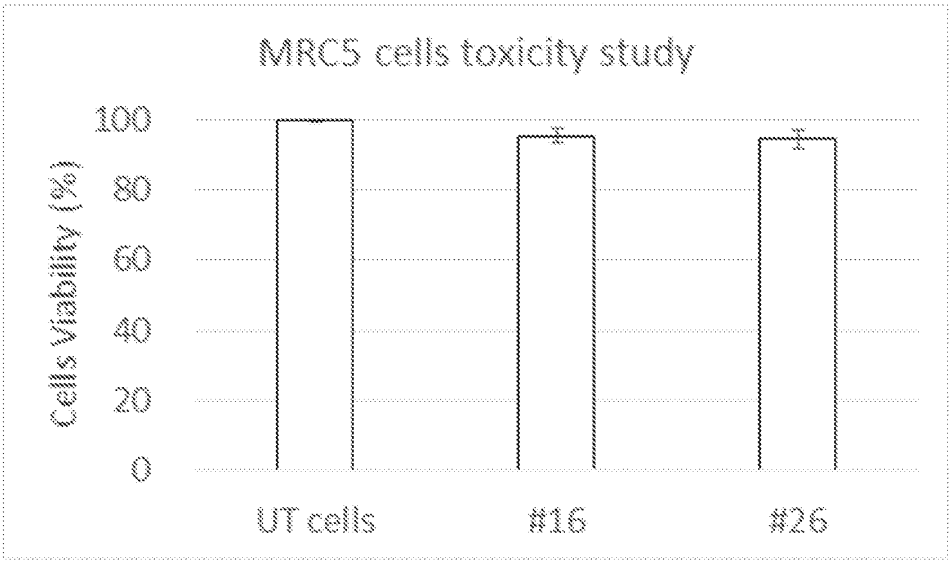

MRC5 cells toxicity study
Cells Viability (%)
100
80
60
40
20
0
UT cells
#16
#26

FIG. 1A

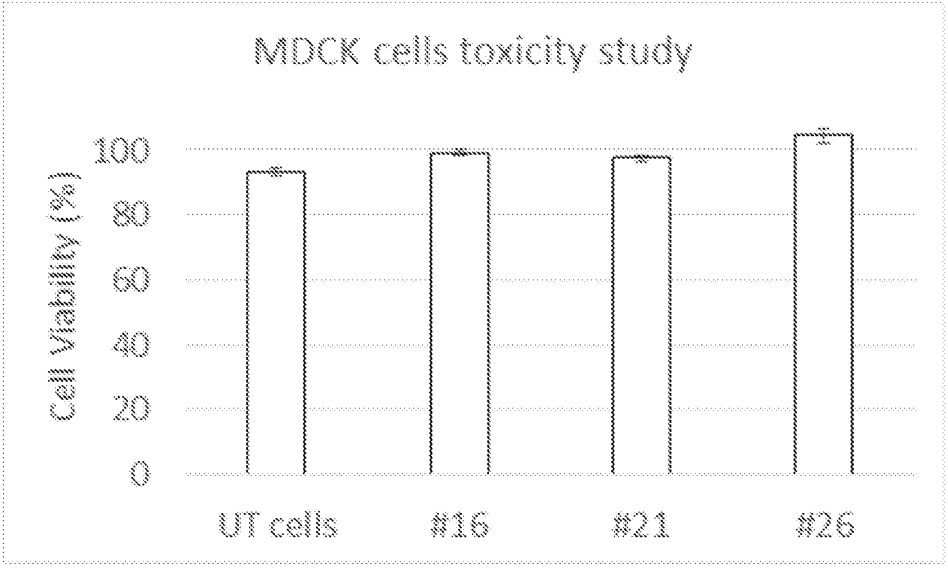

MDCK cells toxicity study
Cell Viability (%)
100
80
60
40
20
0
UT cells
#16
#21
#26

FIG. 1B

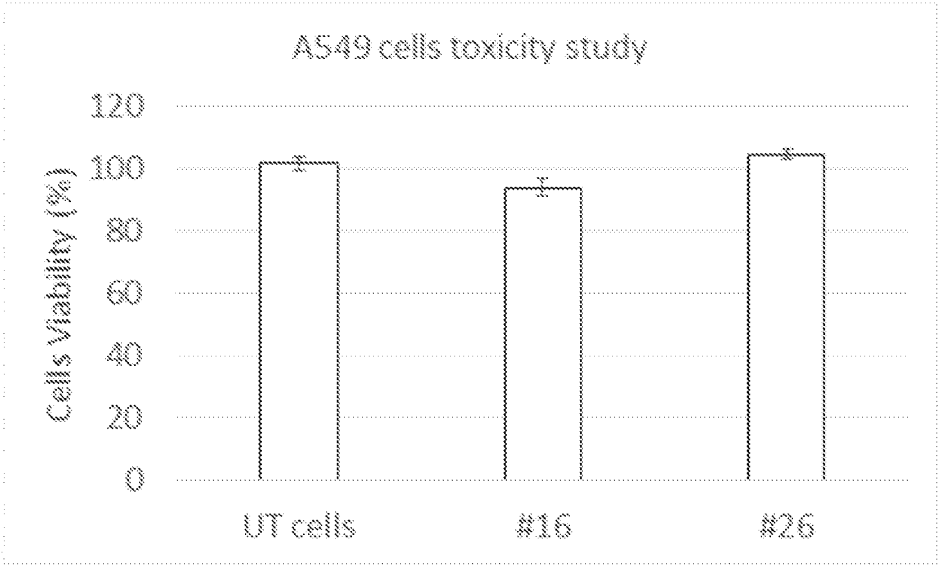

A549 cells toxicity study
Cells Viability (%)
120
100
80
60
40
20
0
UT cells
#16
#26

FIG. 1C

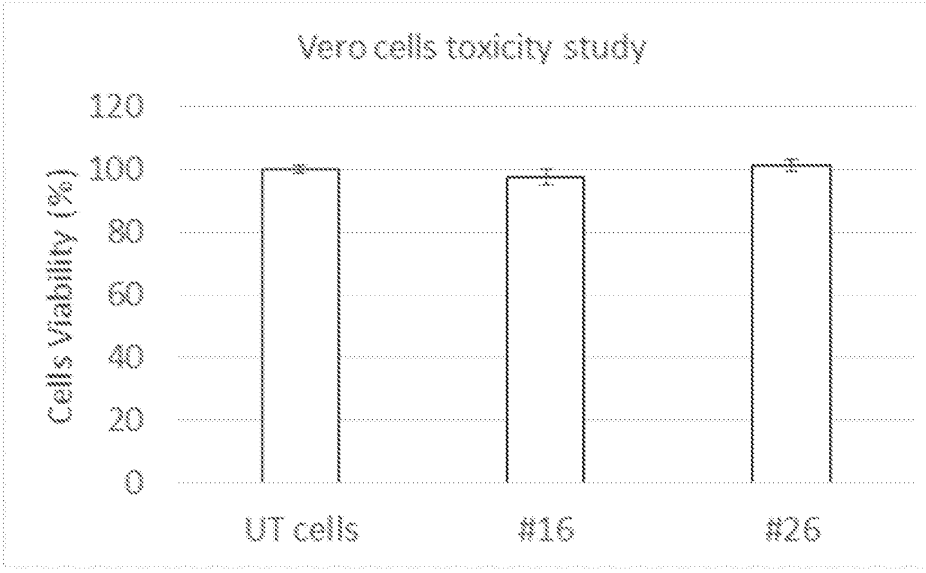

Vero cells toxicity study
Cells Viability (%)
120
100
80
60
40
20
0
UT cells
#16
#26

FIG. 1D

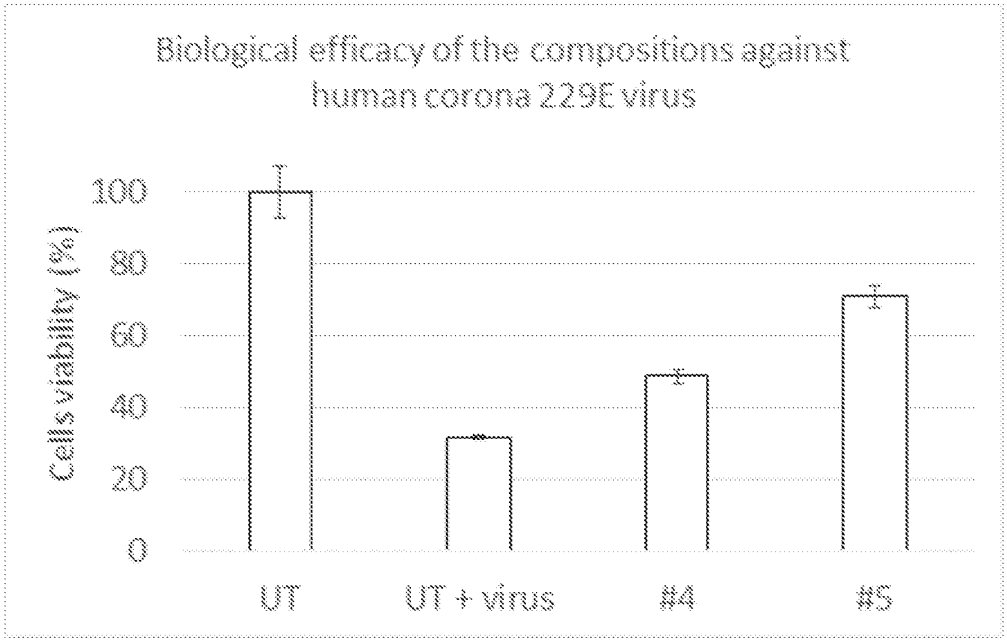

Biological efficacy of the compositions against human corona 229E virus
Cells viability (%)
100
80
60
40
20
0
UT
UT + virus
#4
#5

FIG. 2A

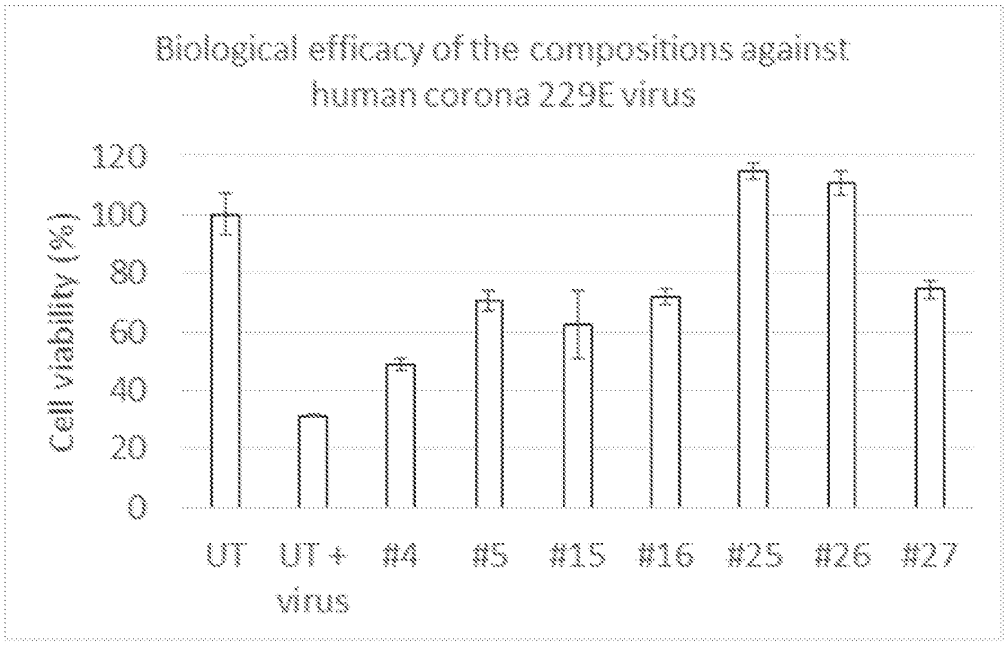

Biological efficacy of the compositions against human corona 229E virus
Cell viability (%)
120
100
80
60
40
20
0
UT
UT + virus
#4
#5
#15
#16
#25
#26
#27

FIG. 2B

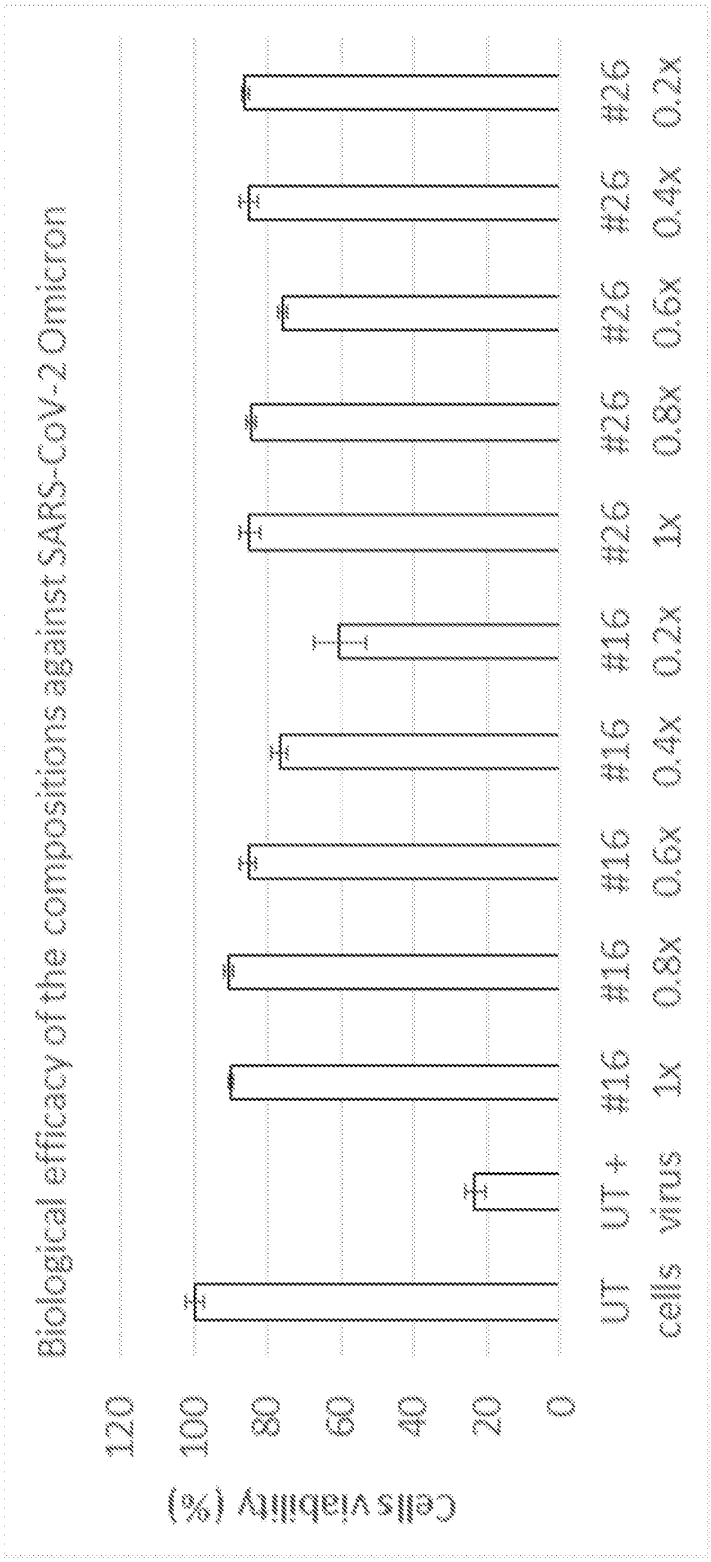

Biological efficacy of the compositions against SARS-CoV-2 Omicron
cells viability (%)
120
100
80
60
40
20
0
cells
UT
virus
UT +
#16
1x
#16
0.8x
#16
0.6x
#16
0.4x
#16
0.2x
#26
1x
#26
0.8x
#26
0.6x
#26
0.4x
#26
0.2x

FIG. 3

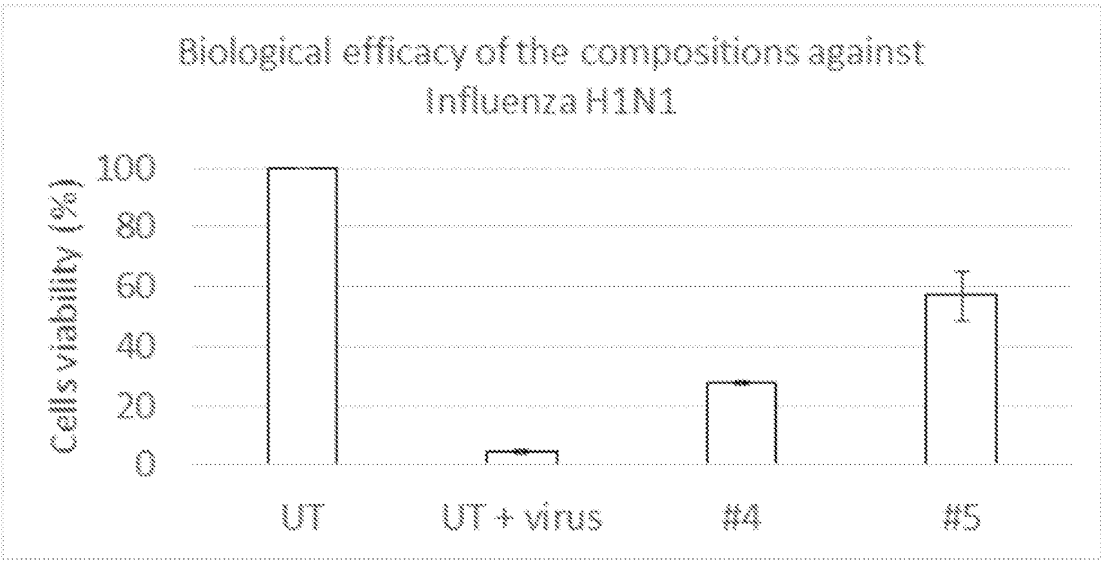

Biological efficacy of the compositions against Influenza H1N1
Cells viability (%)
100
80
60
40
20
0
UT
UT + virus
#4
#5

FIG. 4A

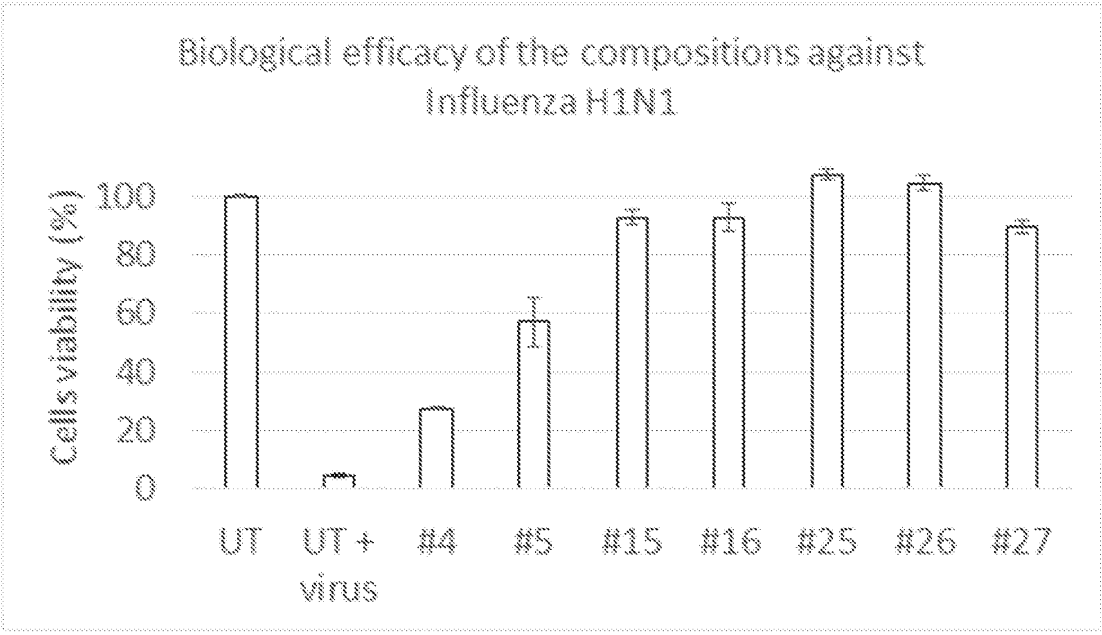

Biological efficacy of the compositions against Influenza H1N1
Cells viability (%)
100
80
60
40
20
0
UT
UT + virus
#4
#5
#15
#16
#25
#26
#27

FIG. 4B

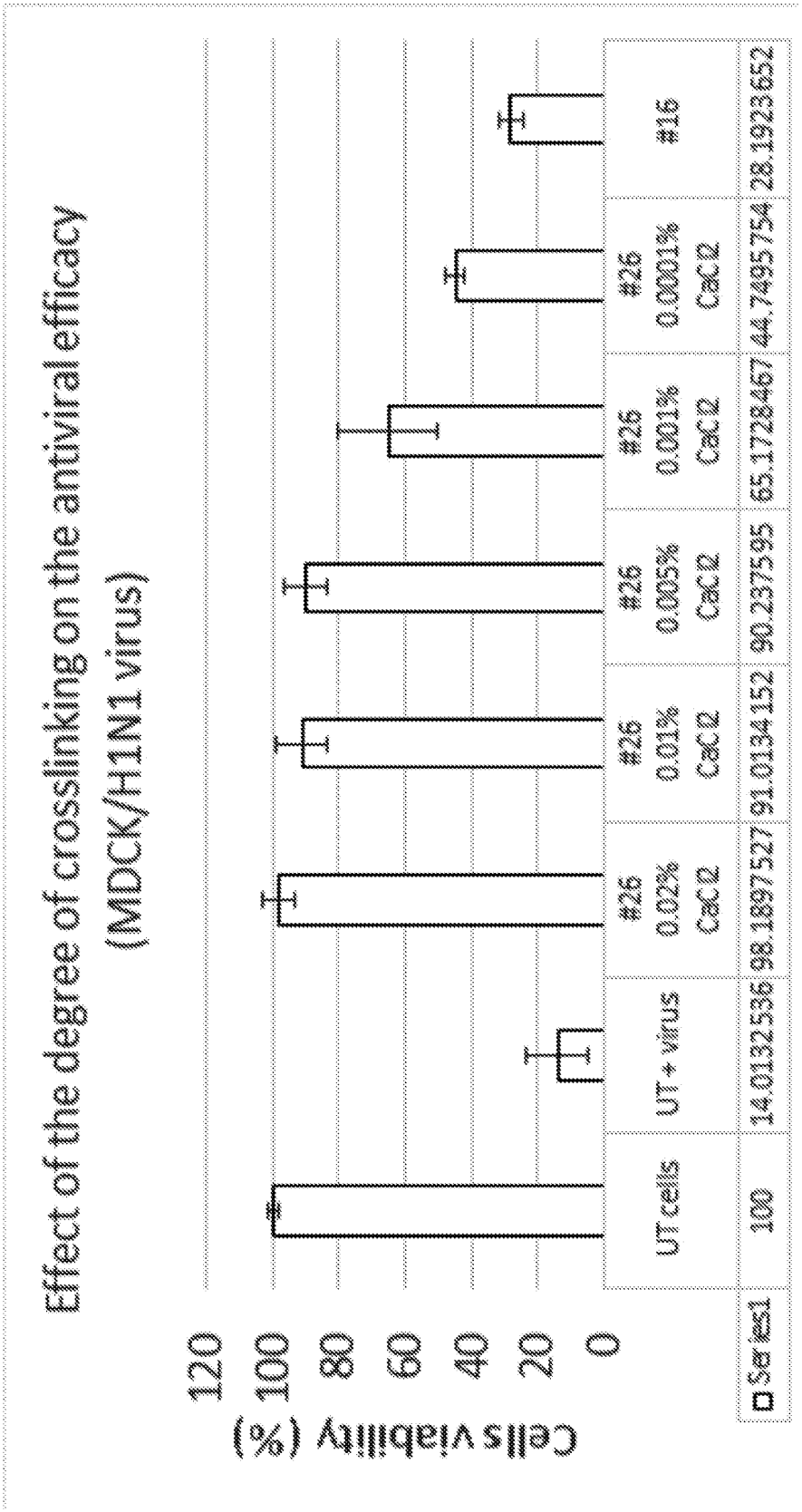

Effect of the degree of crosslinking on the antiviral efficacy
(MDCK/H1N1 virus)
Cells viability (%)
120
100
80
60
40
20
0
UT cells
UT + virus
#26 0.02% CaCl2
#26 0.01% CaCl2
#26 0.005% CaCl2
#26 0.001% CaCl2
#26 0.0001% CaCl2
#16
Series1
100
14.0132536
98.1897527
91.0134152
90.237595
65.1728467
44.7495754
28.1923652

FIG. 5

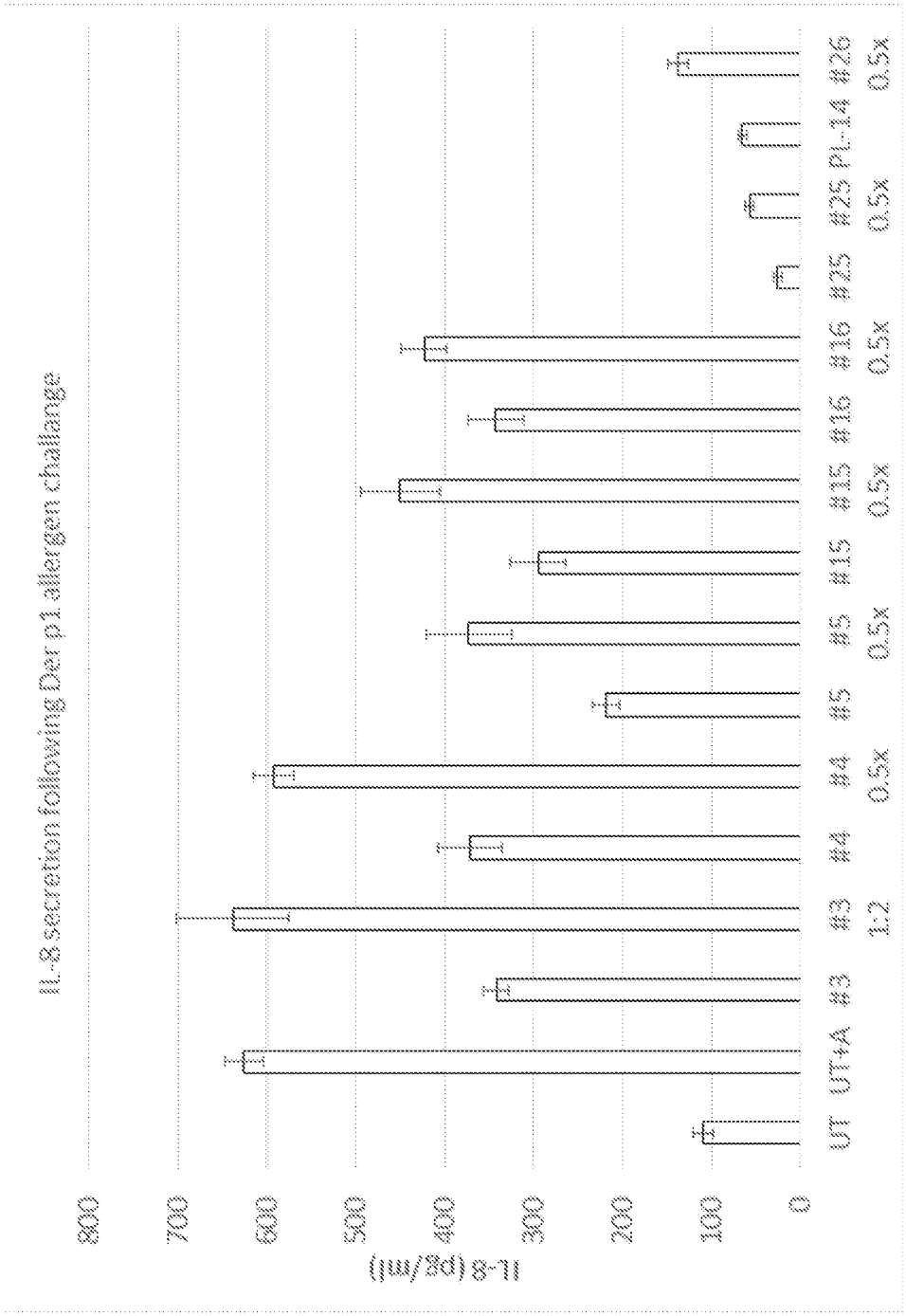

IL-8 secretion following Der p1 allergen challenge
IL-8 (pg/ml)
800
700
600
500
400
300
200
100
0
UT
UT+A
#3
#3
1:2
#4
#4
0.5x
#5
#5
0.5x
#15
#15
0.5x
#16
#16
0.5x
#25
#25
0.5x
PL-14
#26
0.5x

FIG. 6

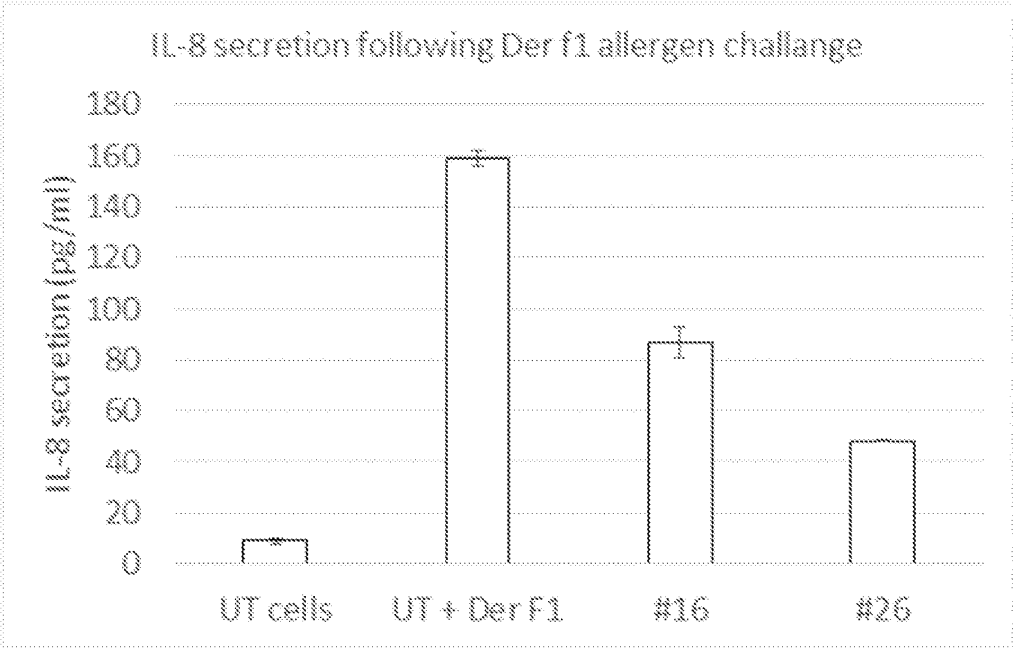

IL-8 secretion following Der f1 allergen challange
IL-8 secretion (pg/ml)
180
160
140
120
100
80
60
40
20
0
UT cells
UT + Der F1
#16
#26

FIG. 7A

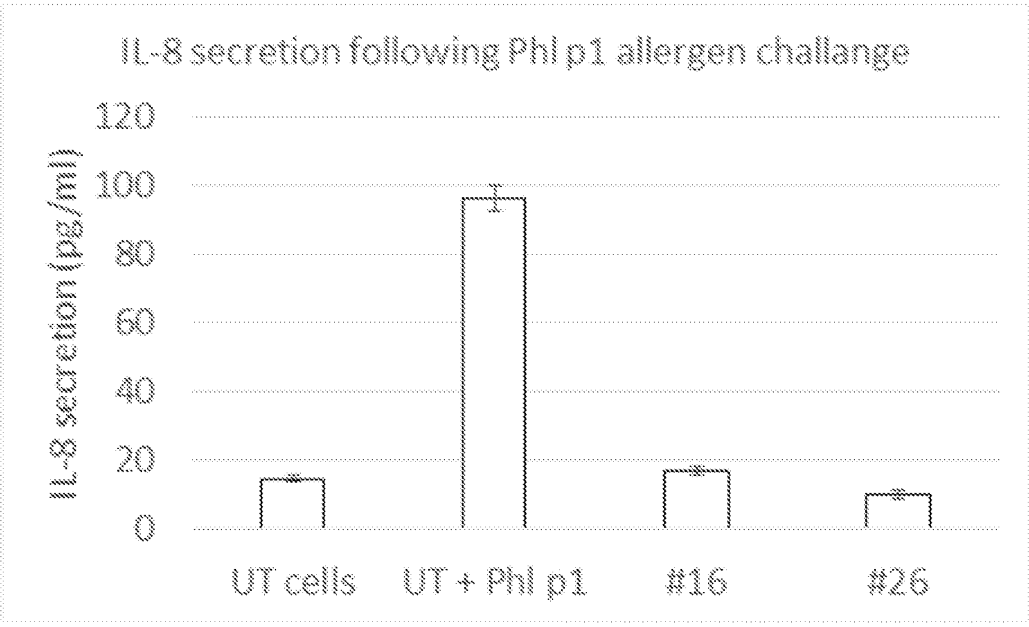

IL-8 secretion following Phl p1 allergen challange
IL-8 secretion (pg/ml)
120
100
80
60
40
20
0
UT cells
UT + Phl p1
#16
#26

FIG. 7B

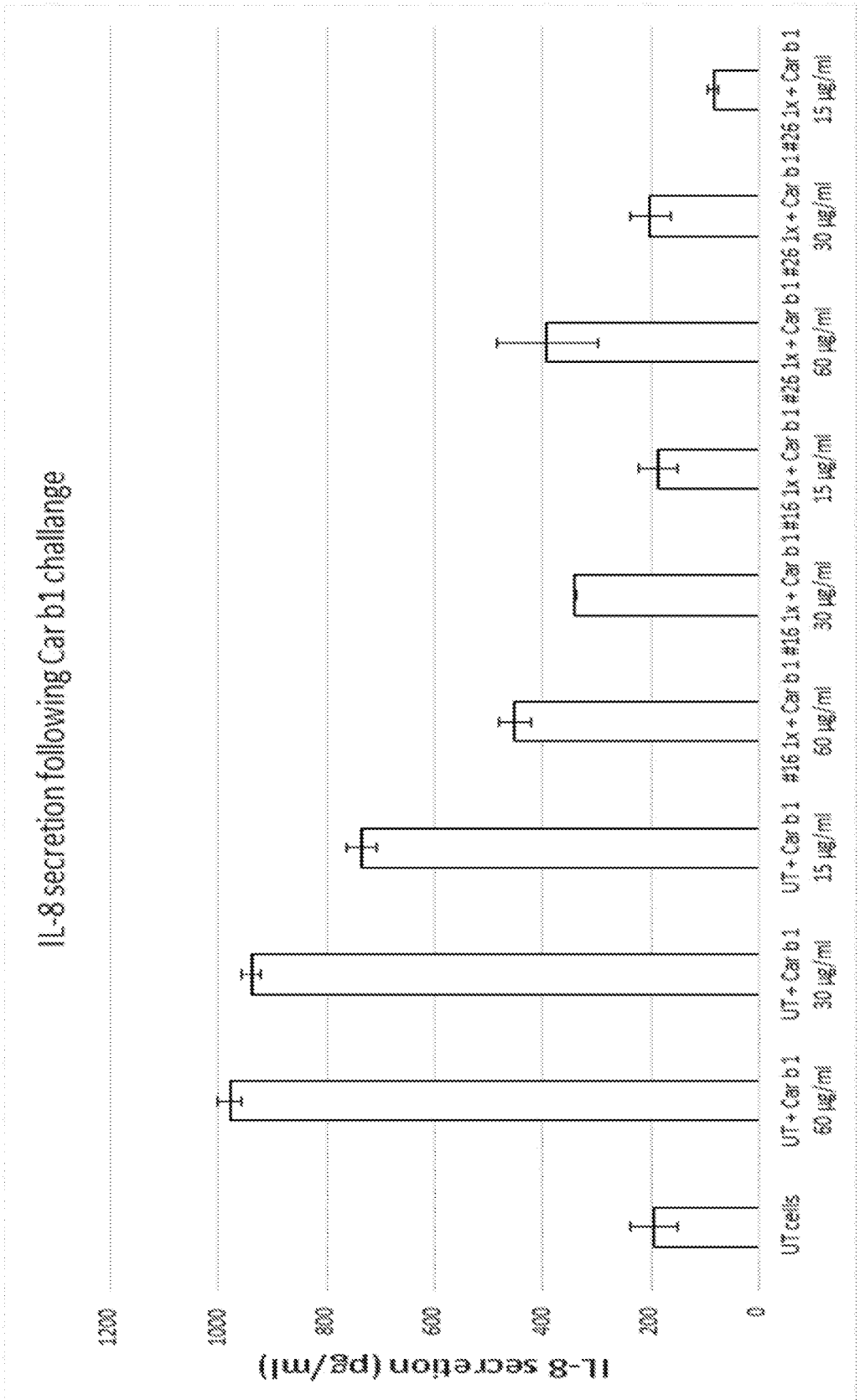

IL-8 secretion following Car b1 challange
IL-8 secretion (pg/ml)
1200
1000
800
600
400
200
0
UT cells
UT + Car b1 60 µg/ml
UT + Car b1 30 µg/ml
UT + Car b1 15 µg/ml
#16 1x + Car b1 60 µg/ml
#16 1x + Car b1 30 µg/ml
#16 1x + Car b1 15 µg/ml
#26 1x + Car b1 60 µg/ml
#26 1x + Car b1 30 µg/ml
#26 1x + Car b1 15 µg/ml

FIG. 8

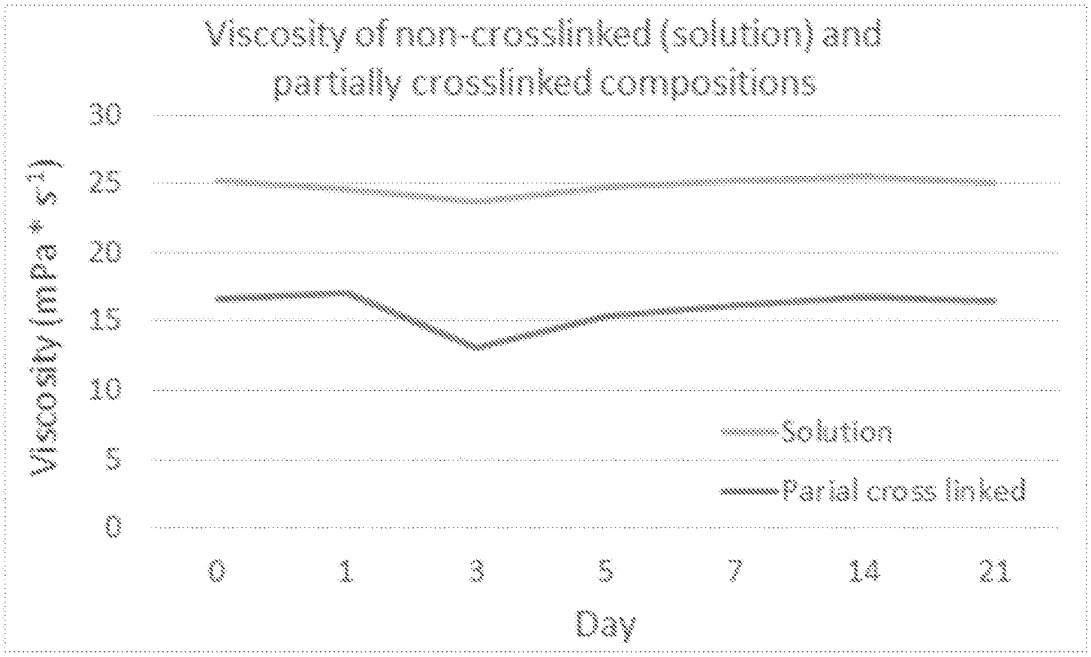

Viscosity of non-crosslinked (solution) and partially crosslinked compositions
Viscosity (mPa * s-1)
30
25
20
15
10
5
0
0
1
3
5
7
14
21
Day
Solution
Parial cross linked

FIG. 9

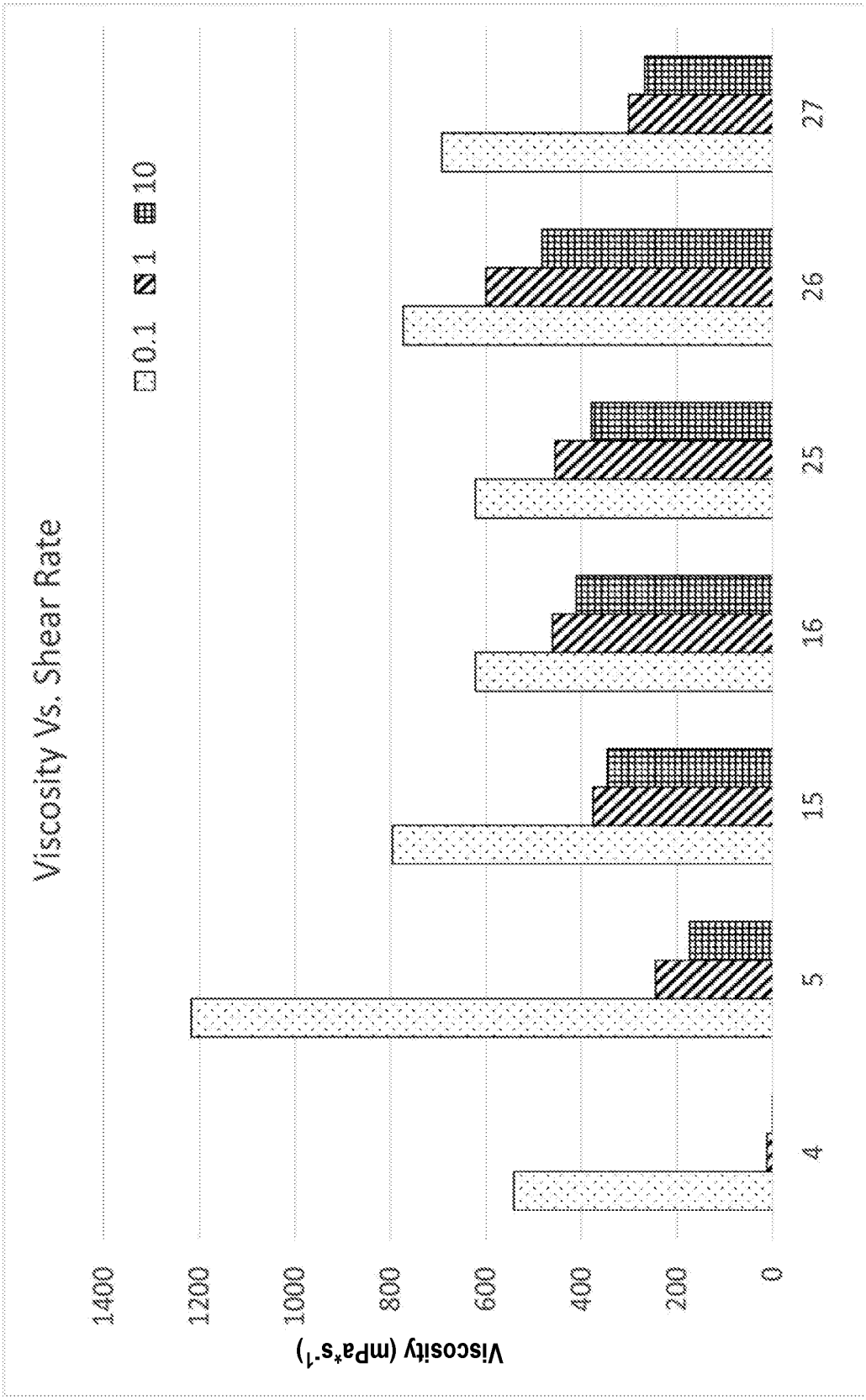

Viscosity Vs. Shear Rate
0.1
1
10
Viscosity (mPa*s-1)
1400
1200
1000
800
600
400
200
0
4
5
15
16
25
26
27

FIG. 10

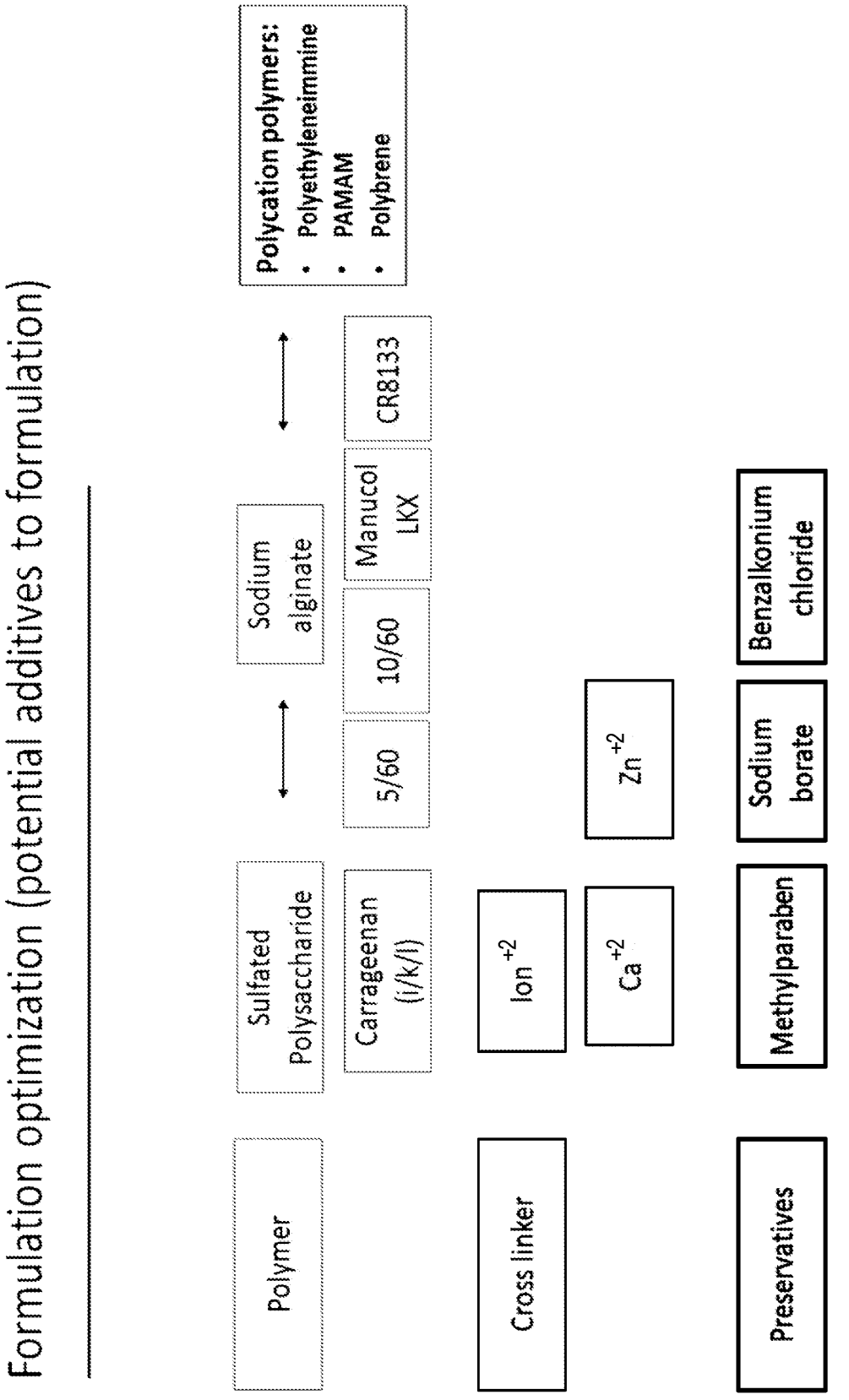

Formulation optimization (potential additives to formulation)
Polymer
Sulfated Polysaccharide
Carrageenan (i/k/l)
5/60
10/60
Sodium alginate
Manucol LKX
CR8133
Polycation polymers:
• Polyethyleneimmine
• PAMAM
• Polybrene
Cross linker
Ion+2
Ca+2
Zn+2
Preservatives
Methylparaben
Sodium borate
Benzalkonium chloride

FIG. 11