SEQUENCE LISTING

<110> JAMES FULLER

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<170> PatentIn version 3.1

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cattggtccg cttacctggg ggcgggctct cctcgggggcg cttataagcg cggtctccat 480
cgtagcactt 490

<210> 53
<211> 495
<212> DNA
<213> Rous sarcoma virus

<400> 2
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acaaggcaag gcttgaccga caattgcatg aagaatctgc ttagggttag gcgttttgcg 120
ctgcttcgcg atgtacgggc cagatatacg cgtatctgag gggactaggg tgtgtttagg 180
cgaaaagcgg ggcttcggtt gtacgcggtt aggagttccc tcaggatata gtagtttcgc 240
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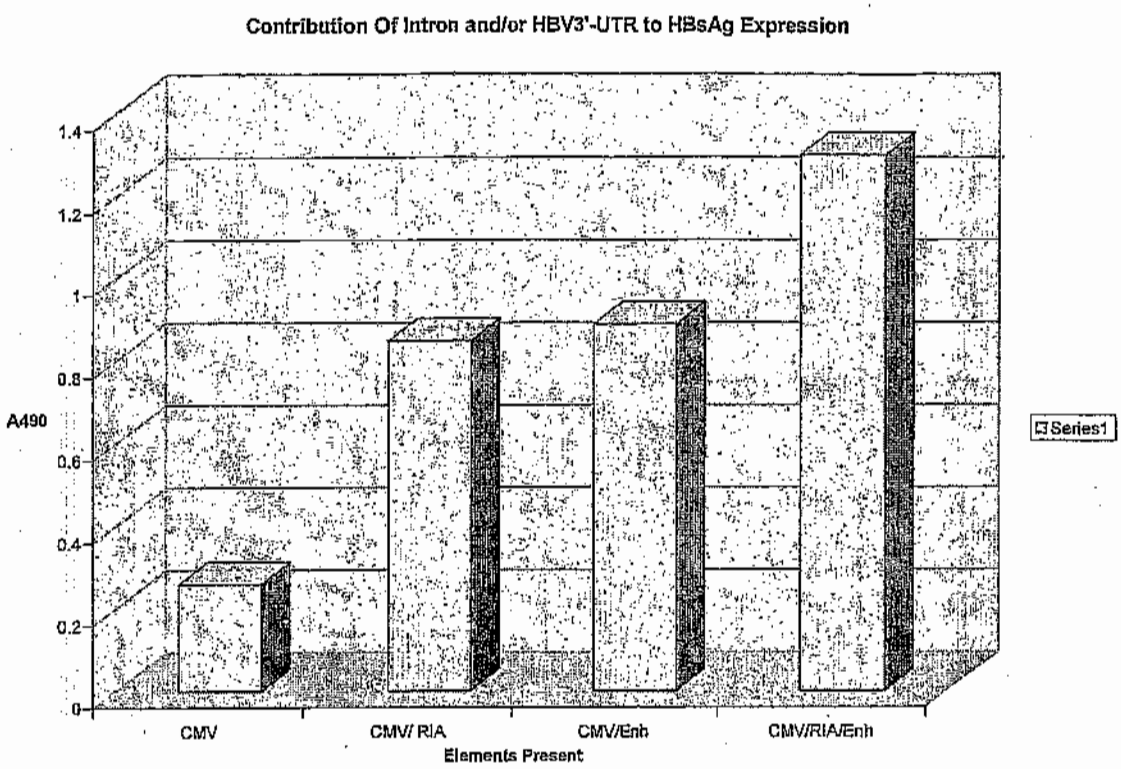

Contribution Of Intron and/or HBV3'-UTR to HBsAg Expression
A490
1.4
1.2
1
0.8
0.6
0.4
0.2
0
CMV
CMV/ RIA
CMV/Enh
CMV/RIA/Enh
Elements Present
Series1

Figure 1

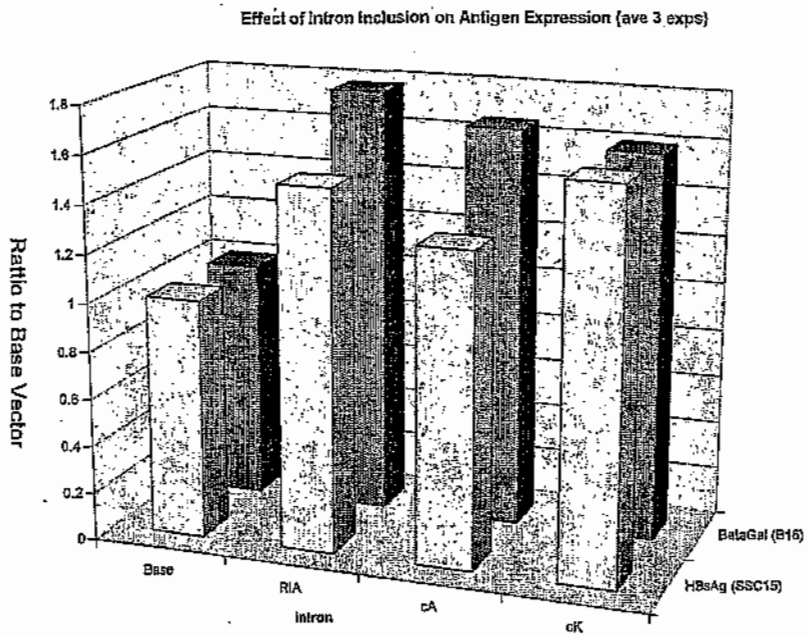

Effect of Intron Inclusion on Antigen Expression (ave 3 exps)
Ratio to Base Vector
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Base
RIA
cA
cK
Intron
BetaGal (B16)
HBsAg (SSC15)

Figure 2

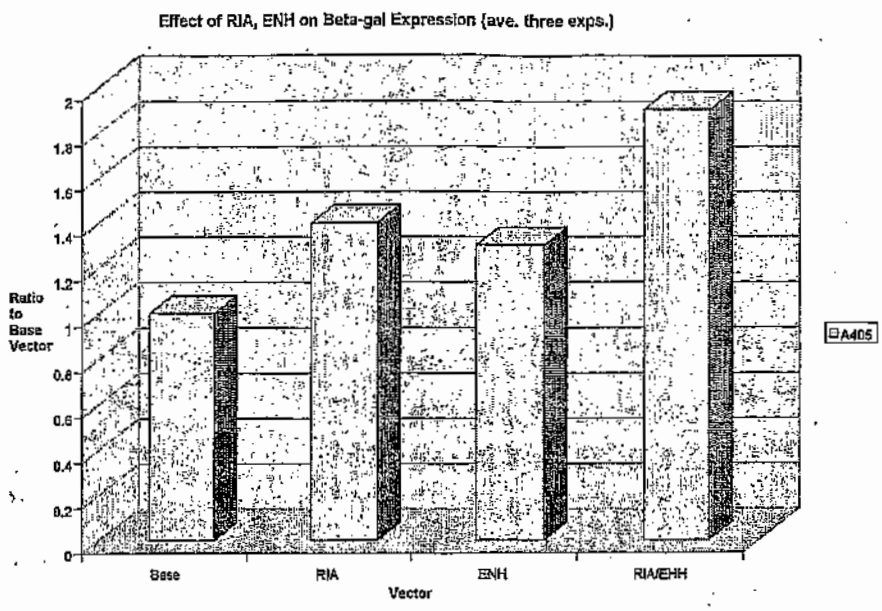

Effect of RIA, ENH on Beta-gal Expression (ave. three exps.)
Ratio to Base Vector
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Base
RIA
ENH
RIA/EHH
Vector
A405

Figure 3

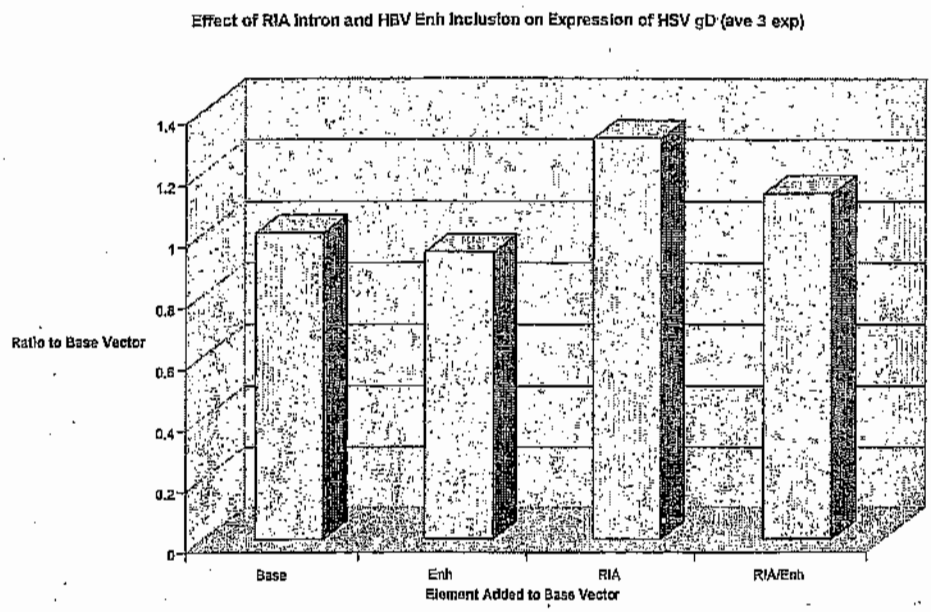

Effect of RIA Intron and HBV Enh Inclusion on Expression of HSV gD (ave 3 exp)
Ratio to Base Vector
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Base
Enh
RIA
RIA/Enh
Element Added to Base Vector

Figure 4

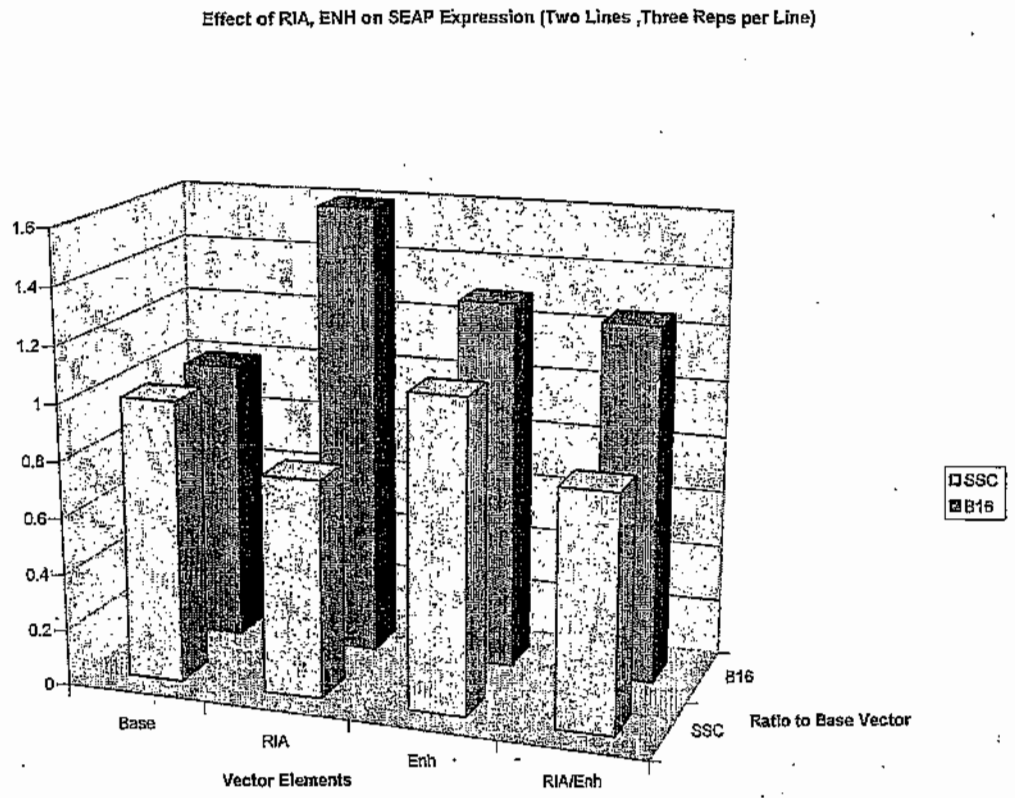

Effect of RIA, ENH on SEAP Expression (Two Lines ,Three Reps per Line)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Base
RIA
Enh
RIA/Enh
Vector Elements
B16
SSC
Ratio to Base Vector
SSC
B16

Figure 5

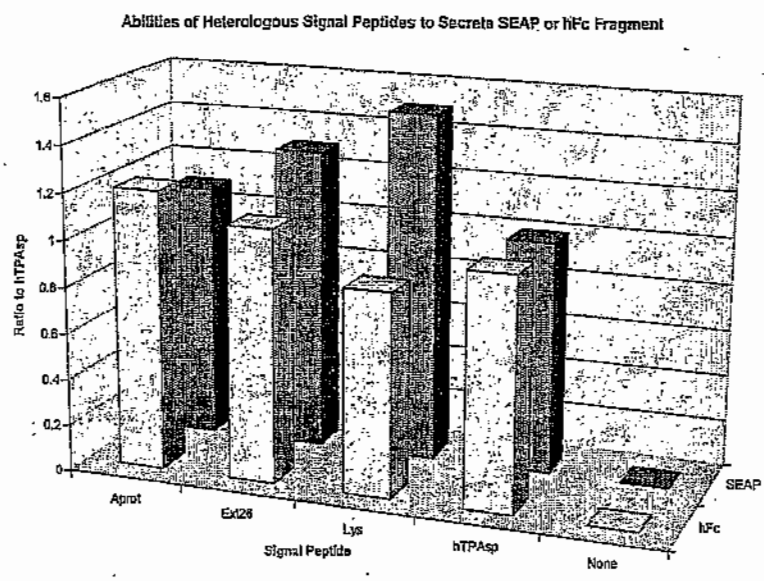

Abilities of Heterologous Signal Peptides to Secrete SEAP or hFc Fragment
Ratio to hTPAsp
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Aprot
Ex26
Lys
hTPAsp
None
Signal Peptide
SEAP
hFc

Figure 6

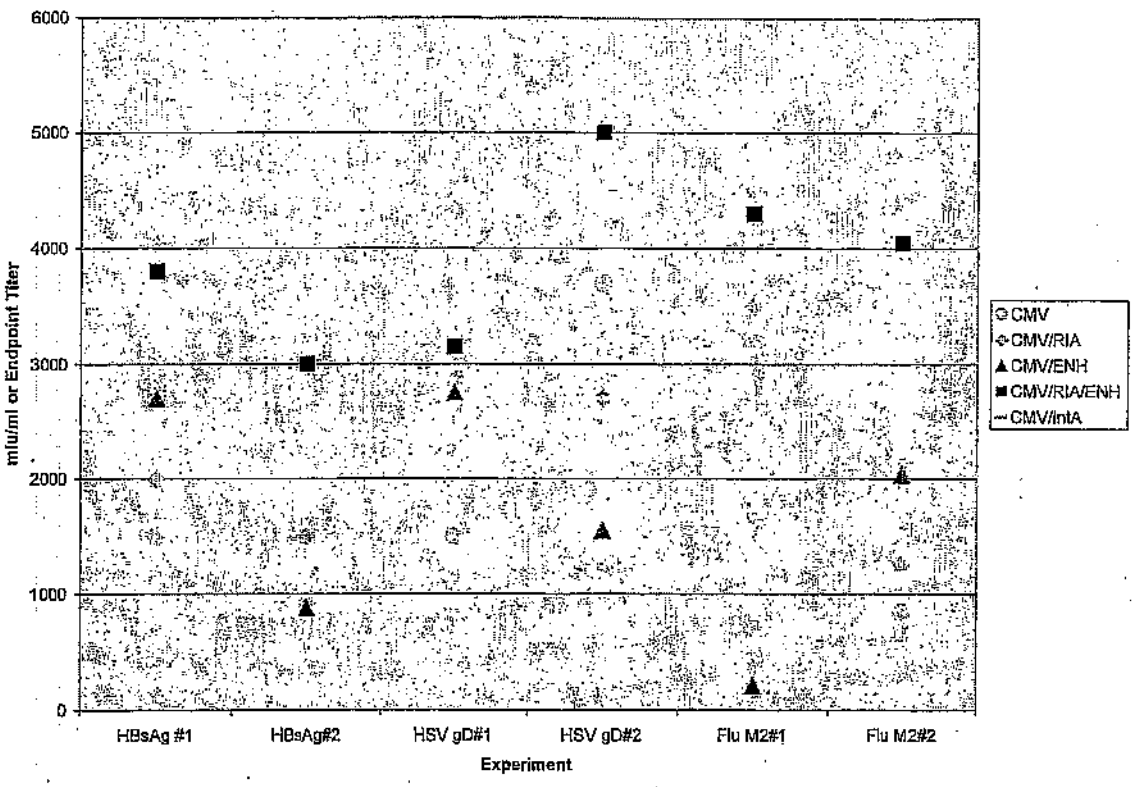

6000
5000
4000
3000
2000
1000
0
mIu/ml or Endpoint Titer
HBsAg #1
HBsAg#2
HSV gD#1
HSV gD#2
Flu M2#1
Flu M2#2
Experiment
CMV
CMV/RIA
CMV/ENH
CMV/RIA/ENH
CMV/IntA

Figure 7

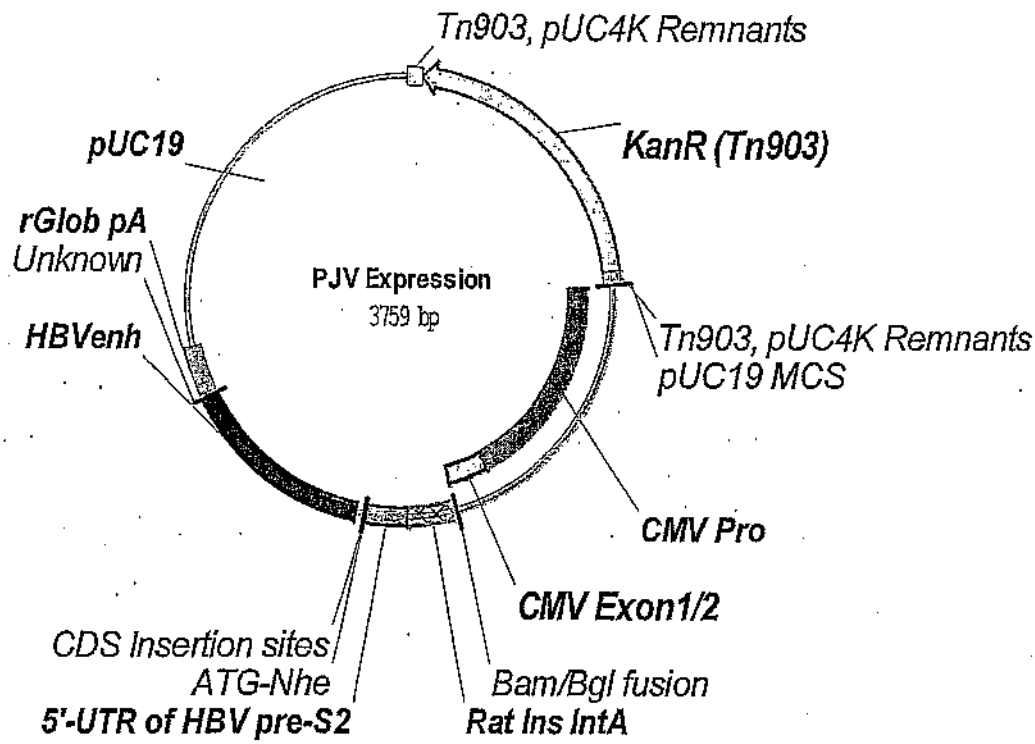

Tn903, pUC4K Remnants
pUC19
KanR (Tn903)
rGlob pA
Unknown
PJV Expression
3759 bp
HBVenh
Tn903, pUC4K Remnants
pUC19 MCS
CMV Pro
CMV Exon1/2
CDS Insertion sites
ATG-Nhe
5'-UTR of HBV pre-S2
Bam/Bgl fusion
Rat Ins IntA

Figure 8

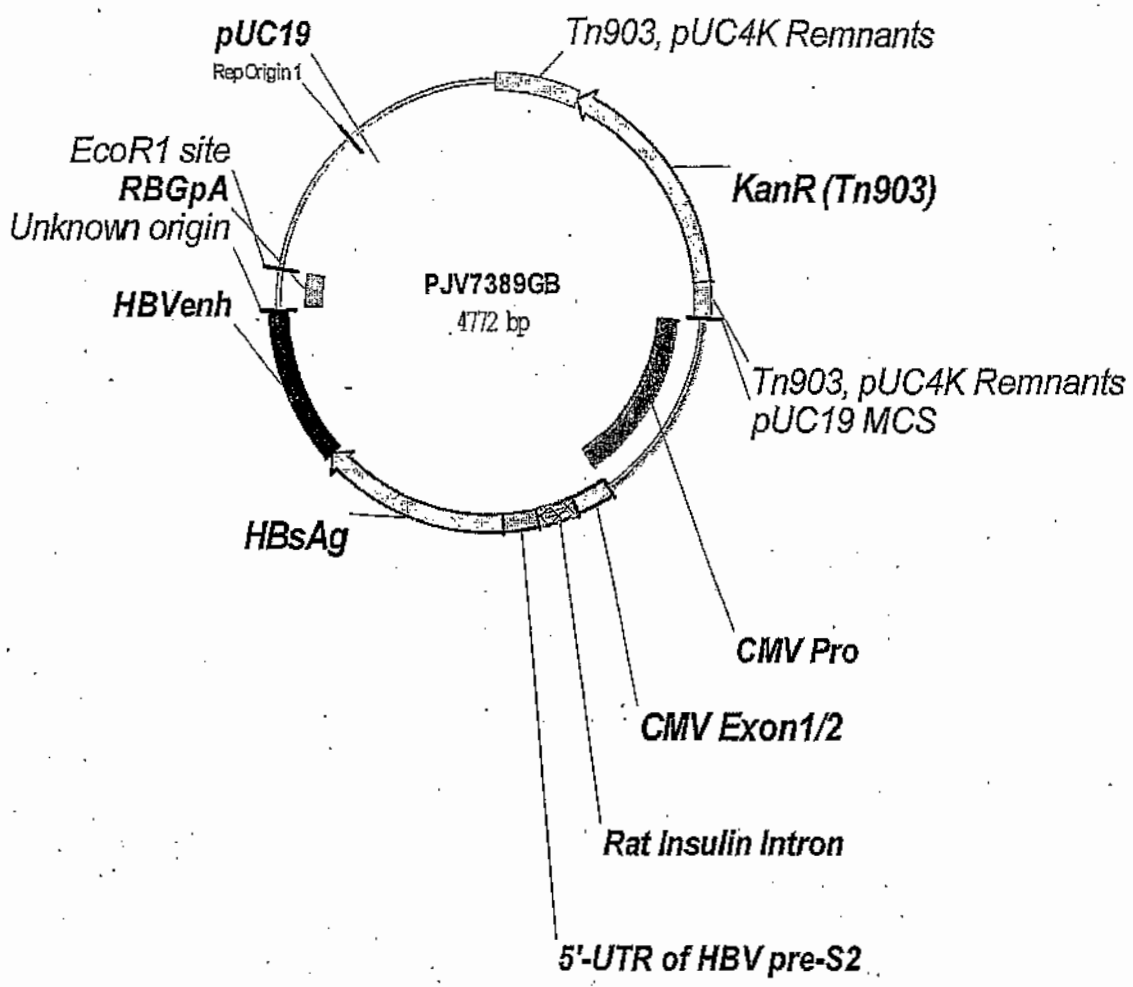

pUC19
Rep Origin 1
Tn903, pUC4K Remnants
EcoR1 site
RBGpA
Unknown origin
KanR (Tn903)
HBVenh
PJV7389GB
4772 bp
Tn903, pUC4K Remnants
pUC19 MCS
HBsAg
CMV Pro
CMV Exon1/2
Rat Insulin Intron
5'-UTR of HBV pre-S2

Figure 9

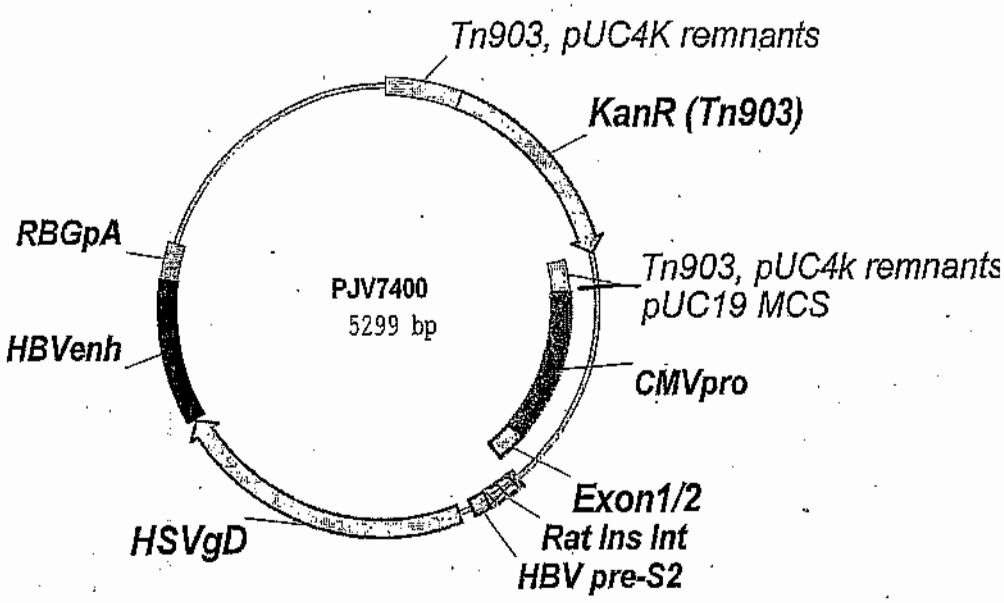

Tn903, pUC4K remnants
KanR (Tn903)
RBGpA
Tn903, pUC4k remnants
pUC19 MCS
PJV7400
5299 bp
HBVenh
CMVpro
Exon1/2
Rat Ins Int
HBV pre-S2
HSVgD

Figure 10

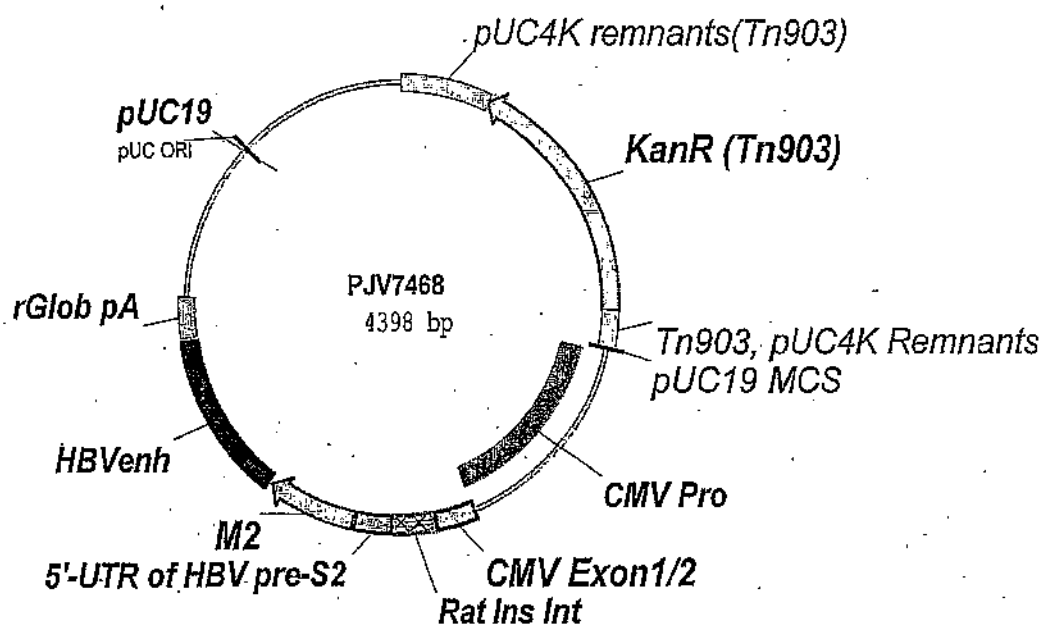

pUC4K remnants(Tn903)
pUC19
pUC ORI
KanR (Tn903)
PJV7468
4398 bp
rGlob pA
Tn903, pUC4K Remnants
pUC19 MCS
HBVenh
CMV Pro
M2
5'-UTR of HBV pre-S2
CMV Exon1/2
Rat Ins Int

Figure 11

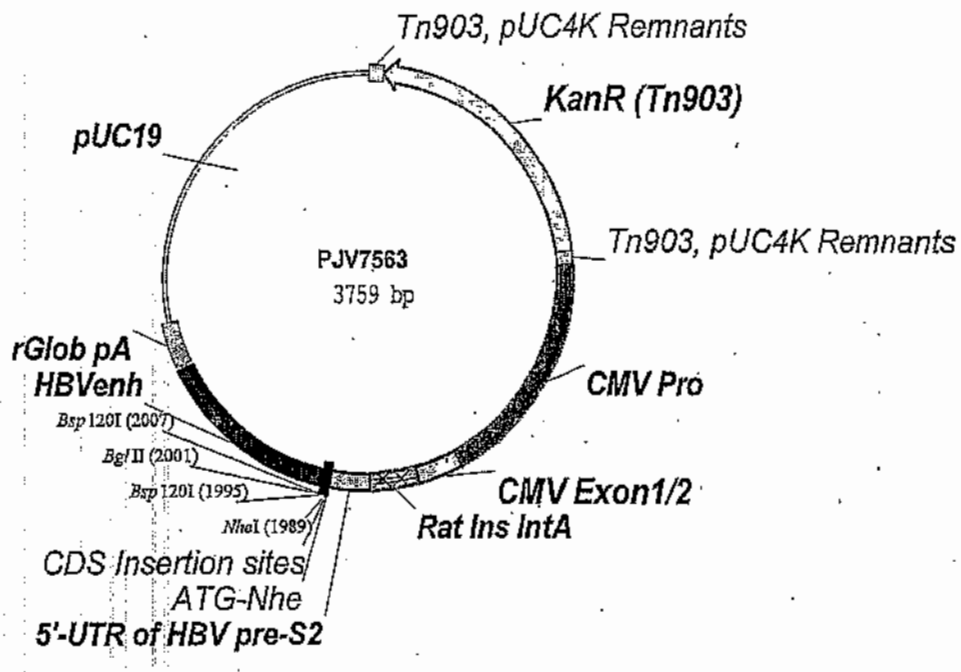

Tn903, pUC4K Remnants
KanR (Tn903)
pUC19
Tn903, pUC4K Remnants
PJV7563
3759 bp
rGlob pA
HBVenh
CMV Pro
Bsp 120I (2007)
Bgl II (2001)
Bsp 120I (1995)
CMV Exon1/2
Rat Ins IntA
NheI (1989)
CDS Insertion sites
ATG-Nhe
5'-UTR of HBV pre-S2

Figure 12

Figure 13

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