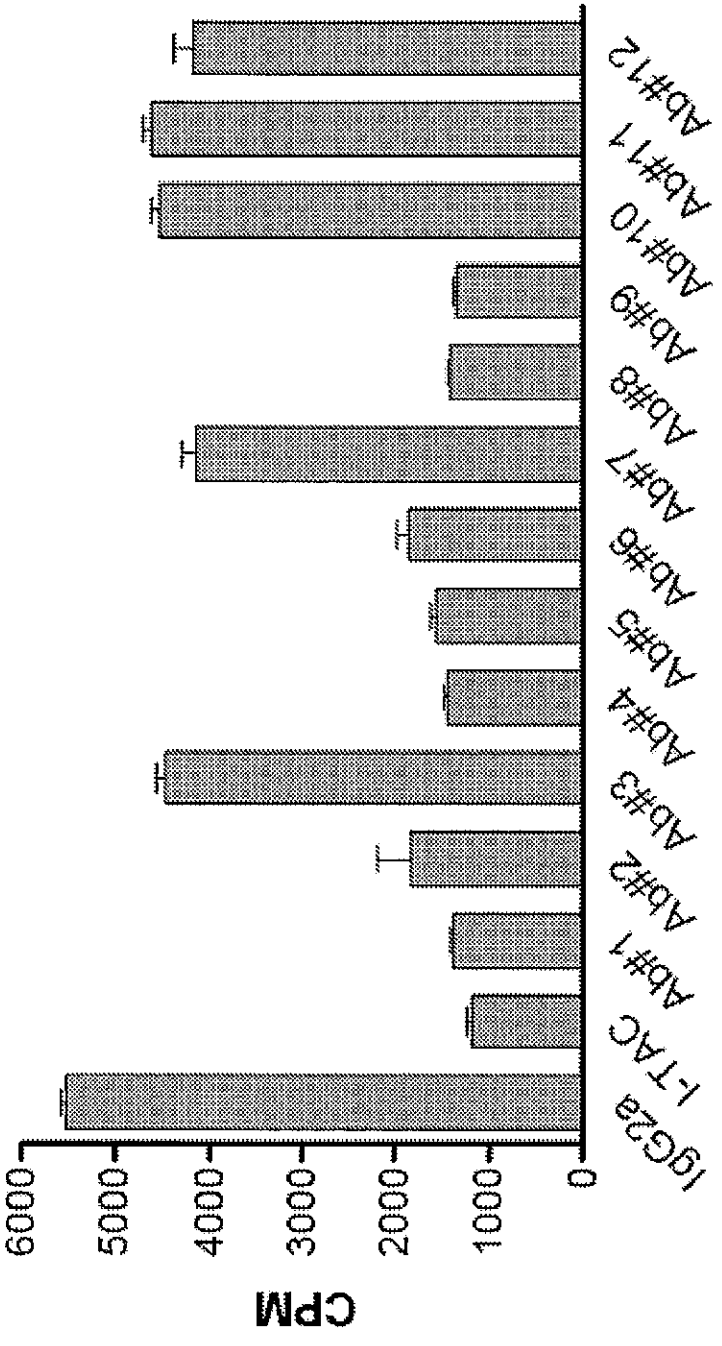

CPM
6000
5000
4000
3000
2000
1000
0
IgG2a
L-TAC
Ab#1
Ab#2
Ab#3
Ab#4
Ab#5
Ab#6
Ab#7
Ab#8
Ab#9
Ab#10
Ab#11
Ab#12

Figure 1.

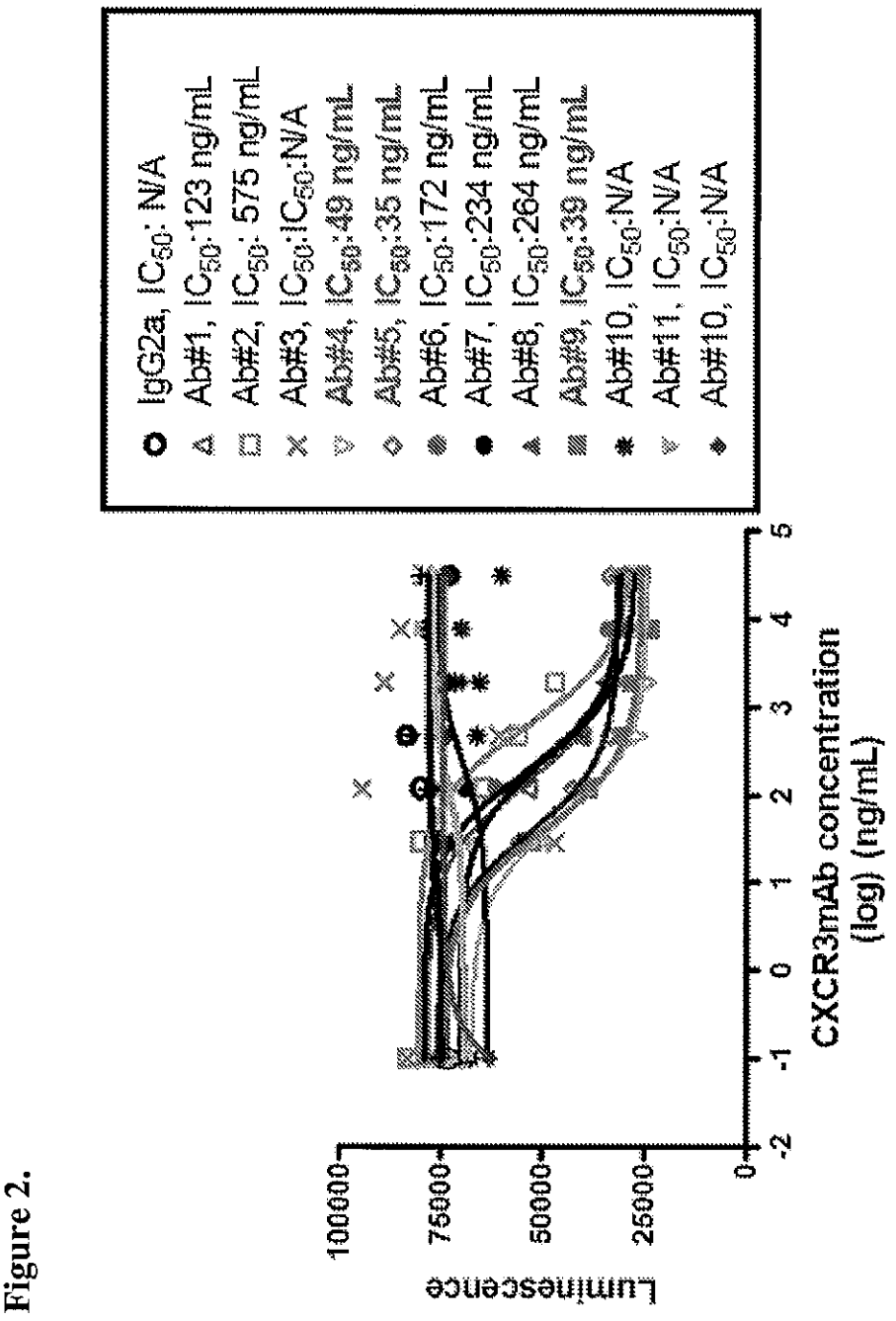
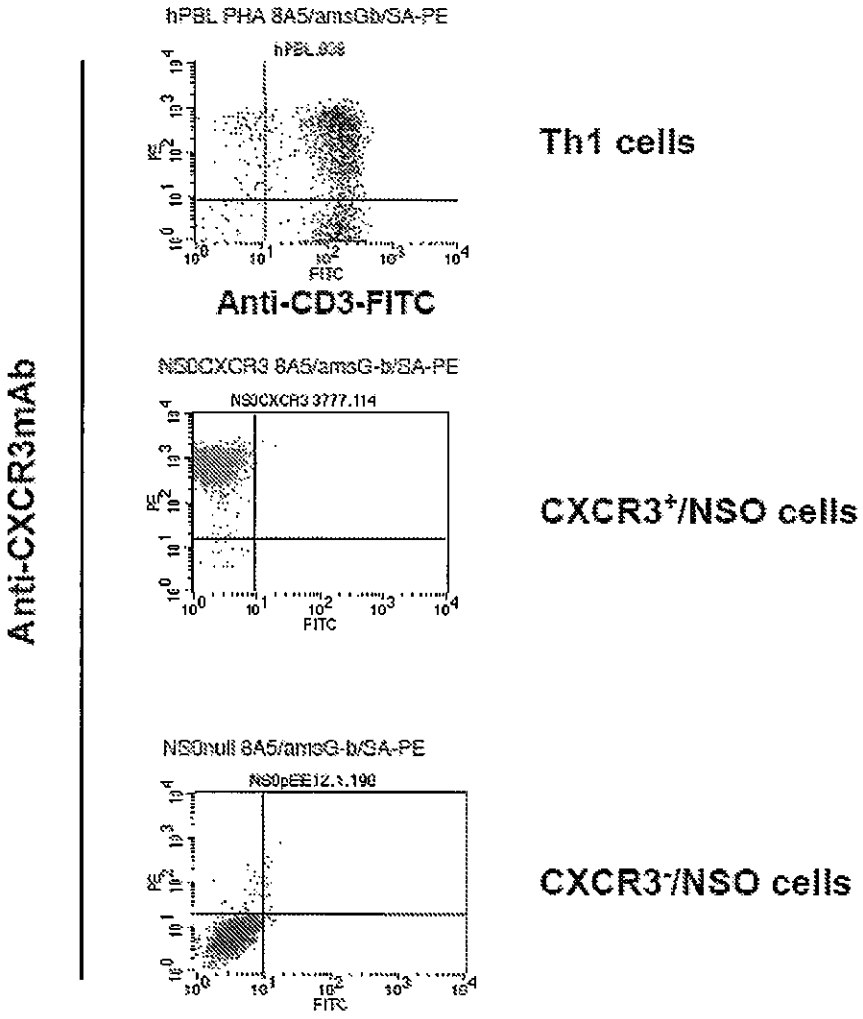

IgG2a, IC50: N/A
Ab#1, IC50:123 ng/mL
Ab#2, IC50: 575 ng/mL
Ab#3, IC50:IC50:N/A
Ab#4, IC50:49 ng/mL
Ab#5, IC50:35 ng/mL
Ab#6, IC50:172 ng/mL
Ab#7, IC50:234 ng/mL
Ab#8, IC50:264 ng/mL
Ab#9, IC50:39 ng/mL
Ab#10, IC50:N/A
Ab#11, IC50:N/A
Ab#10, IC50:N/A
Luminescence
100000
75000
50000
25000
0
-2
-1
0
1
2
3
4
5
CXCR3mAb concentration (log) (ng/mL)

Figure 2.

Figure 3.


hPBL PHA 8A5/amsGb/SA-PE
hPBL.808
PE
FITC
Anti-CD3-FITC
Th1 cells
NS0CXCR3 8A5/amsG-b/SA-PE
NS0CXCR3 3777.114
PE
FITC
CXCR3+/NSO cells
NS0null 8A5/amsG-b/SA-PE
NS0pEE12.1.190
PE
FITC
CXCR3-/NSO cells
Anti-CXCR3mAb

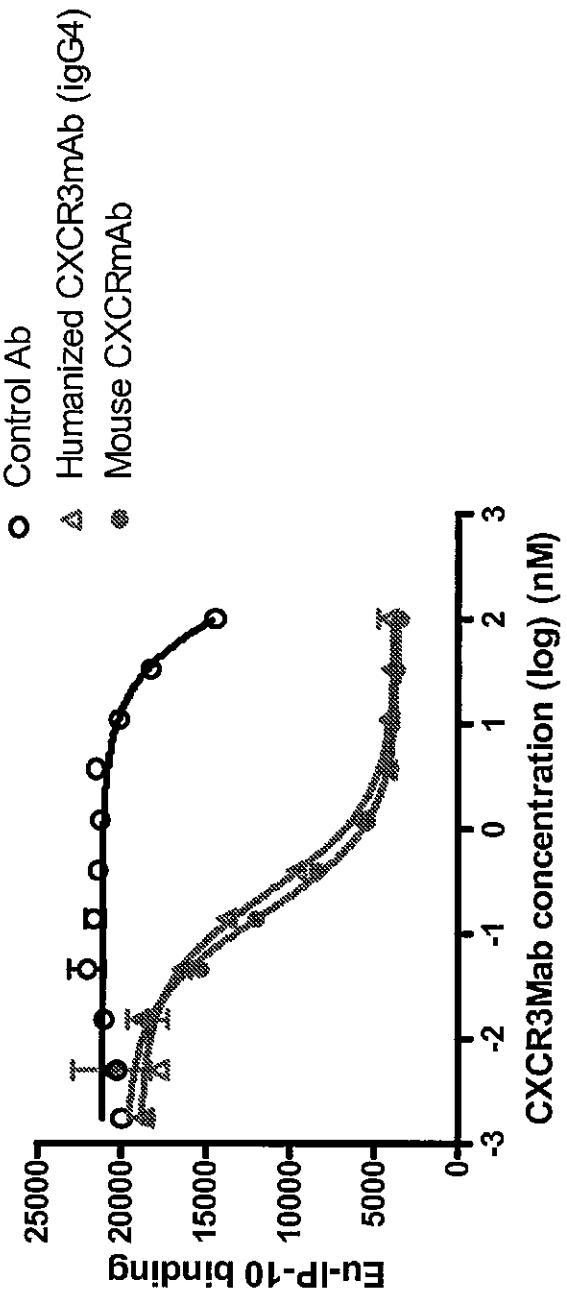

Control Ab
Humanized CXCR3mAb (igG4)
Mouse CXCRmAb
Eu-IP-10 binding
25000
20000
15000
10000
5000
0
-3
-2
-1
0
1
2
3
CXCR3Mab concentration (log) (nM)

Figure 4.

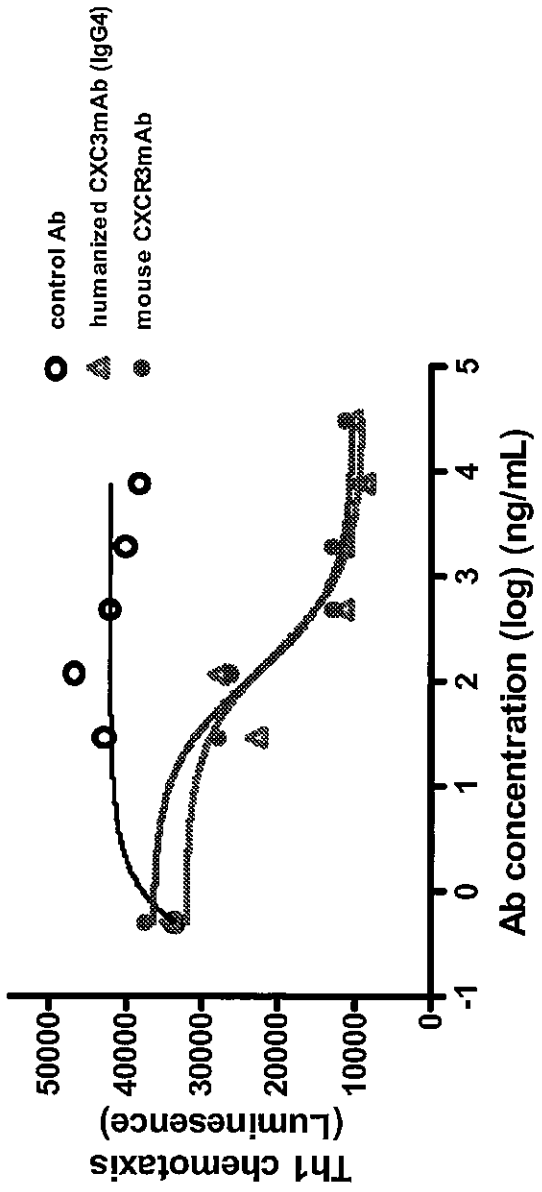

control Ab
humanized CXC3mAb (IgG4)
mouse CXCR3mAb
Th1 chemotaxis
(Luminesence)
50000
40000
30000
20000
10000
0
-1
0
1
2
3
4
5
Ab concentration (log) (ng/mL)

Figure 5.

Figure 6.

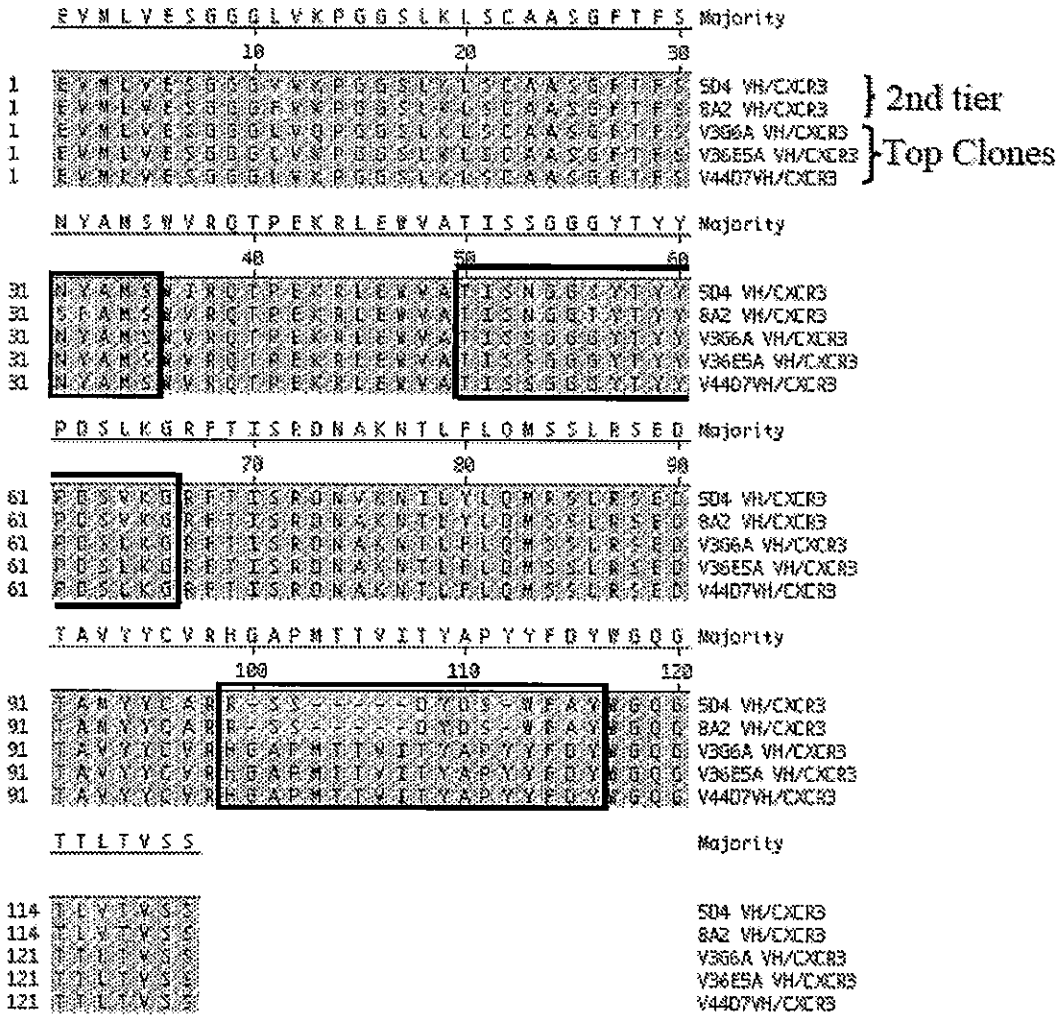

2nd tier
Top Clones
SD4 VH/CXCR3
8A2 VH/CXCR3
V3G6A VH/CXCR3
V3G6E5A VH/CXCR3
V44D7VH/CXCR3
Majority

Figure 7.

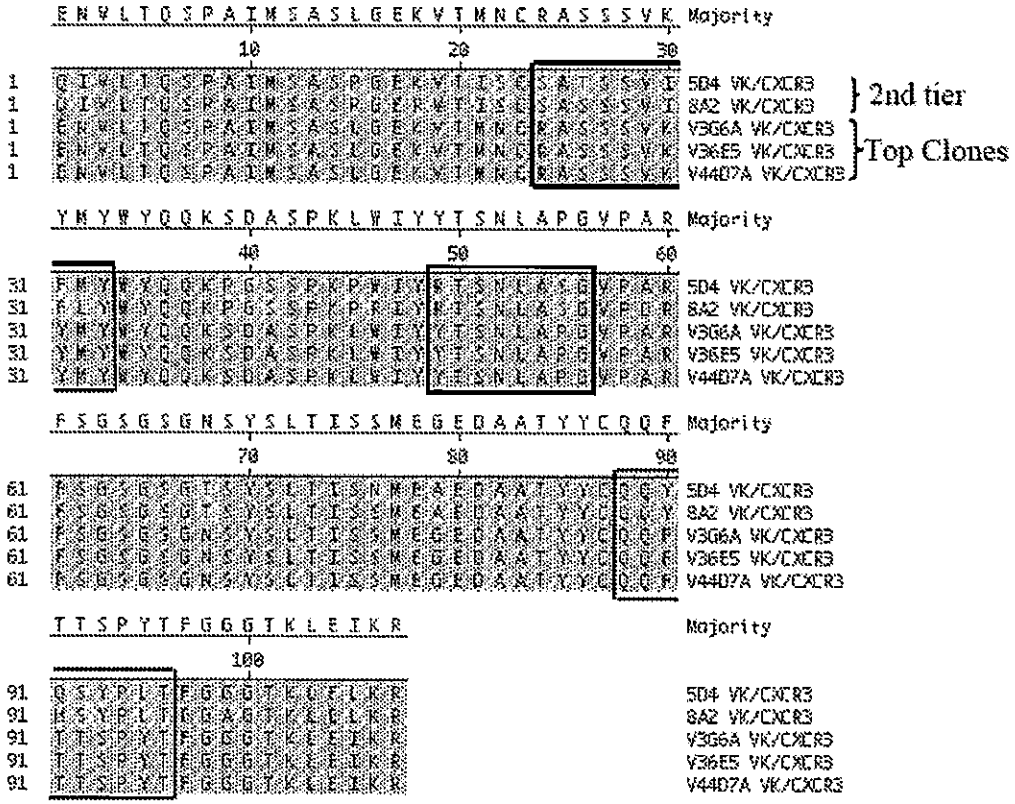

Majority
5D4 VK/CXCR3
8A2 VK/CXCR3
V3G6A VK/CXCR3
V36E5 VK/CXCR3
V44D7A VK/CXCR3
2nd tier
Top Clones

Figure 8.

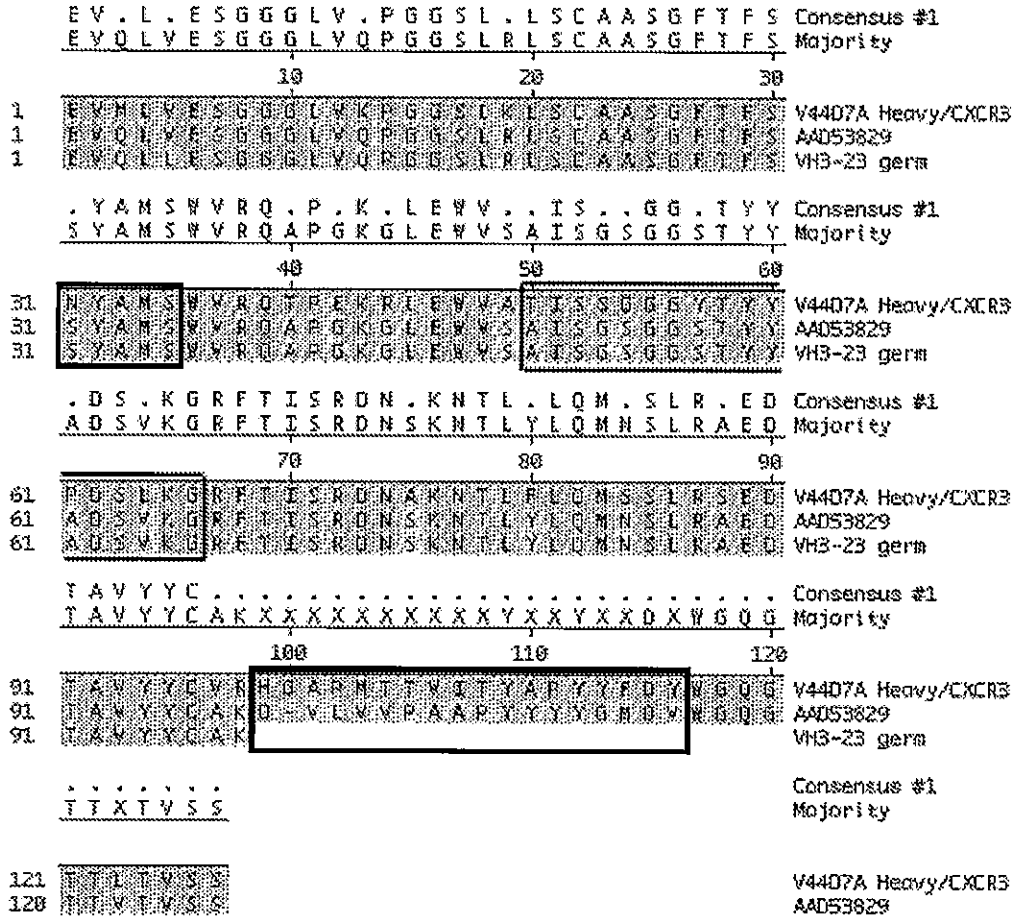

Consensus #1
Majority
V44D7A Heavy/CXCR3
AAD53829
VH3-23 germ
10
20
30
40
50
60
70
80
90
100
110
120

Figure 9.

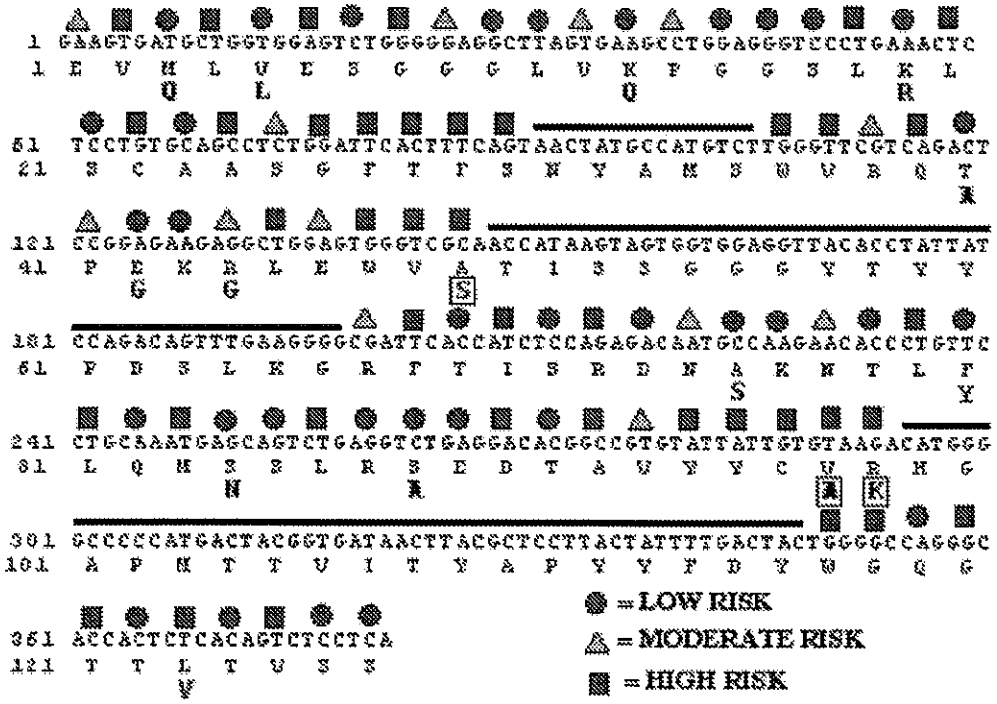


Figure 10.

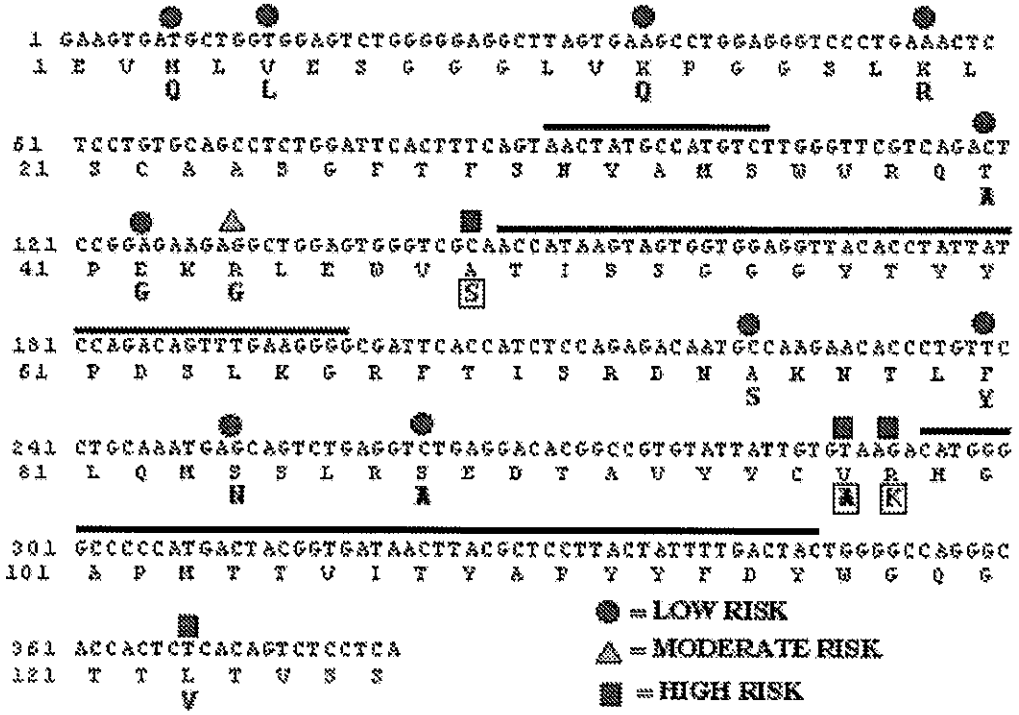


Figure 11.

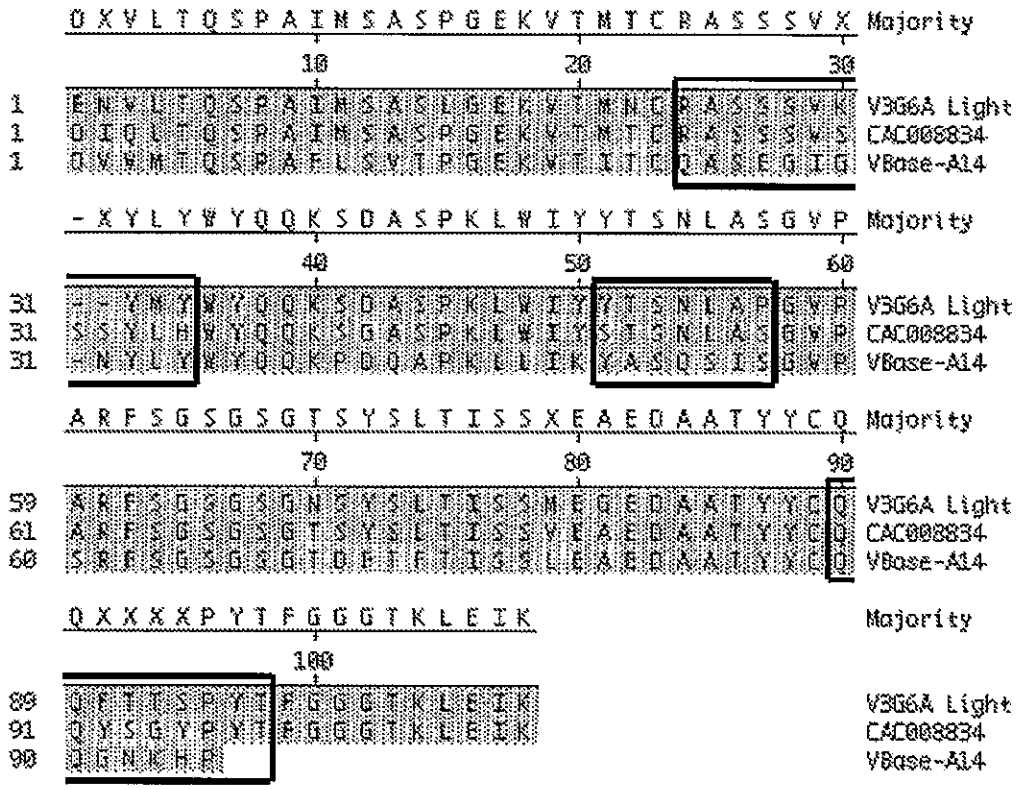


Figure 12.

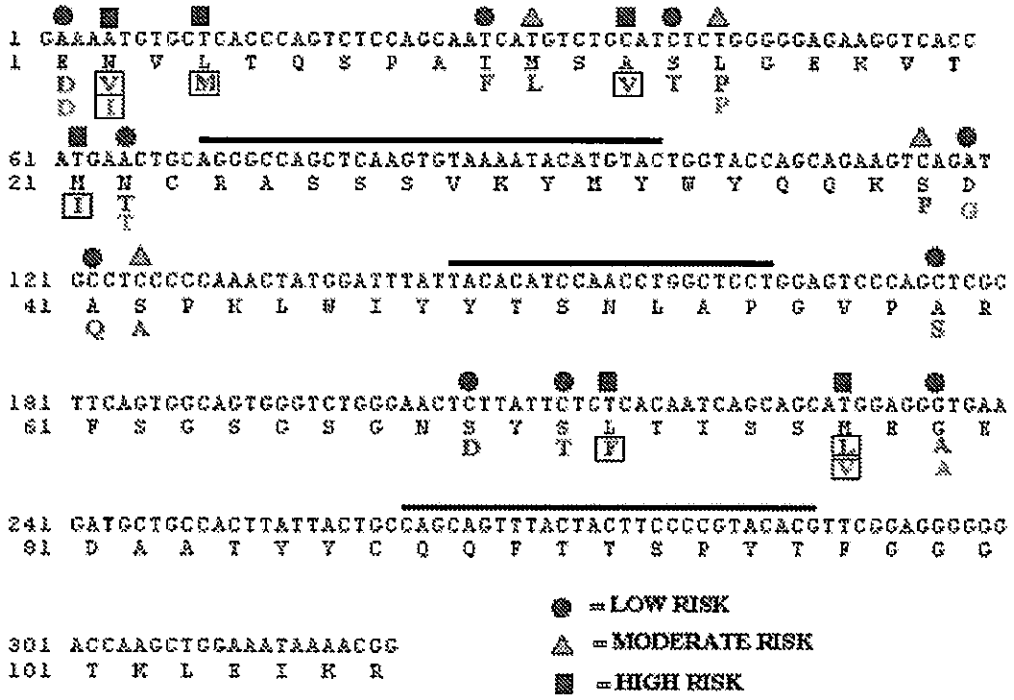
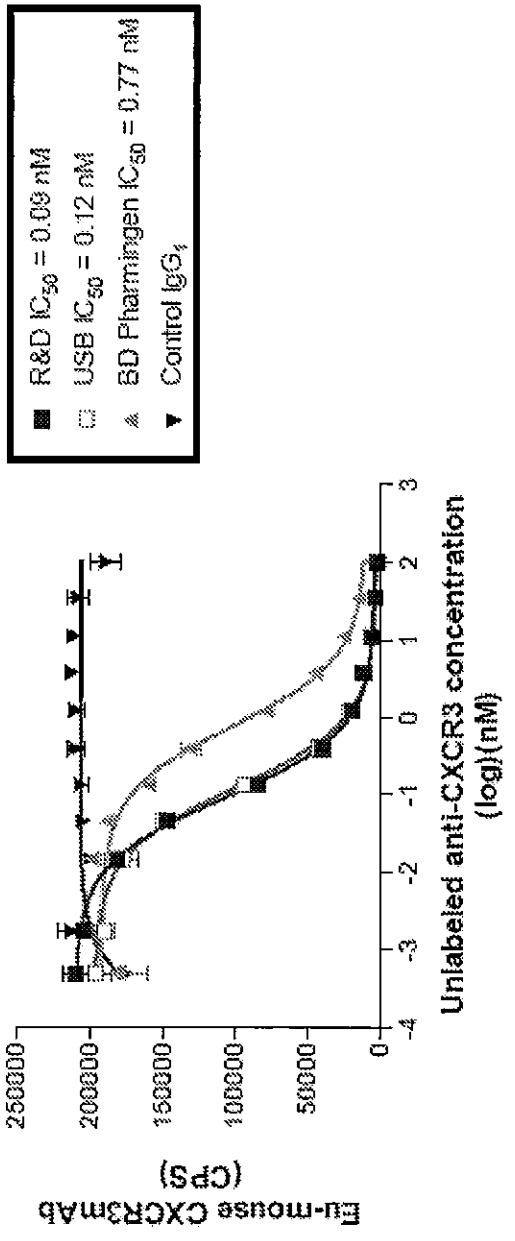


Figure 13.


R&D IC_{50} = 0.09 nM
USB IC_{50} = 0.12 nM
BD Pharmingen IC_{50} = 0.77 nM
Control IgG_1
Eu-mouse CXCR3mAb (CPS)
250000
200000
150000
100000
50000
0
-4
-3
-2
-1
0
1
2
3
Unlabeled anti-CXCR3 concentration (log)(nM)

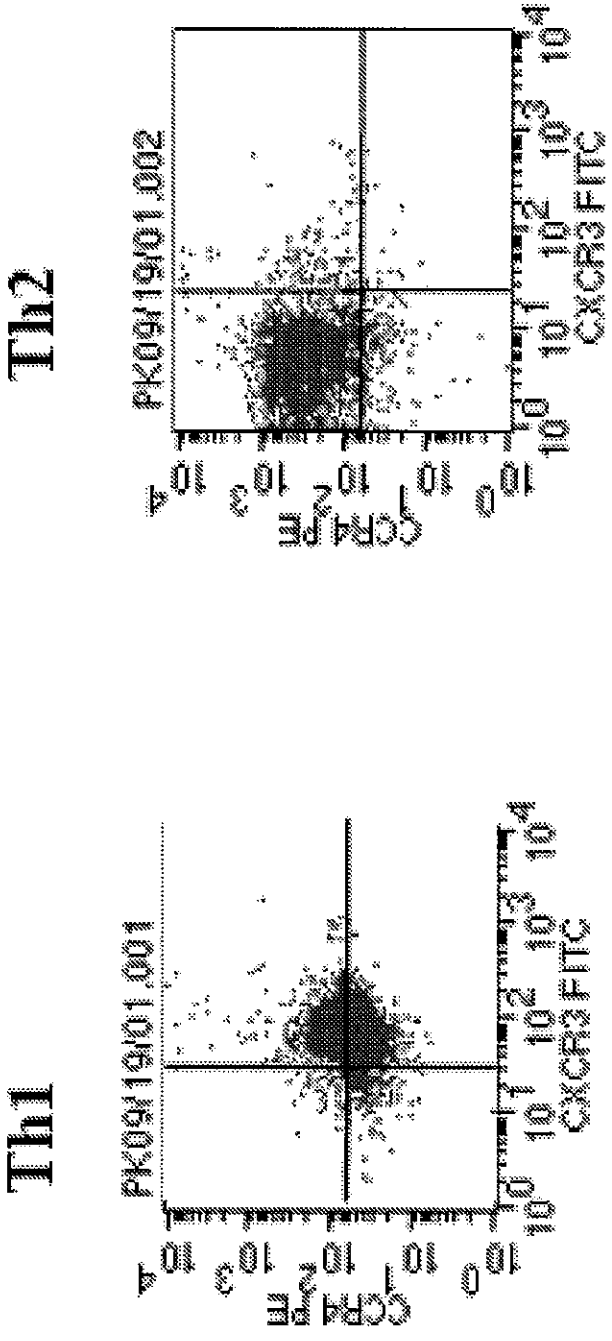
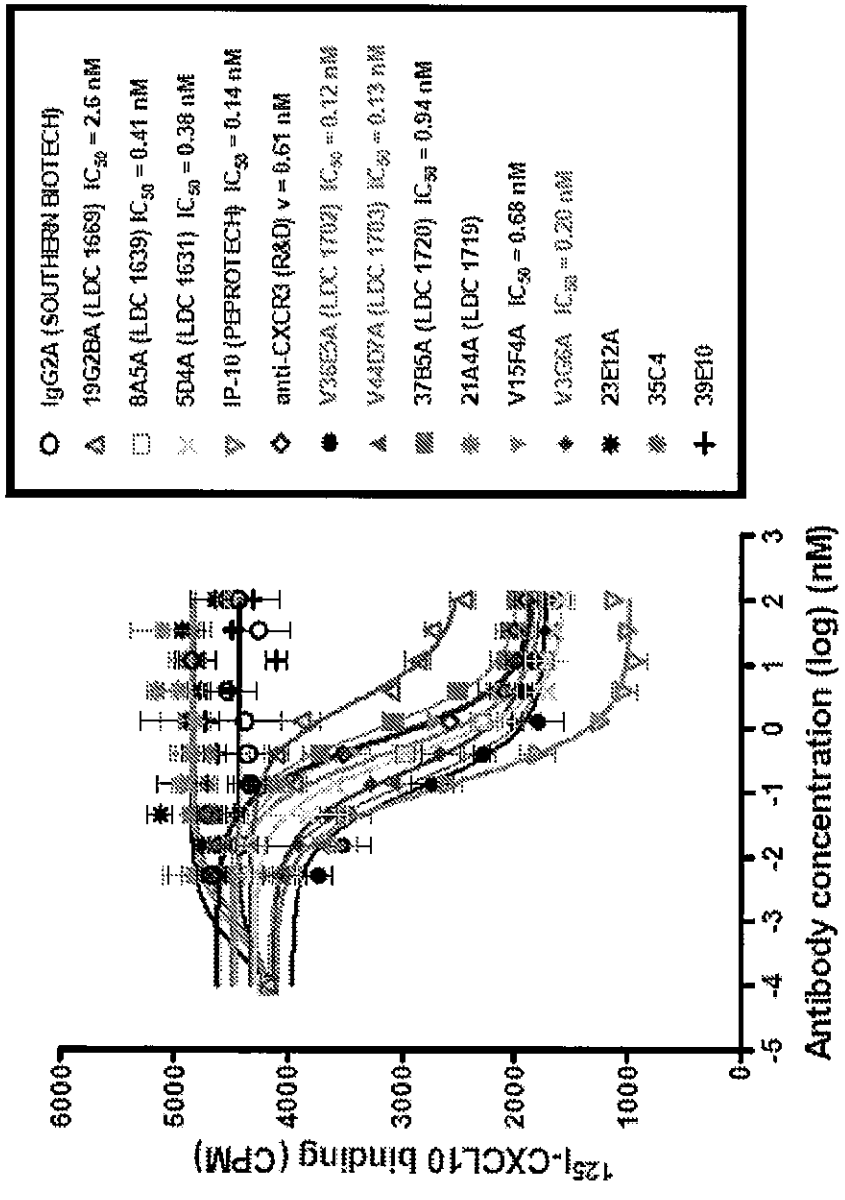

Th2
PK09419001.002
CCR4 PE
CXCR3 FITC
Th1
PK09419001.001
CCR4 PE
CXCR3 FITC

Figure 14.

Figure 15.


IgG2A (SOUTHERN BIOTECH)
19G2BA (LDC 1669) IC50 = 2.6 nM
8A5A (LDC 1639) IC50 = 0.41 nM
5D4A (LDC 1631) IC50 = 0.38 nM
IP-10 (PEPROTECH) IC50 = 0.14 nM
anti-CXCR3 (R&D) v = 0.61 nM
V35E5A (LDC 1702) IC50 = 0.12 nM
V44D7A (LDC 1703) IC50 = 0.13 nM
37B5A (LDC 1720) IC50 = 0.94 nM
21A4A (LDC 1719)
V15F4A IC50 = 0.68 nM
V35C5A IC50 = 0.20 nM
23E12A
35C4
39E10
125I-CXCL10 binding (CPM)
6000
5000
4000
3000
2000
1000
0
-5
-4
-3
-2
-1
0
1
2
3
Antibody concentration (log) (nM)

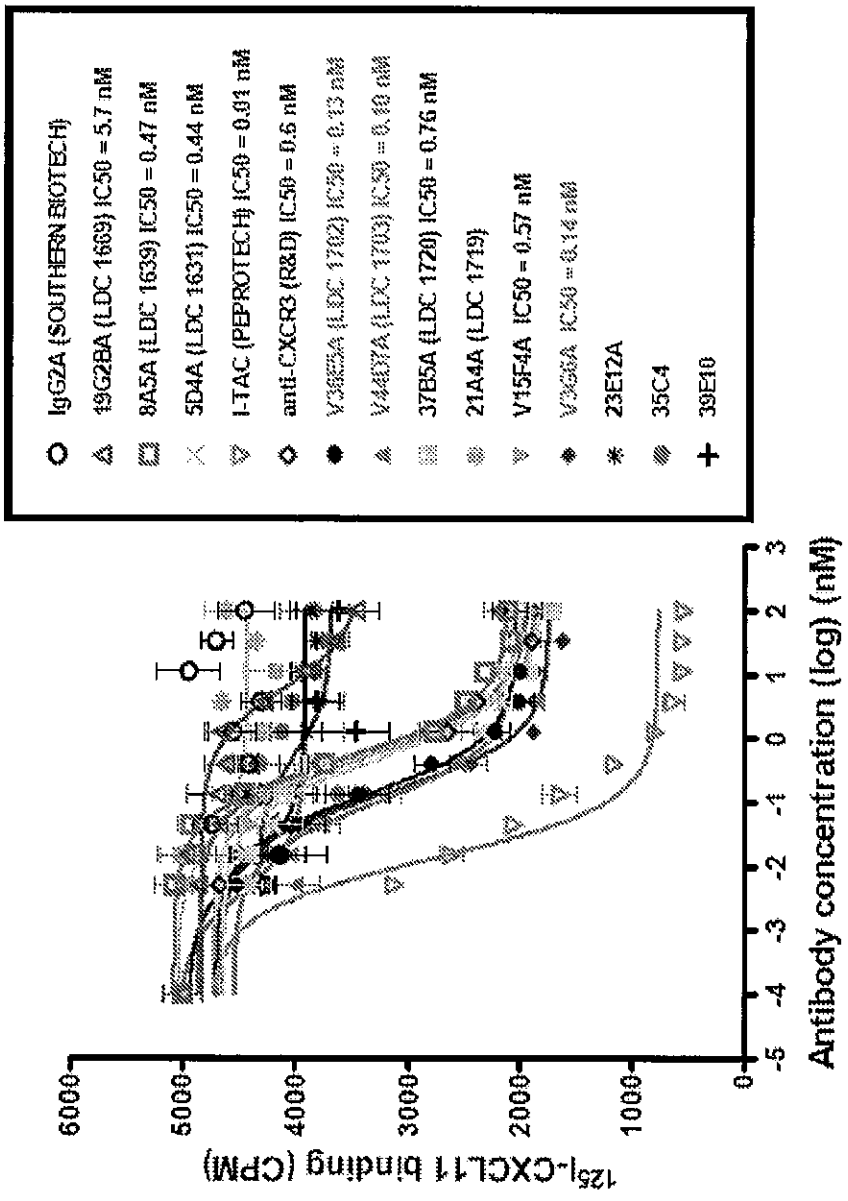

IgG2A (SOUTHERN BIOTECH)
19G2BA (LDC 1669) IC50 = 5.7 nM
8A5A (LDC 1639) IC50 = 0.47 nM
5D4A (LDC 1631) IC50 = 0.44 nM
I-TAC (PEPROTECH) IC50 = 0.01 nM
anti-CXCR3 (R&D) IC50 = 0.6 nM
V3525A (LDC 1702) IC50 = 0.13 nM
V4497A (LDC 1703) IC50 = 0.10 nM
37B5A (LDC 1720) IC50 = 0.76 nM
21A4A (LDC 1719)
V1554A IC50 = 0.57 nM
V3560A IC50 = 0.14 nM
23E12A
35C4
39E10
6000
5000
4000
3000
2000
1000
0
-5 -4 -3 -2 -1 0 1 2 3
Antibody concentration (log) (nM)
125I-CXCL11 binding (CPM)

Figure 16.

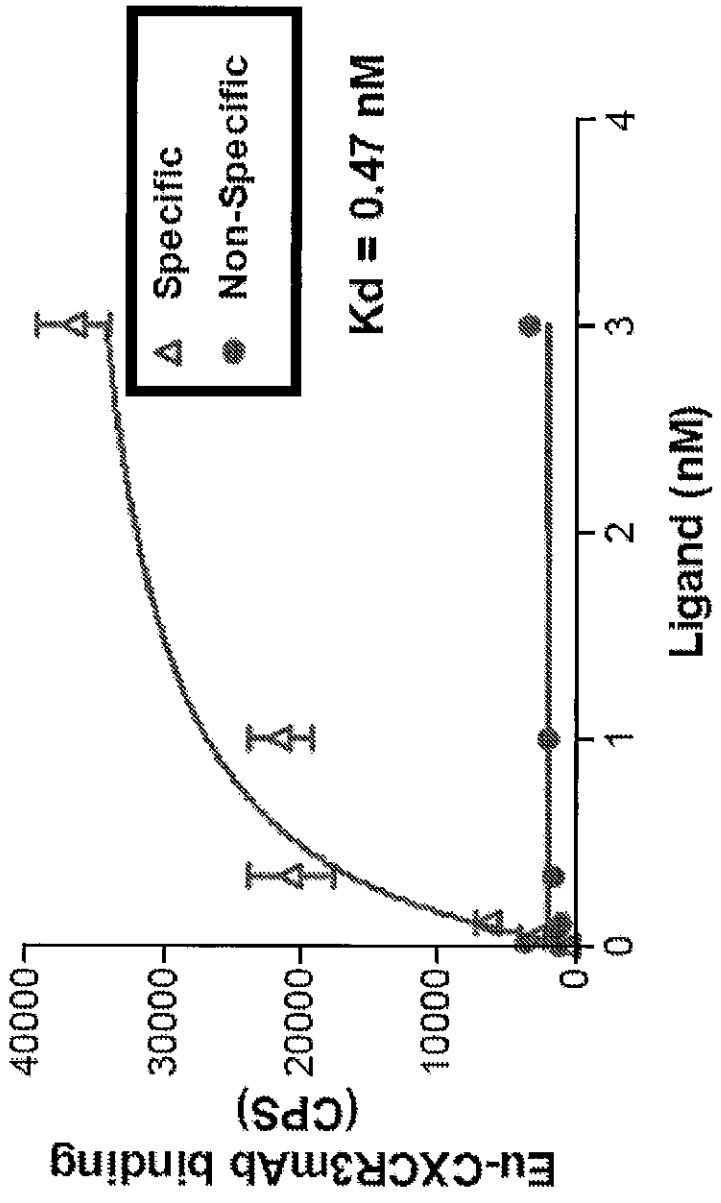
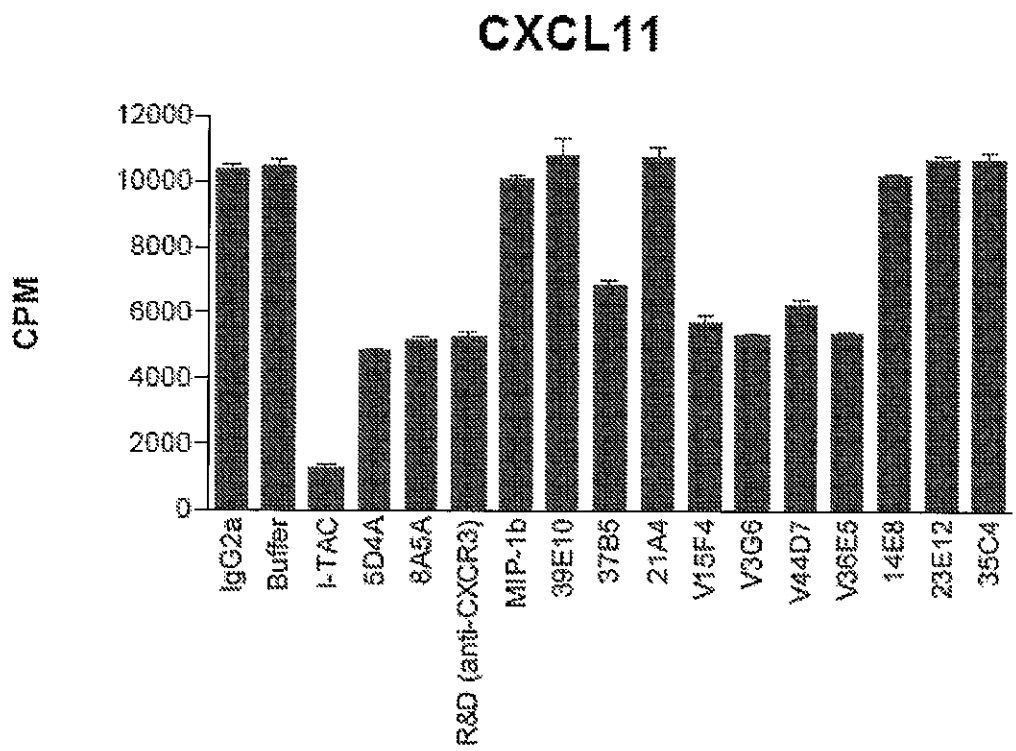

Eu-CXCR3mAb binding
(CPS)
40000
30000
20000
10000
0
0
1
2
3
4
Ligand (nM)
Kd = 0.47 nM
Specific
Non-Specific

Figure 17.

Figure 18.


CXCL11
CPM
12000
10000
8000
6000
4000
2000
0
IgG2a
Buffer
I-TAC
5D4A
8A5A
R&D (anti-CXCR3)
MIP-1b
39E10
37B5
21A4
V15F4
V3G6
V44D7
V36E5
14E8
23E12
35C4

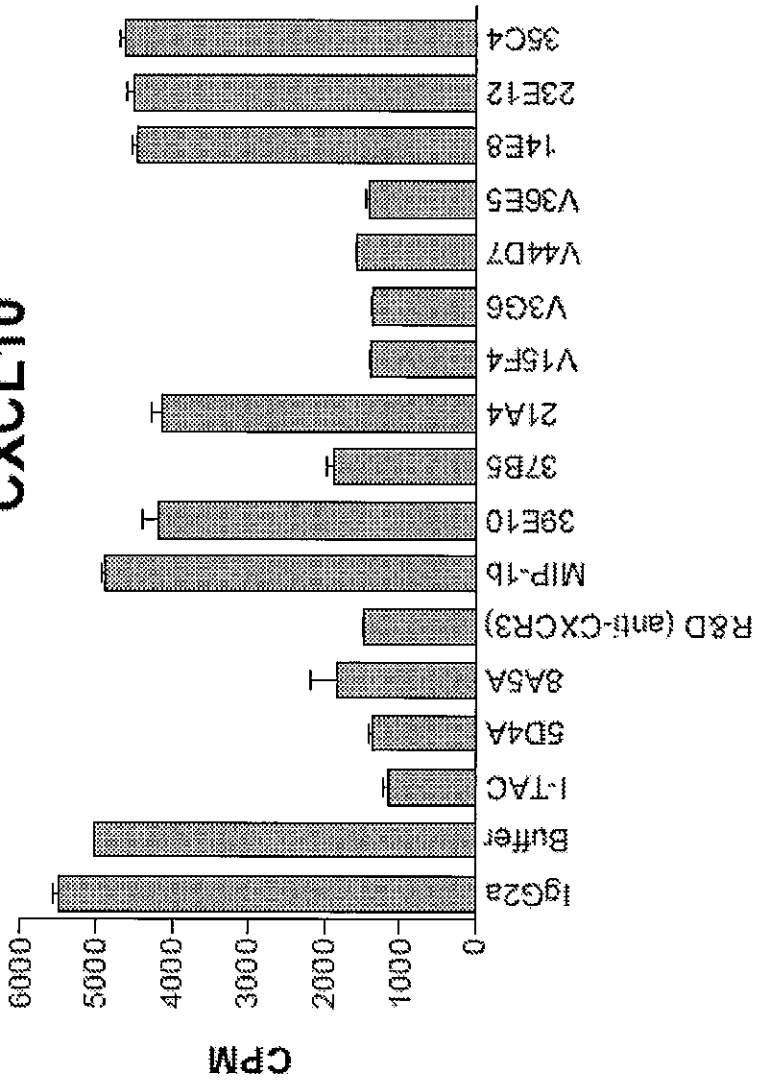

CXCL10
CPM
6000
5000
4000
3000
2000
1000
0
IgG2a
Buffer
I-TAC
5D4A
8A5A
R&D (anti-CXCR3)
MIP-1b
39E10
37B5
21A4
V15F4
V3G6
V44D7
V36E5
14E8
23E12
35C4

Figure 19.

Figure 20.

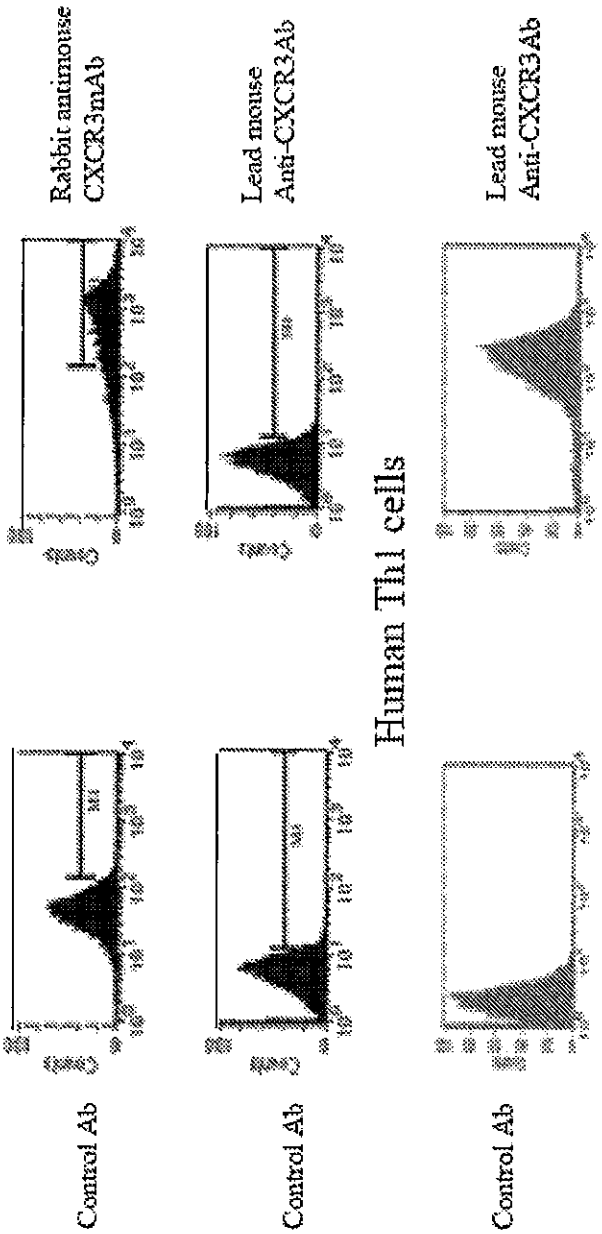
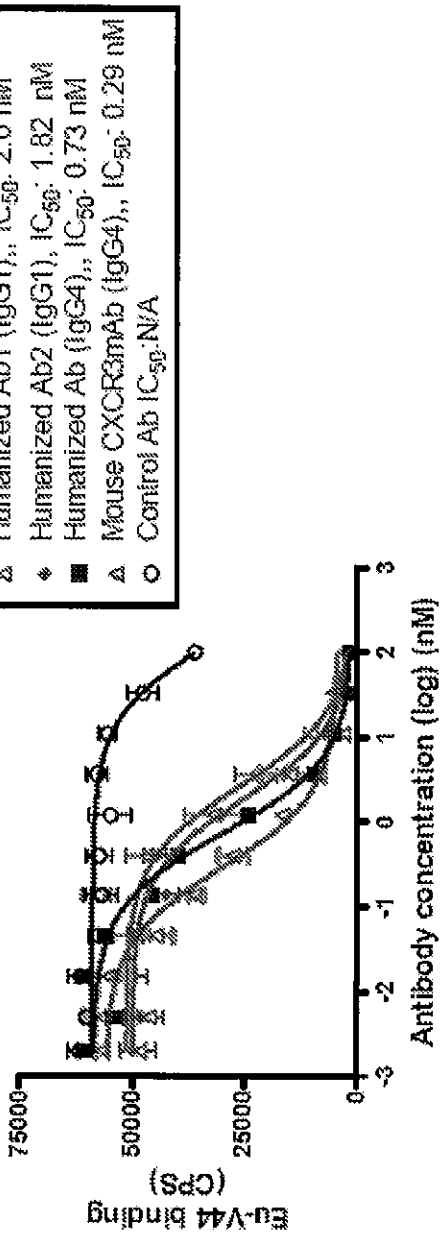

Rat Th1 cells
Human Th1 cells
Control Ab
Rabbit antimouse CXCR3mAb
Control Ab
Lead mouse Anti-CXCR3Ab
Control Ab
Lead mouse Anti-CXCR3Ab

Figure 21.


Humanized Ab1 (IgG1),, IC50: 2.6 nM
Humanized Ab2 (IgG1), IC50: 1.82 nM
Humanized Ab (IgG4),, IC50: 0.73 nM
Mouse CXCR3mAb (IgG4),, IC50: 0.29 nM
Control Ab IC50:N/A
Eu-V44 binding (CPS)
75000
50000
25000
0
-3
-2
-1
0
1
2
3
Antibody concentration (log) (nM)

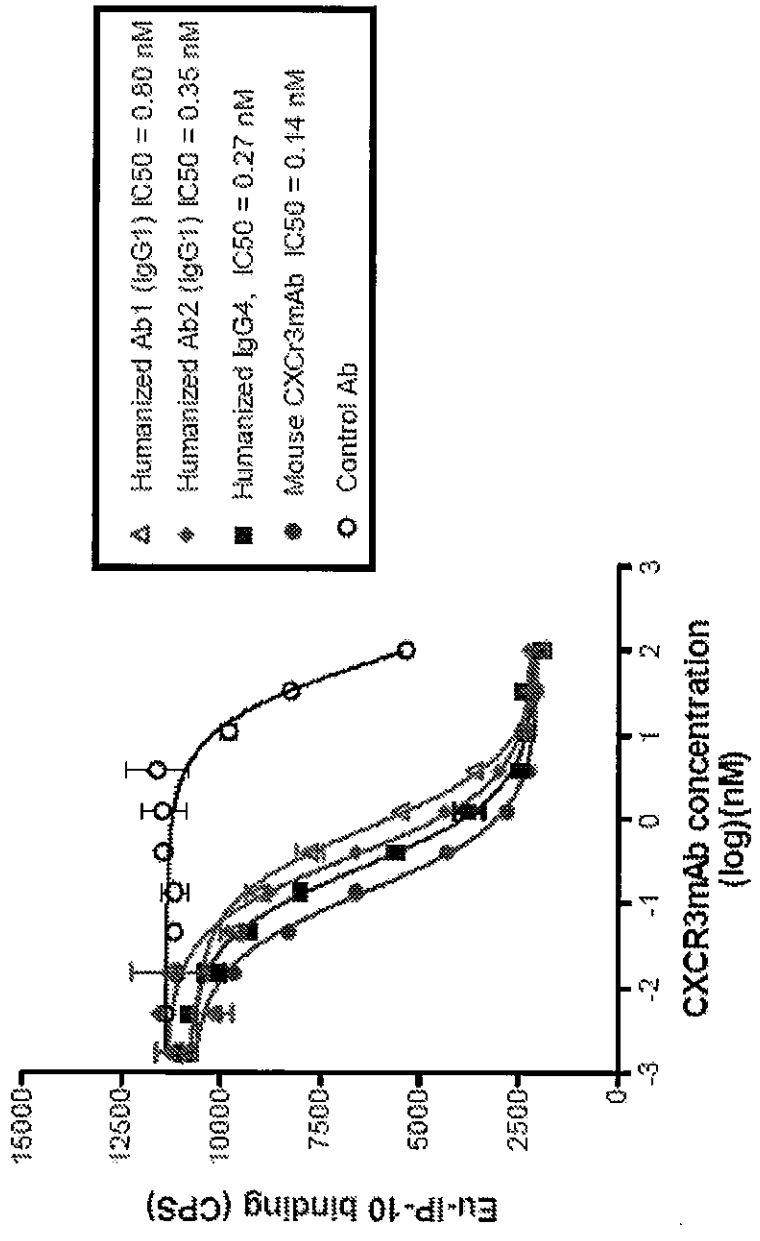
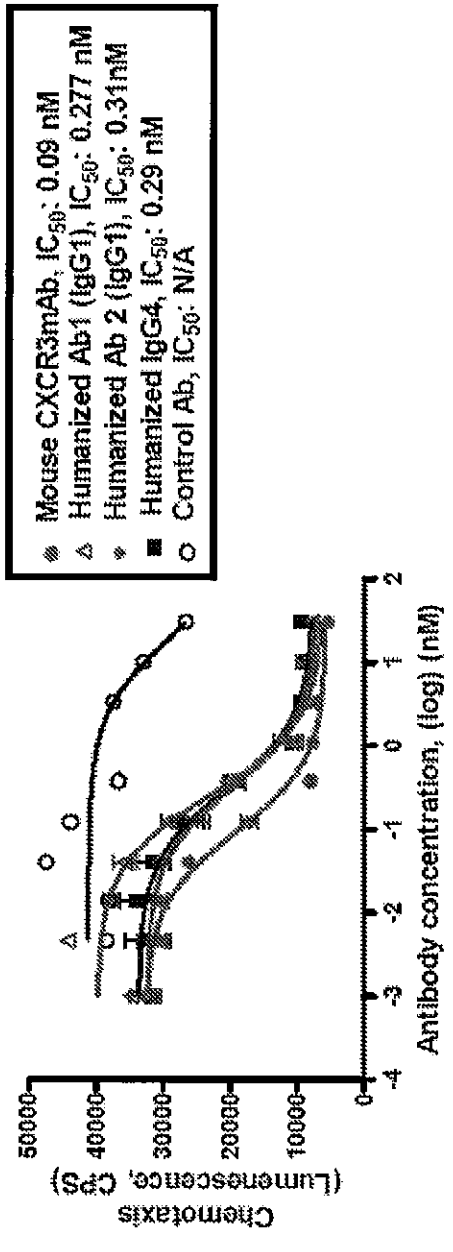

Humanized Ab1 (IgG1) IC50 = 0.80 nM
Humanized Ab2 (IgG1) IC50 = 0.35 nM
Humanized IgG4, IC50 = 0.27 nM
Mouse CXCr3mAb IC50 = 0.14 nM
Control Ab
Eu-IP-10 binding (CPS)
15000
12500
10000
7500
5000
2500
0
-3
-2
-1
0
1
2
3
CXCR3mAb concentration (log)(nM)

Figure 22.

Figure 23.


Mouse CXCR3mAb, IC50: 0.09 nM
Humanized Ab1 (IgG1), IC50: 0.277 nM
Humanized Ab 2 (IgG1), IC50: 0.31nM
Humanized IgG4, IC50: 0.29 nM
Control Ab, IC50: N/A
Chemotaxis (Luminescence, CPS)
50000
40000
30000
20000
10000
0
-4
-3
-2
-1
0
1
2
Antibody concentration, (log) (nM)

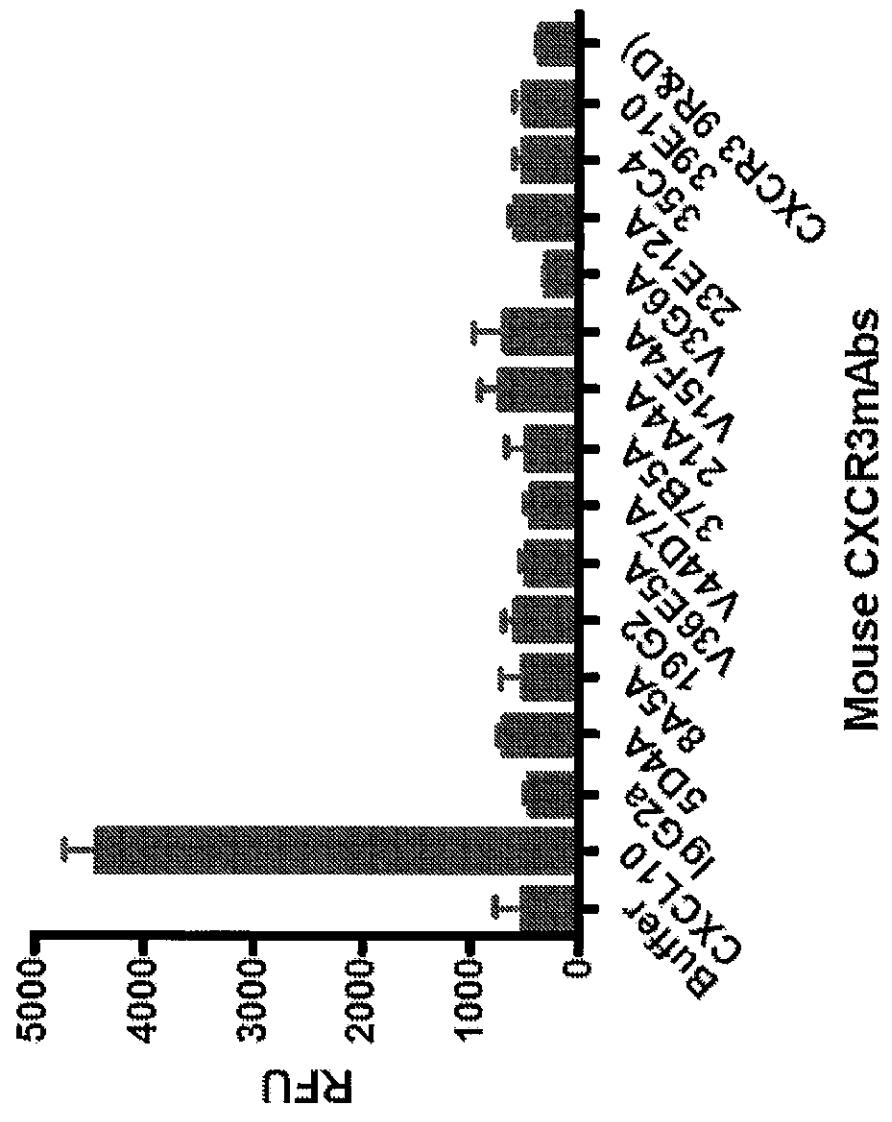

RFU
5000
4000
3000
2000
1000
0
Buffer
CXCL10
IgG2a
5DA4
8A5A
19G2
V36E5A
V4AD7A
37B5A
21A4A
V15FAA
V3G6A
23E12A
35CA
39E10
CXCR3 9R&D
Mouse CXCR3mAbs

Figure 24.