Figure 1

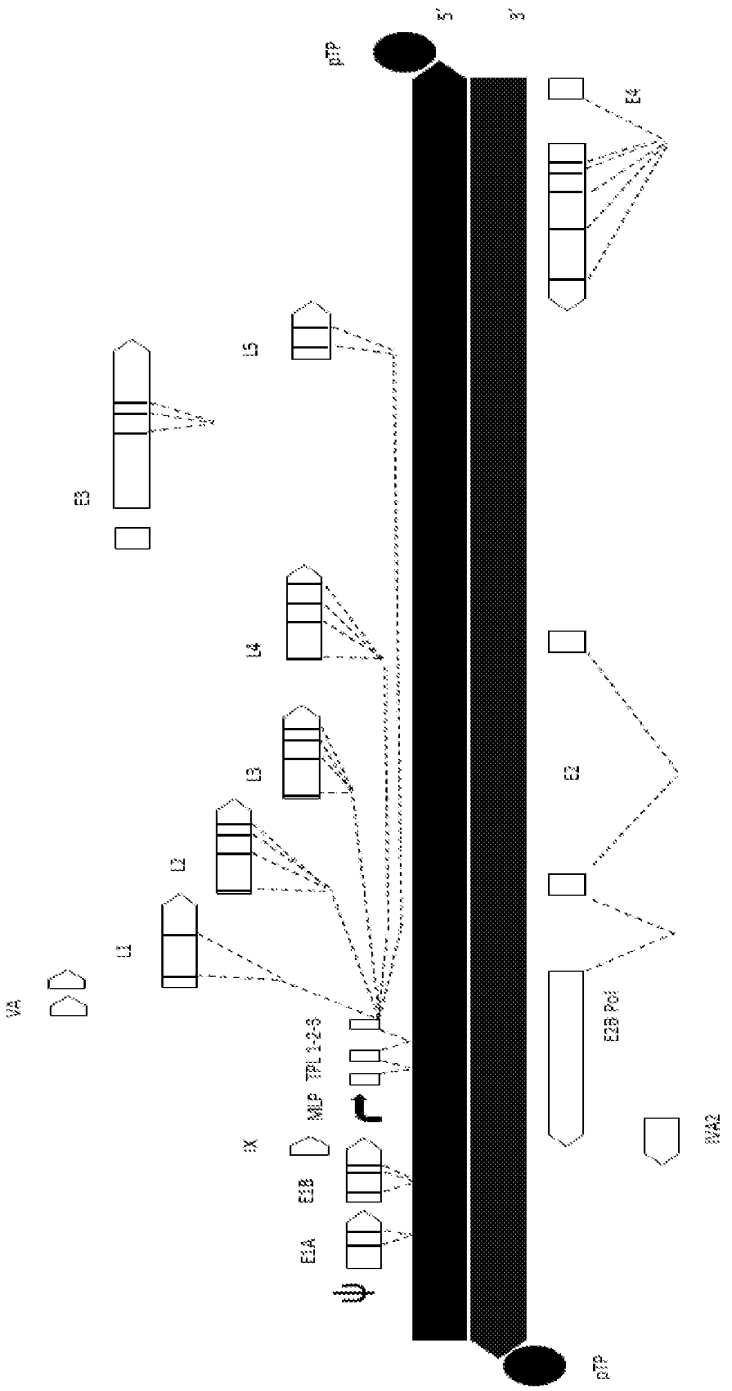

5'
3'
pTP
E4
L5
E3
L4
L3
L2
E2
L1
VA
TPL 1-2-3
E2B Pol
MLP
IX
E2B
E2A
VAA2
pTP

Figure 2

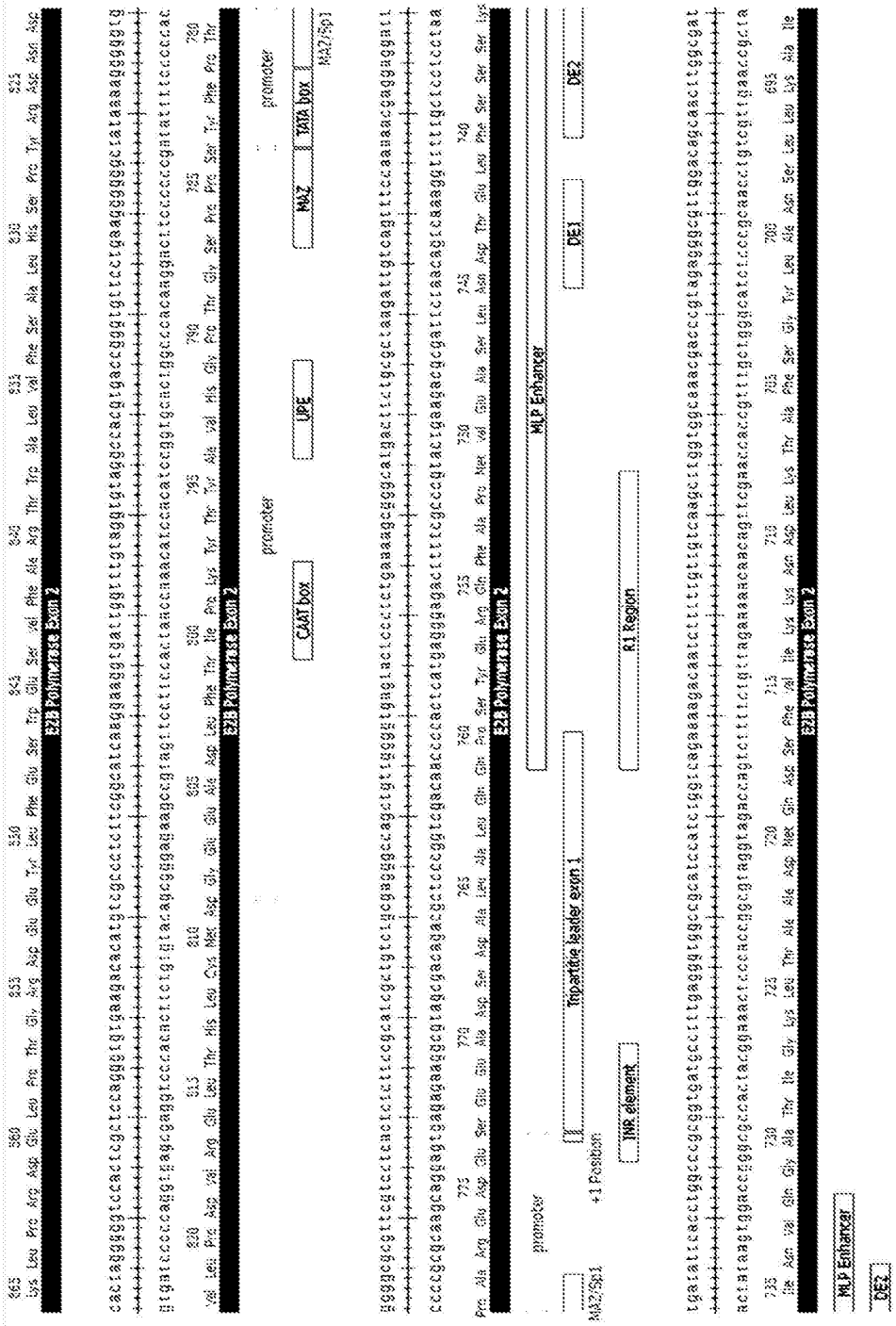

E2A Polymerase Exon 2
promoter
CAAT box
UPE
MAZ
TATA box
MAZ/Sp1
MLP Enhancer
DE1
DE2
Tripartite leader exon 1
+1 Position
TATA element
R1 Region

Figure 3

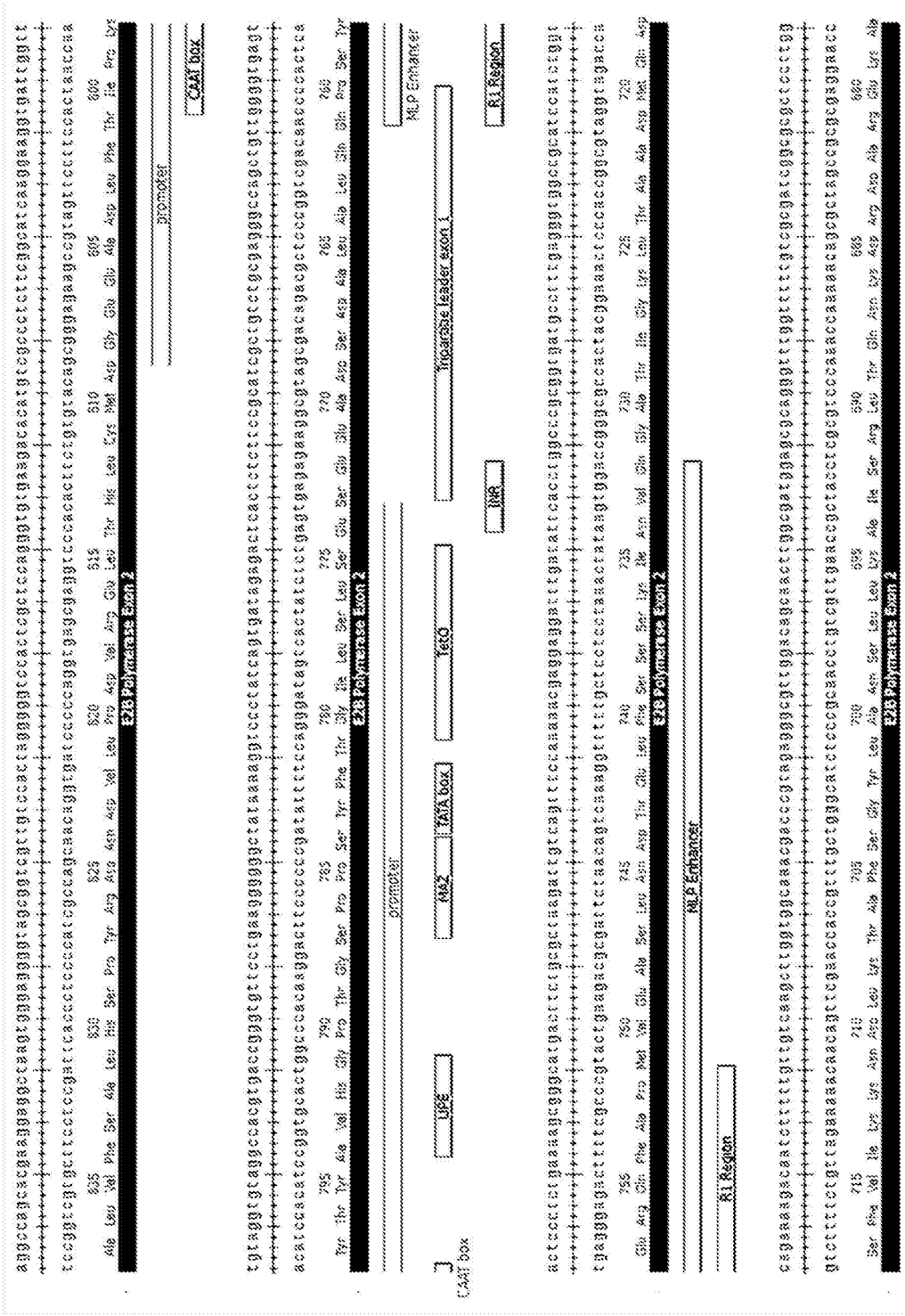

E2B Polymerase Exon 2
promoter
CAAT box
TATA box
TetO
Tricarpsin leader exon 1
INR
R1 Region
MLP Enhancer

Figure 4

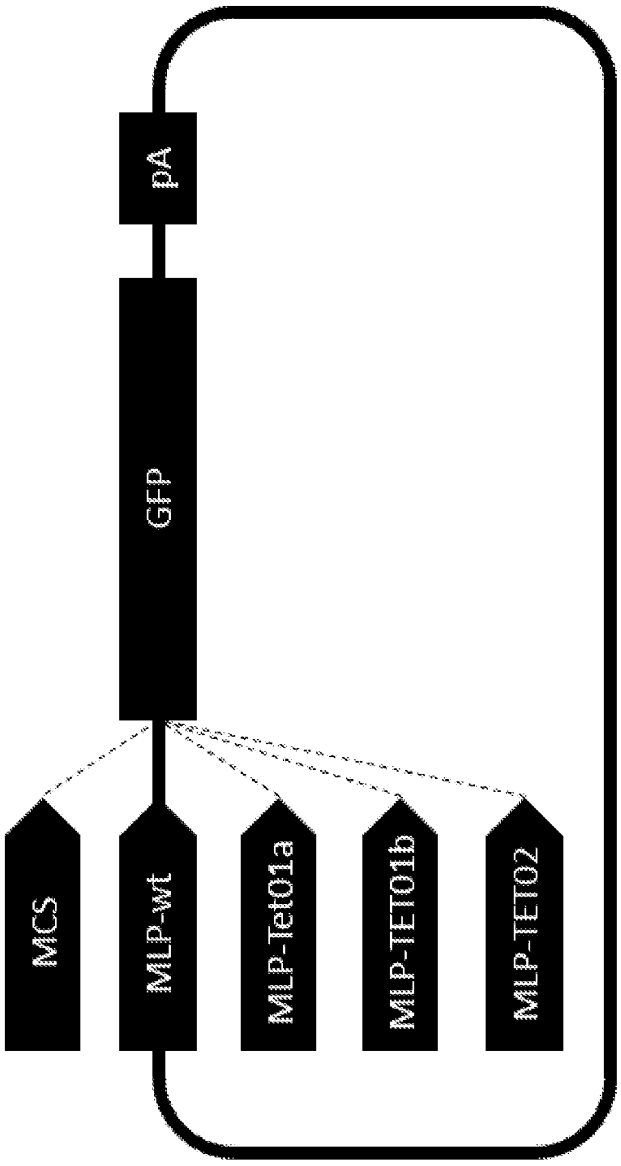


Figure 5

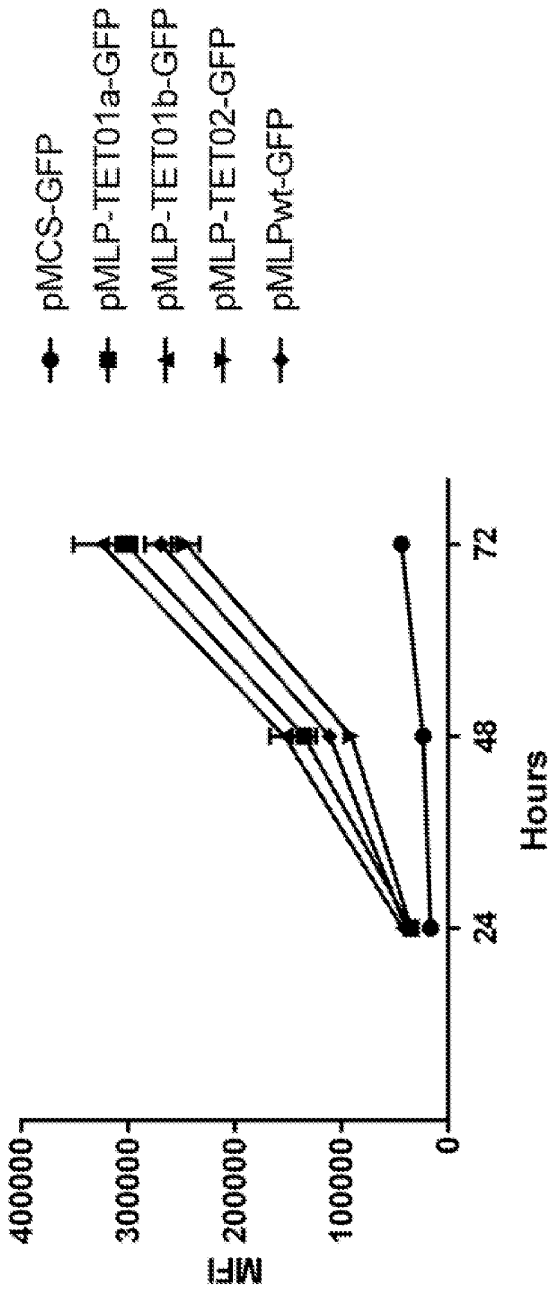

pMCS-GFP
pMLP-TET01a-GFP
pMLP-TET01b-GFP
pMLP-TET02-GFP
pMLPwt-GFP
MFI
400000
300000
200000
100000
0
24
48
72
Hours

Figure 6

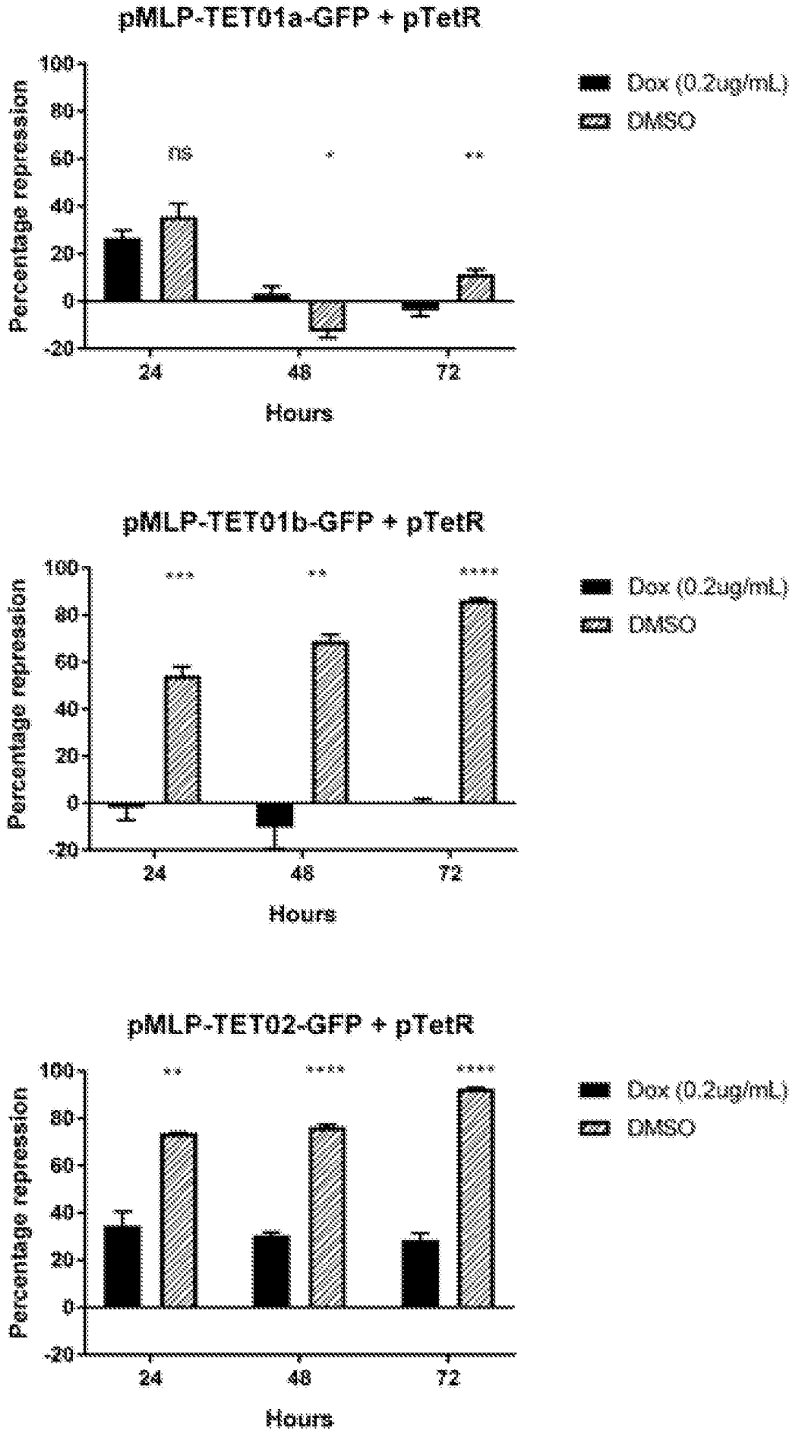

pMLP-TET01a-GFP + pTetR
Percentage repression
100
80
60
40
20
0
-20
ns
*
**
24
48
72
Hours
Dox (0.2ug/mL)
DMSO
pMLP-TET01b-GFP + pTetR
Percentage repression
***
**
****
Hours
Dox (0.2ug/mL)
DMSO
pMLP-TET02-GFP + pTetR
Percentage repression
**
****
****
Hours
Dox (0.2ug/mL)
DMSO

Figure 7

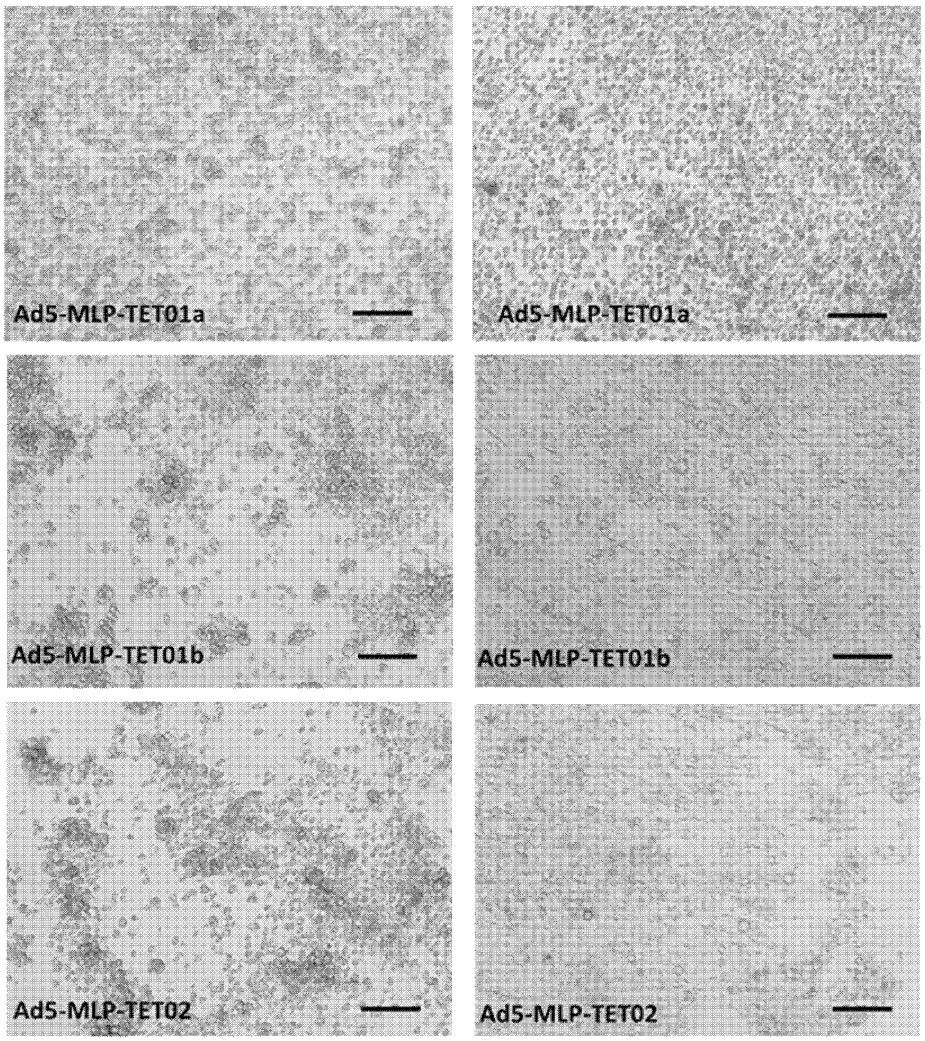

Ad5-MLP-TET01a
Ad5-MLP-TET01a
Ad5-MLP-TET01b
Ad5-MLP-TET01b
Ad5-MLP-TET02
Ad5-MLP-TET02
Day 10: Dox 0.2ug/mL
Day 10: DMSO

Figure 8

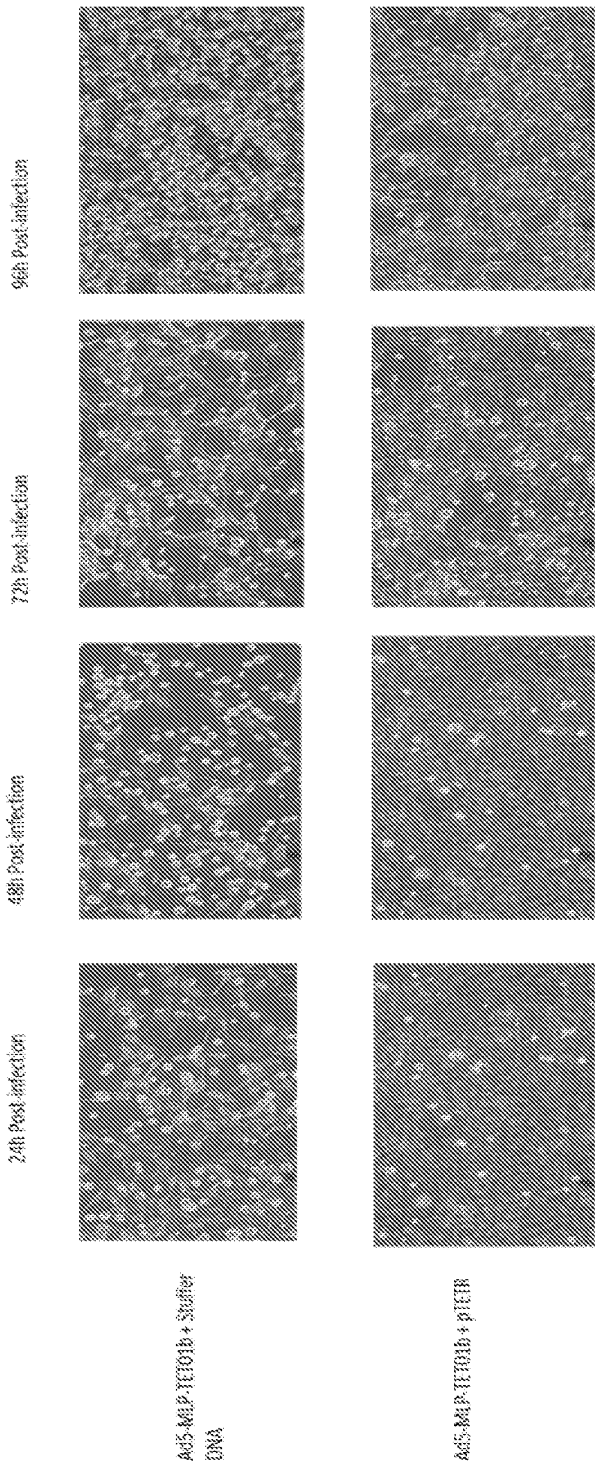

96h Post-infection
72h Post-infection
48h Post-infection
24h Post-infection
A65-MLP-TETO1b + Stuffer DNA
A65-MLP-TETO1b + pTETR

Figure 9

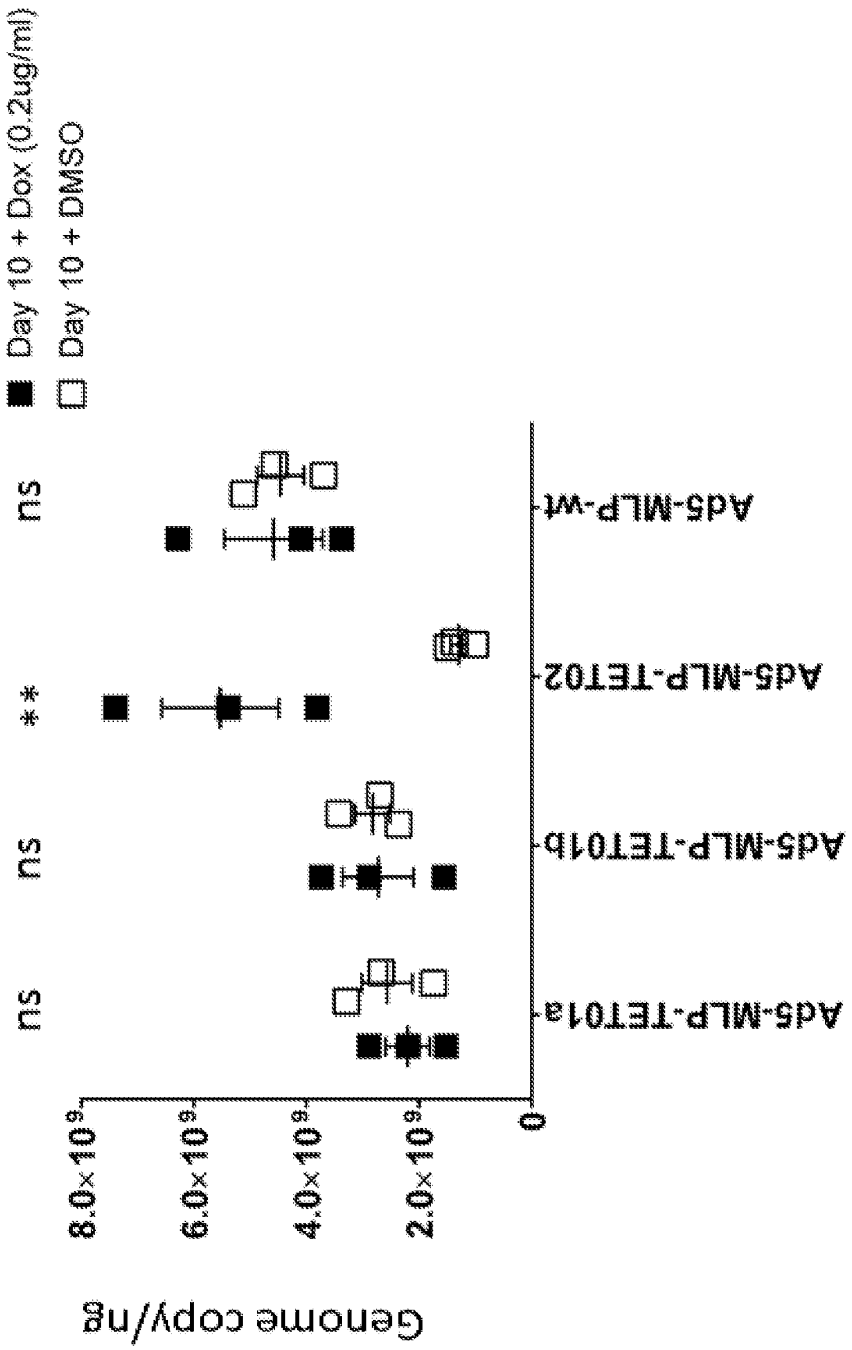

Day 10 + Dox (0.2ug/ml)
Day 10 + DMSO
ns
**
ns
ns
Ad5-MLP-wt
Ad5-MLP-TET02
Ad5-MLP-TET01b
Ad5-MLP-TET01a
0
2.0×10⁹
4.0×10⁹
6.0×10⁹
8.0×10⁹
Genome copy/ng

Figure 10A

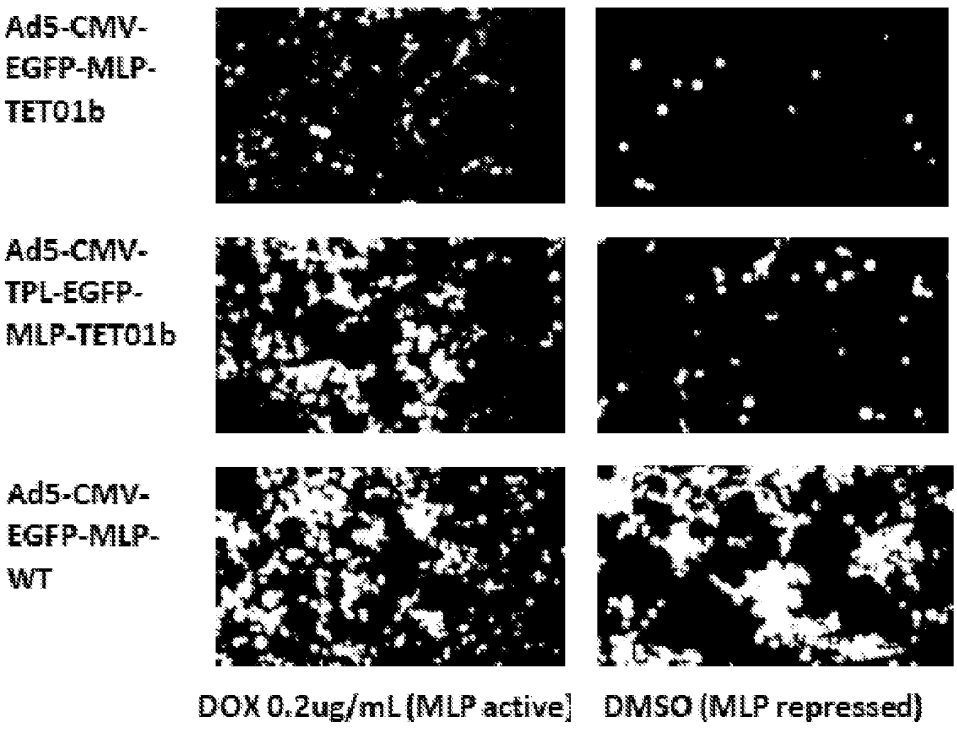
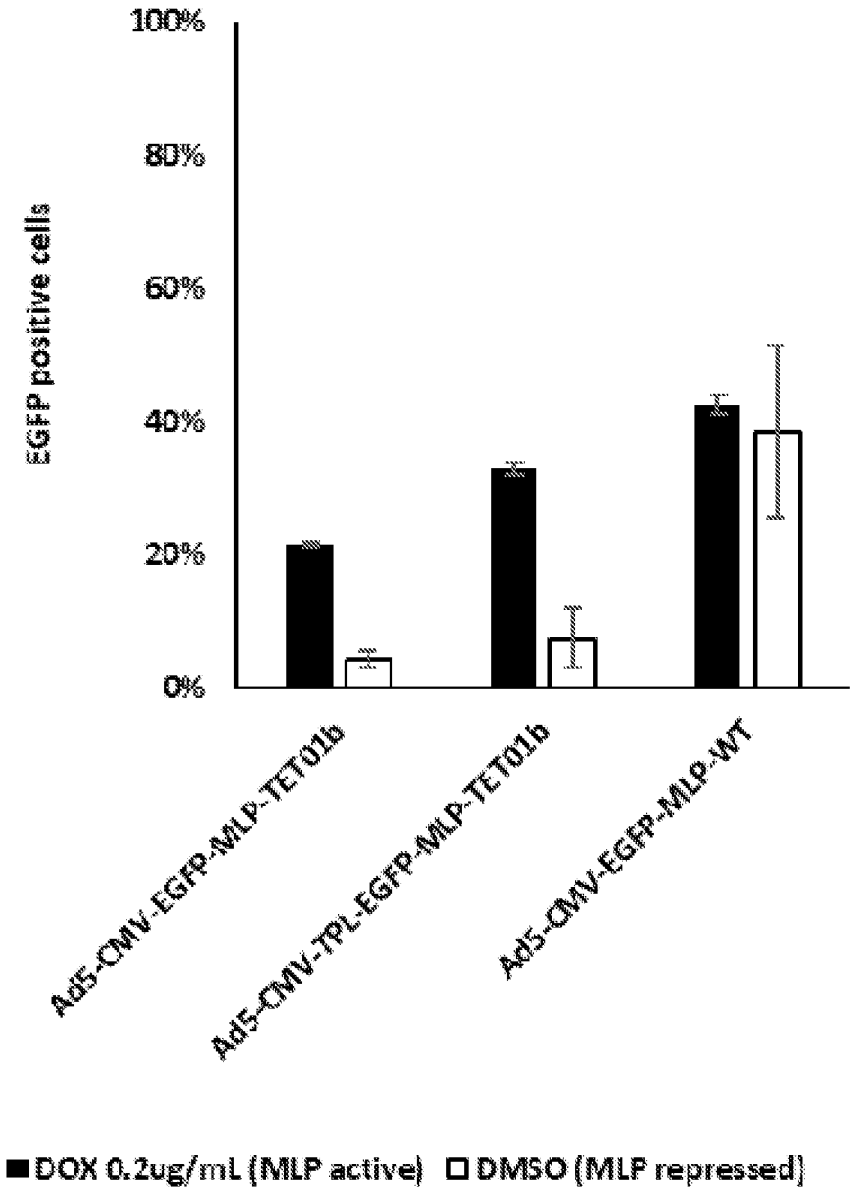
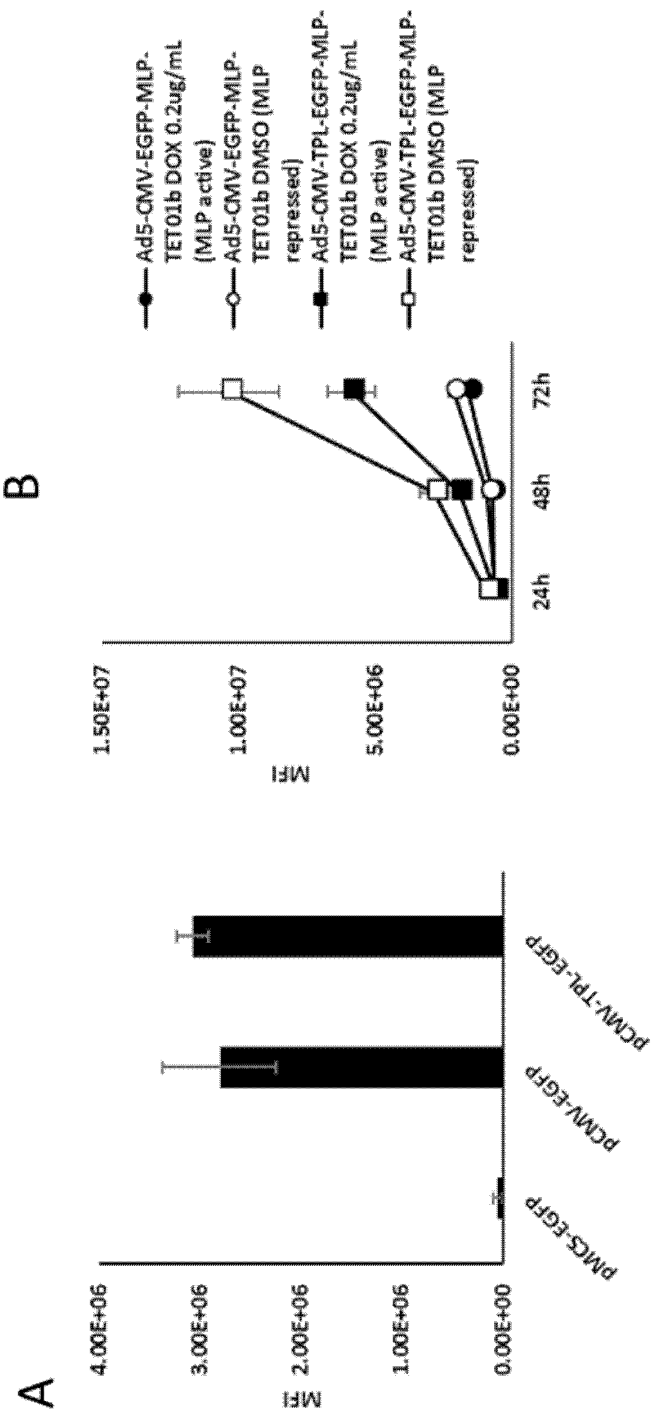

Ad5-CMV-EGFP-MLP-TET01b
Ad5-CMV-TPL-EGFP-MLP-TET01b
Ad5-CMV-EGFP-MLP-WT
DOX 0.2ug/mL (MLP active]
DMSO (MLP repressed)

Figure 10B


100%
80%
60%
40%
20%
0%
EGFP positive cells
Ad5-CMV-EGFP-MLP-TET01b
Ad5-CMV-TPL-EGFP-MLP-TET01b
Ad5-CMV-EGFP-MLP-WT
DOX 0.2ug/mL (MLP active)
DMSO (MLP repressed)

Figures 11A - 11B



Figures 11C - 11D

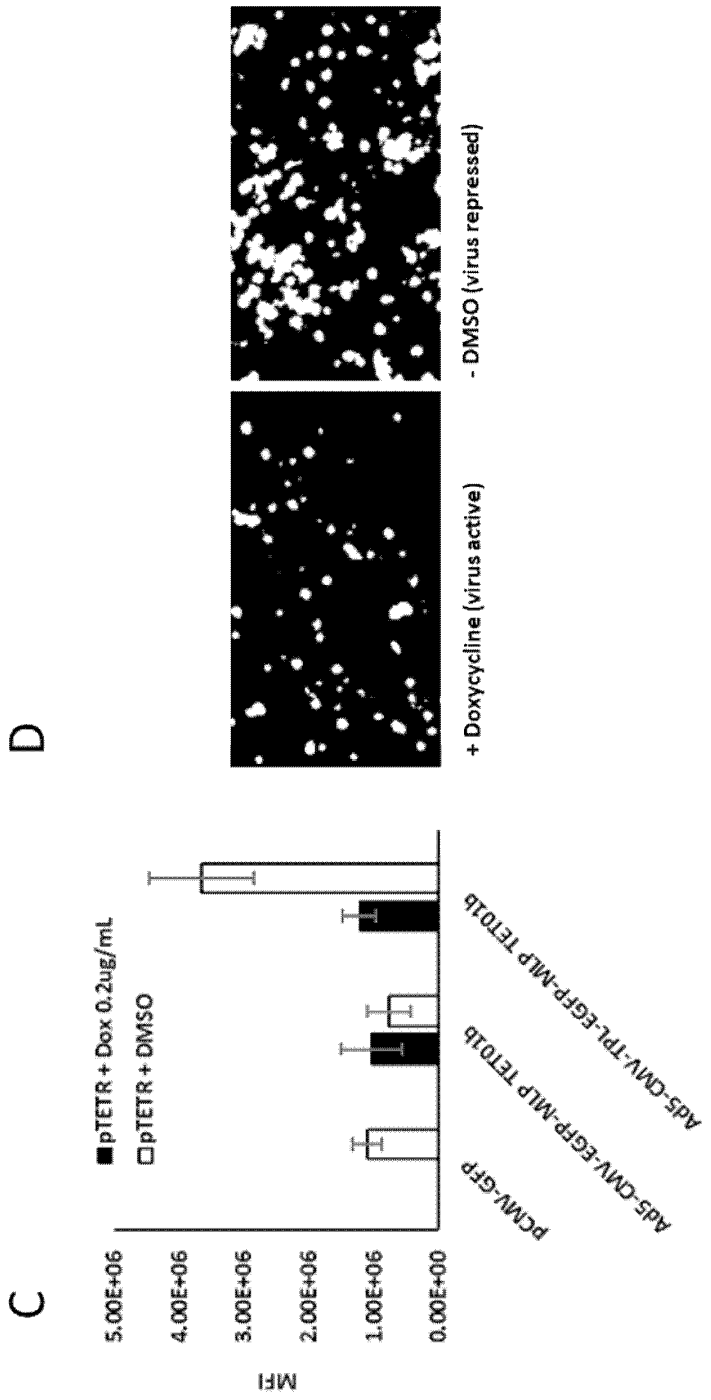
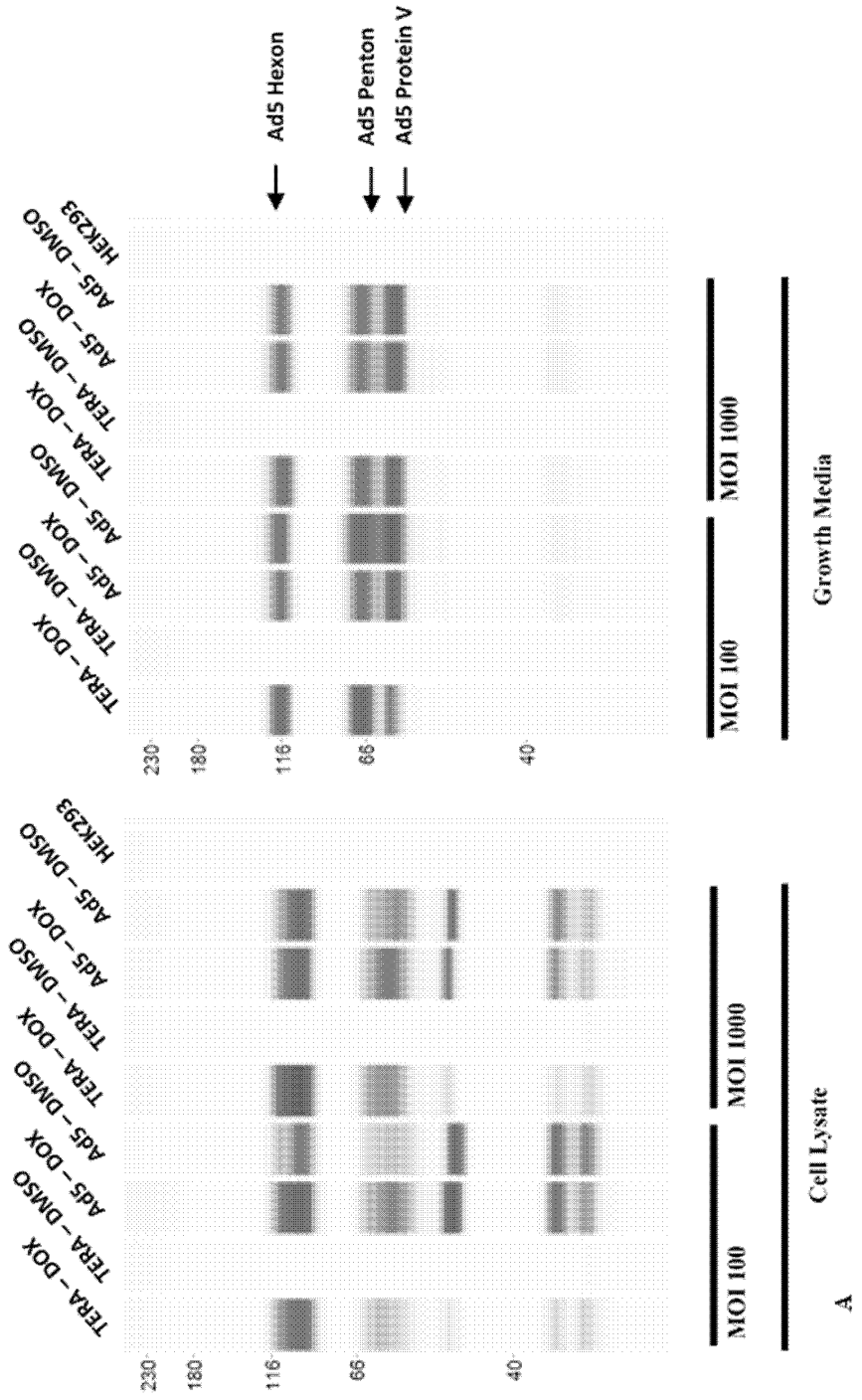
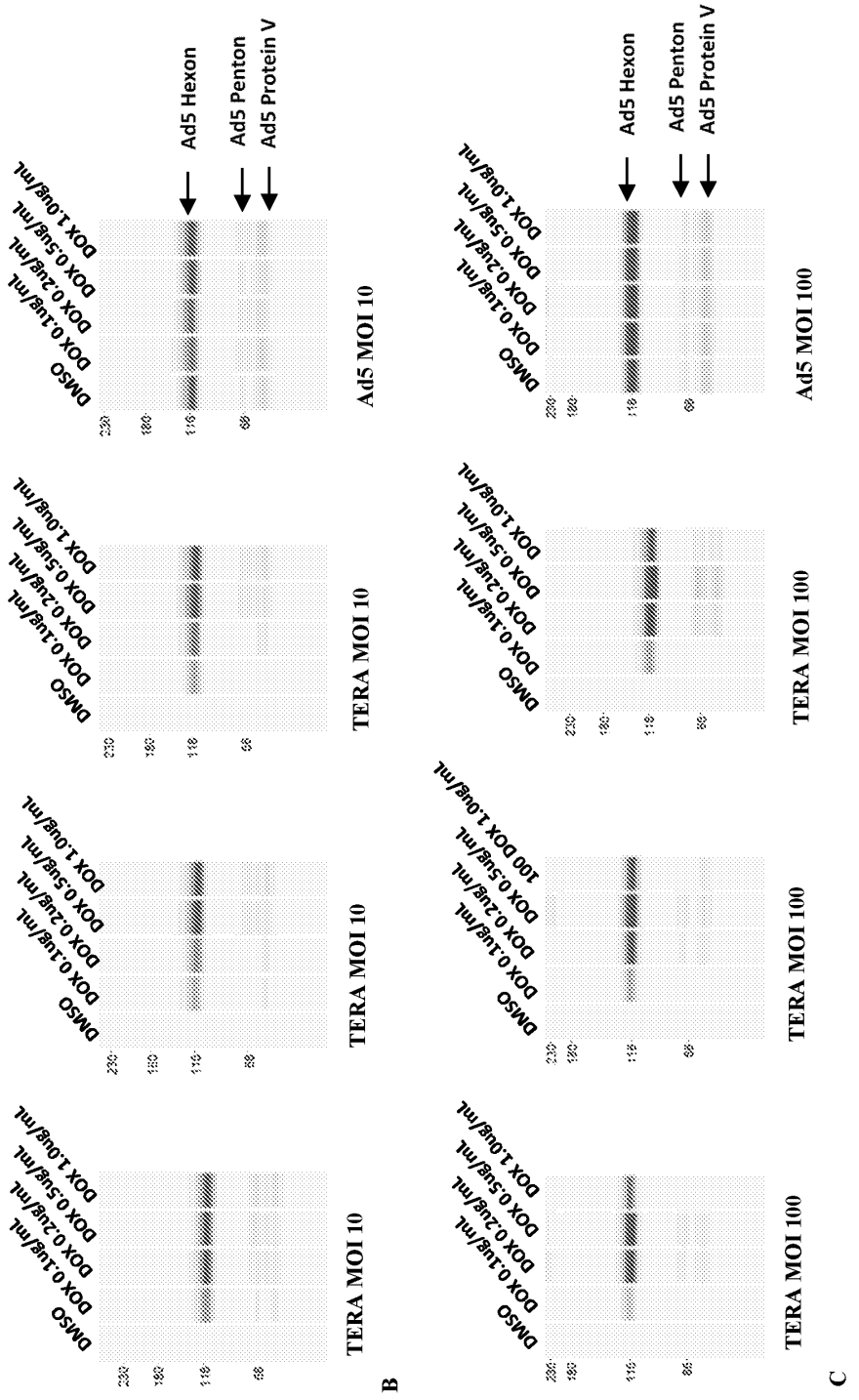


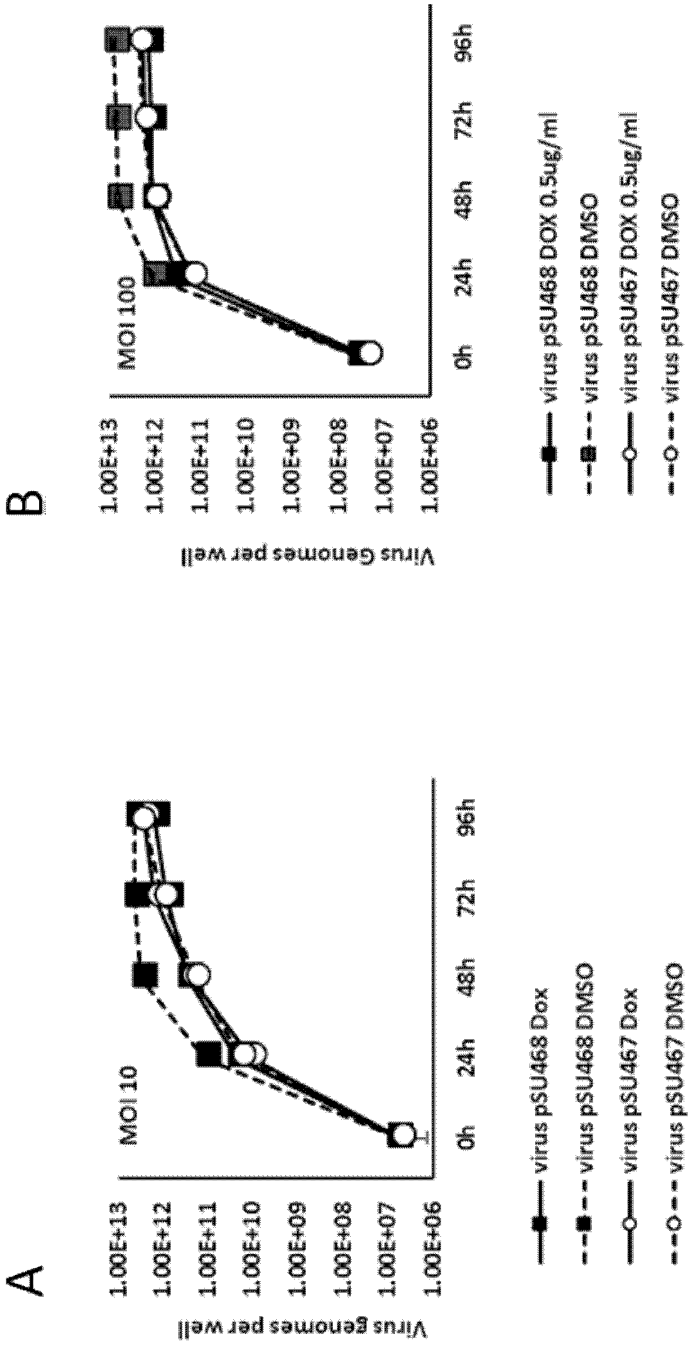
Figure 12A


Ad5 Hexon
Ad5 Penton
Ad5 Protein V
HEK293
Ad5 – DMSO
Ad5 – DOX
TERA – DMSO
TERA – DOX
Ad5 – DMSO
Ad5 – DOX
TERA – DMSO
TERA – DOX
230
180
116
66
40
MOI 100
MOI 1000
Growth Media
Cell Lysate
A

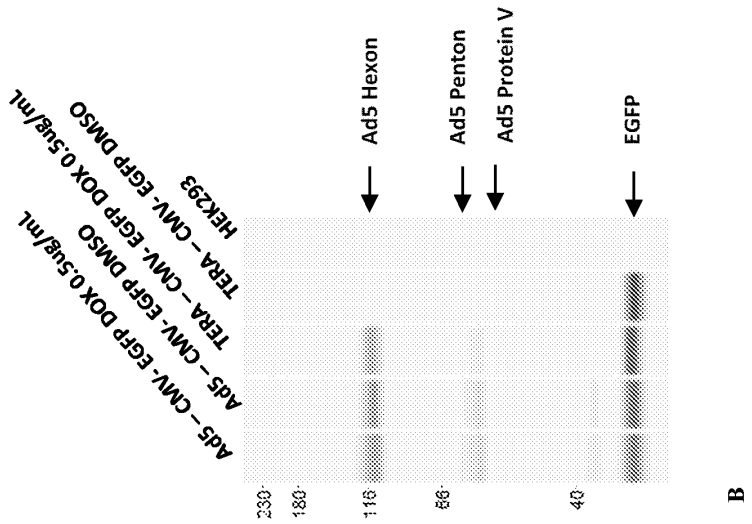
Figures 12B - 12C

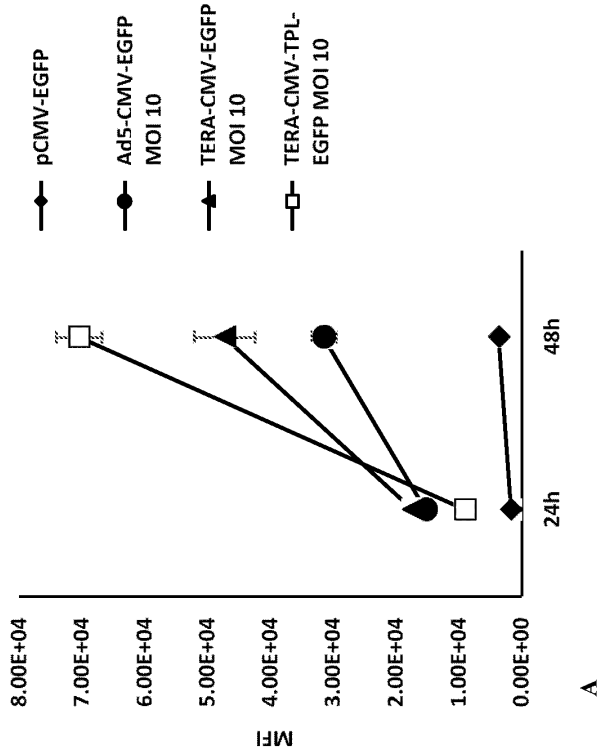


Figures 13A - 13B

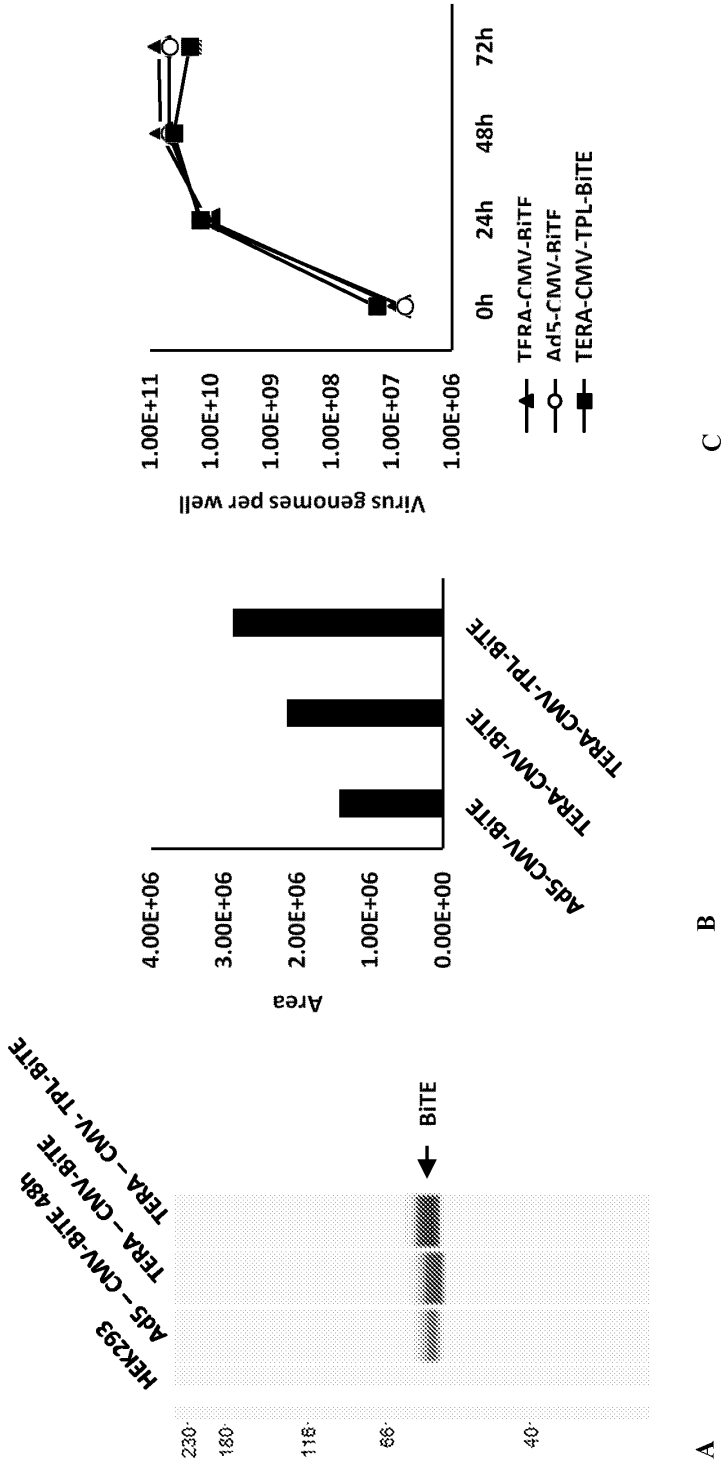


Figures 14A - 14B

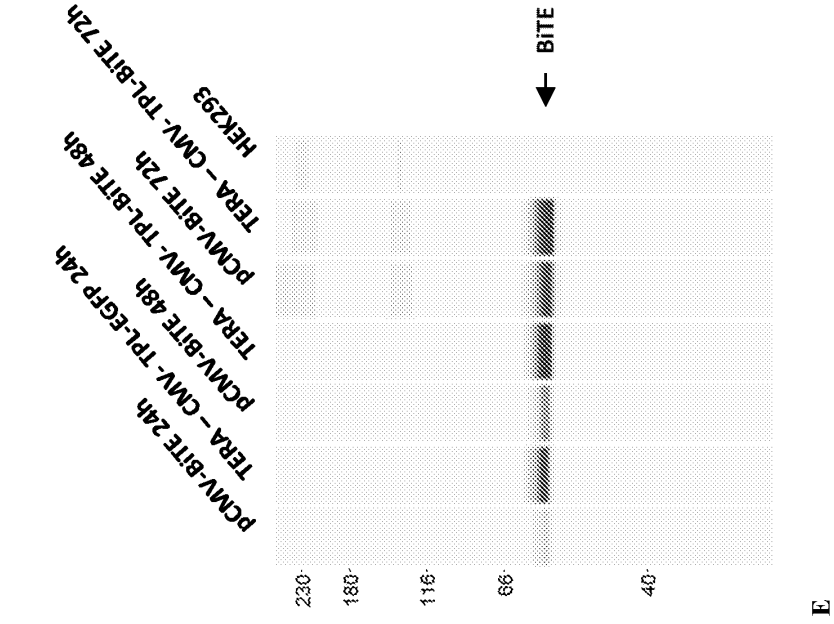




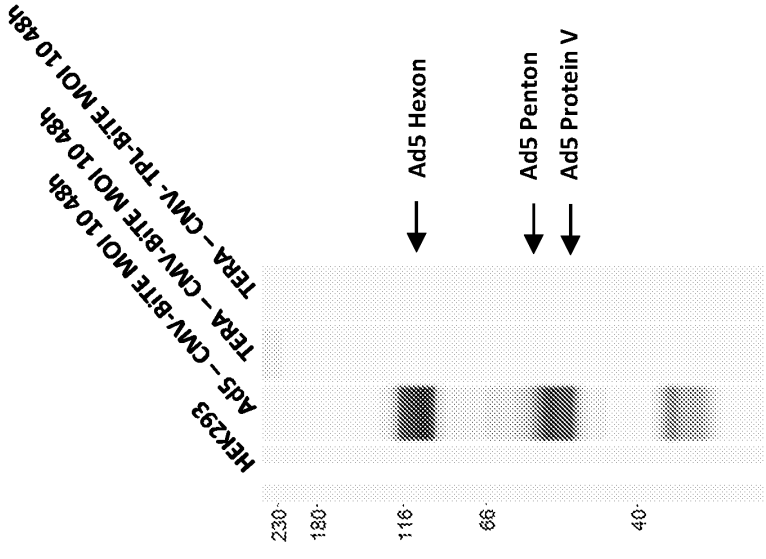
Figures 15A - 15C



Figures 15D - 15E

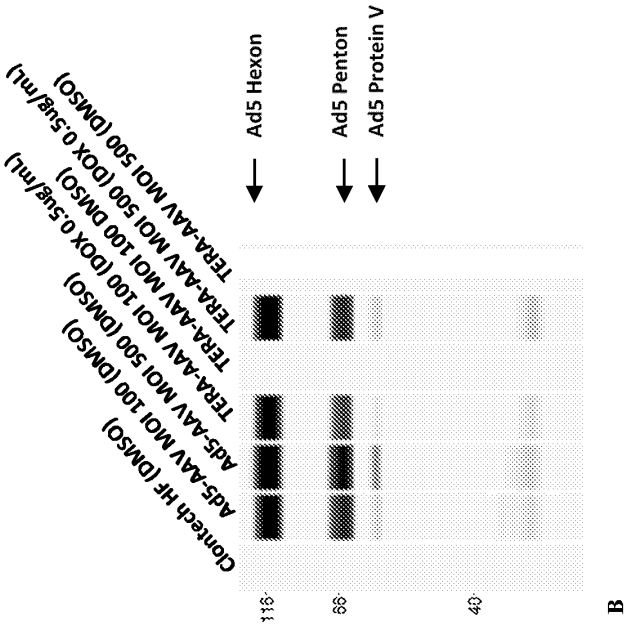


E



D

Figures 16A - 16B



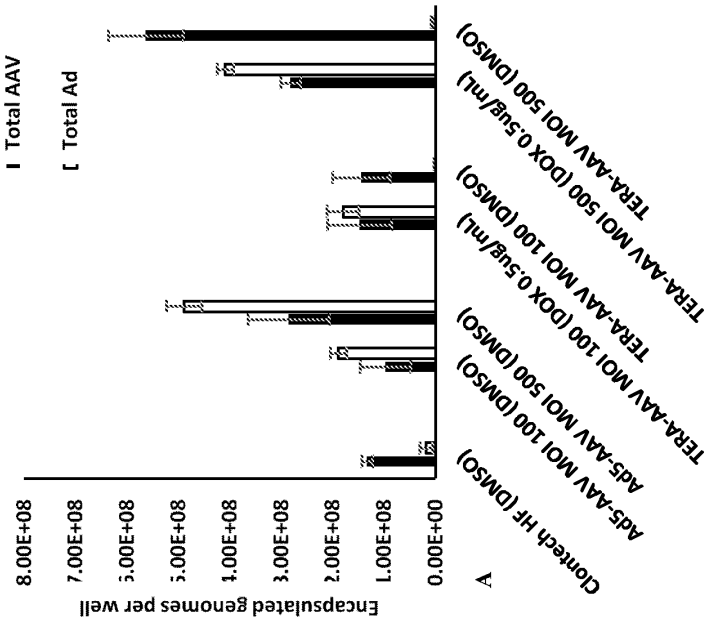


Figure 16C

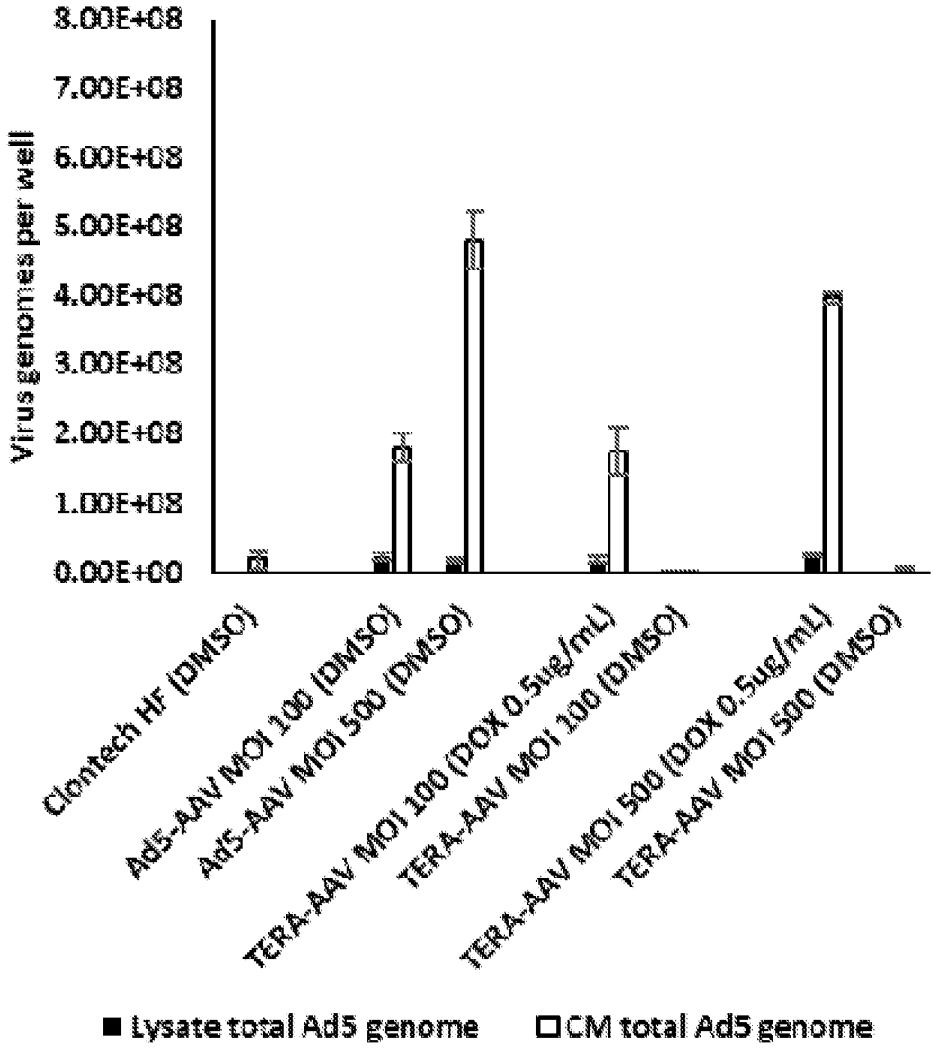
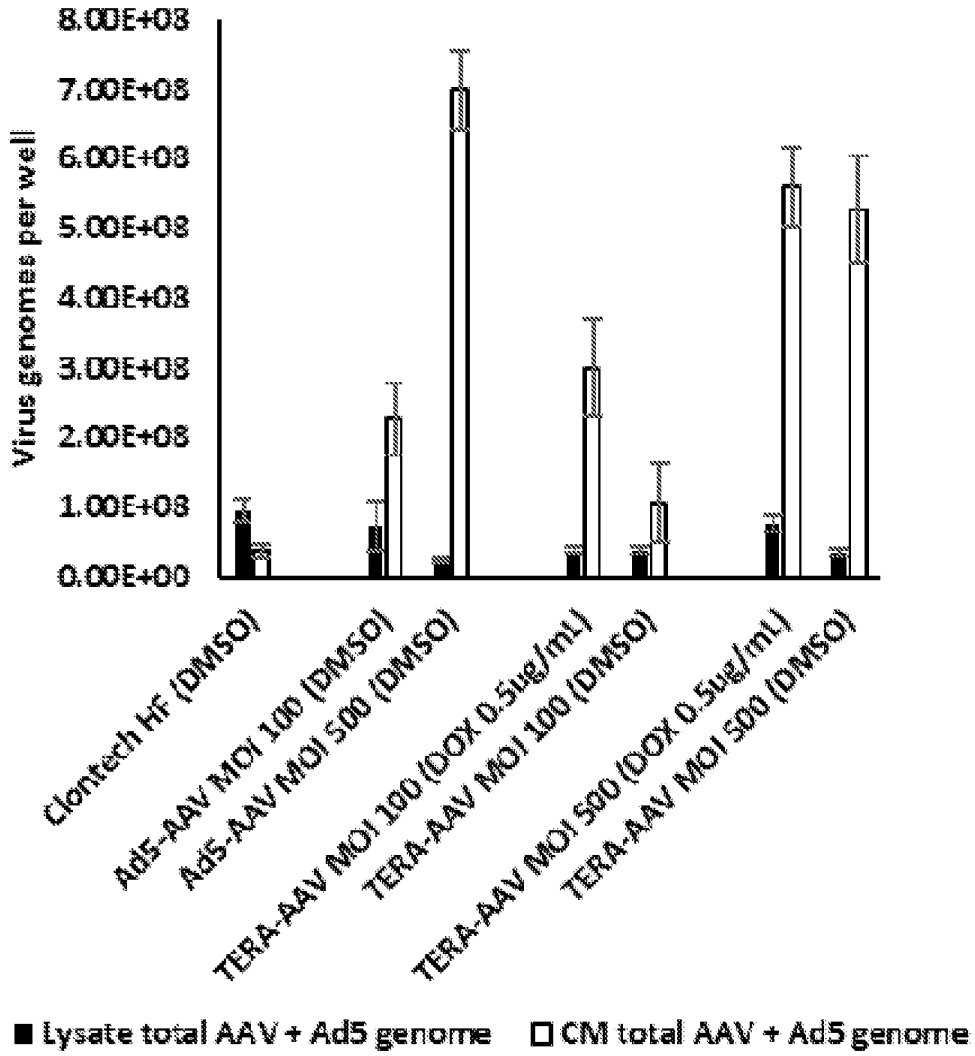
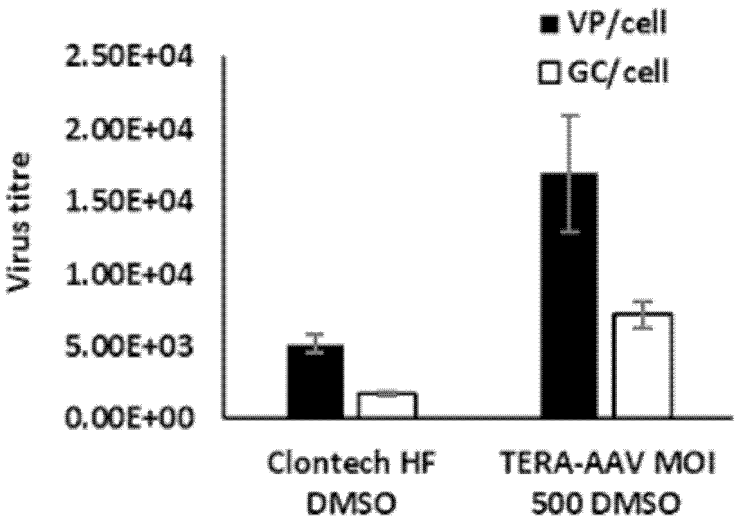

8.00E+08
7.00E+08
6.00E+08
5.00E+08
4.00E+08
3.00E+08
2.00E+08
1.00E+08
0.00E+00
Virus genomes per well
Clontech HF (DMSO)
Ad5-AAV MOI 100 (DMSO)
Ad5-AAV MOI 500 (DMSO)
TERA-AAV MOI 100 (DOX 0.5ug/mL)
TERA-AAV MOI 100 (DMSO)
TERA-AAV MOI 500 (DOX 0.5ug/mL)
TERA-AAV MOI 500 (DMSO)
Lysate total Ad5 genome
CM total Ad5 genome

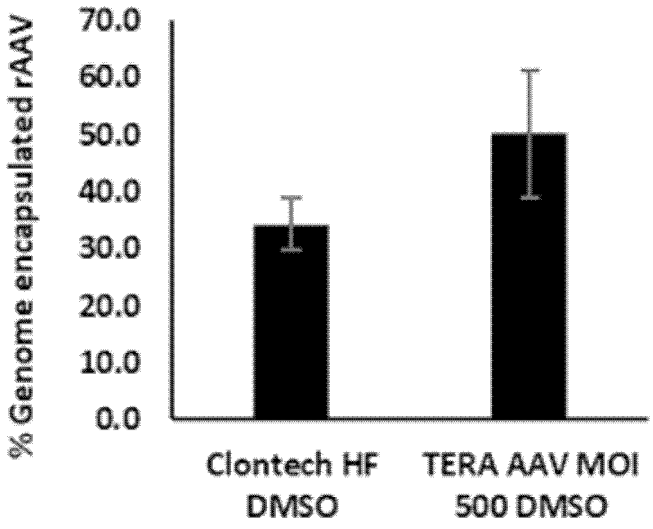
Figure 16D


8.00E+08
7.00E+08
6.00E+08
5.00E+08
4.00E+08
3.00E+08
2.00E+08
1.00E+08
0.00E+00
Virus genomes per well
Clontech HF (DMSO)
Ad5-AAV MOI 100 (DMSO)
Ad5-AAV MOI 500 (DMSO)
TERA-AAV MOI 100 (DOX 0.5ug/mL)
TERA-AAV MOI 100 (DMSO)
TERA-AAV MOI 500 (DOX 0.5ug/mL)
TERA-AAV MOI 500 (DMSO)
Lysate total AAV + Ad5 genome
CM total AAV + Ad5 genome

Figures 16E – 16F

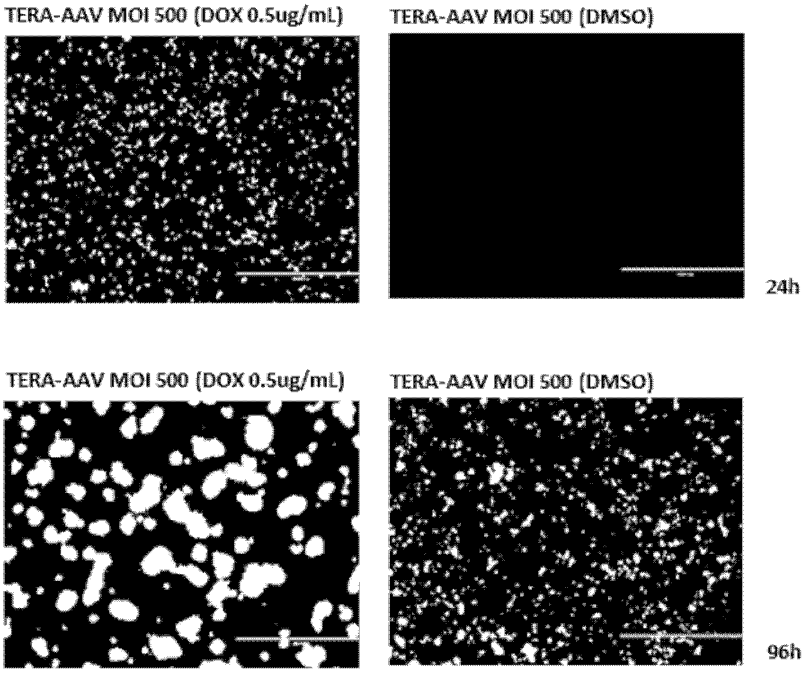


E

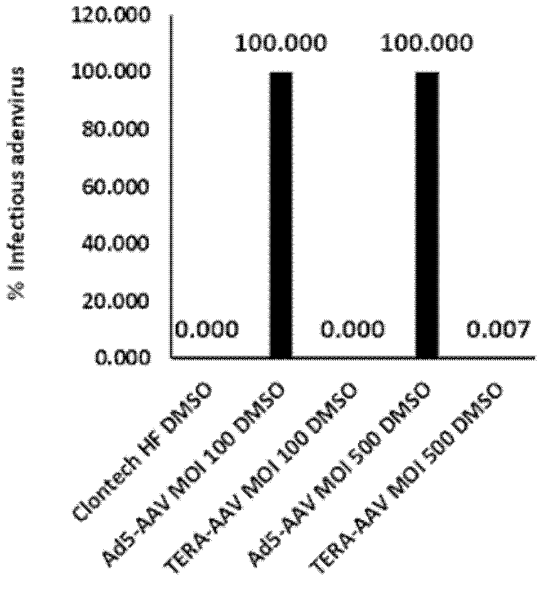


F

Figures 16G - 16H



G



H