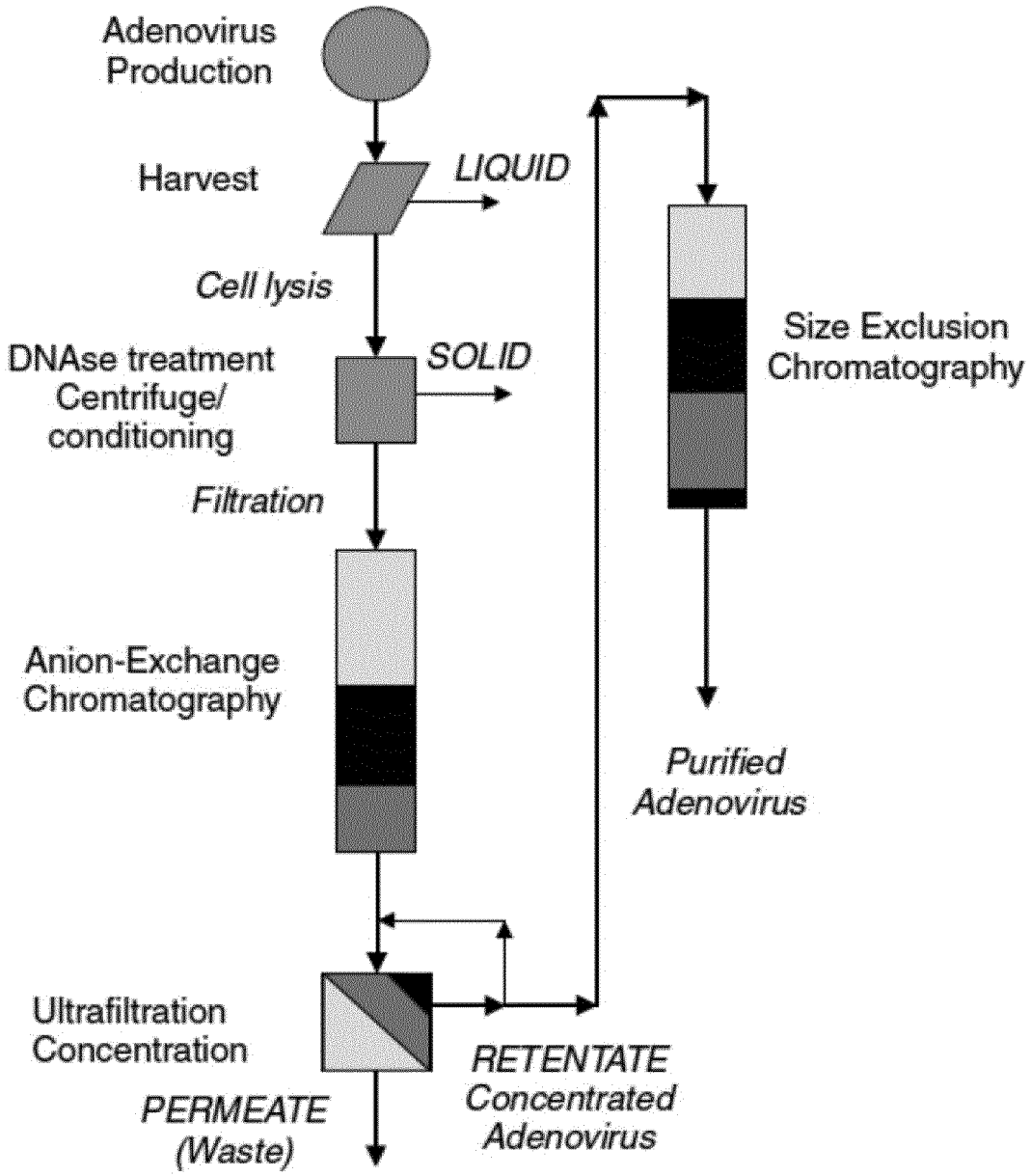
Figure 1


Adenovirus Production
Harvest
LIQUID
Cell lysis
DNAse treatment Centrifuge/ conditioning
SOLID
Filtration
Anion-Exchange Chromatography
Size Exclusion Chromatography
Purified Adenovirus
Ultrafiltration Concentration
RETENTATE Concentrated Adenovirus
PERMEATE (Waste)

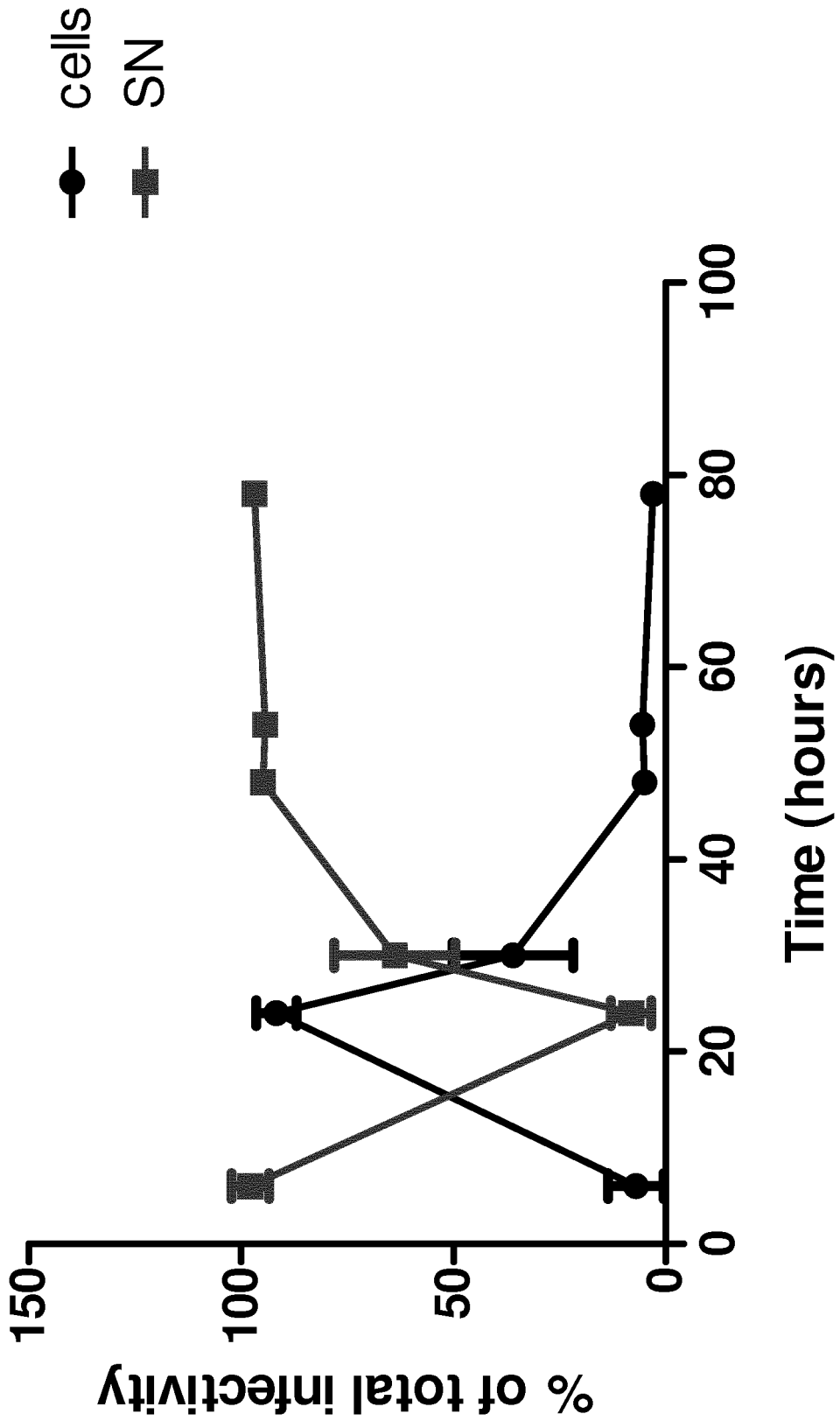

cells
SN
% of total infectivity
150
100
50
0
0
20
40
60
80
100
Time (hours)

Figure2

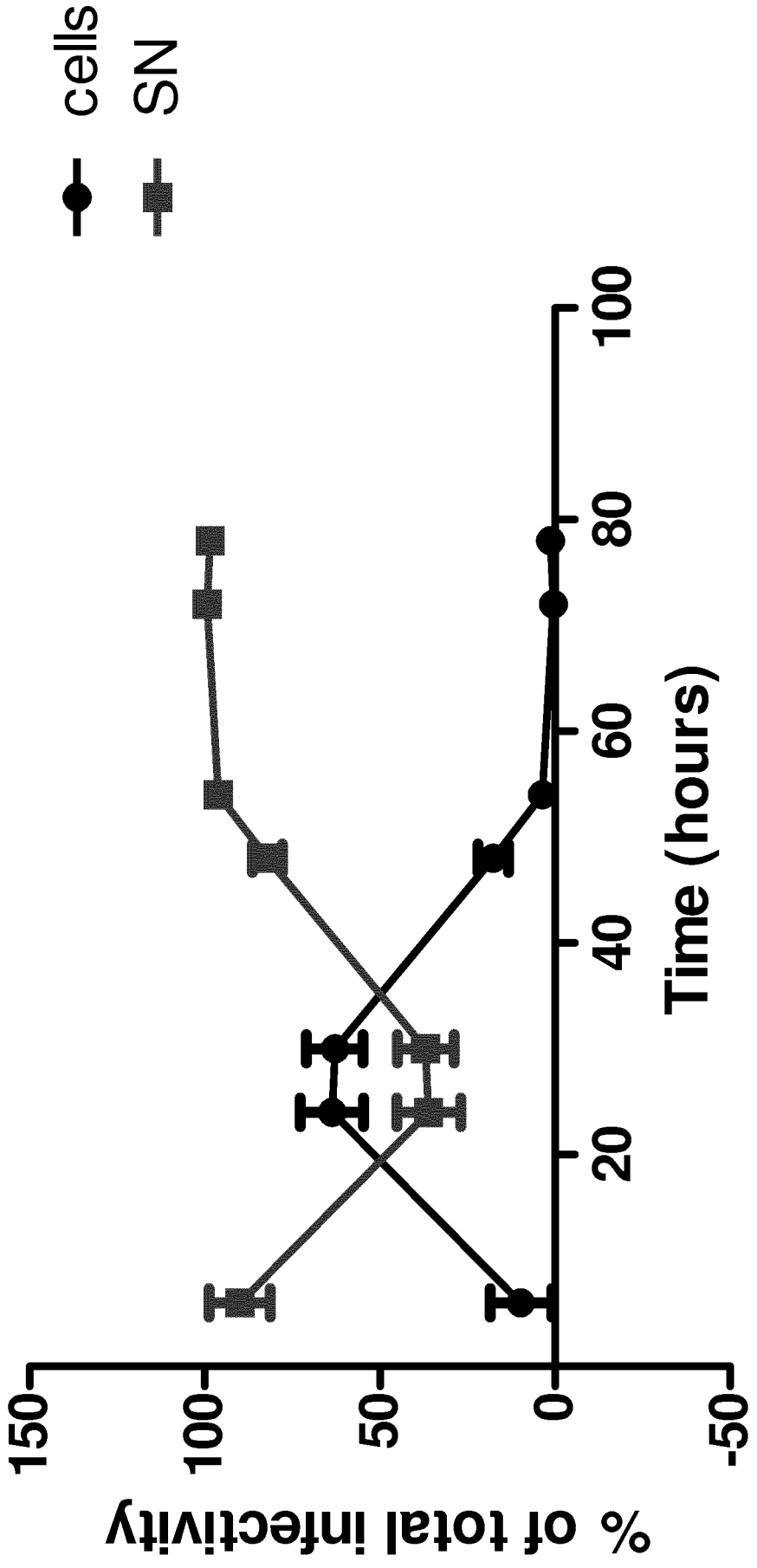

cells
SN
% of total infectivity
150
100
50
0
-50
20
40
60
80
100
Time (hours)

Figure 3

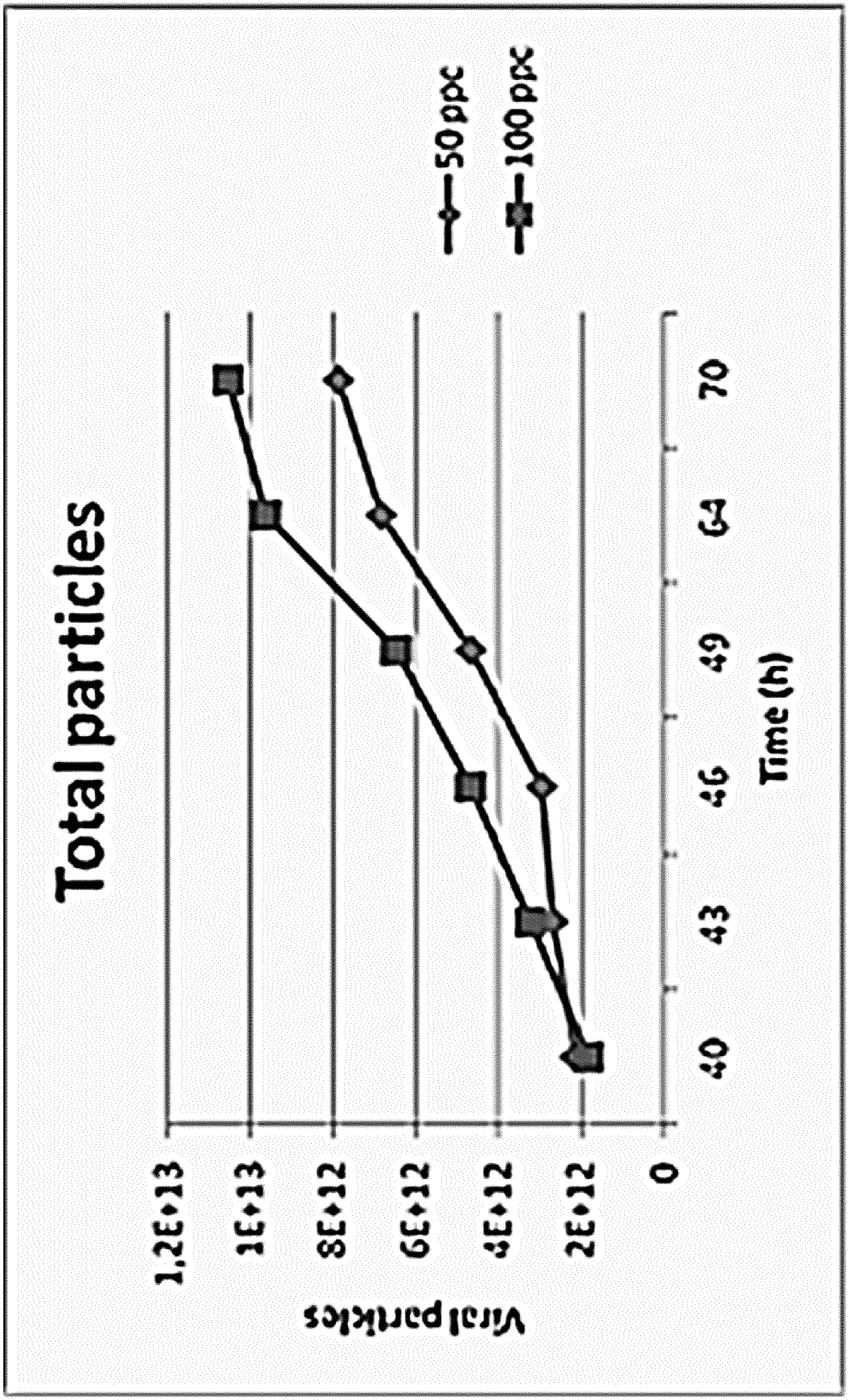

Total particles
50 ppc
100 ppc
Viral particles
1,2E+13
1E+13
8E+12
6E+12
4E+12
2E+12
0
40
43
46
49
64
70
Time (h)

Figure 4

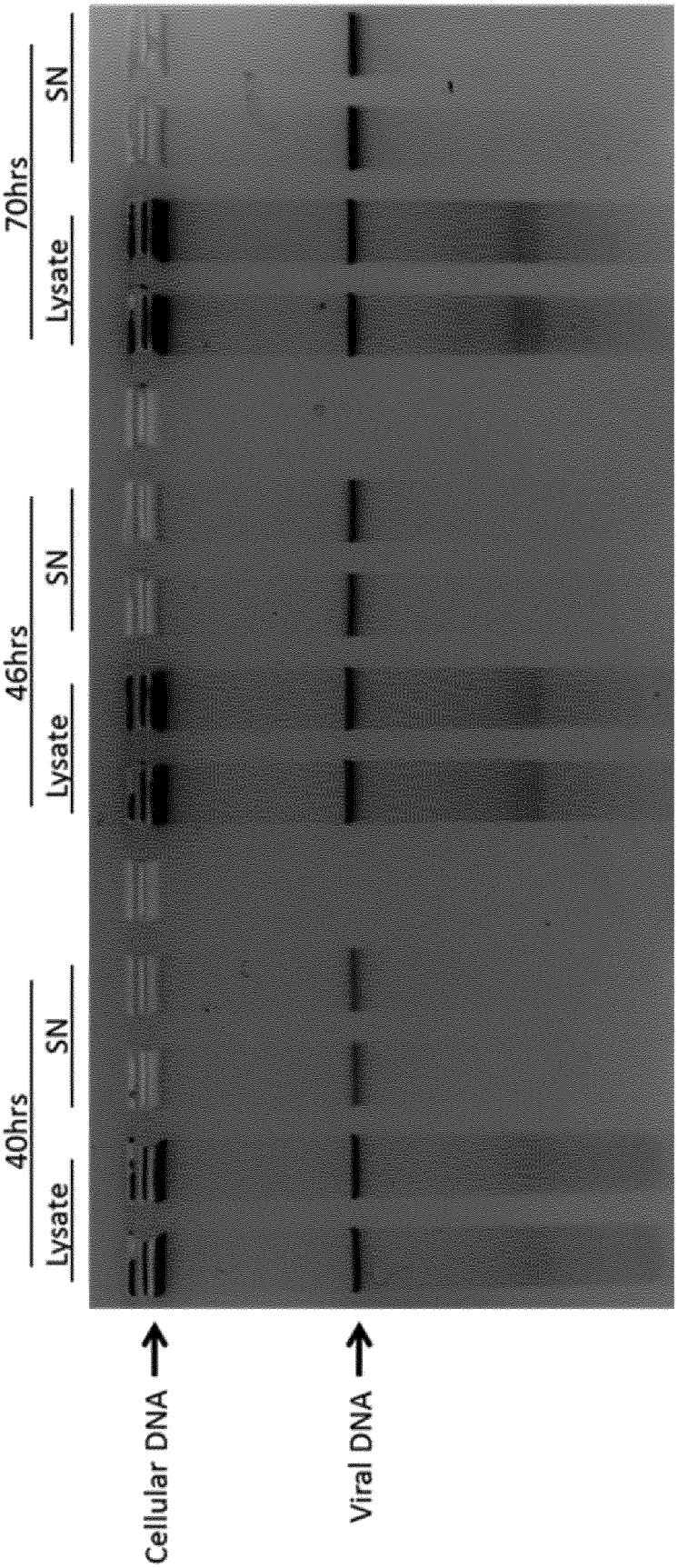

40hrs
Lysate
SN
46hrs
Lysate
SN
70hrs
Lysate
SN
Cellular DNA
Viral DNA

Figure 5

Figure 6

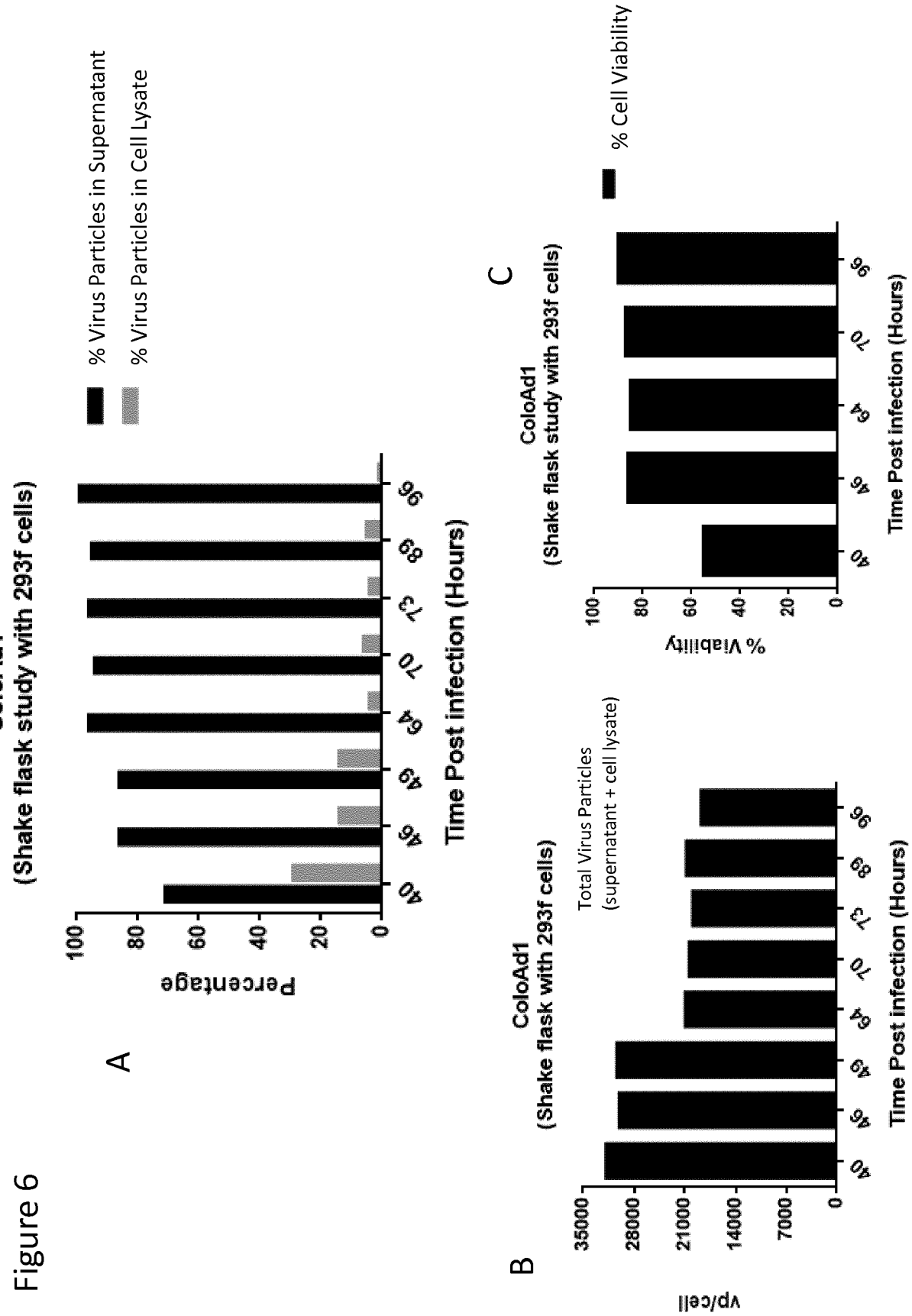

A
ColoAd1
(Shake flask study with 293f cells)
% Virus Particles in Supernatant
% Virus Particles in Cell Lysate
Percentage
Time Post infection (Hours)
B
ColoAd1
(Shake flask with 293f cells)
Total Virus Particles
(supernatant + cell lysate)
vp/cell
Time Post infection (Hours)
C
ColoAd1
(Shake flask study with 293f cells)
% Cell Viability
% Viability
Time Post infection (Hours)

Figure 7

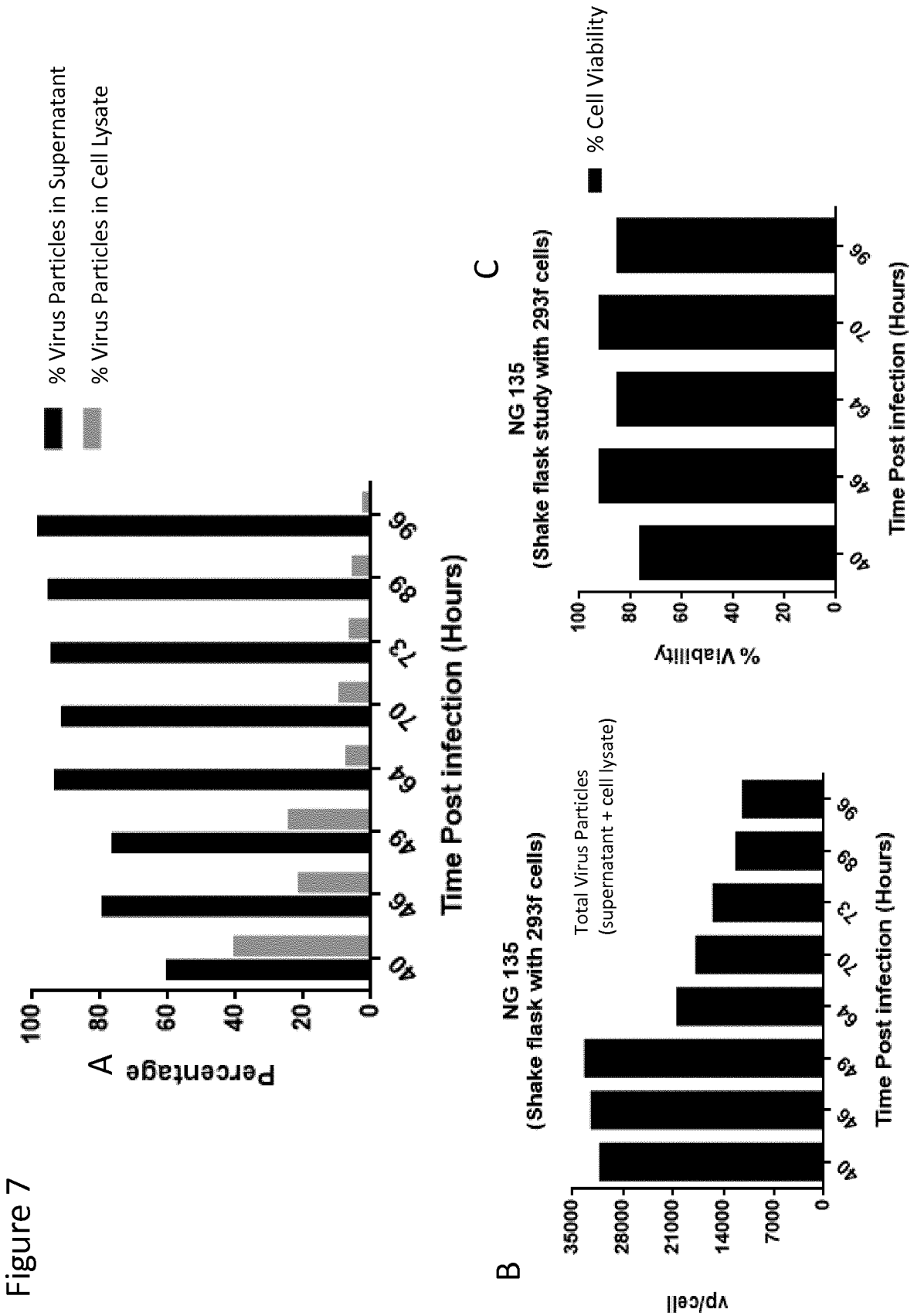
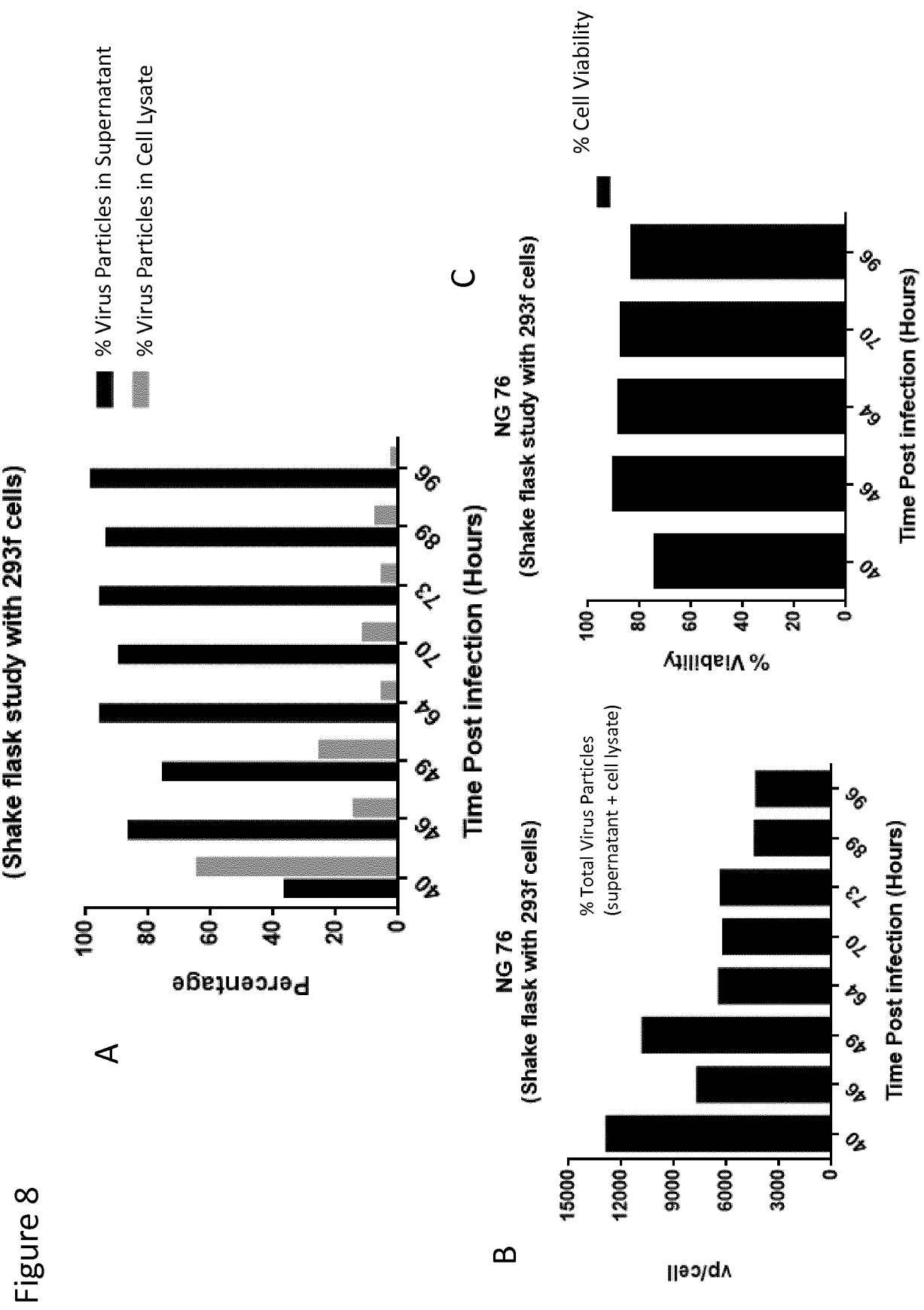

A
NG 135
(Shake flask study with 293f cells)
% Virus Particles in Supernatant
% Virus Particles in Cell Lysate
Percentage
Time Post infection (Hours)
B
NG 135
(Shake flask with 293f cells)
Total Virus Particles
(supernatant + cell lysate)
vp/cell
Time Post infection (Hours)
C
NG 135
(Shake flask study with 293f cells)
% Cell Viability
% Viability
Time Post infection (Hours)

Figure 8


A
NG 76
(Shake flask study with 293f cells)
% Virus Particles in Supernatant
% Virus Particles in Cell Lysate
Percentage
Time Post infection (Hours)
B
NG 76
(Shake flask with 293f cells)
% Total Virus Particles
(supernatant + cell lysate)
vp/cell
Time Post infection (Hours)
C
NG 76
(Shake flask study with 293f cells)
% Cell Viability
% Viability
Time Post infection (Hours)

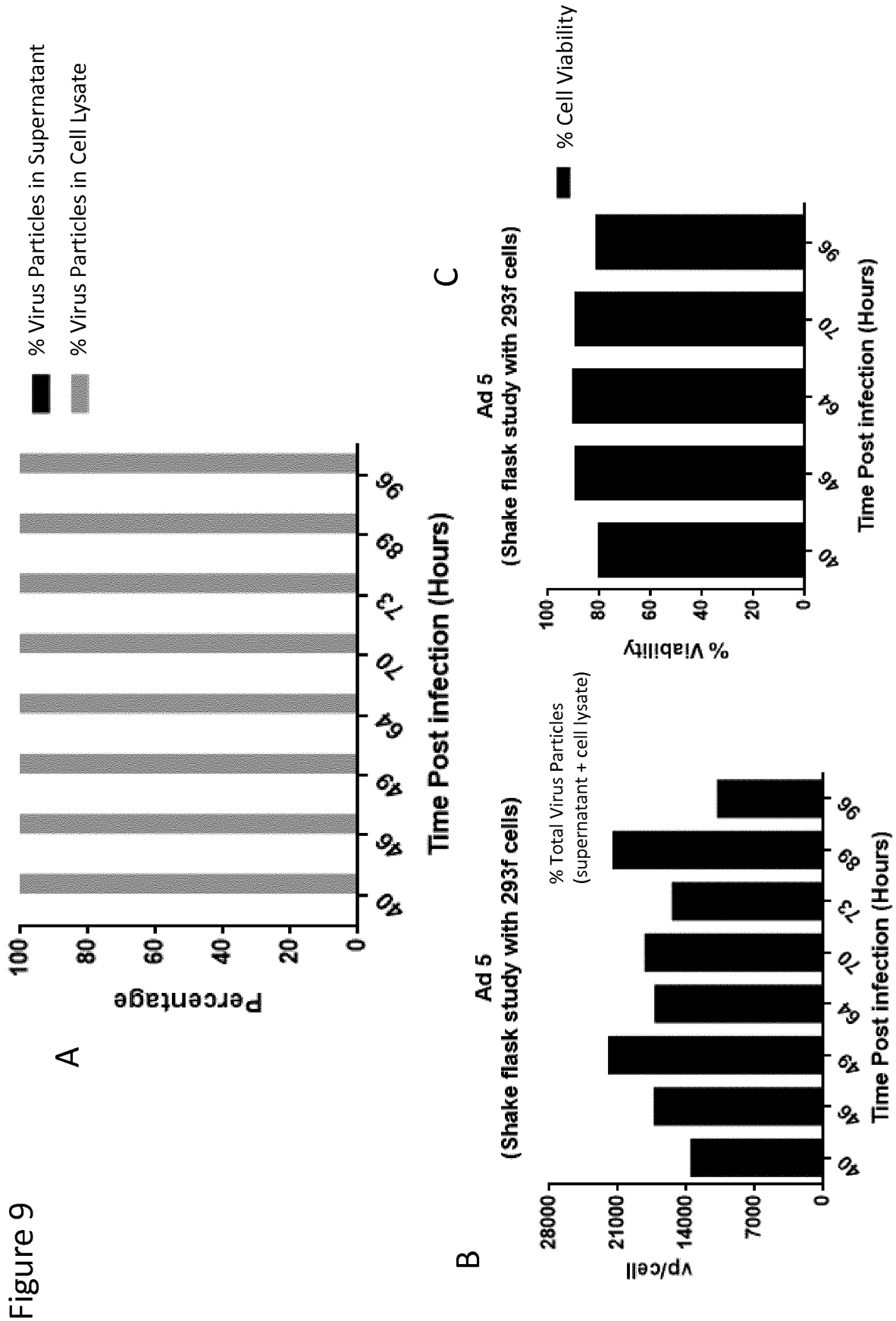
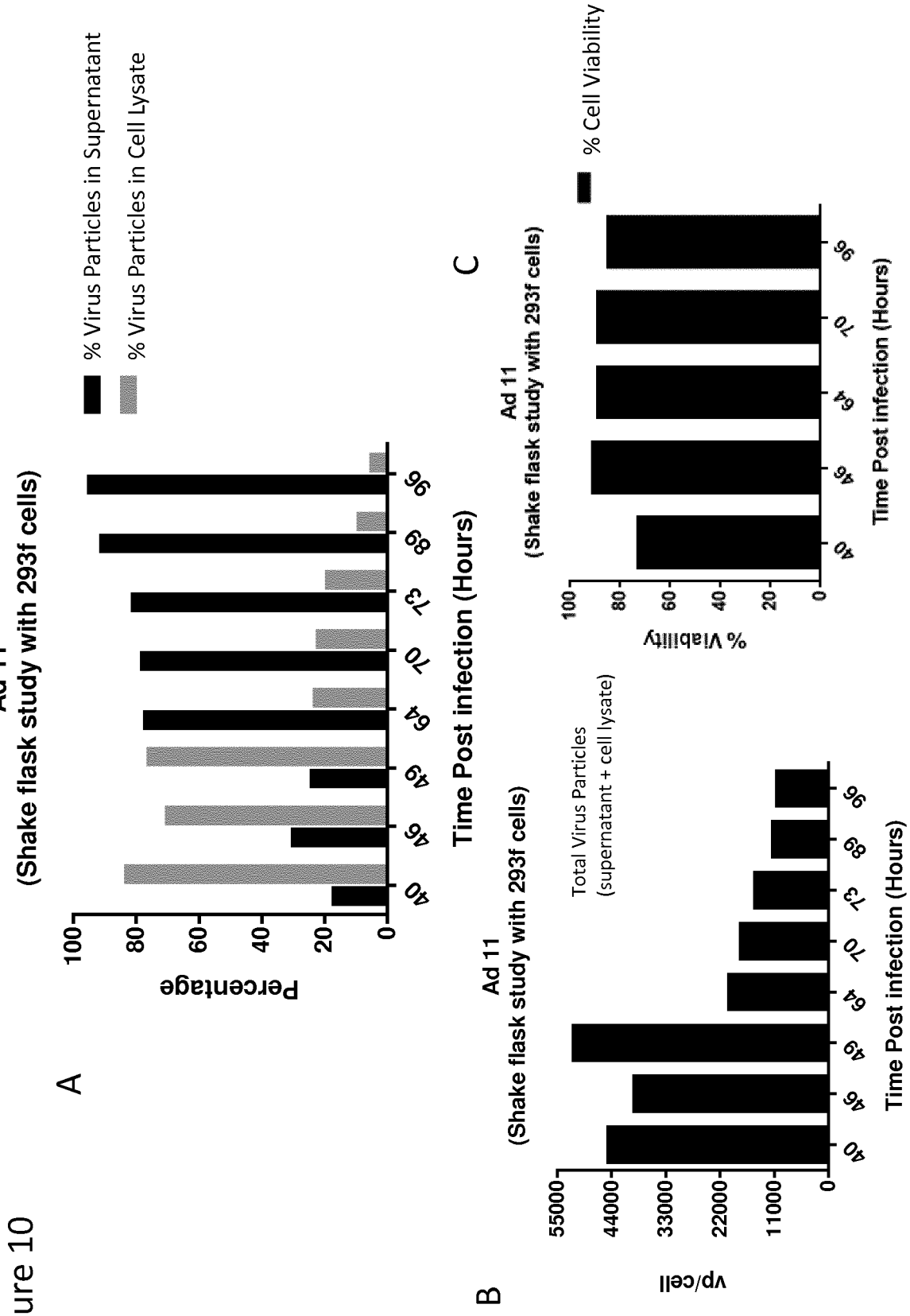

A
Ad 5
(Shake flask study with 293f cells)
% Virus Particles in Supernatant
% Virus Particles in Cell Lysate
Percentage
100
80
60
40
20
0
40
46
49
64
70
73
89
96
Time Post infection (Hours)
B
Ad 5
(Shake flask study with 293f cells)
% Total Virus Particles
(supernatant + cell lysate)
vp/cell
28000
21000
14000
7000
0
Time Post infection (Hours)
C
Ad 5
(Shake flask study with 293f cells)
% Cell Viability
% Viability
100
80
60
40
20
0
Time Post infection (Hours)

Figure 9

Figure 10


A
Ad 11
(Shake flask study with 293f cells)
% Virus Particles in Supernatant
% Virus Particles in Cell Lysate
Percentage
Time Post infection (Hours)
B
Ad 11
(Shake flask study with 293f cells)
Total Virus Particles
(supernatant + cell lysate)
vp/cell
Time Post infection (Hours)
C
Ad 11
(Shake flask study with 293f cells)
% Cell Viability
% Viability
Time Post infection (Hours)