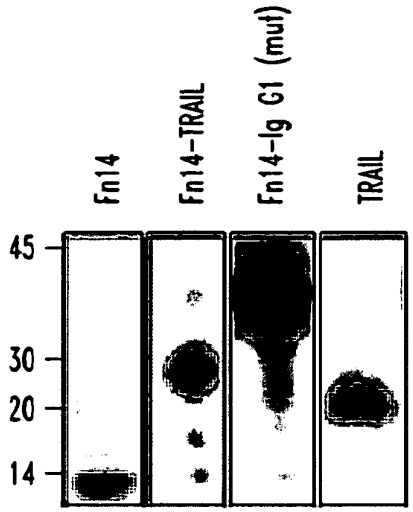

Fn14
Fn14-TRAIL
Fn14-Ig G1 (mut)
TRAIL
45
30
20
14

FIG.1A

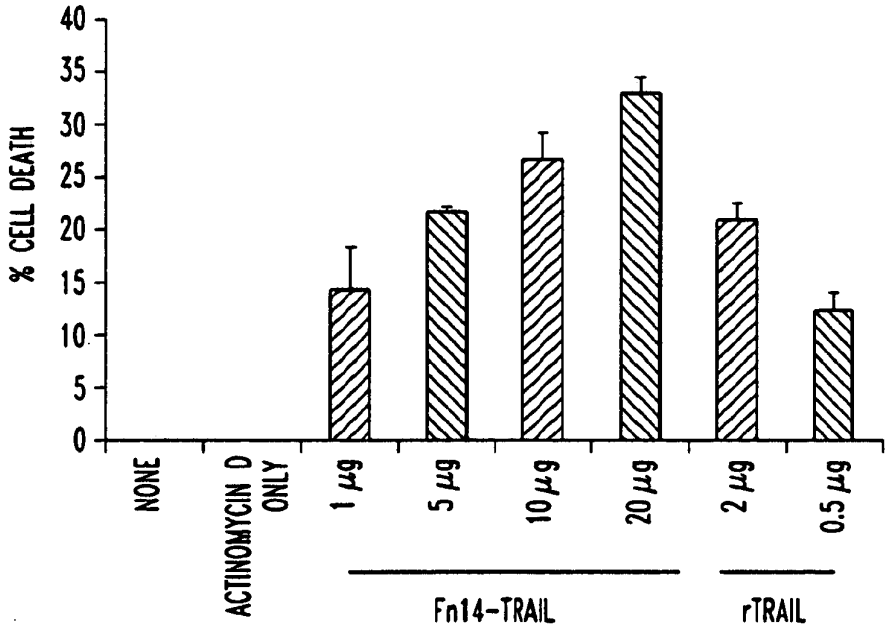

% CELL DEATH
40
35
30
25
20
15
10
5
0
NONE
ACTINOMYCIN D ONLY
1 μg
5 μg
10 μg
20 μg
2 μg
0.5 μg
Fn14-TRAIL
rTRAIL

FIG.1C

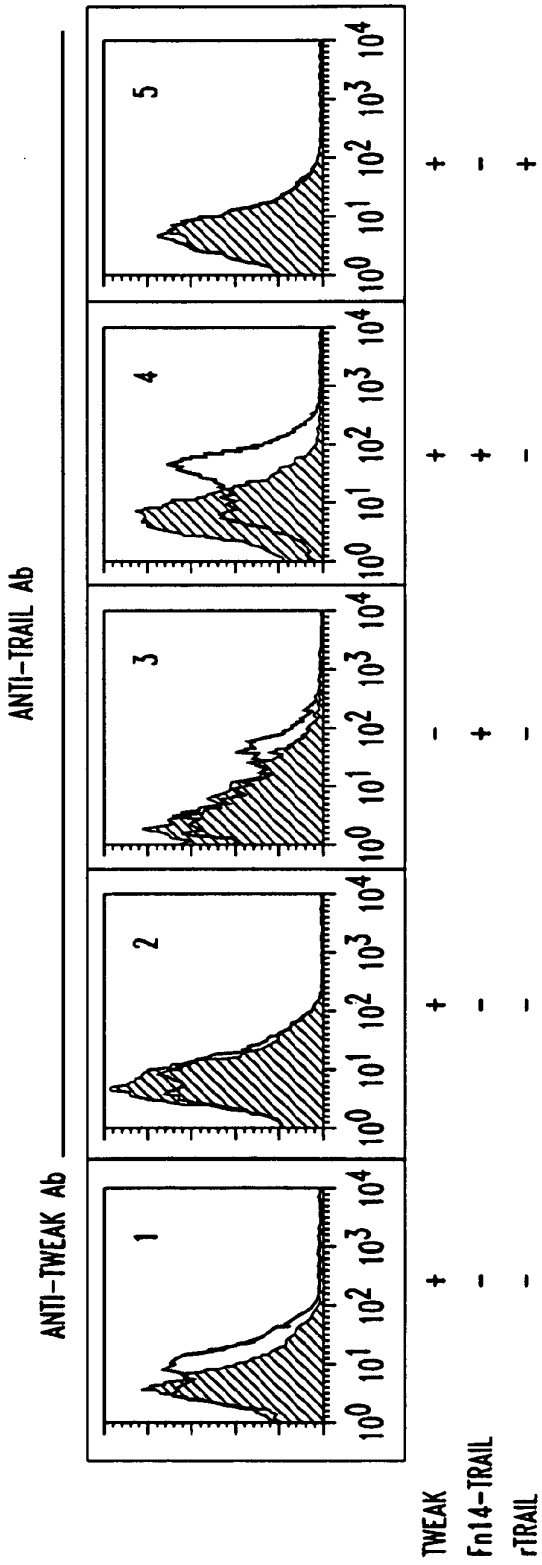

ANTI-TRAIL Ab
ANTI-TWEAK Ab
1
2
3
4
5
10^0 10^1 10^2 10^3 10^4
TWEAK + + - + +
Fn14-TRAIL - - + + -
rTRAIL - - - - +

FIG.1B

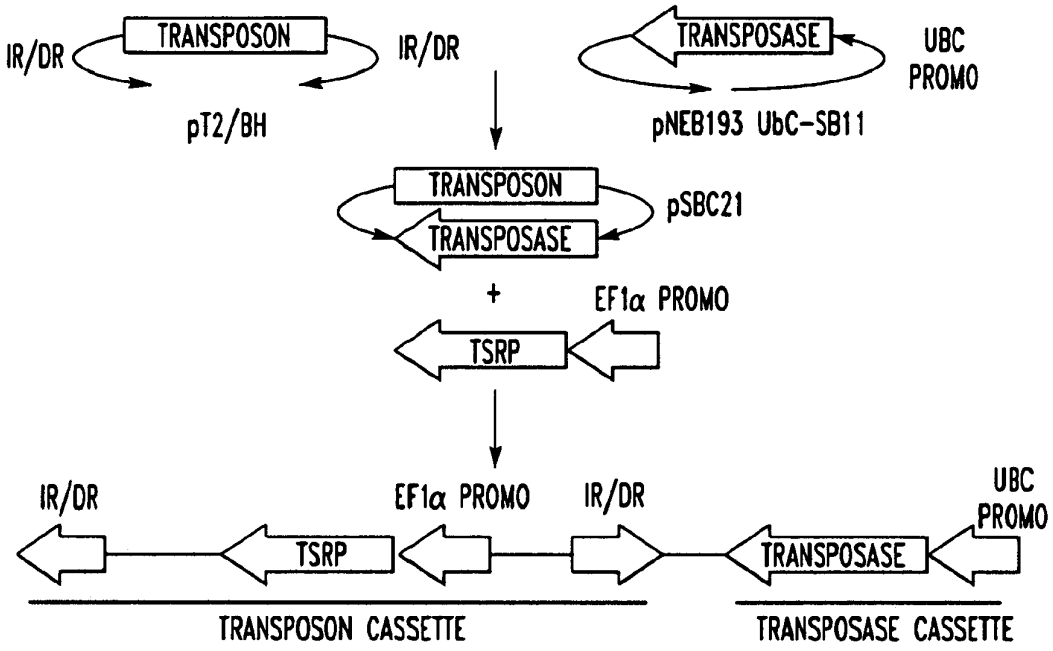

IR/DR
TRANSPOSON
IR/DR
pT2/BH
TRANSPOSASE
UBC
PROMO
pNEB193 UbC-SB11
TRANSPOSON
TRANSPOSASE
pSBC21
+
EF1α PROMO
TSRP
IR/DR
EF1α PROMO
IR/DR
UBC
PROMO
TSRP
TRANSPOSASE
TRANSPOSON CASSETTE
TRANSPOSASE CASSETTE

FIG.2A

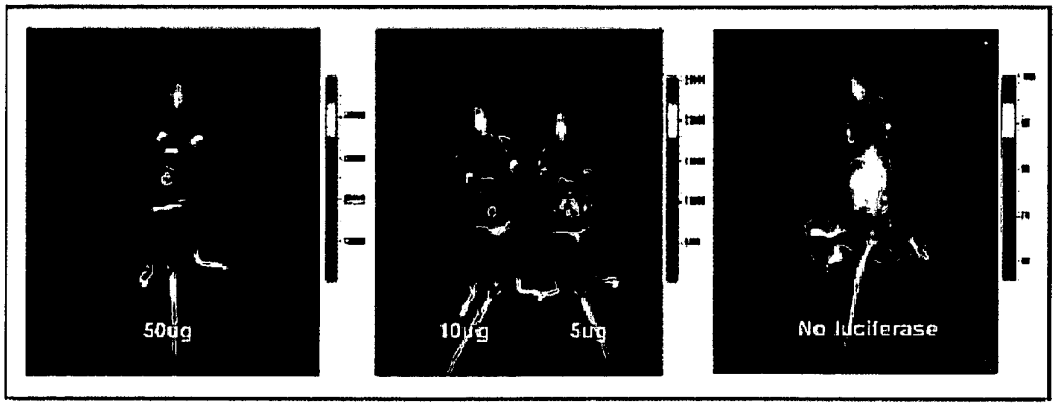

50ug
10ug
5ug
No luciferase

FIG.2B

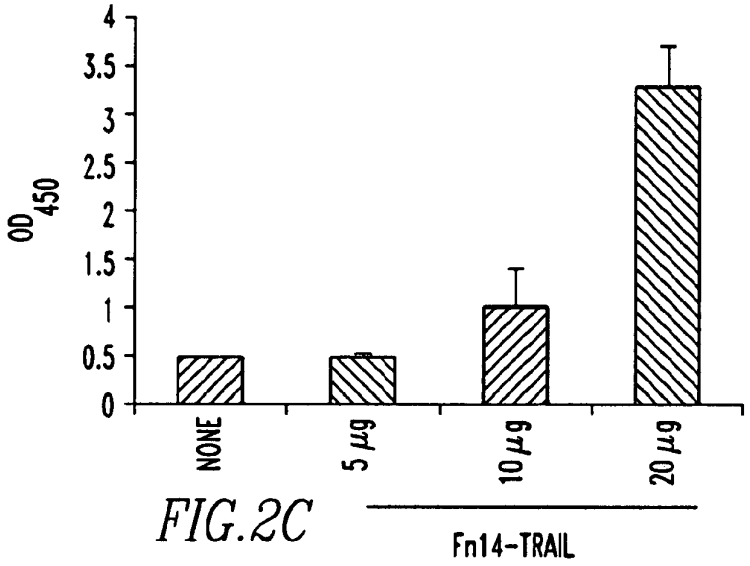

4
3.5
3
2.5
2
1.5
1
0.5
0
OD450
NONE
5 μg
10 μg
20 μg
Fn14-TRAIL

FIG.2C

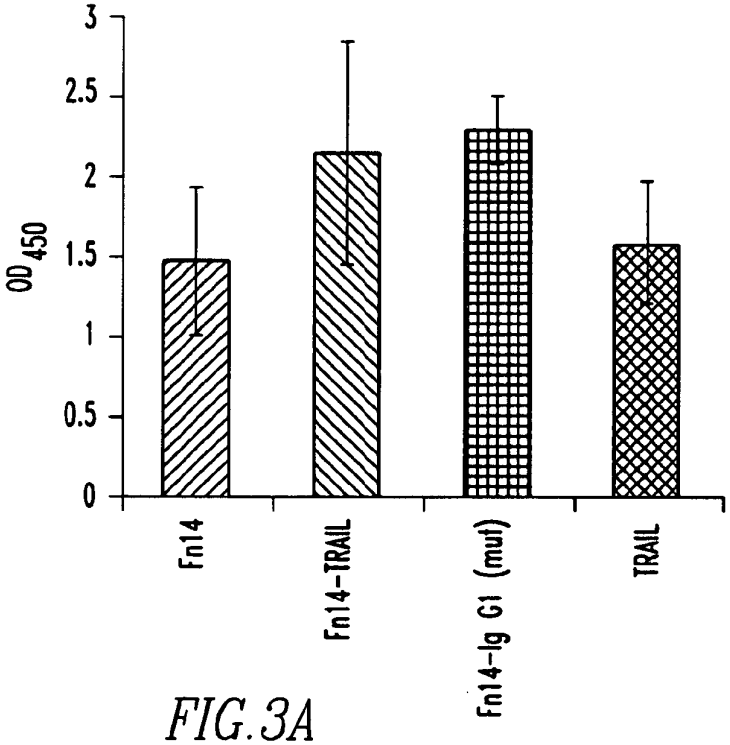

3
2.5
2
1.5
1
0.5
0
OD450
Fn14
Fn14-TRAIL
Fn14-Ig G1 (mut)
TRAIL

FIG.3A

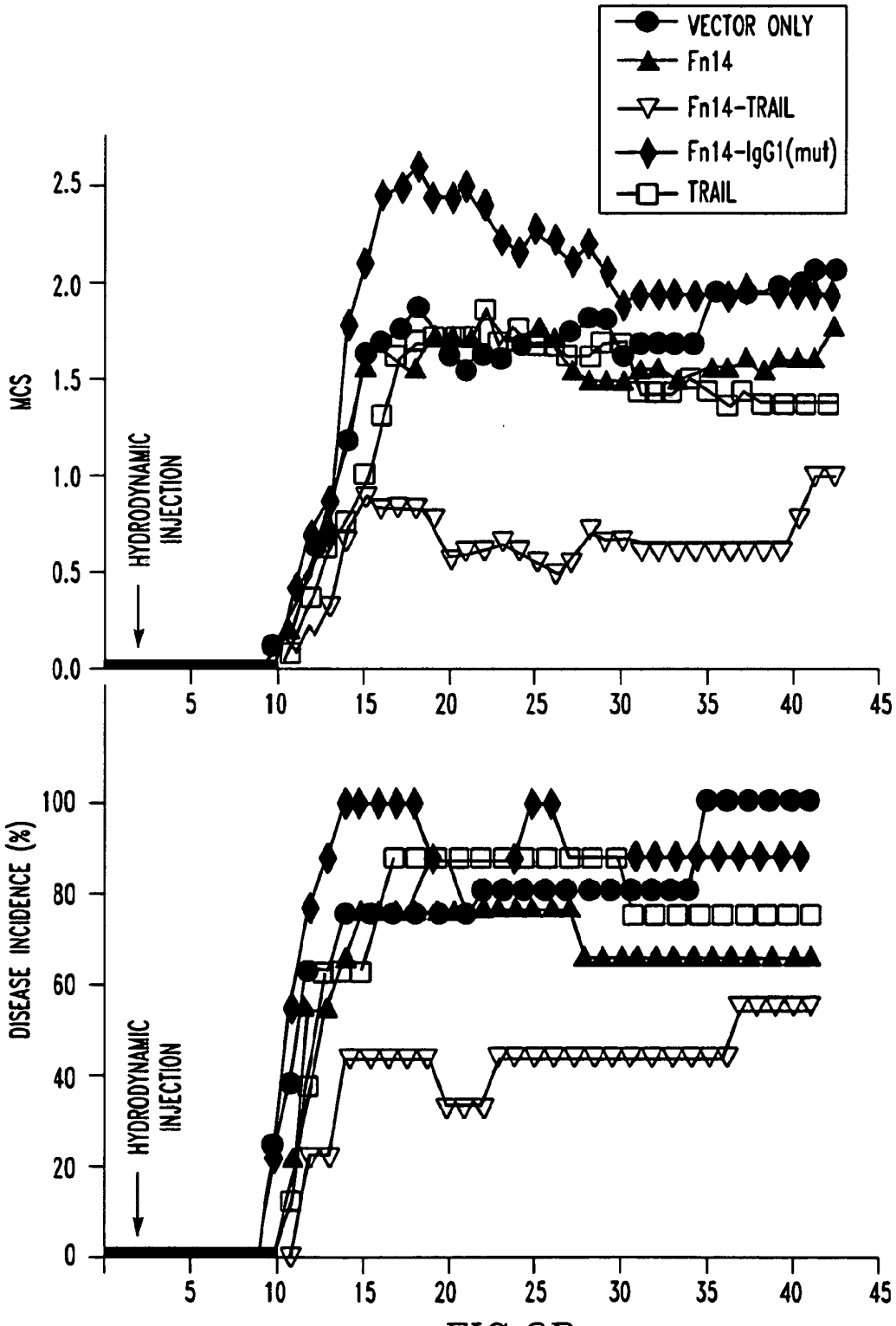

VECTOR ONLY
Fn14
Fn14-TRAIL
Fn14-IgG1(mut)
TRAIL
MCS
2.5
2.0
1.5
1.0
0.5
0.0
HYDRODYNAMIC INJECTION
5
10
15
20
25
30
35
40
45
DISEASE INCIDENCE (%)
100
80
60
40
20
0
HYDRODYNAMIC INJECTION

FIG. 3B

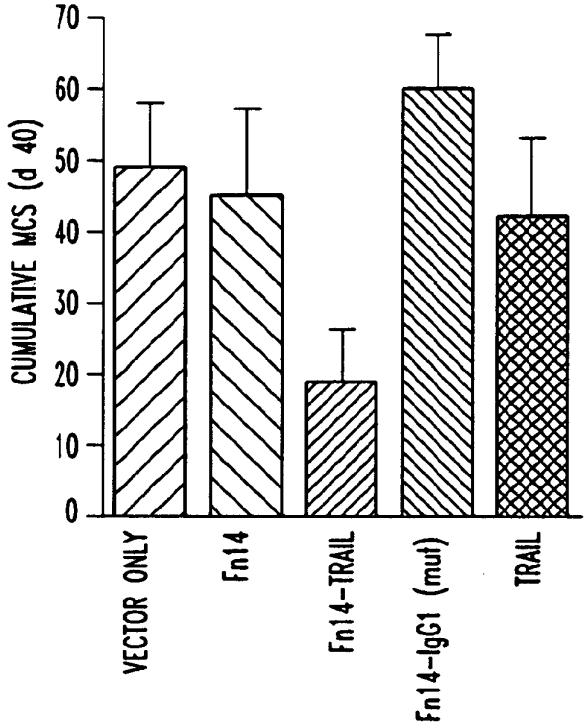

CUMULATIVE MCS (d 40)
70
60
50
40
30
20
10
0
VECTOR ONLY
Fn14
Fn14-TRAIL
Fn14-IgG1 (mut)
TRAIL

FIG.3C

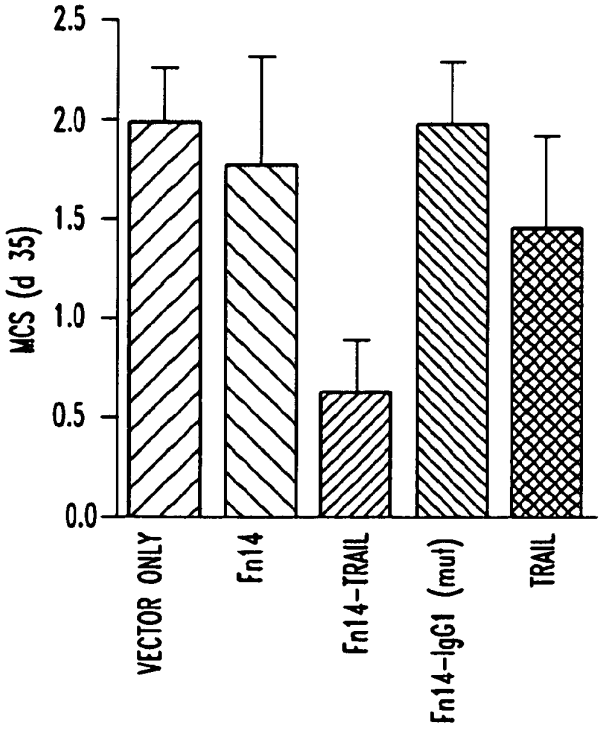

MCS (d 35)
2.5
2.0
1.5
1.0
0.5
0.0
VECTOR ONLY
Fn14
Fn14-TRAIL
Fn14-IgG1 (mut)
TRAIL

FIG.3D

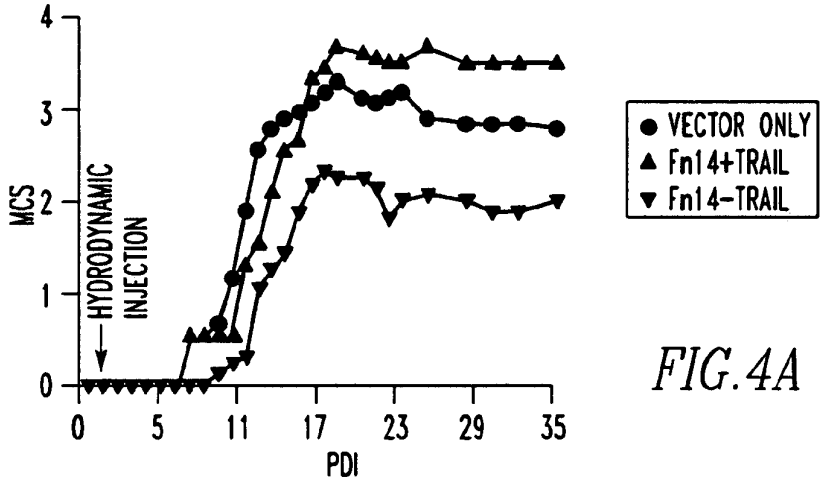

4
3
2
1
0
MCS
HYDRODYNAMIC INJECTION
0
5
11
17
23
29
35
PDI
VECTOR ONLY
Fn14+TRAIL
Fn14-TRAIL

FIG.4A

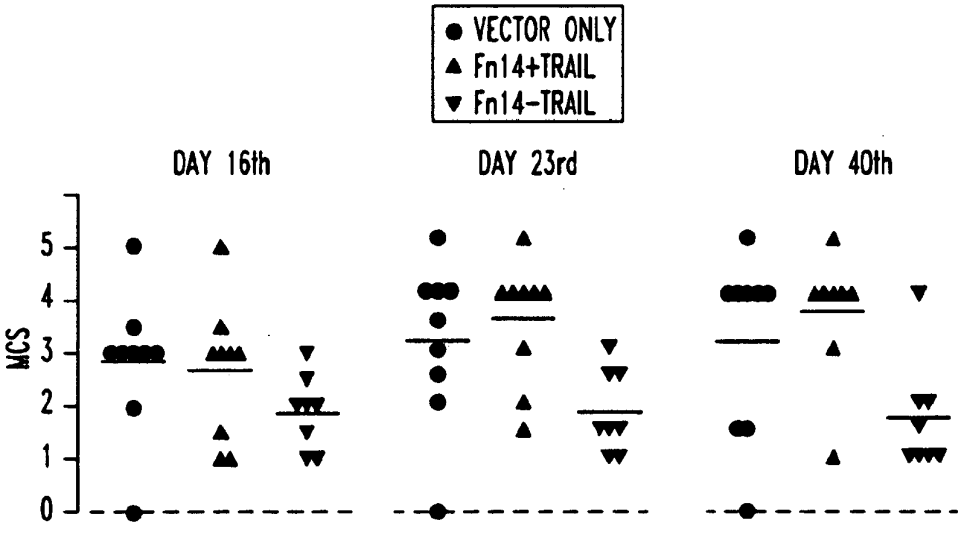

VECTOR ONLY
Fn14+TRAIL
Fn14-TRAIL
DAY 16th
DAY 23rd
DAY 40th
MCS
5
4
3
2
1
0

FIG.4B

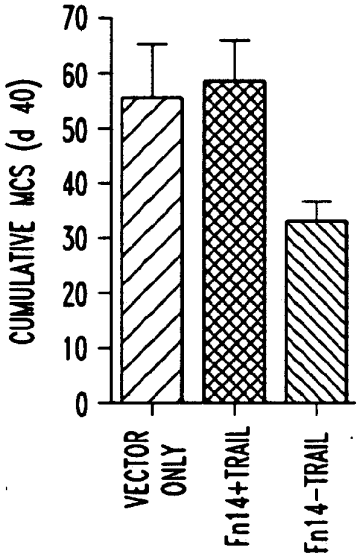

CUMULATIVE MCS (d 40)
70
60
50
40
30
20
10
0
VECTOR ONLY
Fn14+TRAIL
Fn14-TRAIL

FIG. 4C

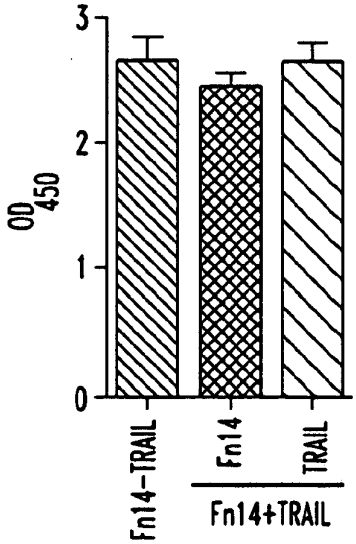

OD450
3
2
1
0
Fn14-TRAIL
Fn14
TRAIL
Fn14+TRAIL

FIG. 4D

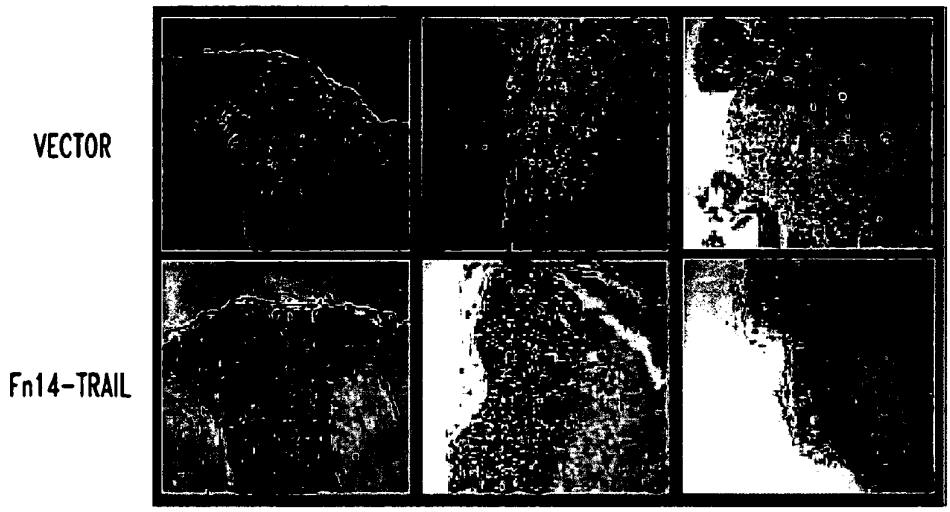


FIG.5A

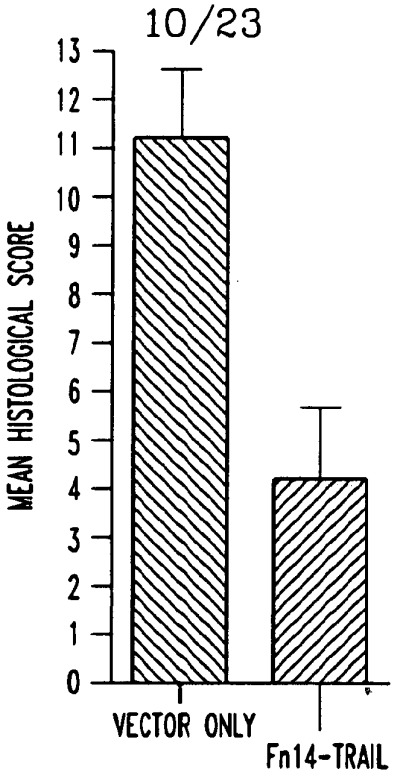

MEAN HISTOLOGICAL SCORE
0
1
2
3
4
5
6
7
8
9
10
11
12
13
VECTOR ONLY
Fn14-TRAIL

FIG.5B

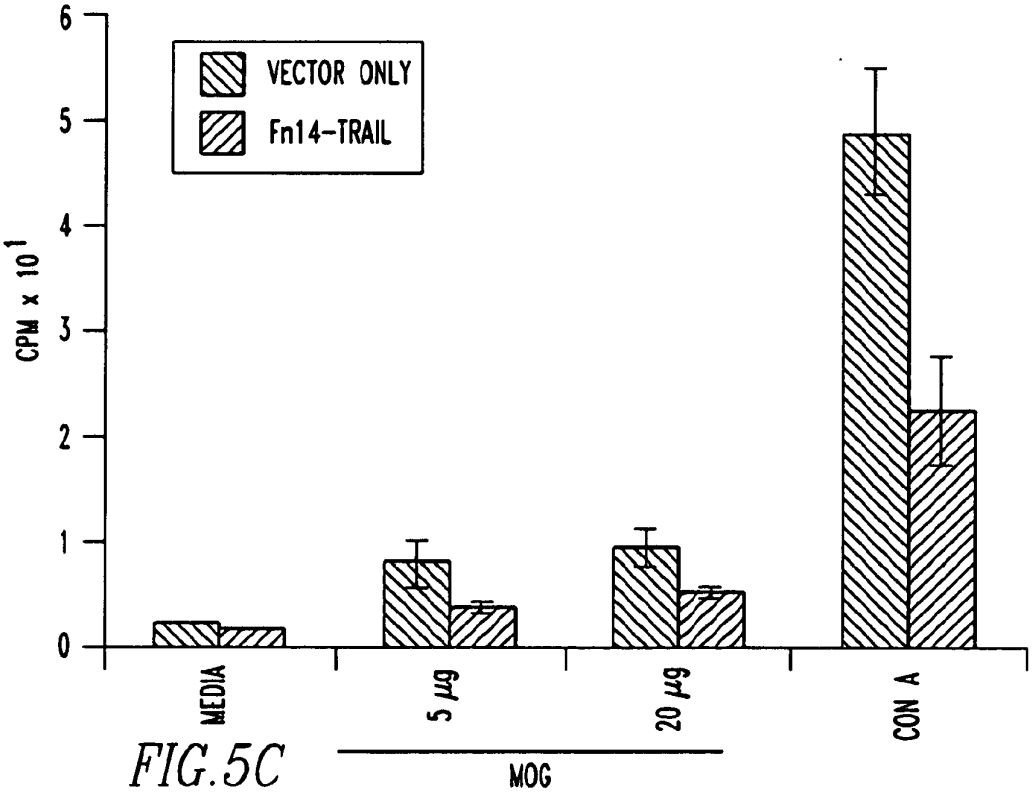

VECTOR ONLY
Fn14-TRAIL
CPM x 10¹
0
1
2
3
4
5
6
MEDIA
5 µg
20 µg
CON A
MOG

FIG.5C

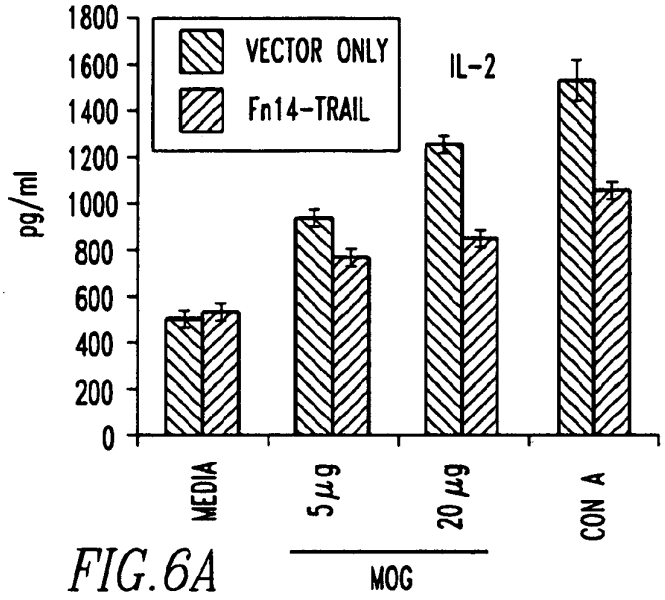

1800
1600
1400
1200
1000
800
600
400
200
0
pg/ml
VECTOR ONLY
Fn14-TRAIL
IL-2
MEDIA
5 μg
20 μg
CON A
MOG

FIG.6A

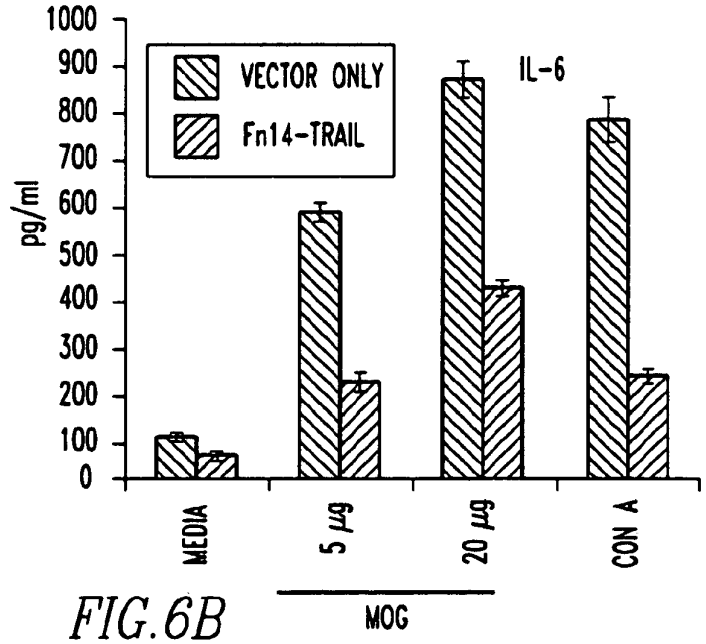

1000
900
800
700
600
500
400
300
200
100
0
pg/ml
VECTOR ONLY
Fn14-TRAIL
IL-6
MEDIA
5 μg
20 μg
CON A
MOG

FIG.6B

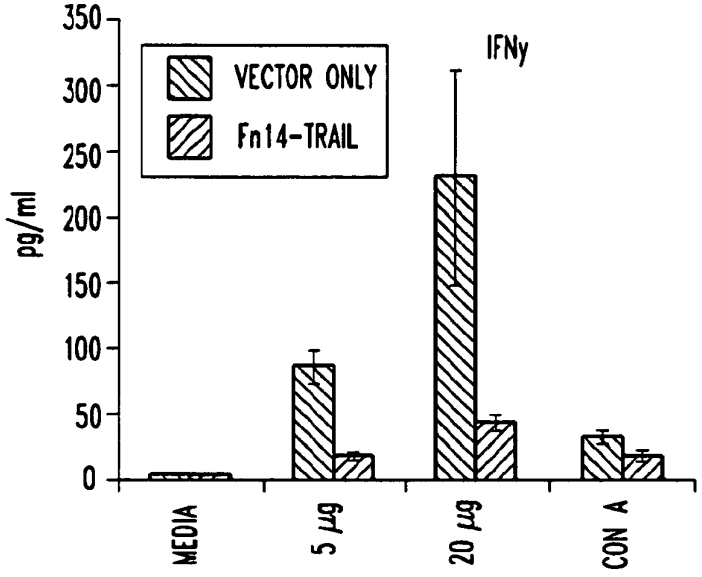

IFNγ
VECTOR ONLY
Fn14-TRAIL
pg/ml
350
300
250
200
150
100
50
0
MEDIA
5 μg
20 μg
CON A
MOG

FIG.6C

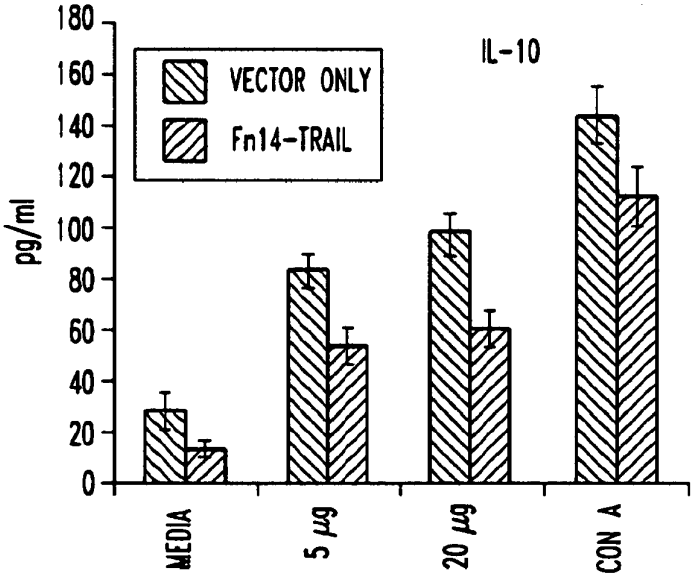

IL-10
VECTOR ONLY
Fn14-TRAIL
pg/ml
180
160
140
120
100
80
60
40
20
0
MEDIA
5 μg
20 μg
CON A
MOG

FIG.6D

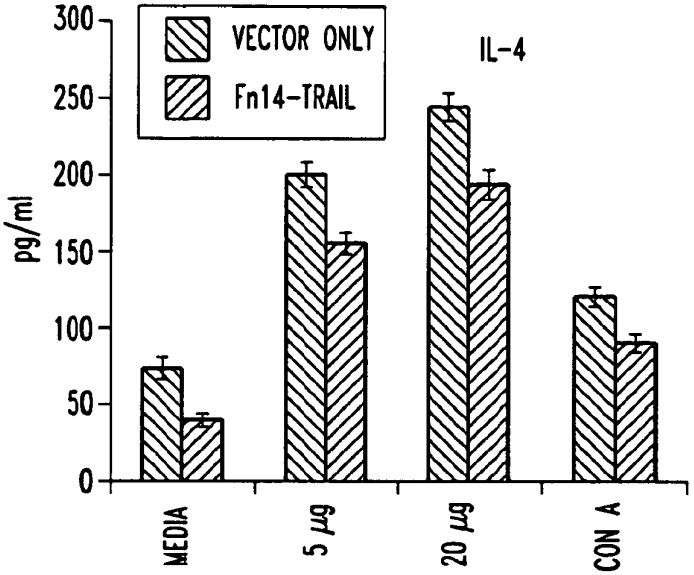

300
250
200
150
100
50
0
pg/ml
VECTOR ONLY
Fn14-TRAIL
IL-4
MEDIA
5 μg
20 μg
CON A
MOG

FIG. 6E

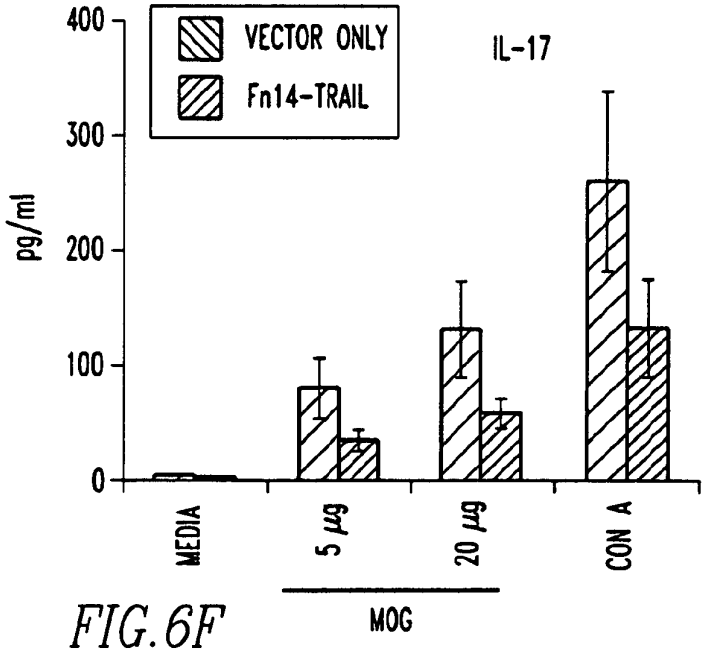

400
300
200
100
0
pg/ml
VECTOR ONLY
Fn14-TRAIL
IL-17
MEDIA
5 μg
20 μg
CON A
MOG

FIG. 6F

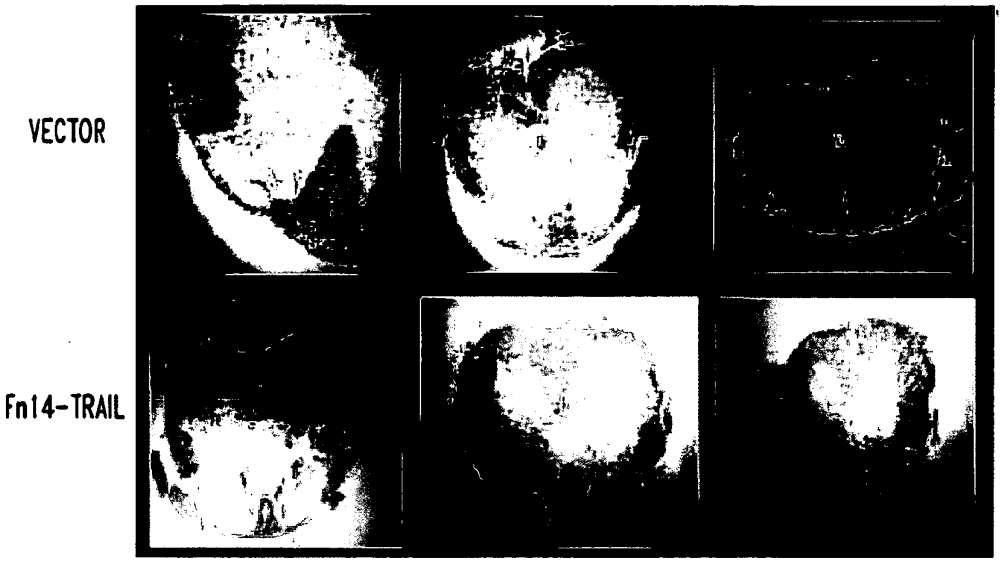

VECTOR
Fn14-TRAIL

FIG. 7A

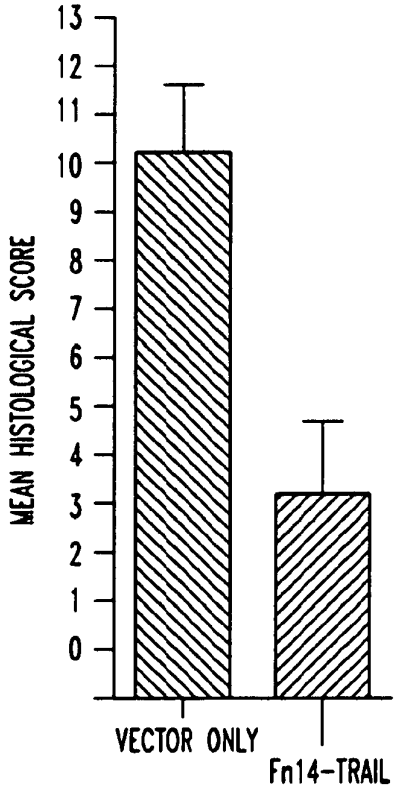

MEAN HISTOLOGICAL SCORE
13
12
11
10
9
8
7
6
5
4
3
2
1
0
VECTOR ONLY
Fn14-TRAIL

FIG. 7B

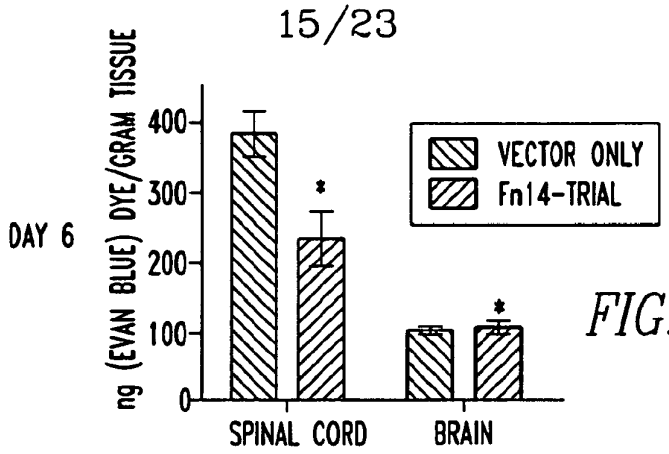


FIG.8A

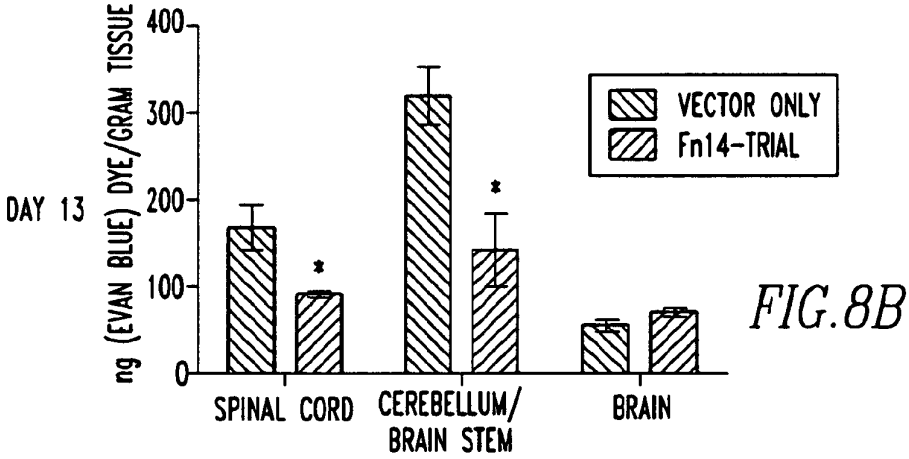


FIG.8B

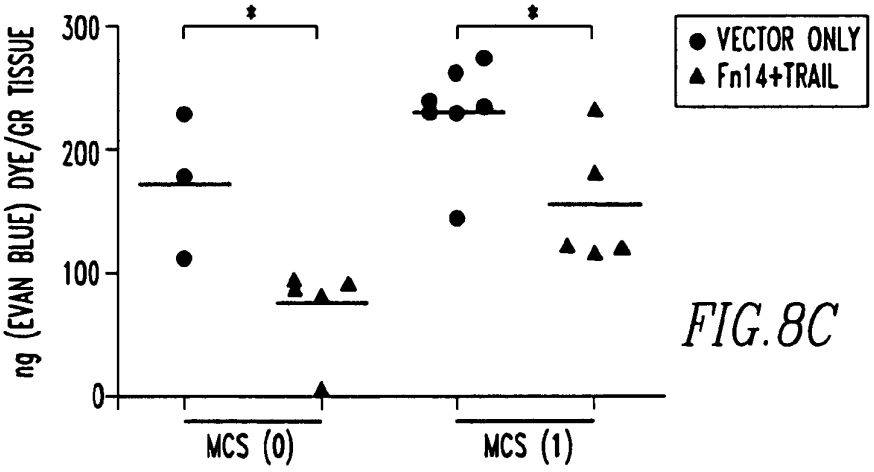


FIG.8C

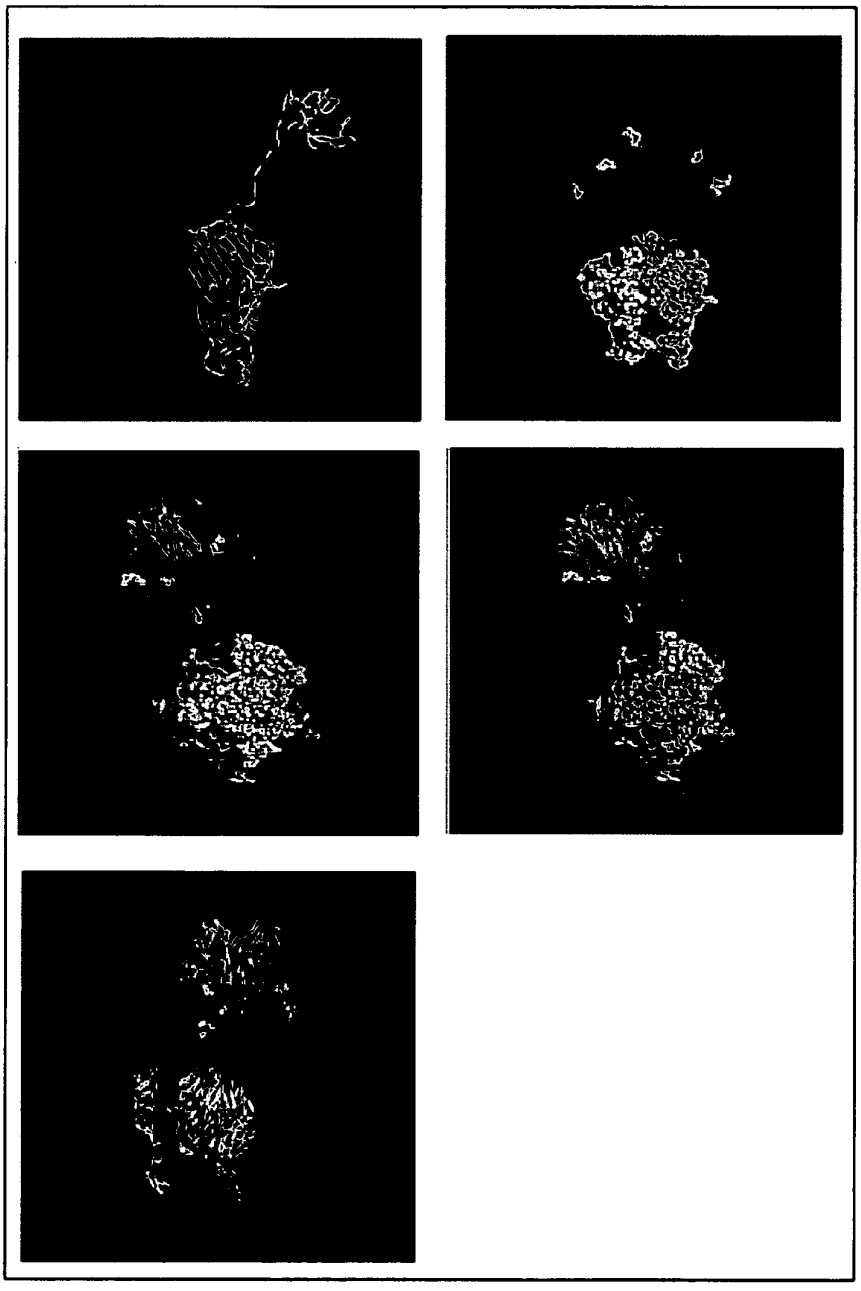


FIG.9

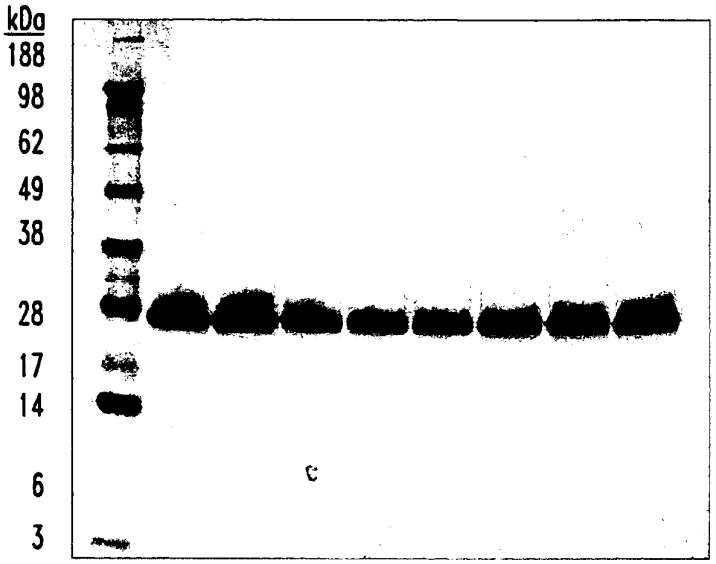

kDa
188
98
62
49
38
28
17
14
6
3

FIG.10

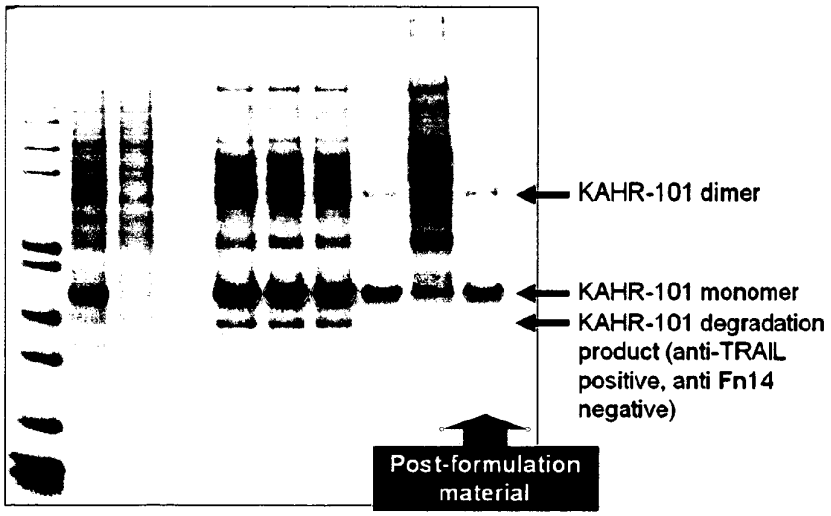

KAHR-101 dimer
KAHR-101 monomer
KAHR-101 degradation product (anti-TRAIL positive, anti Fn14 negative)
Post-formulation material

FIG.11

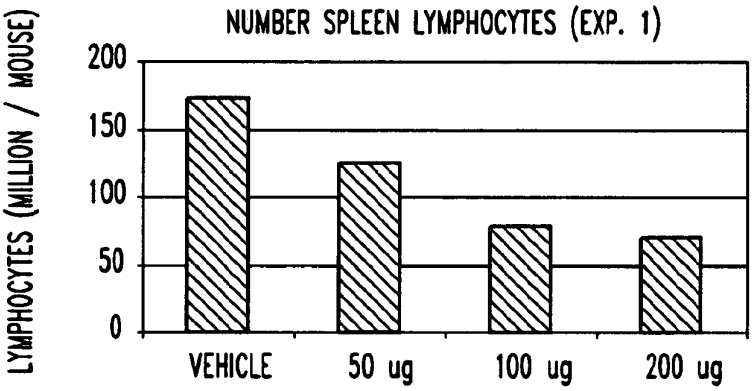


FIG.12A

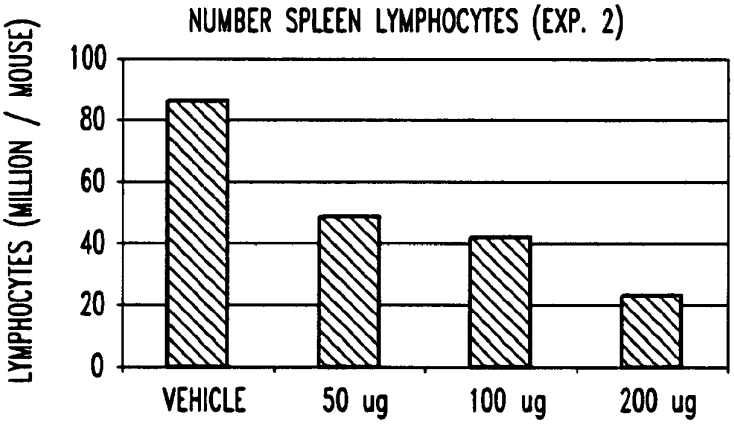


FIG.12B

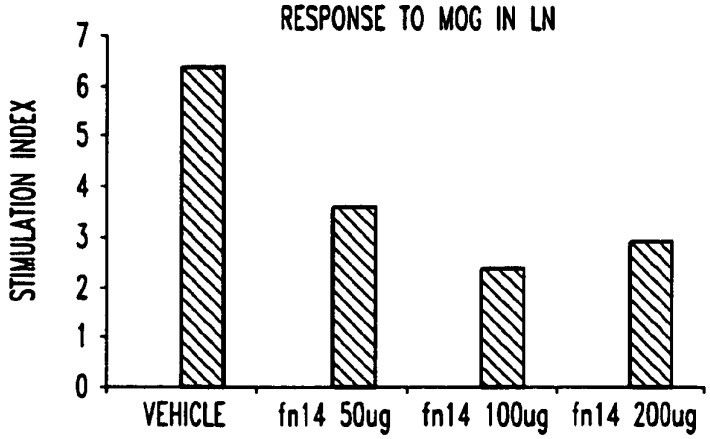


FIG.13

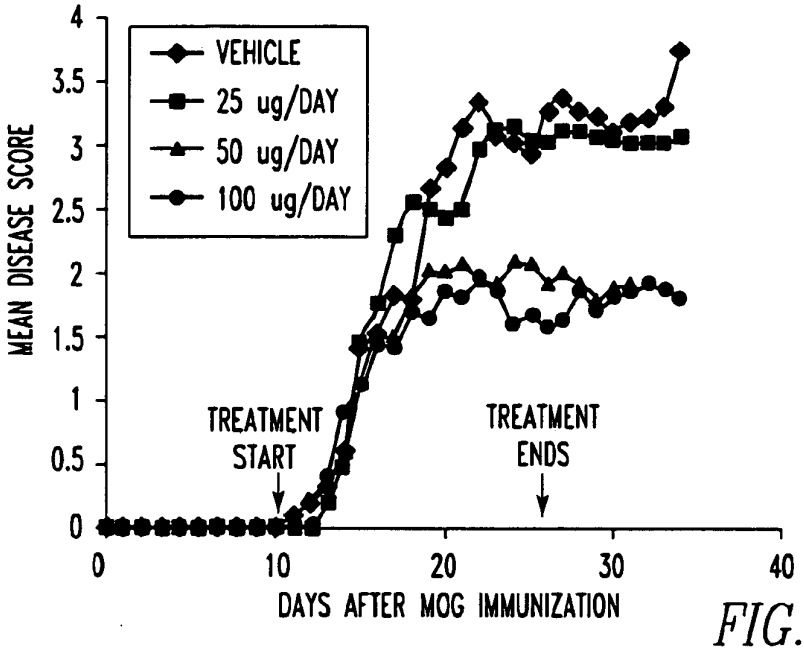


FIG.14A

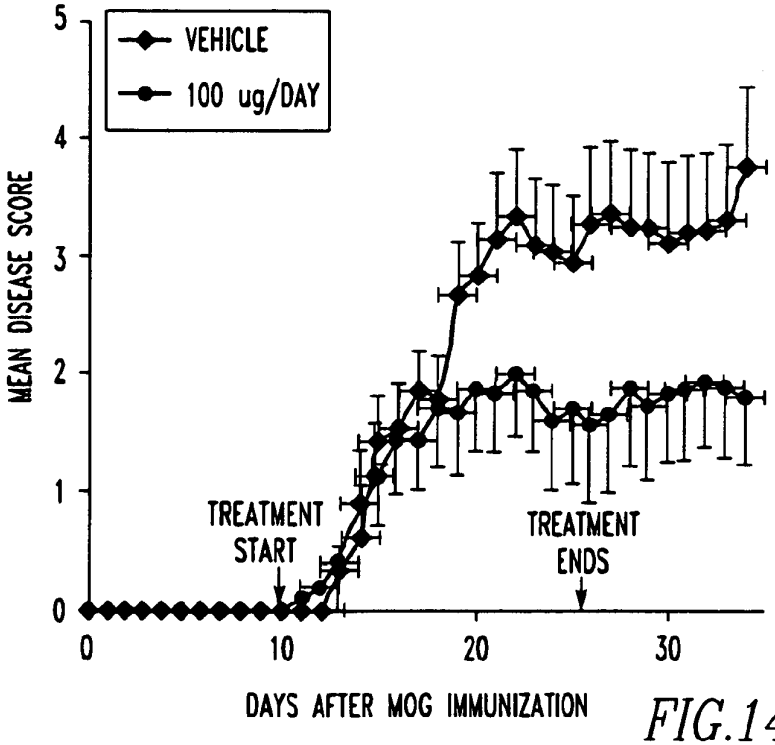


FIG.14B

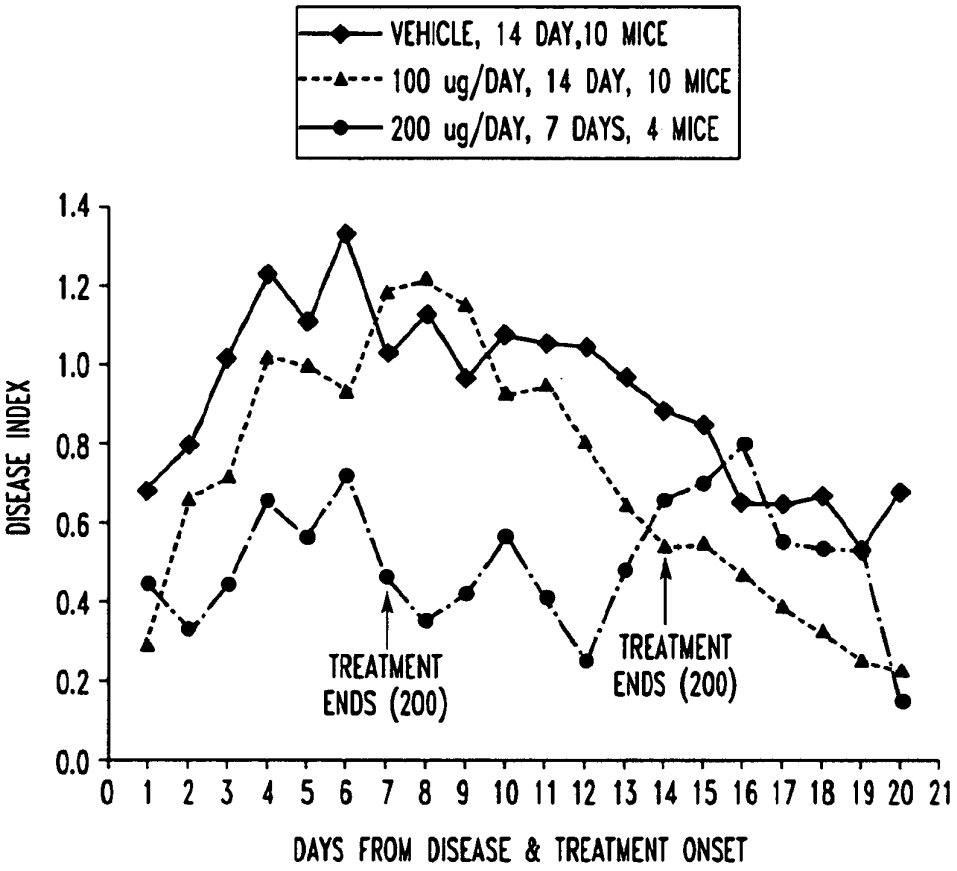

VEHICLE, 14 DAY,10 MICE
100 ug/DAY, 14 DAY, 10 MICE
200 ug/DAY, 7 DAYS, 4 MICE
DISEASE INDEX
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
TREATMENT ENDS (200)
TREATMENT ENDS (200)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
DAYS FROM DISEASE & TREATMENT ONSET

FIG.15

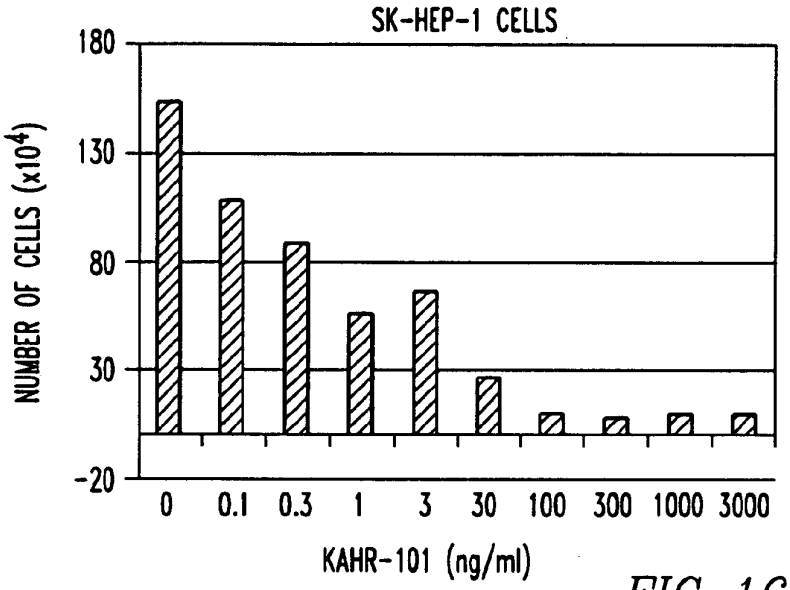


FIG 16A

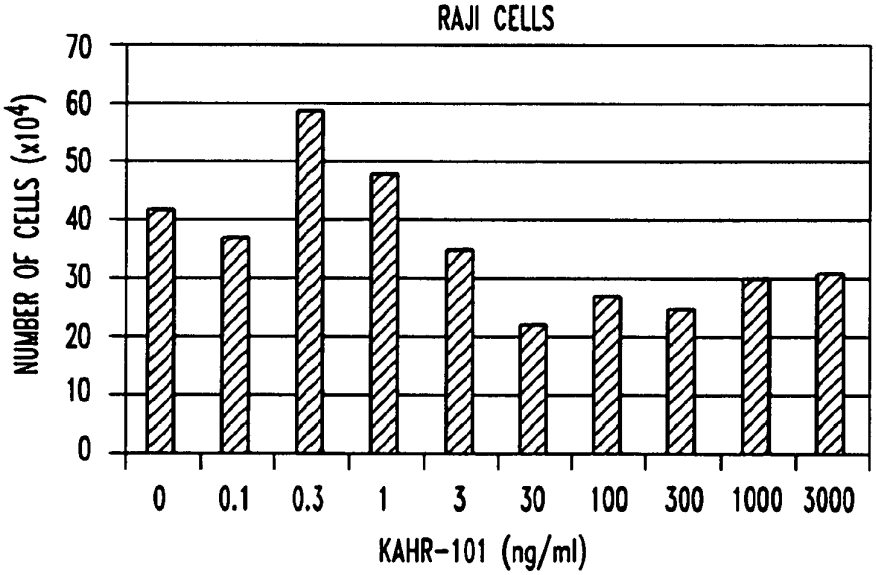


FIG 16B

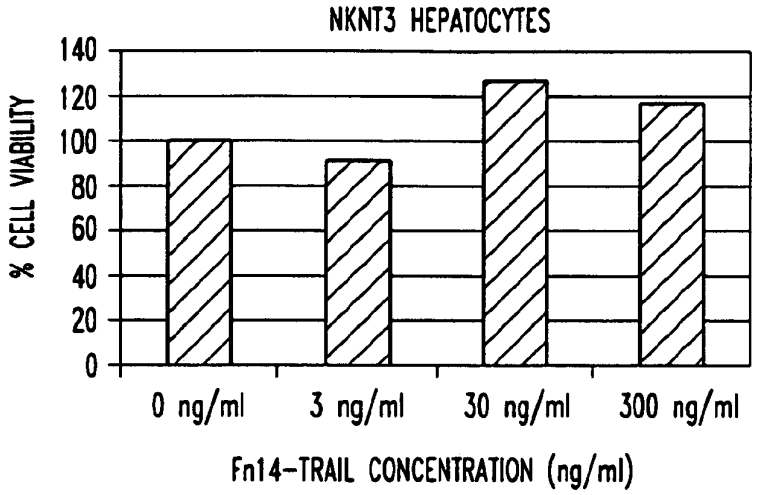


FIG 16C

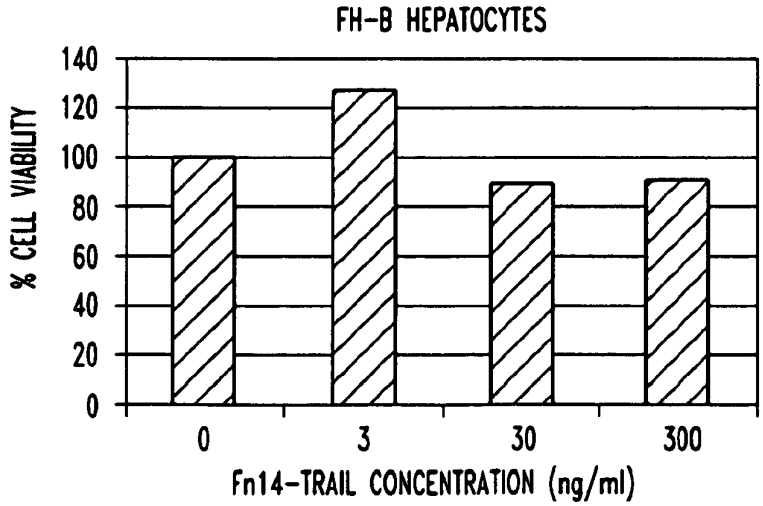


FIG 16D

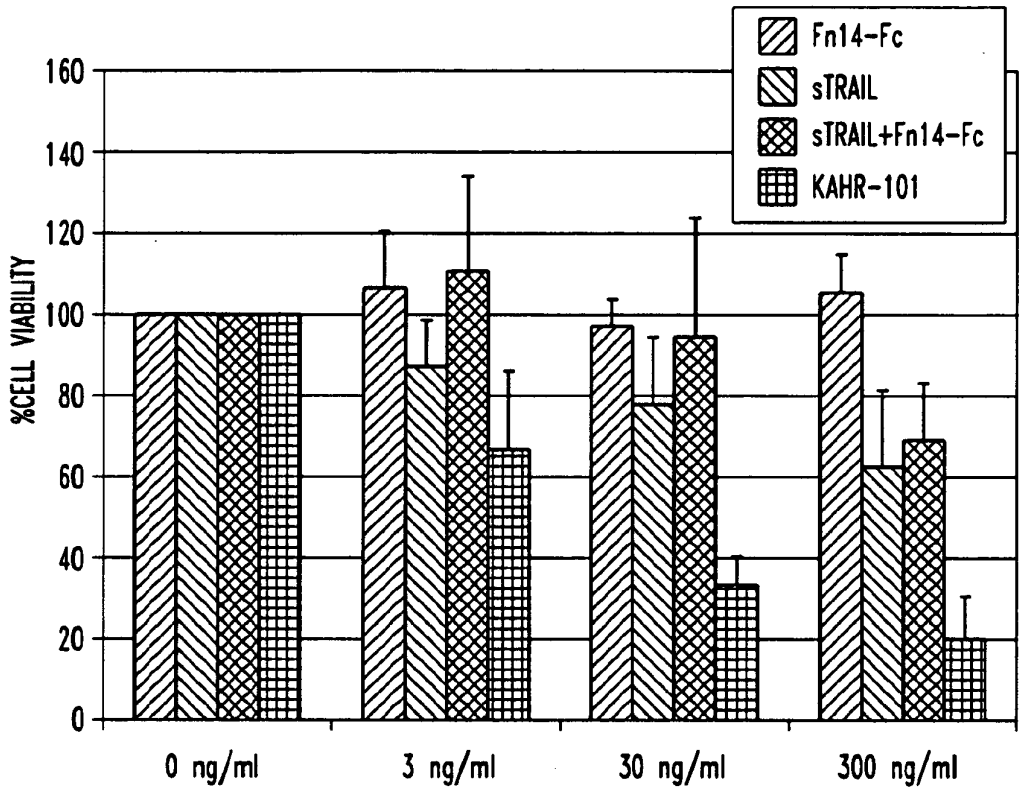

Fn14-Fc
sTRAIL
sTRAIL+Fn14-Fc
KAHR-101
%CELL VIABILITY
160
140
120
100
80
60
40
20
0
0 ng/ml
3 ng/ml
30 ng/ml
300 ng/ml

FIG.17

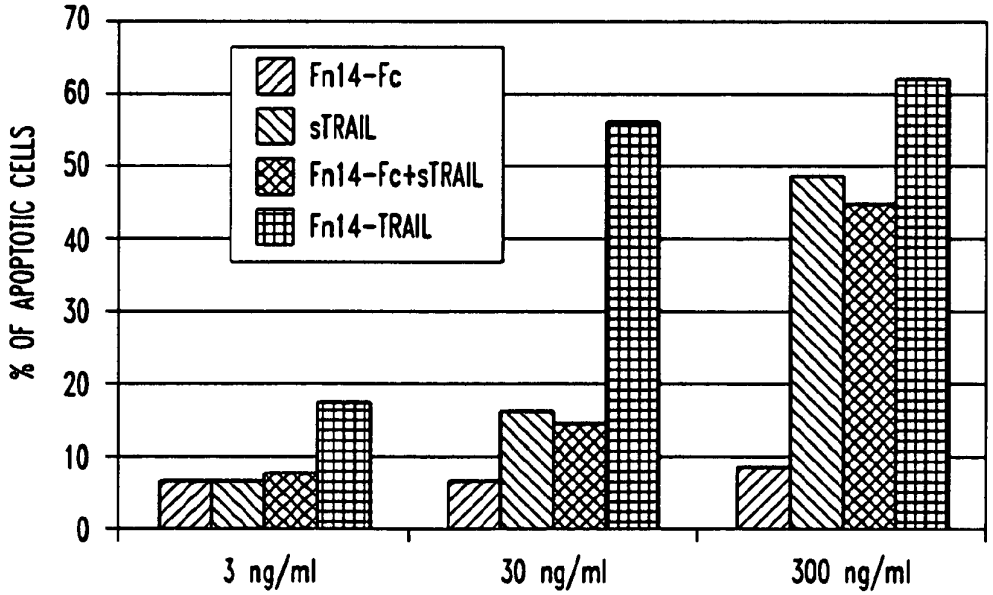

Fn14-Fc
sTRAIL
Fn14-Fc+sTRAIL
Fn14-TRAIL
% OF APOPTOTIC CELLS
70
60
50
40
30
20
10
0
3 ng/ml
30 ng/ml
300 ng/ml

FIG.18