FIGURE 1

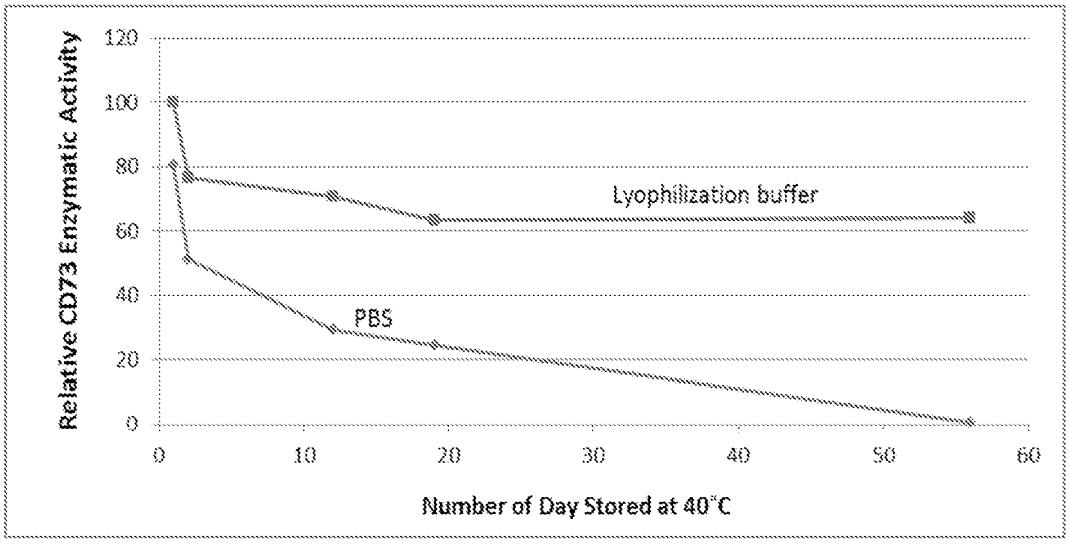

Relative CD73 Enzymatic Activity
120
100
80
60
40
20
0
0
10
20
30
40
50
60
Lyophilization buffer
PBS
Number of Day Stored at 40°C

FIGURE 2A

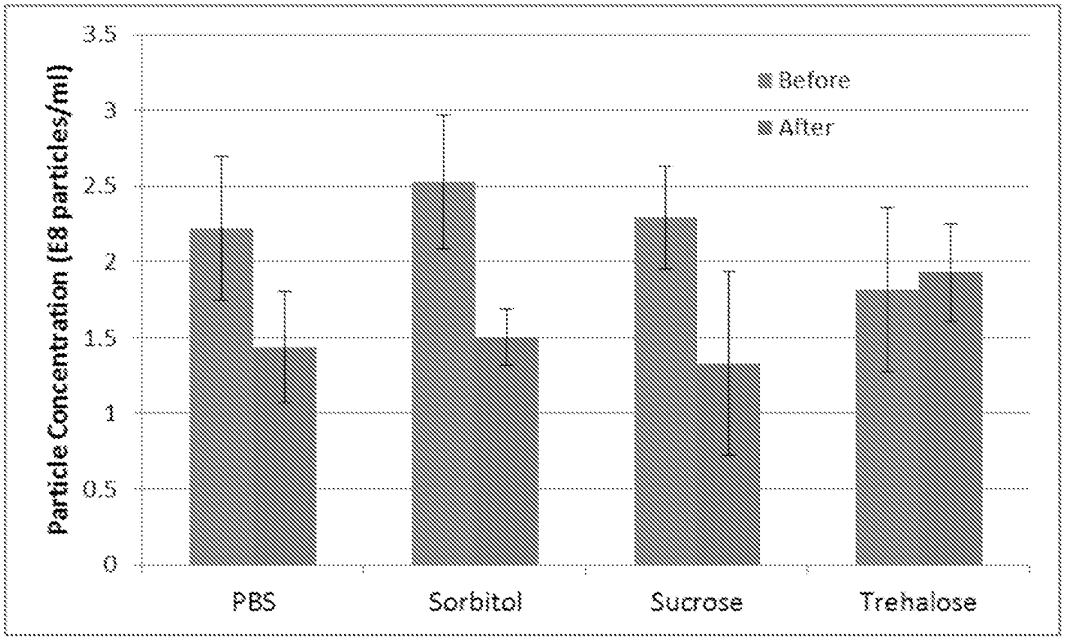

Particle Concentration (E8 particles/ml)
3.5
3
2.5
2
1.5
1
0.5
0
Before
After
PBS
Sorbitol
Sucrose
Trehalose

FIGURE 2B

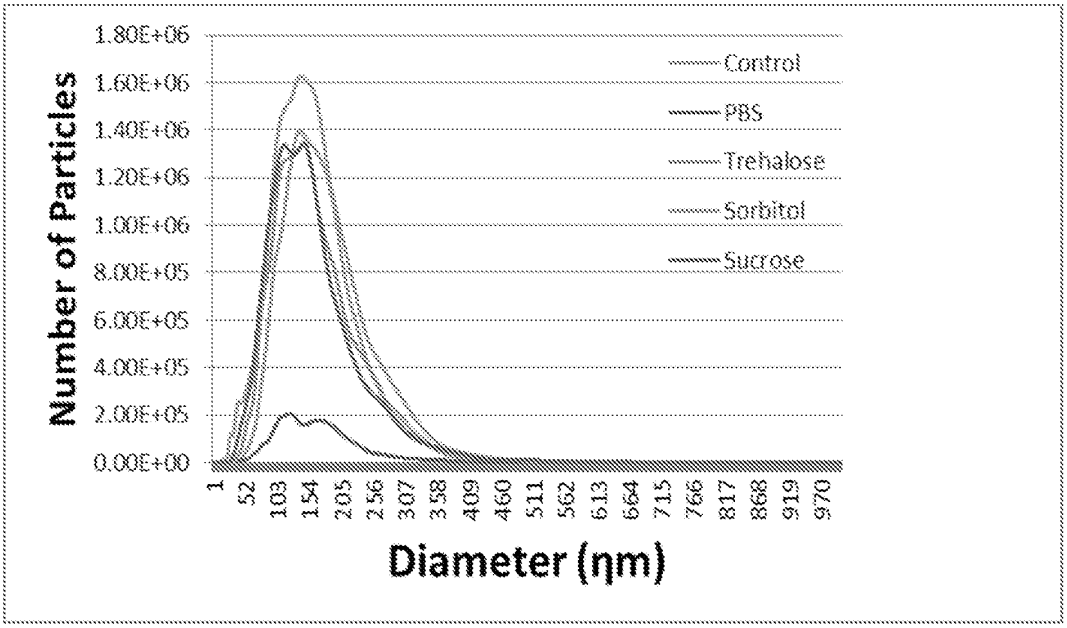

Number of Particles
1.80E+06
1.60E+06
1.40E+06
1.20E+06
1.00E+06
8.00E+05
6.00E+05
4.00E+05
2.00E+05
0.00E+00
1
52
103
154
205
256
307
358
409
460
511
562
613
664
715
766
817
868
919
970
Diameter (ηm)
Control
PBS
Trehalose
Sorbitol
Sucrose

FIGURE 2C

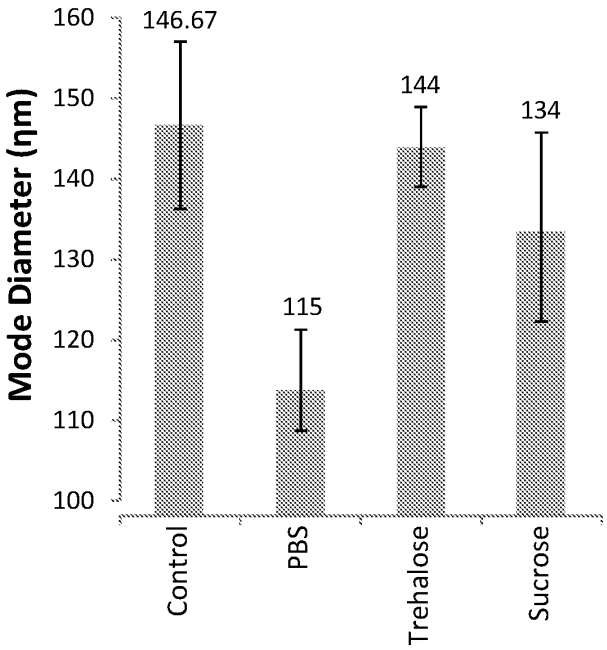

Mode Diameter (ηm)
160
150
140
130
120
110
100
146.67
115
144
134
Control
PBS
Trehalose
Sucrose

FIGURE 3

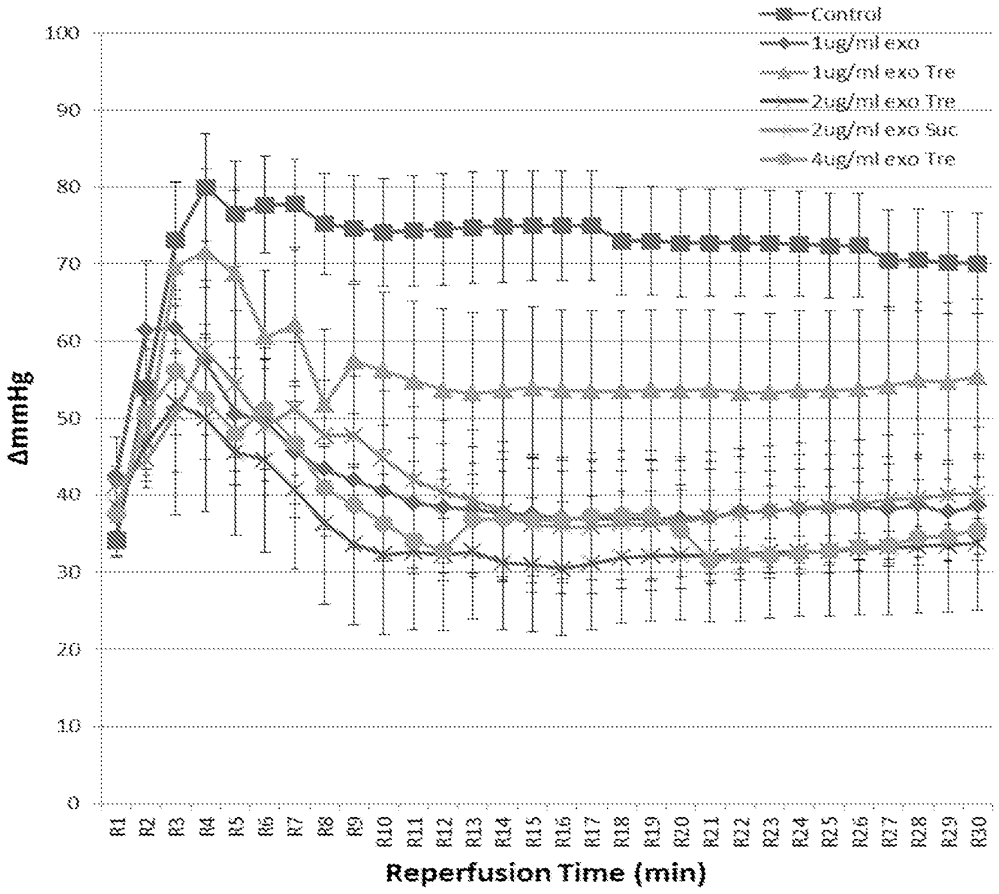

Control
1ug/ml exo
1ug/ml exo Tre
2ug/ml exo Tre
2ug/ml exo Suc
4ug/ml exo Tre
ΔmmHg
100
90
80
70
60
50
40
30
20
10
0
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23 R24 R25 R26 R27 R28 R29 R30
Reperfusion Time (min)

FIGURE 4

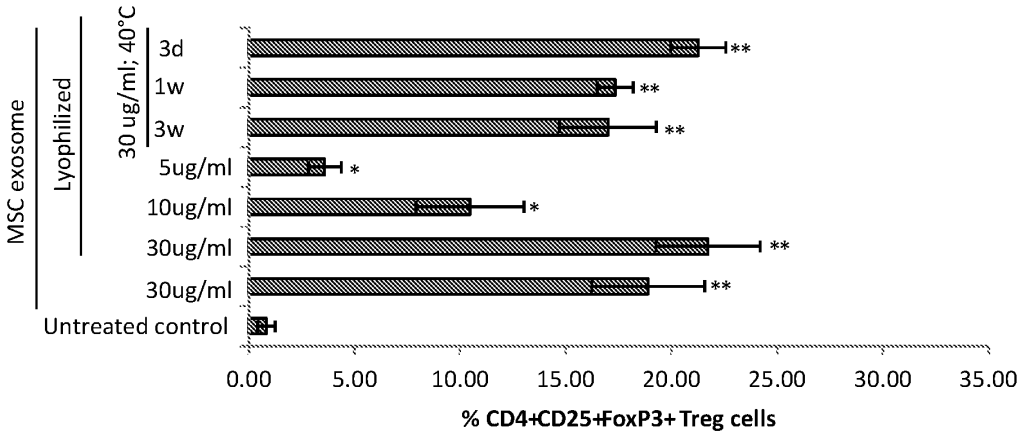
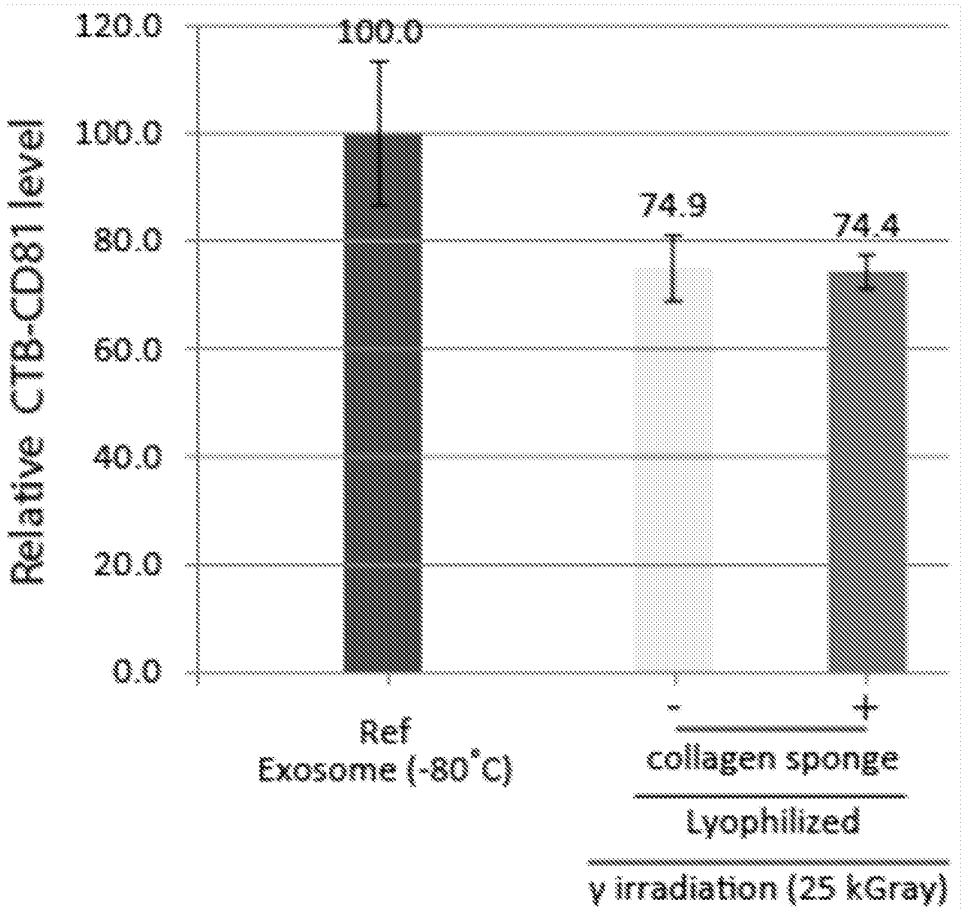

MSC exosome
Lyophilized
30 ug/ml; 40°C
3d
1w
3w
5ug/ml
10ug/ml
30ug/ml
30ug/ml
Untreated control
**
**
**
*
*
**
**
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
% CD4+CD25+FoxP3+ Treg cells

FIGURE 5


120.0
100.0
80.0
60.0
40.0
20.0
0.0
Relative CTB-CD81 level
100.0
74.9
74.4
Ref
Exosome (-80°C)
-
+
collagen sponge
Lyophilized
γ irradiation (25 kGray)