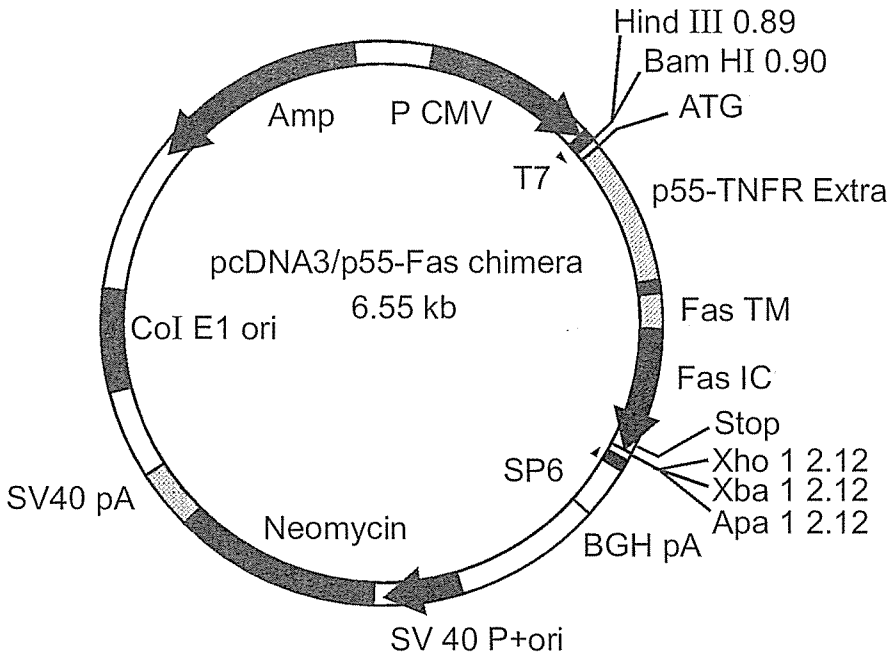

Hind III 0.89
Bam HI 0.90
ATG
p55-TNFR Extra
Fas TM
Fas IC
Stop
Xho 1 2.12
Xba 1 2.12
Apa 1 2.12
BGH pA
SV 40 P+ori
Neomycin
SV40 pA
SP6
T7
Amp
P CMV
pcDNA3/p55-Fas chimera
6.55 kb
CoI E1 ori

Fig. 1a

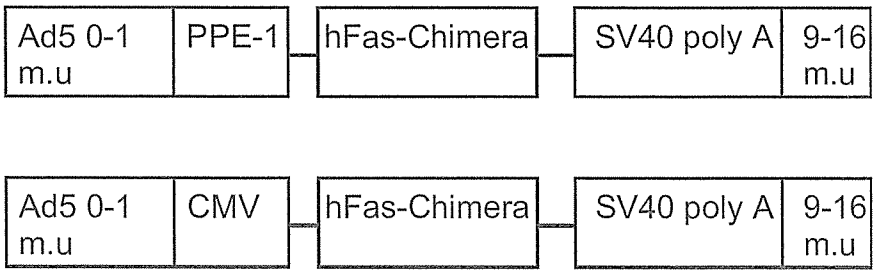

Ad5 0-1 m.u
PPE-1
hFas-Chimera
SV40 poly A
9-16 m.u
Ad5 0-1 m.u
CMV
hFas-Chimera
SV40 poly A
9-16 m.u

Fig. 1b

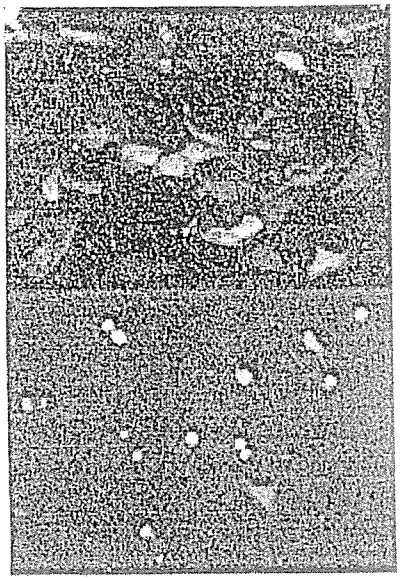


Fig. 2a

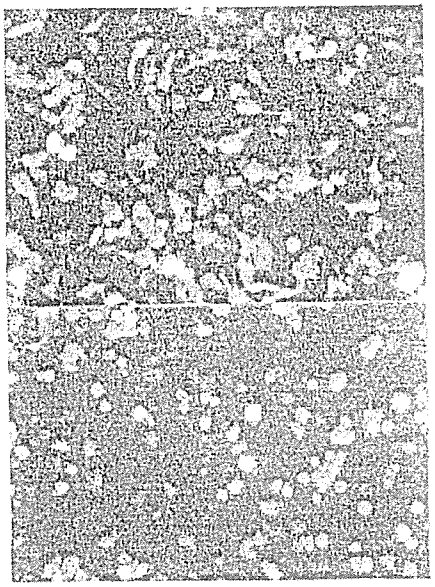


Fig. 2b

Fig. 3a

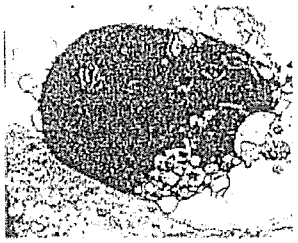


Fig. 3b

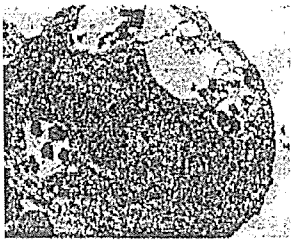


Fig. 3c

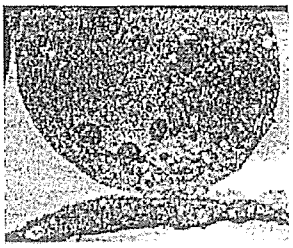


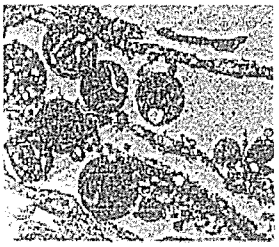
Fig. 3d



Fig. 3e



Fig. 3f



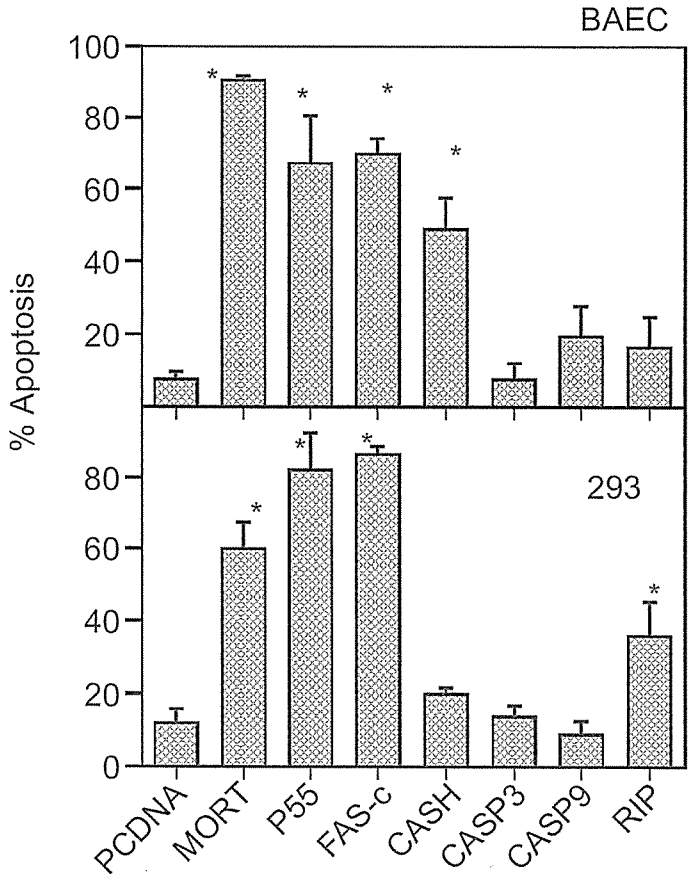

BAEC
293
% Apoptosis
100
80
60
40
20
0
PCDNA
MORT
P55
FAS-c
CASH
CASP3
CASP9
RIP

Fig. 4

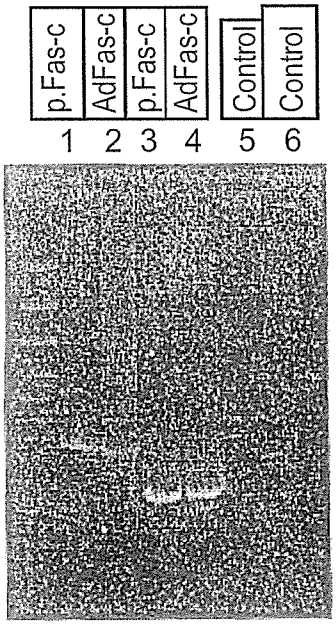


Fig. 5a

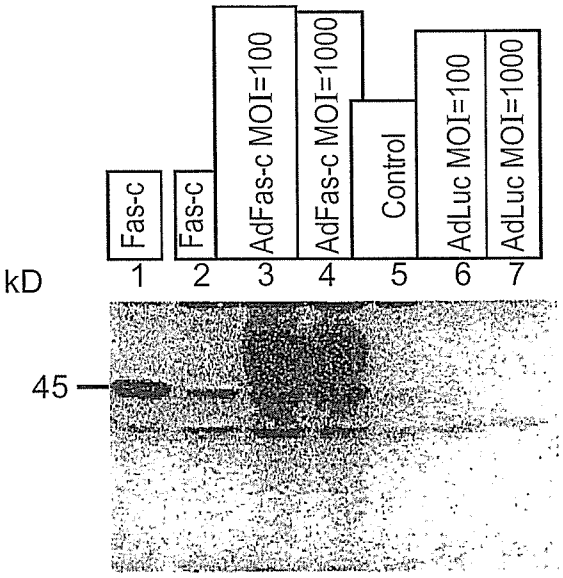


Fig. 5b

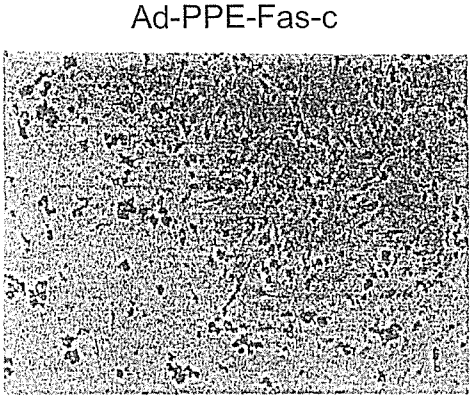


Fig. 6a

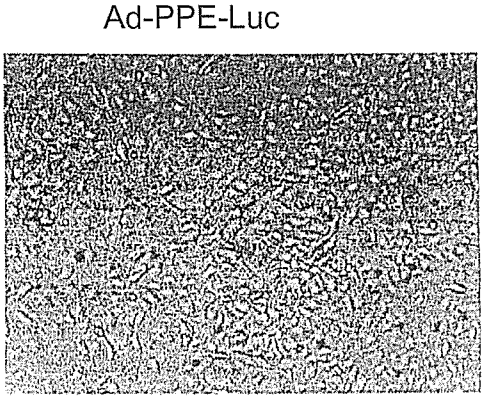


Fig. 6b

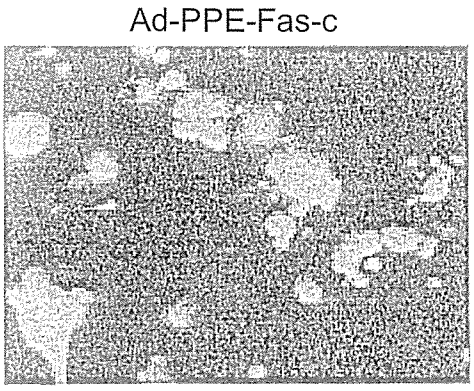


Fig. 6c

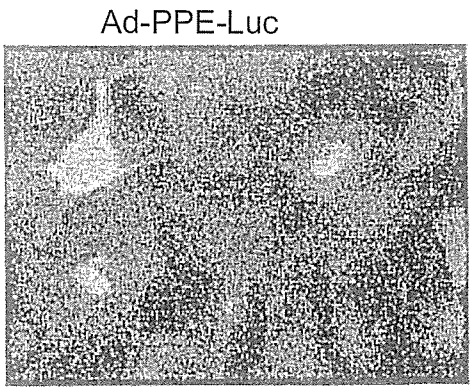


Fig. 6d

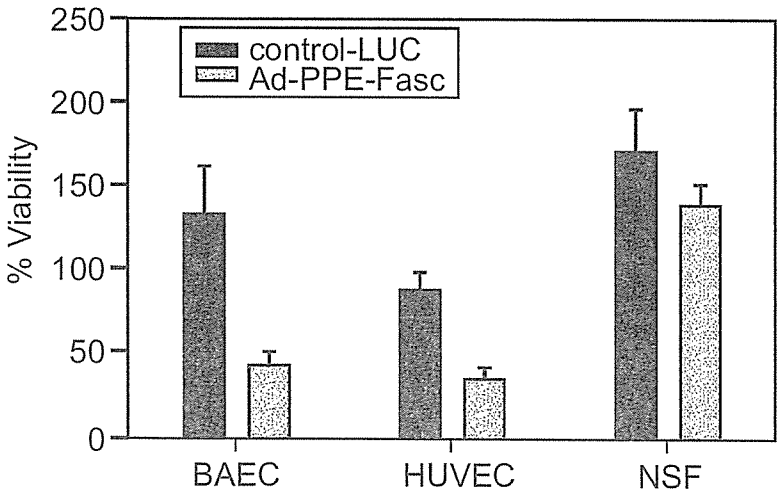


Fig. 7

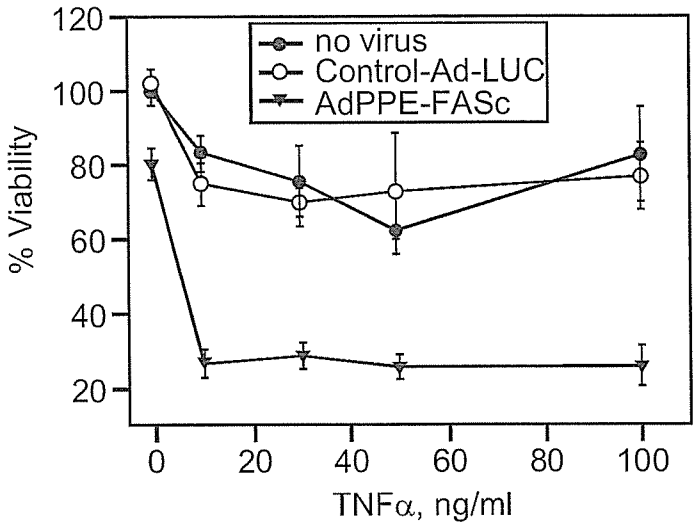


Fig. 8

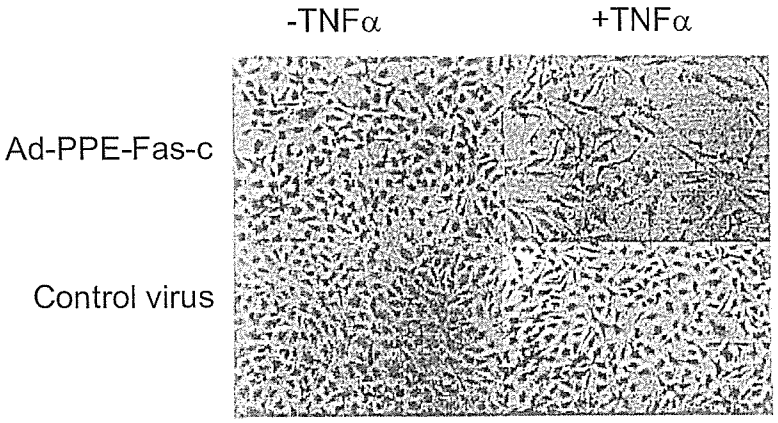


Fig. 9a

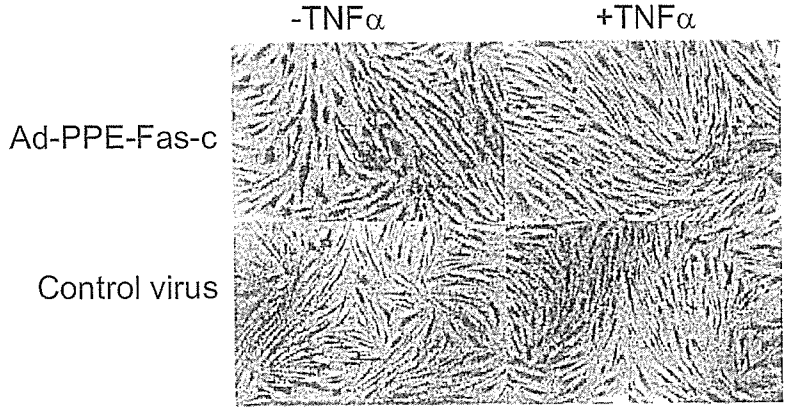


Fig. 9b

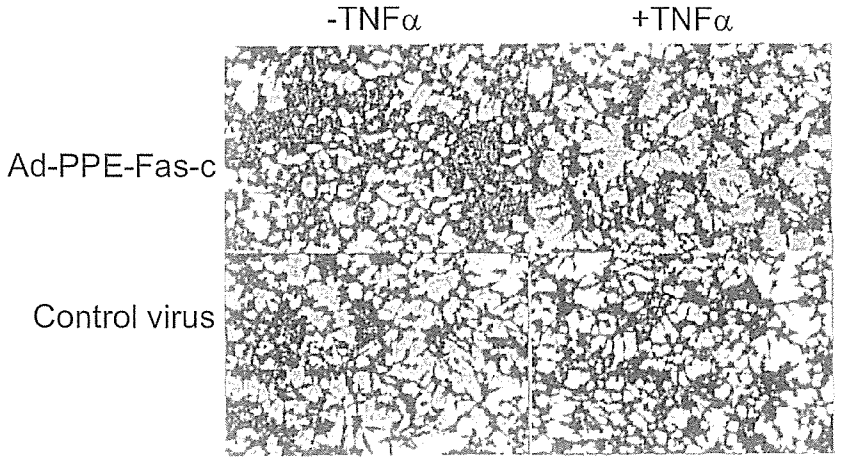


Fig. 9c

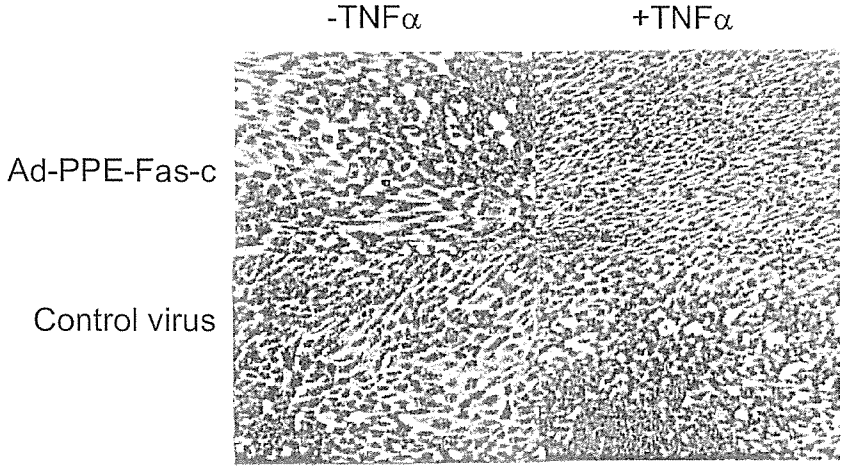


Fig. 9d

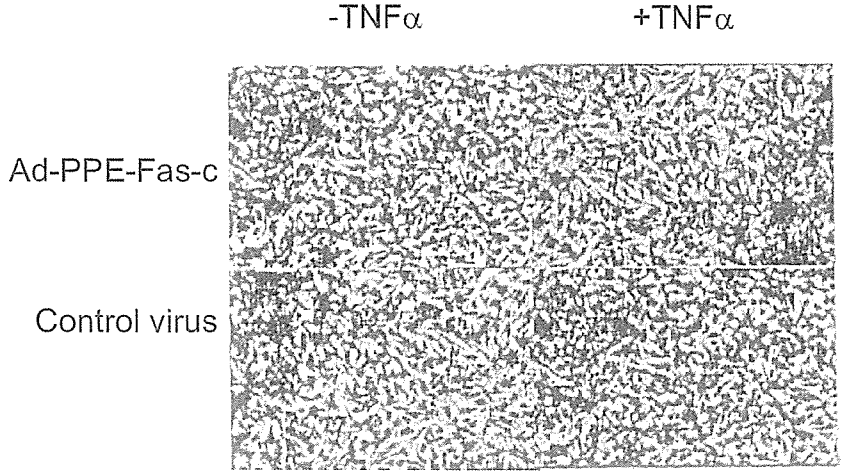


Fig. 9e

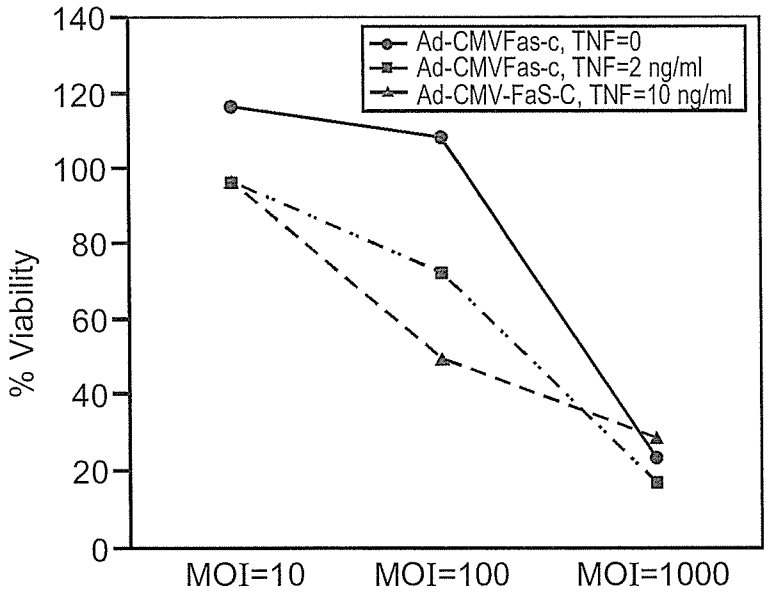


Fig. 10a

Control virus

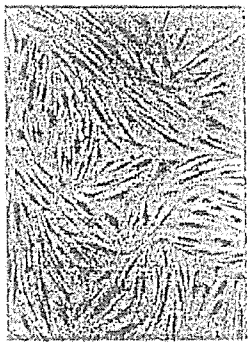


Fig. 10b

Ad-CMV-Fas-c

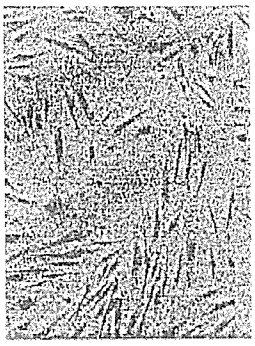


Fig. 10c

Ad-CMV-Fas-c
+TNFα

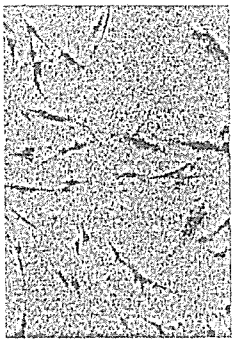


Fig. 10d

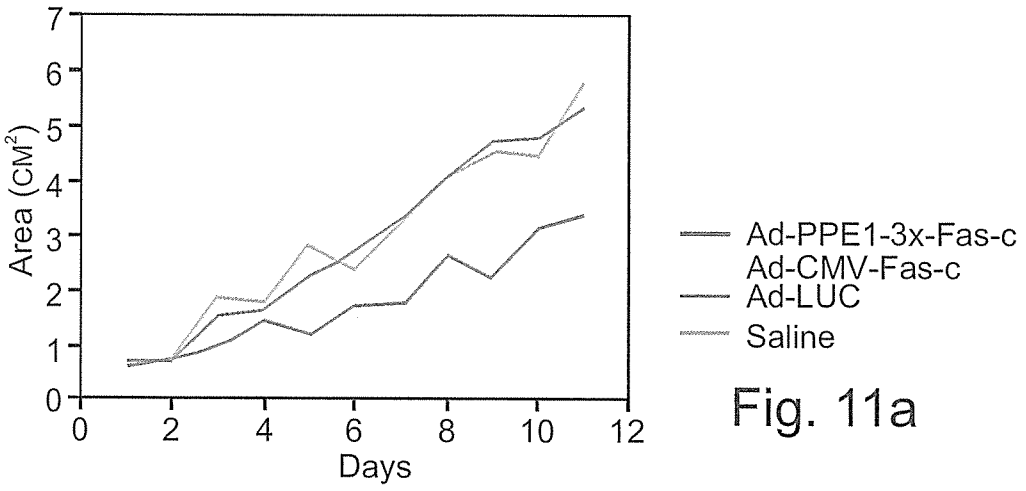


Fig. 11a

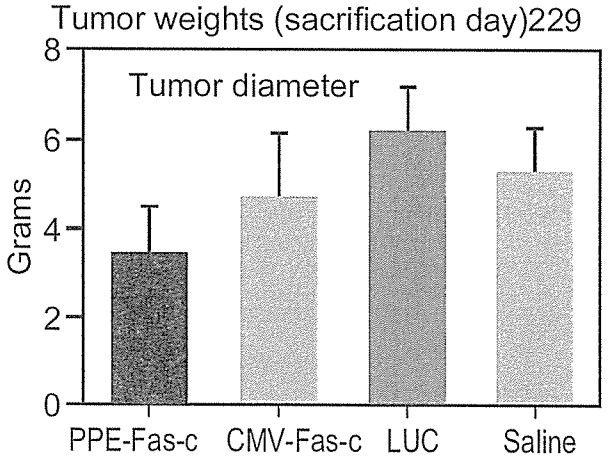


Fig. 11b

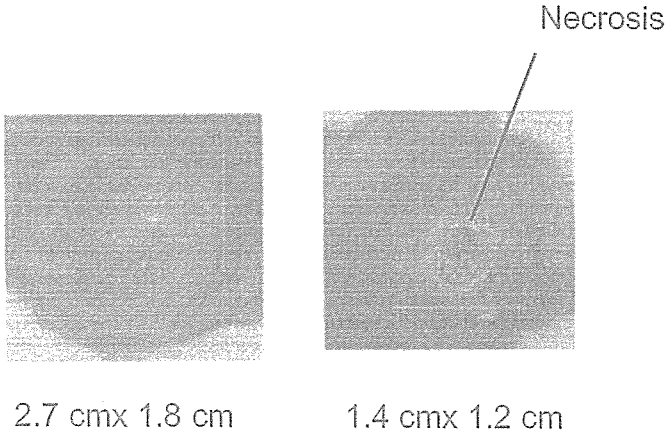


Fig. 11c

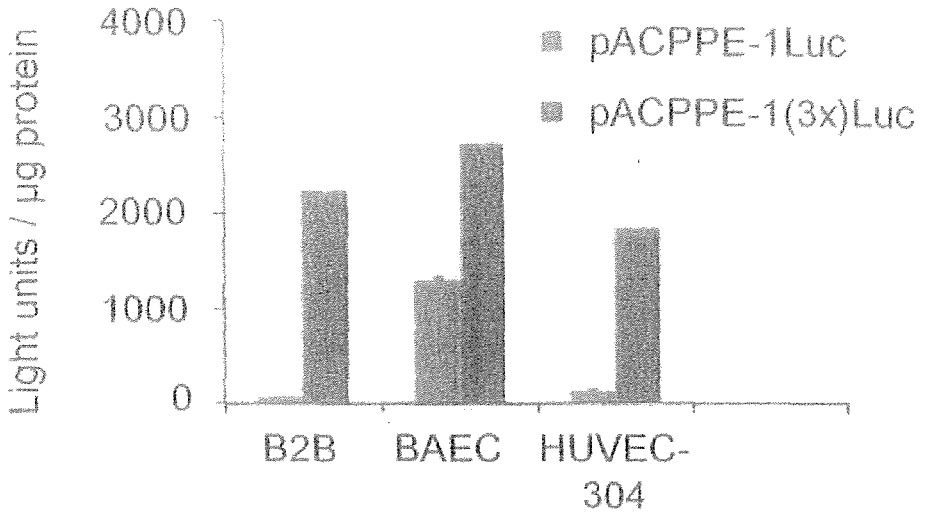

Light units / µg protein
4000
3000
2000
1000
0
pACPPE-1Luc
pACPPE-1(3x)Luc
B2B
BAEC
HUVEC-304

Fig. 12

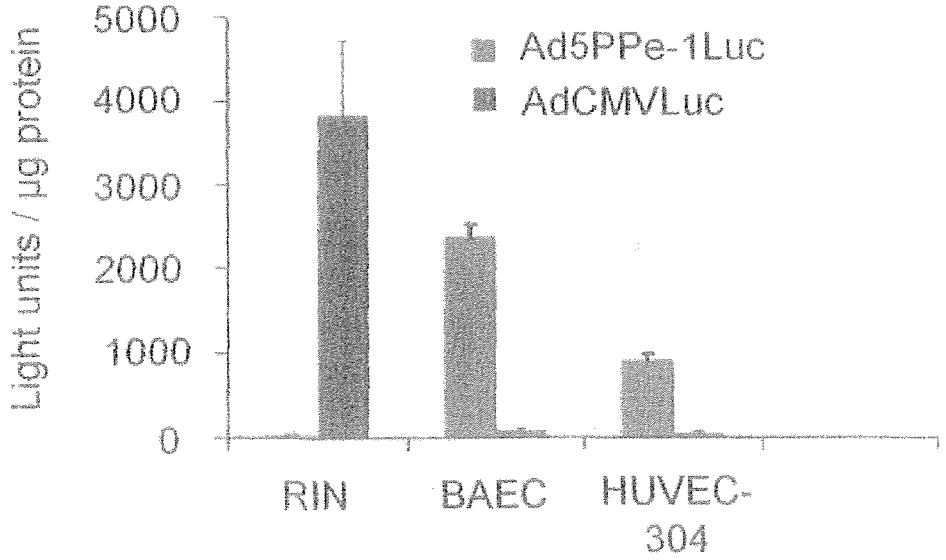

Light units / µg protein
5000
4000
3000
2000
1000
0
Ad5PPe-1Luc
AdCMVLuc
RIN
BAEC
HUVEC-304

Fig. 13

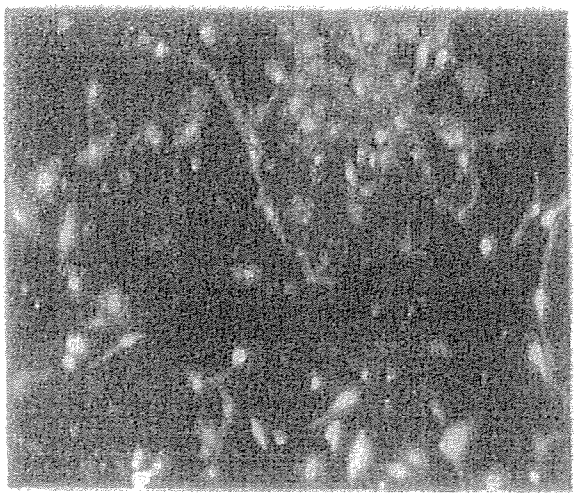


Fig. 14a

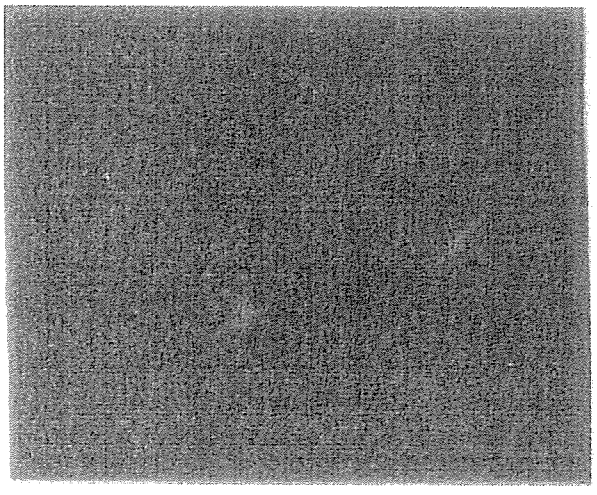


Fig. 14b

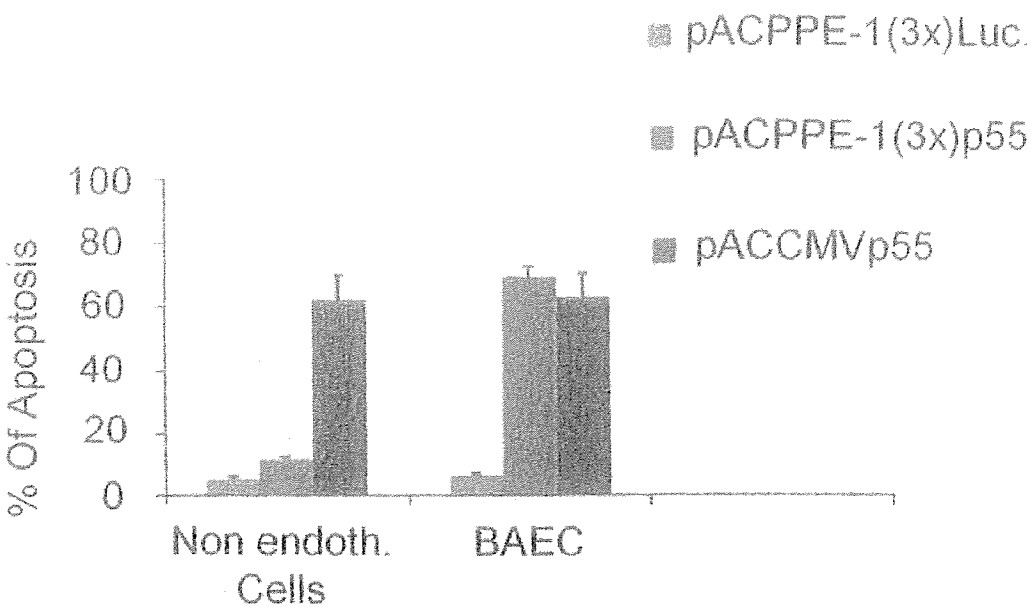

pACPPE-1(3x)Luc.
pACPPE-1(3x)p55
pACCMVp55
% Of Apoptosis
100
80
60
40
20
0
Non endoth. Cells
BAEC

Fig. 15

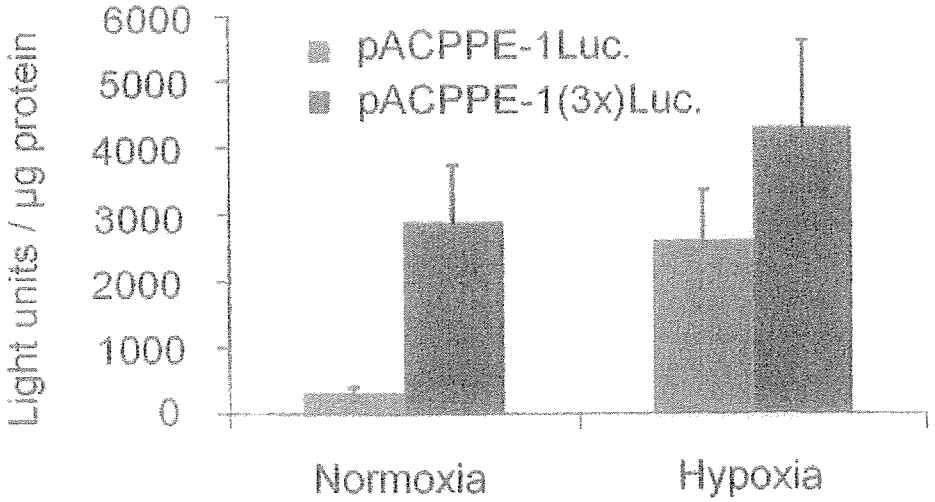

Light units / µg protein
6000
5000
4000
3000
2000
1000
0
pACPPE-1Luc.
pACPPE-1(3x)Luc.
Normoxia
Hypoxia

Fig. 16

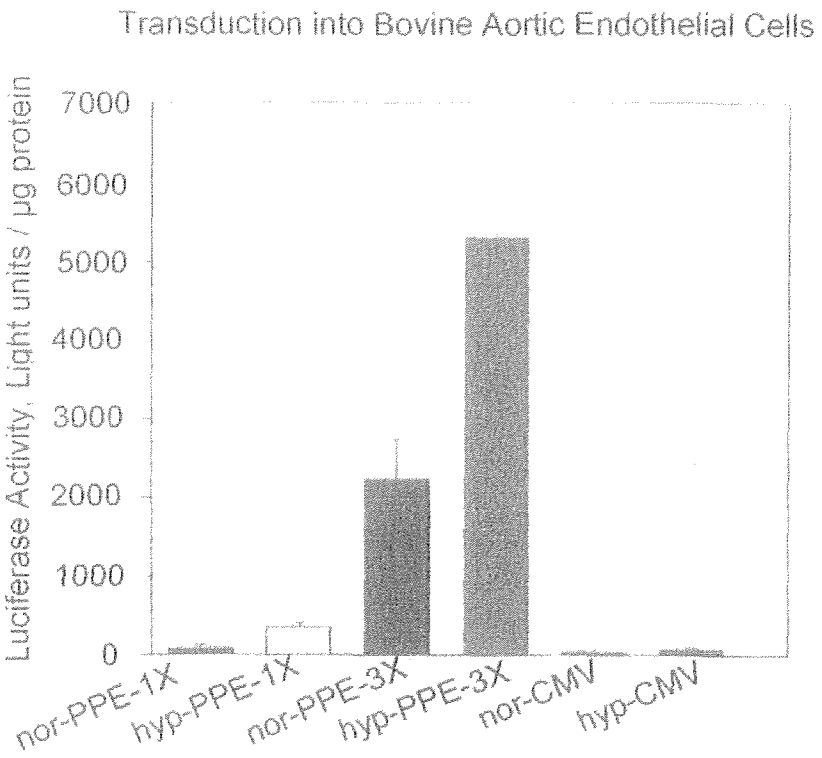

Transduction into Bovine Aortic Endothelial Cells
Luciferase Activity, Light units / µg protein
7000
6000
5000
4000
3000
2000
1000
0
nor-PPE-1X
hyp-PPE-1X
nor-PPE-3X
hyp-PPE-3X
nor-CMV
hyp-CMV

Fig. 17

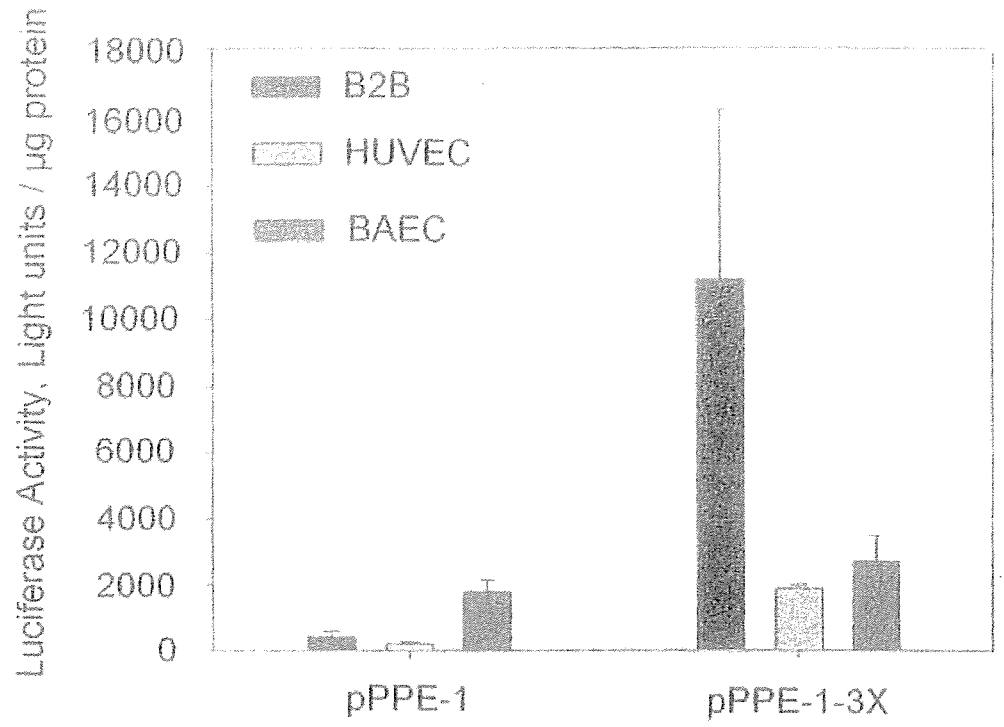

Luciferase Activity, Light units / µg protein
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
B2B
HUVEC
BAEC
pPPE-1
pPPE-1-3X

Fig. 18

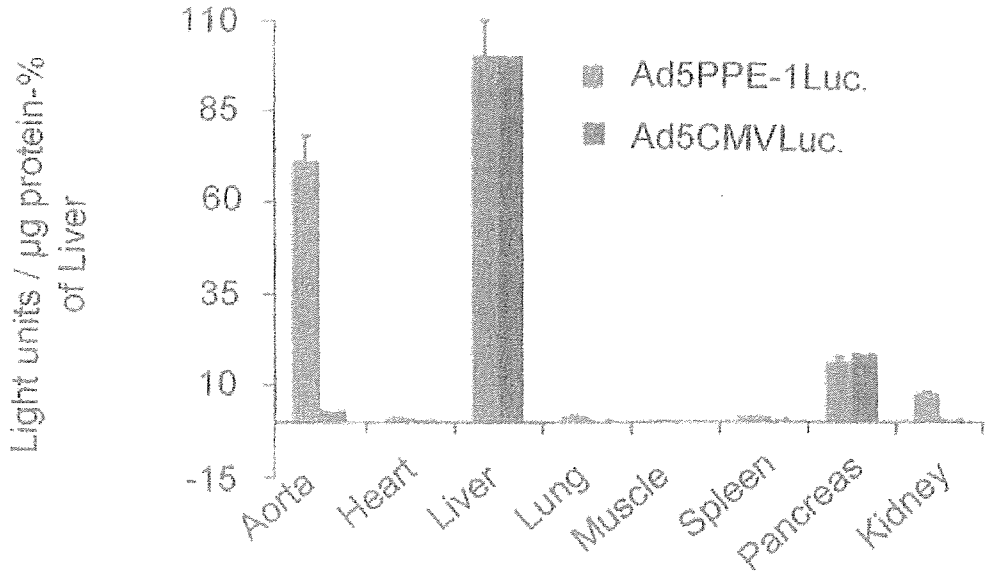
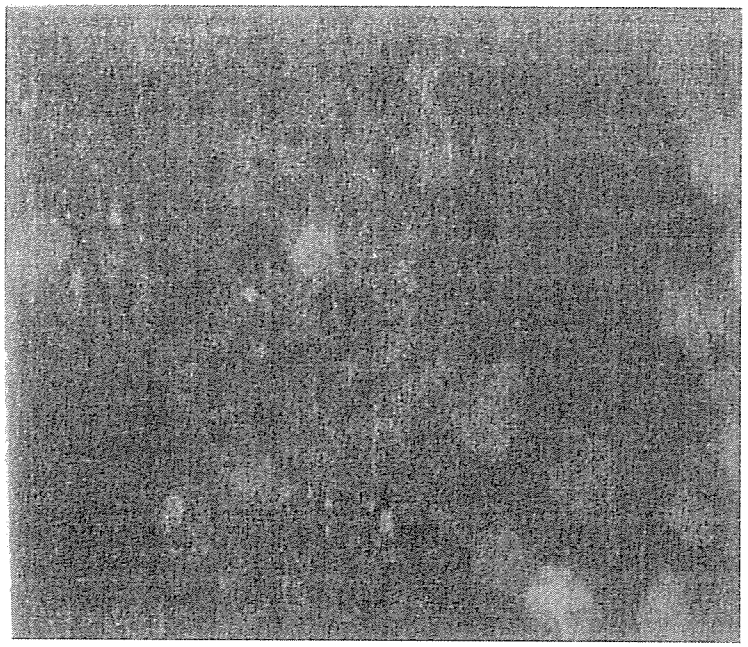
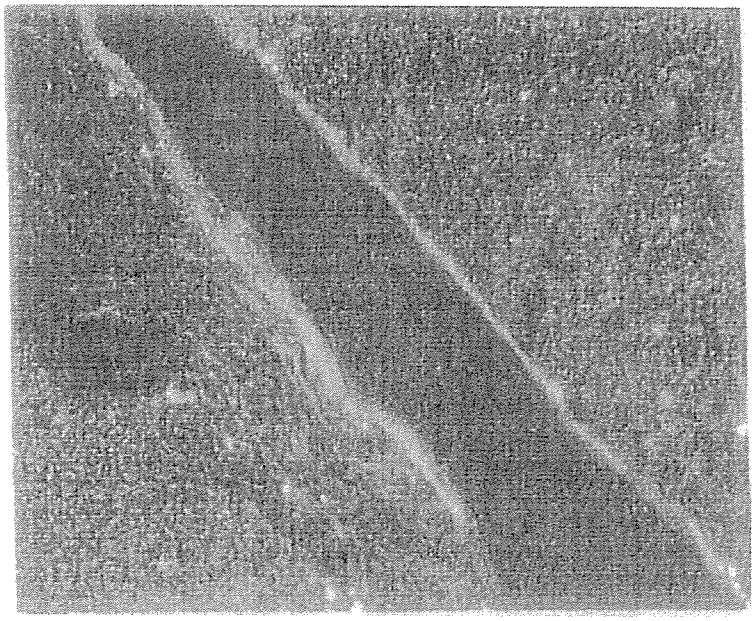

Light units / µg protein-% of Liver
110
85
60
35
10
-15
Ad5PPE-1Luc.
Ad5CMVLuc.
Aorta
Heart
Liver
Lung
Muscle
Spleen
Pancreas
Kidney

Fig. 19



CMV

Fig. 20a



PPE

Fig. 20b

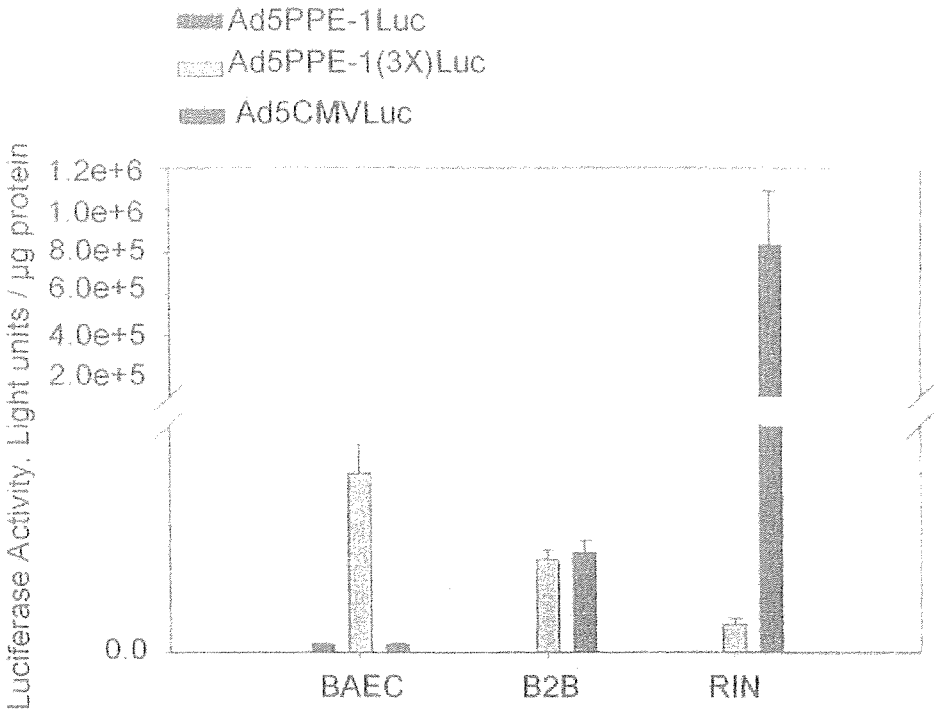

Ad5PPE-1Luc
Ad5PPE-1(3X)Luc
Ad5CMVLuc
Luciferase Activity, Light units / µg protein
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
0.0
BAEC
B2B
RIN

Fig. 21

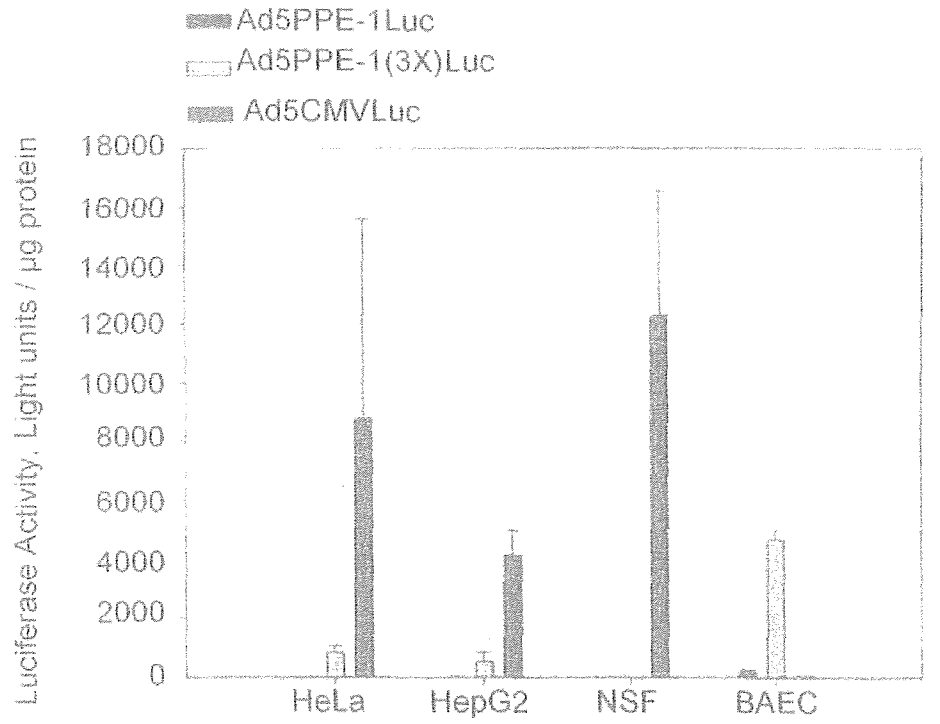

Ad5PPE-1Luc
Ad5PPE-1(3X)Luc
Ad5CMVLuc
Luciferase Activity, Light units / µg protein
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
HeLa
HepG2
NSF
BAEC

Fig. 22

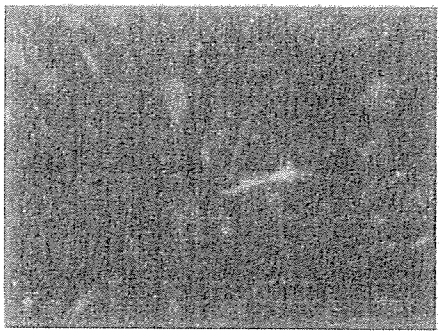


Fig. 23a

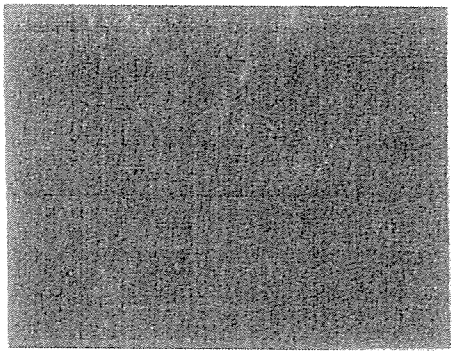


Fig. 24a

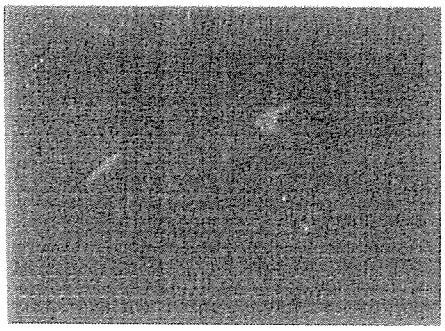


Fig. 23b

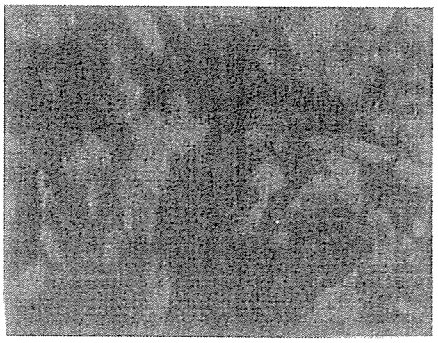


Fig. 24b

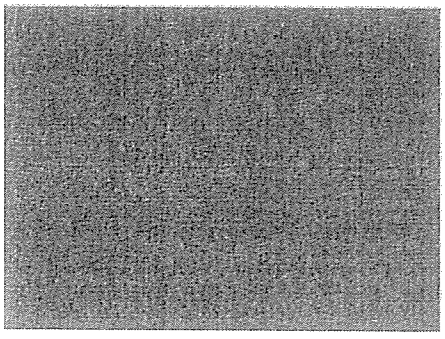


Fig. 23c

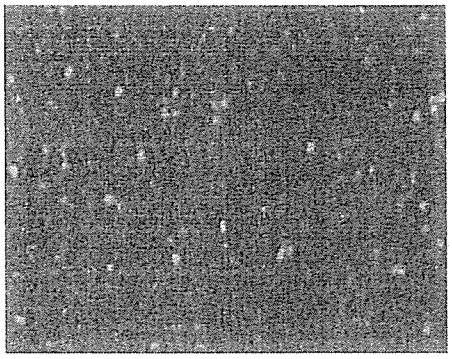


Fig. 25a

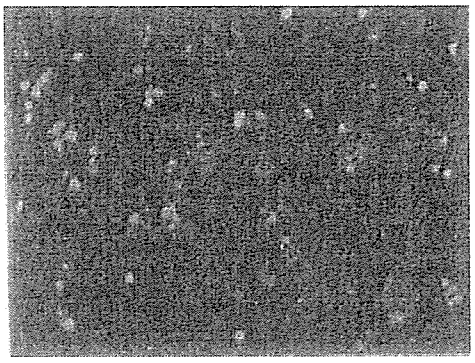


Fig. 26a

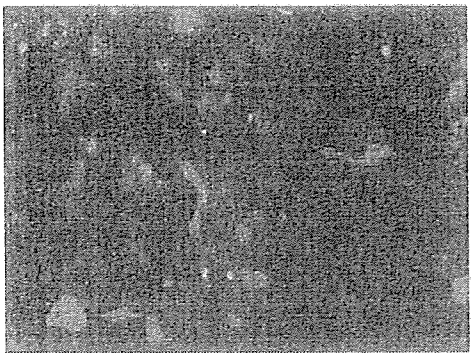


Fig. 25b

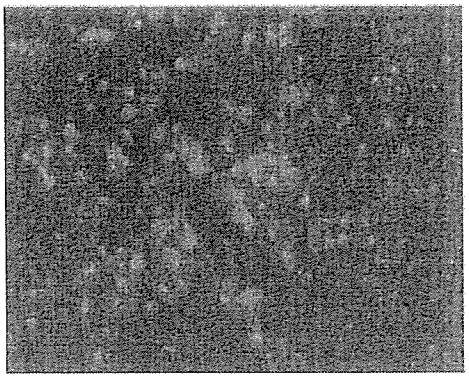


Fig. 26b

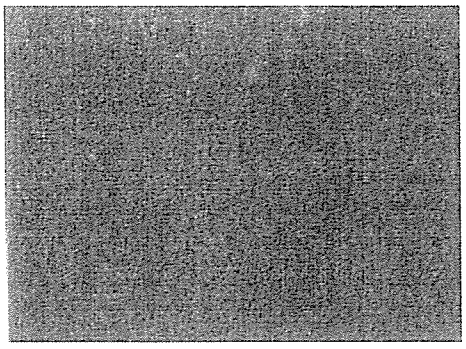


Fig. 27a

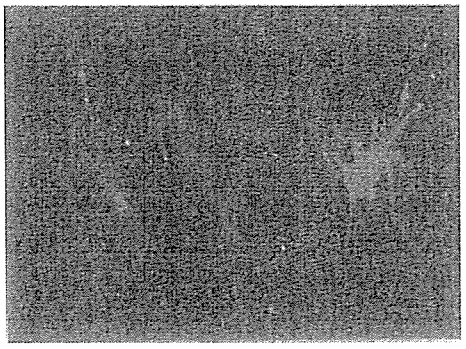


Fig. 27b

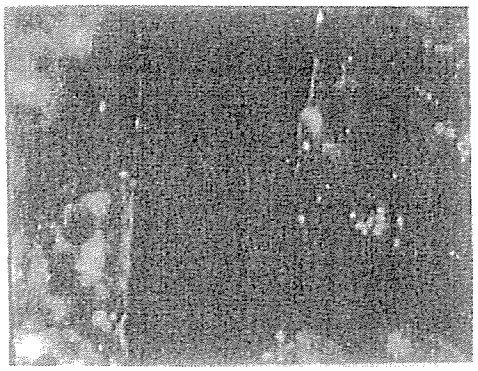


Fig. 28a



Fig. 28b

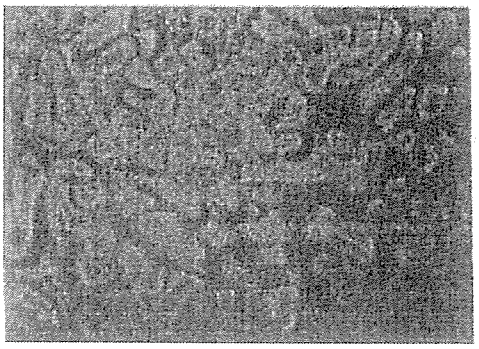


Fig. 29a

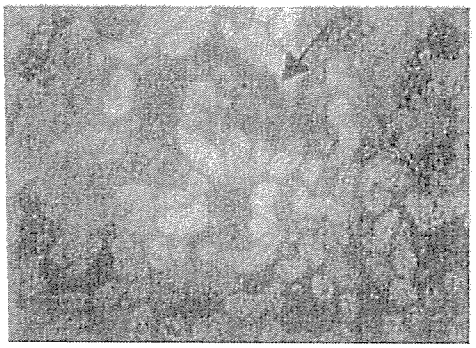


Fig. 29b

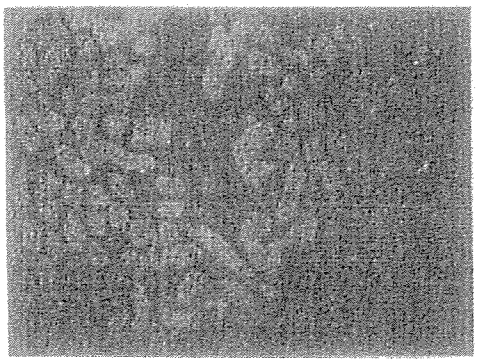


Fig. 29c

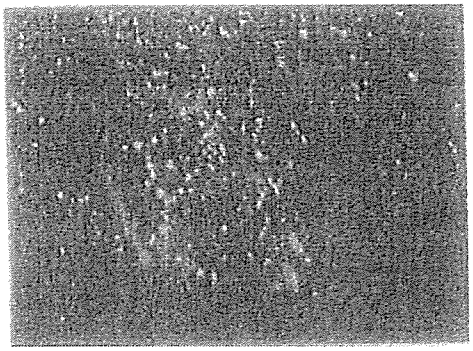


Fig. 30a

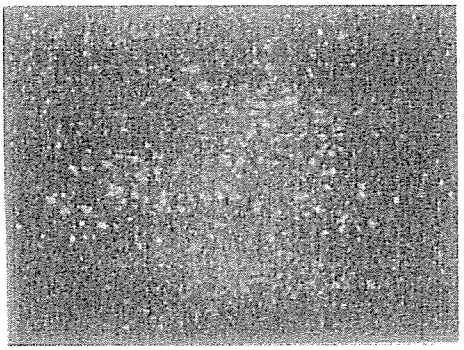


Fig. 30b

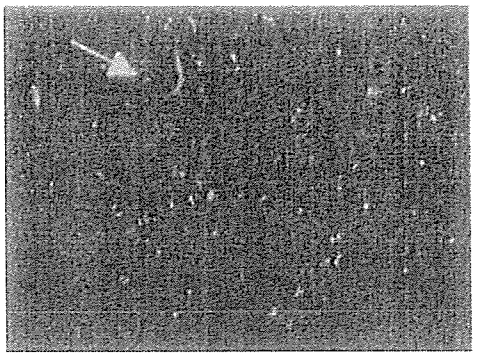


Fig. 30c

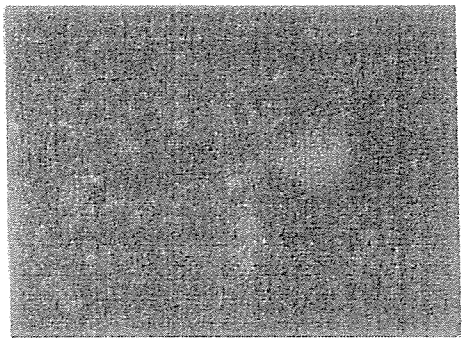


Fig. 31a

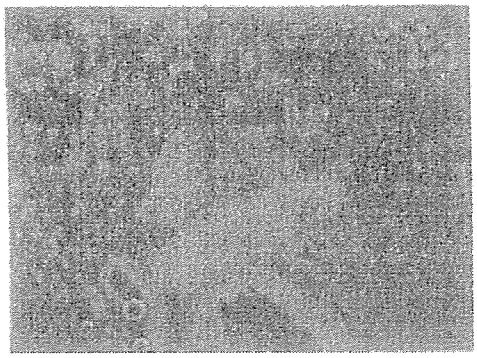


Fig. 31b

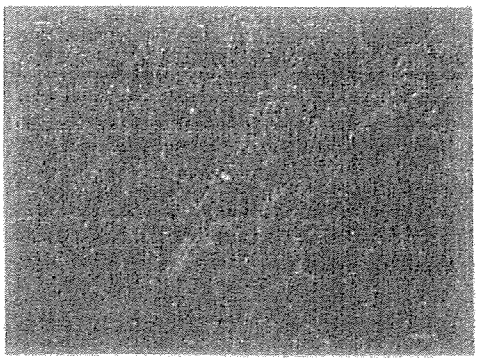


Fig. 31c

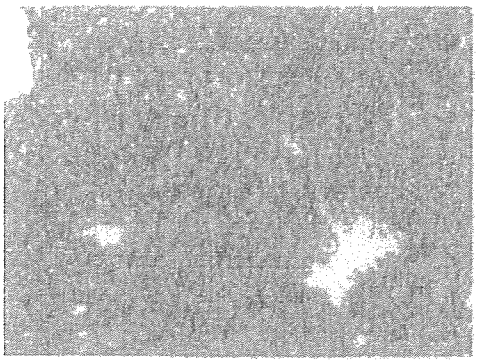


Fig. 31c'

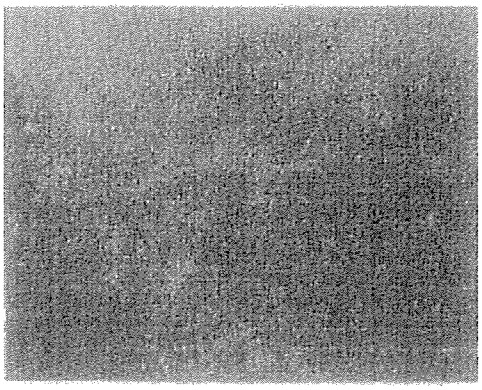


Fig. 31d

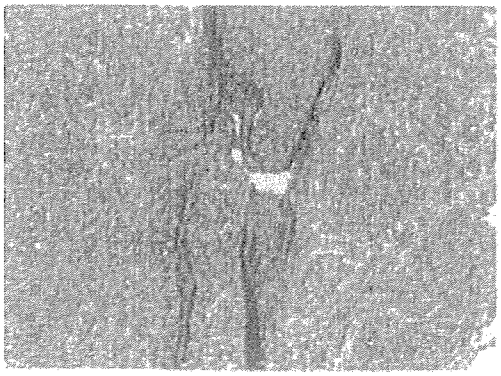


Fig. 31d'

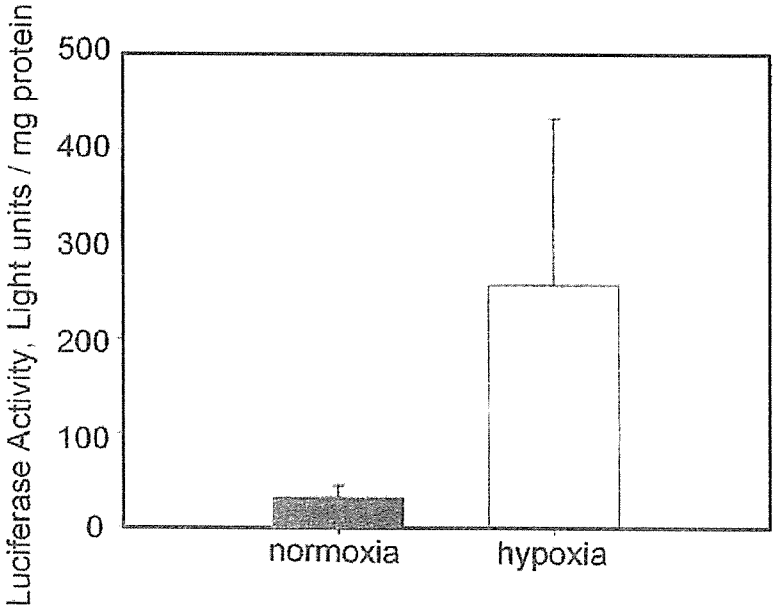


Fig. 32

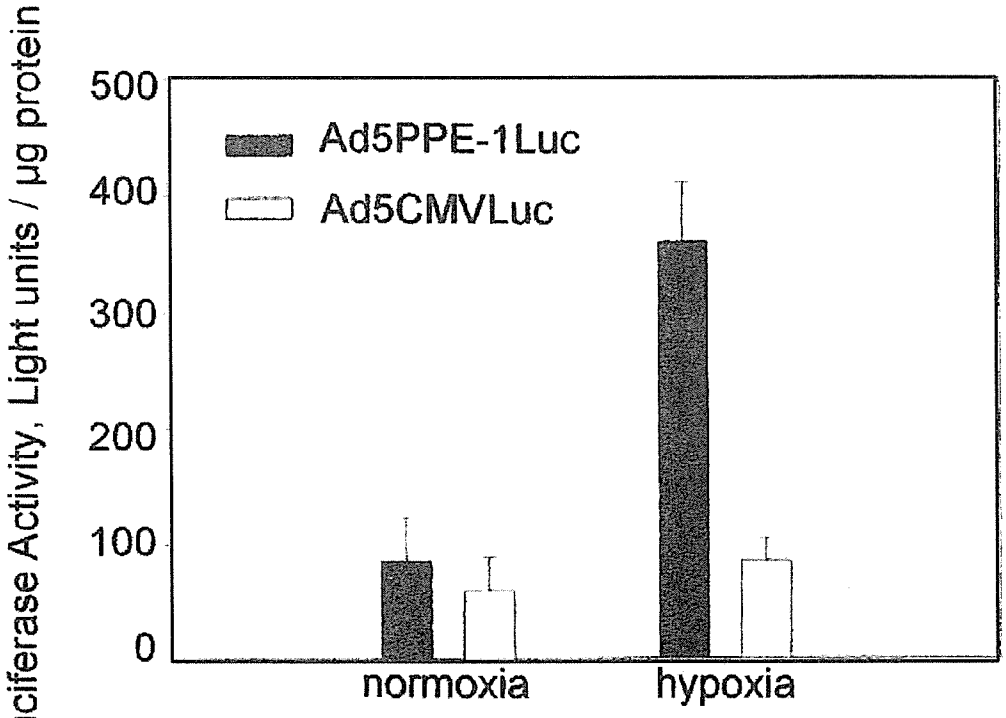

Luciferase Activity, Light units / µg protein
500
400
300
200
100
0
Ad5PPE-1Luc
Ad5CMVLuc
normoxia
hypoxia

Fig. 33

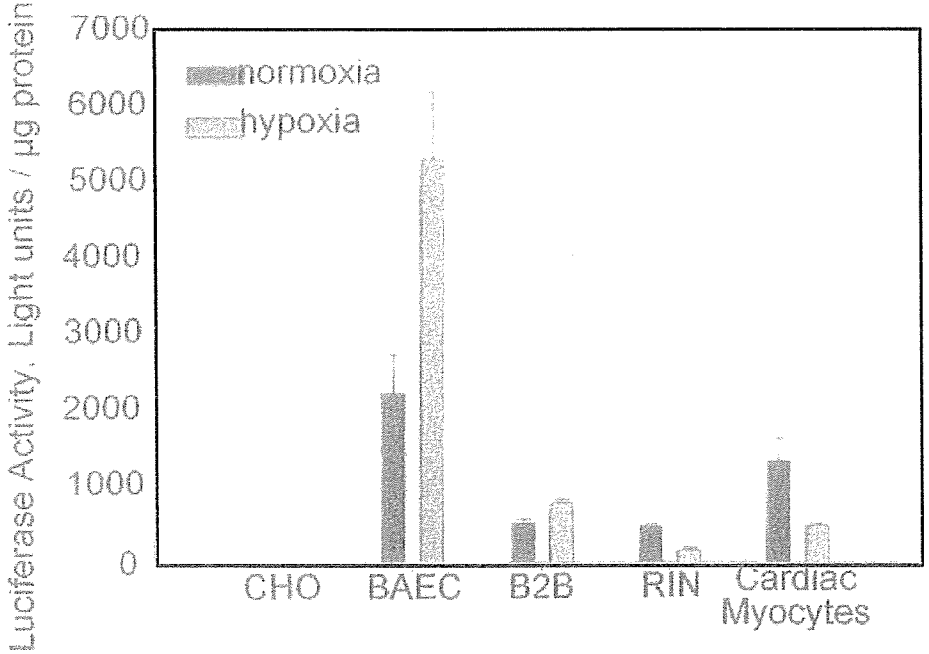

Luciferase Activity, Light units / µg protein
7000
6000
5000
4000
3000
2000
1000
0
normoxia
hypoxia
CHO
BAEC
B2B
RIN
Cardiac Myocytes

Fig. 34

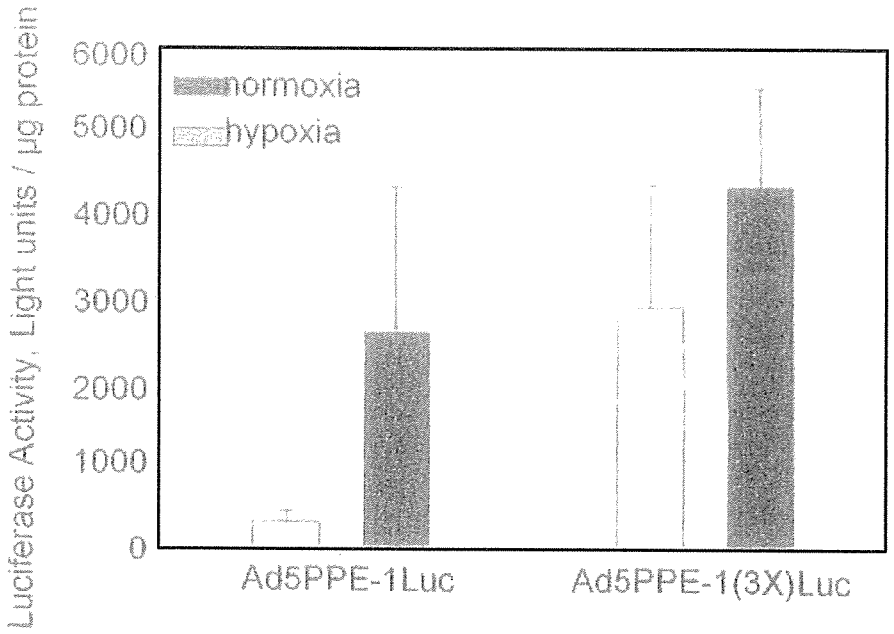

Luciferase Activity, Light units / µg protein
6000
5000
4000
3000
2000
1000
0
normoxia
hypoxia
Ad5PPE-1Luc
Ad5PPE-1(3X)Luc

Fig. 35

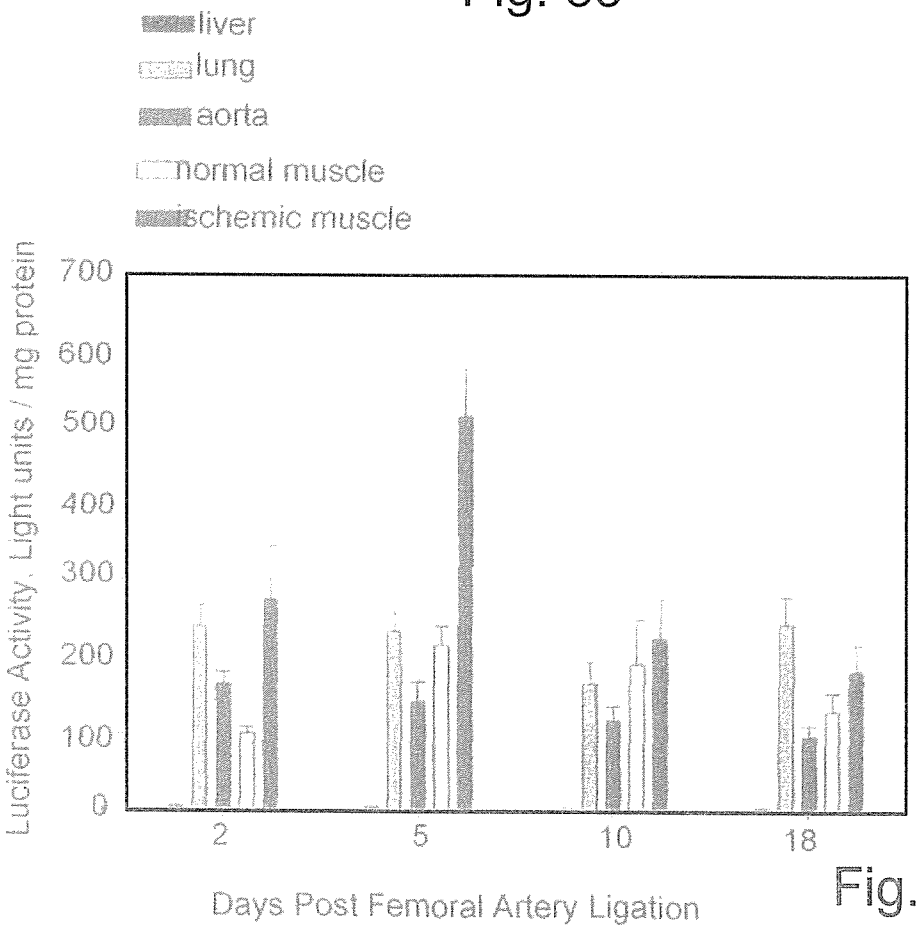

liver
lung
aorta
normal muscle
ischemic muscle
Luciferase Activity, Light units / mg protein
700
600
500
400
300
200
100
0
2
5
10
18
Days Post Femoral Artery Ligation

Fig. 36

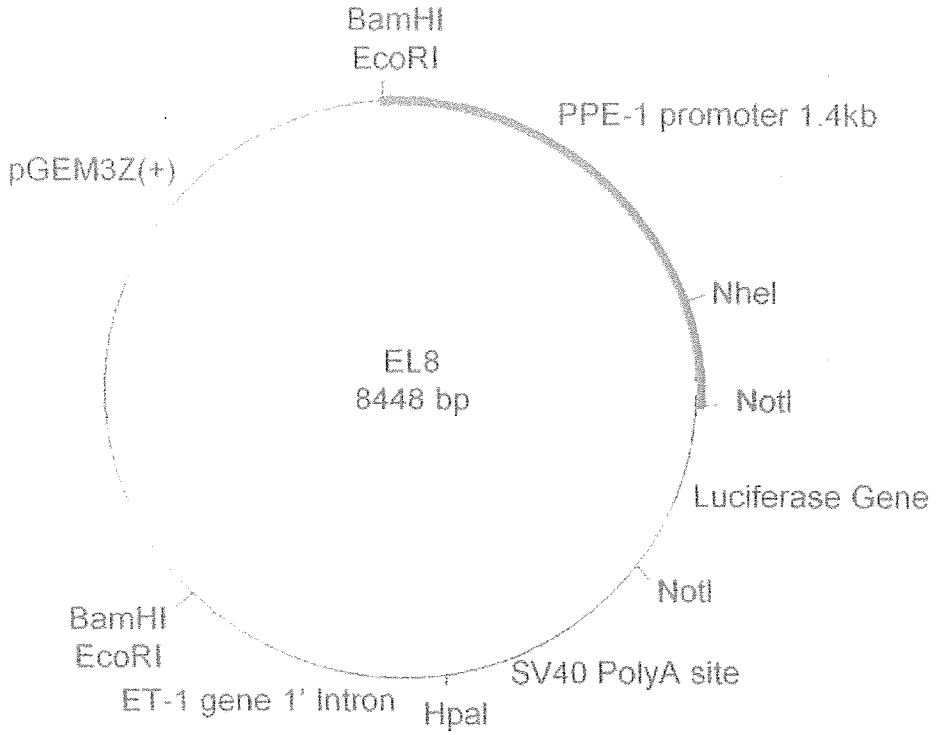

BamHI
EcoRI
PPE-1 promoter 1.4kb
pGEM3Z(+)
NheI
EL8
8448 bp
NotI
Luciferase Gene
NotI
BamHI
EcoRI
SV40 PolyA site
ET-1 gene 1' intron
HpaI

Fig. 37a

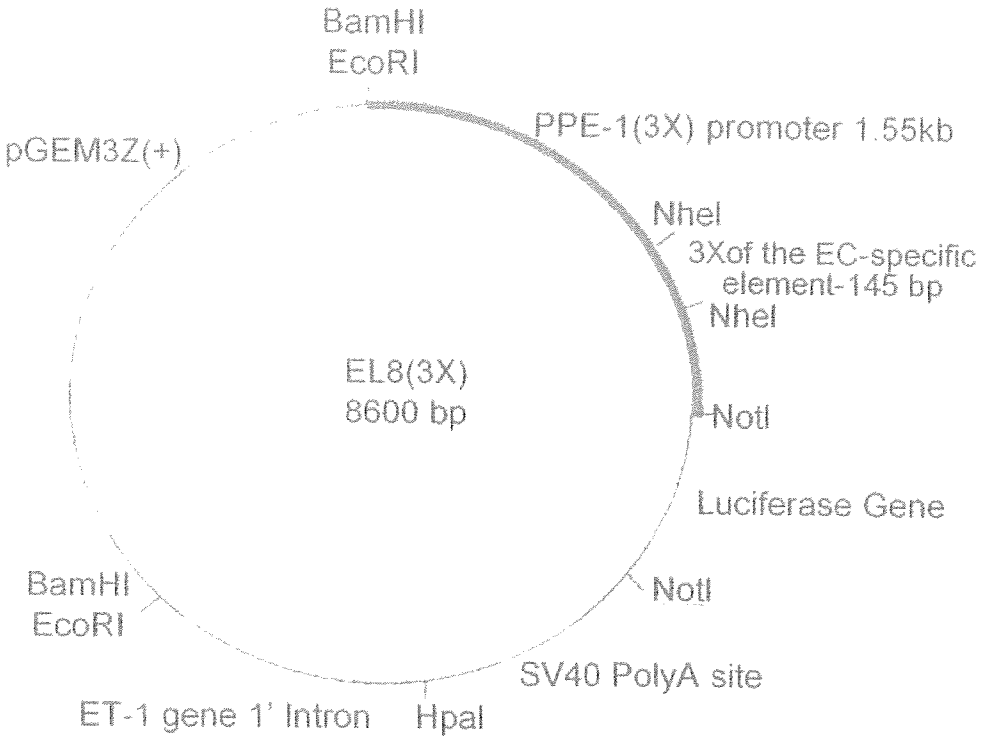

BamHI
EcoRI
PPE-1(3X) promoter 1.55kb
pGEM3Z(+)
NheI
3Xof the EC-specific
element-145 bp
NheI
EL8(3X)
8600 bp
NotI
Luciferase Gene
BamHI
EcoRI
NotI
SV40 PolyA site
ET-1 gene 1' Intron
HpaI

Fig. 37b

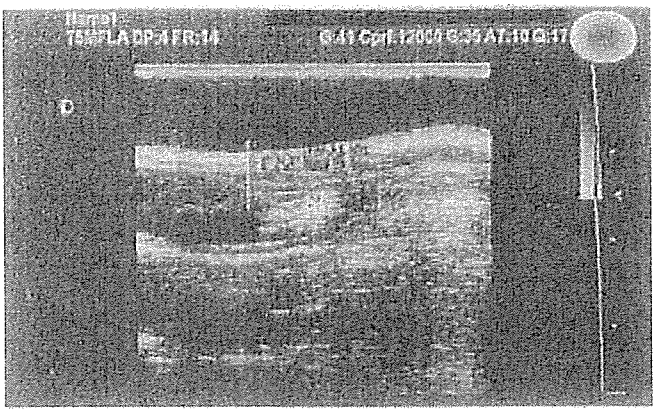


Fig. 38a

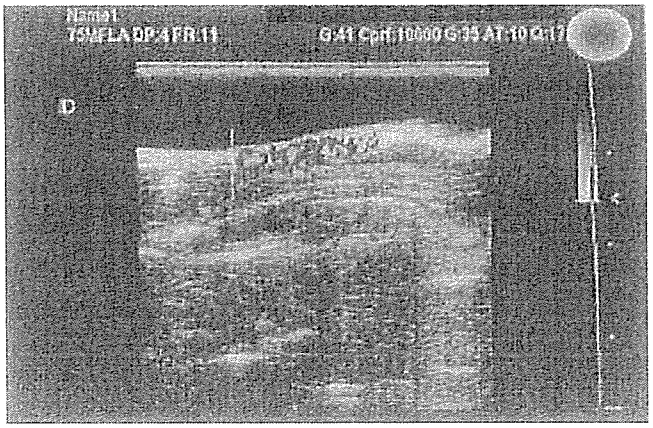


Fig. 38b

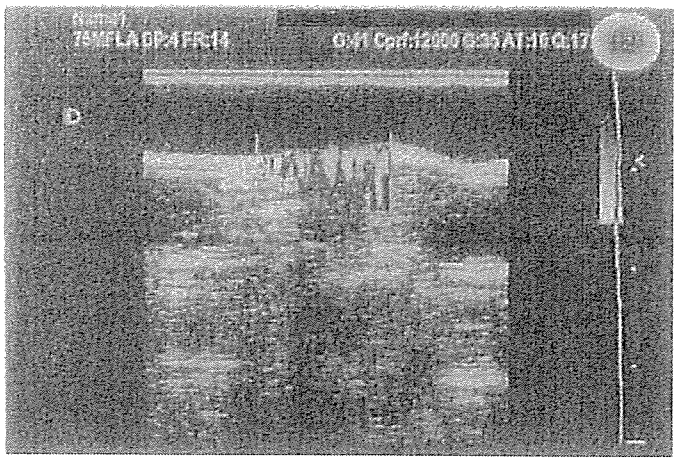


Fig. 38c

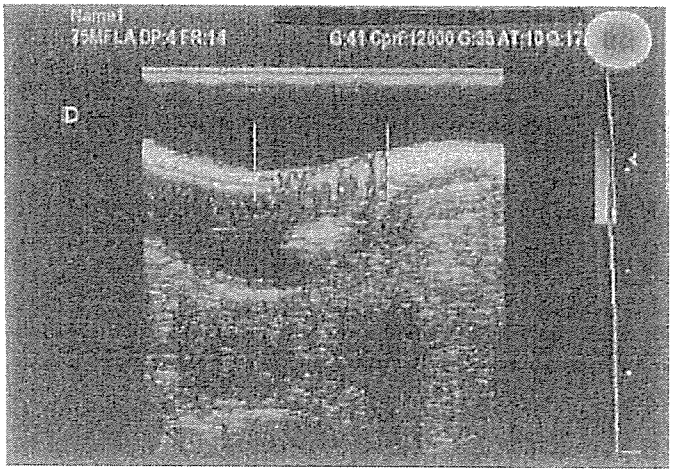


Fig. 38d

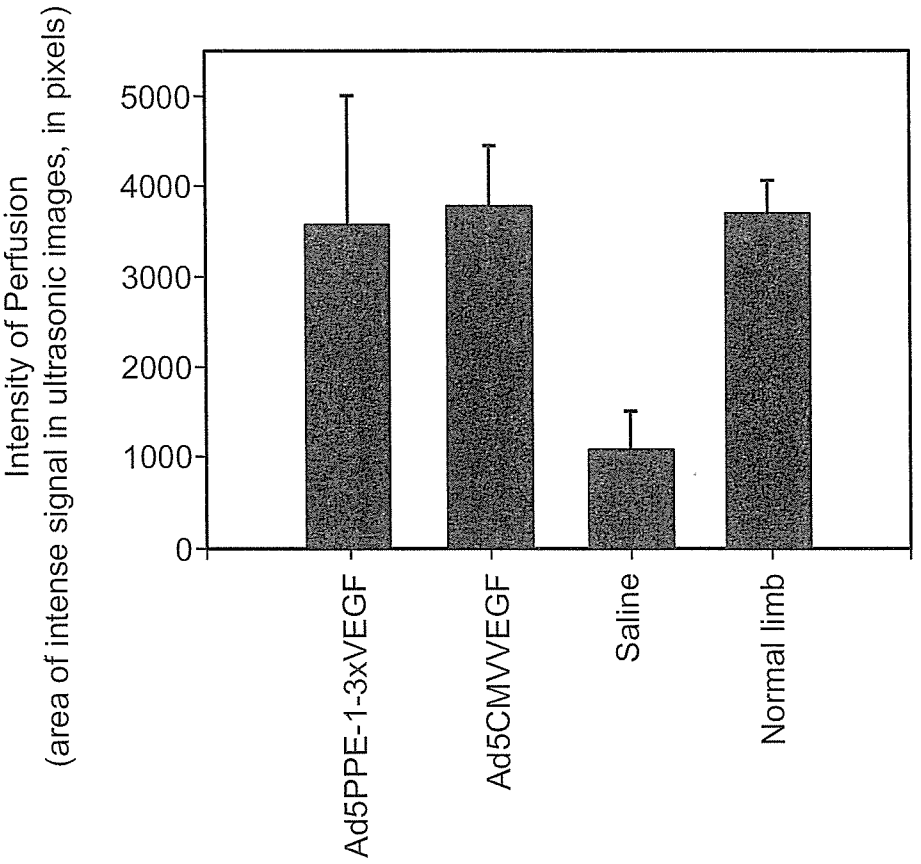

Intensity of Perfusion
(area of intense signal in ultrasonic images, in pixels)
5000
4000
3000
2000
1000
0
Ad5PPE-1-3xVEGF
Ad5CMVVEGF
Saline
Normal limb

Fig. 38e

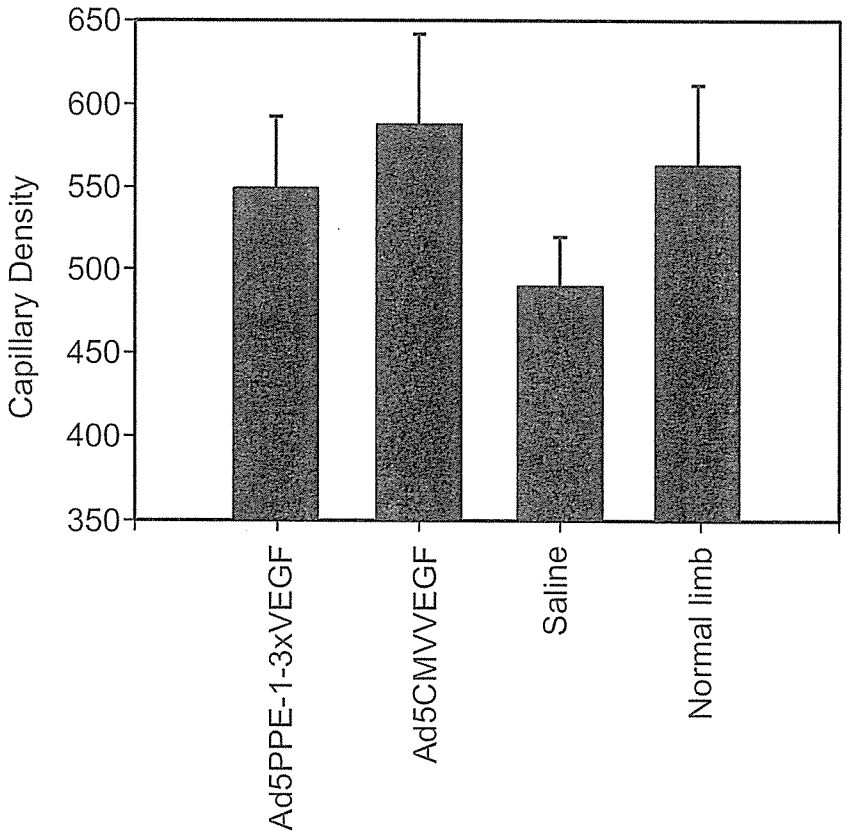

650
600
550
500
450
400
350
Capillary Density
Ad5PPE-1-3xVEGF
Ad5CMVVEGF
Saline
Normal limb

Fig. 38f

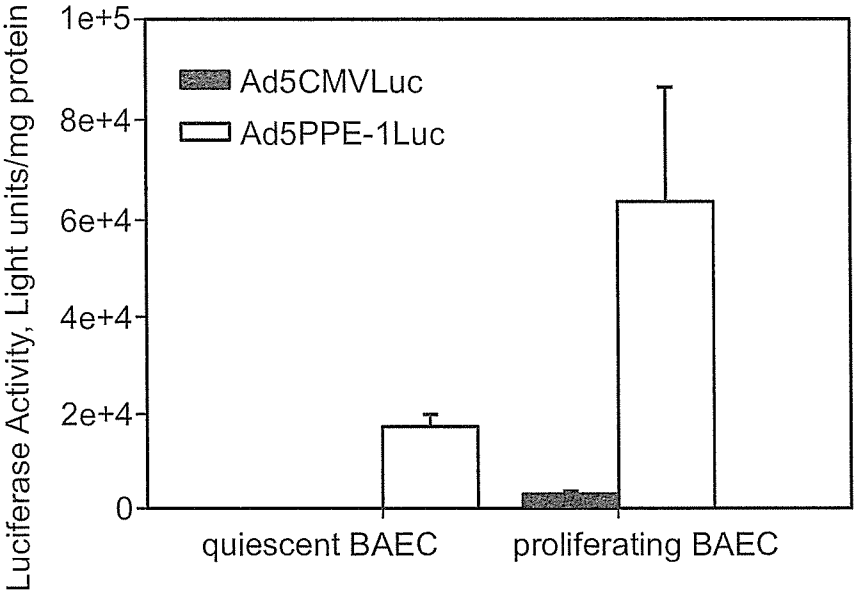

Luciferase Activity, Light units/mg protein
1e+5
8e+4
6e+4
4e+4
2e+4
0
Ad5CMVLuc
Ad5PPE-1Luc
quiescent BAEC
proliferating BAEC

Fig. 39

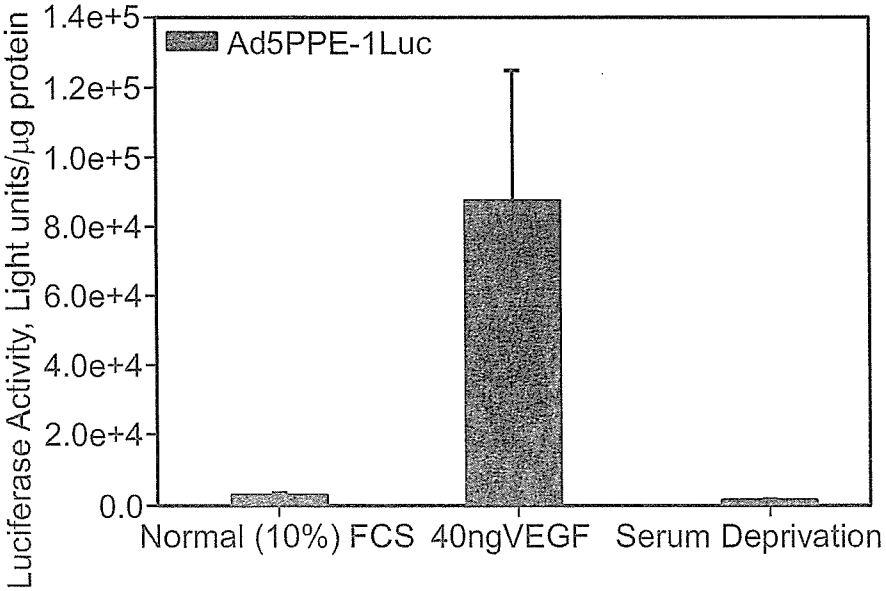

Luciferase Activity, Light units/μg protein
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
0.0
Ad5PPE-1Luc
Normal (10%) FCS
40ngVEGF
Serum Deprivation

Fig. 40

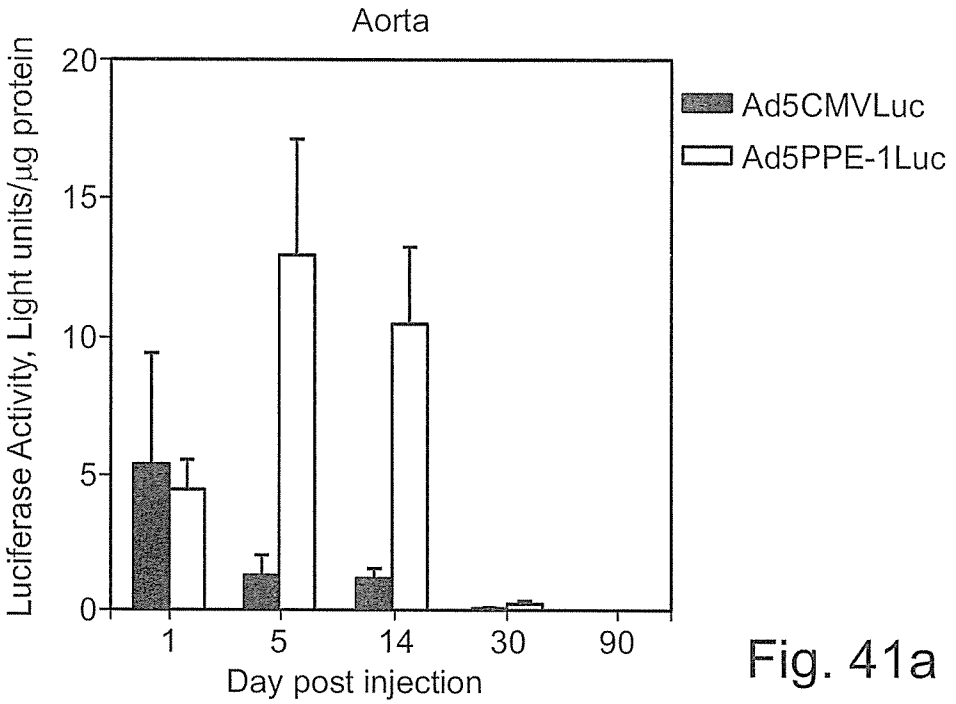


Fig. 41a

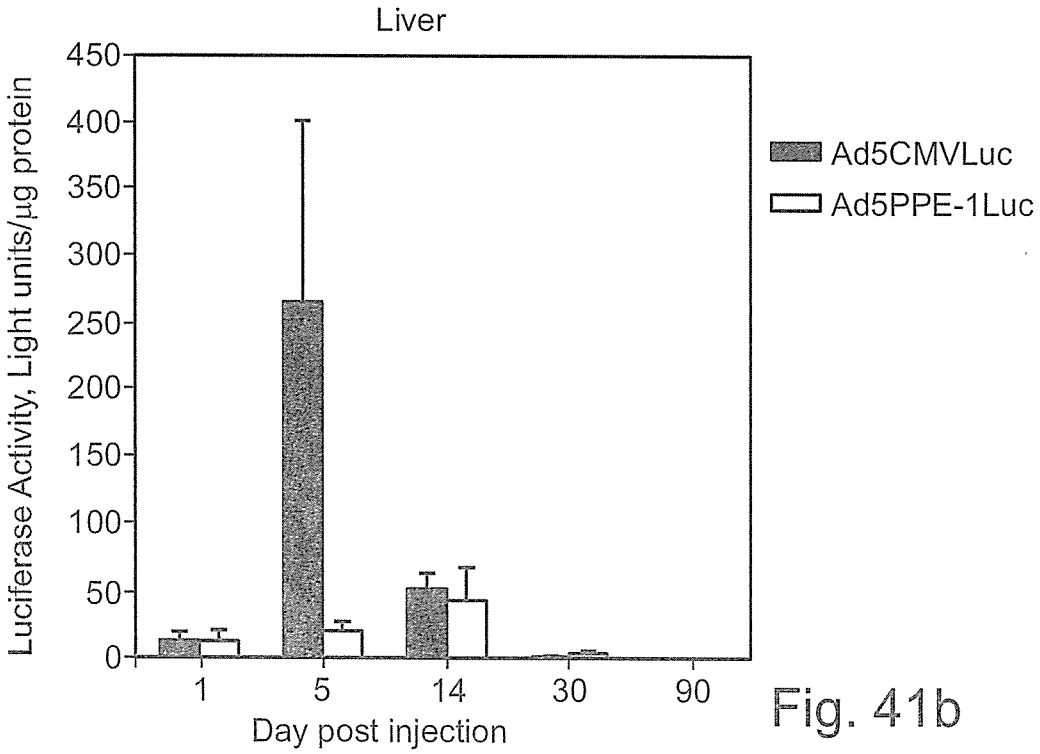


Fig. 41b

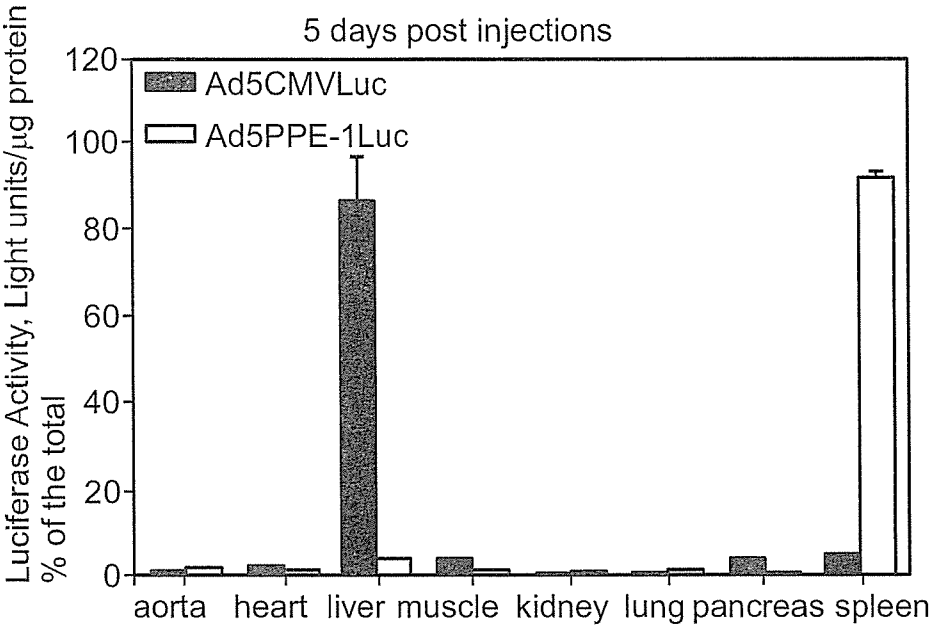


Fig. 42a

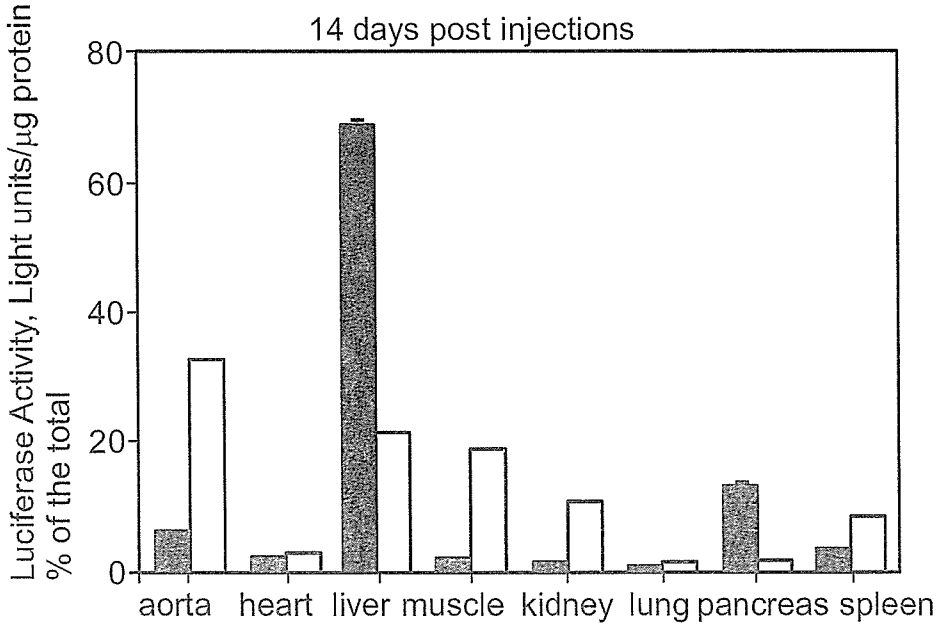


Fig. 42b

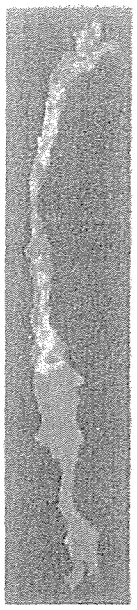


Fig. 43

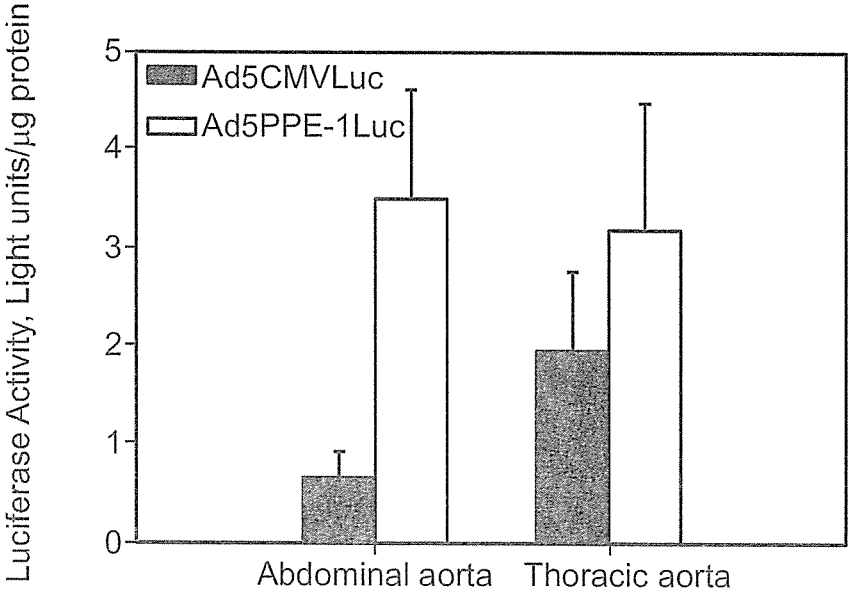

Luciferase Activity, Light units/μg protein
5
4
3
2
1
0
Ad5CMVLuc
Ad5PPE-1Luc
Abdominal aorta
Thoracic aorta

Fig. 44

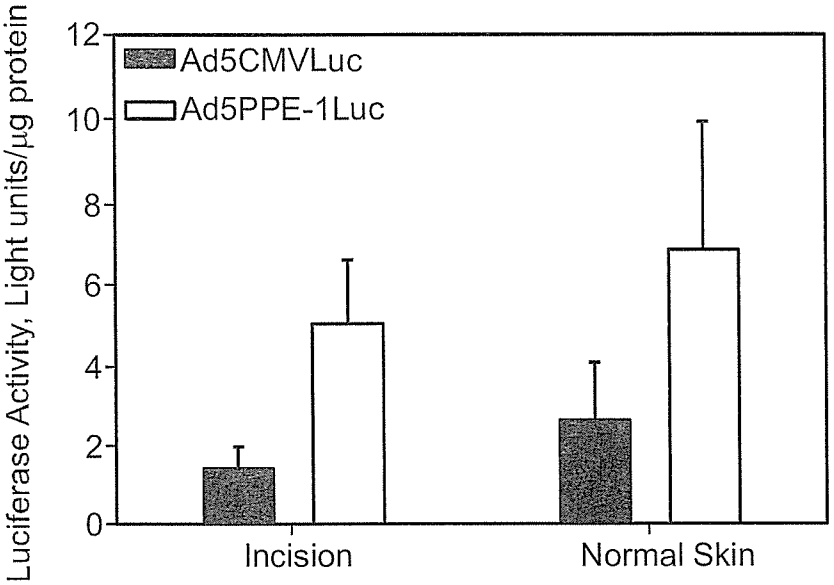

Luciferase Activity, Light units/µg protein
12
10
8
6
4
2
0
Ad5CMVLuc
Ad5PPE-1Luc
Incision
Normal Skin

Fig. 45

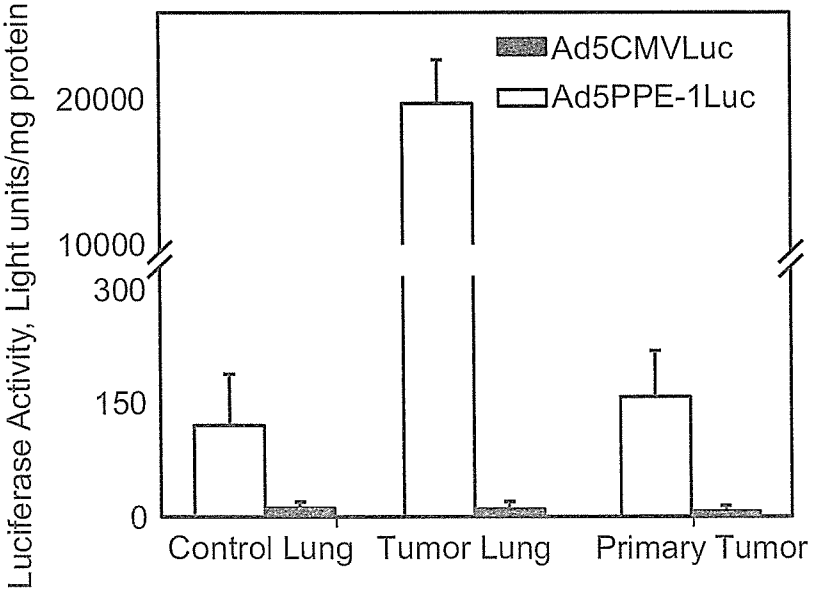

Luciferase Activity, Light units/mg protein
20000
10000
300
150
0
Ad5CMVLuc
Ad5PPE-1Luc
Control Lung
Tumor Lung
Primary Tumor

Fig. 46



Fig. 47a

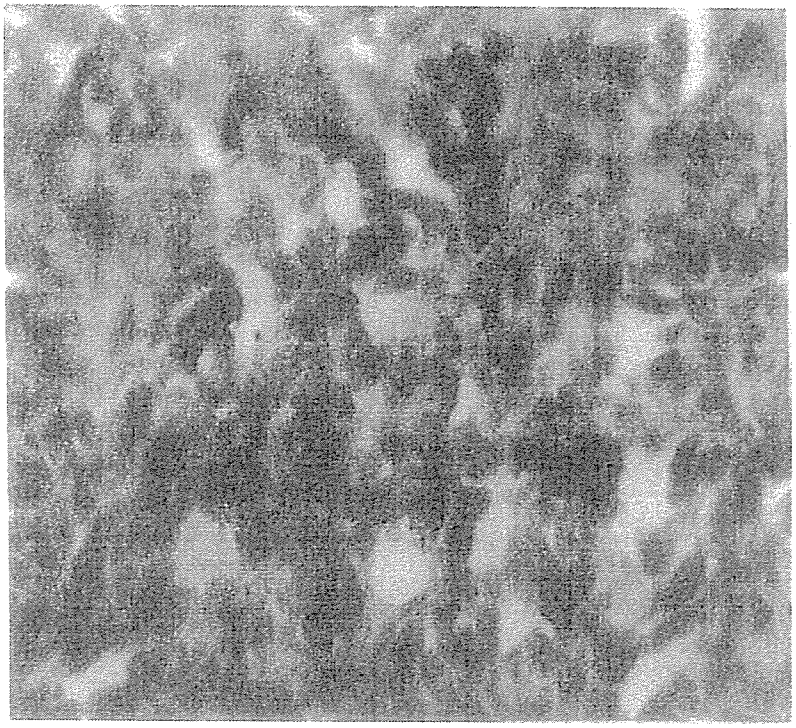


Fig. 47b

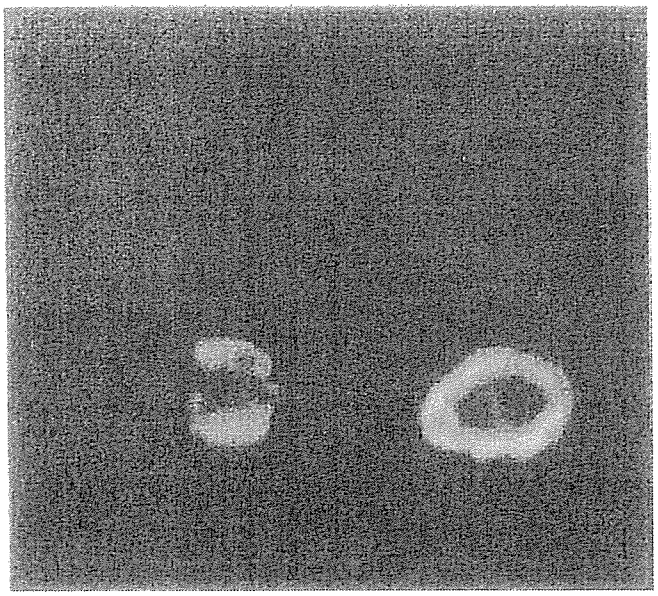


Fig. 47c

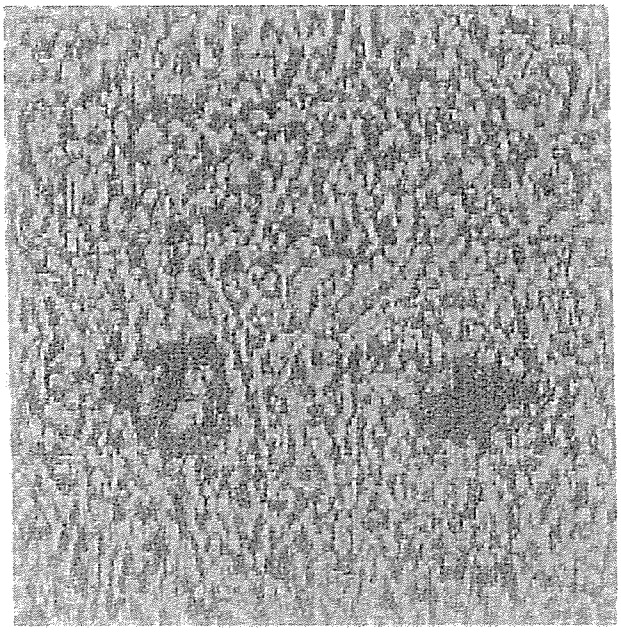


Fig. 47d

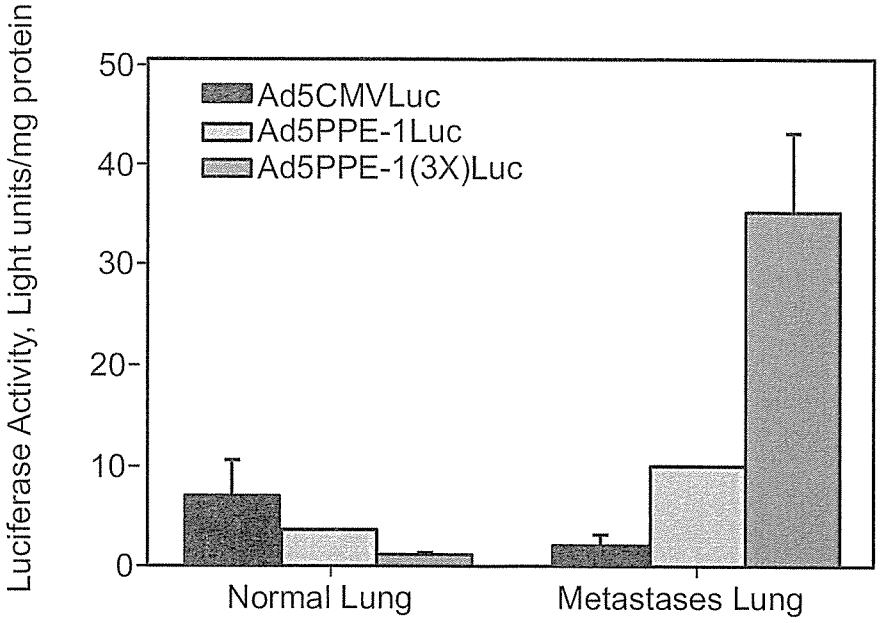

Luciferase Activity, Light units/mg protein
50
40
30
20
10
0
Ad5CMVLuc
Ad5PPE-1Luc
Ad5PPE-1(3X)Luc
Normal Lung
Metastases Lung

Fig. 48

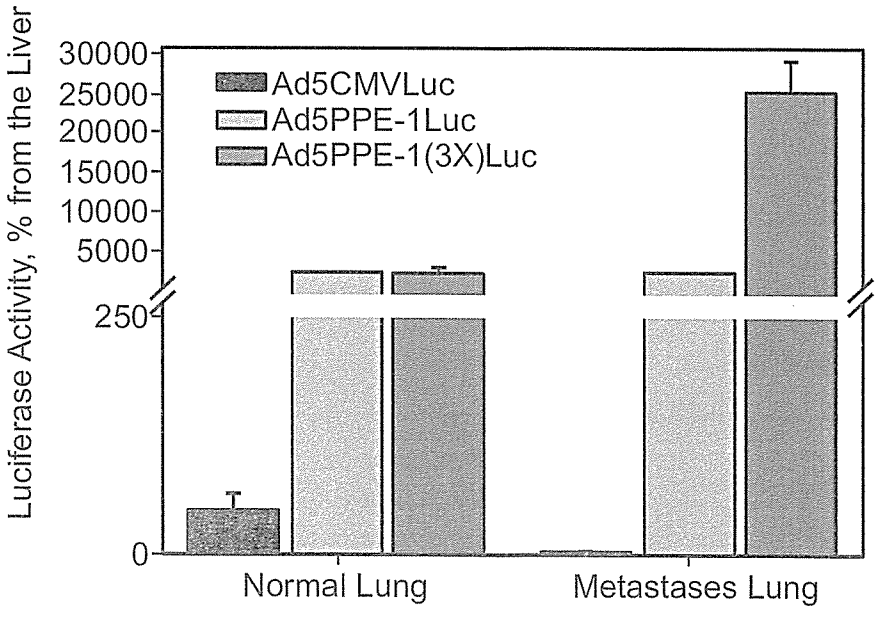

Luciferase Activity, % from the Liver
30000
25000
20000
15000
10000
5000
250
0
Ad5CMVLuc
Ad5PPE-1Luc
Ad5PPE-1(3X)Luc
Normal Lung
Metastases Lung

Fig. 49

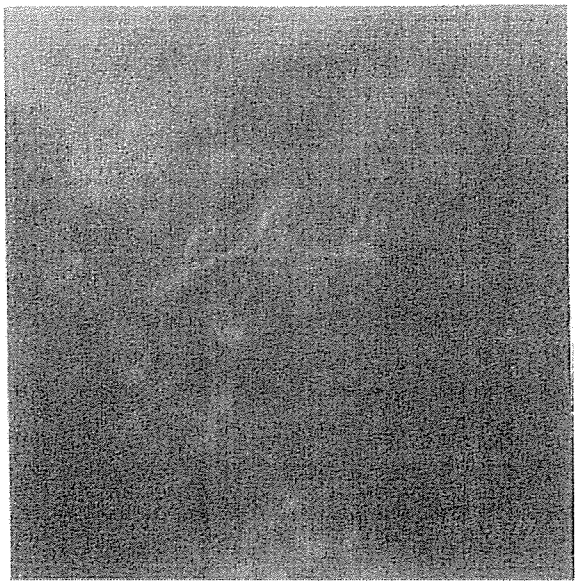


Fig. 50a

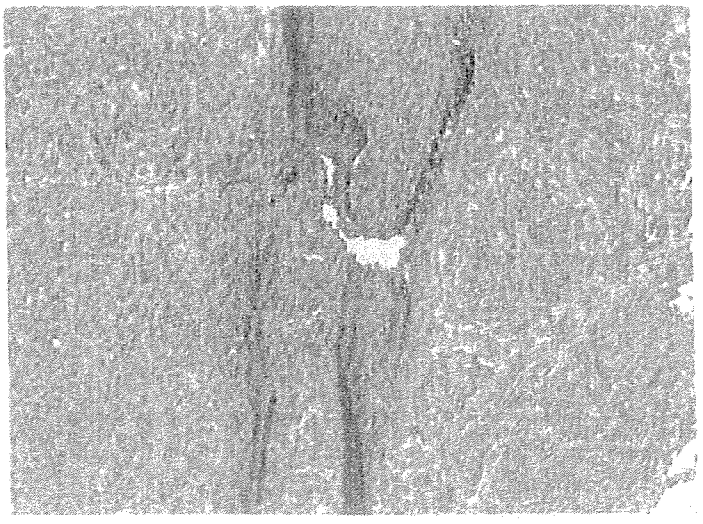


Fig. 50b

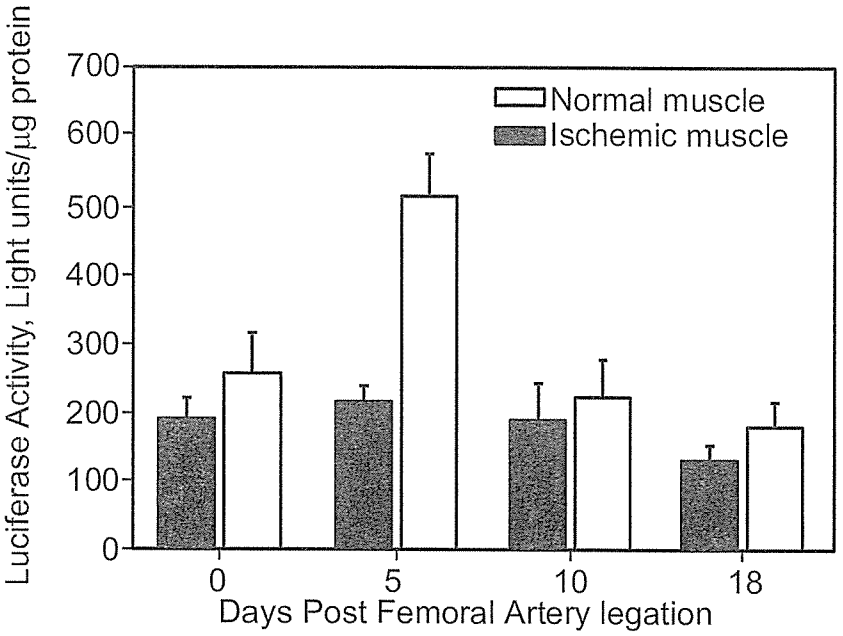

Luciferase Activity, Light units/µg protein
700
600
500
400
300
200
100
0
Normal muscle
Ischemic muscle
0
5
10
18
Days Post Femoral Artery legation

Fig. 51

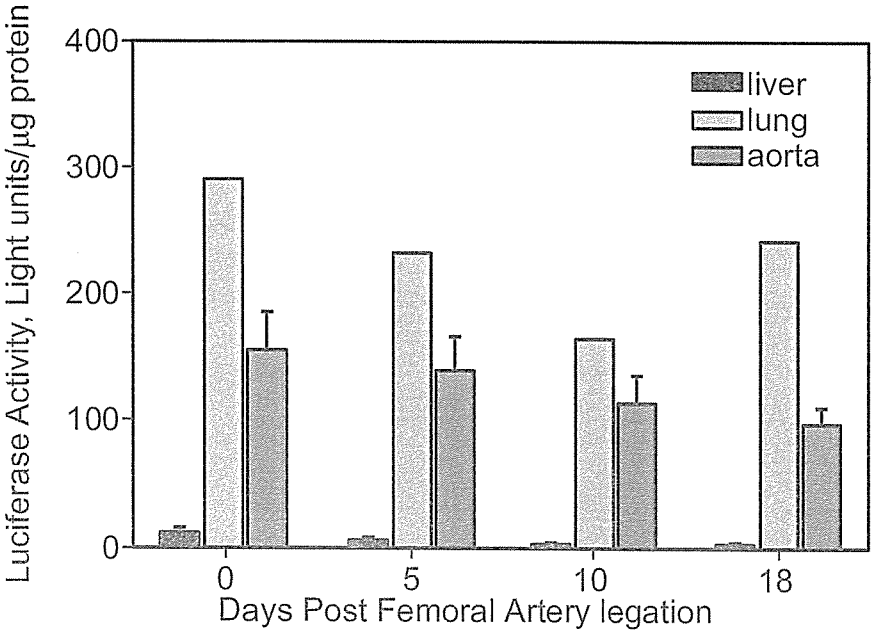

Luciferase Activity, Light units/µg protein
400
300
200
100
0
liver
lung
aorta
0
5
10
18
Days Post Femoral Artery legation

Fig. 52

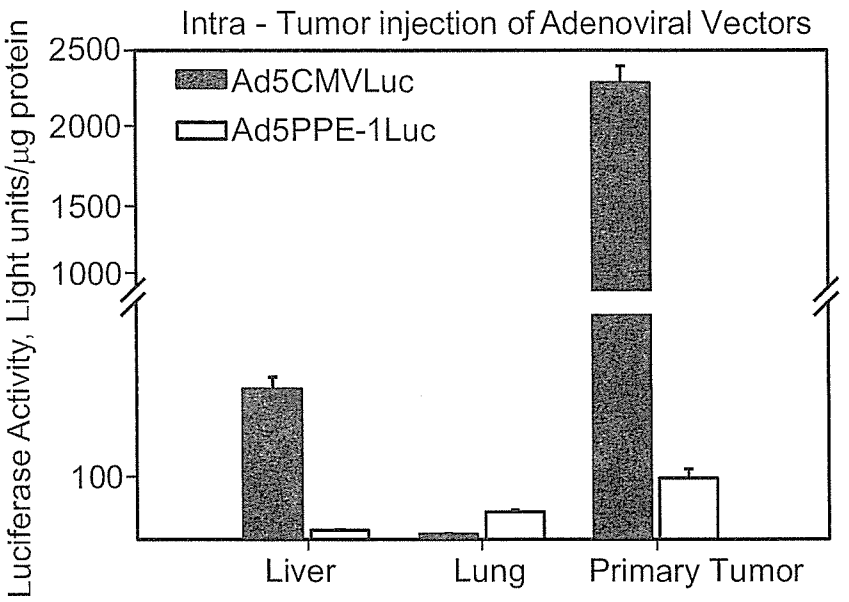


Fig. 53

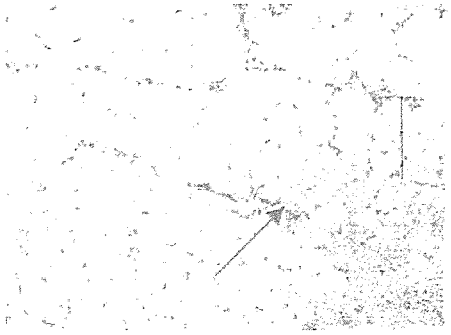


Fig. 54a

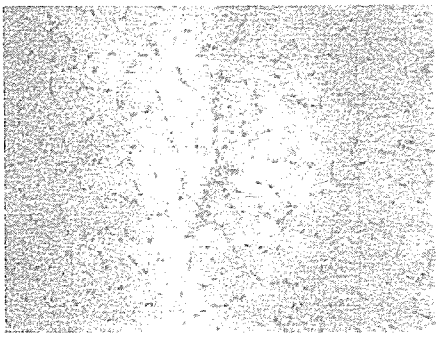


Fig. 54c

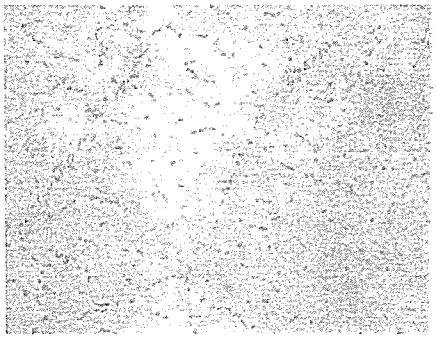


Fig. 54b

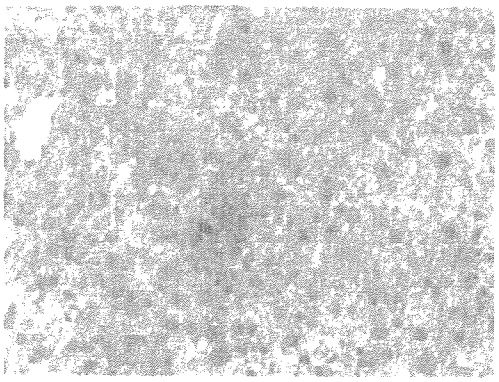


Fig. 54d

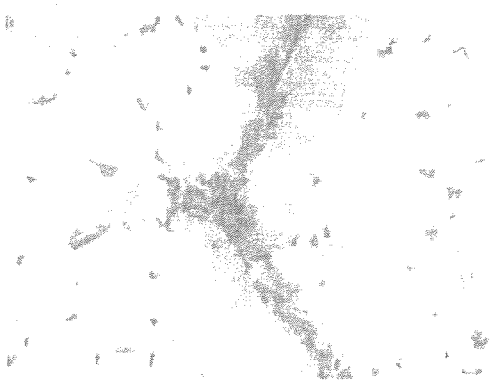


Fig. 54e

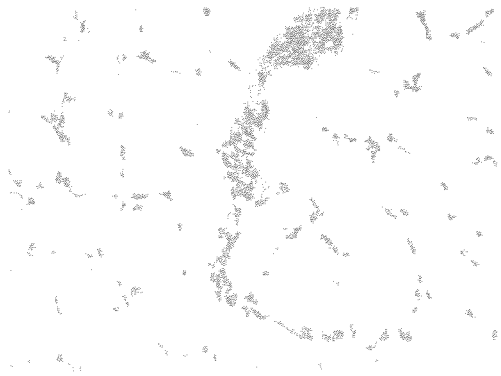


Fig. 54f

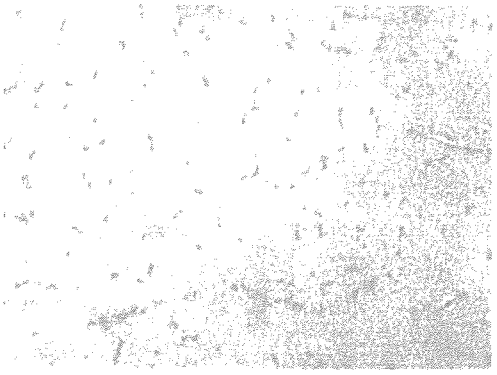


Fig. 54g

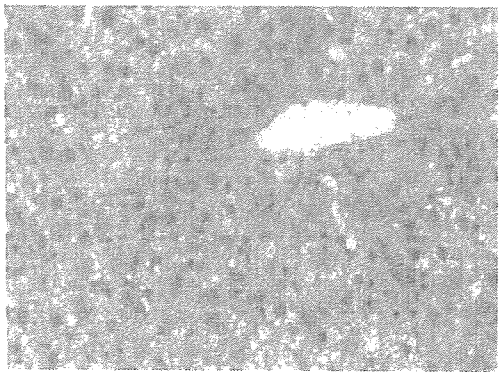


Fig. 54h

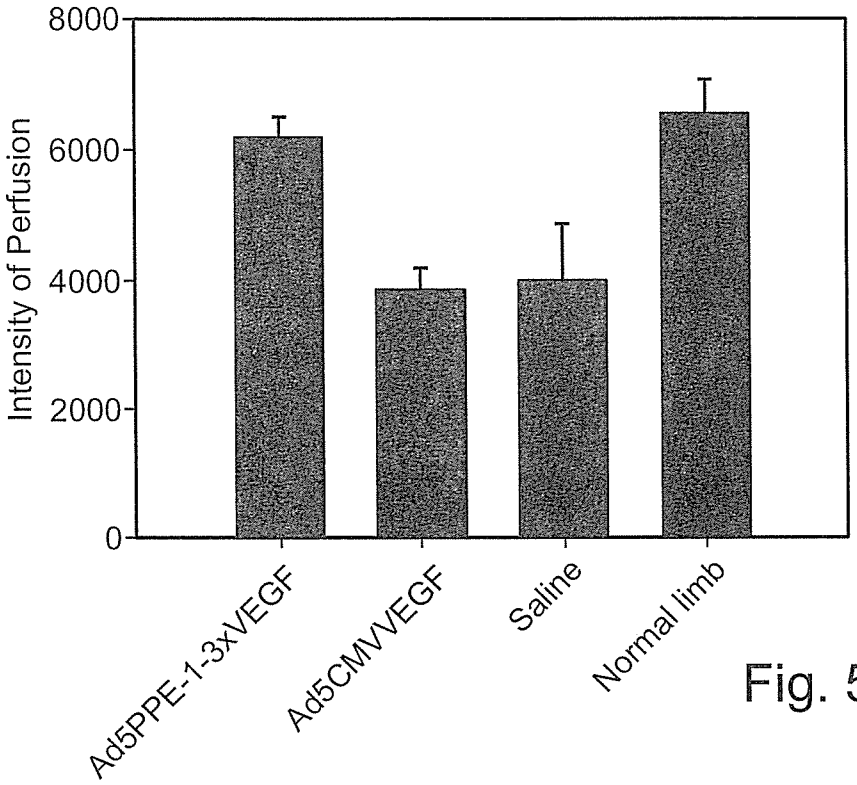


Fig. 55a

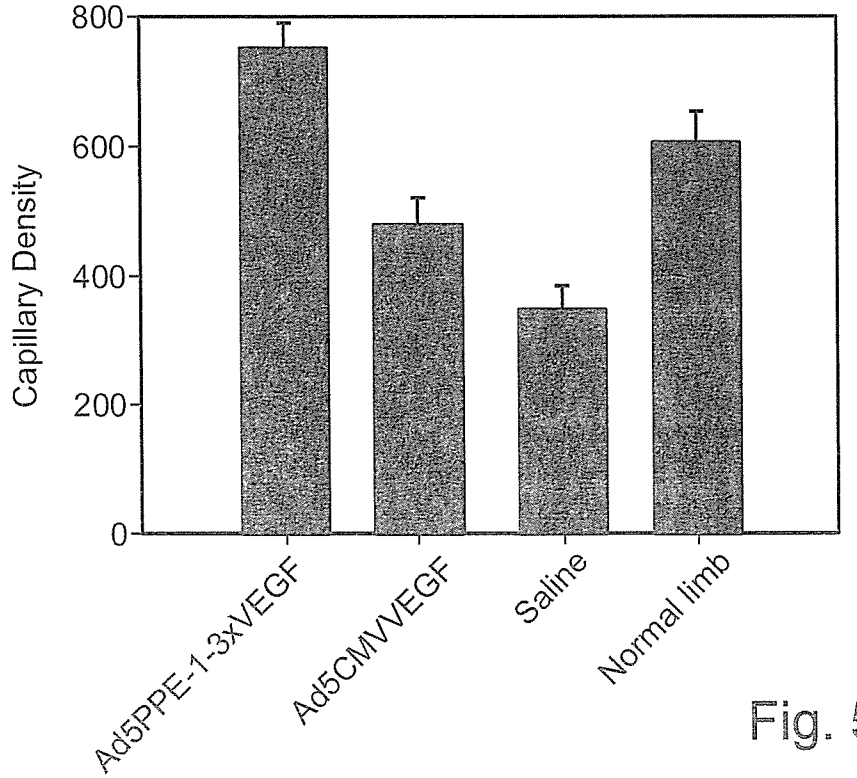


Fig. 55b

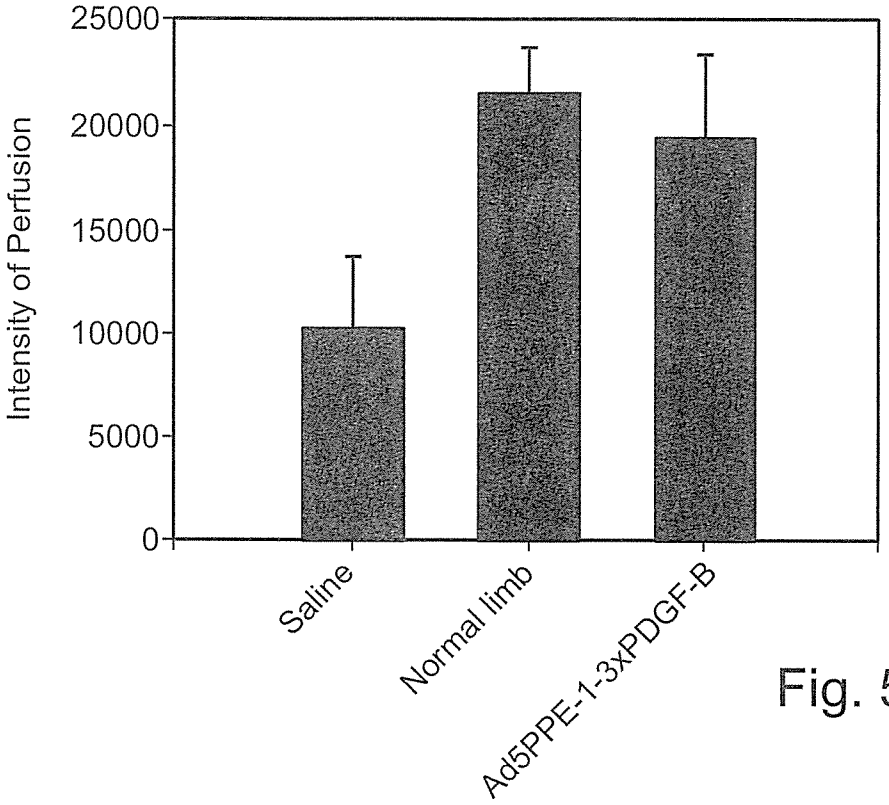


Fig. 56a

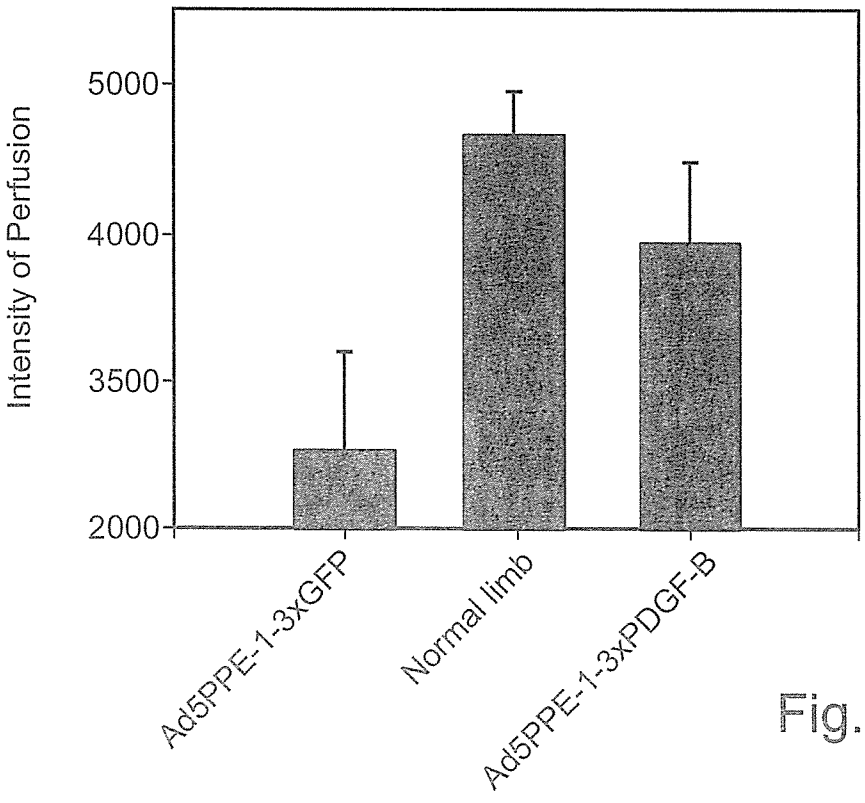


Fig. 56b

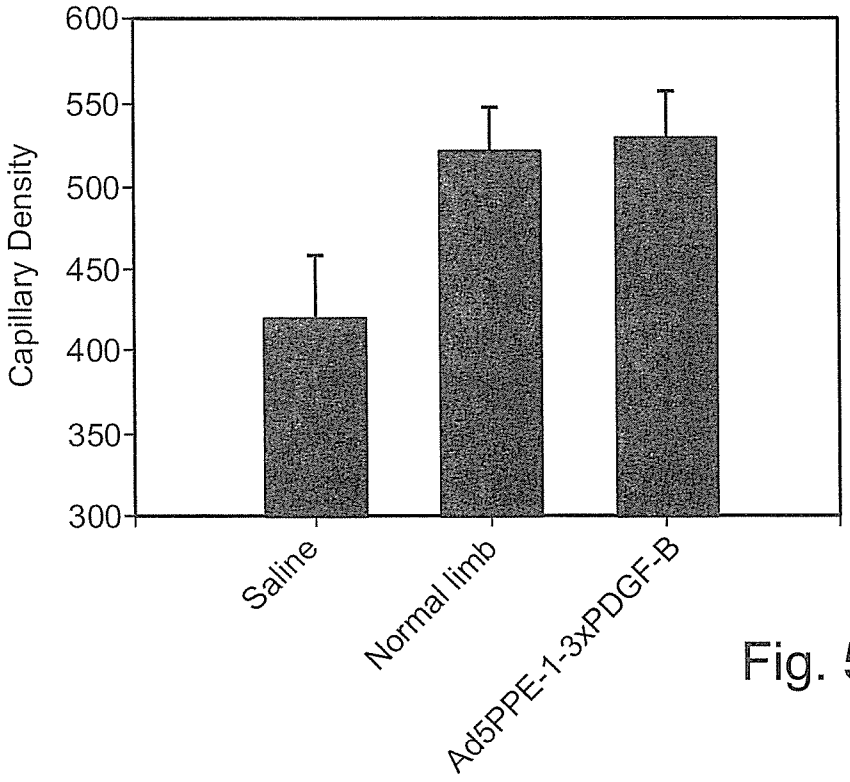

600
550
500
450
400
350
300
Capillary Density
Saline
Normal limb
Ad5PPE-1-3xPDGF-B

Fig. 56c

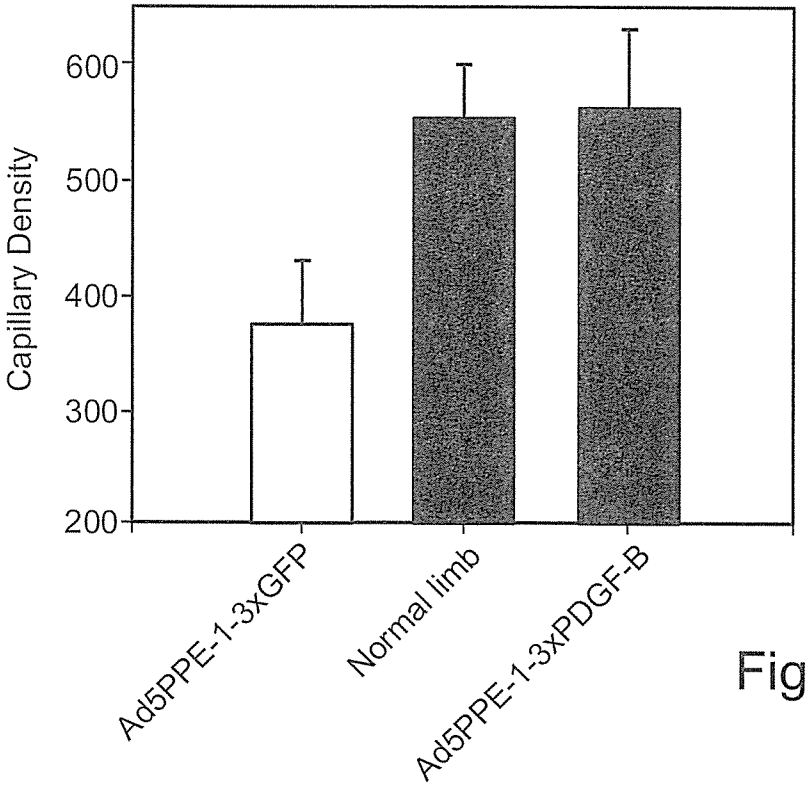

Capillary Density
600
500
400
300
200
Ad5PPE-1-3xGFP
Normal limb
Ad5PPE-1-3xPDGF-B

Fig. 56d

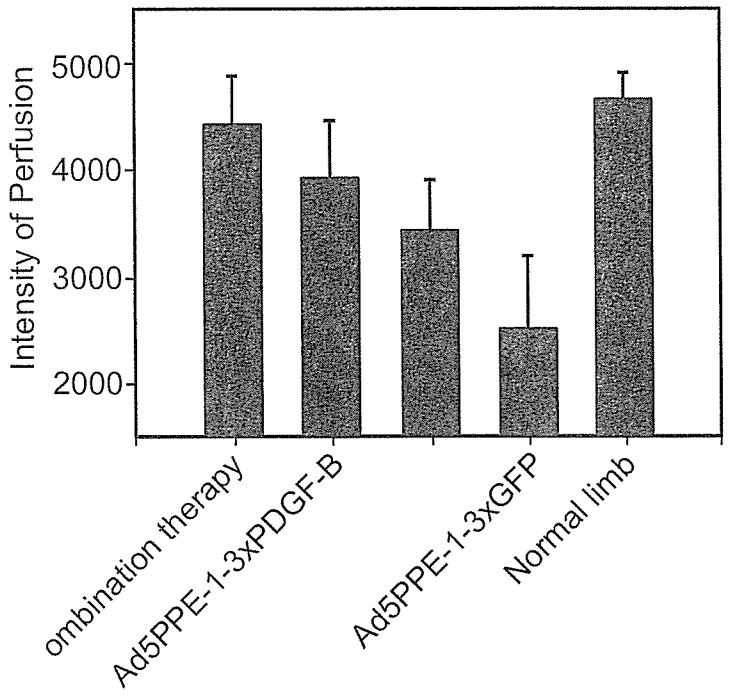


Fig. 57a

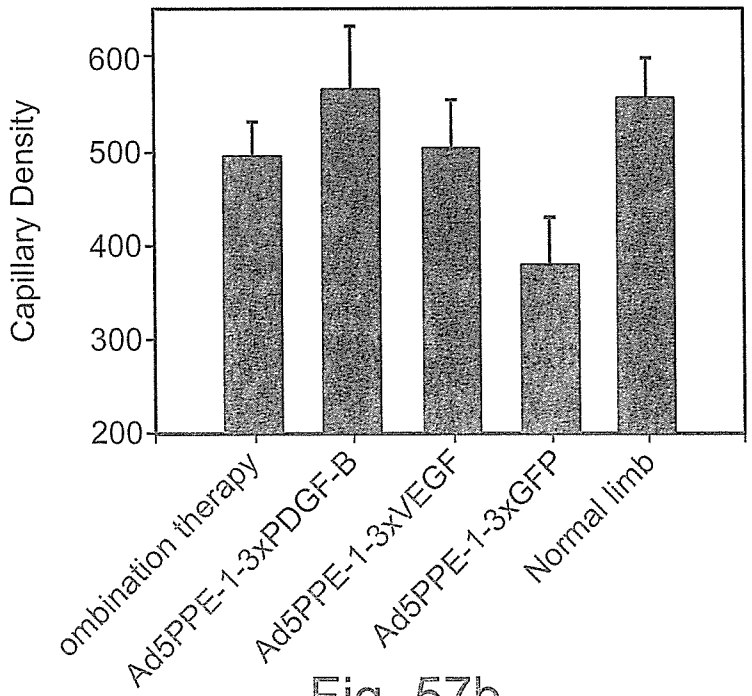


Fig. 57b



Fig. 57c



Fig. 57d



Fig. 57e



Fig. 57f

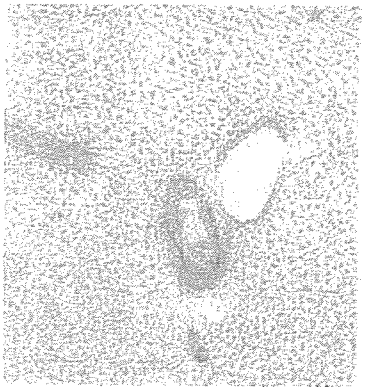


Fig. 57g

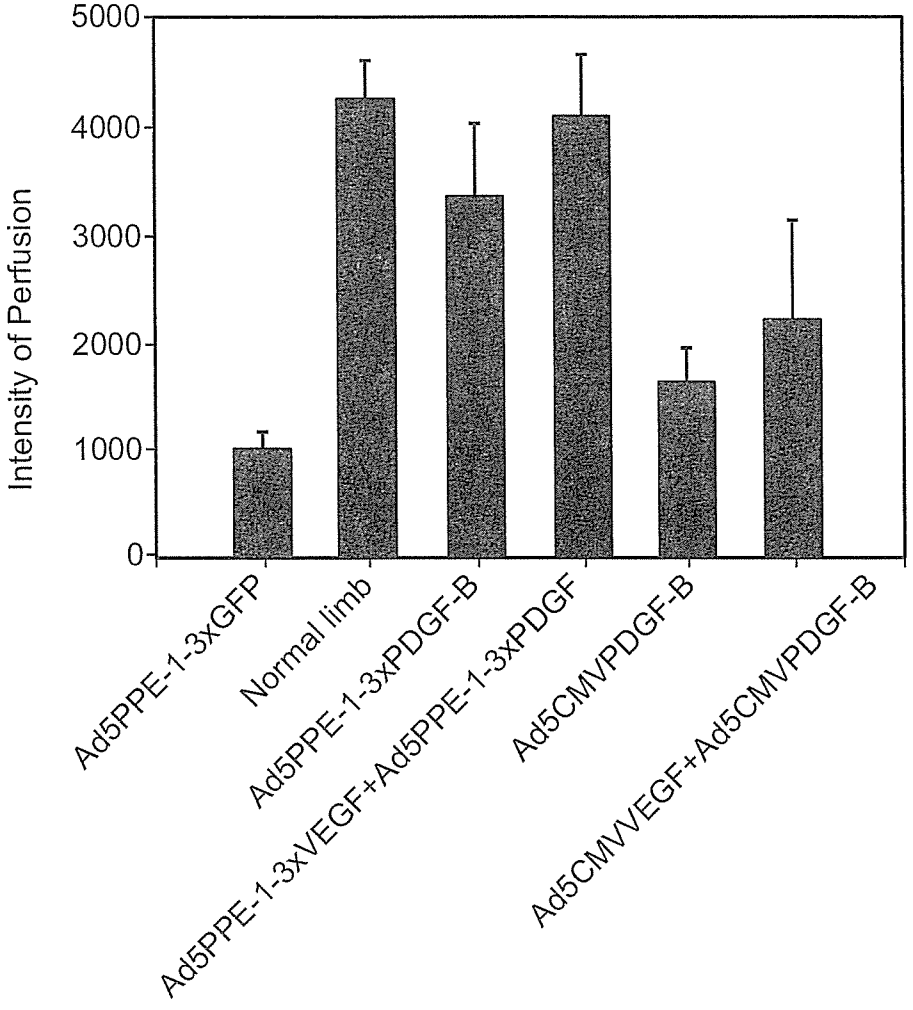

5000
4000
3000
2000
1000
0
Intensity of Perfusion
Ad5PPE-1-3xGFP
Normal limb
Ad5PPE-1-3xPDGF-B
Ad5PPE-1-3xVEGF+Ad5PPE-1-3xPDGF
Ad5CMVPDGF-B
Ad5CMVVEGF+Ad5CMVPDGF-B

Fig. 58

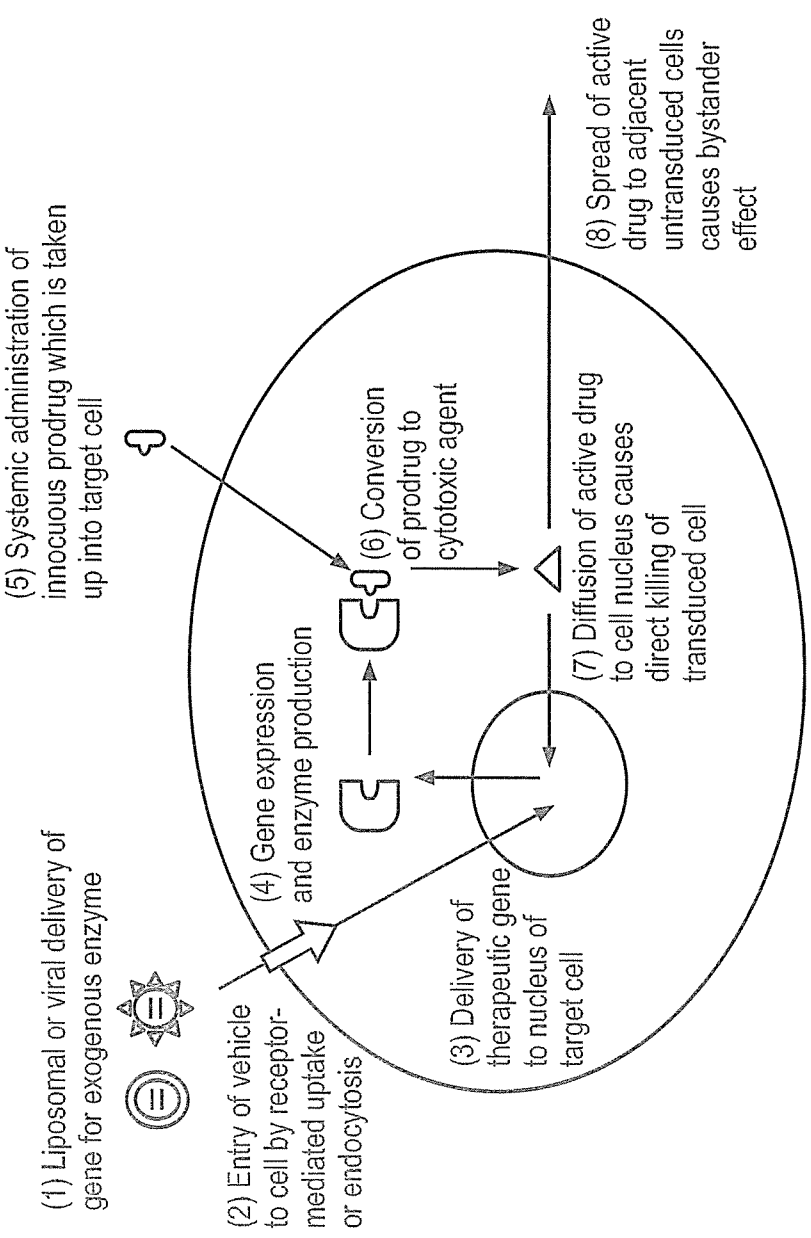

(1) Liposomal or viral delivery of gene for exogenous enzyme
(2) Entry of vehicle to cell by receptor-mediated uptake or endocytosis
(3) Delivery of therapeutic gene to nucleus of target cell
(4) Gene expression and enzyme production
(5) Systemic administration of innocuous prodrug which is taken up into target cell
(6) Conversion of prodrug to cytotoxic agent
(7) Diffusion of active drug to cell nucleus causes direct killing of transduced cell
(8) Spread of active drug to adjacent untransduced cells causes bystander effect

Fig. 59

Fig. 60A

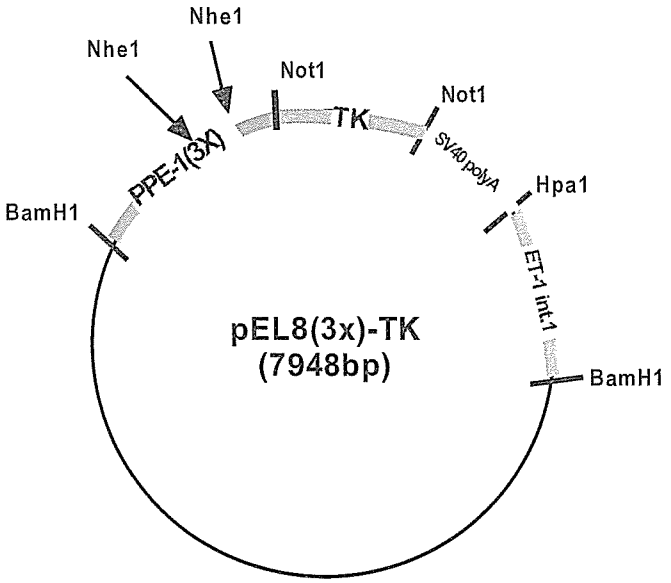
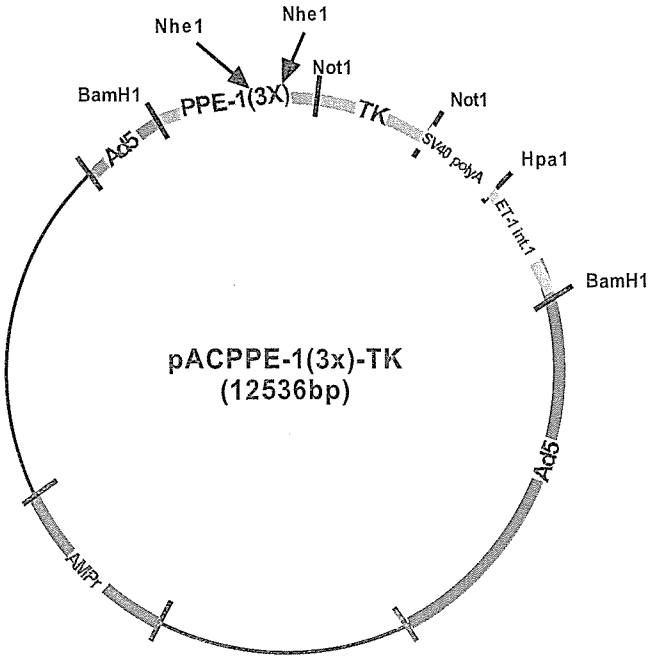


Fig. 60B



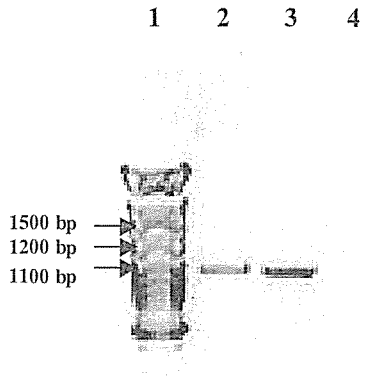


Fig. 61

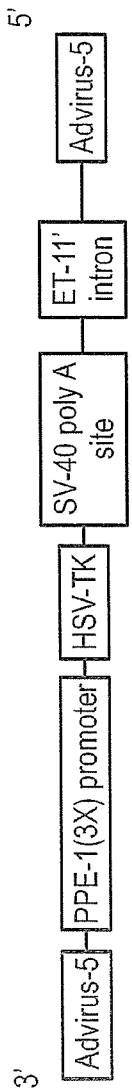


Fig. 62a

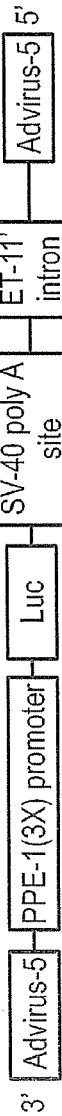


Fig. 62b

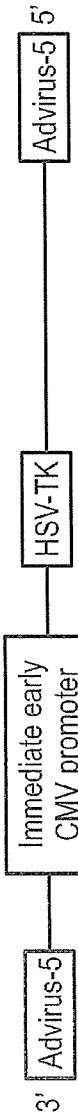


Fig. 62c

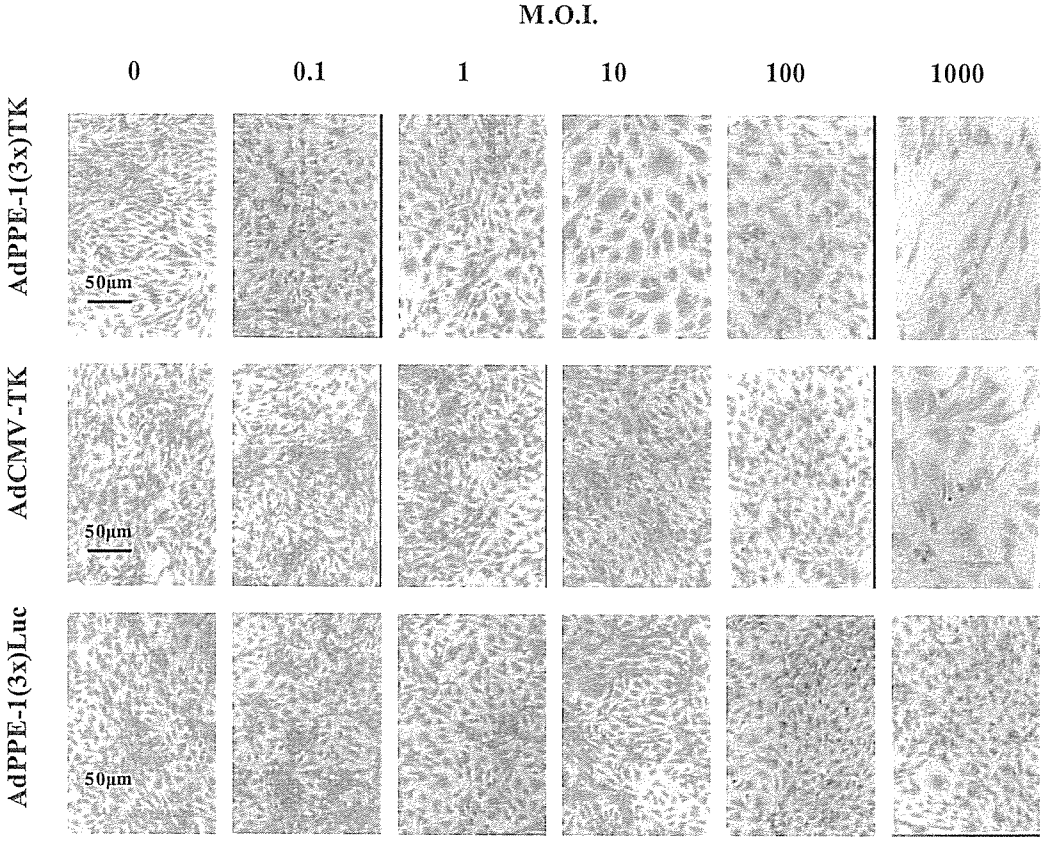

M.O.I.
0
0.1
1
10
100
1000
AdPPE-1(3x)TK
AdCMV-TK
AdPPE-1(3x)Luc
50μm
50μm
50μm

Fig. 63

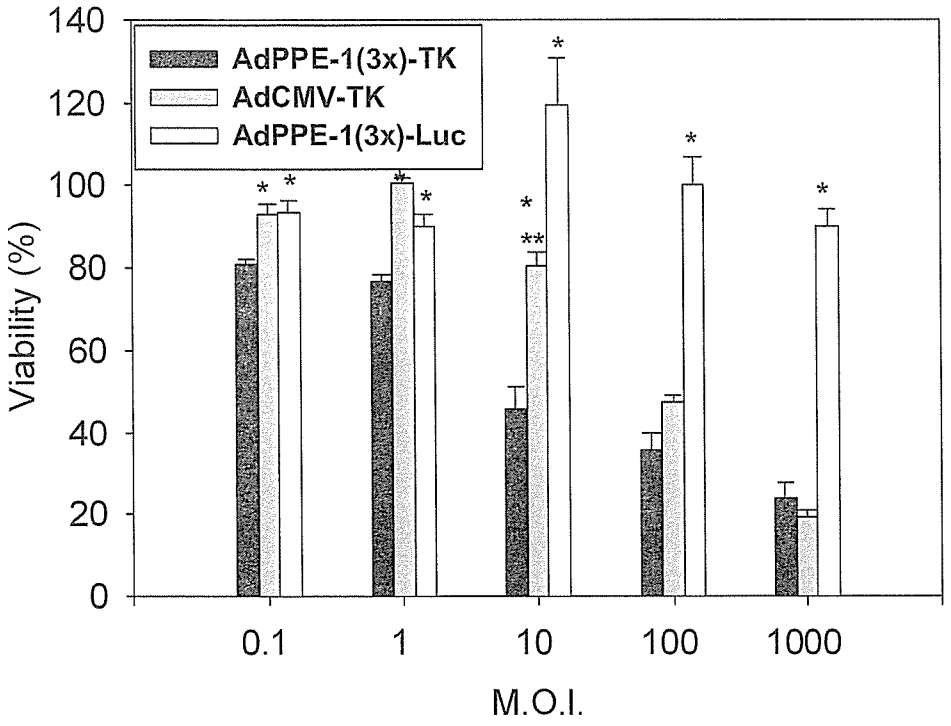

AdPPE-1(3x)-TK
AdCMV-TK
AdPPE-1(3x)-Luc
Viability (%)
140
120
100
80
60
40
20
0
0.1
1
10
100
1000
M.O.I.

Fig. 64

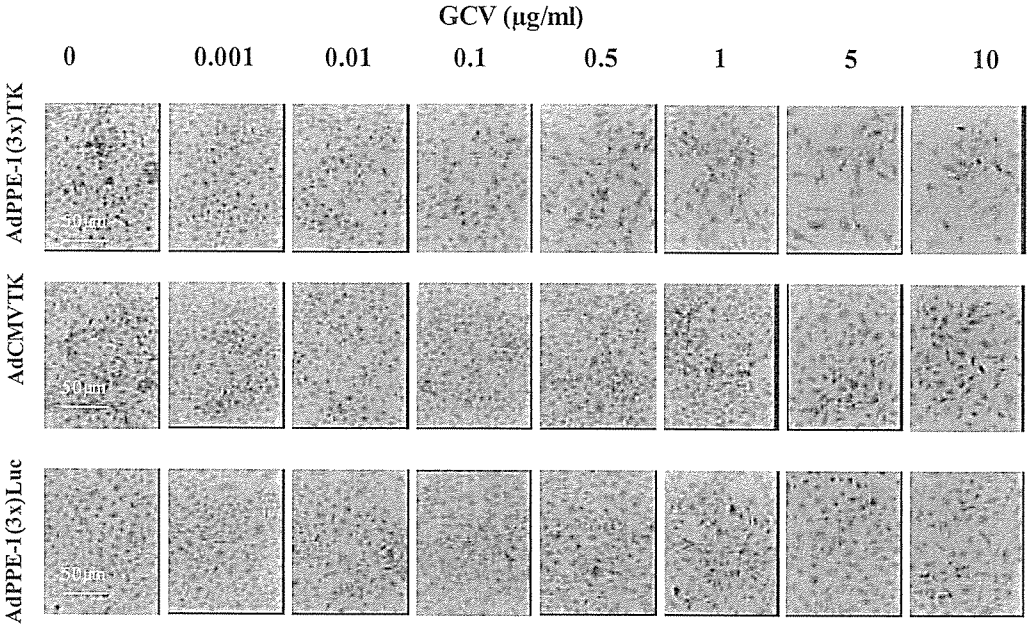

GCV (μg/ml)
0
0.001
0.01
0.1
0.5
1
5
10
AdPPE-1(3x)TK
AdCMVTK
AdPPE-1(3x)Luc
50μm

Fig. 65

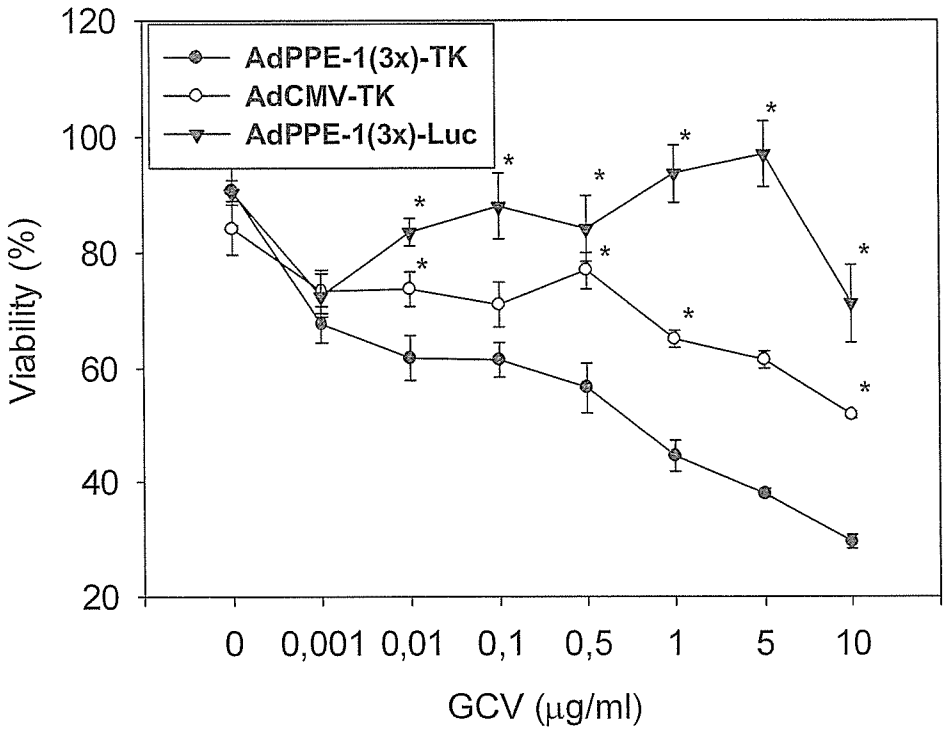

AdPPE-1(3x)-TK
AdCMV-TK
AdPPE-1(3x)-Luc
Viability (%)
120
100
80
60
40
20
0
0,001
0,01
0,1
0,5
1
5
10
GCV (μg/ml)

Fig. 66

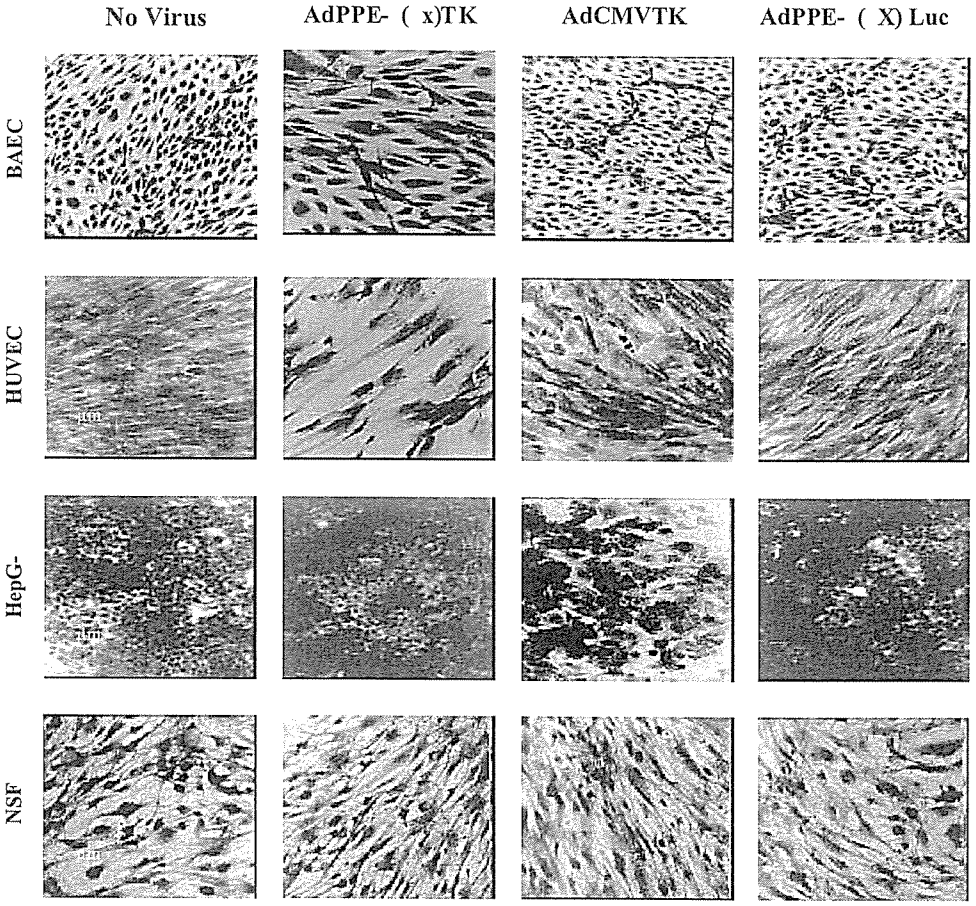


Fig. 67

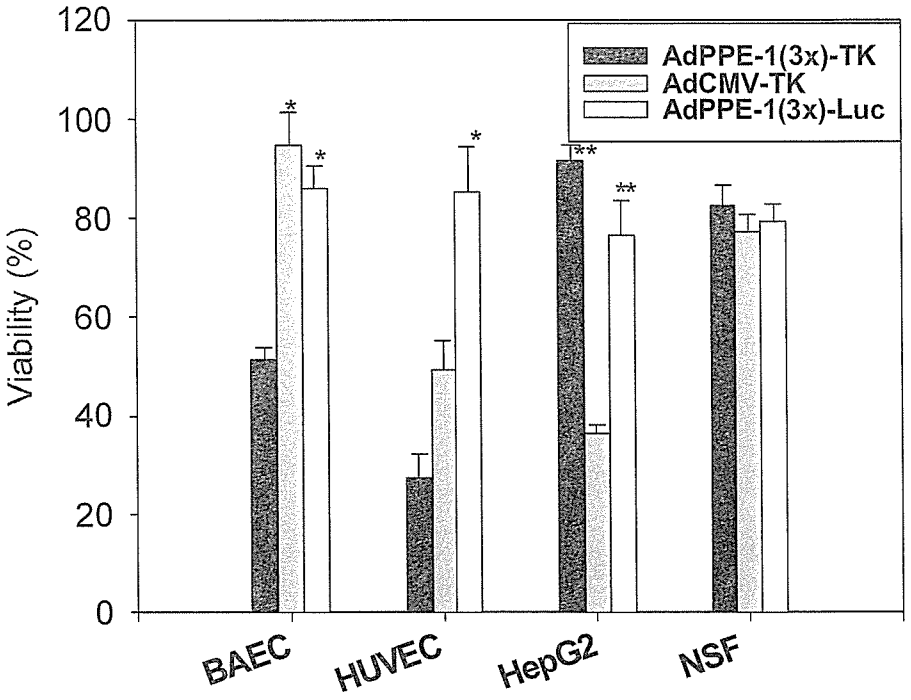

120
100
80
60
40
20
0
Viability (%)
AdPPE-1(3x)-TK
AdCMV-TK
AdPPE-1(3x)-Luc
*
*
*
**
**
BAEC
HUVEC
HepG2
NSF

Fig. 68

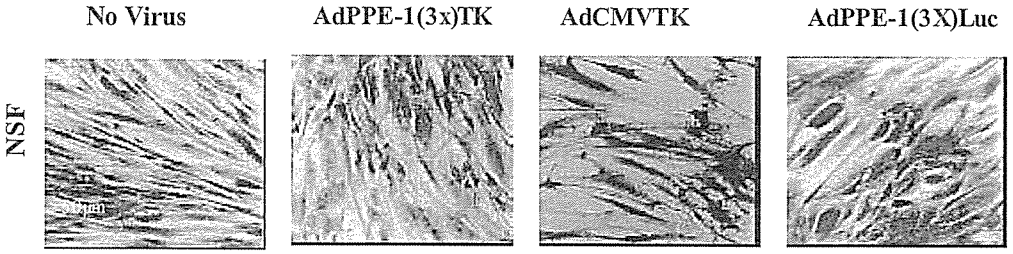


Fig. 69

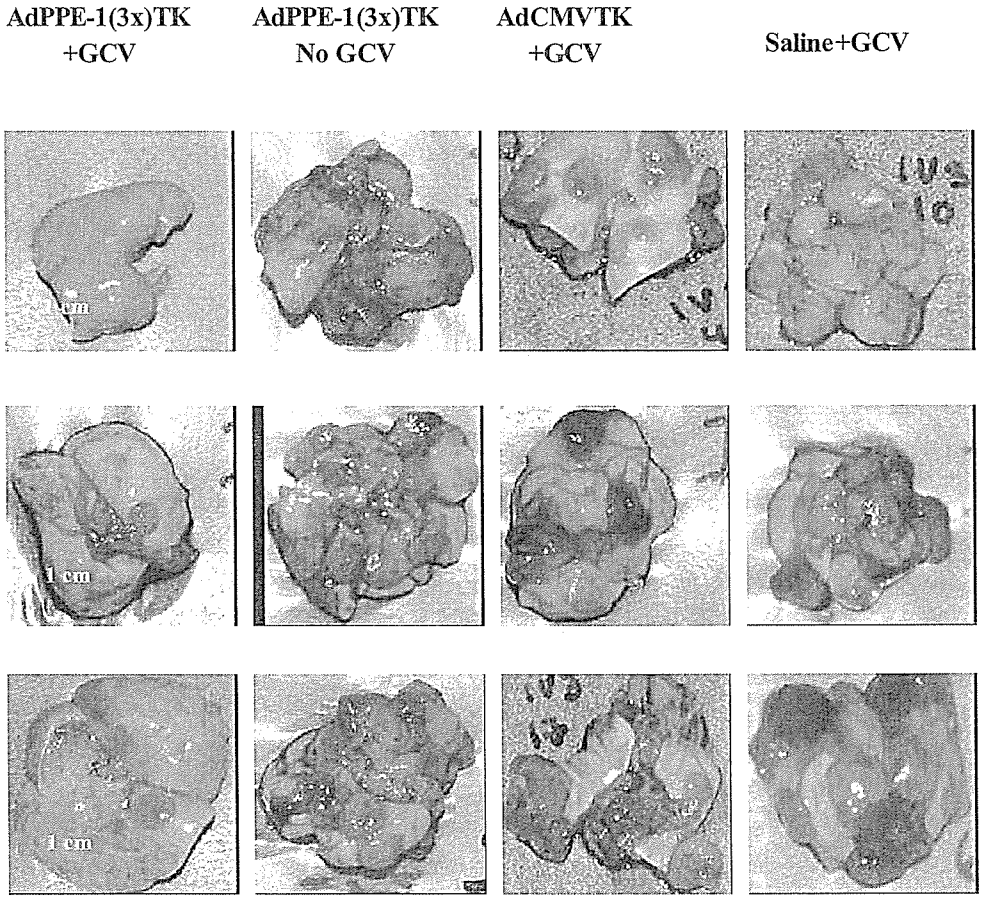

AdPPE-1(3x)TK
+GCV
AdPPE-1(3x)TK
No GCV
AdCMVTK
+GCV
Saline+GCV
1 cm
1 cm
1 cm

Fig. 70

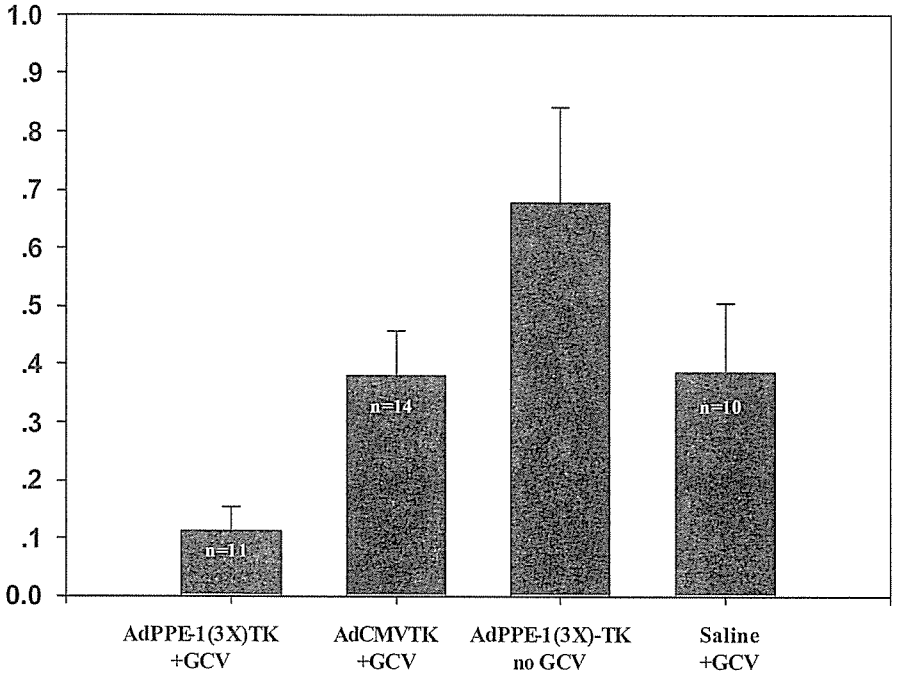
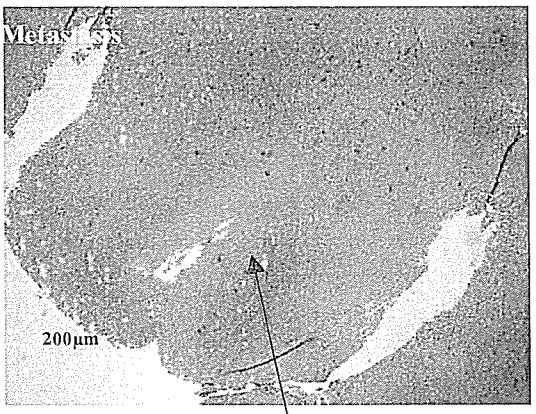

1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0.0
n=11
n=14
n=10
AdPPE-1(3X)TK +GCV
AdCMVTK +GCV
AdPPE-1(3X)-TK no GCV
Saline +GCV

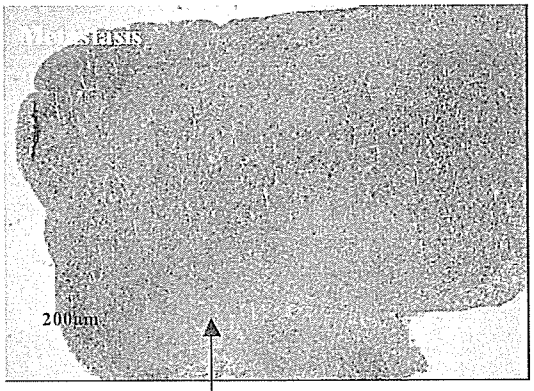
Fig. 71

AdPPE-1(3x) TK + GCV



Central necrosis

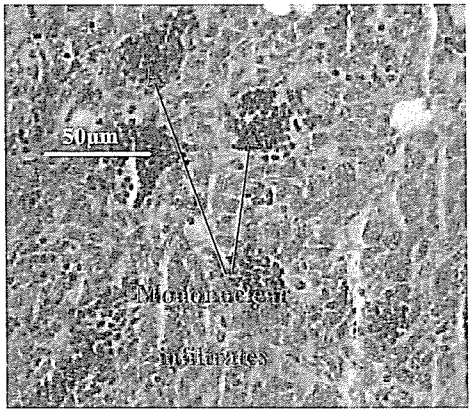
AdPPE-1(3x)-TK no GCV



Peripheral necrosis

Fig. 72a

AdPPE-1(3x)TK + GCV



AdPPE-1(3x)TK no GCV

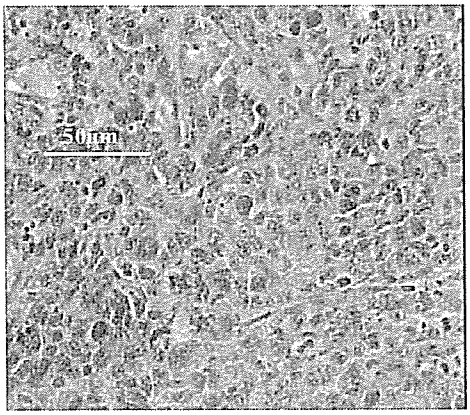
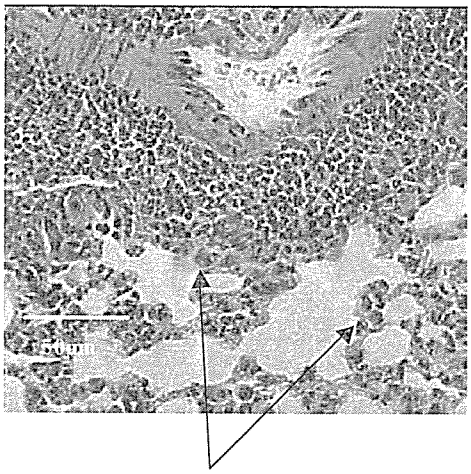


Fig. 72b

AdPPE-1(3x)TK + GCV



Mononuclear

infiltrates

AdPPE-1(3x)TK no GCV

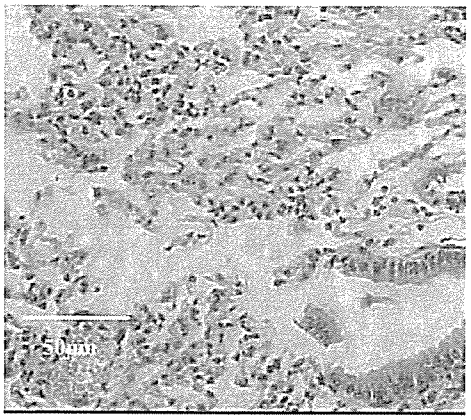


Fig. 72c

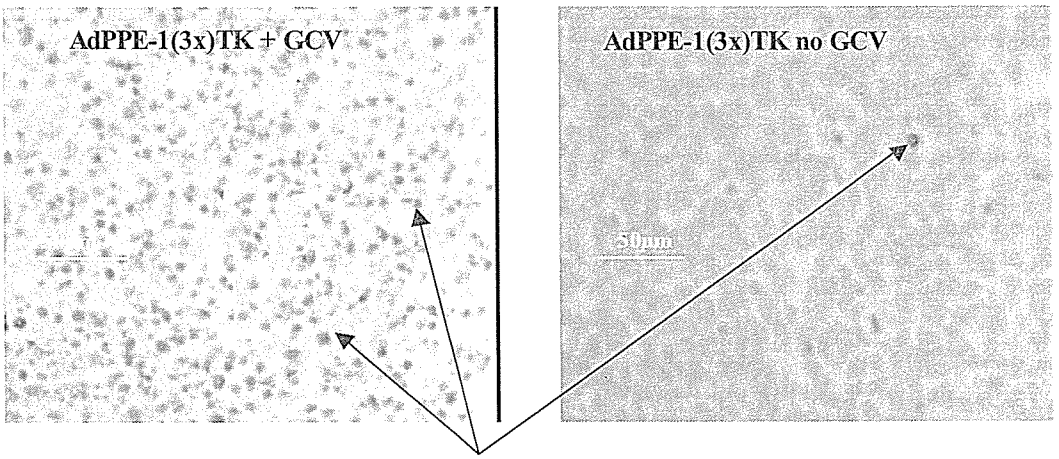


Fig. 73a

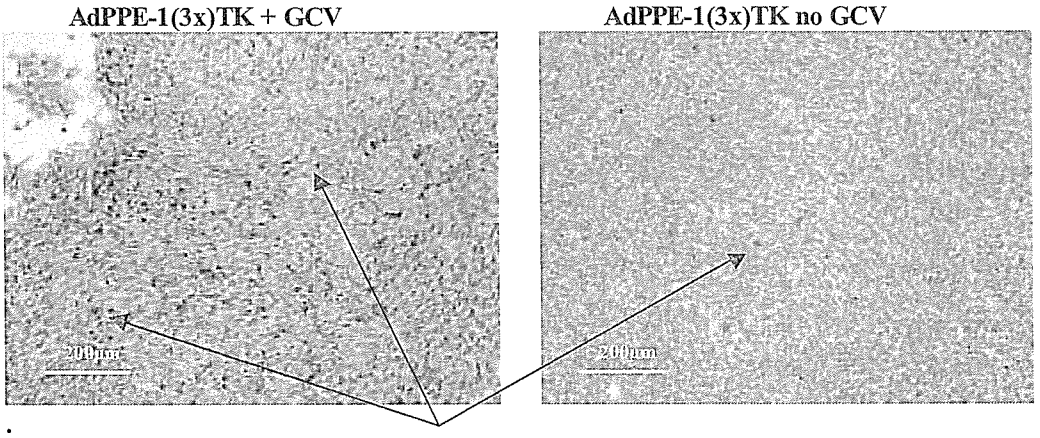


Fig. 73b

AdPPE-1(3x)TK + GCV

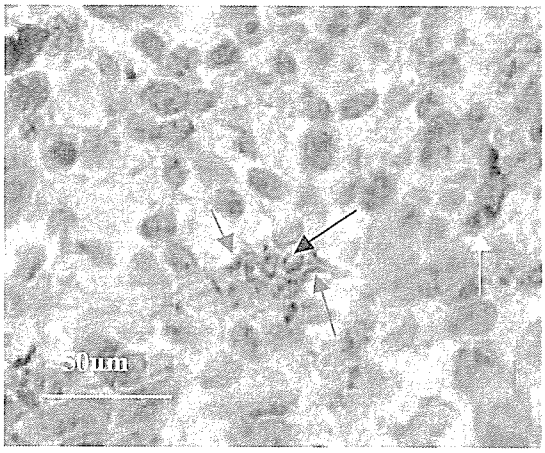


Fig 74a

AdPPE-1(3x)TK no GCV

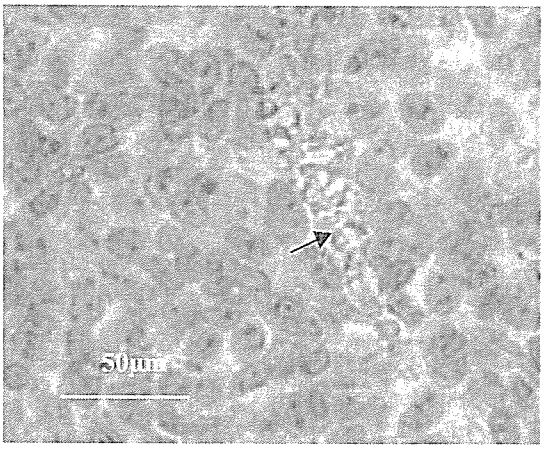
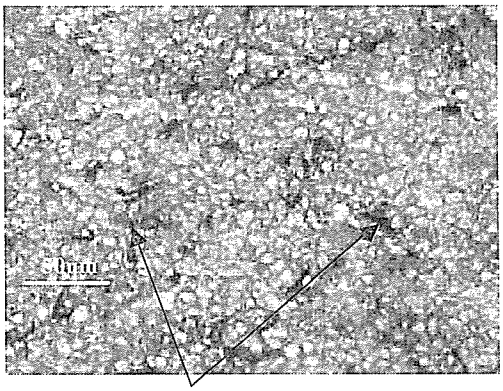


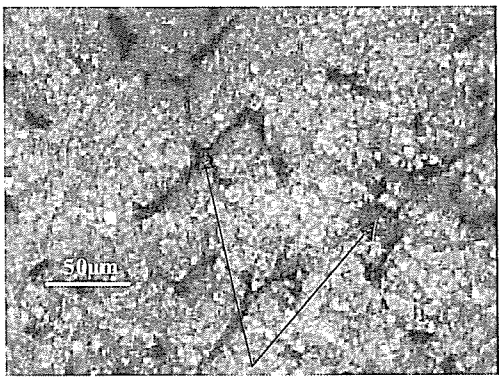
Fig 74b

AdPPE-1(3x)TK + GCV



Short blood vessels, without branching or continuity.

AdPPE-1(3x)TK no GCV



Numerous blood vessels, with distinct borders and branching.

Fig. 75a

AdPPE-1(3x)TK + GCV

AdPPE-1(3x)TK no GCV

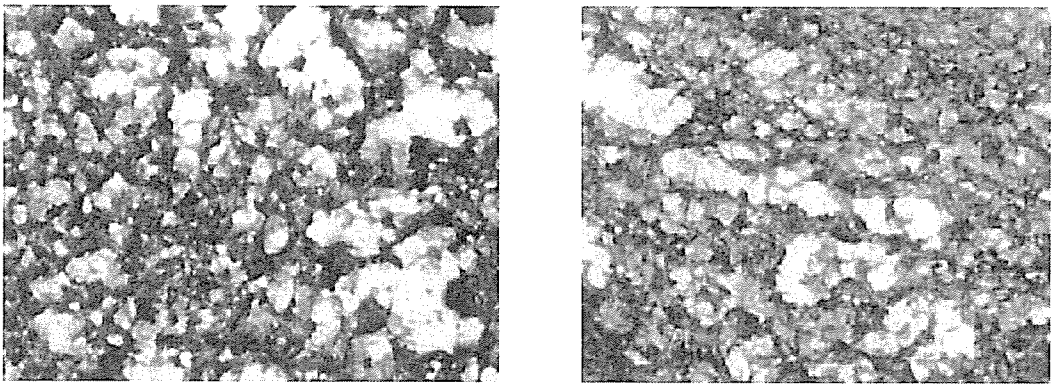
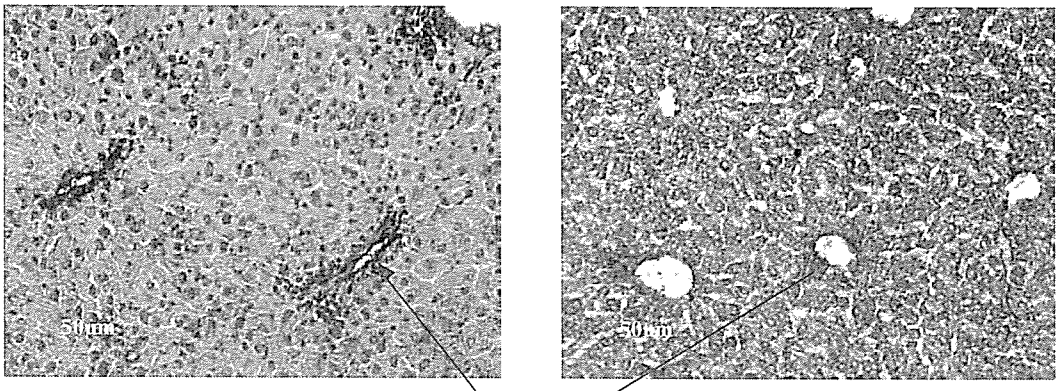


Fig. 75b



Blood vessels

Fig. 75c

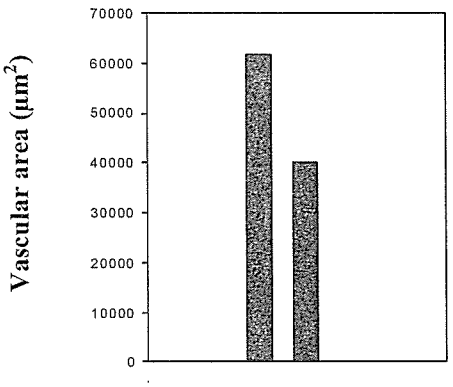

Vascular area (µm²)
70000
60000
50000
40000
30000
20000
10000
0

Fig. 75d

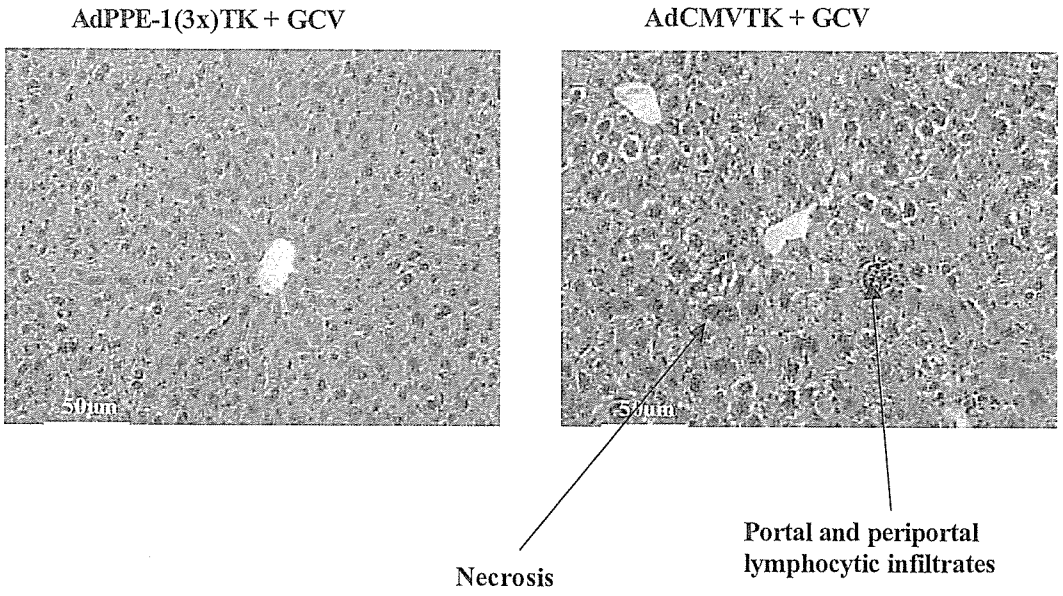

AdPPE-1(3x)TK + GCV
AdCMVTK + GCV
50µm
50µm
Necrosis
Portal and periportal
lymphocytic infiltrates

Fig. 76

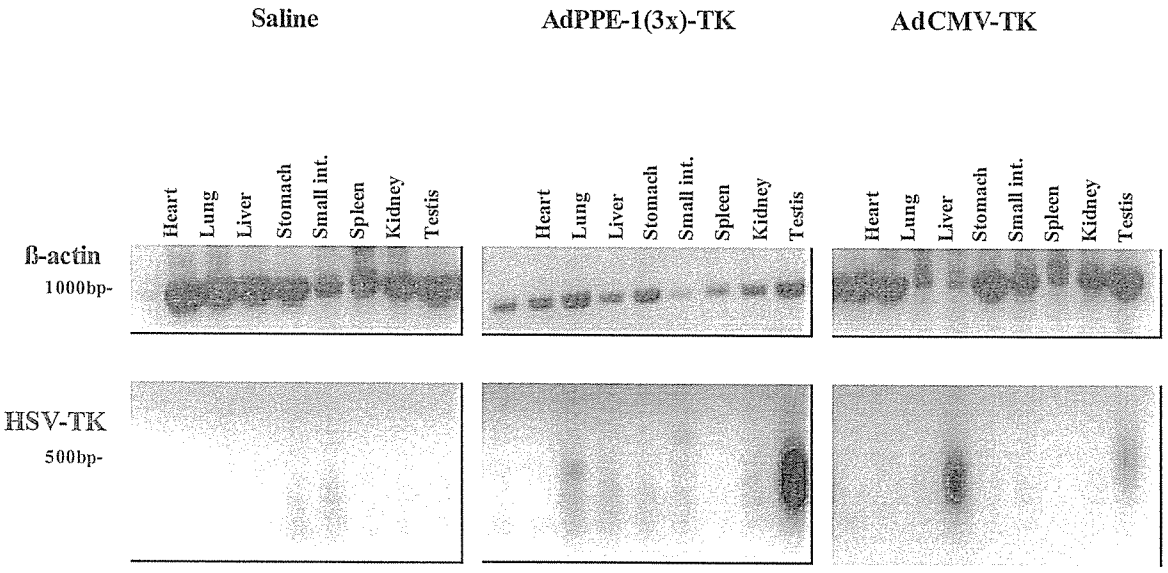

Saline
AdPPE-1(3x)-TK
AdCMV-TK
Heart
Lung
Liver
Stomach
Small int.
Spleen
Kidney
Testis
ß-actin
1000bp-
HSV-TK
500bp-

Fig. 77

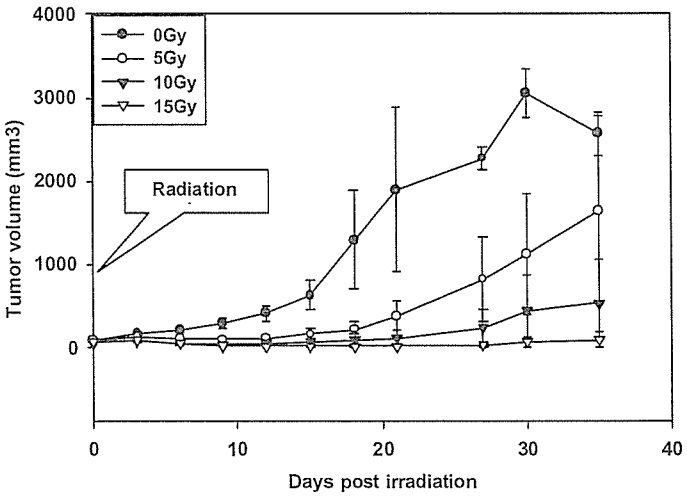


Fig. 78a

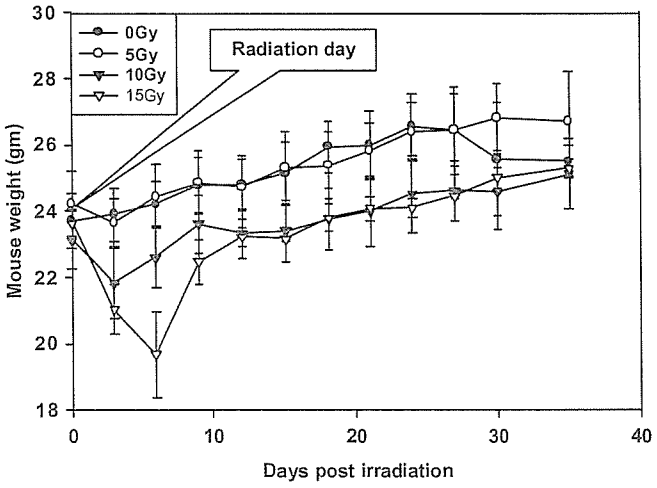


Fig. 78b

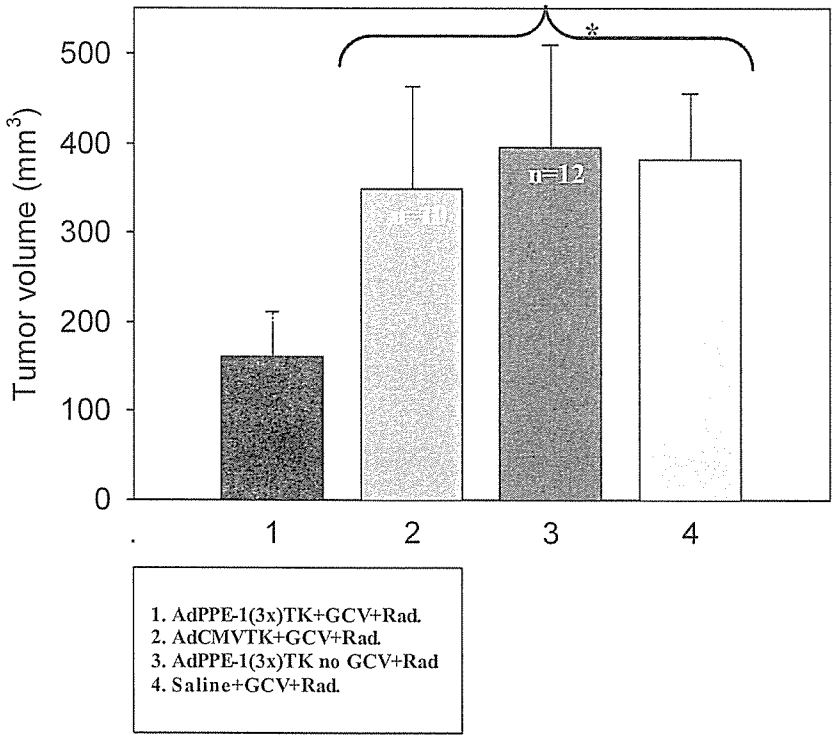

Tumor volume (mm3)
500
400
300
200
100
0
1
2
3
4
*
n=12
1. AdPPE-1(3x)TK+GCV+Rad.
2. AdCMVTK+GCV+Rad.
3. AdPPE-1(3x)TK no GCV+Rad
4. Saline+GCV+Rad.

Fig. 79a

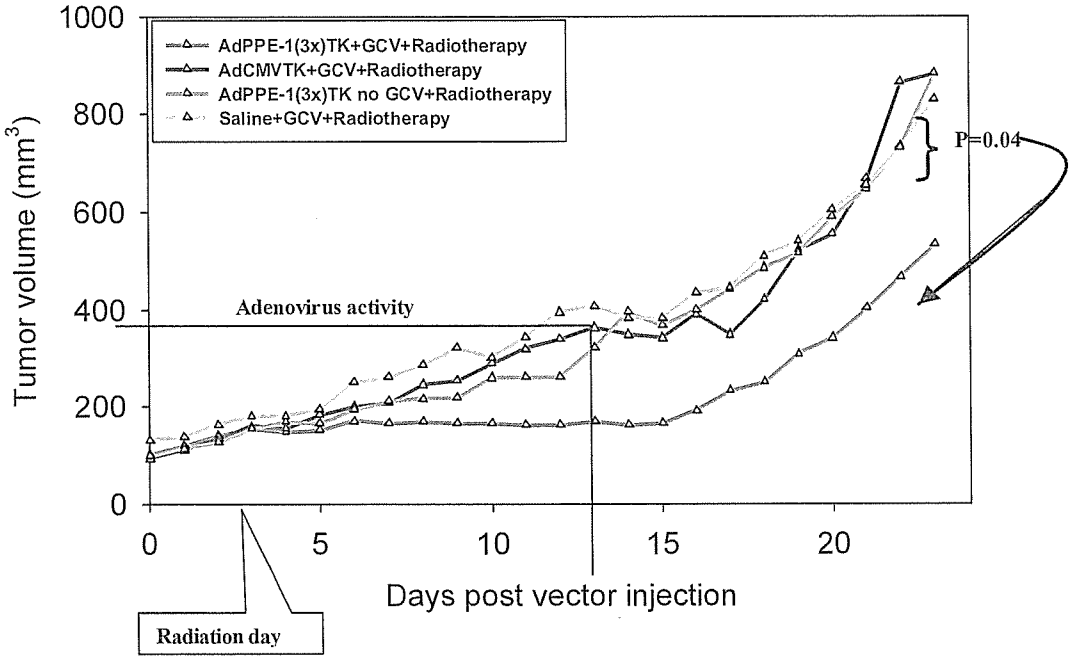

1000
800
600
400
200
0
Tumor volume (mm3)
AdPPE-1(3x)TK+GCV+Radiotherapy
AdCMVTK+GCV+Radiotherapy
AdPPE-1(3x)TK no GCV+Radiotherapy
Saline+GCV+Radiotherapy
P=0.04
Adenovirus activity
0
5
10
15
20
Days post vector injection
Radiation day

Fig. 79b

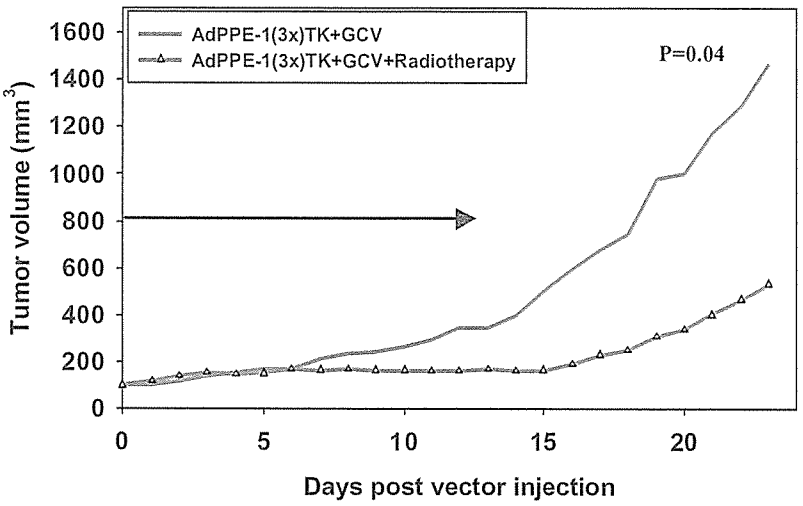

AdPPE-1(3x)TK+GCV
AdPPE-1(3x)TK+GCV+Radiotherapy
P=0.04
Tumor volume (mm3)
1600
1400
1200
1000
800
600
400
200
0
0
5
10
15
20
Days post vector injection

Fig. 79c

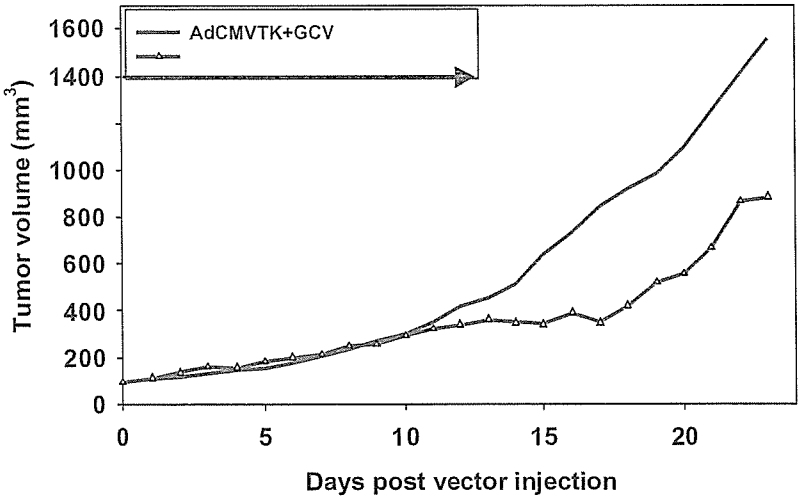


Fig. 79d

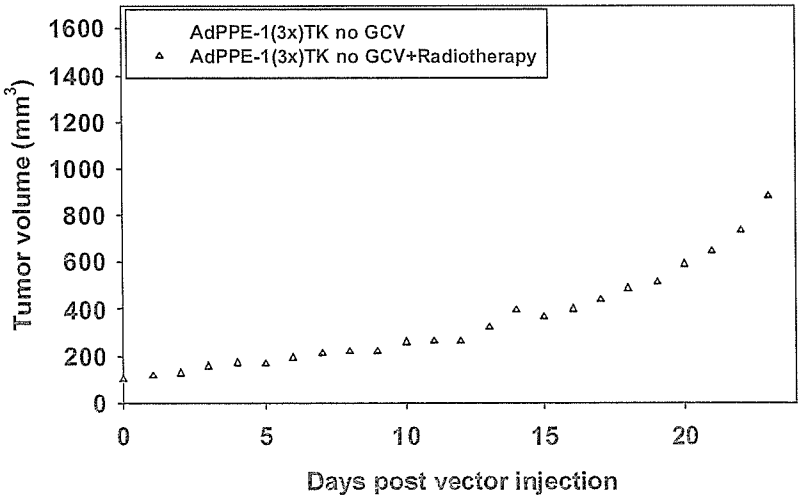


Fig. 79e

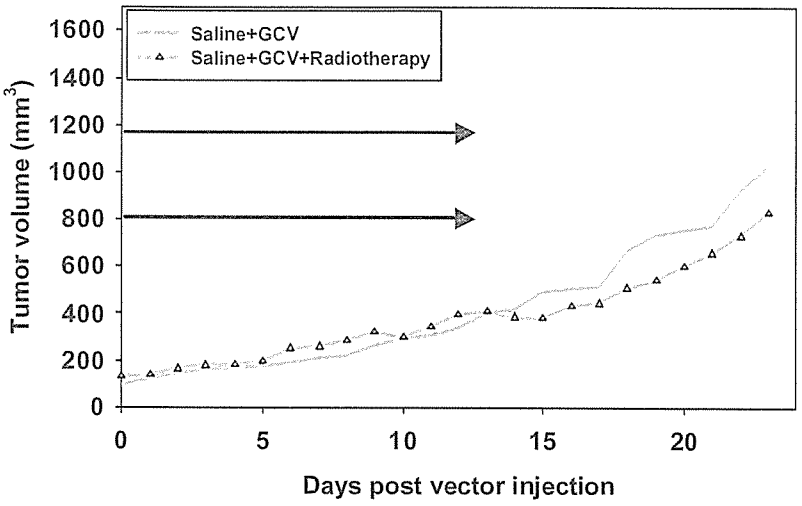


Fig. 79f

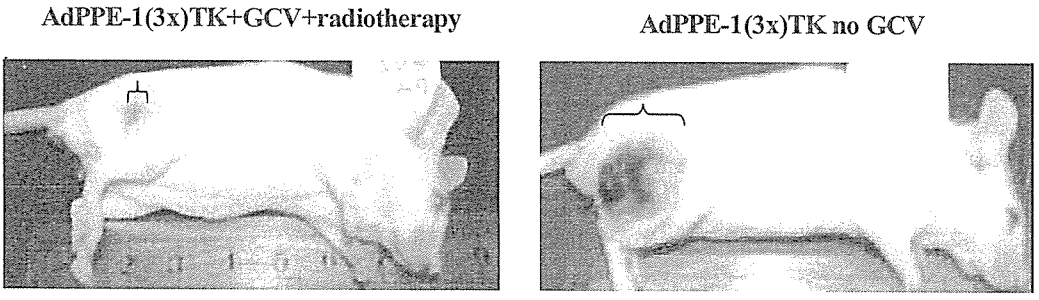


Fig. 79g

Fig 80a.

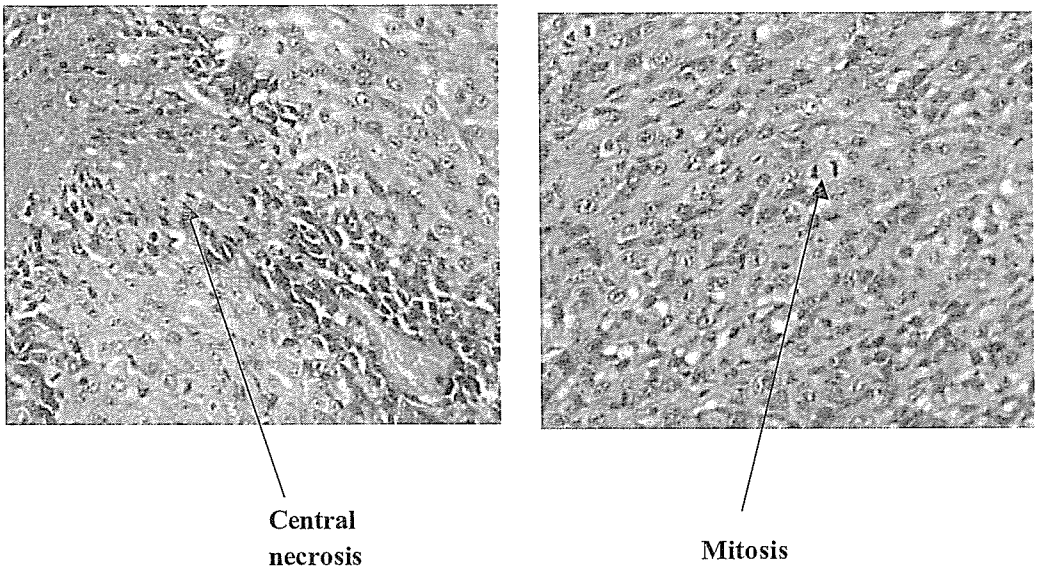
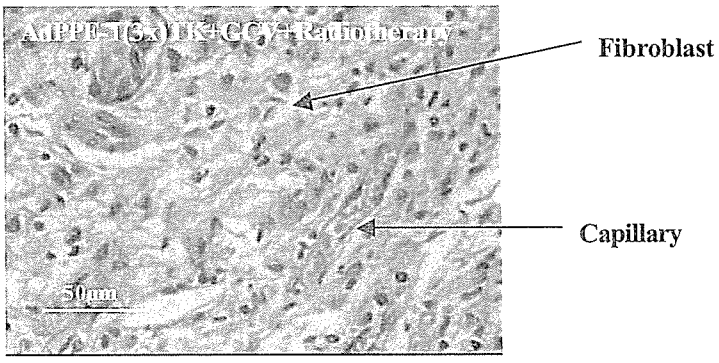
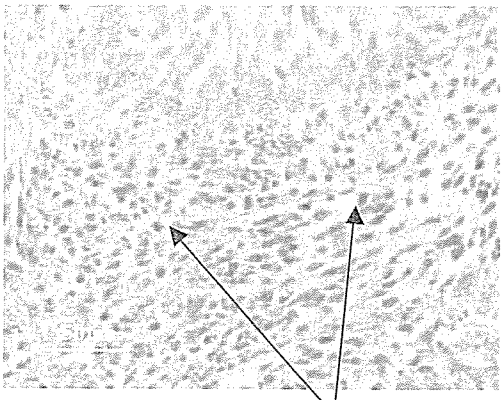


Fig 80b.



AdPPE-1(3x)TK+GCV+radiotherapy

AdPPE-1(3x)TK no GCV



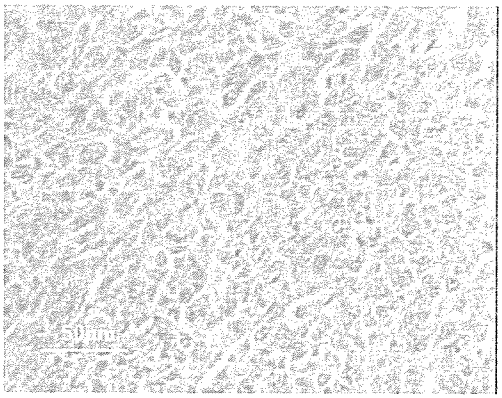
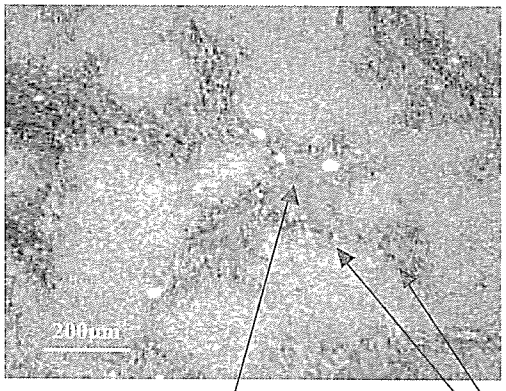


Fig. 81a

Apoptotic tumor cells

AdPPE-1(3x)TK+GCV+radiotherapy

AdPPE-1(3x)TK no GCV



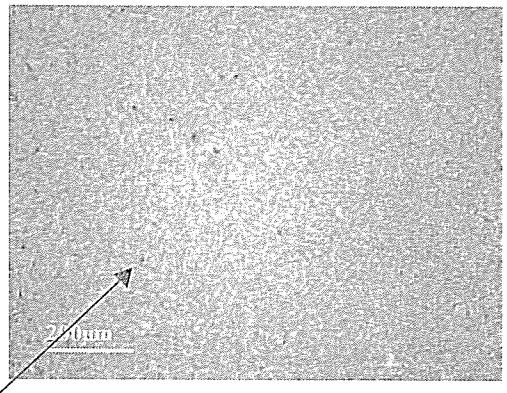
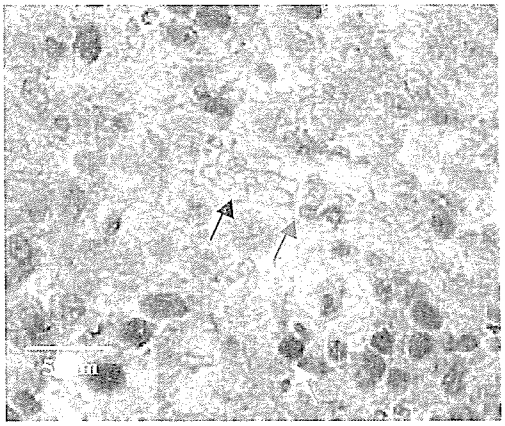


Fig. 81b

Serpentine-like central

Apoptotic tumor cells

AdPPE-1(3x)TK+GCV+radiotherapy



AdPPE-1(3x)TK no GCV

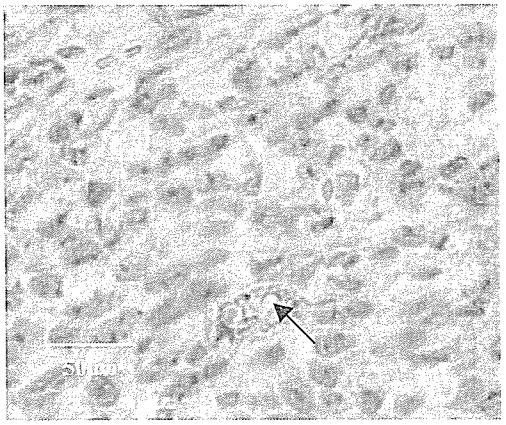
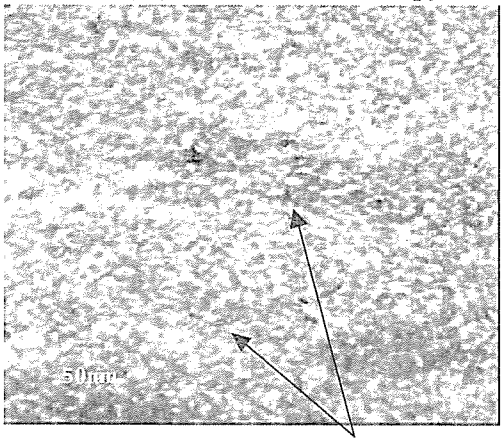
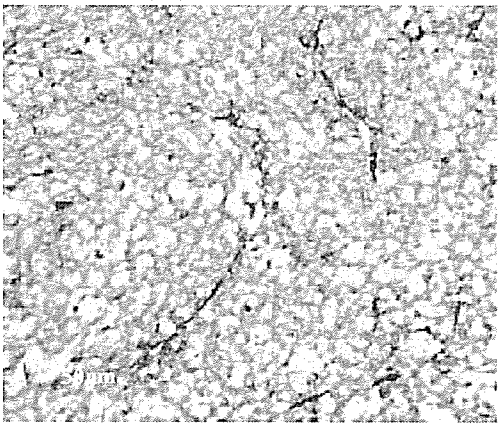


Fig. 82

AdPPE-1(3x)TK+GCV+radiotherapy



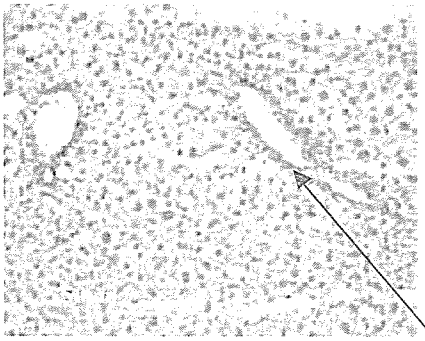
AdPPE-1(3x)TK no GCV



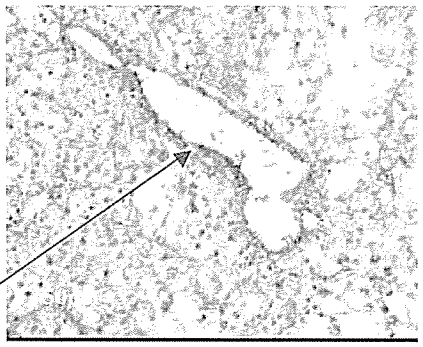
Short vessel without continuity

Fig. 83a

AdPPE-1(3x)TK+GCV+radiotherapy



AdPPE-1(3x)TK no GCV



Blood vessels

Fig. 83b

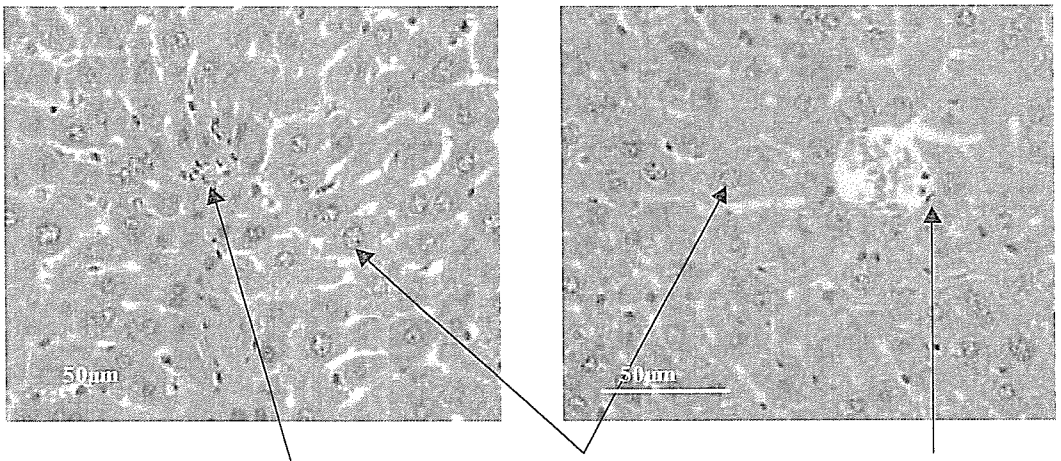


Fig. 84

Kupfer cell hyperplasia

Enlarged hepatocyte nuclei

Endothelial cell

Fig 85a.

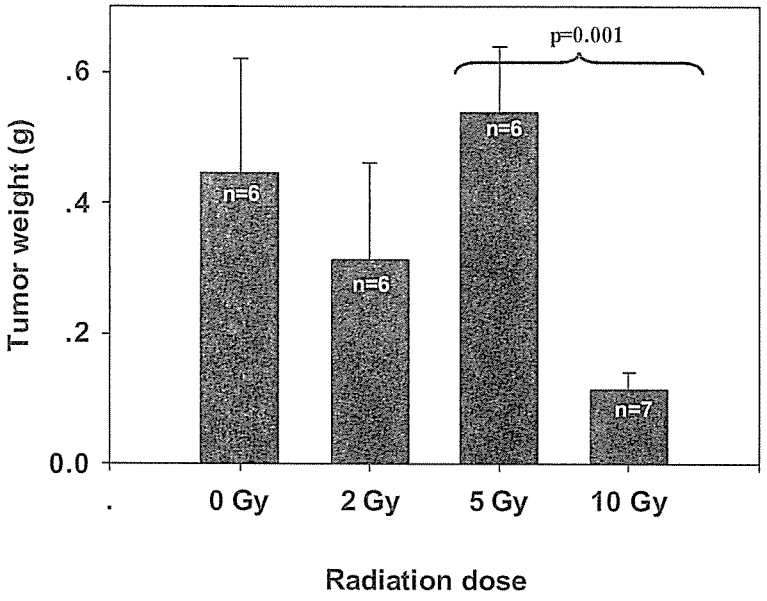


Fig 85b.

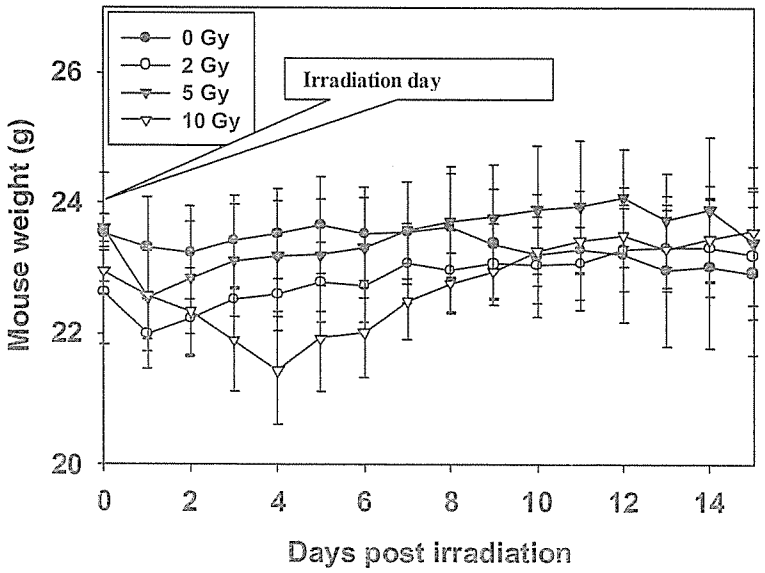


Fig. 86a.

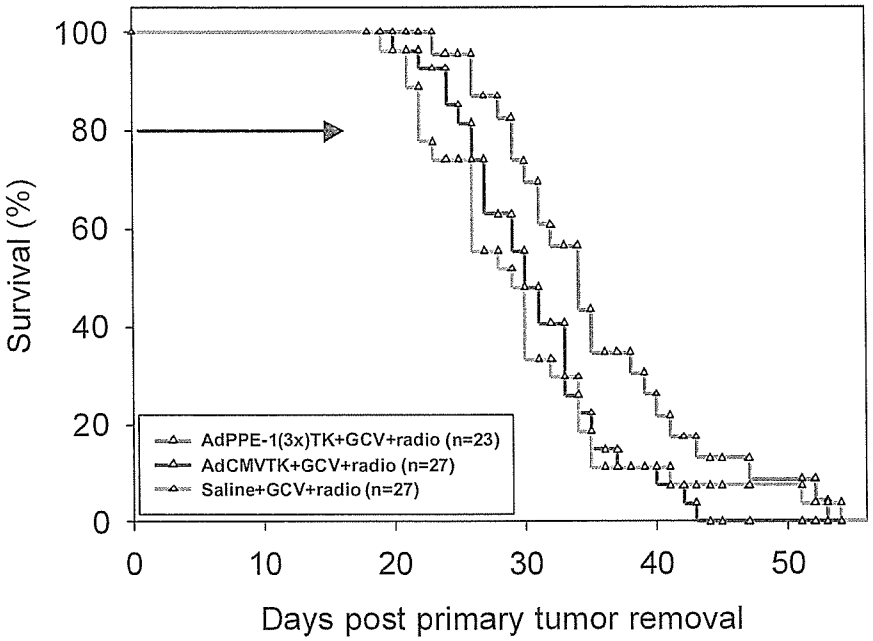


Fig. 86b.

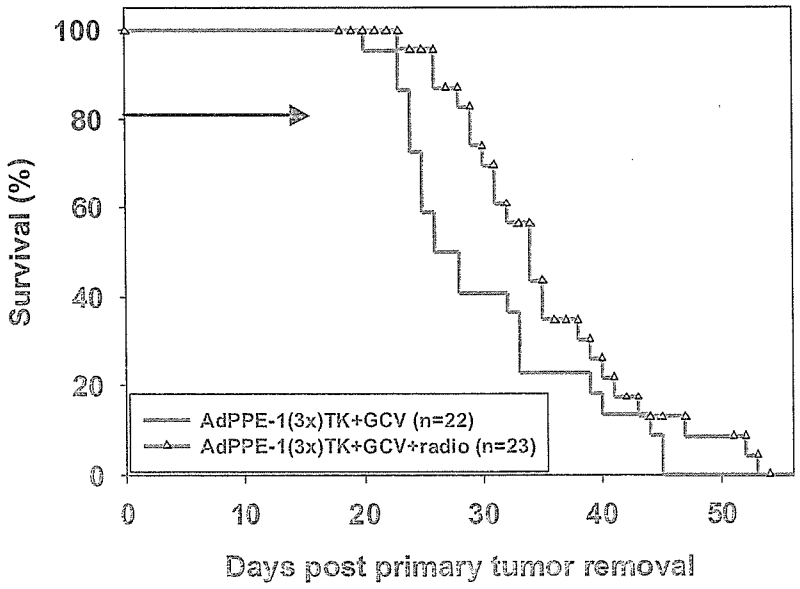


Fig. 86c.

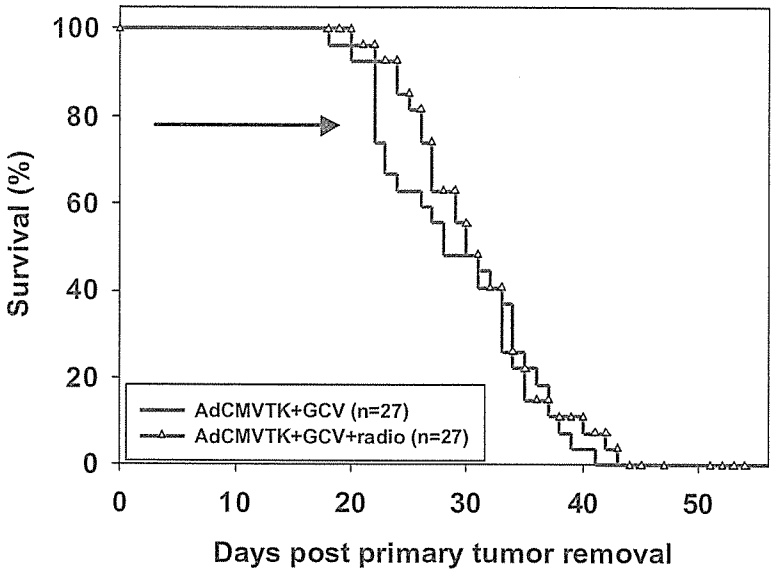
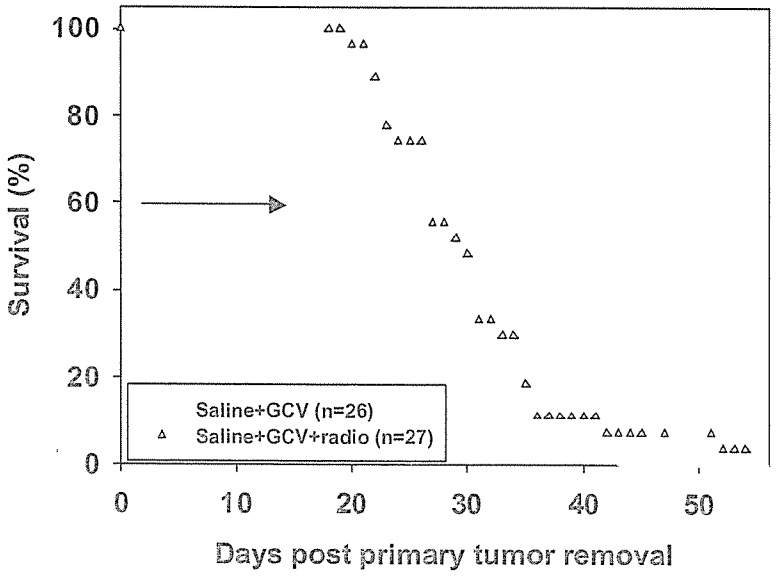


Fig. 86d.



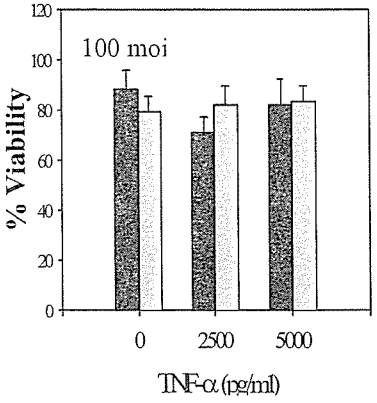


Fig. 87a

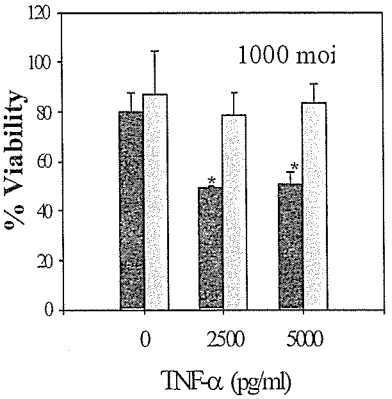


Fig. 87b

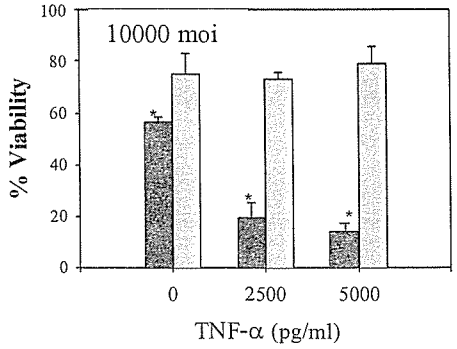


Fig. 87c

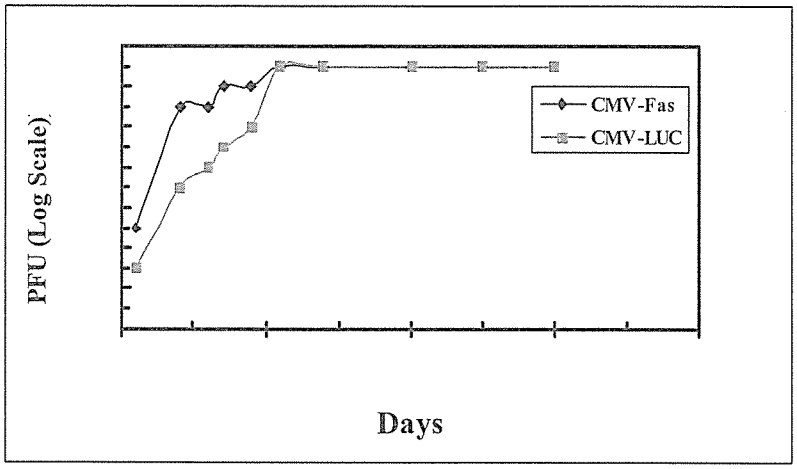


Fig. 88

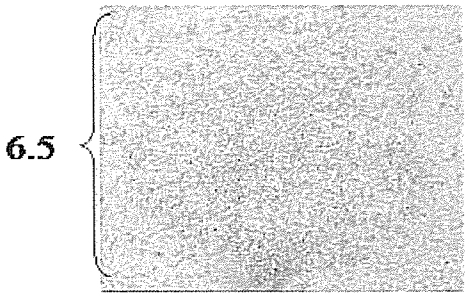


Fig. 89a

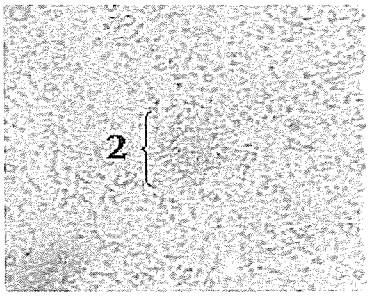


Fig. 89b

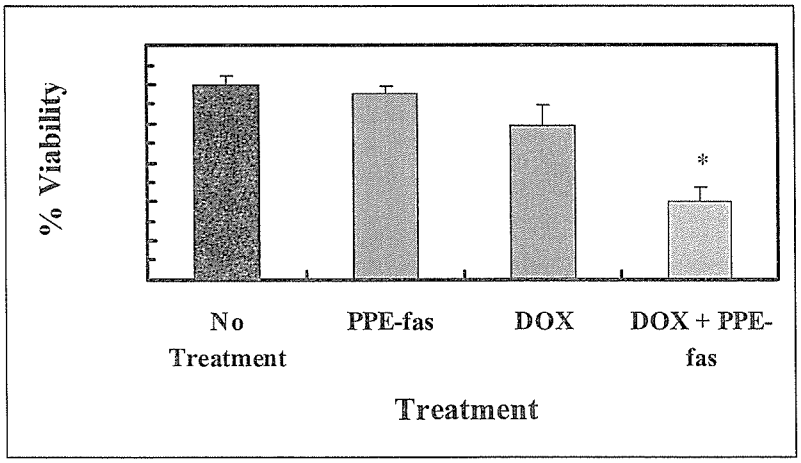


Fig. 90

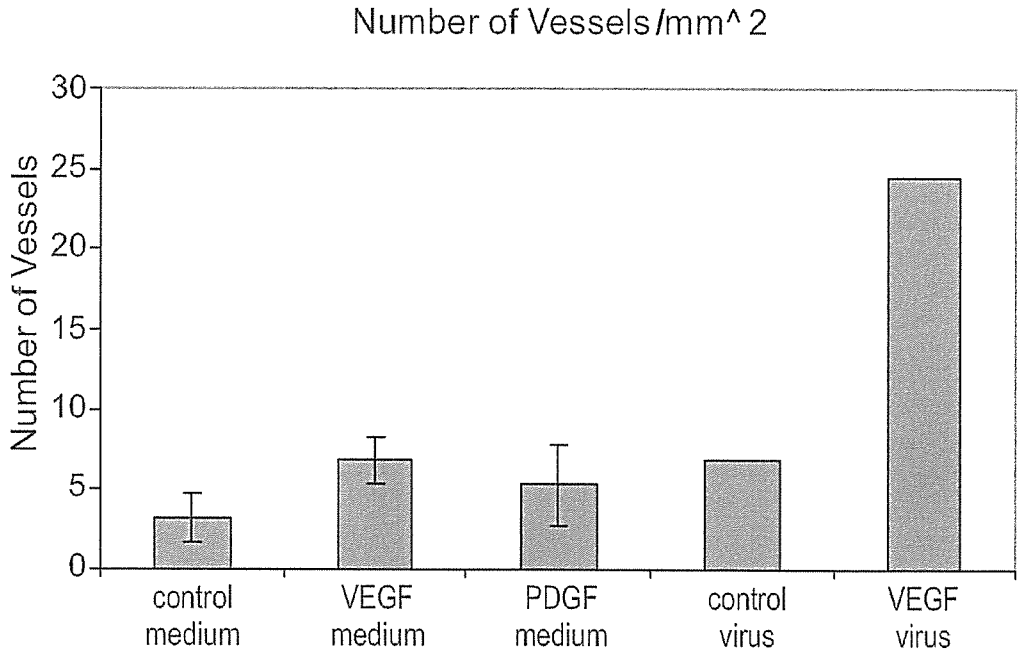


Fig. 91a

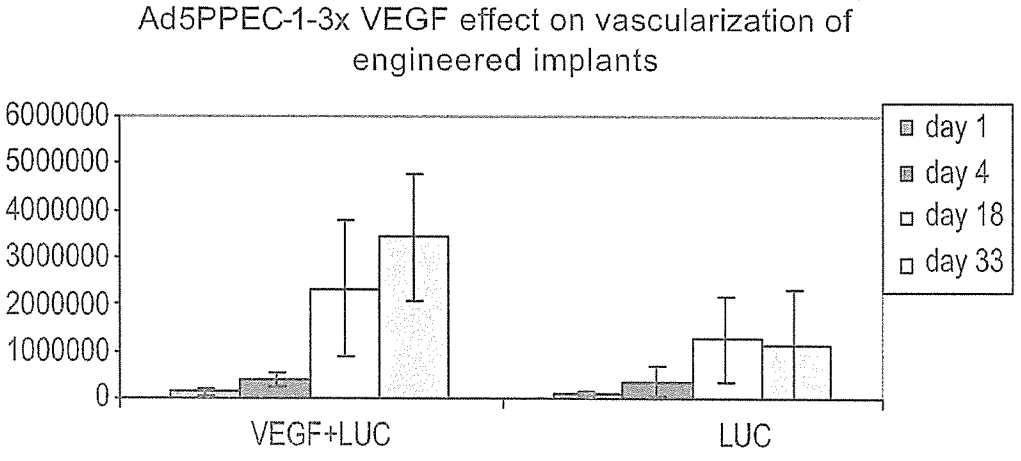


Fig. 91b

gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtagtgta cttctgatcg gcgatactag ggagataagg atgtacctga caaaaccaca ttgttgttgt tatcattatt atttagtttt ccttccttgc taactcctga cggaatcttt ctcacctcaa atgcgaagta ctttagttta gaaaagactt ggtggaaggg gtggtggtgg aaaagtaggg tgatcttcca aactaatctg gttccccgcc cgccccagta gctgggattc aagagcgaag agtggggatc gtcccccttgt ttgatcagaa agacataaaa ggaaaatcaa gtgaacaatg atcagcccca cctccacccc acccccctgc gcgcgcacaa tacaatctat ttaatt ***gtacttcatacttttcattccaatggggtgactttgcttctggag*** aaactcttg attcttgaac tctgggg*ctg gcagctagca aaa*ggggaag cgggctgctg ctctctgcag gttctgcagc ggtctctgtc tagtgggtgt tttcttttc ttagccctgc ccctggattg tcagacggcg ggcgtctgcc tctgaagtta gccgtgattt cctctagagc cgggtct*tat ctct*ggct*gc acgt*tgcctg t*gggtgacta atc*aca*caat* aacattgttt agggctggaa taaagtcaga gctgtttacc cccactctat aggggttcaa *tataaaaagg* cggcggagaa ctgtccgagt cagacgcgtt cctgcaccgg cgctgagagc ctgacccggt ctgctccgct gtccttgcgc gctgcctccc ggctgcccgc gacgctttcg ccccagtgga agggccactt gctgaggacc gcgctgagat ctaaaaaaaa aacaaaaaac aaaaaacaaa aaaacccaga ggcgatcaga gcgaccagac accgtcctct tcgttttgca ttgagttcca tttgcaaccg agttttcttt ttttccttt tccccactct tctgacccct ttgcagaatg gattatttic ccgtgatctt ctctctgctg ttcgtgactt tccaaggagc tccagaaaca ggtaggcgcc acttgcgaat ctttctactt cagcgcagca gttatcgctt ctgttttcca ctttctttc tttctttct ttcattcttt ccttttatt tatttttta attactgaag ctccagcagc aagtgcctta caattaatta acttctgtgt gaagcgaaag aaataaaacc cctgtttgaa tacagctgac tacaaccgag tatcgcatag cttc-1334

Fig. 92

5'- gtacttcatacttttcattccaatggggtgactttgcttctggag ggtgactttgcttctggag cca gtacttcatacttttcatt gtacttcatacttttcattccaatggggtgactttgcttnctggag gctagctgccag -3'

Fig. 93

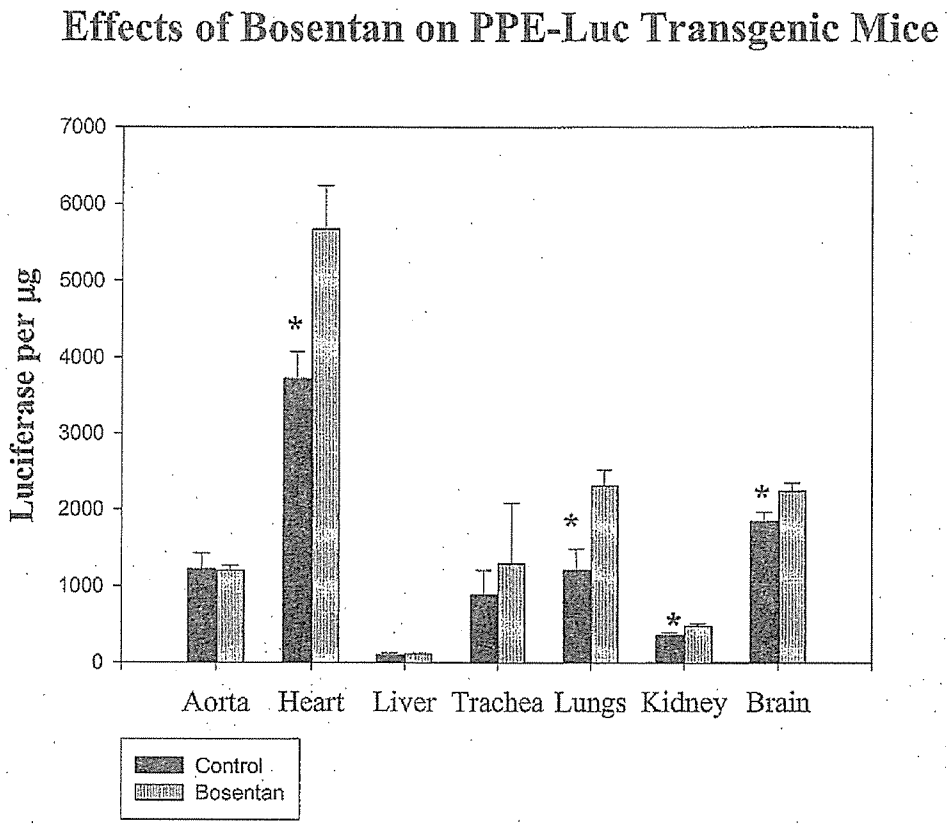

Effects of Bosentan on PPE-Luc Transgenic Mice
Luciferase per µg
7000
6000
5000
4000
3000
2000
1000
0
*
*
*
*
Aorta
Heart
Liver
Trachea
Lungs
Kidney
Brain
Control
Bosentan

FIG. 94

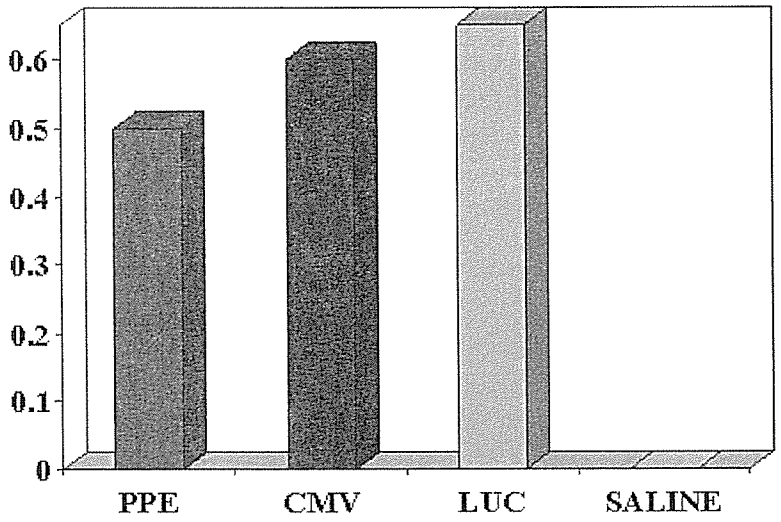


Fig. 95a

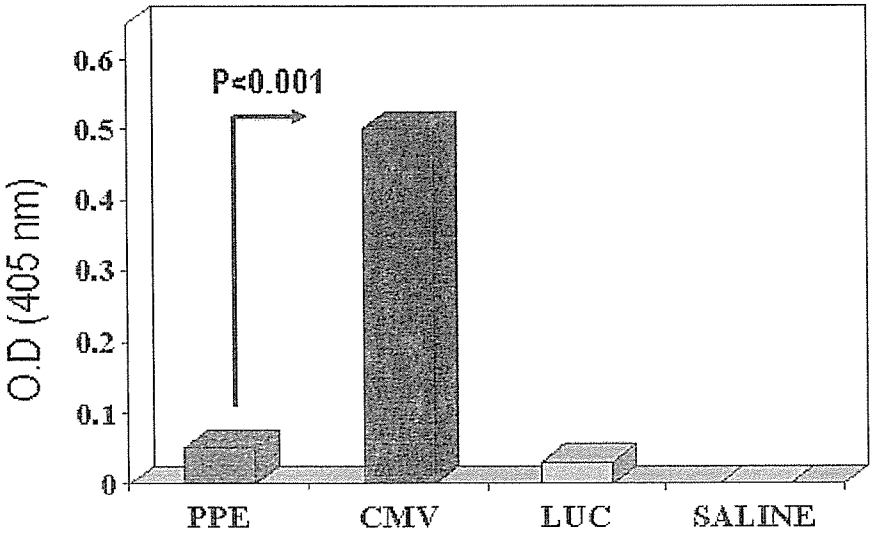


Fig. 95b

Fig. 96

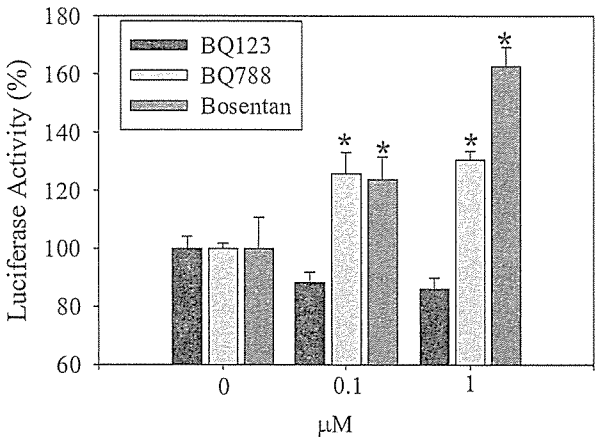

180
160
140
120
100
80
60
Luciferase Activity (%)
BQ123
BQ788
Bosentan
*
*
*
*
0
0.1
1
μM

Fig. 97A

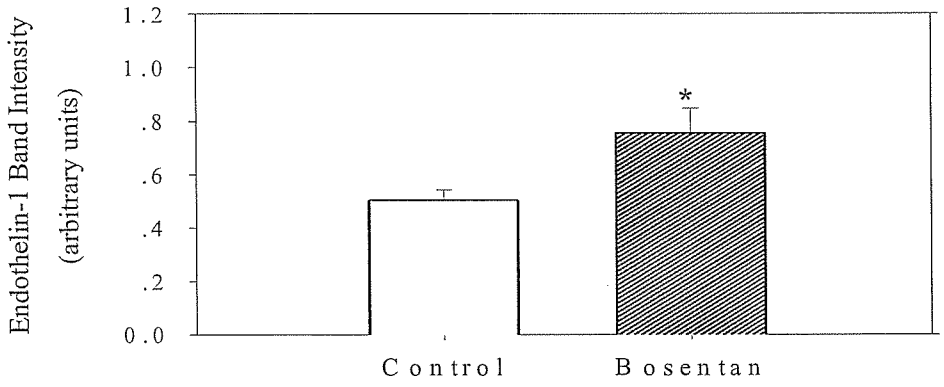
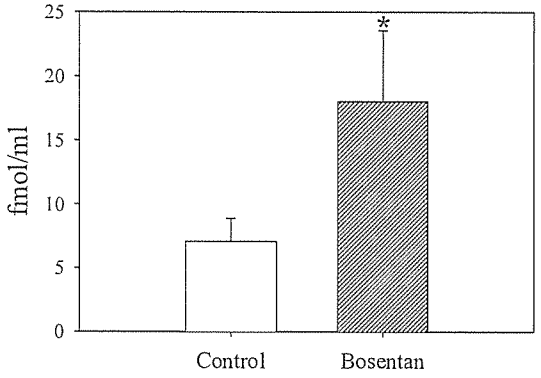

Endothelin-1 Band Intensity
(arbitrary units)
1.2
1.0
.8
.6
.4
.2
0.0
*
Control
Bosentan

Fig. 97B



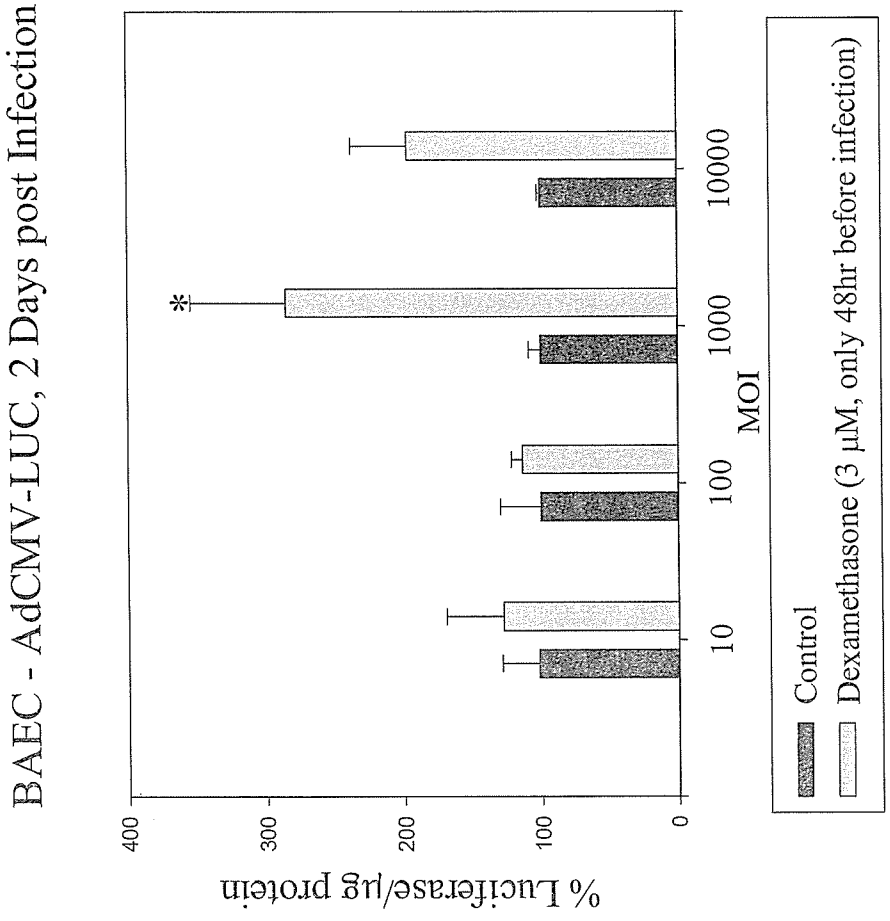
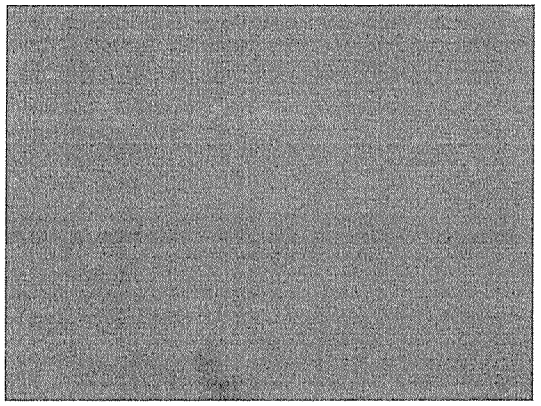
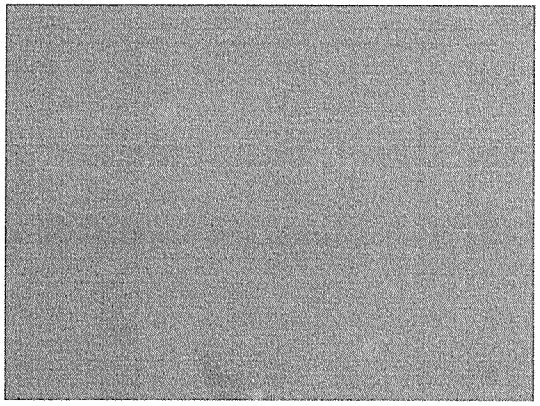

BAEC - AdCMV-LUC, 2 Days post Infection
% Luciferase/µg protein
400
300
200
100
0
*
10
100
1000
10000
MOI
Control
Dexamethasone (3 µM, only 48hr before infection)

Fig. 98

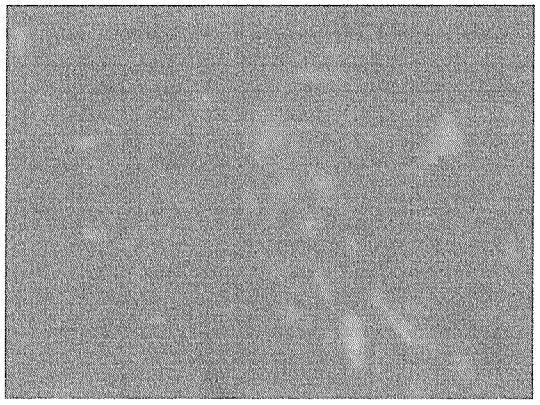
AdPPE-GFP (100 MOI)

No treatment





Dex 3μM



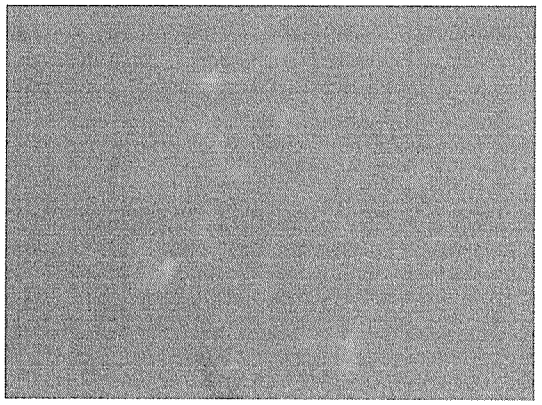
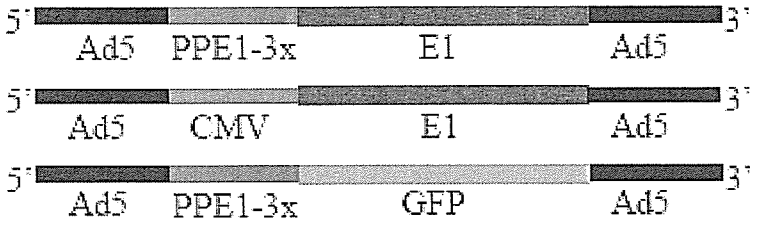


Fig. 99

Fig. 100



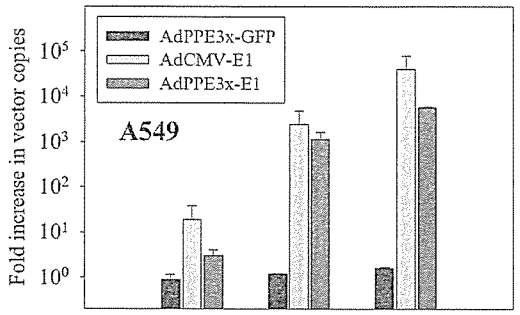


Fig. 101a

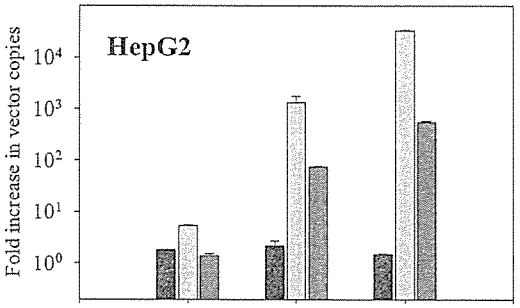


Fig. 101b

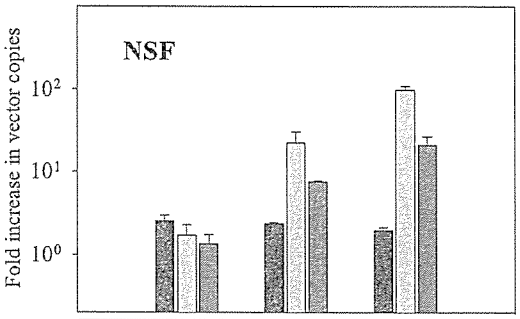


Fig. 101c

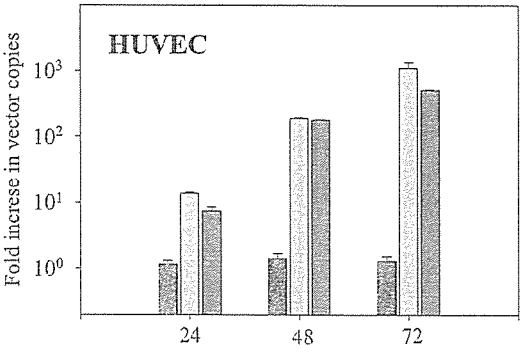
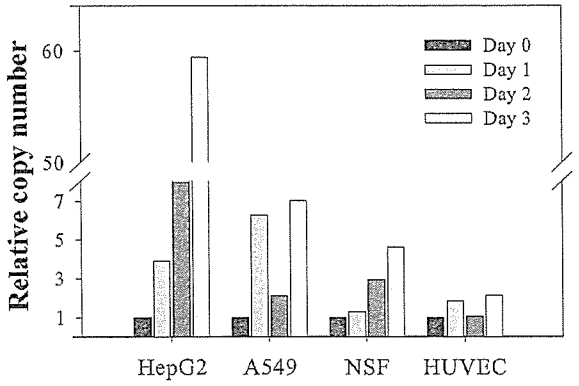


Fig. 101d

Fig. 101e


Relative copy number
60
50
7
5
3
1
Day 0
Day 1
Day 2
Day 3
HepG2
A549
NSF
HUVEC

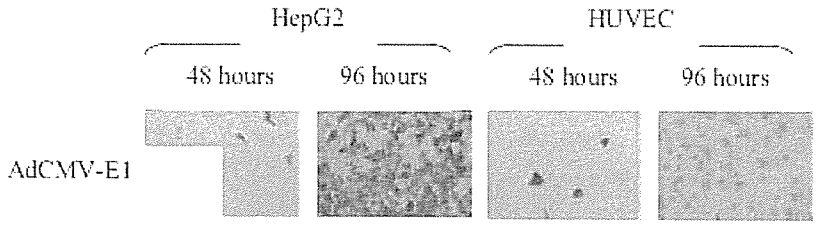


Fig. 102a Fig. 102b Fig. 102c Fig. 102d

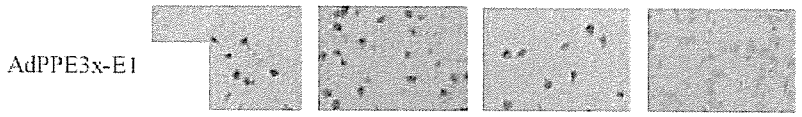


Fig. 102e Fig. 102f Fig. 102g Fig. 102h

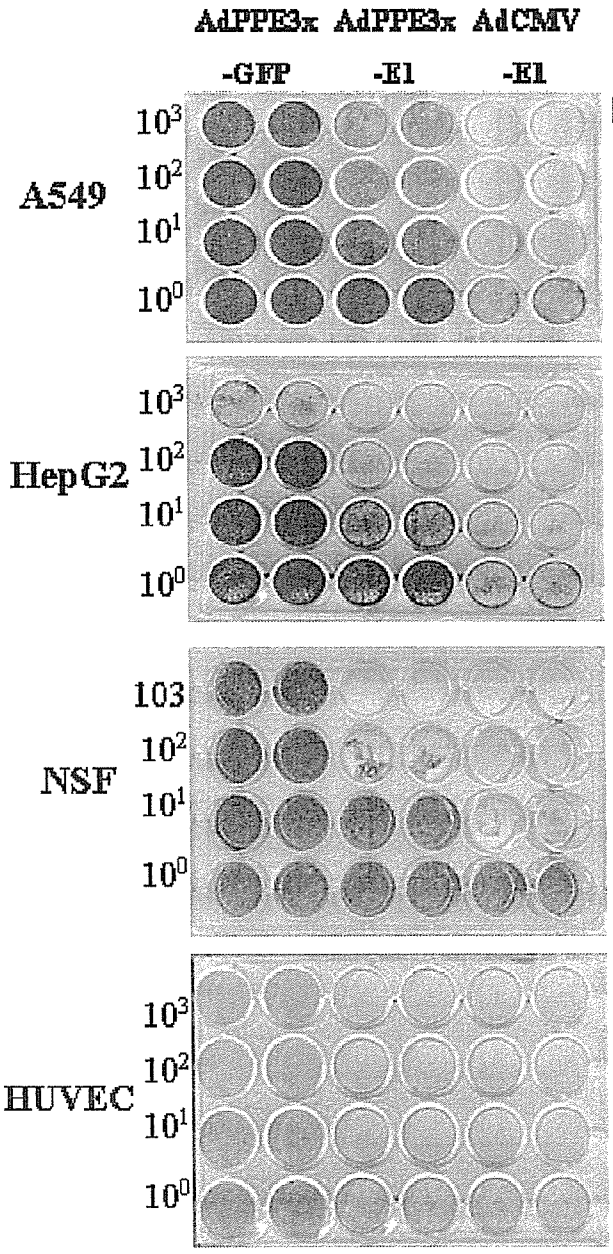


Fig. 103a

Fig. 103b

Fig. 103c

Fig. 103d

Fig. 103e

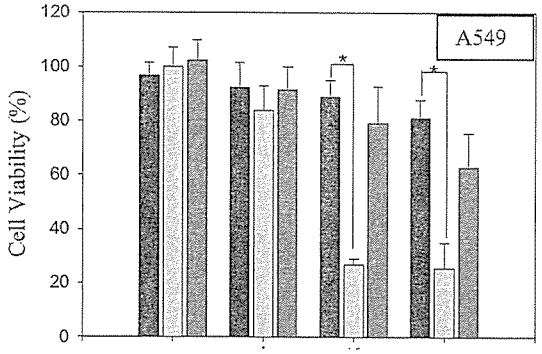


Fig. 103f

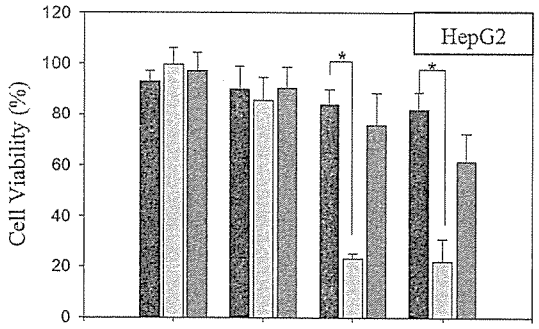


Fig. 103g

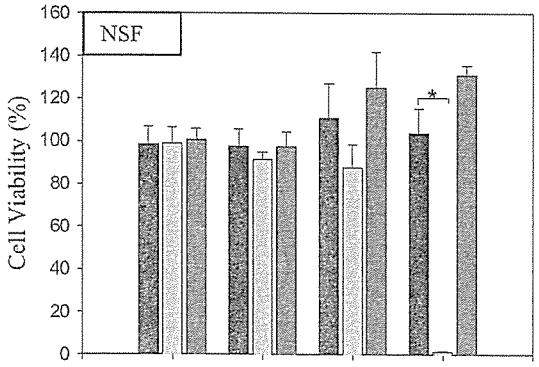
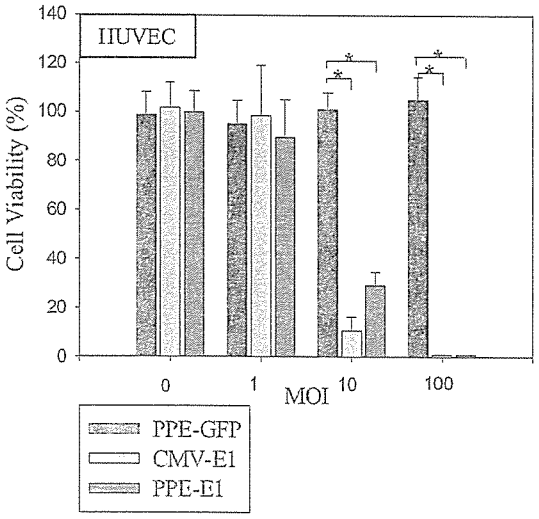


Fig. 103h



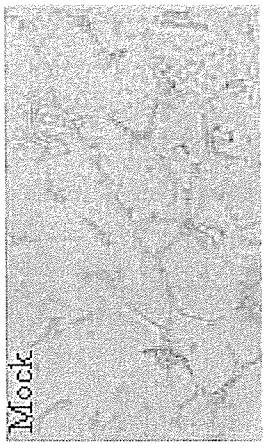


Fig. 104a



Fig. 104c

Fig. 104b

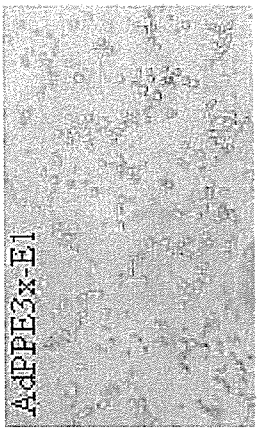


Fig. 104d

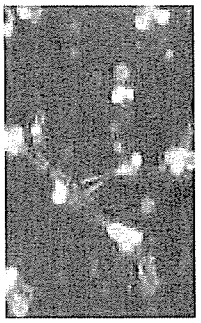


Fig. 106a

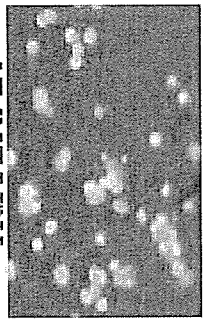


Fig. 106b

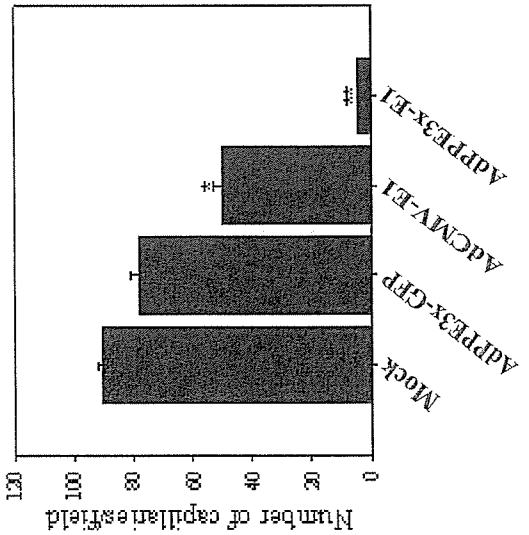


Fig. 105

Fig. 107

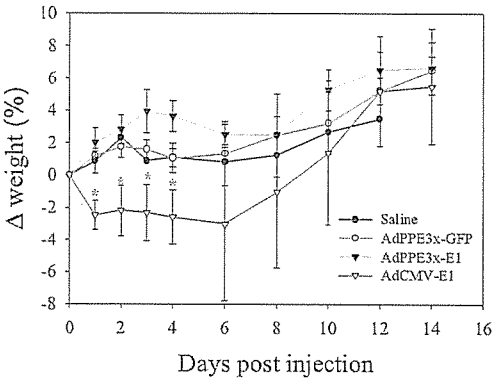


Fig. 108

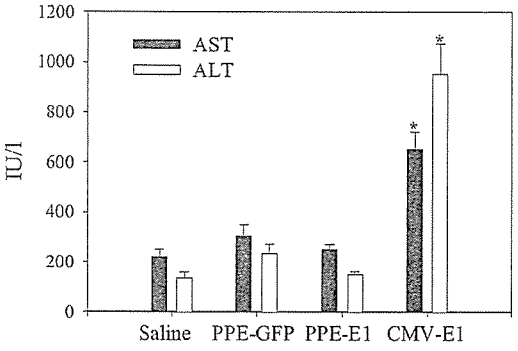


Fig. 109a

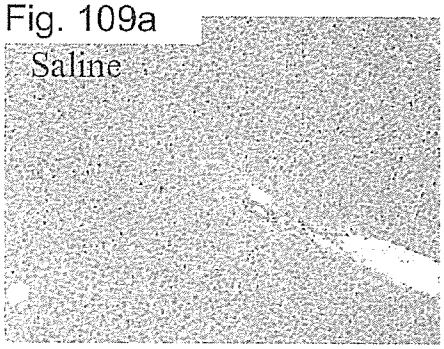


Fig. 109c

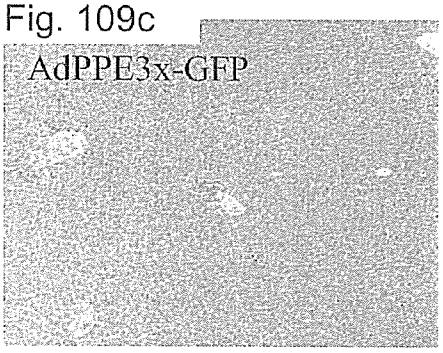


Fig. 109b

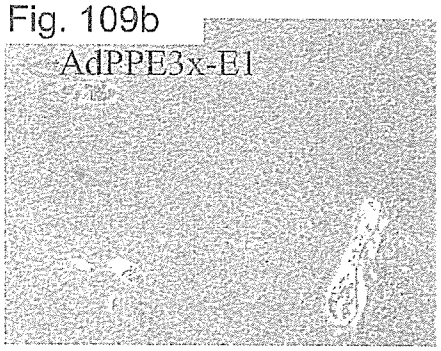
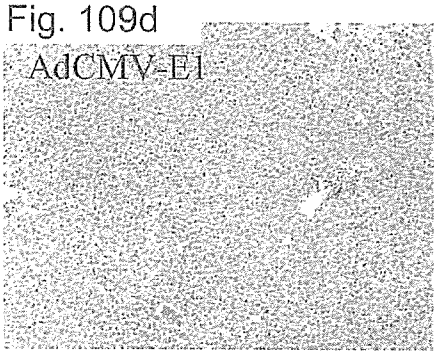


Fig. 109d



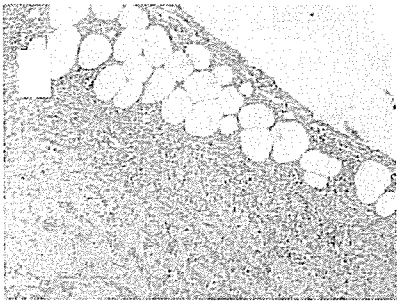


Fig. 110a

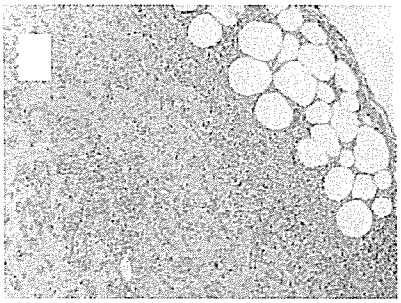


Fig. 110b

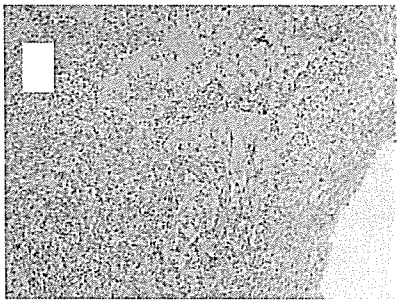


Fig. 110c

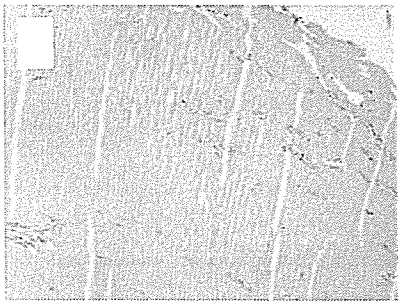
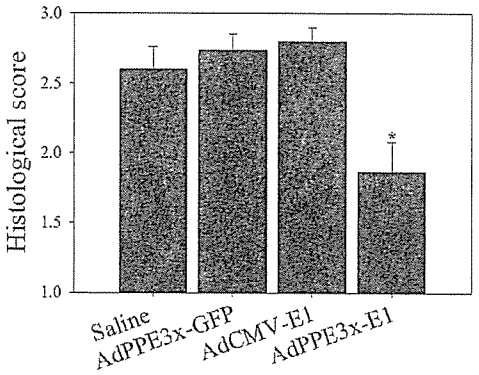


Fig. 110d

Fig. 110e


Histological score
3.0
2.5
2.0
1.5
1.0
*
Saline
AdPPE3x-GFP
AdCMV-E1
AdPPE3x-E1

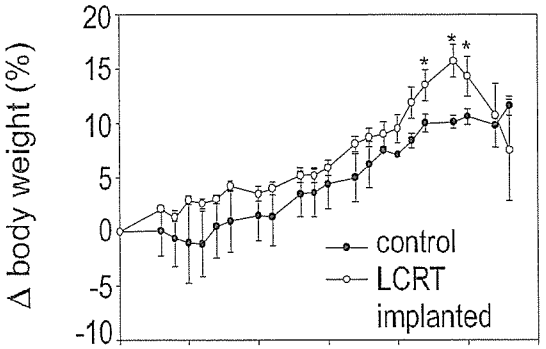


Fig. 111a

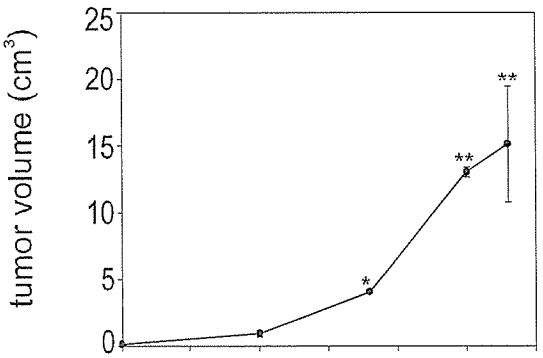


Fig. 111b

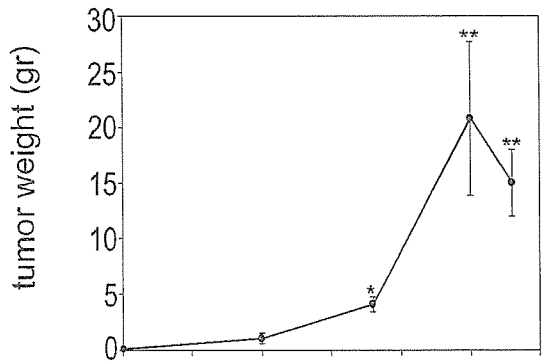


Fig. 111c

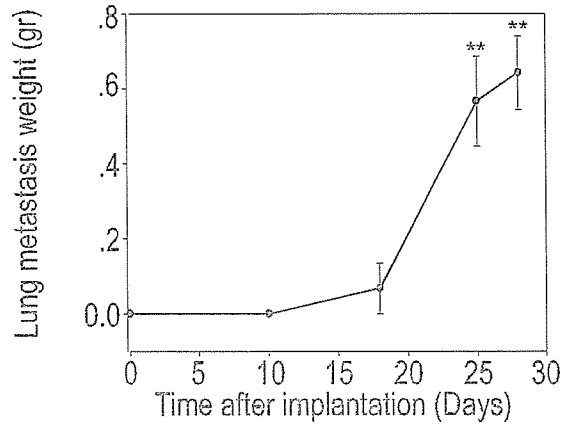


Fig. 111d

Fig. 111e

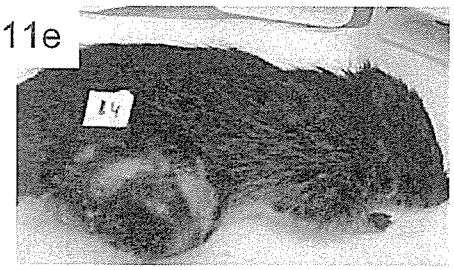


Fig. 111f

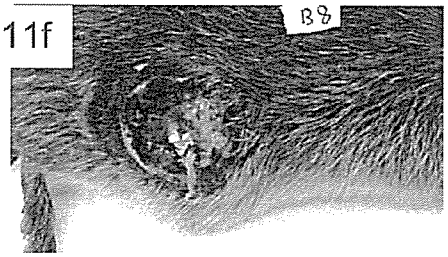


Fig. 111g

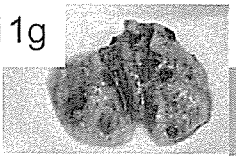


Fig. 111h

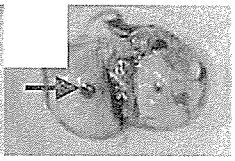


Fig. 111i



Fig. 111j

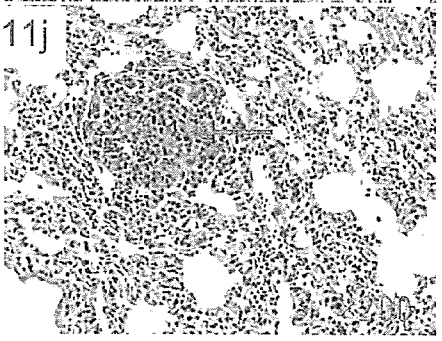
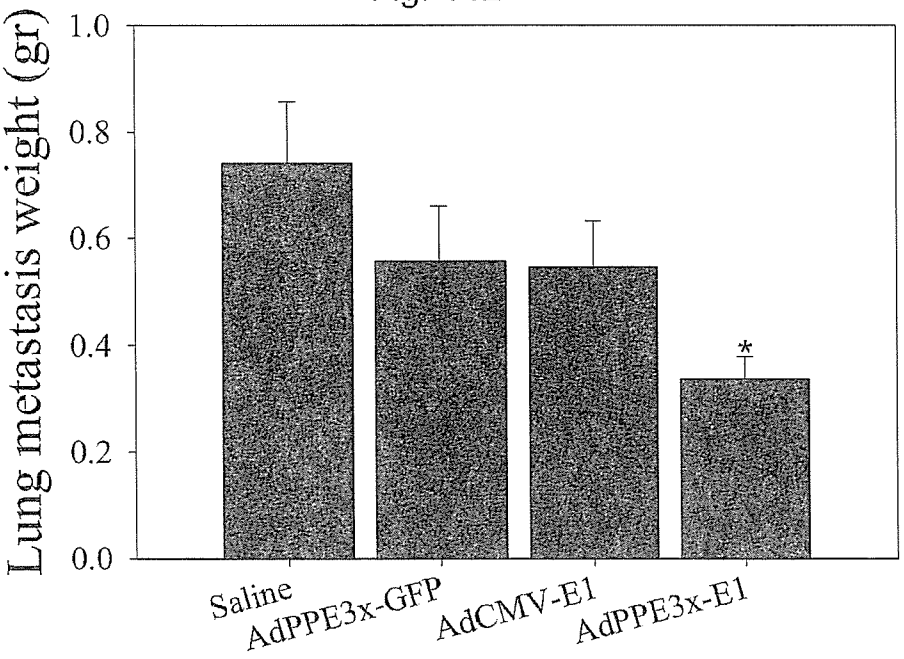


Fig. 112


Lung metastasis weight (gr)
1.0
0.8
0.6
0.4
0.2
0.0
*
Saline
AdPPE3x-GFP
AdCMV-E1
AdPPE3x-E1

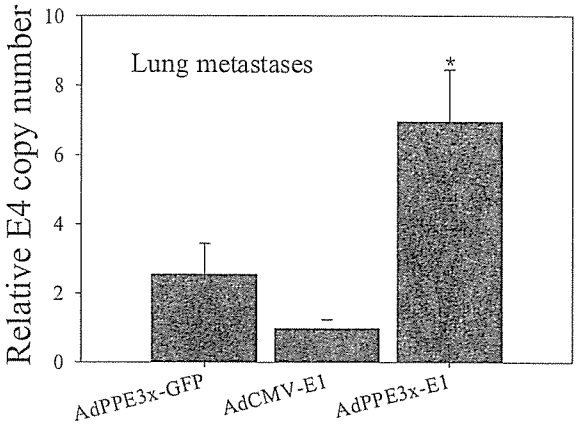


Fig. 113a

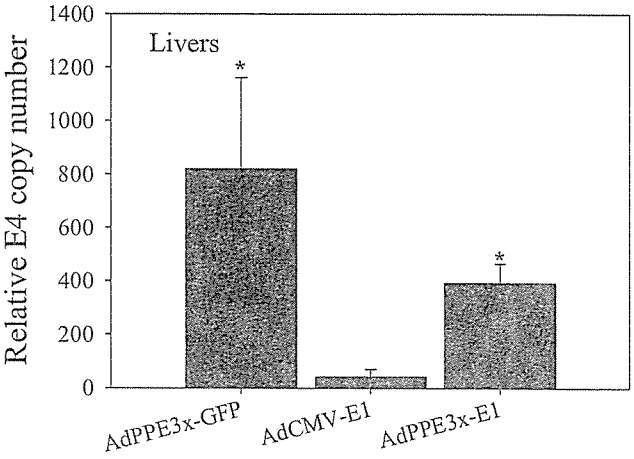


Fig. 113b