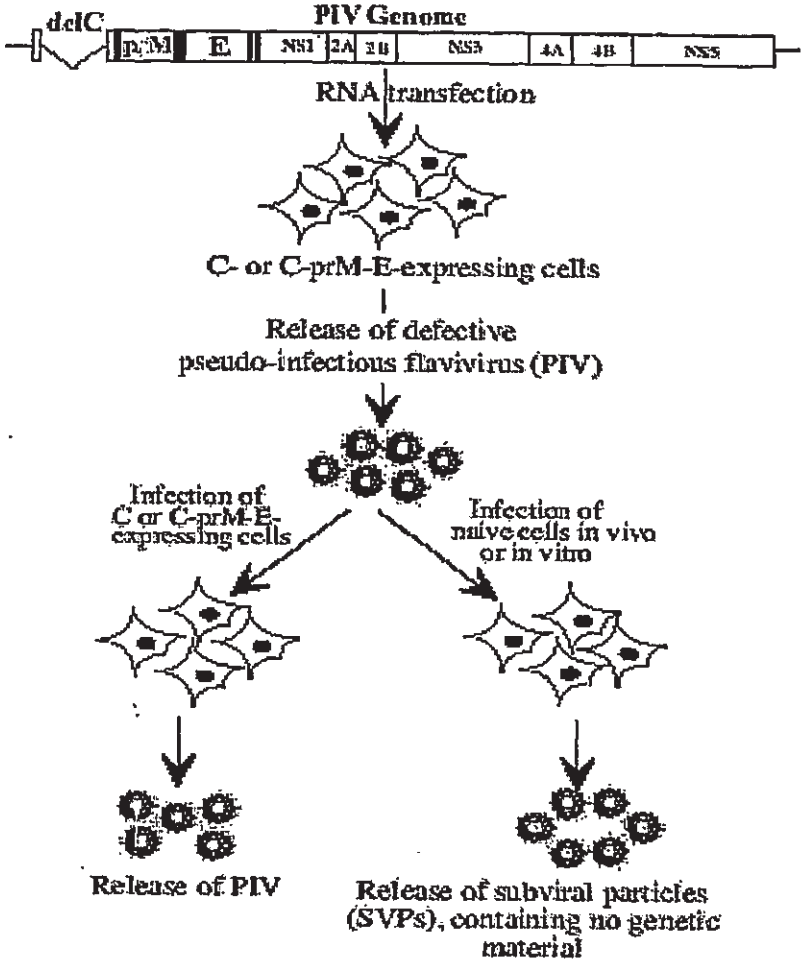

dclC
PIV Genome
prM
E
NS1
2A
2B
NS3
4A
4B
NS5
RNA transfection
C- or C-prM-E-expressing cells
Release of defective
pseudo-infectious flavivirus (PIV)
Infection of
C or C-prM-E-
expressing cells
Infection of
naive cells in vivo
or in vitro
Release of PIV
Release of subviral particles
(SVPs), containing no genetic
material

Fig.1

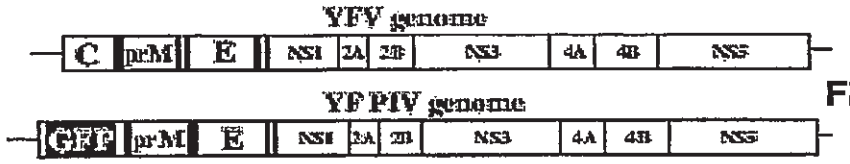


Fig.2A

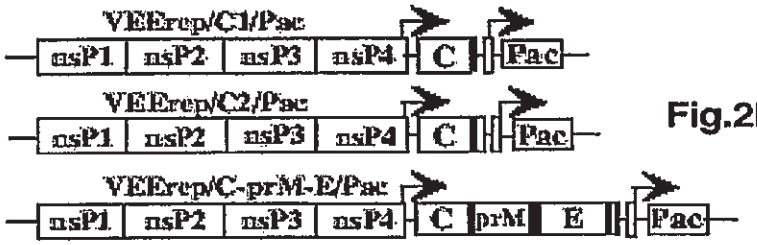


Fig.2B

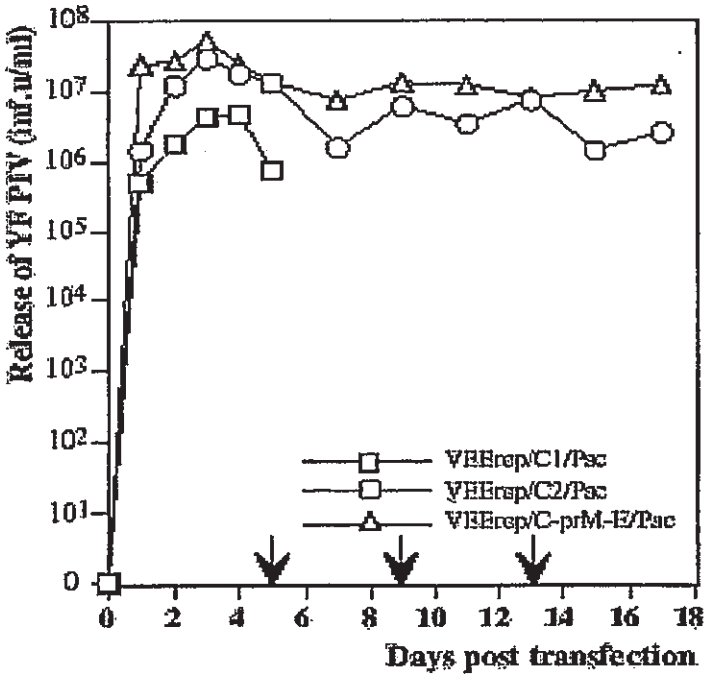


Fig.2C

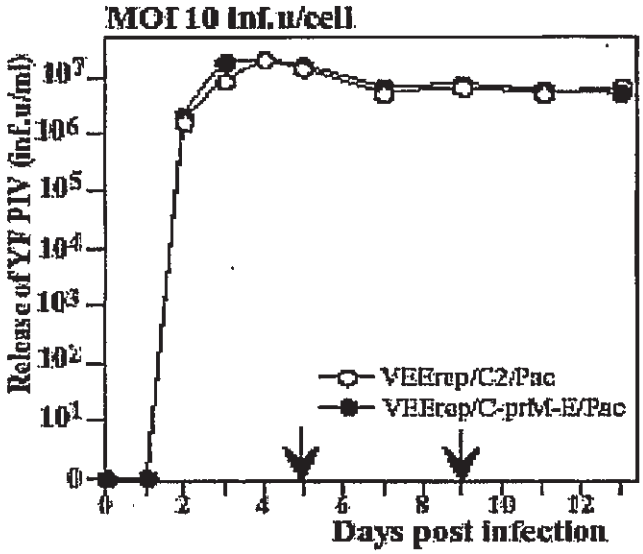

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Release of YF PIV (inf.u/ml)
10^7
10^6
10^5
10^4
10^3
10^2
10^1
0
0 2 4 6 8 10 12
Days post infection
VEErep/C2/Pac
VEErep/C-prM-E/Pac

Fig. 3A

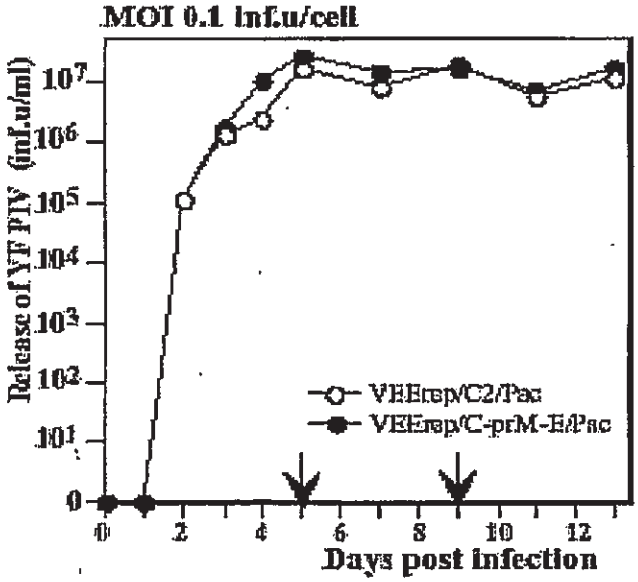

MOI 0.1 Inf.u/cell
Release of YF PIV (inf.u/ml)
10^7
10^6
10^5
10^4
10^3
10^2
10^1
0
0 2 4 6 8 10 12
Days post infection
VEErep/C2/Pac
VEErep/C-prM-E/Pac

Fig. 3B

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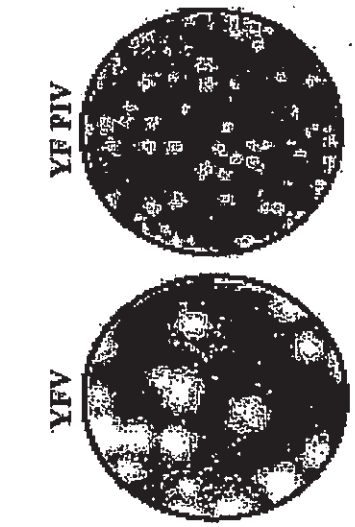


Fig. 4C

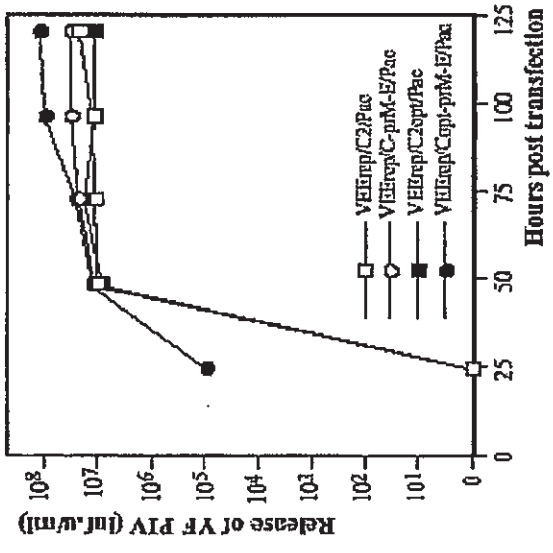


Fig. 4B

Fig. 5A

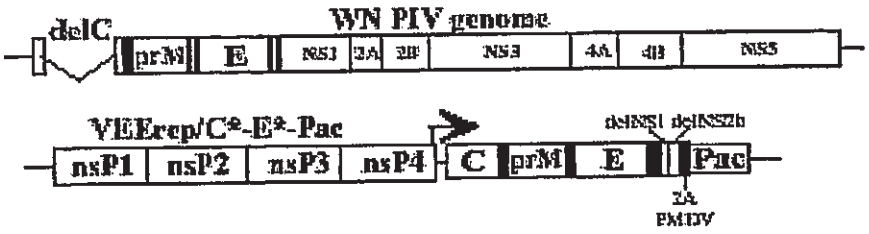




Fig. 5B

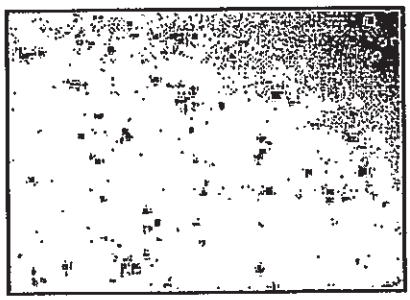


Fig. 5C

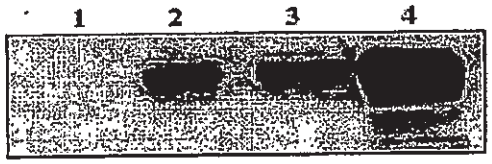


Fig. 6A

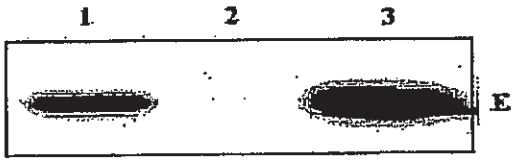


Fig. 6B

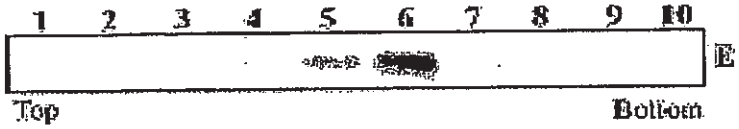


Fig. 6C

Fig. 7A

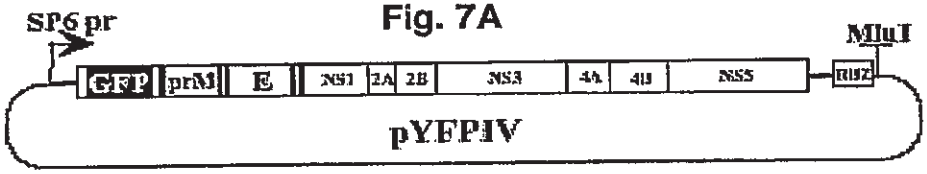
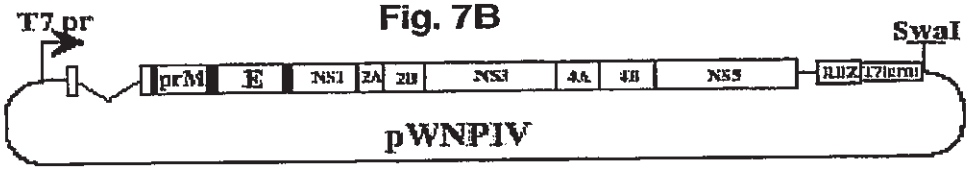


Fig. 7B



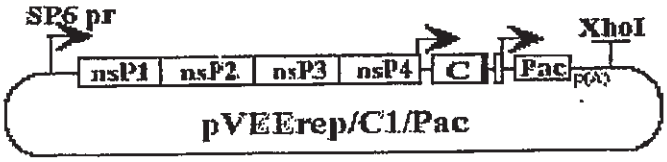


Fig. 7C

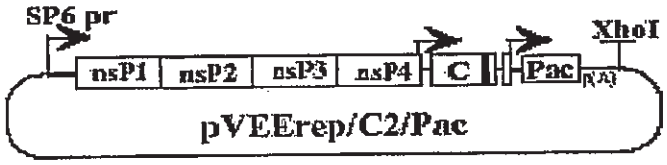


Fig. 7D



Fig. 7E

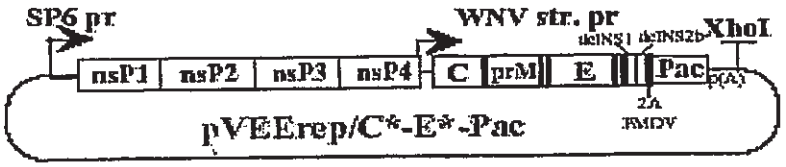


Fig. 7F

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Fig. 8A

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Fig.8B

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Fig. 8C

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Fig.8D

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Fig. 8E

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Fig. 8F

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Fig. 8G

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(SEQ ID NO: 7)

Fig. 8H

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Fig. 8I

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Fig. 8J

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Fig.8K

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Fig. 8L

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Fig. 8M

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Fig. 8N

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Fig. 8O

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Fig. 8P

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Fig. 8Q

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Fig. 8R

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Fig. 8S

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Fig. 8T

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gacagtaagagaattatgcagtgctgccataaccatgagtgataacactgcggccaacttacttctgacaacgatcggag
gaccgaaggagctaaccgcttttttgcacaacatgggggatcatgtaactcgccttgatcgttgggaaccggagctgaatg
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aactacttactctagcttcccggcaacaattaatagactggatggaggcggataaagttgcaggaccacttctgcgctcggc
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gaccccgtagaaaagatcaaaggatcttcttgagatcctttttttctgcgcgtaatctgctgcttgcaaacaaaaaaaccacc
gctaccagcggtggtttgtttgccggatcaagagctaccaactcttttccgaaggtaactggcttcagcagagcgcagatac
caaatactgtccttctagtgtagccgtagttaggccaccacttcaagaactctgtagcaccgcctacatacctcgctctgctaa

Fig. 8U

tcctgttaccagtggctgctgccagtggcgataagtcgtgtcttaccgggttggactcaagacgatagttaccggataaggcg
cagcggtcgggctgaacgggggttcgtgcacacagcccagcttggagcgaacgacctacaccgaactgagataccta
cagcgtgagcattgagaaagcgccacgcttcccgaagggagaaaggcggacaggtatccggtaagcggcagggtcg
gaacaggagagcgcacgagggagcttccagggggaaacgcctggtatctttatagtcctgtcgggtttcgccacctctgac
ttgagcgtcgatttttgtgatgctcgtcaggggggcggagcctatggaaaaacgccagcaacgcgagctcgatttaggtga
cactata **(SEQ ID NO: 11)**

Fig. 8V

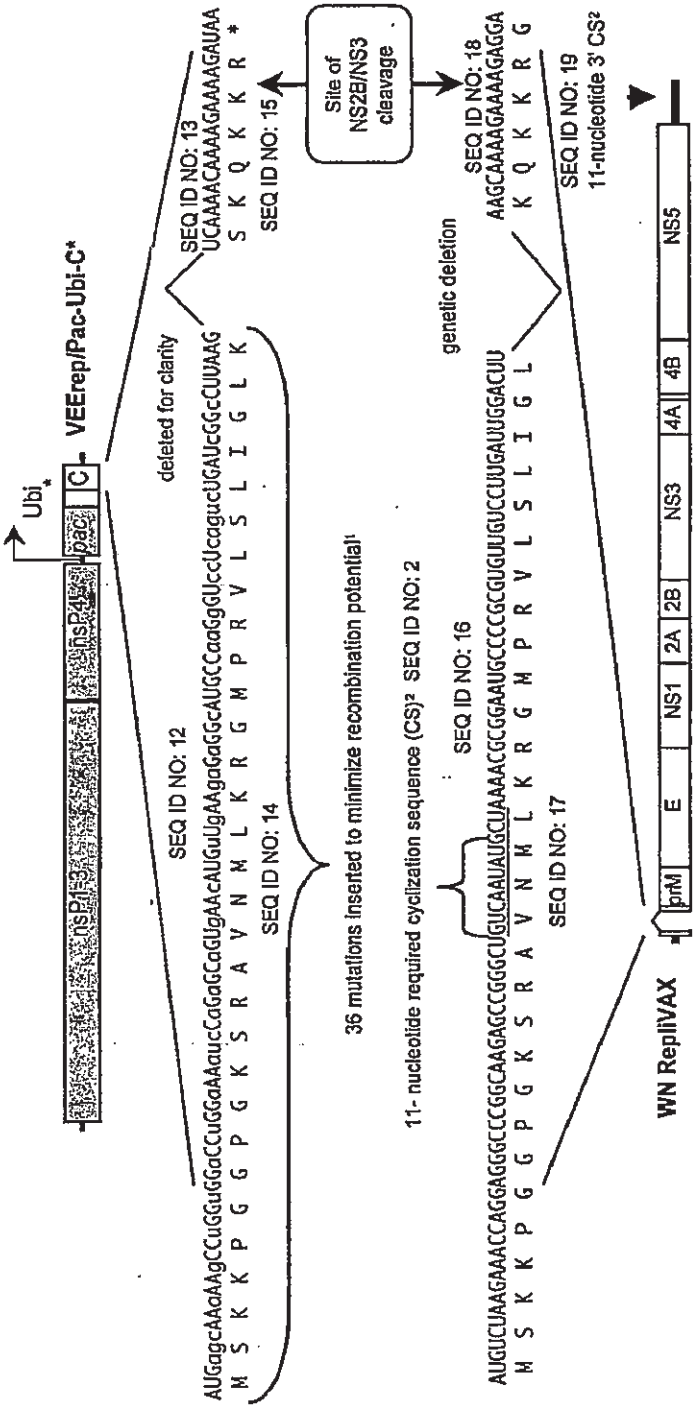
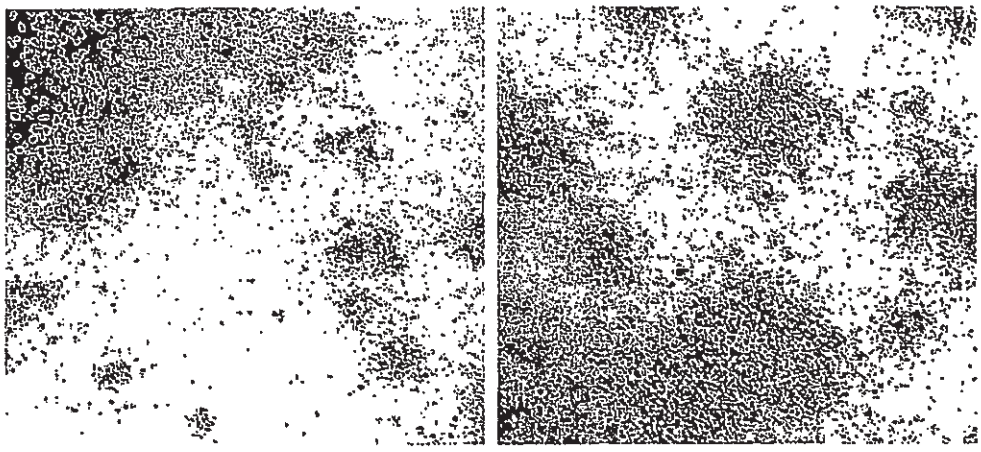
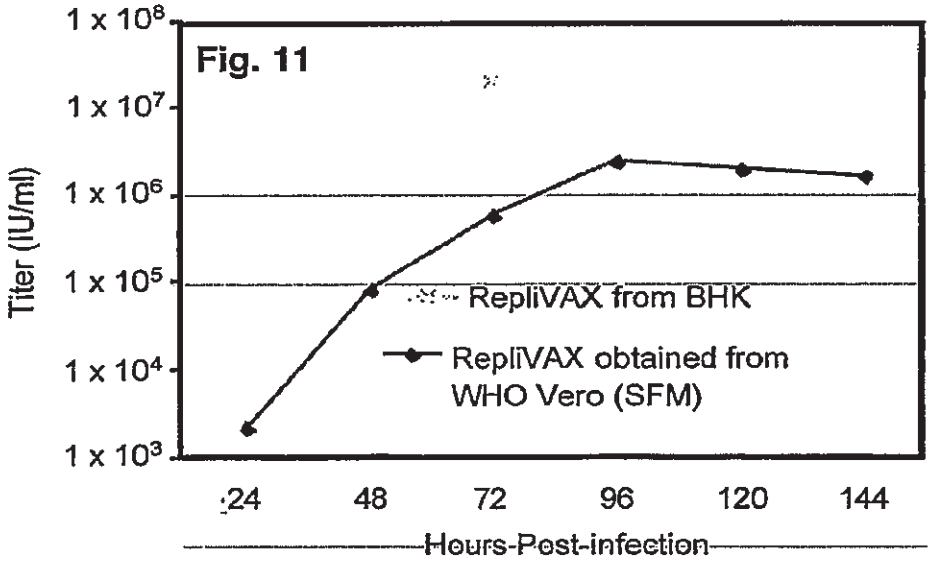
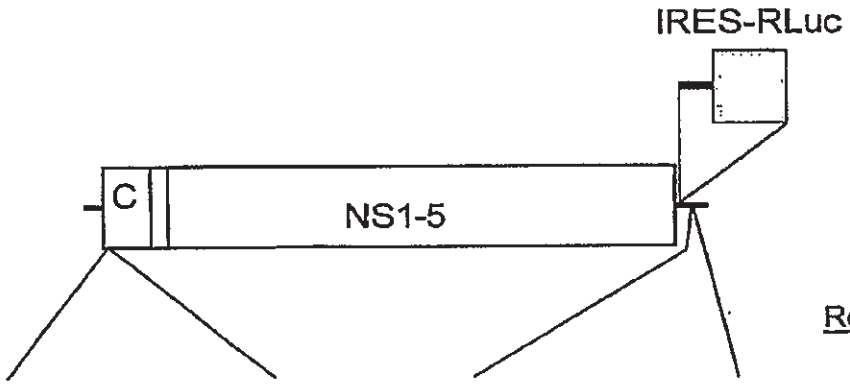

Ubi*
pac
C
VEErep/Pac-Ubi-C*
deleted for clarity
SEQ ID NO: 13
SEQ ID NO: 12
SEQ ID NO: 15
Site of NS2B/NS3 cleavage
SEQ ID NO: 18
SEQ ID NO: 14
36 mutations inserted to minimize recombination potential¹
genetic deletion
11- nucleotide required cyclization sequence (CS)² SEQ ID NO: 2
SEQ ID NO: 16
SEQ ID NO: 19
11-nucleotide 3' CS²
SEQ ID NO: 17
WN RepliVAX
prM
E
NS1
2A
2B
NS3
4A
4B
NS5

Fig. 9



WN RepliVAX p0 **Fig. 10** WN RepliVAX p10





			Replication level
WT	GUCAAUAUGCU(SEQ ID NO:2)	AGCAUAUUGAC(SEQ ID NO:30)	100
m7	CUCAAUAUGCU(SEQ ID NO:20)	AGCAUAUUGAG(SEQ ID NO:31)	2
m8	GACAAUAUGCU(SEQ ID NO:21)	AGCAUAUUGUC(SEQ ID NO:32)	3
m9	GUGAAUAUGCU(SEQ ID NO:22)	AGCAUAUUCAC(SEQ ID NO:33)	82
m10	GUCUAUAUGCU(SEQ ID NO:23)	AGCAUAUAGAC(SEQ ID NO:34)	173
m11	GUCAUUAUGCU(SEQ ID NO:24)	AGCAUAAUGAC(SEQ ID NO:35)	69
m12	GUCAAAAUGCU(SEQ ID NO:25)	AGCAUUUUGAC(SEQ ID NO:36)	69
m13	GUCAAUUUGCU(SEQ ID NO:26)	AGCAAAUUGAC(SEQ ID NO:37)	138
m14	GUCAAUAUCCU(SEQ ID NO:27)	AGGAUAUUGAC(SEQ ID NO:38)	24
m15	GUCAAUAUGGU(SEQ ID NO:28)	ACCAUAUUGAC(SEQ ID NO:39)	42
m16	GUCAAUAUGCA(SEQ ID NO:29)	UGCAUAUUGAC(SEQ ID NO:40)	69

Fig.12A

IRES-RLuc
C
NS1-5
Replication level
WT GUCAAUAUGCU (SEQ ID NO:2) AGCAUAUUGAC (SEQ ID NO:30) 100
m17 GUCUAUUUGCU (SEQ ID NO:41) AGCAAAUAGAC (SEQ ID NO:43) 109
m17-5 GUCUAUUUGCU (SEQ ID NO:42) AGCAUAUUGAC (SEQ ID NO:30) <1*
m17-3 GUCAAUAUGCU (SEQ ID NO:2) AGCAAAUAGAC (SEQ ID NO:44) <1*
NC Containing flame shift in NS5

Fig. 12B