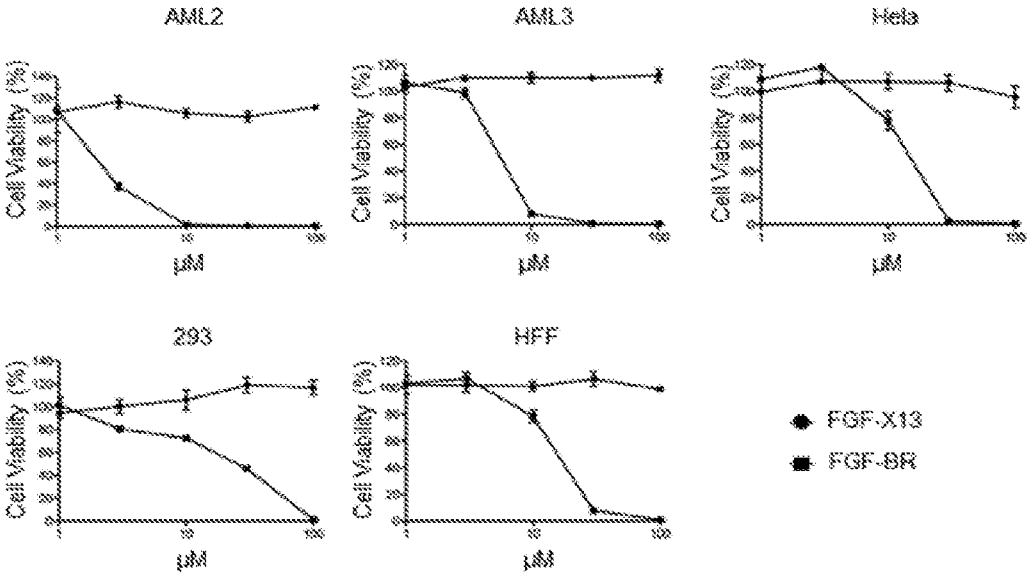
A

p53 (a.a. 370-386)	KSKKGQSTSRHKKLMFK	(SEQ ID NO: 34)
HEXIM1 (a.a. 150-161)	K-KKHRRRPS-KK---K	(SEQ ID NO: 35)

B

BR-WT	QLGKKKHRRRPSKKKRHW	(SEQ ID NO: 3)
BR-RRR12	QLGKKRHRRRPSRRRRHW	(SEQ ID NO: 4)
BR-iLAA	QLGKKILAARPSKKKRHW	(SEQ ID NO: 5)

C



D

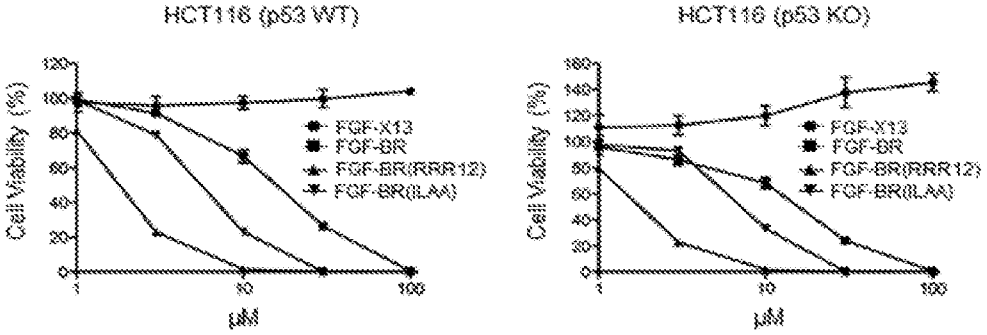


Fig. 1

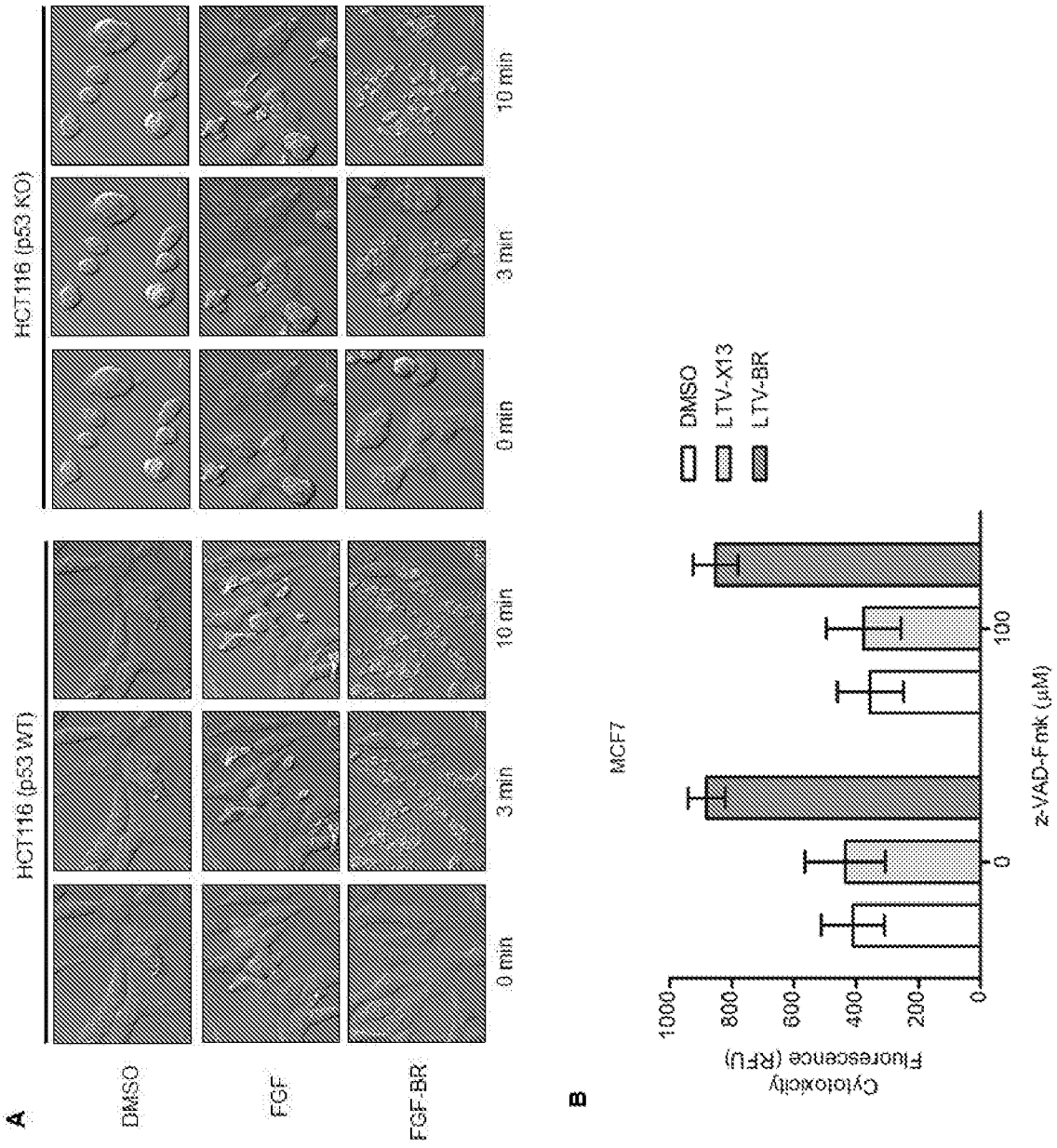

A
HCT116 (p53 WT)
HCT116 (p53 KO)
DMSO
FGF
FGF-BR
0 min
3 min
10 min
B
MCF7
DMSO
LTV-X13
LTV-BR
Cytotoxicity
Fluorescence (RFU)
1000
800
600
400
200
0
0
100
z-VAD-FMK (μM)

Fig. 2

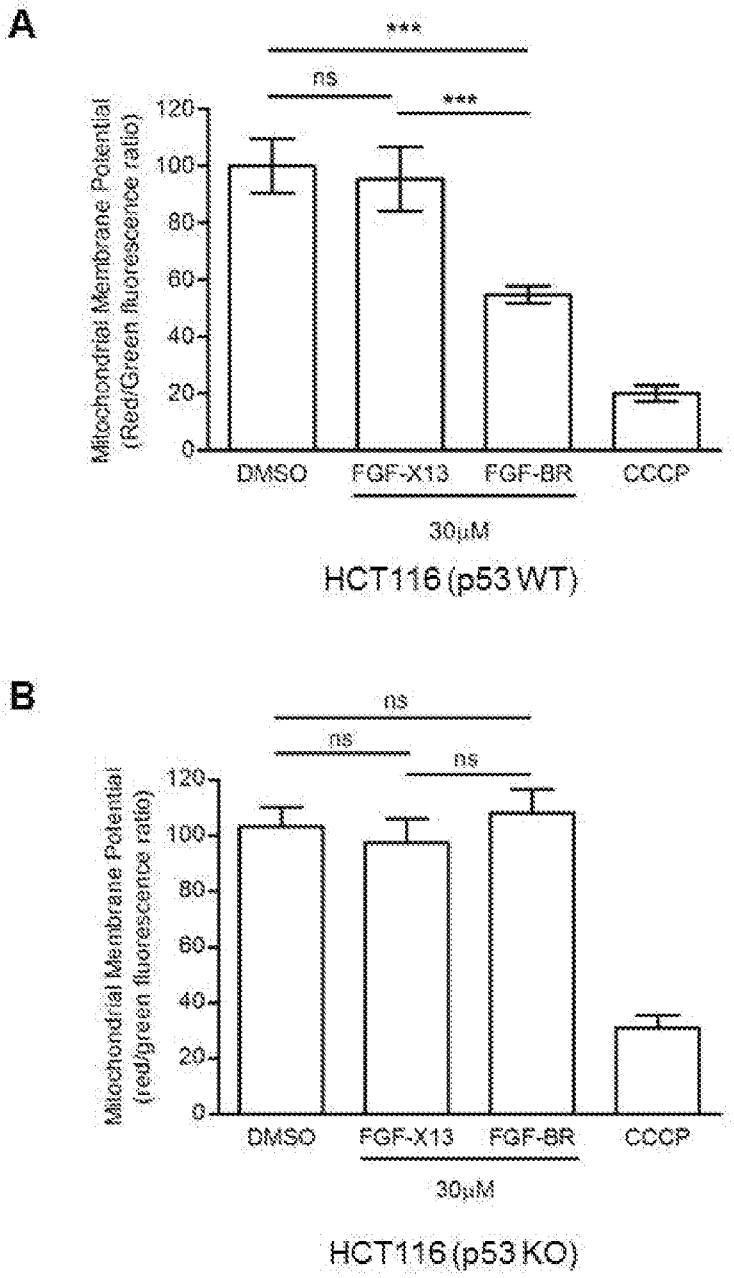

A
***
ns
***
Mitochondrial Membrane Potential (Red/Green fluorescence ratio)
120
100
80
60
40
20
0
DMSO
FGF-X13
FGF-BR
CCCP
30μM
HCT116 (p53 WT)
B
ns
ns
ns
Mitochondrial Membrane Potential (red/green fluorescence ratio)
120
100
80
60
40
20
0
DMSO
FGF-X13
FGF-BR
CCCP
30μM
HCT116 (p53 KO)

Fig. 3

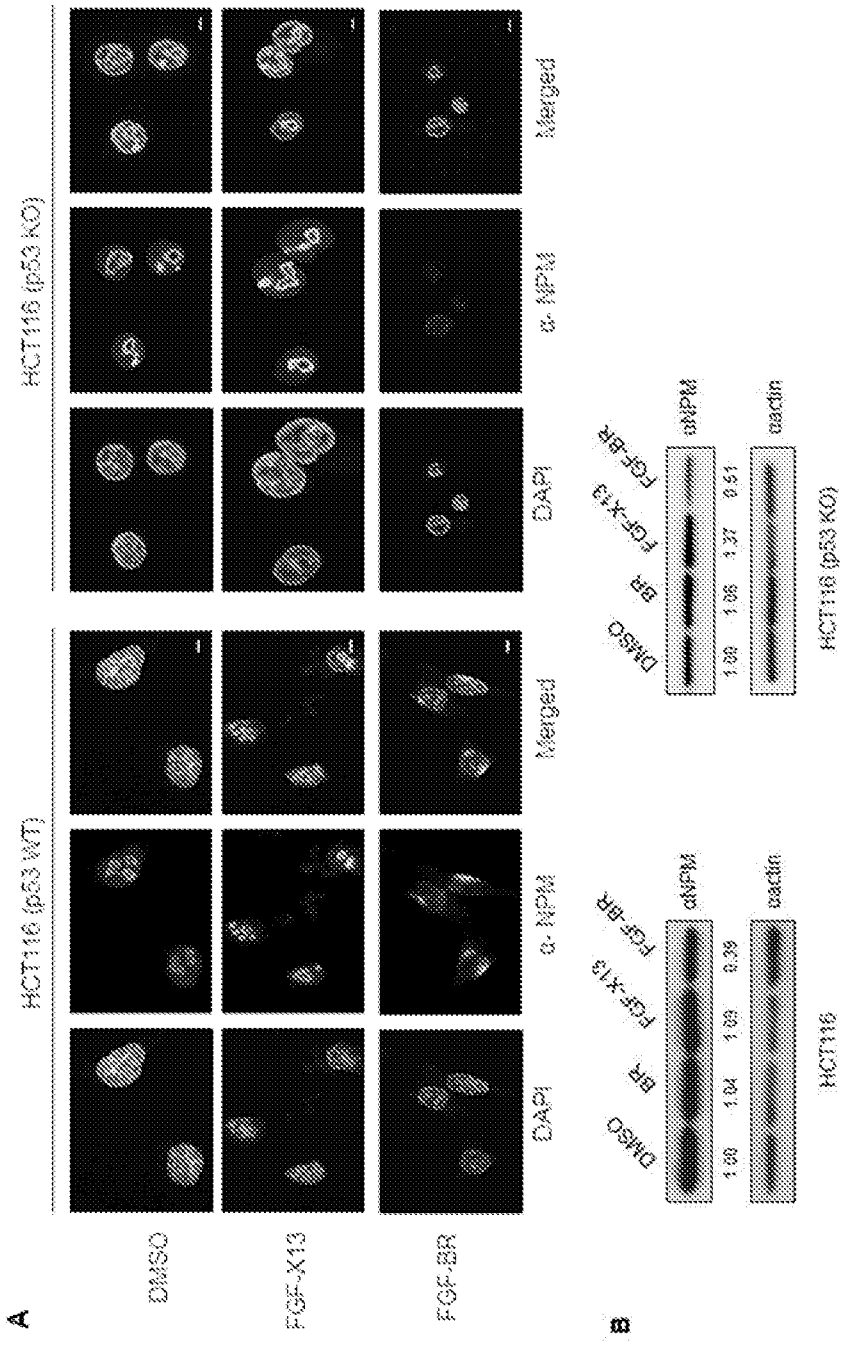

A
HCT116 (p53 WT)
HCT116 (p53 KO)
DMSO
FGF-X13
FGF-BR
DAPI
α- NPM
Merged
B
DMSO
BR
FGF-X13
FGF-BR
αNPM
actin
1.00
1.04
1.09
0.39
1.00
1.06
1.37
0.61
HCT116
HCT116 (p53 KO)

Fig. 4

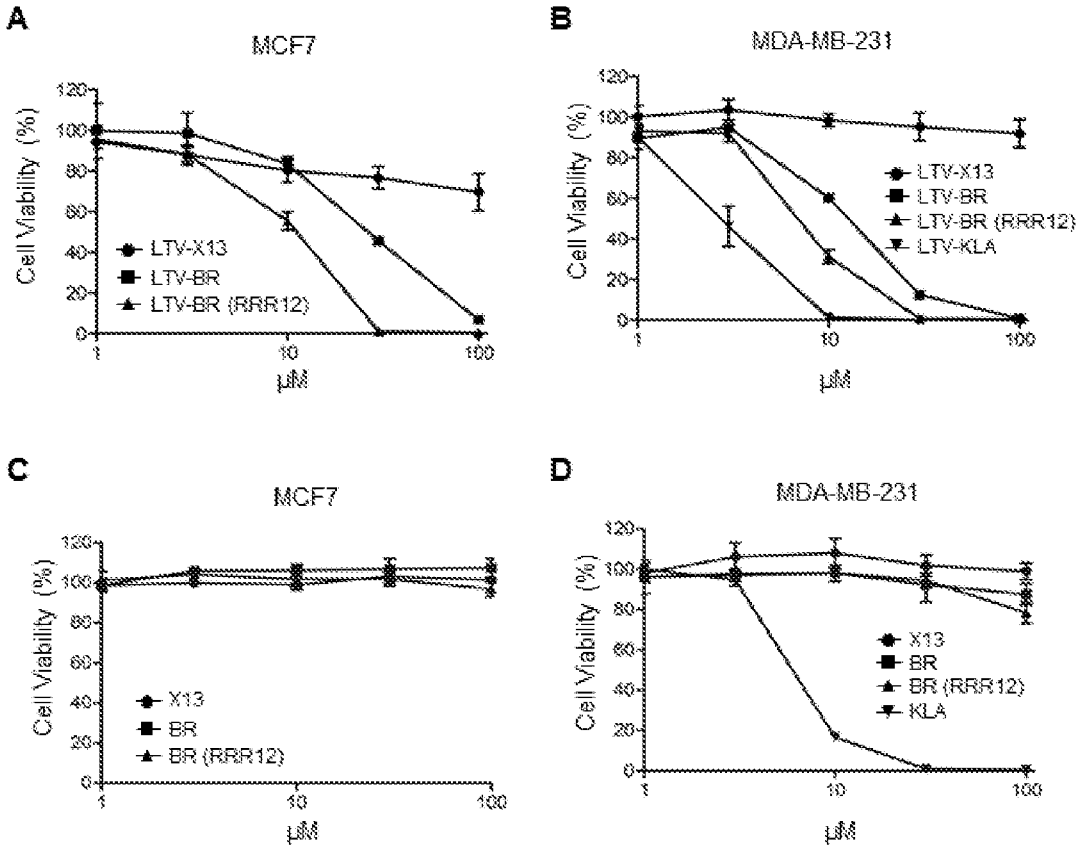

A
MCF7
Cell Viability (%)
LTV-X13
LTV-BR
LTV-BR (RRR12)
μM
B
MDA-MB-231
LTV-X13
LTV-BR
LTV-BR (RRR12)
LTV-KLA
C
MCF7
X13
BR
BR (RRR12)
D
MDA-MB-231
X13
BR
BR (RRR12)
KLA

Fig. 5

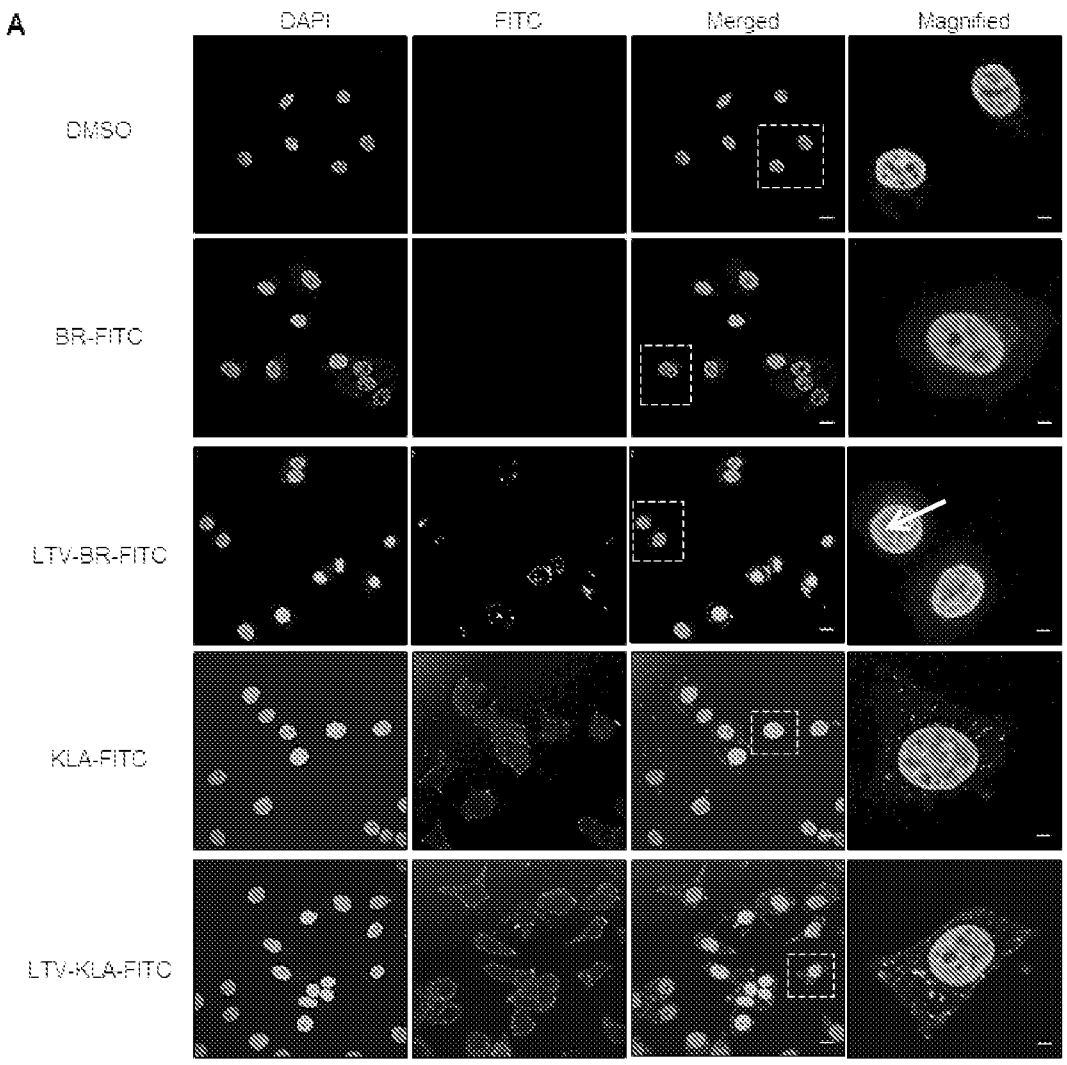

A
DAPI
FITC
Merged
Magnified
DMSO
BR-FITC
LTV-BR-FITC
KLA-FITC
LTV-KLA-FITC

Fig. 6

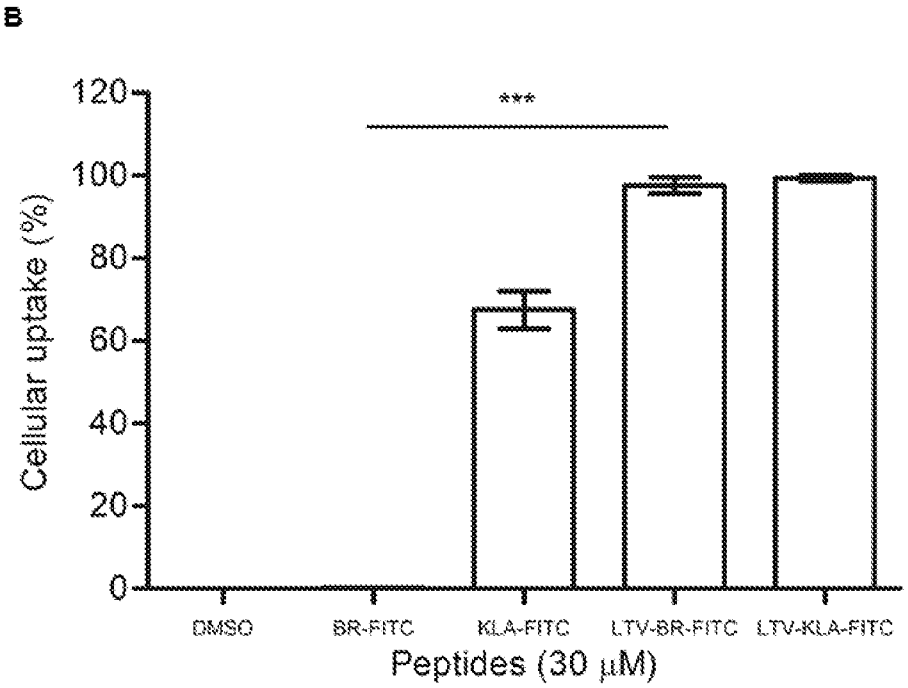
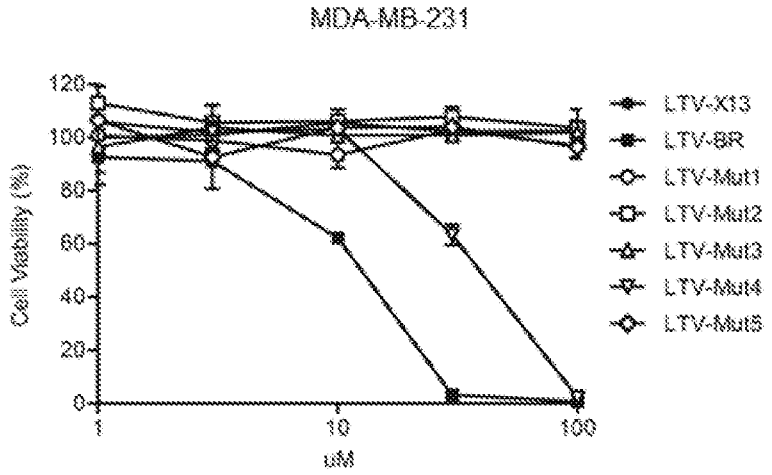
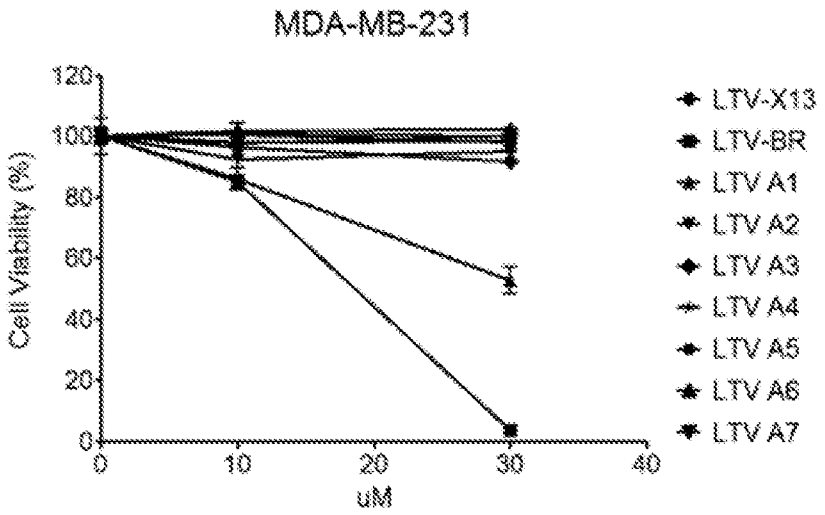


Fig. 6 (Continued)



Name	Sequence		Cell Killing Potency
LTV-BR	LTVSPWYGCGQLGKKRHRRRPSKKKRHW	(SEQ ID NO: 15)	++
LTV-Mut1	LTVSPWYGCGQLGKKRH----------	(SEQ ID NO: 22)	-
LTV-Mut2	LTVSPWYGCGQLGKKRHRRRPS-------	(SEQ ID NO: 23)	-
LTV-Mut3	LTVSPWYGCG----------PSKKKRHW	(SEQ ID NO: 24)	-
LTV-Mut4	LTVSPWYGCG--------HRRRPSKKKRHW	(SEQ ID NO: 25)	+
LTV-Mut5	LTVSPWYGCG--------HRRRPS-------	(SEQ ID NO: 26)	-

Fig. 7



Name	Sequence		Cell Killing Potency
LTV-BR	LTVSPWYGCGQLGKKRHRRPPSKKKRHN	(SEQ ID NO: 15)	++
LTV-BR(A1)	LTVSPWYGCGQLGAAAHRRRPSKKKRHN	(SEQ ID NO: 27)	+
LTV-BR(A2)	LTVSPWYGCGQLGKKRHAAAPSKKKRHN	(SEQ ID NO: 28)	-
LTV-BR(A3)	LTVSPWYGCGQLGKKRHRRRPSAAAAHN	(SEQ ID NO: 29)	-
LTV-BR(A4)	LTVSPWYGCGQLGAAARAAAPSKKKRHN	(SEQ ID NO: 30)	-
LTV-BR(A5)	LTVSPWYGCGQLGAAAHRRRPSAAAAHN	(SEQ ID NO: 31)	-
LTV-BR(A6)	LTVSPWYGCGQLGKKRHAAAPSAAAAHN	(SEQ ID NO: 32)	-
LTV-BR(A7)	LTVSPWYGCGQLGAAARAAAPSAAAAHN	(SEQ ID NO: 33)	-

Fig. 8

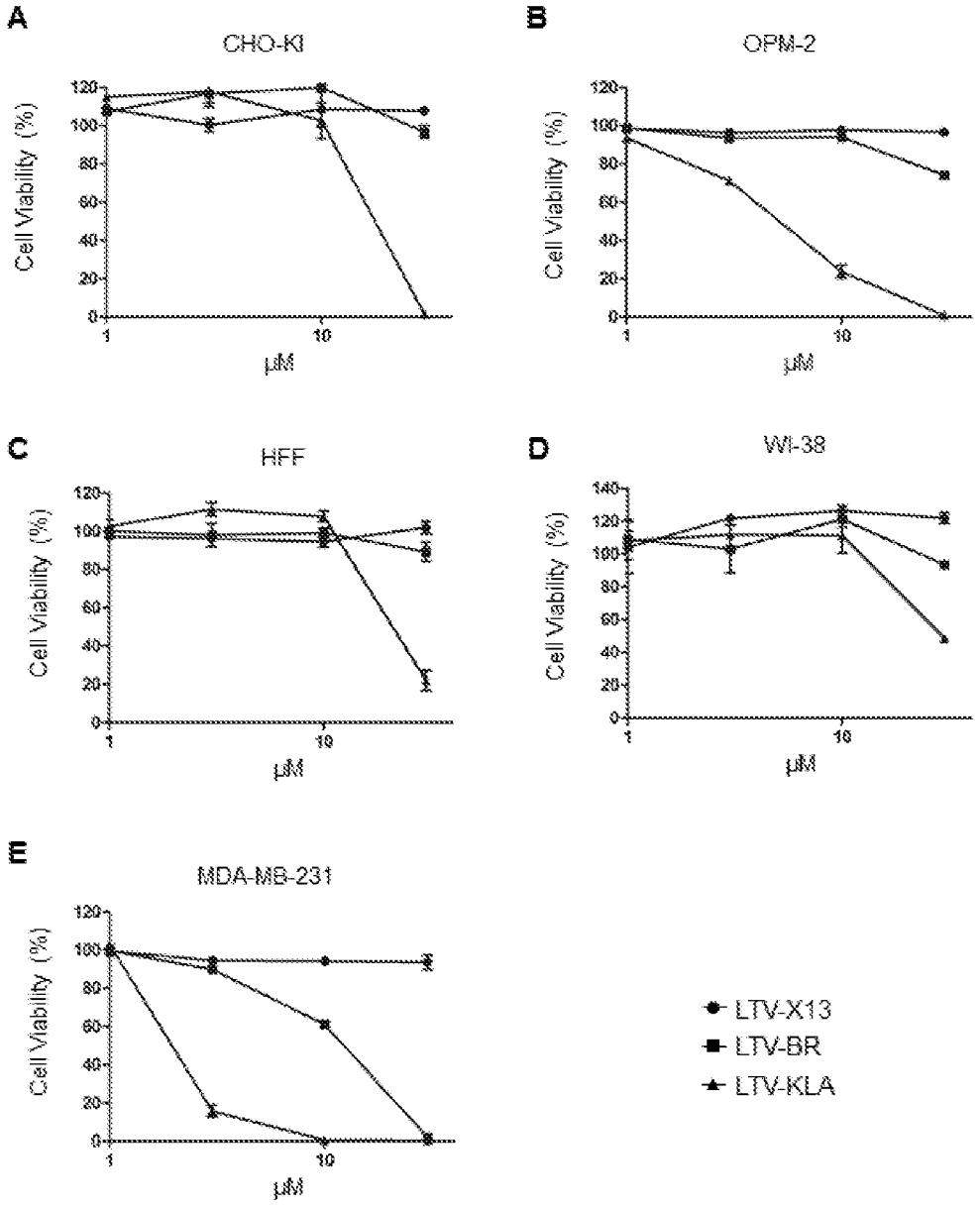

A
CHO-KI
B
OPM-2
C
HFF
D
WI-38
E
MDA-MB-231
Cell Viability (%)
μM
LTV-X13
LTV-BR
LTV-KLA

Fig. 9

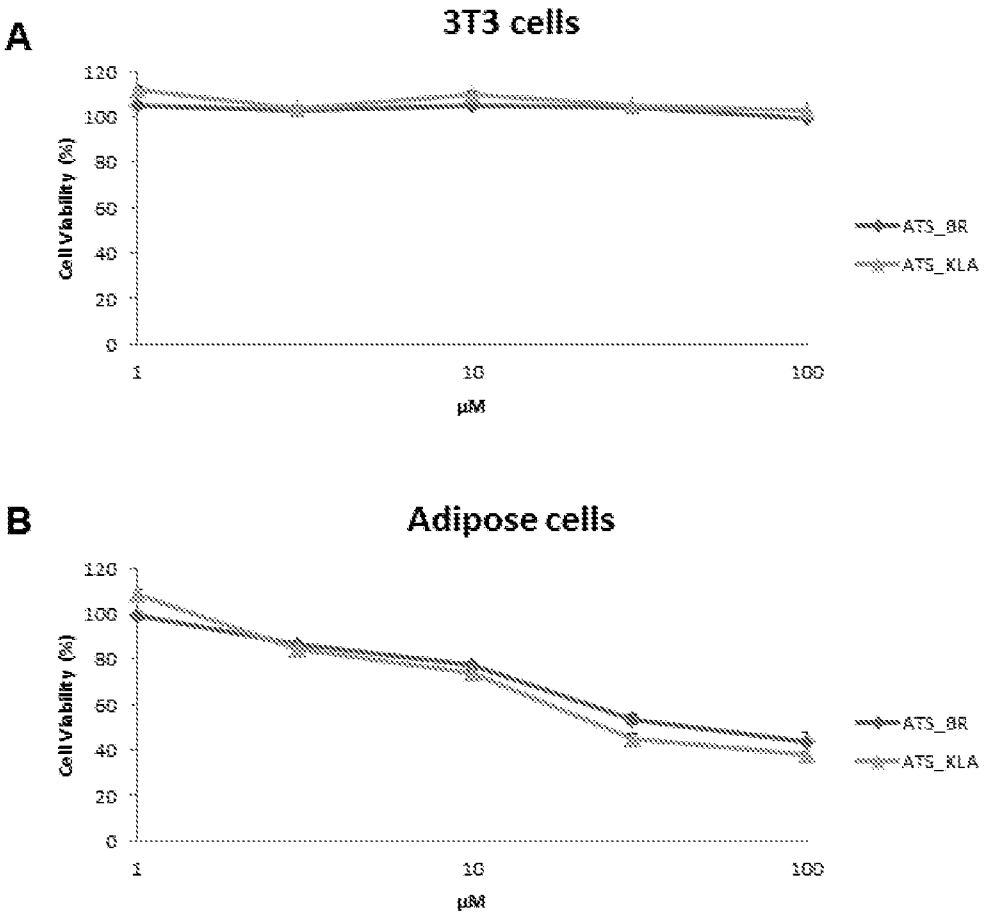

A
3T3 cells
Cell Viability (%)
120
100
80
60
40
20
0
1
10
100
μM
ATS_8R
ATS_KLA
B
Adipose cells
Cell Viability (%)
120
100
80
60
40
20
0
1
10
100
μM
ATS_8R
ATS_KLA

Fig. 10

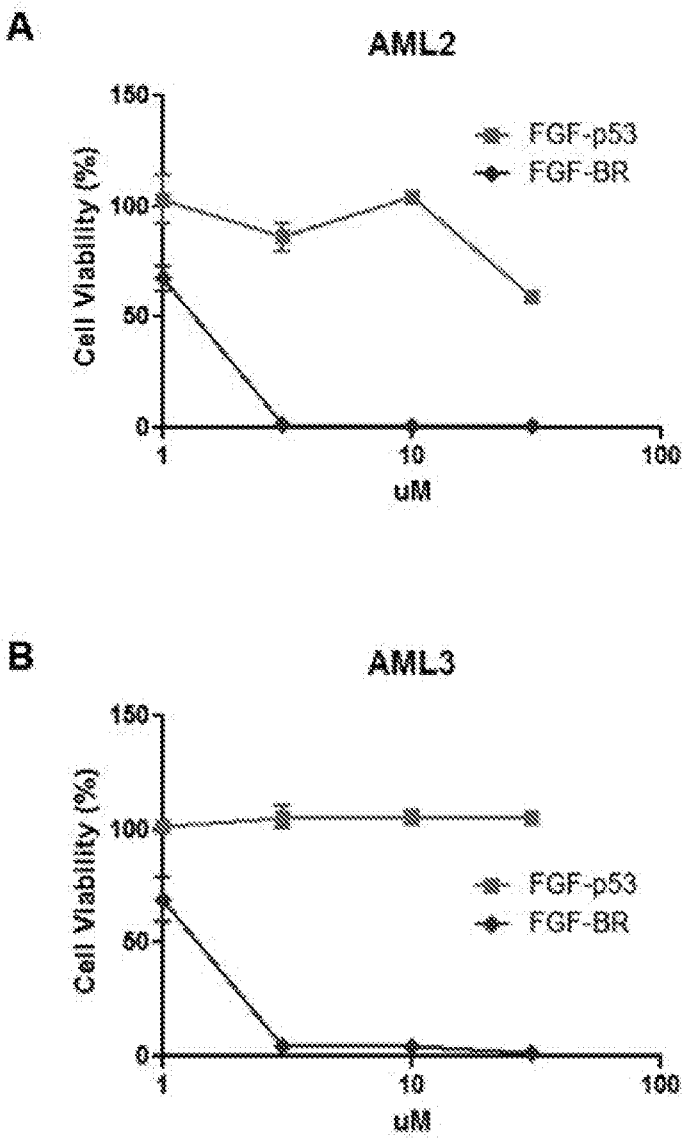

A
AML2
150
100
50
0
Cell Viability (%)
FGF-p53
FGF-BR
1
10
100
uM
B
AML3
150
100
50
0
Cell Viability (%)
FGF-p53
FGF-BR
1
10
100
uM

Fig. 11