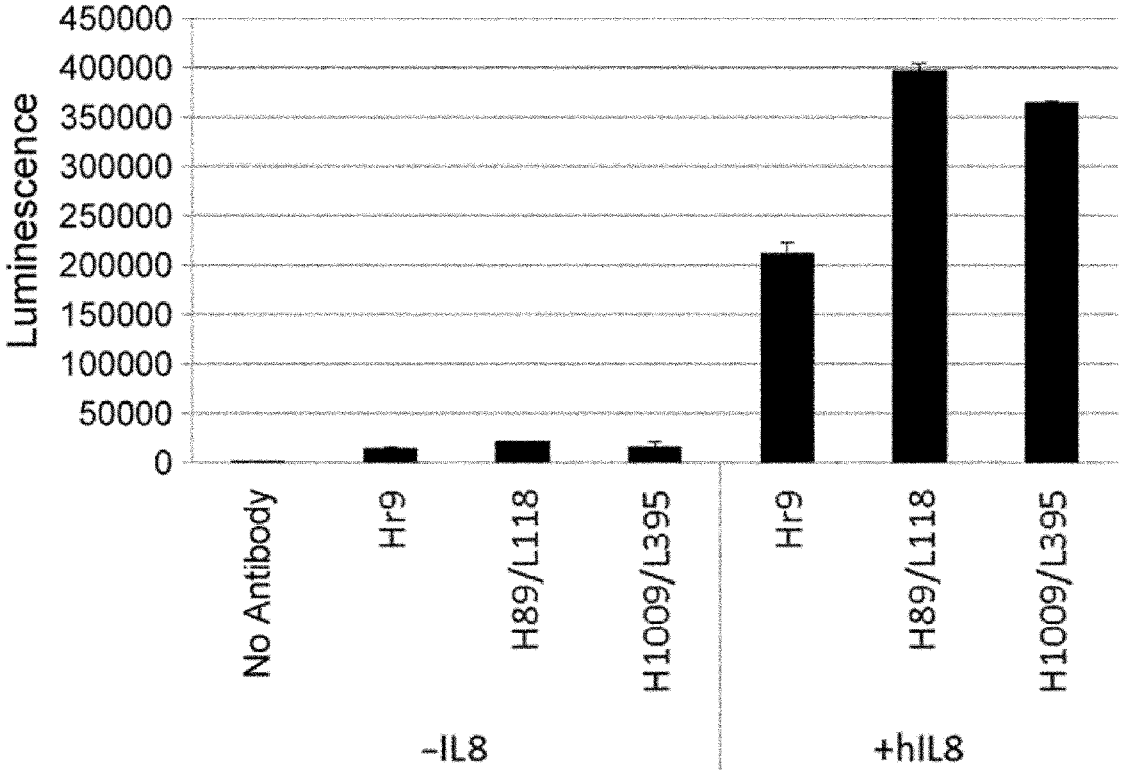
[Fig. 28C]



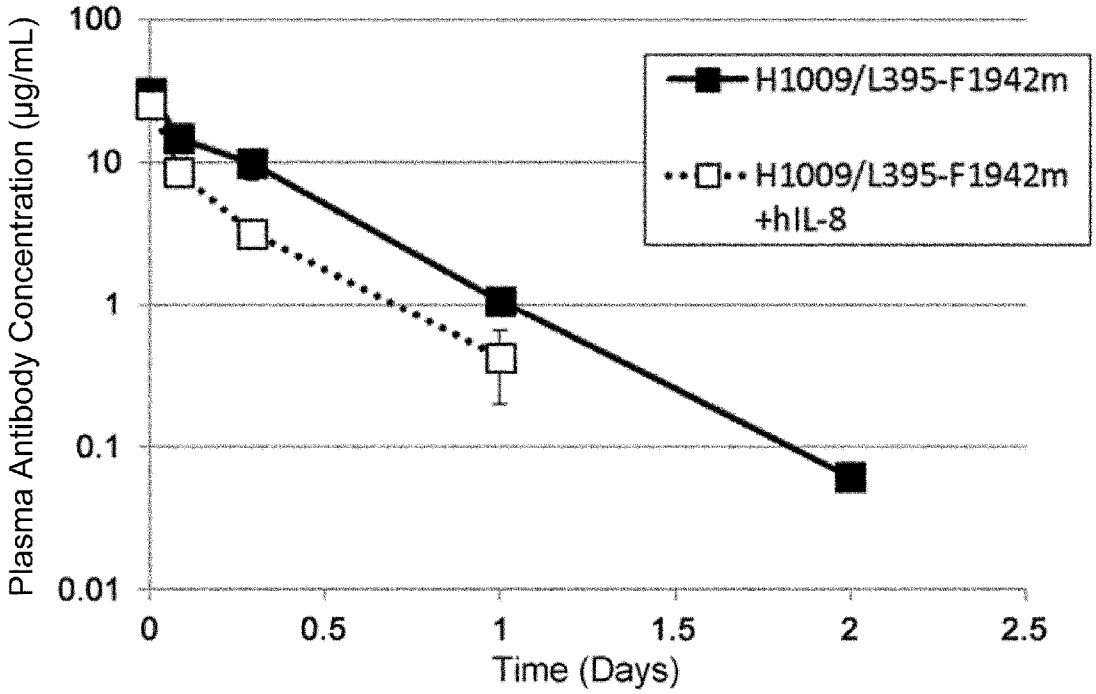
[Fig. 29]



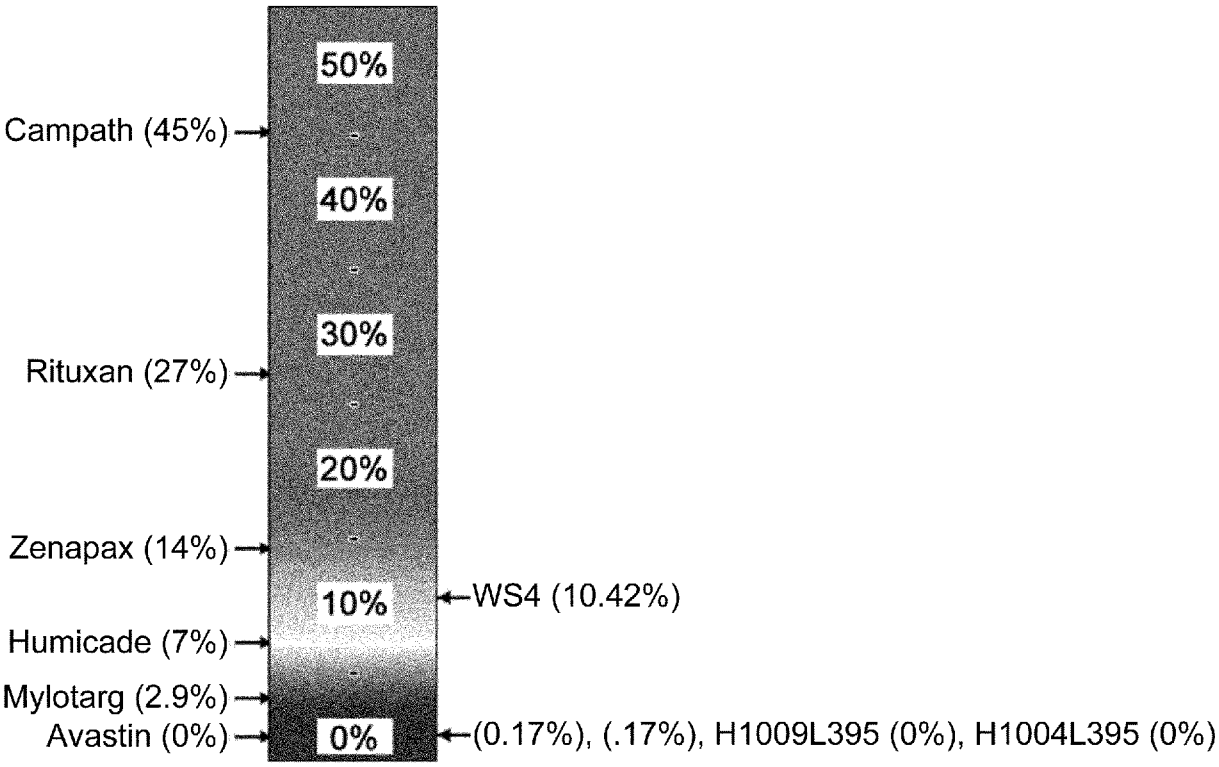
[Fig. 30]


Luminescence
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
No Antibody
Hr9
H89/L118
H1009/L395
Hr9
H89/L118
H1009/L395
-IL8
+hIL8

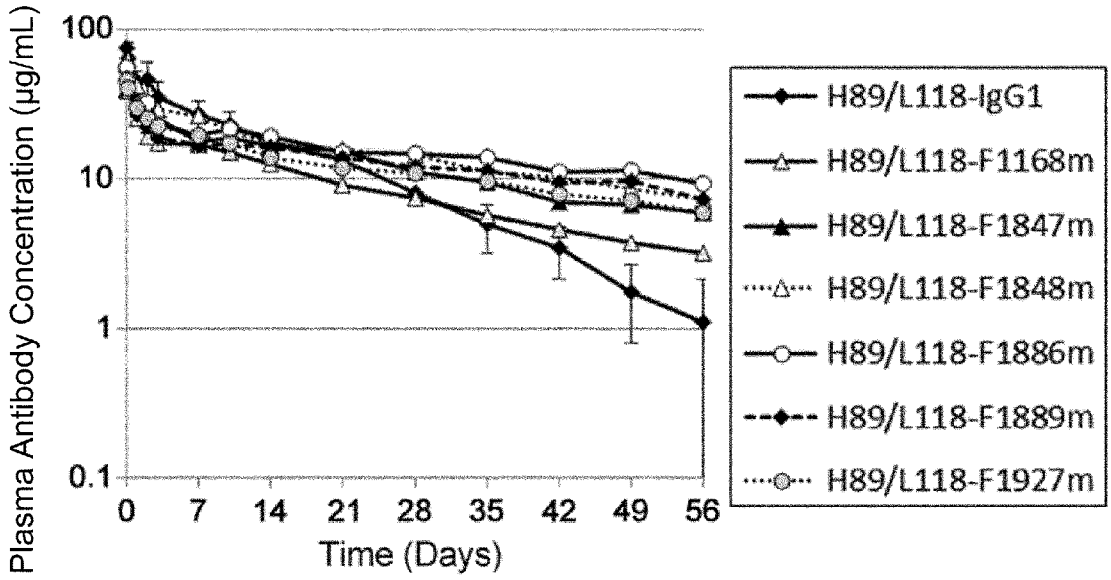
[Fig. 31]


Plasma Antibody Concentration (μg/mL)
100
10
1
0.1
0.01
0
0.5
1
1.5
2
2.5
Time (Days)
H1009/L395-F1942m
H1009/L395-F1942m +hIL-8

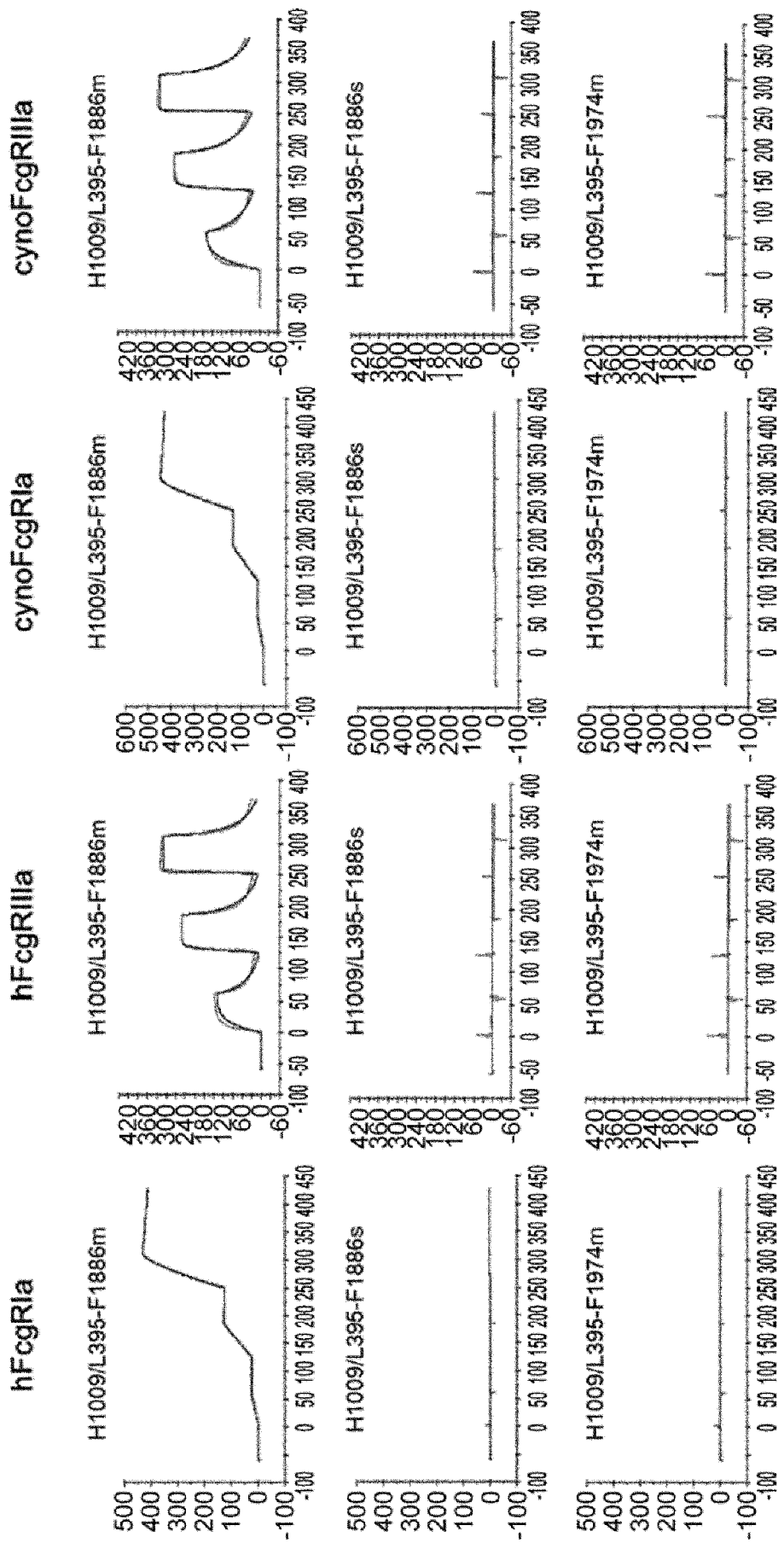
[Fig. 32]


50%
40%
30%
20%
10%
0%
Campath (45%)
Rituxan (27%)
Zenapax (14%)
Humicade (7%)
Mylotarg (2.9%)
Avastin (0%)
WS4 (10.42%)
(0.17%), (.17%), H1009L395 (0%), H1004L395 (0%)

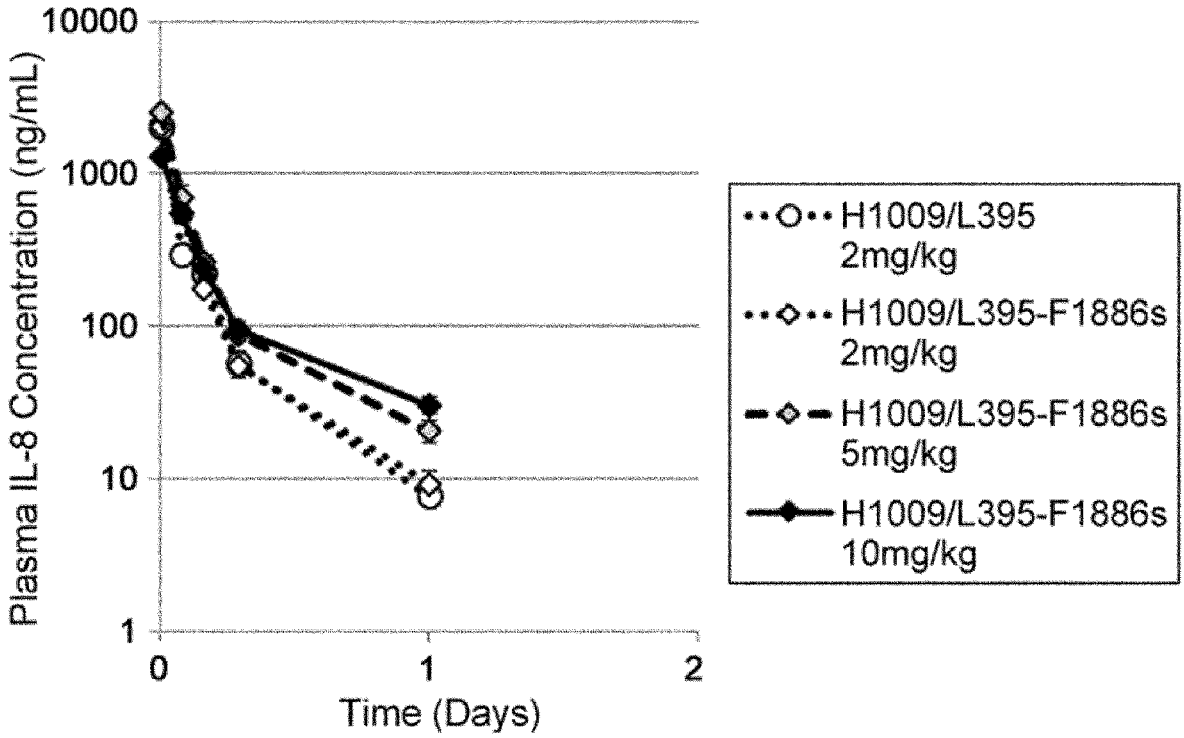
[Fig. 33]


Plasma Antibody Concentration (µg/mL)
100
10
1
0.1
0
7
14
21
28
35
42
49
56
Time (Days)
H89/L118-IgG1
H89/L118-F1168m
H89/L118-F1847m
H89/L118-F1848m
H89/L118-F1886m
H89/L118-F1889m
H89/L118-F1927m

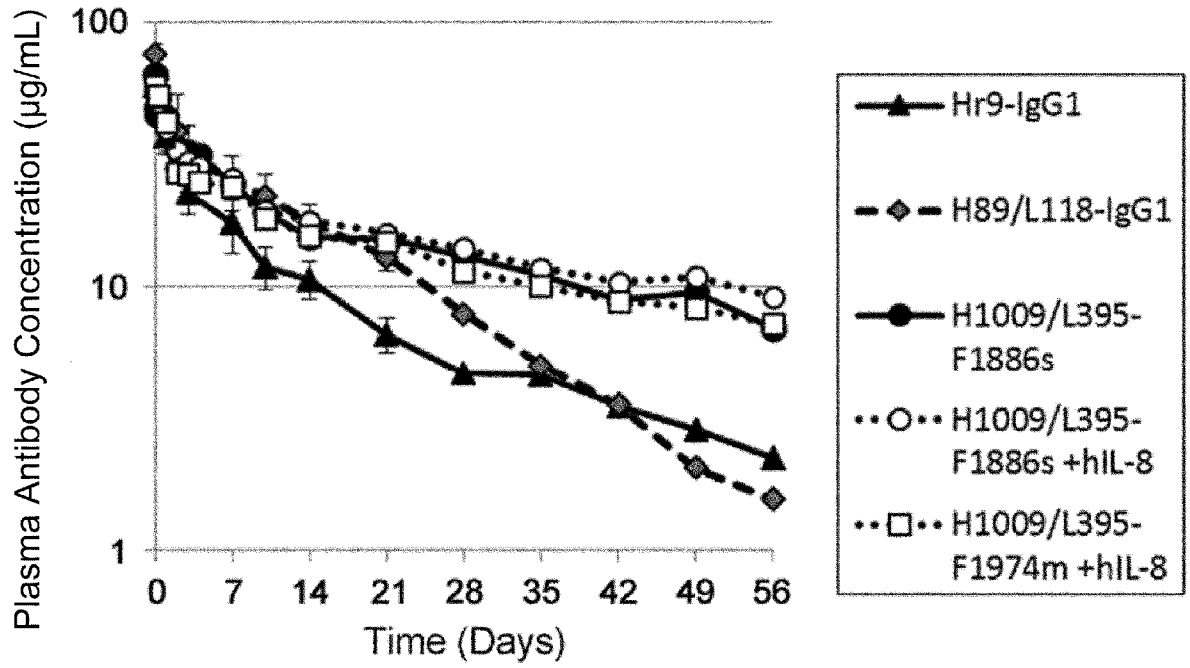
[Fig. 34]


hFcgRIa
hFcgRIIIa
cynoFcgRIa
cynoFcgRIIIa
H1009/L395-F1886m
H1009/L395-F1886s
H1009/L395-F1974m

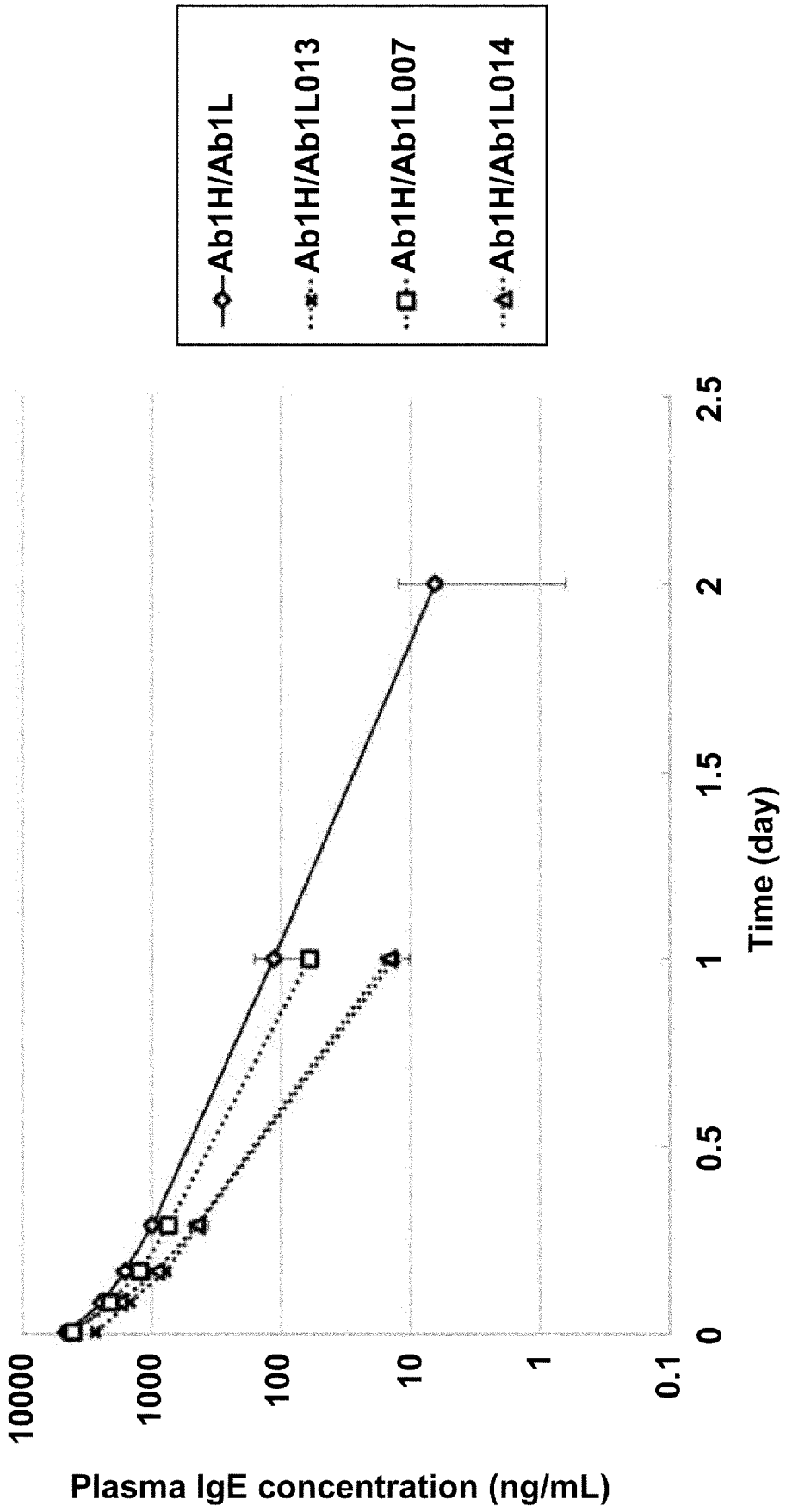
[Fig. 35]


10000
1000
100
10
1
Plasma IL-8 Concentration (ng/mL)
0
1
2
Time (Days)
H1009/L395 2mg/kg
H1009/L395-F1886s 2mg/kg
H1009/L395-F1886s 5mg/kg
H1009/L395-F1886s 10mg/kg

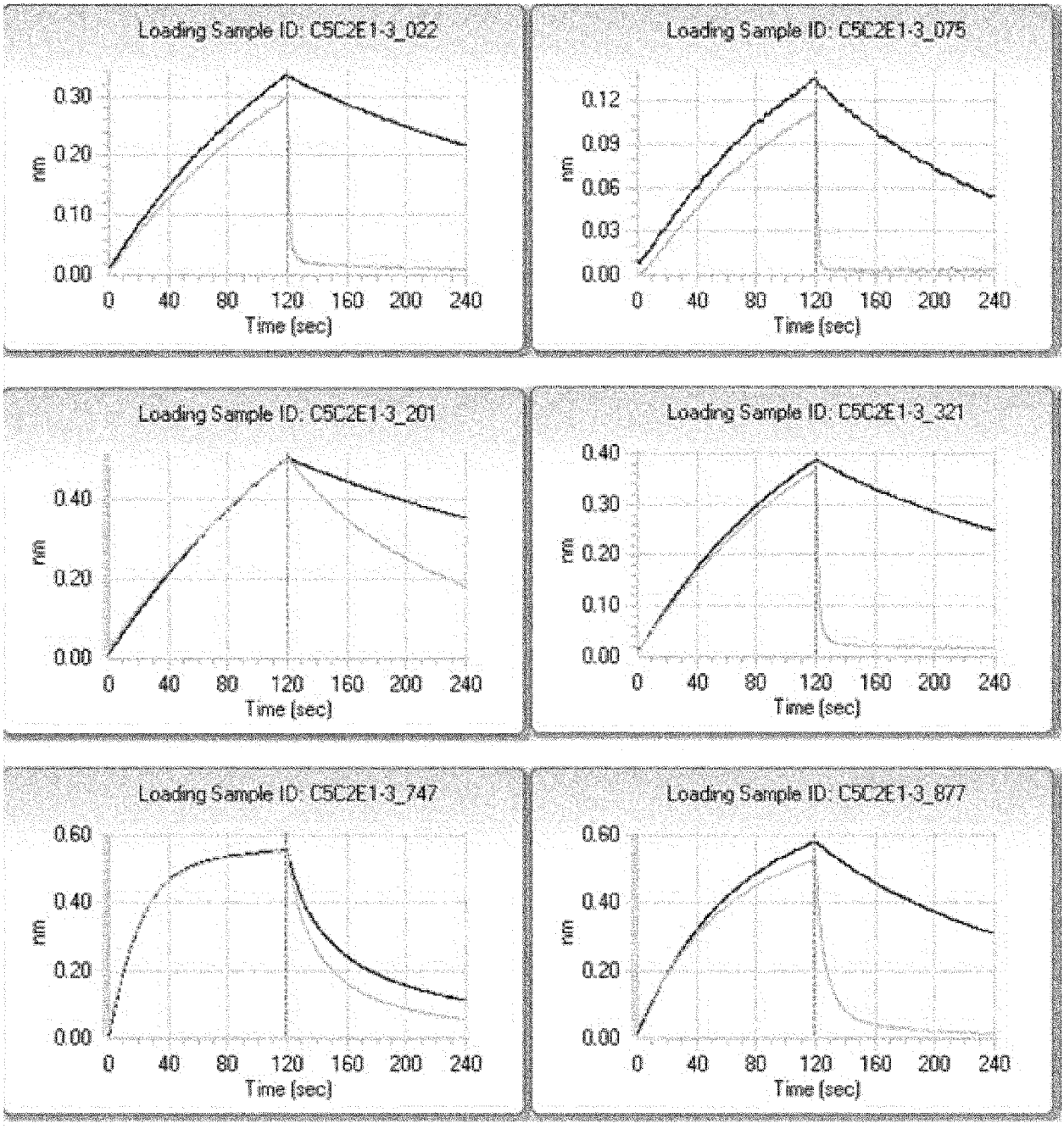
[Fig. 36]


100
10
1
Plasma Antibody Concentration (µg/mL)
0
7
14
21
28
35
42
49
56
Time (Days)
Hr9-IgG1
H89/L118-IgG1
H1009/L395-F1886s
H1009/L395-F1886s +hIL-8
H1009/L395-F1974m +hIL-8

[Fig. 37]

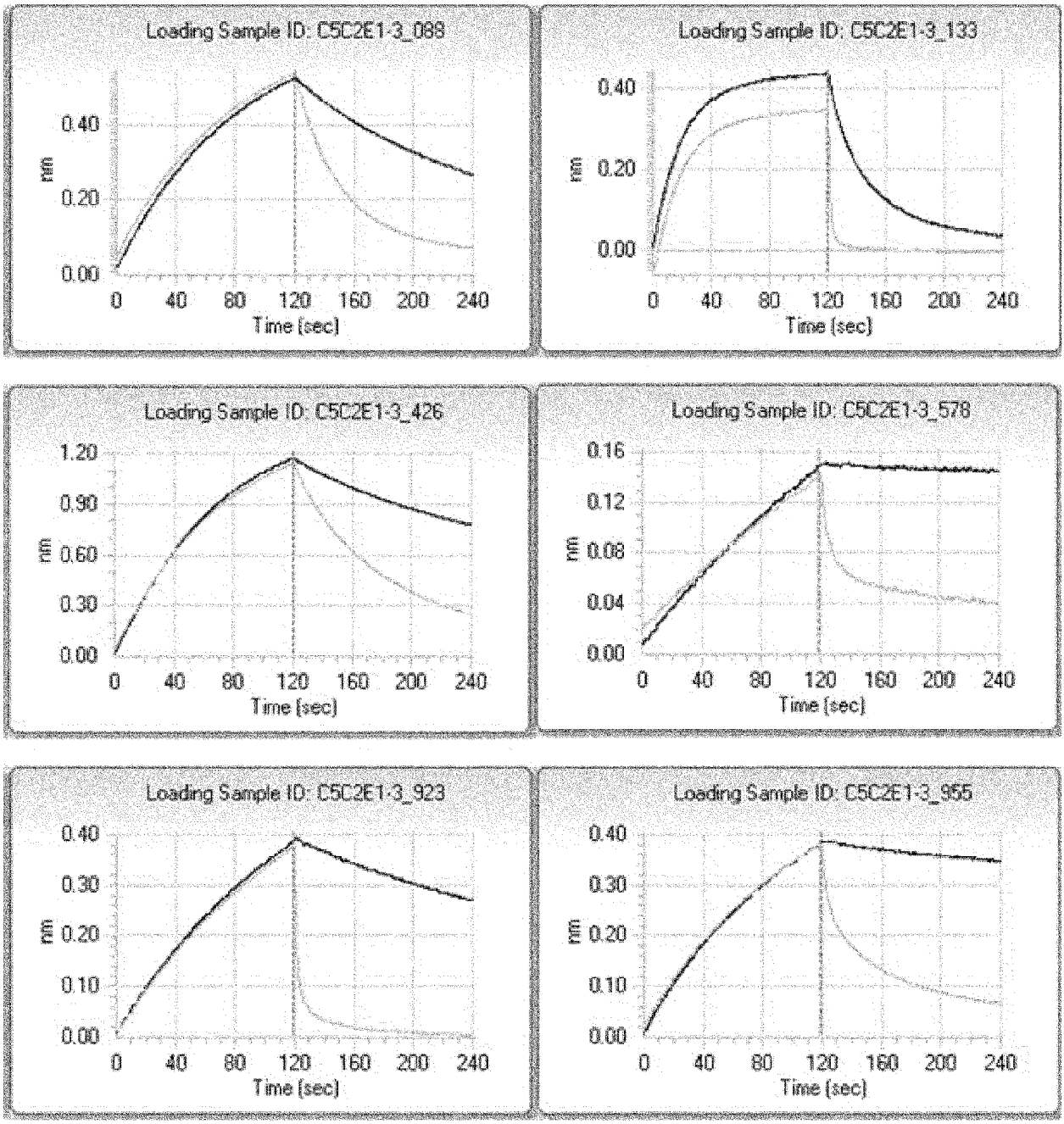

Ab1H/Ab1L
Ab1H/Ab1L013
Ab1H/Ab1L007
Ab1H/Ab1L014
10000
1000
100
10
1
0.1
Plasma IgE concentration (ng/mL)
0
0.5
1
1.5
2
2.5
Time (day)

[Fig. 38A]

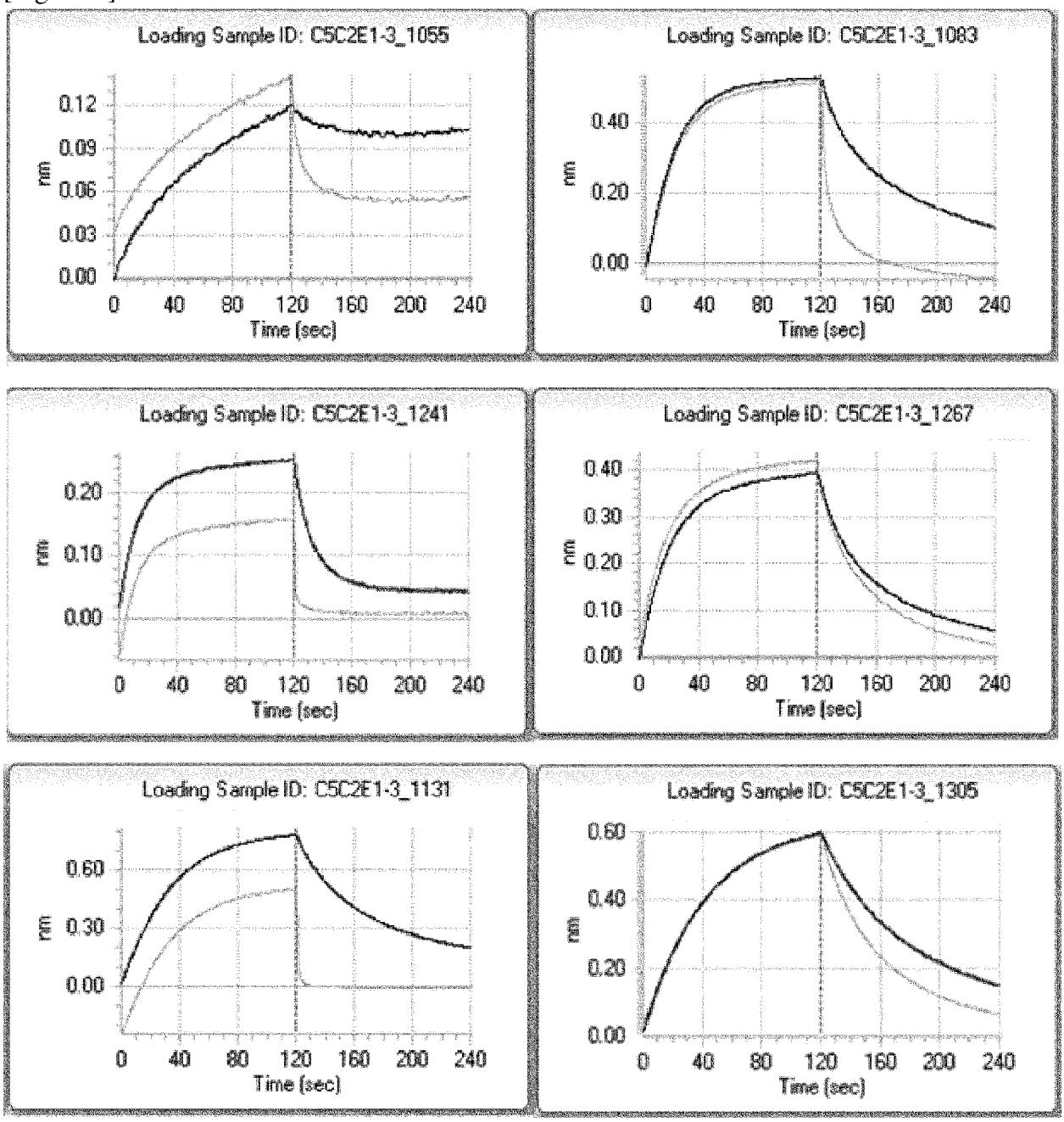


— association: 1.2mM $CaCl_2$-pH7.4, dissociation: 1.2mM $CaCl_2$-pH7.4
— association: 1.2mM $CaCl_2$-pH7.4, dissociation: 3μM $CaCl_2$-pH5.8

[Fig. 38B]

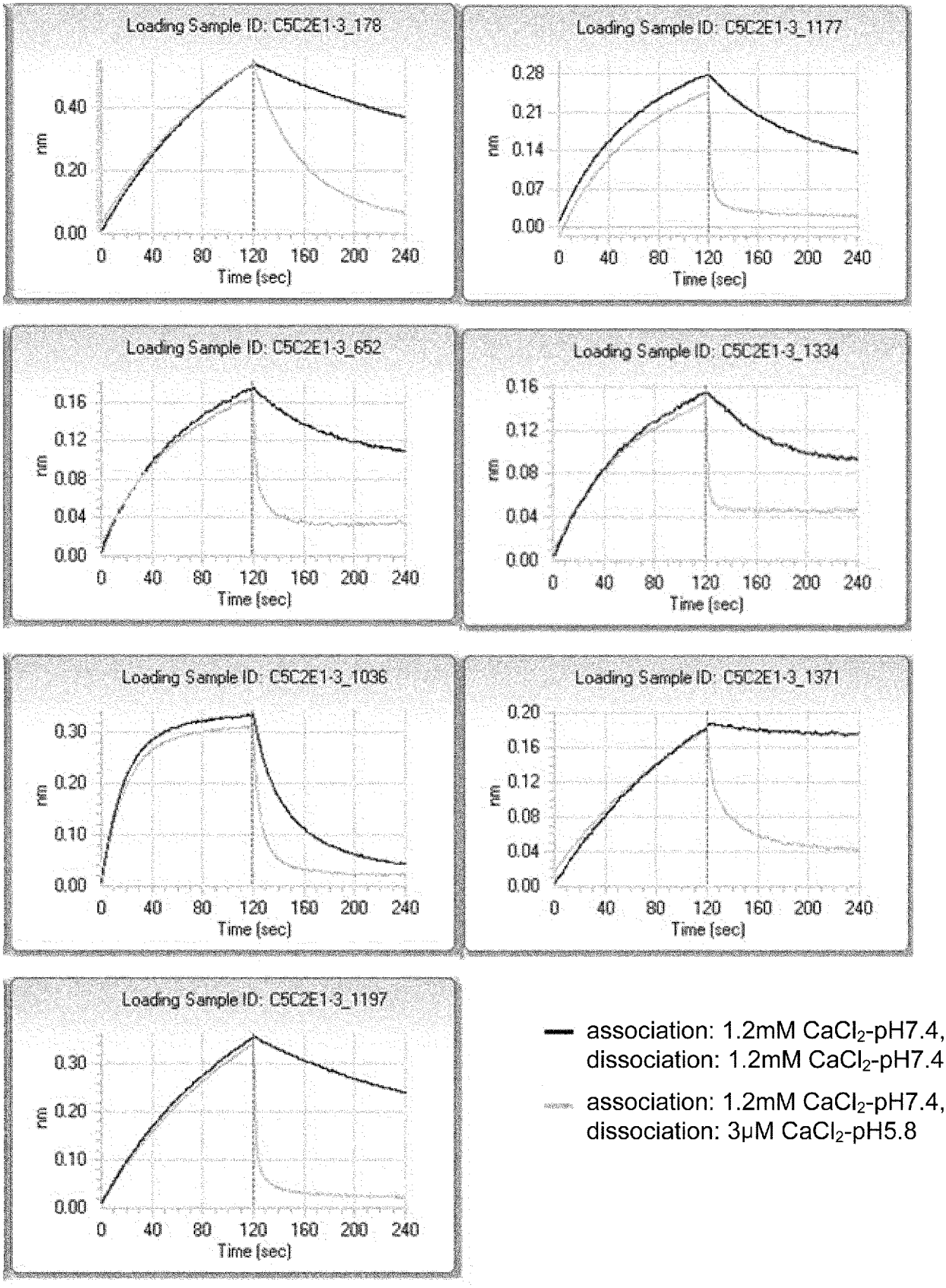

Loading Sample ID: C5C2E1-3_088
Loading Sample ID: C5C2E1-3_133
Loading Sample ID: C5C2E1-3_426
Loading Sample ID: C5C2E1-3_578
Loading Sample ID: C5C2E1-3_923
Loading Sample ID: C5C2E1-3_955
nm
Time (sec)
0 40 80 120 160 200 240
association: 1.2mM CaCl2-pH7.4, dissociation: 1.2mM CaCl2-pH7.4
association: 1.2mM CaCl2-pH7.4, dissociation: 3μM CaCl2-pH5.8

[Fig. 38C]

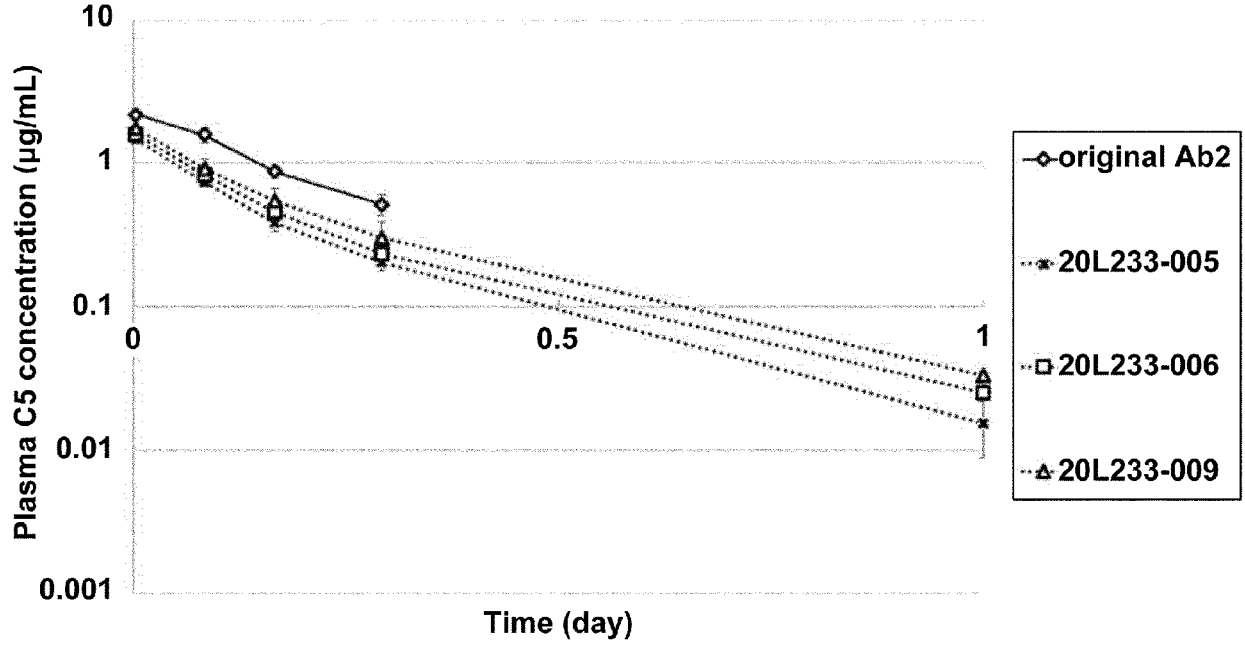


— association: 1.2mM $CaCl_2$-pH7.4, dissociation: 1.2mM $CaCl_2$-pH7.4
— association: 1.2mM $CaCl_2$-pH7.4, dissociation: 3μM $CaCl_2$-pH5.8

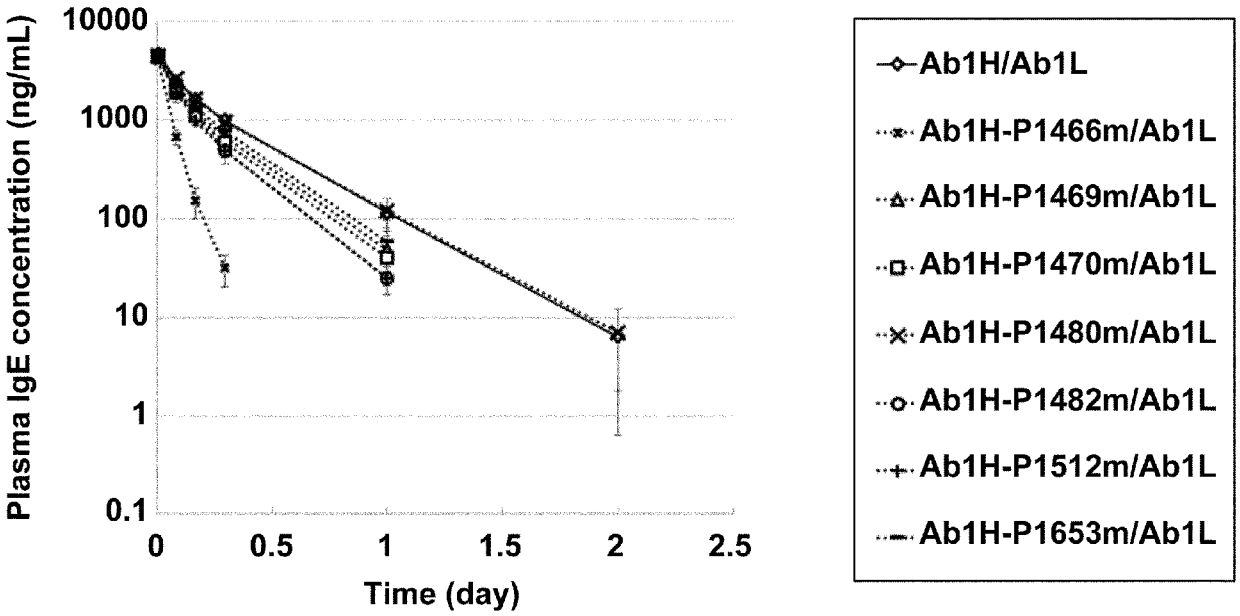
[Fig. 38D]


Loading Sample ID: C5C2E1-3_178
Loading Sample ID: C5C2E1-3_1177
Loading Sample ID: C5C2E1-3_652
Loading Sample ID: C5C2E1-3_1334
Loading Sample ID: C5C2E1-3_1036
Loading Sample ID: C5C2E1-3_1371
Loading Sample ID: C5C2E1-3_1197
nm
Time (sec)
association: 1.2mM CaCl2-pH7.4, dissociation: 1.2mM CaCl2-pH7.4
association: 1.2mM CaCl2-pH7.4, dissociation: 3μM CaCl2-pH5.8

[Fig. 39]


10
1
0.1
0.01
0.001
0
0.5
1
Plasma C5 concentration (μg/mL)
Time (day)
original Ab2
20L233-005
20L233-006
20L233-009

[Fig. 40]


10000
1000
100
10
1
0.1
0
0.5
1
1.5
2
2.5
Plasma IgE concentration (ng/mL)
Time (day)
Ab1H/Ab1L
Ab1H-P1466m/Ab1L
Ab1H-P1469m/Ab1L
Ab1H-P1470m/Ab1L
Ab1H-P1480m/Ab1L
Ab1H-P1482m/Ab1L
Ab1H-P1512m/Ab1L
Ab1H-P1653m/Ab1L