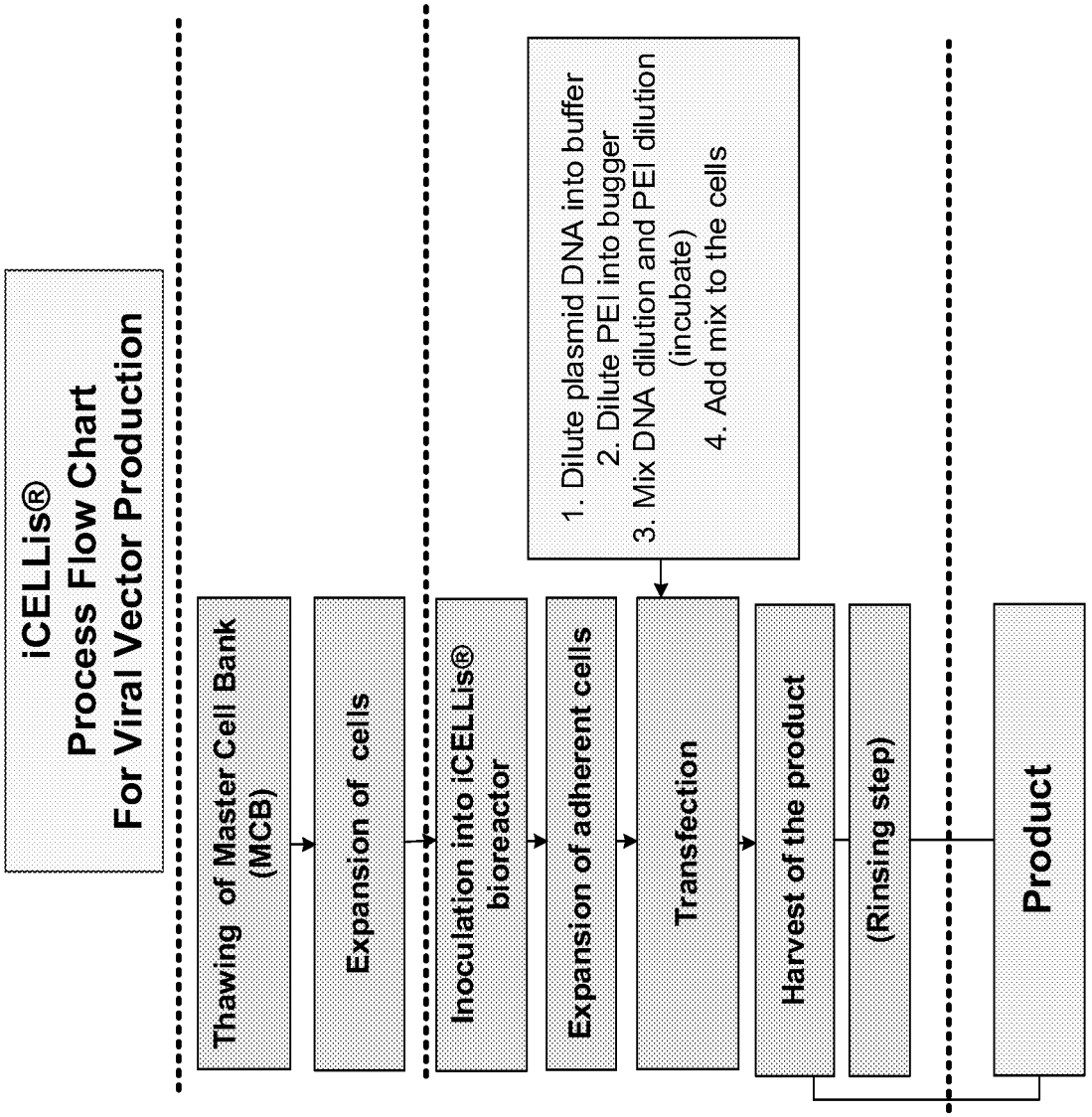
iCELLis®
Process Flow Chart
For Viral Vector Production
Thawing of Master Cell Bank (MCB)
Expansion of cells
Inoculation into iCELLis® bioreactor
Expansion of adherent cells
1. Dilute plasmid DNA into buffer
2. Dilute PEI into bugger
3. Mix DNA dilution and PEI dilution (incubate)
4. Add mix to the cells
Transfection
Harvest of the product
(Rinsing step)
Product

Figure 1

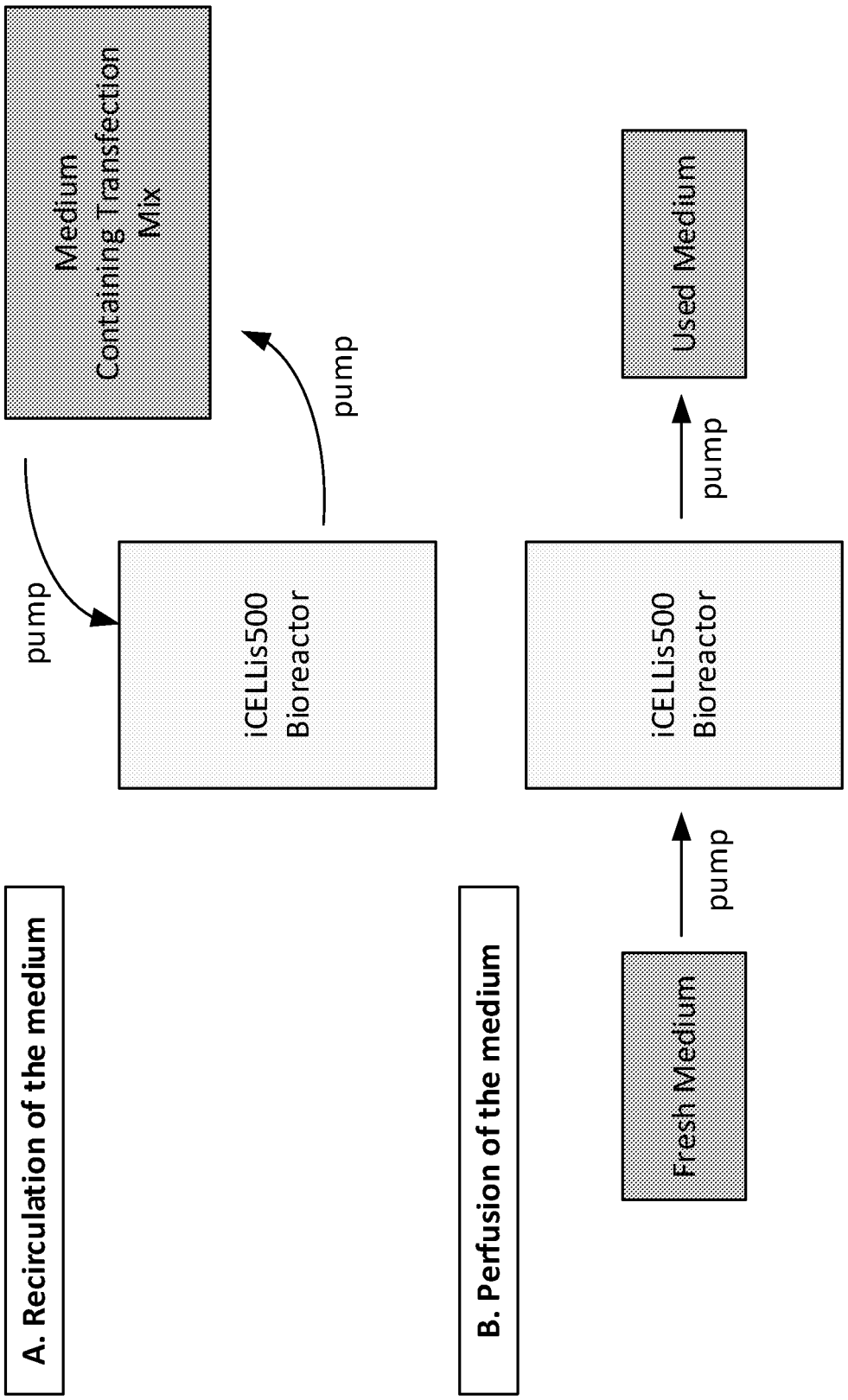
A. Recirculation of the medium
Medium Containing Transfection Mix
pump
iCELLis500 Bioreactor
pump
B. Perfusion of the medium
Fresh Medium
pump
iCELLis500 Bioreactor
pump
Used Medium

Figure 2

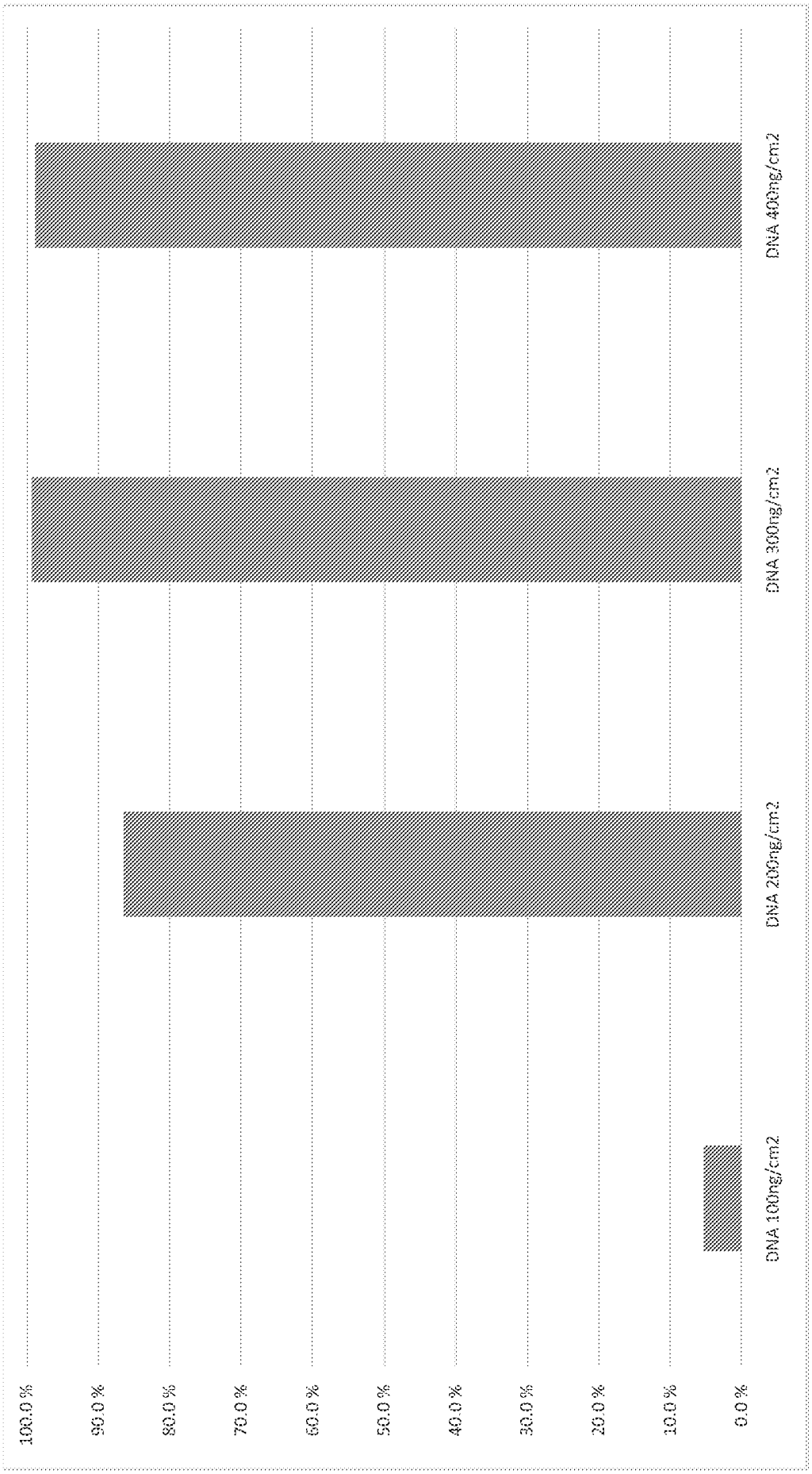
100.0 %
90.0 %
80.0 %
70.0 %
60.0 %
50.0 %
40.0 %
30.0 %
20.0 %
10.0 %
0.0 %
DNA 100ng/cm2
DNA 200ng/cm2
DNA 300ng/cm2
DNA 400ng/cm2

Figure 3.

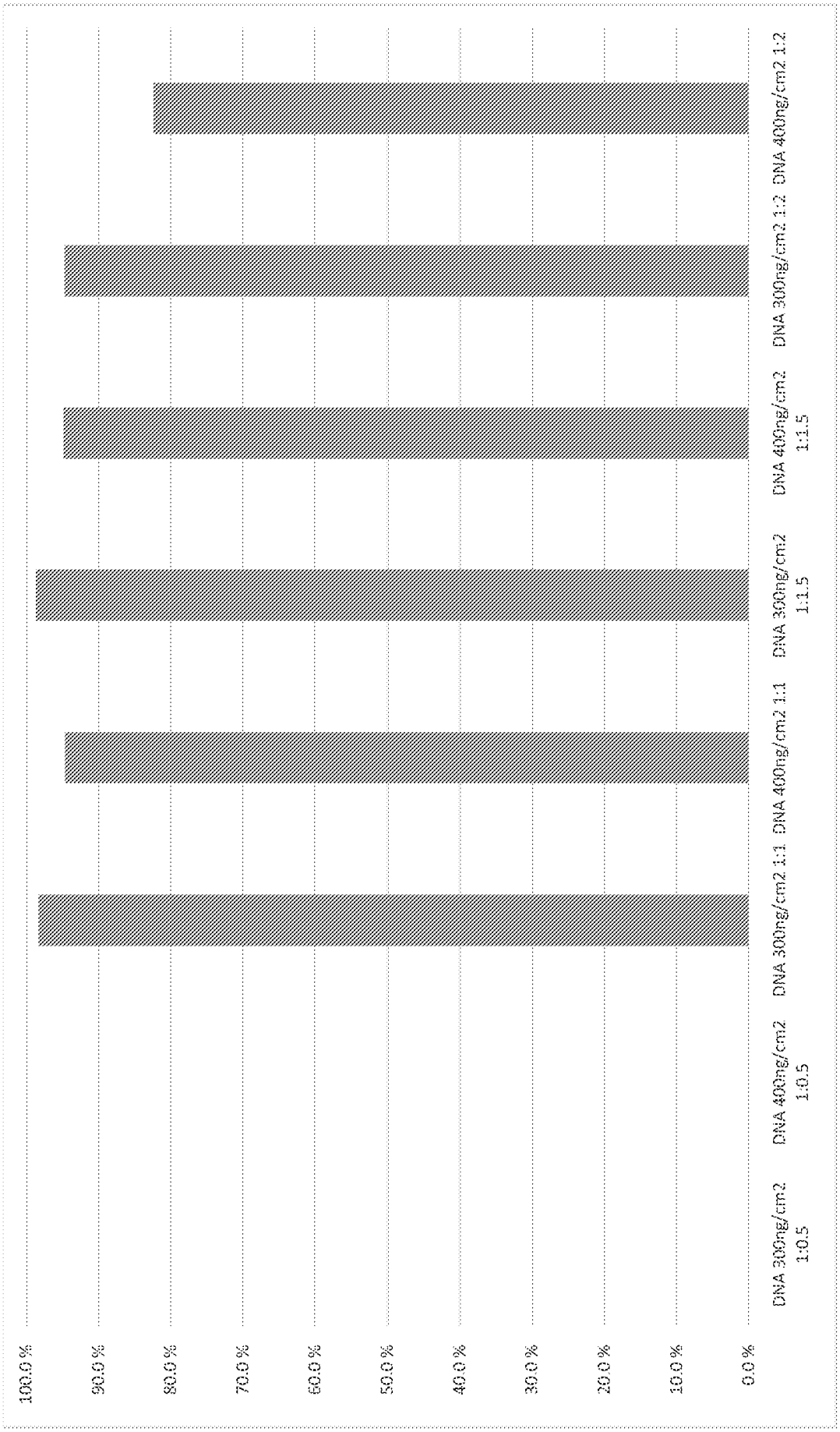
100.0 %
90.0 %
80.0 %
70.0 %
60.0 %
50.0 %
40.0 %
30.0 %
20.0 %
10.0 %
0.0 %
DNA 300ng/cm2 1:0.5
DNA 400ng/cm2 1:0.5
DNA 300ng/cm2 1:1
DNA 400ng/cm2 1:1
DNA 300ng/cm2 1:1.5
DNA 400ng/cm2 1:1.5
DNA 300ng/cm2 1:2
DNA 400ng/cm2 1:2

Figure 4.

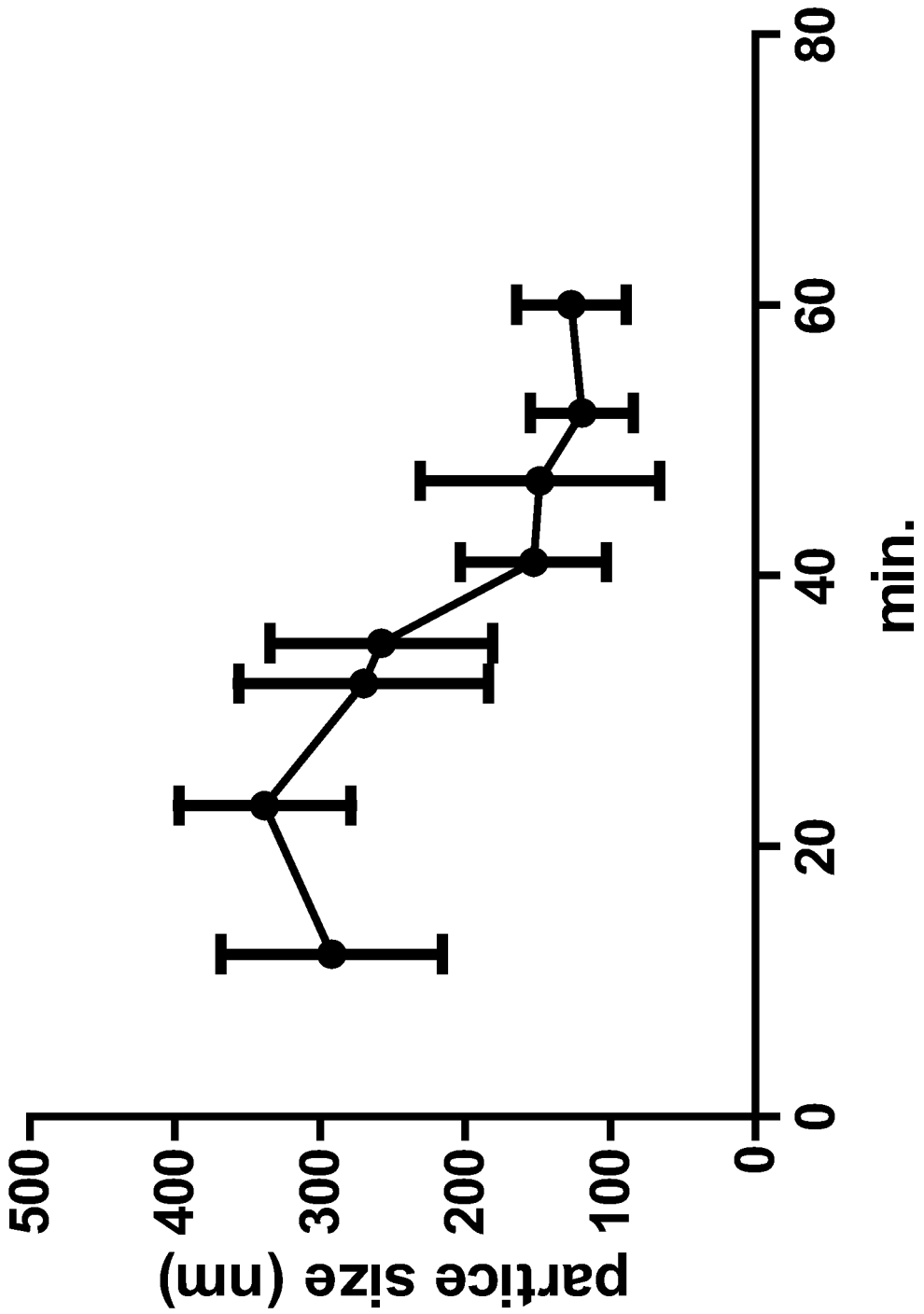

Figure 5