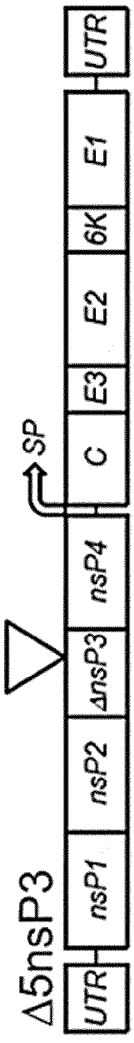
Figure 1



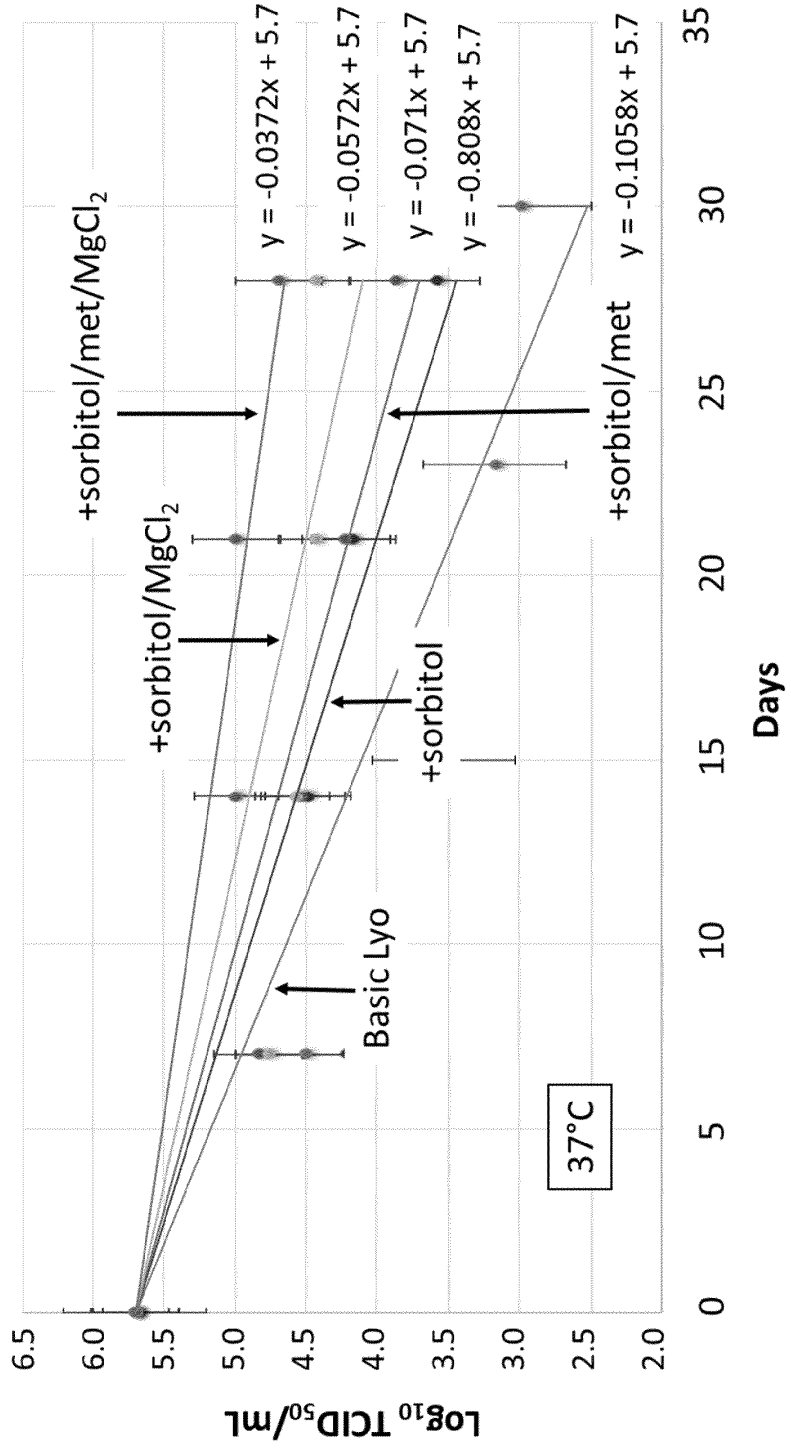

+sorbitol/met/MgCl2
+sorbitol/MgCl2
+sorbitol
Basic Lyo
+sorbitol/met
y = -0.0372x + 5.7
y = -0.0572x + 5.7
y = -0.071x + 5.7
y = -0.808x + 5.7
y = -0.1058x + 5.7
37°C
Log10 TCID50/mL
Days
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
5
10
15
20
25
30
35

Figure 2

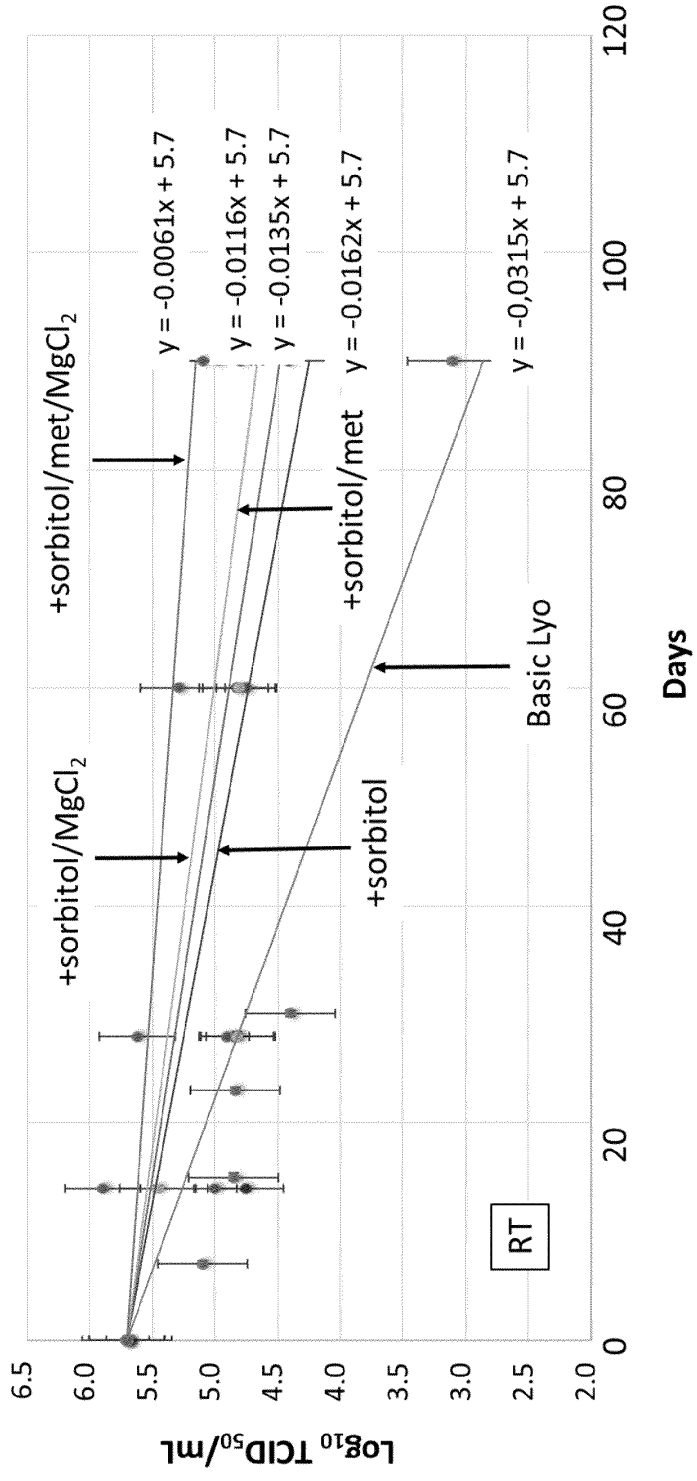

y = -0.0061x + 5.7
y = -0.0116x + 5.7
y = -0.0135x + 5.7
y = -0.0162x + 5.7
y = -0,0315x + 5.7
+sorbitol/met/MgCl2
+sorbitol/met
+sorbitol/MgCl2
+sorbitol
Basic Lyo
RT
Log10 TCID50/mL
Days
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
20
40
60
80
100
120

Figure 3

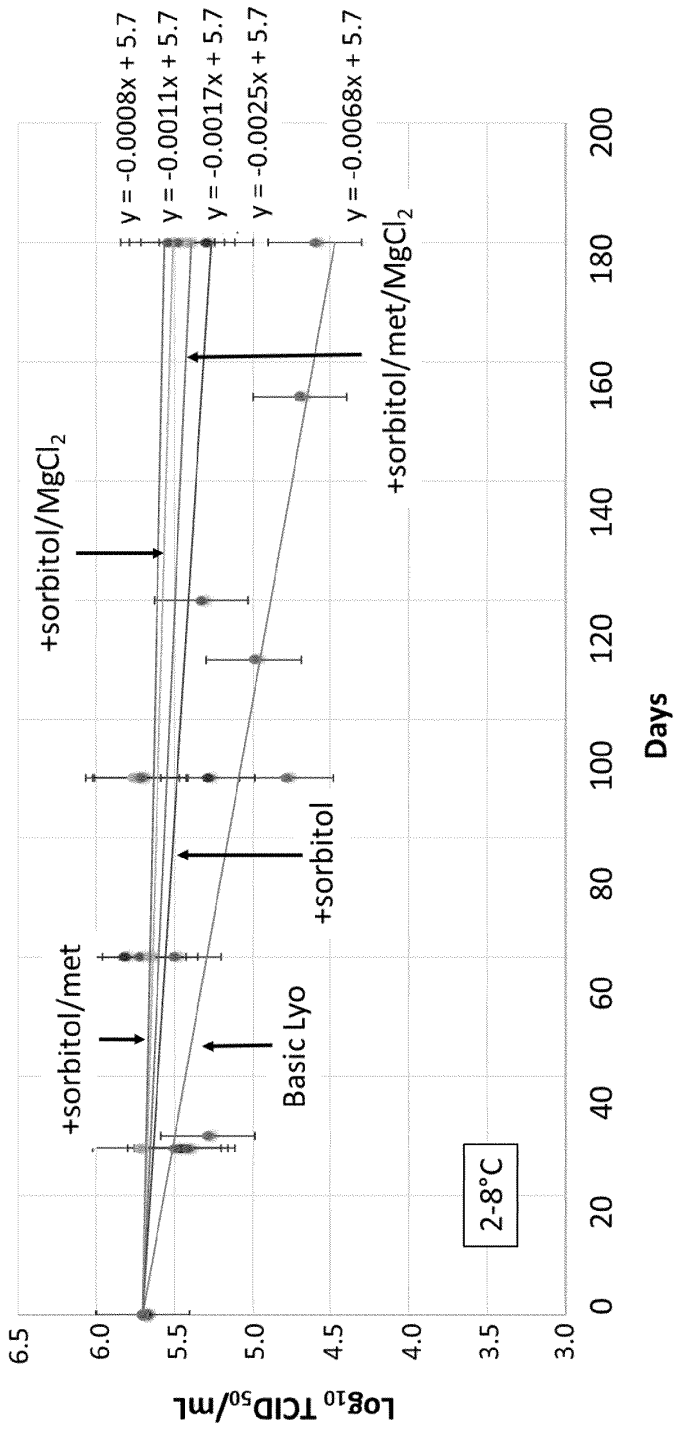

y = -0.0008x + 5.7
y = -0.0011x + 5.7
y = -0.0017x + 5.7
y = -0.0025x + 5.7
y = -0.0068x + 5.7
+sorbitol/MgCl2
+sorbitol/met/MgCl2
+sorbitol/met
Basic Lyo
+sorbitol
2-8°C
Log10 TCID50/mL
Days
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
0
20
40
60
80
100
120
140
160
180
200

Figure 4

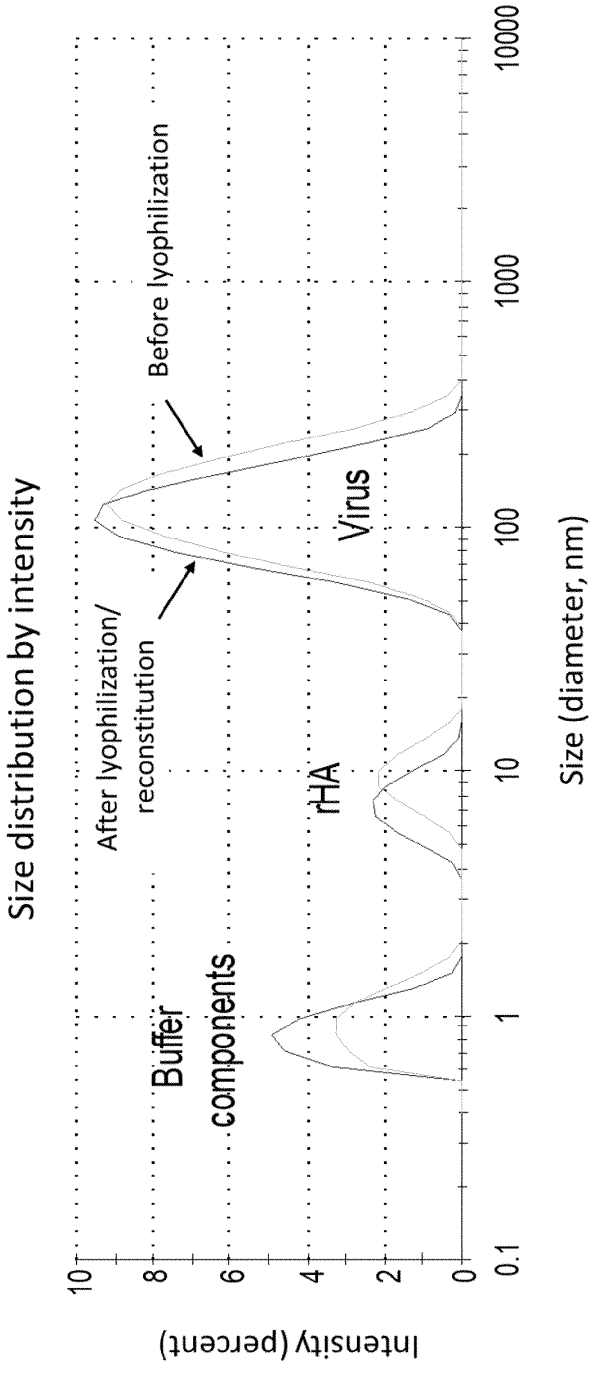
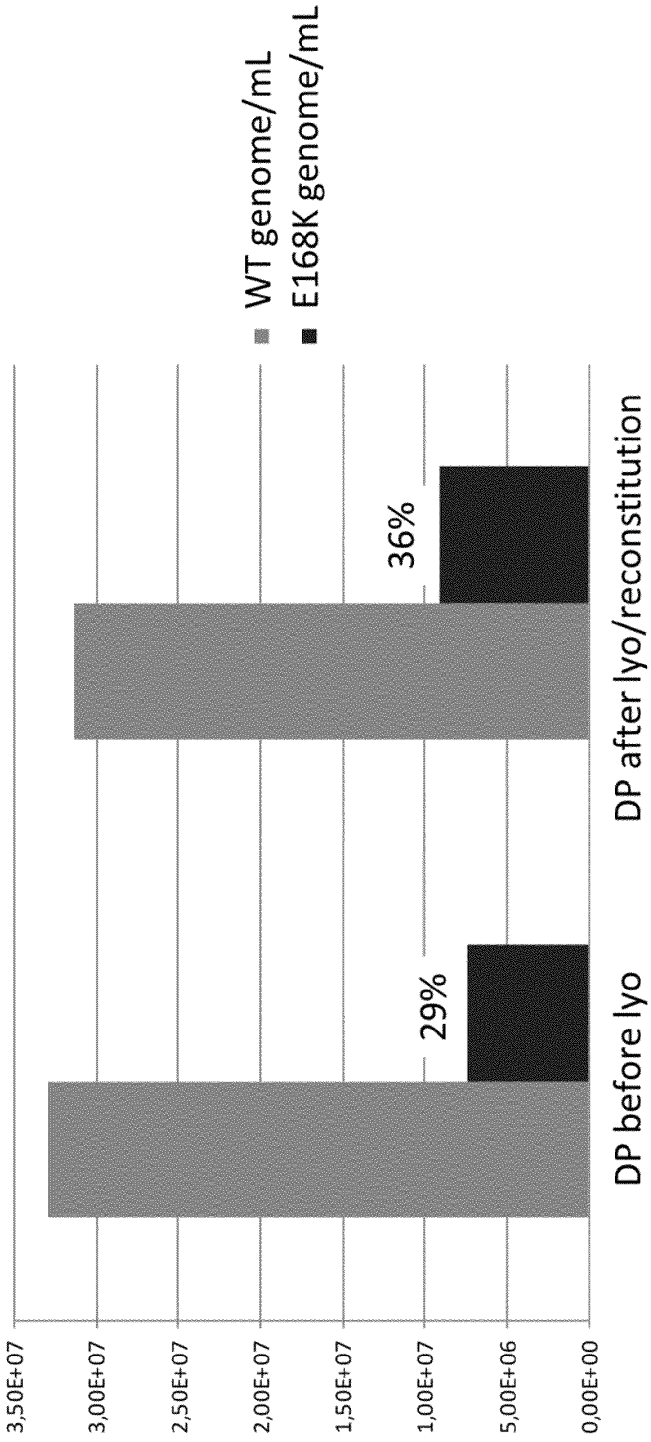

Size distribution by intensity
Before lyophilization
After lyophilization/
reconstitution
Buffer
components
rHA
Virus
Intensity (percent)
Size (diameter, nm)
0
2
4
6
8
10
0.1
1
10
100
1000
10000

**Figure 5**

**Figure 6**


WT genome/mL
E168K genome/mL
3,50E+07
3,00E+07
2,50E+07
2,00E+07
1,50E+07
1,00E+07
5,00E+06
0,00E+00
29%
36%
DP before lyo
DP after lyo/reconstitution

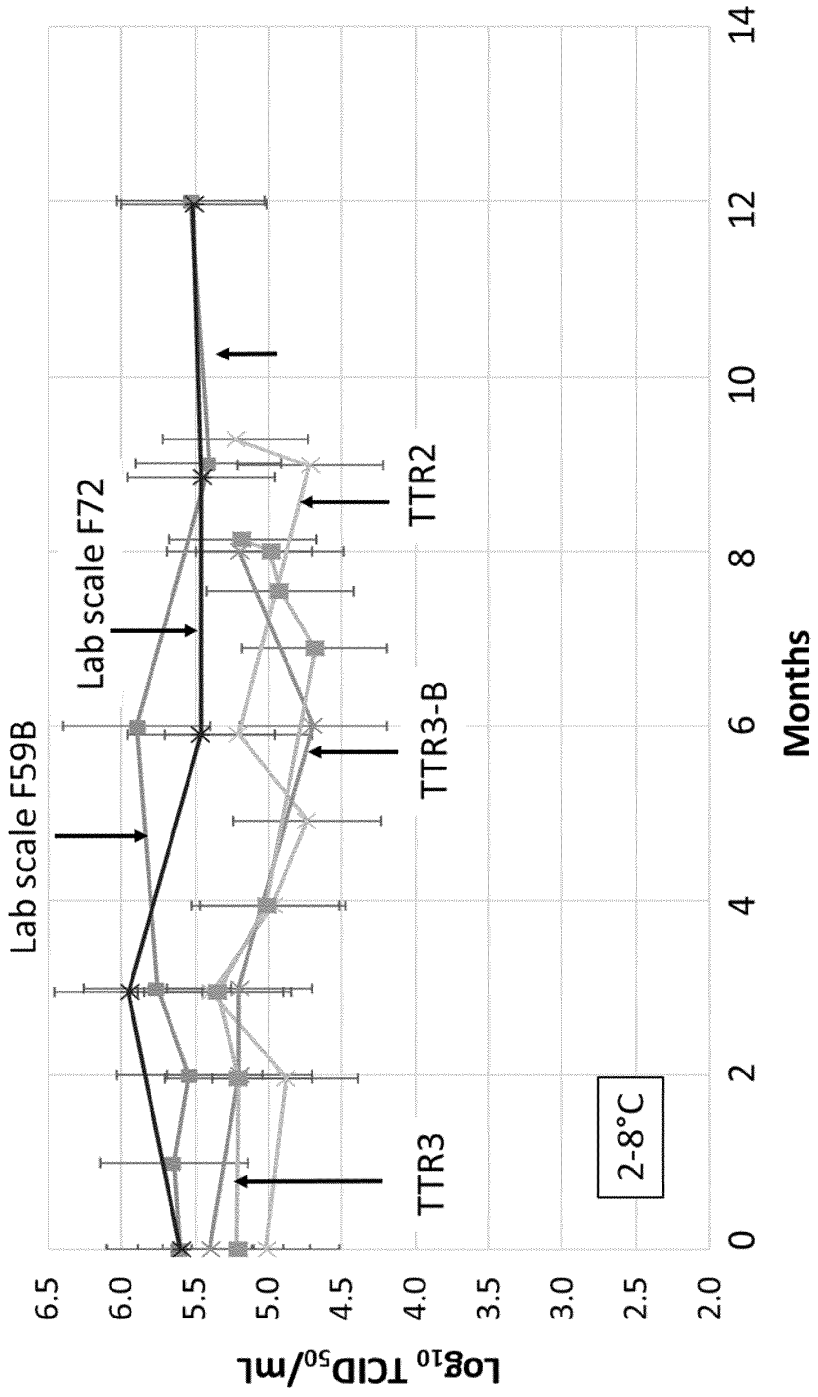

Lab scale F59B
Lab scale F72
TTR3
TTR3-B
TTR2
2-8°C
Log10 TCID50/mL
Months
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
2
4
6
8
10
12
14

Figure 7

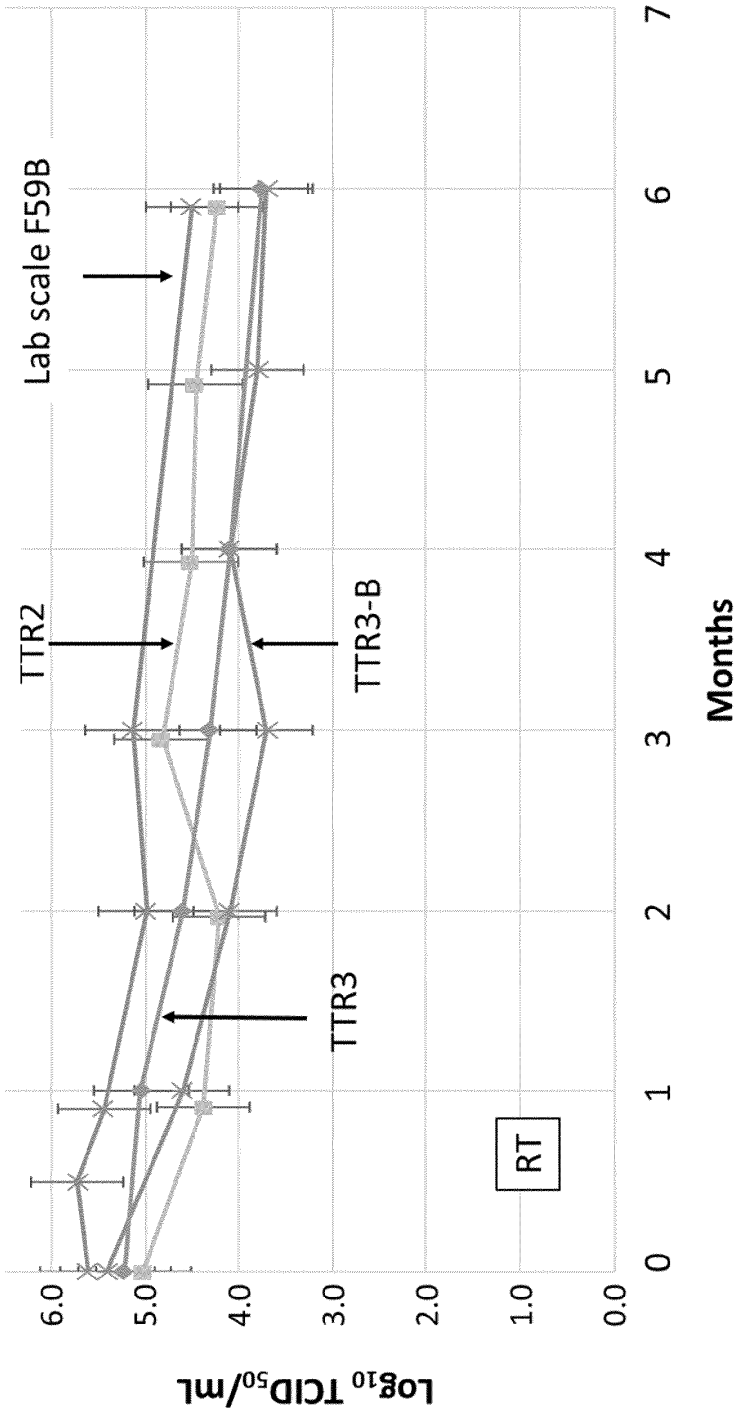

Lab scale F59B
TTR2
TTR3-B
TTR3
RT
Log10 TCID50/mL
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0
1
2
3
4
5
6
7
Months

Figure 8

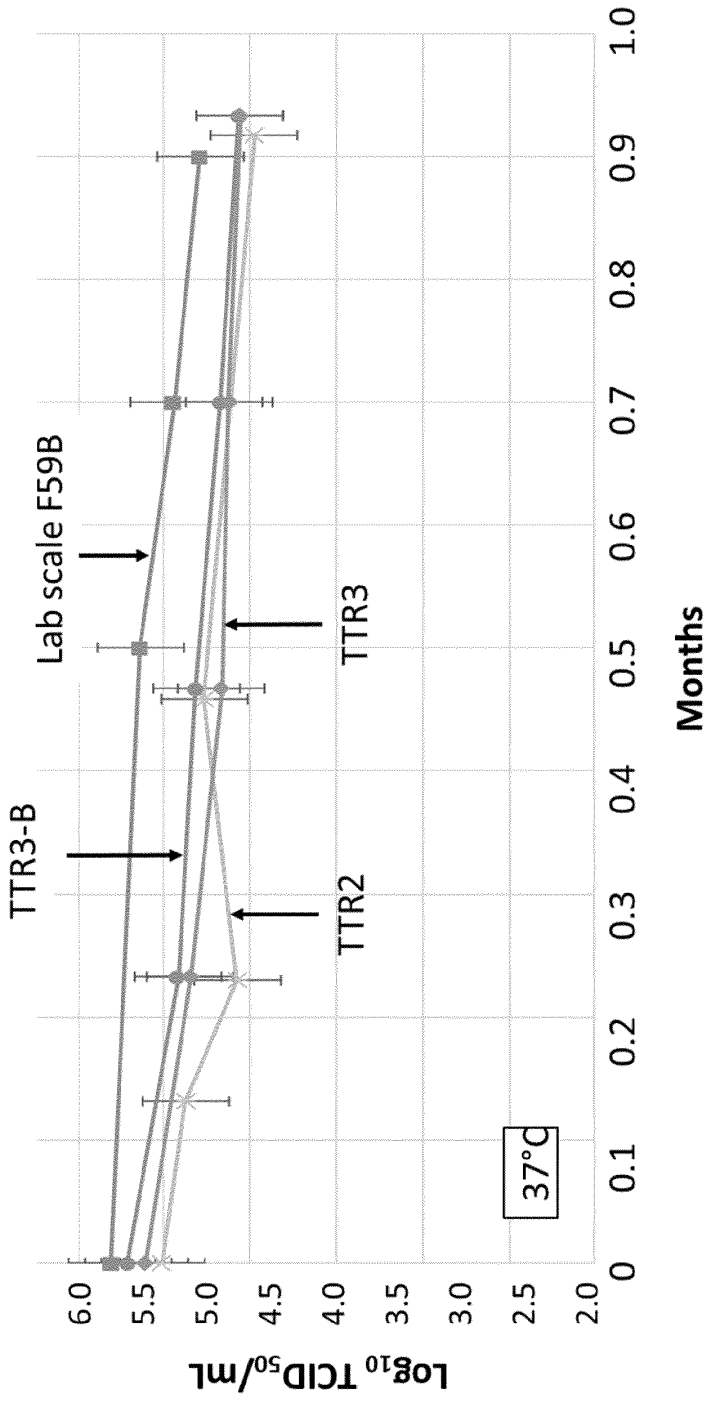

Log10 TCID50/mL
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Months
TTR3-B
Lab scale F59B
TTR2
TTR3
37°C

Figure 9

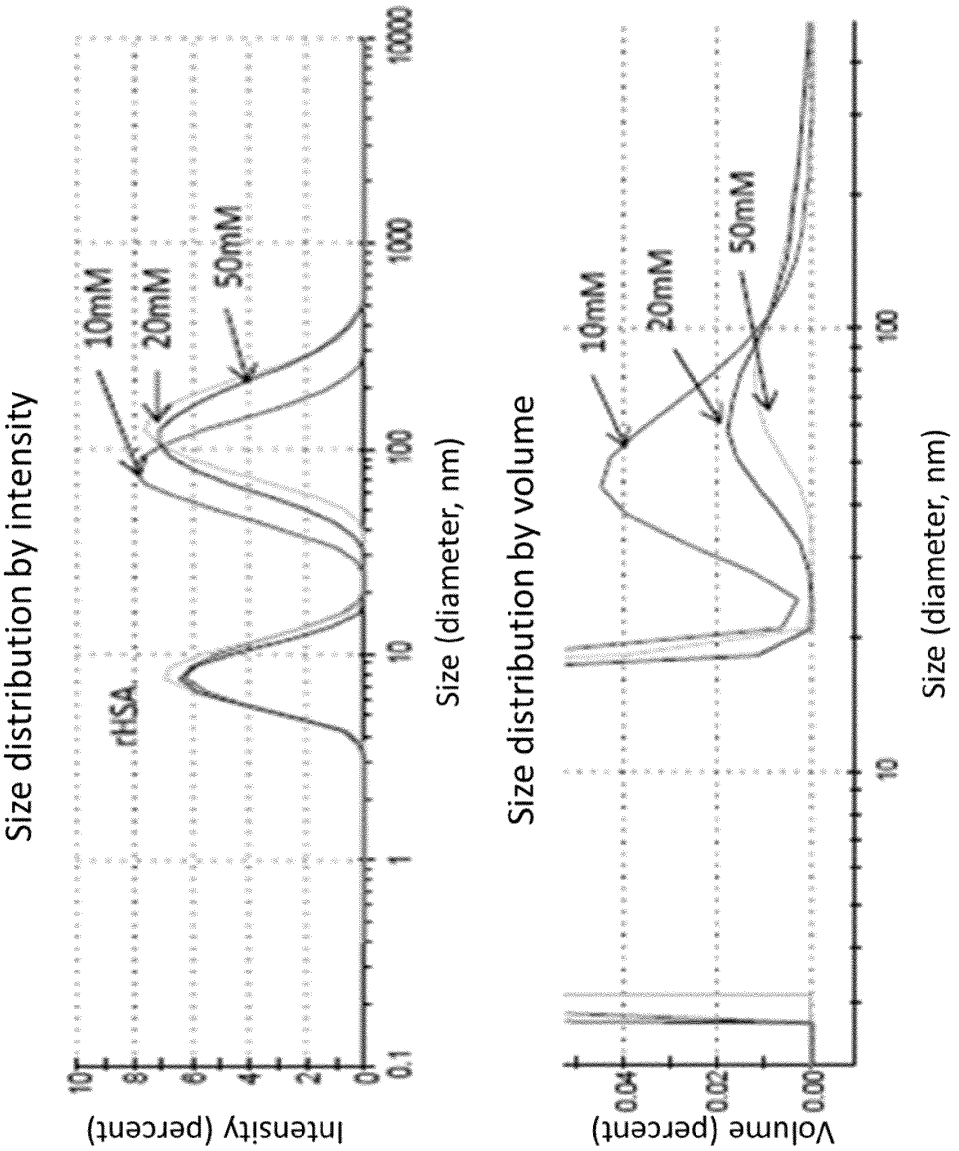

Size distribution by intensity
Intensity (percent)
Size (diameter, nm)
rHSA
10mM
20mM
50mM
Size distribution by volume
Volume (percent)
Size (diameter, nm)
10mM
20mM
50mM

Figure 10

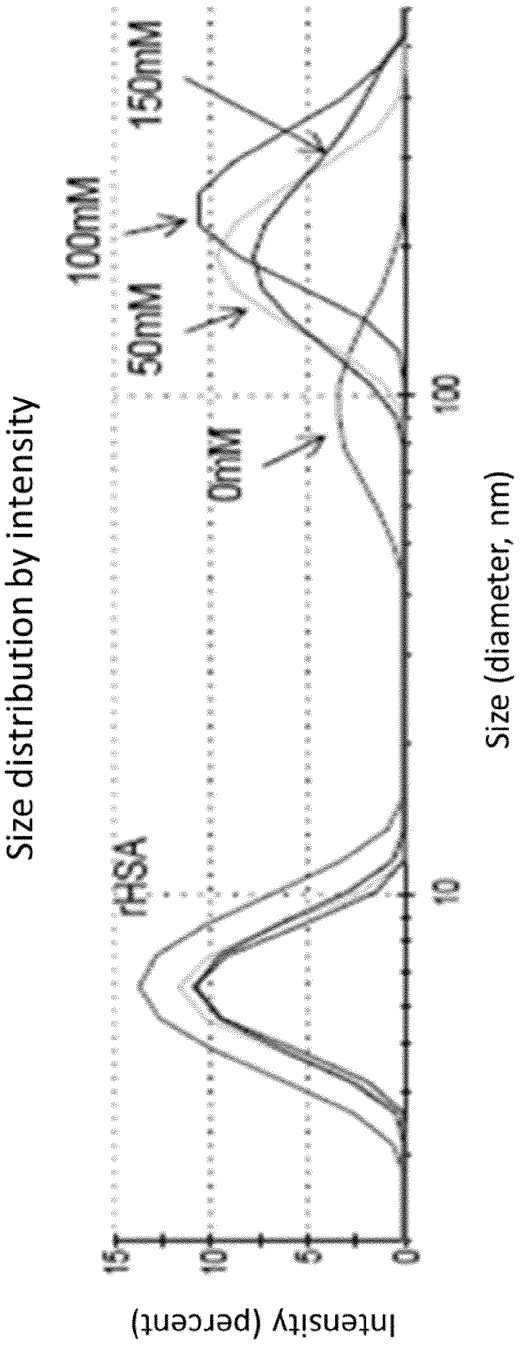

Size distribution by intensity
rHSA
0mM
50mM
100mM
150mM
Intensity (percent)
Size (diameter, nm)
15
10
5
0
10
100

Figure 11

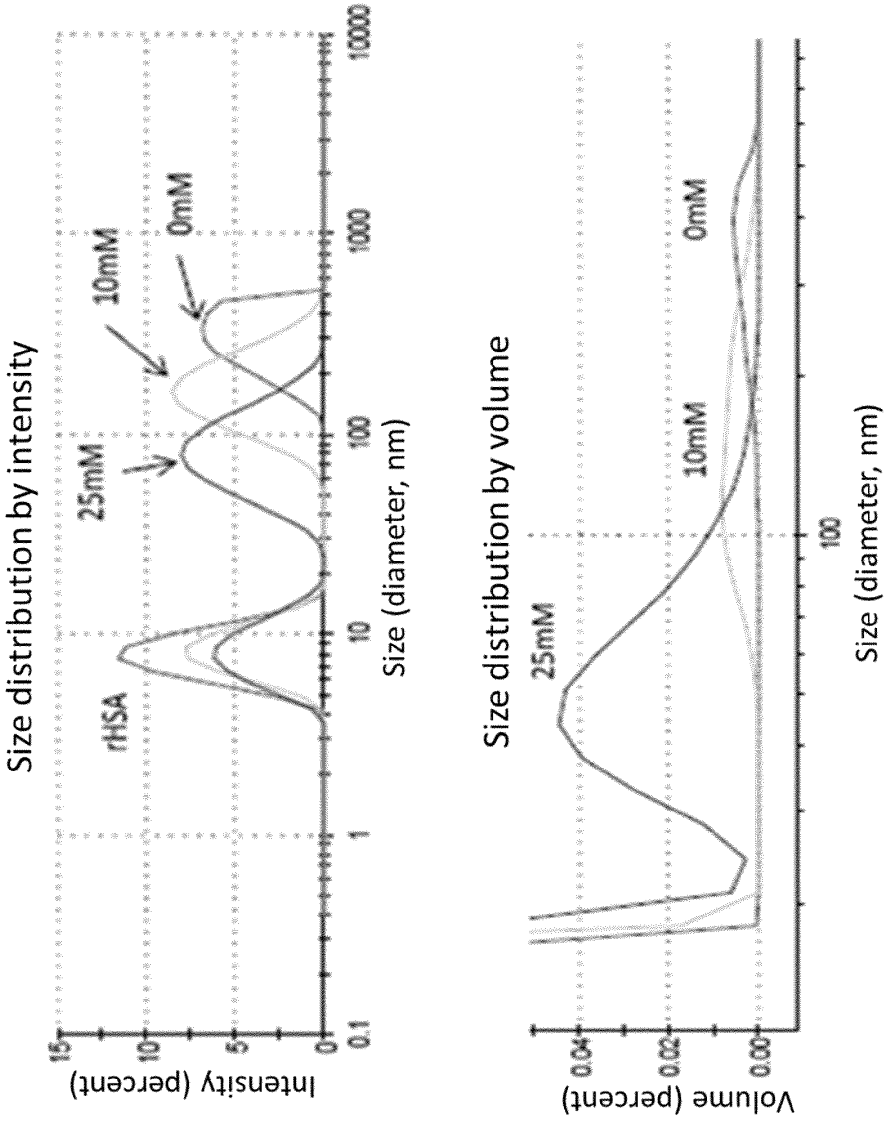

Size distribution by intensity
rHSA
25mM
10mM
0mM
Intensity (percent)
Size (diameter, nm)
Size distribution by volume
25mM
10mM
0mM
Volume (percent)
Size (diameter, nm)

**Figure 12**

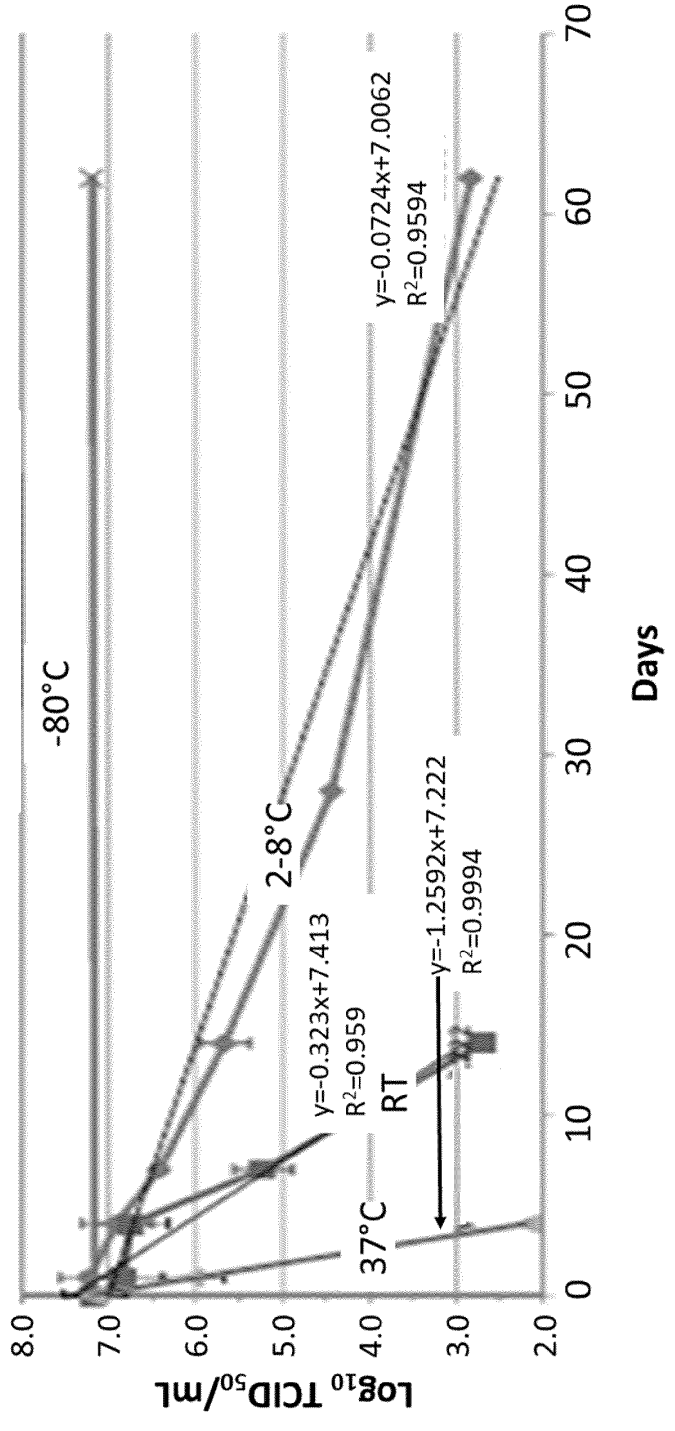

-80°C
2-8°C
RT
37°C
y=-0.323x+7.413
R²=0.959
y=-1.2592x+7.222
R²=0.9994
y=-0.0724x+7.0062
R²=0.9594
Log10 TCID50/mL
Days
8.0
7.0
6.0
5.0
4.0
3.0
2.0
0
10
20
30
40
50
60
70

Figure 13

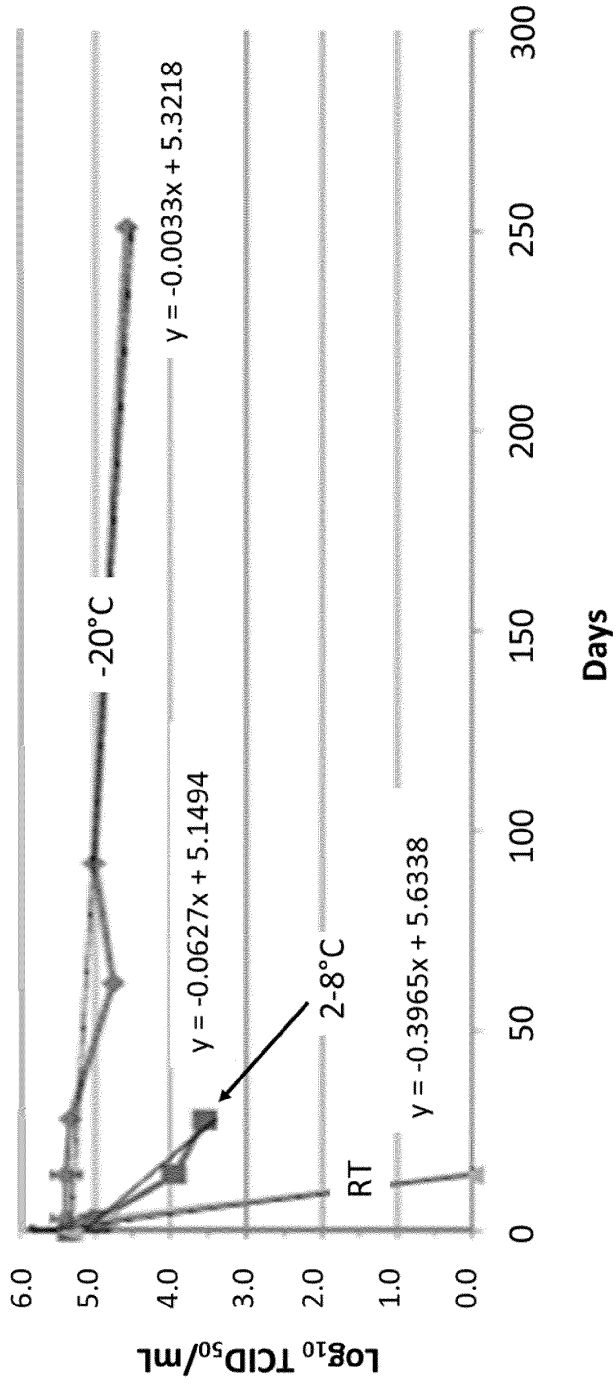

6.0
5.0
4.0
3.0
2.0
1.0
0.0
Log10 TCID50/mL
0
50
100
150
200
250
300
Days
-20°C
y = -0.0033x + 5.3218
y = -0.0627x + 5.1494
2-8°C
RT
y = -0.3965x + 5.6338

Figure 14

Figure 15 (A)

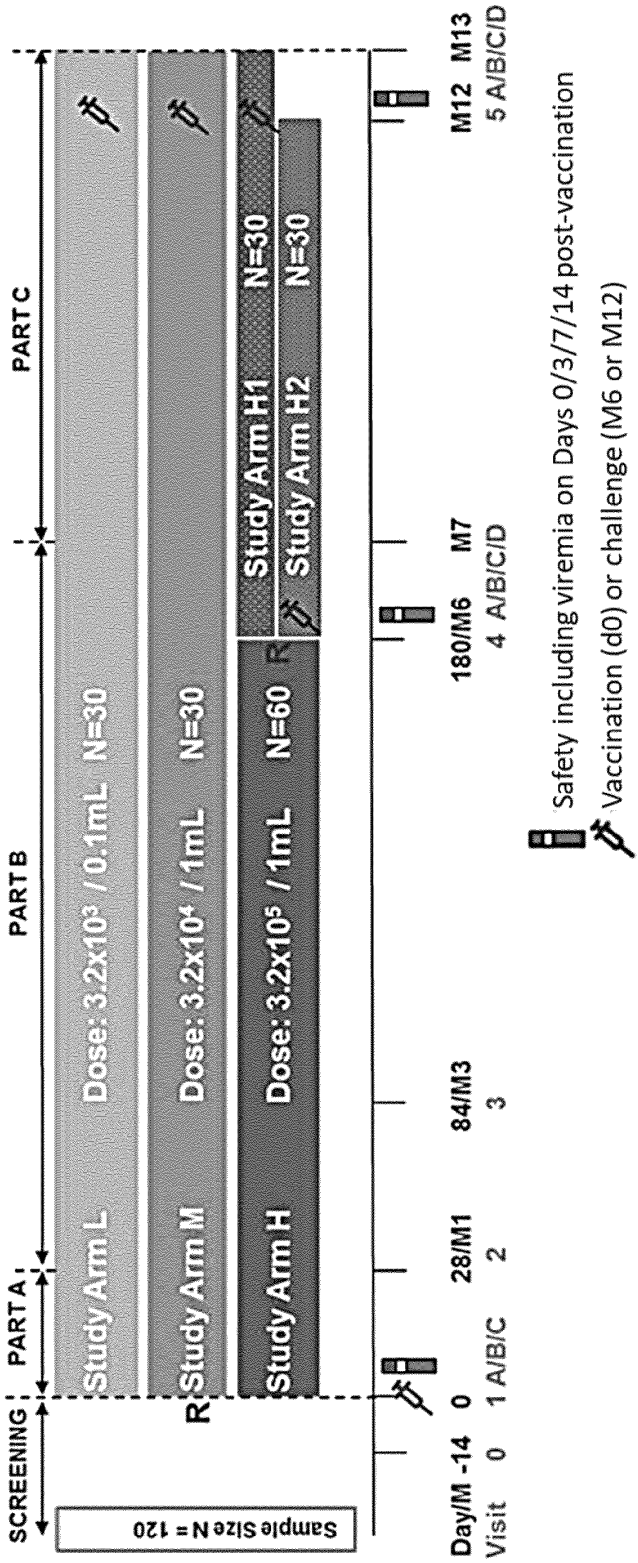
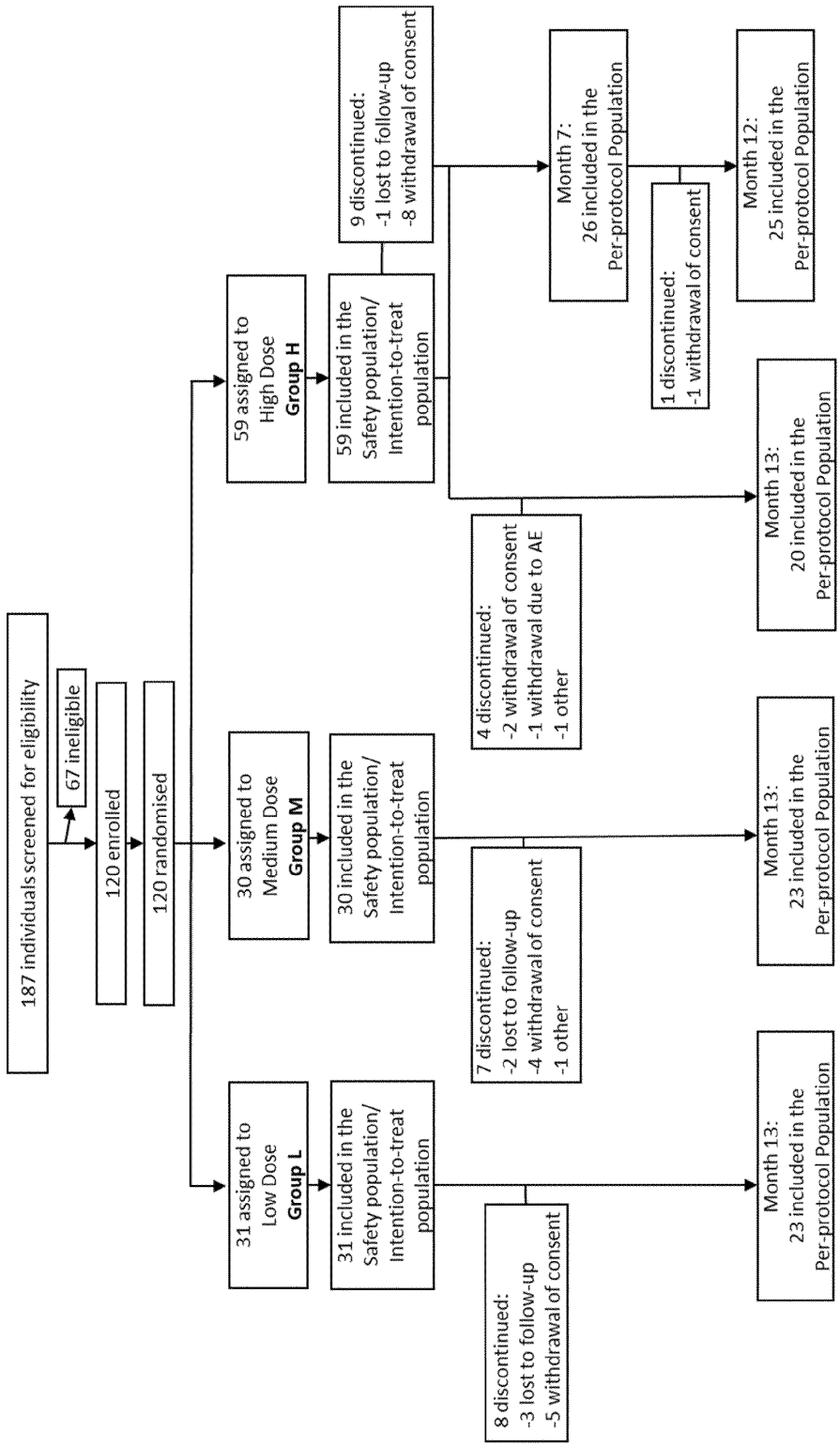

SCREENING
PART A
PART B
PART C
Sample Size N = 120
Study Arm L
Dose: 3.2x10³ / 0.1mL N=30
Study Arm M
Dose: 3.2x10⁴ / 1mL N=30
Study Arm H
Dose: 3.2x10⁵ / 1mL N=60
R
Study Arm H1 N=30
Study Arm H2 N=30
Day/M -14 0 28/M1 84/M3 180/M6 M7 M12 M13
Visit 0 1 A/B/C 2 3 4 A/B/C/D 5 A/B/C/D
Safety including viremia on Days 0/3/7/14 post-vaccination
Vaccination (d0) or challenge (M6 or M12)

Figure 15 (B)


187 individuals screened for eligibility
67 ineligible
120 enrolled
120 randomised
31 assigned to Low Dose Group L
30 assigned to Medium Dose Group M
59 assigned to High Dose Group H
31 included in the Safety population/ Intention-to-treat population
30 included in the Safety population/ Intention-to-treat population
59 included in the Safety population/ Intention-to-treat population
8 discontinued:
-3 lost to follow-up
-5 withdrawal of consent
7 discontinued:
-2 lost to follow-up
-4 withdrawal of consent
-1 other
4 discontinued:
-2 withdrawal of consent
-1 withdrawal due to AE
-1 other
9 discontinued:
-1 lost to follow-up
-8 withdrawal of consent
Month 13:
23 included in the Per-protocol Population
Month 13:
23 included in the Per-protocol Population
Month 13:
20 included in the Per-protocol Population
1 discontinued:
-1 withdrawal of consent
Month 7:
26 included in the Per-protocol Population
Month 12:
25 included in the Per-protocol Population

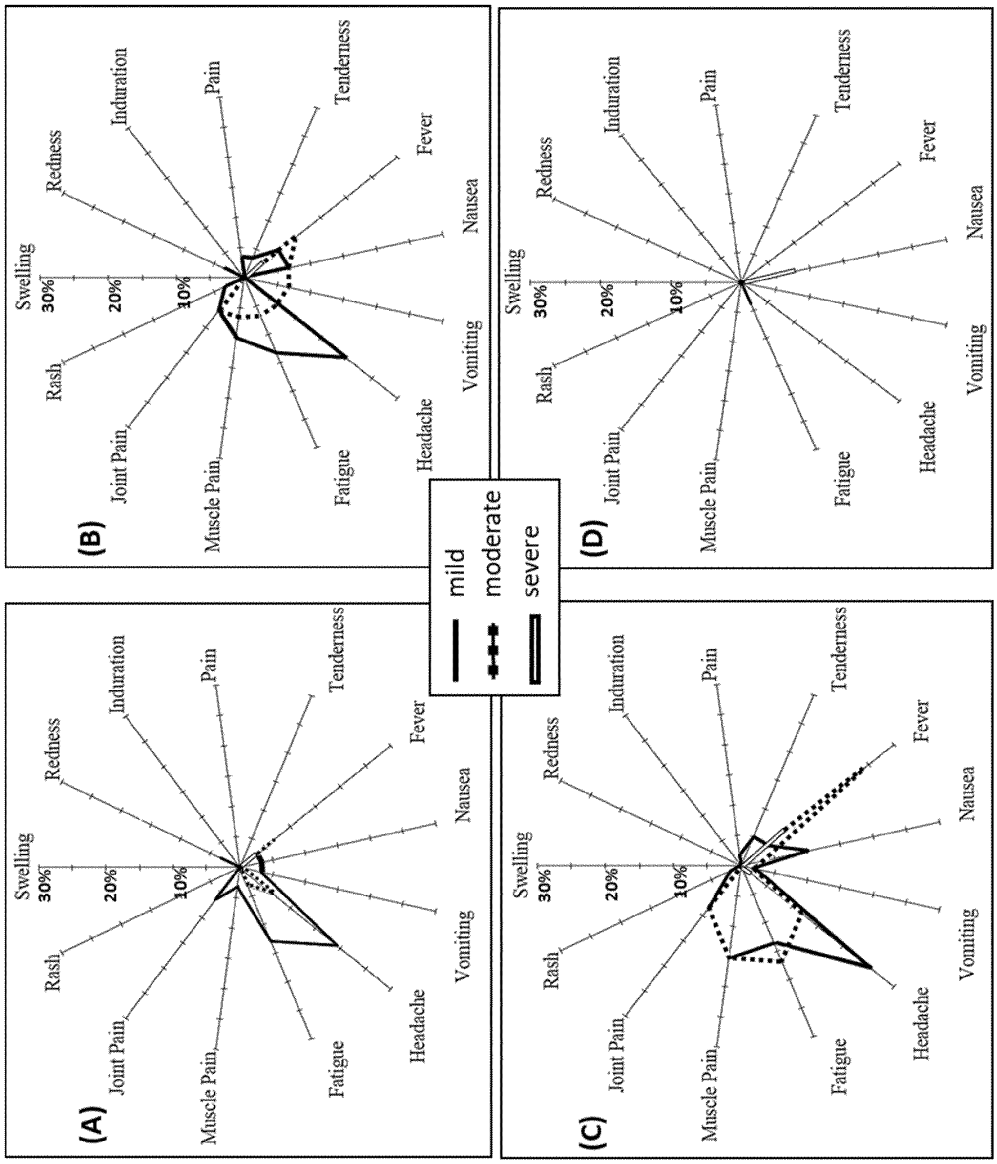

(A)
(B)
(C)
(D)
Swelling
Redness
Induration
Pain
Tenderness
Fever
Nausea
Vomiting
Headache
Fatigue
Muscle Pain
Joint Pain
Rash
30%
20%
10%
mild
moderate
severe

Figure 16

**Figure 16 (continued)**

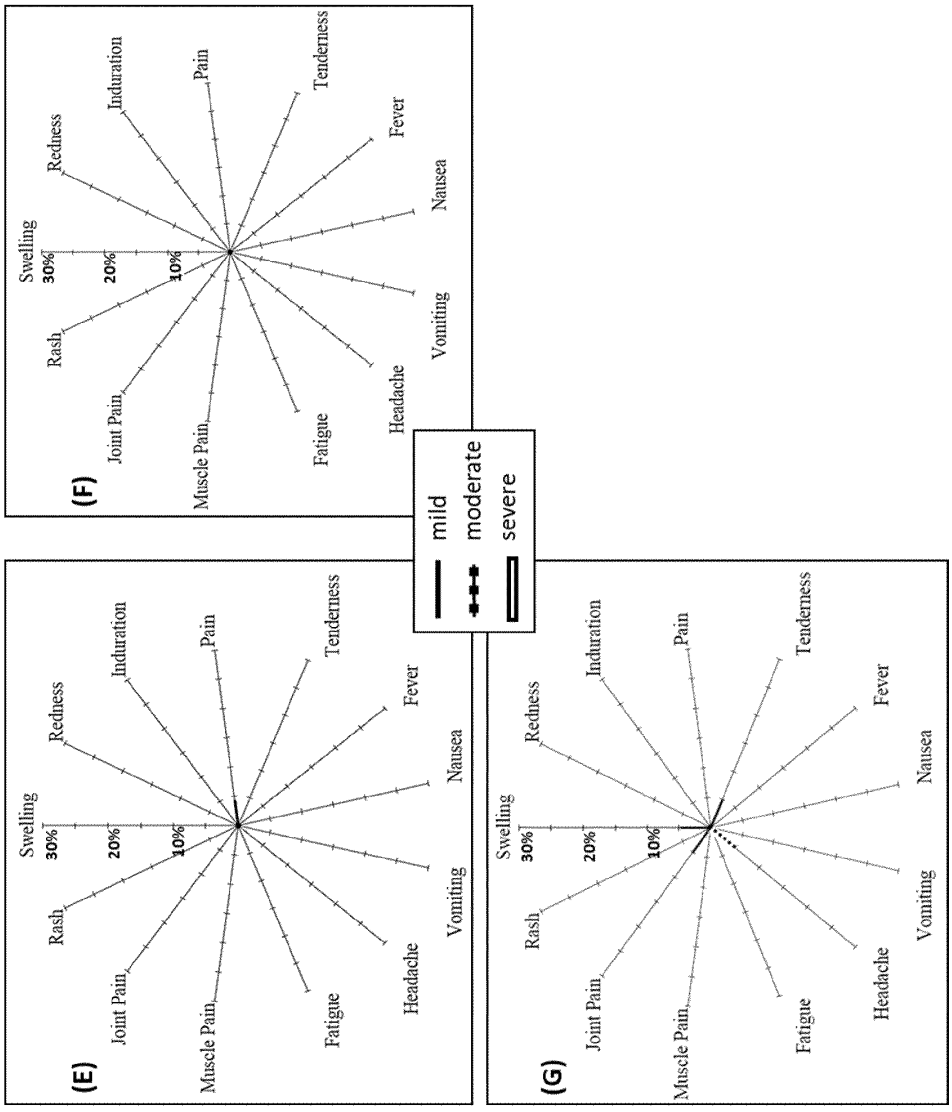


**Figure 17**

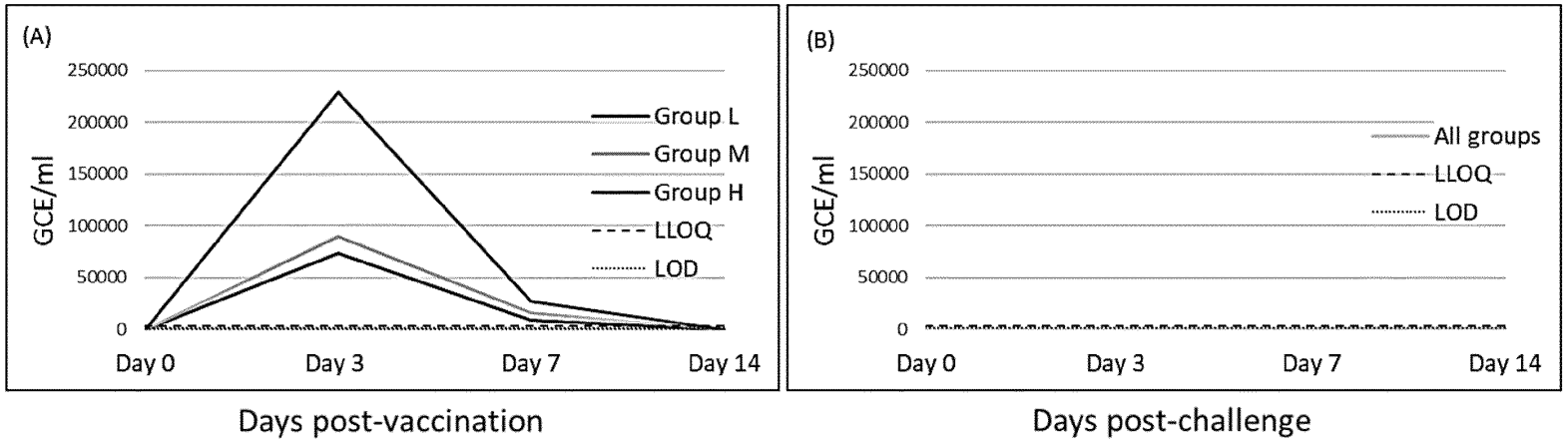



**Figure 18**

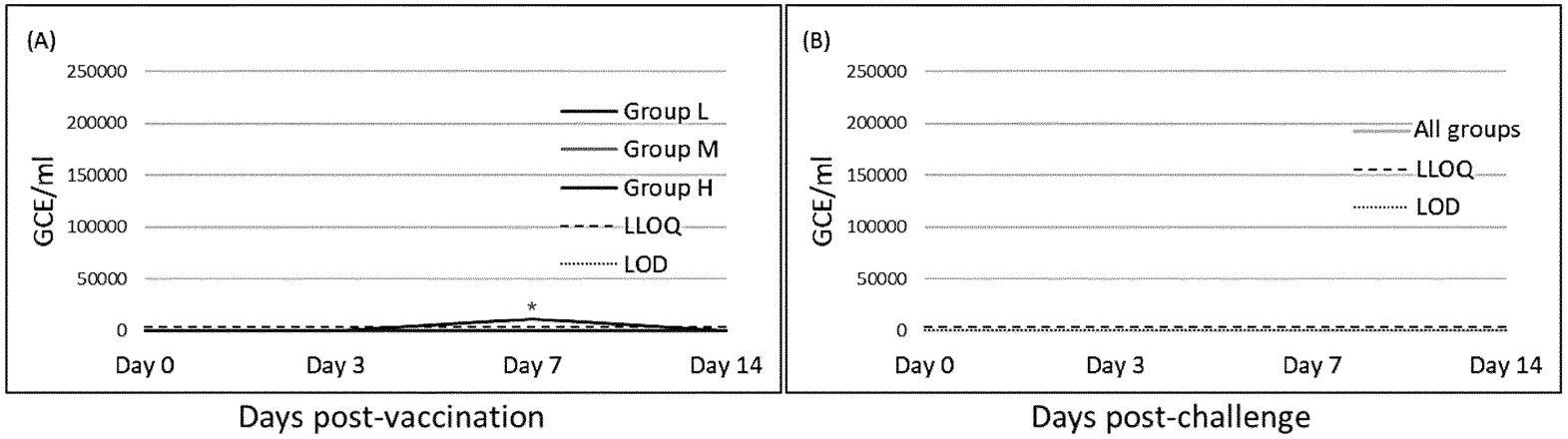


**Figure 19**

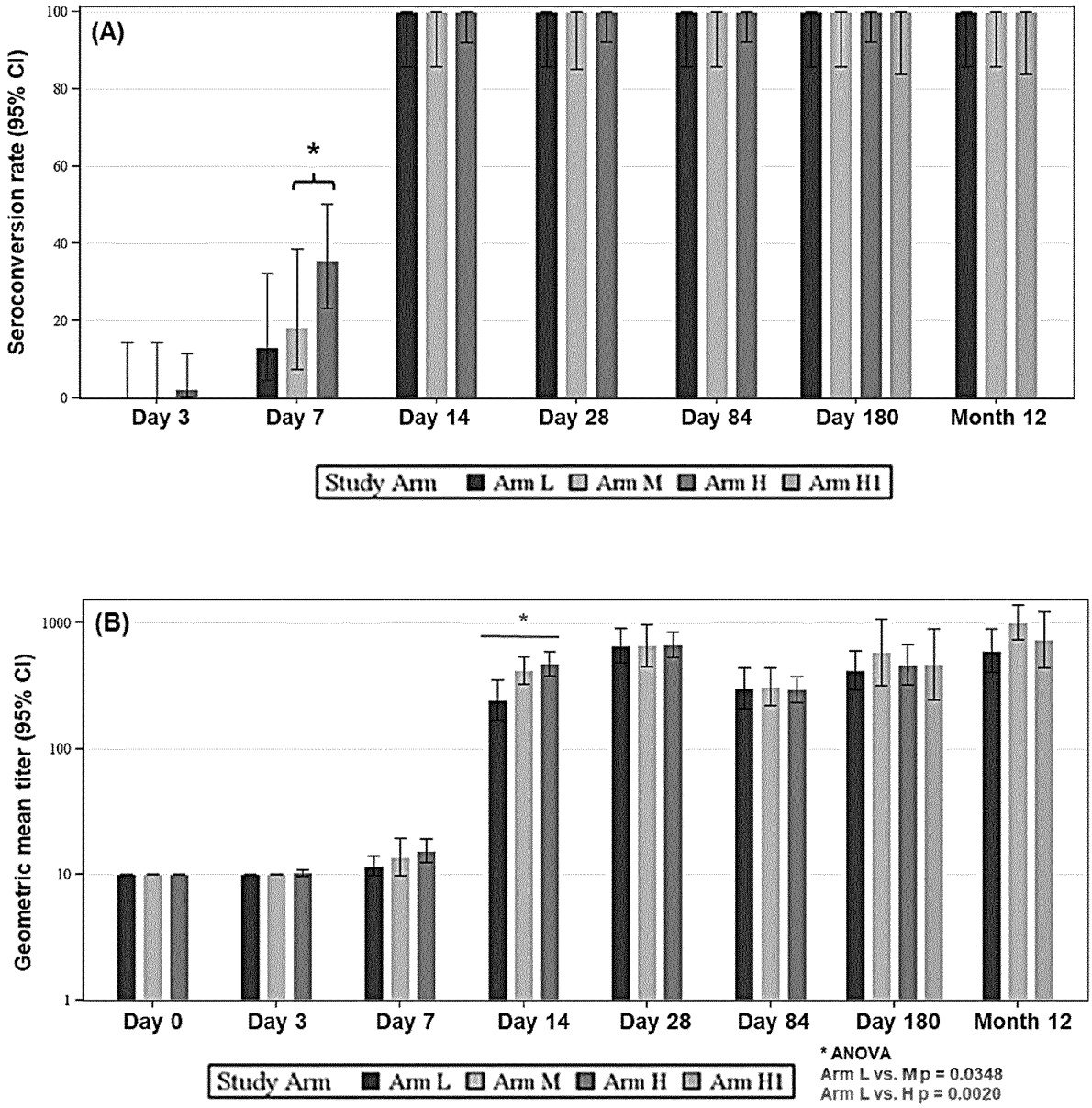

(A)
Seroconversion rate (95% CI)
100
80
60
40
20
0
*
Day 3
Day 7
Day 14
Day 28
Day 84
Day 180
Month 12
Study Arm
Arm L
Arm M
Arm H
Arm H1
(B)
Geometric mean titer (95% CI)
1000
100
10
1
*
Day 0
Day 3
Day 7
Day 14
Day 28
Day 84
Day 180
Month 12
Study Arm
Arm L
Arm M
Arm H
Arm H1
* ANOVA
Arm L vs. M p = 0.0348
Arm L vs. H p = 0.0020

**Figure 20**

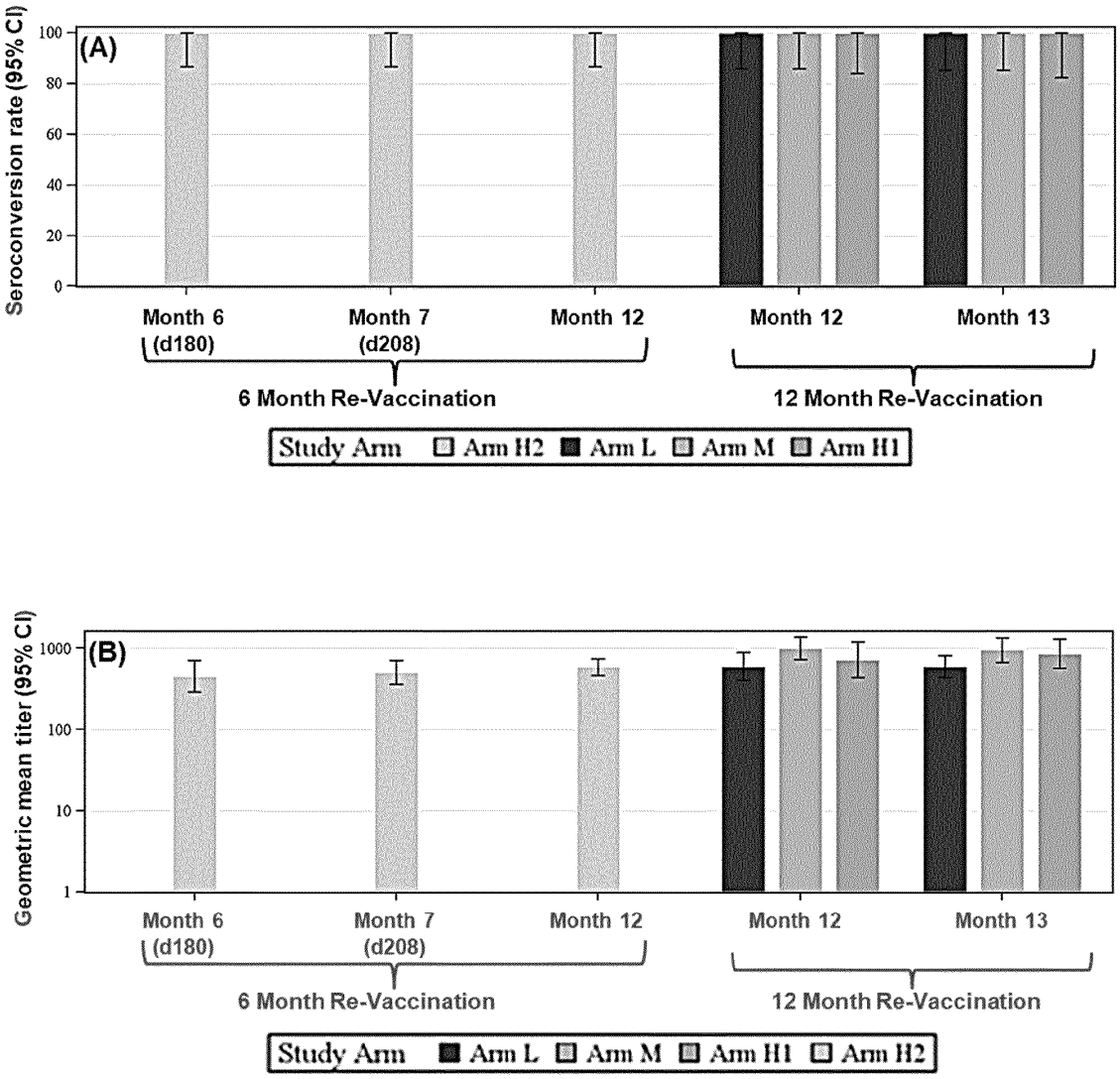
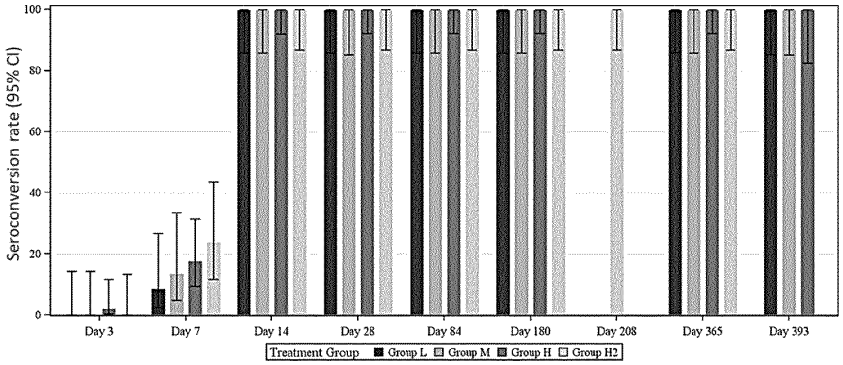
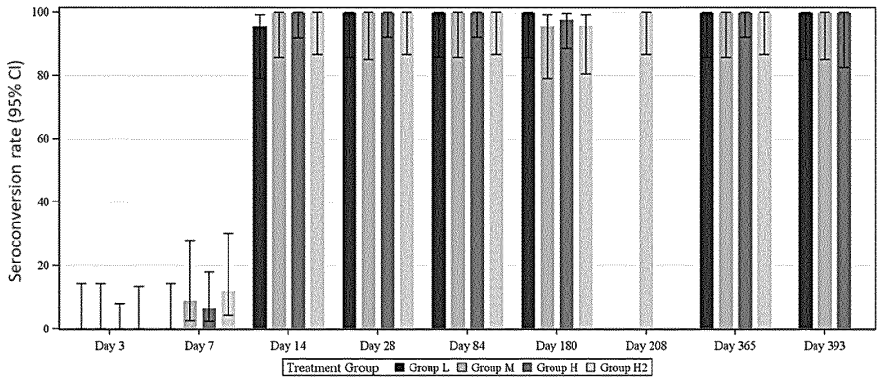

(A)
Seroconversion rate (95% CI)
100
80
60
40
20
0
Month 6 (d180)
Month 7 (d208)
Month 12
Month 12
Month 13
6 Month Re-Vaccination
12 Month Re-Vaccination
Study Arm
Arm H2
Arm L
Arm M
Arm H1
(B)
Geometric mean titer (95% CI)
1000
100
10
1
Month 6 (d180)
Month 7 (d208)
Month 12
Month 12
Month 13
6 Month Re-Vaccination
12 Month Re-Vaccination
Study Arm
Arm L
Arm M
Arm H1
Arm H2

**Figure 21**

**(A) 1:40**




**(B) 1:80**




**(C) 1:160**

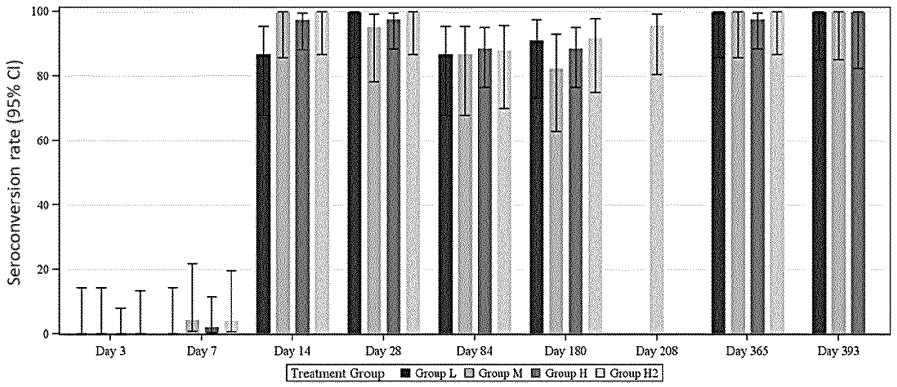
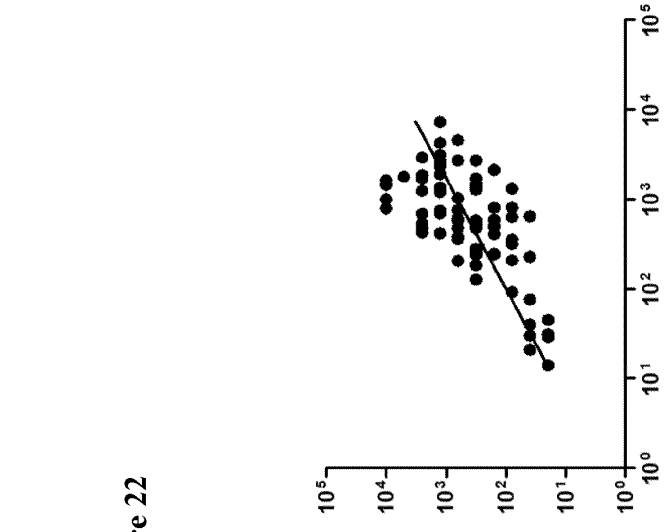


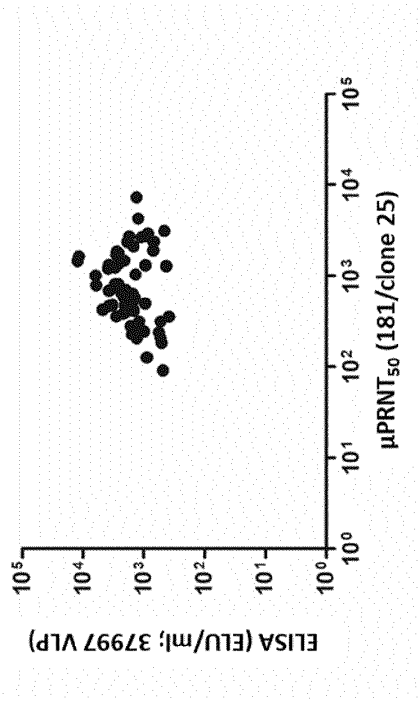
**Figure 22**

**(A)**




| | |
|---|---|
| Number of XY Pairs | 75 |
| Pearson r | 0.6724 |
| 95% confidence interval | 0.5256 to 0.7803 |
| P value (two-tailed) | < 0.0001 |
| P value summary | **** |
| Is the correlation significant? (alpha=0.05) | Yes |
| R square | 0.4521 |

**(B)**




| | |
|---|---|
| Number of XY Pairs | 65 |
| Pearson r | 0.1991 |
| 95% confidence interval | -0.04710 to 0.4226 |
| P value (two-tailed) | 0.1117 |
| P value summary | ns |
| Is the correlation significant? (alpha=0.05) | No |
| R square | 0.03966 |

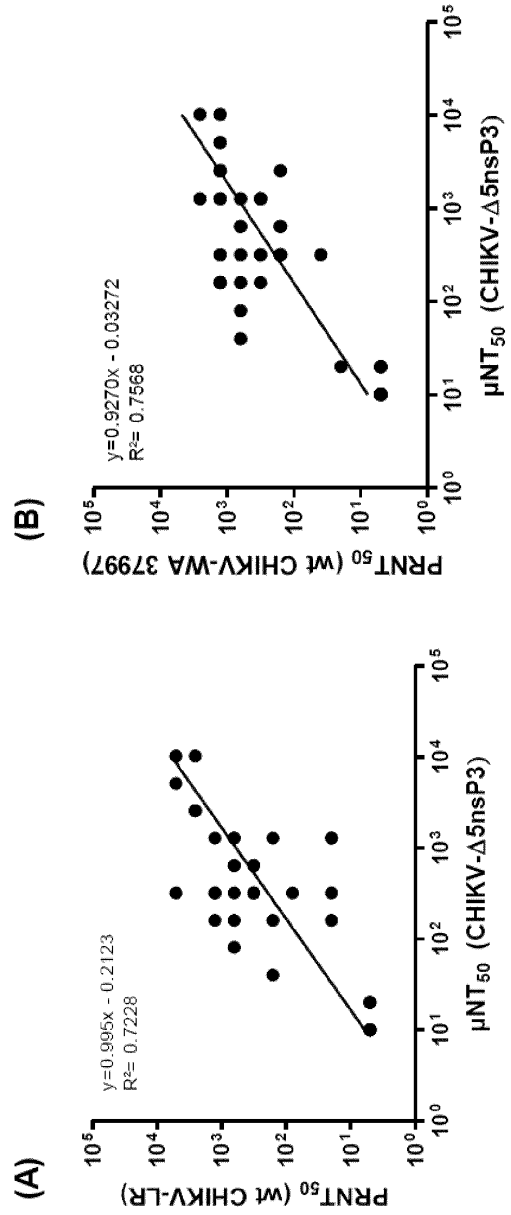

(A)
PRNT50 (wt CHIKV-LR)
y=0.995x - 0.2123
R²= 0.7228
µNT50 (CHIKV-Δ5nsP3)
(B)
PRNT50 (wt CHIKV-WA 37997)
y=0.9270x - 0.03272
R²= 0.7568
µNT50 (CHIKV-Δ5nsP3)

Figure 23

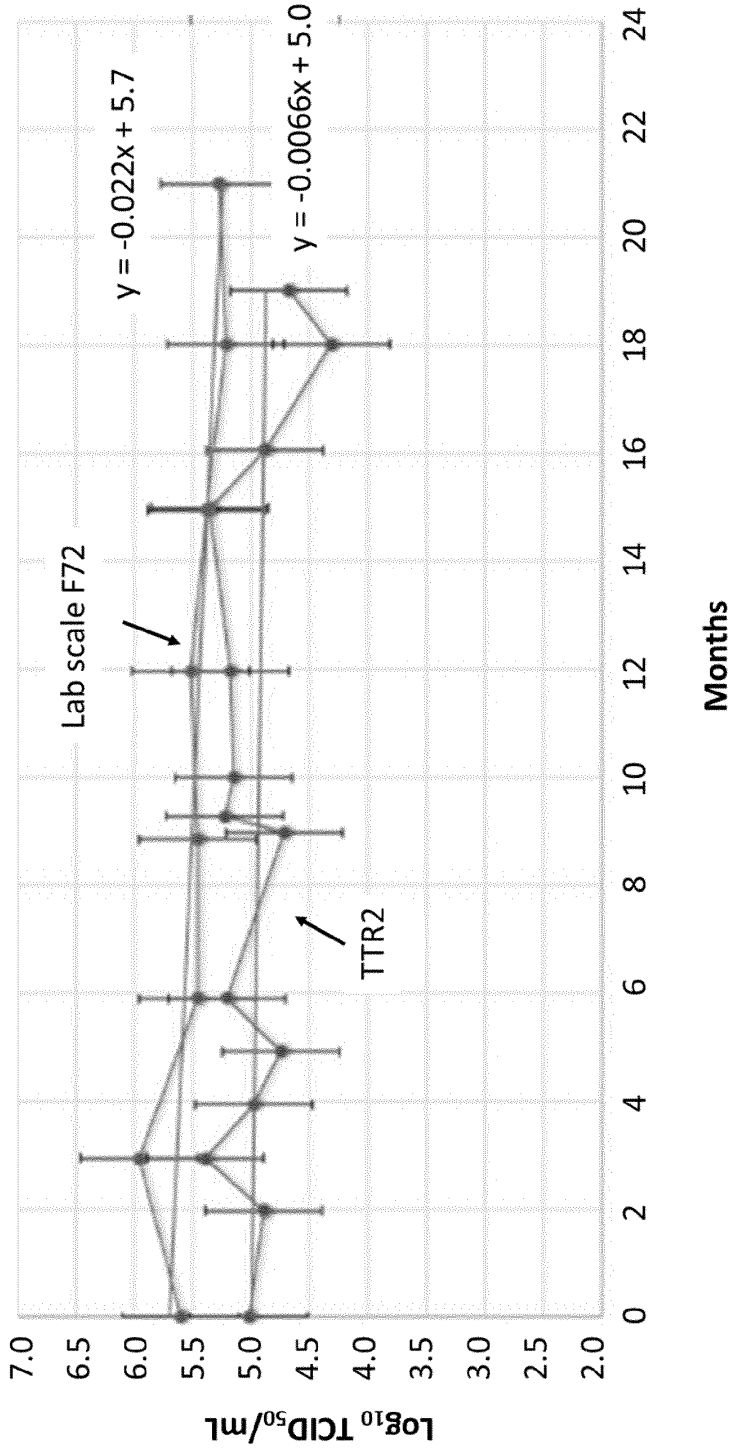
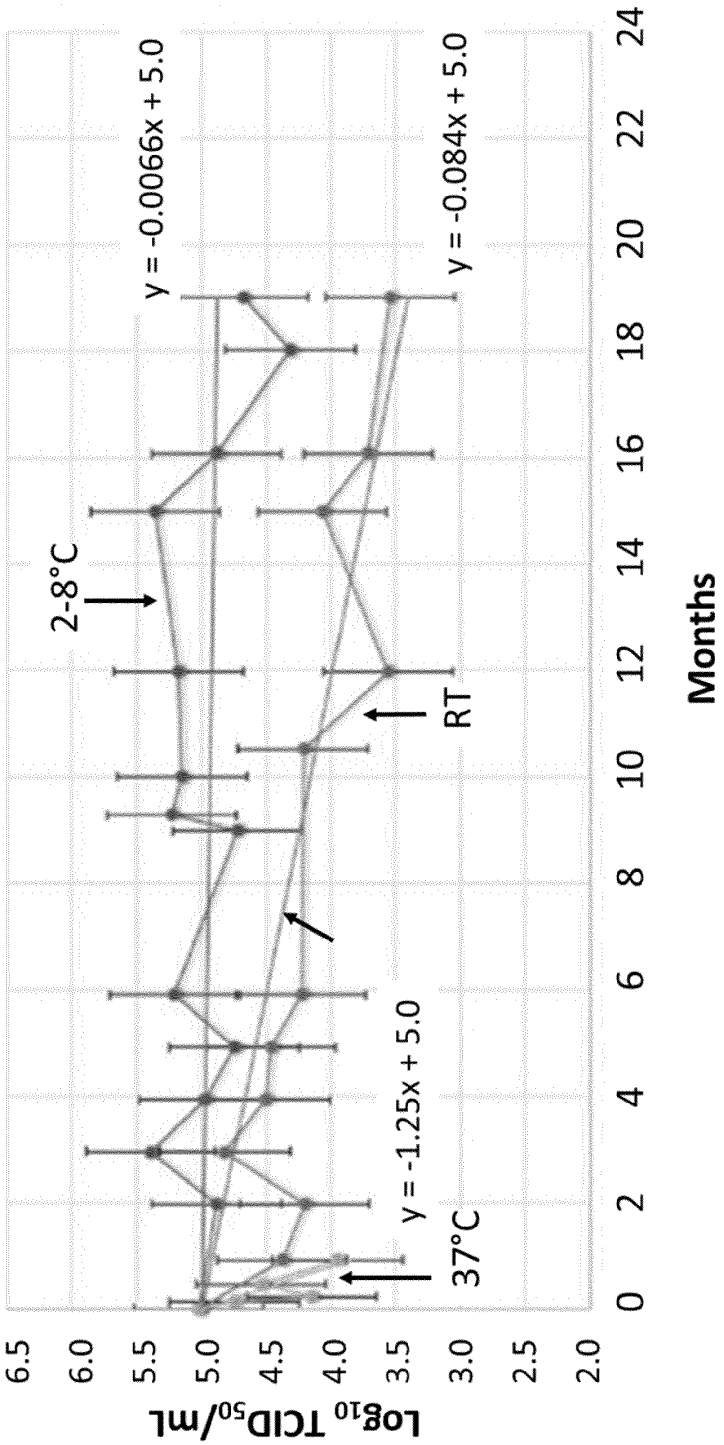

y = -0.022x + 5.7
y = -0.0066x + 5.0
Lab scale F72
TTR2
Log10 TCID50/mL
Months
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
2
4
6
8
10
12
14
16
18
20
22
24

Figure 24

Figure 25


y = -0.0066x + 5.0
y = -0.084x + 5.0
y = -1.25x + 5.0
2-8°C
RT
37°C
Log10 TCID50/mL
Months
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
0
2
4
6
8
10
12
14
16
18
20
22
24