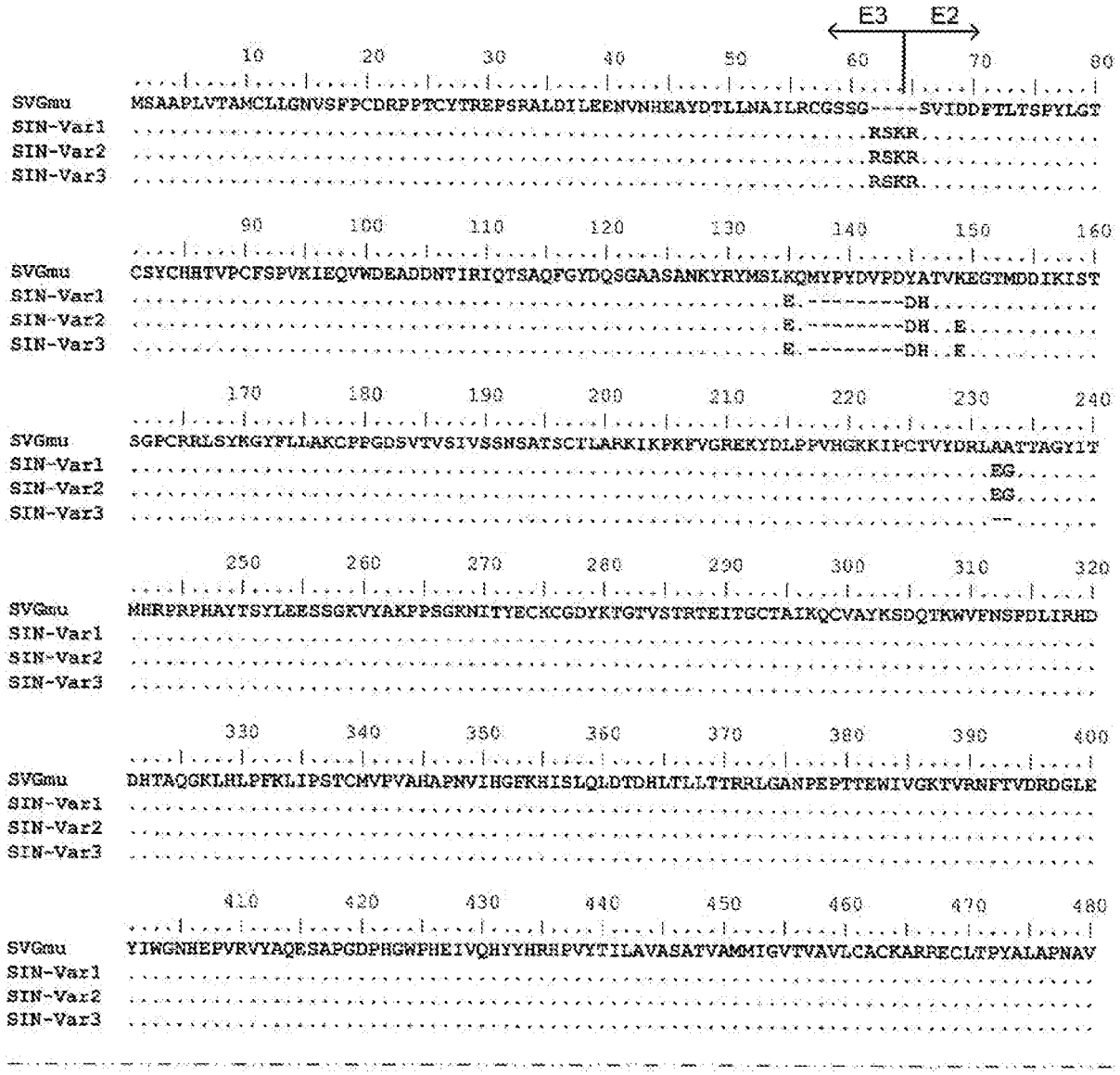

E3
E2
SVGmu MSAAPLVTAMCLLGNVSFPCDRPPTCYTREPSRALDILEENVNHEAYDTLLNAILRCGSSG----SVIDDFTLTSPYLGT
SIN-Var1 .....RSKR.....
SIN-Var2 .....RSKR.....
SIN-Var3 .....RSKR.....
SVGmu CSYCHHTVPCFSPVKIEQVWDEADDNTIRIQTSAQFGYDQSGAASANKYRYMSLKQDHTYPYDVPDYATVKEGTMDDIKIST
SIN-Var1 .....E.---------DH.....
SIN-Var2 .....E.---------DH..E.....
SIN-Var3 .....E.---------DH..E.....
SVGmu SGPCRRLSYKGYFLLAKCPPGDSVTVSIVSSNSATSCTLARKIKPKFVGREKYDLPPVHGKKIPCTVYDRLAATTAGYIT
SIN-Var1 .....EG.....
SIN-Var2 .....EG.....
SIN-Var3 .....--.....
SVGmu MHRPRPHAYTSYLEESSGKVYAKPPSGKNITYECKCGDYKTGTVSTRTEITGCTAIKQCVAYKSDQTKWVFNSPDLIRHD
SIN-Var1 .....
SIN-Var2 .....
SIN-Var3 .....
SVGmu DHTAQGKLHLPFKLIPSTCMVPVAHAPNVIHGFKHISLQLDTDHLTLLTTRRLGANPEPTTEWIVGKTVRNFTVDRDGLE
SIN-Var1 .....
SIN-Var2 .....
SIN-Var3 .....
SVGmu YIWGNHEPVRVYAQESAPGDPHGWPHEIVQHYYHRHPVYTILAVASATVAMMIGVTVAVLCACKARRECLTPYALAPNAV
SIN-Var1 .....
SIN-Var2 .....
SIN-Var3 .....

FIGURE 1A

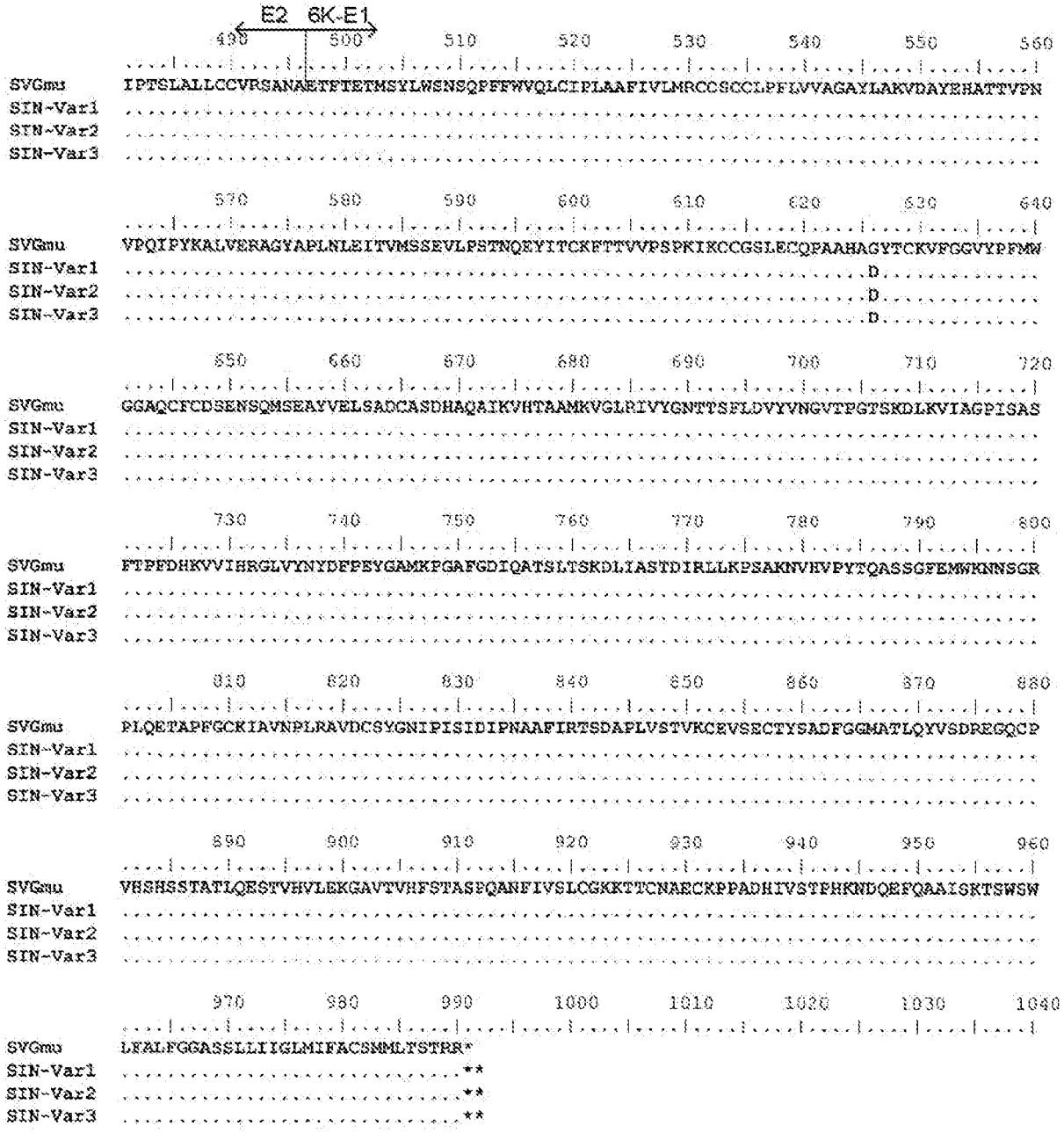

E2 6K-E1
490 500 510 520 530 540 550 560
SVGmu IPTSLALLCCVRSANAETFTETMSYLWSNSQPFFWVQLCIPLAAFIVLMRCCSCCLPFLVVAGAYLAKVDAYEHATTVPN
SIN-Var1
SIN-Var2
SIN-Var3
570 580 590 600 610 620 630 640
SVGmu VPQIPYKALVERAGYAPLNLEITVMSSEVLPSTNQEYITCKFTTVVPSPKIKCCGSLECQPAAHAGYTCKVFGGVYPFMW
SIN-Var1 D
SIN-Var2 D
SIN-Var3 D
650 660 670 680 690 700 710 720
SVGmu GGAQCFCDSENSQMSEAYVELSADCASDHAQAIKVHTAAMKVGLRIVYGNTTSFLDVYVNGVTPGTSKDLKVIAGPISAS
SIN-Var1
SIN-Var2
SIN-Var3
730 740 750 760 770 780 790 800
SVGmu FTPFDHKVVIHRGLVYNYDFPEYGAMKPGAFGDIQATSLTSKDLIASTDIRLLKPSAKNVHVPYTQASSGFEMWKHNSGR
SIN-Var1
SIN-Var2
SIN-Var3
810 820 830 840 850 860 870 880
SVGmu PLQETAPFGCKIAVNPLRAVDCSYGNIPISIDIPNAAFIRTSDAPLVSTVKCEVSECTYSADFGGMATLQYVSDREGQCP
SIN-Var1
SIN-Var2
SIN-Var3
890 900 910 920 930 940 950 960
SVGmu VHSHSSTATLQESTVHVLEKGAVTVHFSTASPQANFIVSLCGKKTTCNAECKPPADHIVSTPHKNDQEFQAAISKTSWSW
SIN-Var1
SIN-Var2
SIN-Var3
970 980 990 1000 1010 1020 1030 1040
SVGmu LFALFGGASSLLIIGLMIFACSMMLTSTRR*
SIN-Var1 **
SIN-Var2 **
SIN-Var3 **

FIGURE 1B

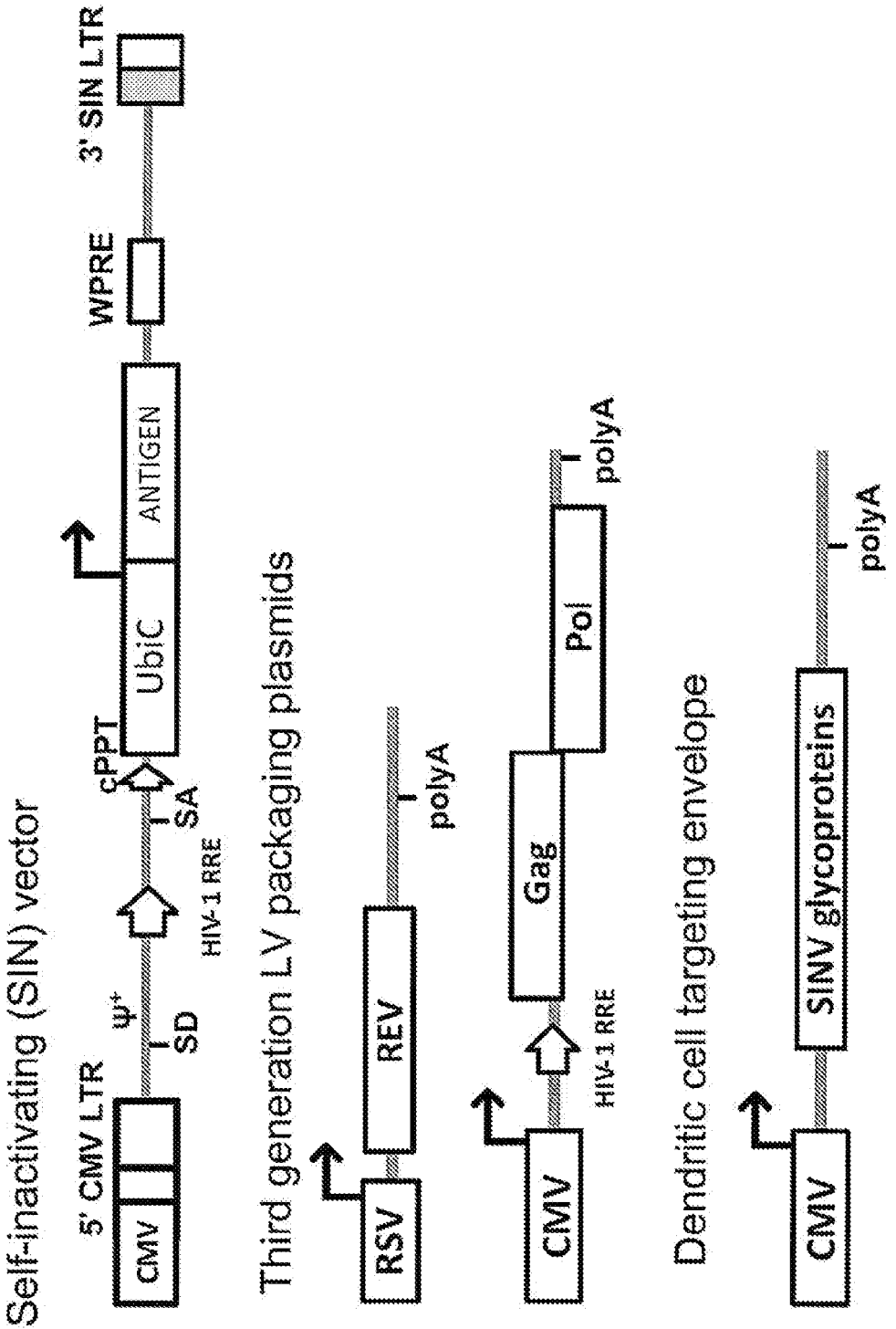

Self-inactivating (SIN) vector
5' CMV LTR
CMV
ψ+
SD
HIV-1 RRE
cPPT
UbiC
ANTIGEN
SA
WPRE
3' SIN LTR
Third generation LV packaging plasmids
RSV
REV
polyA
CMV
Gag
Pol
polyA
HIV-1 RRE
Dendritic cell targeting envelope
CMV
SINV glycoproteins
polyA

FIGURE 2

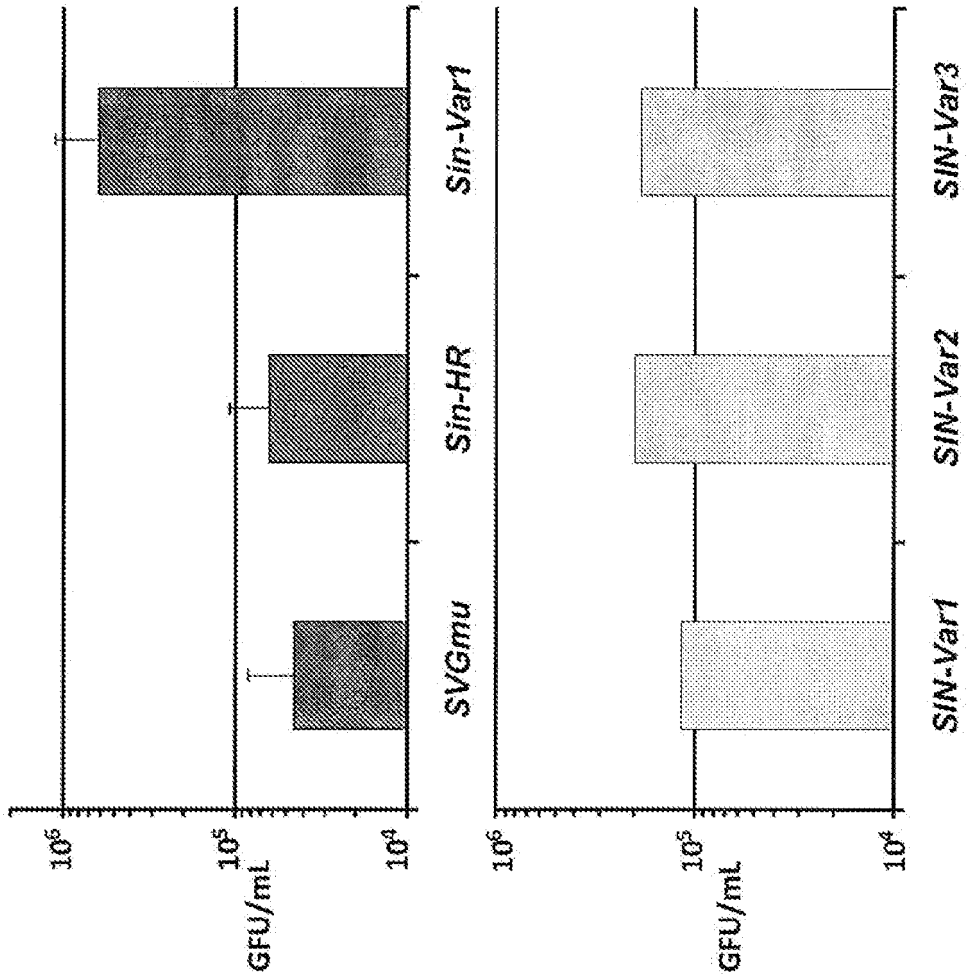

GFU/mL
10^6
10^5
10^4
SVGmu
Sin-HR
Sin-Var1
SIN-Var1
SIN-Var2
SIN-Var3

FIGURE 3

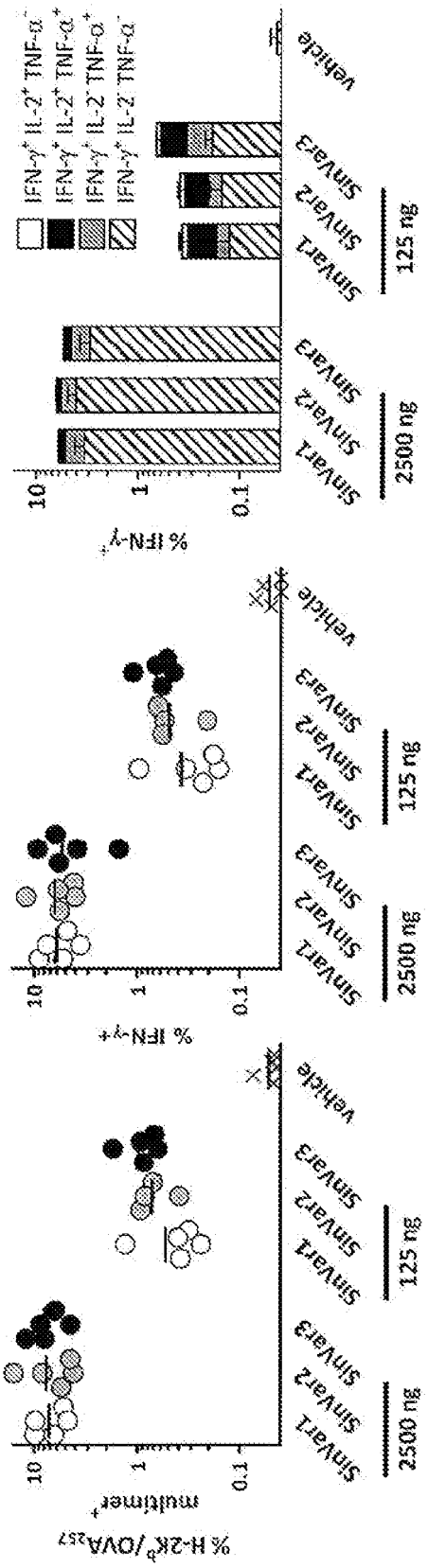

% H-2K^b/OVA$_{257}$ multimer$^+$
% IFN-γ$^+$
IFN-γ$^+$ IL-2$^+$ TNF-α$^-$
IFN-γ$^+$ IL-2$^+$ TNF-α$^+$
IFN-γ$^+$ IL-2$^-$ TNF-α$^+$
IFN-γ$^+$ IL-2$^-$ TNF-α$^-$
10
1
0.1
SinVar1
SinVar2
SinVar3
2500 ng
125 ng
vehicle

FIGURE 4A

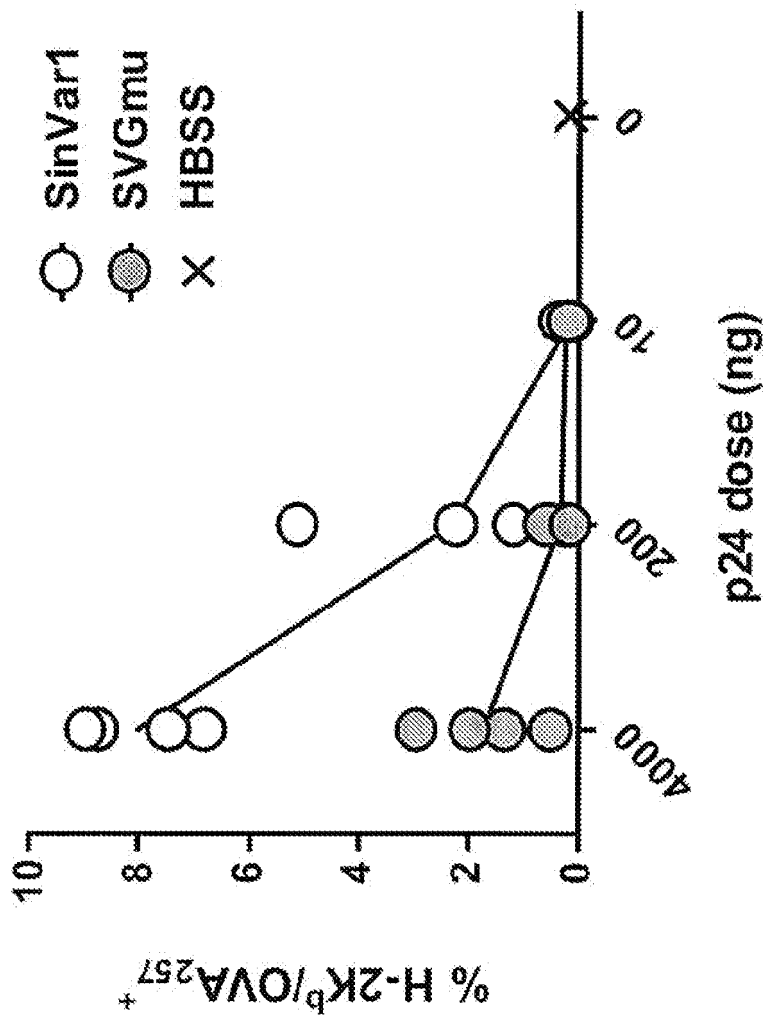

SinVar1
SVGmu
HBSS
0
10
200
4000
p24 dose (ng)
% H-2K^{b}/OVA$_{257}^{+}$
0
2
4
6
8
10

FIGURE 4B

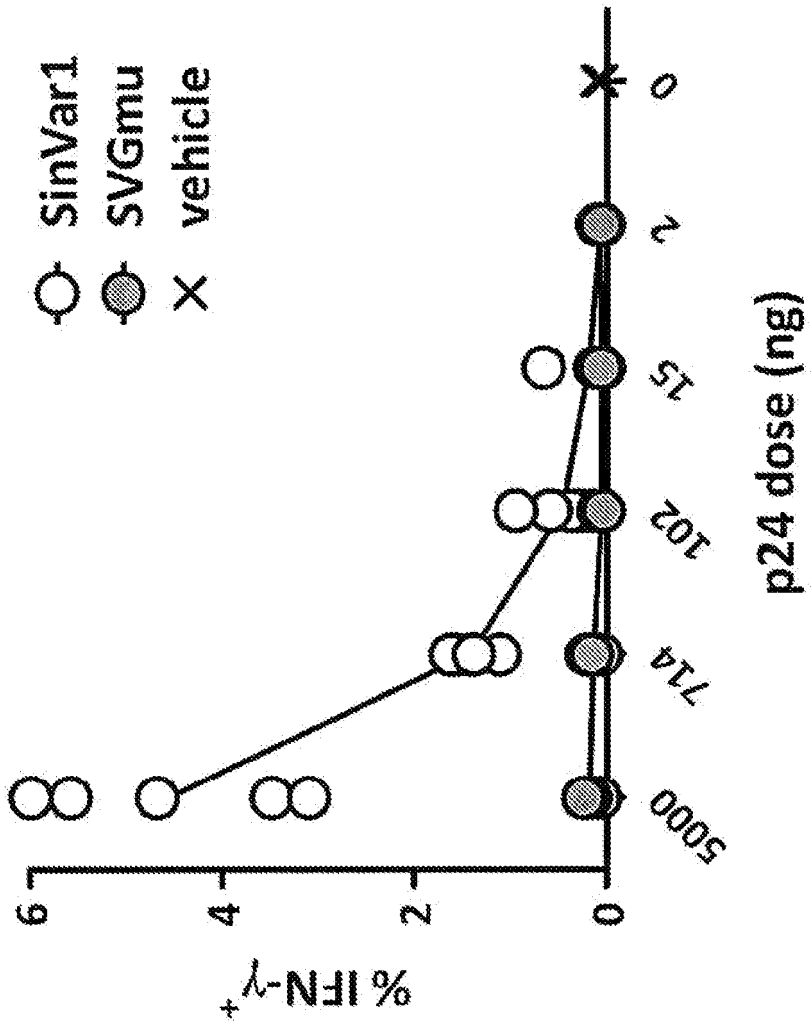
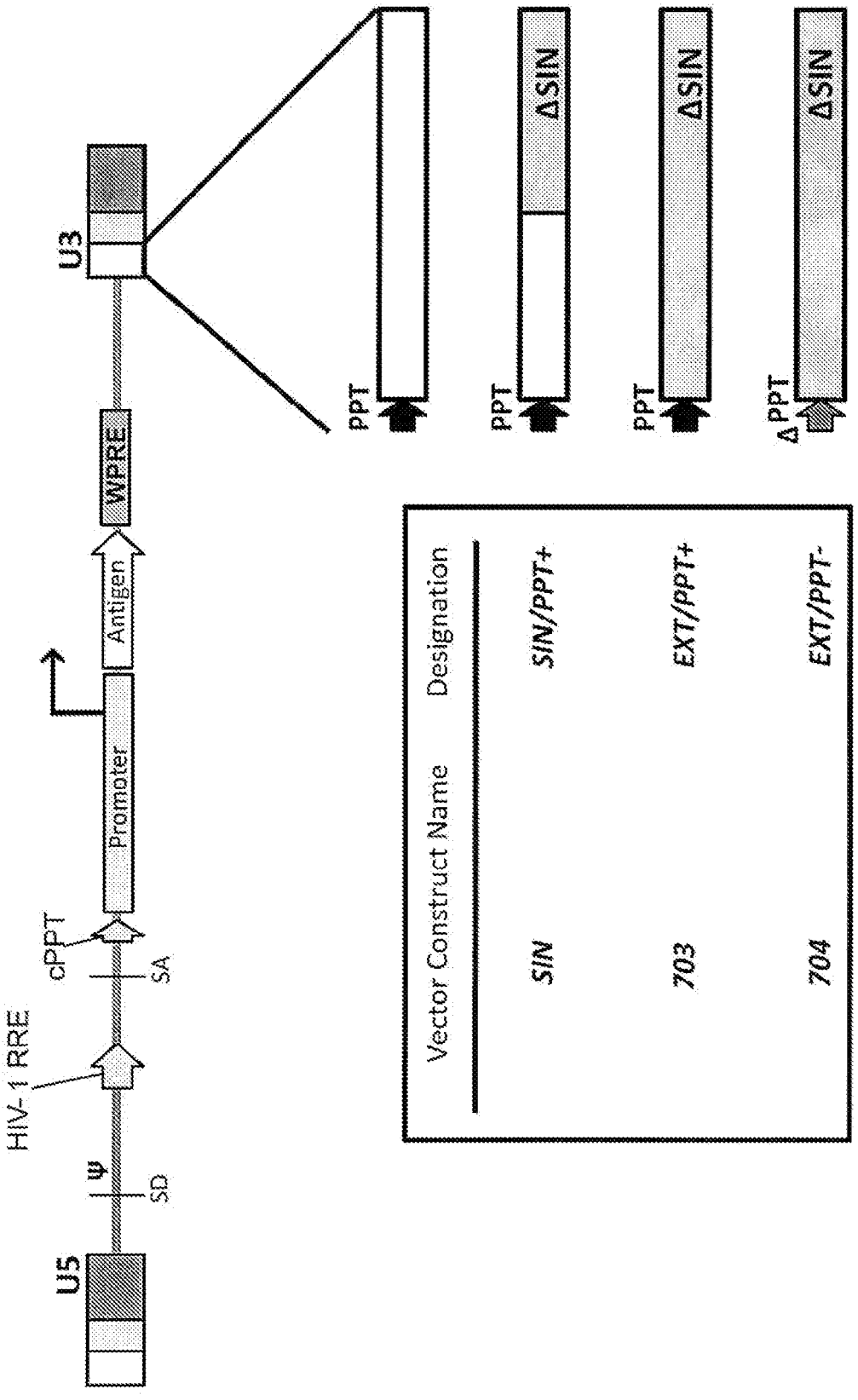

SinVar1
SVGmu
vehicle
% IFN-γ+
0
2
4
6
0
2
15
102
714
5000
p24 dose (ng)

FIGURE 4C



Vector Construct Name	Designation
SIN	*SIN/PPT+*
703	*EXT/PPT+*
704	*EXT/PPT-*

FIGURE 5A

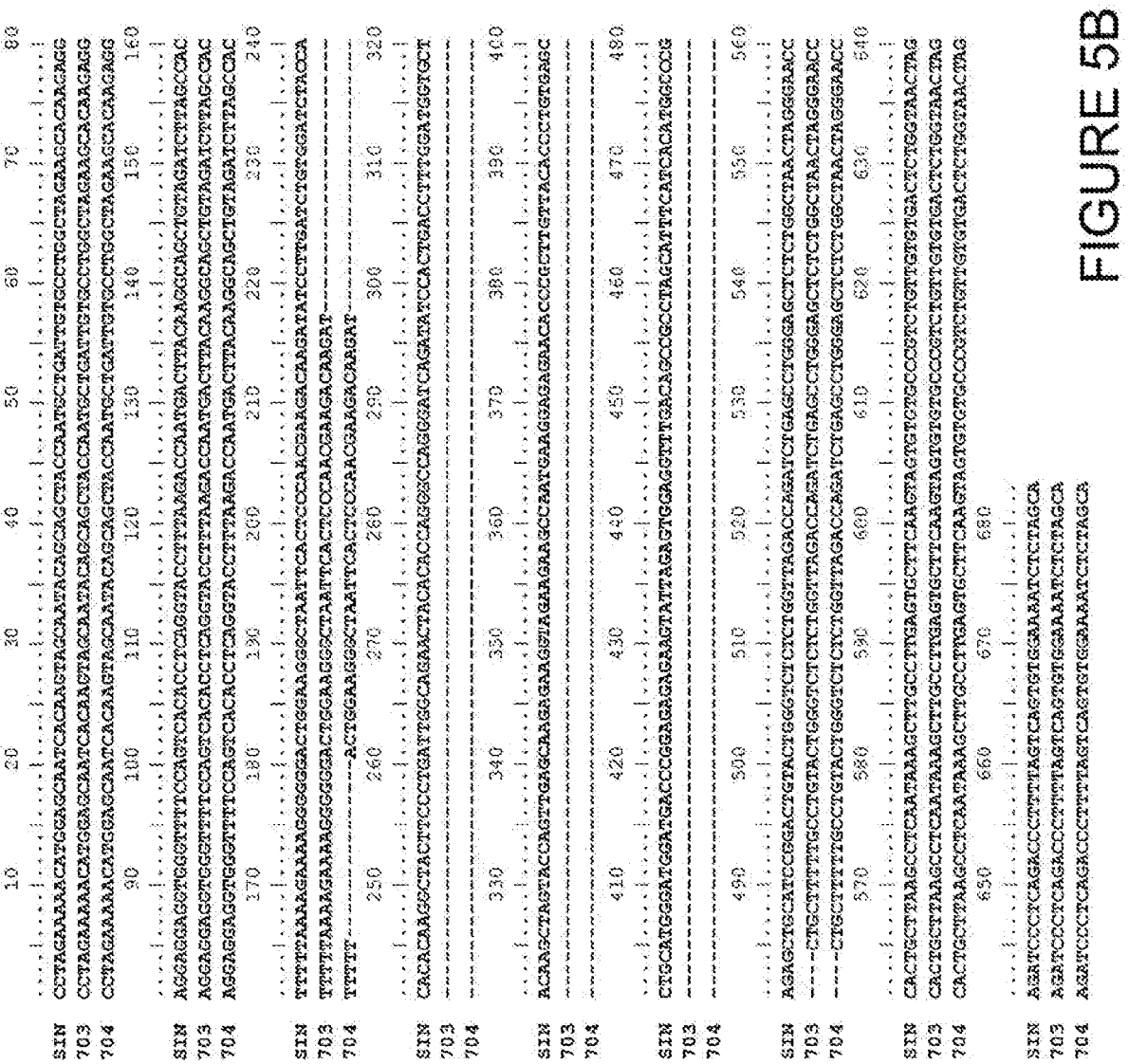


FIGURE 5B

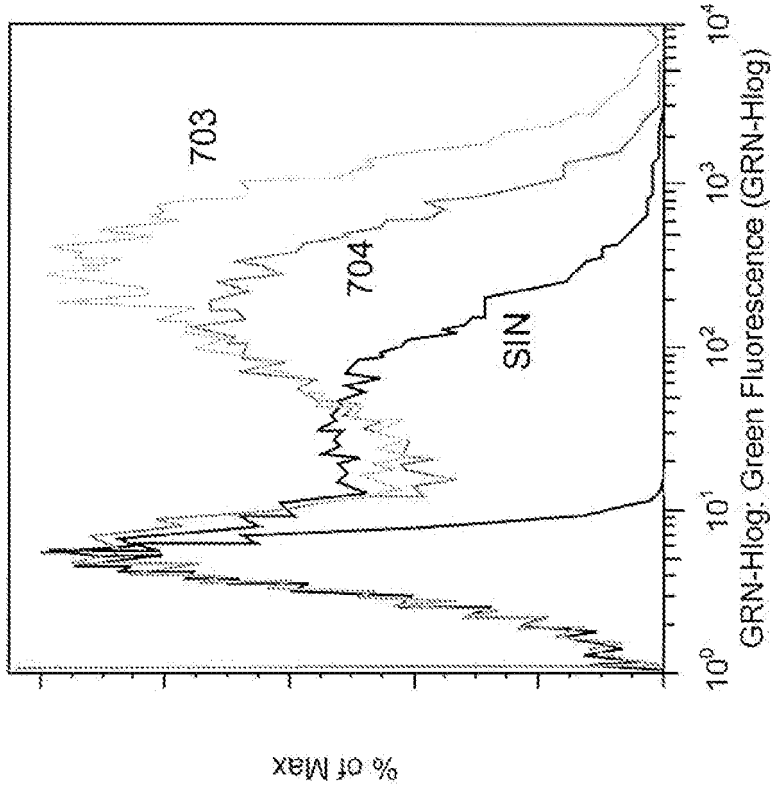


FIGURE 6B

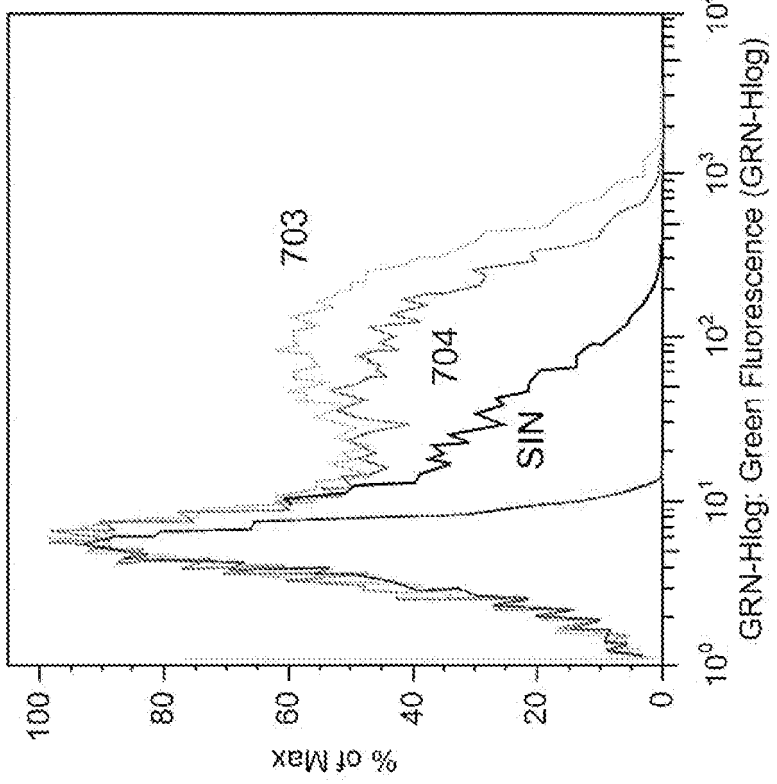


FIGURE 6A

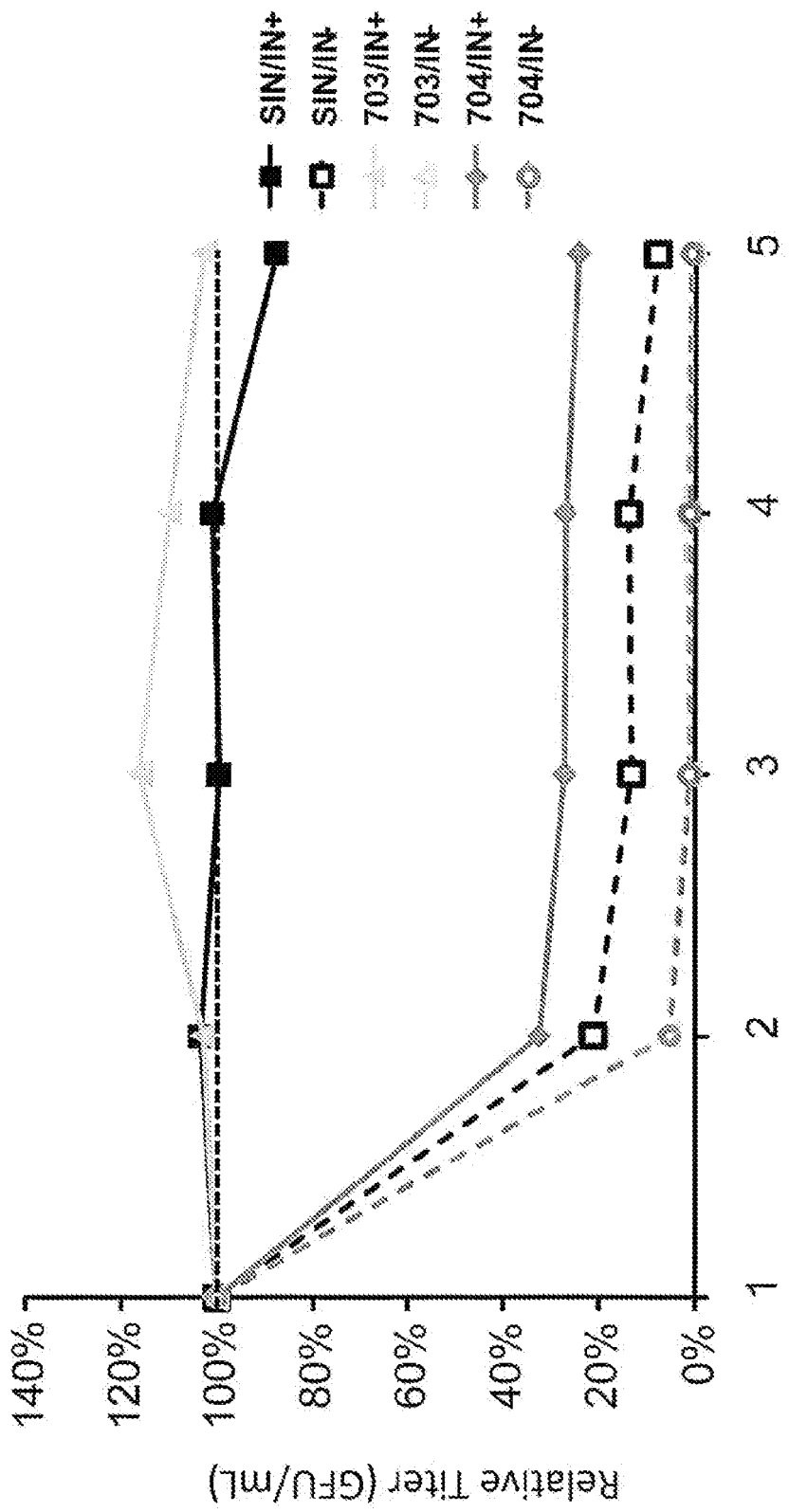

SIN/IN+
SIN/IN-
703/IN+
703/IN-
704/IN+
704/IN-
140%
120%
100%
80%
60%
40%
20%
0%
Relative Titer (GFU/mL)
1
2
3
4
5
Passage

FIGURE 7

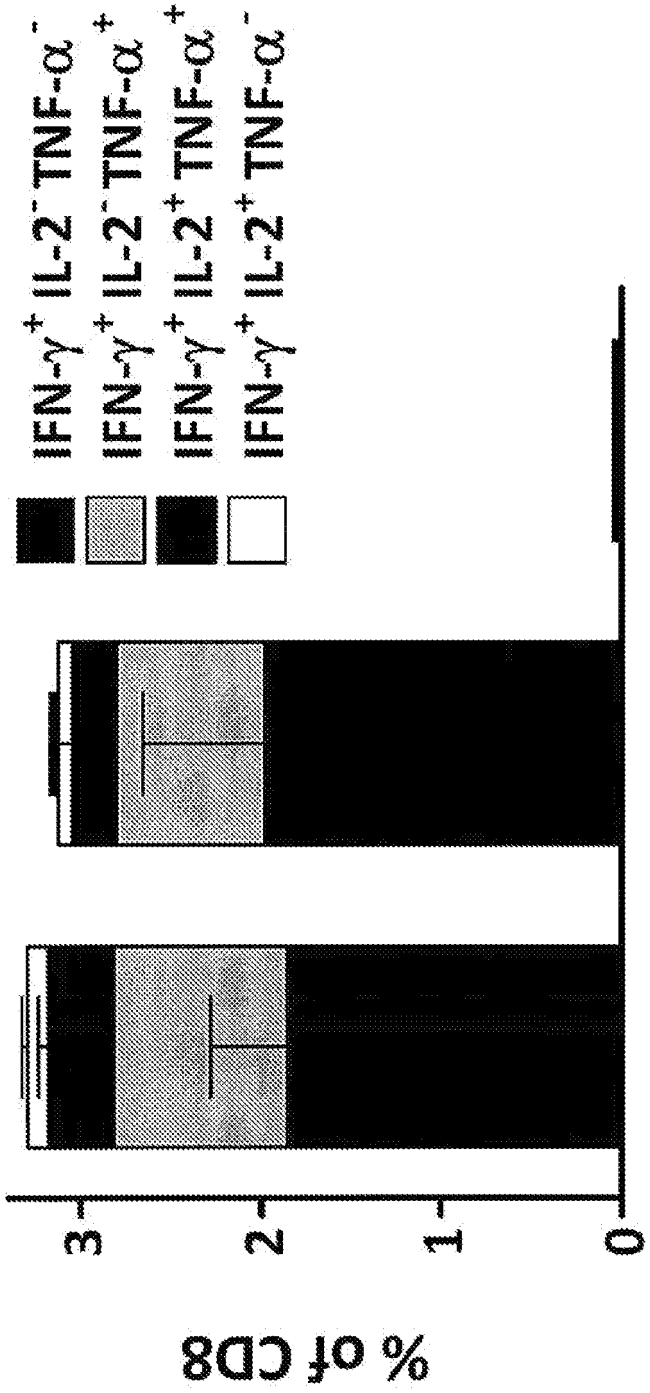

IFN-γ+ IL-2- TNF-α-
IFN-γ+ IL-2- TNF-α+
IFN-γ+ IL-2+ TNF-α+
IFN-γ+ IL-2+ TNF-α-
% of CD8
0
1
2
3
Int^wt
Int^D64V
vehicle

FIGURE 8

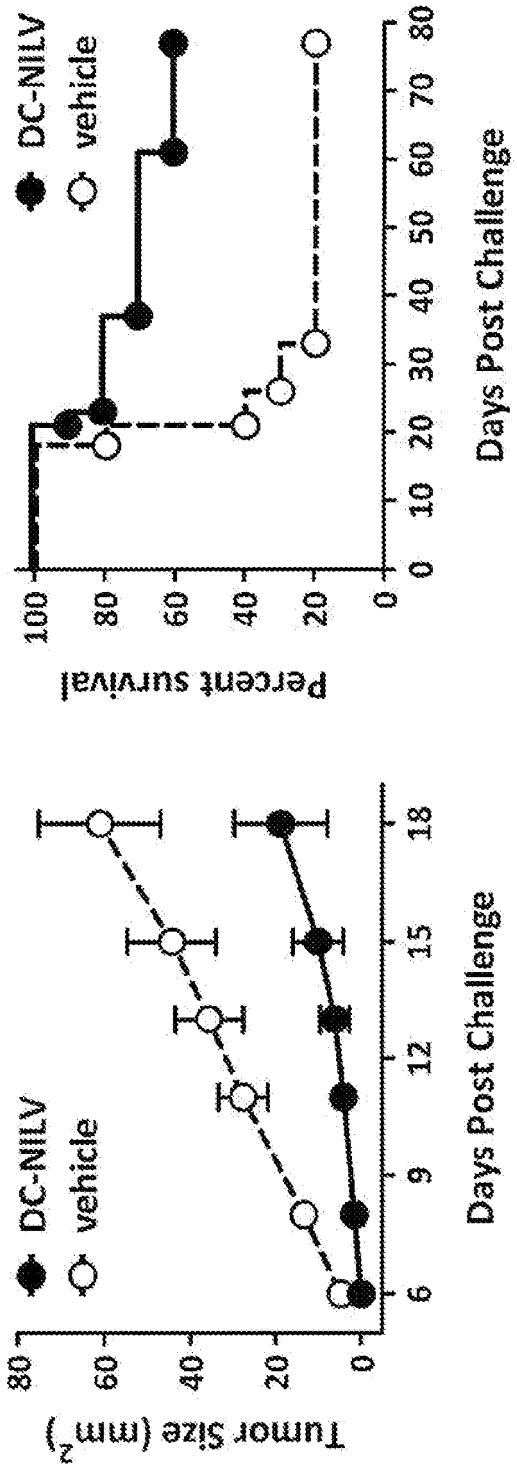

DC-NILV
vehicle
Tumor Size (mm²)
0
20
40
60
80
6
9
12
15
18
Days Post Challenge
DC-NILV
vehicle
Percent survival
0
20
40
60
80
100
0
10
20
30
40
50
60
70
80
Days Post Challenge

FIGURE 9