FIGURE 1

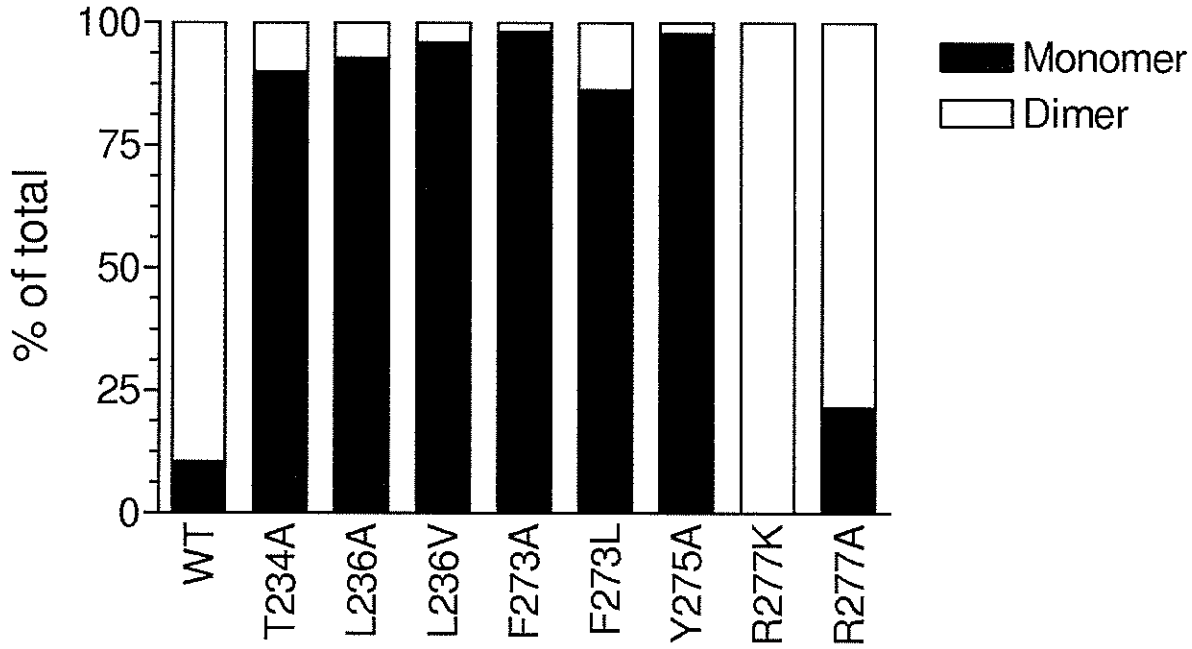

100
75
50
25
0
% of total
WT
T234A
L236A
L236V
F273A
F273L
Y275A
R277K
R277A
Monomer
Dimer

FIGURE 2

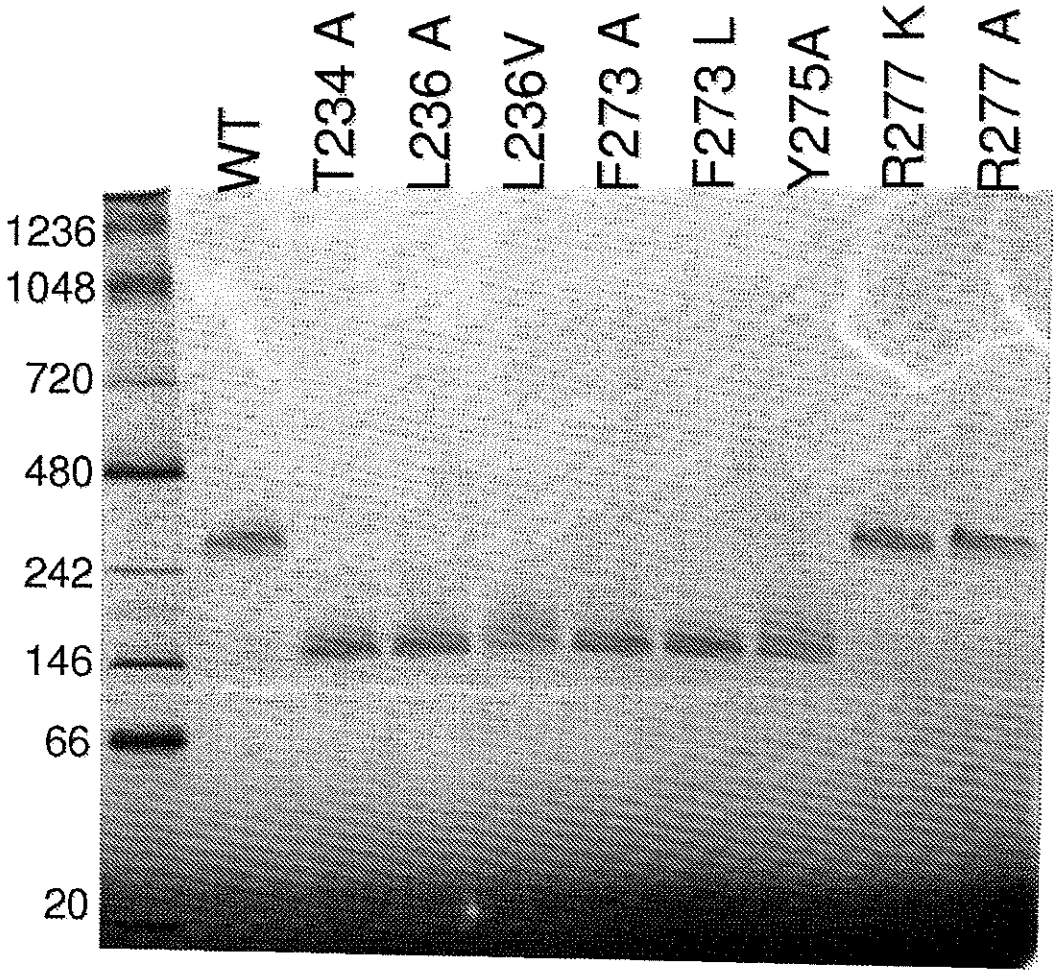

WT
T234 A
L236 A
L236V
F273 A
F273 L
Y275A
R277 K
R277 A
1236
1048
720
480
242
146
66
20

FIGURE 3

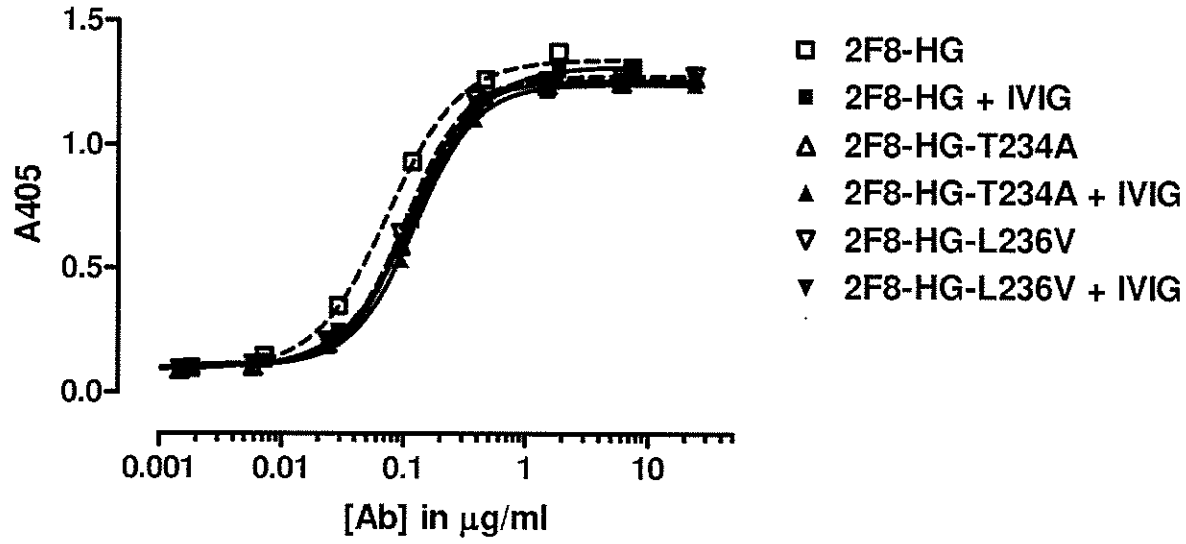


FIGURE 4

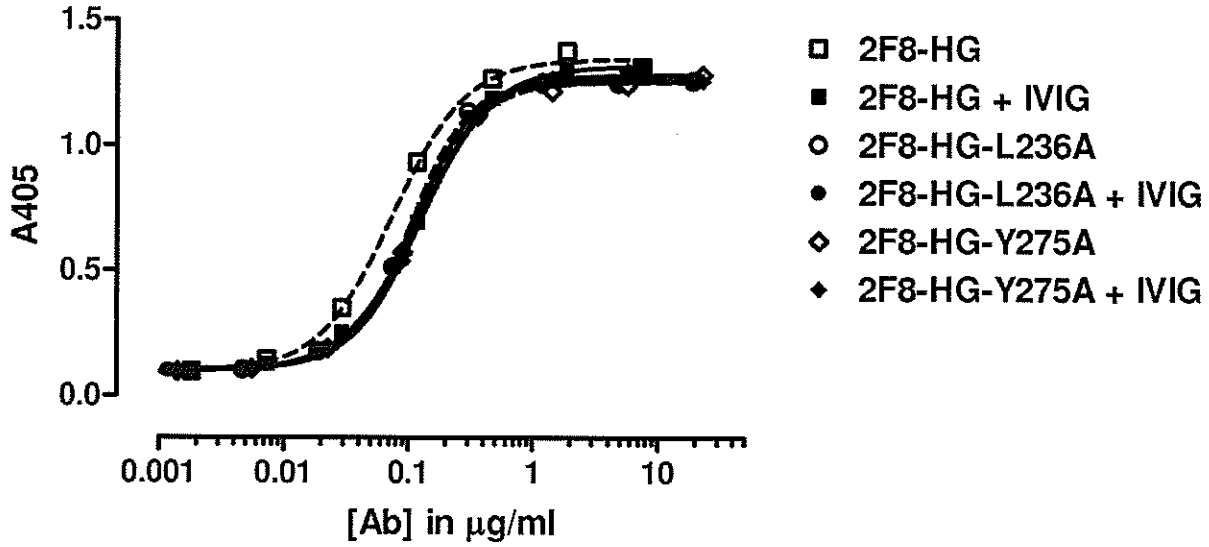
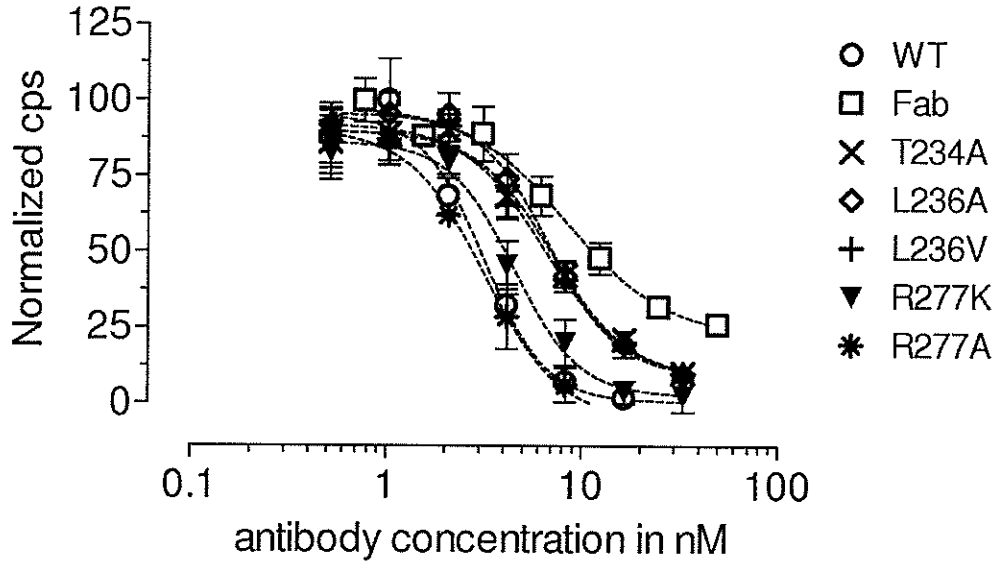


FIGURE 5


125
100
75
50
25
0
Normalized cps
0.1
1
10
100
antibody concentration in nM
WT
Fab
T234A
L236A
L236V
R277K
R277A

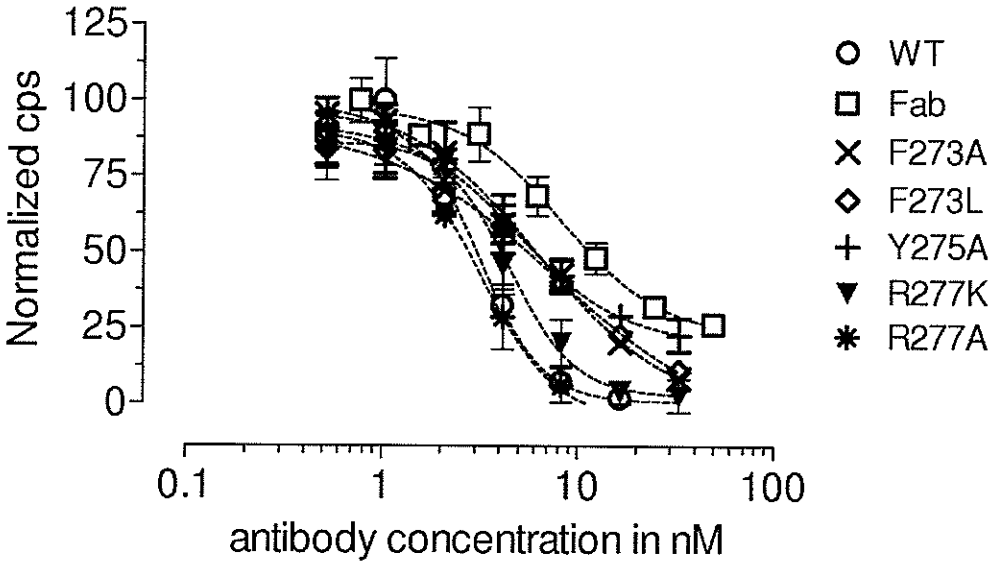

125
100
75
50
25
0
Normalized cps
0.1
1
10
100
antibody concentration in nM
WT
Fab
F273A
F273L
Y275A
R277K
R277A

FIGURE 6

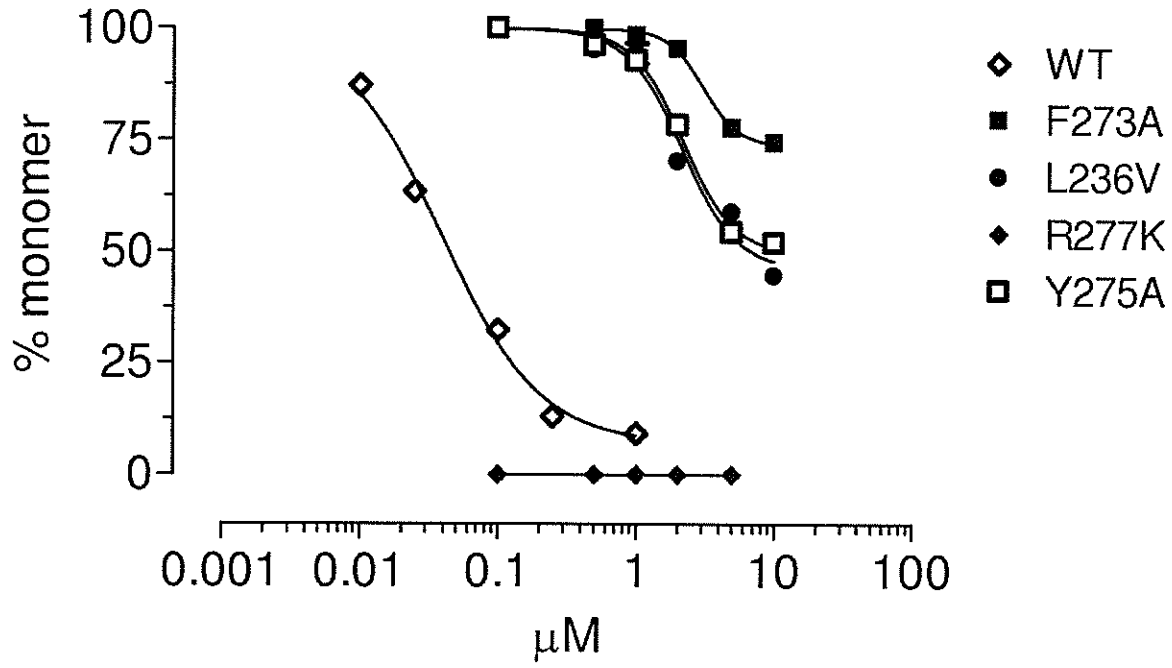

100
75
50
25
0
% monomer
0.001
0.01
0.1
1
10
100
µM
WT
F273A
L236V
R277K
Y275A

FIGURE 7

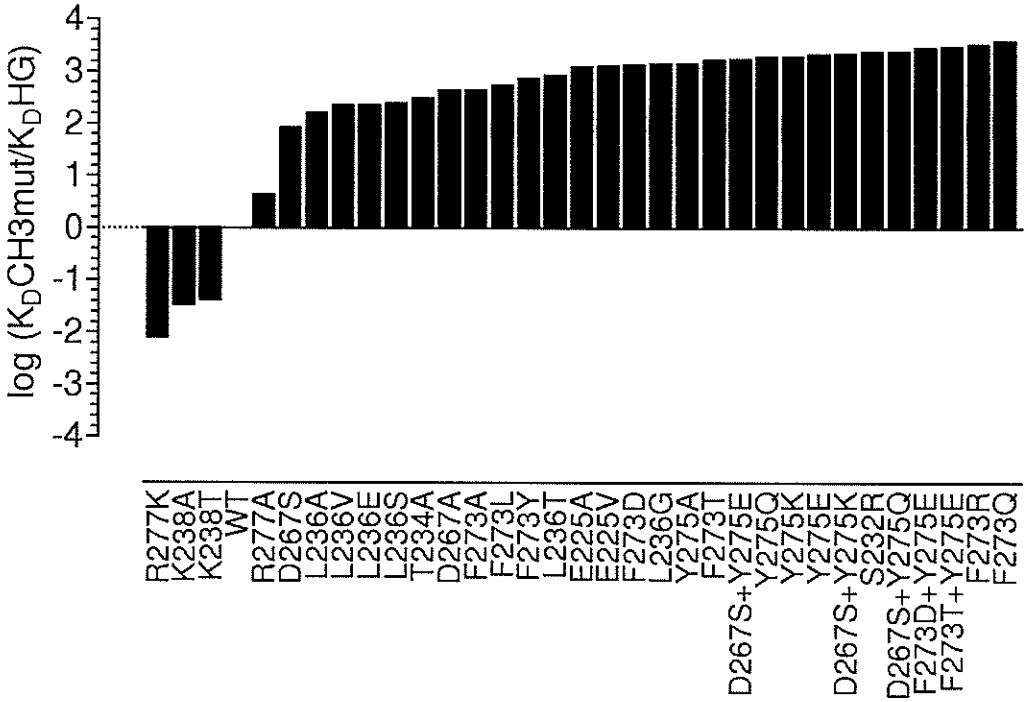

log (K_DCH3mut/K_DHG)
4
3
2
1
0
-1
-2
-3
-4
R277K
K238A
K238T
WT
R277A
D267S
L236A
L236V
L236E
L236S
T234A
D267A
F273A
F273L
F273Y
L236T
E225A
E225V
F273D
L236G
Y275A
F273T
D267S+Y275E
Y275Q
Y275K
Y275E
D267S+Y275K
S232R
D267S+Y275Q
F273D+Y275E
F273T+Y275E
F273R
F273Q

FIGURE 8

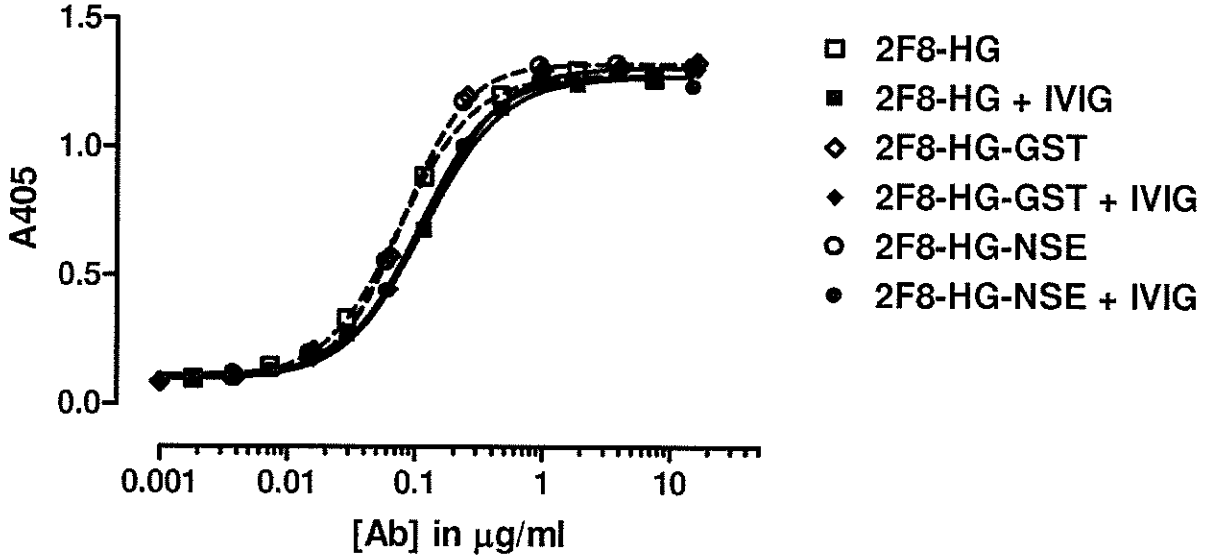

1.5
1.0
0.5
0.0
A405
0.001
0.01
0.1
1
10
[Ab] in µg/ml
2F8-HG
2F8-HG + IVIG
2F8-HG-GST
2F8-HG-GST + IVIG
2F8-HG-NSE
2F8-HG-NSE + IVIG

FIGURE 9

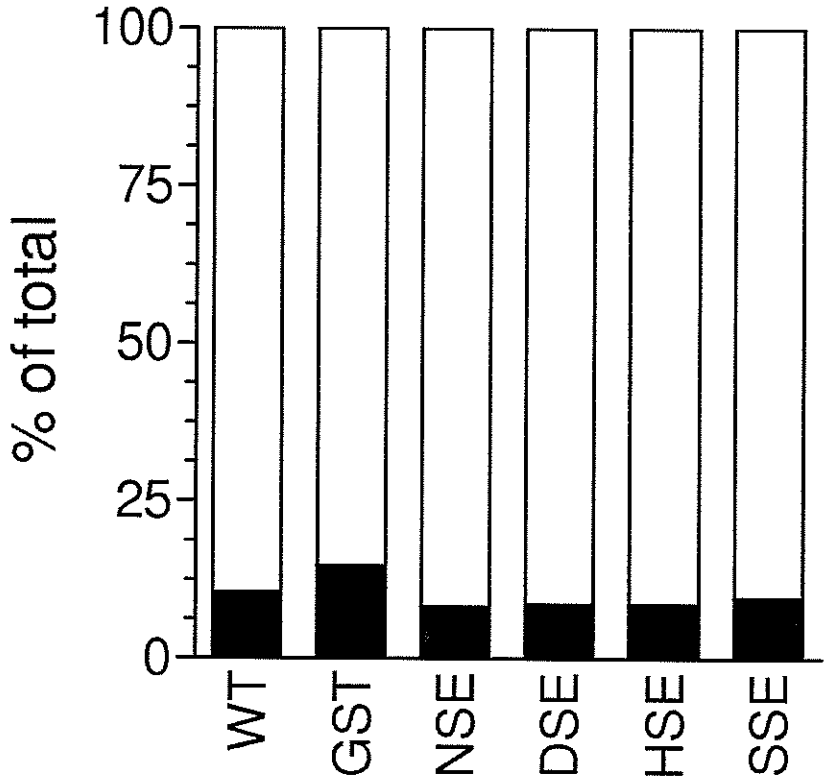
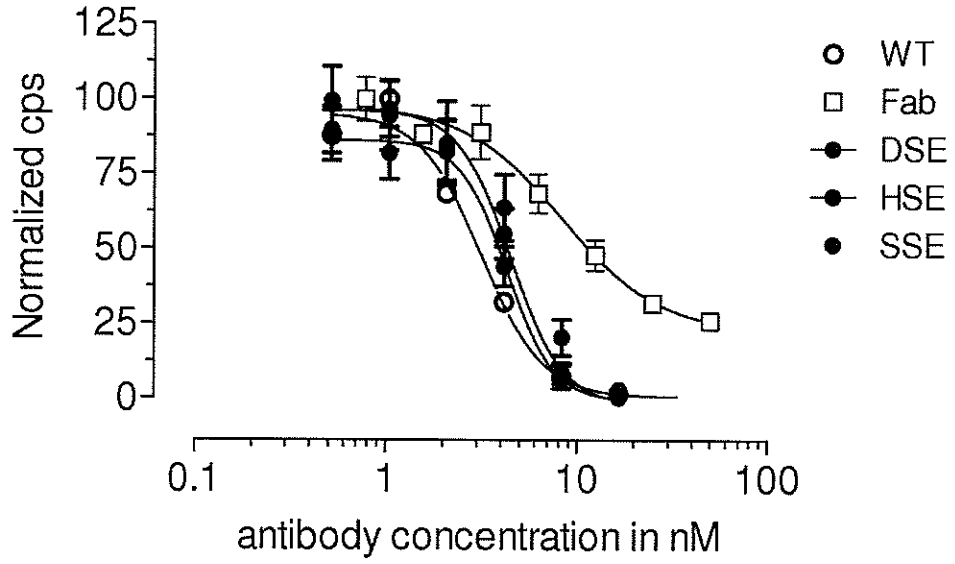


FIGURE 10


125
100
75
50
25
0
Normalized cps
0.1
1
10
100
antibody concentration in nM
WT
Fab
DSE
HSE
SSE

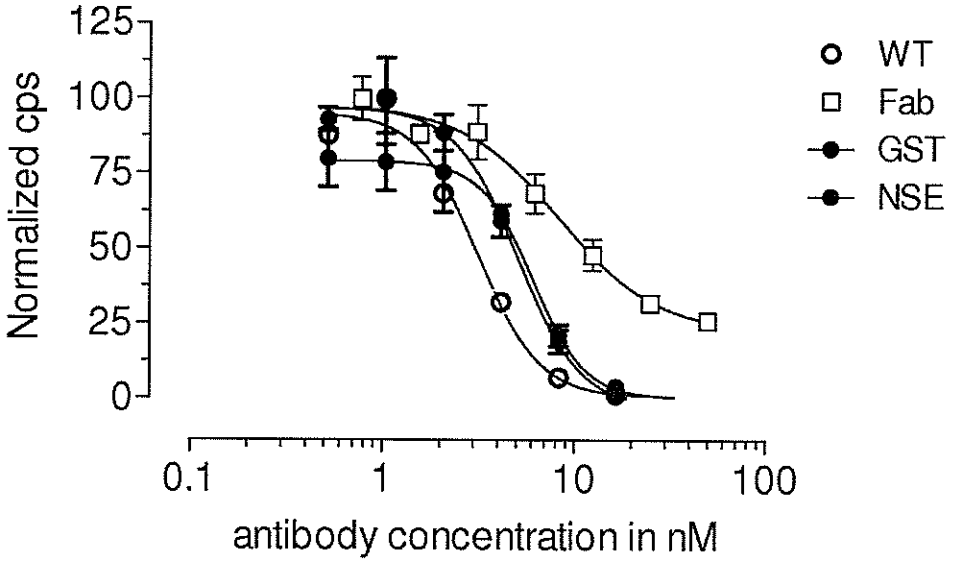

125
100
75
50
25
0
Normalized cps
0.1
1
10
100
antibody concentration in nM
WT
Fab
GST
NSE

FIGURE 11

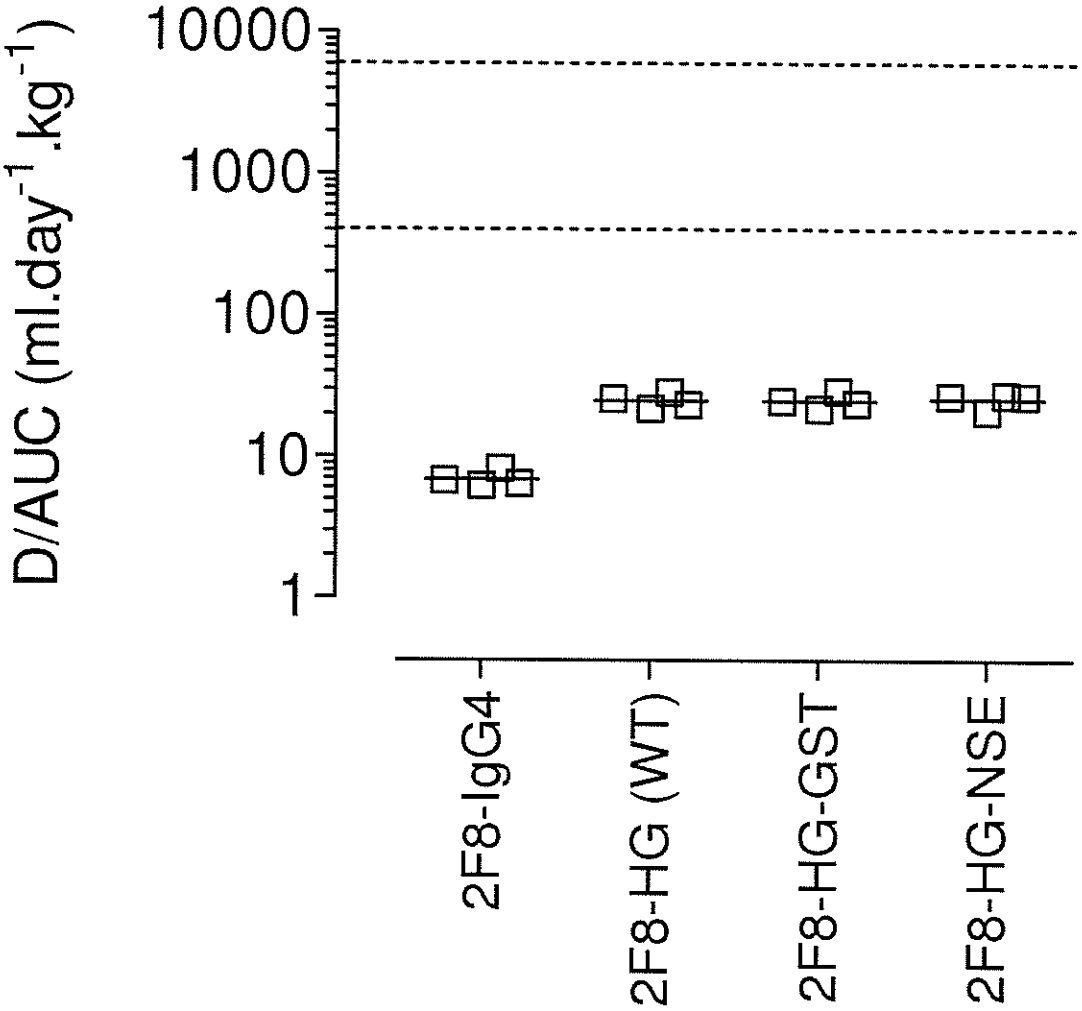

D/AUC (ml.day-1.kg-1)
10000
1000
100
10
1
2F8-IgG4
2F8-HG (WT)
2F8-HG-GST
2F8-HG-NSE

FIGURE 12

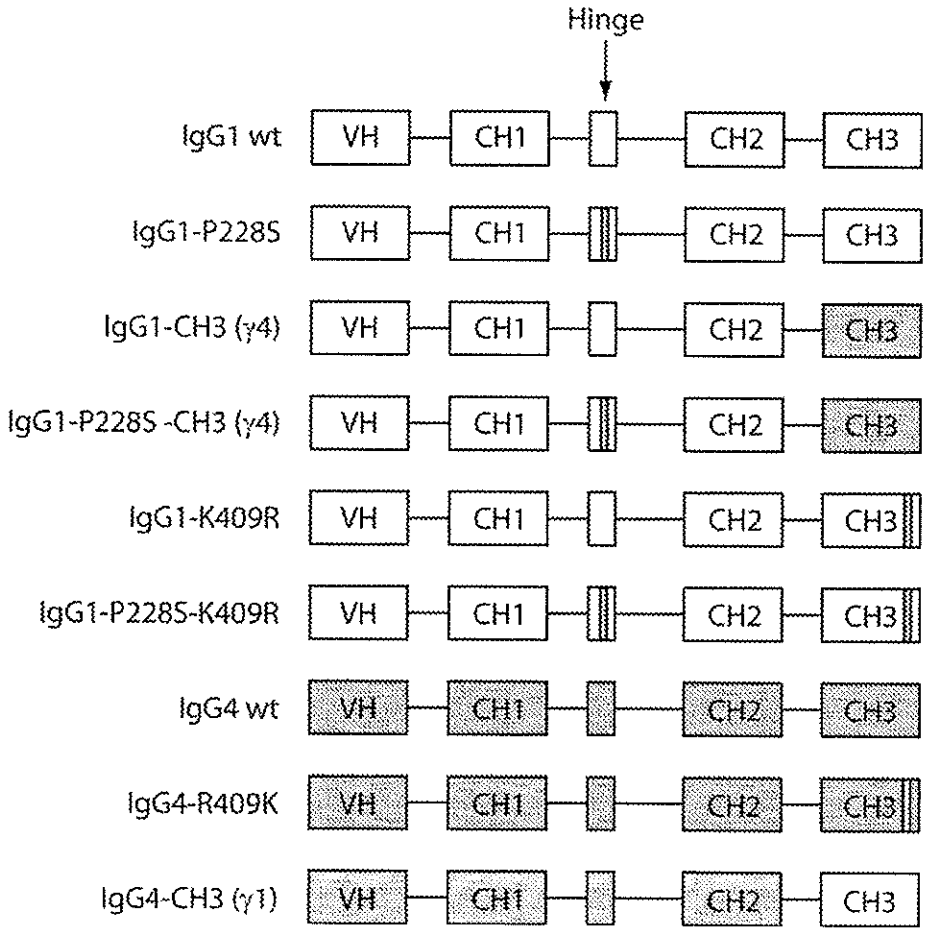

Hinge
IgG1 wt
VH
CH1
CH2
CH3
IgG1-P228S
IgG1-CH3 (γ4)
IgG1-P228S -CH3 (γ4)
IgG1-K409R
IgG1-P228S-K409R
IgG4 wt
IgG4-R409K
IgG4-CH3 (γ1)

FIGURE 13

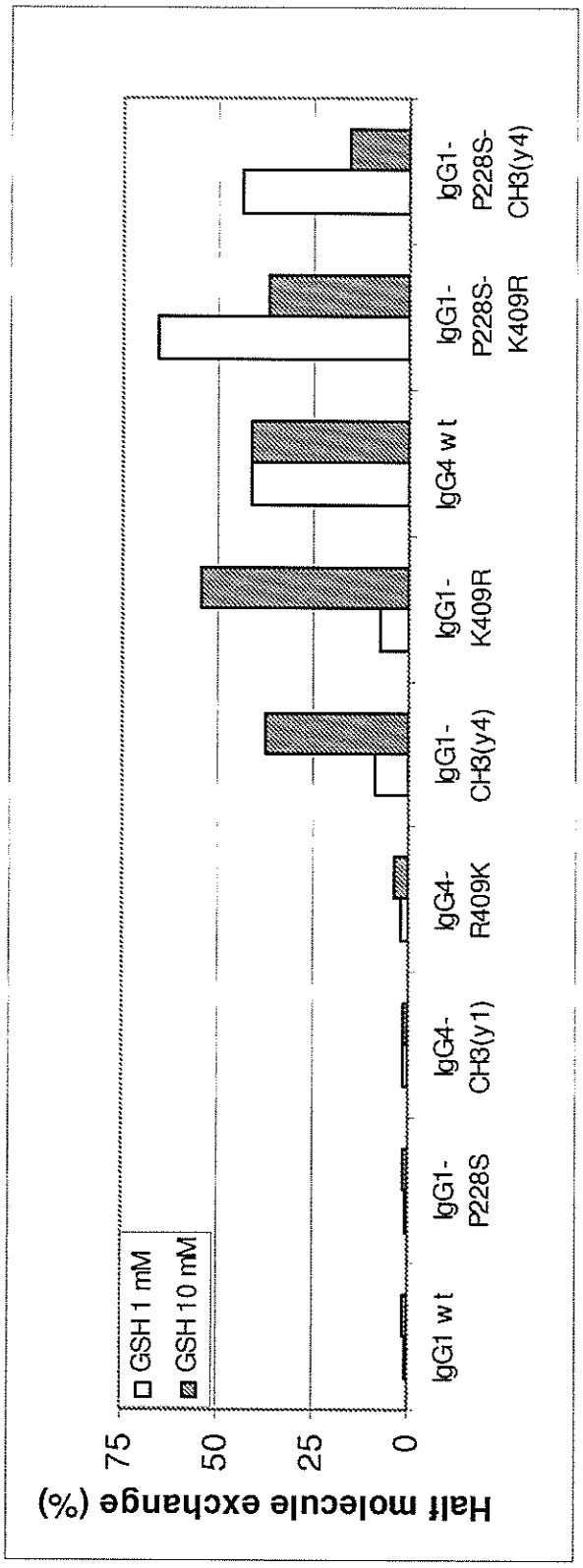

Half molecule exchange (%)
75
50
25
0
GSH 1 mM
GSH 10 mM
IgG1 wt
IgG1-P228S
IgG4-CH3(y1)
IgG4-R409K
IgG1-CH3(y4)
IgG1-K409R
IgG4 wt
IgG1-P228S-K409R
IgG1-P228S-CH3(y4)

FIGURE 14

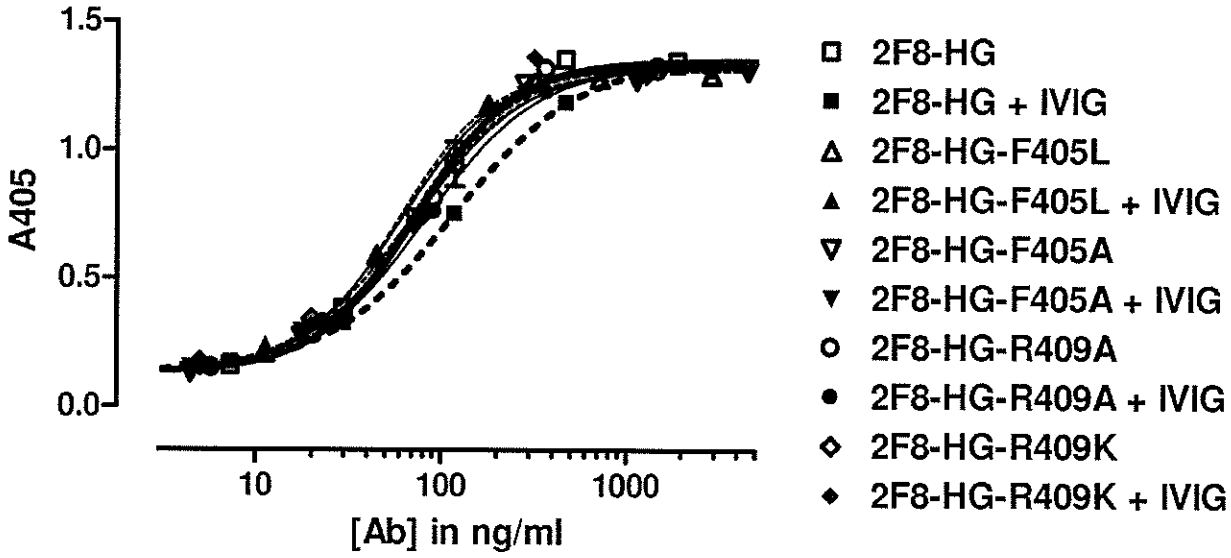

1.5
1.0
0.5
0.0
A405
10
100
1000
[Ab] in ng/ml
2F8-HG
2F8-HG + IVIG
2F8-HG-F405L
2F8-HG-F405L + IVIG
2F8-HG-F405A
2F8-HG-F405A + IVIG
2F8-HG-R409A
2F8-HG-R409A + IVIG
2F8-HG-R409K
2F8-HG-R409K + IVIG

FIGURE 15

FIGURE 16

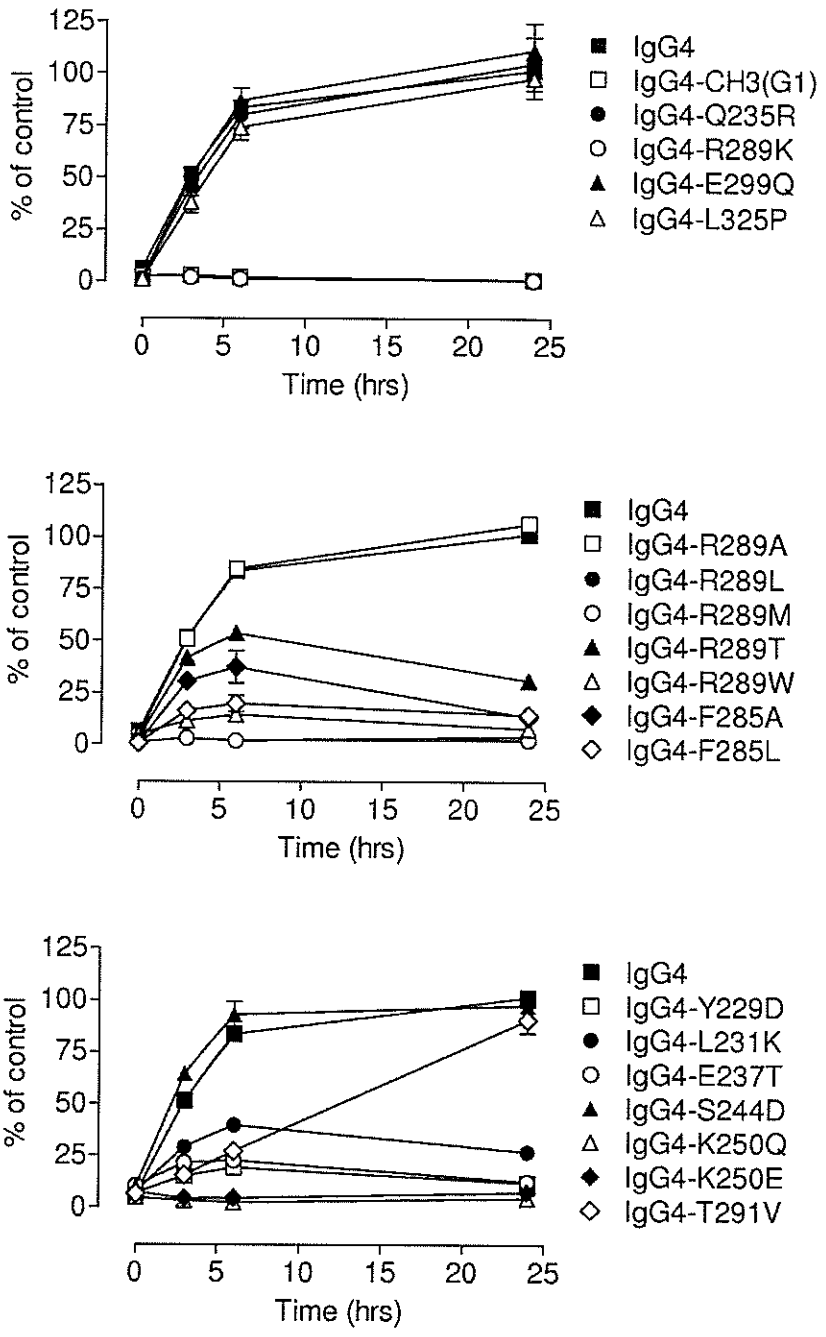

% of control
125
100
75
50
25
0
0 5 10 15 20 25
Time (hrs)
IgG4
IgG4-CH3(G1)
IgG4-Q235R
IgG4-R289K
IgG4-E299Q
IgG4-L325P
% of control
125
100
75
50
25
0
0 5 10 15 20 25
Time (hrs)
IgG4
IgG4-R289A
IgG4-R289L
IgG4-R289M
IgG4-R289T
IgG4-R289W
IgG4-F285A
IgG4-F285L
% of control
125
100
75
50
25
0
0 5 10 15 20 25
Time (hrs)
IgG4
IgG4-Y229D
IgG4-L231K
IgG4-E237T
IgG4-S244D
IgG4-K250Q
IgG4-K250E
IgG4-T291V

FIGURE 17

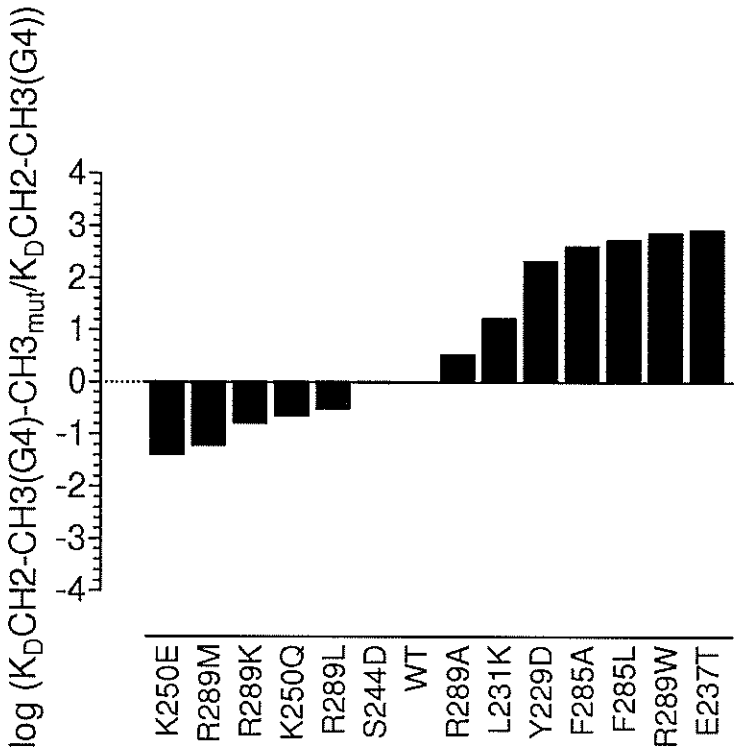

log (K_DCH2-CH3(G4)-$CH3_{mut}$/K_DCH2-CH3(G4))
4
3
2
1
0
-1
-2
-3
-4
K250E
R289M
R289K
K250Q
R289L
S244D
WT
R289A
L231K
Y229D
F285A
F285L
R289W
E237T

FIGURE 18

