FIG.1a

5merTcf-SV40-Luc reporter construct (CTL501):

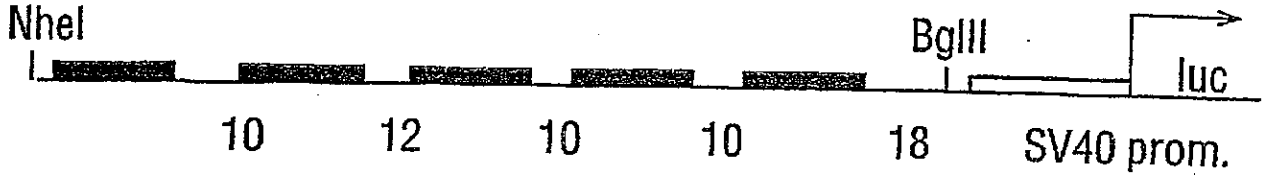


FIG. 1b

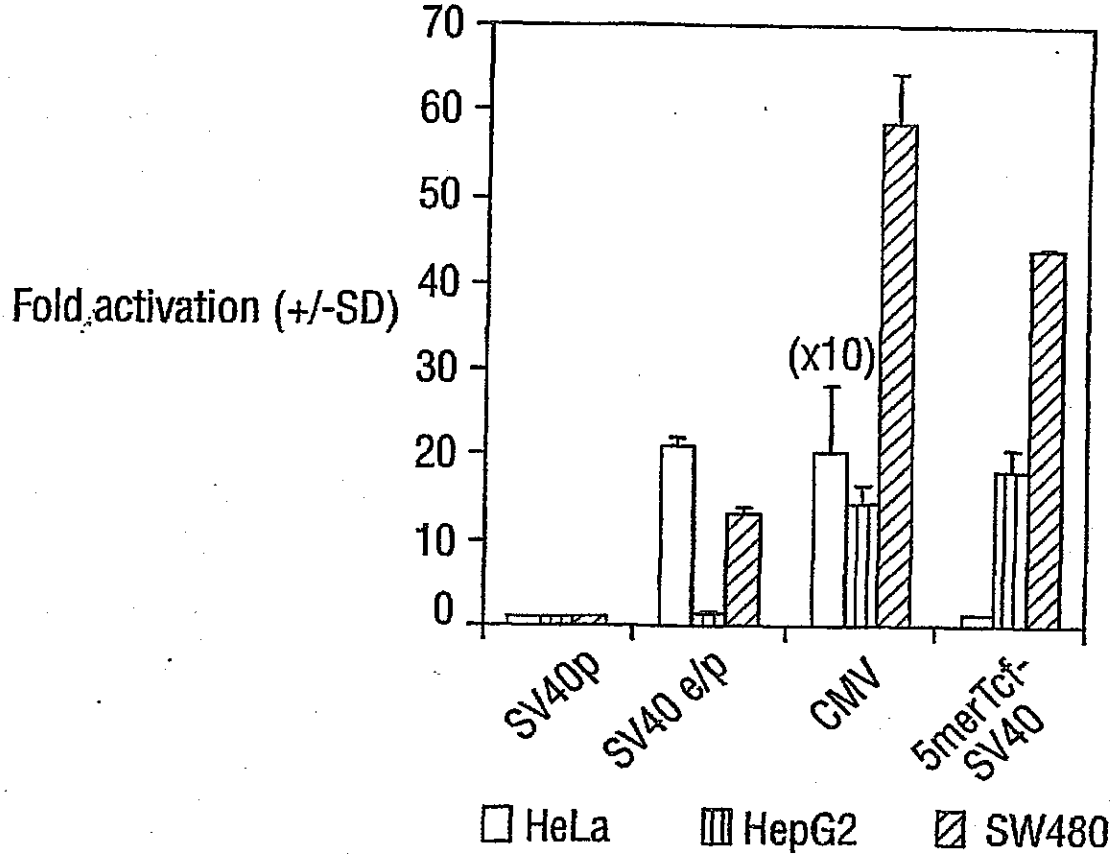


FIG. 1c

5merTcf-SV40 (CTL501) antisense strand

TTGAGATGCAGATCGCAGATCTGATAAAGGTGCATTTAGA*GATCAAAG*
*G*TAGGACTCTT*GATCAAAGG*ACTGAATTCCTT*GATCAAAGG*TGCATTTAG
A*GATCAAAGG*TAGGACTCTTT*GATCAAAGG*GACTAGTAAGCTTGCTAGC
ACGCGTAAGAGCTCGGTACC

FIG.2a

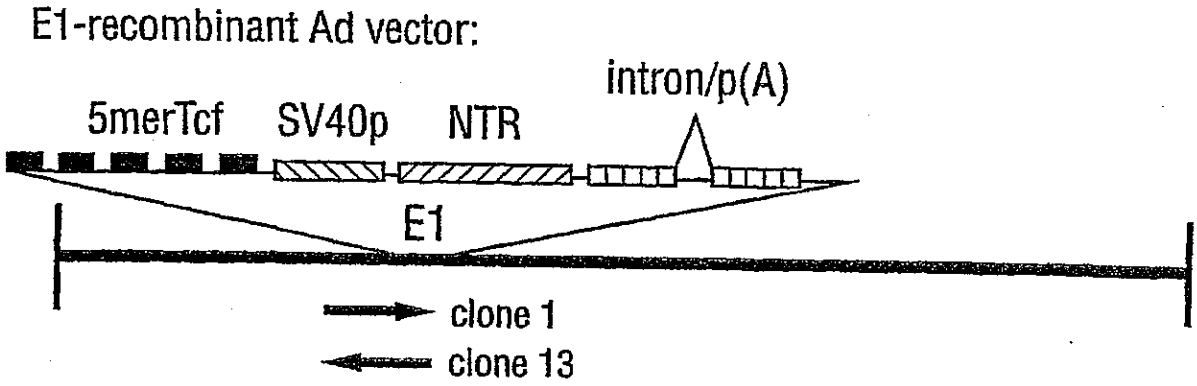

E1-recombinant Ad vector:
intron/p(A)
5merTcf
SV40p
NTR
E1
clone 1
clone 13

FIG. 2b

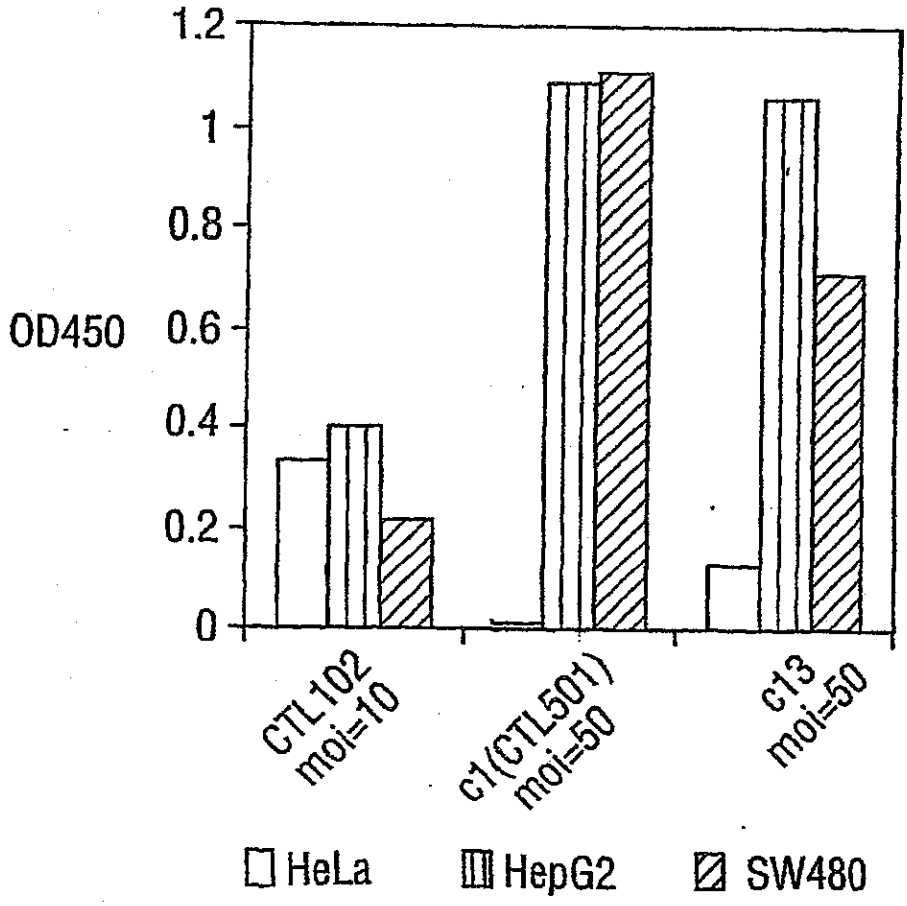

OD450
1.2
1
0.8
0.6
0.4
0.2
0
CTL102 moi=10
c1(CTL501) moi=50
c13 moi=50
HeLa
HepG2
SW480

FIG. 3b

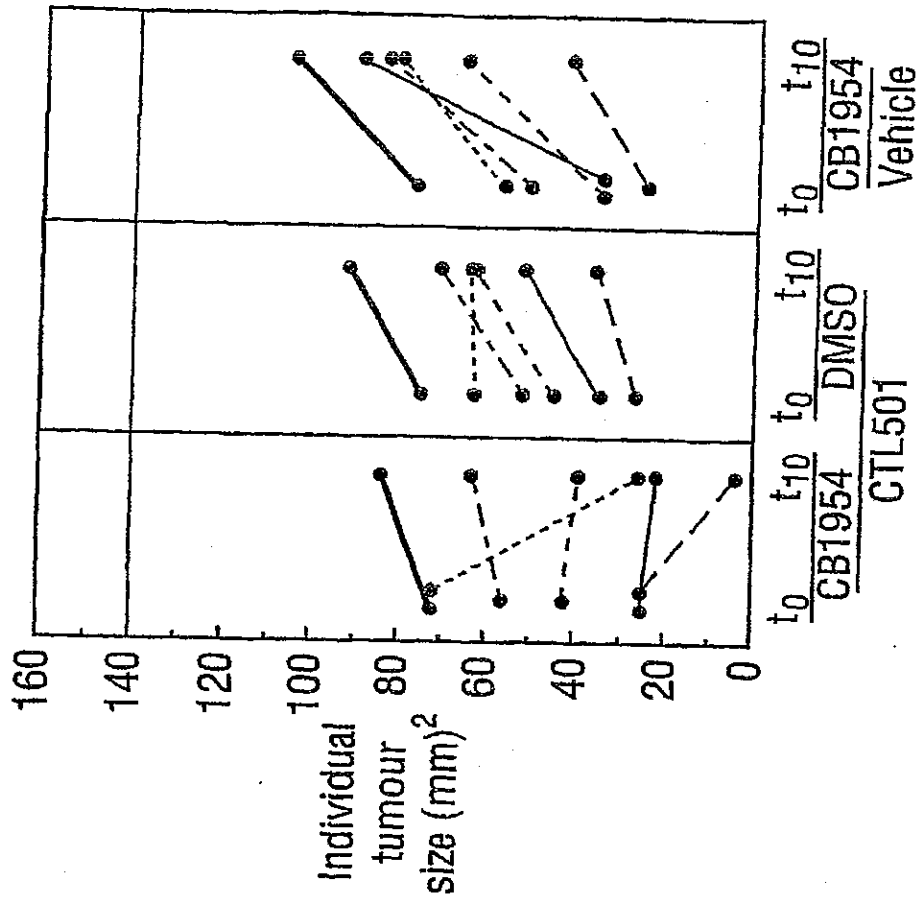

Individual tumour size (mm)^2
160
140
120
100
80
60
40
20
0
t_0 / CB1954 t_{10} / CTL501
t_0 / DMSO t_{10}
t_0 / CB1954 t_{10} / Vehicle

FIG. 3a

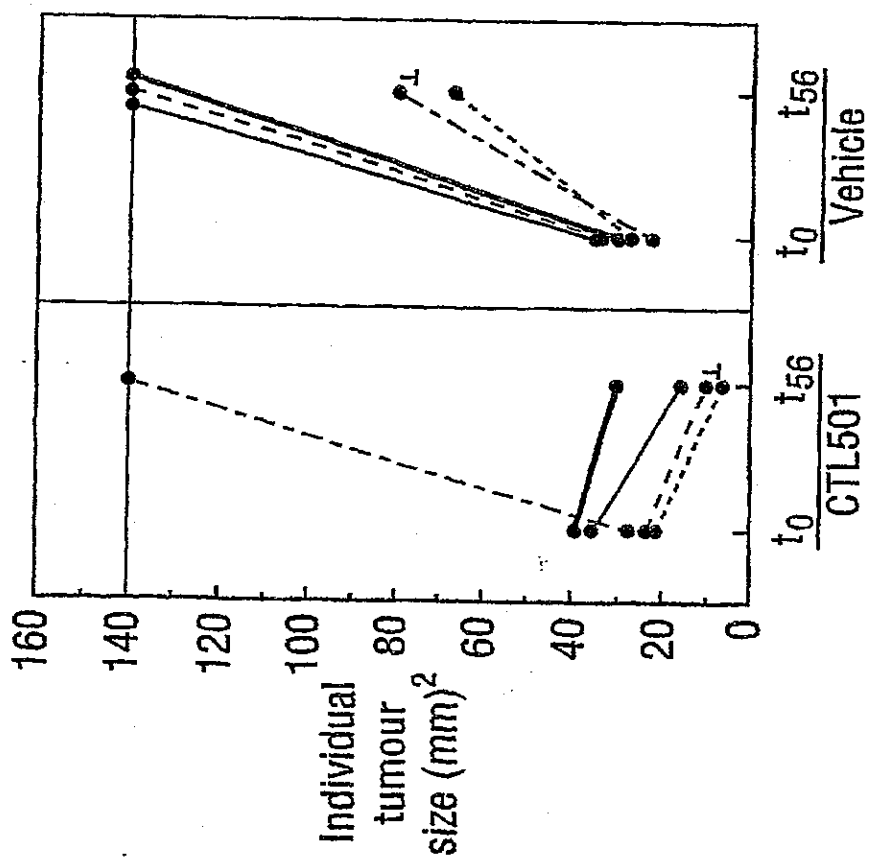

Individual tumour size (mm)^2
160
140
120
100
80
60
40
20
0
t_0 / CTL501 t_{56}
t_0 / Vehicle t_{56}

FIG. 4

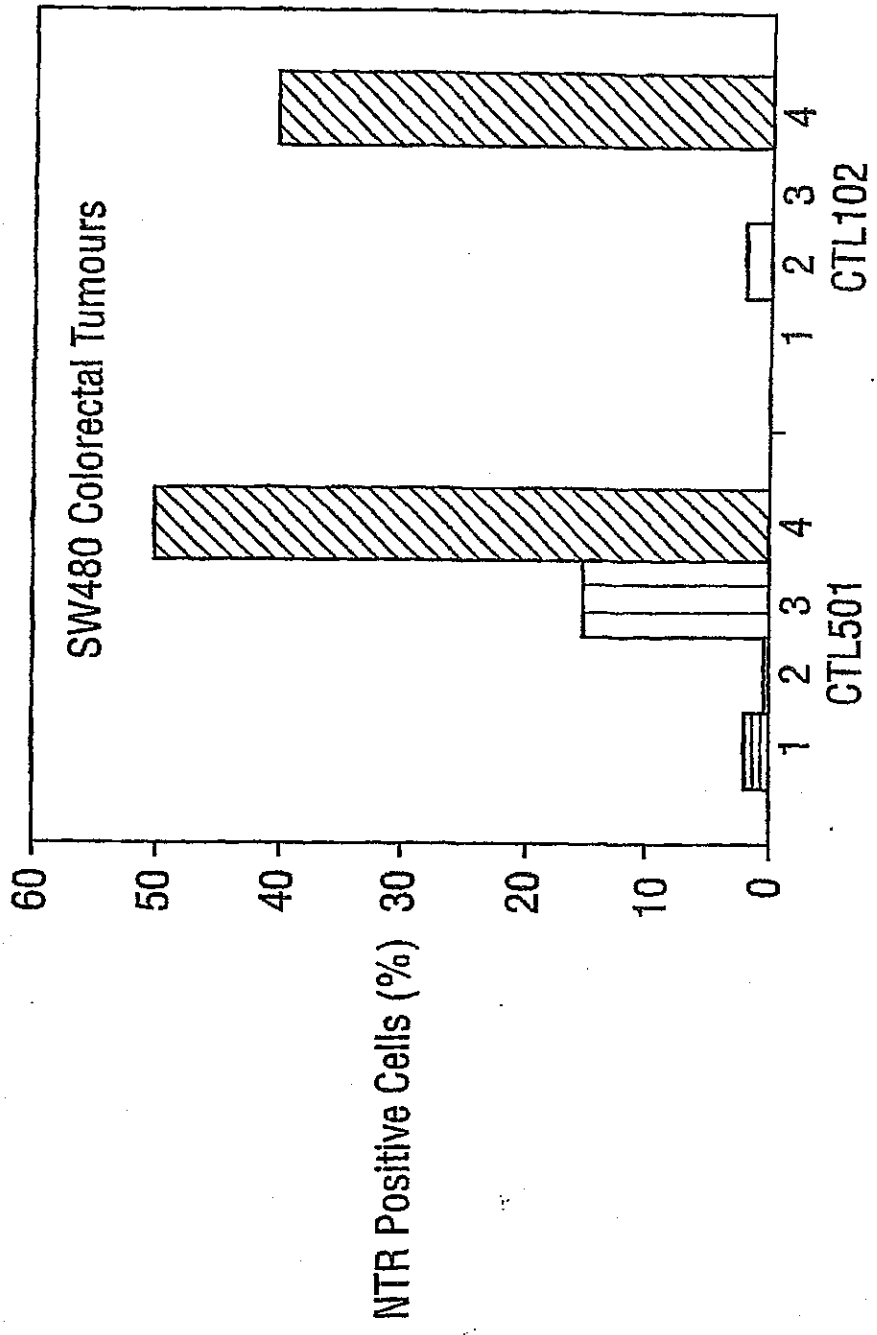

SW480 Colorectal Tumours
NTR Positive Cells (%)
0
10
20
30
40
50
60
1
2
3
4
CTL501
1
2
3
4
CTL102

FIG. 5

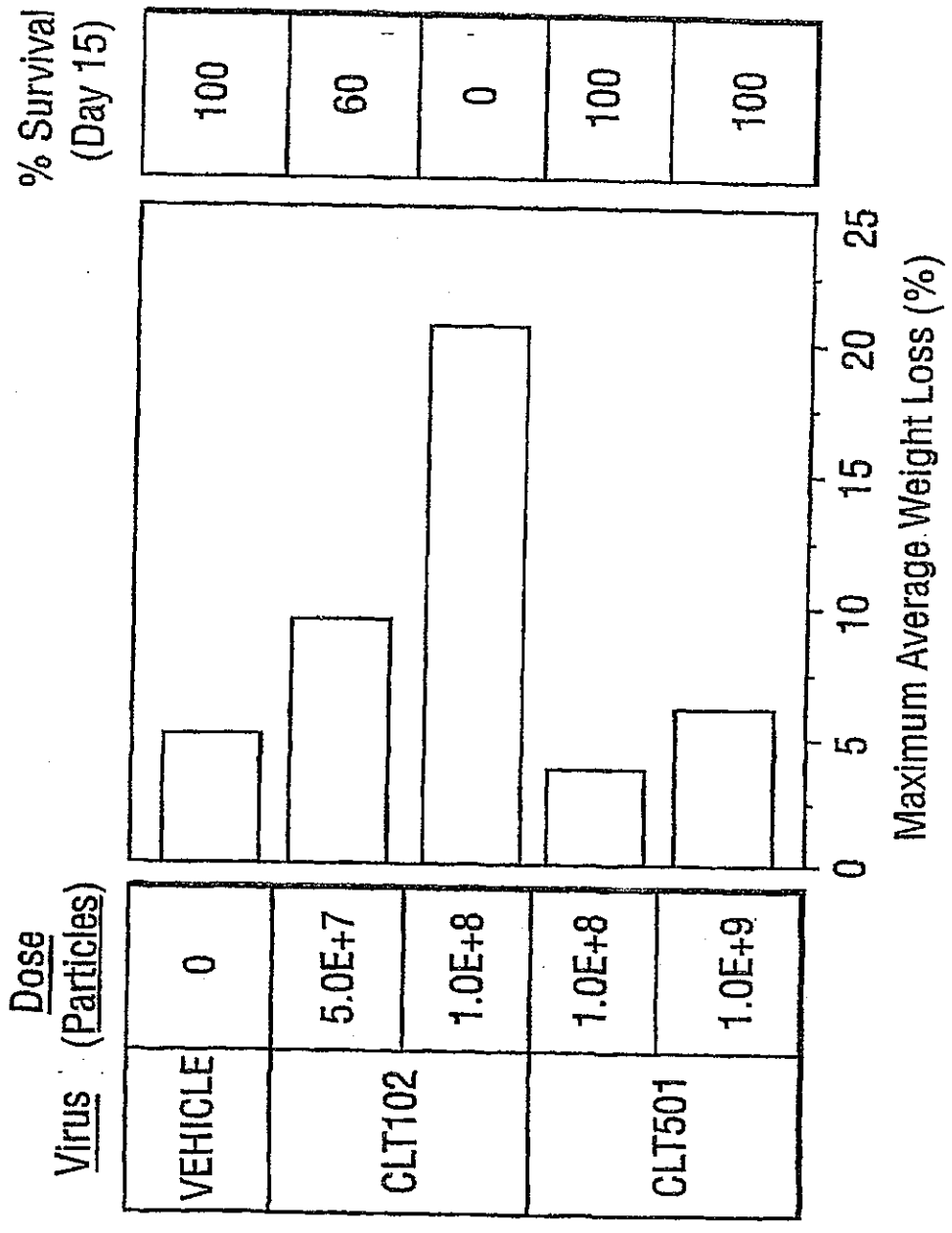

% Survival (Day 15)
100
60
0
100
100
Maximum Average Weight Loss (%)
0
5
10
15
20
25
Dose (Particles)
Virus
VEHICLE
0
CLT102
5.0E+7
1.0E+8
CLT501
1.0E+8
1.0E+9

FIG. 6a

5merTcf-EIBTATA-Luc reporter construct (CTL502):

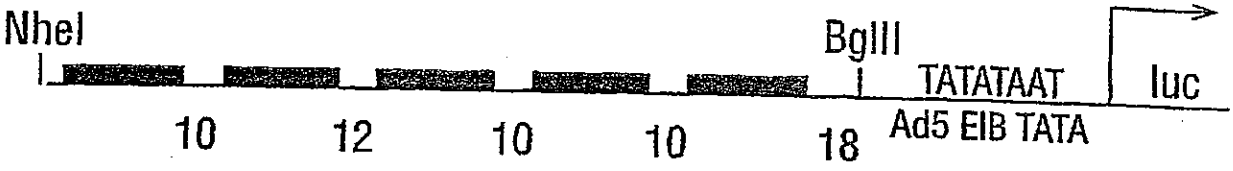


FIG. 6b

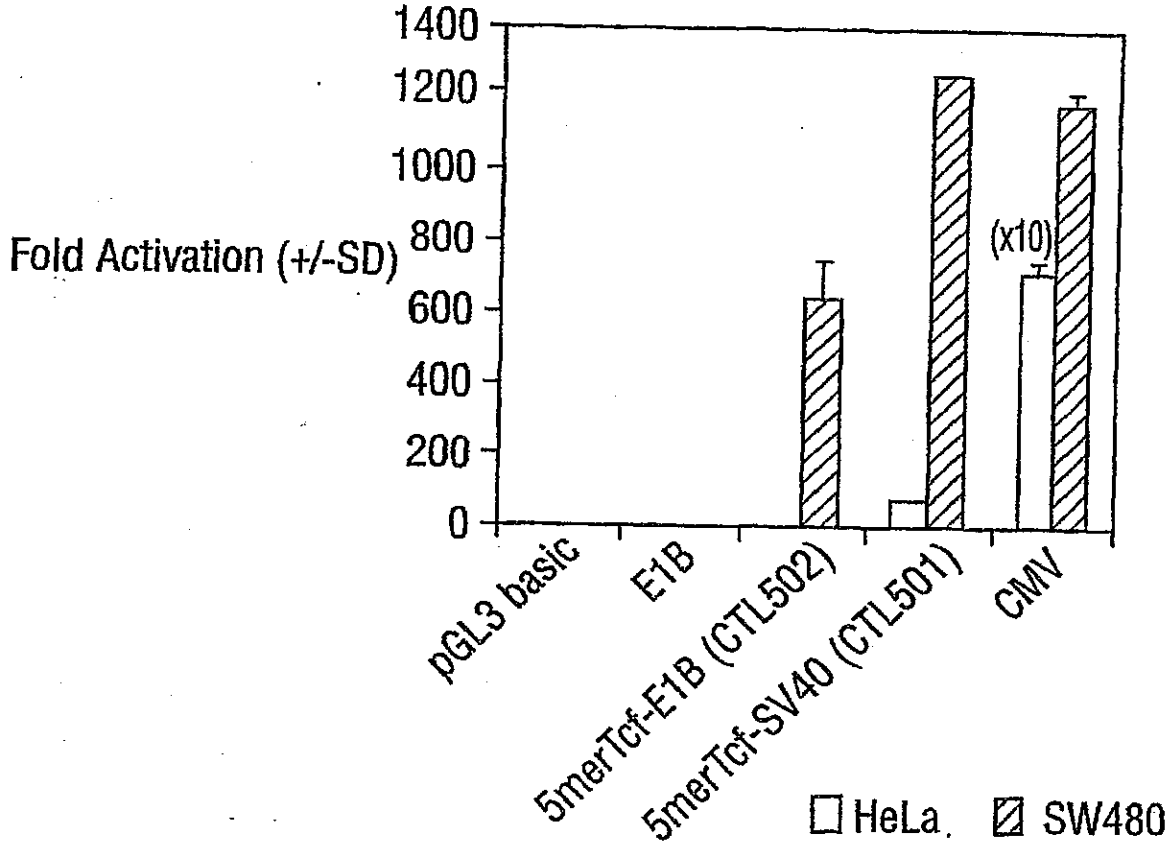


FIG. 6c

EIBTATA clone 2 antisense strand

GGATGCCAAGCTTTTTAGCTTCCTTAGCTCCTGAAAATCTCGCCAAGCTGA

TGAATTCGAGCTGGCGC*ATTATATA*CCCTCTAGAGTCGACGGATCGAGATC

TCGAGCCCGGGCTAGCACGCGTAAGAGCTCGGTACC

7/23

FIG. 7

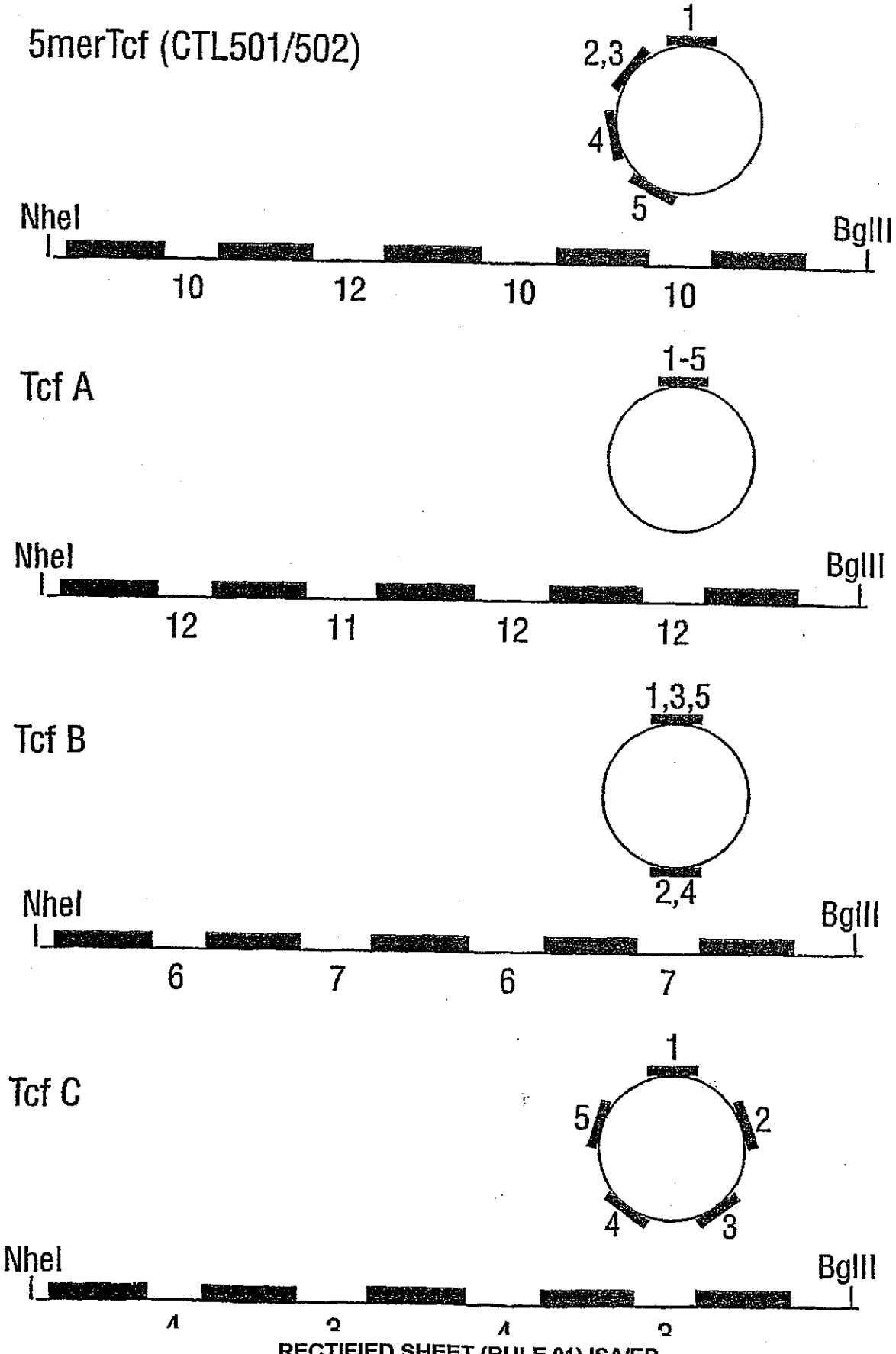

5merTcf (CTL501/502)
1
2,3
4
5
NheI
BglII
10
12
10
10
Tcf A
1-5
NheI
BglII
12
11
12
12
Tcf B
1,3,5
2,4
NheI
BglII
6
7
6
7
Tcf C
1
5
2
4
3
NheI
BglII

FIG. 8a

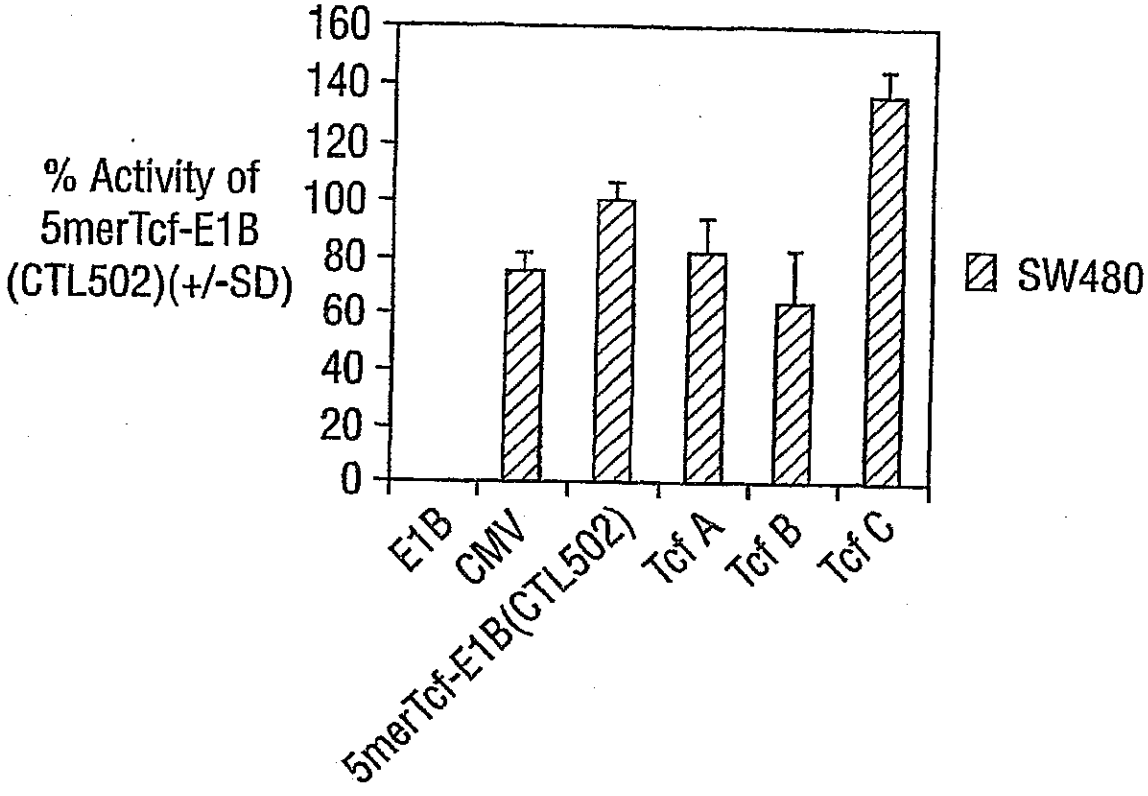

% Activity of
5merTcf-E1B
(CTL502)(+/-SD)
160
140
120
100
80
60
40
20
0
E1B
CMV
5merTcf-E1B(CTL502)
Tcf A
Tcf B
Tcf C
SW480

FIG. 8b

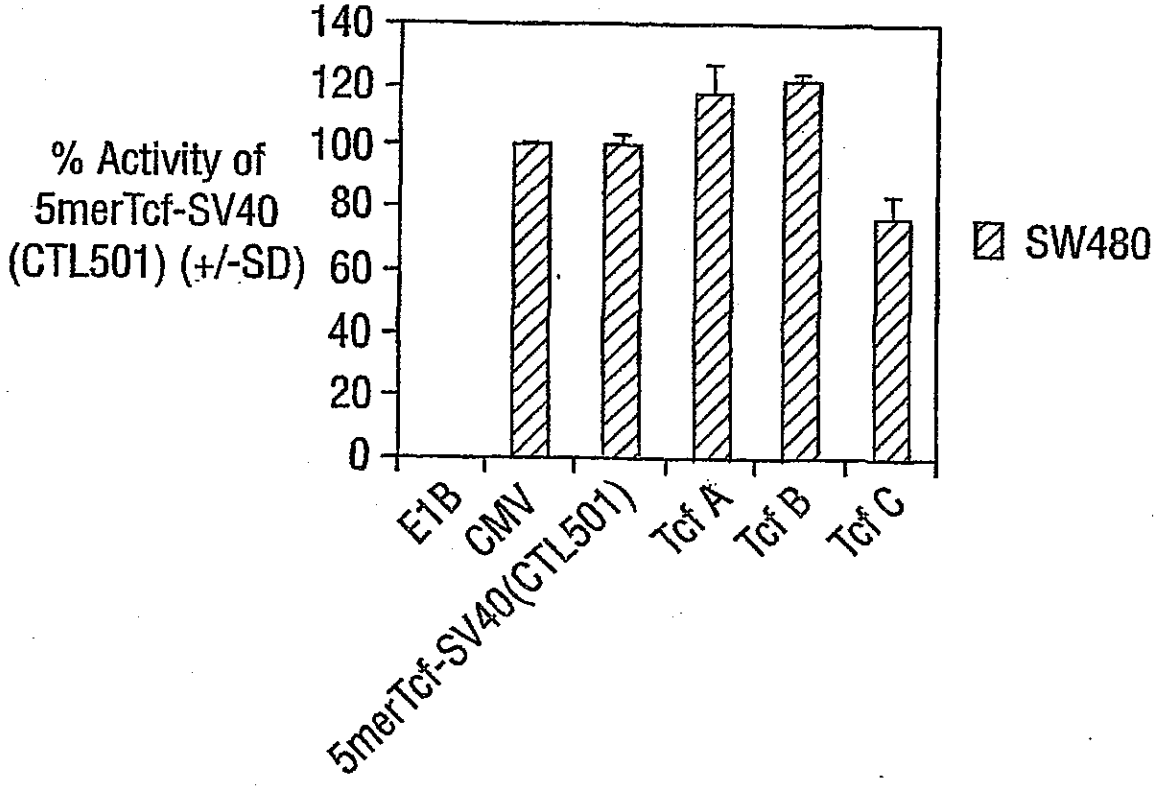

% Activity of
5merTcf-SV40
(CTL501) (+/-SD)
140
120
100
80
60
40
20
0
E1B
CMV
5merTcf-SV40(CTL501)
Tcf A
Tcf B
Tcf C
SW480

FIG. 9a

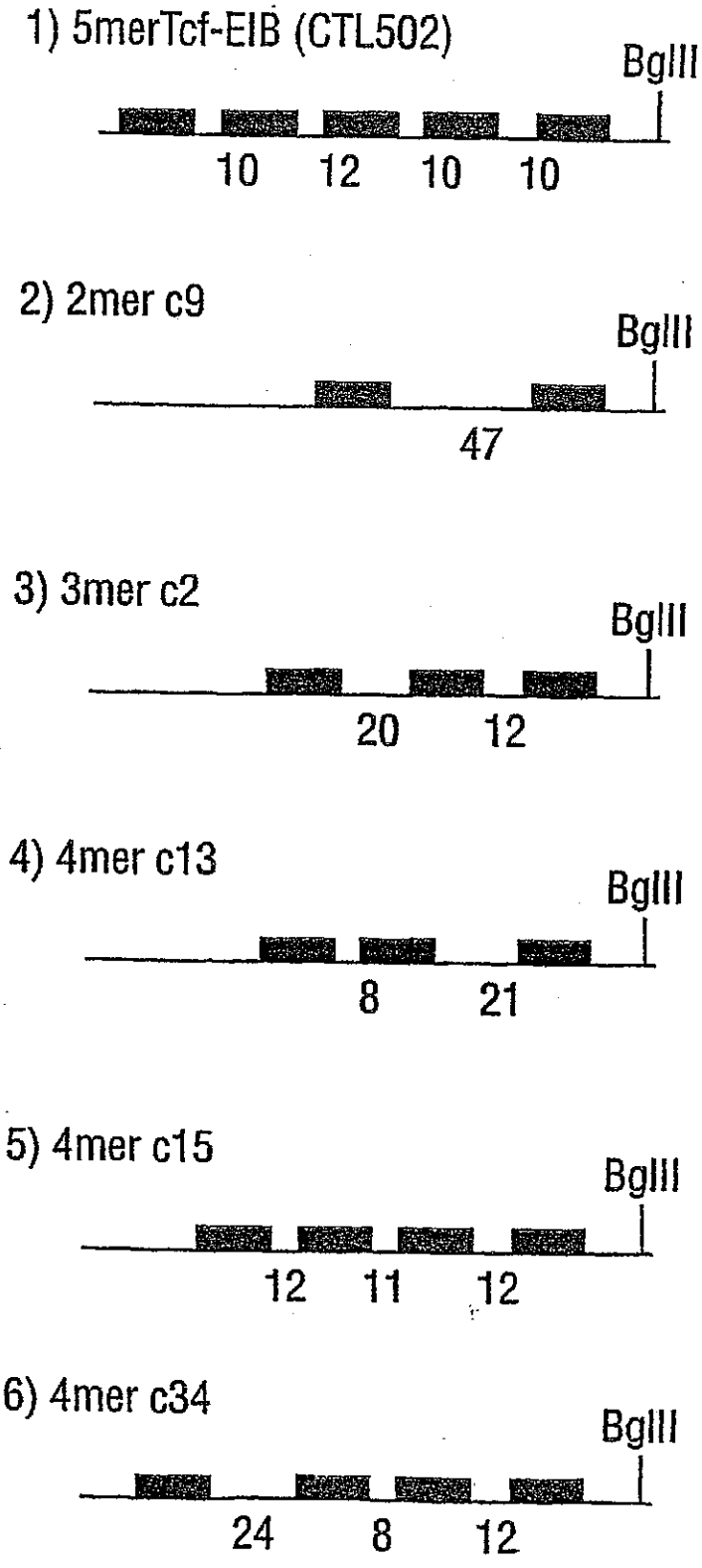

1) 5merTcf-EIB (CTL502)
BglII
10 12 10 10
2) 2mer c9
BglII
47
3) 3mer c2
BglII
20 12
4) 4mer c13
BglII
8 21
5) 4mer c15
BglII
12 11 12
6) 4mer c34
BglII
24 8 12

FIG.9b

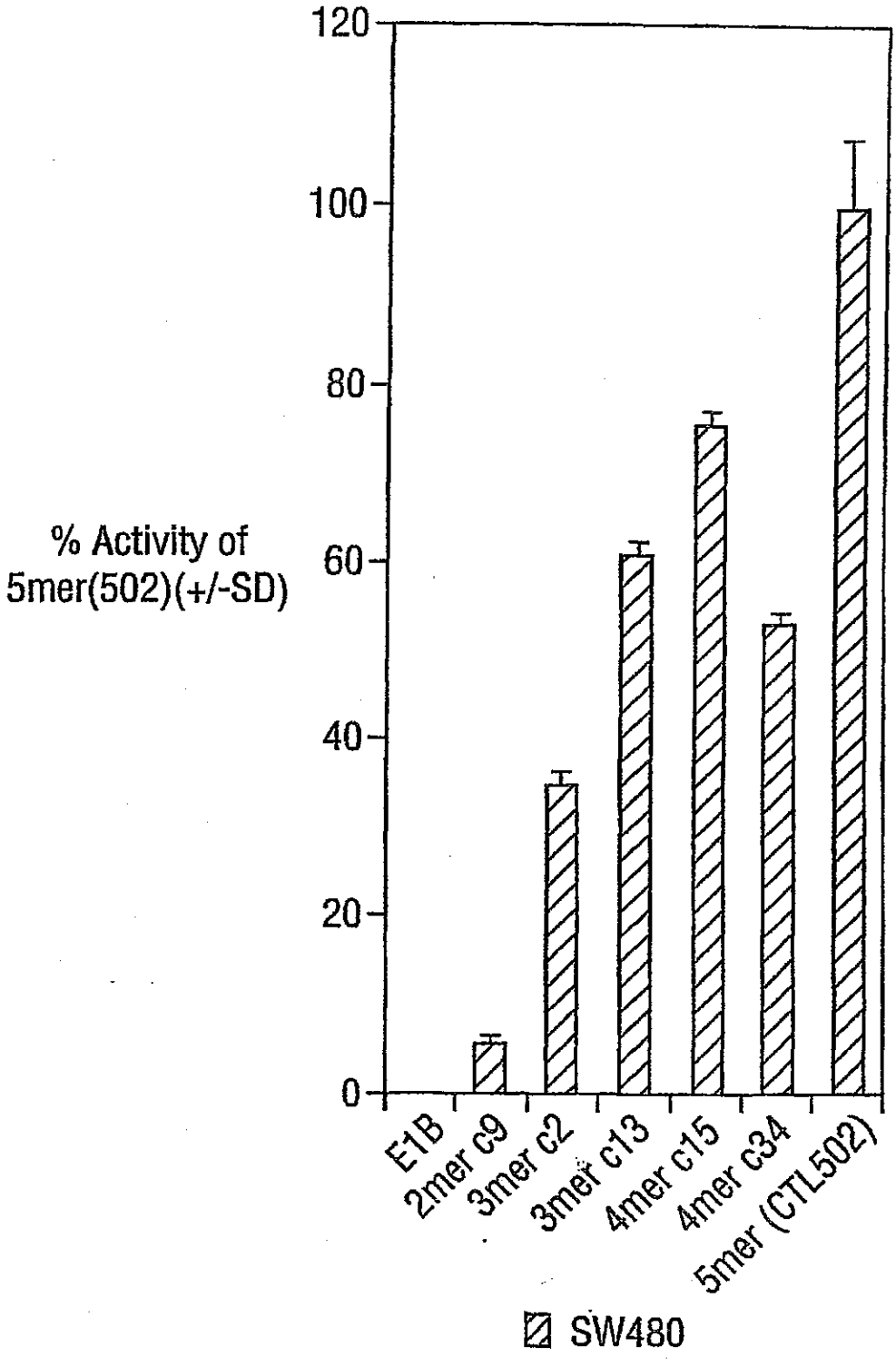

120
100
80
60
40
20
0
% Activity of
5mer(502)(+/-SD)
E1B
2mer c9
3mer c2
3mer c13
4mer c15
4mer c34
5mer (CTL502)
SW480

FIG. 9c (i)

2merTcf-E1BTATA clone 9 antisense strand

ATCGAGATCTGATAAAGGTGCATTTAGA*GATCAAAGG*TAGGTTACTCTTTG

AATTCAGGTGCAATTTAAAGGTAGGAAACTCTT*GATCAAAGG*ACTAGTAAG

CTTGCTAGCACGCGTAAGAGCTCGGTACC

3merTcf-E1BTATA clone 2 antisense strand

ATCGAGATCTGATAAAGGTGCATTTAGA*GATCAAAGG*TAGGTTACT

CTT*GATCAAAGG*ACTGAATTCAGGAAACTCTT*GATCAAAGG*ACTAGTAAGCT

TGCTAGCACGCGTAAGAGCTCGGTACC

3merTcf-E1BTATA clone 13 antisense strand

ATCGAGATCTGATAAAGGTGCATTTAGA*GATCAAAGG*TAGTCACAGGTGC

AATTTAGA*GATCAAAGG*TAGGAATT*GATCAAAGG*ATAGTAAGCTTGCTAGC

ACGCGTAAGAGCTCGGTACC

4merTcf-E1BTATA clone 15 antisense strand

ATCGAGATCTGATAAAGGTTCTT*GATCAAAGG*ACTGAATTCCTT*GATCAAA*

*GG*TGCAATTTAGA*GATCAAAGG*TAGGAAACTCTT*GATCAAAGG*ACTAGTAA

GCTTGCTAGCACGCGTAAGAGCTCGGTACC

FIG. 9c (ii)

4merTcf-E1BTATA clone 34 antisense strand

ATCGAGATCGATAAAGGTGCATTTAGAC*GATCAAAGG*TAGGTTACTCTT*GA*

*TCAAAGG*AATTCCTT*GATCAAAGG*TGCAATTTAGAGAAGGTAGGAAACTCT

T*GATCAAAGG*ACTAGTAAGCTTGCTAGCACGCGTAAGAGCTCGGTACC

FIG.10a

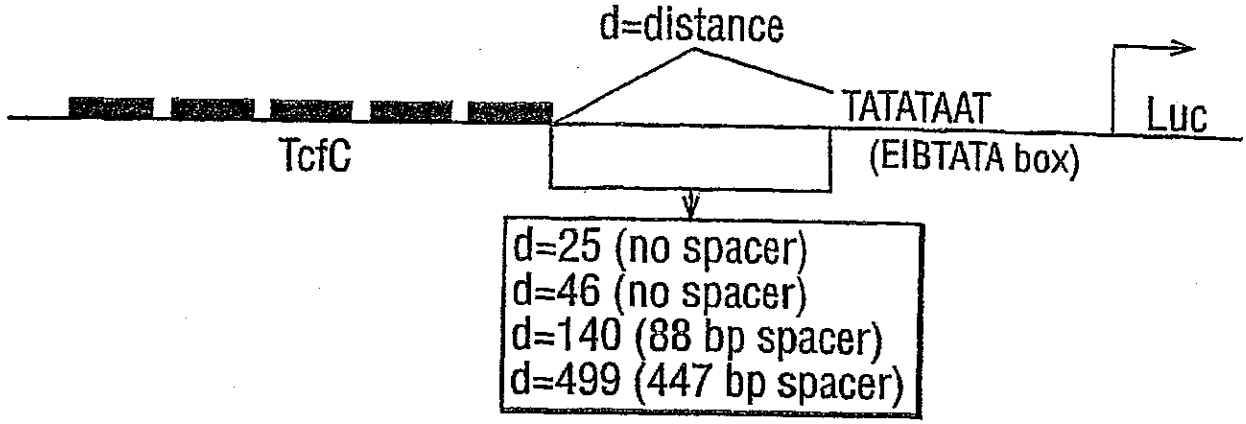


FIG.10b

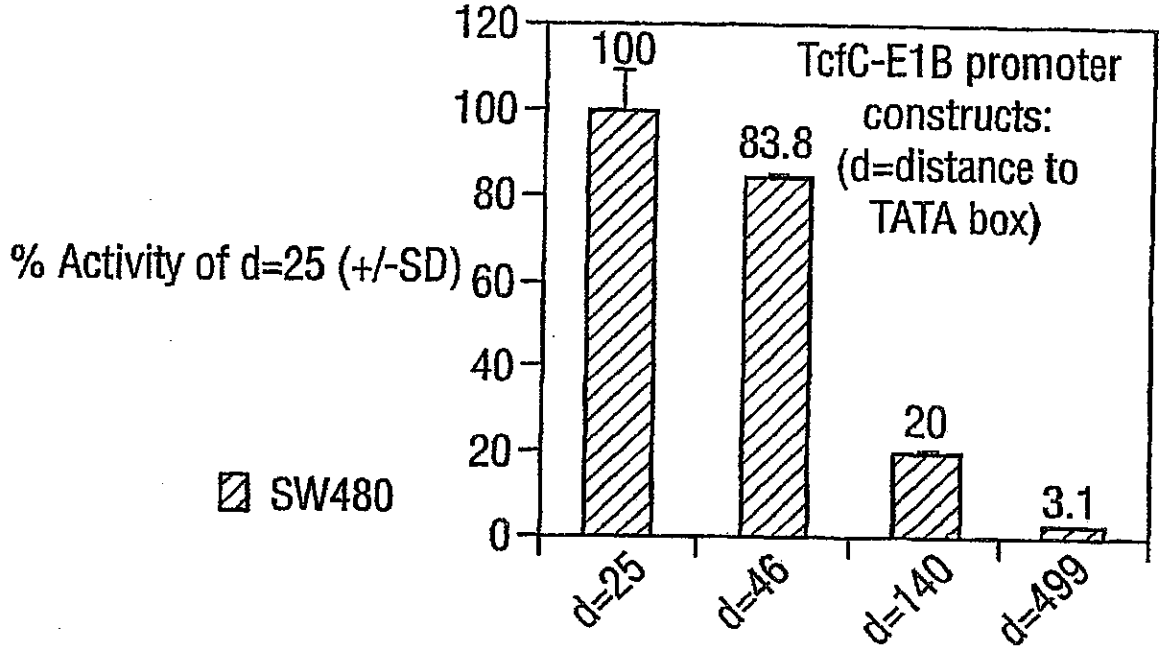


FIG.10c

/TcfC-EIBTATA (d=25) clone 6 antisense strand

TACCAACAGTACCGGAATGCCAAGCTAGCTTTTTAGCTTCCTTAGCTCCTG

AAAATCTCGCCAAGCTGATGAATTCGAGCTGGCGCATTATATACCCTCTG

ATAAAGGTGCATTTAGA*GATCAAAGG*TAT*GATCAAAGG*ACTT*GATCAAAGG*T

GA*GATCAAAGG*TATT*GATCAAAGG*ACTAGAGCTTACTTAGATCGCAGATCTC

GAGCCCGGGCTAGCACGCGTAAGAGCTCGGTACCTATCG

FIG.11

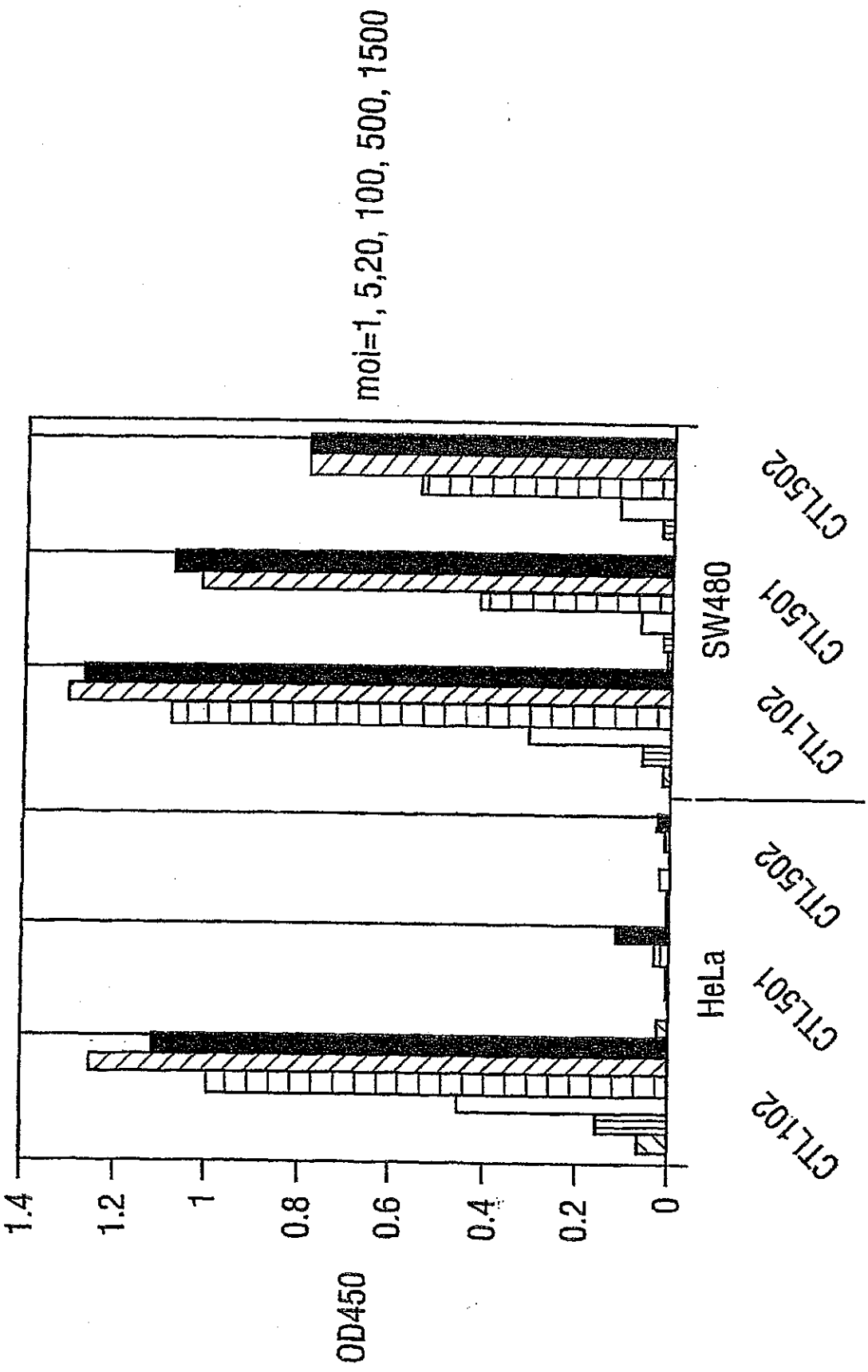

moi=1, 5,20, 100, 500, 1500
SW480
HeLa
CTL102
CTL501
CTL502
CTL102
CTL501
CTL502
1.4
1.2
1
0.8
0.6
0.4
0.2
0
OD450

FIG.12a

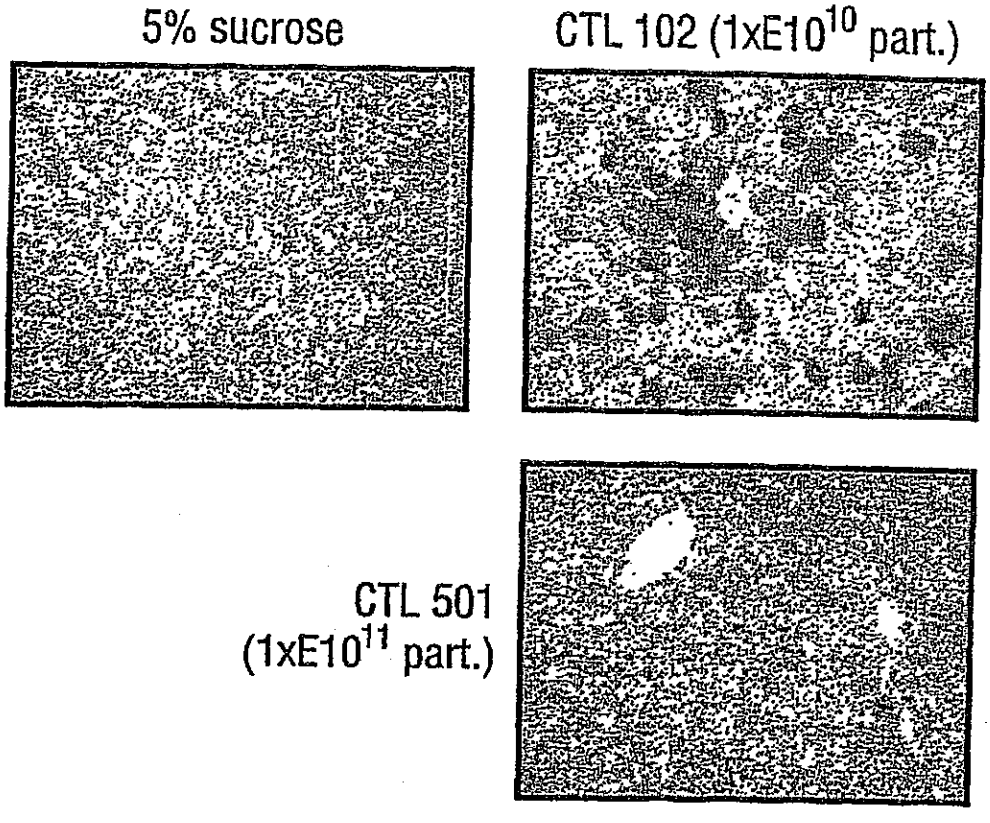


FIG. 12b

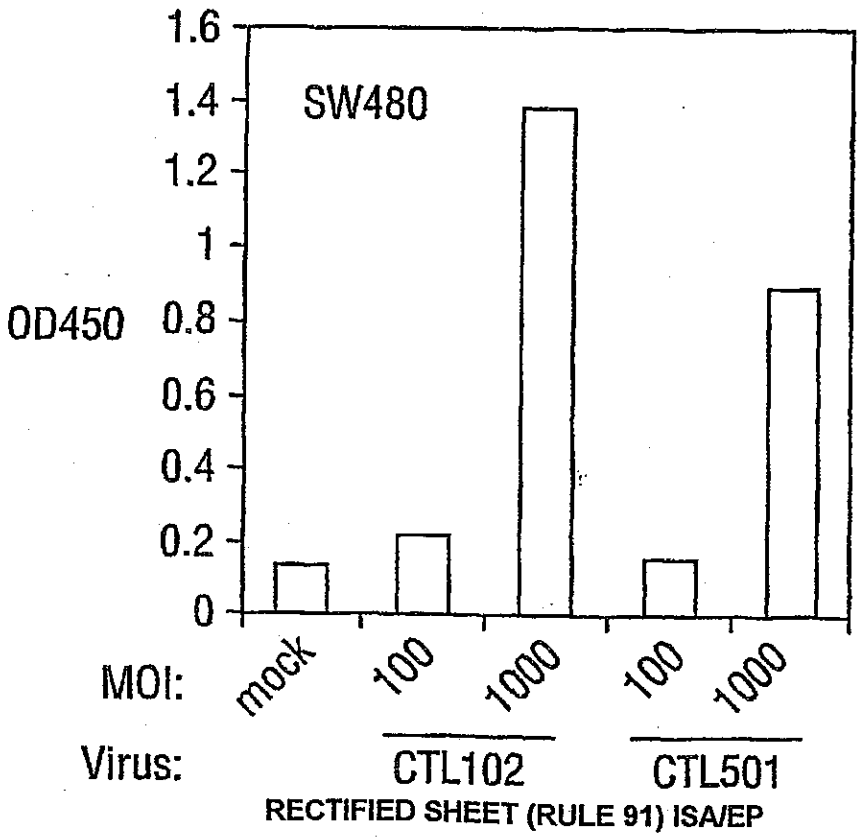


FIG. 13

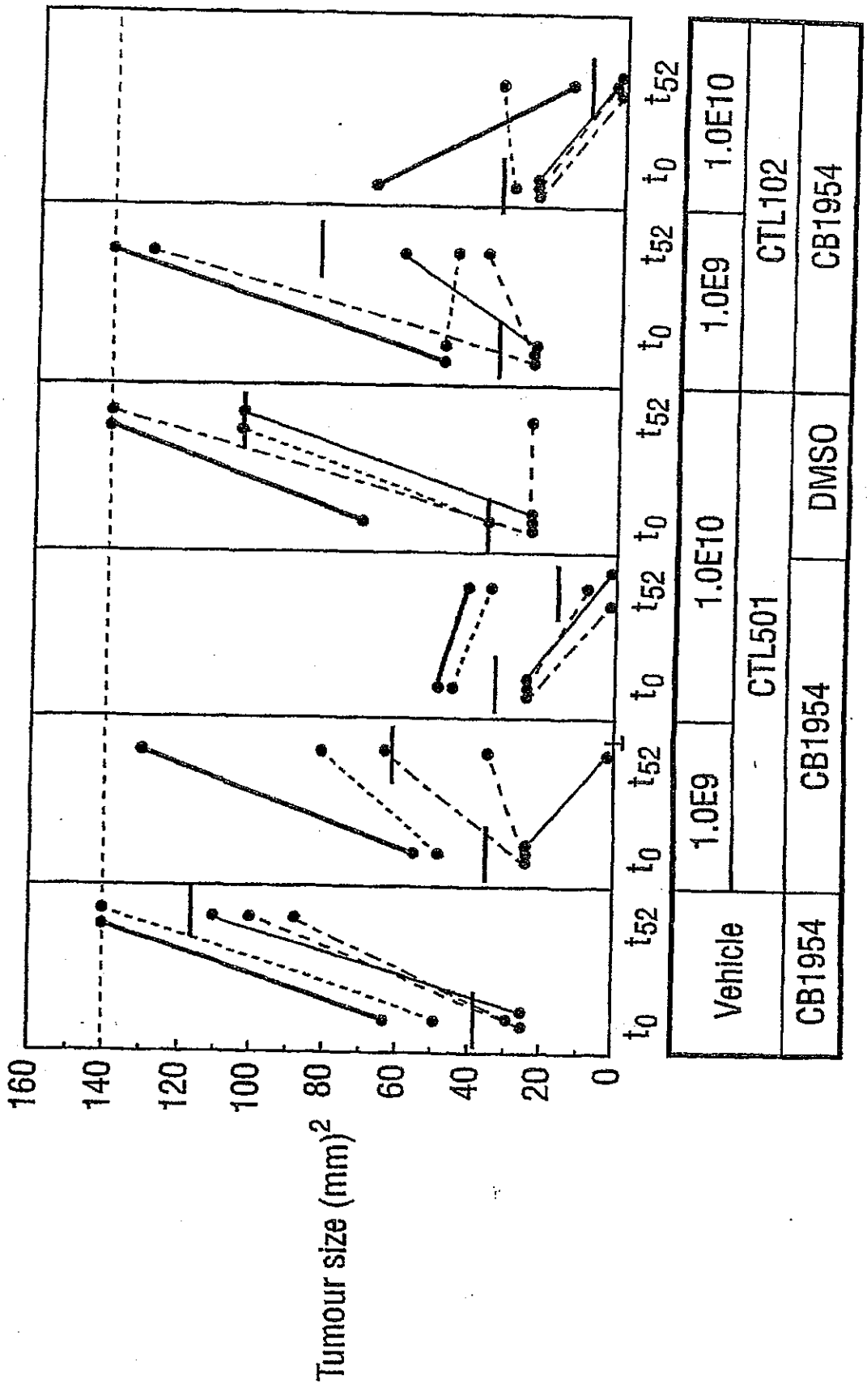

Tumour size (mm)^2
160
140
120
100
80
60
40
20
0
t_0
t_{52}
Vehicle
CB1954
1.0E9
1.0E10
CTL501
CB1954
1.0E9
1.0E10
CTL102
DMSO
CB1954

FIG. 14

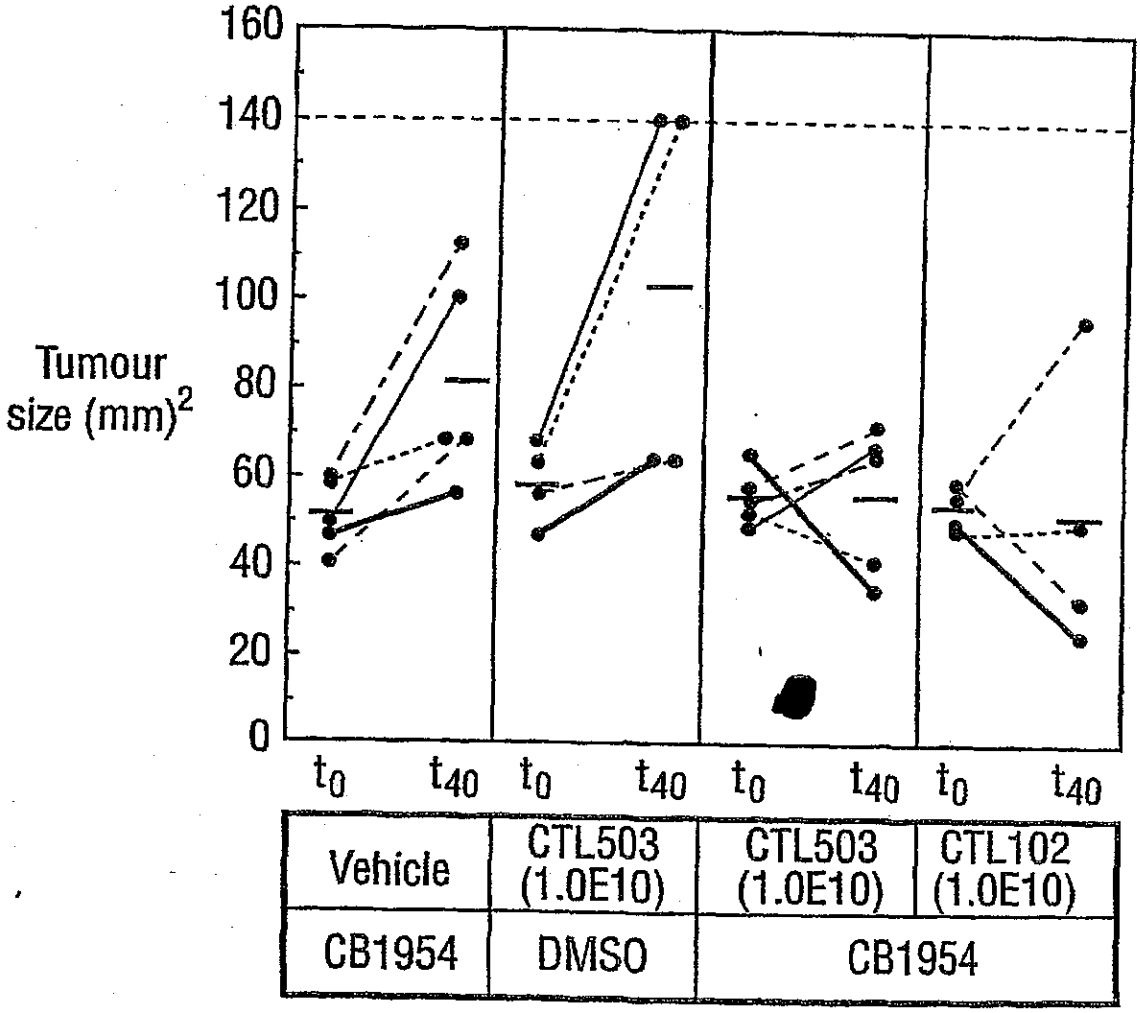

Tumour size $(mm)^2$
160
140
120
100
80
60
40
20
0
t_0 t_{40} t_0 t_{40} t_0 t_{40} t_0 t_{40}
Vehicle
CTL503 (1.0E10)
CTL503 (1.0E10)
CTL102 (1.0E10)
CB1954
DMSO
CB1954

FIG.15a

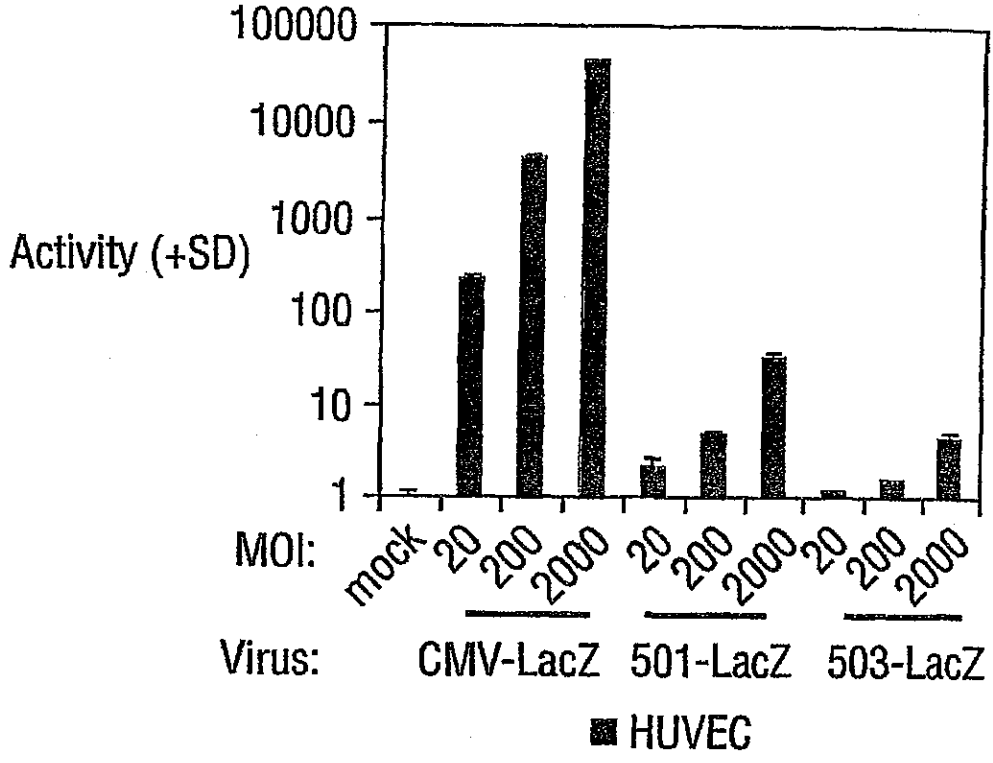


FIG. 15b

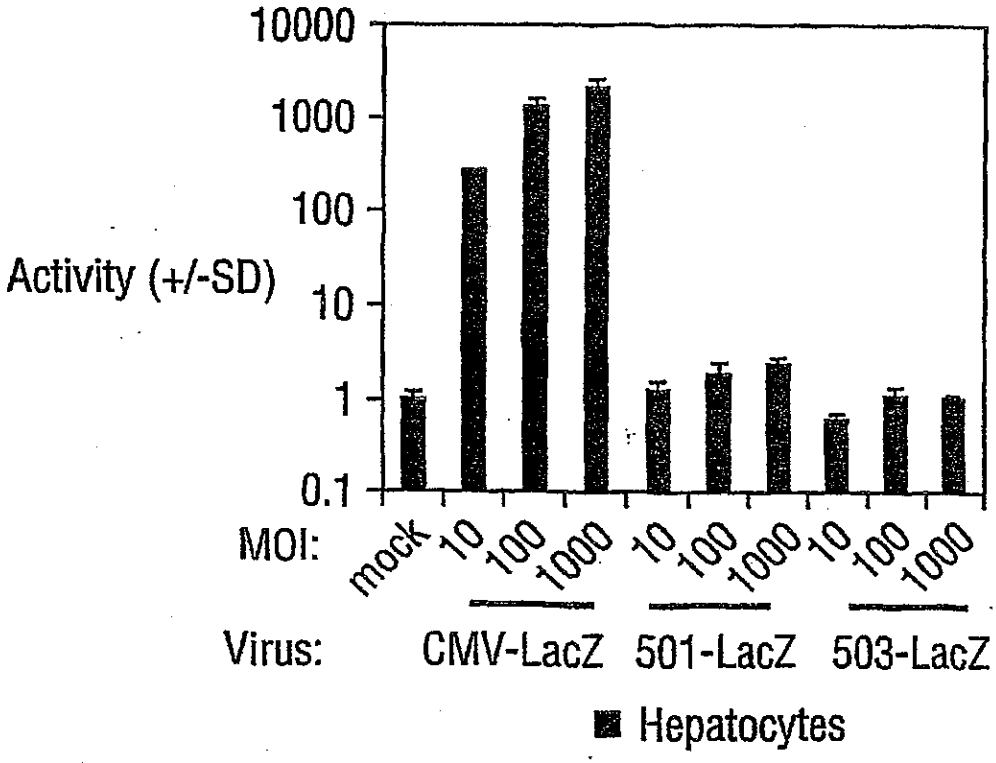
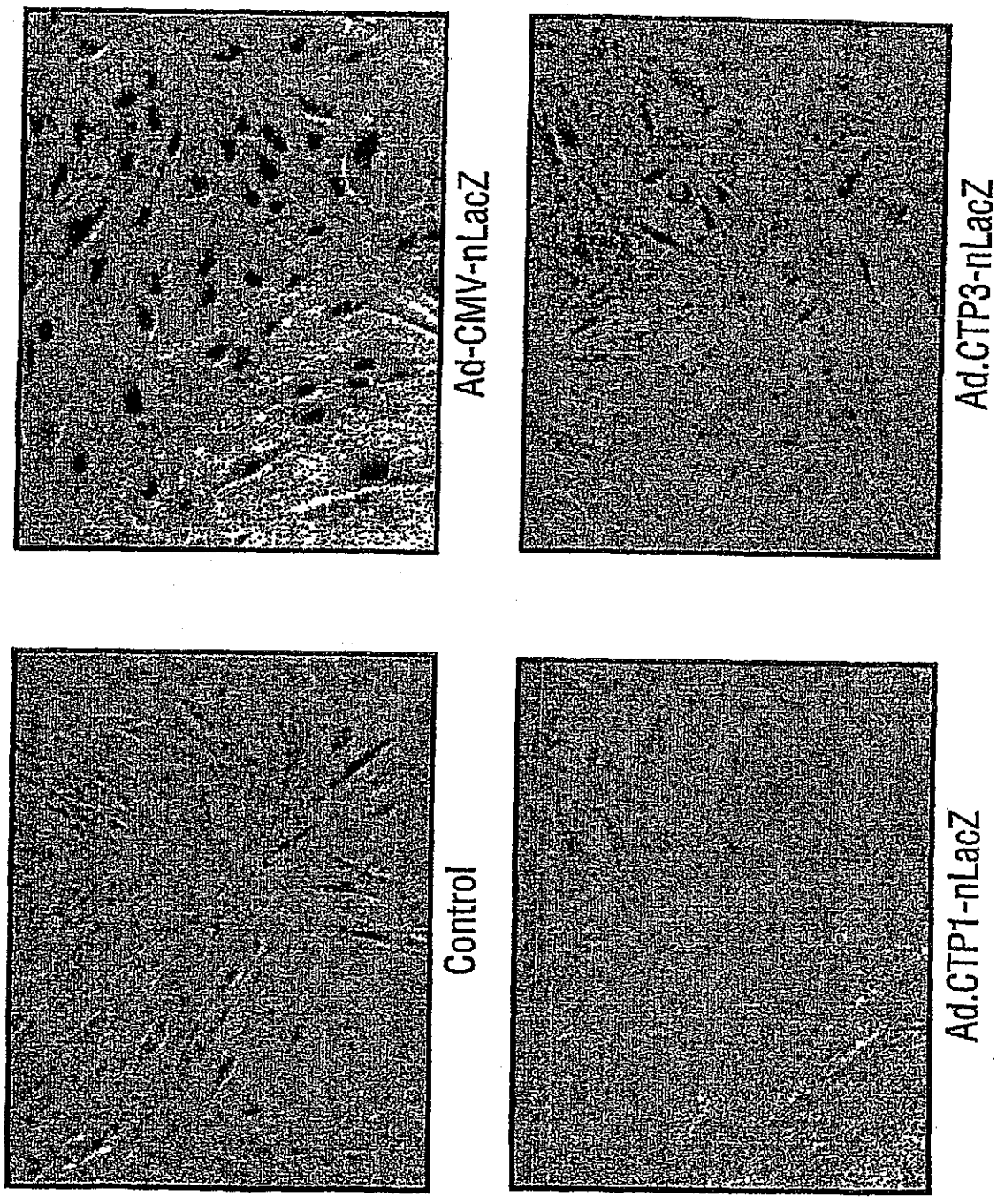


FIG. 15C - Primary human dermal fibroblasts



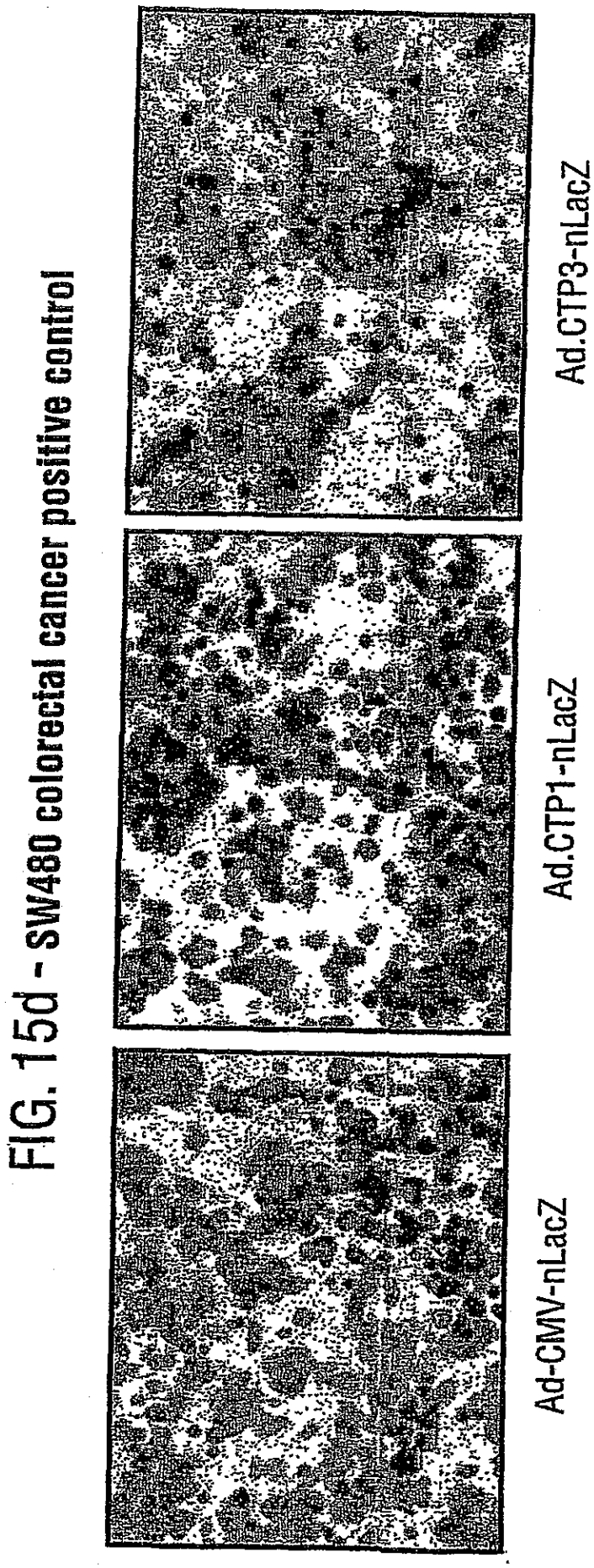


FIG. 15d - SW480 colorectal cancer positive control

FIG.16a

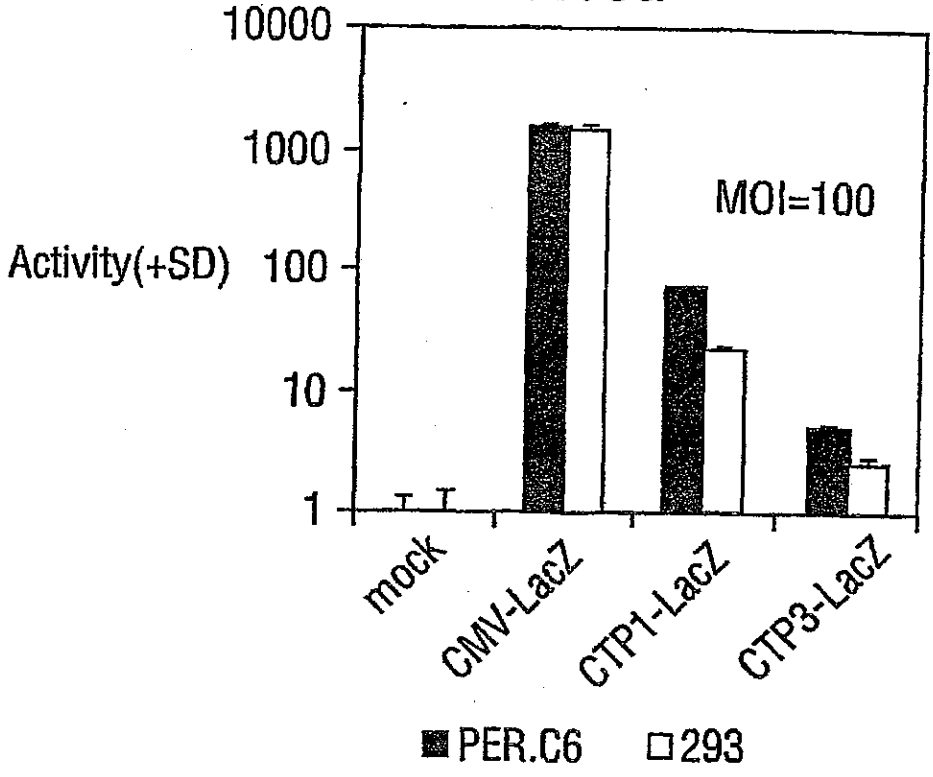


FIG. 16b

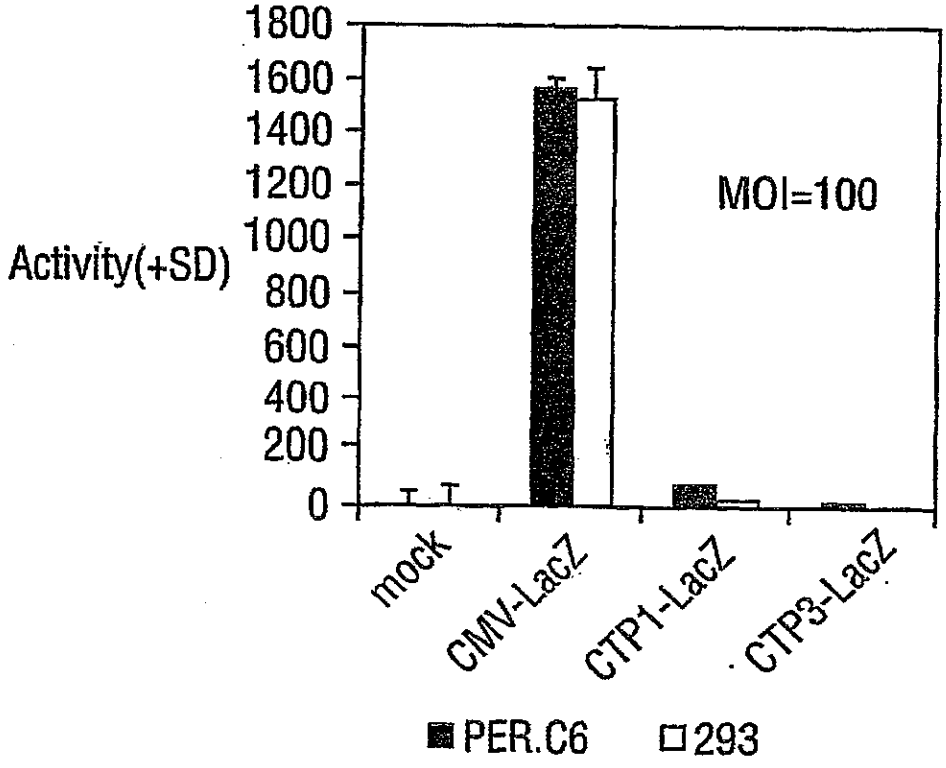
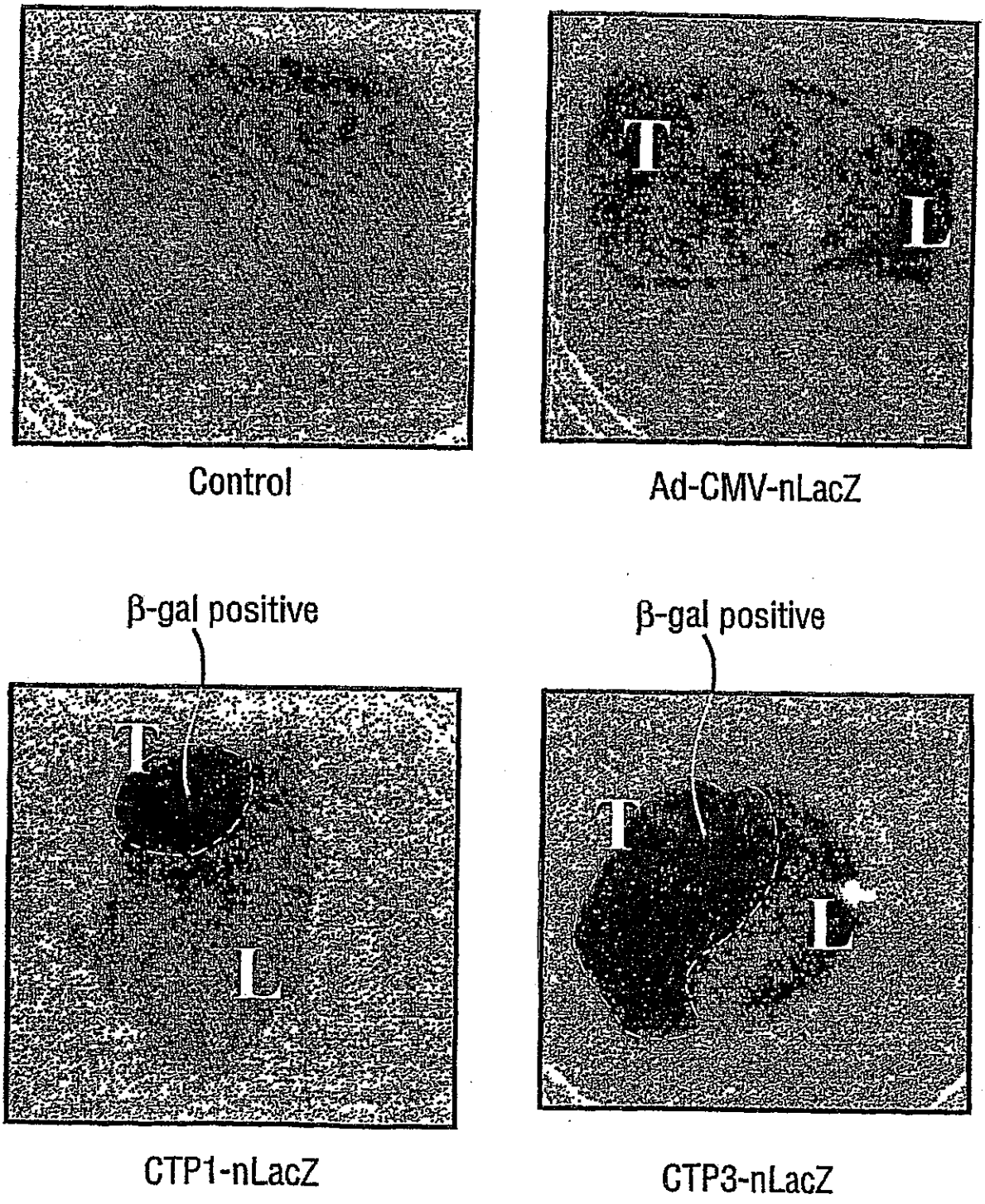


FIG.17


Control
Ad-CMV-nLacZ
β-gal positive
β-gal positive
T
L
T
L
CTP1-nLacZ
CTP3-nLacZ

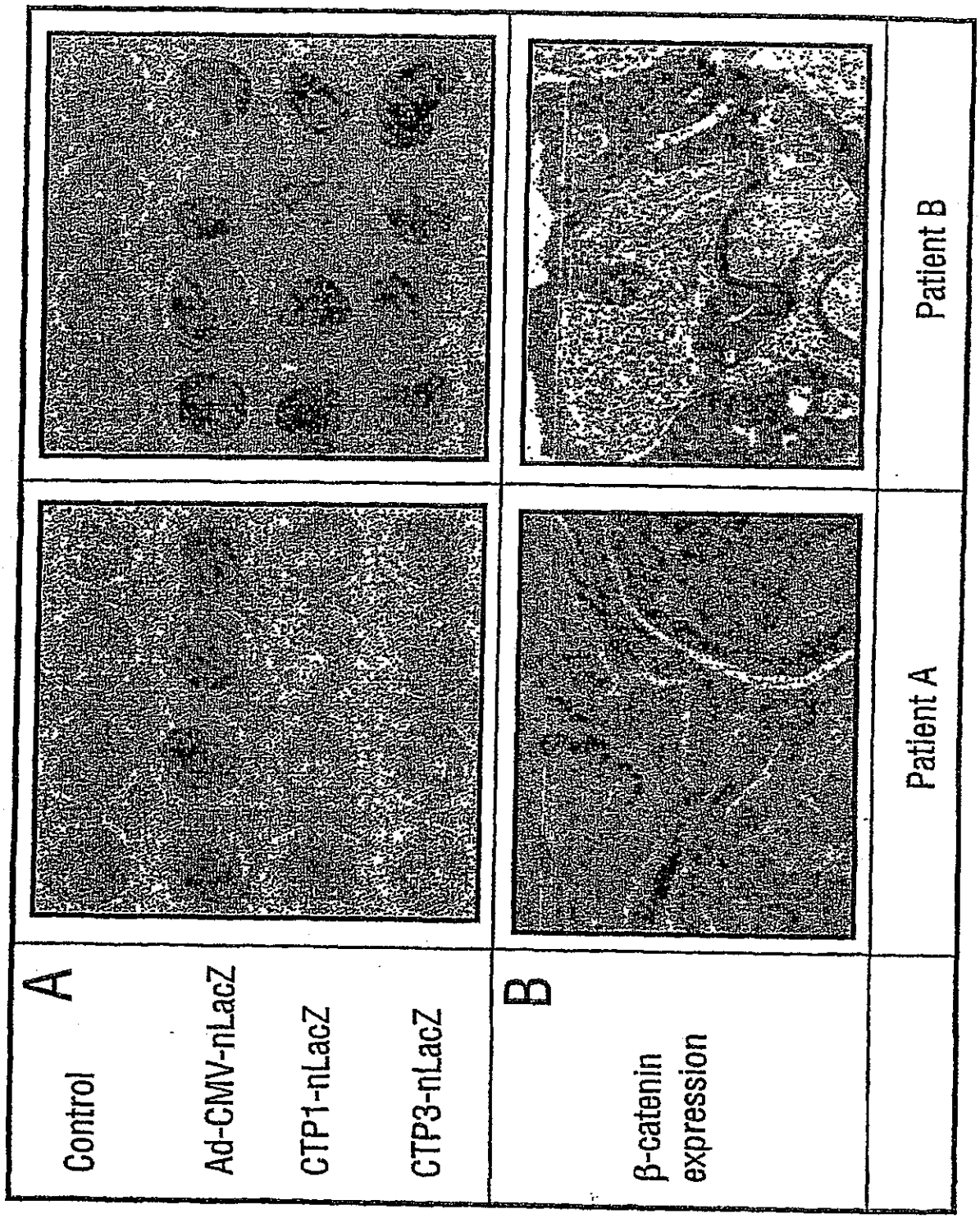

A
Control
Ad-CMV-nLacZ
CTP1-nLacZ
CTP3-nLacZ
B
β-catenin expression
Patient A
Patient B

FIG. 18