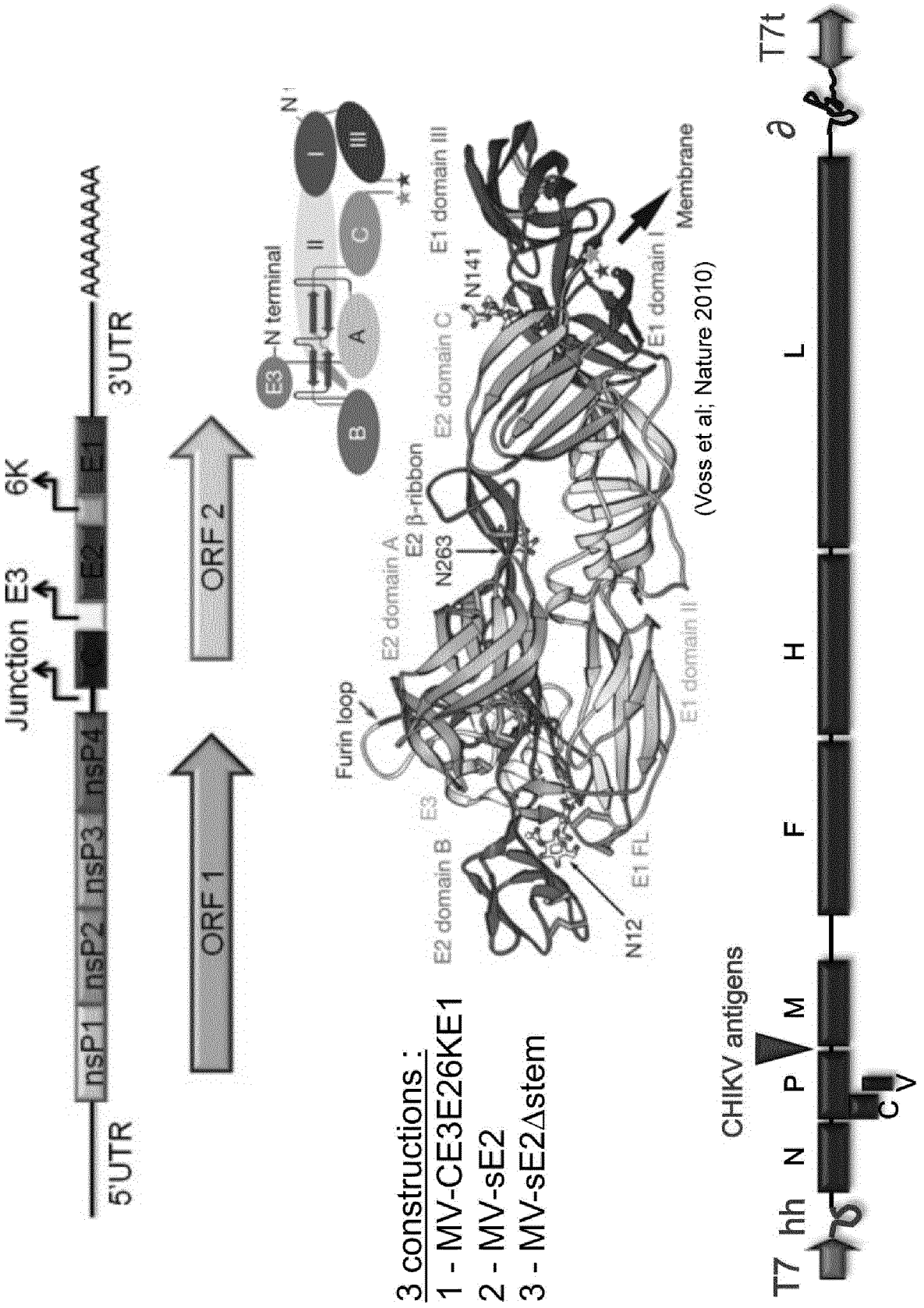

5'UTR
nsP1
nsP2
nsP3
nsP4
Junction
E3
6K
E2
E1
AAAAAAAA
3'UTR
ORF 1
ORF 2
N terminal
E3
I
II
III
A
B
C
E2 domain A
E2 β-ribbon
E2 domain C
E1 domain III
N141
N263
Furin loop
E3
E2 domain B
E1 domain I
Membrane
E1 domain II
E1 FL
N12
(Voss et al; Nature 2010)
3 constructions :
1 - MV-CE3E26KE1
2 - MV-sE2
3 - MV-sE2Δstem
T7
hh
N
P
M
F
H
L
∂
T7t
CHIKV antigens
C
V

FIGURE 1A

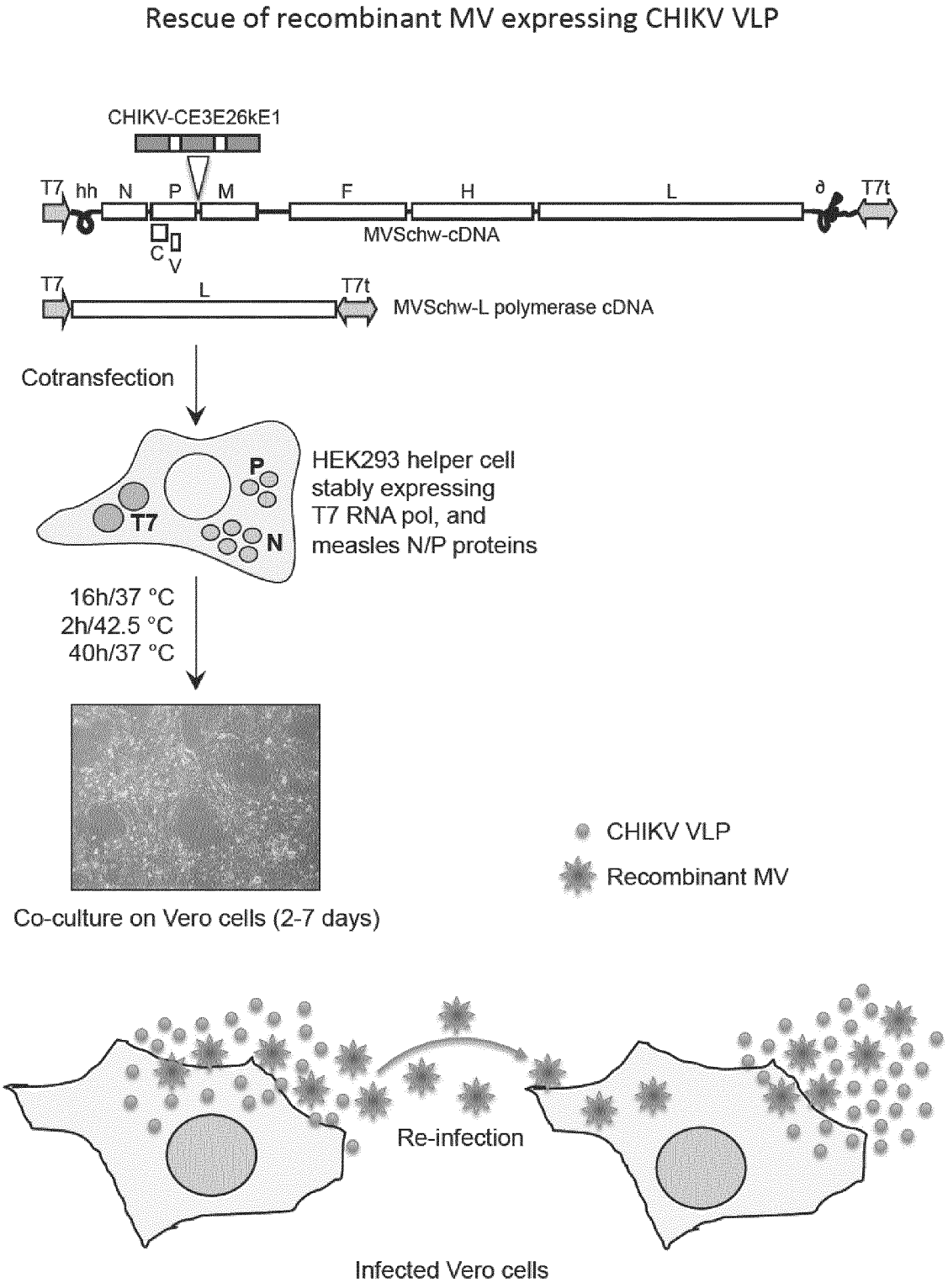

Rescue of recombinant MV expressing CHIKV VLP
CHIKV-CE3E26kE1
T7
hh
N
P
M
F
H
L
∂
T7t
C
V
MVSchw-cDNA
T7
L
T7t
MVSchw-L polymerase cDNA
Cotransfection
P
T7
N
HEK293 helper cell
stably expressing
T7 RNA pol, and
measles N/P proteins
16h/37 °C
2h/42.5 °C
40h/37 °C
CHIKV VLP
Recombinant MV
Co-culture on Vero cells (2-7 days)
Re-infection
Infected Vero cells

**FIGURE 1B**

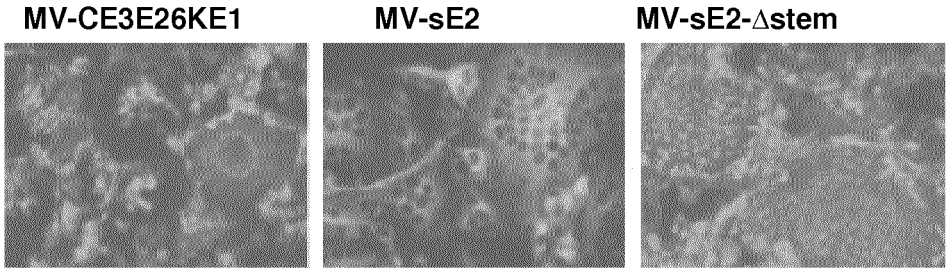



FIGURE 2

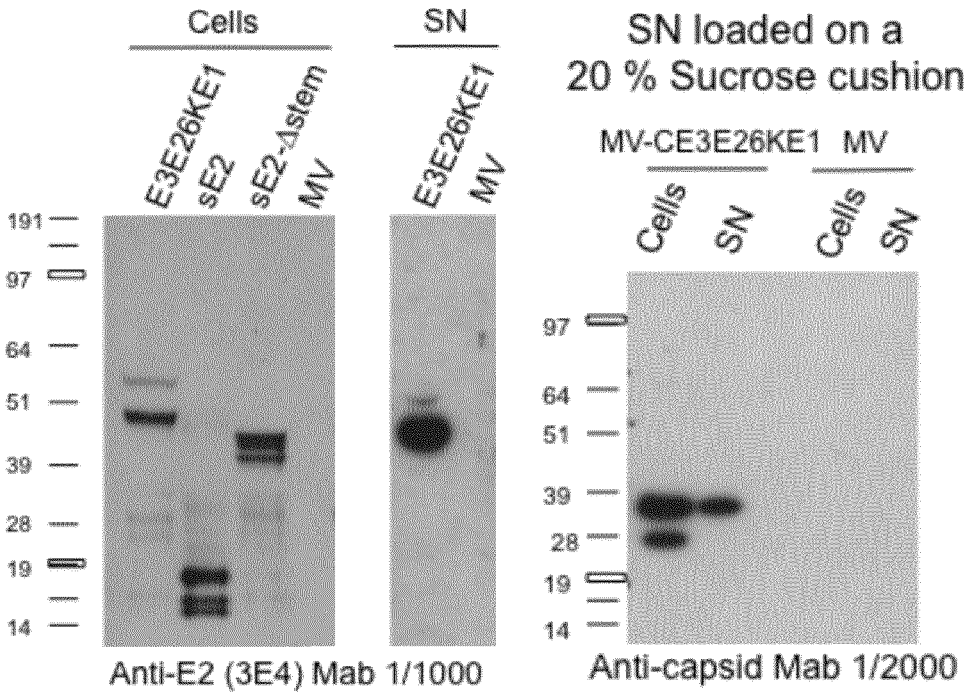



FIGURE 3

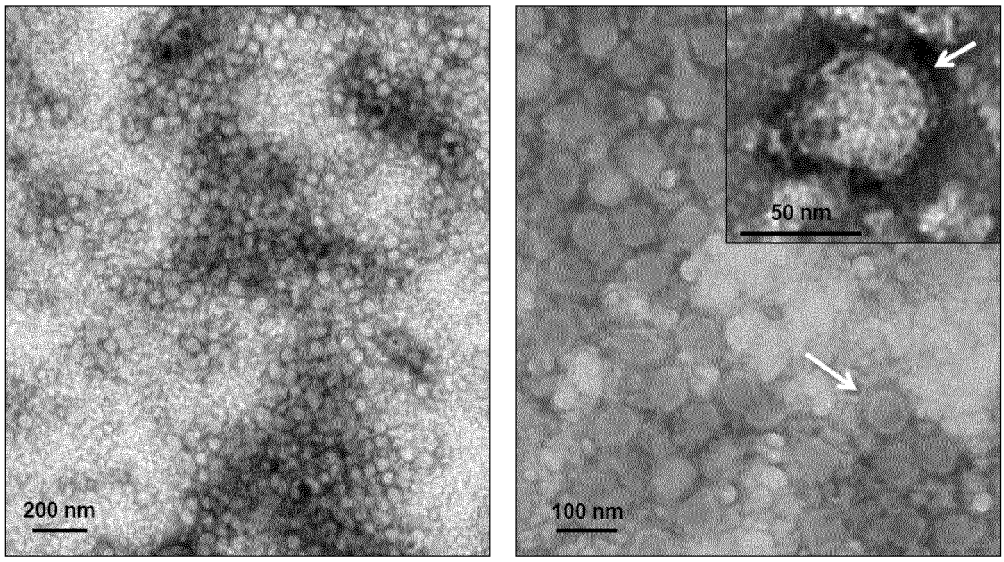



FIGURE 4

SLAIPVMCLLANTTFPCSQDNFNVYKATRPYLAHCPDCGEGHSCHSPVAL
ERIRNEATDGTLKIQVSLQIGIKTDDSHDWTKLRYMDNHMPADAERAGLF
VRTSAPCTITGTMGHFILARCPKGETLTVGFTDSRKISHSCTHPFHHDPP
VIGRE*

FIGURE 5

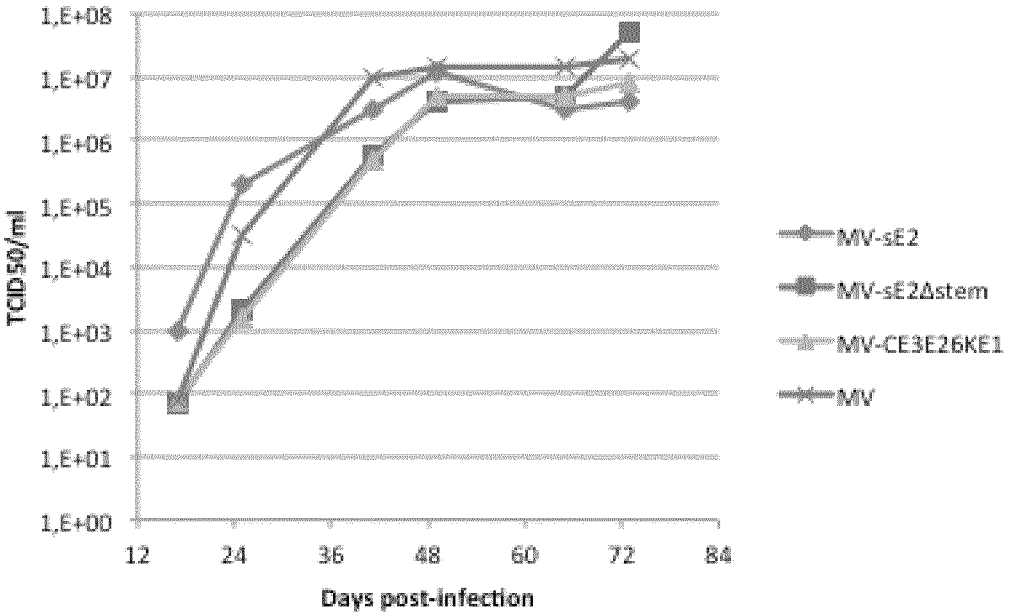



FIGURE 6

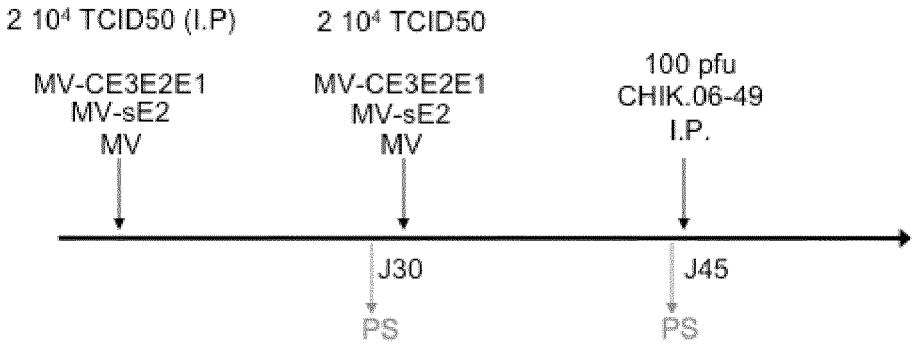



**FIGURE 7**

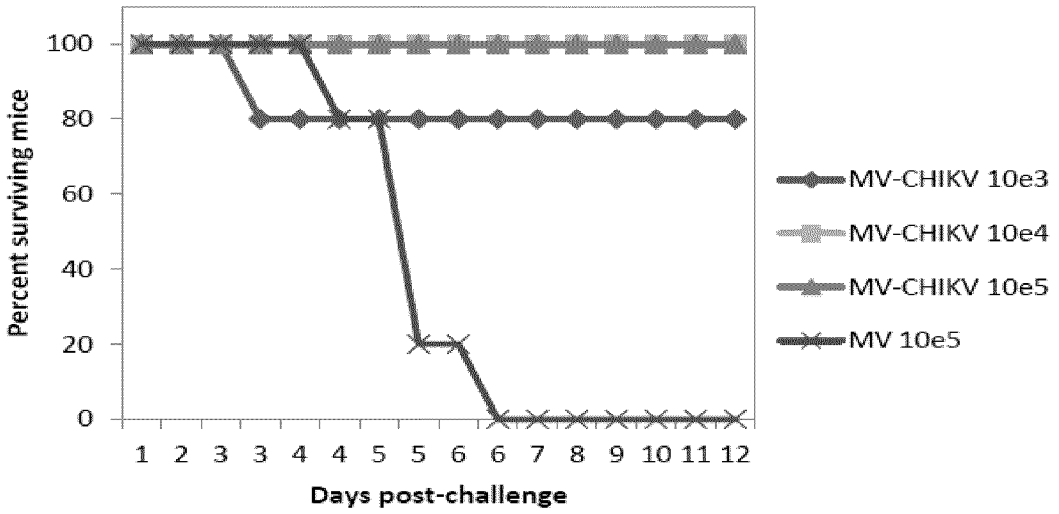



**FIGURE 8**

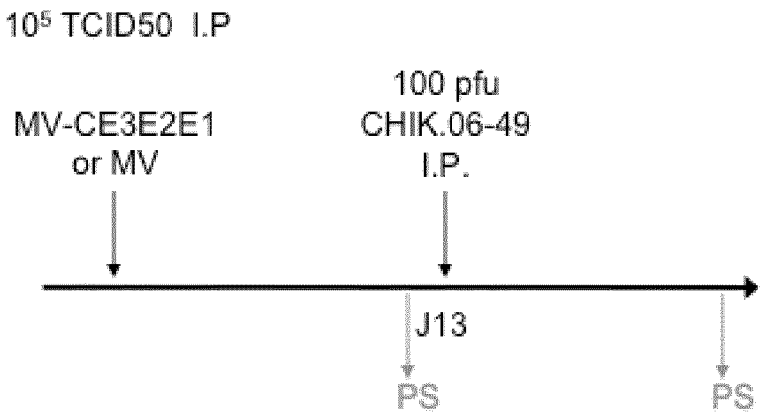



FIGURE 9

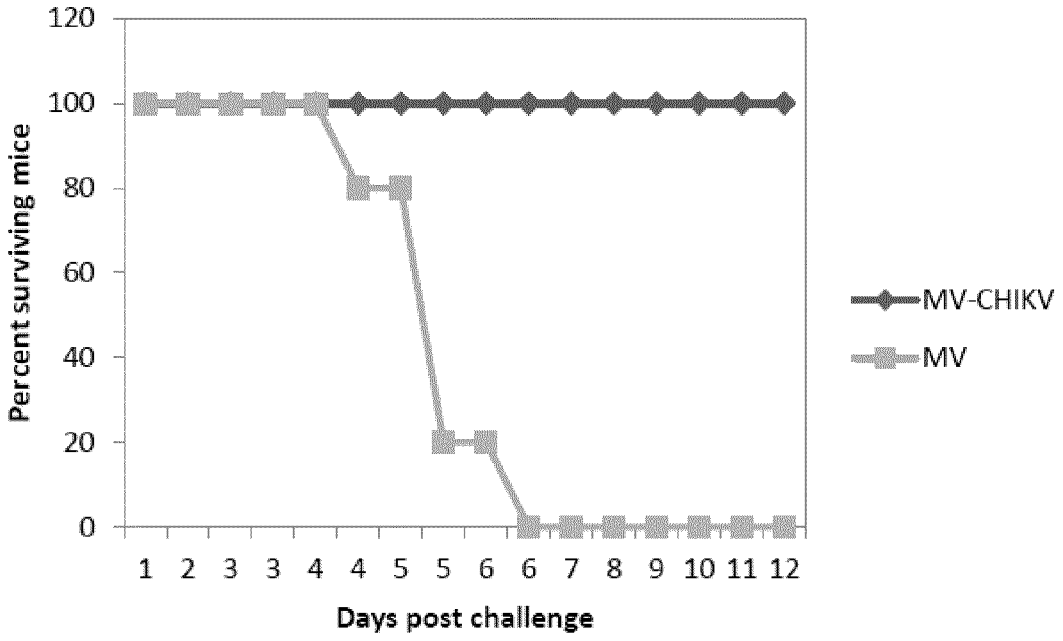
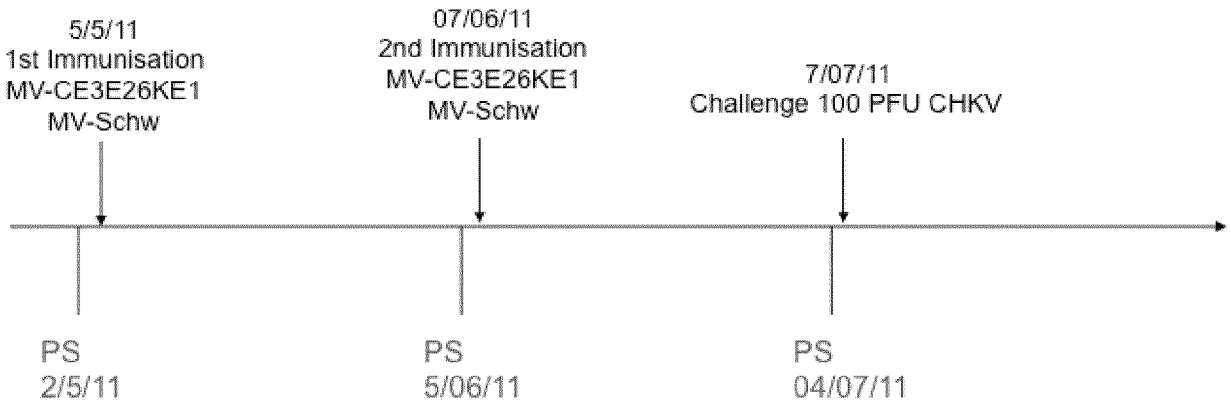



FIGURE 10




MV-CE3E26KE1 :
Group 1 : 6 mice $10^3$ TCID/mice
Group 2 : 6 mice $10^4$ TCID/mice
Group 3 : 6 mice $10^5$ TCID/mice

MV-Schw :
Group 4 : 6 mice $10^5$ TCID/mice

**FIGURE 11**

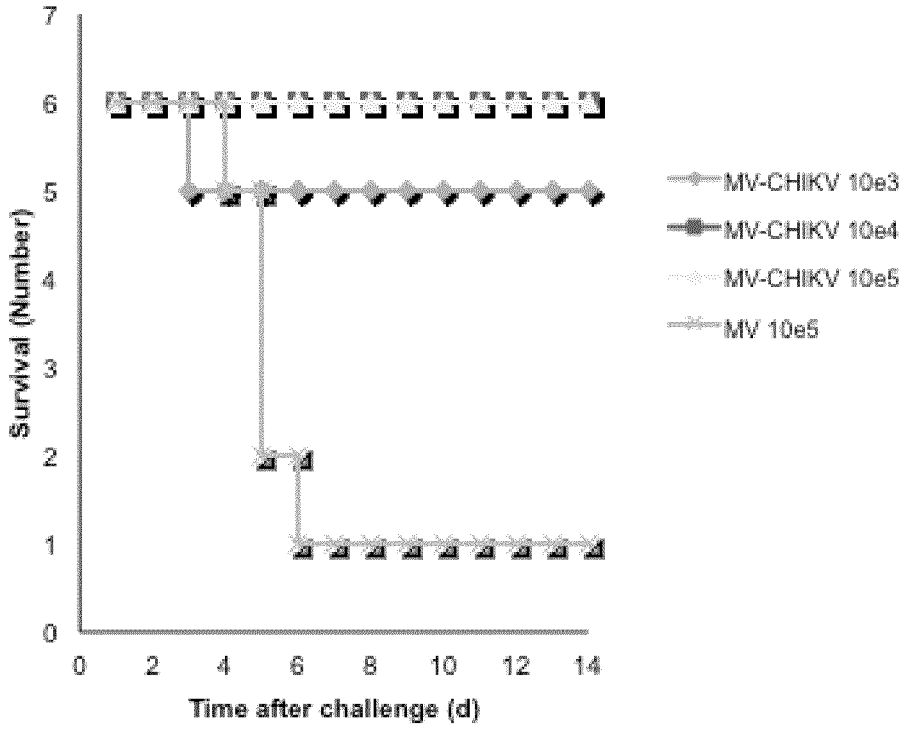



**FIGURE 12**

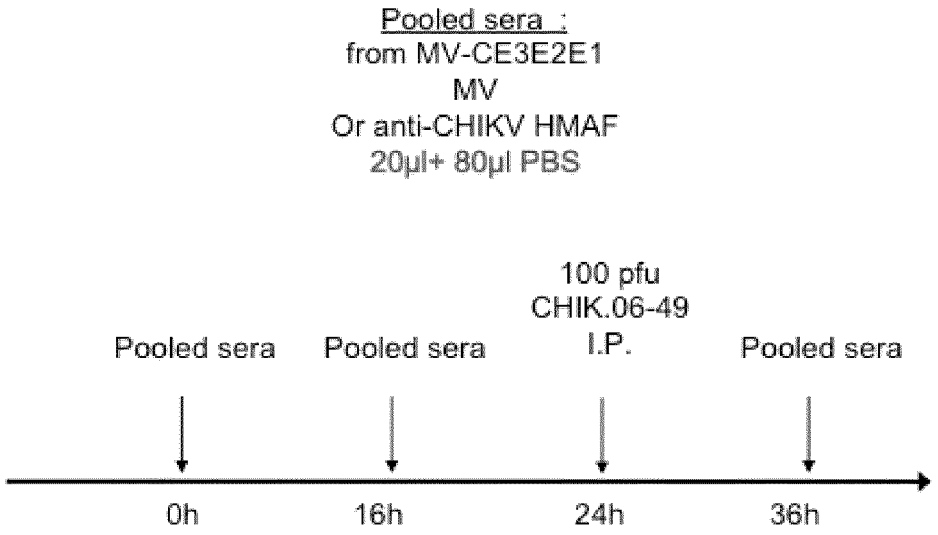



**FIGURE 13**

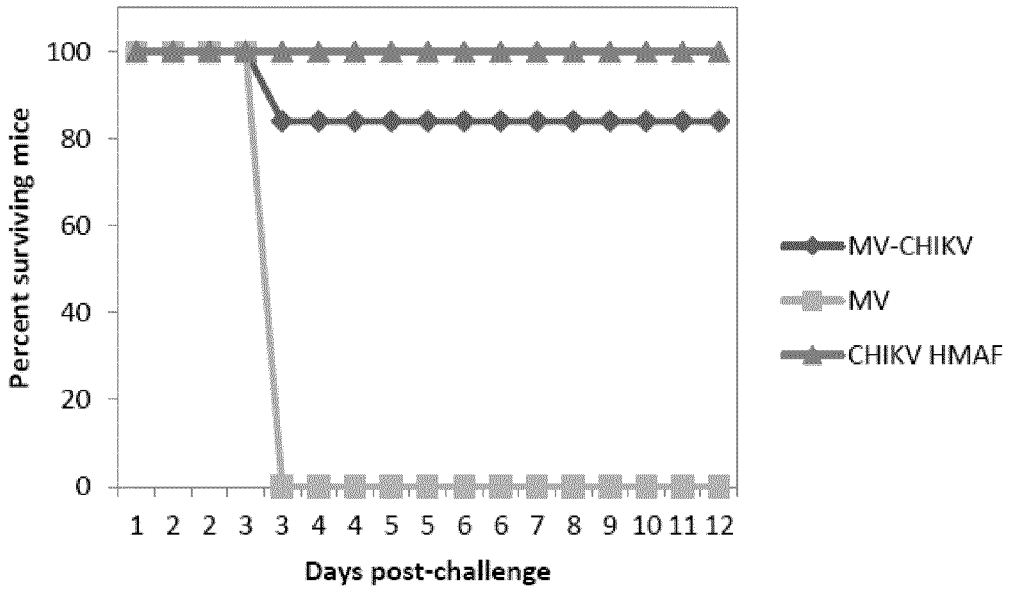



**FIGURE 14**

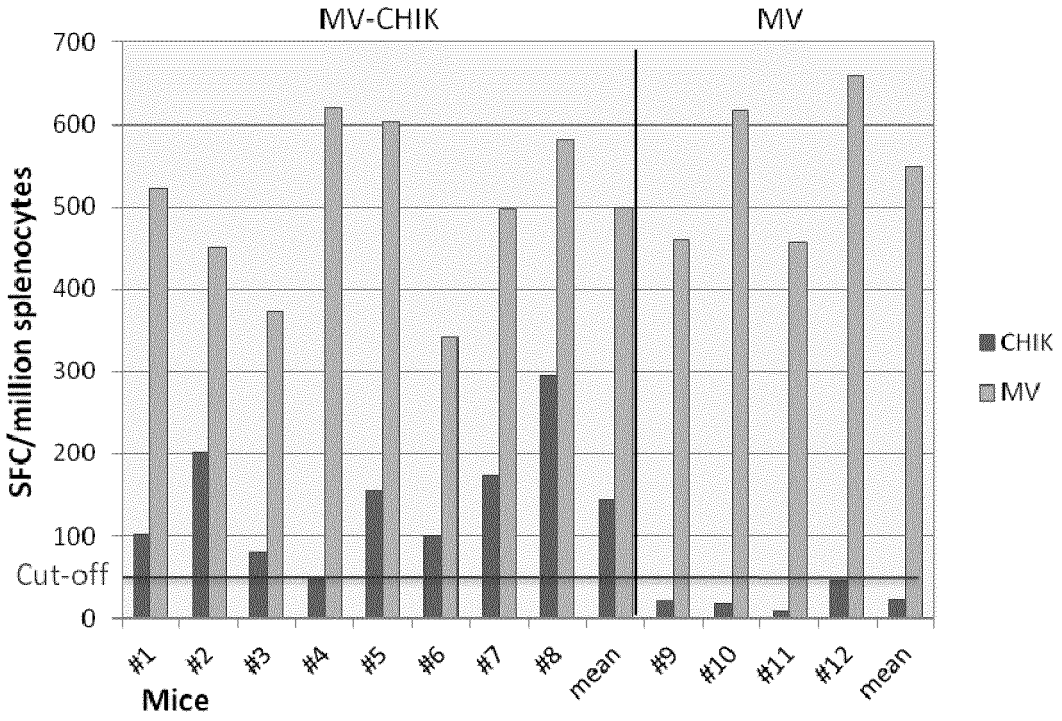

MV-CHIK
MV
700
600
500
400
300
200
100
Cut-off
0
SFC/million splenocytes
#1
#2
#3
#4
#5
#6
#7
#8
mean
#9
#10
#11
#12
mean
Mice
CHIK
MV

**FIGURE 15**

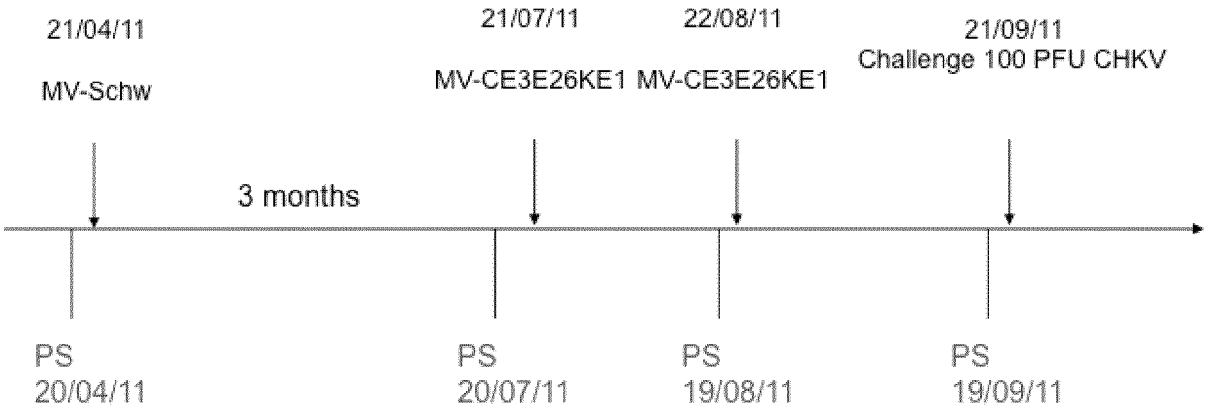



**FIGURE 16**

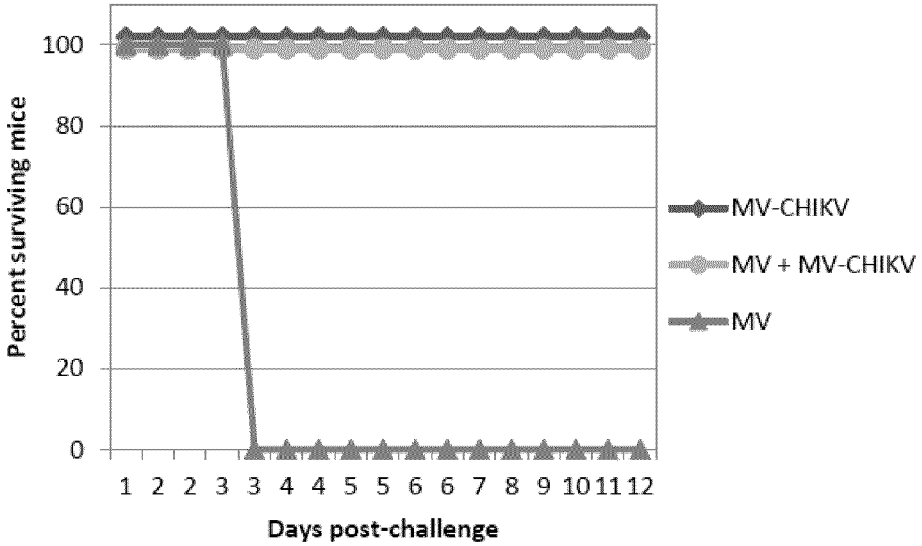



**FIGURE 17**

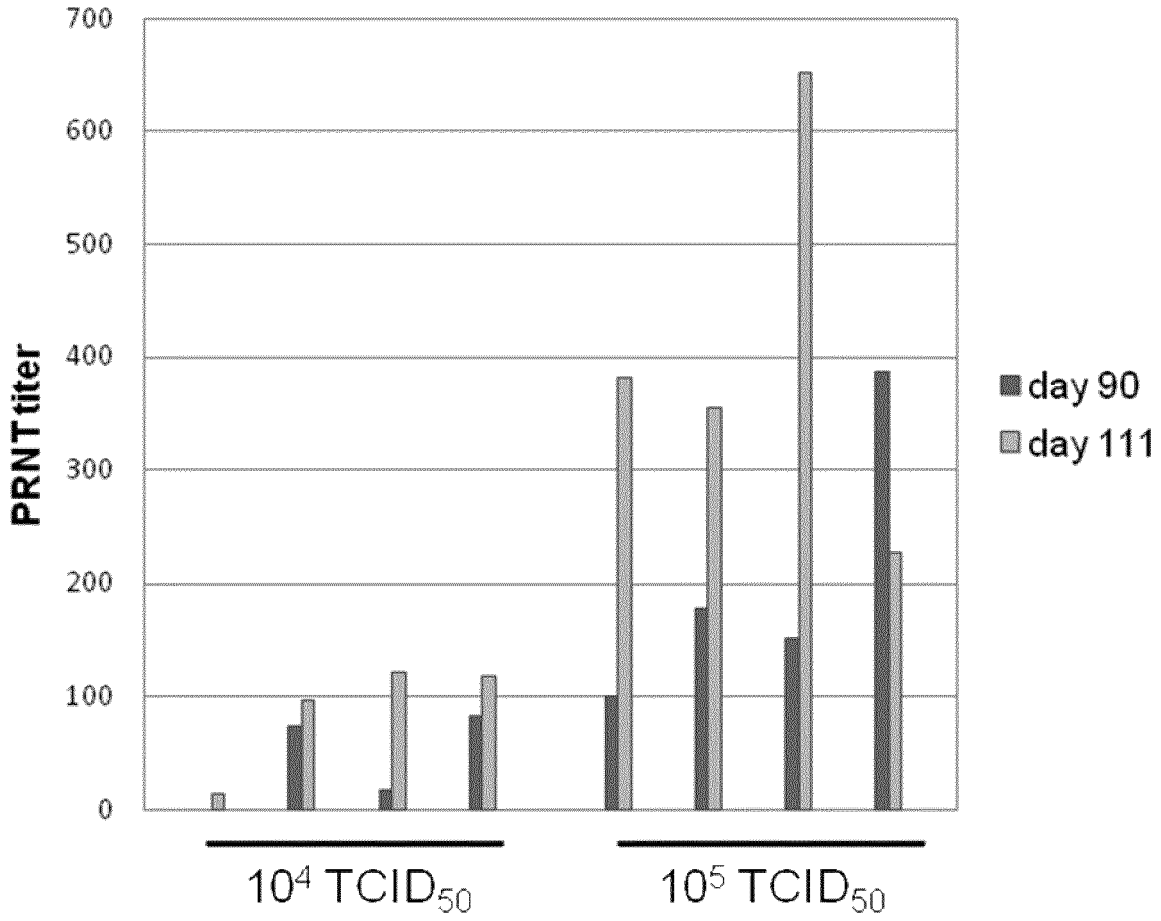

700
600
500
400
300
200
100
0
PRNT titer
day 90
day 111
10^4 TCID50
10^5 TCID50

FIGURE 18