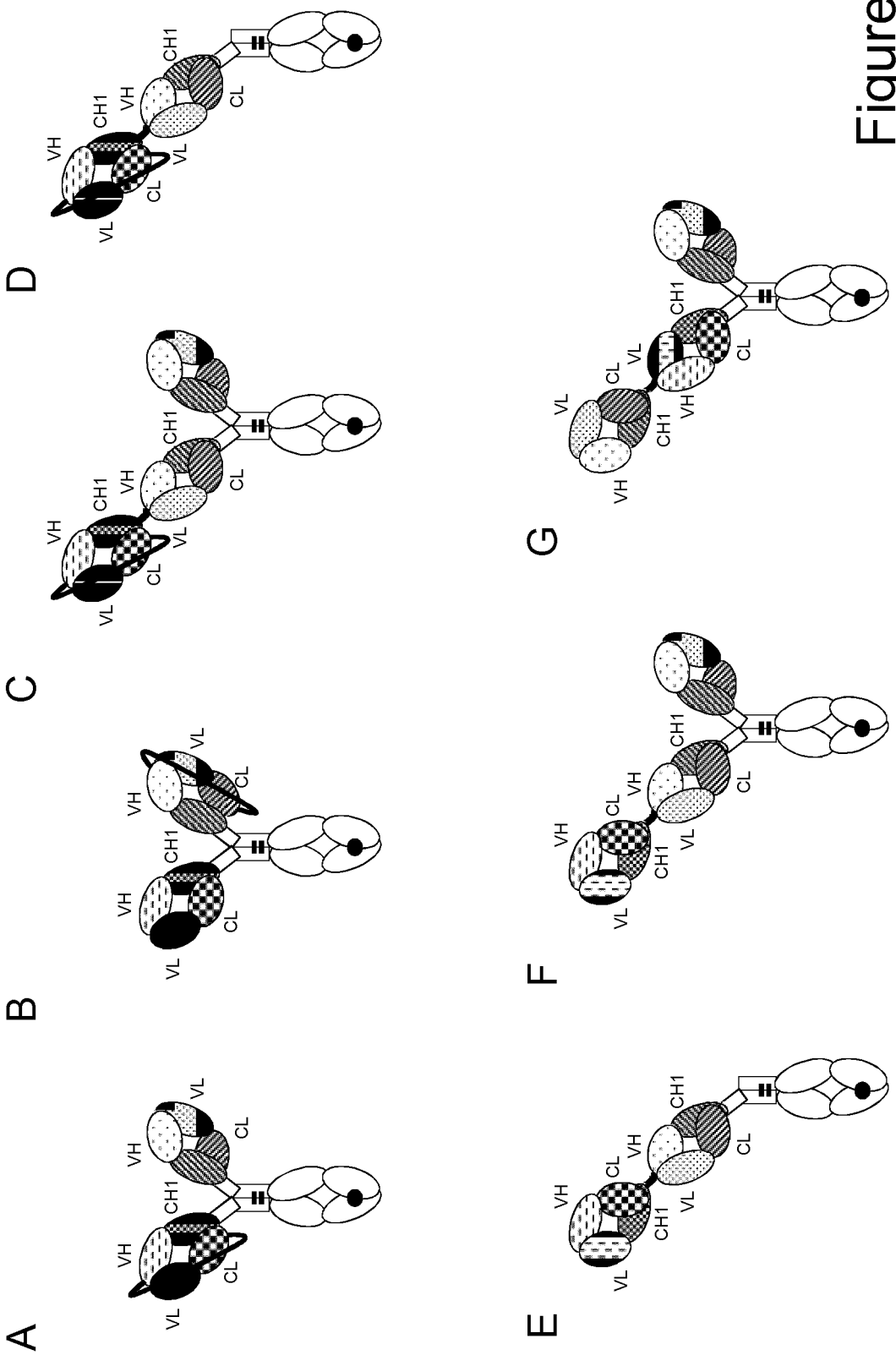
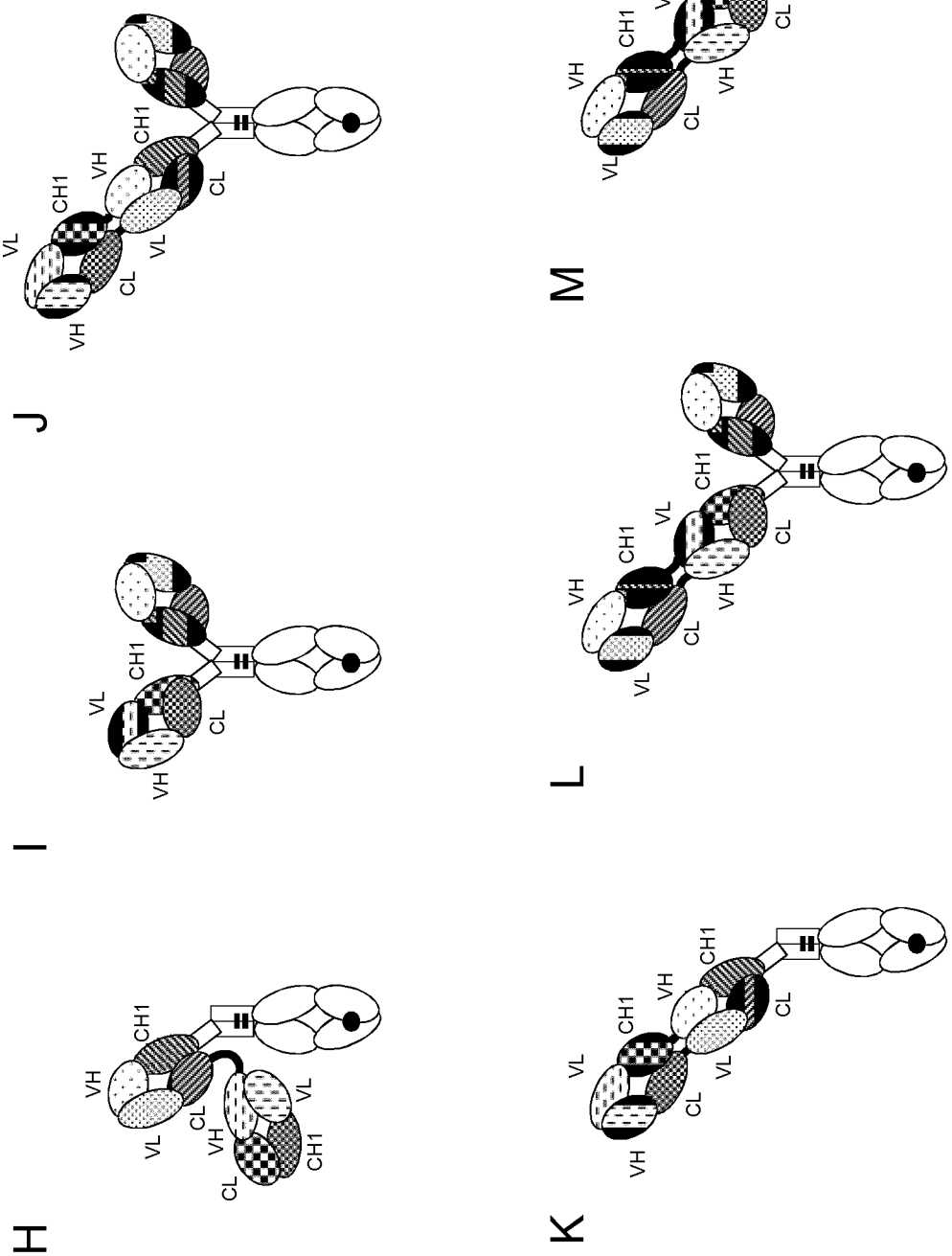

A
VH
VL
CH1
CL
B
VH
VL
CH1
CL
C
VH
VL
CH1
CL
D
VH
VL
CH1
CL
E
VH
VL
CH1
CL
F
VH
VL
CH1
CL
G
VH
VL
CH1
CL

Figure 1

Figure 1


H
VH
CH1
VL
CL
VH
VL
CL
CH1
I
VL
CH1
VH
CL
J
VL
CH1
VH
CL
VH
CH1
VL
CL
K
VL
CH1
VH
CL
VL
VH
CH1
CL
L
VH
CH1
VL
CL
VH
VL
CH1
CL
M
VH
CH1
VL
CL
VH
VL
CH1
CL

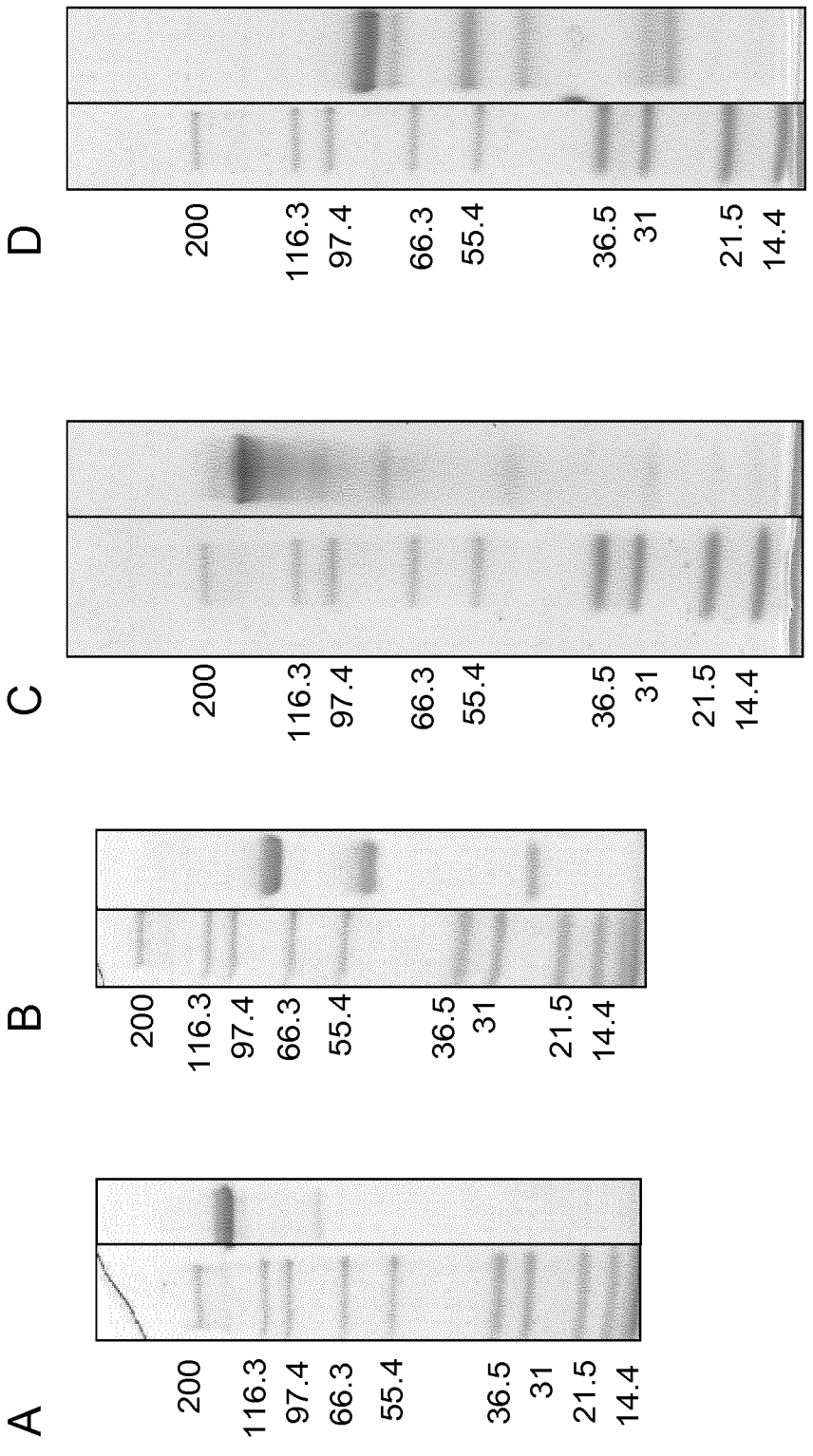
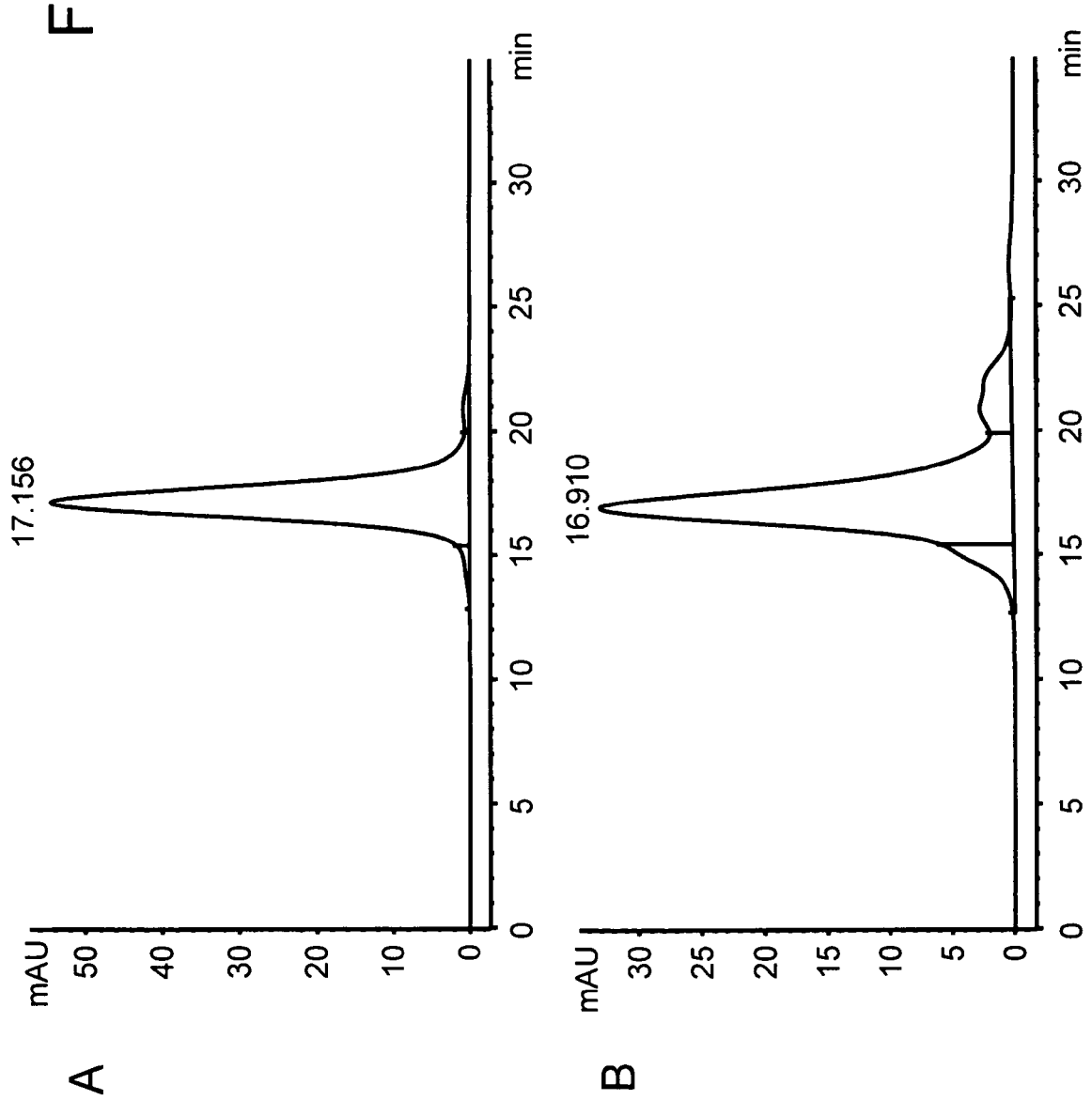


Figure 2

Figure 3


A
mAU
50
40
30
20
10
0
17.156
0
5
10
15
20
25
30
min
B
mAU
30
25
20
15
10
5
0
16.910
0
5
10
15
20
25
30
min

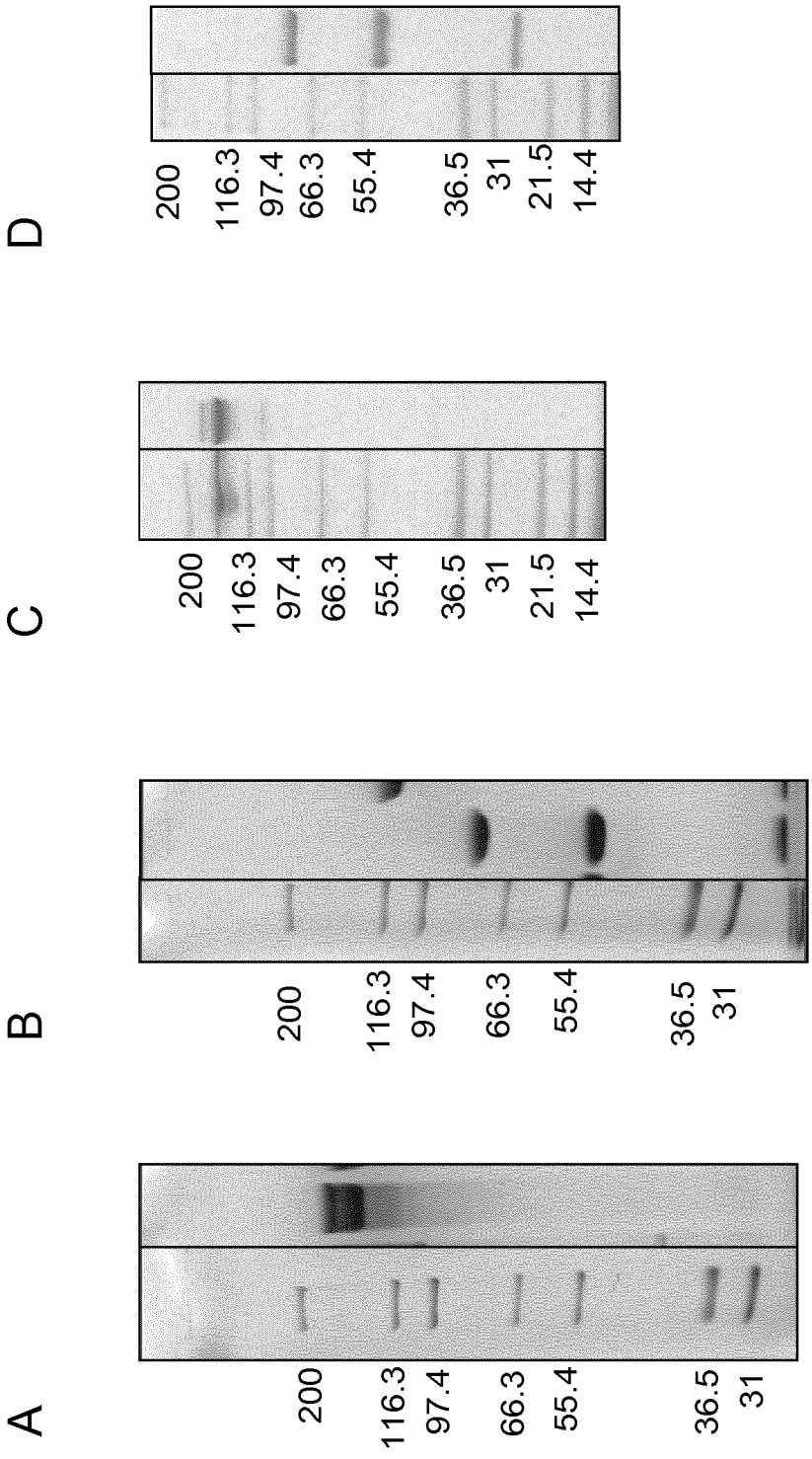

A
200
116.3
97.4
66.3
55.4
36.5
31
B
200
116.3
97.4
66.3
55.4
36.5
31
C
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
D
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4

Figure 4

Figure 5

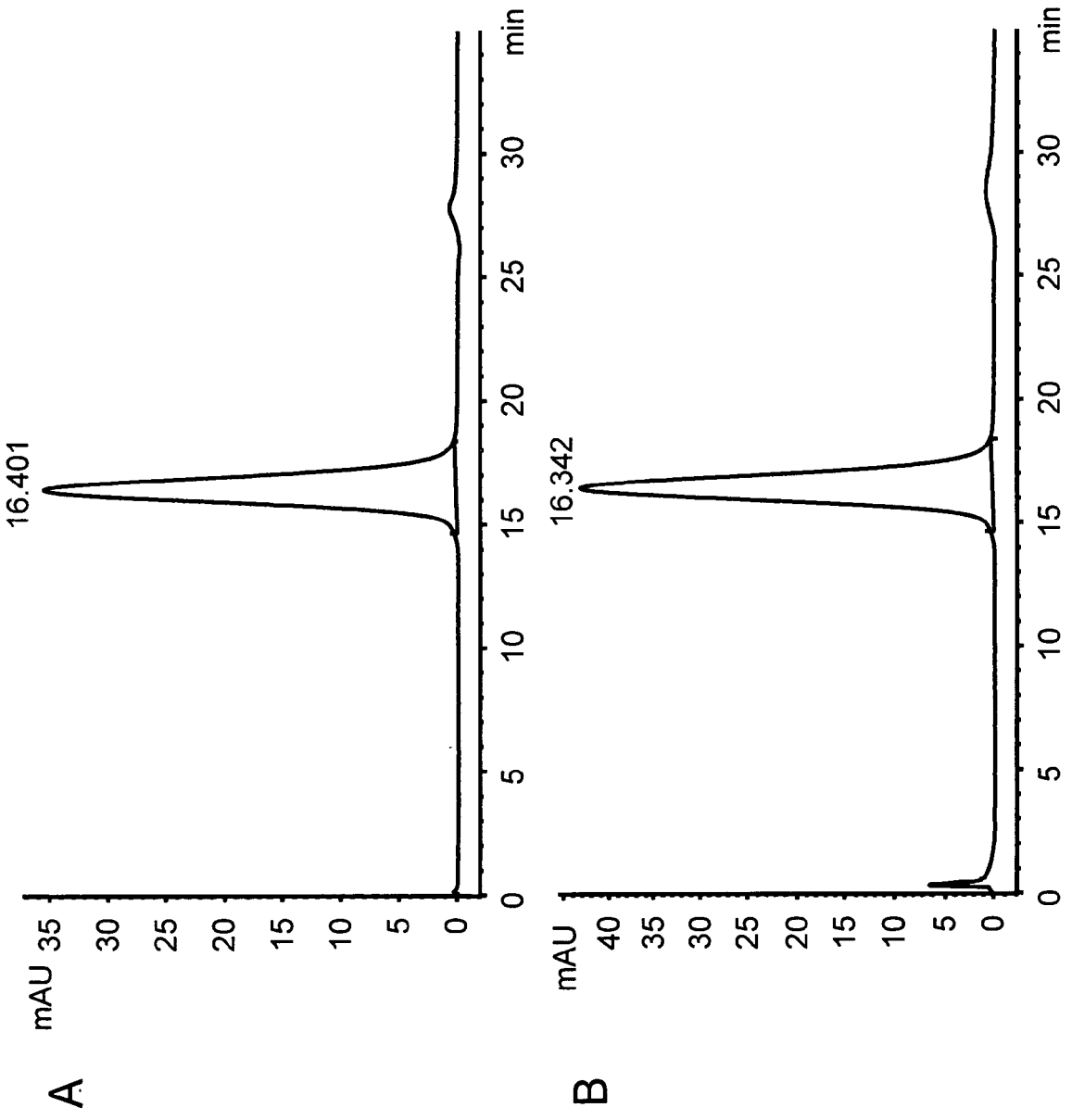
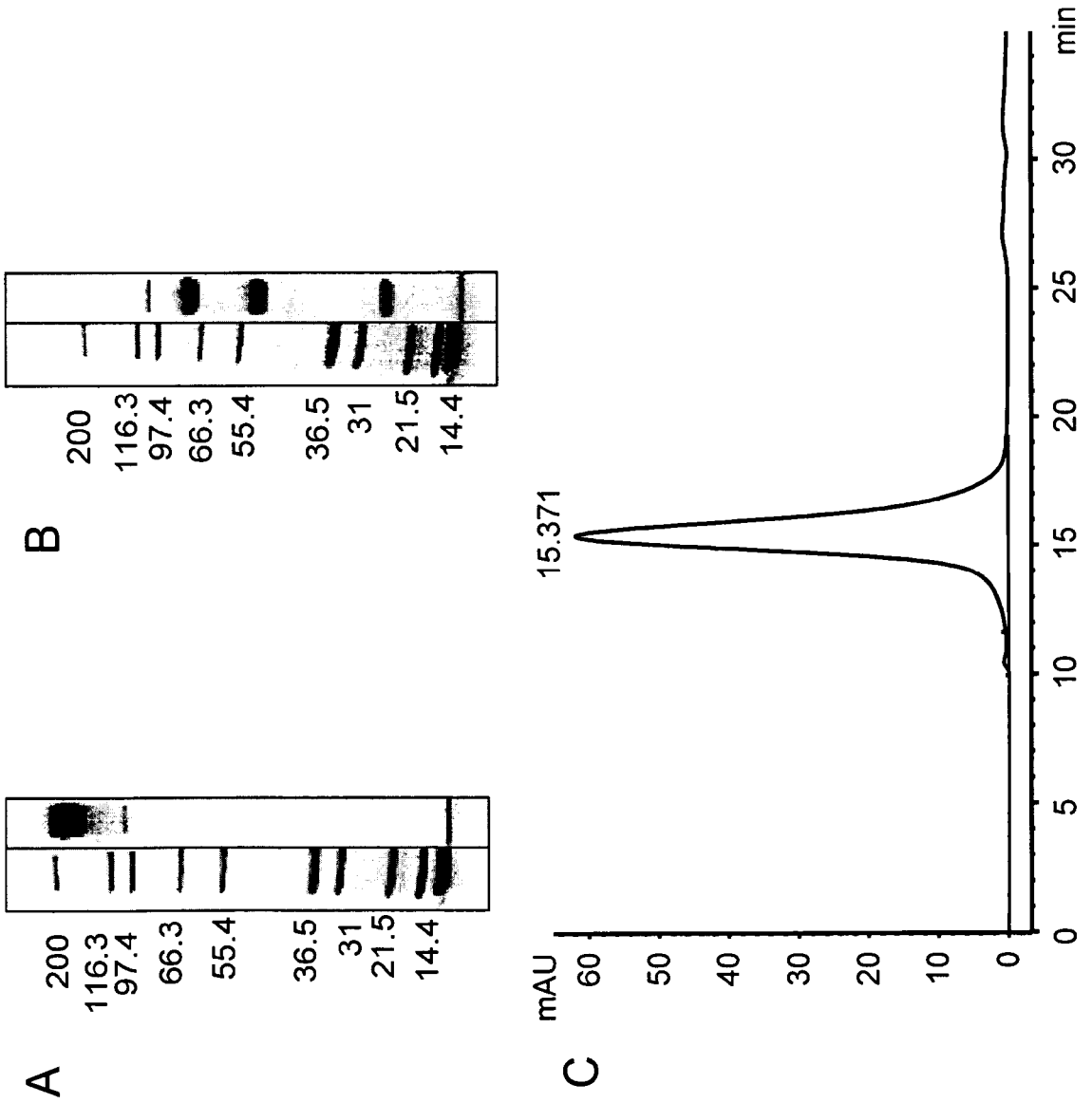

A
mAU
35
30
25
20
15
10
5
0
16.401
0
5
10
15
20
25
30
min
B
mAU
40
35
30
25
20
15
10
5
0
16.342
0
5
10
15
20
25
30
min

Figure 6


A
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
B
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
15.371
mAU
60
50
40
30
20
10
0
0
5
10
15
20
25
30
min

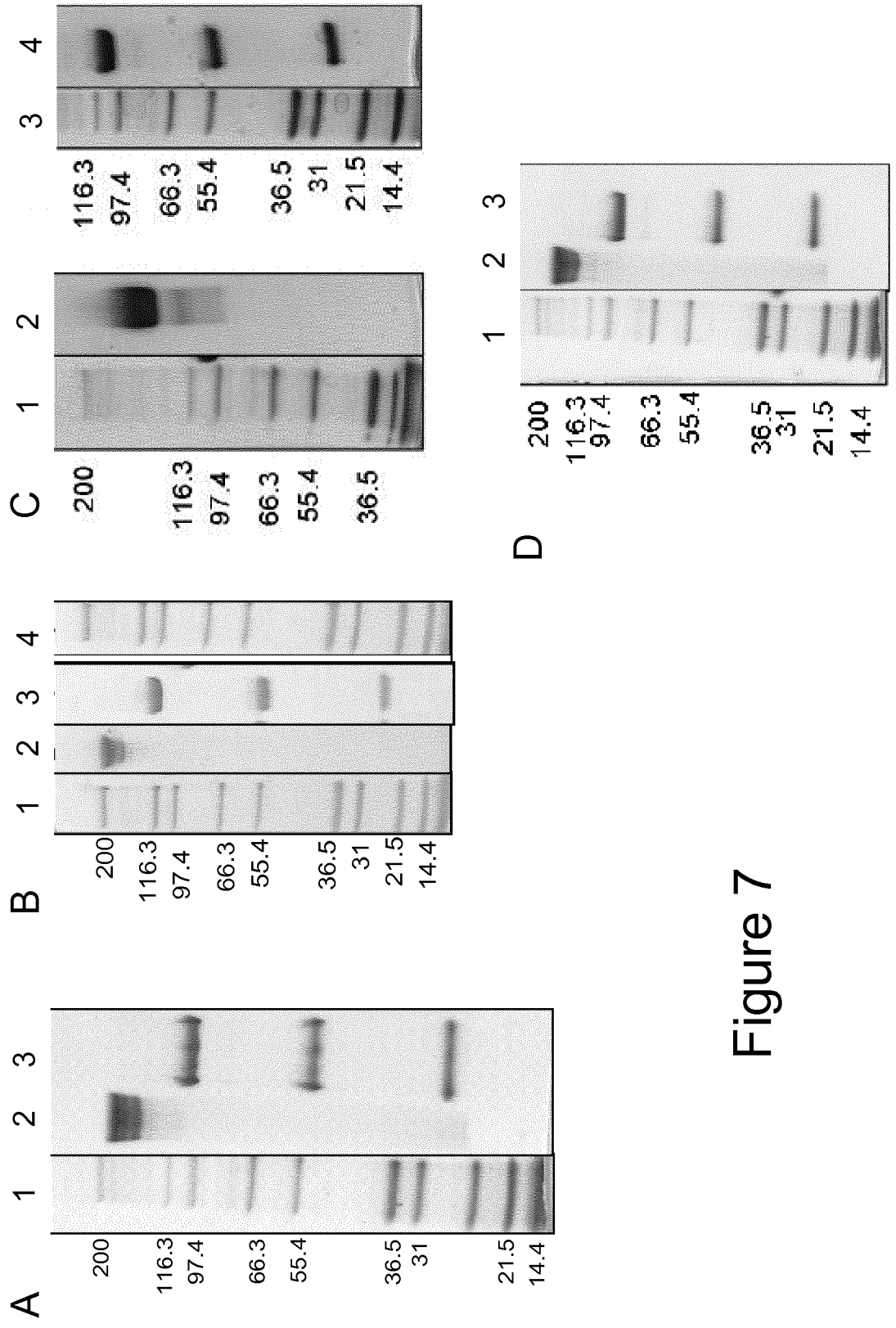

A
1
2
3
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
B
1
2
3
4
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
1
2
3
4
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
D
1
2
3
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4

Figure 7

Figure 8

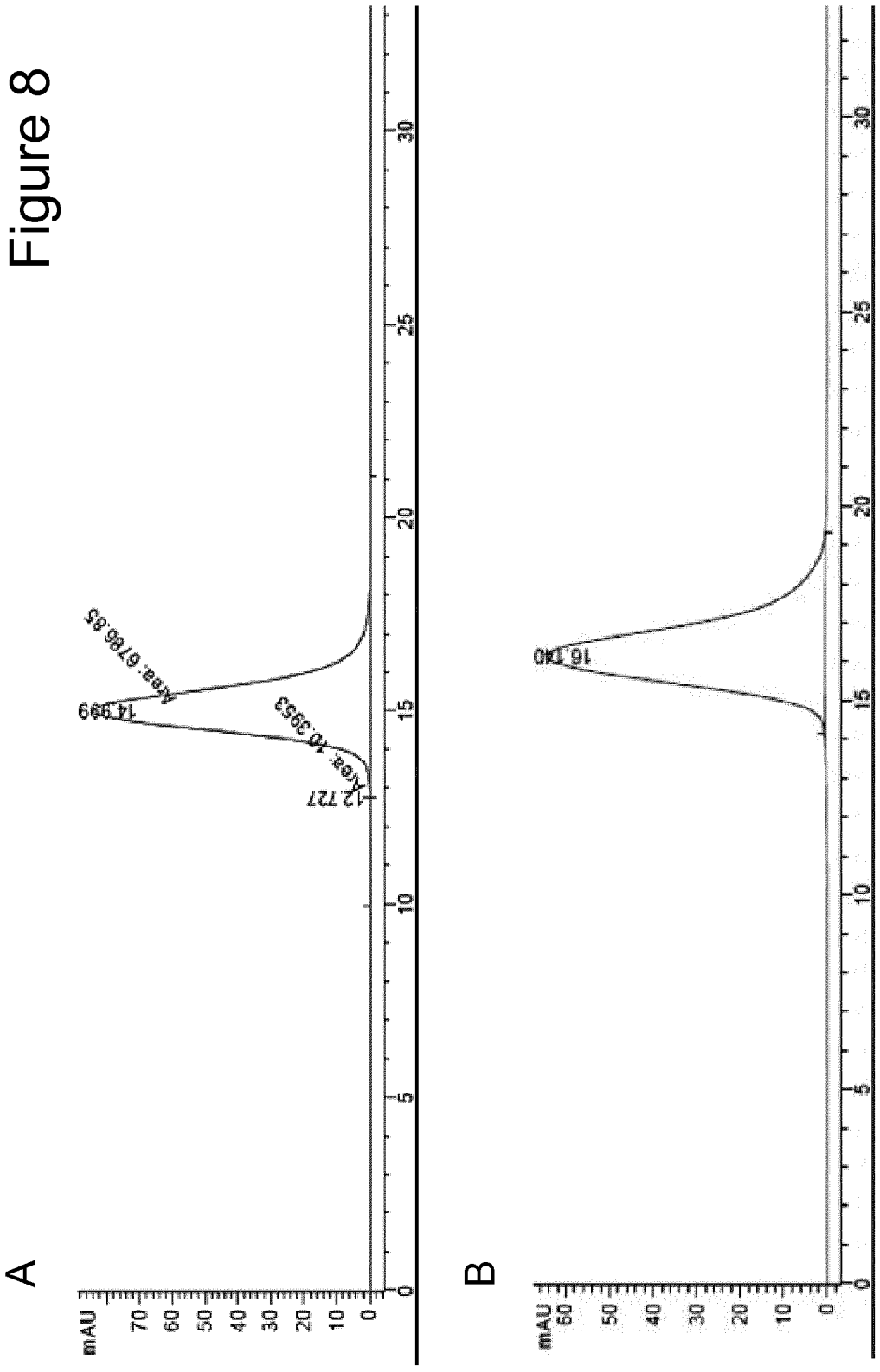

A
mAU
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
12.727
Area: 10.3953
14.999
Area: 678.85
B
mAU
60
50
40
30
20
10
0
0
5
10
15
20
25
30
16.740

Figure 8

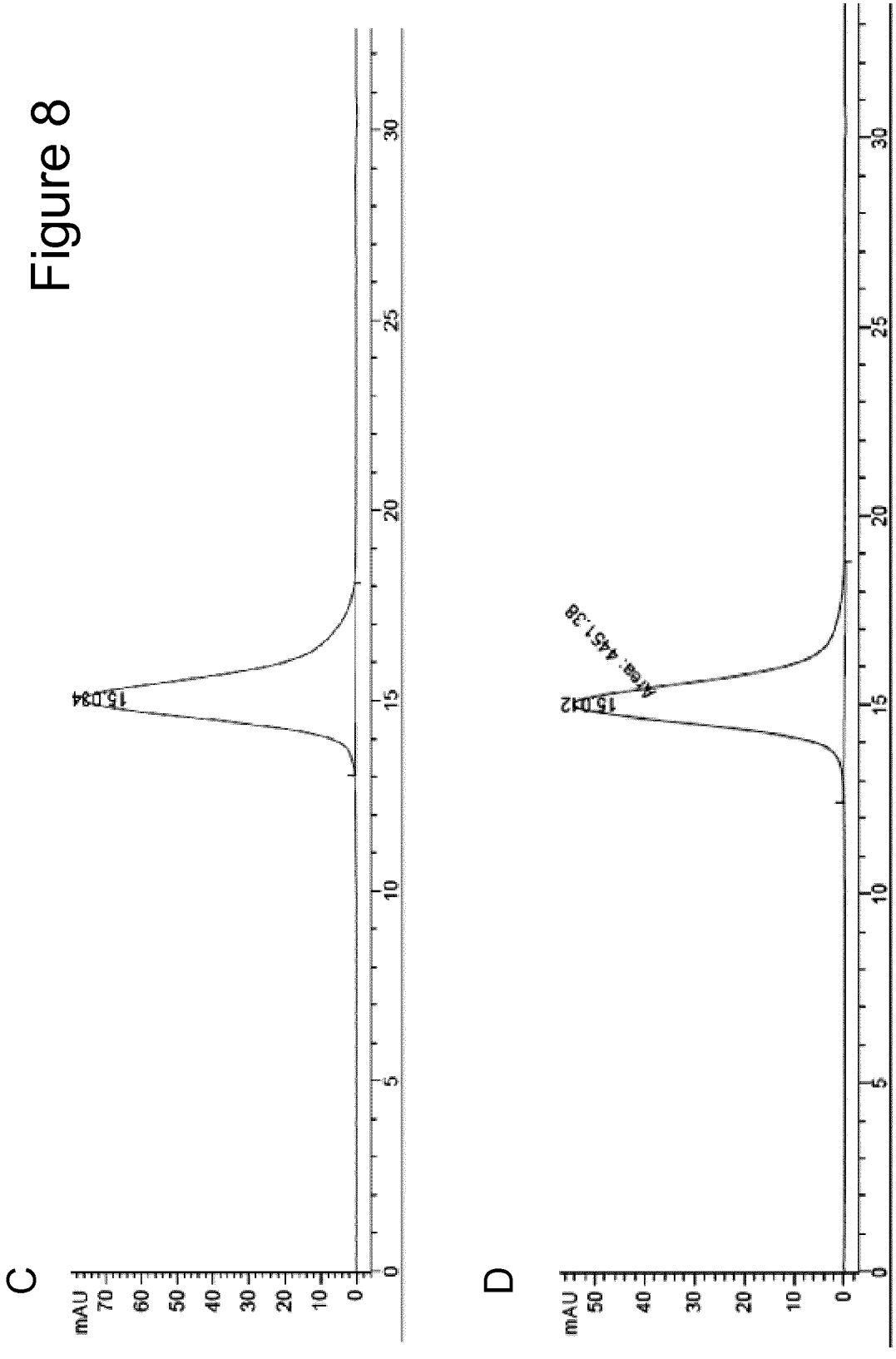

C
mAU
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
15.034
D
mAU
50
40
30
20
10
0
0
5
10
15
20
25
30
15.042
Area: 445.38

Figure 9

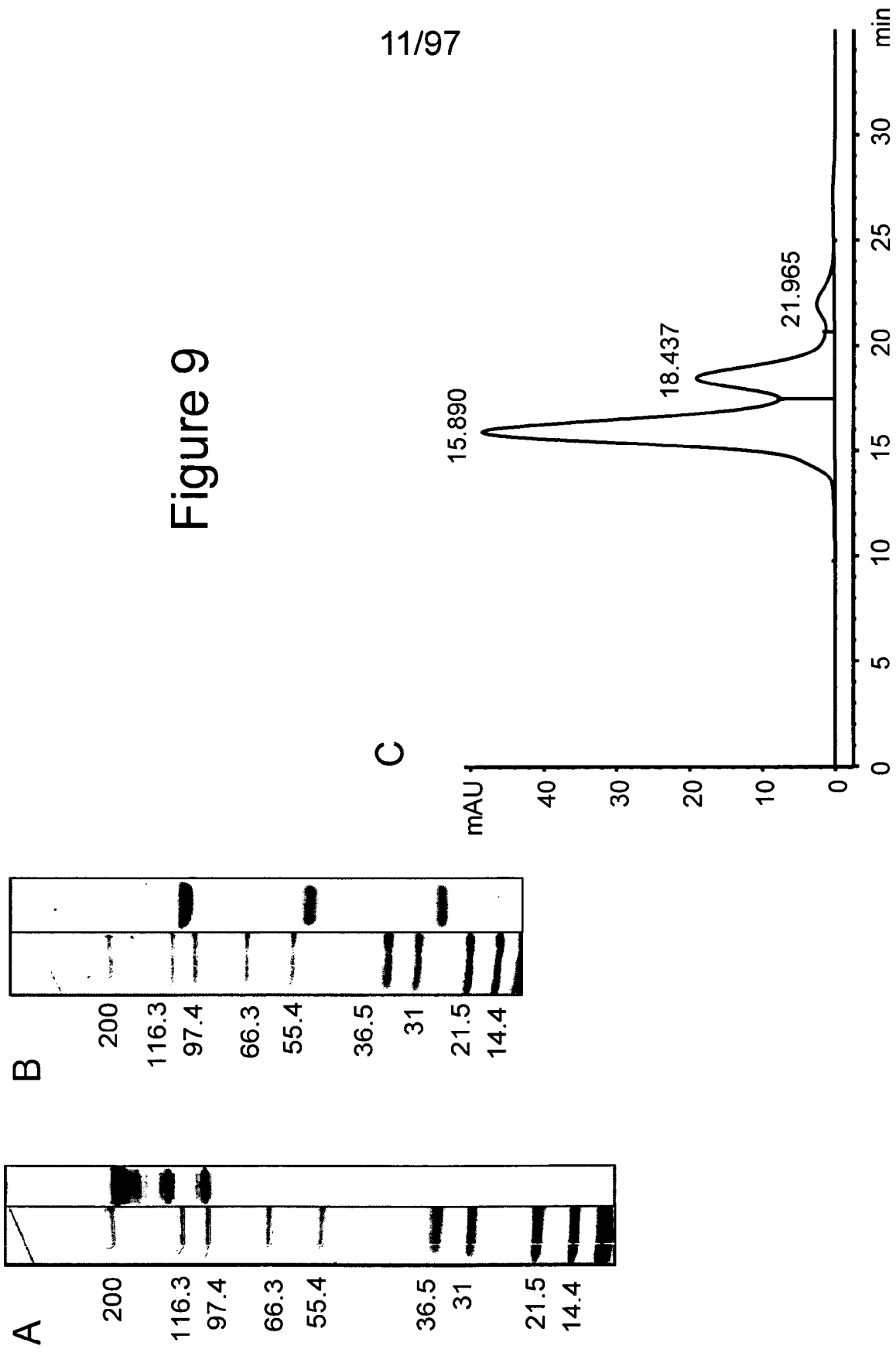

A
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
B
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
mAU
40
30
20
10
0
0
5
10
15
20
25
30
min
15.890
18.437
21.965

Figure 10

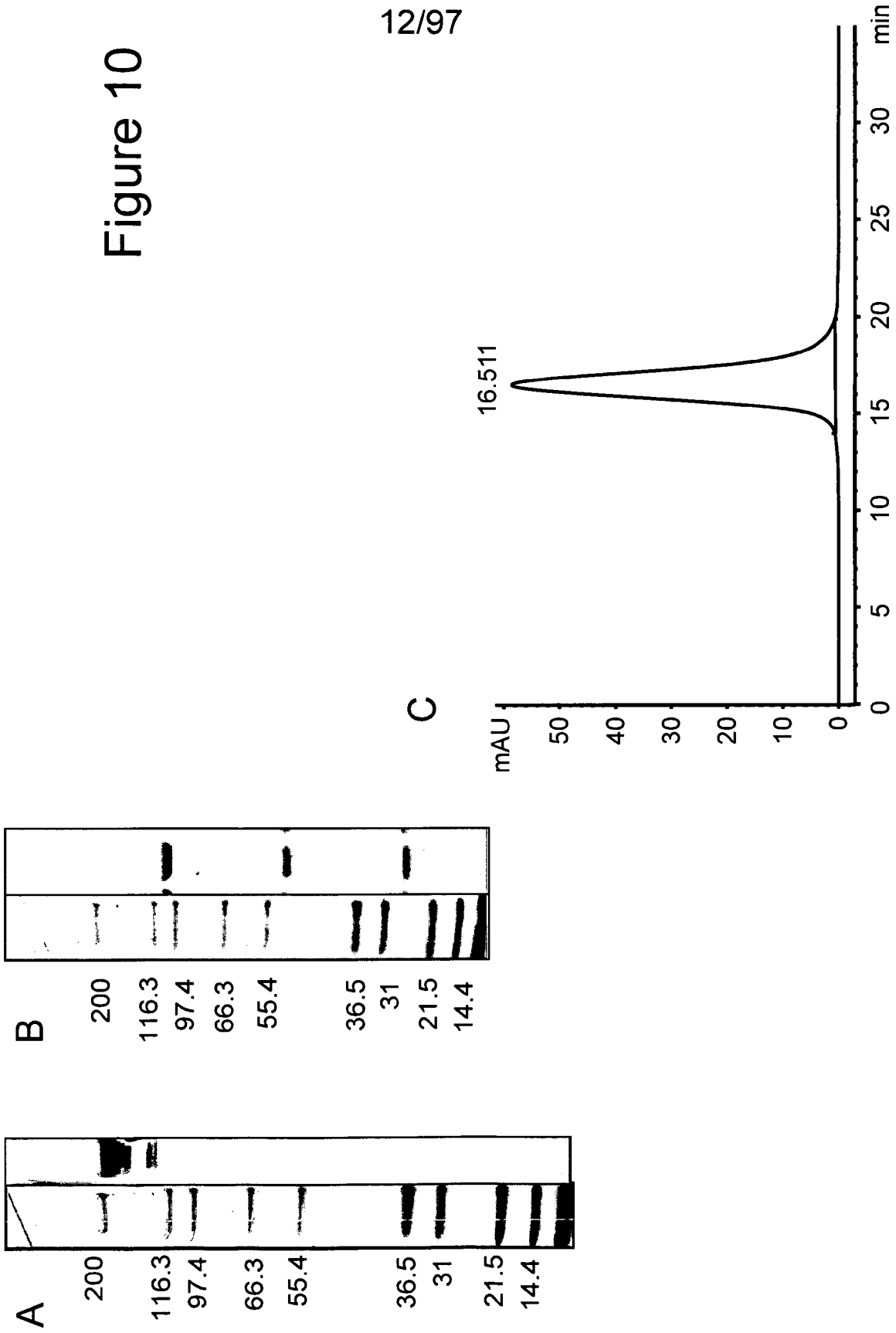
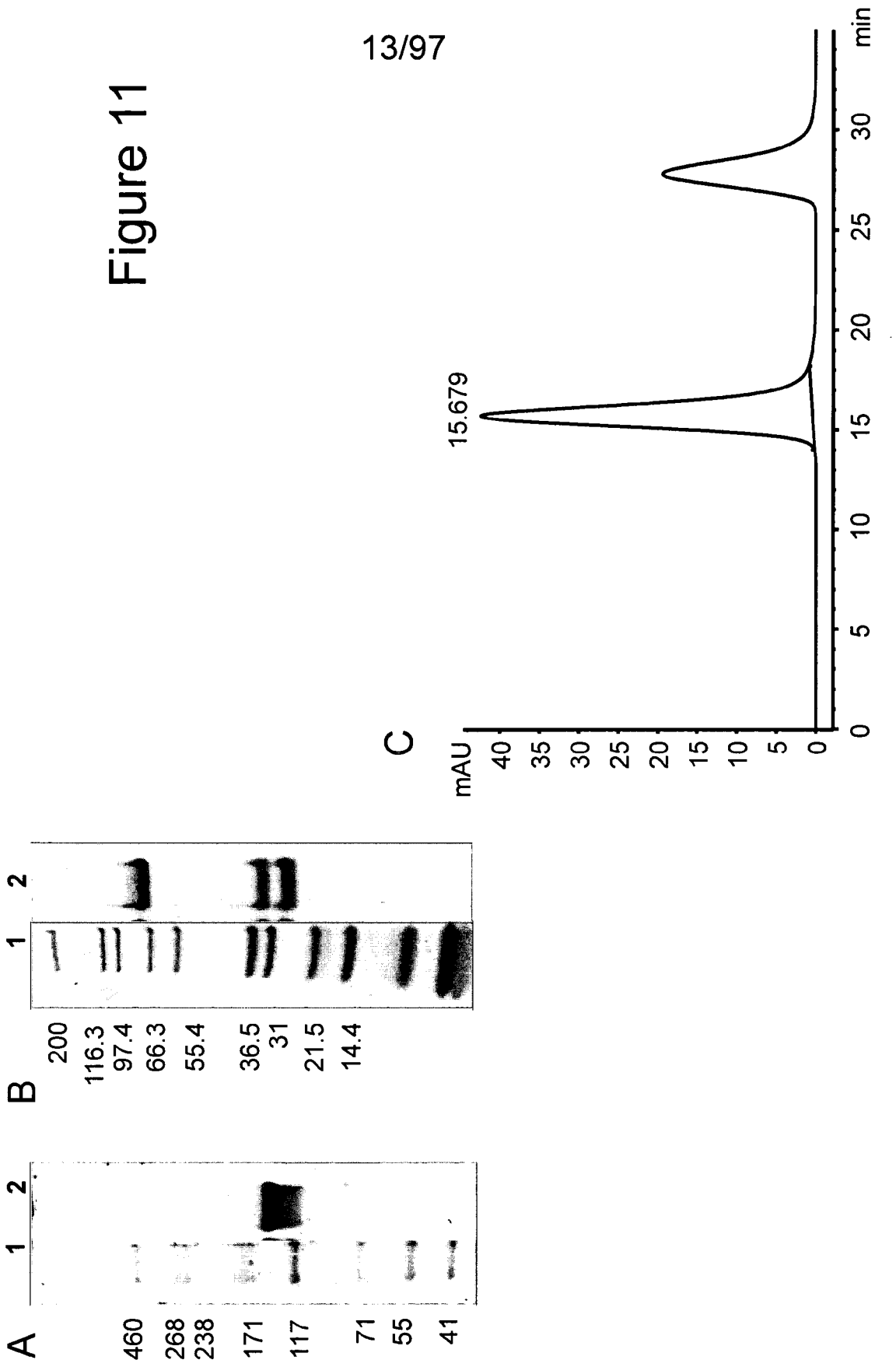
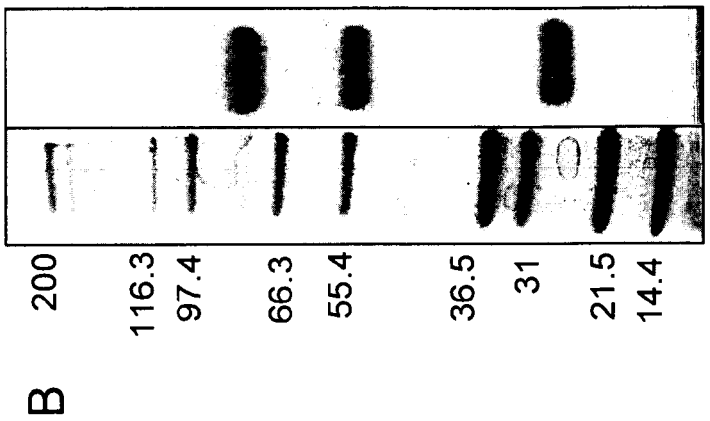
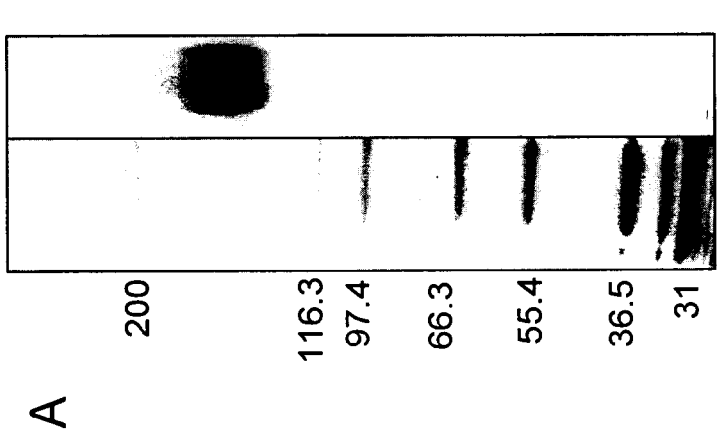

A
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
B
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
16.511
mAU
50
40
30
20
10
0
0
5
10
15
20
25
30
min

Figure 11


A
1
2
460
268
238
171
117
71
55
41
B
1
2
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
15.679
mAU
40
35
30
25
20
15
10
5
0
0
5
10
15
20
25
30
min


B
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4


A
200
116.3
97.4
66.3
55.4
36.5
31

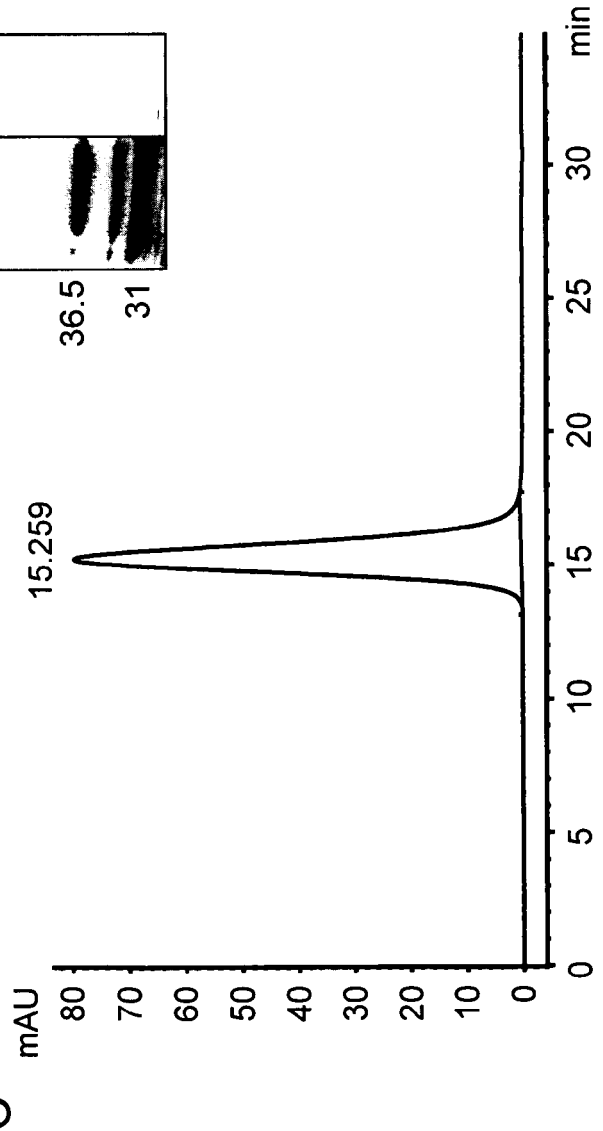
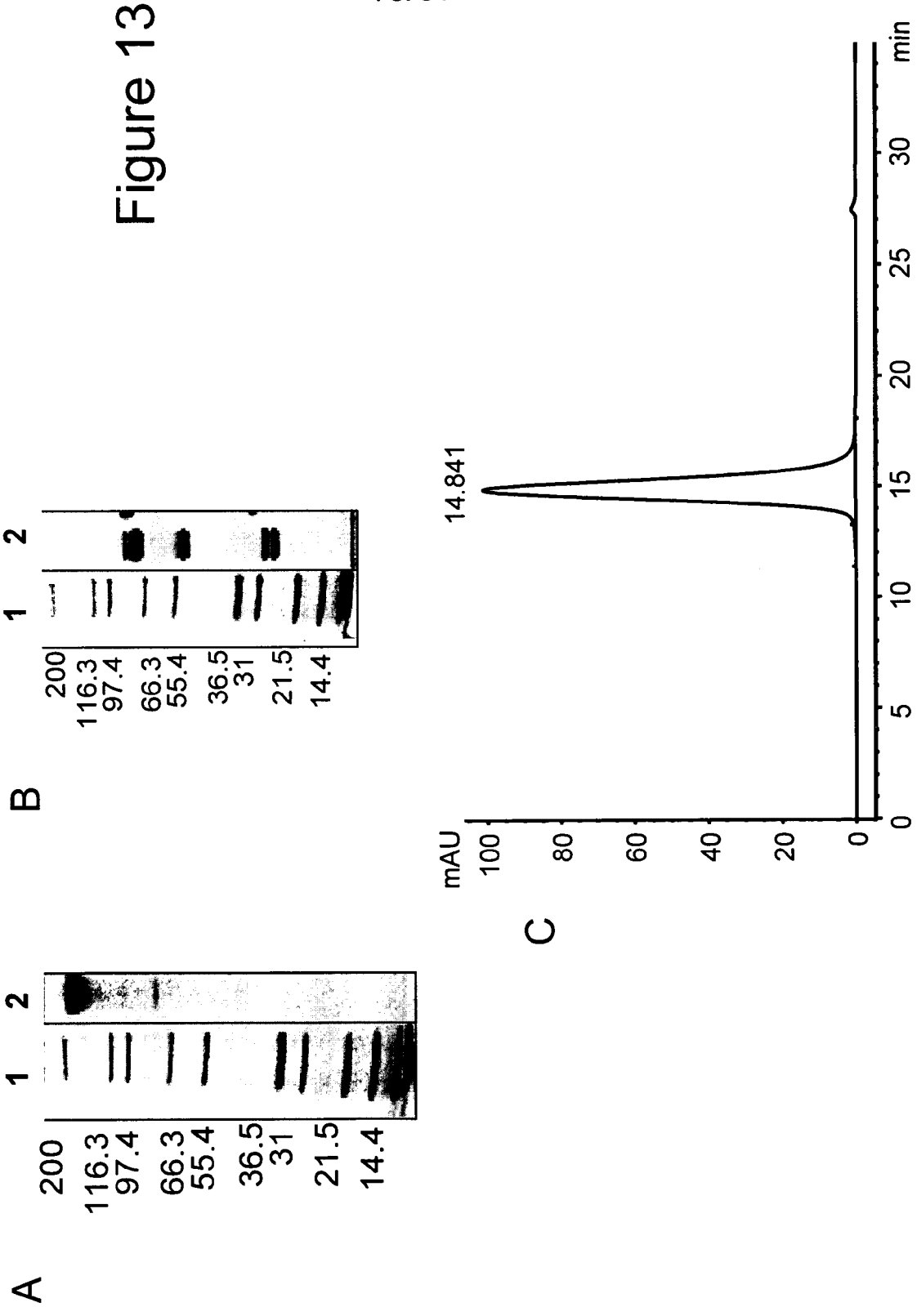

C
mAU
80
70
60
50
40
30
20
10
0
15.259
0
5
10
15
20
25
30
min

Figure 12

Figure 13


A
1
2
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
B
1
2
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
14.841
mAU
100
80
60
40
20
0
0
5
10
15
20
25
30
min

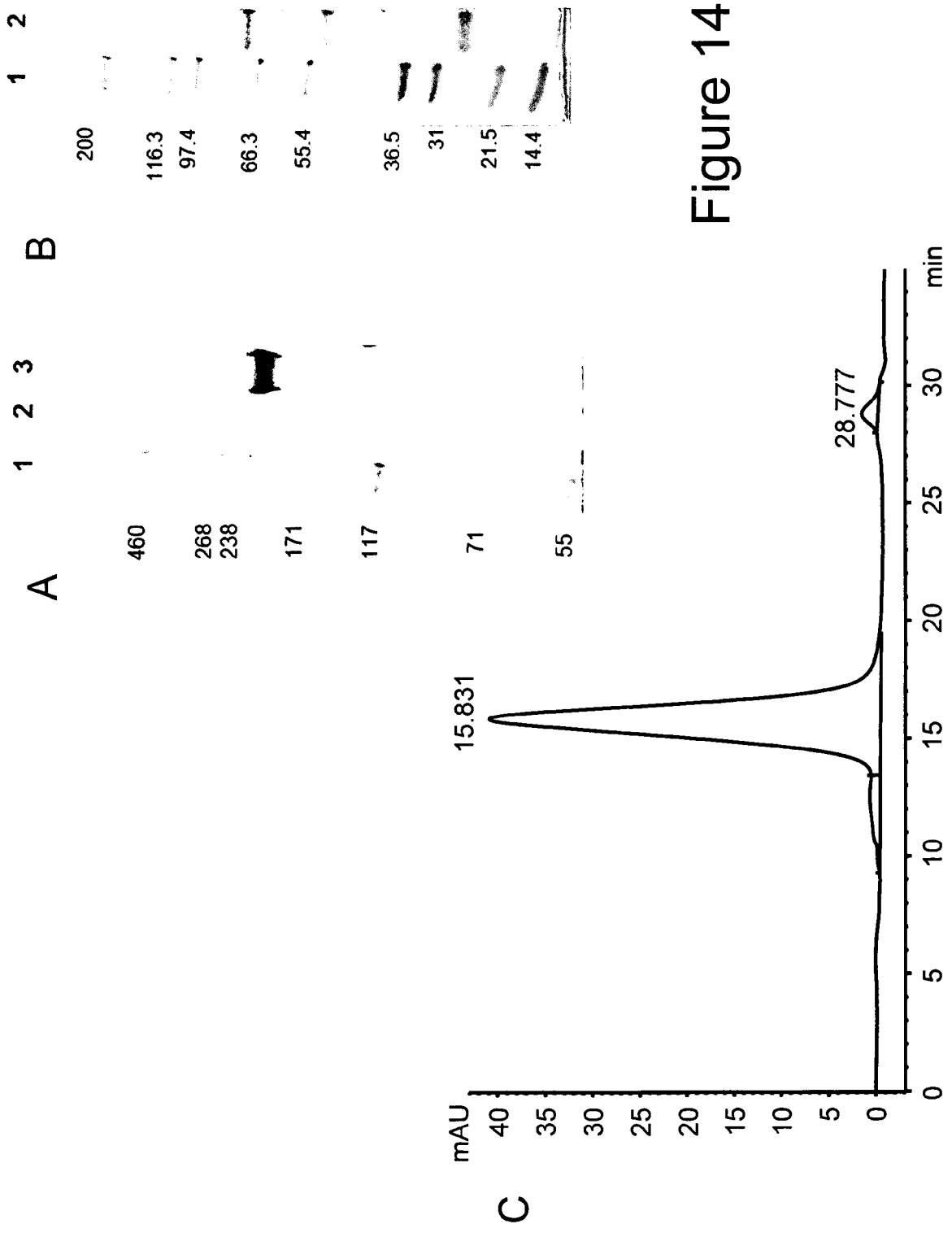
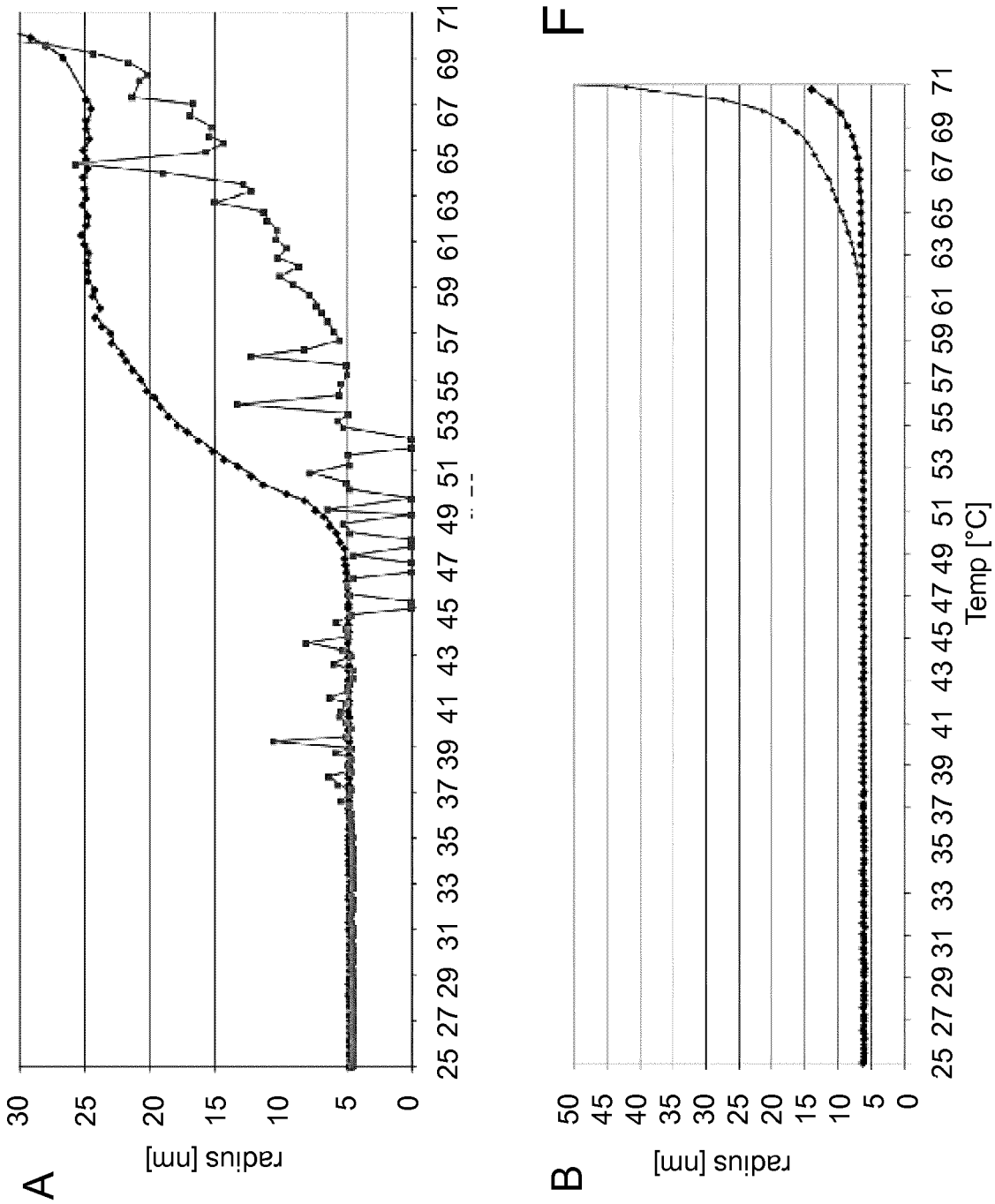

A
1 2 3
460
268
238
171
117
71
55
B
1 2
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4
C
mAU
40
35
30
25
20
15
10
5
0
15.831
28.777
0
5
10
15
20
25
30
min

Figure 14

Figure 15


A
radius [nm]
0
5
10
15
20
25
30
25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71
B
radius [nm]
0
5
10
15
20
25
30
35
40
45
50
25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71
Temp [°C]

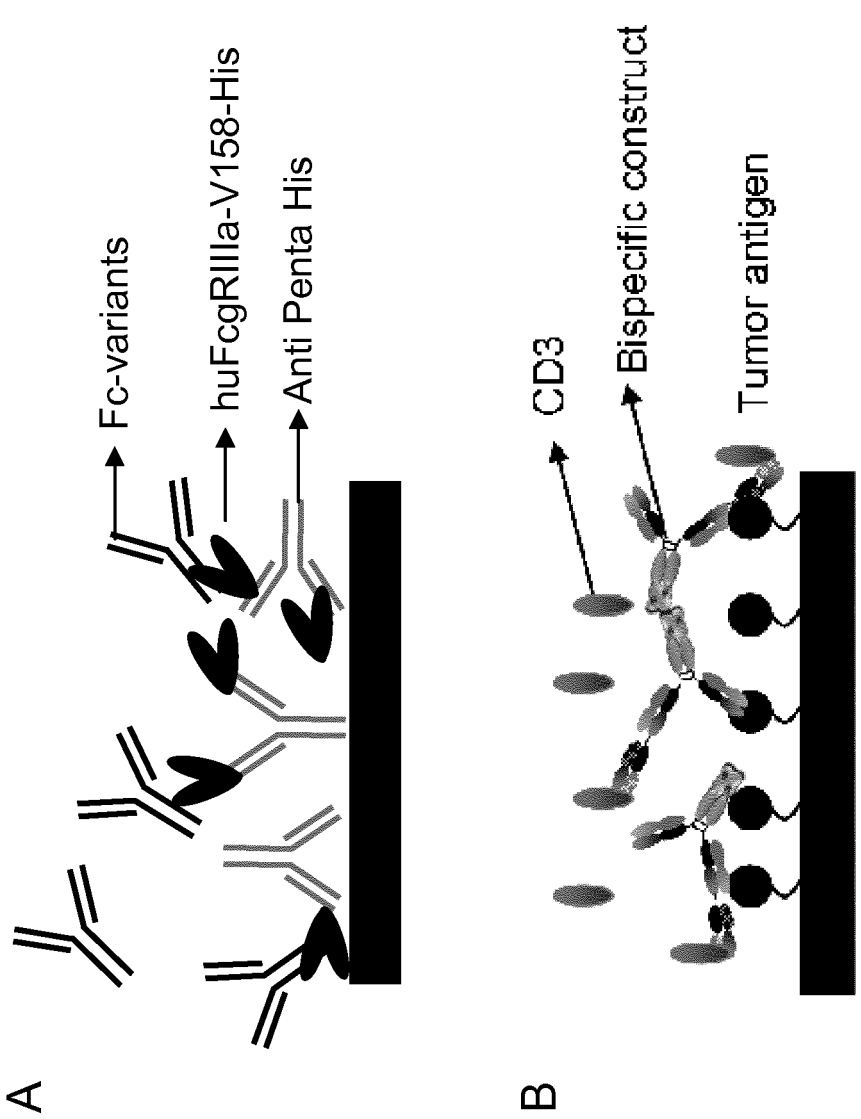

A
Fc-variants
huFcgRIIIa-V158-His
Anti Penta His
B
CD3
Bispecific construct
Tumor antigen

Figure 16

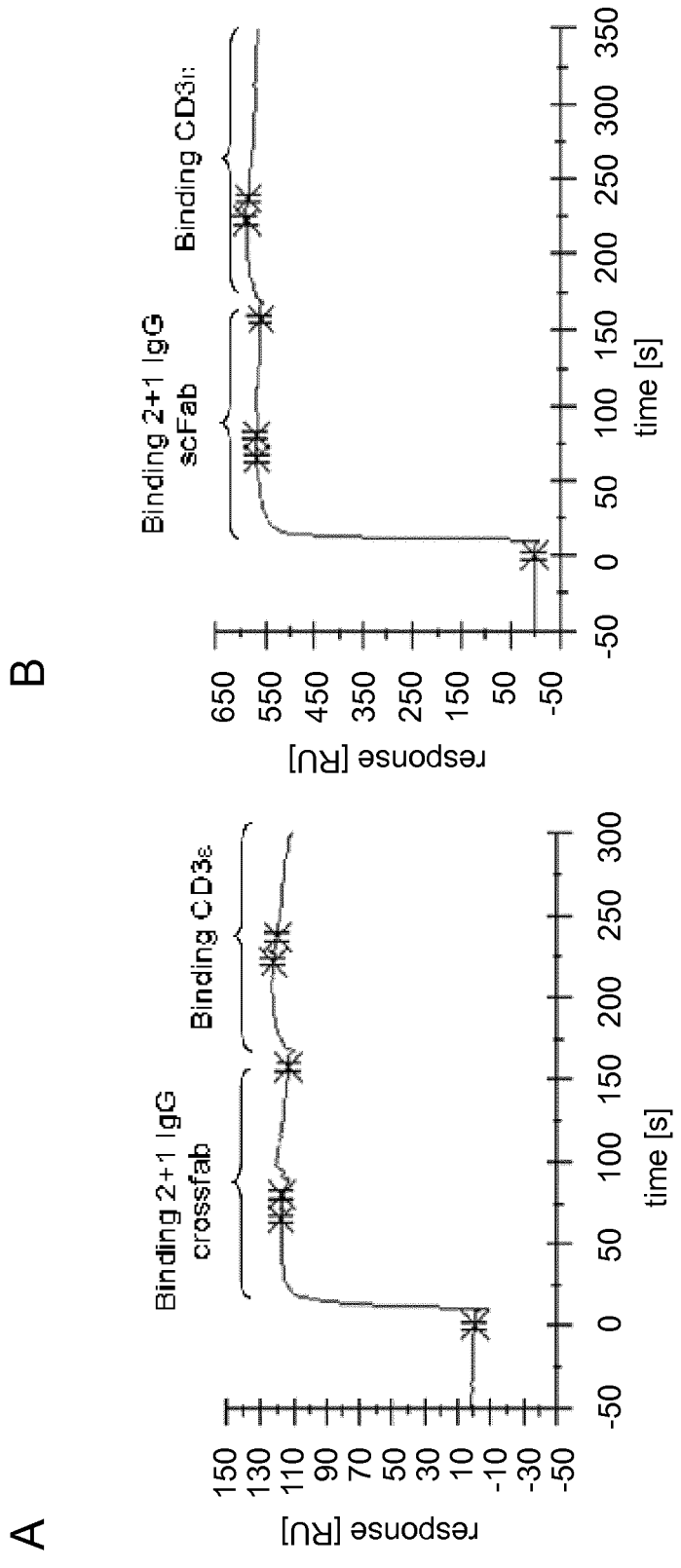

A
response [RU]
150
130
110
90
70
50
30
10
-10
-30
-50
-50
0
50
100
150
200
250
300
time [s]
Binding 2+1 IgG crossfab
Binding CD3ε
B
response [RU]
650
550
450
350
250
150
50
-50
-50
0
50
100
150
200
250
300
350
time [s]
Binding 2+1 IgG scFab
Binding CD3ε

Figure 17

Figure 18

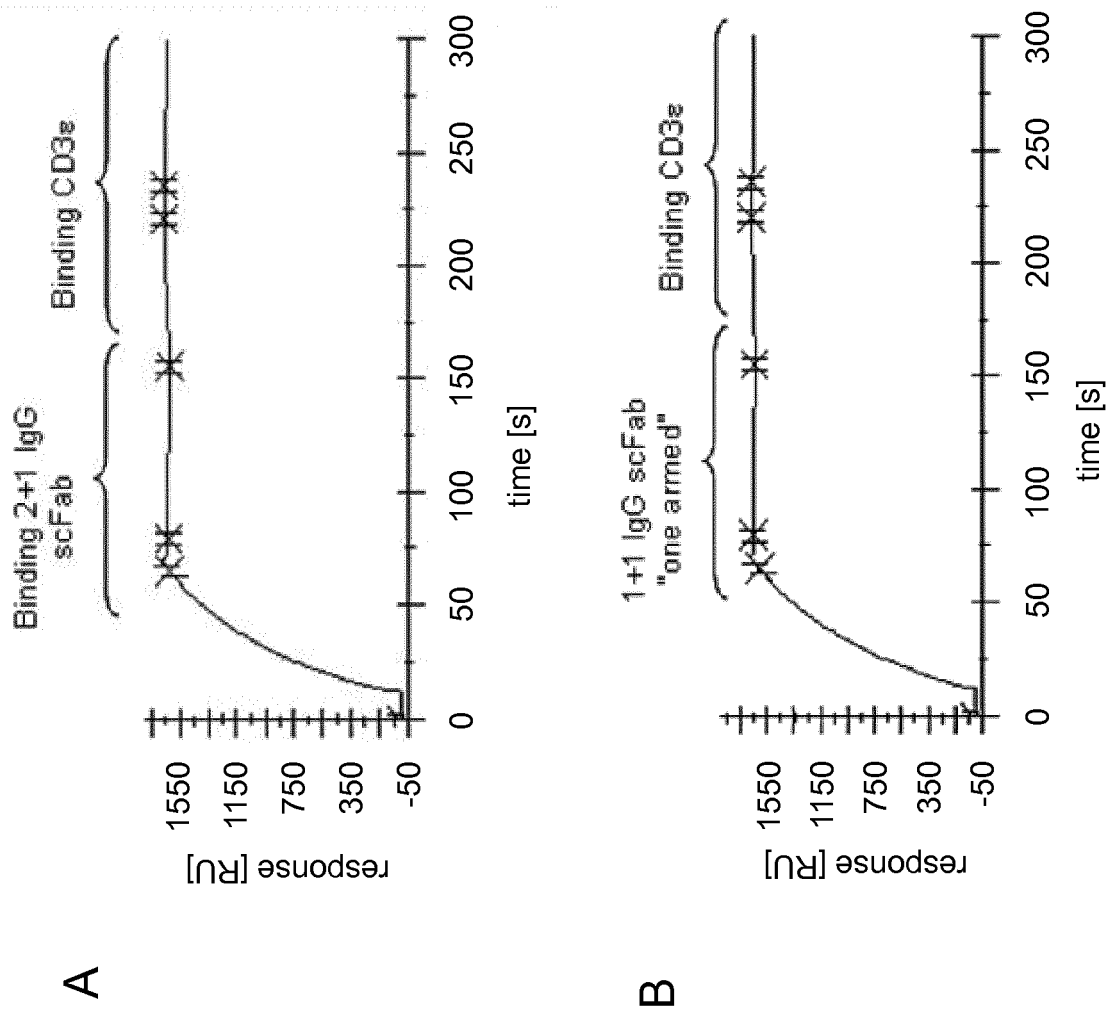
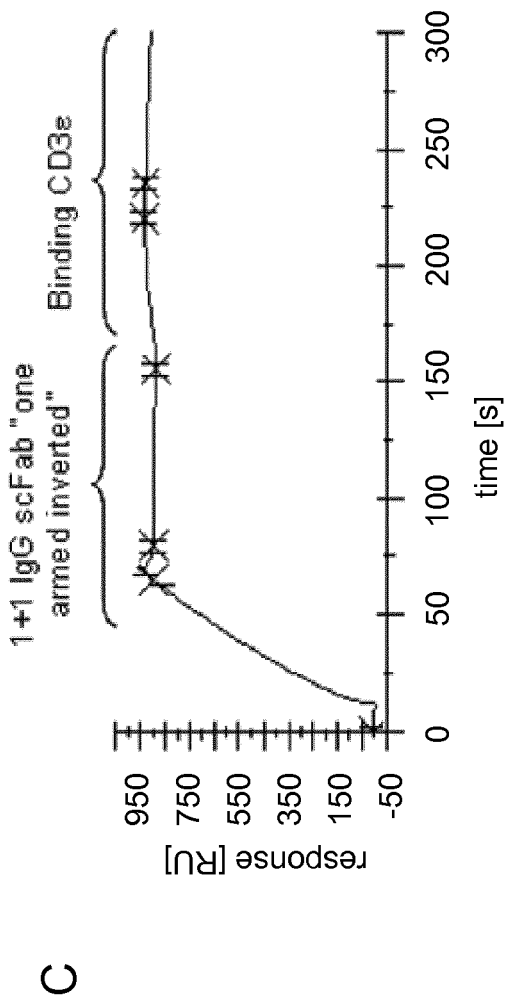
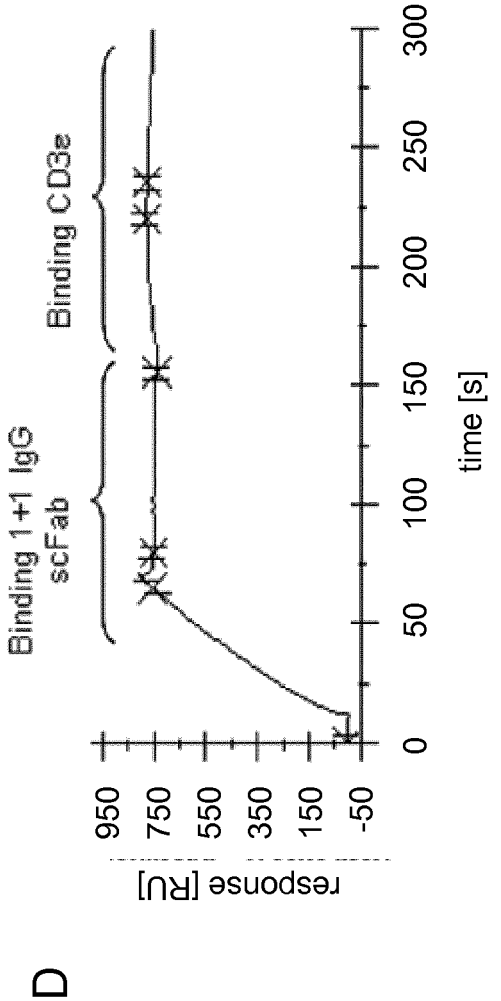

A
Binding 2+1 IgG scFab
Binding CD3ε
response [RU]
1550
1150
750
350
-50
0
50
100
150
200
250
300
time [s]
B
1+1 IgG scFab "one armed"
Binding CD3ε
response [RU]
1550
1150
750
350
-50
0
50
100
150
200
250
300
time [s]

Figure 18


C
1+1 IgG scFab "one armed inverted"
Binding CD3ε
response [RU]
950
750
550
350
150
-50
0
50
100
150
200
250
300
time [s]


D
Binding 1+1 IgG scFab
Binding CD3ε
response [RU]
950
750
550
350
150
-50
0
50
100
150
200
250
300
time [s]

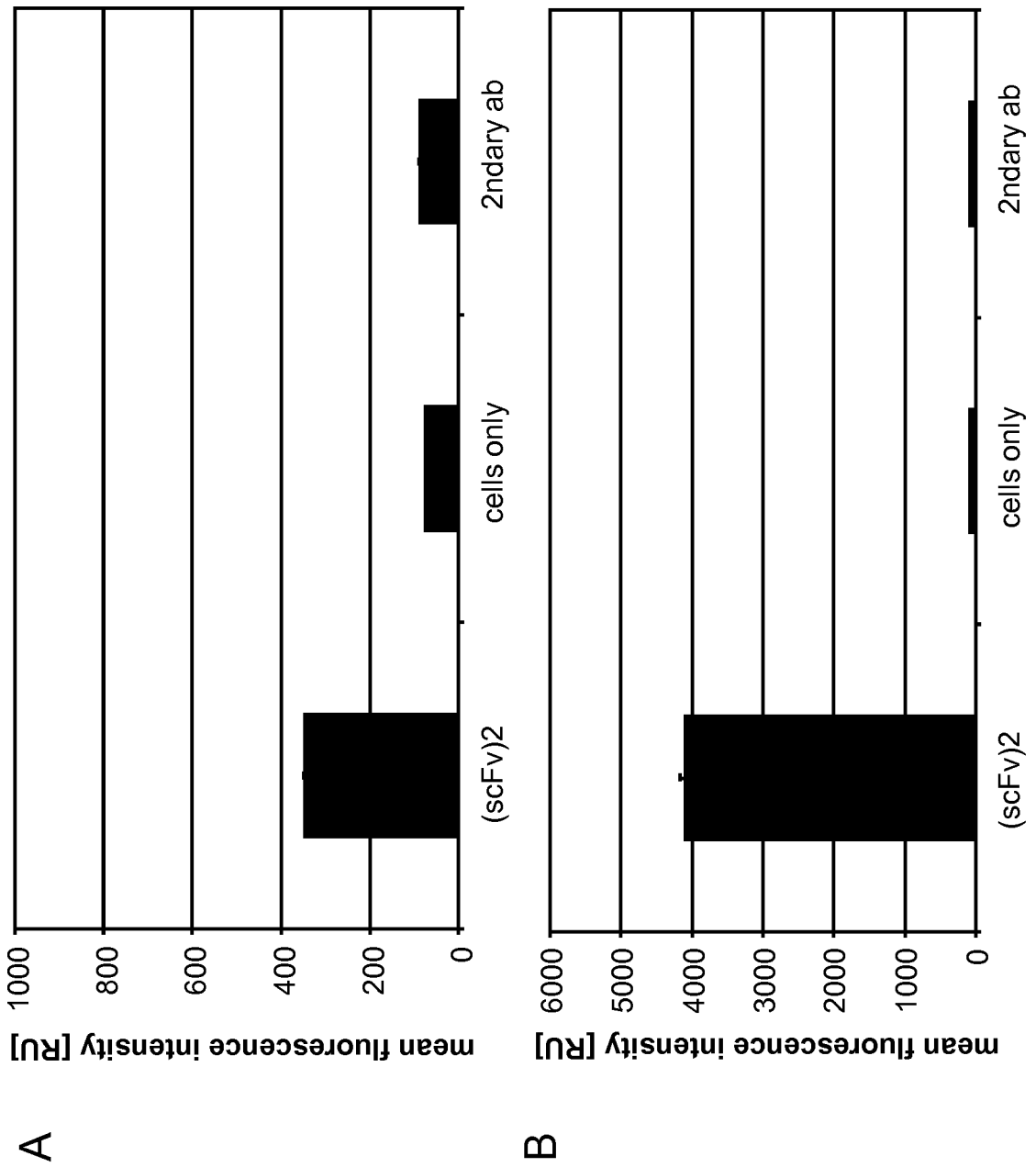

A
mean fluorescence intensity [RU]
1000
800
600
400
200
0
(scFv)2
cells only
2ndary ab
B
mean fluorescence intensity [RU]
6000
5000
4000
3000
2000
1000
0
(scFv)2
cells only
2ndary ab

Figure 19

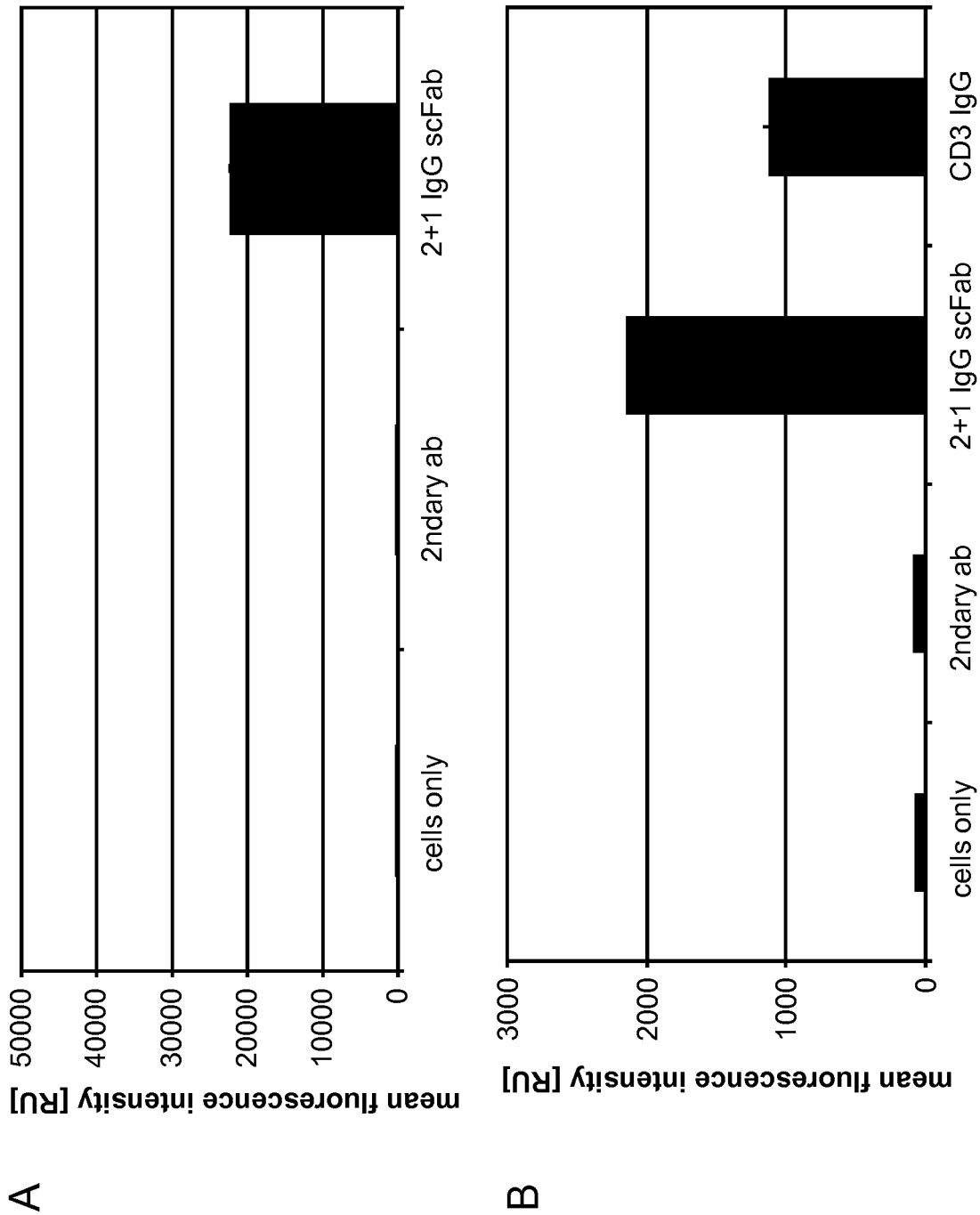

A
mean fluorescence intensity [RU]
50000
40000
30000
20000
10000
0
cells only
2ndary ab
2+1 IgG scFab
B
mean fluorescence intensity [RU]
3000
2000
1000
0
cells only
2ndary ab
2+1 IgG scFab
CD3 IgG

Figure 20

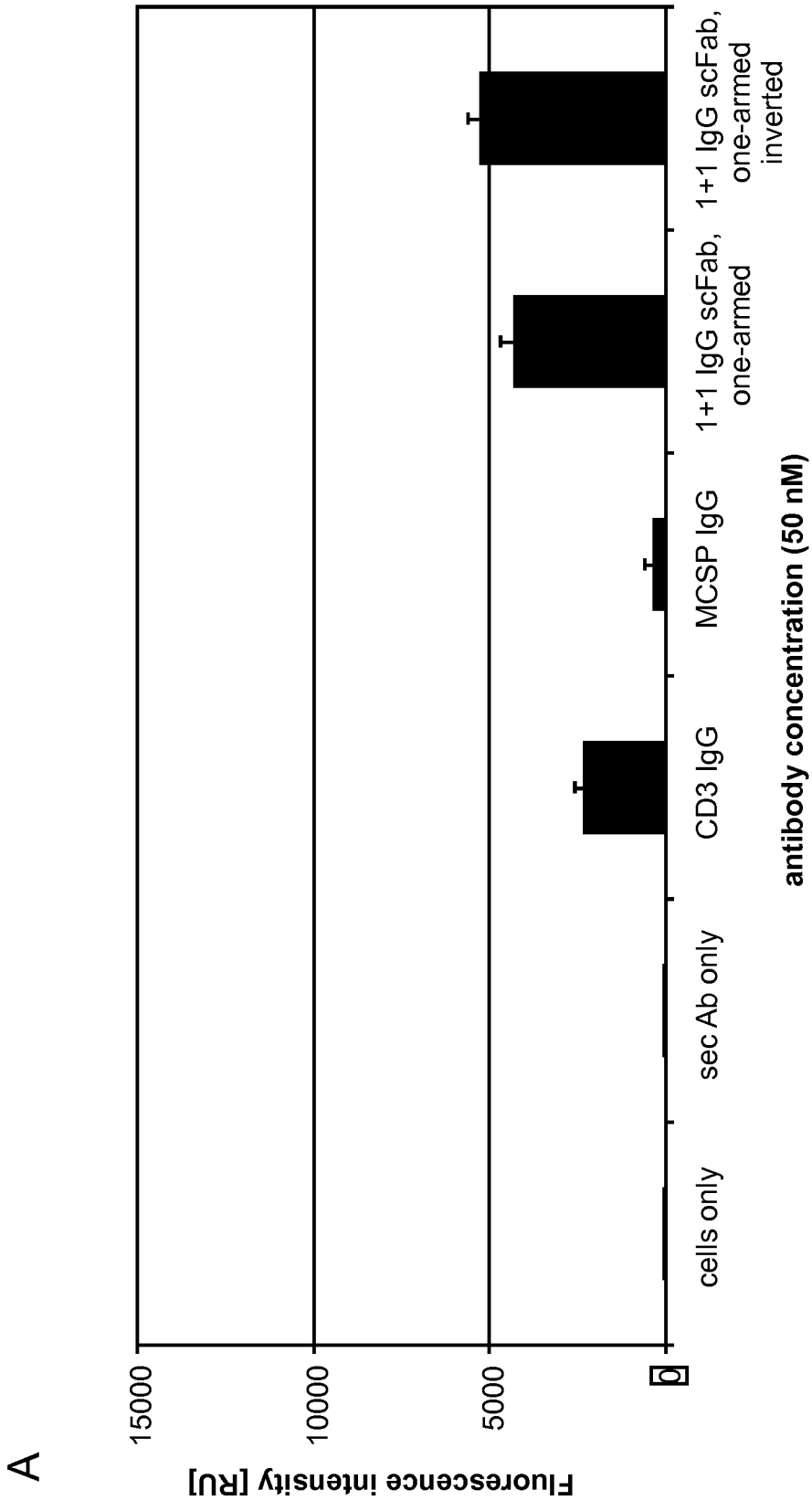

A
Fluorescence intensity [RU]
15000
10000
5000
0
cells only
sec Ab only
CD3 IgG
MCSP IgG
1+1 IgG scFab, one-armed
1+1 IgG scFab, one-armed inverted
antibody concentration (50 nM)

Figure 21

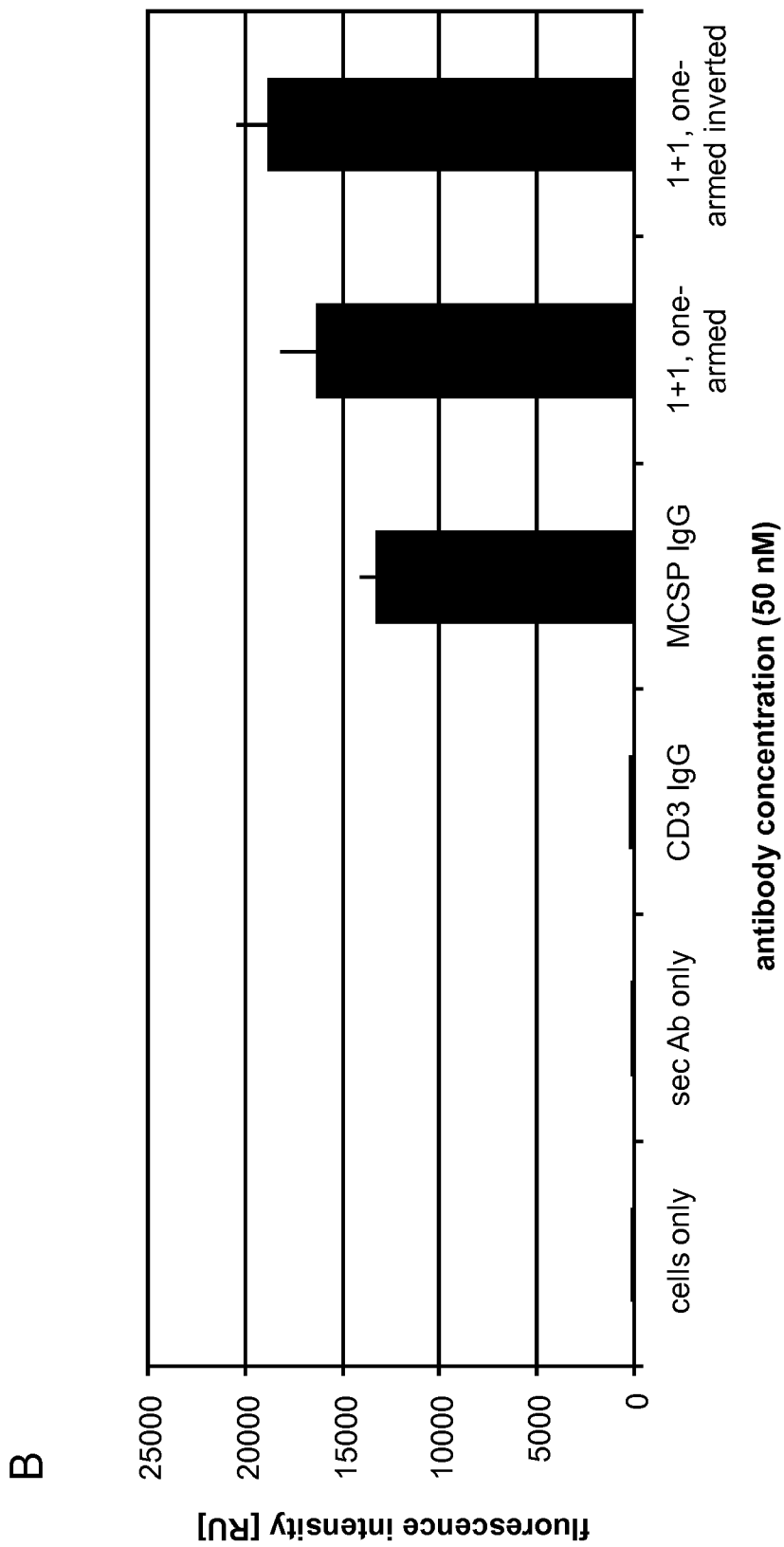

B
fluorescence intensity [RU]
25000
20000
15000
10000
5000
0
cells only
sec Ab only
CD3 IgG
MCSP IgG
1+1, one-armed
1+1, one-armed inverted
antibody concentration (50 nM)

Figure 21

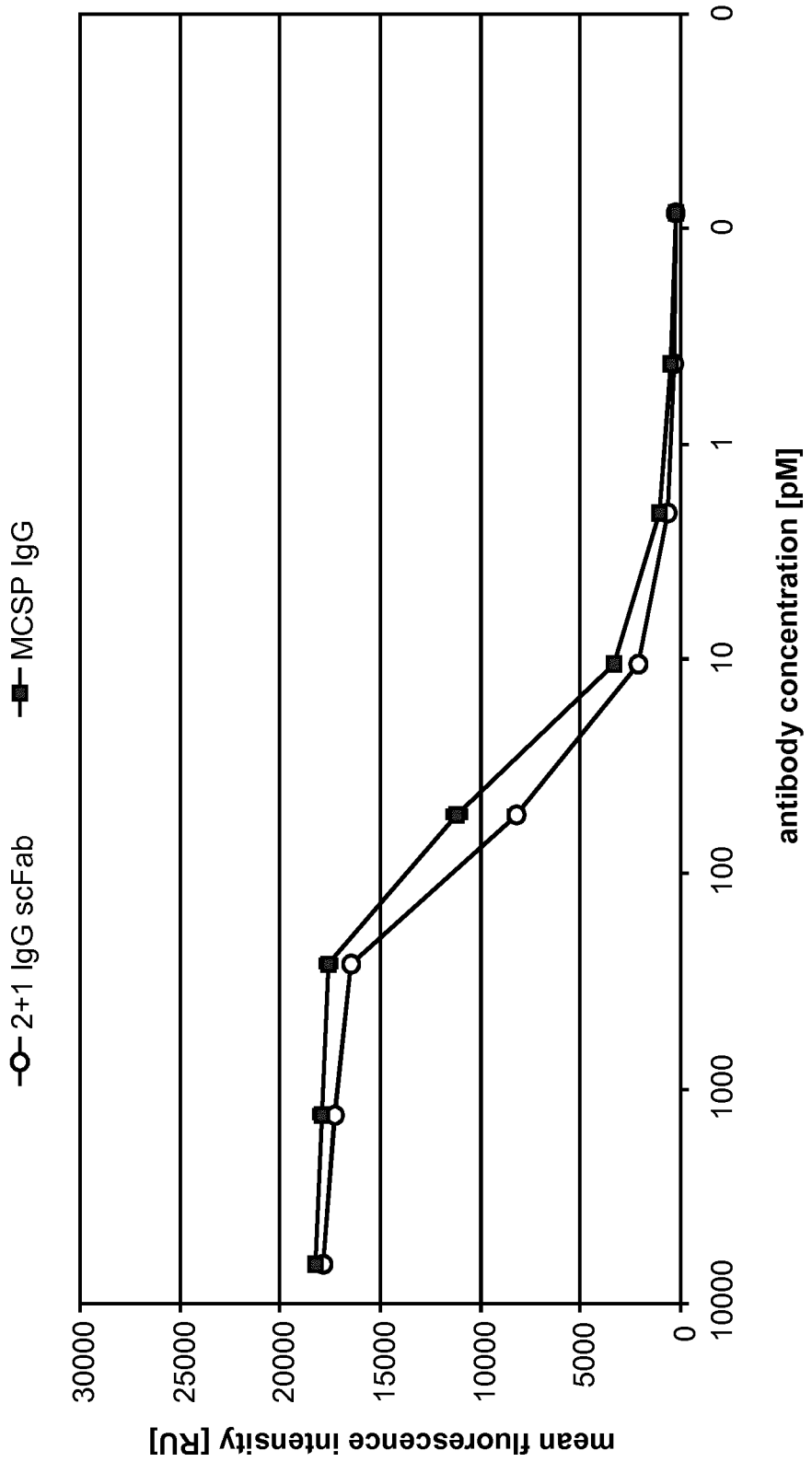

mean fluorescence intensity [RU]
30000
25000
20000
15000
10000
5000
0
10000
1000
100
10
1
0
0
0
antibody concentration [pM]
2+1 IgG scFab
MCSP IgG

Figure 22

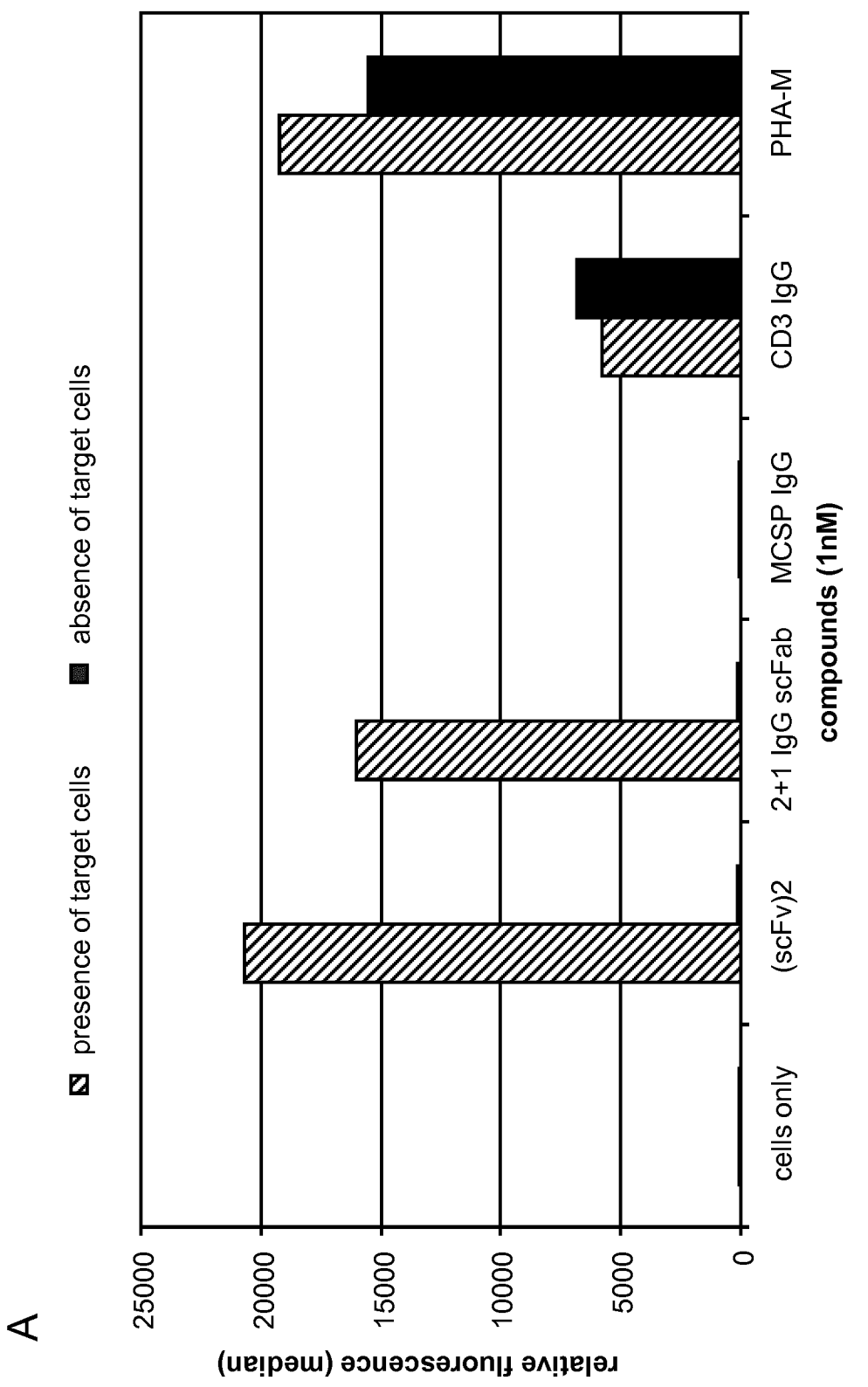

A
presence of target cells
absence of target cells
relative fluorescence (median)
25000
20000
15000
10000
5000
0
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG
PHA-M
compounds (1nM)

Figure 23

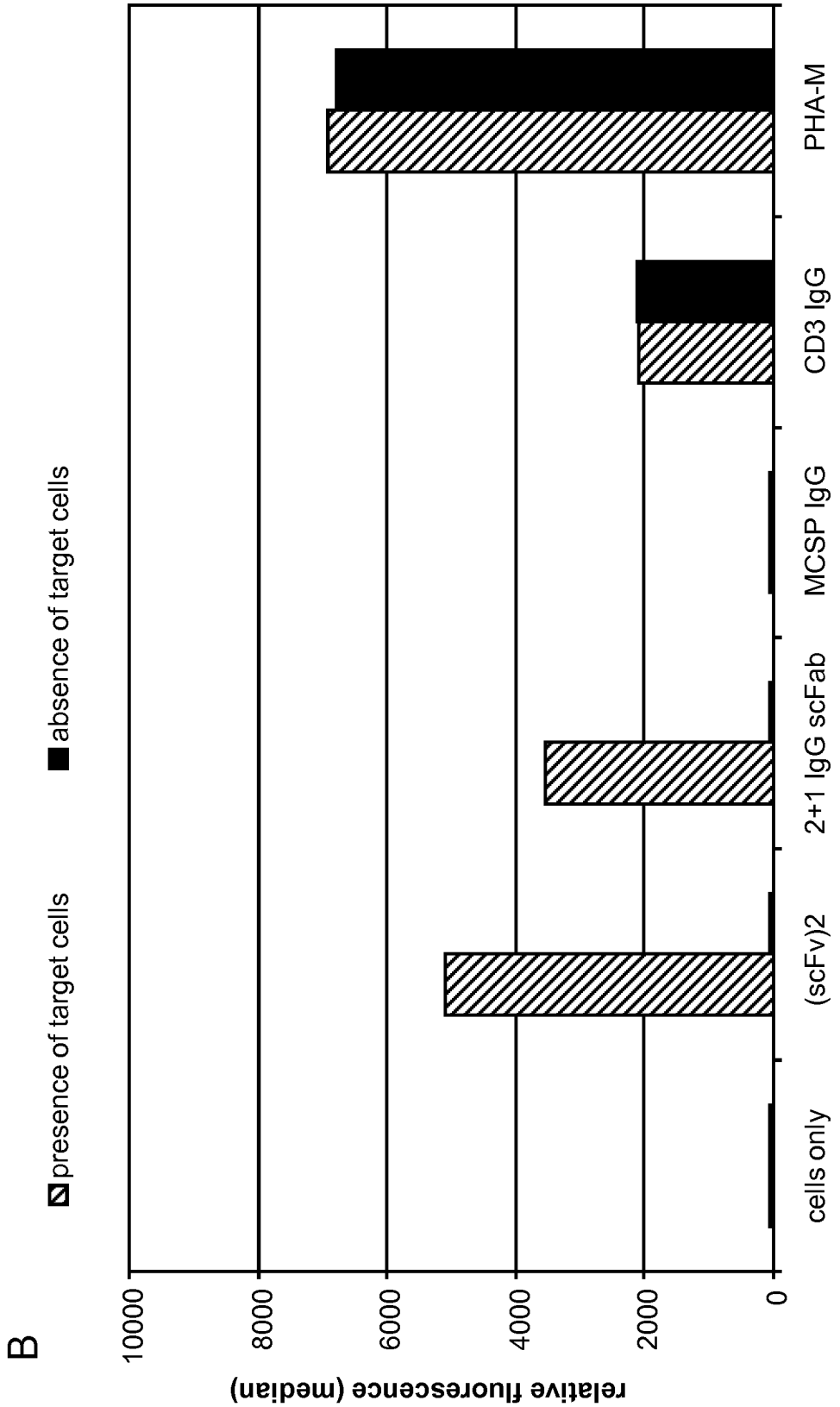

B
presence of target cells
absence of target cells
relative fluorescence (median)
10000
8000
6000
4000
2000
0
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG
PHA-M
compounds (1nM)

Figure 23

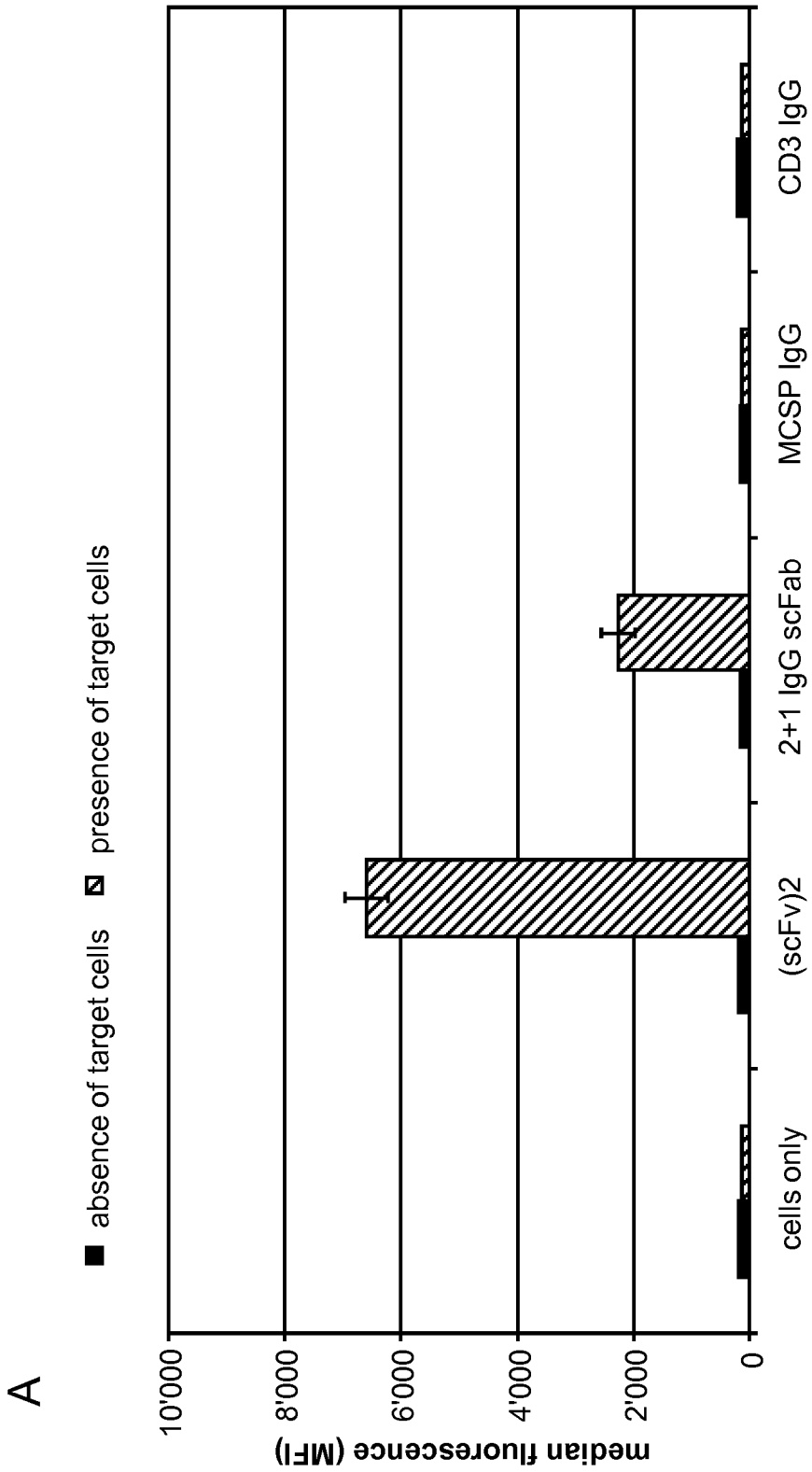

A
absence of target cells
presence of target cells
median fluorescence (MFI)
10'000
8'000
6'000
4'000
2'000
0
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG

Figure 24

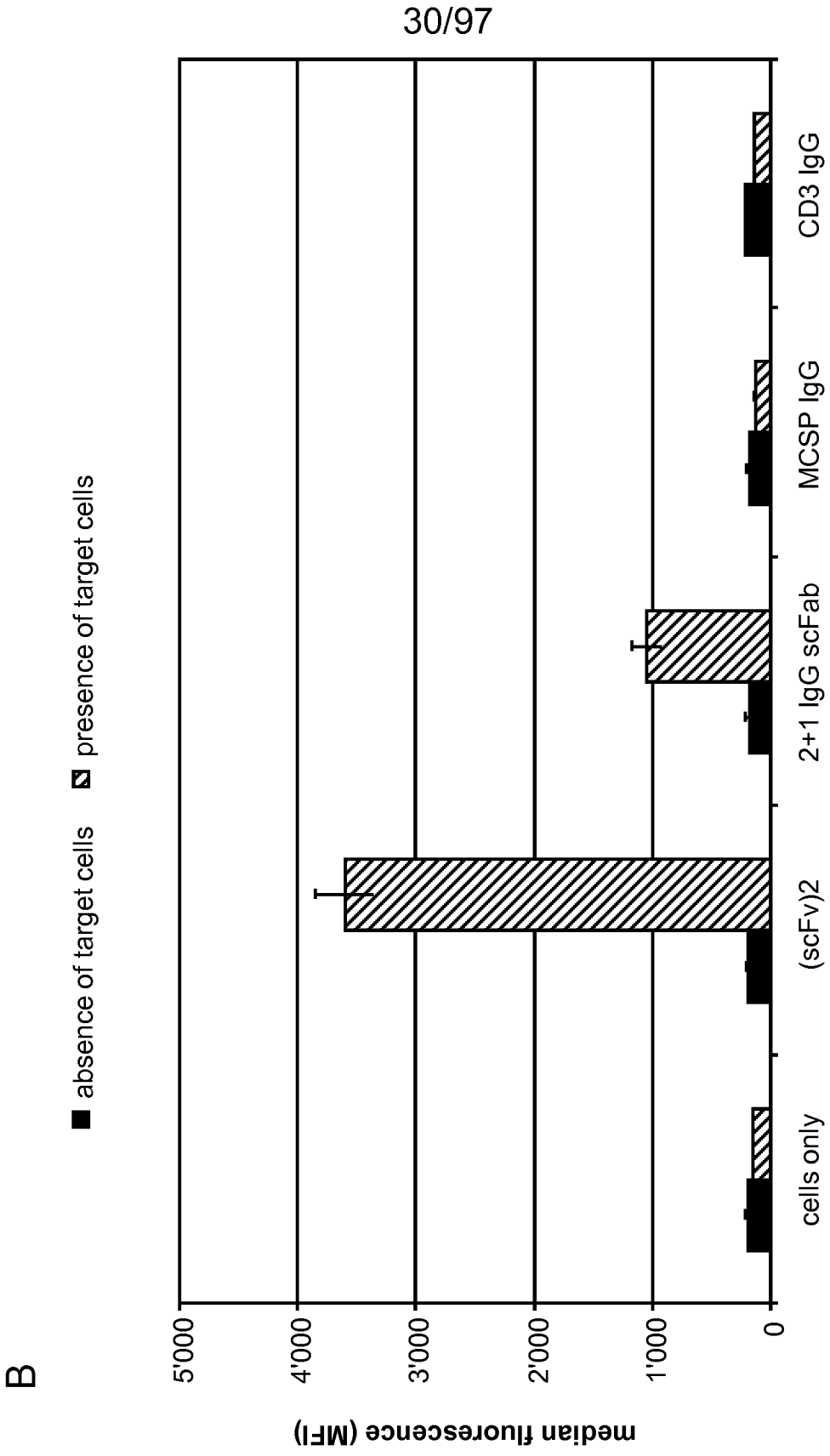

B
absence of target cells
presence of target cells
median fluorescence (MFI)
5'000
4'000
3'000
2'000
1'000
0
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG

Figure 24

Figure 25

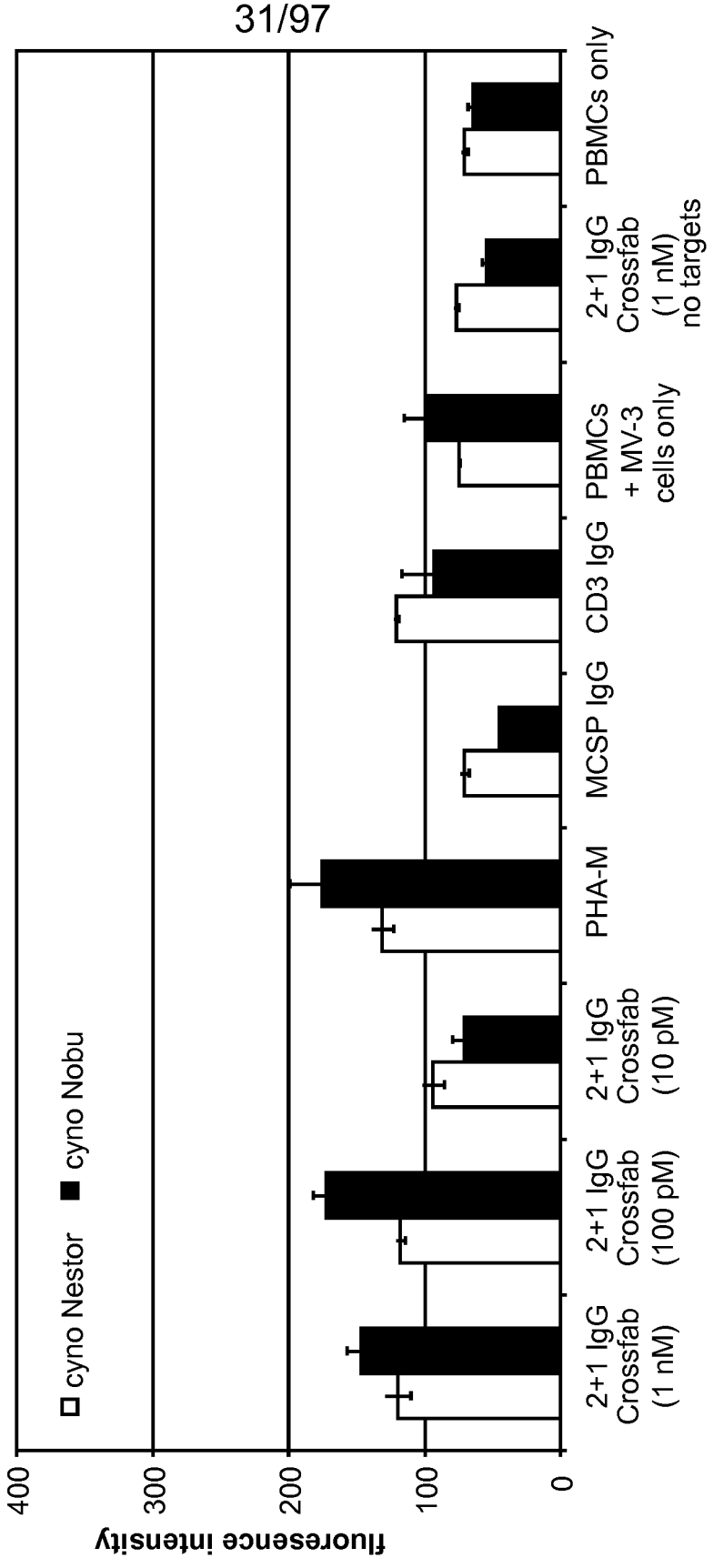

cyno Nestor
cyno Nobu
Fluorescence intensity
400
300
200
100
0
2+1 IgG Crossfab (1 nM)
2+1 IgG Crossfab (100 pM)
2+1 IgG Crossfab (10 pM)
PHA-M
MCSP IgG
CD3 IgG
PBMCs + MV-3 cells only
2+1 IgG Crossfab (1 nM) no targets
PBMCs only

Figure 26

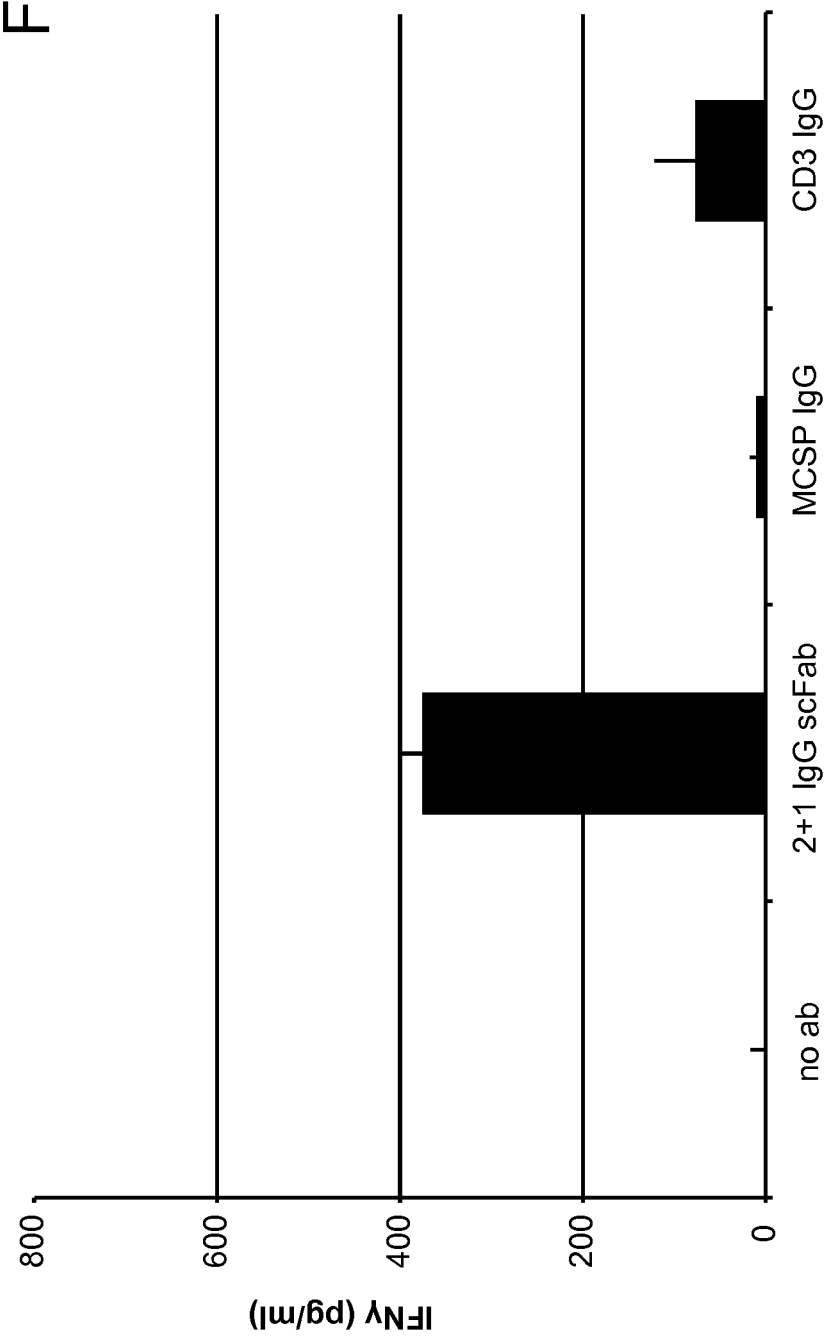


Figure 27

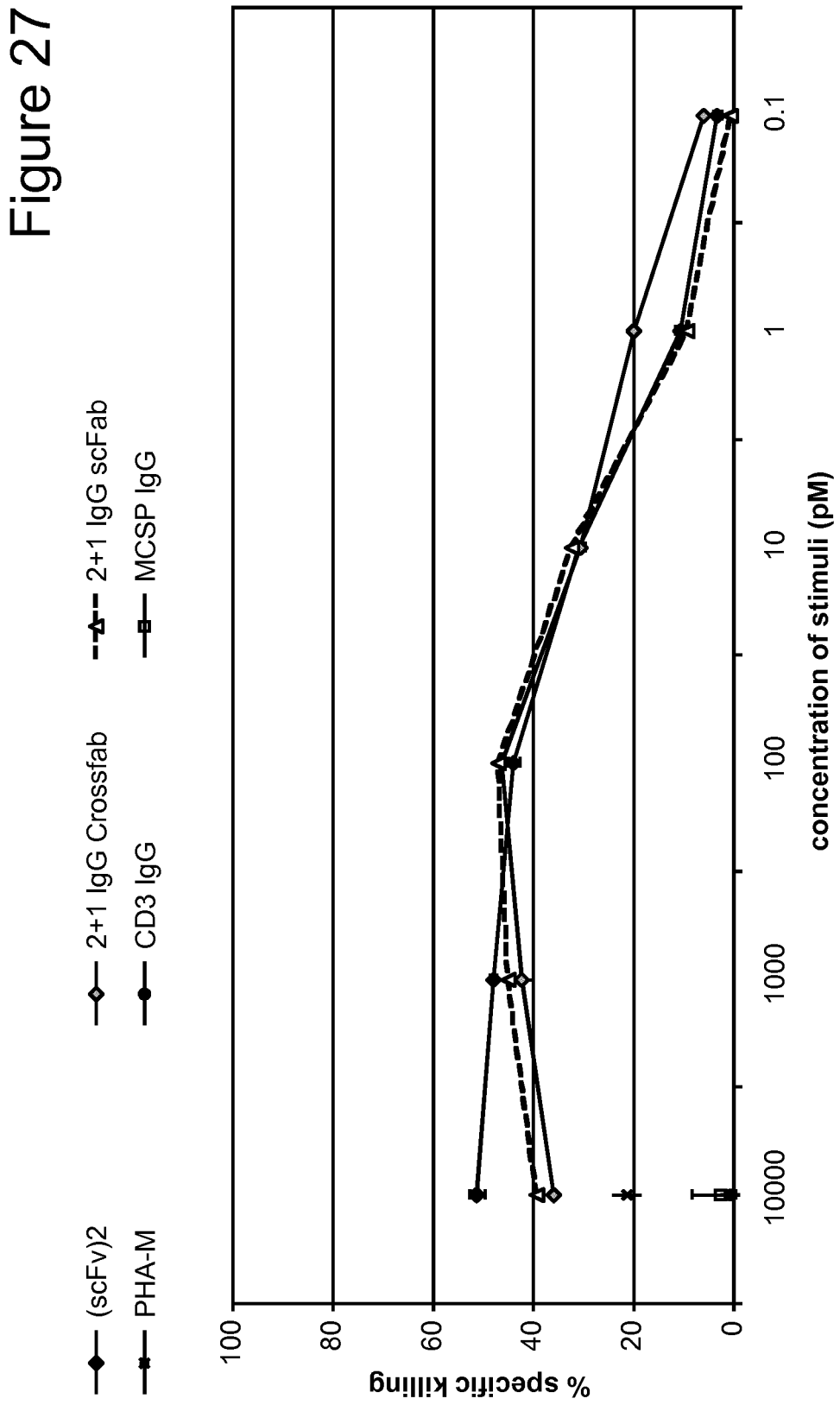

(scFv)2
2+1 IgG Crossfab
2+1 IgG scFab
PHA-M
CD3 IgG
MCSP IgG
% specific killing
0
20
40
60
80
100
concentration of stimuli (pM)
0.1
1
10
100
1000
10000

Figure 28

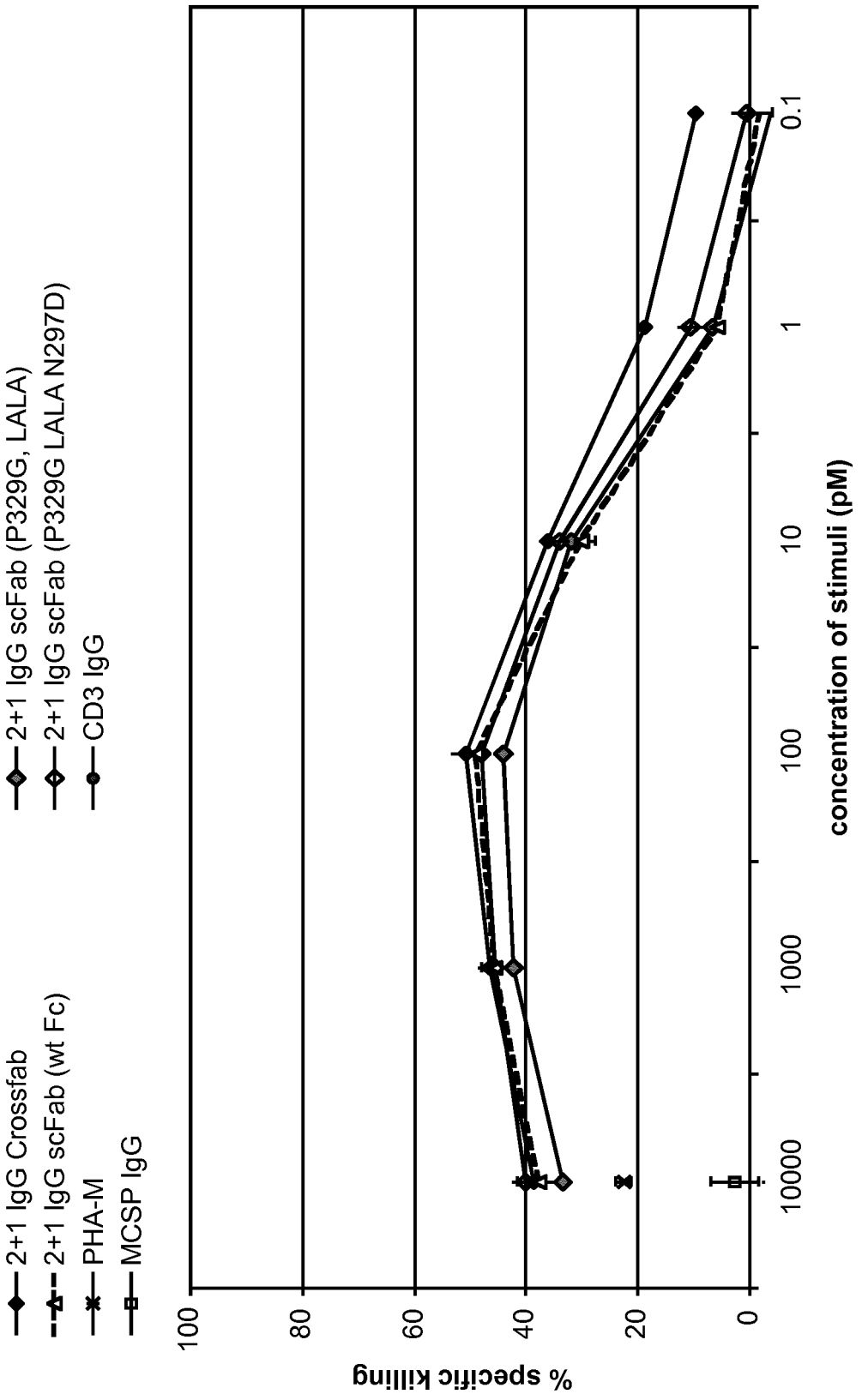

2+1 IgG Crossfab
2+1 IgG scFab (wt Fc)
PHA-M
MCSP IgG
2+1 IgG scFab (P329G, LALA)
2+1 IgG scFab (P329G LALA N297D)
CD3 IgG
% specific killing
0
20
40
60
80
100
concentration of stimuli (pM)
10000
1000
100
10
1
0.1

Figure 29

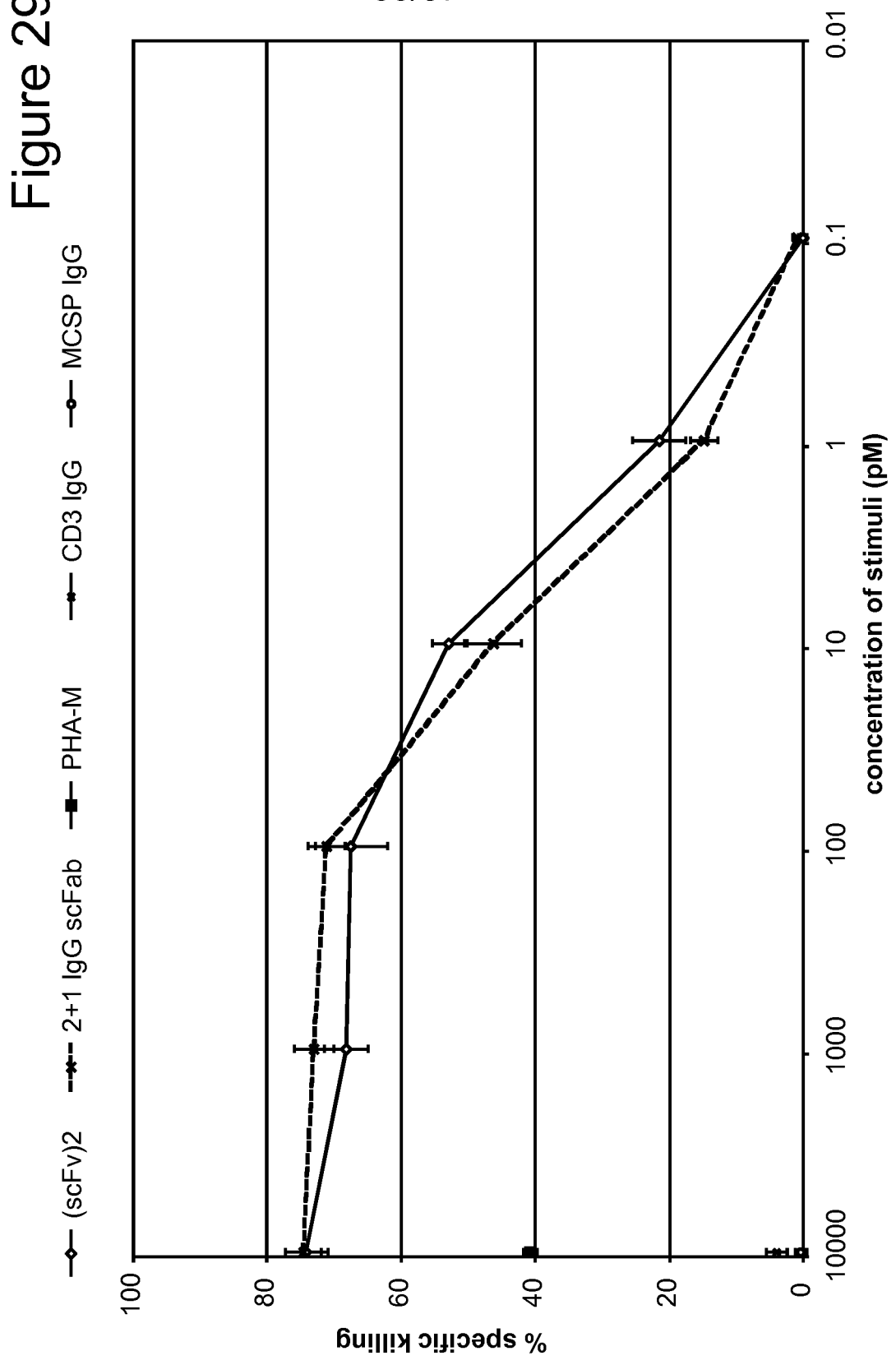

(scFv)2
2+1 IgG scFab
PHA-M
CD3 IgG
MCSP IgG
% specific killing
100
80
60
40
20
0
concentration of stimuli (pM)
10000
1000
100
10
1
0.1
0.01

Figure 30

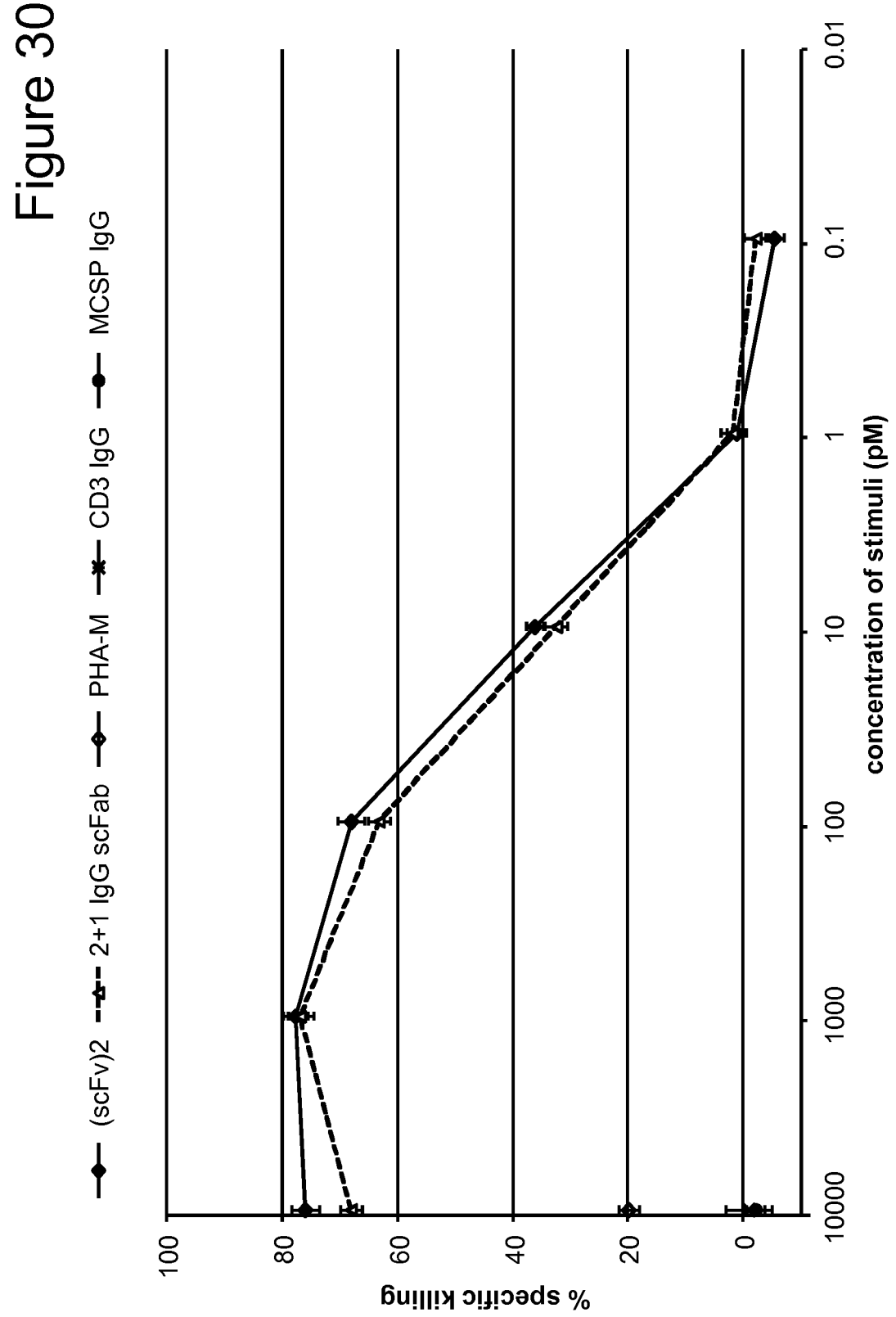

(scFv)2
2+1 IgG scFab
PHA-M
CD3 IgG
MCSP IgG
% specific killing
100
80
60
40
20
0
10000
1000
100
10
1
0.1
0.01
concentration of stimuli (pM)

Figure 31

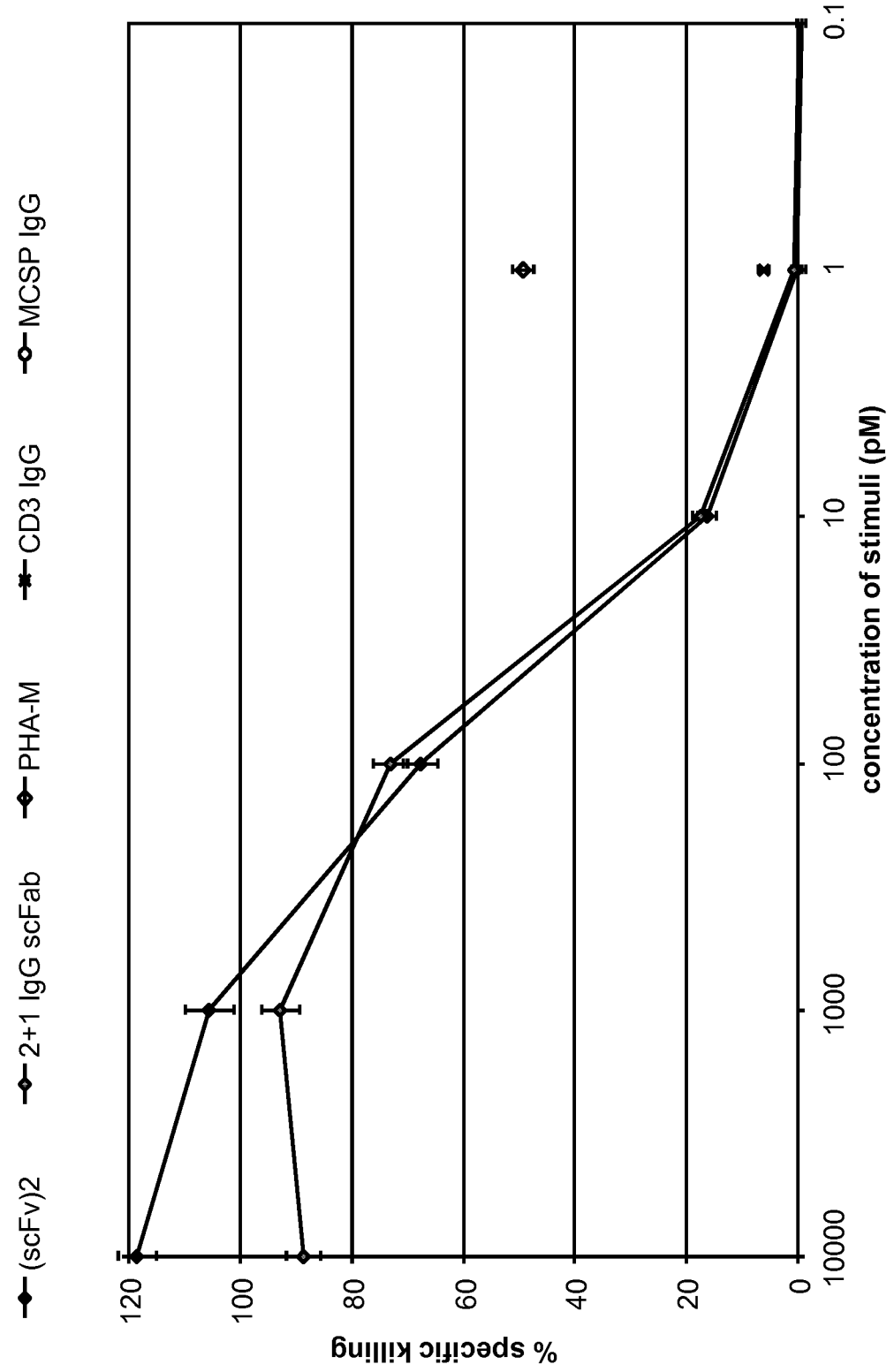

(scFv)2
2+1 IgG scFab
PHA-M
CD3 IgG
MCSP IgG
% specific killing
120
100
80
60
40
20
0
10000
1000
100
10
1
0.1
concentration of stimuli (pM)

Figure 32

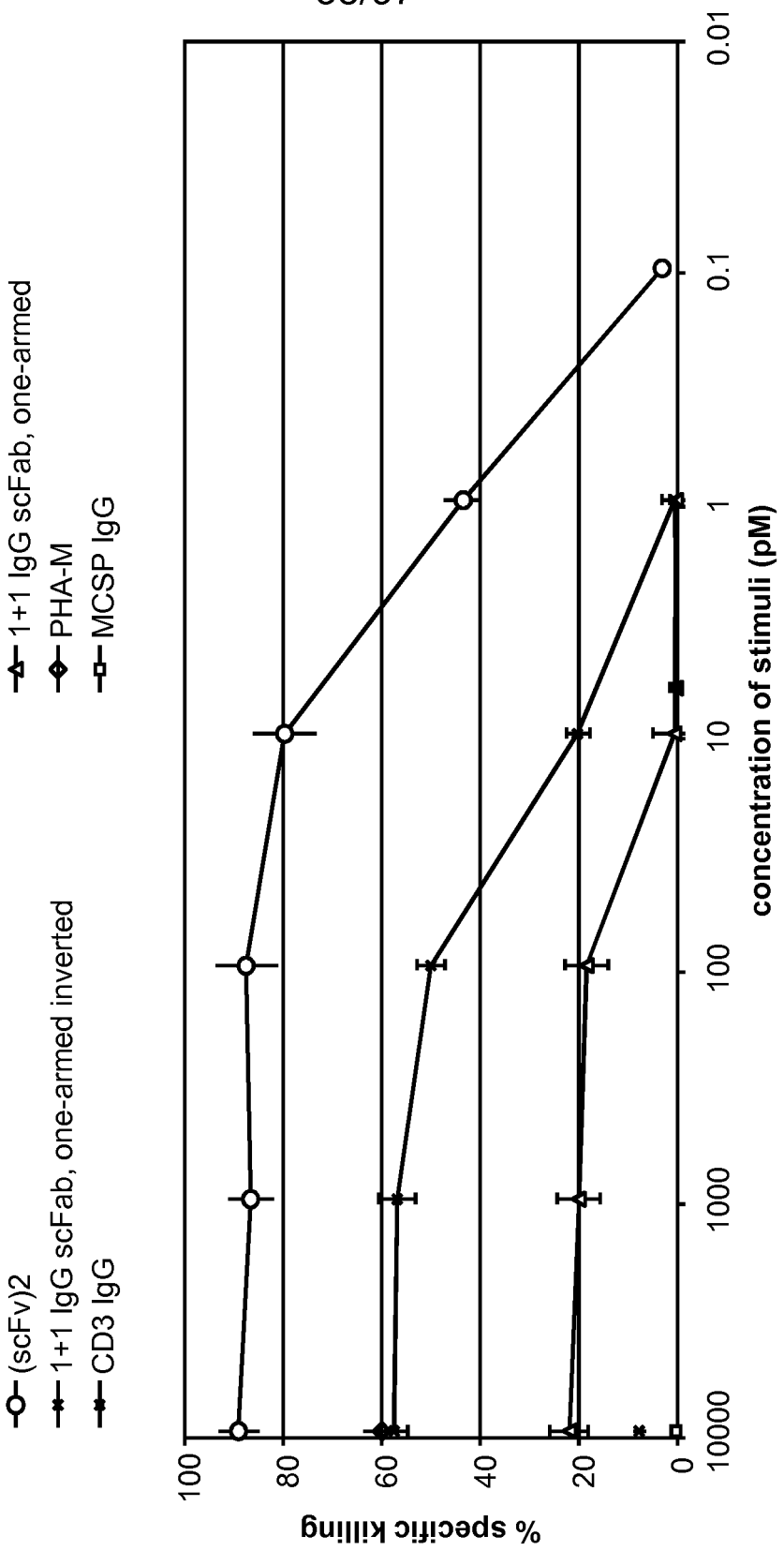

(scFv)2
1+1 IgG scFab, one-armed inverted
CD3 IgG
1+1 IgG scFab, one-armed
PHA-M
MCSP IgG
% specific killing
100
80
60
40
20
0
concentration of stimuli (pM)
10000
1000
100
10
1
0.1
0.01

Figure 33

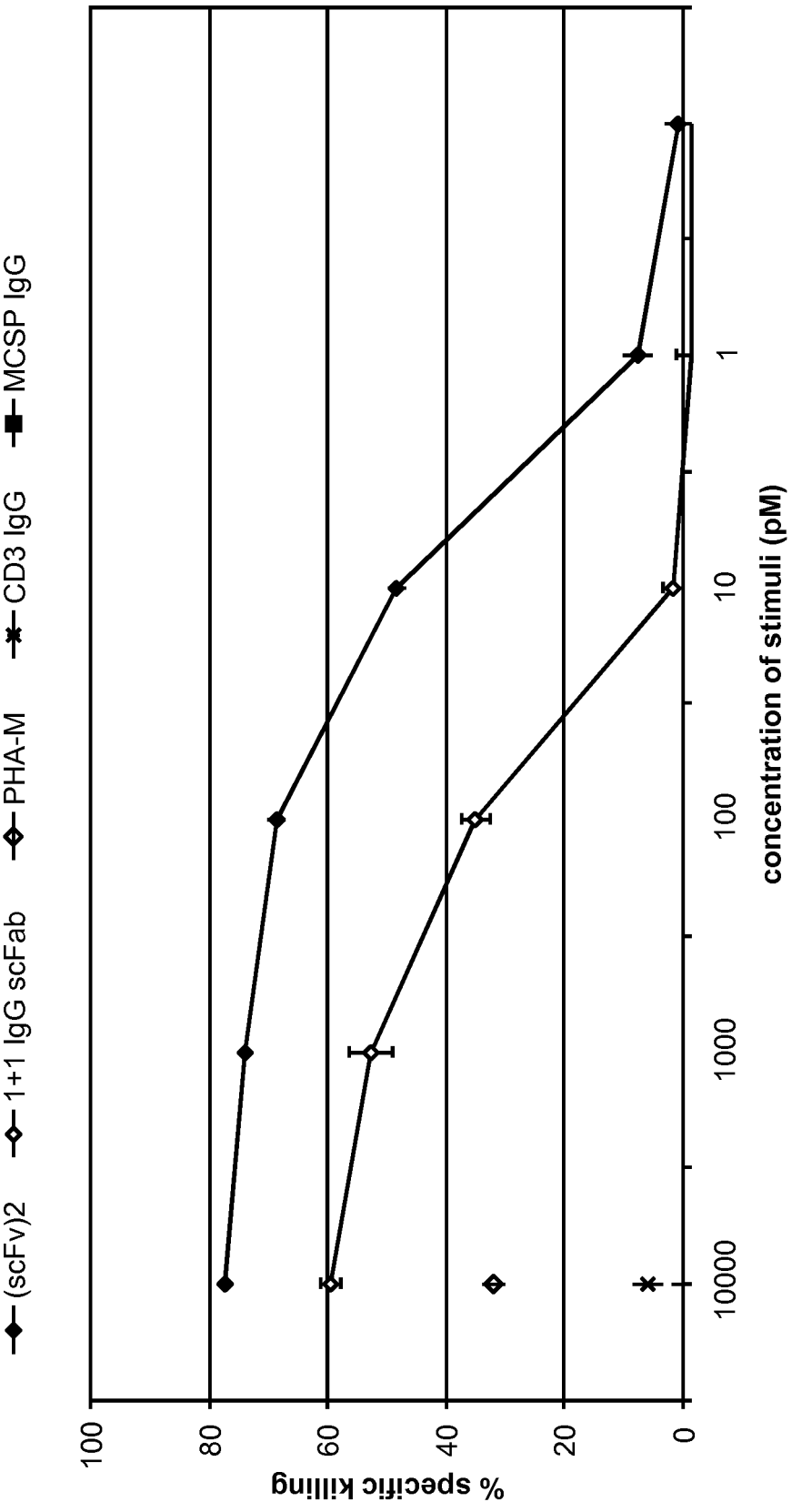

(scFv)2
1+1 IgG scFab
PHA-M
CD3 IgG
MCSP IgG
% specific killing
100
80
60
40
20
0
10000
1000
100
10
1
concentration of stimuli (pM)

Figure 34

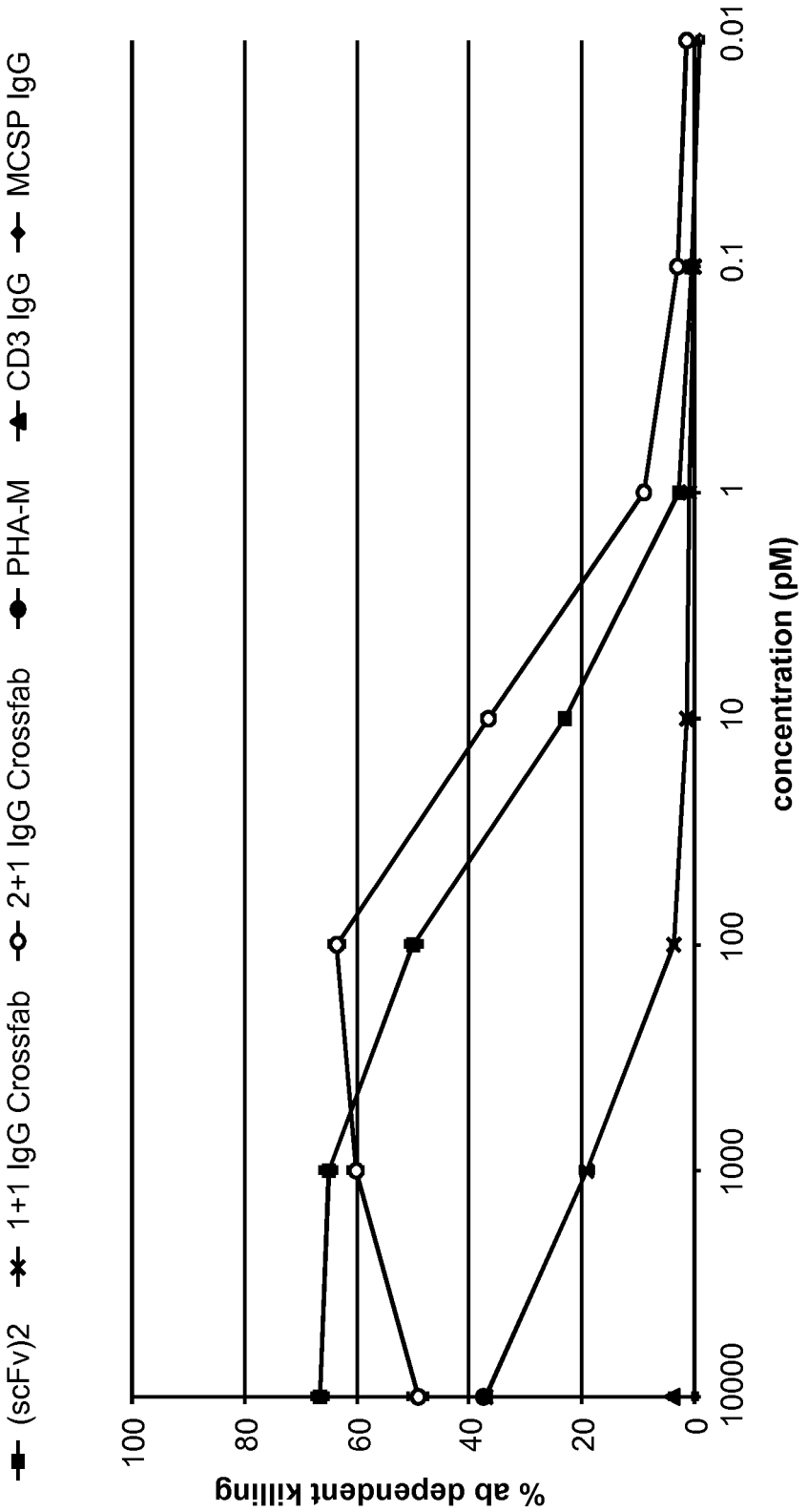

(scFv)2
1+1 IgG Crossfab
2+1 IgG Crossfab
PHA-M
CD3 IgG
MCSP IgG
% ab dependent killing
100
80
60
40
20
0
10000
1000
100
10
1
0.1
0.01
concentration (pM)

Figure 35

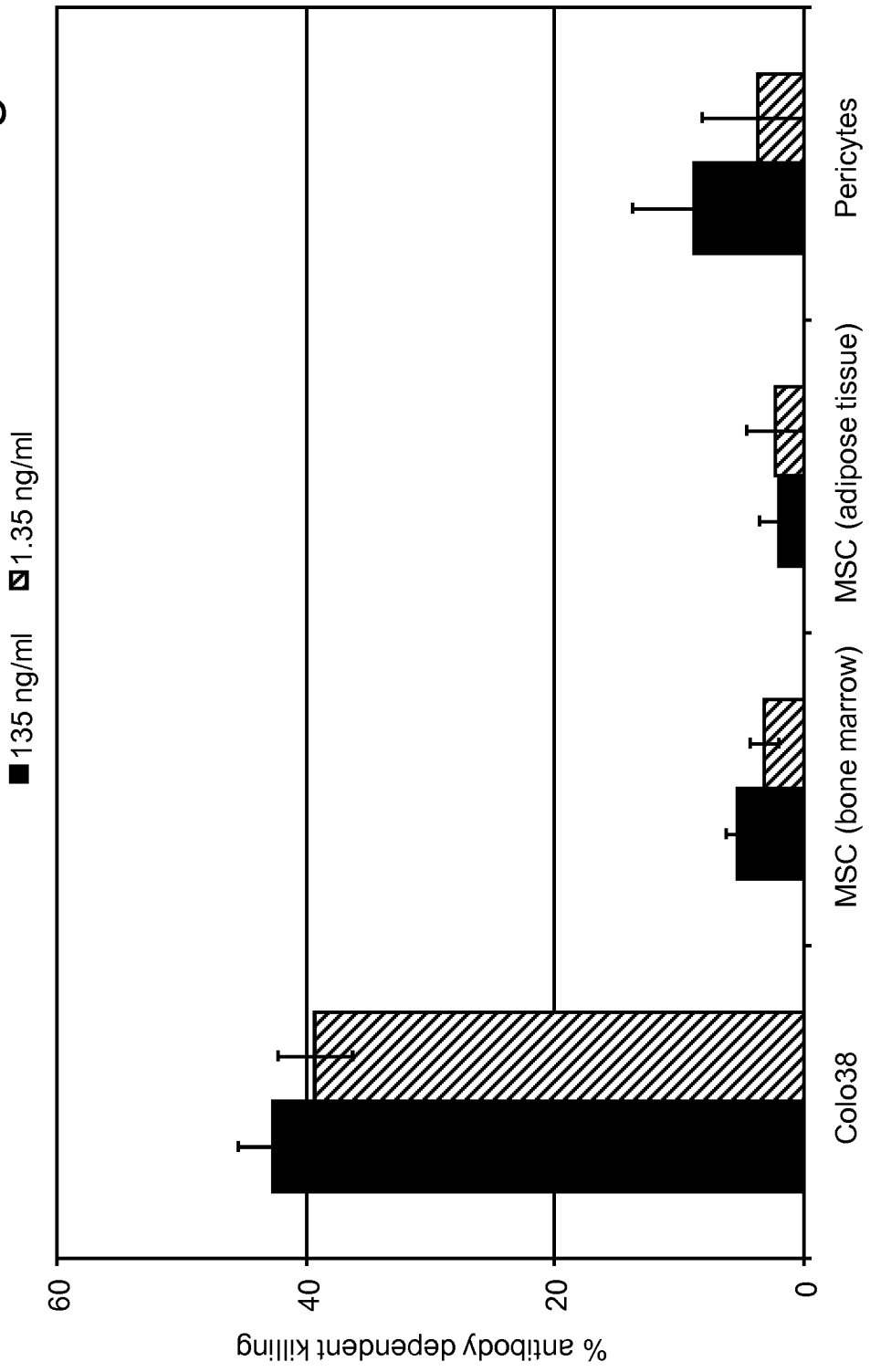

135 ng/ml
1.35 ng/ml
% antibody dependent killing
0
20
40
60
Colo38
MSC (bone marrow)
MSC (adipose tissue)
Pericytes

Figure 36

A

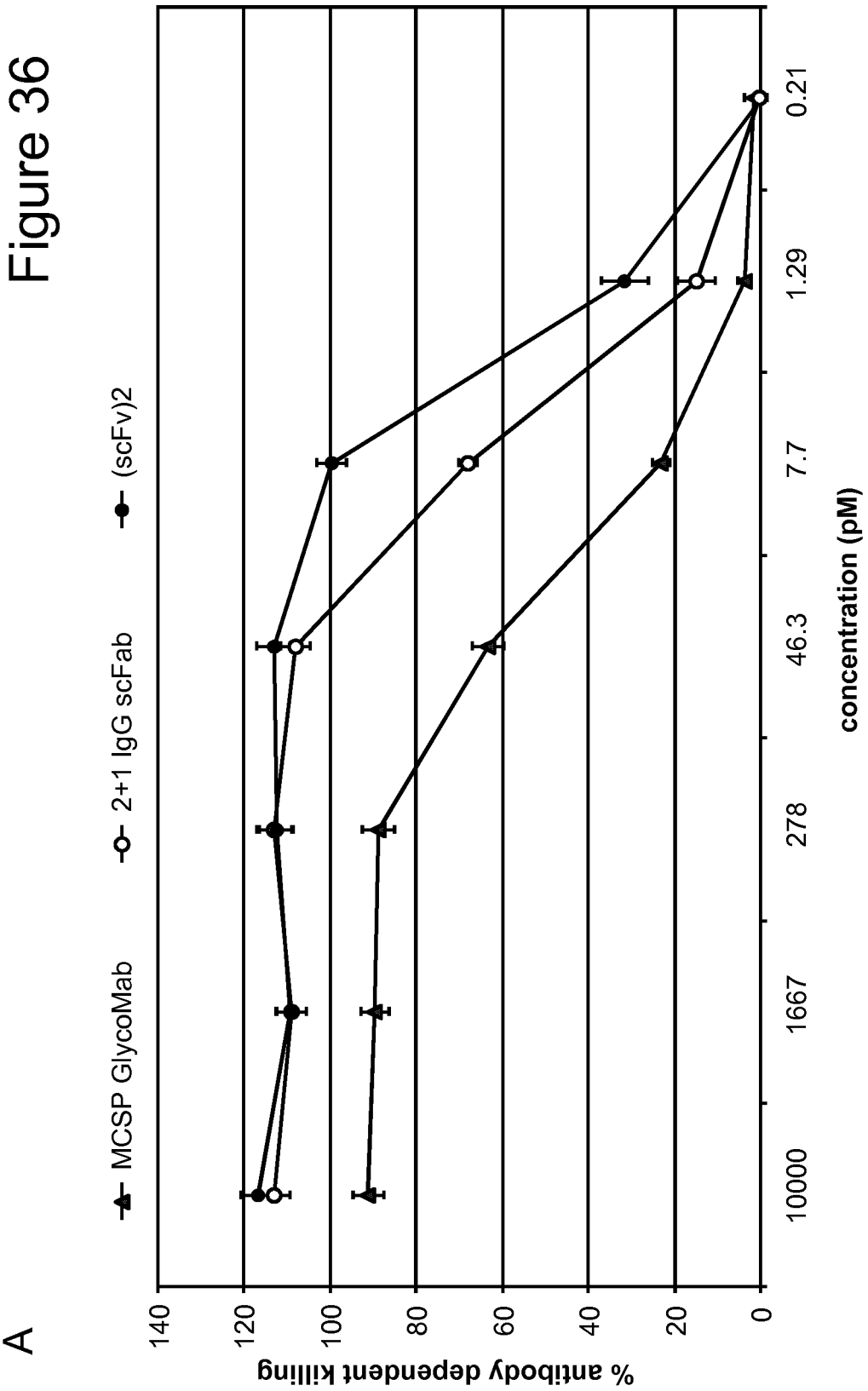

% antibody dependent killing
140
120
100
80
60
40
20
0
concentration (pM)
10000
1667
278
46.3
7.7
1.29
0.21
MCSP GlycoMab
2+1 IgG scFab
(scFv)2

Figure 36

B

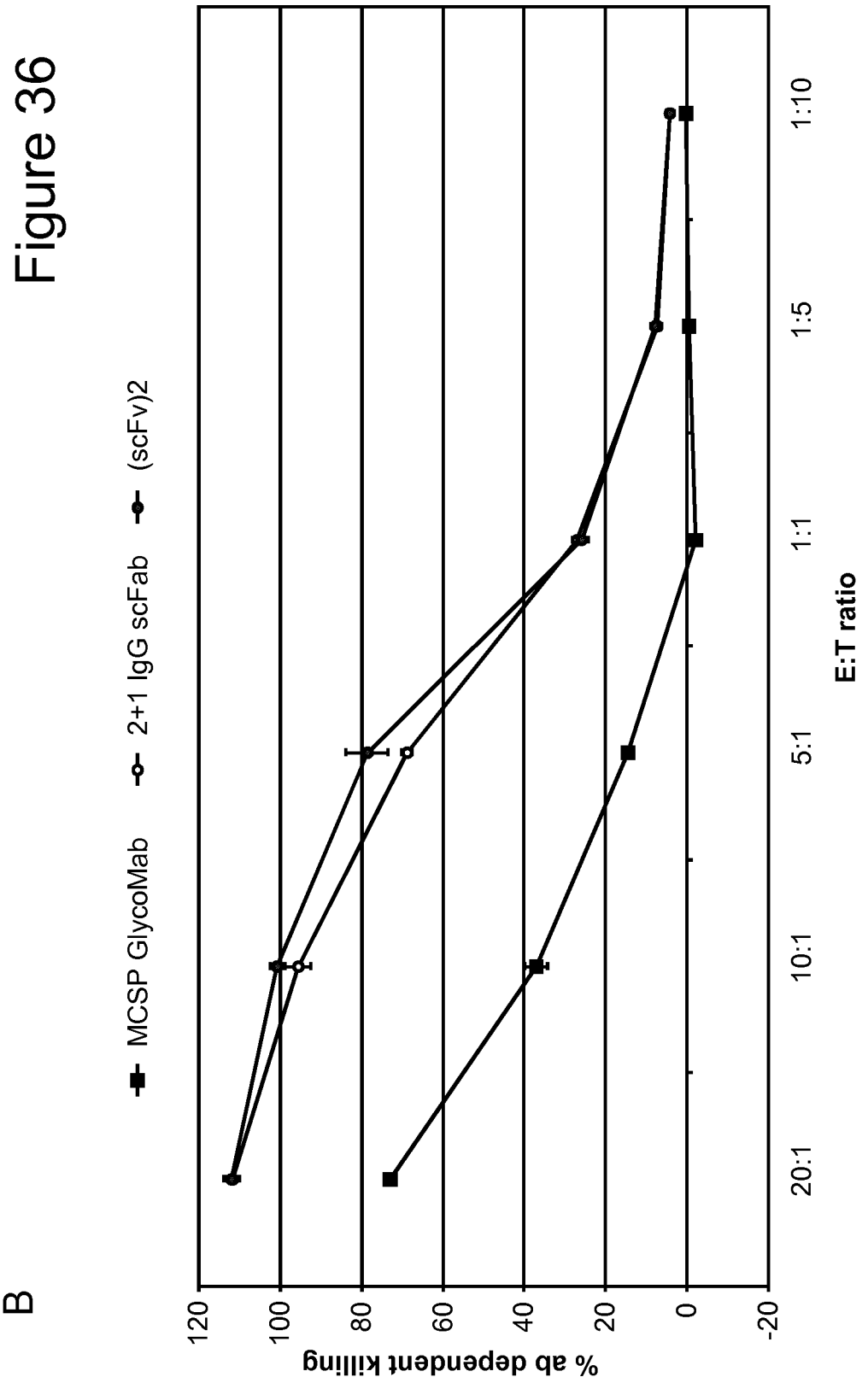

MCSP GlycoMab
2+1 IgG scFab
(scFv)2
% ab dependent killing
120
100
80
60
40
20
0
-20
20:1
10:1
5:1
1:1
1:5
1:10
E:T ratio

Figure 37

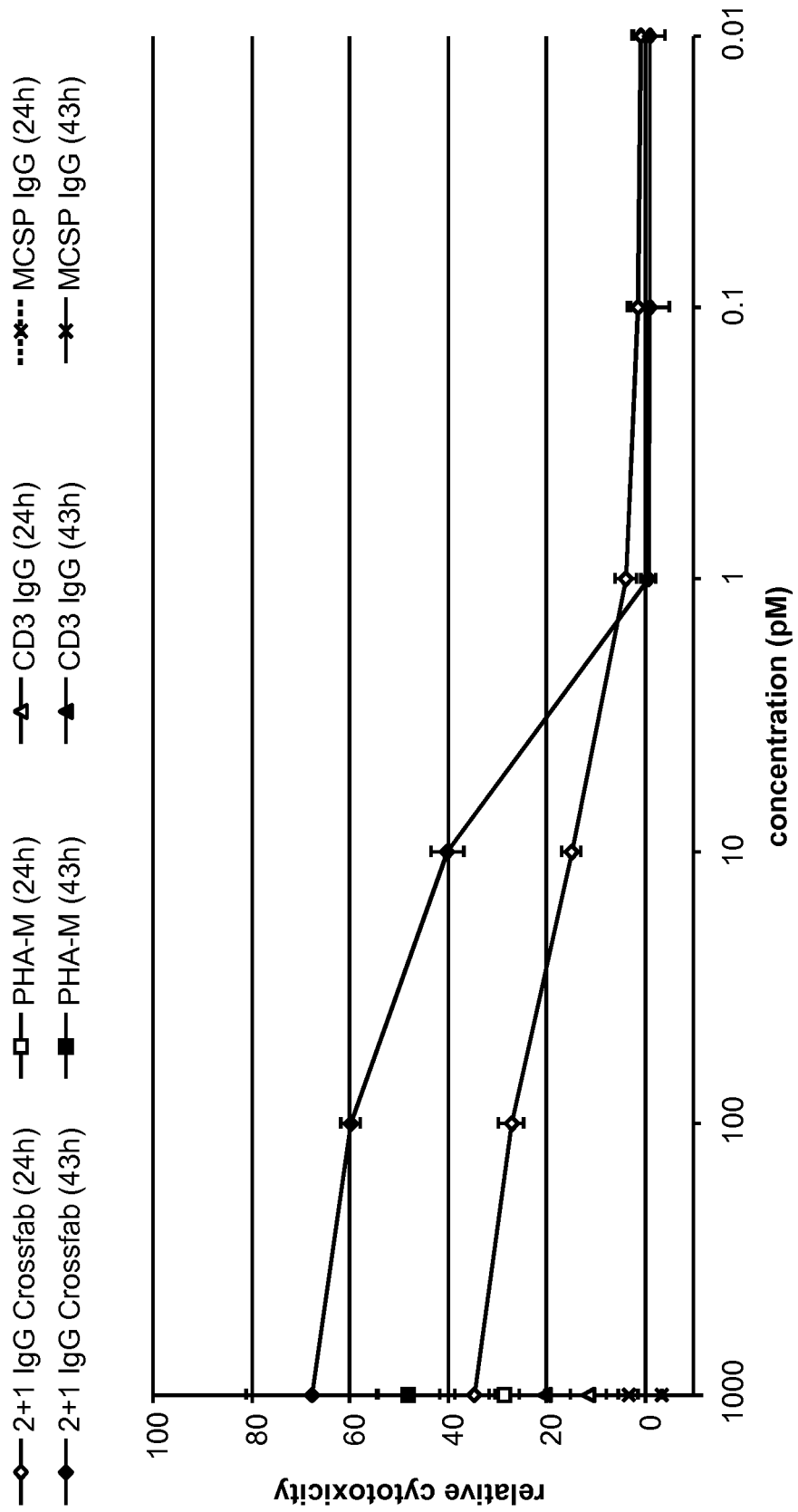

2+1 IgG Crossfab (24h)
2+1 IgG Crossfab (43h)
PHA-M (24h)
PHA-M (43h)
CD3 IgG (24h)
CD3 IgG (43h)
MCSP IgG (24h)
MCSP IgG (43h)
relative cytotoxicity
100
80
60
40
20
0
concentration (pM)
1000
100
10
1
0.1
0.01

Figure 38

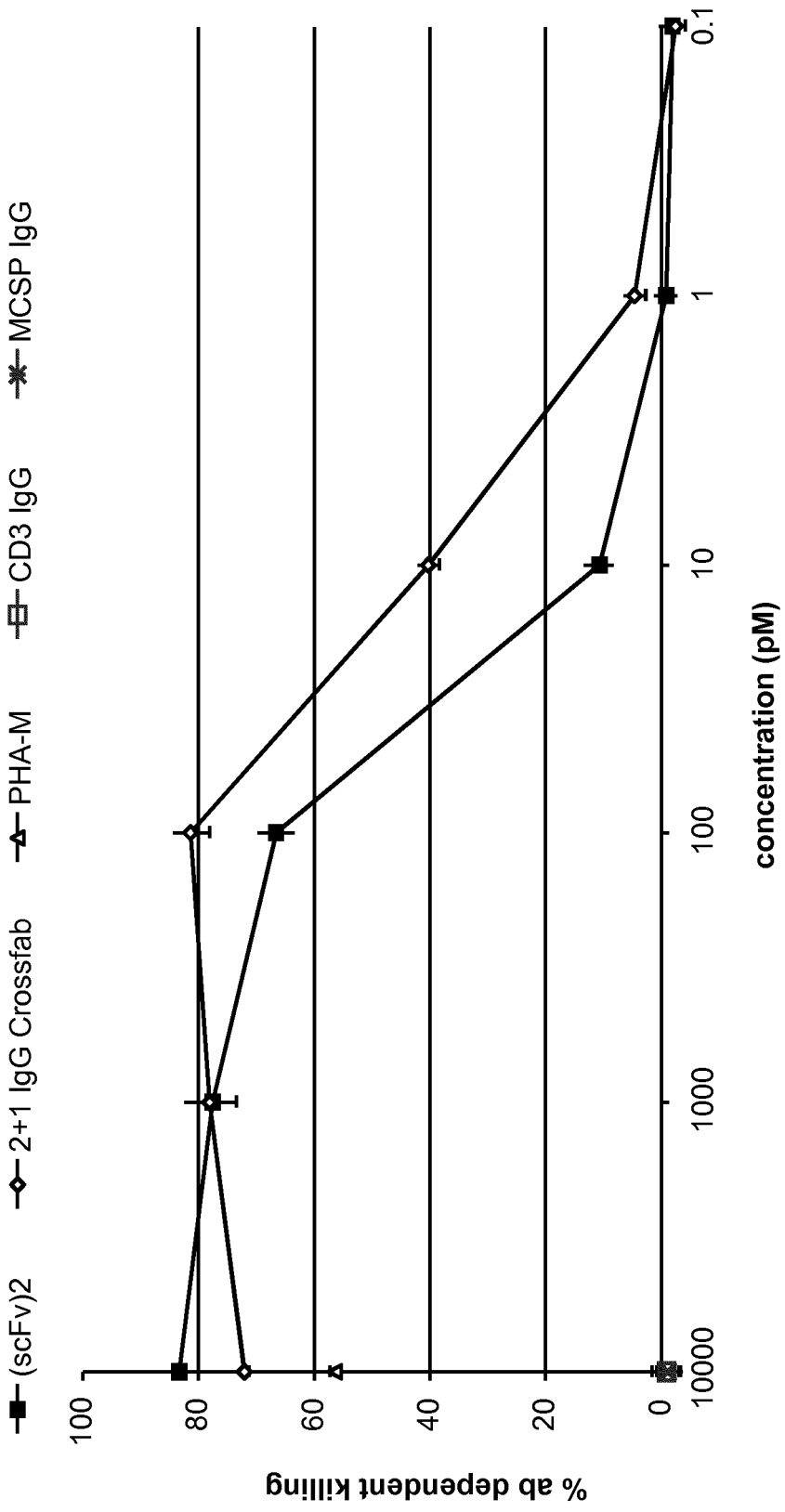

(scFv)2
2+1 IgG Crossfab
PHA-M
CD3 IgG
MCSP IgG
% ab dependent killing
100
80
60
40
20
0
10000
1000
100
10
1
0.1
concentration (pM)

Figure 39

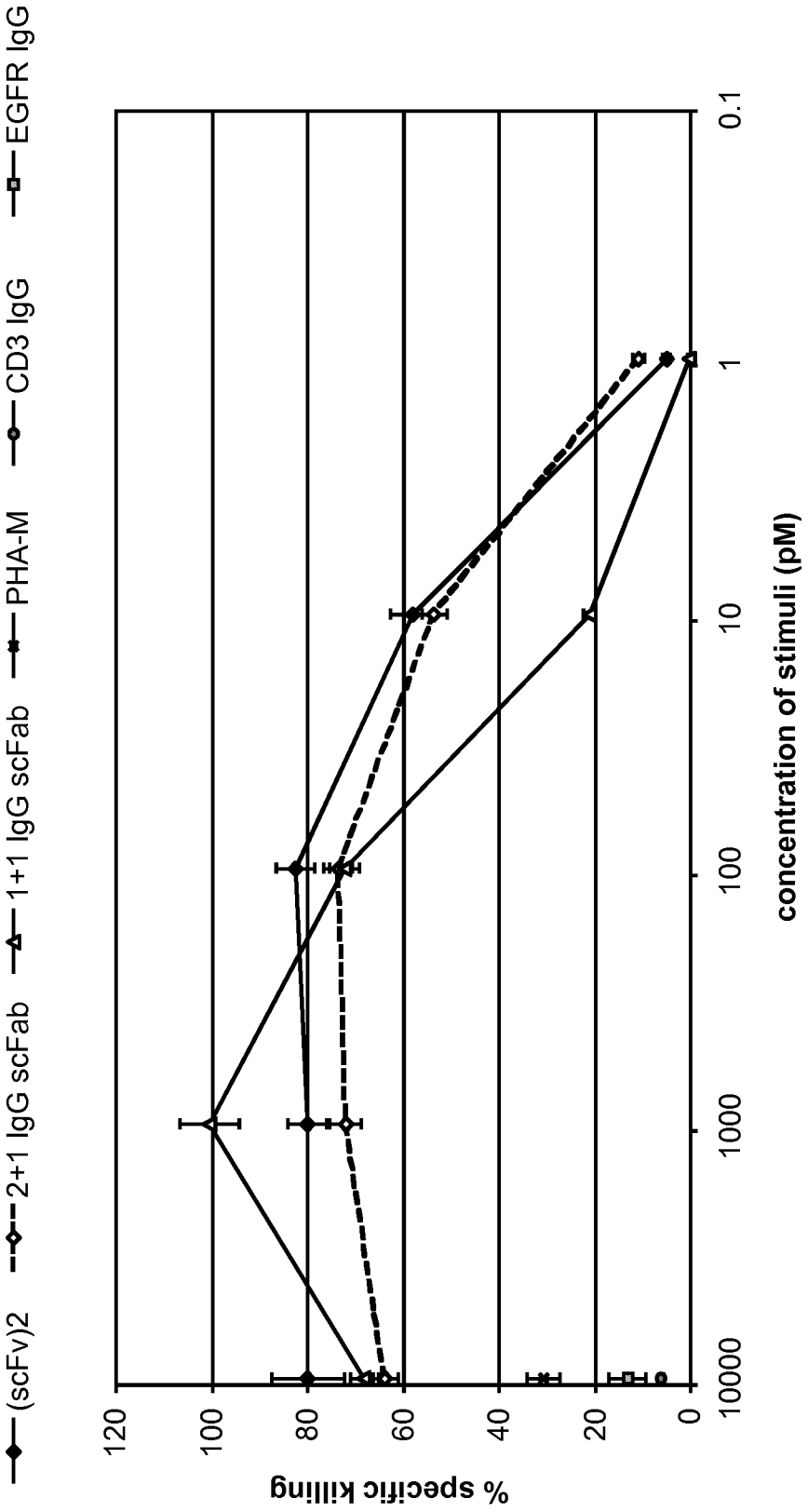

(scFv)2
2+1 IgG scFab
1+1 IgG scFab
PHA-M
CD3 IgG
EGFR IgG
% specific killing
120
100
80
60
40
20
0
10000
1000
100
10
1
0.1
concentration of stimuli (pM)

Figure 40

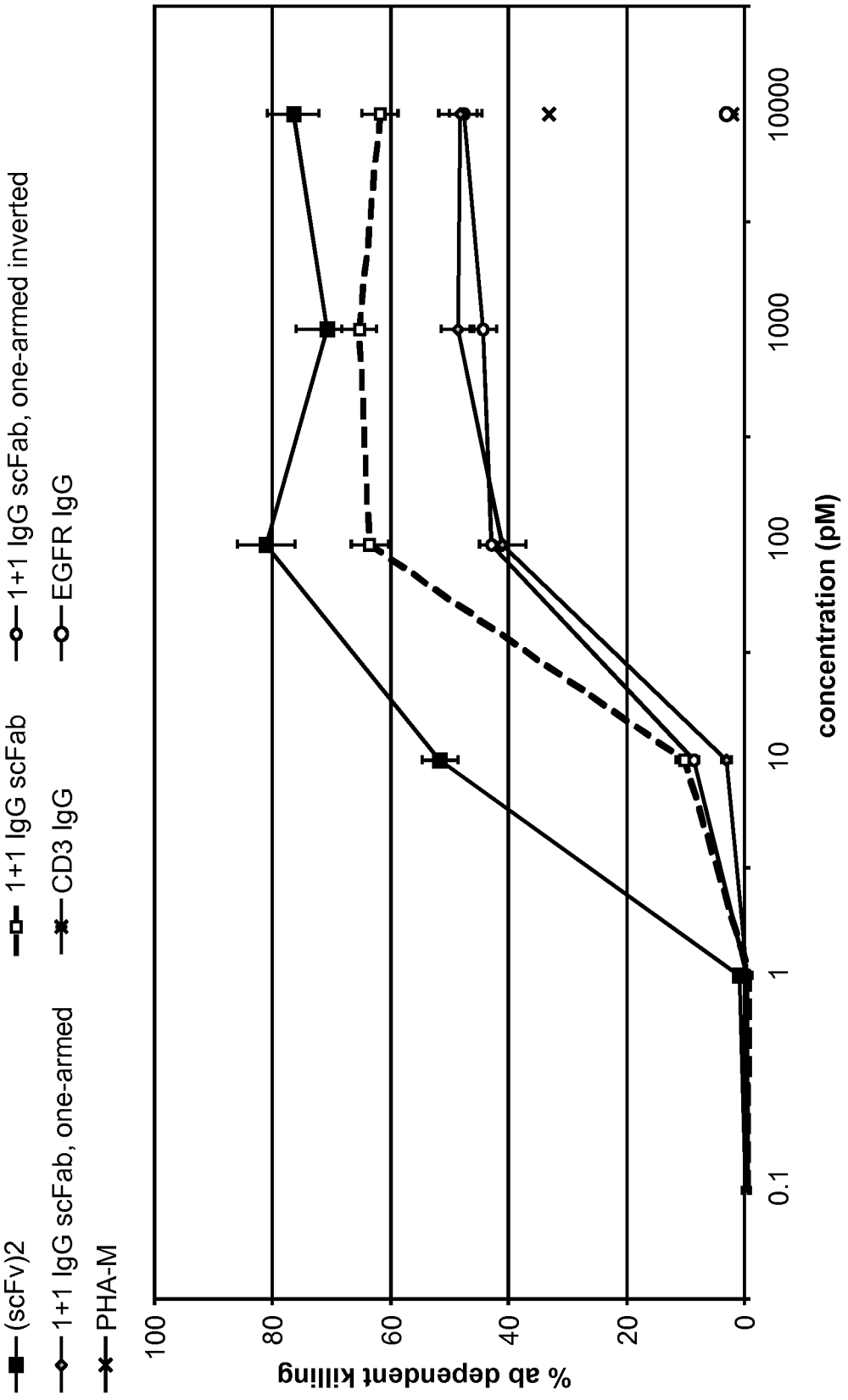

(scFv)2
1+1 IgG scFab
1+1 IgG scFab, one-armed inverted
1+1 IgG scFab, one-armed
CD3 IgG
EGFR IgG
PHA-M
% ab dependent killing
concentration (pM)
0
20
40
60
80
100
0.1
1
10
100
1000
10000

Figure 41

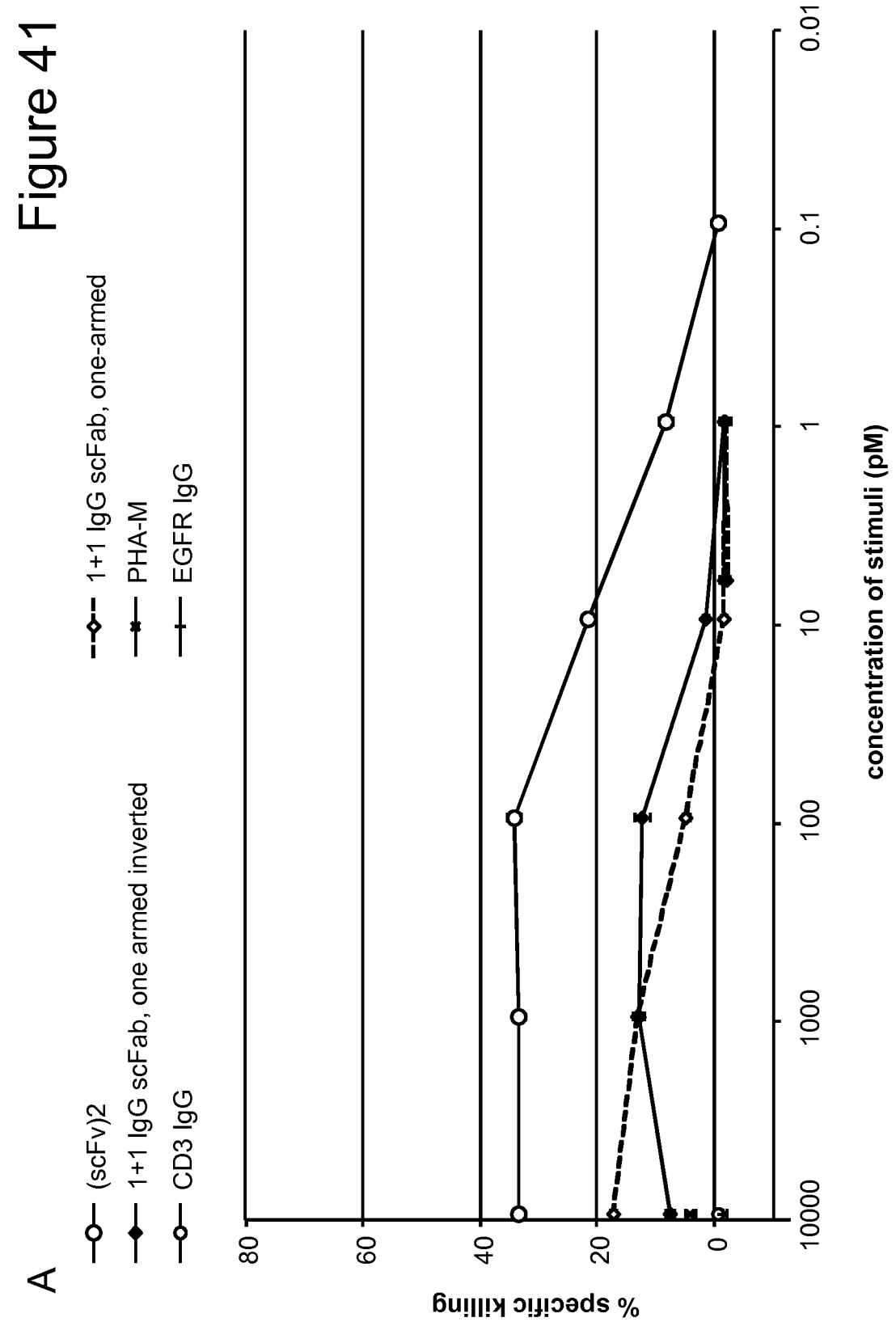

A
(scFv)2
1+1 IgG scFab, one armed inverted
CD3 IgG
1+1 IgG scFab, one-armed
PHA-M
EGFR IgG
% specific killing
80
60
40
20
0
10000
1000
100
10
1
0.1
0.01
concentration of stimuli (pM)

Figure 41

B

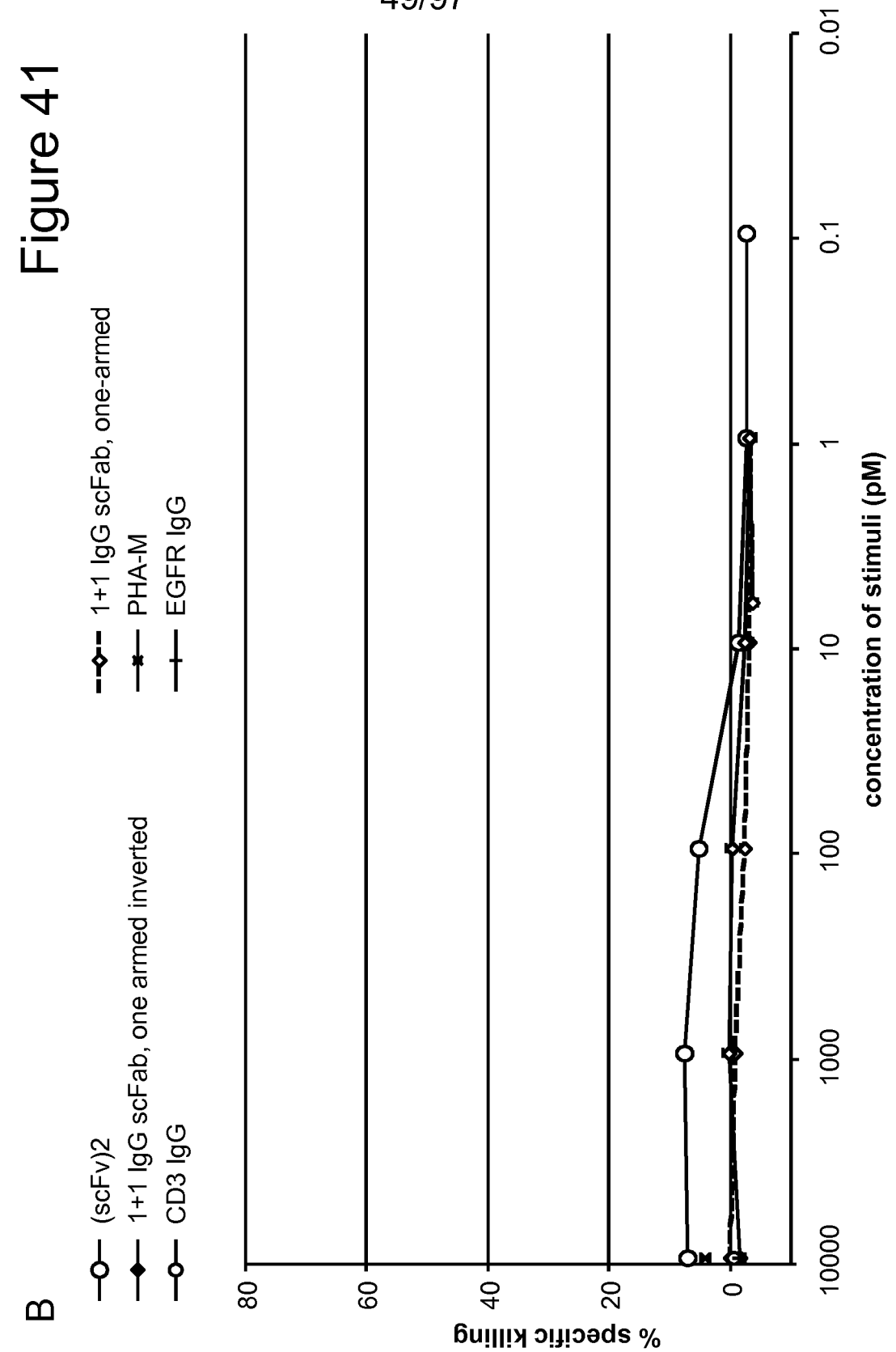
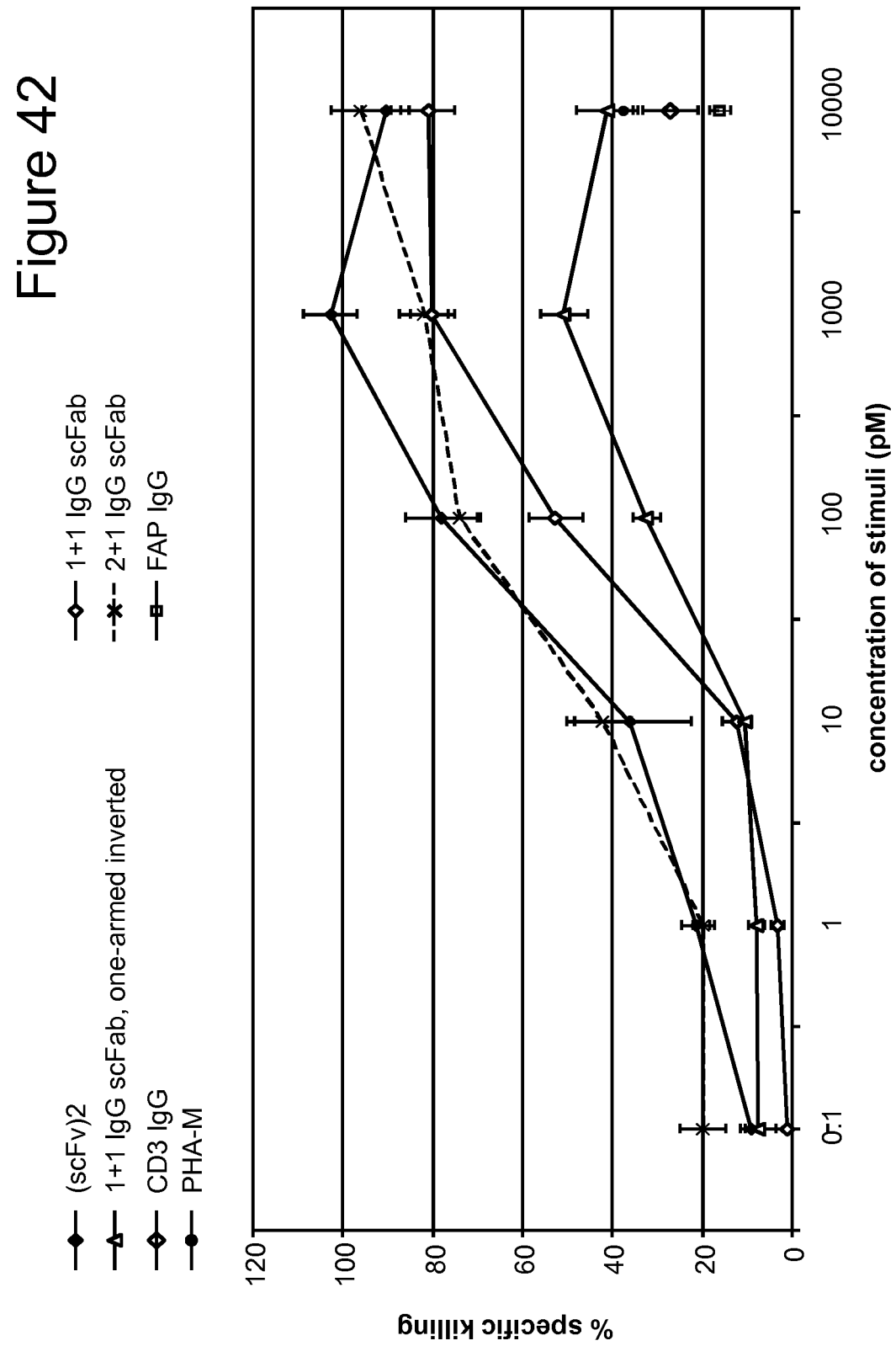

(scFv)2
1+1 IgG scFab, one armed inverted
CD3 IgG
1+1 IgG scFab, one-armed
PHA-M
EGFR IgG
% specific killing
80
60
40
20
0
10000
1000
100
10
1
0.1
0.01
concentration of stimuli (pM)

Figure 42


(scFv)2
1+1 IgG scFab, one-armed inverted
CD3 IgG
PHA-M
1+1 IgG scFab
2+1 IgG scFab
FAP IgG
% specific killing
0
20
40
60
80
100
120
0:1
1
10
100
1000
10000
concentration of stimuli (pM)

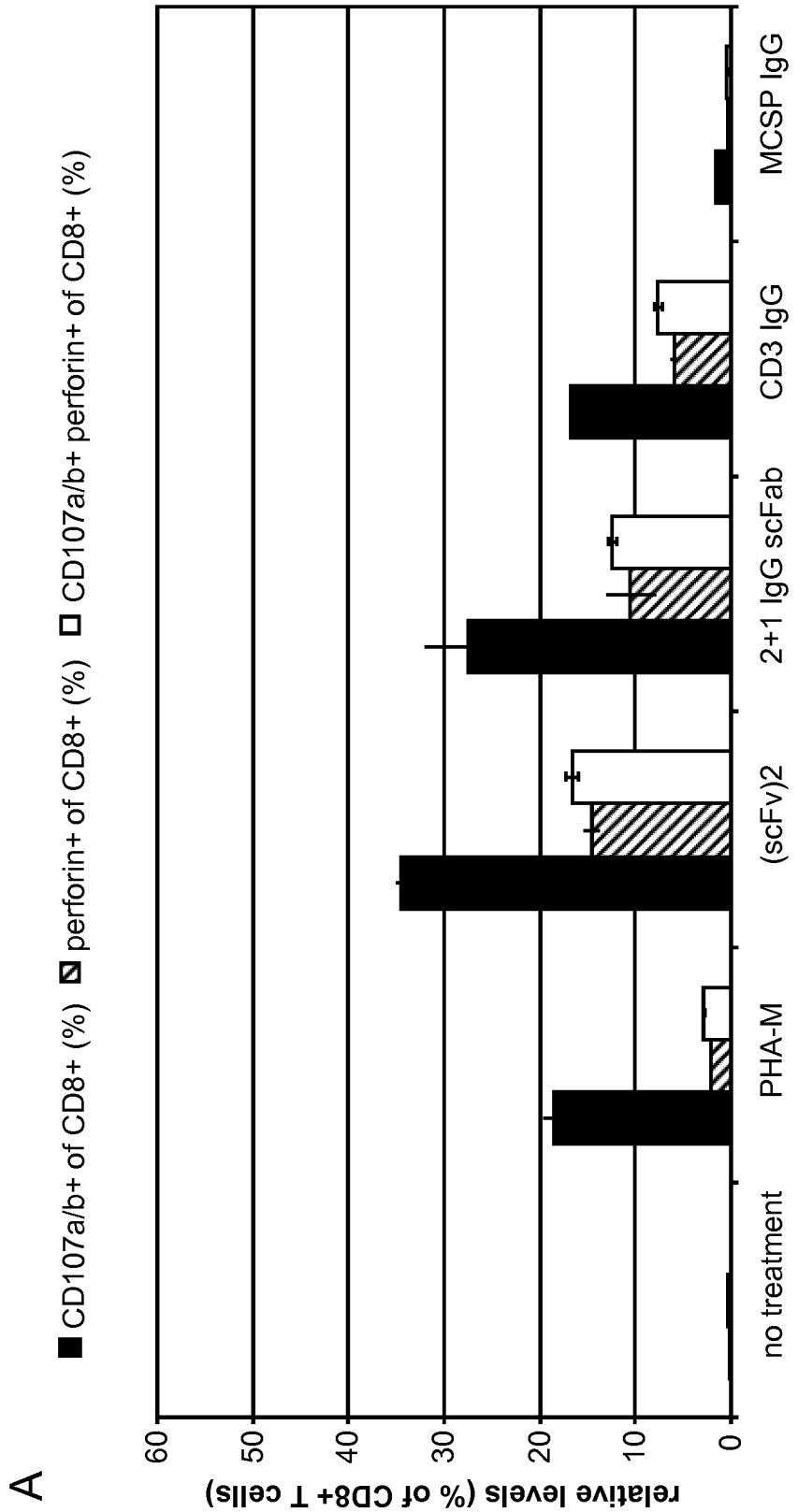

A
CD107a/b+ of CD8+ (%)
perforin+ of CD8+ (%)
CD107a/b+ perforin+ of CD8+ (%)
relative levels (% of CD8+ T cells)
0
10
20
30
40
50
60
no treatment
PHA-M
(scFv)2
2+1 IgG scFab
CD3 IgG
MCSP IgG

Figure 43

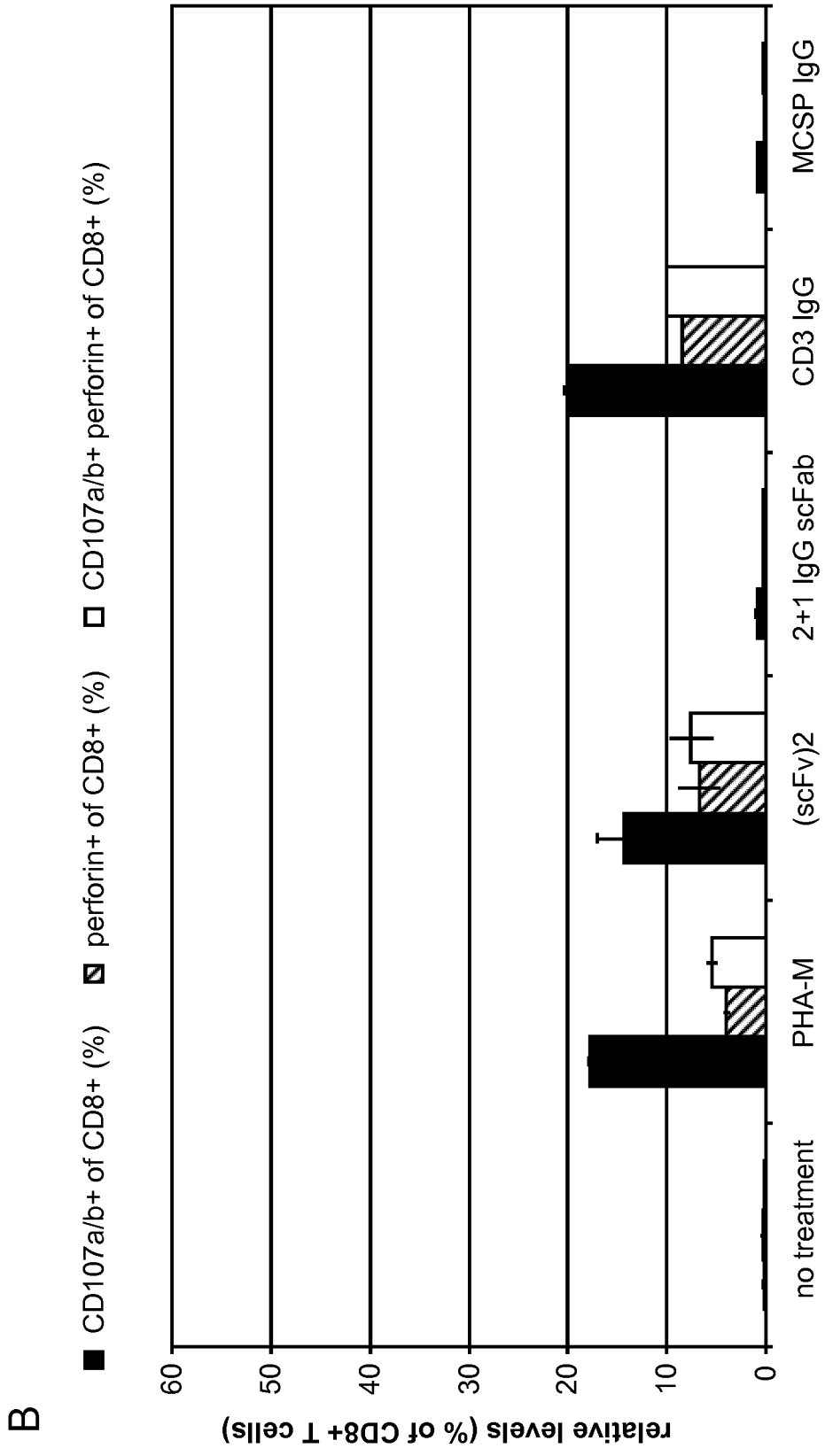

B
CD107a/b+ of CD8+ (%)
perforin+ of CD8+ (%)
CD107a/b+ perforin+ of CD8+ (%)
relative levels (% of CD8+ T cells)
0
10
20
30
40
50
60
no treatment
PHA-M
(scFv)2
2+1 IgG scFab
CD3 IgG
MCSP IgG

Figure 43

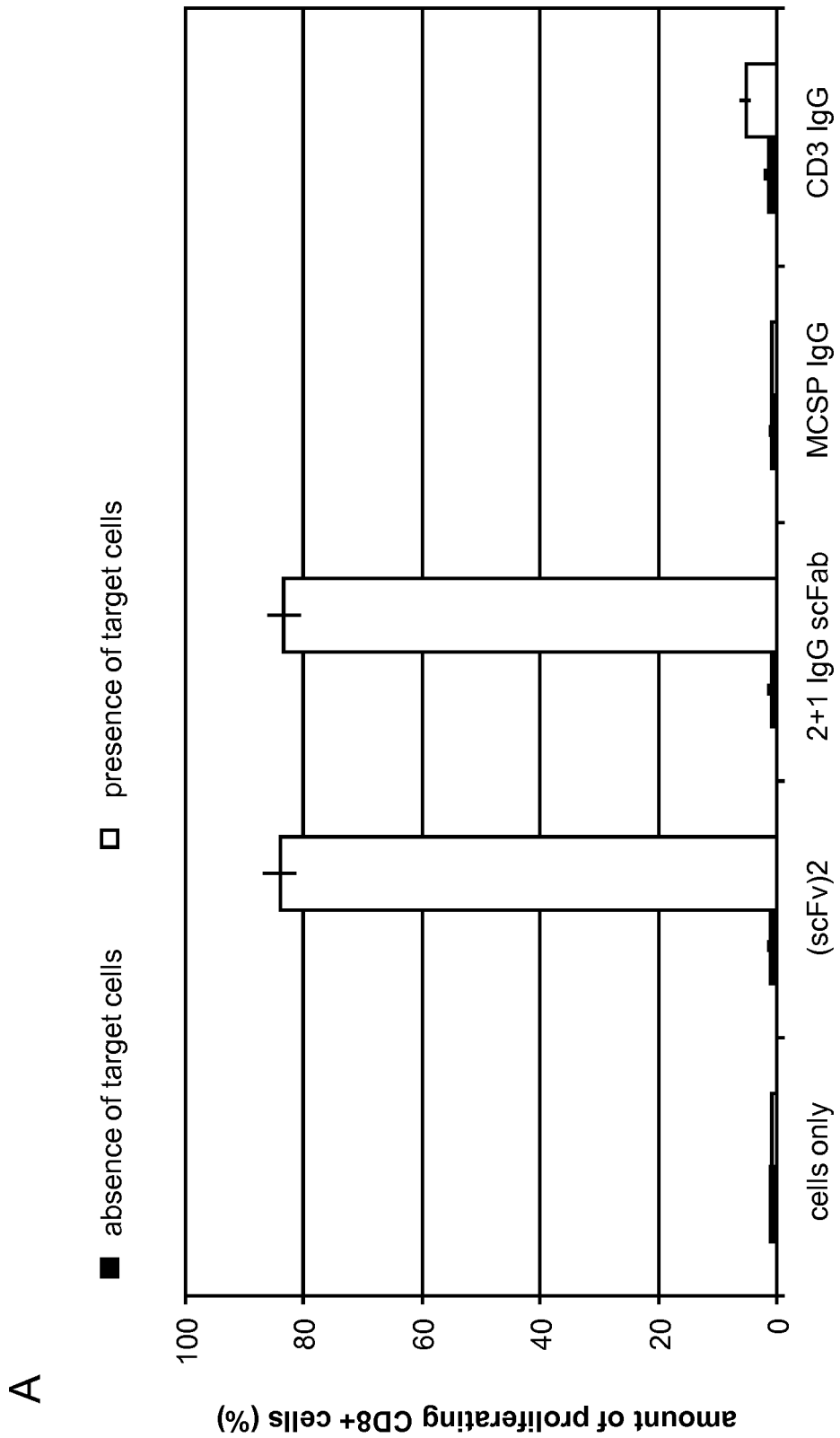

A
absence of target cells
presence of target cells
amount of proliferating CD8+ cells (%)
100
80
60
40
20
0
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG

Figure 44

Figure 44

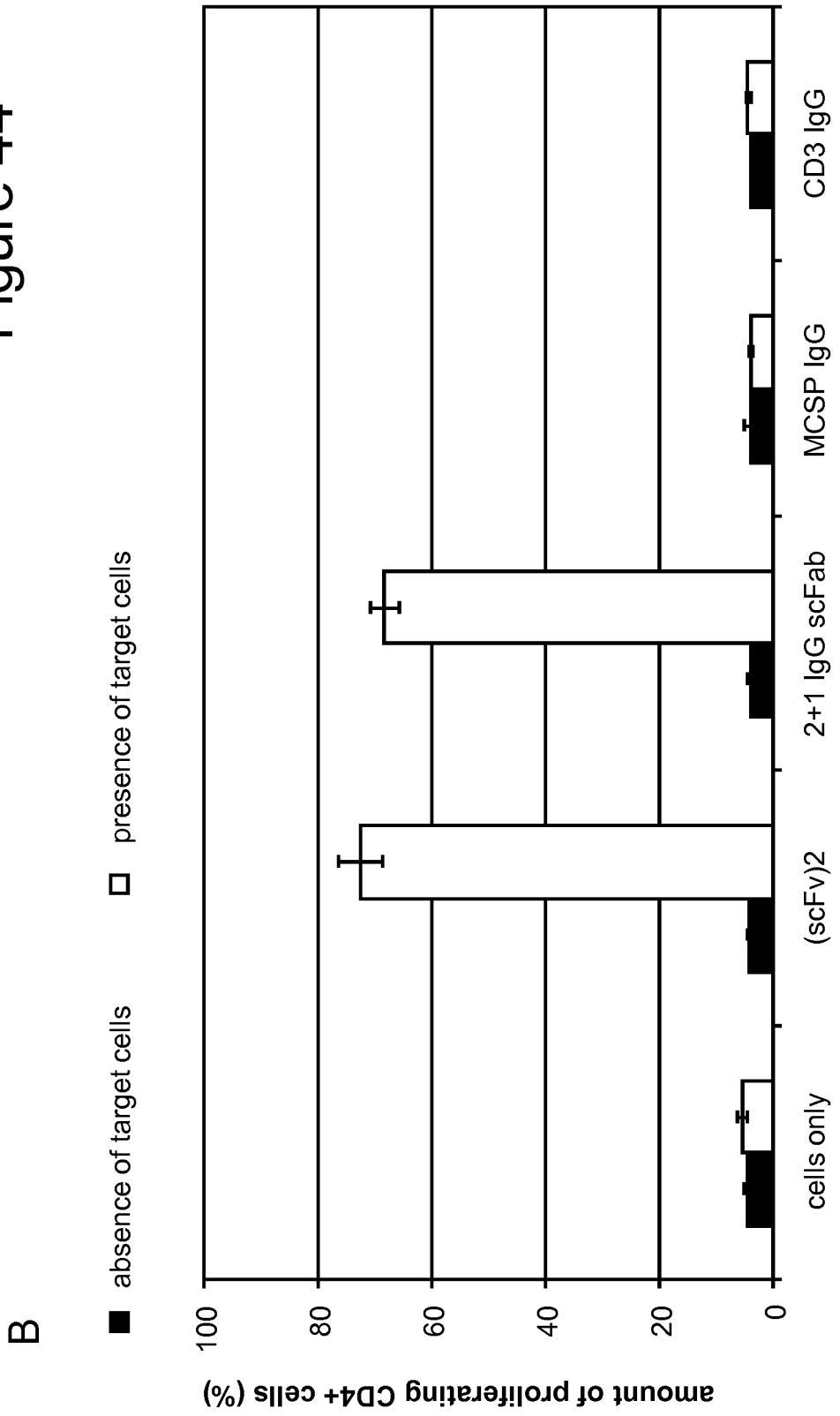

B
absence of target cells
presence of target cells
amount of proliferating CD4+ cells (%)
0
20
40
60
80
100
cells only
(scFv)2
2+1 IgG scFab
MCSP IgG
CD3 IgG

Figure 45

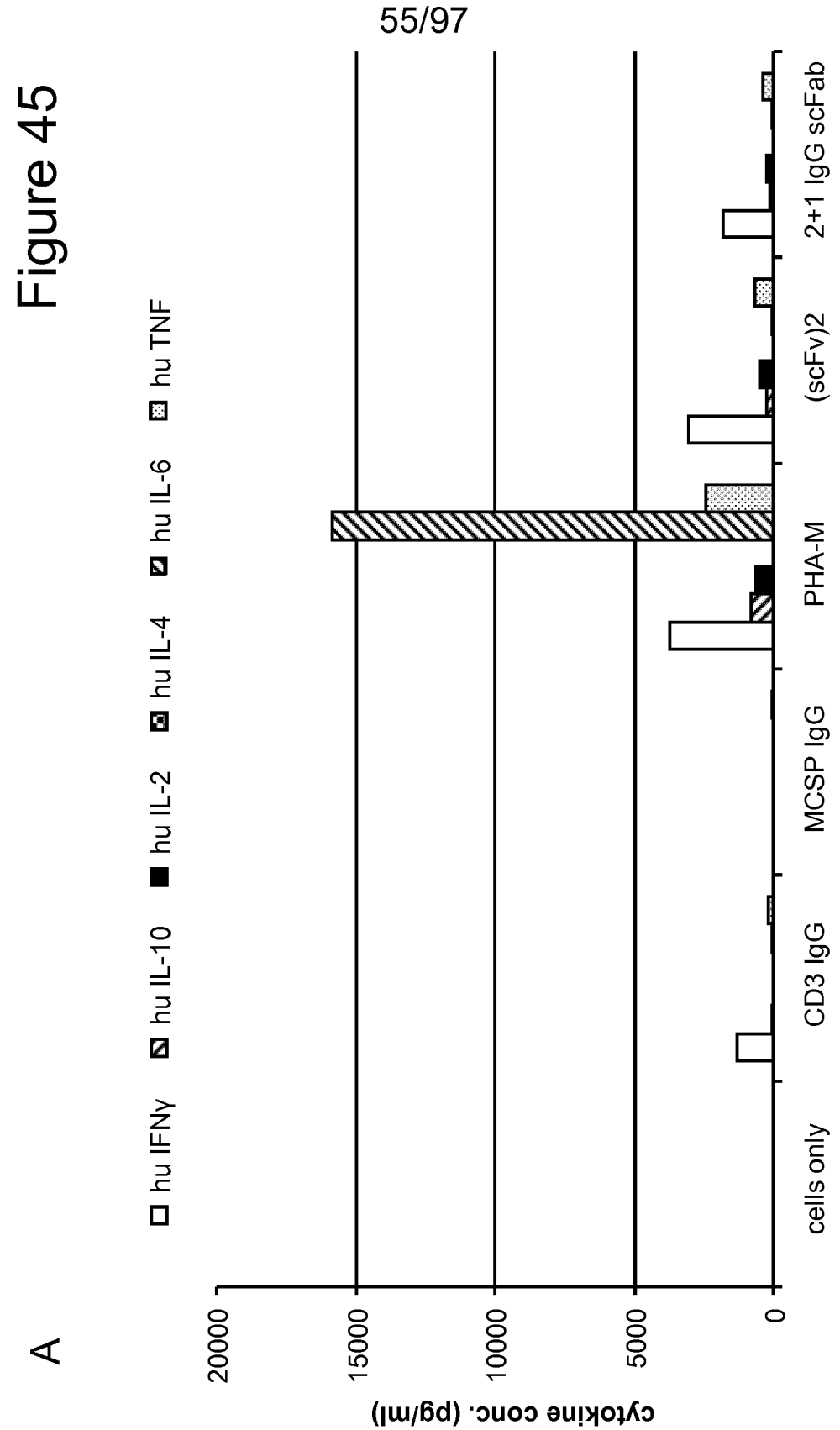
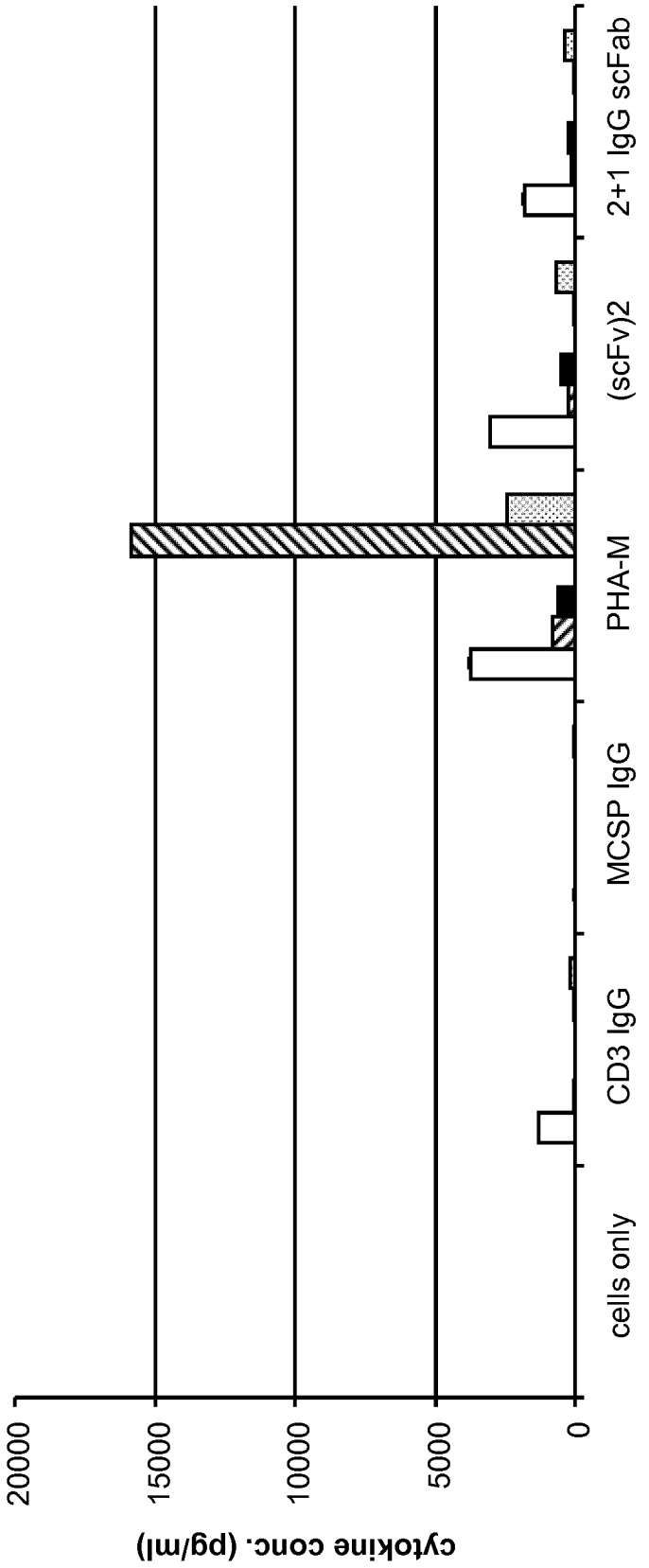

A
hu IFNγ
hu IL-10
hu IL-2
hu IL-4
hu IL-6
hu TNF
cytokine conc. (pg/ml)
20000
15000
10000
5000
0
cells only
CD3 IgG
MCSP IgG
PHA-M
(scFv)2
2+1 IgG scFab

Figure 45

B


hu IFNγ
hu IL-10
hu IL-2
hu IL-4
hu IL-6
hu TNF
cytokine conc. (pg/ml)
20000
15000
10000
5000
0
cells only
CD3 IgG
MCSP IgG
PHA-M
(scFv)2
2+1 IgG scFab

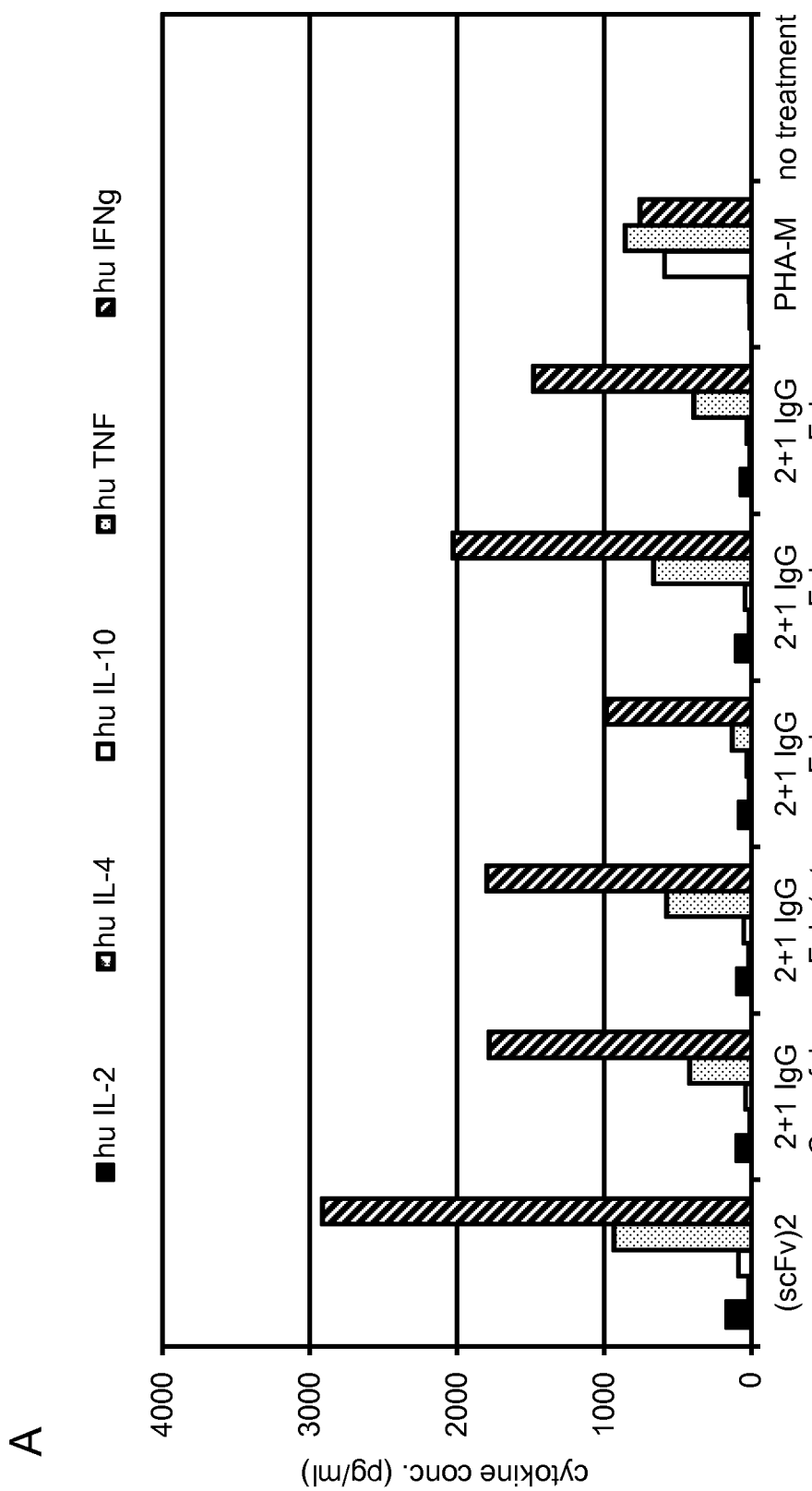

A
cytokine conc. (pg/ml)
4000
3000
2000
1000
0
hu IL-2
hu IL-4
hu IL-10
hu TNF
hu IFNg
(scFv)2
2+1 IgG Crossfab
2+1 IgG scFab (wt Fc)
2+1 IgG scFab (LALA)
2+1 IgG scFab (LALA, P329G)
2+1 IgG scFab (LALA, P329G, N297D)
PHA-M
no treatment

Figure 46

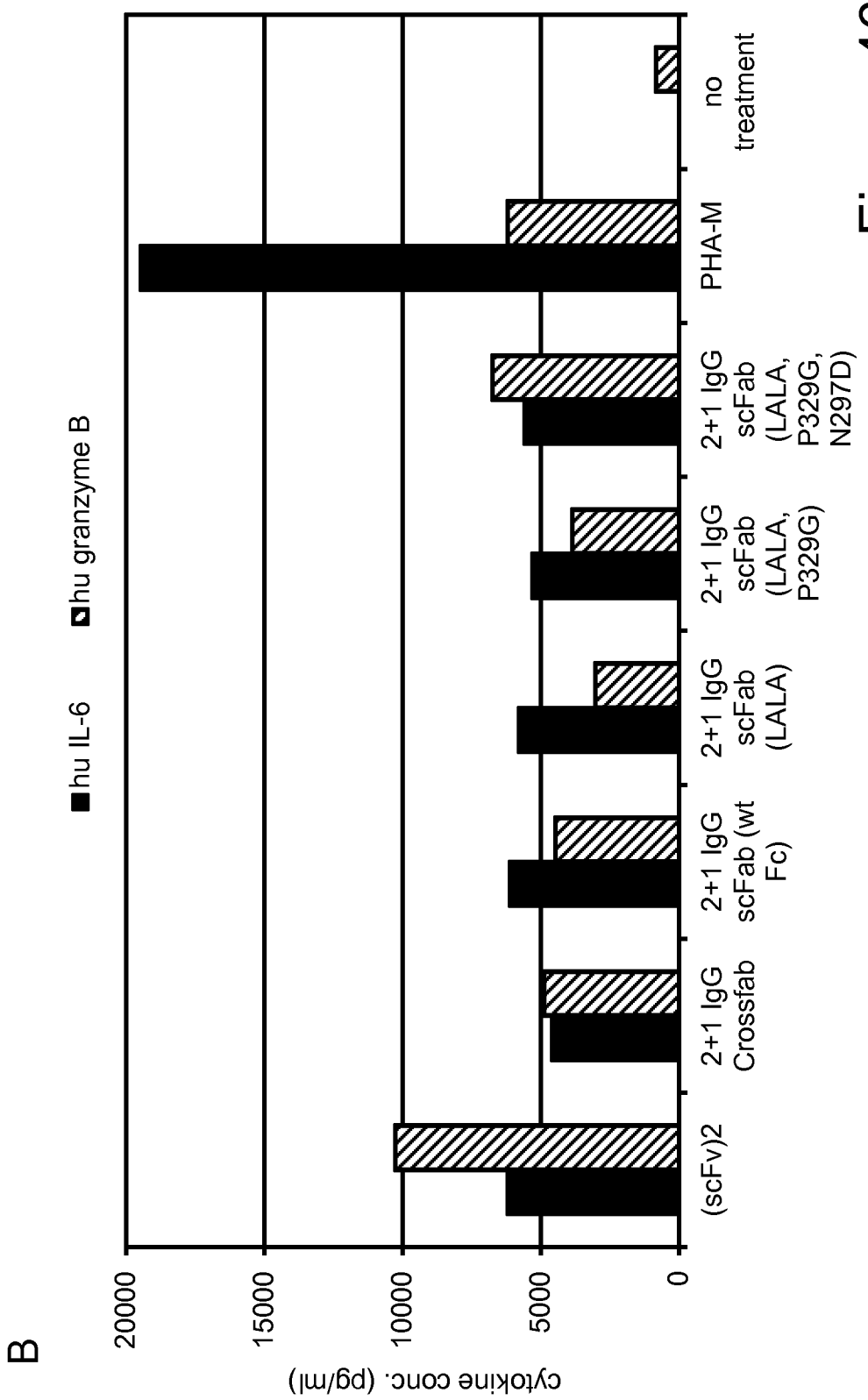

B
cytokine conc. (pg/ml)
20000
15000
10000
5000
0
hu IL-6
hu granzyme B
(scFv)2
2+1 IgG Crossfab
2+1 IgG scFab (wt Fc)
2+1 IgG scFab (LALA)
2+1 IgG scFab (LALA, P329G)
2+1 IgG scFab (LALA, P329G, N297D)
PHA-M
no treatment

Figure 46

Figure 46

C

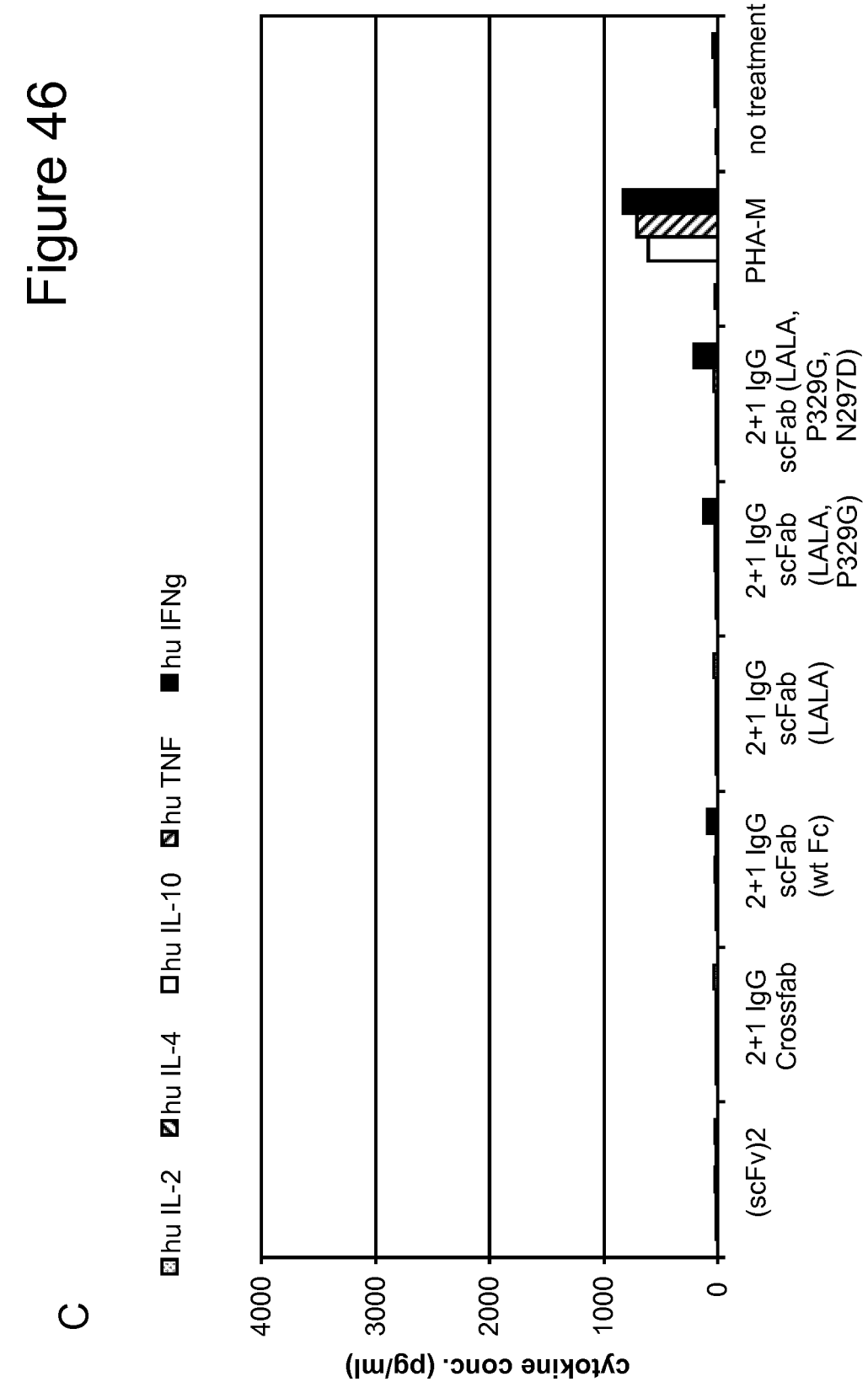

hu IL-2
hu IL-4
hu IL-10
hu TNF
hu IFNg
cytokine conc. (pg/ml)
4000
3000
2000
1000
0
(scFv)2
2+1 IgG Crossfab
2+1 IgG scFab (wt Fc)
2+1 IgG scFab (LALA)
2+1 IgG scFab (LALA, P329G)
2+1 IgG scFab (LALA, P329G, N297D)
PHA-M
no treatment

Figure 46

D

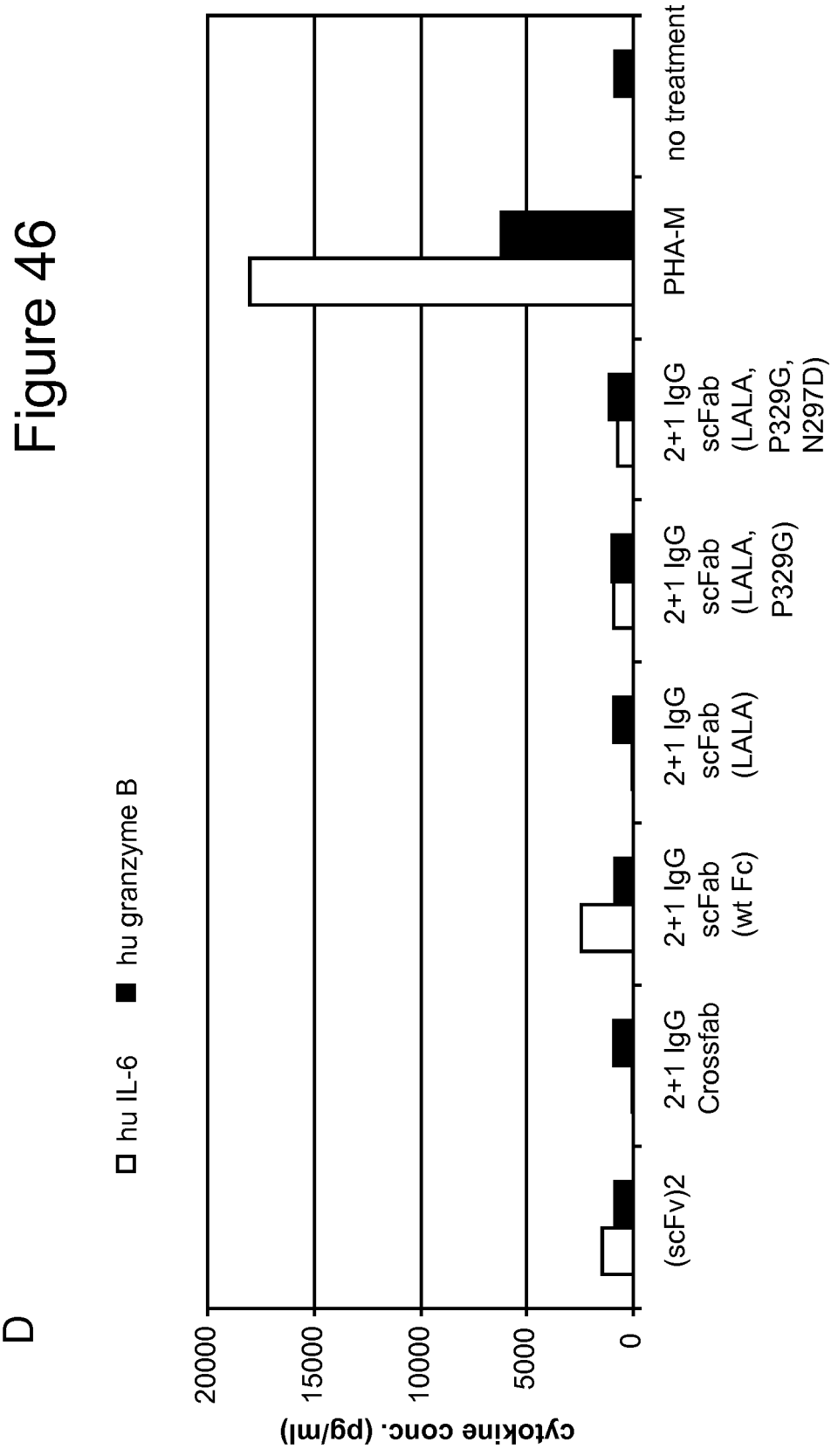

hu IL-6
hu granzyme B
cytokine conc. (pg/ml)
20000
15000
10000
5000
0
(scFv)2
2+1 IgG Crossfab
2+1 IgG scFab (wt Fc)
2+1 IgG scFab (LALA)
2+1 IgG scFab (LALA, P329G)
2+1 IgG scFab (LALA, P329G, N297D)
PHA-M
no treatment

Figure 47

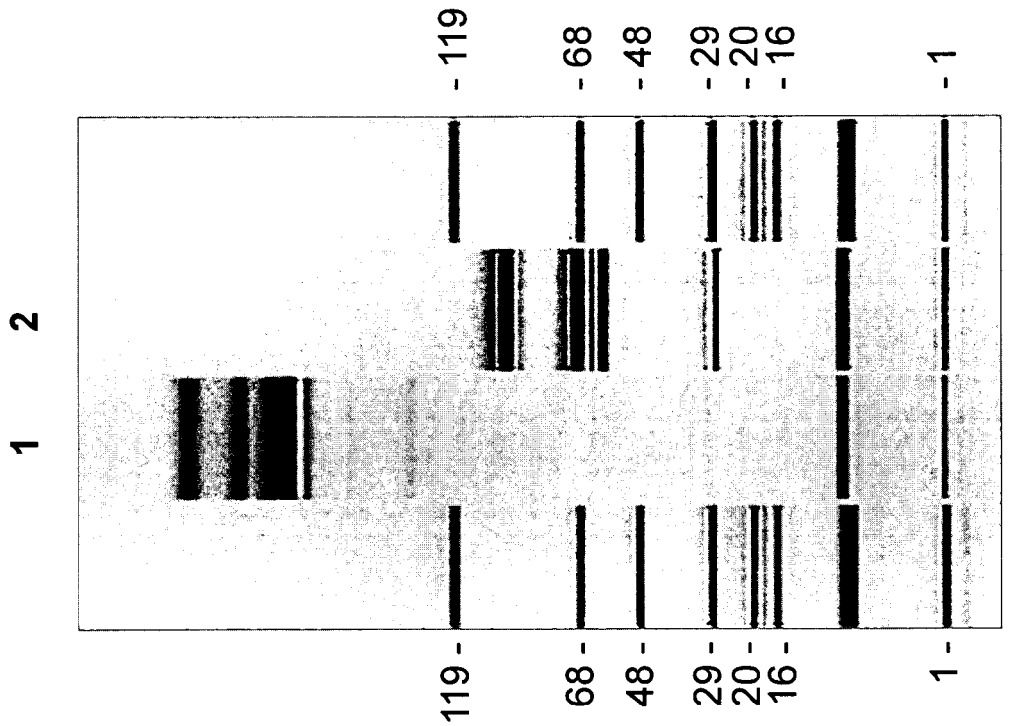
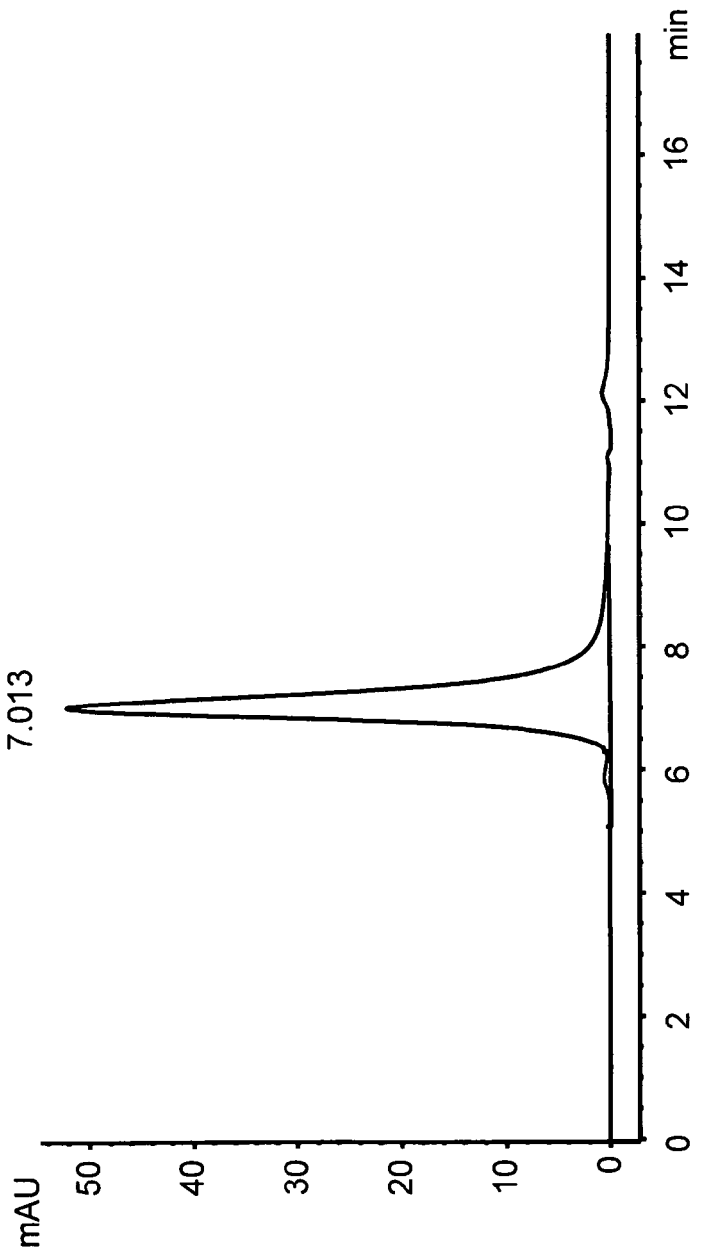


Figure 48



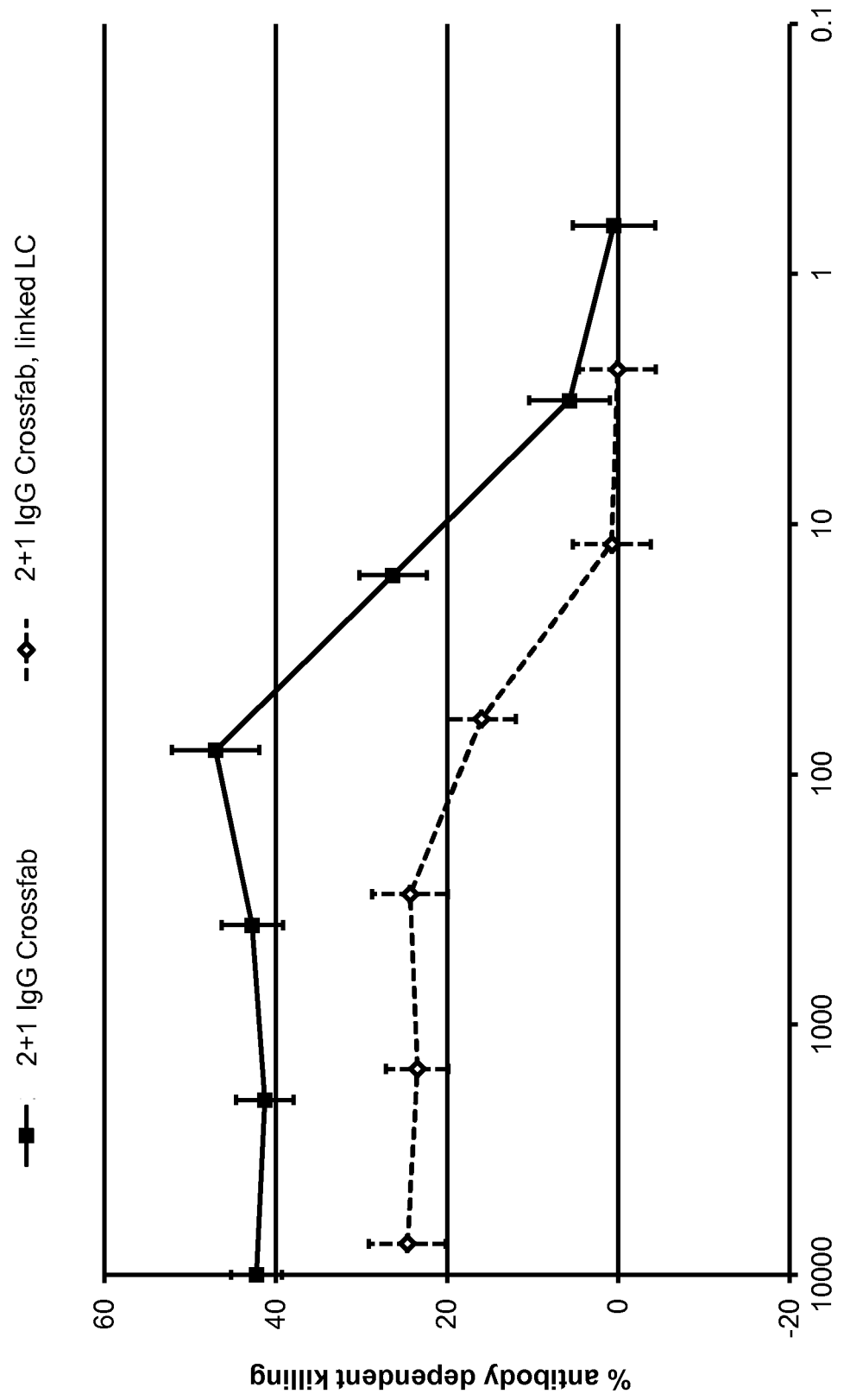

2+1 IgG Crossfab
2+1 IgG Crossfab, linked LC
% antibody dependent killing
60
40
20
0
-20
0.1
1
10
100
1000
10000
concentration (pM)

Figure 49

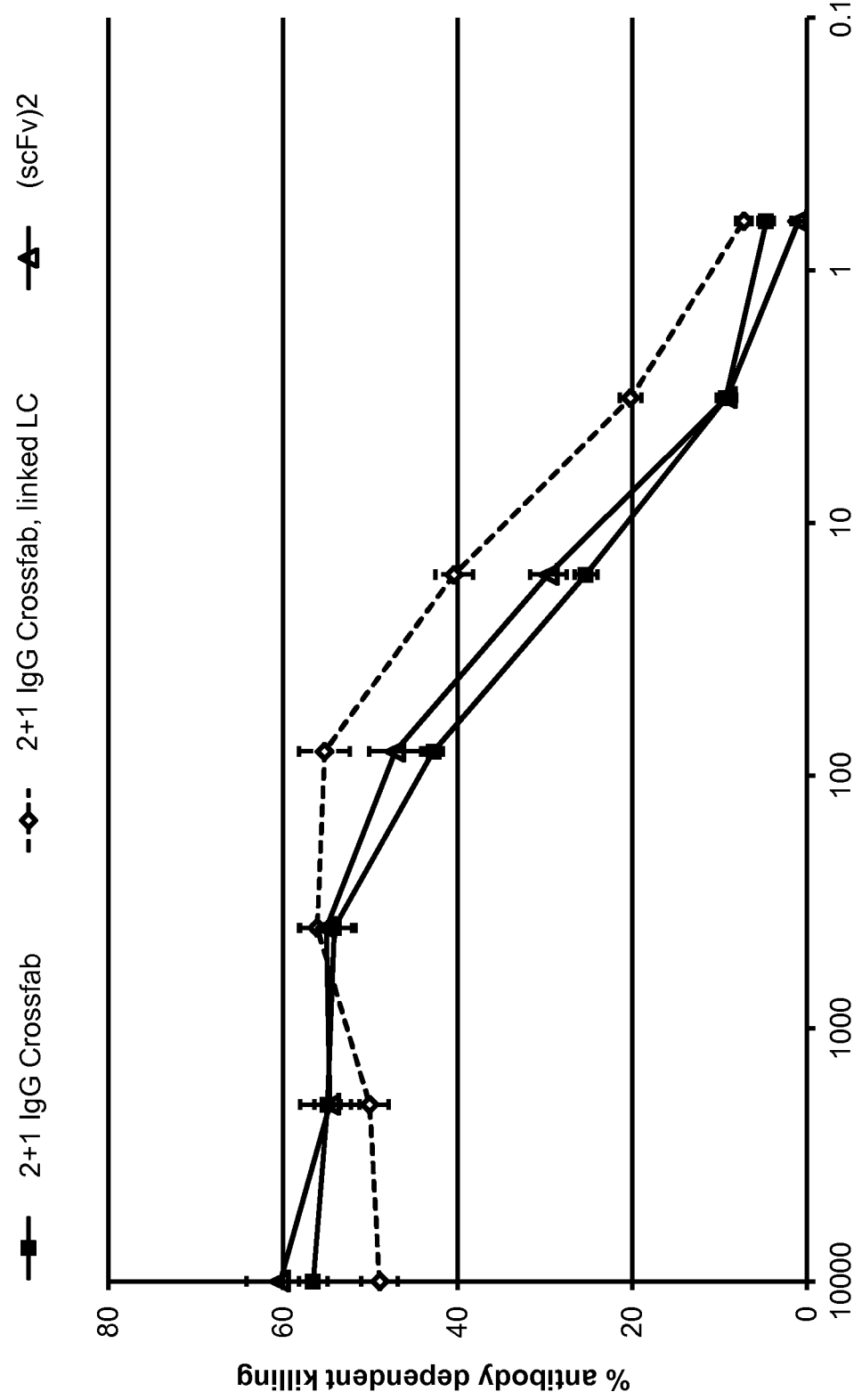

2+1 IgG Crossfab
2+1 IgG Crossfab, linked LC
(scFv)2
% antibody dependent killing
0
20
40
60
80
concentration (pM)
0.1
1
10
100
1000
10000

Figure 50

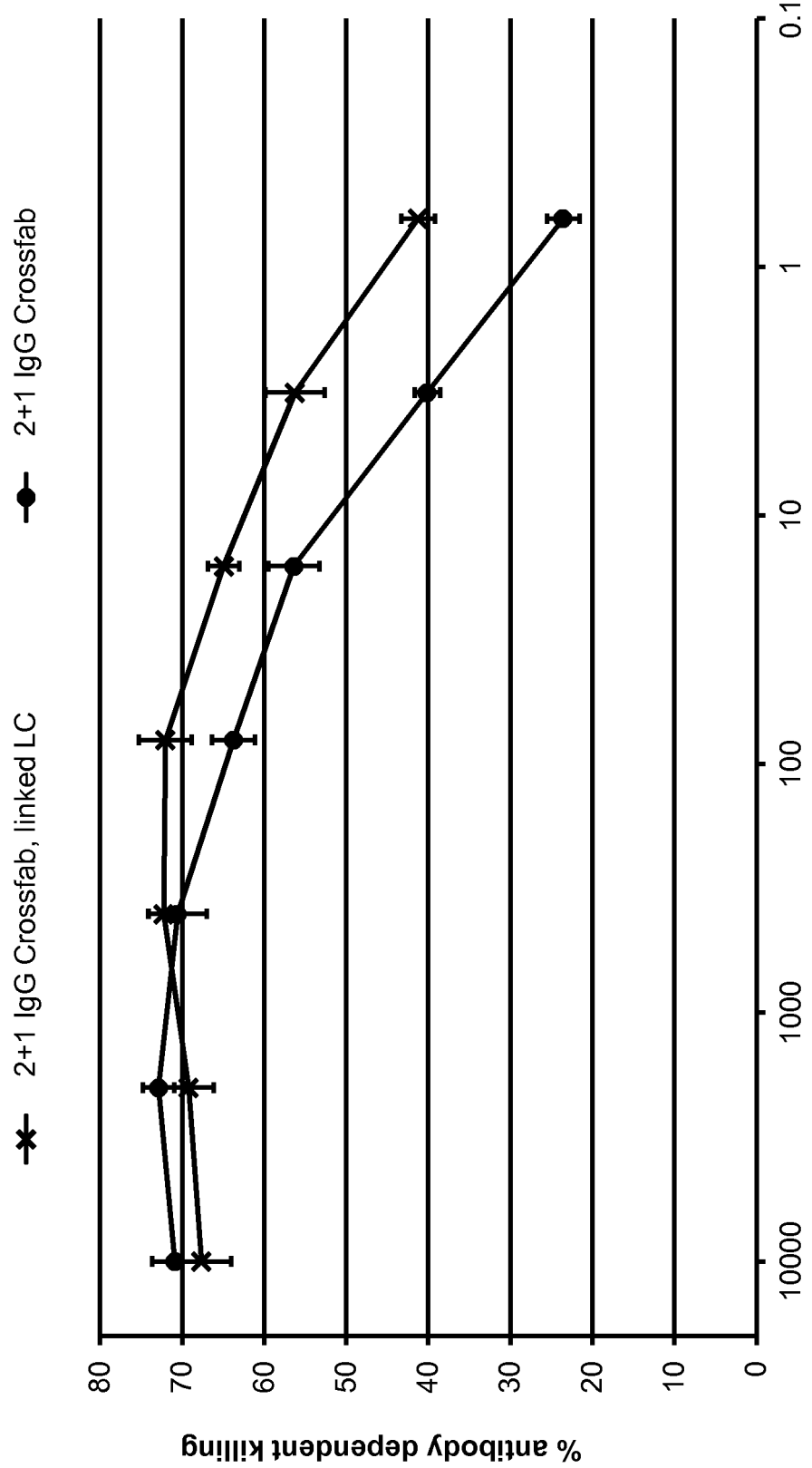

% antibody dependent killing
0
10
20
30
40
50
60
70
80
concentration (pM)
0.1
1
10
100
1000
10000
2+1 IgG Crossfab, linked LC
2+1 IgG Crossfab

Figure 51

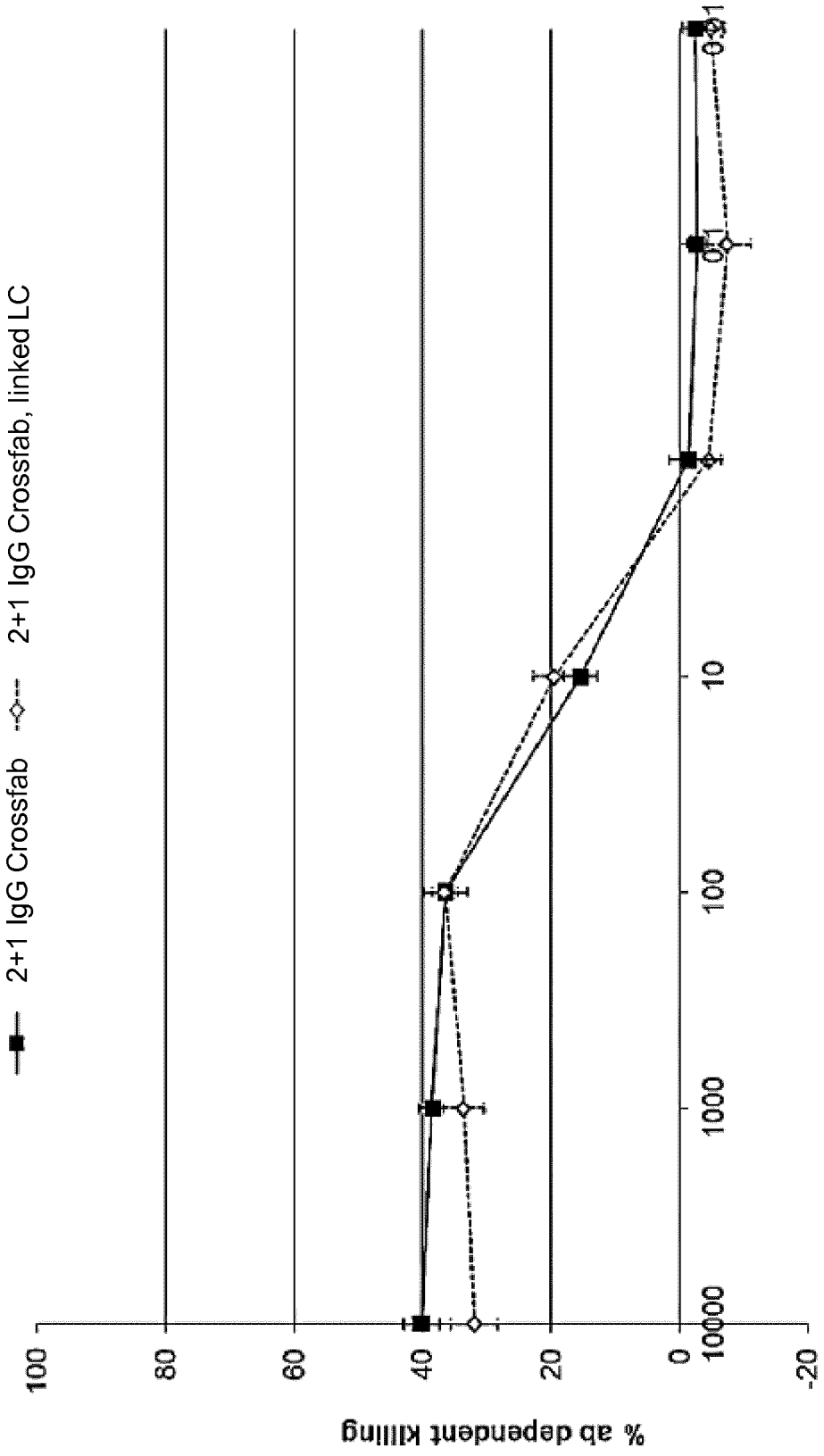

2+1 IgG Crossfab
2+1 IgG Crossfab, linked LC
% ab dependent killing
final antibody concentration (pM)
100
80
60
40
20
0
-20
0.1
1
10
100
1000
10000

Figure 52

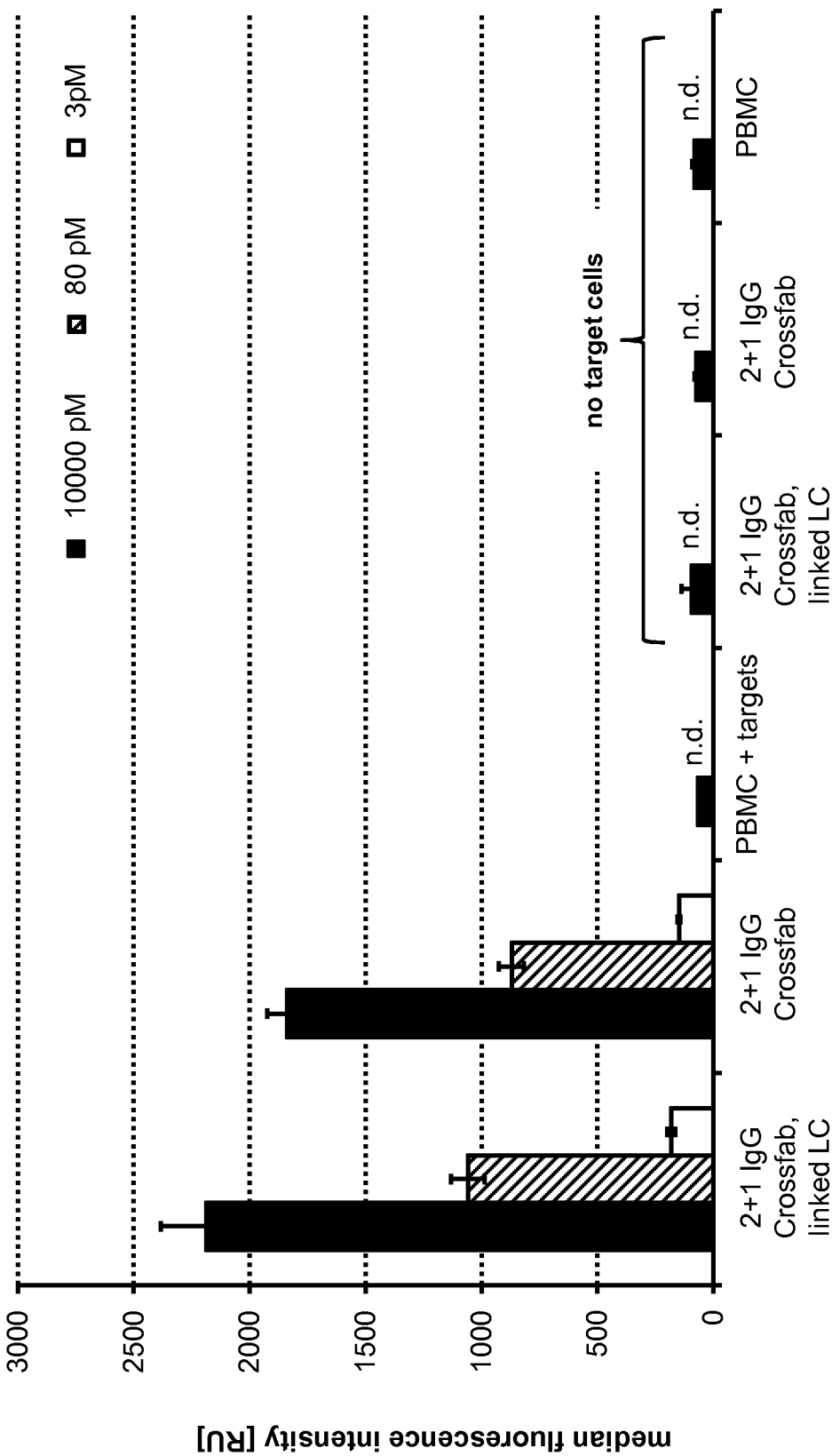

median fluorescence intensity [RU]
3000
2500
2000
1500
1000
500
0
10000 pM
80 pM
3pM
n.d.
n.d.
n.d.
n.d.
no target cells
2+1 IgG Crossfab, linked LC
2+1 IgG Crossfab
PBMC + targets
2+1 IgG Crossfab, linked LC
2+1 IgG Crossfab
PBMC

Figure 53A

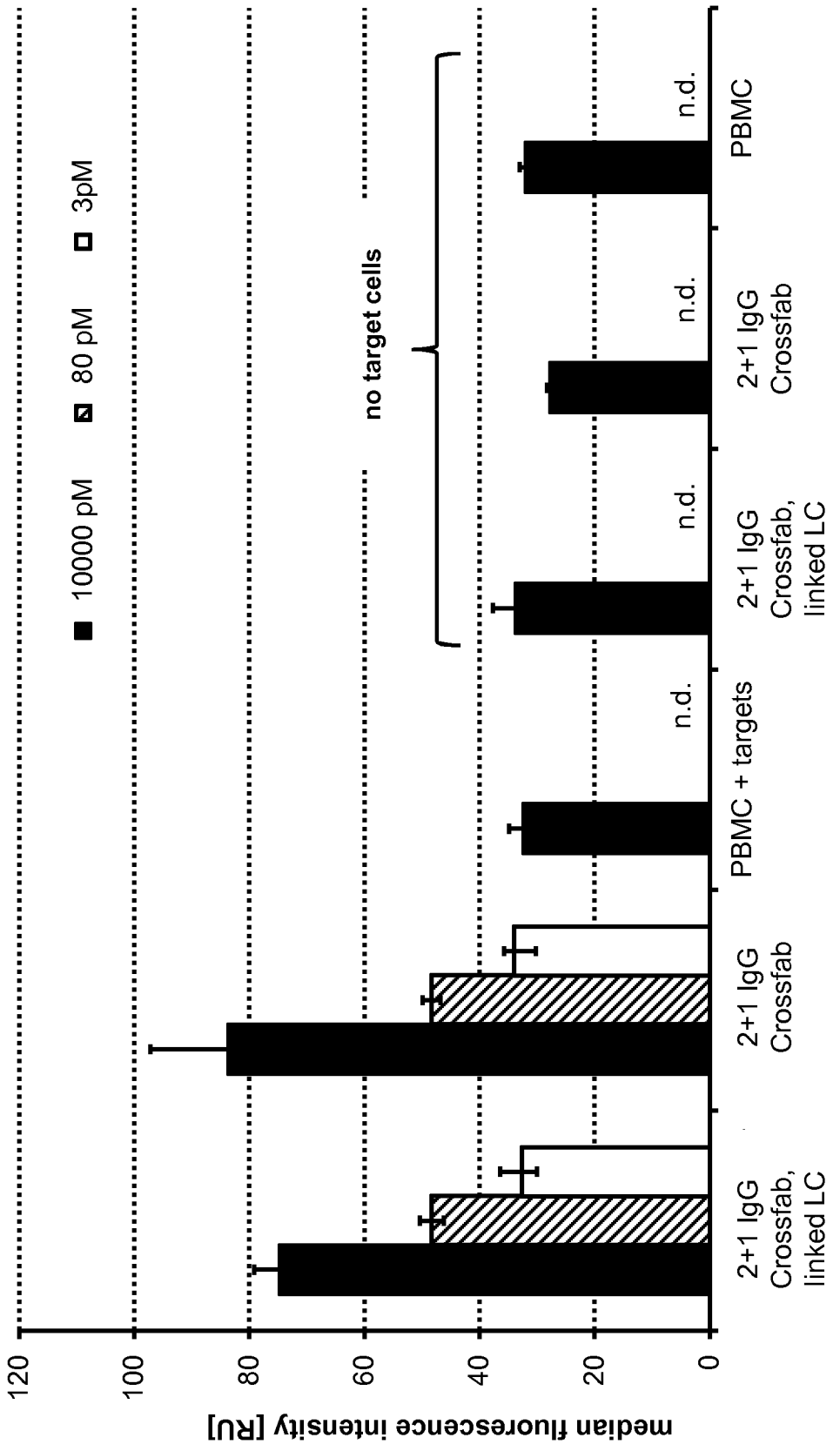

median fluorescence intensity [RU]
120
100
80
60
40
20
0
10000 pM
80 pM
3pM
no target cells
n.d.
n.d.
n.d.
n.d.
2+1 IgG Crossfab, linked LC
2+1 IgG Crossfab
PBMC + targets
2+1 IgG Crossfab, linked LC
2+1 IgG Crossfab
PBMC

Figure 53B

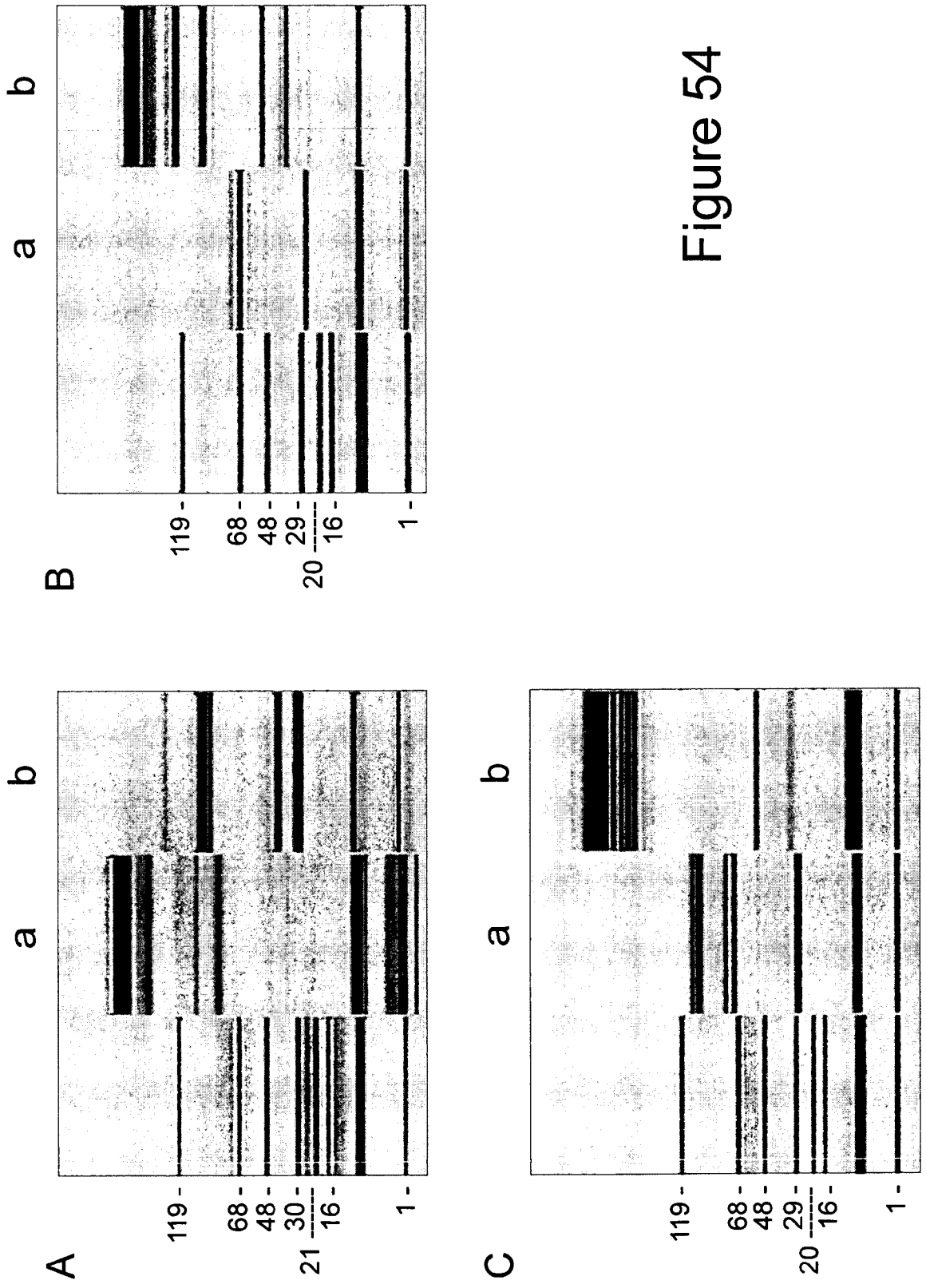

A
a
b
119
68
48
30
21
16
1
B
a
b
119
68
48
29
20
16
1
C
a
b
119
68
48
29
20
16
1

Figure 54

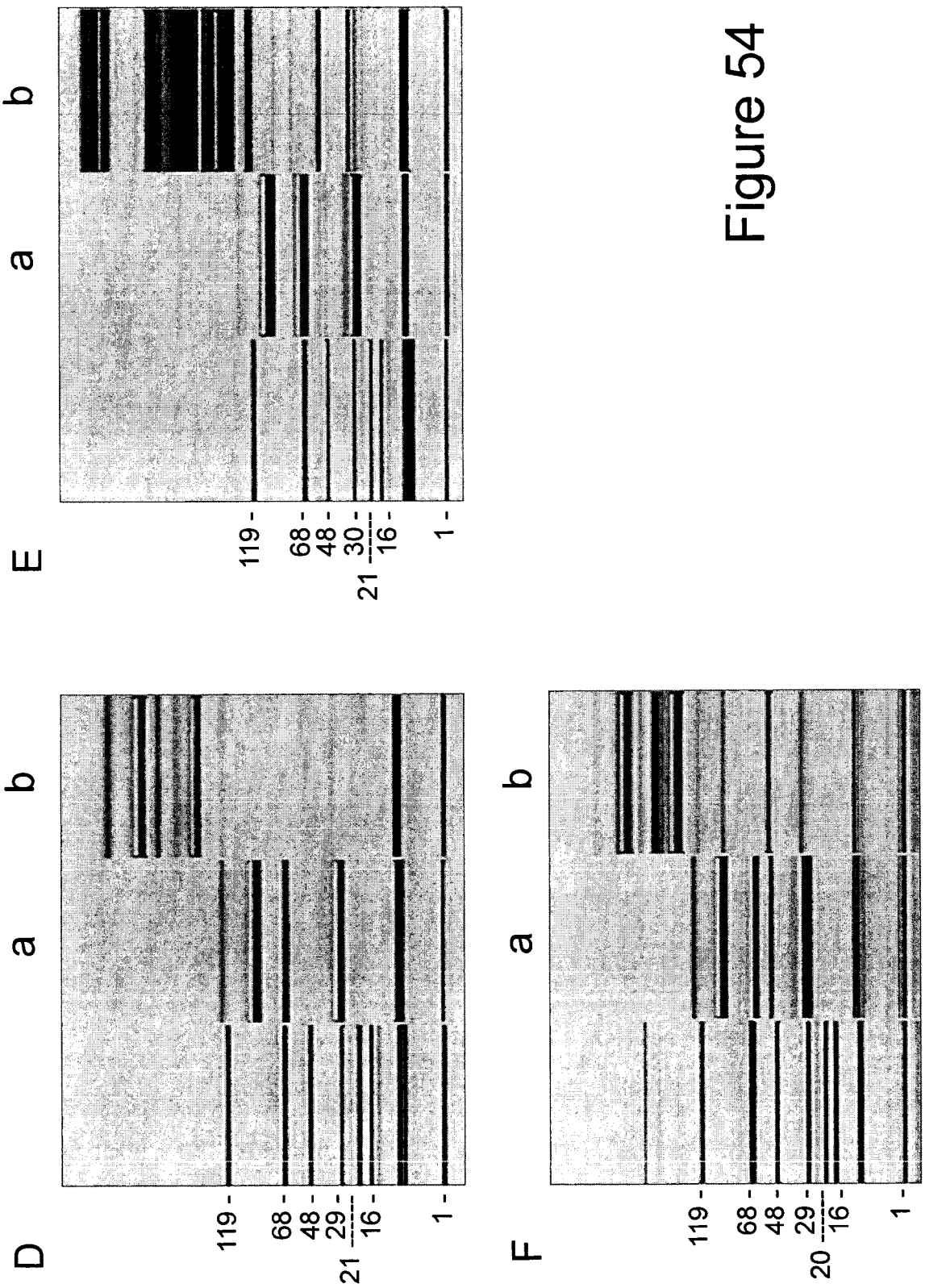

D
a
b
119
68
48
29
21
16
1
E
a
b
119
68
48
30
21
16
1
F
a
b
119
68
48
29
20
16
1

Figure 54

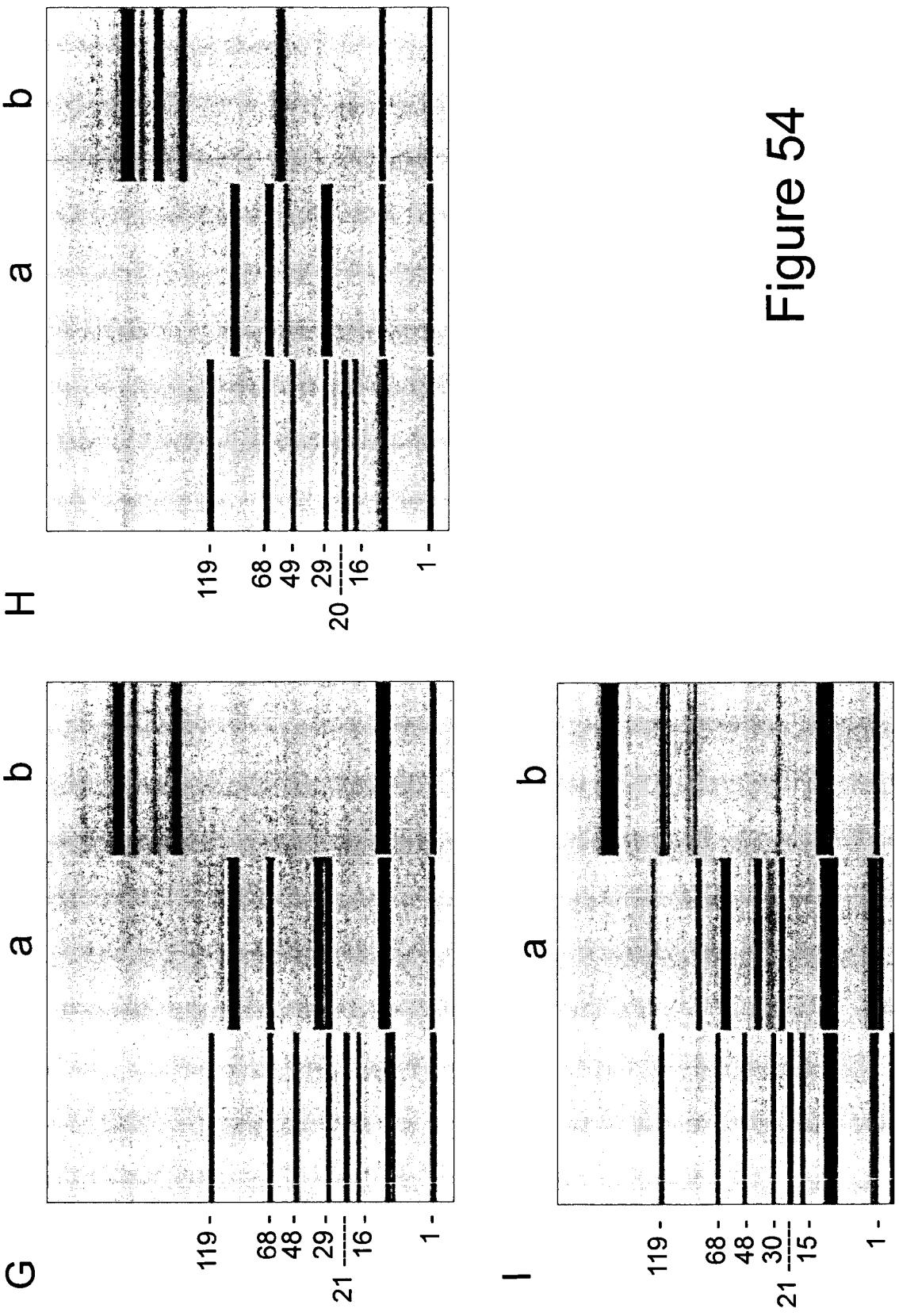

G
a
b
119
68
48
29
21
16
1
H
a
b
119
68
49
29
20
16
1
I
a
b
119
68
48
30
21
15
1

Figure 54

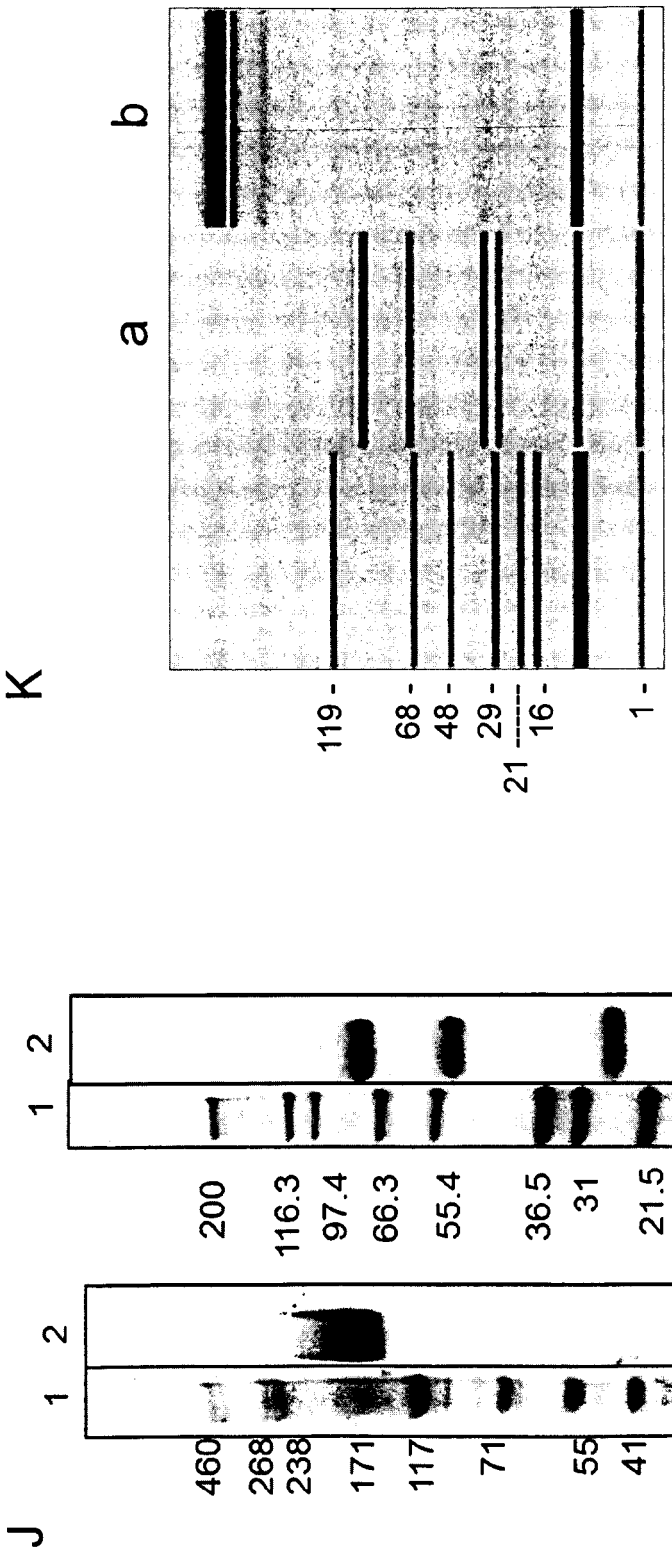

K
a
b
119 -
68 -
48 -
29 -
21
16 -
1 -
J
1
2
460
268
238
171
117
71
55
41
200
116.3
97.4
66.3
55.4
36.5
31
21.5
14.4

Figure 54

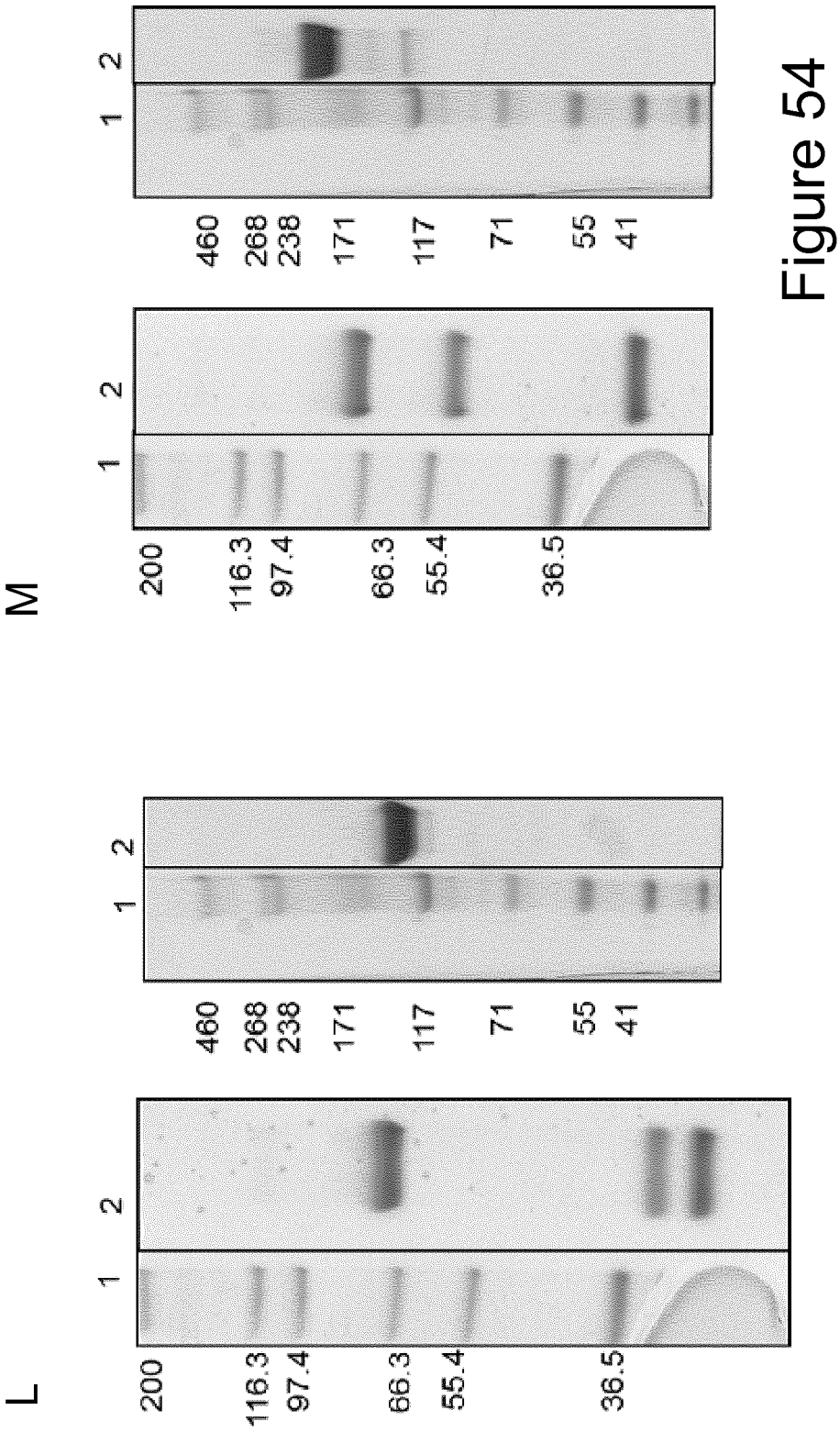
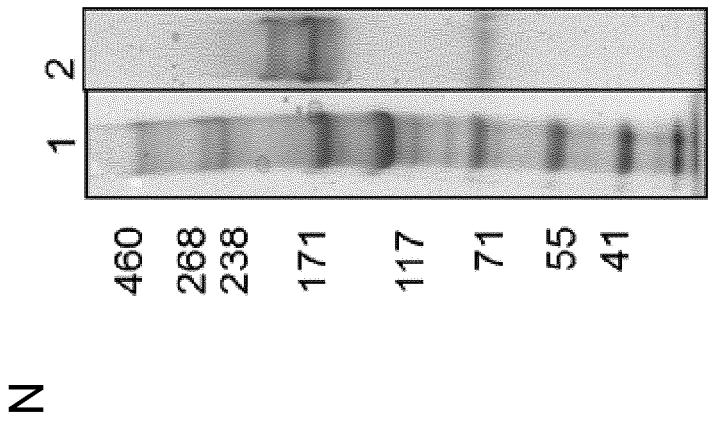

M
1
2
460
268
238
171
117
71
55
41
200
116.3
97.4
66.3
55.4
36.5
L
1
2
460
268
238
171
117
71
55
41
200
116.3
97.4
66.3
55.4
36.5

Figure 54

Figure 54



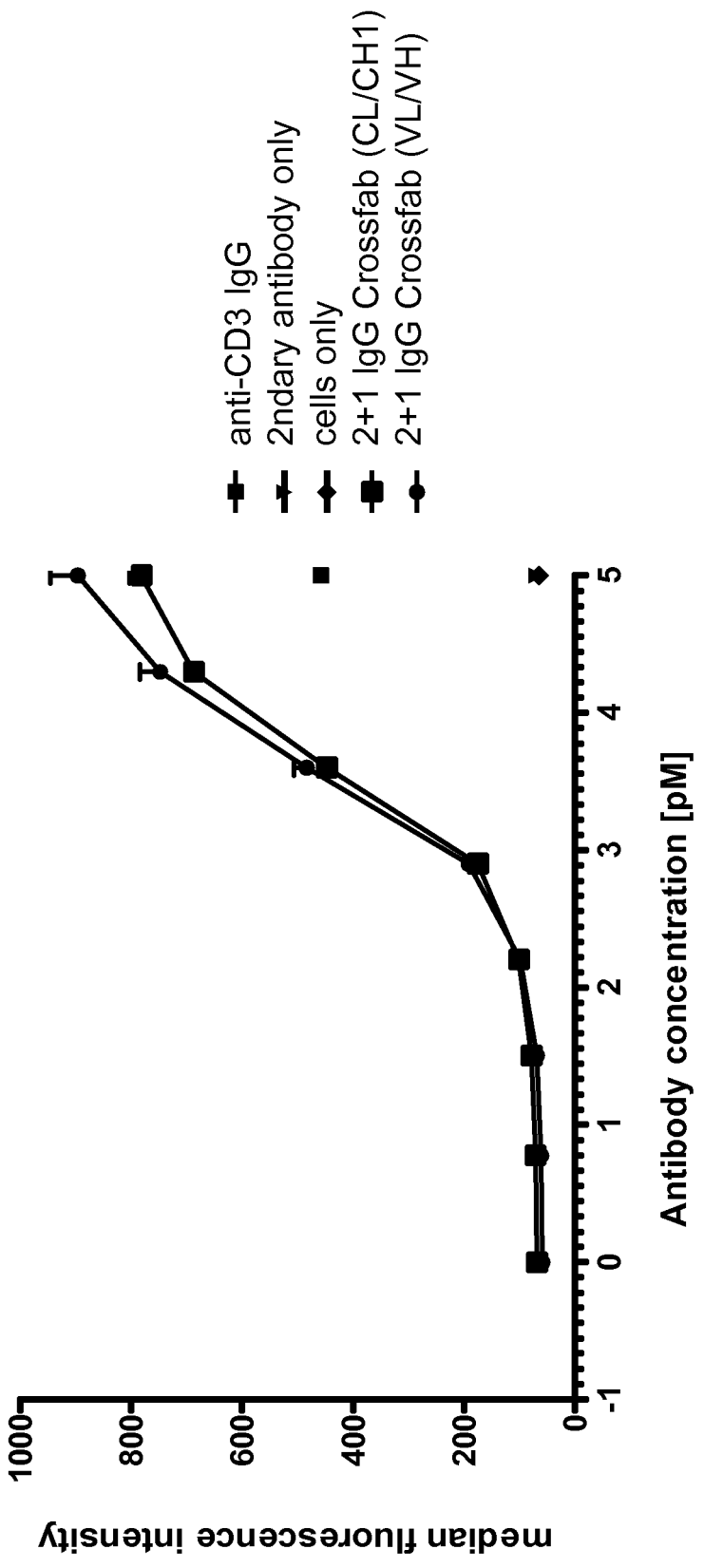

anti-CD3 IgG
2ndary antibody only
cells only
2+1 IgG Crossfab (CL/CH1)
2+1 IgG Crossfab (VL/VH)
median fluorescence intensity
1000
800
600
400
200
0
-1
0
1
2
3
4
5
Antibody concentration [pM]

Figure 55A

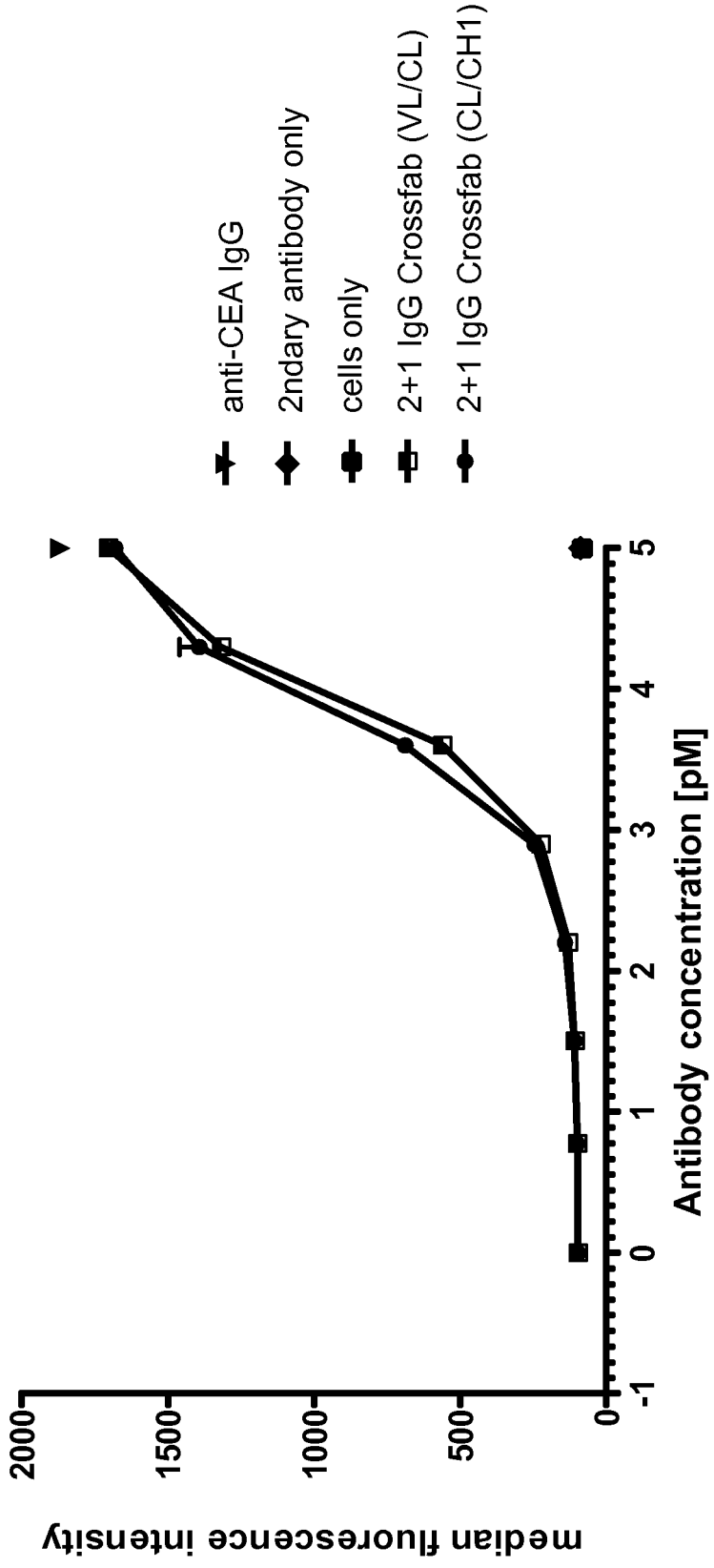

anti-CEA IgG
2ndary antibody only
cells only
2+1 IgG Crossfab (VL/CL)
2+1 IgG Crossfab (CL/CH1)
median fluorescence intensity
2000
1500
1000
500
0
-1
0
1
2
3
4
5
Antibody concentration [pM]

Figure 55B

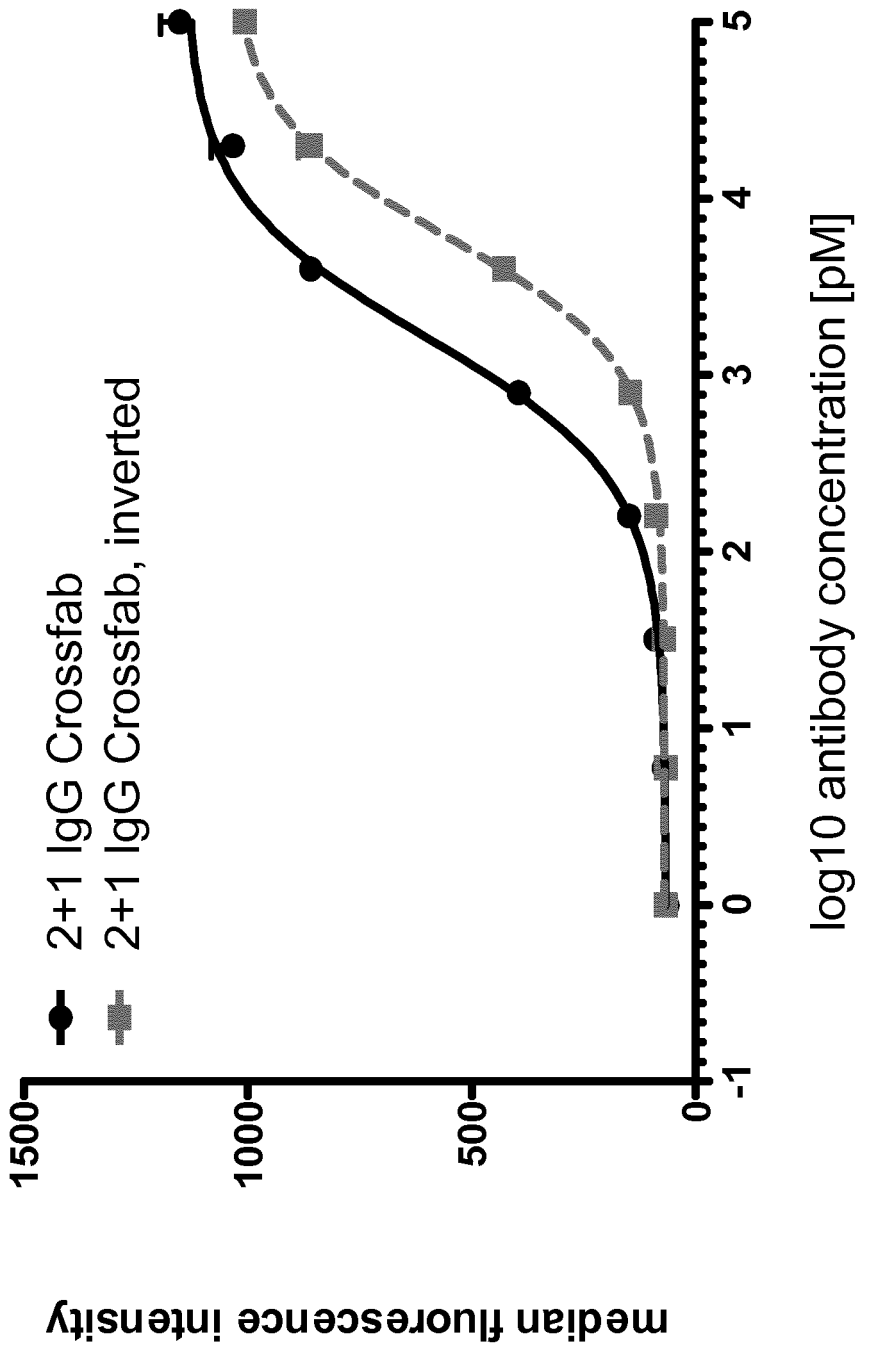

median fluorescence intensity
1500
1000
500
0
-1
0
1
2
3
4
5
log10 antibody concentration [pM]
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted

Figure 56A

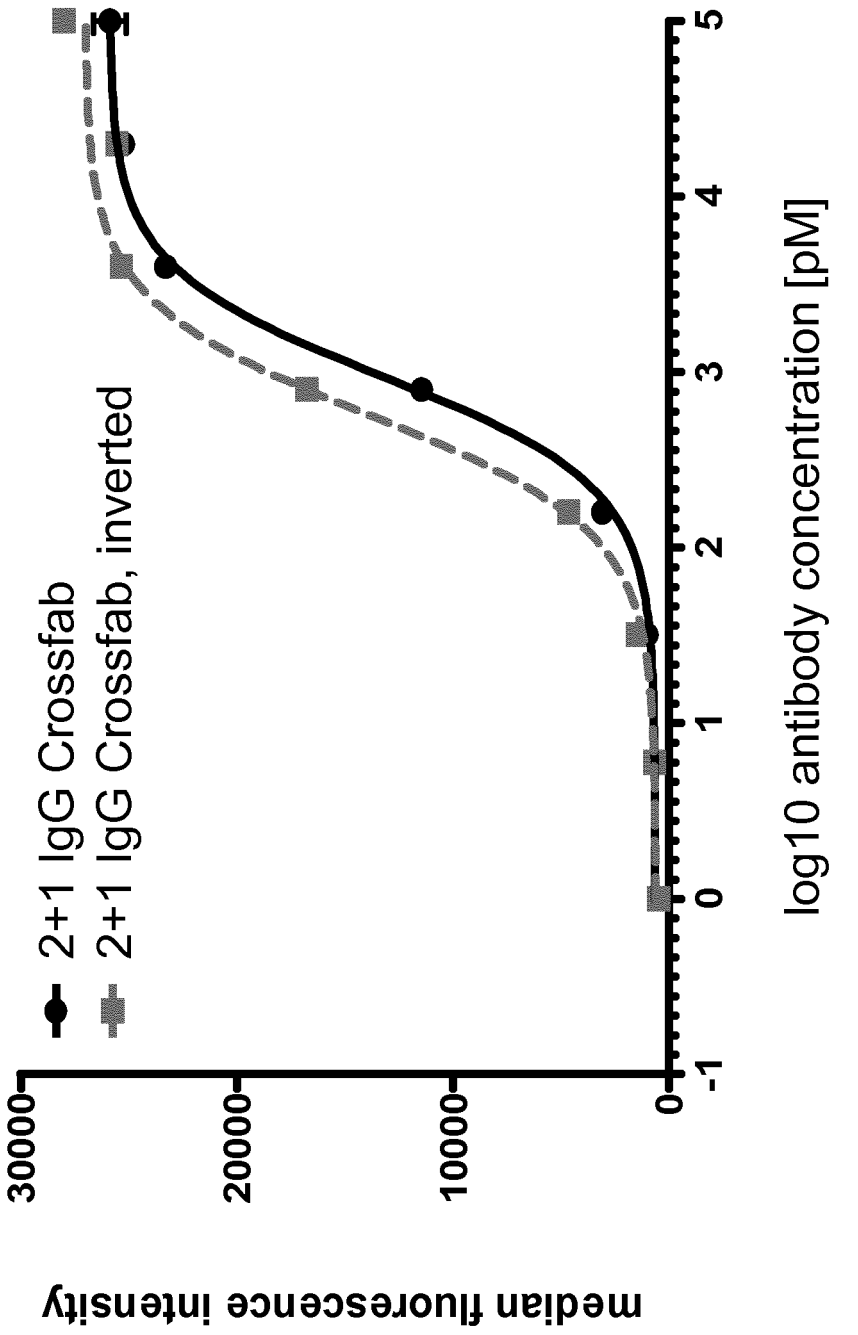

median fluorescence intensity
30000
20000
10000
0
-1
0
1
2
3
4
5
log10 antibody concentration [pM]
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted

Figure 56B

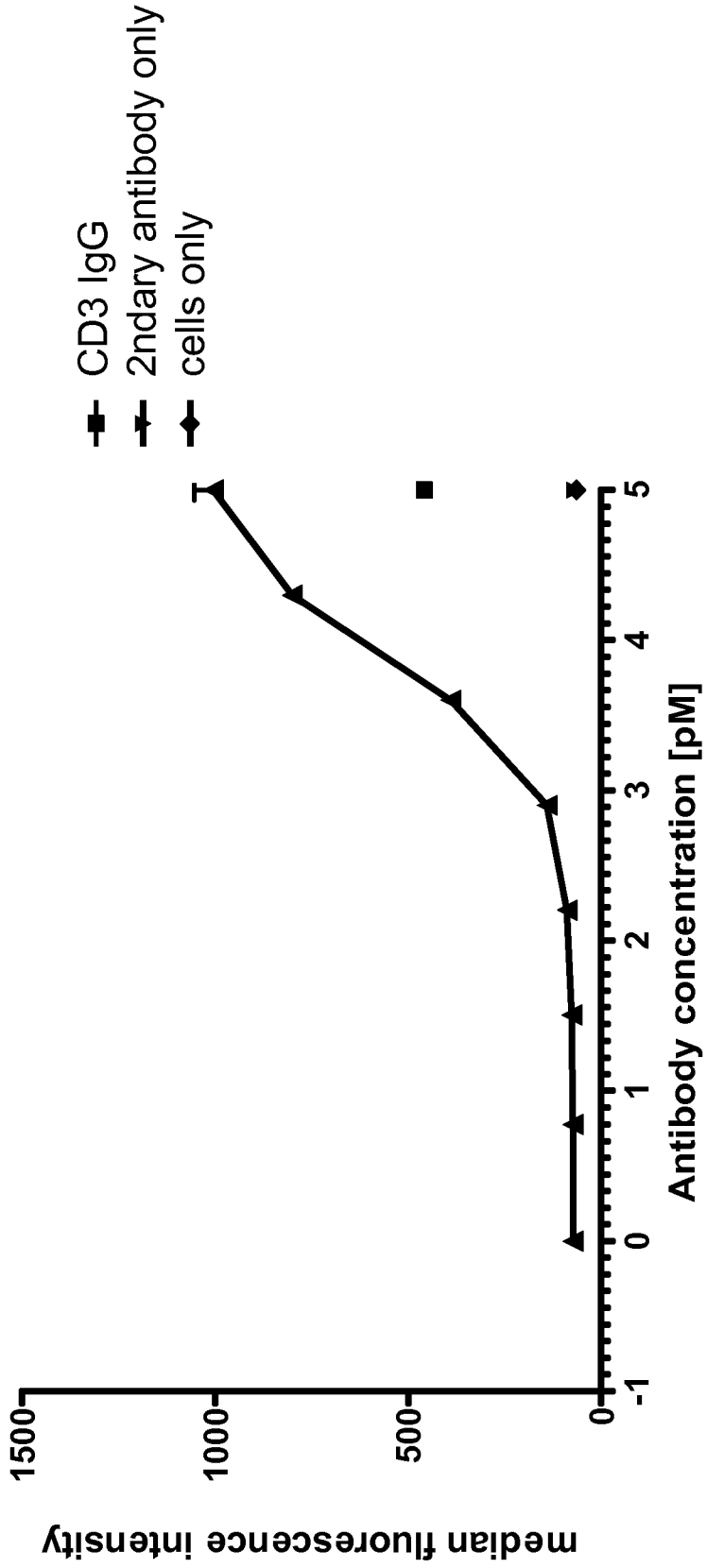

CD3 IgG
2ndary antibody only
cells only
median fluorescence intensity
1500
1000
500
0
-1
0
1
2
3
4
5
Antibody concentration [pM]

Figure 57A

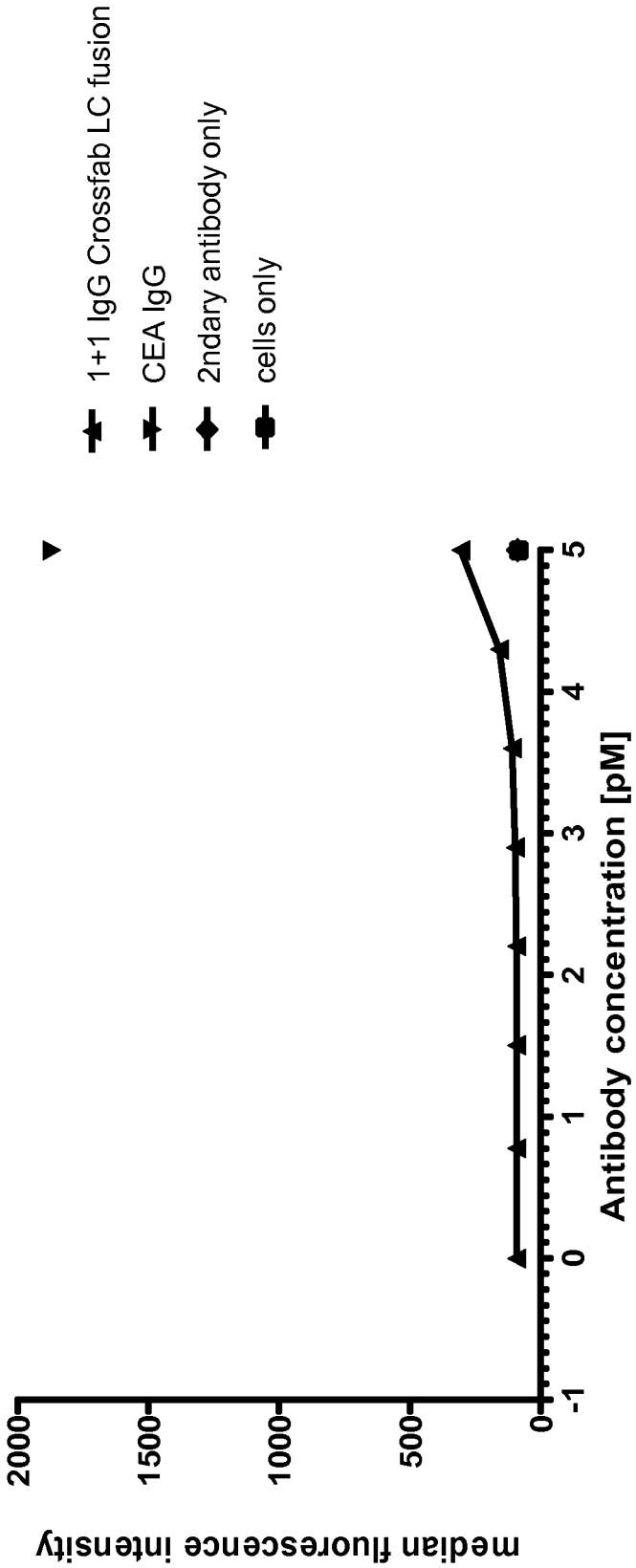

1+1 IgG Crossfab LC fusion
CEA IgG
2ndary antibody only
cells only
median fluorescence intensity
2000
1500
1000
500
0
-1
0
1
2
3
4
5
Antibody concentration [pM]

Figure 57B

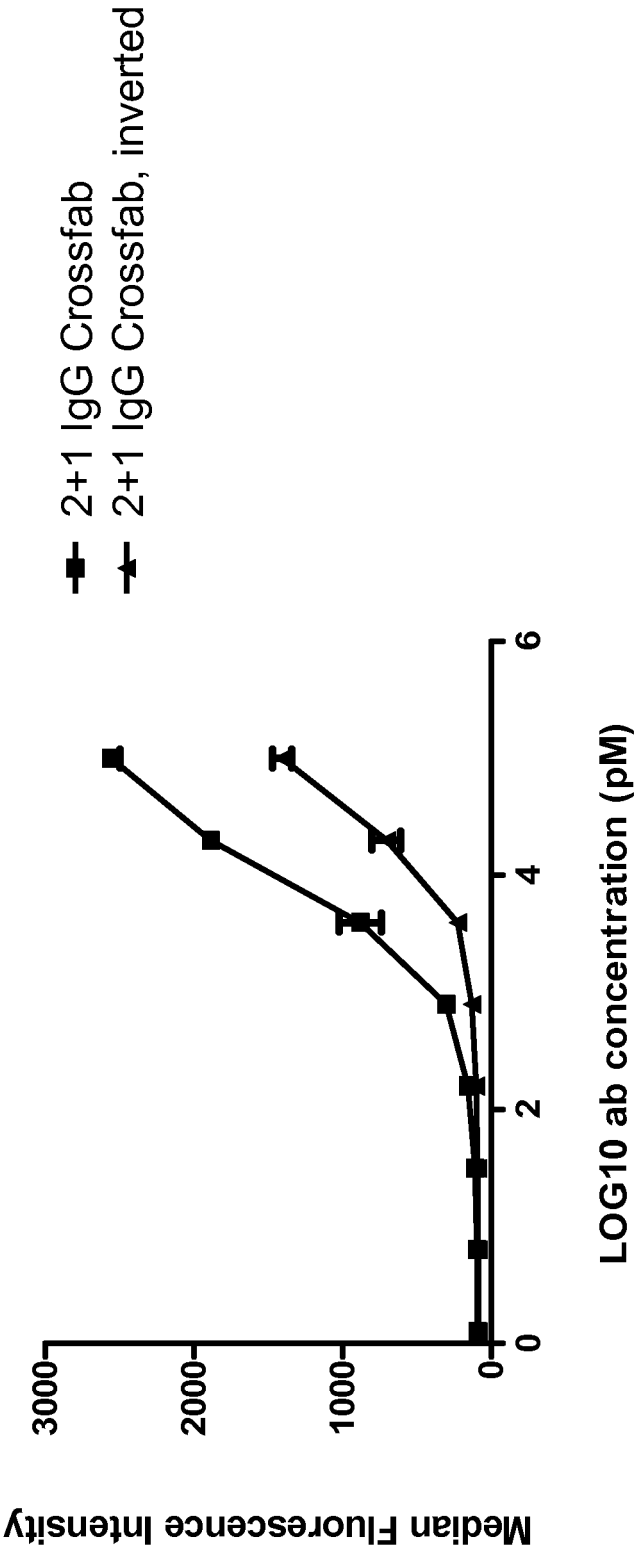

2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
Median Fluorescence Intensity
3000
2000
1000
0
0
2
4
6
LOG10 ab concentration (pM)

Figure 58A

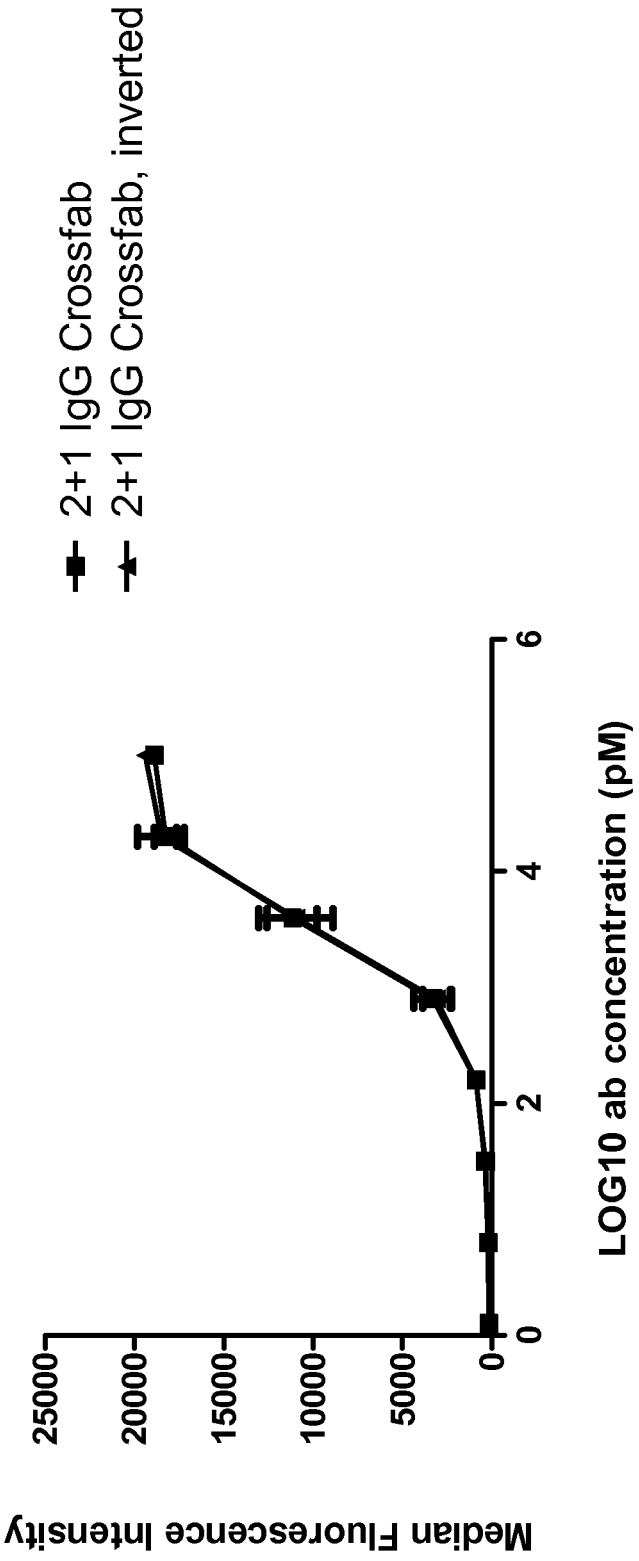

2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
Median Fluorescence Intensity
25000
20000
15000
10000
5000
0
0
2
4
6
LOG10 ab concentration (pM)

Figure 58B

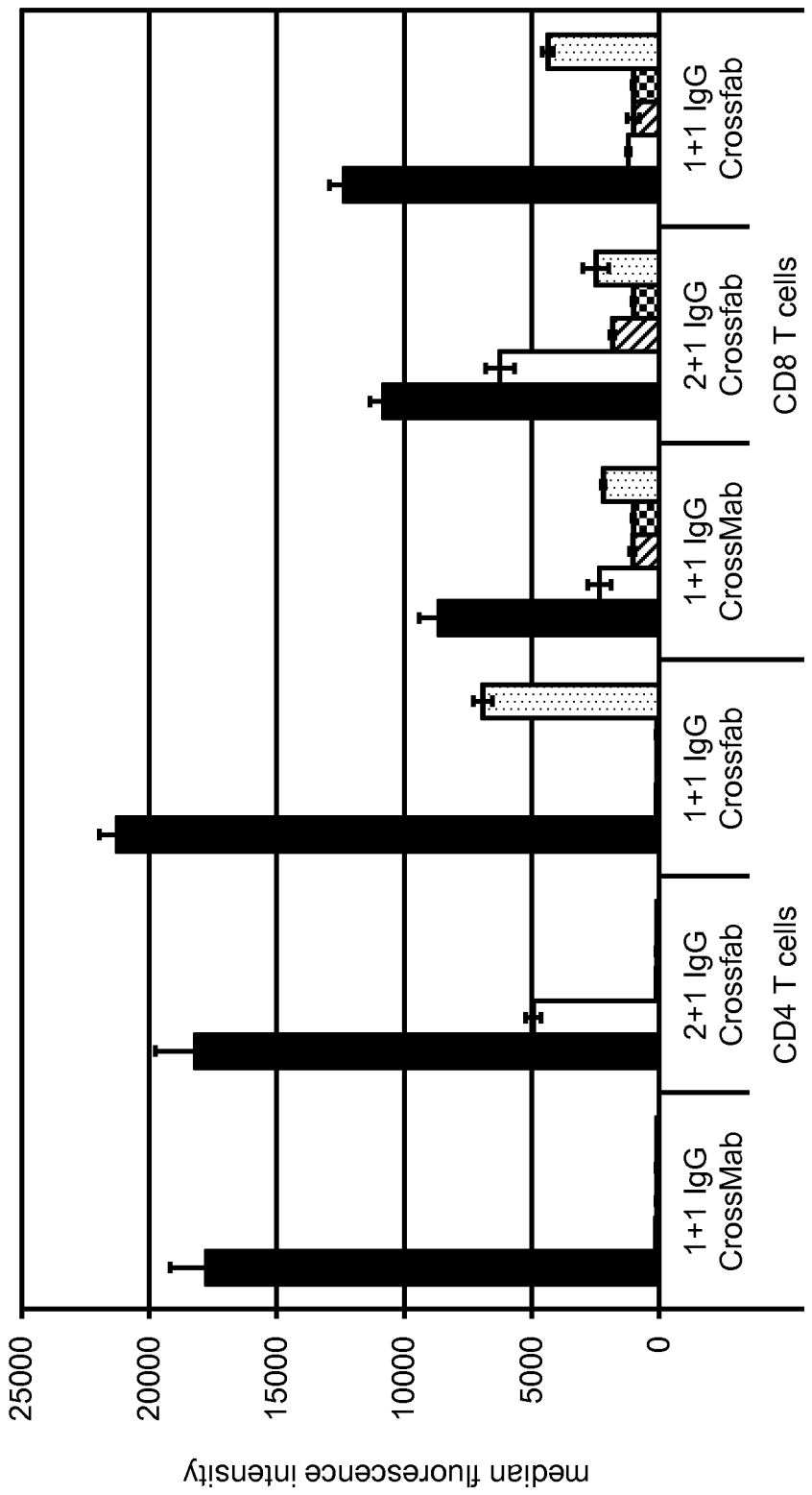

10000 pM
8 pM
1.3 pM
no antibody
10000 pM, no targets
median fluorescence intensity
25000
20000
15000
10000
5000
0
1+1 IgG CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
1+1 IgG CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
CD4 T cells
CD8 T cells

Figure 59A

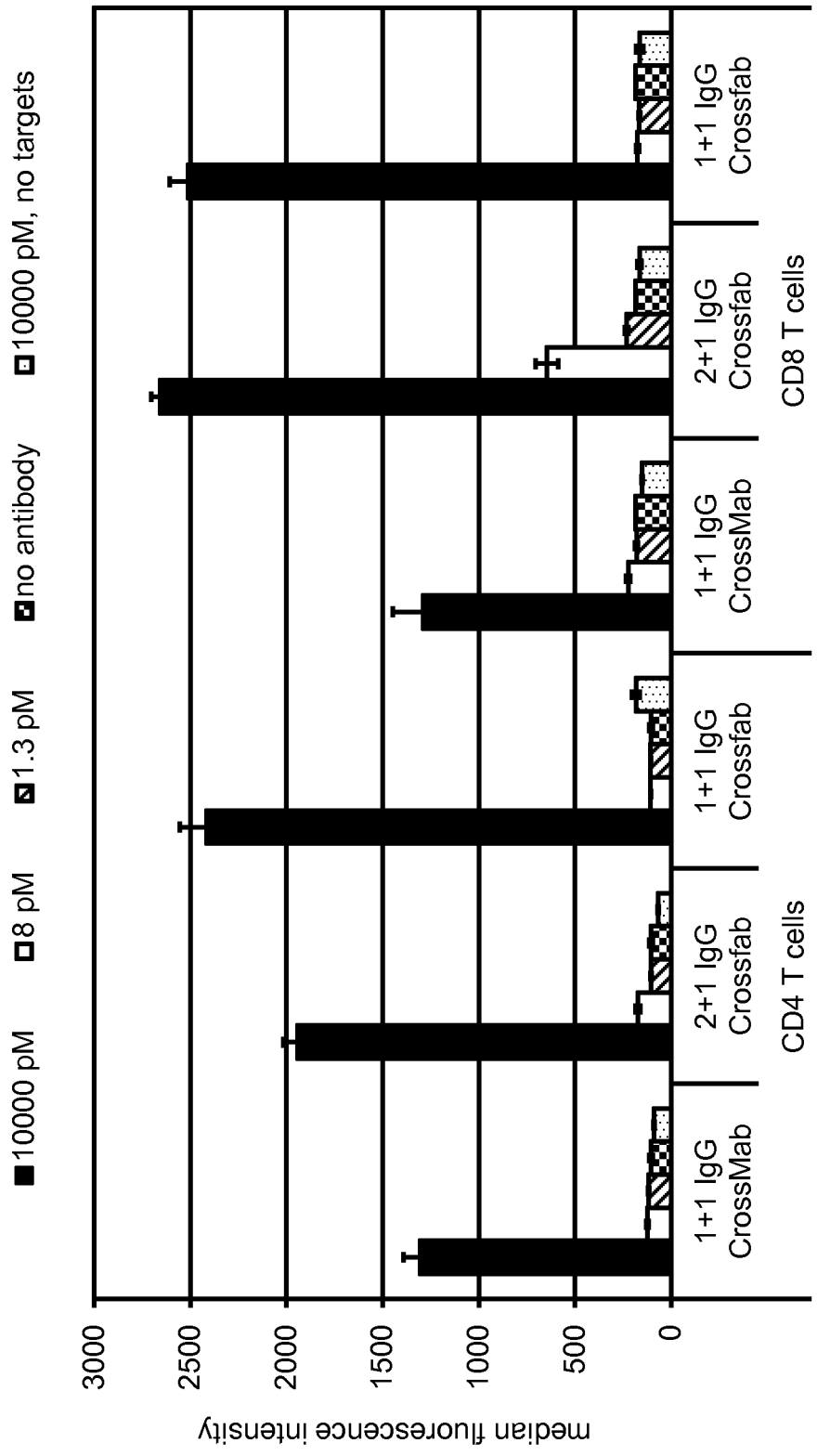

10000 pM
8 pM
1.3 pM
no antibody
10000 pM, no targets
median fluorescence intensity
3000
2500
2000
1500
1000
500
0
1+1 IgG CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
1+1 IgG CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
CD4 T cells
CD8 T cells

Figure 59B

Figure 60A

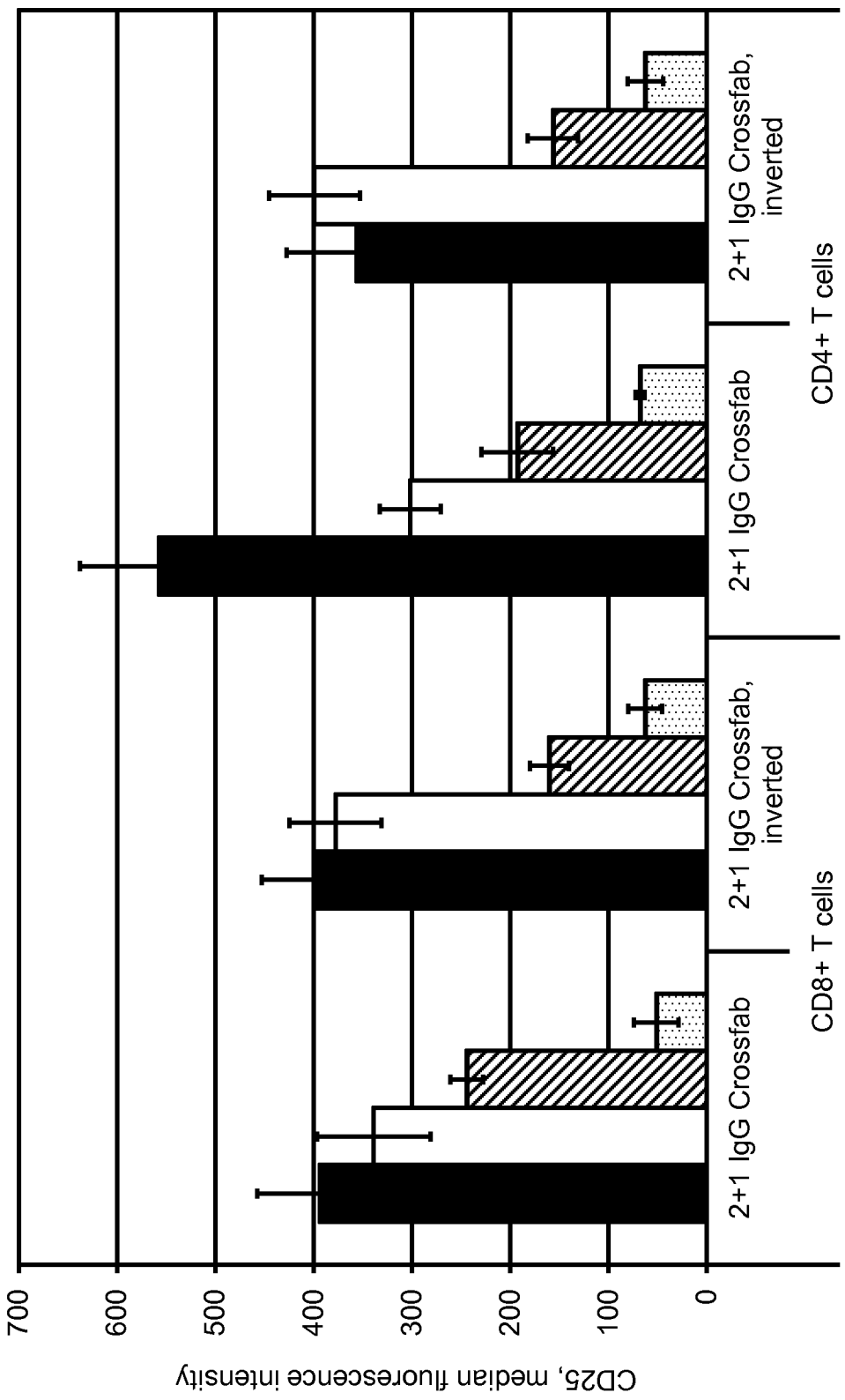
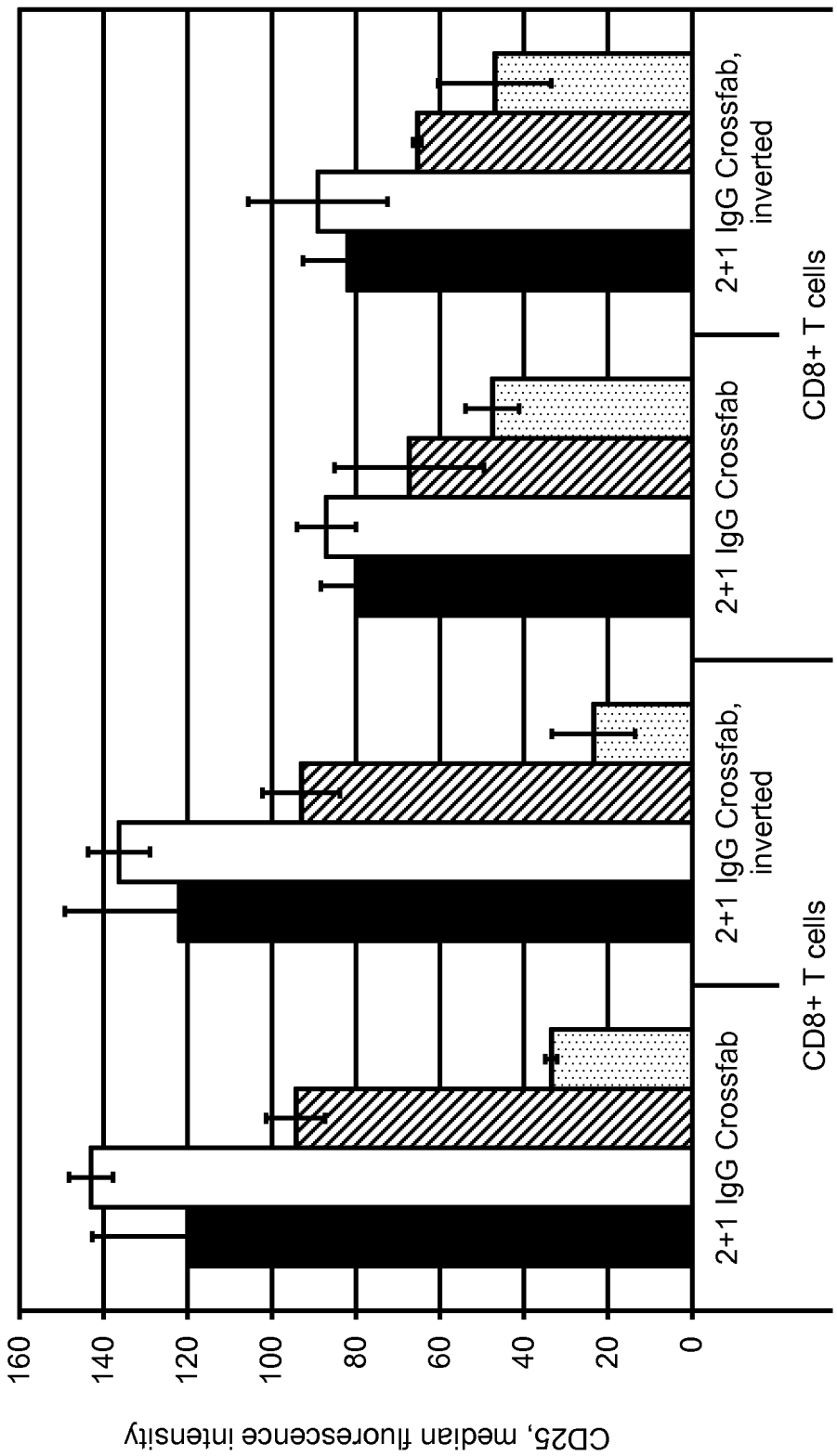

10000 pM
278 pM
8 pM
10000 pM, no targets
CD25, median fluorescence intensity
0
100
200
300
400
500
600
700
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
CD8+ T cells
CD4+ T cells

Figure 60B


10000 pM
278 pM
8 pM
10000 pM, no targets
CD25, median fluorescence intensity
160
140
120
100
80
60
40
20
0
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
2+1 IgG Crossfab
2+1 IgG Crossfab, inverted
CD8+ T cells
CD8+ T cells

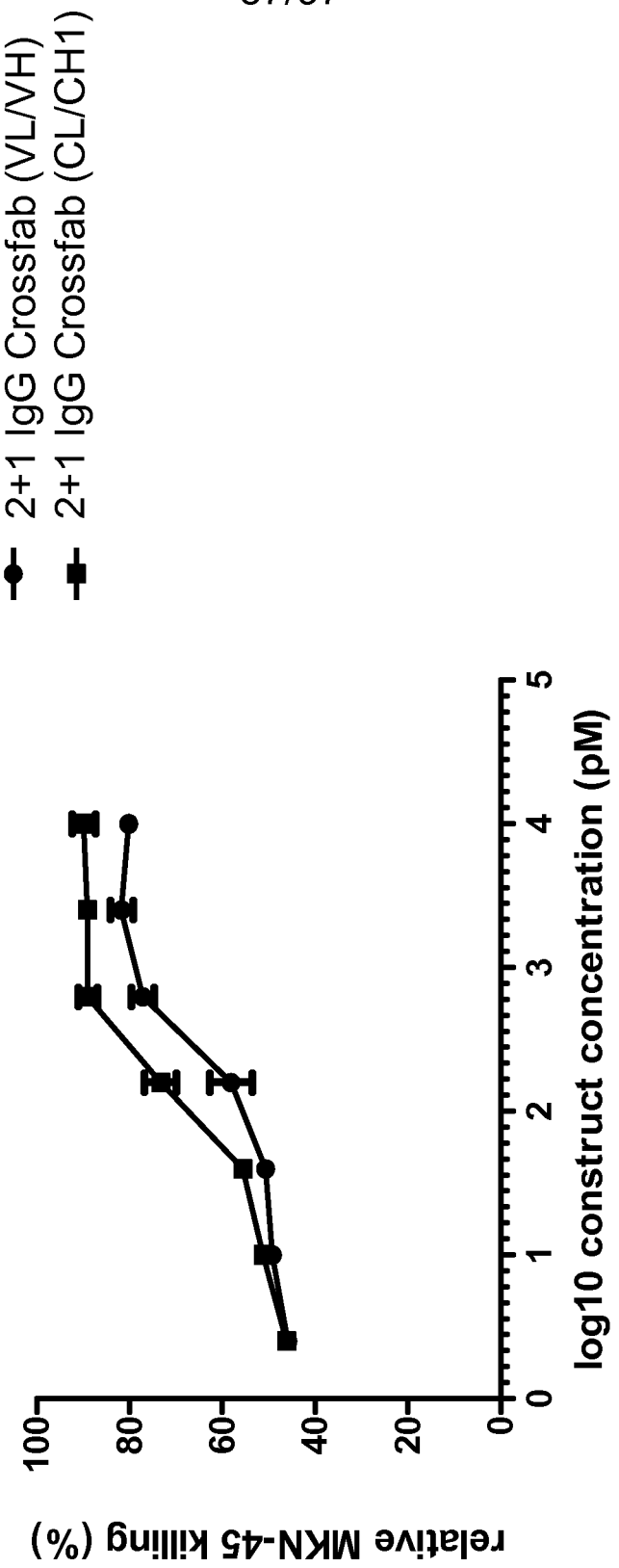

2+1 IgG Crossfab (VL/VH)
2+1 IgG Crossfab (CL/CH1)
relative MKN-45 killing (%)
100
80
60
40
20
0
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 61A

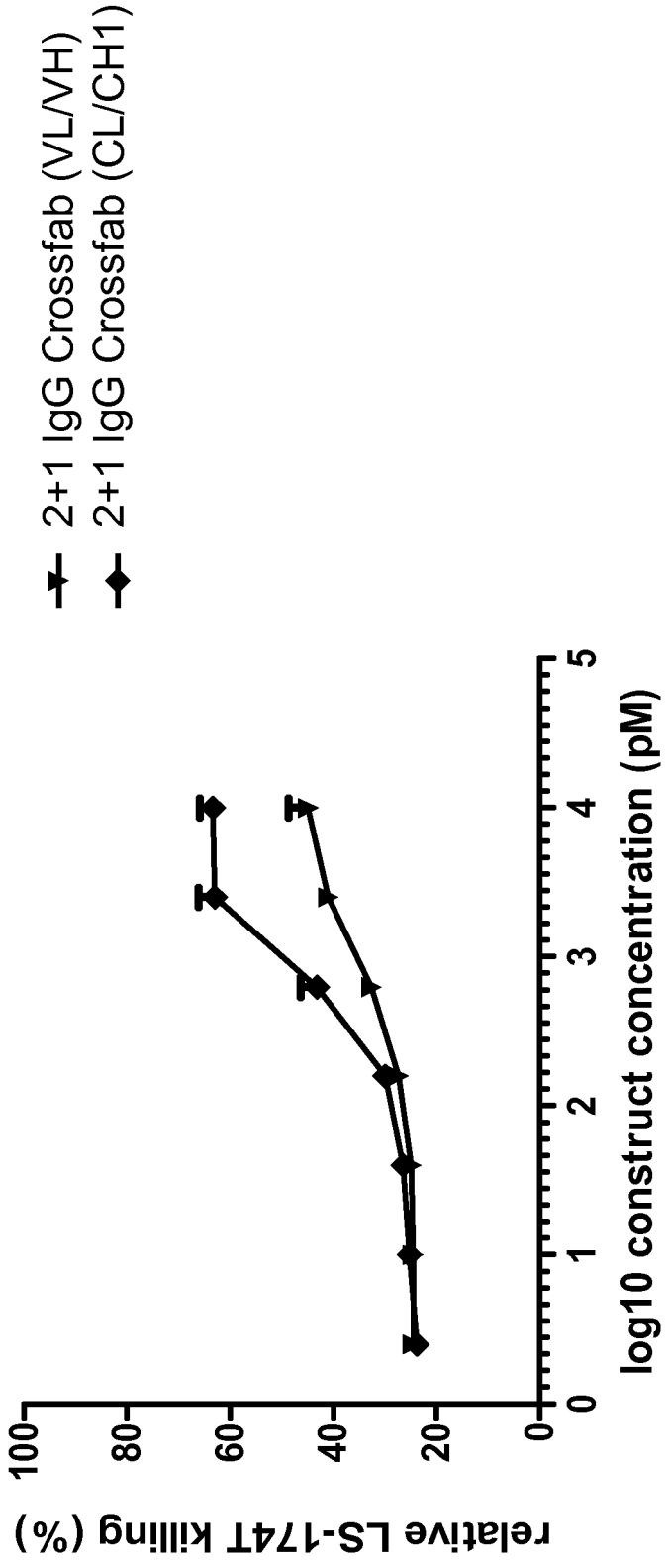

2+1 IgG Crossfab (VL/VH)
2+1 IgG Crossfab (CL/CH1)
relative LS-174T killing (%)
100
80
60
40
20
0
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 61B

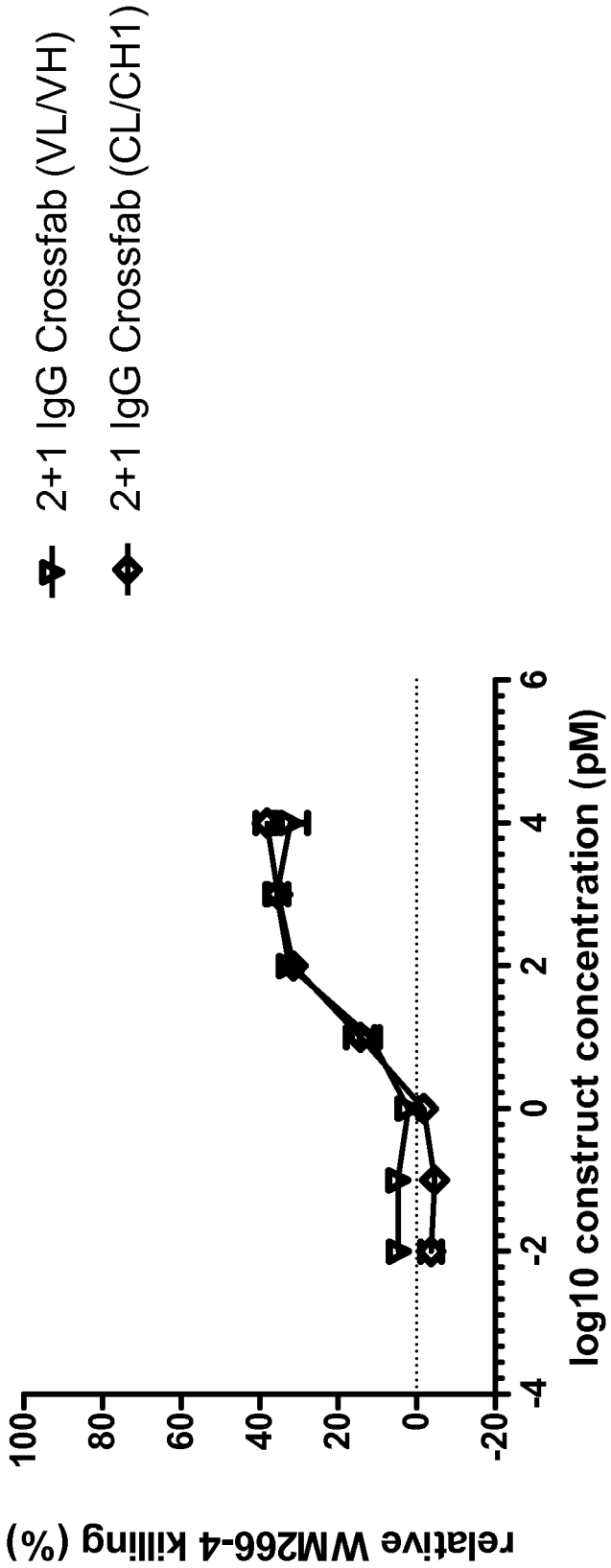

2+1 IgG Crossfab (VL/VH)
2+1 IgG Crossfab (CL/CH1)
relative WM266-4 killing (%)
100
80
60
40
20
0
-20
-4
-2
0
2
4
6
log10 construct concentration (pM)

Figure 62

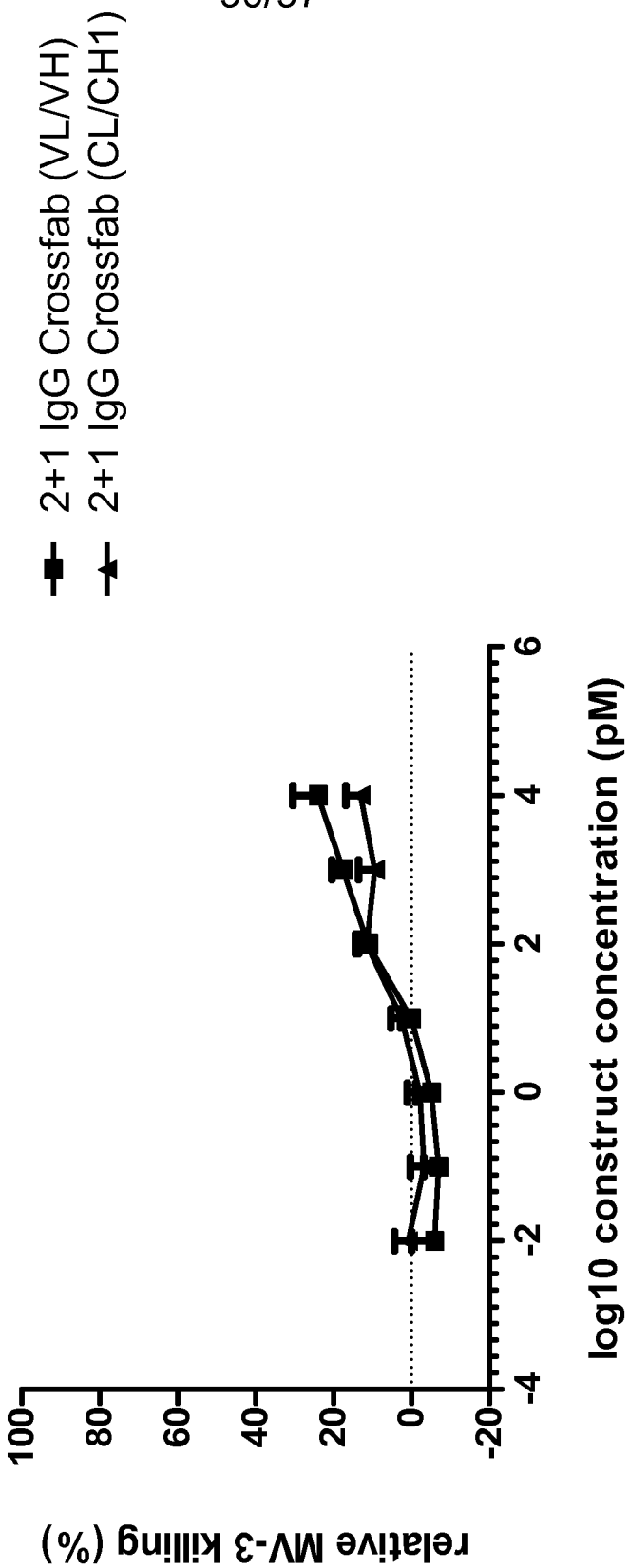

2+1 IgG Crossfab (VL/VH)
2+1 IgG Crossfab (CL/CH1)
relative MV-3 killing (%)
100
80
60
40
20
0
-20
-4
-2
0
2
4
6
log10 construct concentration (pM)

Figure 63

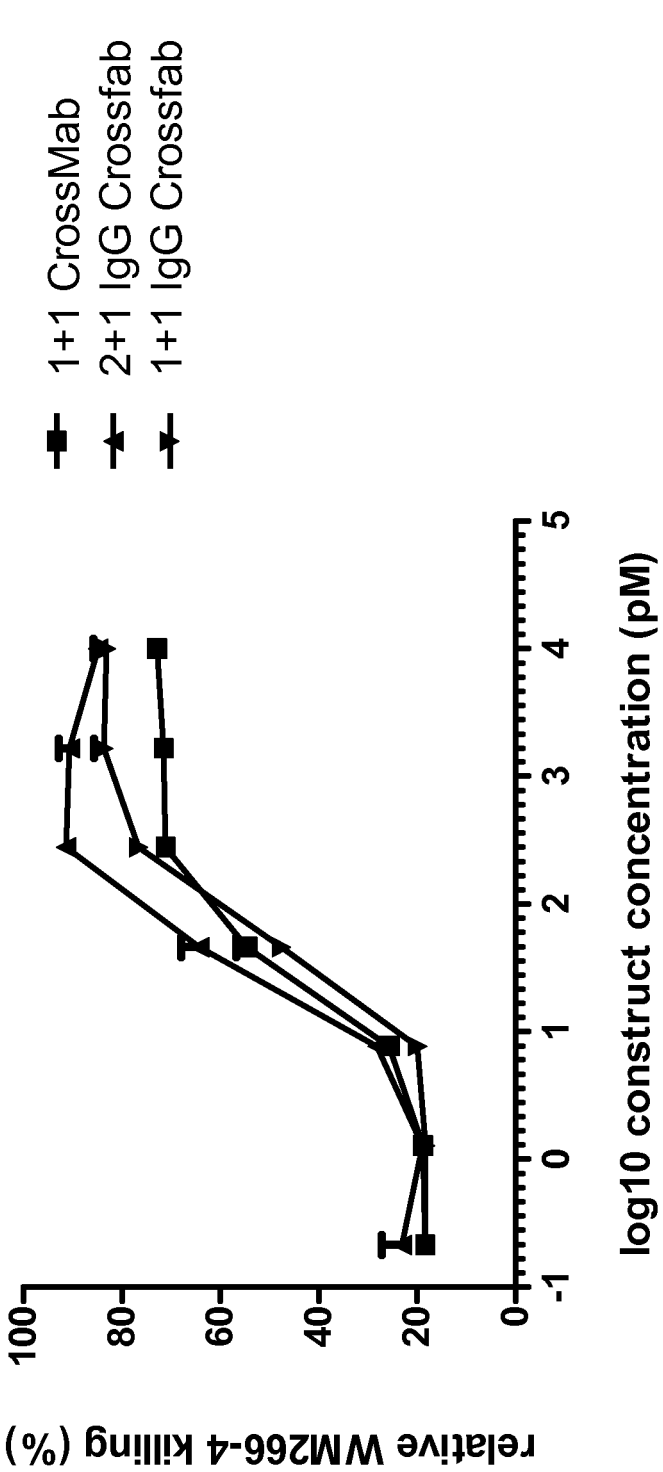

1+1 CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
relative WM266-4 killing (%)
0
20
40
60
80
100
-1
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 64A

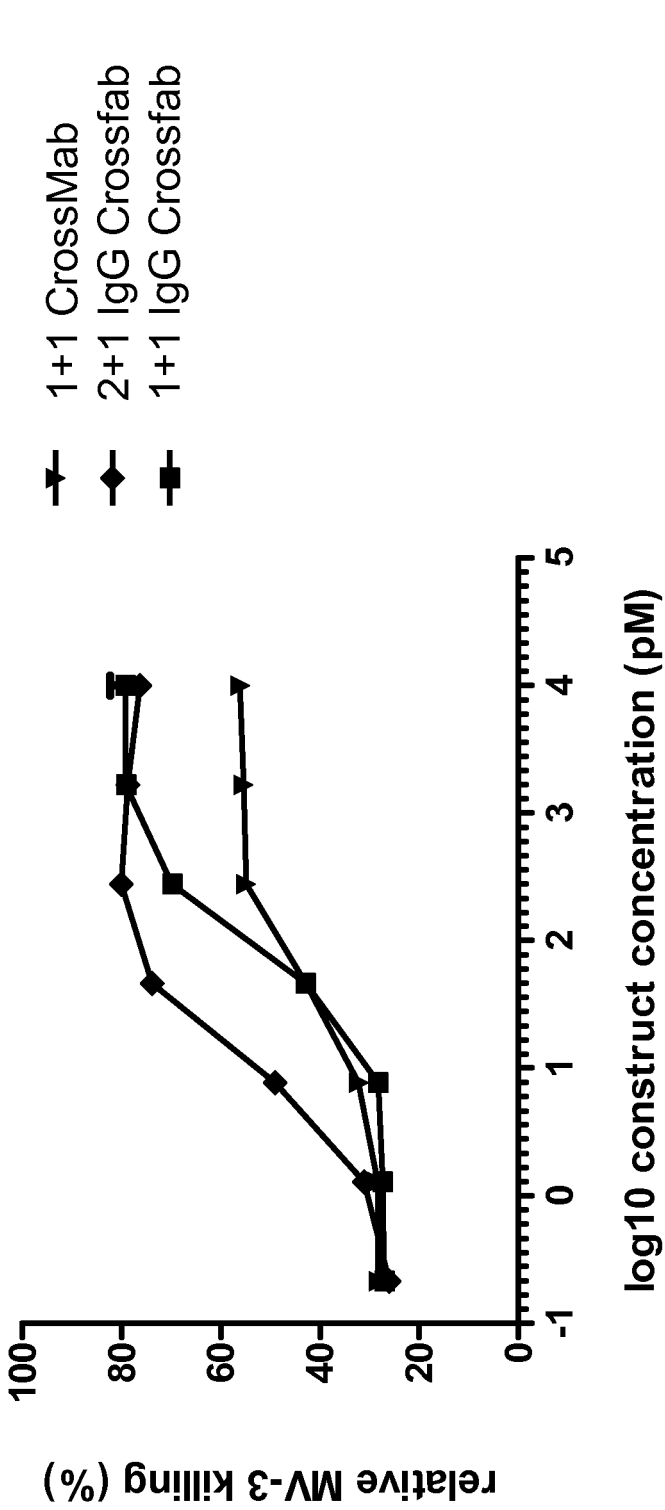

1+1 CrossMab
2+1 IgG Crossfab
1+1 IgG Crossfab
relative MV-3 killing (%)
100
80
60
40
20
0
-1
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 64B

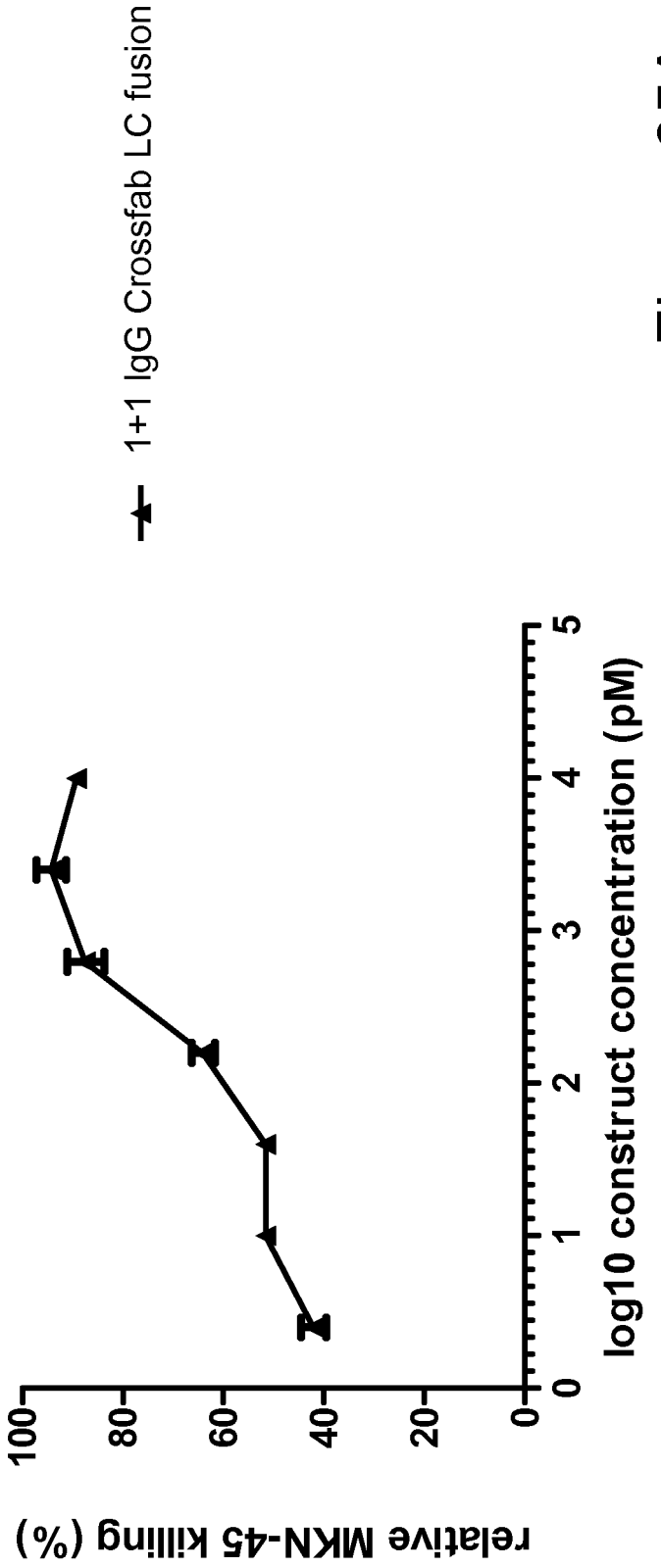

1+1 IgG Crossfab LC fusion
relative MKN-45 killing (%)
100
80
60
40
20
0
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 65A

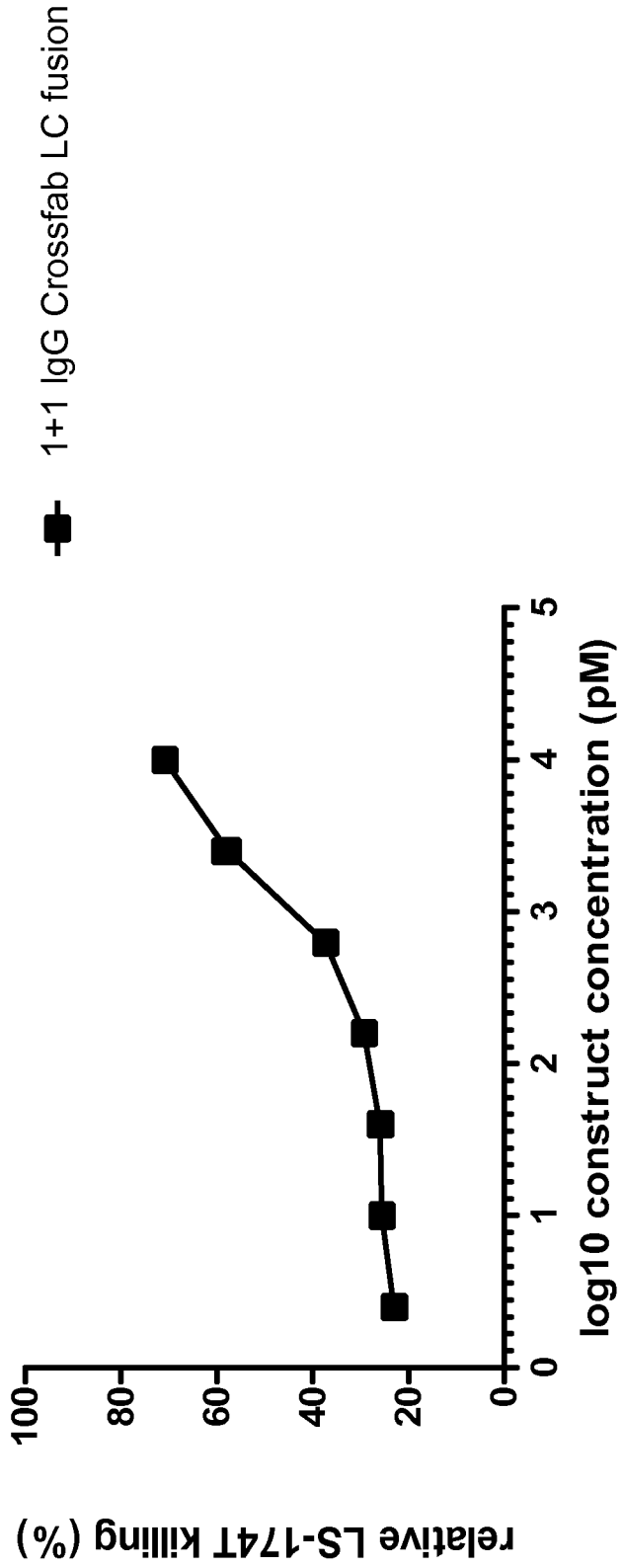

1+1 IgG Crossfab LC fusion
relative LS-174T killing (%)
100
80
60
40
20
0
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 65B

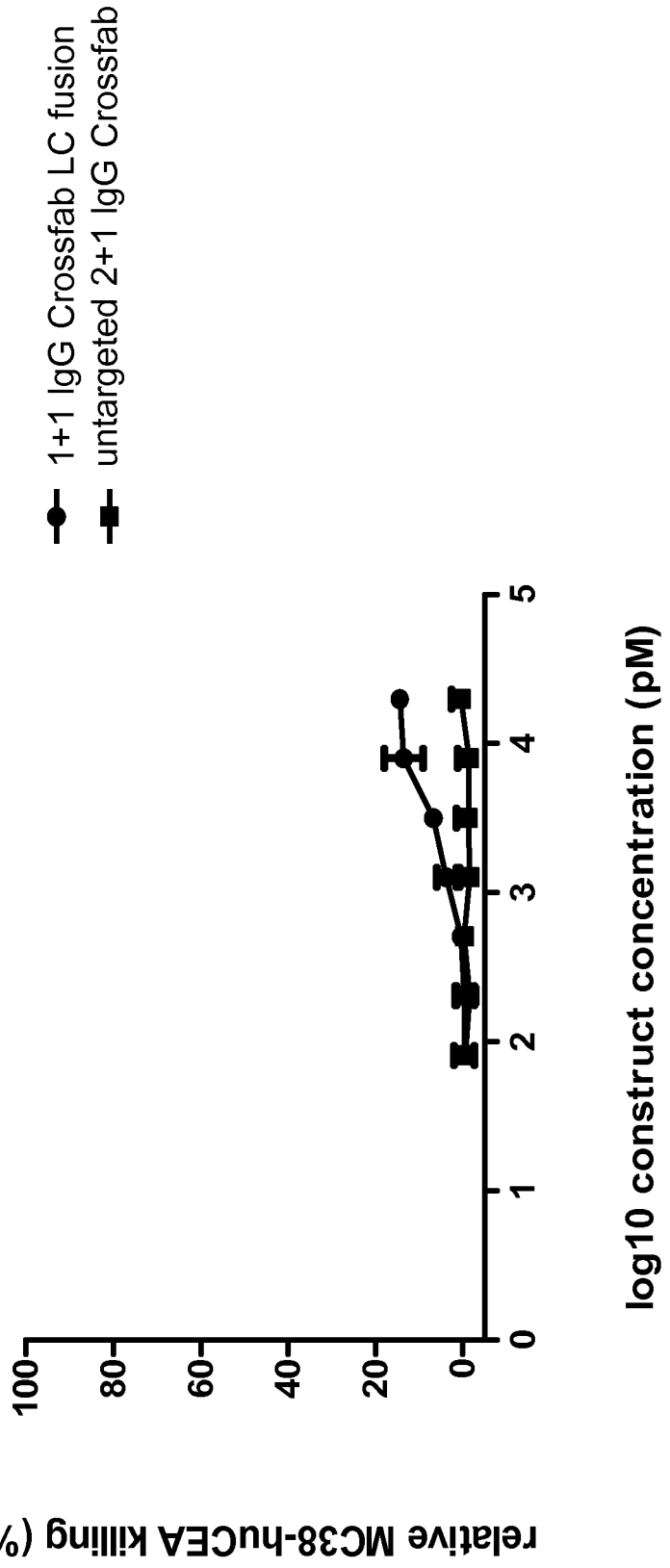

1+1 IgG Crossfab LC fusion
untargeted 2+1 IgG Crossfab
relative MC38-huCEA killing (%)
100
80
60
40
20
0
0
1
2
3
4
5
log10 construct concentration (pM)

Figure 66

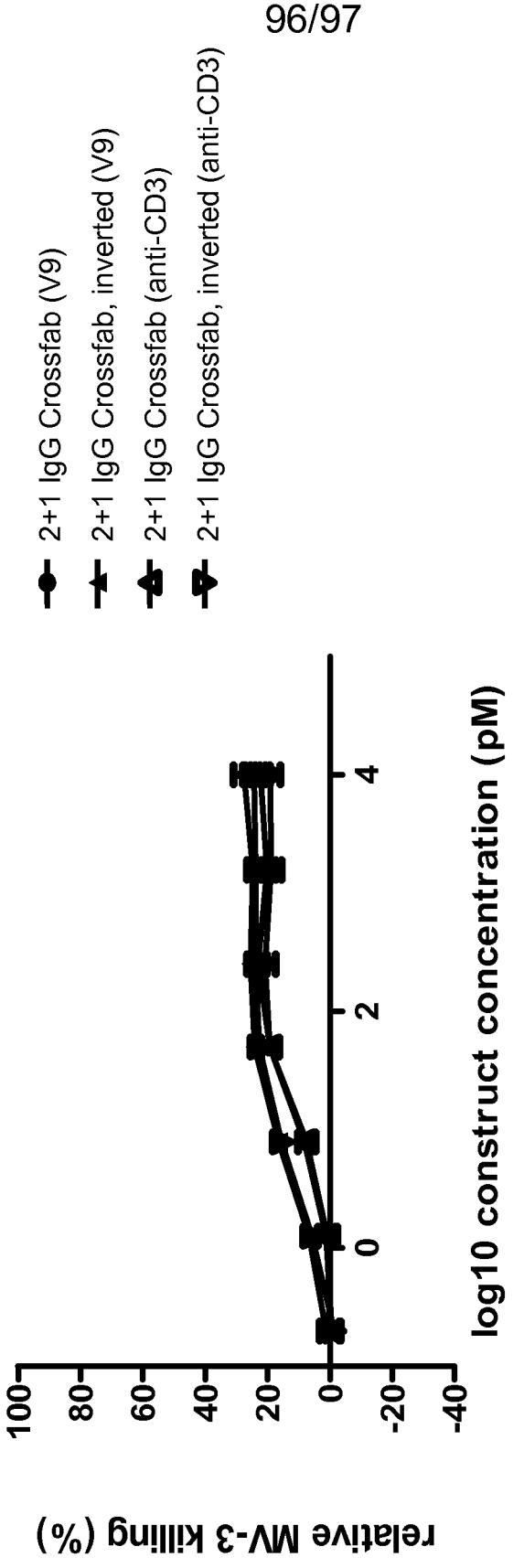

2+1 IgG Crossfab (V9)
2+1 IgG Crossfab, inverted (V9)
2+1 IgG Crossfab (anti-CD3)
2+1 IgG Crossfab, inverted (anti-CD3)
relative MV-3 killing (%)
100
80
60
40
20
0
-20
-40
0
2
4
log10 construct concentration (pM)

Figure 67A

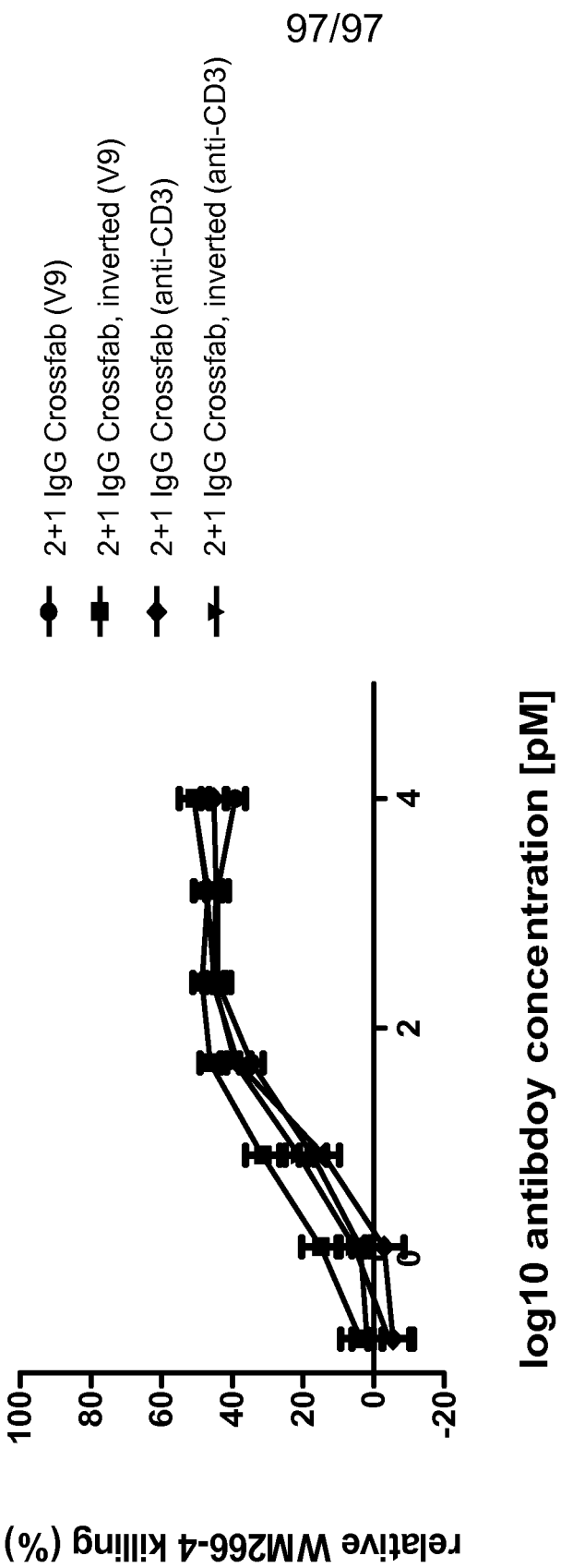

2+1 IgG Crossfab (V9)
2+1 IgG Crossfab, inverted (V9)
2+1 IgG Crossfab (anti-CD3)
2+1 IgG Crossfab, inverted (anti-CD3)
relative WM266-4 killing (%)
100
80
60
40
20
0
-20
-4
-2
0
2
4
log10 antibdoy concentration [pM]

Figure 67B