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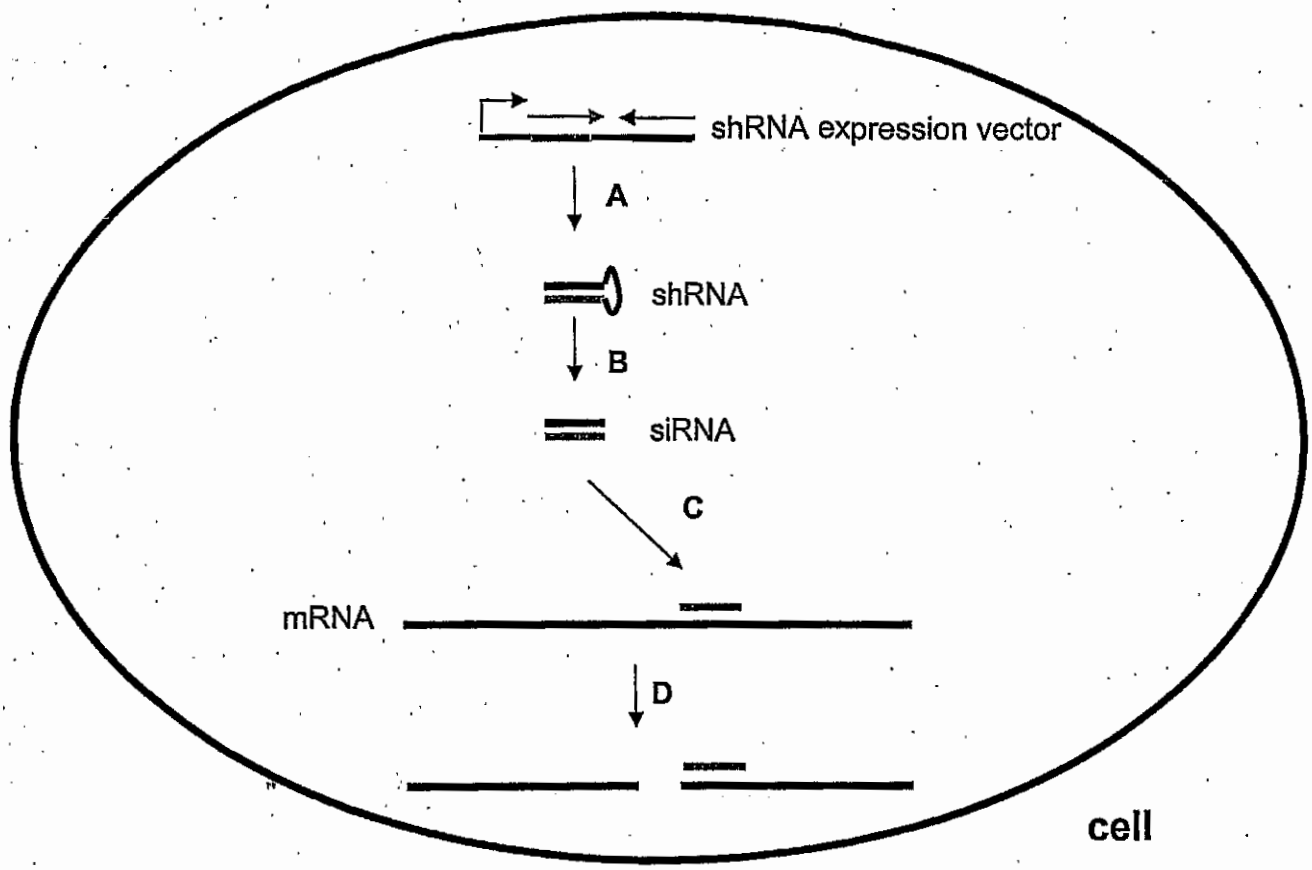

shRNA expression vector
A
shRNA
B
siRNA
C
mRNA
D
cell

Fig. 1

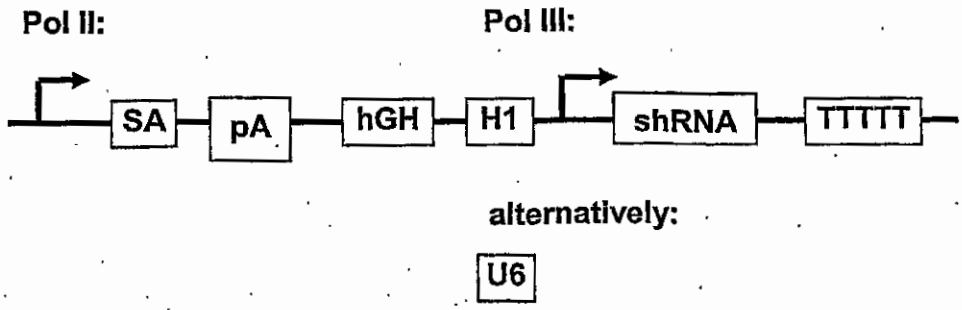

Pol II:
Pol III:
SA
pA
hGH
H1
shRNA
TTTTT
alternatively:
U6

Fig. 2

- 2 / 8-

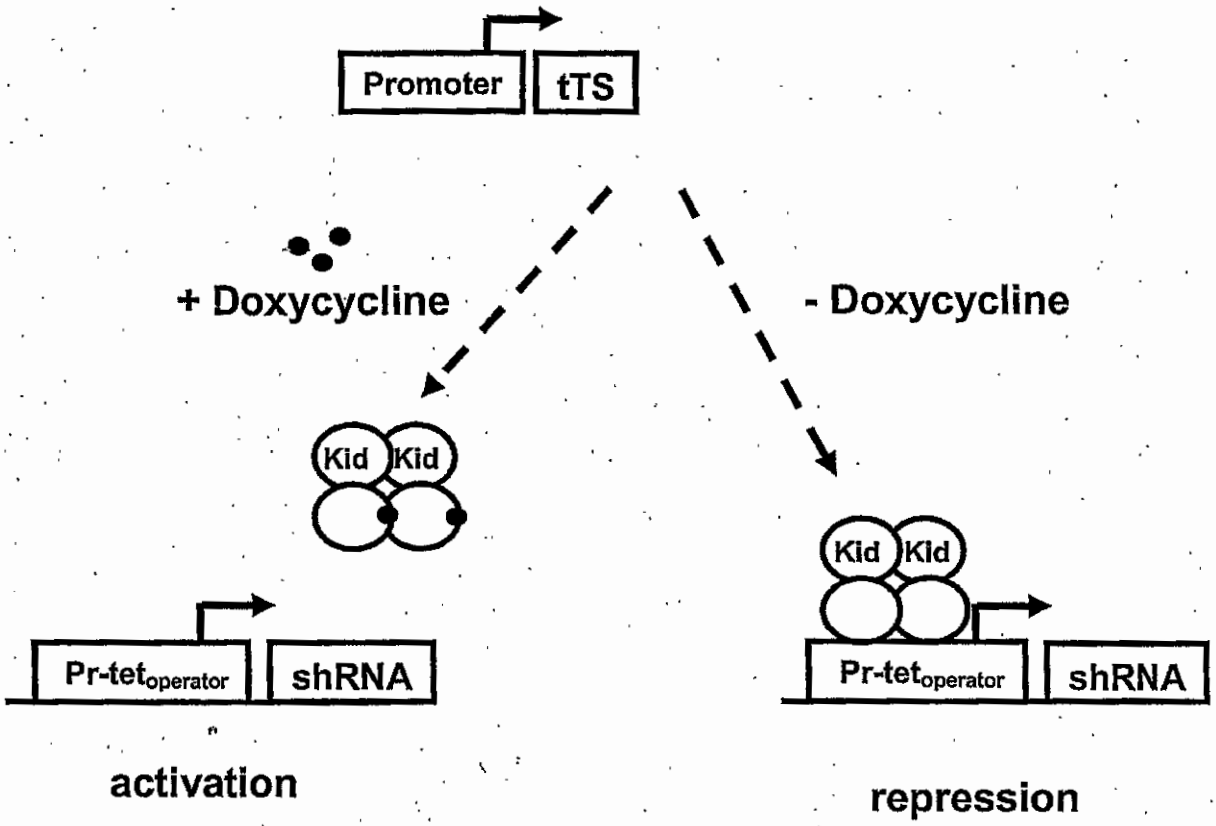

Promoter
tTS
+ Doxycycline
- Doxycycline
Kid
Kid
Pr-tet operator
shRNA
activation
repression

Fig. 3

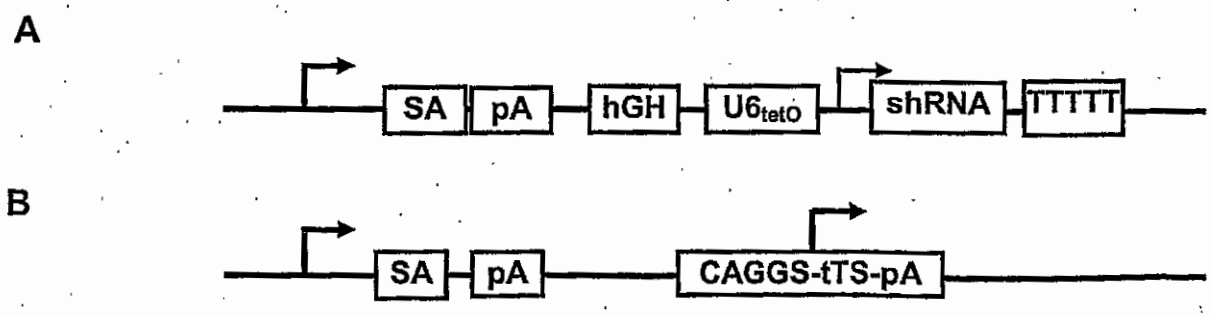

A
SA
pA
hGH
U6 tetO
shRNA
TTTTT
B
SA
pA
CAGGS-tTS-pA

Fig. 4

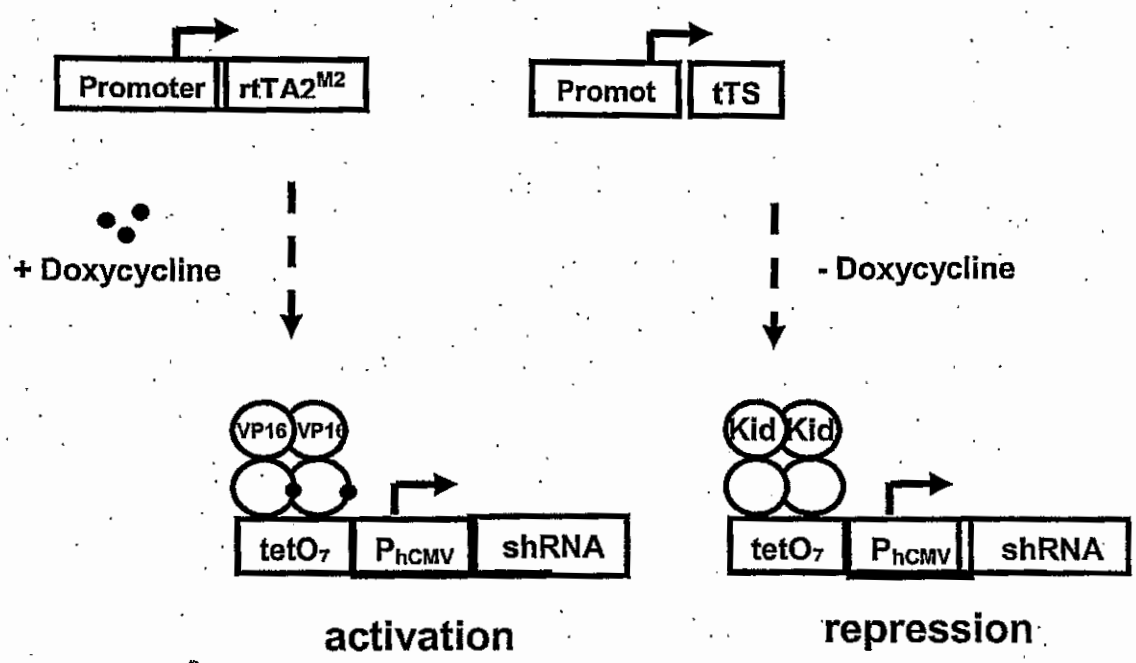

Promoter
rtTA2M2
Promot
tTS
+ Doxycycline
- Doxycycline
VP16
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Kid
Kid
tetO7
PhCMV
shRNA
tetO7
PhCMV
shRNA
activation
repression

Fig. 5

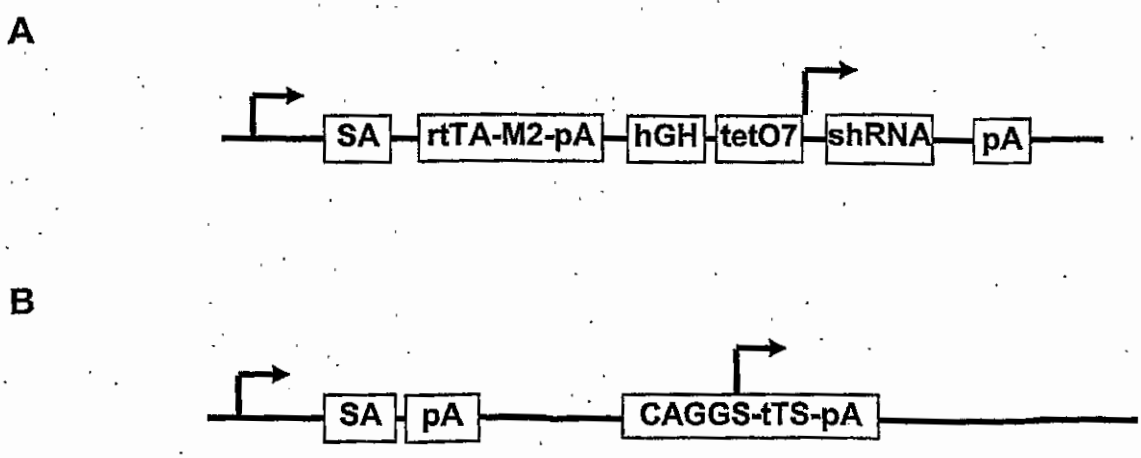

A
SA
rtTA-M2-pA
hGH
tetO7
shRNA
pA
B
SA
pA
CAGGS-tTS-pA

Fig. 6

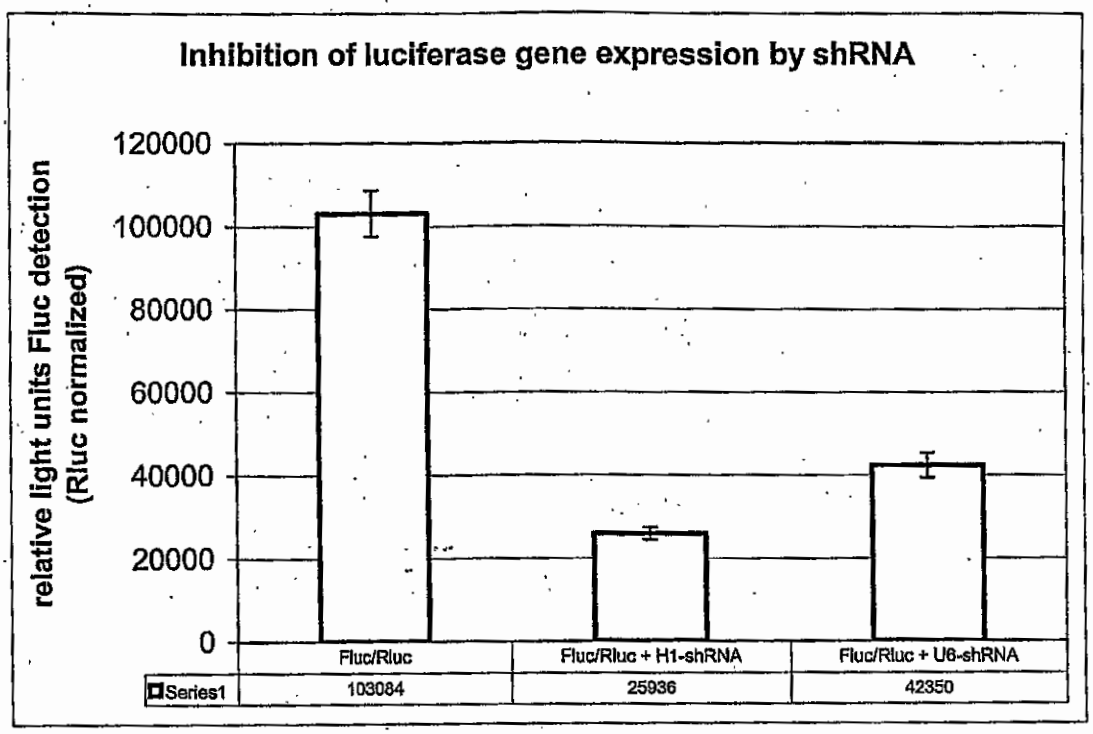


Fig.7

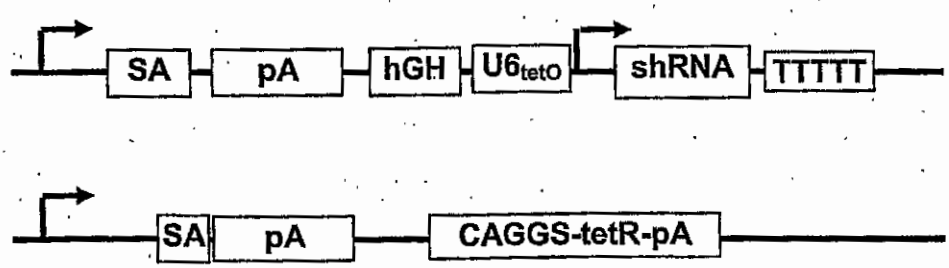


Fig.8

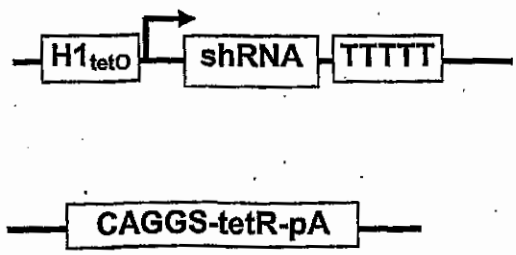


Fig.9

- 5 / 8-

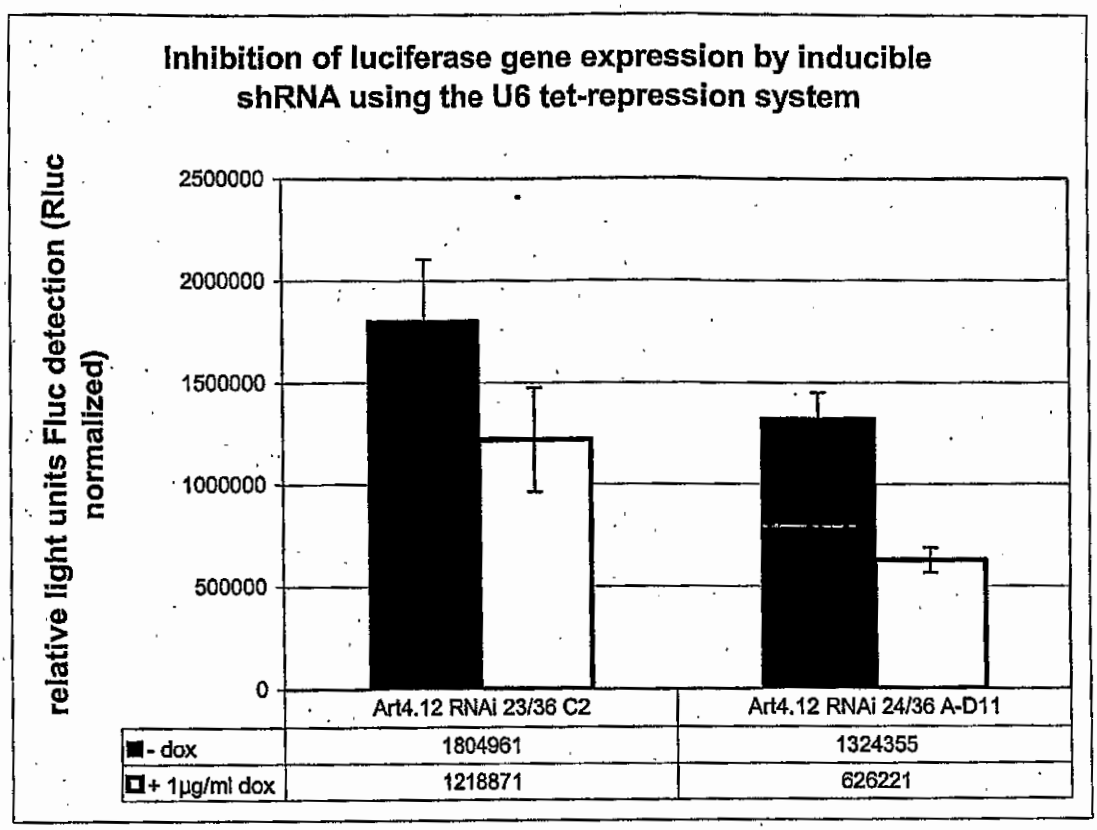

Inhibition of luciferase gene expression by inducible shRNA using the U6 tet-repression system
relative light units Fluc detection (Rluc normalized)
2500000
2000000
1500000
1000000
500000
0
Art4.12 RNAi 23/36 C2
Art4.12 RNAi 24/36 A-D11
- dox
1804961
1324355
+ 1µg/ml dox
1218871
626221

Fig.10

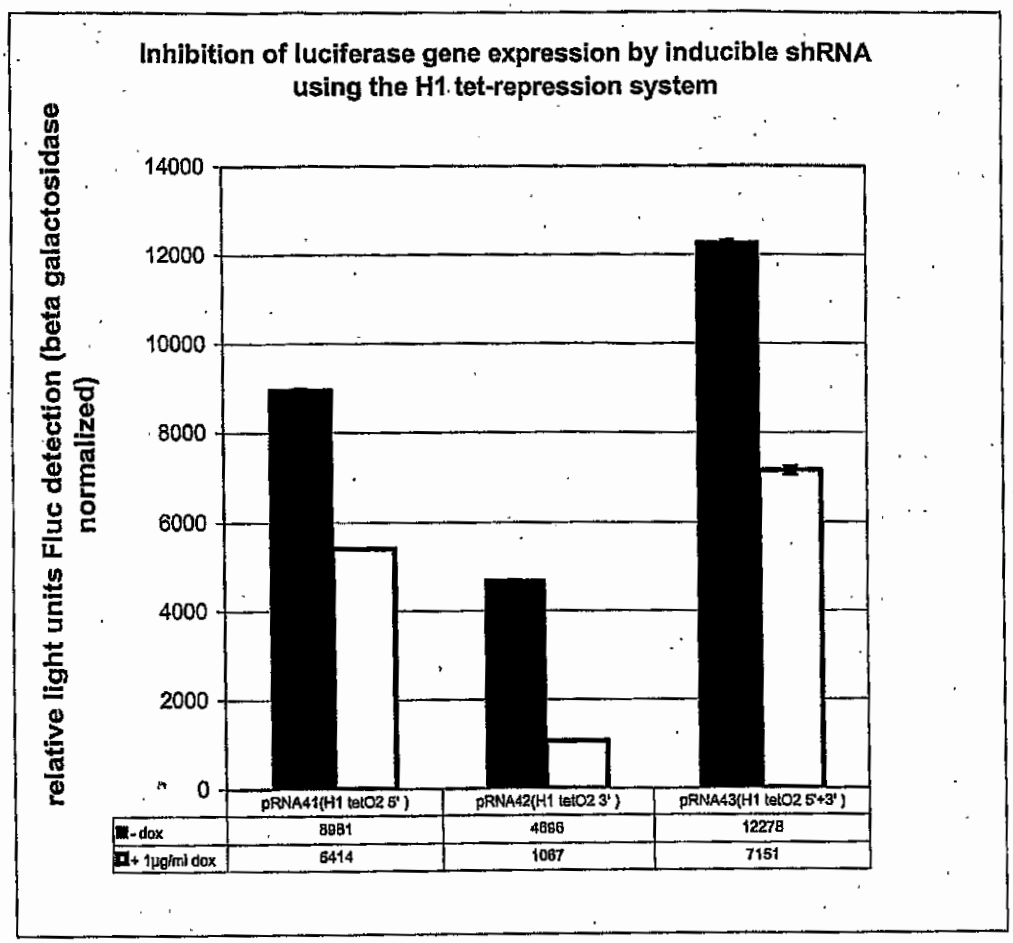

Inhibition of luciferase gene expression by inducible shRNA using the H1 tet-repression system
relative light units Fluc detection (beta galactosidase normalized)
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12000
10000
8000
6000
4000
2000
0
pRNA41(H1 tetO2 5')
pRNA42(H1 tetO2 3')
pRNA43(H1 tetO2 5'+3')
- dox
8981
4866
12278
+ 1µg/ml dox
5414
1067
7151

Fig.11

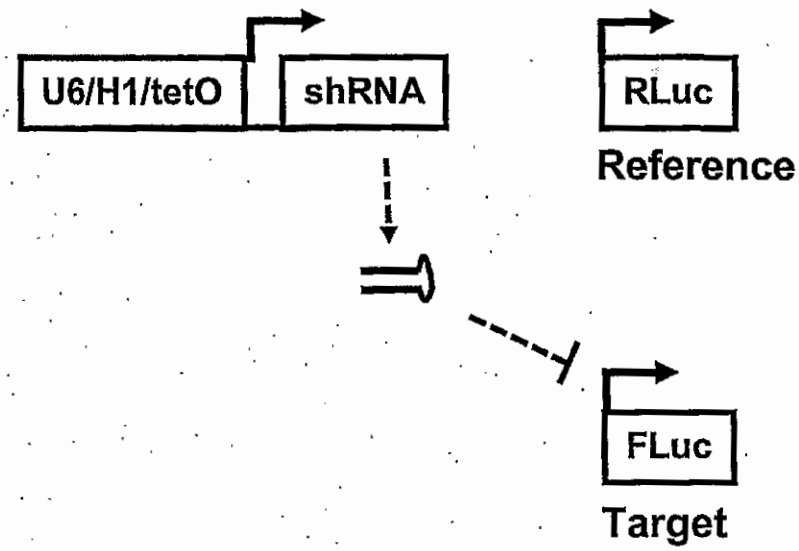
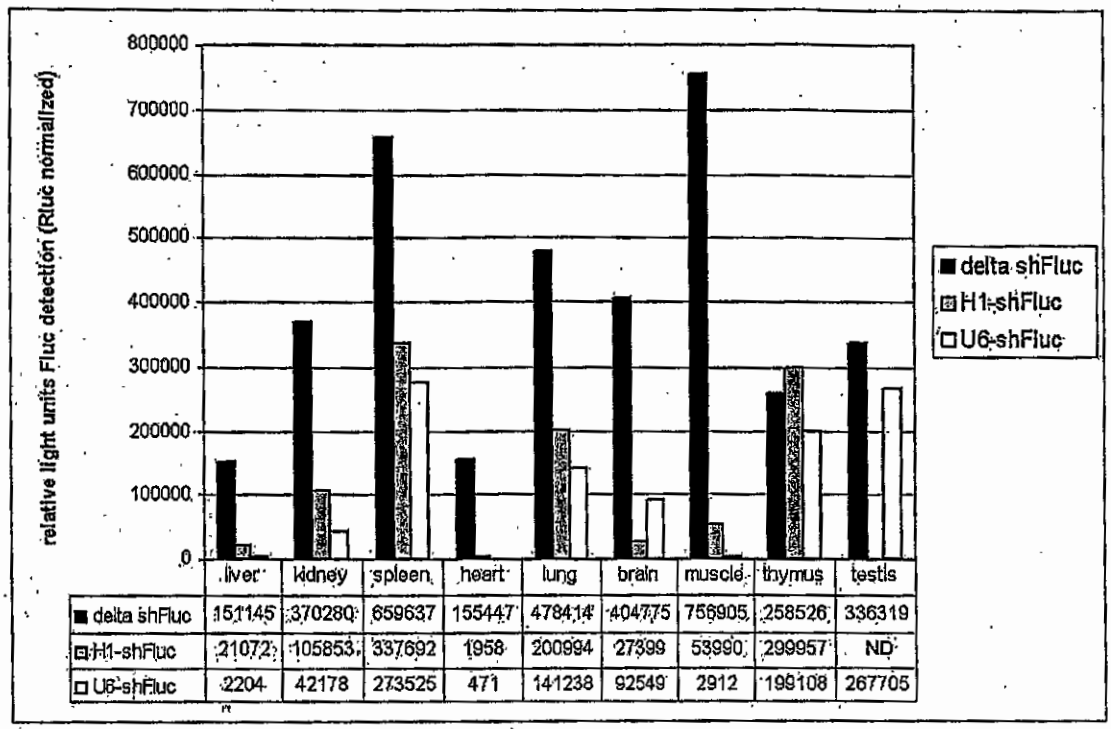
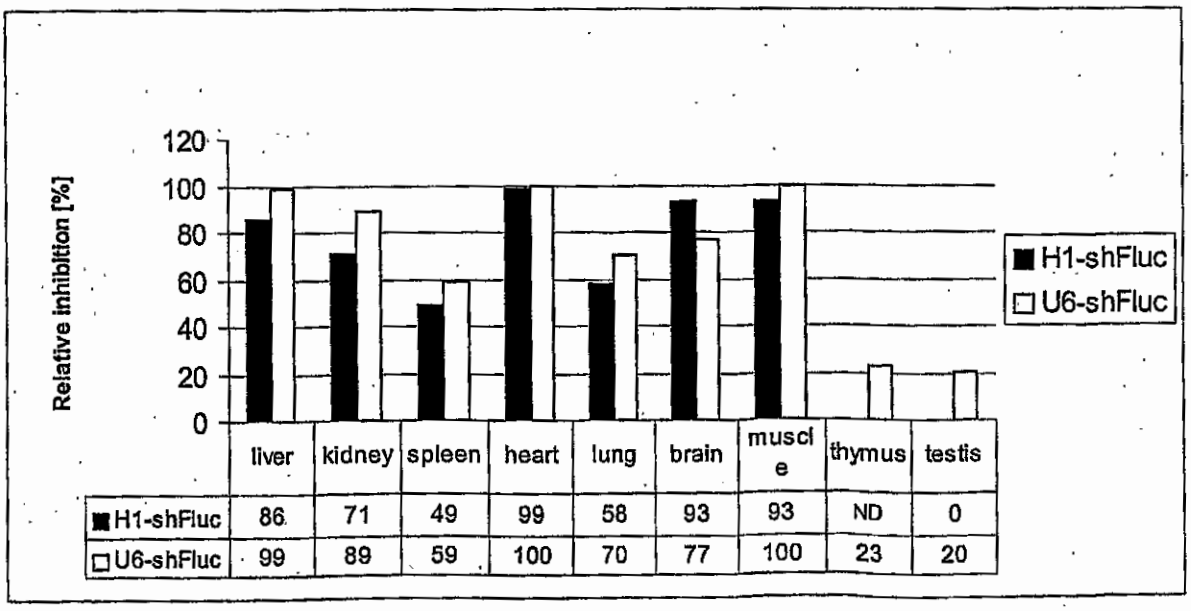


Fig.12



	liver	kidney	spleen	heart	lung	brain	muscle	thymus	testis
delta shFluc	151145	370280	659637	155447	478414	404775	756905	258526	336319
H1-shFluc	21072	105853	337692	1958	200994	27399	53990	299957	ND
U6-shFluc	2204	42178	273525	471	141238	92549	2912	199108	267705

Fig. 13A



	liver	kidney	spleen	heart	lung	brain	muscle	thymus	testis
H1-shFluc	86	71	49	99	58	93	93	ND	0
U6-shFluc	99	89	59	100	70	77	100	23	20

Fig.13B

SEQUENCE LISTING

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<220>

<223> Description of Artificial Sequence: sequence of homology region

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<220>
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<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Targeting vector for Rosa26 locus with a Fluc-hygro insert

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<211> 4665
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Sequence of
Rluc-H1-shRNA neo insert

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<210> 6
<211> 15199
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Targeting vector for Rosa26 locus with Rluc-H1-shRNA neo insert

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<220>
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Rluc-U6-shRNA neo insert

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<211> 15174
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Targeting vector for Rosa26 locus with a Rluc-U6-shRNA neo insert

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<211> 4641
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Rluc tet01 insert

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<210> 10
<211> 4640
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Rluc tet02 insert

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<210> 11
<211> 3387
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: H1 tet5' shRNA vector

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<210> 12
<211> 3387
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: H1 tet3' shRNA vector

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aatacgactc actatagggc gaattgg 3387

<210> 13
<211> 3387
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: H1 tet5' + 3'
shRNA vector

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<210> 14
<211> 7209
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
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<220>
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