Drawings

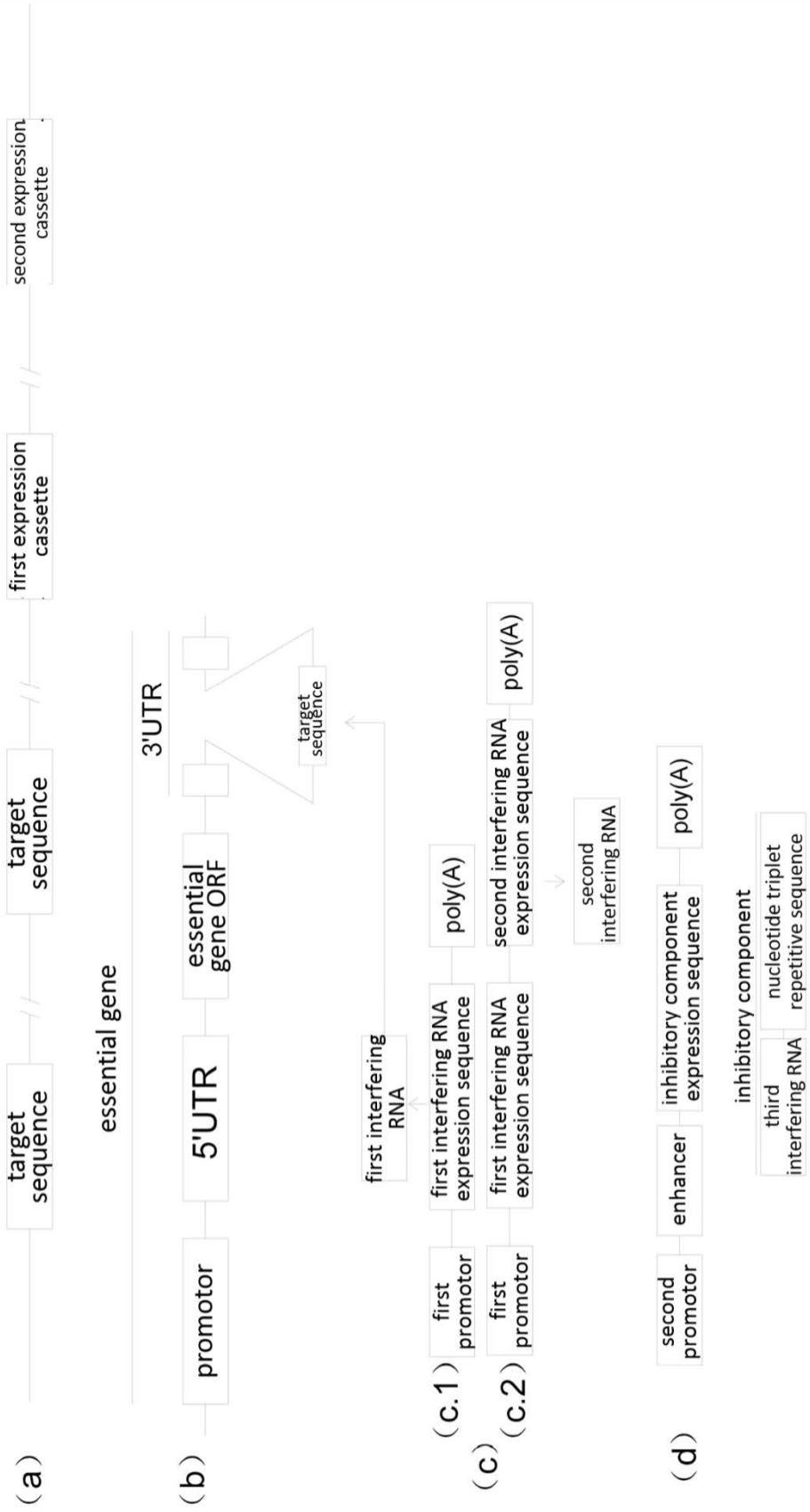


Fig. 1

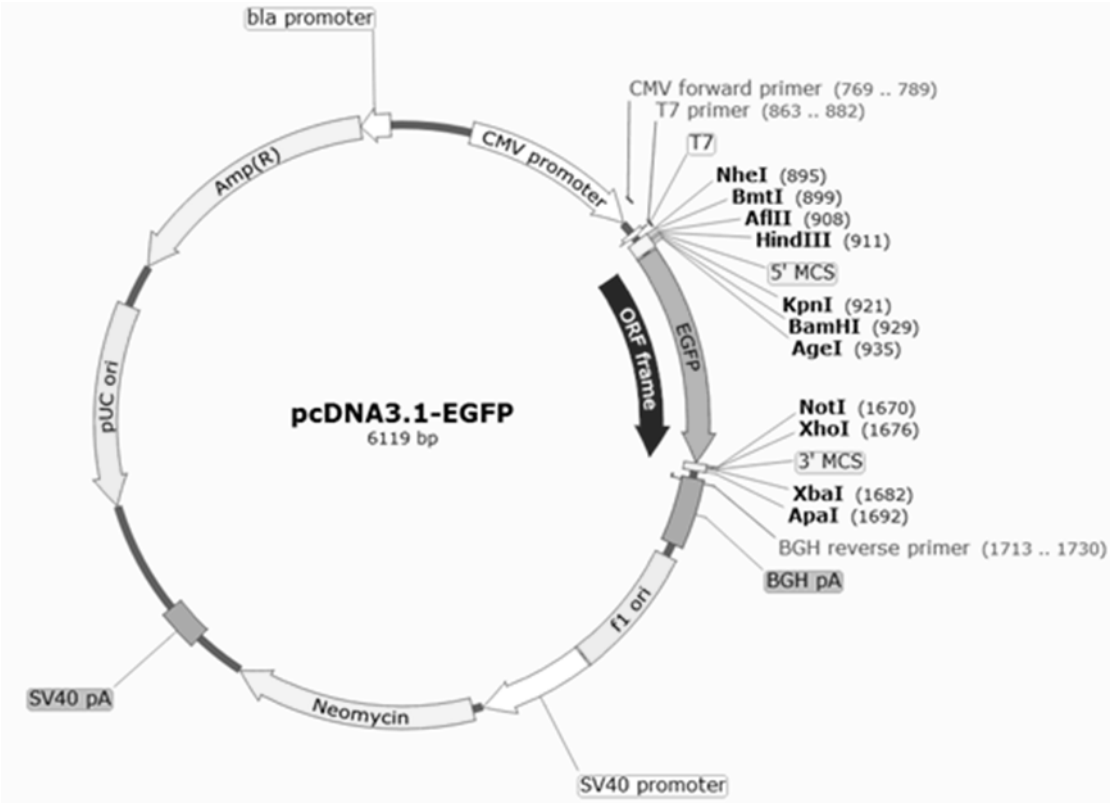

bla promoter
CMV forward primer (769 .. 789)
T7 primer (863 .. 882)
T7
NheI (895)
BmtI (899)
AflII (908)
HindIII (911)
5' MCS
KpnI (921)
BamHI (929)
AgeI (935)
ORF frame
EGFP
NotI (1670)
XhoI (1676)
3' MCS
XbaI (1682)
ApaI (1692)
BGH reverse primer (1713 .. 1730)
BGH pA
f1 ori
SV40 promoter
Neomycin
SV40 pA
pUC ori
Amp(R)
CMV promoter
pcDNA3.1-EGFP
6119 bp

Fig. 2

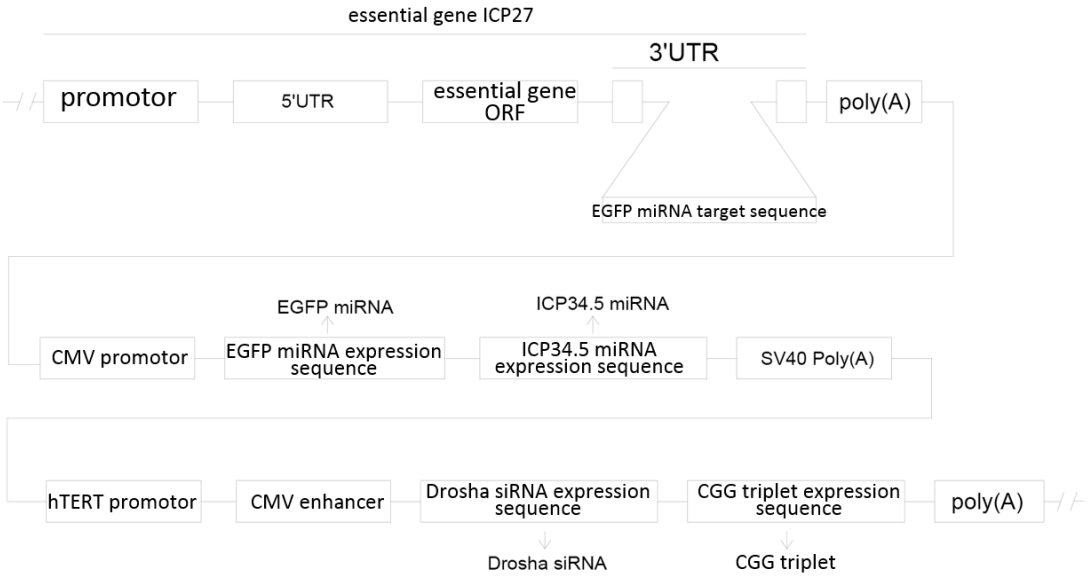

essential gene ICP27
3'UTR
promotor
5'UTR
essential gene ORF
poly(A)
EGFP miRNA target sequence
EGFP miRNA
ICP34.5 miRNA
CMV promotor
EGFP miRNA expression sequence
ICP34.5 miRNA expression sequence
SV40 Poly(A)
hTERT promotor
CMV enhancer
Drosha siRNA expression sequence
CGG triplet expression sequence
poly(A)
Drosha siRNA
CGG triplet

Fig. 3

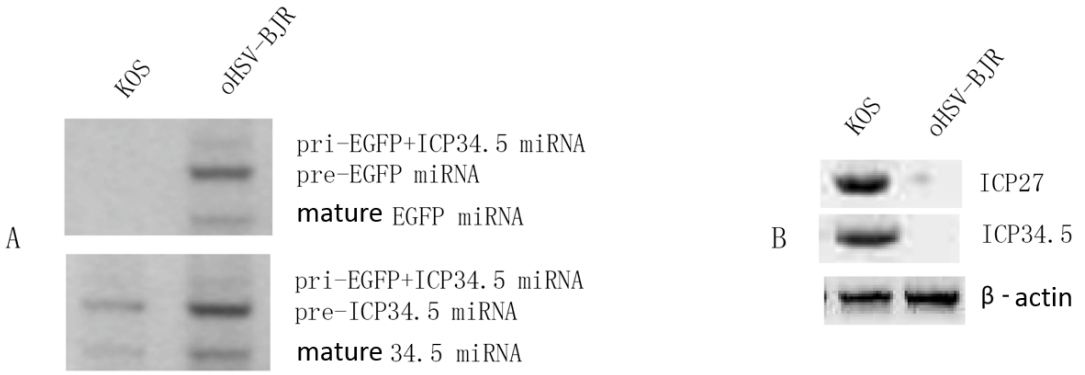

KOS
oHSV-BJR
A
pri-EGFP+ICP34.5 miRNA
pre-EGFP miRNA
mature EGFP miRNA
pri-EGFP+ICP34.5 miRNA
pre-ICP34.5 miRNA
mature 34.5 miRNA
KOS
oHSV-BJR
B
ICP27
ICP34.5
β - actin

Fig. 4

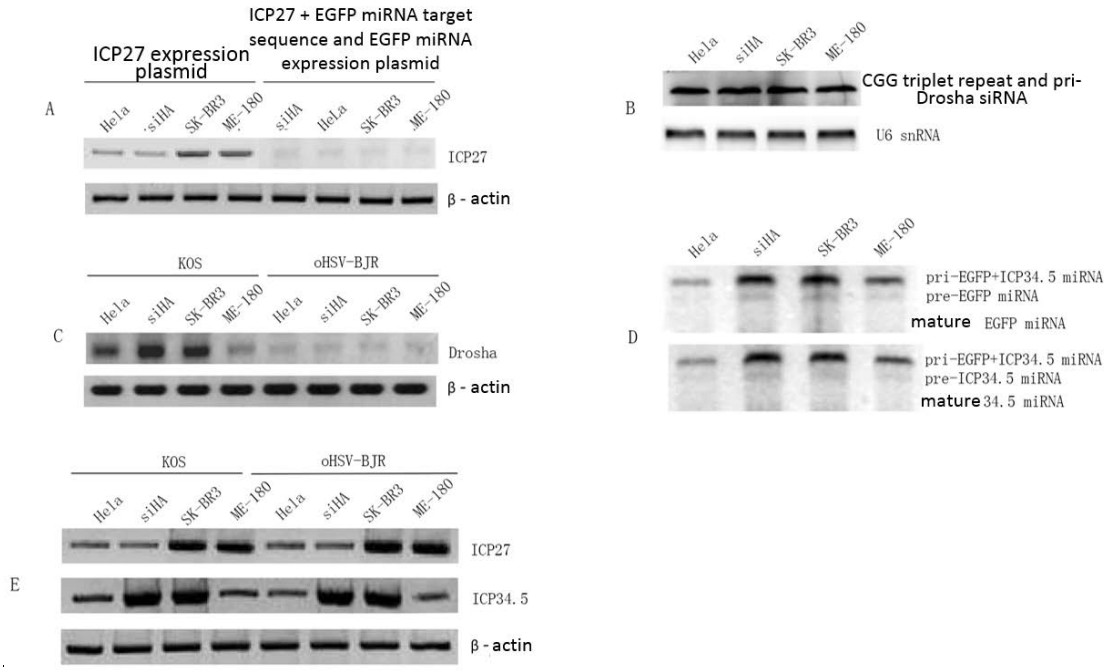

ICP27 + EGFP miRNA target sequence and EGFP miRNA expression plasmid
ICP27 expression plasmid
A
HeLa
siHA
SK-BR3
ME-180
ICP27
β - actin
KOS
oHSV-BJR
C
Drosha
β - actin
E
ICP27
ICP34.5
β - actin
B
CGG triplet repeat and pri-Drosha siRNA
U6 snRNA
D
pri-EGFP+ICP34.5 miRNA
pre-EGFP miRNA
mature EGFP miRNA
pri-EGFP+ICP34.5 miRNA
pre-ICP34.5 miRNA
mature 34.5 miRNA

Fig. 5

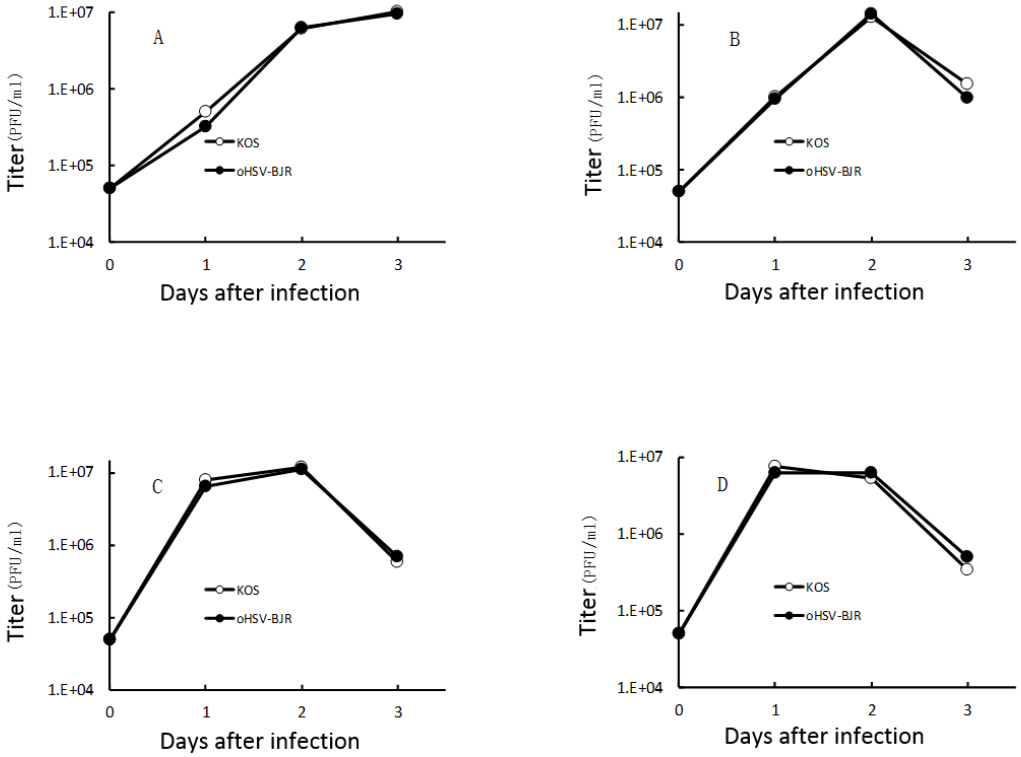

A
B
C
D
Titer (PFU/ml)
1.E+07
1.E+06
1.E+05
1.E+04
KOS
oHSV-BJR
0
1
2
3
Days after infection

Fig. 6

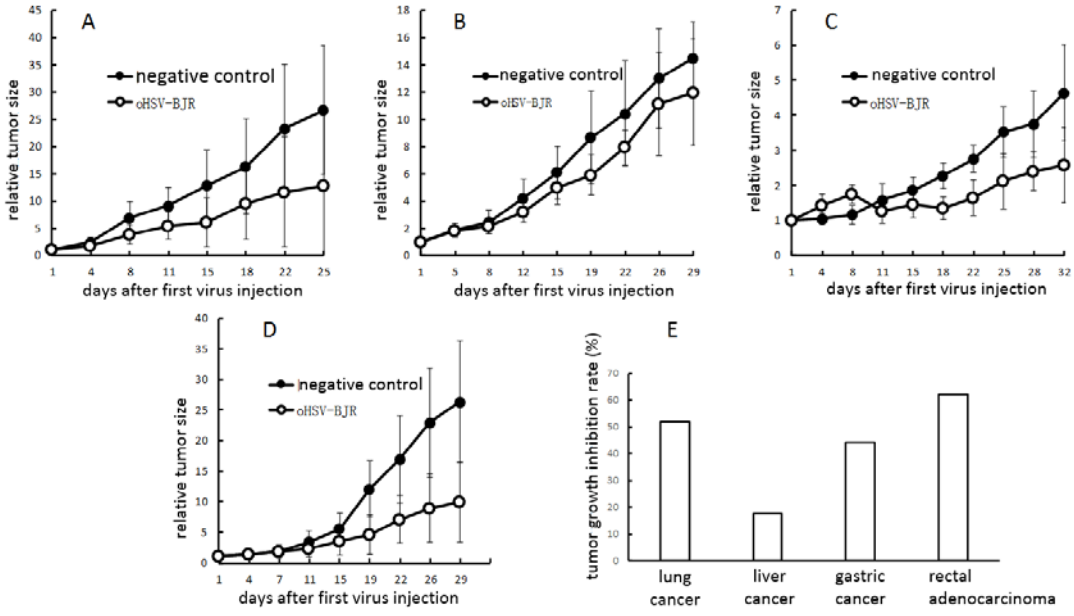

A
B
C
D
E
negative control
oHSV-BJR
relative tumor size
days after first virus injection
tumor growth inhibition rate (%)
lung cancer
liver cancer
gastric cancer
rectal adenocarcinoma

Fig. 7