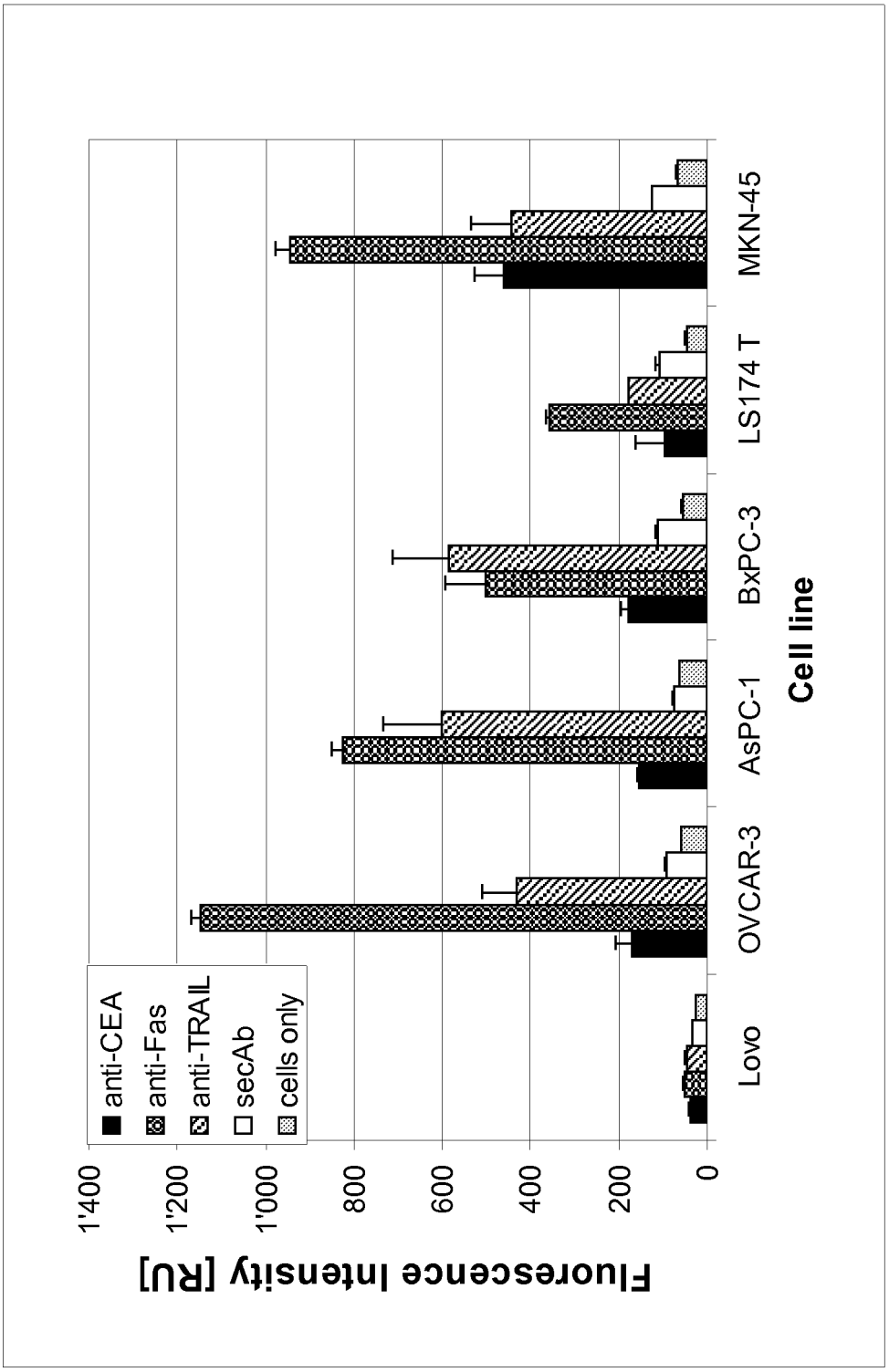
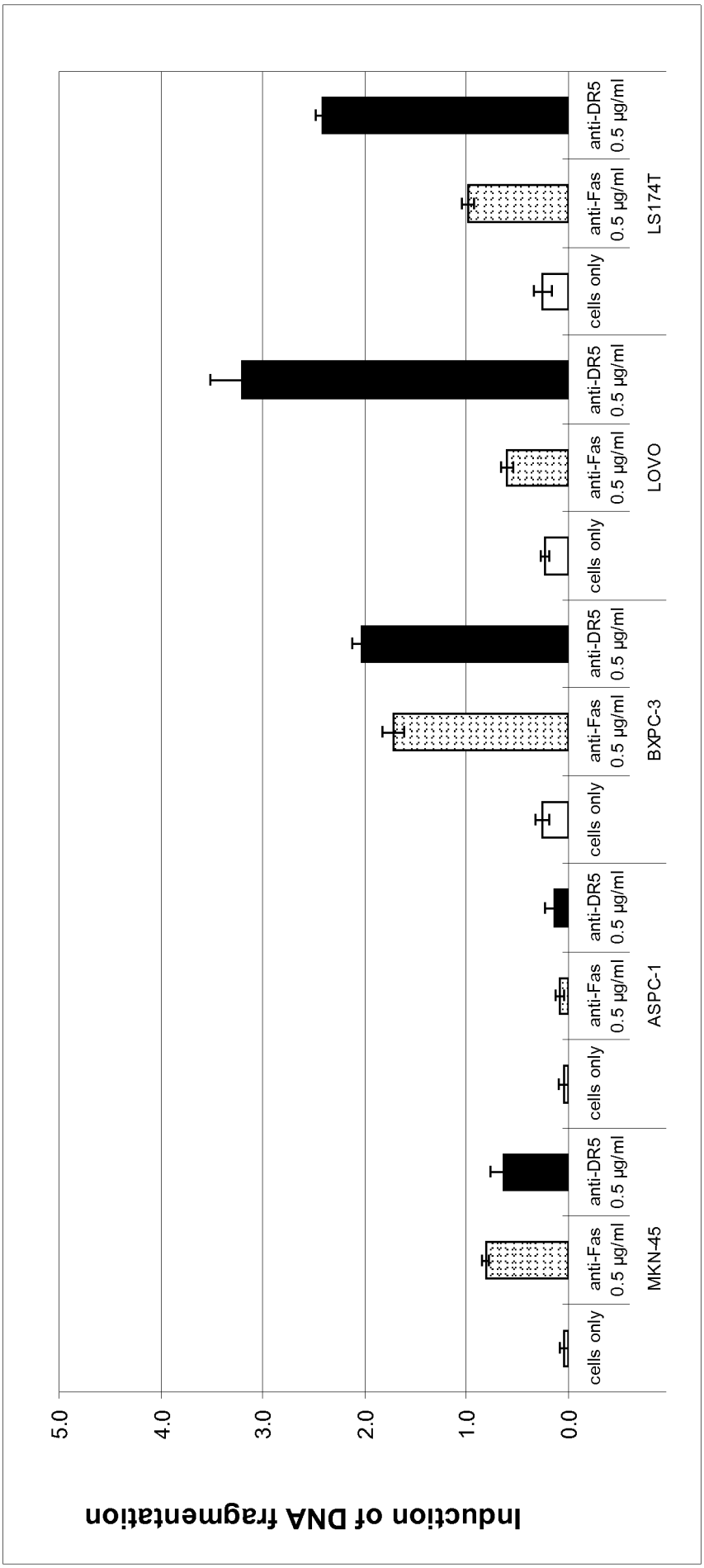

Fluorescence Intensity [RU]
1'400
1'200
1'000
800
600
400
200
0
anti-CEA
anti-Fas
anti-TRAIL
secAb
cells only
Lovo
OVCAR-3
AsPC-1
BxPC-3
LS174 T
MKN-45
Cell line

Fig. 1

Fig. 2


Induction of DNA fragmentation
5.0
4.0
3.0
2.0
1.0
0.0
cells only
anti-Fas 0.5 µg/ml
anti-DR5 0.5 µg/ml
MKN-45
cells only
anti-Fas 0.5 µg/ml
anti-DR5 0.5 µg/ml
ASPC-1
cells only
anti-Fas 0.5 µg/ml
anti-DR5 0.5 µg/ml
BXPC-3
cells only
anti-Fas 0.5 µg/ml
anti-DR5 0.5 µg/ml
LOVO
cells only
anti-Fas 0.5 µg/ml
anti-DR5 0.5 µg/ml
LS174T

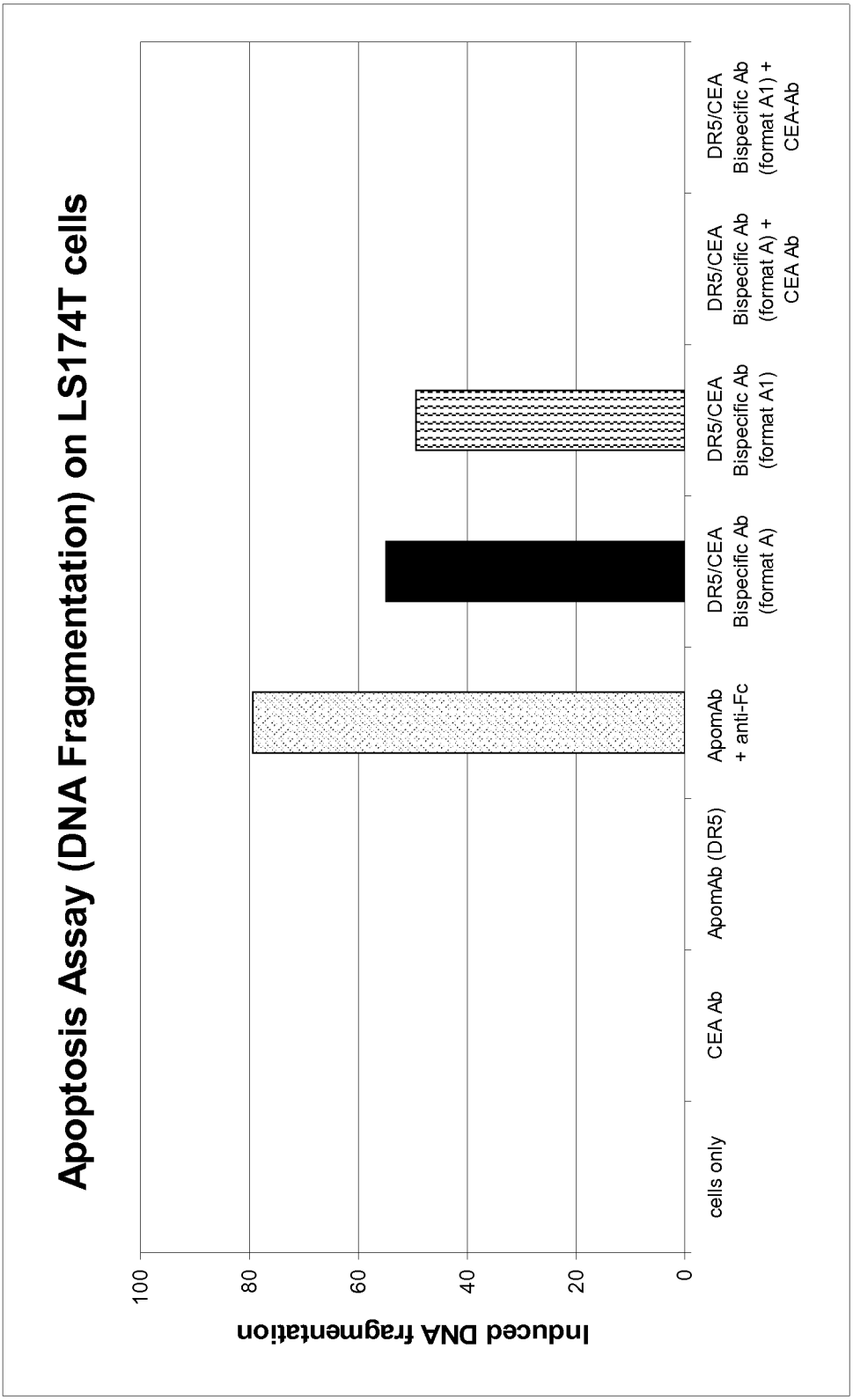

Apoptosis Assay (DNA Fragmentation) on LS174T cells
Induced DNA fragmentation
0
20
40
60
80
100
cells only
CEA Ab
ApomAb (DR5)
ApomAb + anti-Fc
DR5/CEA Bispecific Ab (format A)
DR5/CEA Bispecific Ab (format A1)
DR5/CEA Bispecific Ab (format A) + CEA Ab
DR5/CEA Bispecific Ab (format A1) + CEA-Ab

Fig. 3

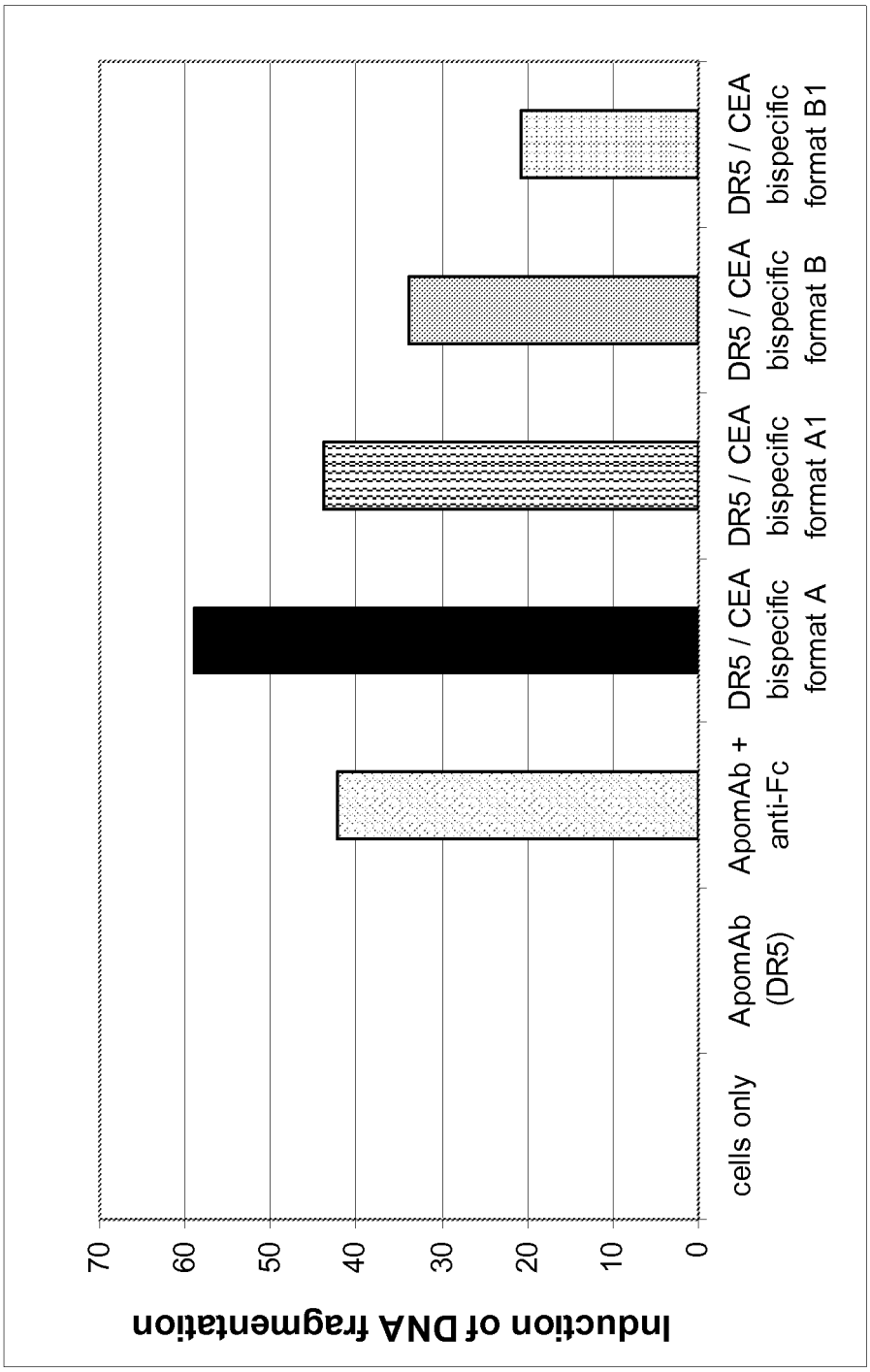

Induction of DNA fragmentation
70
60
50
40
30
20
10
0
cells only
ApomAb (DR5)
ApomAb + anti-Fc
DR5 / CEA bispecific format A
DR5 / CEA bispecific format A1
DR5 / CEA bispecific format B
DR5 / CEA bispecific format B1

Fig. 4

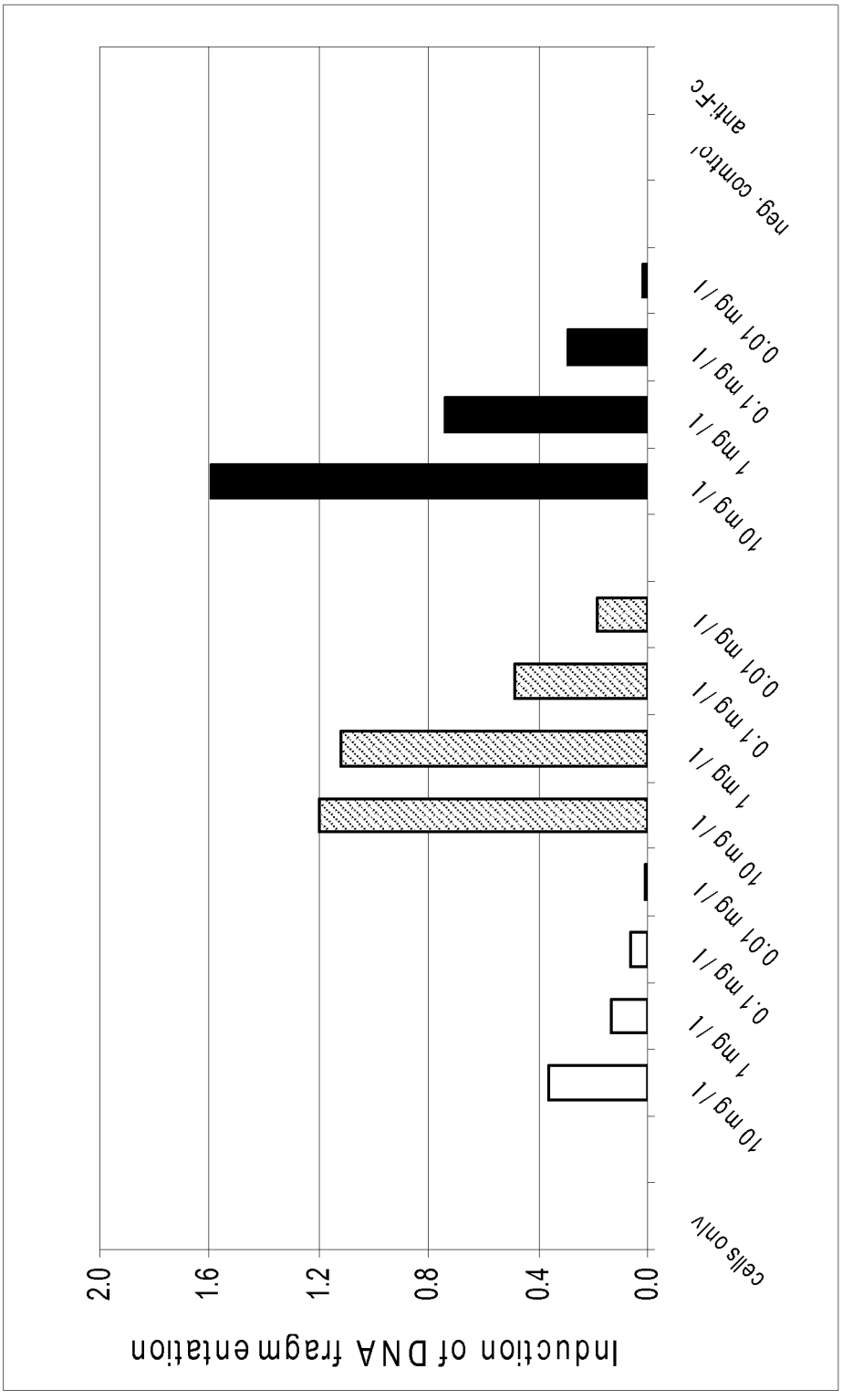
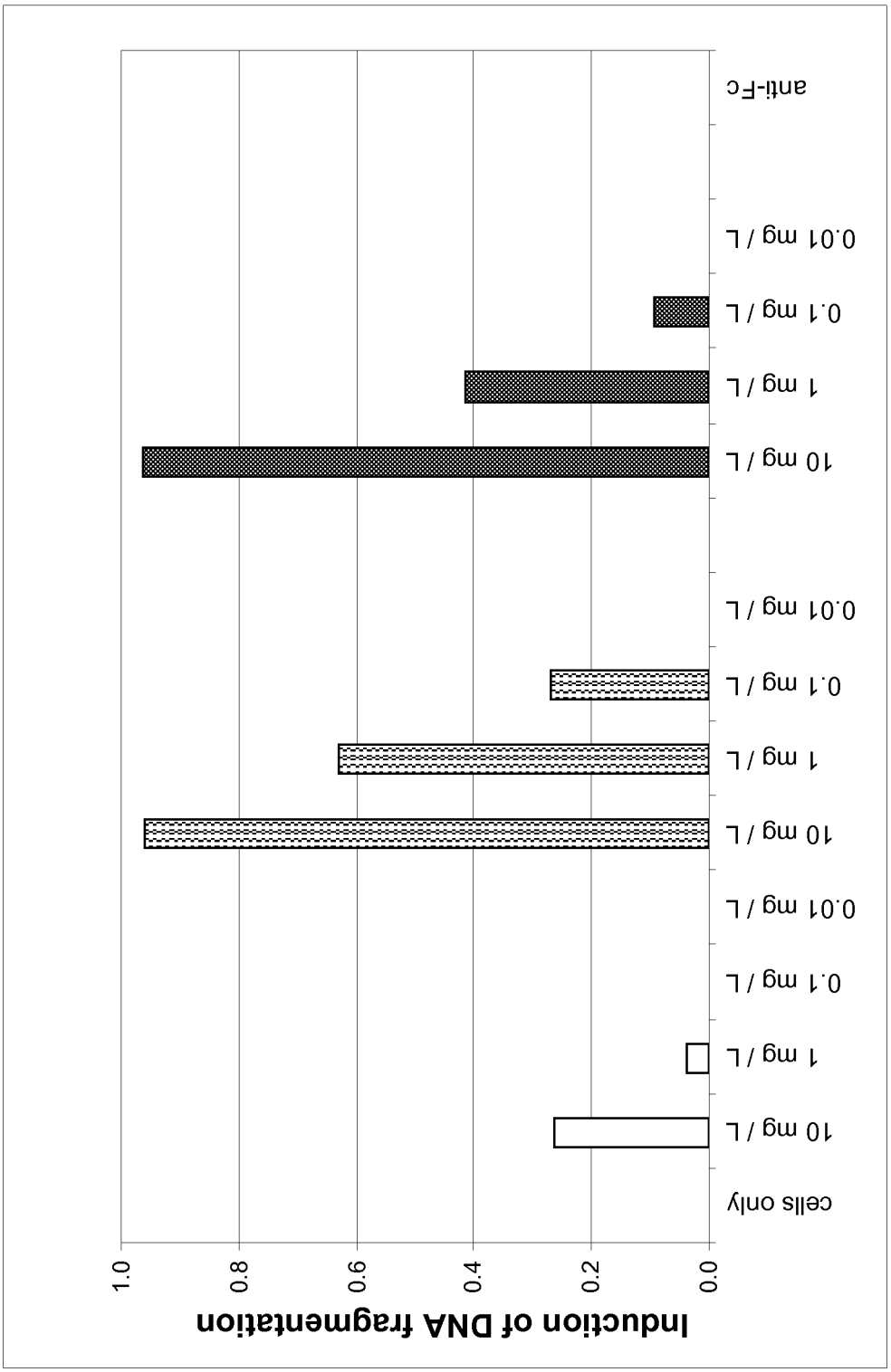

Induction of DNA fragmentation
2.0
1.6
1.2
0.8
0.4
0.0
cells only
10 mg / l
1 mg / l
0.1 mg / l
0.01 mg / l
10 mg / l
1 mg / l
0.1 mg / l
0.01 mg / l
10 mg / l
1 mg / l
0.1 mg / l
0.01 mg / l
neg. contr.
anti-Fc

Fig. 5

Fig. 6


Induction of DNA fragmentation
0.0
0.2
0.4
0.6
0.8
1.0
cells only
10 mg / L
1 mg / L
0.1 mg / L
0.01 mg / L
10 mg / L
1 mg / L
0.1 mg / L
0.01 mg / L
10 mg / L
1 mg / L
0.1 mg / L
0.01 mg / L
anti-Fc

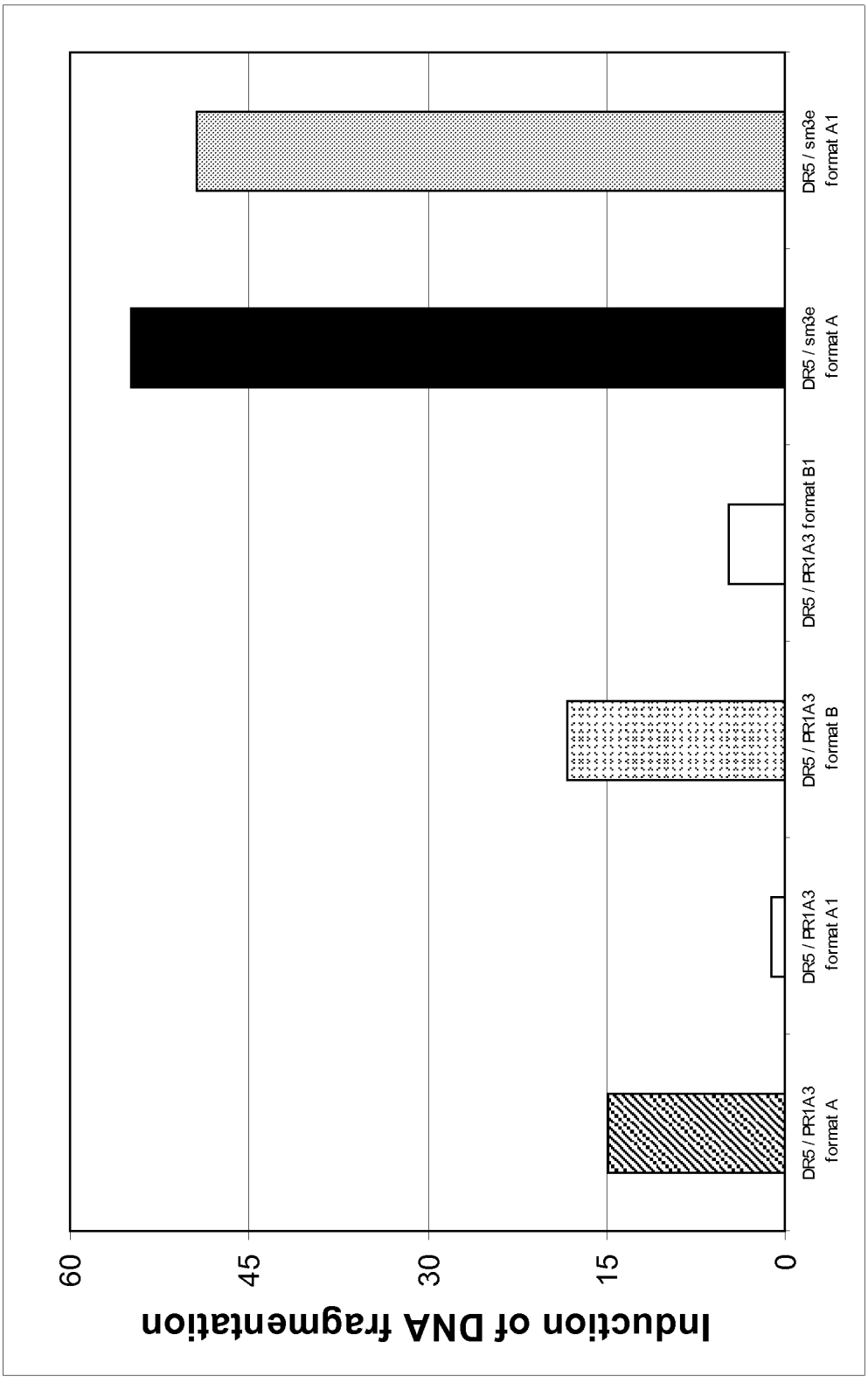

Induction of DNA fragmentation
60
45
30
15
0
DR5 / PR1A3 format A
DR5 / PR1A3 format A1
DR5 / PR1A3 format B
DR5 / PR1A3 format B1
DR5 / sm3e format A
DR5 / sm3e format A1

Fig. 7

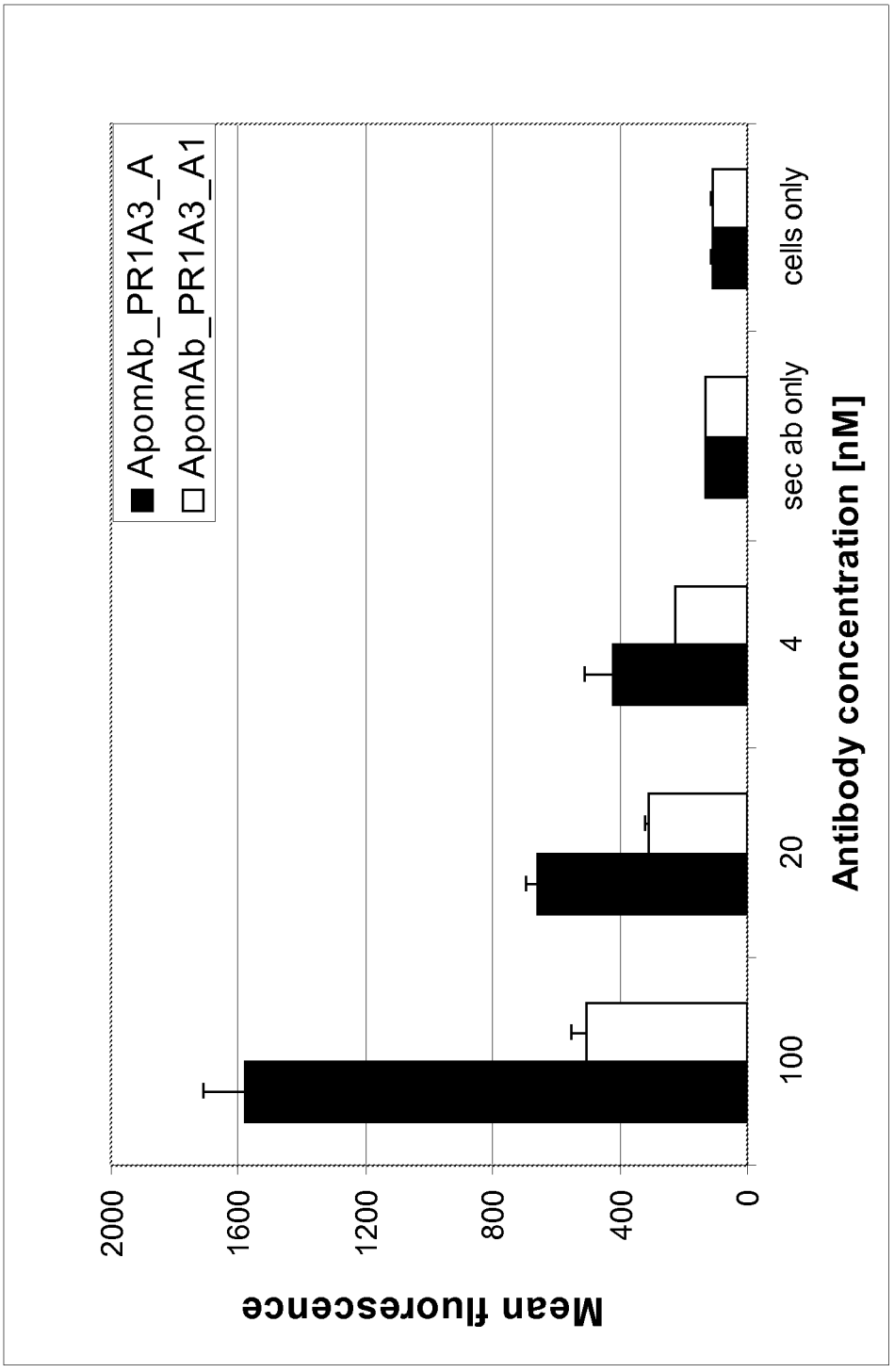

ApomAb_PR1A3_A
ApomAb_PR1A3_A1
Mean fluorescence
2000
1600
1200
800
400
0
100
20
4
sec ab only
cells only
Antibody concentration [nM]

Fig. 8

Fig. 9

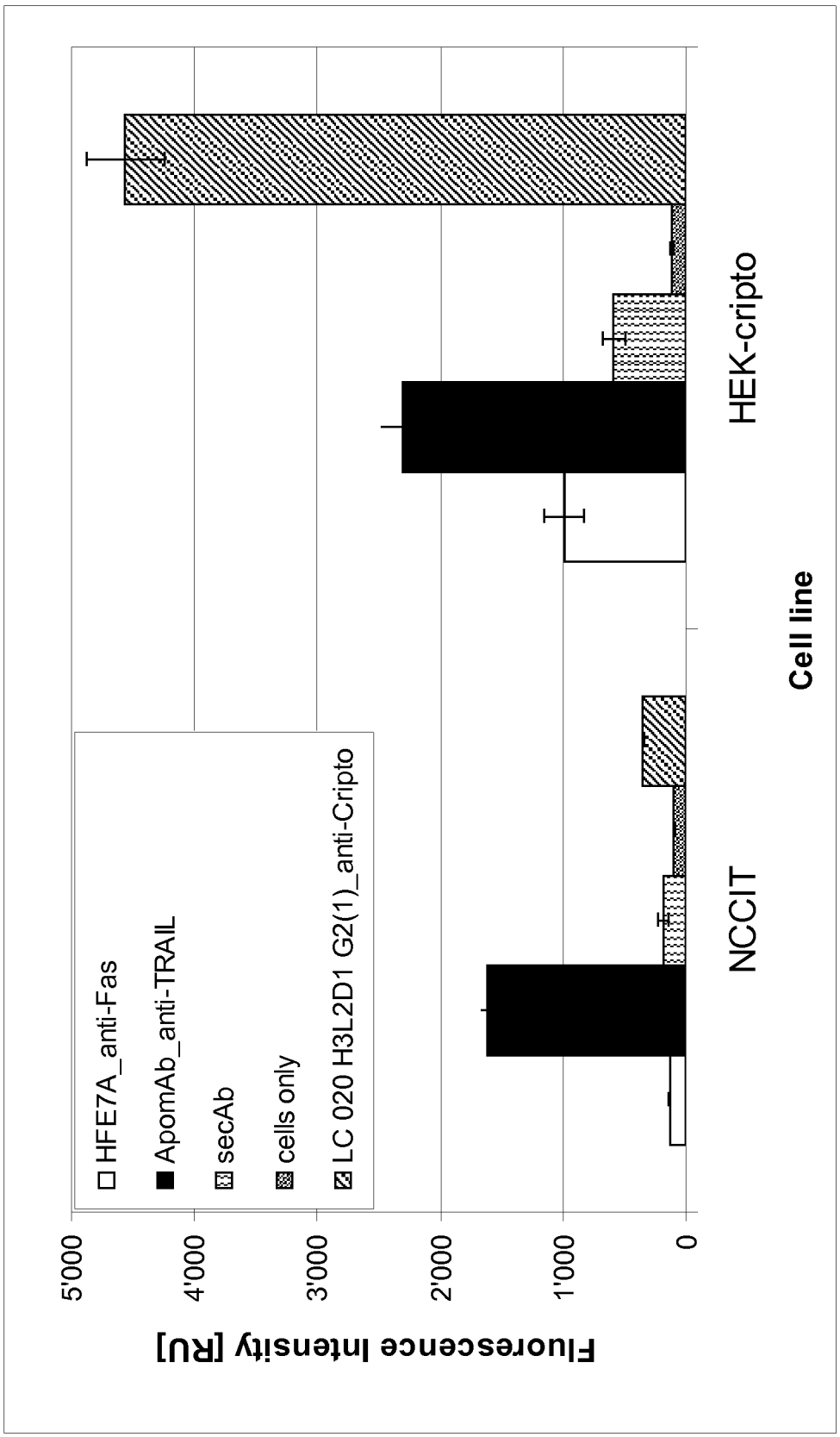

Fluorescence Intensity [RU]
5'000
4'000
3'000
2'000
1'000
0
HFE7A_anti-Fas
ApomAb_anti-TRAIL
secAb
cells only
LC 020 H3L2D1 G2(1)_anti-Cripto
NCCIT
HEK-cripto
Cell line

Fig. 10

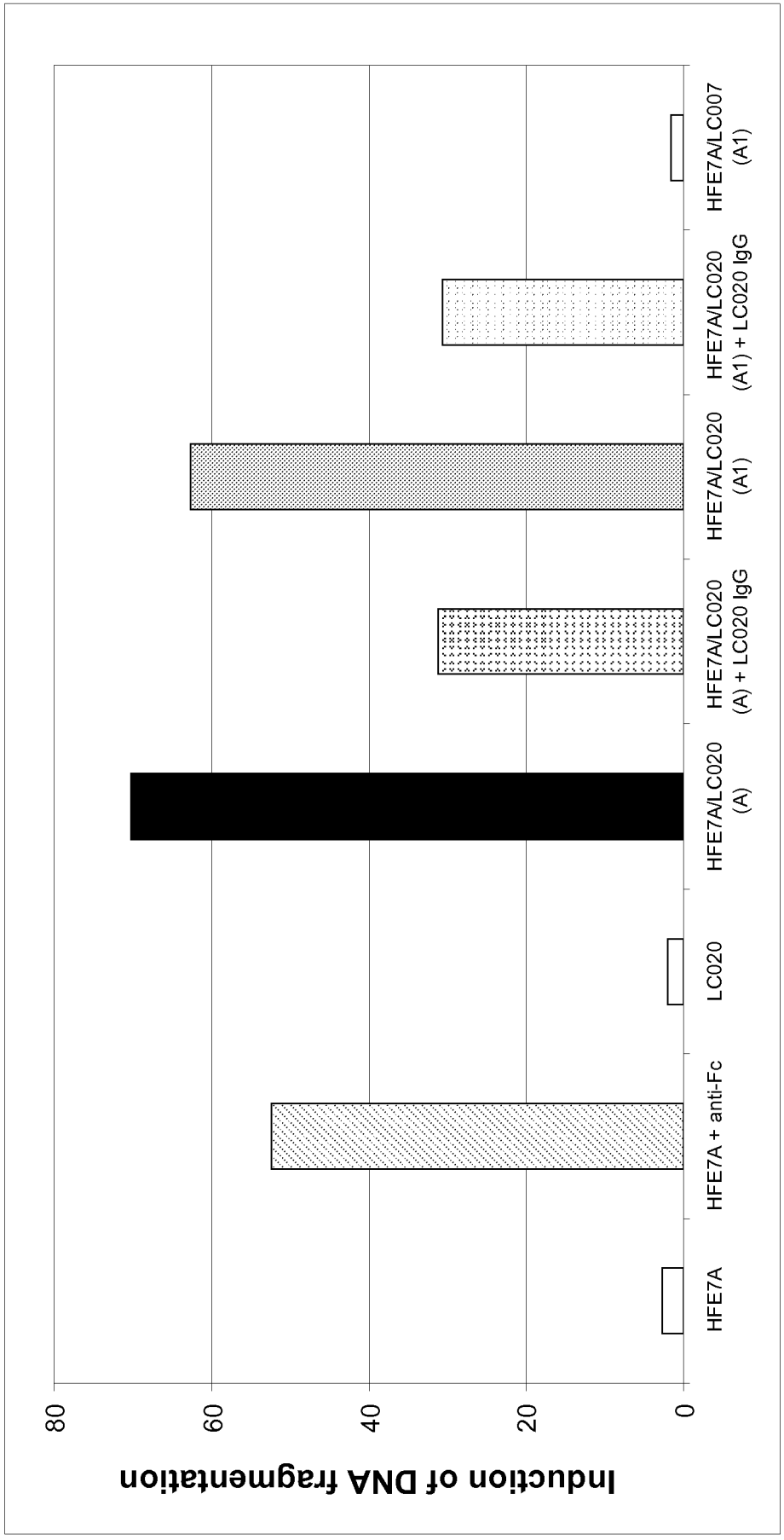
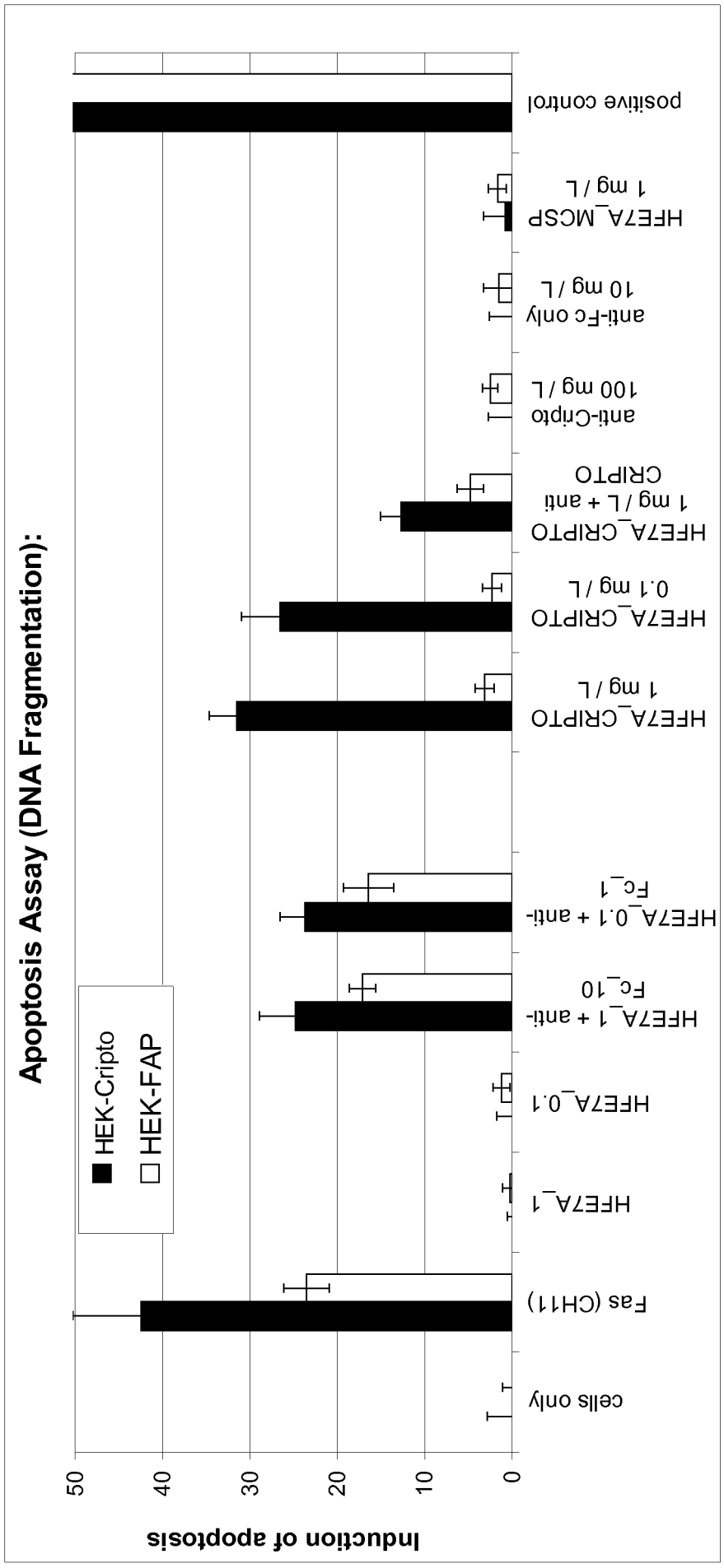

Induction of DNA fragmentation
0
20
40
60
80
HFE7A
HFE7A + anti-Fc
LC020
HFE7A/LC020 (A)
HFE7A/LC020 (A) + LC020 IgG
HFE7A/LC020 (A1)
HFE7A/LC020 (A1) + LC020 IgG
HFE7A/LC007 (A1)

Fig. 11


Apoptosis Assay (DNA Fragmentation):
Induction of apoptosis
0
10
20
30
40
50
HEK-Cripto
HEK-FAP
cells only
Fas (CH11)
HFE7A_1
HFE7A_0.1
HFE7A_1 + anti-Fc_10
HFE7A_0.1 + anti-Fc_1
HFE7A_CRIPTO 1 mg / L
HFE7A_CRIPTO 0.1 mg / L
HFE7A_CRIPTO 1 mg / L + anti CRIPTO
anti-Cripto 100 mg / L
anti-Fc only 10 mg / L
HFE7A_MCSP 1 mg / L
positive control

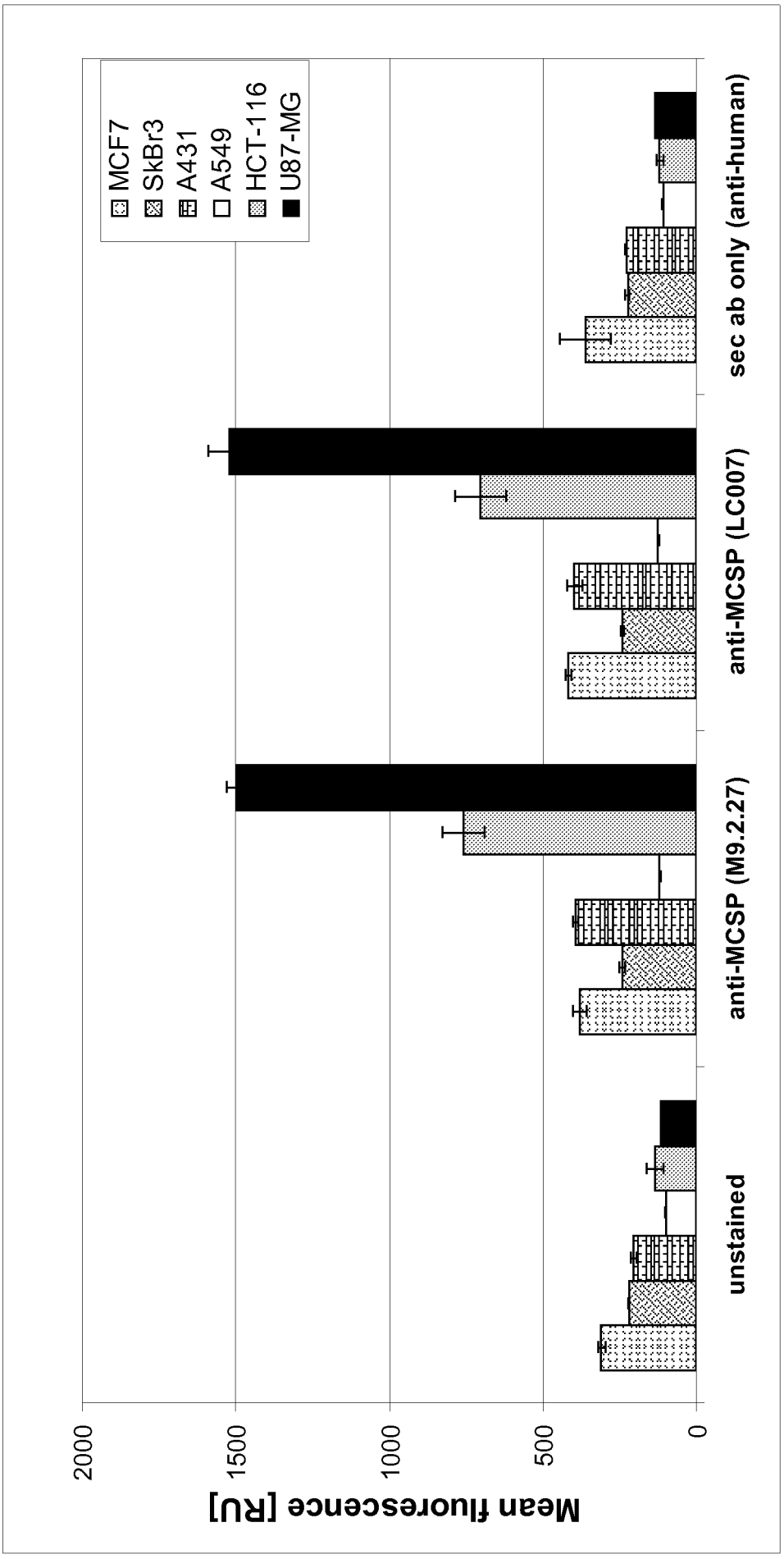
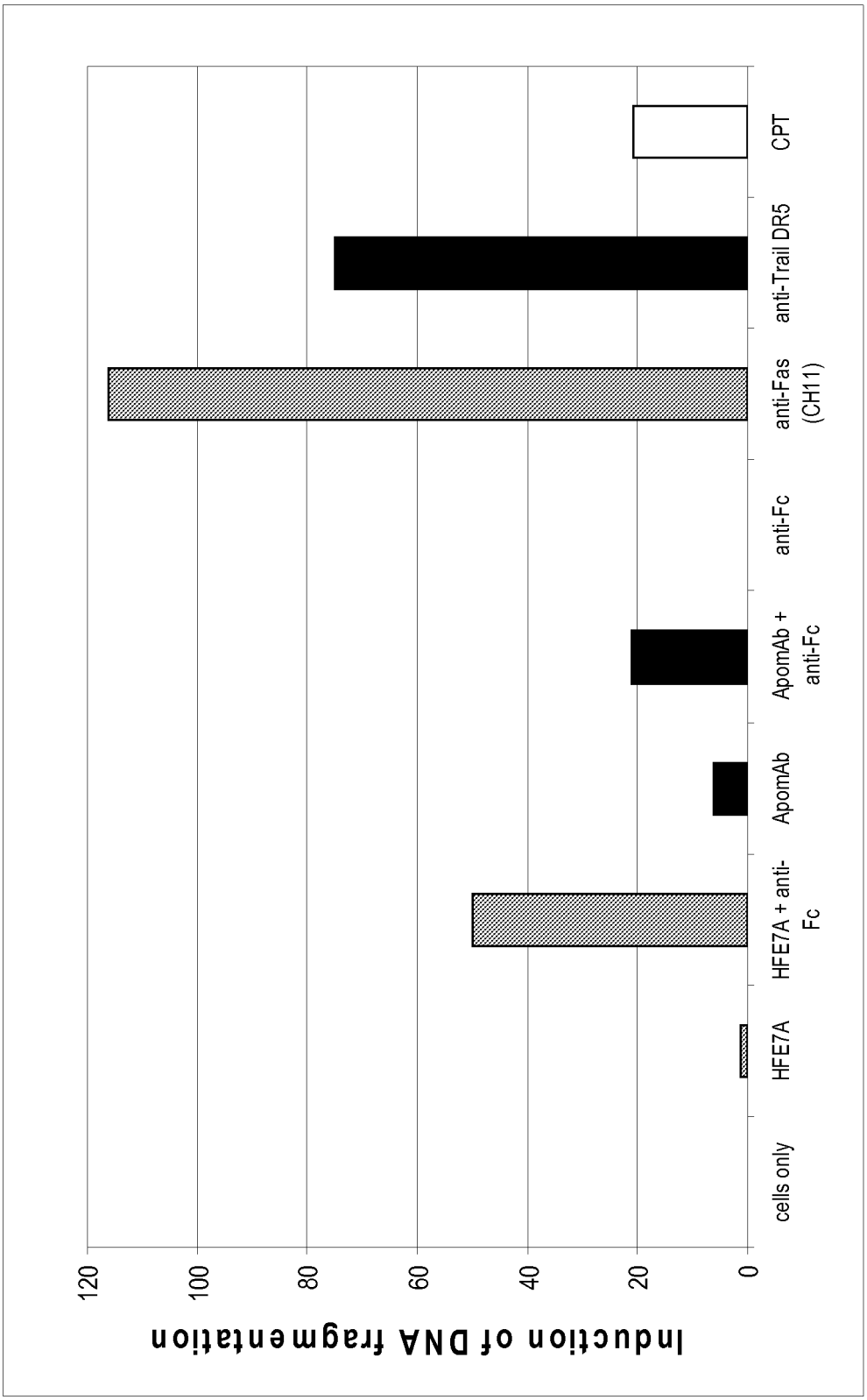

Mean fluorescence [RU]
2000
1500
1000
500
0
MCF7
SkBr3
A431
A549
HCT-116
U87-MG
unstained
anti-MCSP (M9.2.27)
anti-MCSP (LC007)
sec ab only (anti-human)

Fig. 12

Fig. 13 A


Induction of DNA fragmentation
120
100
80
60
40
20
0
cells only
HFE7A
HFE7A + anti-Fc
ApomAb
ApomAb + anti-Fc
anti-Fc
anti-Fas (CH11)
anti-Trail DR5
CPT

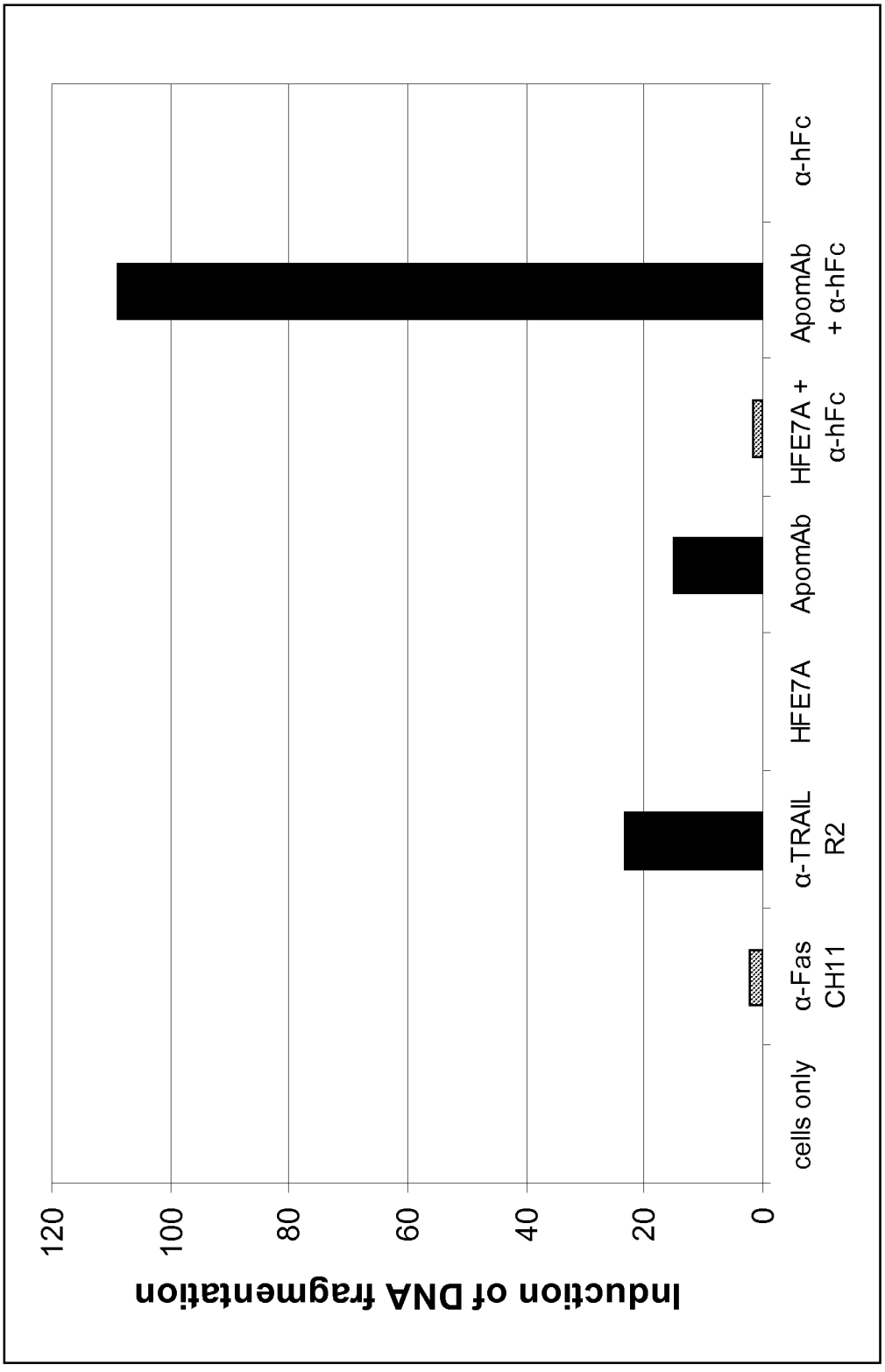

Induction of DNA fragmentation
0
20
40
60
80
100
120
cells only
α-Fas CH11
α-TRAIL R2
HFE7A
ApomAb
HFE7A + α-hFc
ApomAb + α-hFc
α-hFc

Fig. 13 B

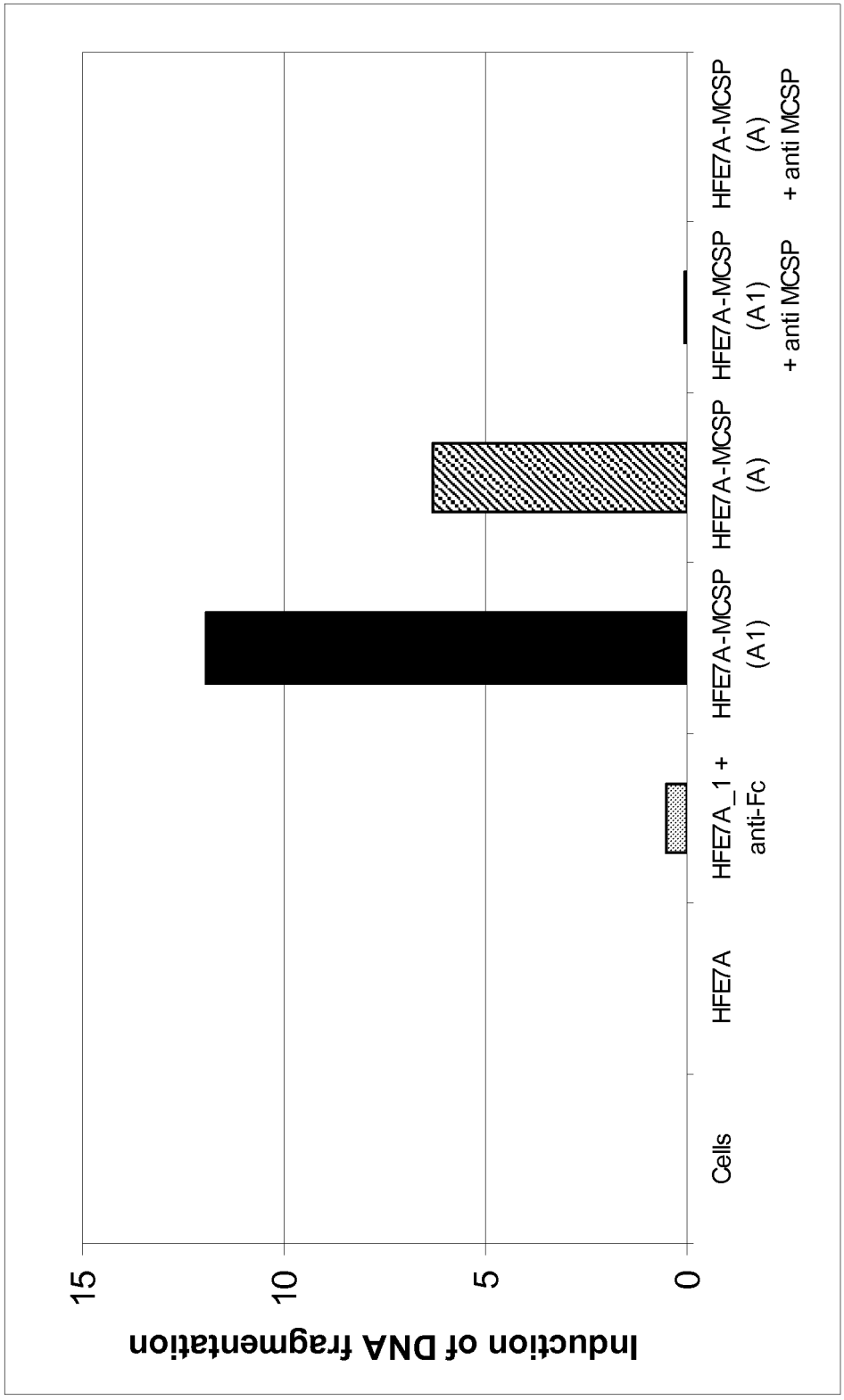

Induction of DNA fragmentation
15
10
5
0
Cells
HFE7A
HFE7A_1 + anti-Fc
HFE7A-MCSP (A1)
HFE7A-MCSP (A)
HFE7A-MCSP (A1) + anti MCSP
HFE7A-MCSP (A) + anti MCSP

Fig. 14

Fig. 15 A

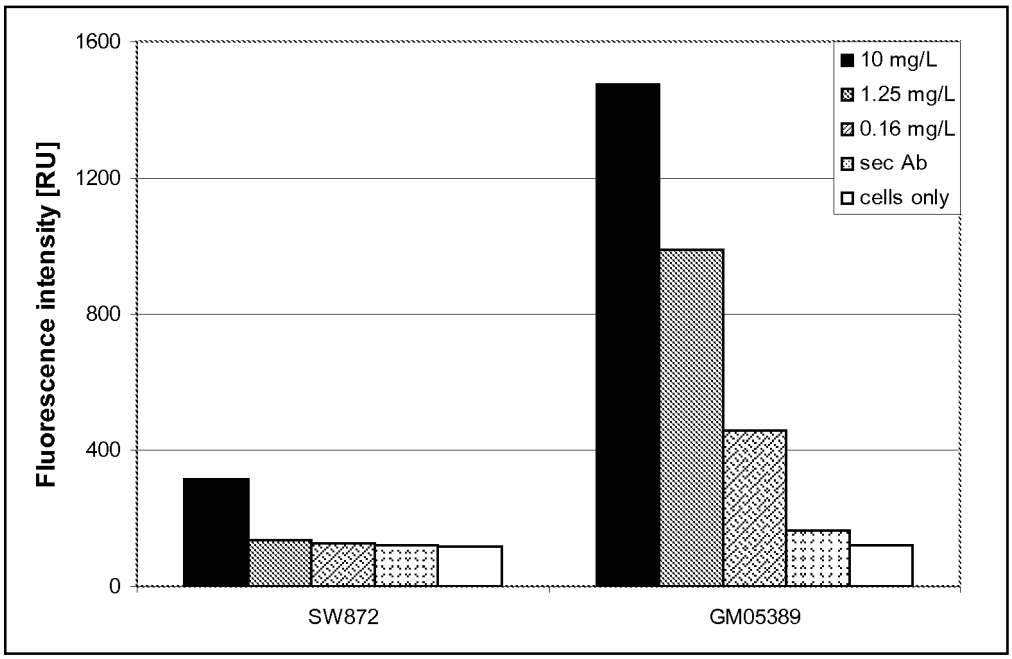


Fig. 15 B

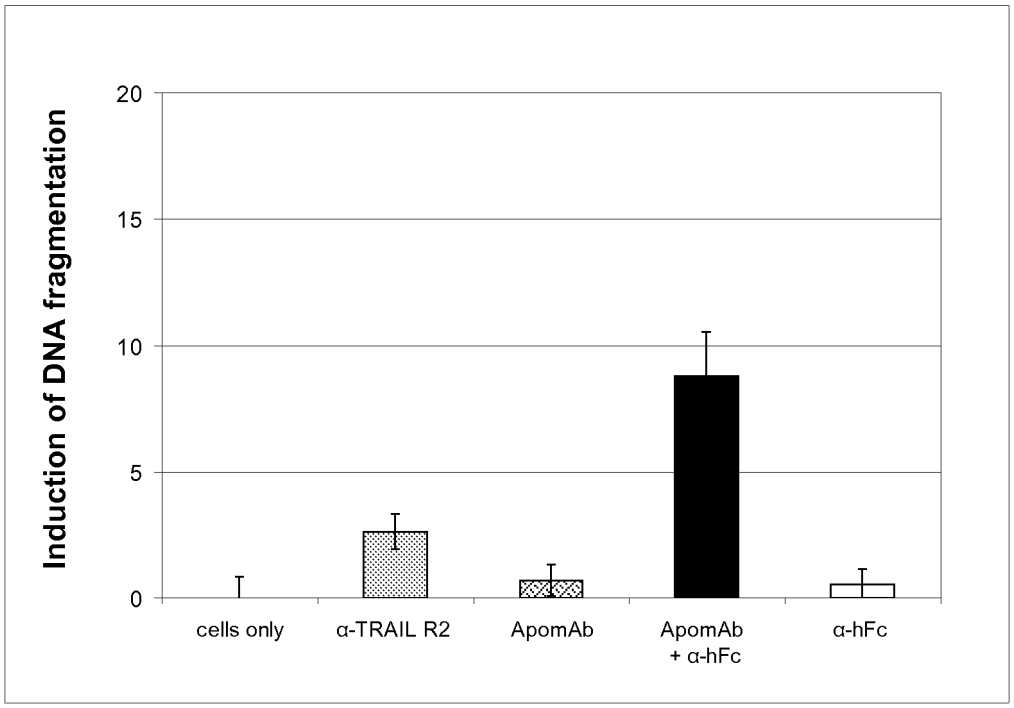
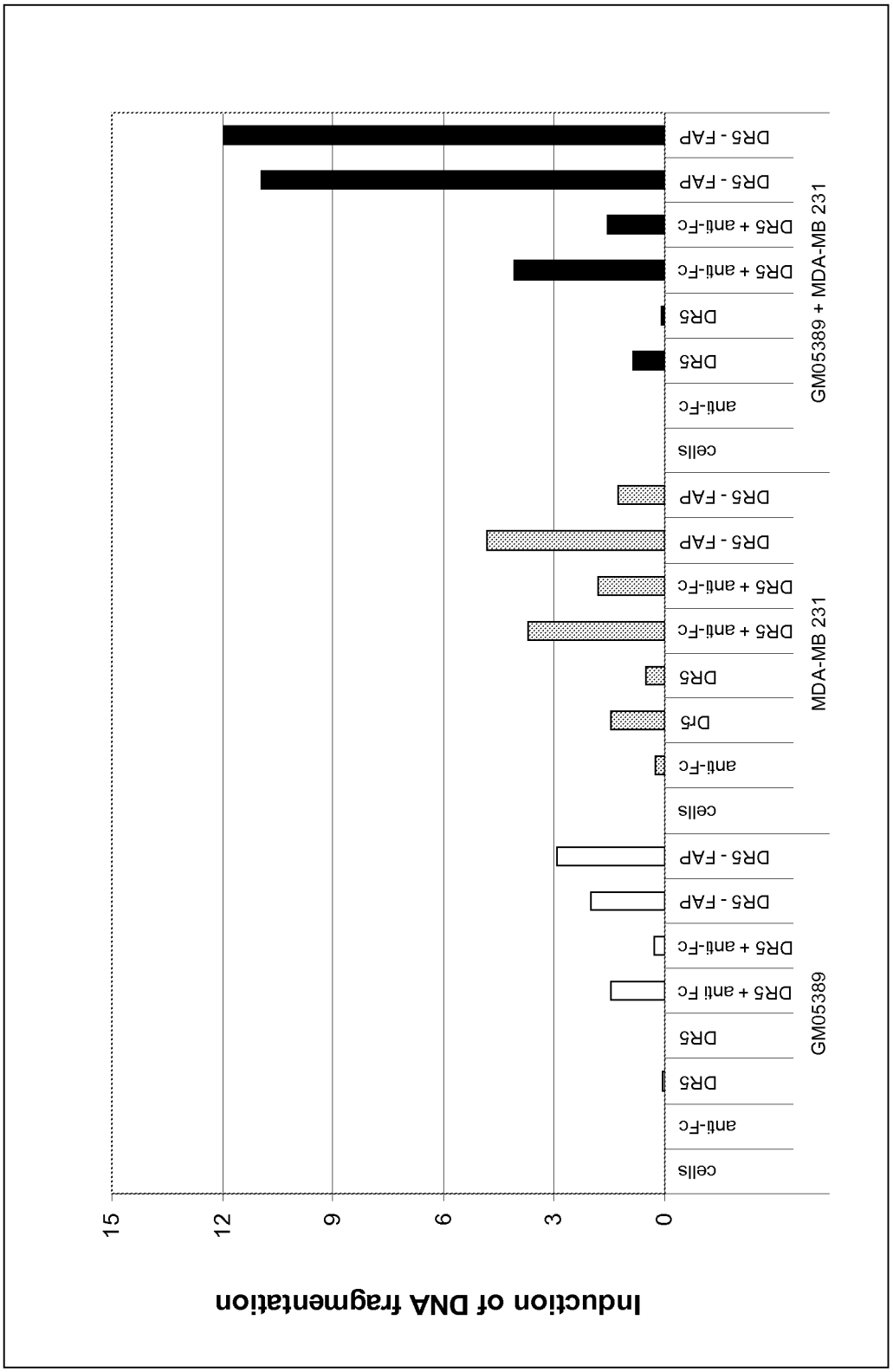


Fig. 16


Induction of DNA fragmentation
0
3
6
9
12
15
cells
anti-Fc
DR5
DR5
DR5 + anti Fc
DR5 + anti-Fc
DR5 - FAP
DR5 - FAP
GM05389
cells
anti-Fc
Dr5
DR5
DR5 + anti-Fc
DR5 + anti-Fc
DR5 + anti-Fc
DR5 - FAP
DR5 - FAP
MDA-MB 231
cells
anti-Fc
DR5
DR5
DR5 + anti-Fc
DR5 + anti-Fc
DR5 - FAP
DR5 - FAP
GM05389 + MDA-MB 231

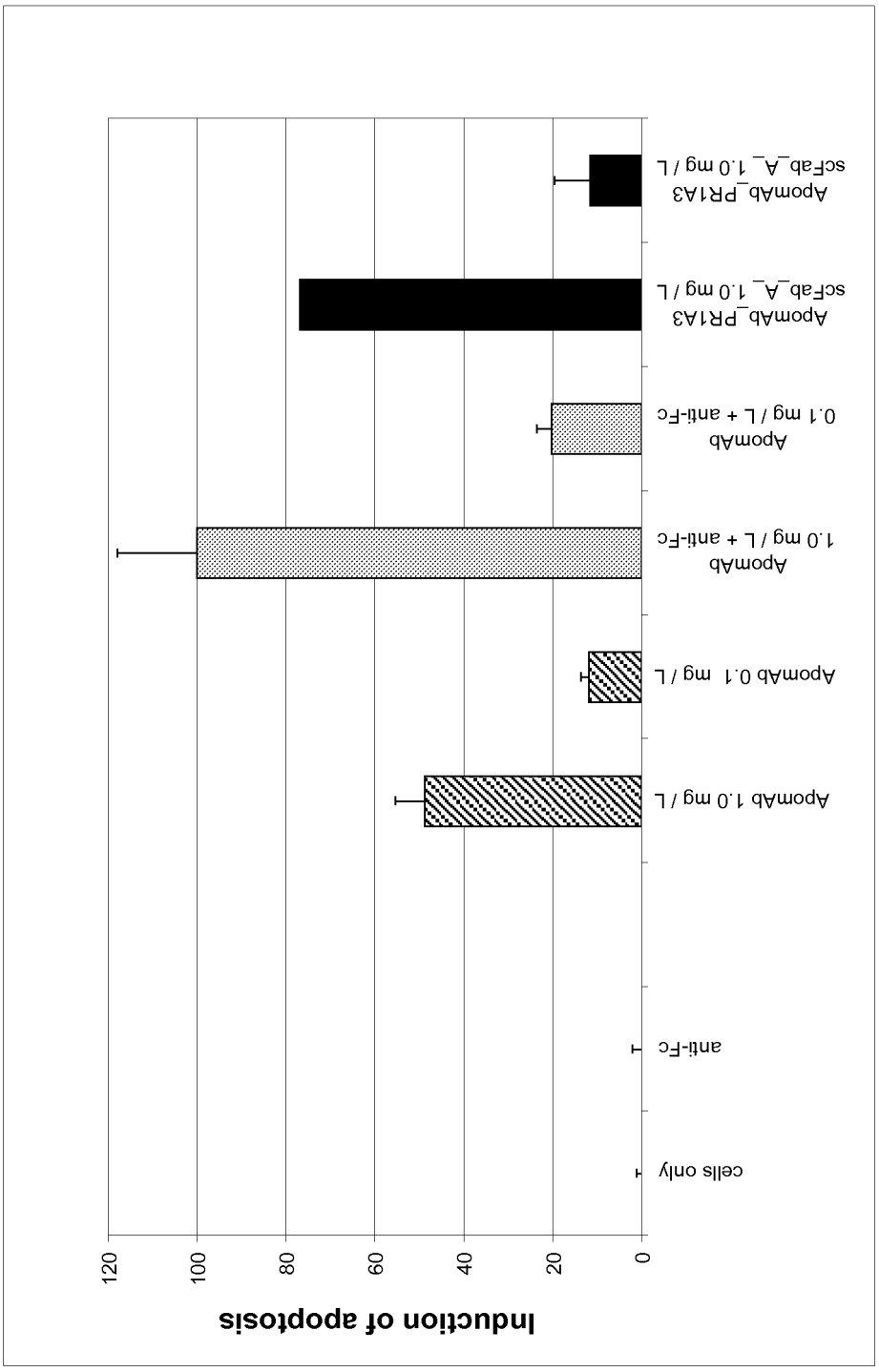

Induction of apoptosis
0
20
40
60
80
100
120
cells only
anti-Fc
ApomAb 1.0 mg / L
ApomAb 0.1 mg / L
ApomAb
1.0 mg / L + anti-Fc
ApomAb
0.1 mg / L + anti-Fc
ApomAb_PR1A3
scFab_A_ 1.0 mg / L
ApomAb_PR1A3
scFab_A_ 1.0 mg / L

Fig. 17

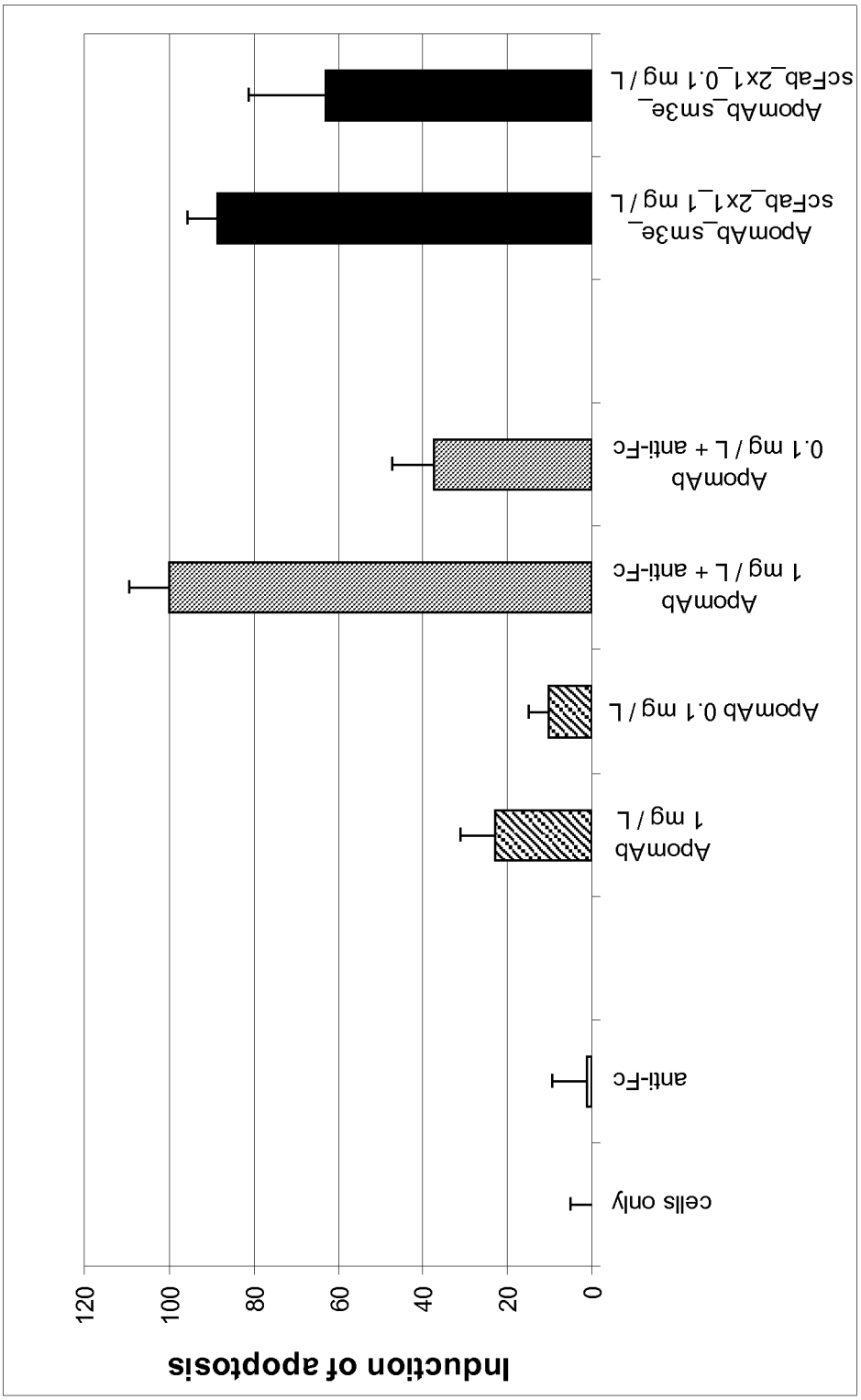

Induction of apoptosis
0
20
40
60
80
100
120
cells only
anti-Fc
ApomAb 1 mg / L
ApomAb 0.1 mg / L
ApomAb 1 mg / L + anti-Fc
ApomAb 0.1 mg / L + anti-Fc
ApomAb_sm3e_ scFab_2x1_1 mg / L
ApomAb_sm3e_ scFab_2x1_0.1 mg / L

Fig. 18

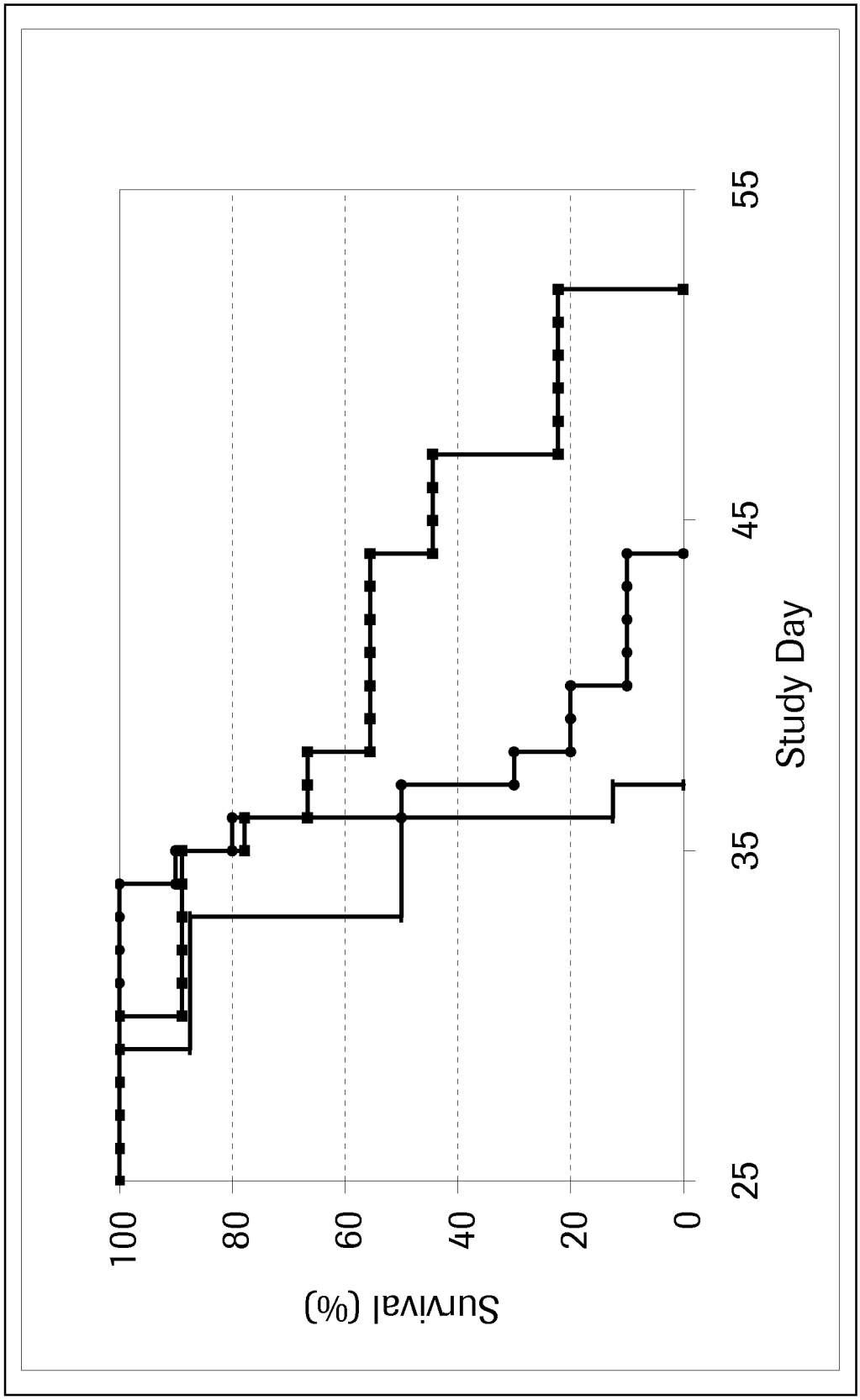


Fig. 19