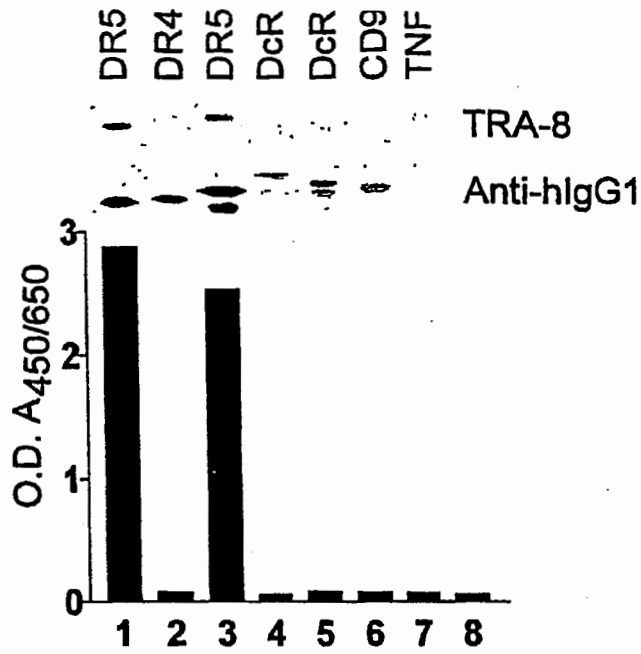


FIG.1A



FIG.1D

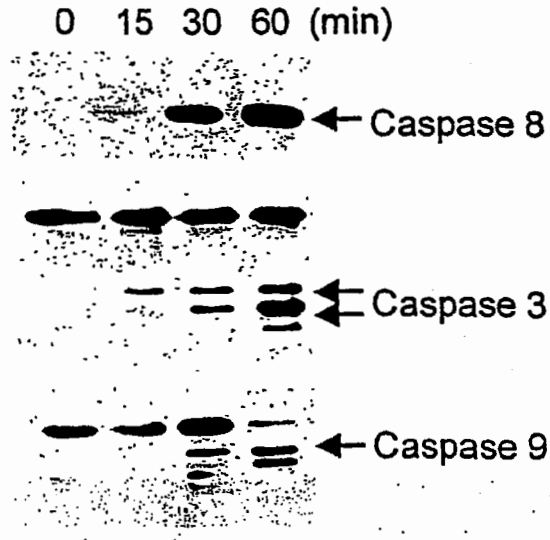


FIG.1F

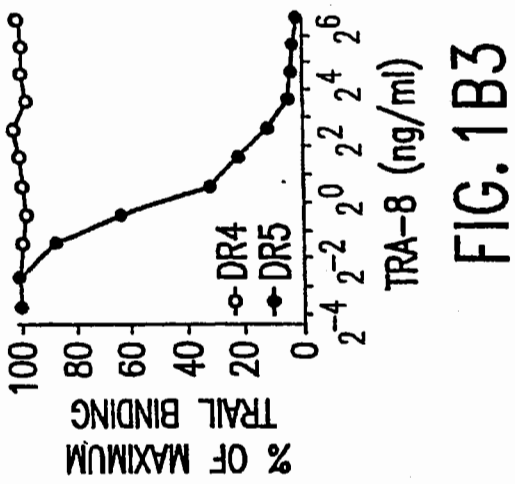


FIG. 1B3

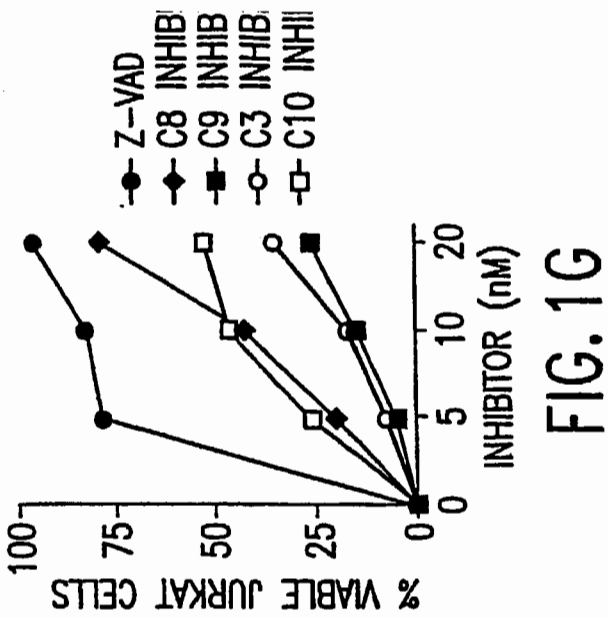


FIG. 1G

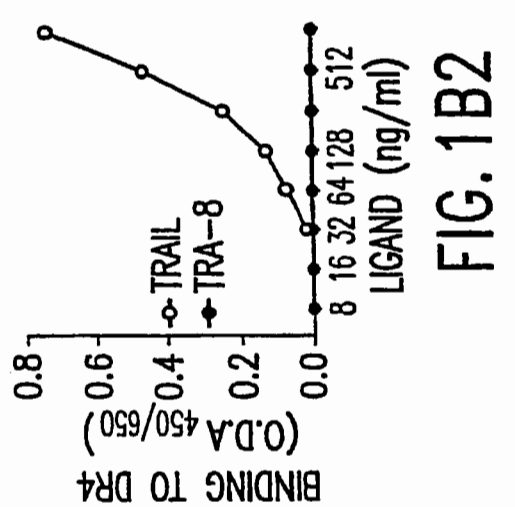


FIG. 1B2

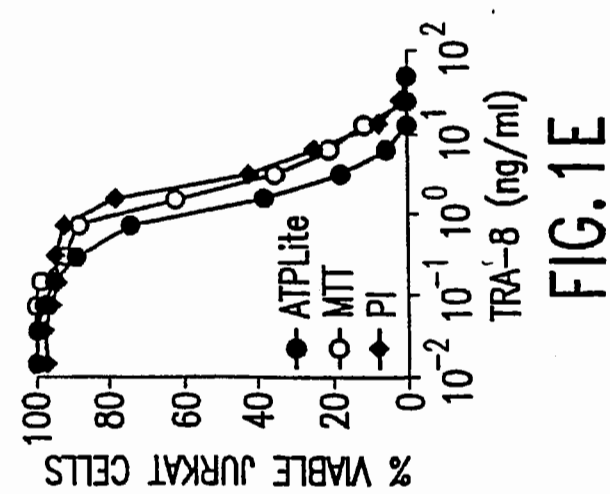


FIG. 1E

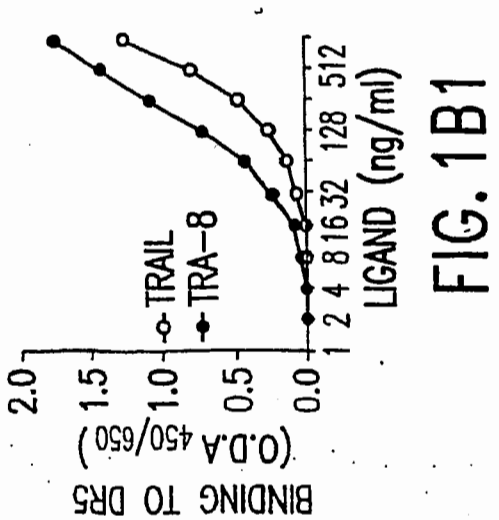


FIG. 1B1

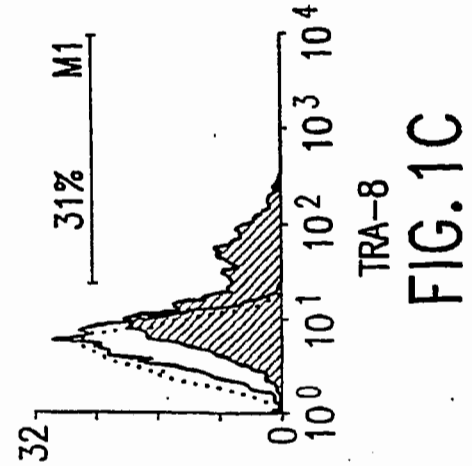


FIG. 1C

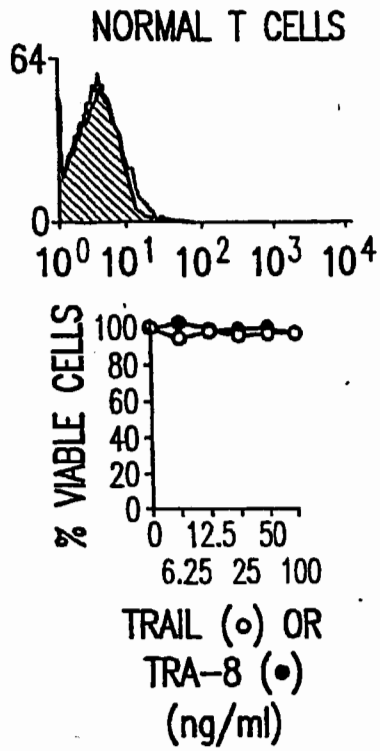


FIG. 2A1

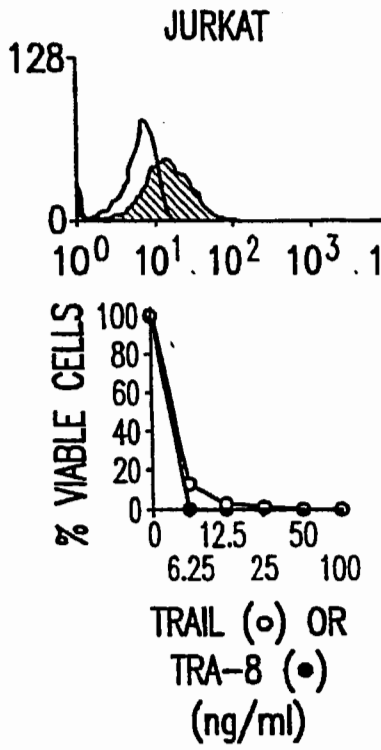


FIG. 2A2

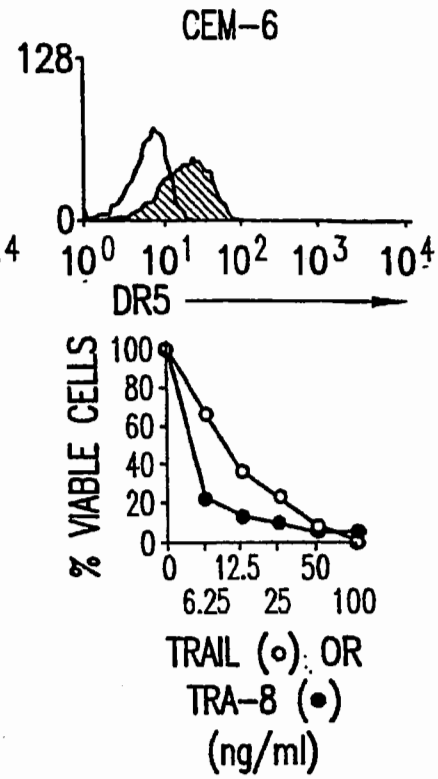


FIG. 2A3

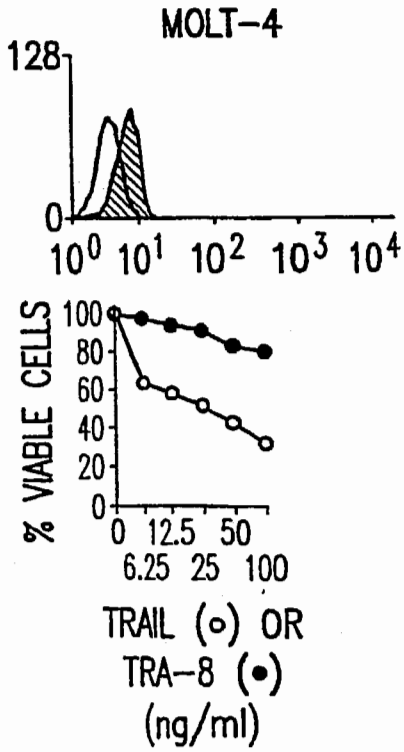


FIG. 2A4

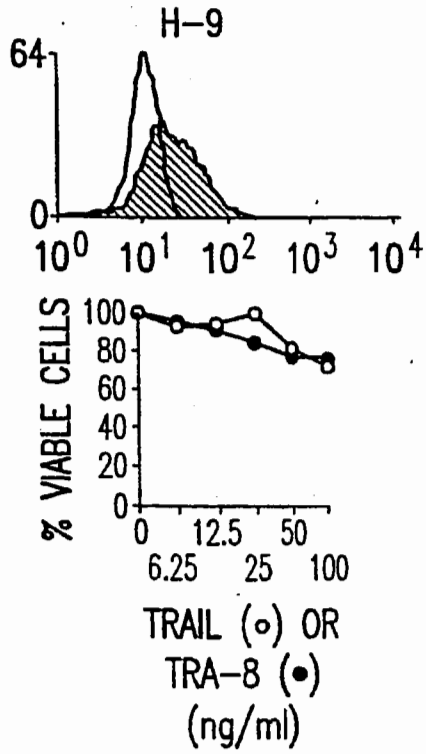


FIG. 2A5

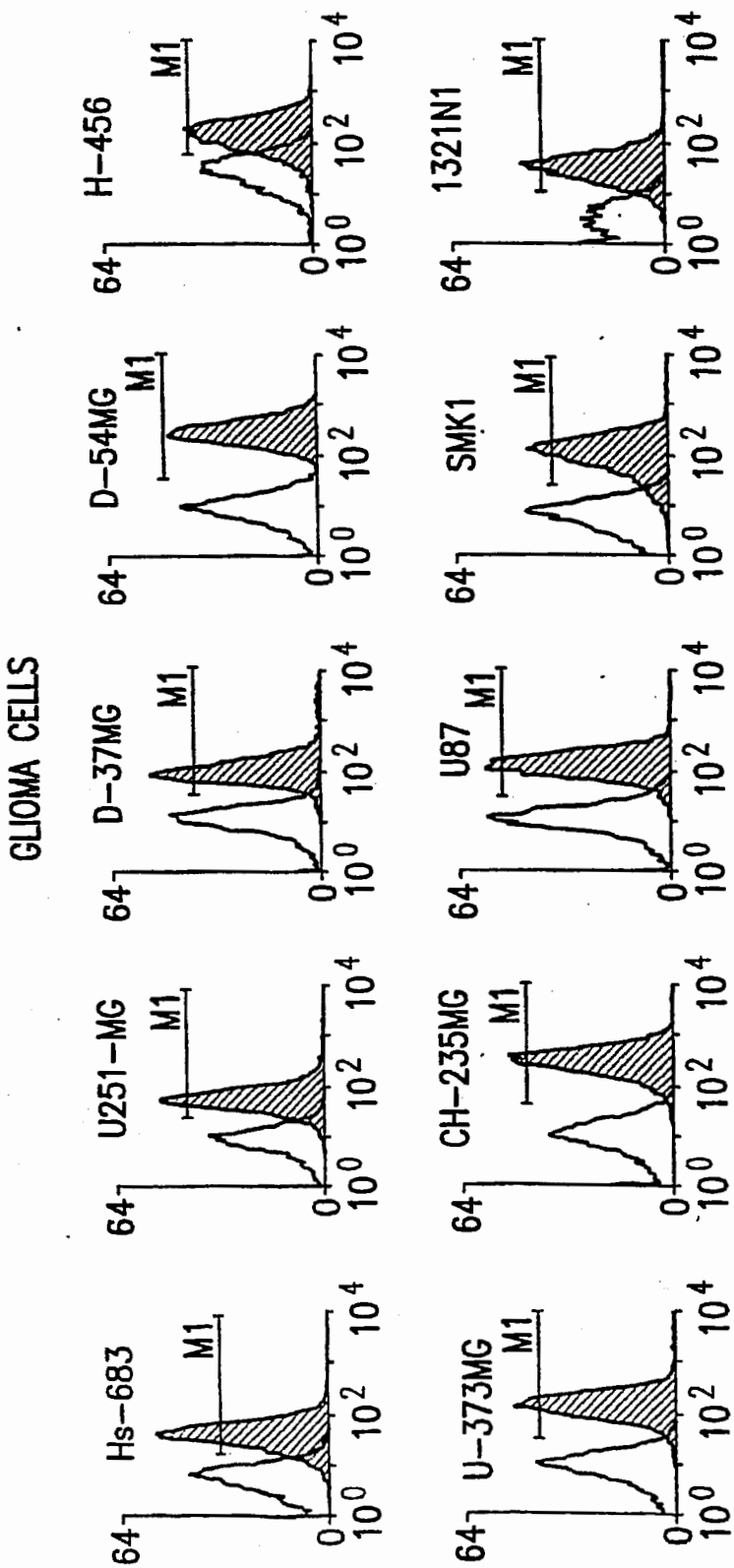

GLIOMA CELLS
H-456
D-54MG
1321N1
D-37MG
SMK1
U251-MG
U87
CH-235MG
Hs-683
U-373MG
M1
64
0
10^0
10^2
10^4

FIG. 2B

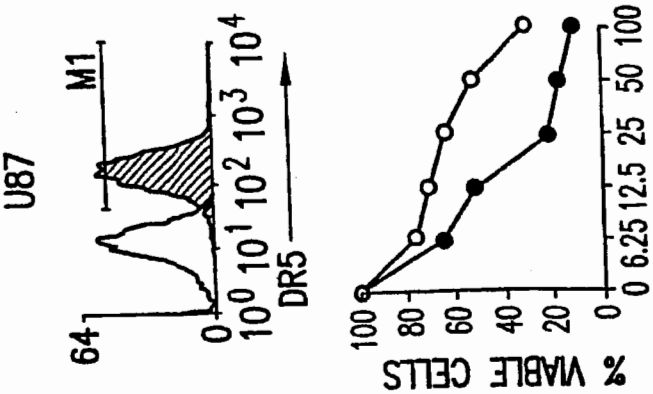


FIG. 2B 3

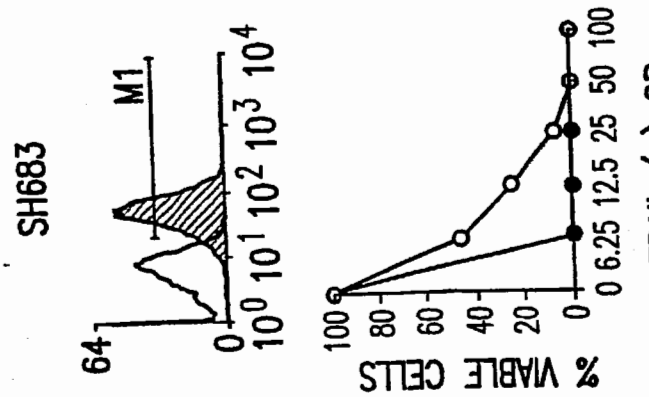


FIG. 2B 2

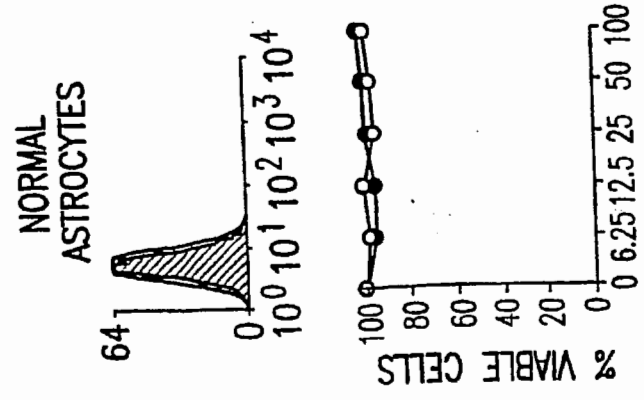


FIG. 2B 1

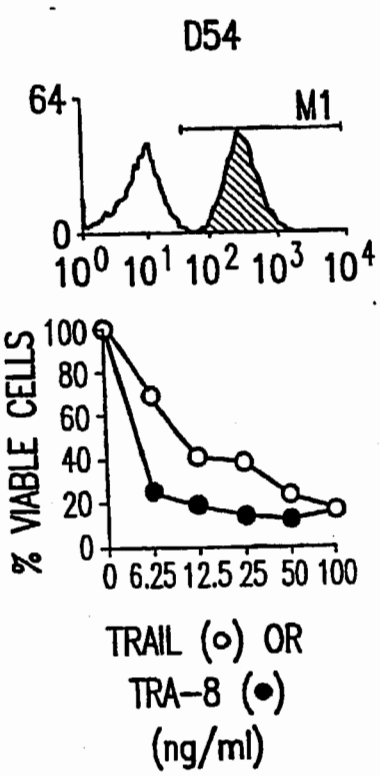


FIG. 2B'4

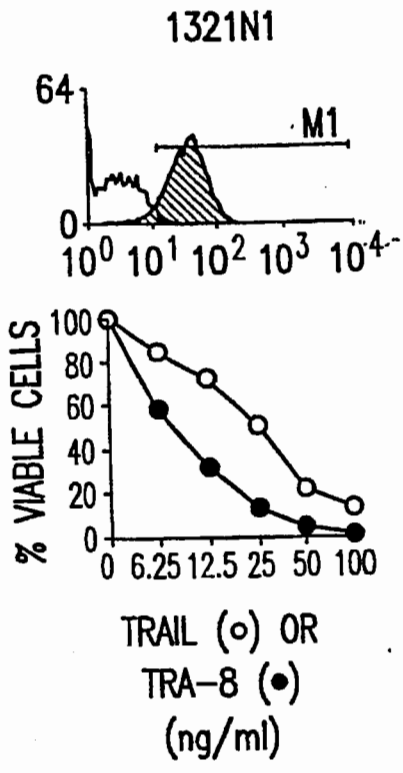


FIG. 2B'5

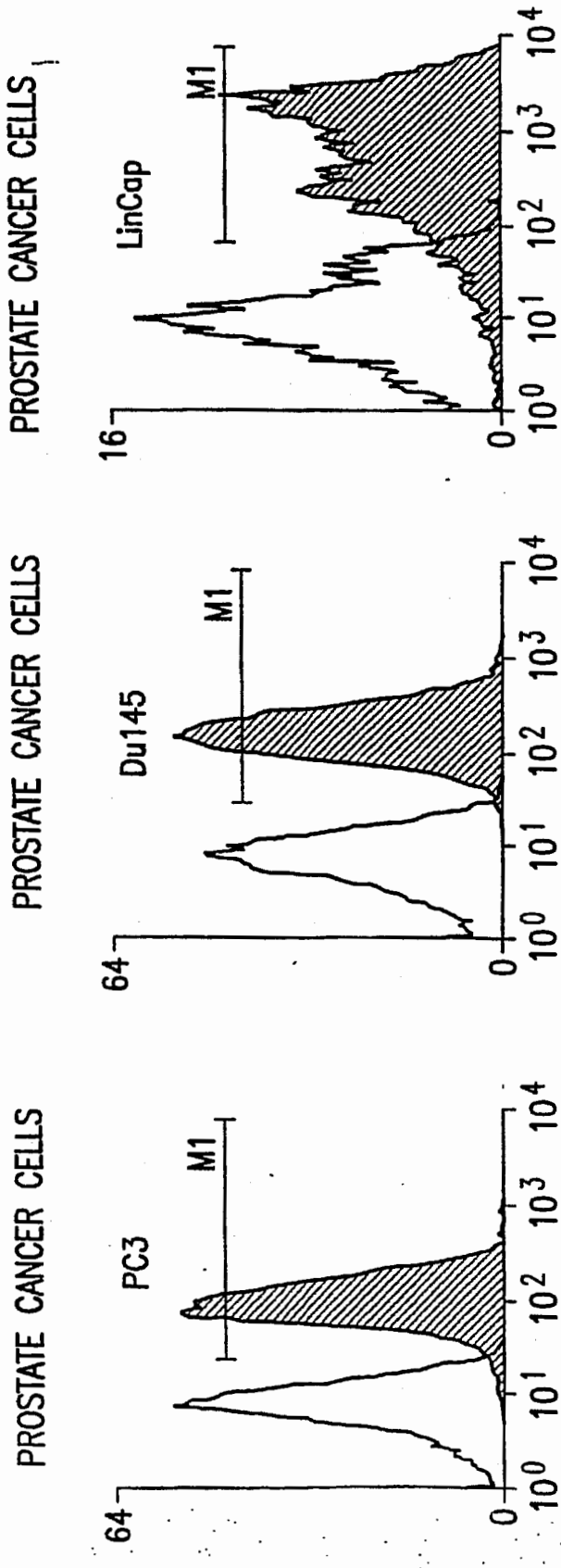
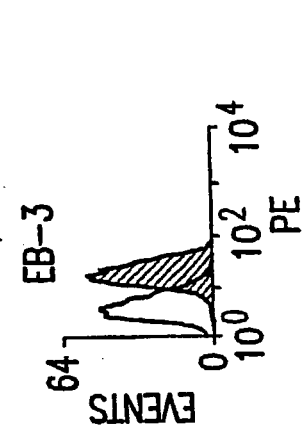


FIG. 2C1

FIG. 2C2

FIG. 2C3



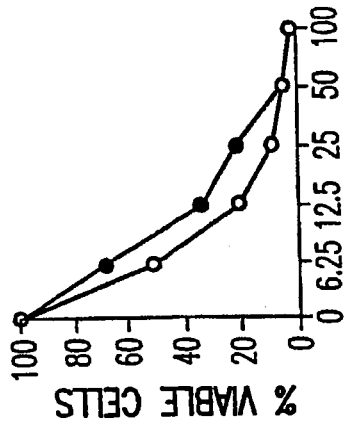


FIG. 2D3



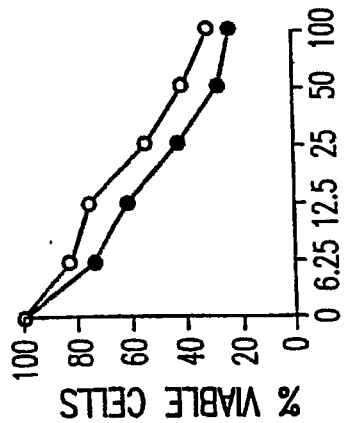
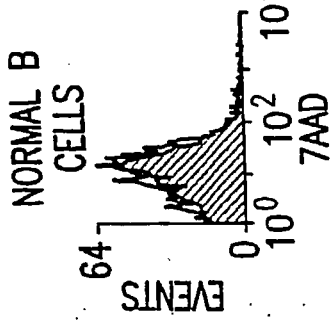


FIG. 2D2



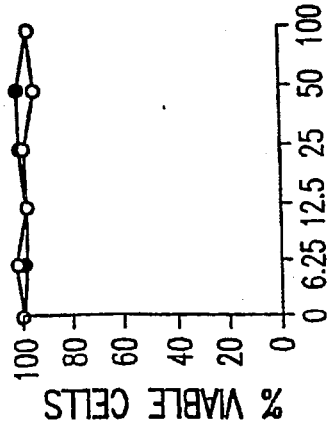
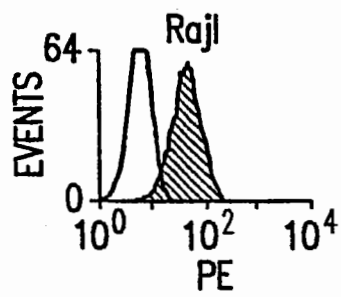


FIG. 2D1



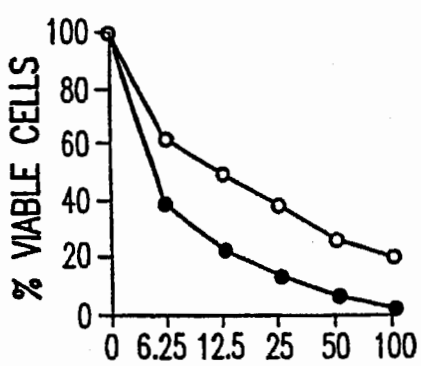
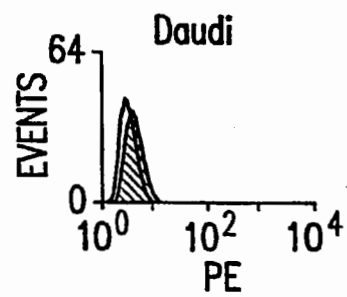


FIG. 2D4



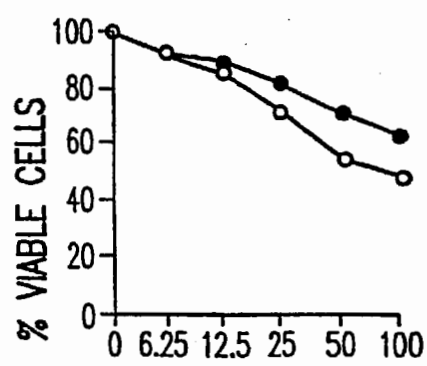


FIG. 2D5

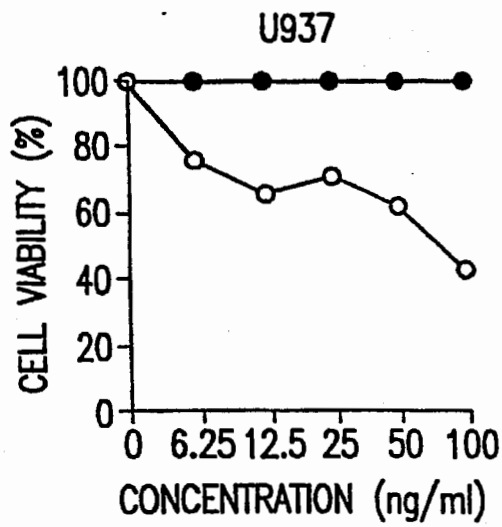

U937
100
80
60
40
20
0
CELL VIABILITY (%)
0 6.25 12.5 25 50 100
CONCENTRATION (ng/ml)

FIG. 3A

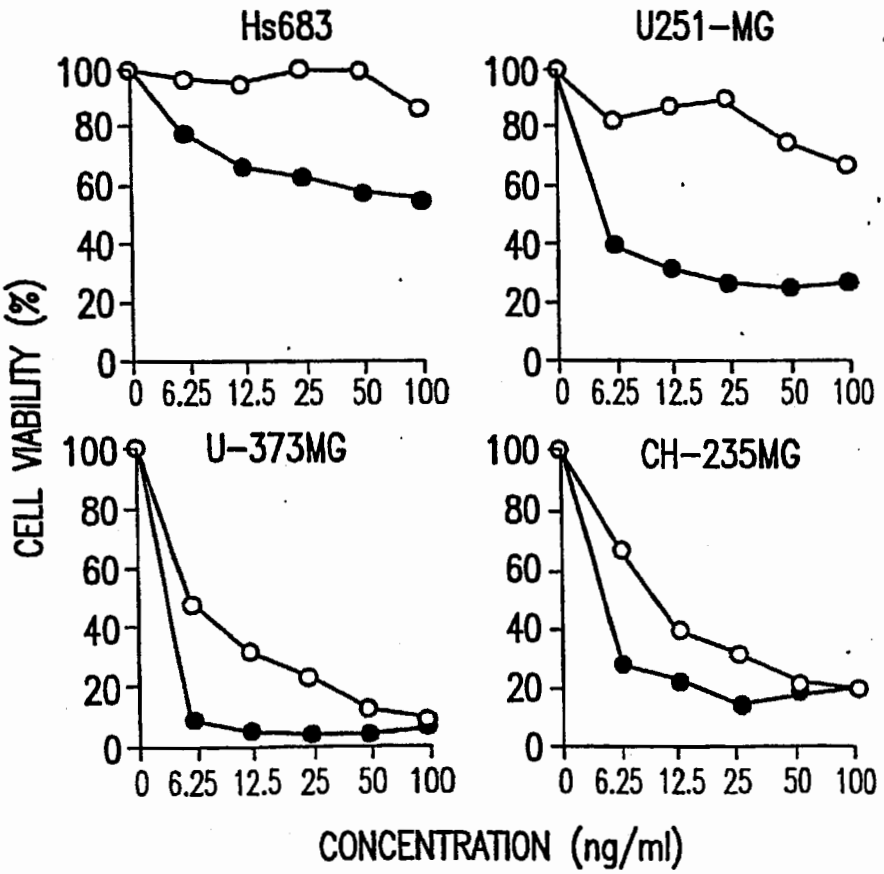

Hs683
U251-MG
U-373MG
CH-235MG
CELL VIABILITY (%)
100
80
60
40
20
0
0 6.25 12.5 25 50 100
CONCENTRATION (ng/ml)

FIG. 3B1

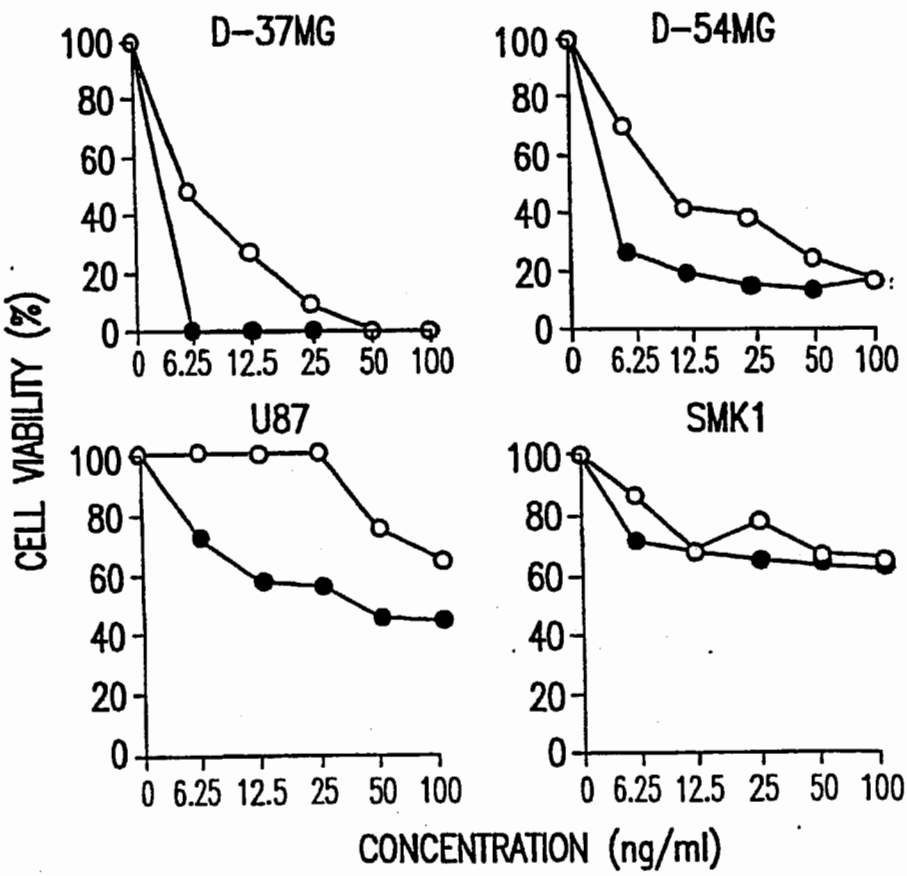

D-37MG
D-54MG
U87
SMK1
CELL VIABILITY (%)
100
80
60
40
20
0
0 6.25 12.5 25 50 100
CONCENTRATION (ng/ml)

FIG. 3B2

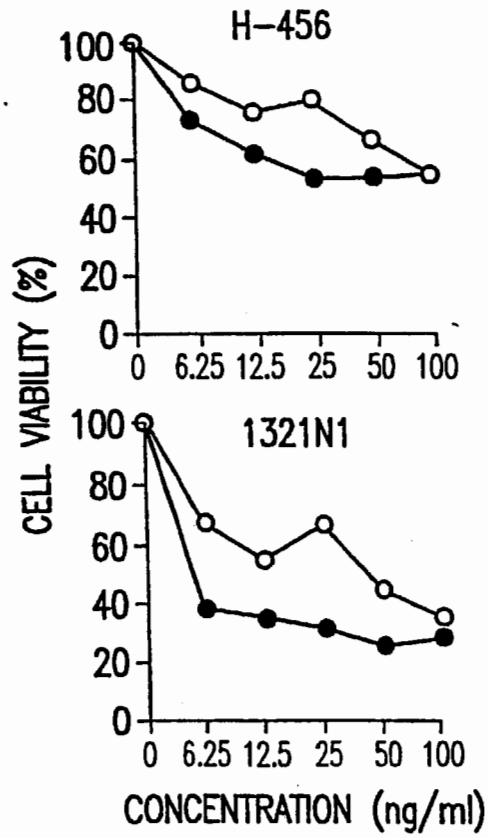

H-456
100
80
60
40
20
0
0 6.25 12.5 25 50 100
1321N1
100
80
60
40
20
0
0 6.25 12.5 25 50 100
CELL VIABILITY (%)
CONCENTRATION (ng/ml)

FIG. 3B3

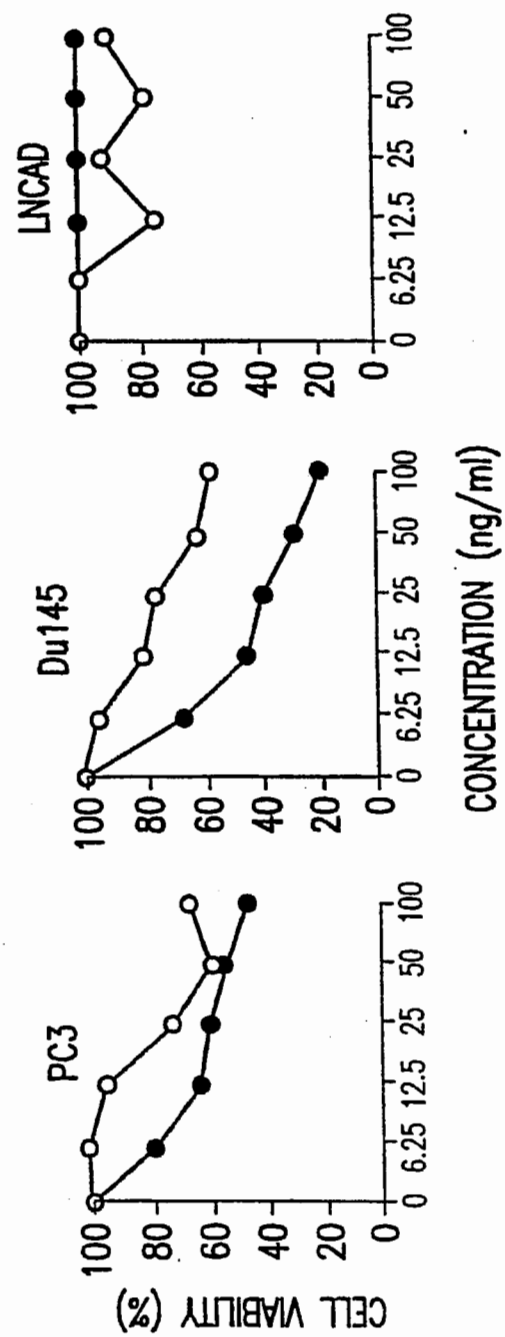

LNCAD
Du145
PC3
100
80
60
40
20
0
0
6.25
12.5
25
50
100
CELL VIABILITY (%)
CONCENTRATION (ng/ml)

FIG. 3C

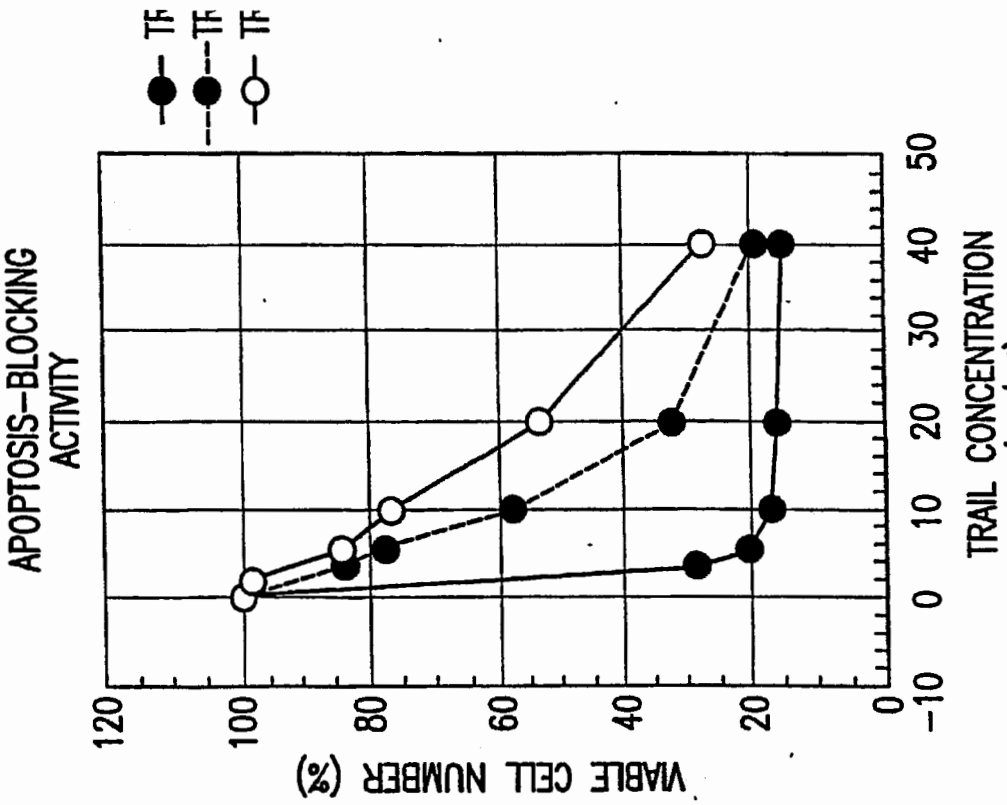

TF
TF
TF
APOPTOSIS-BLOCKING ACTIVITY
VIABLE CELL NUMBER (%)
120
100
80
60
40
20
0
-10
0
10
20
30
40
50
TRAIL CONCENTRATION (ng/ml)

FIG. 4B

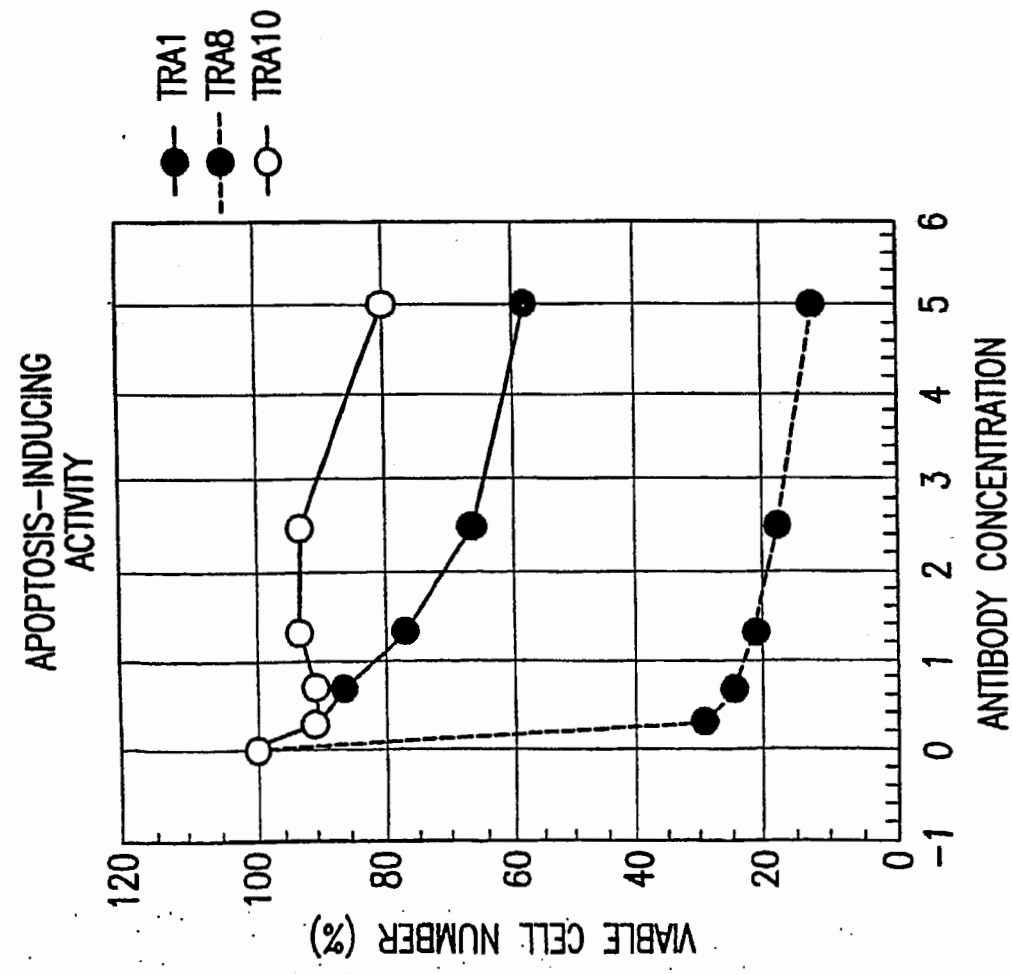

TRA1
TRA8
TRA10
APOPTOSIS-INDUCING ACTIVITY
VIABLE CELL NUMBER (%)
120
100
80
60
40
20
0
-1
0
1
2
3
4
5
6
ANTIBODY CONCENTRATION (μg/ml)

FIG. 4A

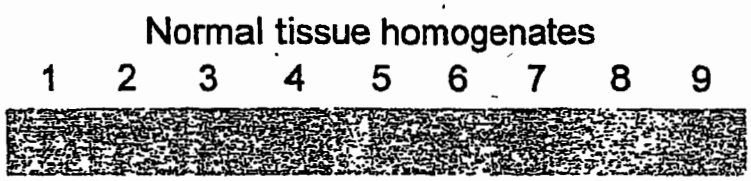


FIG.5A

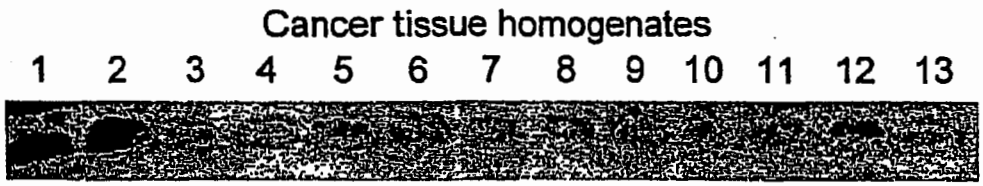


FIG.5B

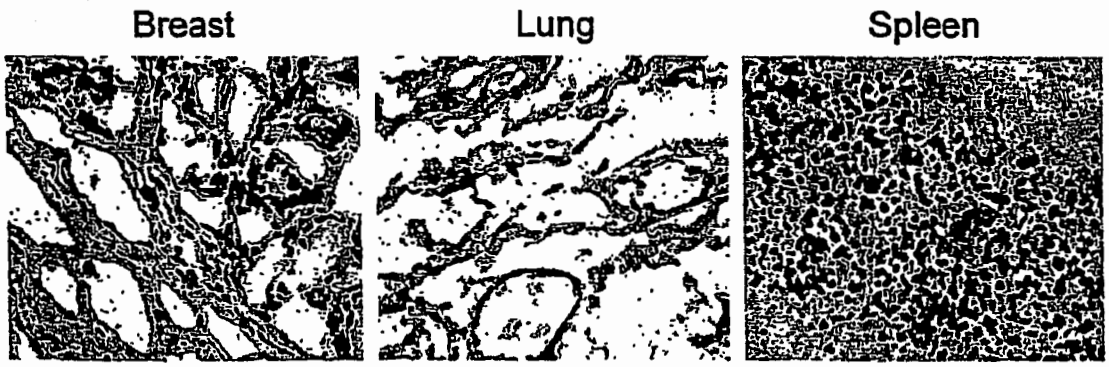


FIG.5C

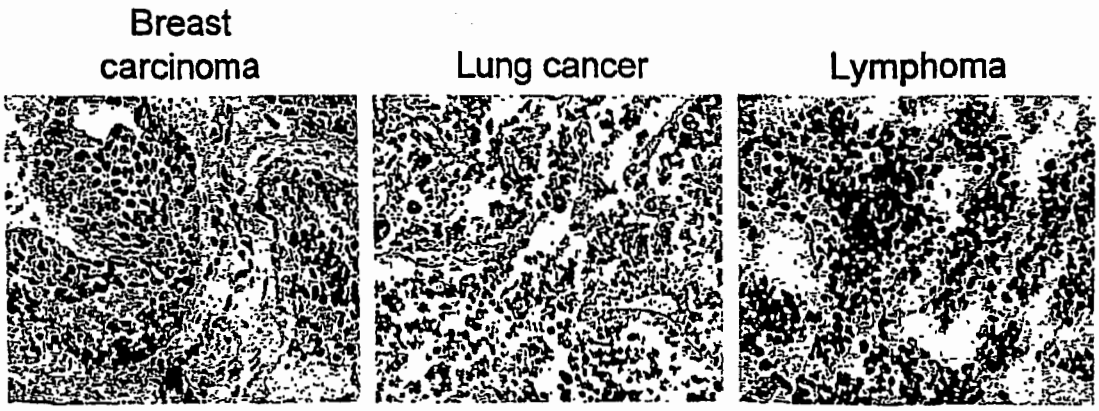


FIG.5D

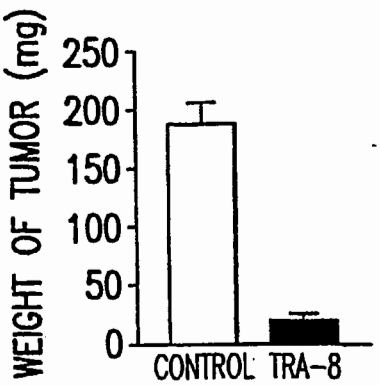


FIG. 6A

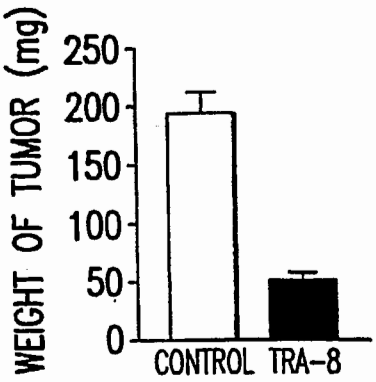


FIG. 6B

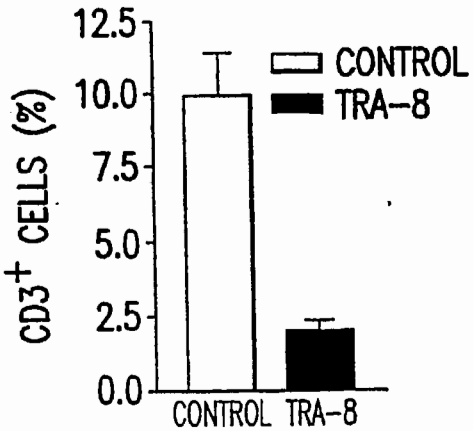


FIG. 6D

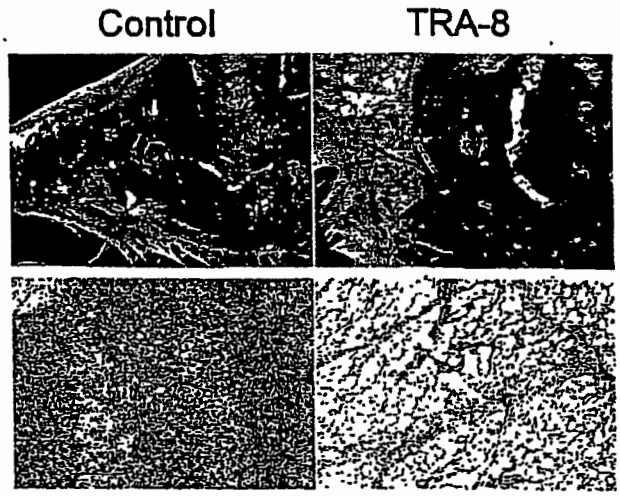


FIG.6C

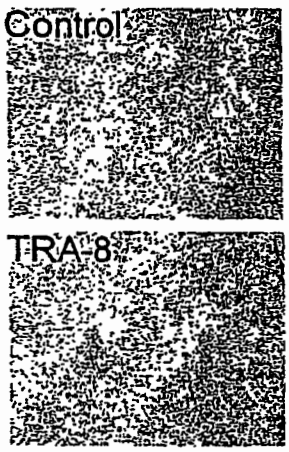


FIG.6E

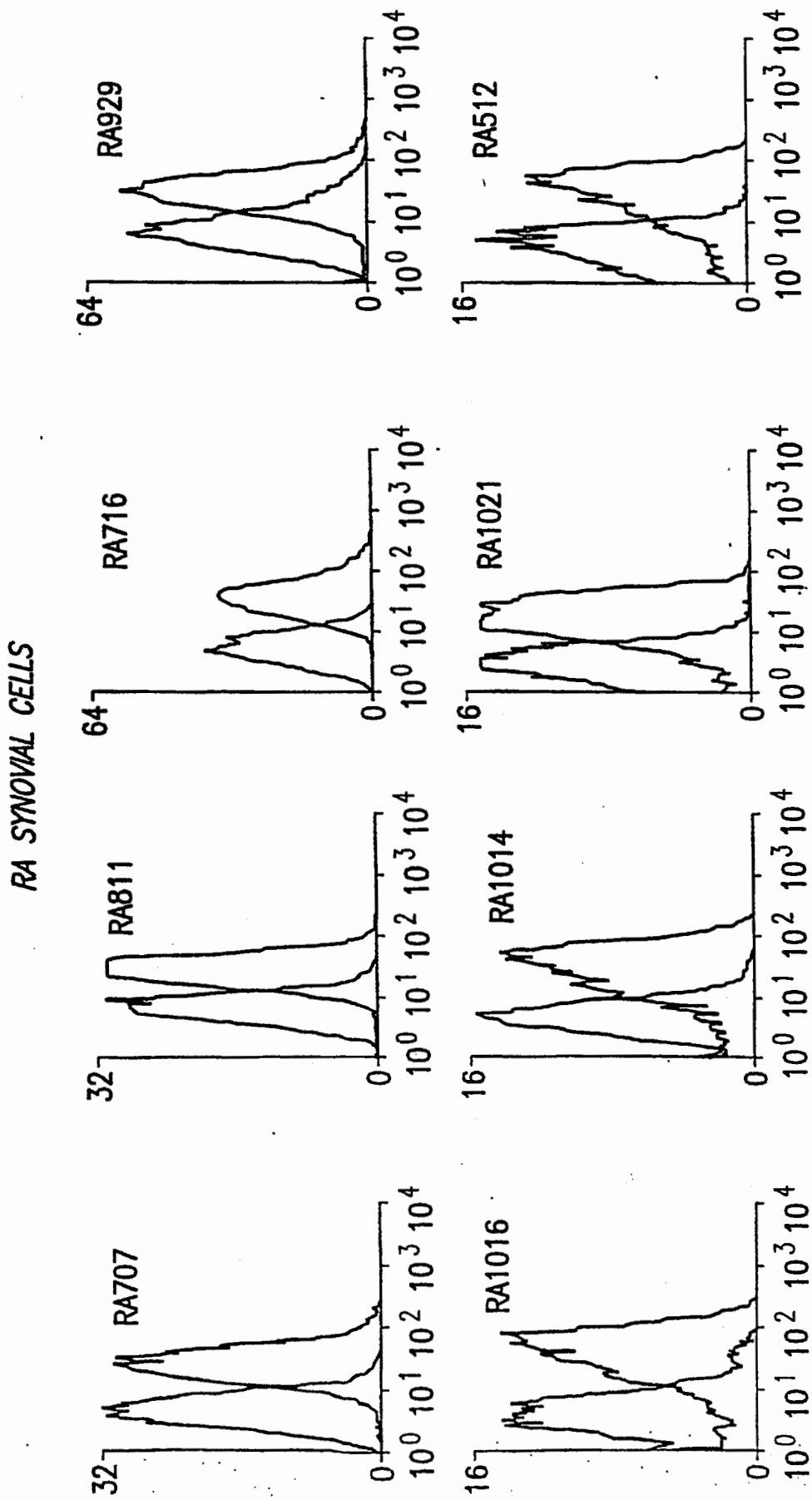

RA SYNOVIAL CELLS
RA707
RA811
RA716
RA929
RA1016
RA1014
RA1021
RA512
32
64
16
0
10^0 10^1 10^2 10^3 10^4
DR5

FIG. 7A

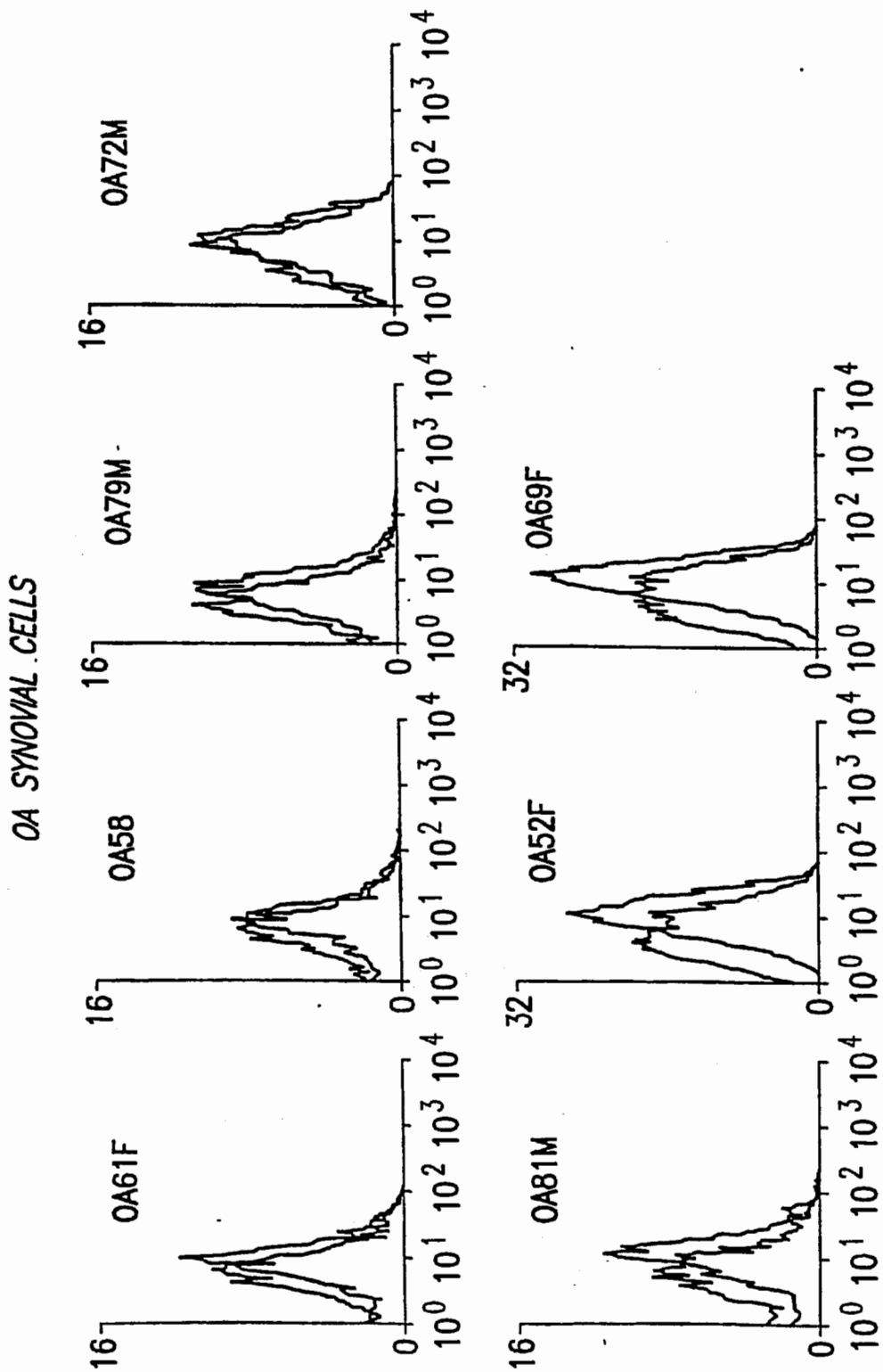

OA SYNOVIAL CELLS
OA61F
OA58
OA79M
OA72M
OA81M
OA52F
OA69F
16
32
0
10^0 10^1 10^2 10^3 10^4
DR5

FIG. 7B

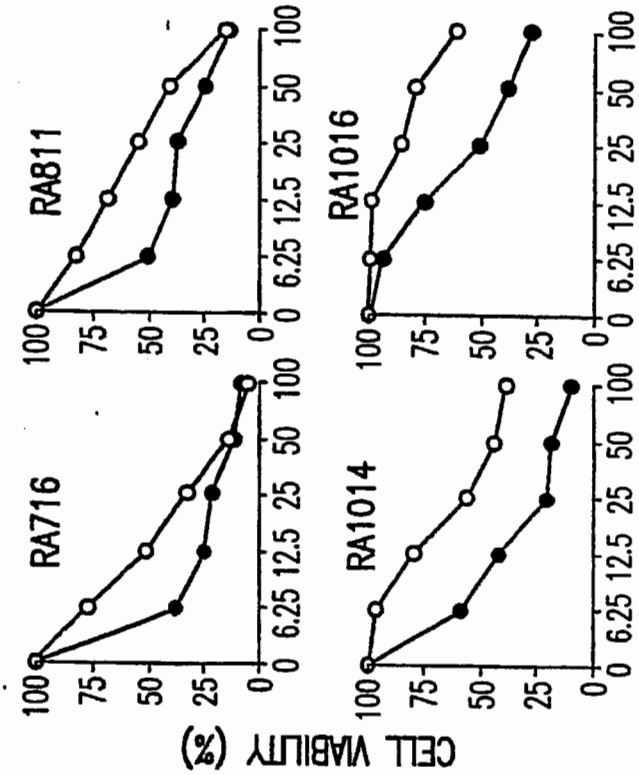


FIG. 8A2

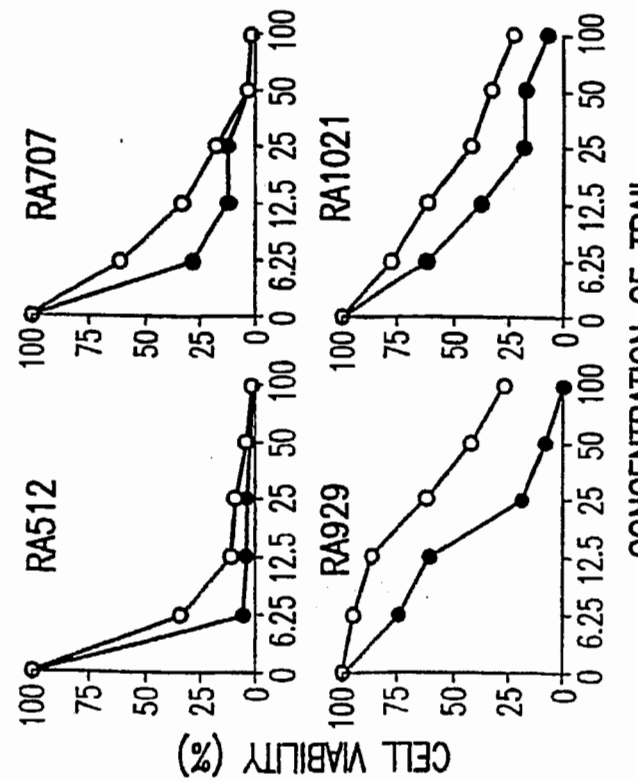


FIG. 8A1

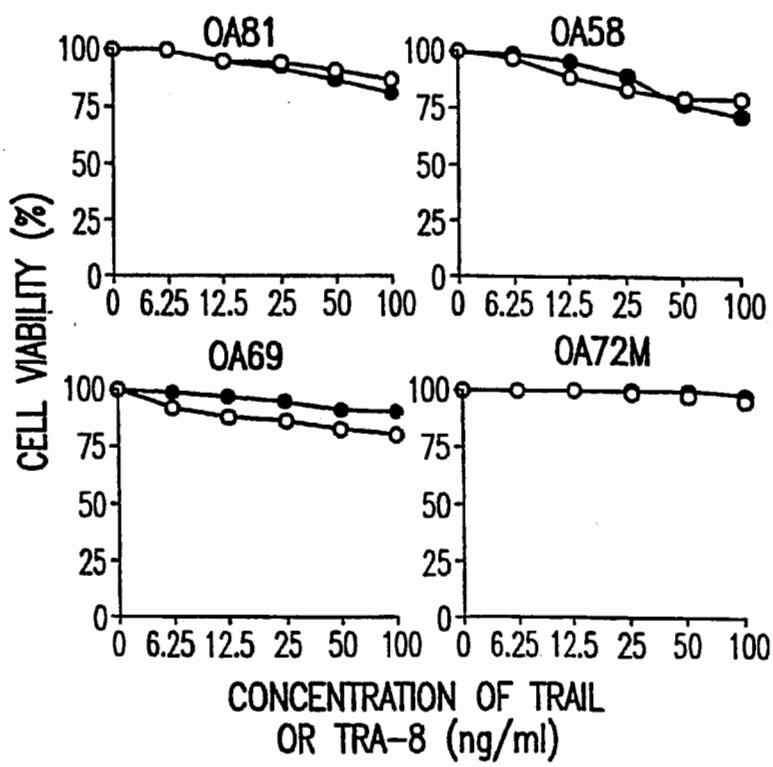

OA81
OA58
OA69
OA72M
CELL VIABILITY (%)
100
75
50
25
0
0 6.25 12.5 25 50 100
CONCENTRATION OF TRAIL
OR TRA-8 (ng/ml)

FIG. 8B

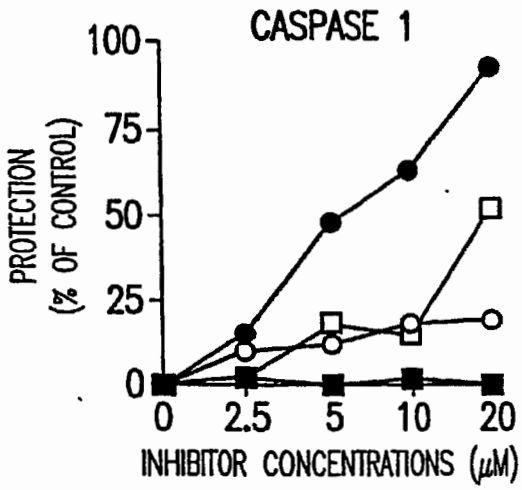


FIG. 9A

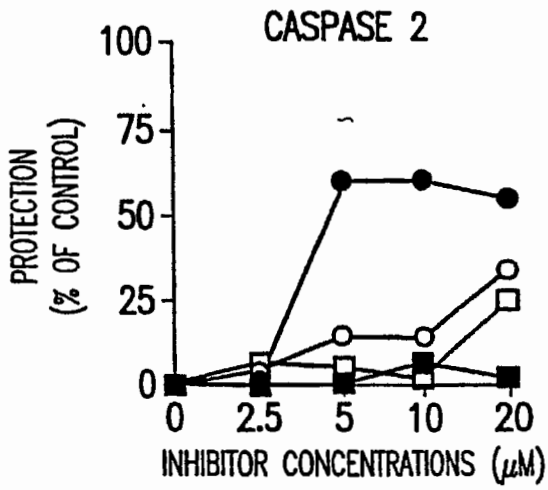


FIG. 9B

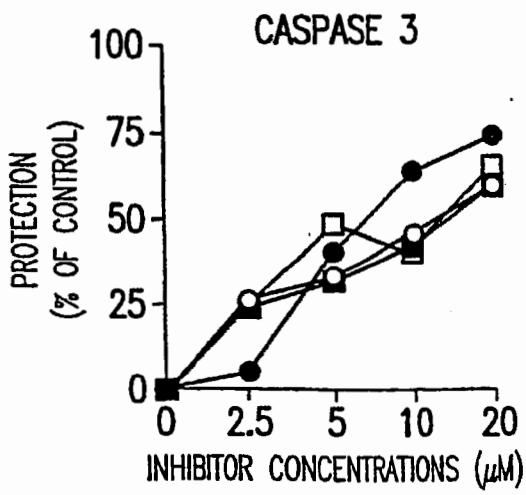


FIG. 9C

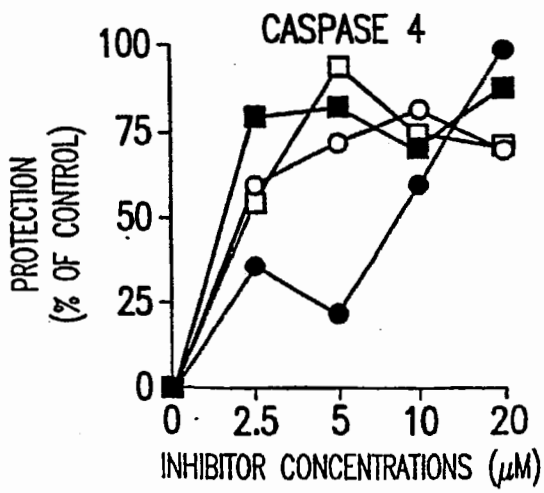


FIG. 9D

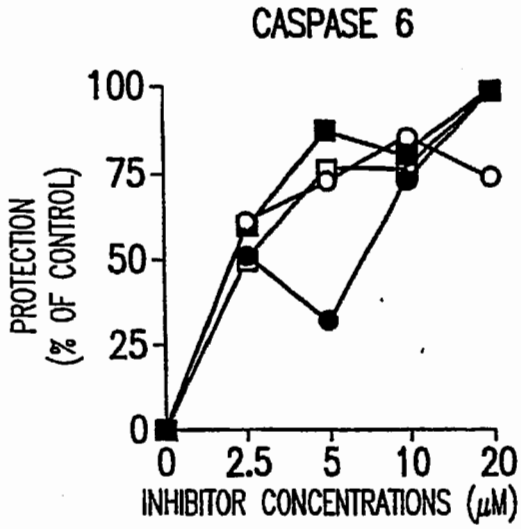


FIG. 9E

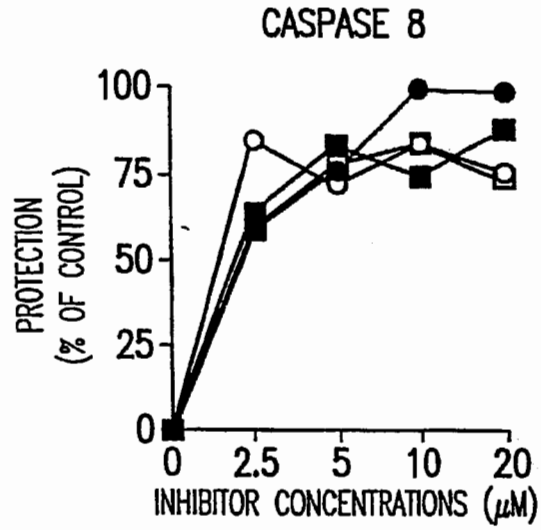


FIG. 9F

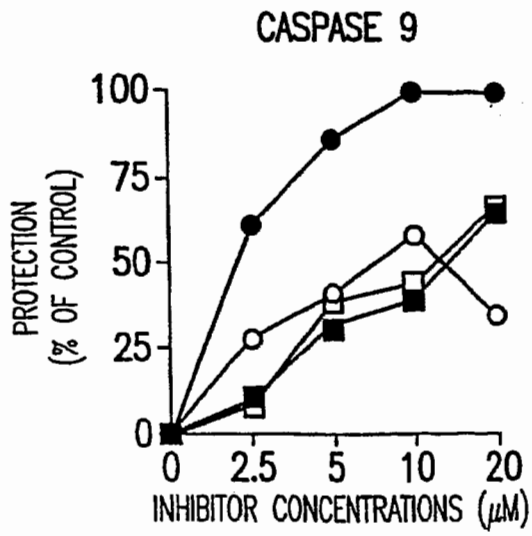


FIG. 9G

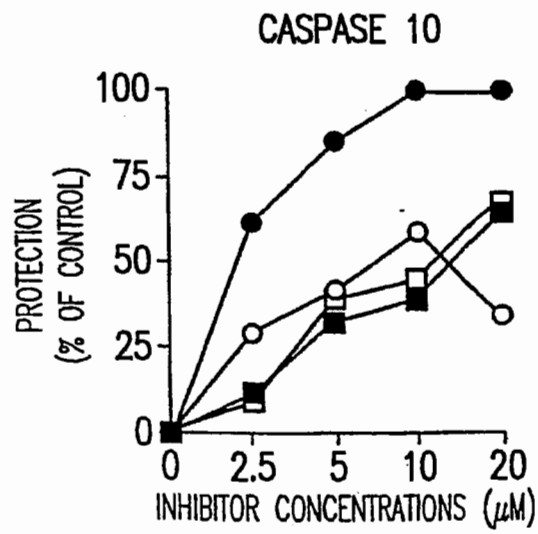


FIG. 9H

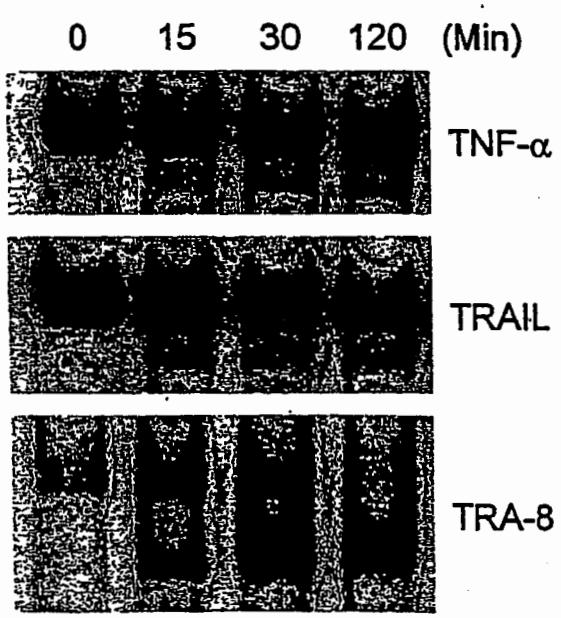


FIG.10A

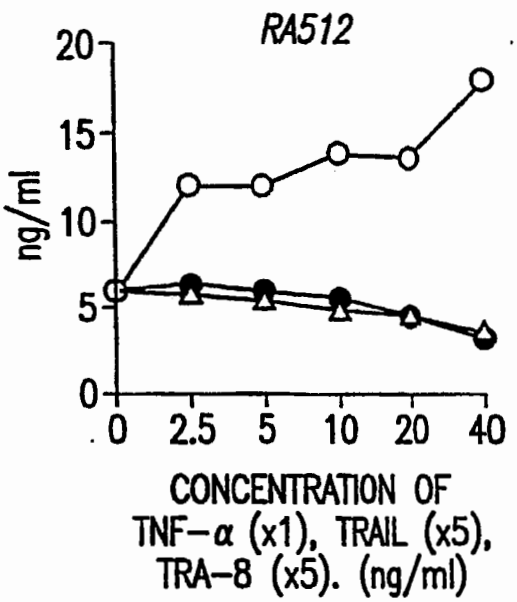


FIG. 10B1

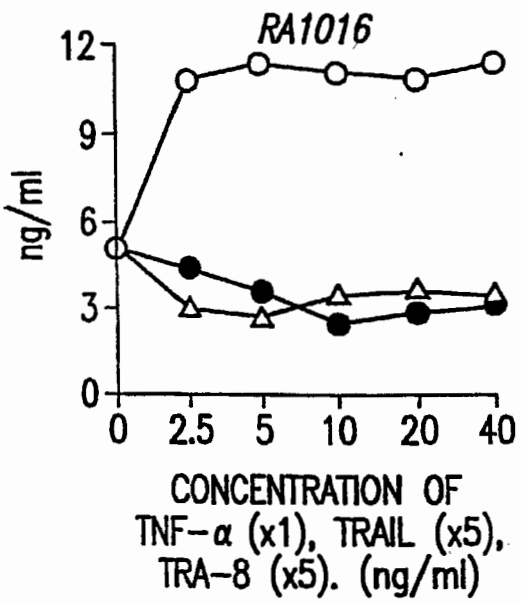


FIG. 10B2

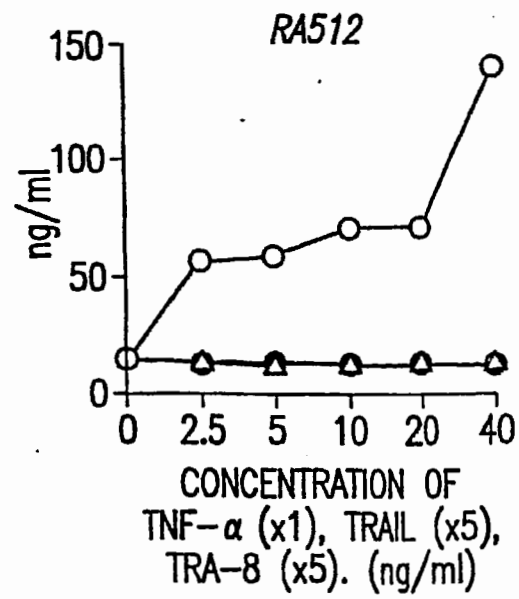


FIG. 10C1

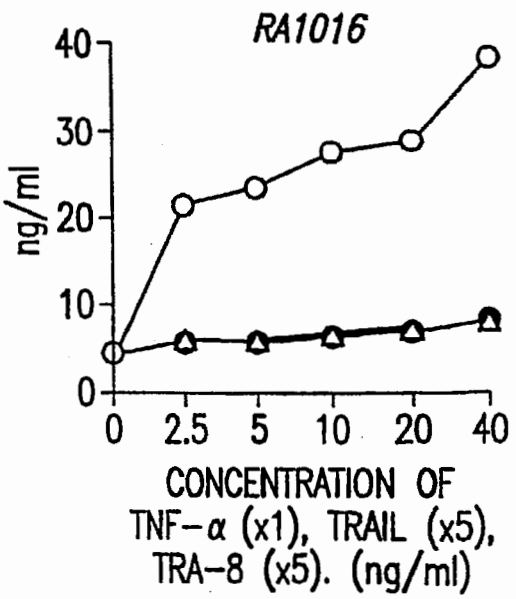


FIG. 10C2

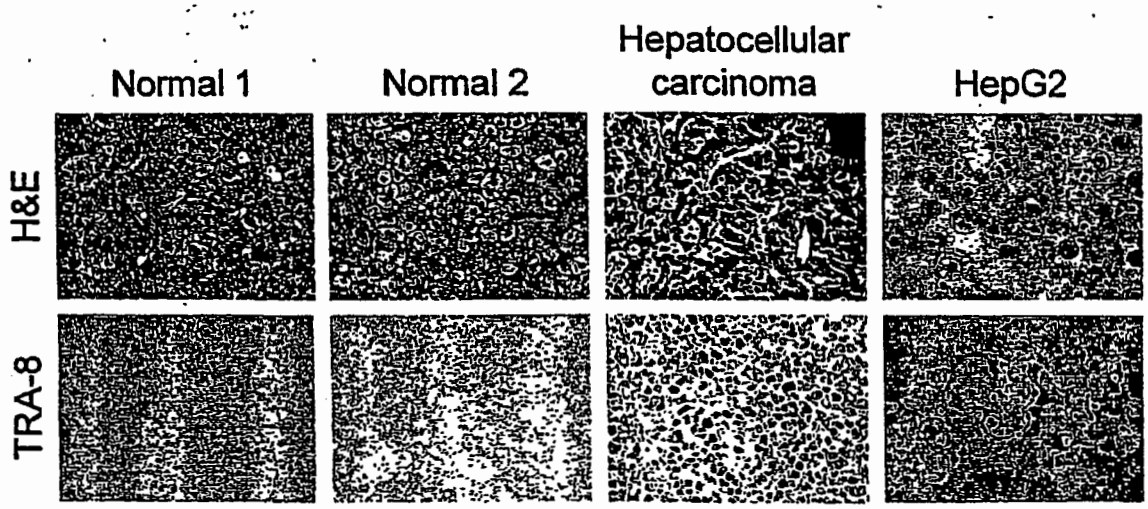


FIG.11A

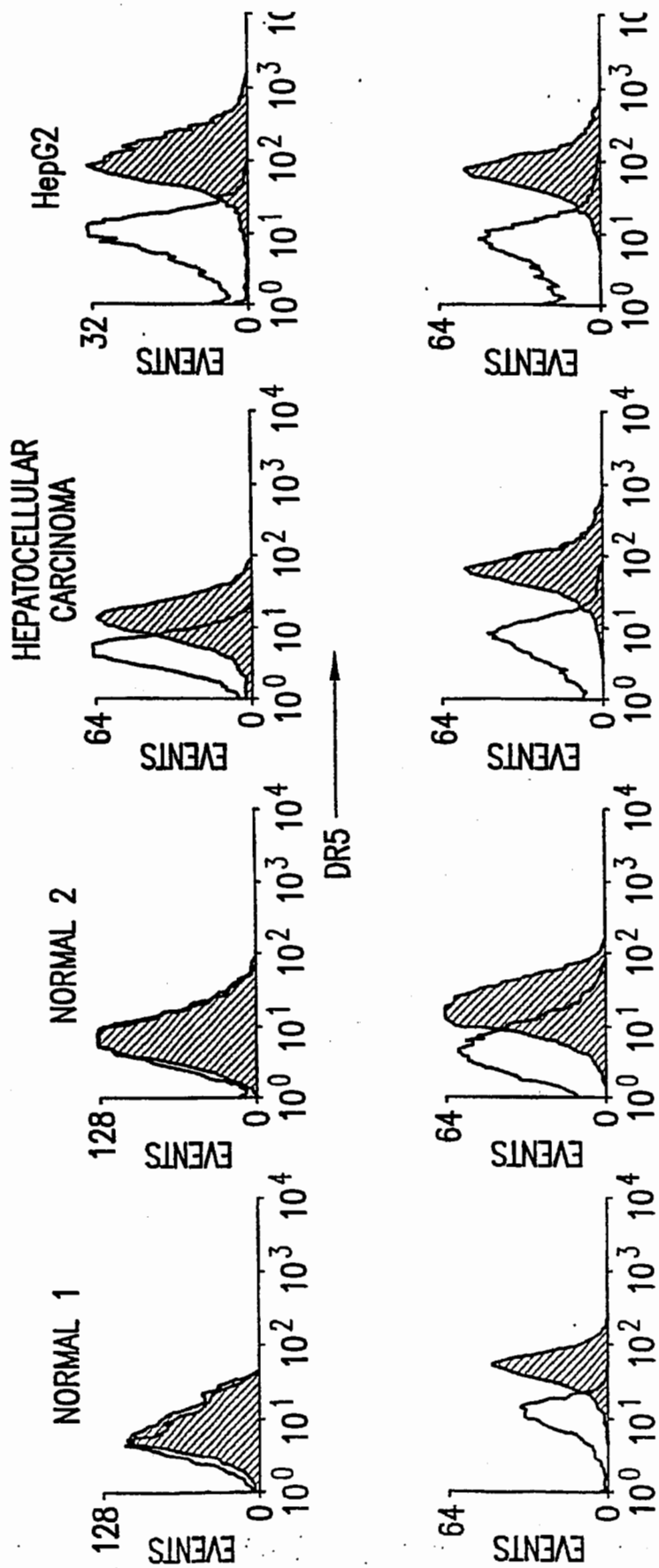

NORMAL 1
NORMAL 2
HEPATOCELLULAR CARCINOMA
HepG2
EVENTS
DR5
Fas
0
32
64
128
10^0
10^1
10^2
10^3
10^4

FIG. 11B

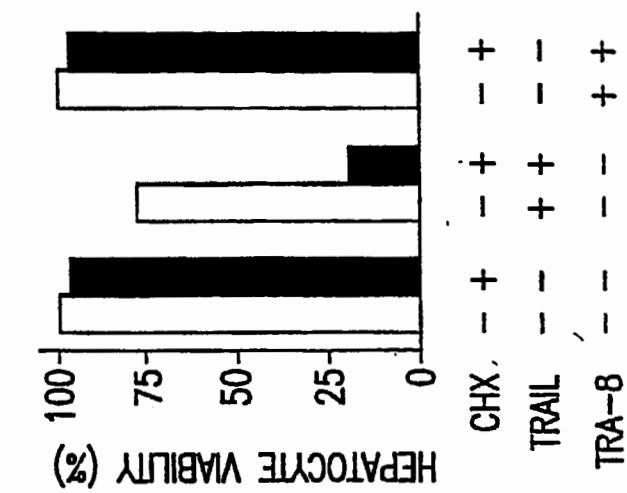


FIG. 12C

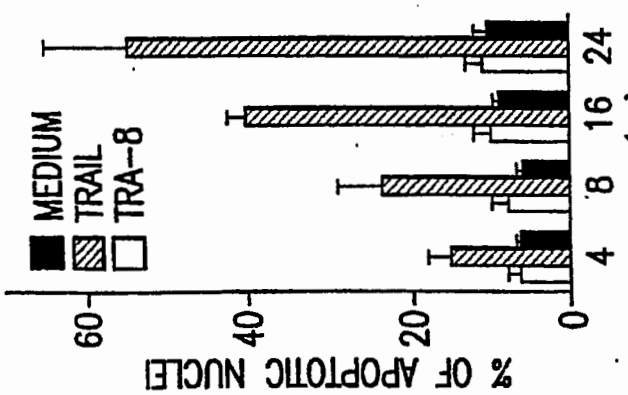


FIG. 12B



FIG. 12A

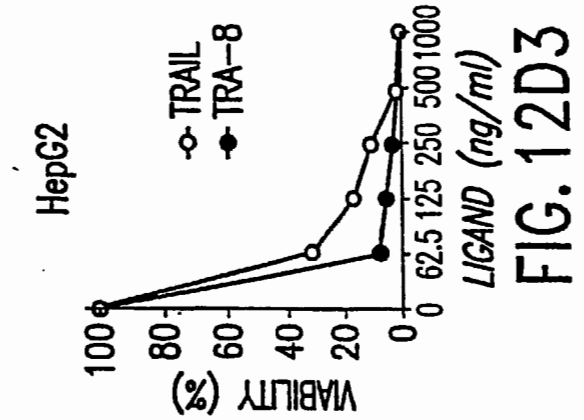


FIG. 12D3

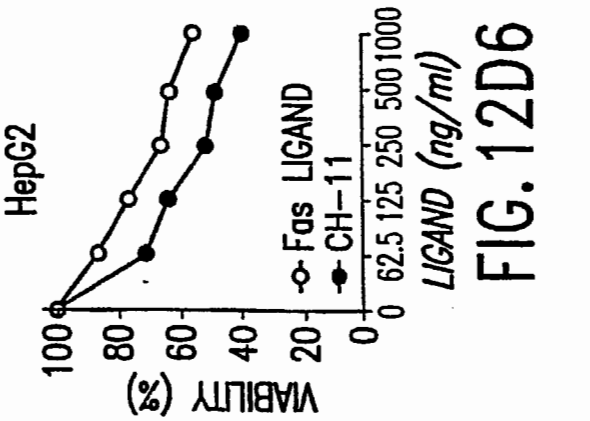


FIG. 12D6

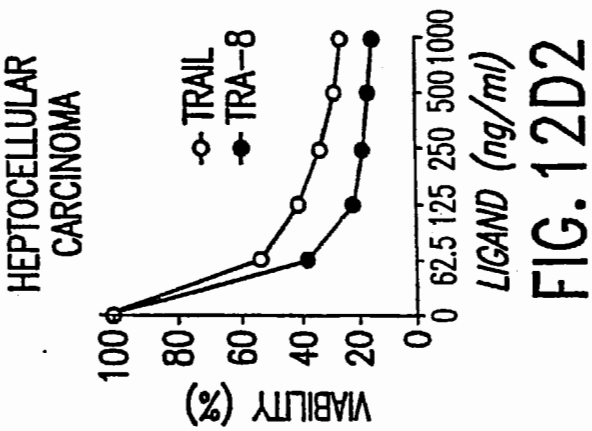


FIG. 12D2

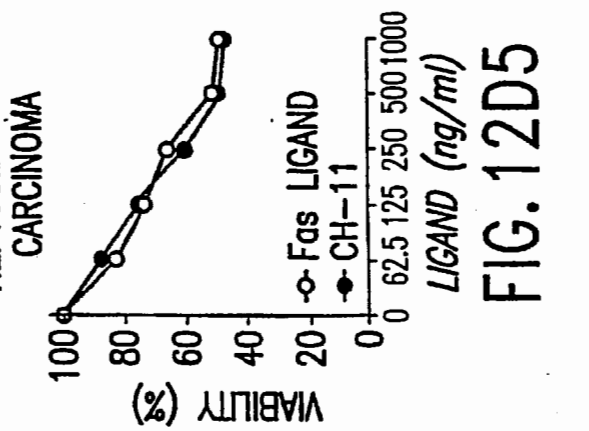


FIG. 12D5

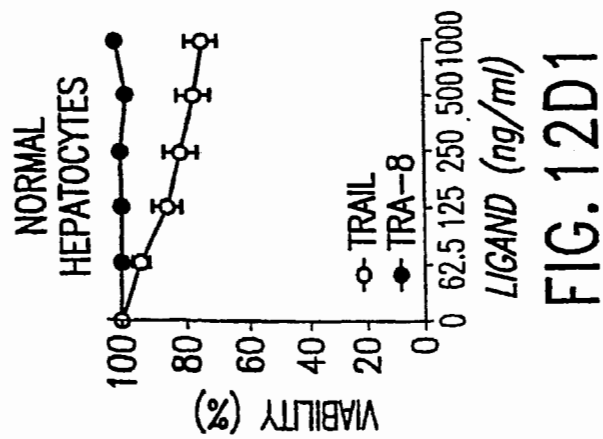


FIG. 12D1

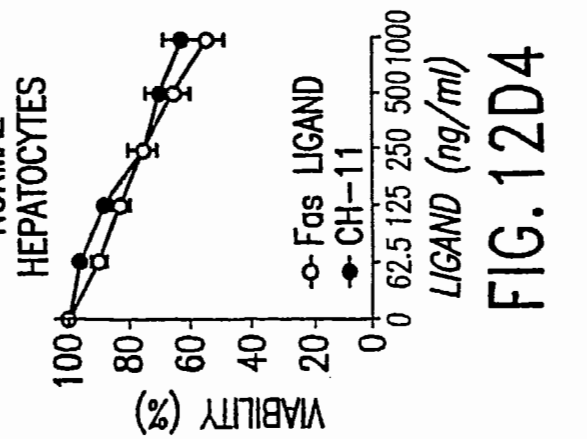


FIG. 12D4

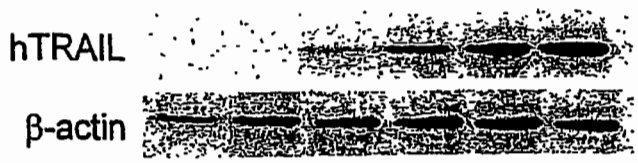


FIG.13A

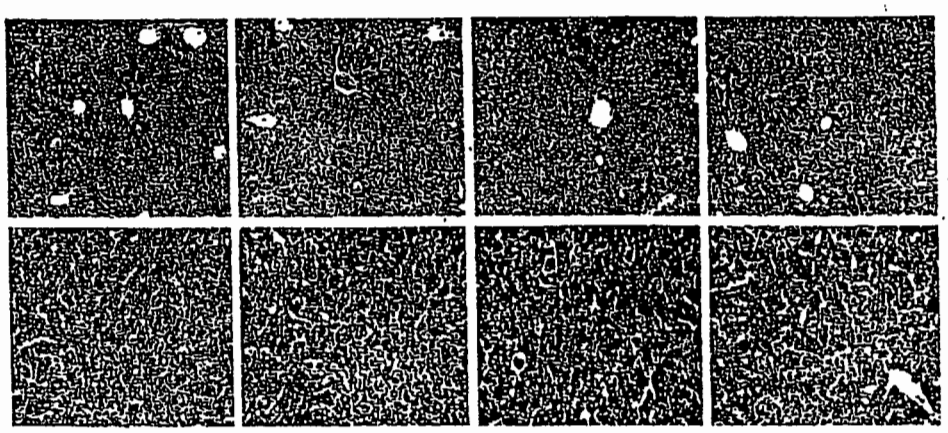


FIG.13D

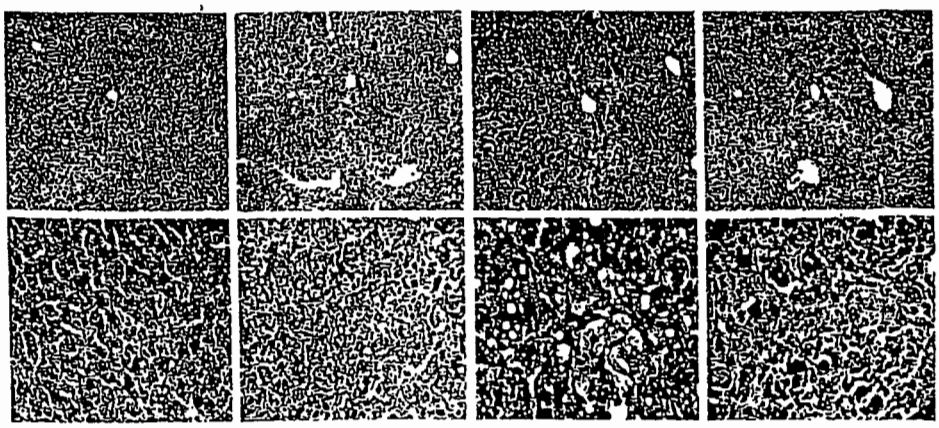


FIG.13E

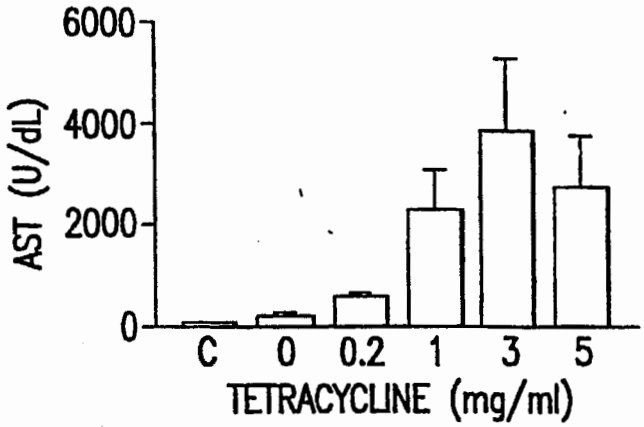


FIG. 13B

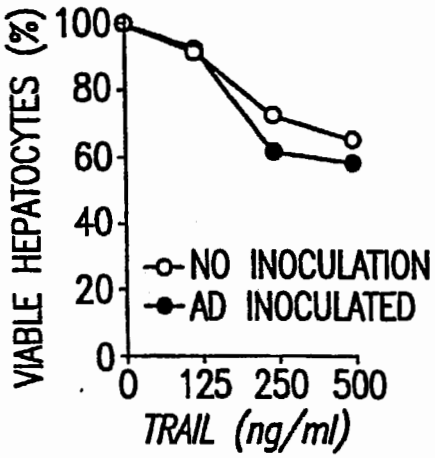


FIG. 13C1

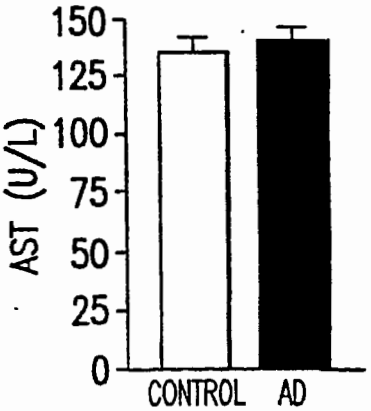


FIG. 13C2

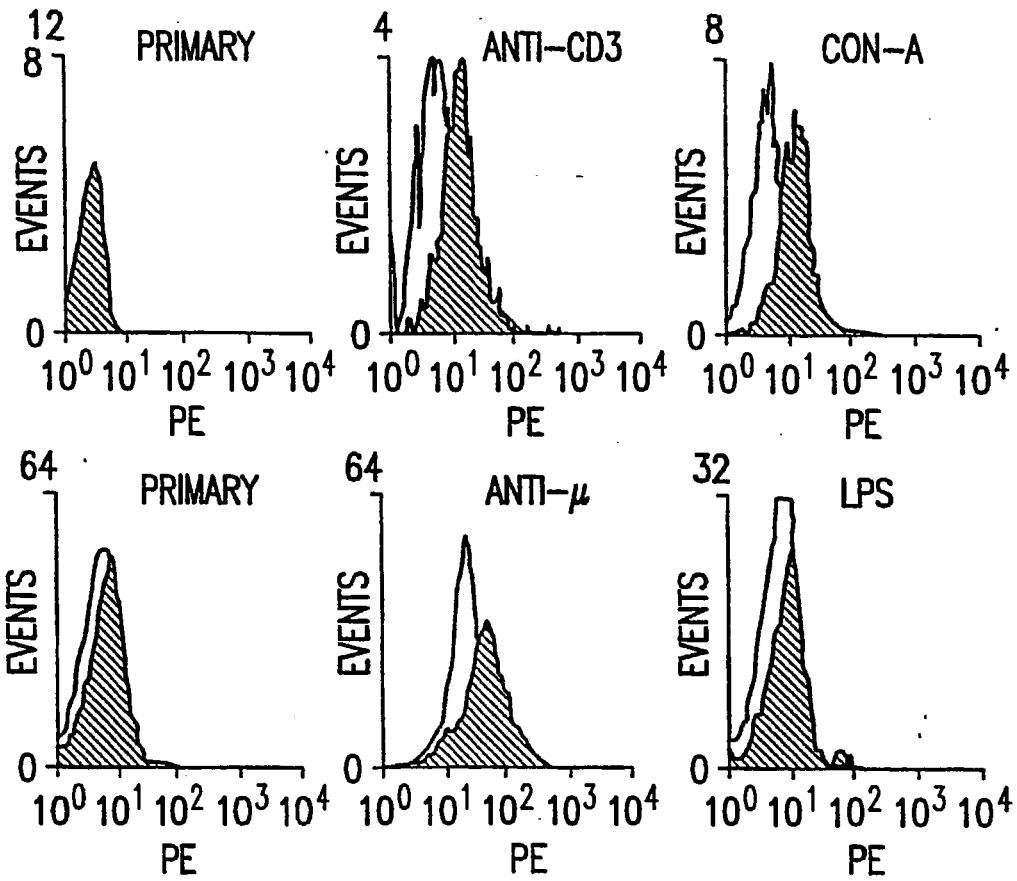

PRIMARY
ANTI-CD3
CON-A
PRIMARY
ANTI-μ
LPS
EVENTS
PE
12
8
4
64
32
0
10^0 10^1 10^2 10^3 10^4

FIG. 14

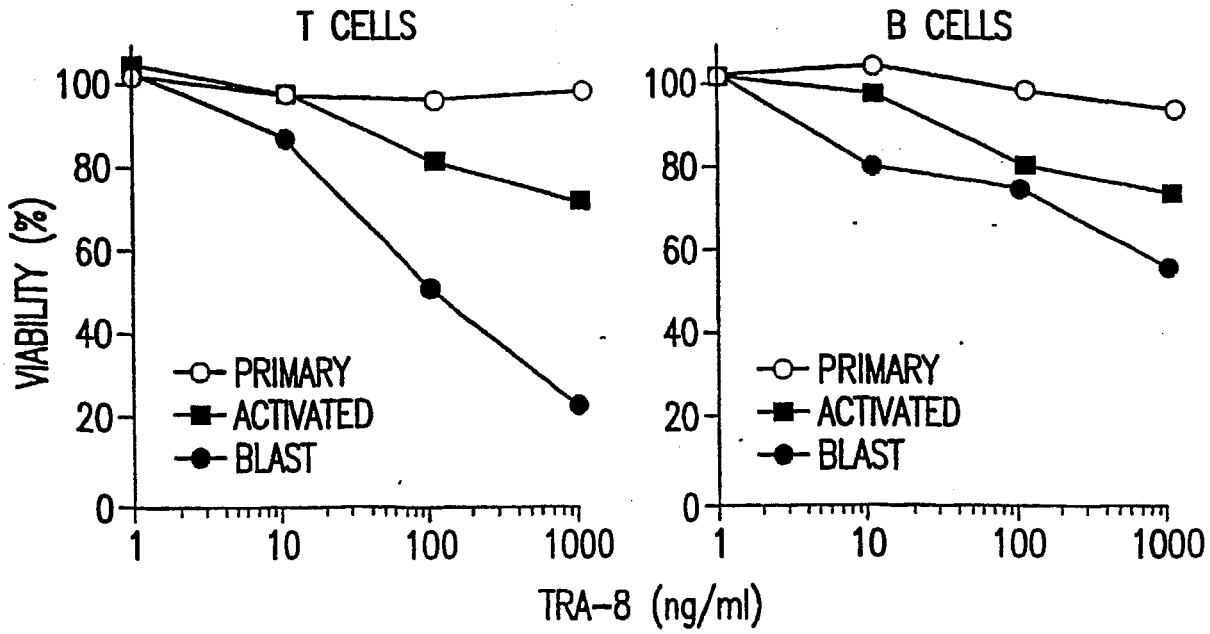

T CELLS
B CELLS
VIABILITY (%)
PRIMARY
ACTIVATED
BLAST
100
80
60
40
20
0
1
10
100
1000
TRA-8 (ng/ml)

FIG. 15

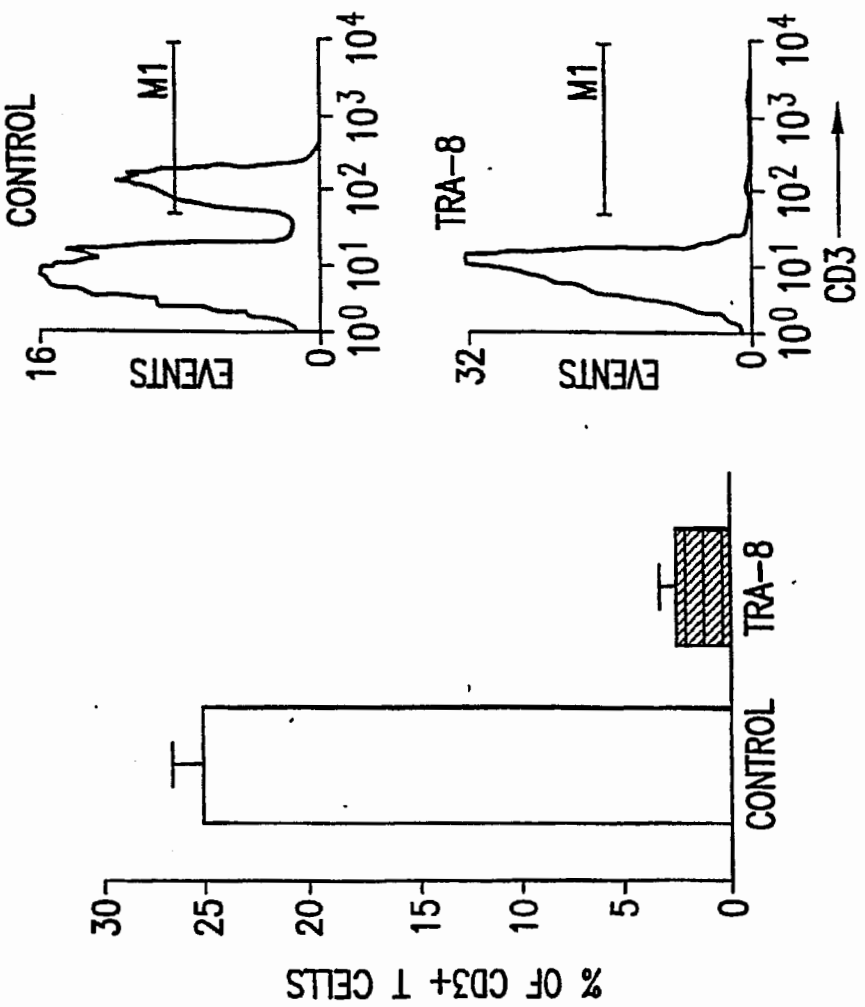

CONTROL
M1
EVENTS
16
0
10^0 10^1 10^2 10^3 10^4
TRA-8
M1
EVENTS
32
0
10^0 10^1 10^2 10^3 10^4
CD3
% OF CD3+ T CELLS
30
25
20
15
10
5
0
CONTROL
TRA-8

FIG. 16

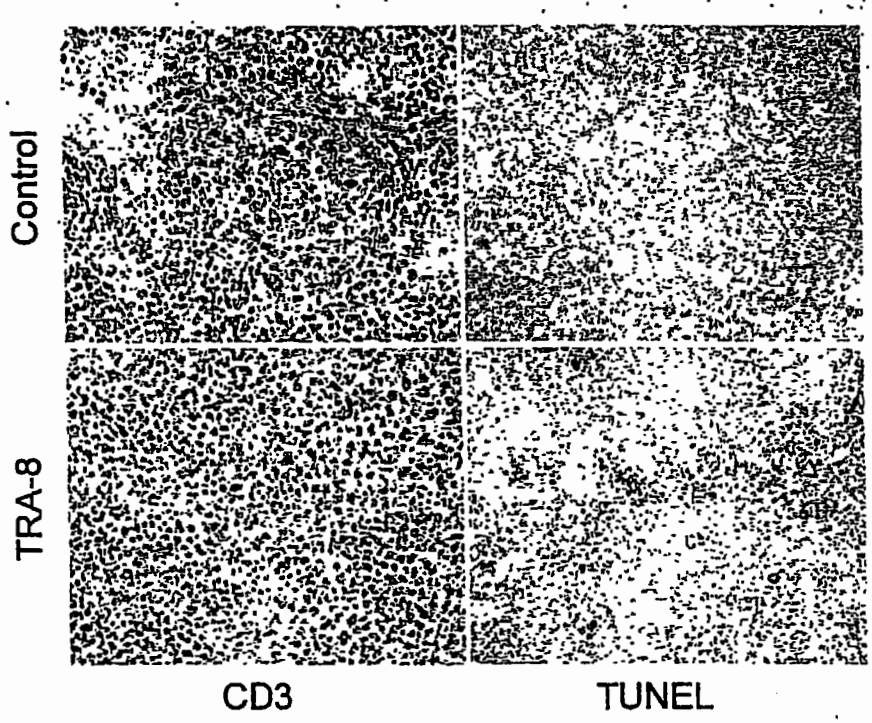


FIG.17

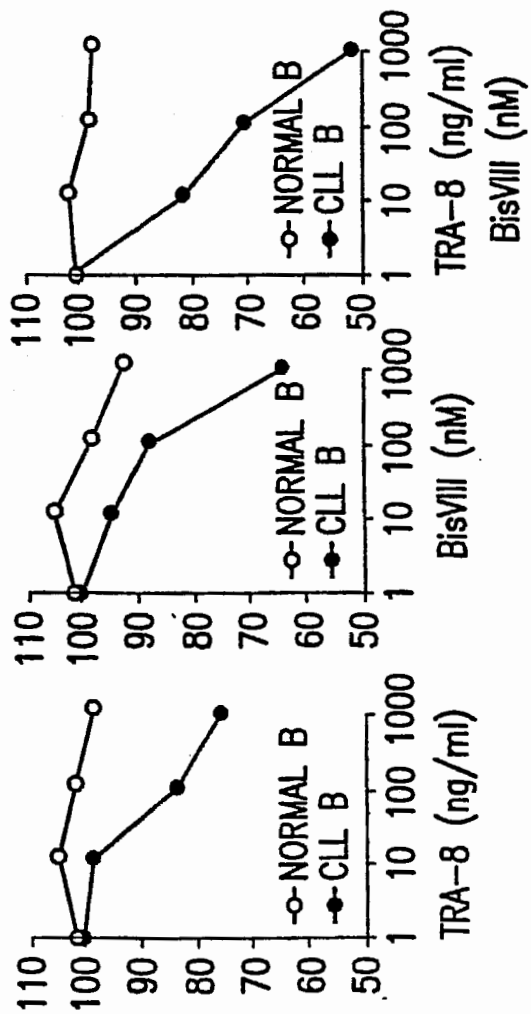

110
100
90
80
70
60
50
NORMAL B
CLL B
1 10 100 1000
TRA–8 (ng/ml)
BisVIII (nM)

FIG. 18

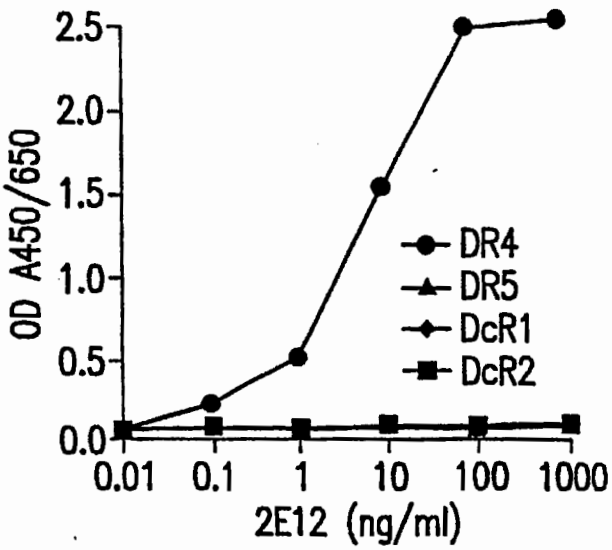


FIG. 19A

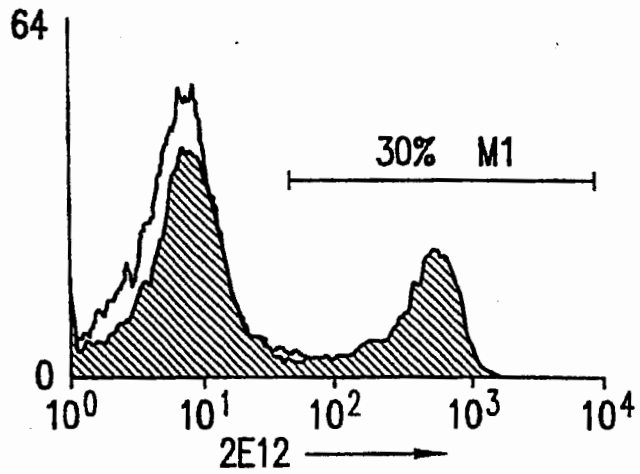


FIG. 19B

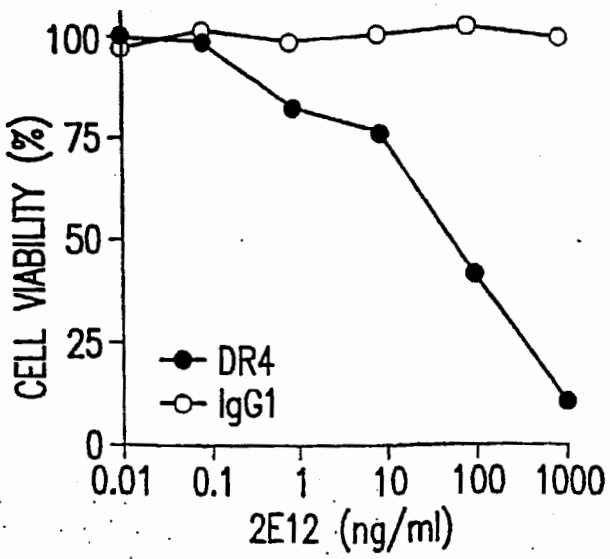


FIG. 19C

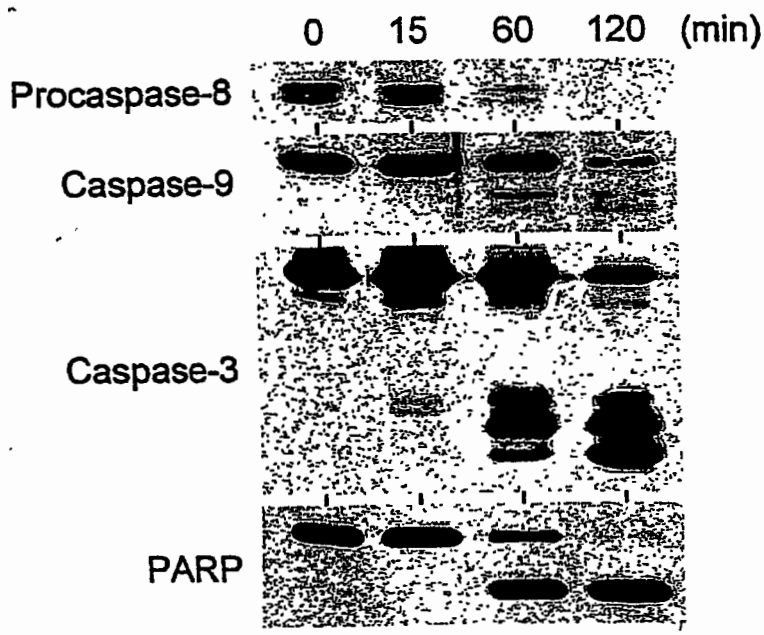


FIG.19D

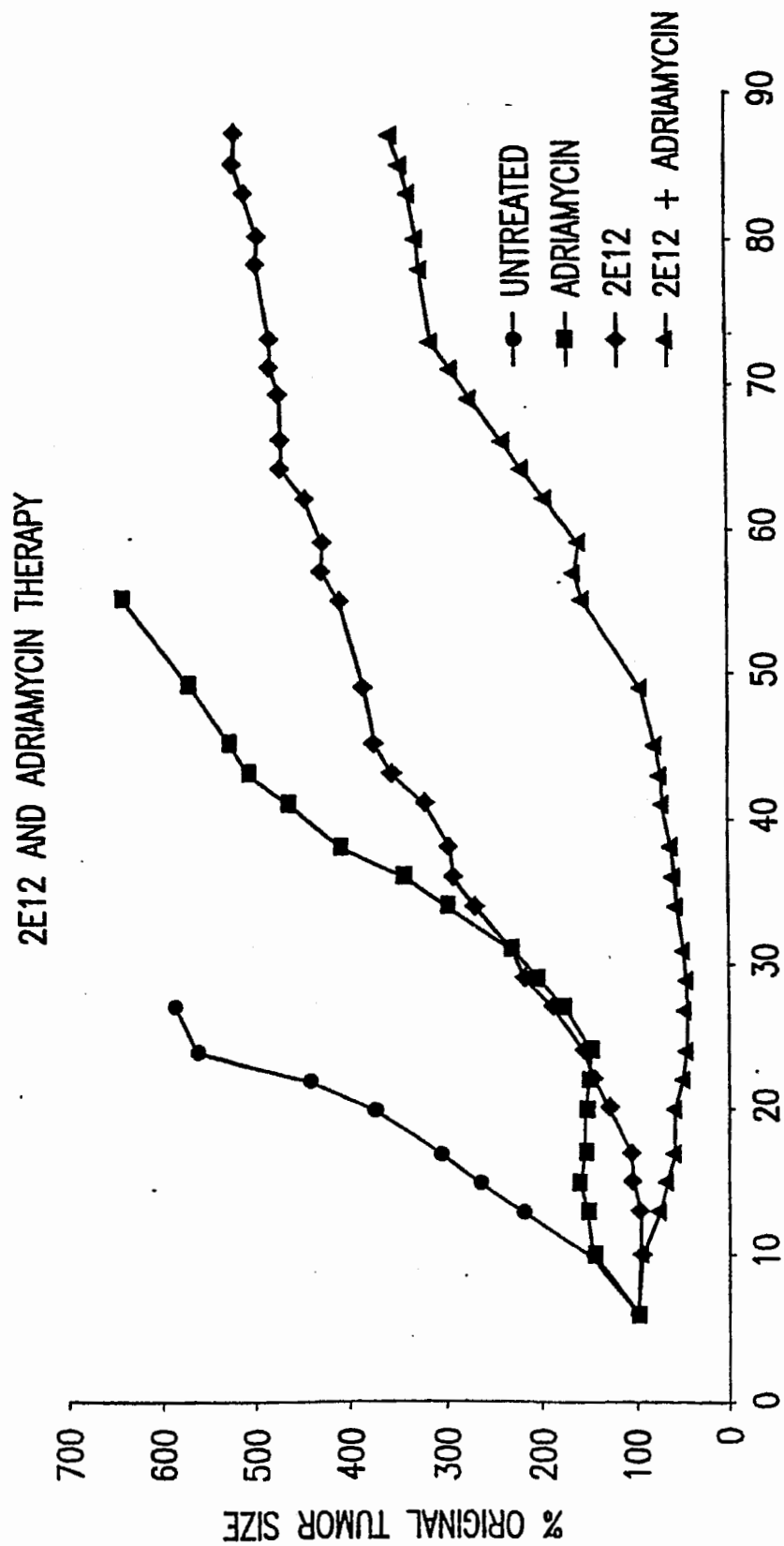

2E12 AND ADRIAMYCIN THERAPY
% ORIGINAL TUMOR SIZE
DAY
UNTREATED
ADRIAMYCIN
2E12
2E12 + ADRIAMYCIN
0
100
200
300
400
500
600
700
0
10
20
30
40
50
60
70
80
90

FIG. 20

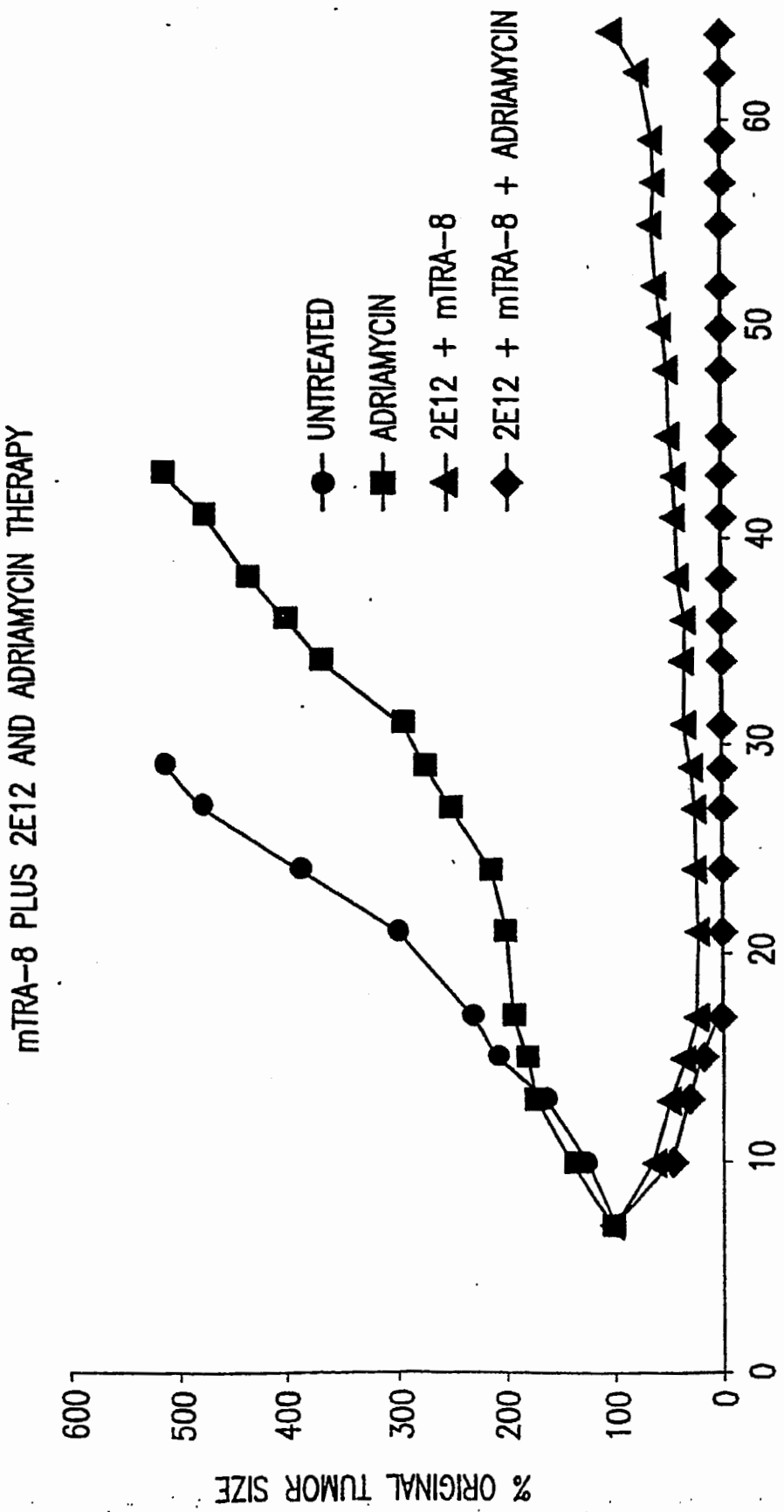

mTRA-8 PLUS 2E12 AND ADRIAMYCIN THERAPY
UNTREATED
ADRIAMYCIN
2E12 + mTRA-8
2E12 + mTRA-8 + ADRIAMYCIN
% ORIGINAL TUMOR SIZE
600
500
400
300
200
100
0
0
10
20
30
40
50
60
DAY

FIG. 21

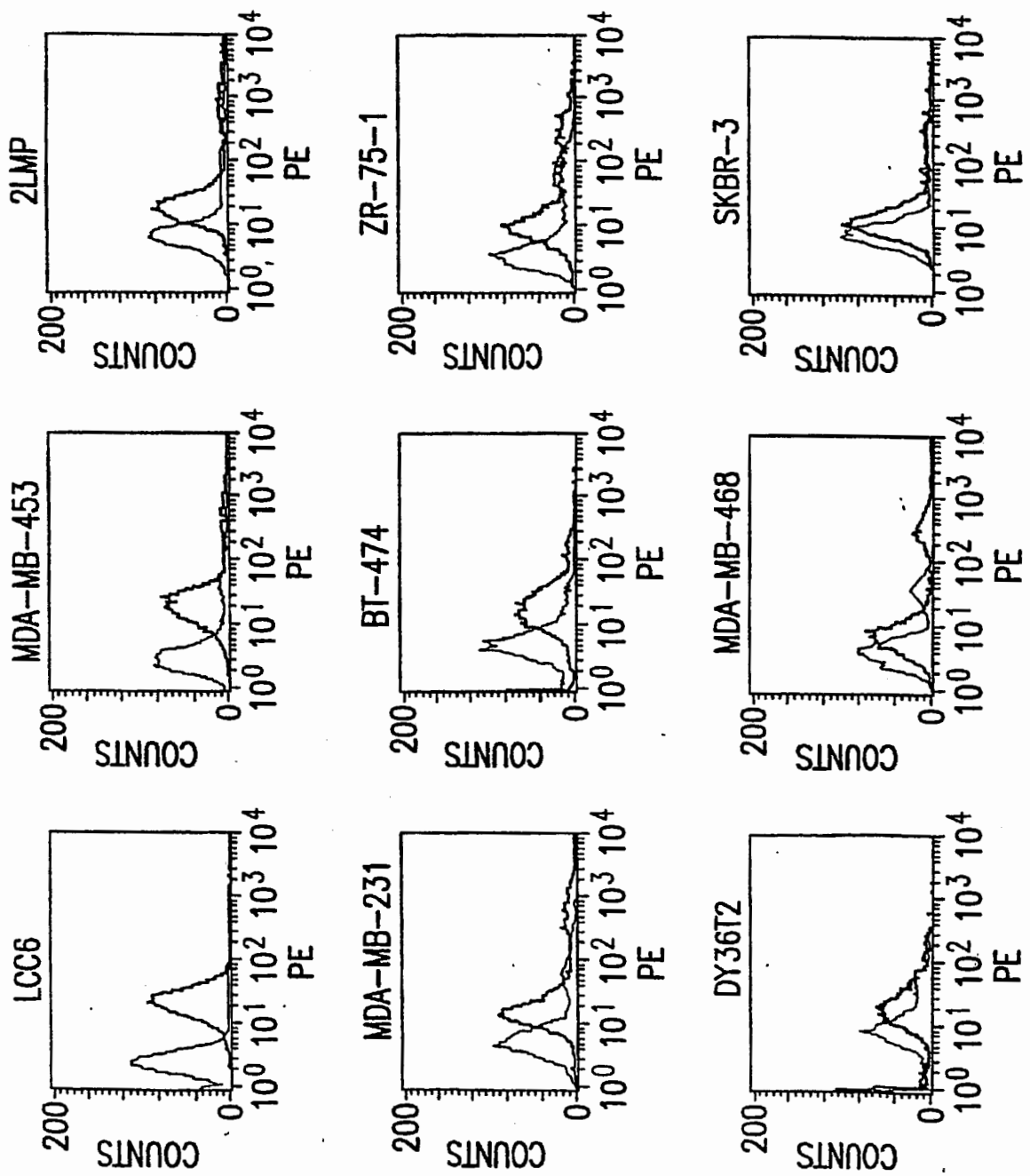

2LMP
ZR-75-1
SKBR-3
MDA-MB-453
BT-474
MDA-MB-468
LCC6
MDA-MB-231
DY36T2
COUNTS
200
0
10^0 10^1 10^2 10^3 10^4
PE

FIG. 22A

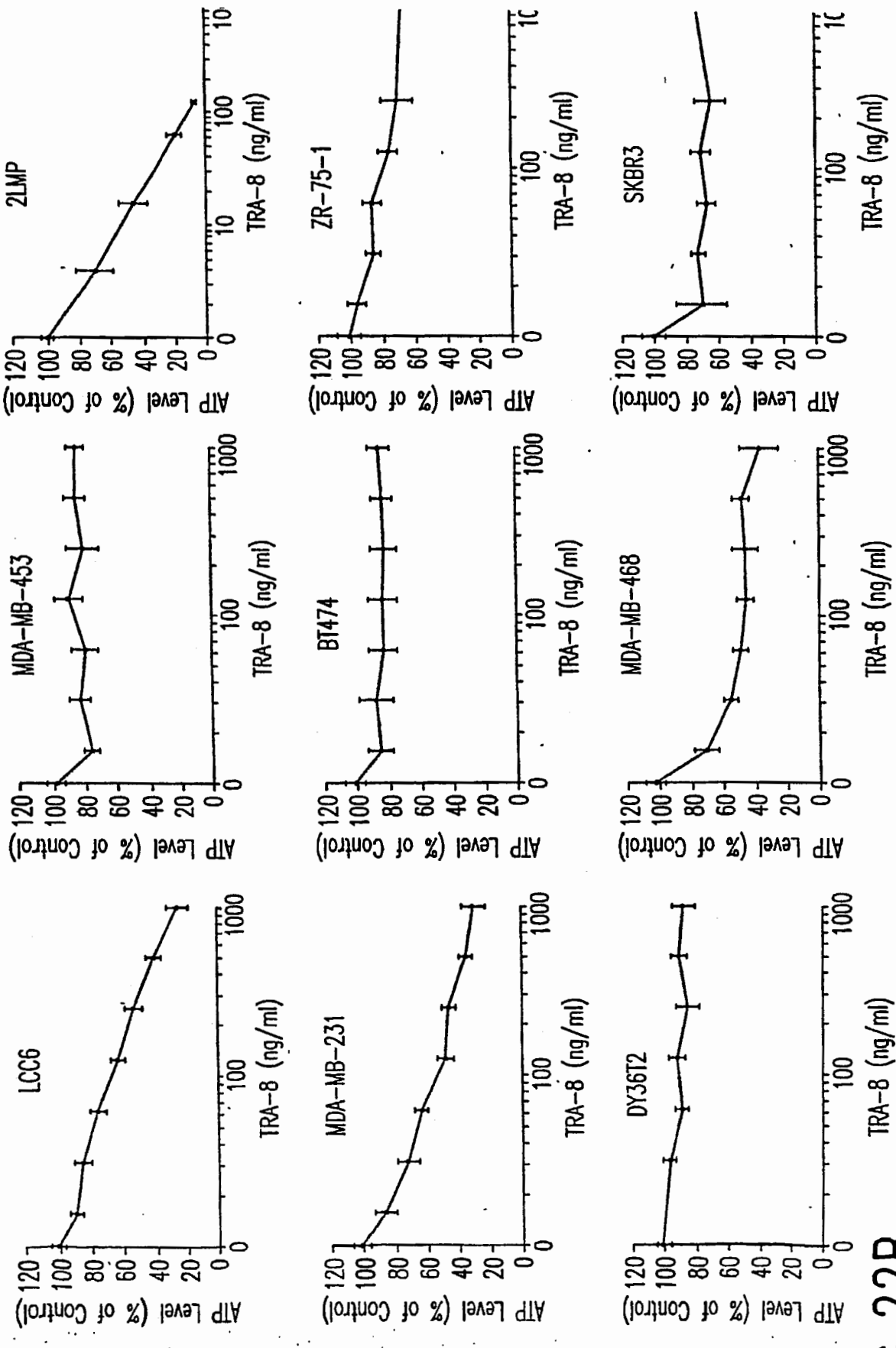

2LMP
ZR-75-1
SKBR3
MDA-MB-453
BT474
MDA-MB-468
LCC6
MDA-MB-231
DY36T2
ATP Level (% of Control)
TRA-8 (ng/ml)
0
20
40
60
80
100
120
1
10
100
1000

FIG. 22B

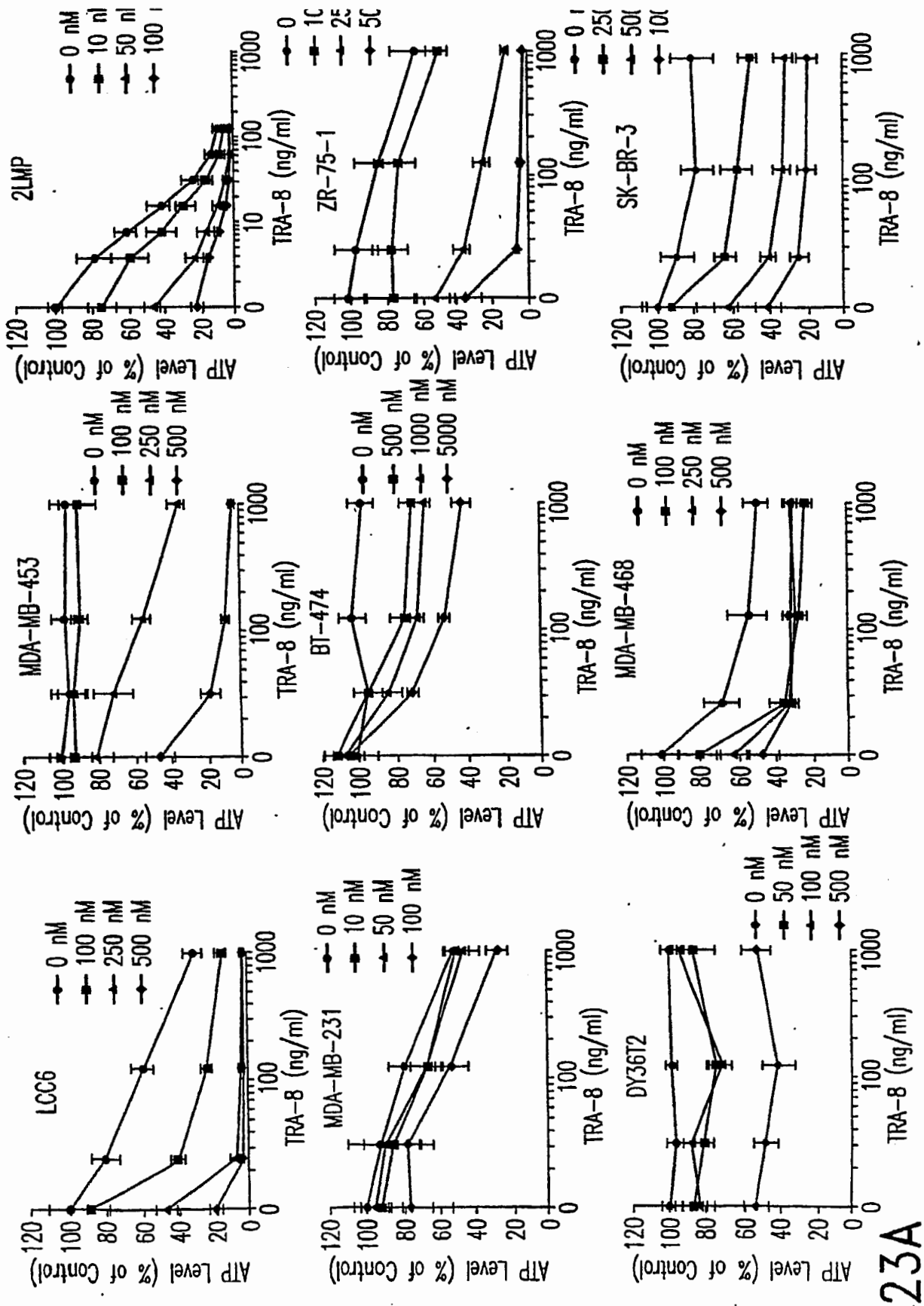

2LMP
ZR-75-1
SK-BR-3
MDA-MB-453
BT-474
MDA-MB-468
LCC6
MDA-MB-231
DY36T2
ATP Level (% of Control)
TRA-8 (ng/ml)
0 nM
10 nM
50 nM
100 nM
250 nM
500 nM
1000 nM
5000 nM

FIG. 23A

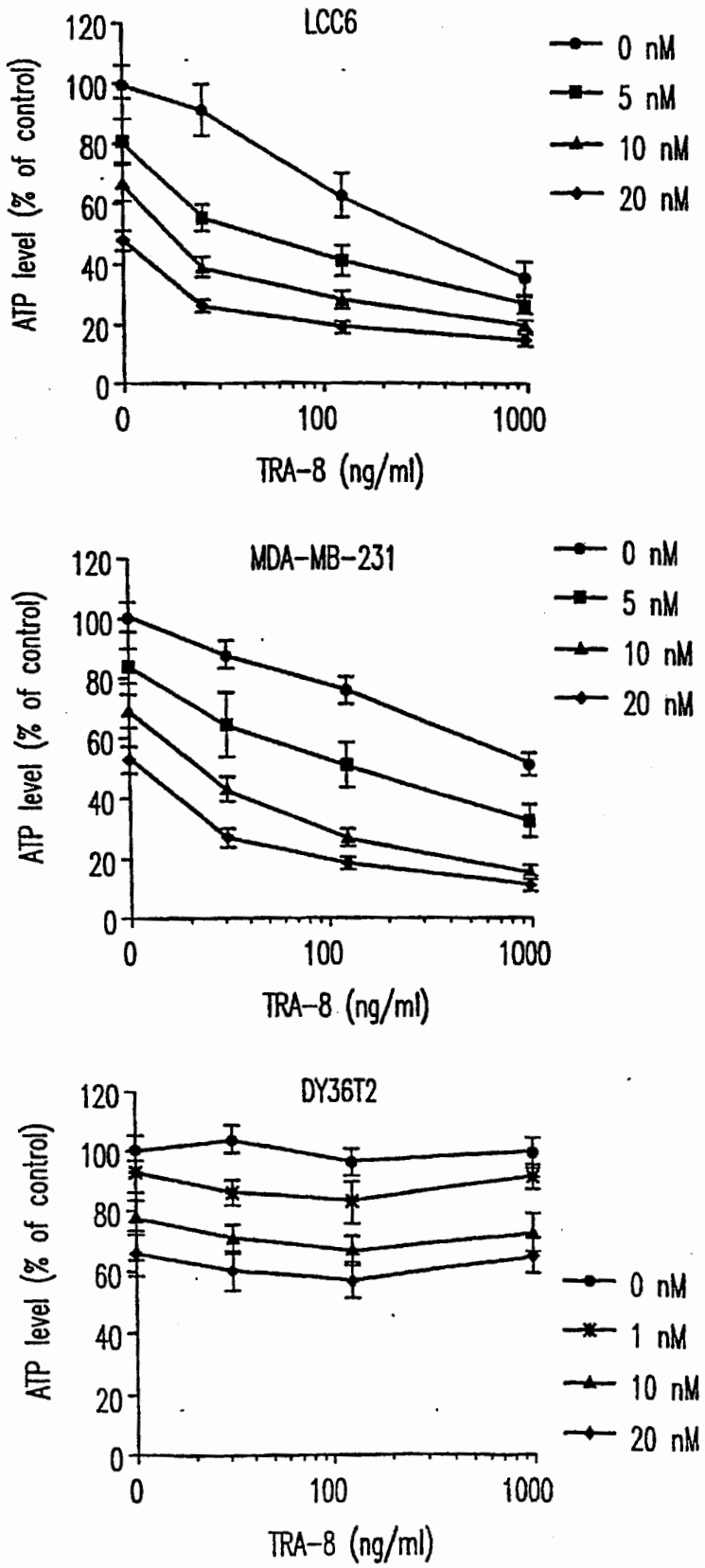

LCC6
ATP level (% of control)
120
100
80
60
40
20
0
0
100
1000
TRA-8 (ng/ml)
0 nM
5 nM
10 nM
20 nM
MDA-MB-231
ATP level (% of control)
120
100
80
60
40
20
0
0
100
1000
TRA-8 (ng/ml)
0 nM
5 nM
10 nM
20 nM
DY36T2
ATP level (% of control)
120
100
80
60
40
20
0
0
100
1000
TRA-8 (ng/ml)
0 nM
1 nM
10 nM
20 nM

FIG. 23B1

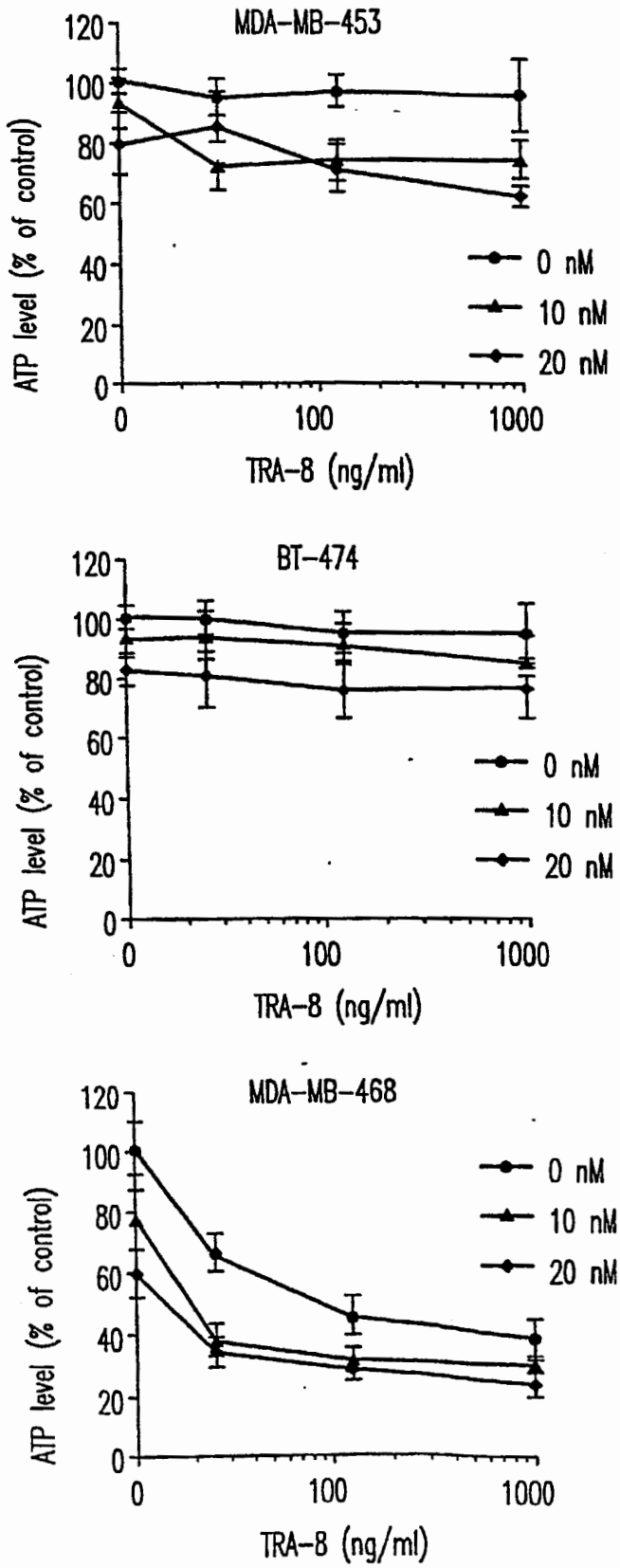

MDA-MB-453
ATP level (% of control)
120
100
80
60
40
20
0
0
100
1000
TRA-8 (ng/ml)
0 nM
10 nM
20 nM
BT-474
ATP level (% of control)
TRA-8 (ng/ml)
MDA-MB-468
ATP level (% of control)
TRA-8 (ng/ml)

FIG. 23B2

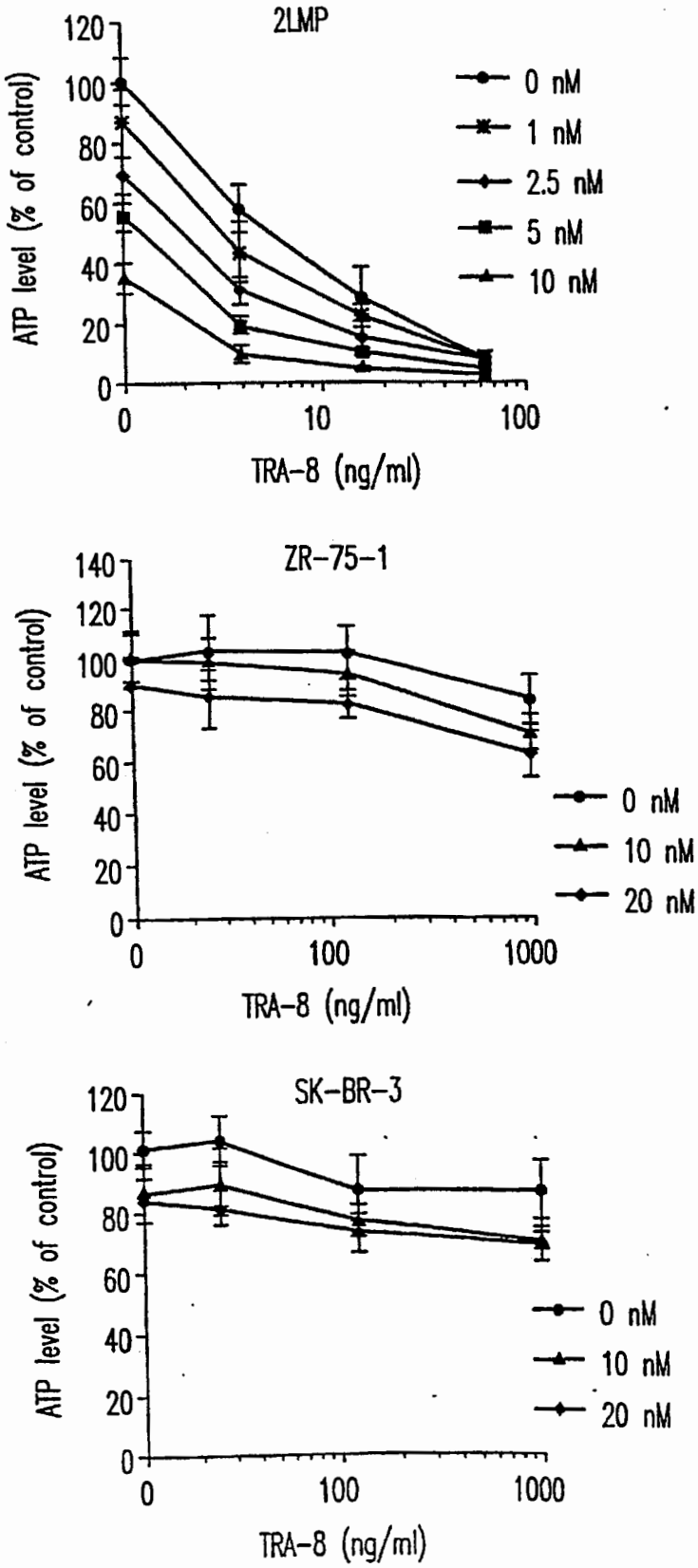

2LMP
ATP level (% of control)
TRA-8 (ng/ml)
0 nM
1 nM
2.5 nM
5 nM
10 nM
ZR-75-1
ATP level (% of control)
TRA-8 (ng/ml)
0 nM
10 nM
20 nM
SK-BR-3
ATP level (% of control)
TRA-8 (ng/ml)
0 nM
10 nM
20 nM

FIG. 23B3

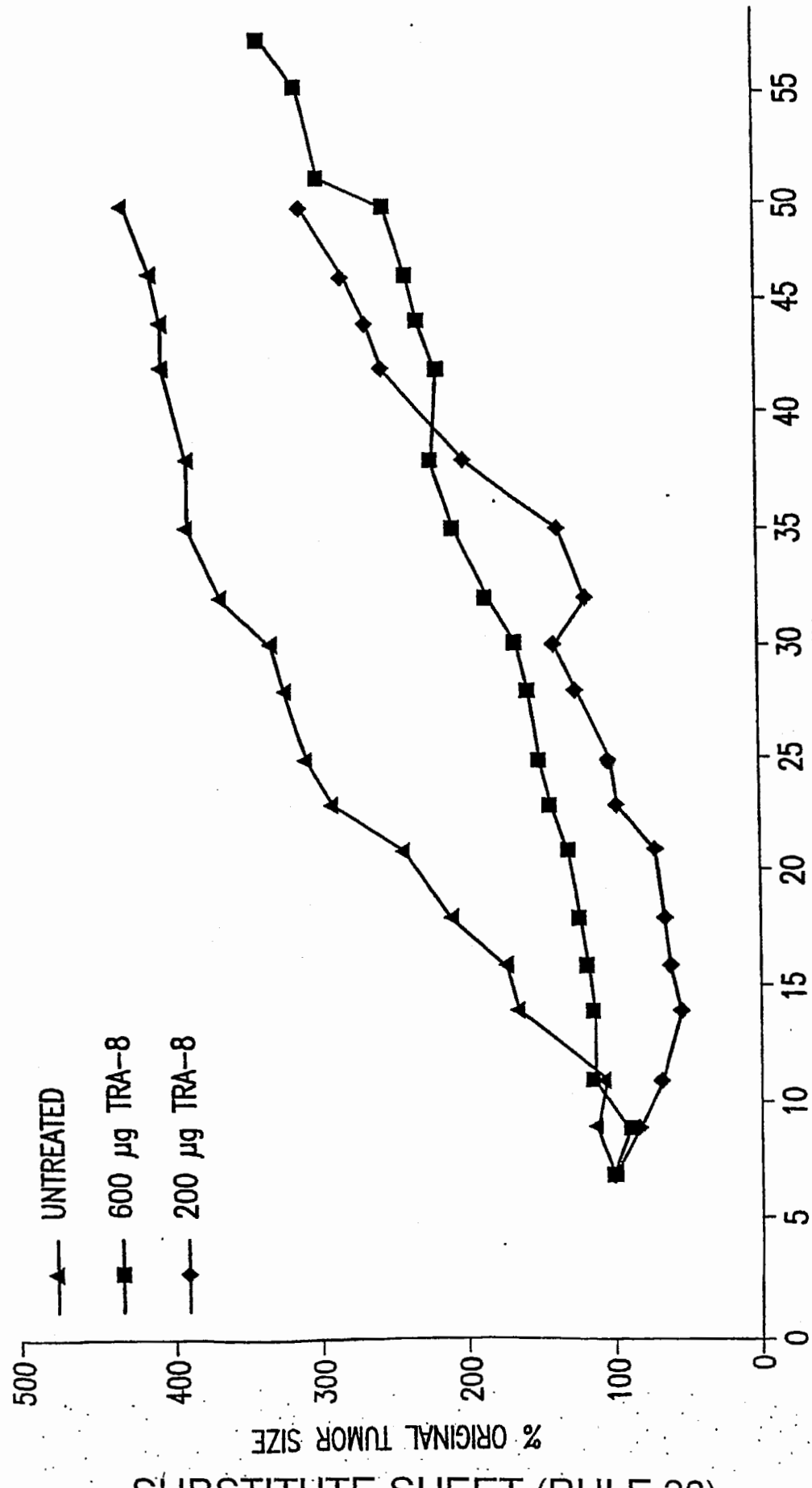

UNTREATED
600 µg TRA-8
200 µg TRA-8
% ORIGINAL TUMOR SIZE
500
400
300
200
100
0
0
5
10
15
20
25
30
35
40
45
50
55
DAY

FIG. 24

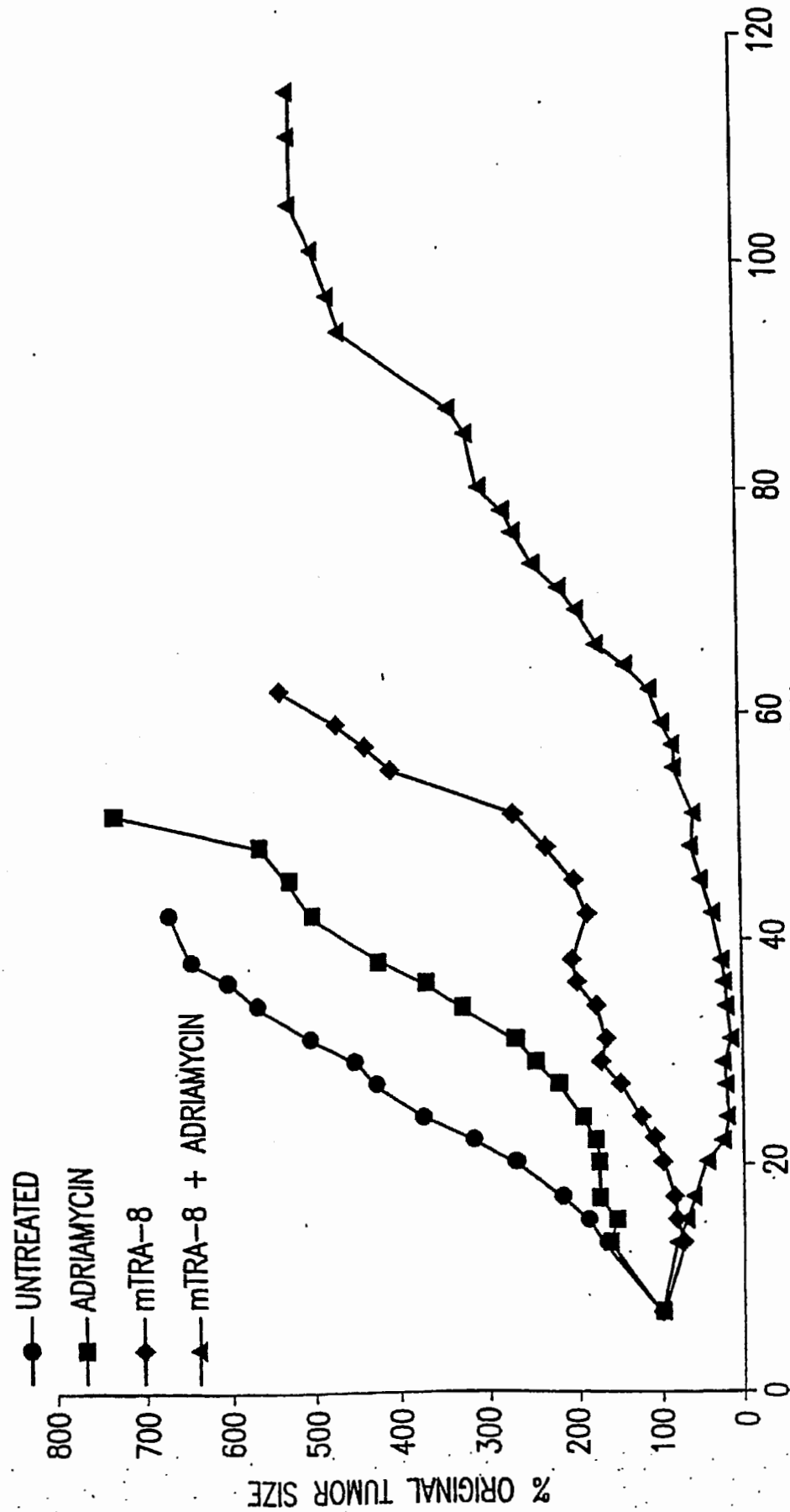

UNTREATED
ADRIAMYCIN
mTRA-8
mTRA-8 + ADRIAMYCIN
% ORIGINAL TUMOR SIZE
0
100
200
300
400
500
600
700
800
0
20
40
60
80
100
120
DAY

FIG. 25

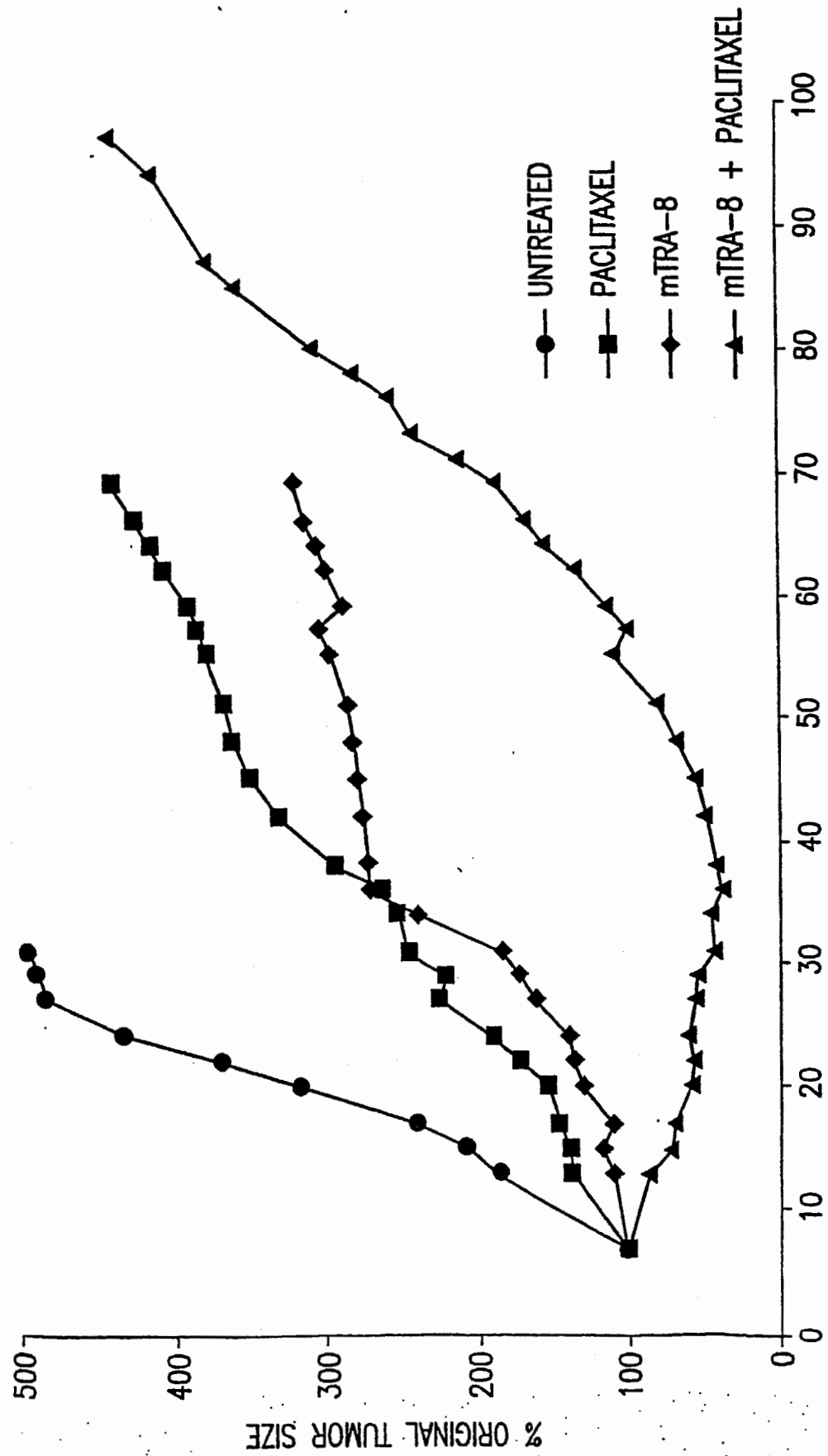

UNTREATED
PACLITAXEL
mTRA-8
mTRA-8 + PACLITAXEL
% ORIGINAL TUMOR SIZE
DAY
0
10
20
30
40
50
60
70
80
90
100
100
200
300
400
500

FIG. 26

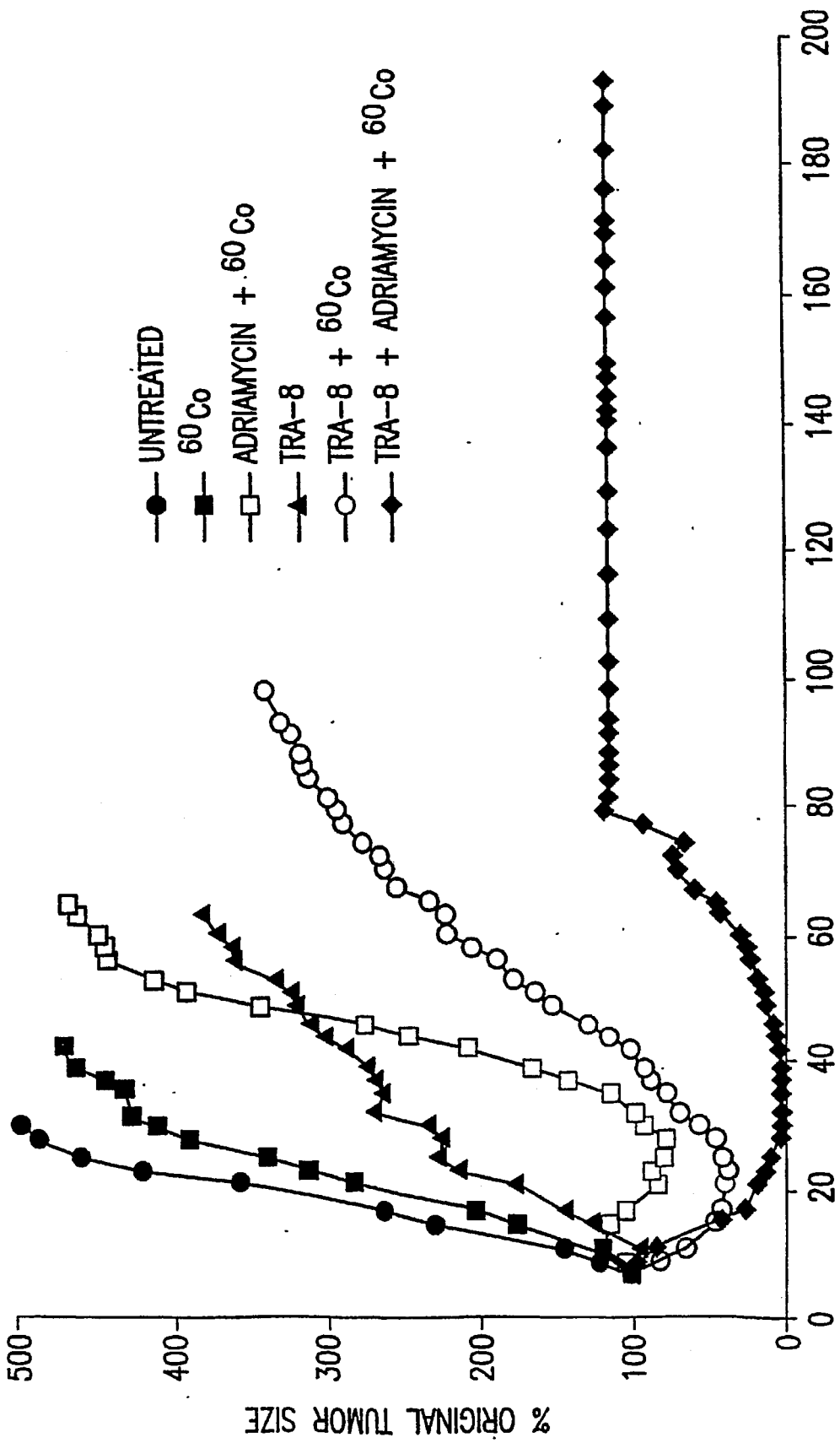

UNTREATED
60Co
ADRIAMYCIN + 60Co
TRA-8
TRA-8 + 60Co
TRA-8 + ADRIAMYCIN + 60Co
% ORIGINAL TUMOR SIZE
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
180
200
DAY

FIG. 27