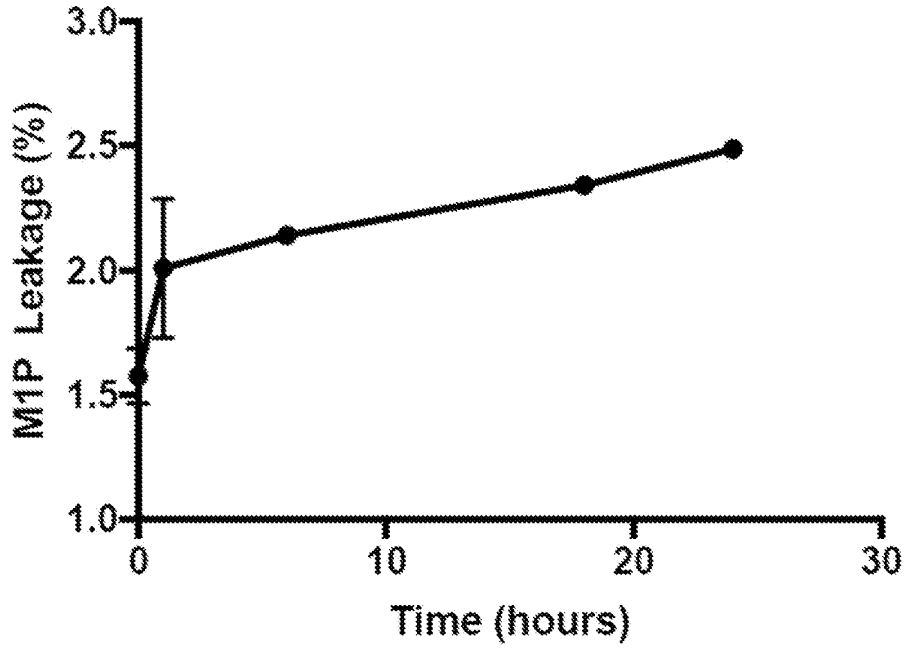


FIG. 1

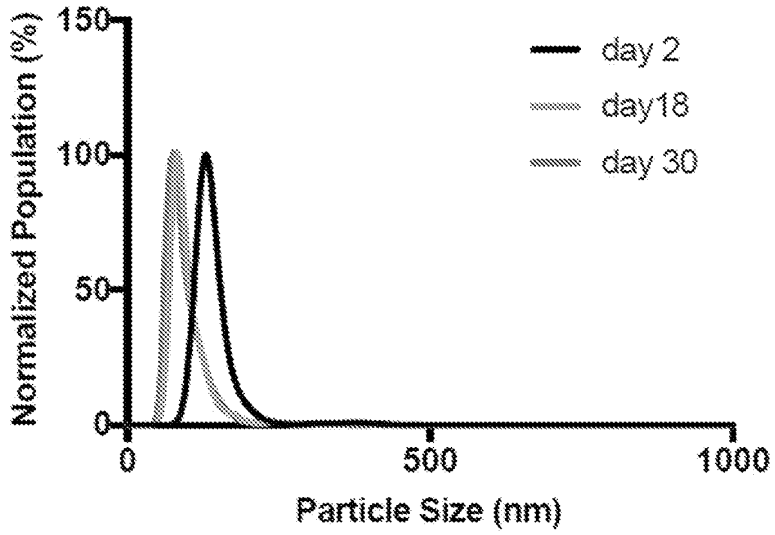

Normalized Population (%)
150
100
50
0
0
500
1000
Particle Size (nm)
day 2
day18
day 30

FIG. 2A

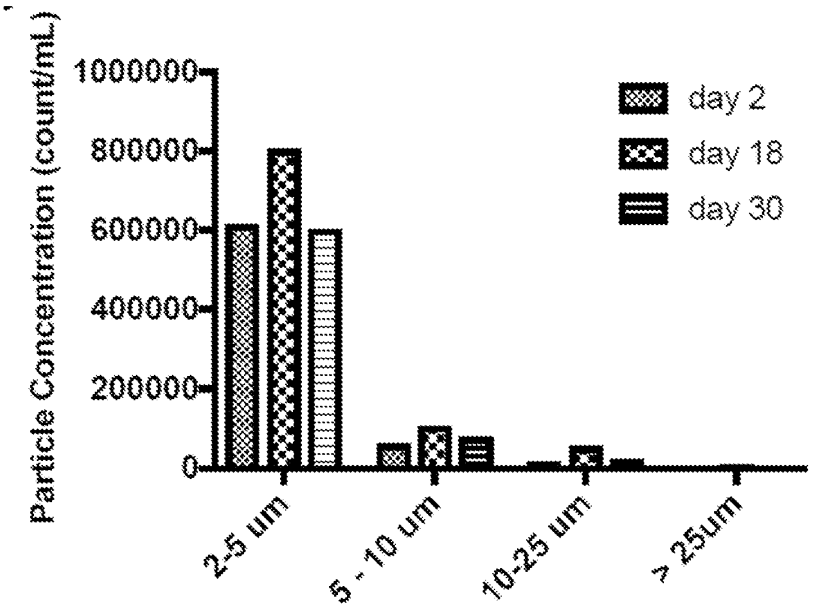

Particle Concentration (count/mL)
1000000
800000
600000
400000
200000
0
2-5 um
5 - 10 um
10-25 um
> 25um
day 2
day 18
day 30

FIG. 2B

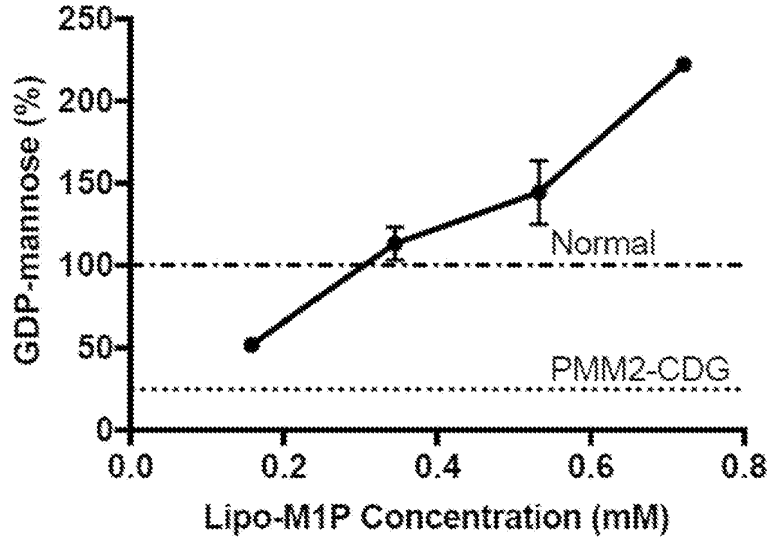

250
200
150
100
50
0
GDP-mannose (%)
Normal
PMM2-CDG
0.0
0.2
0.4
0.6
0.8
Lipo-M1P Concentration (mM)

FIG. 3A

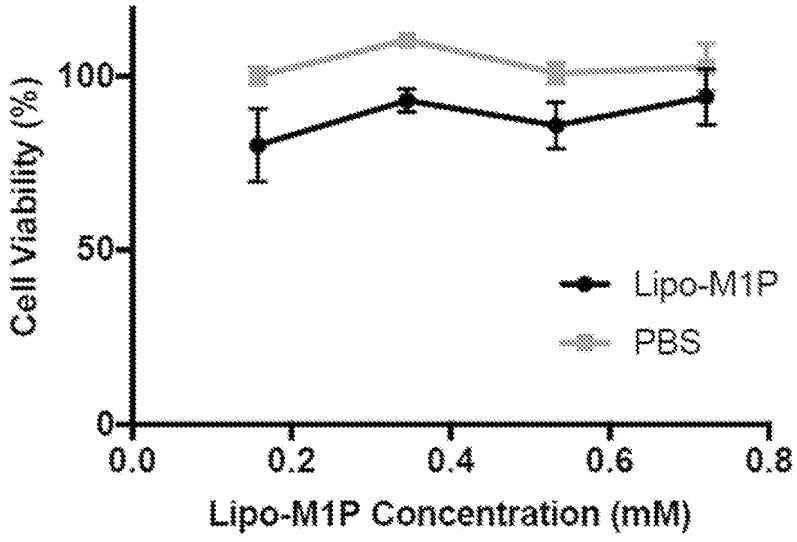

100
50
0
Cell Viability (%)
Lipo-M1P
PBS
0.0
0.2
0.4
0.6
0.8
Lipo-M1P Concentration (mM)

FIG. 3B

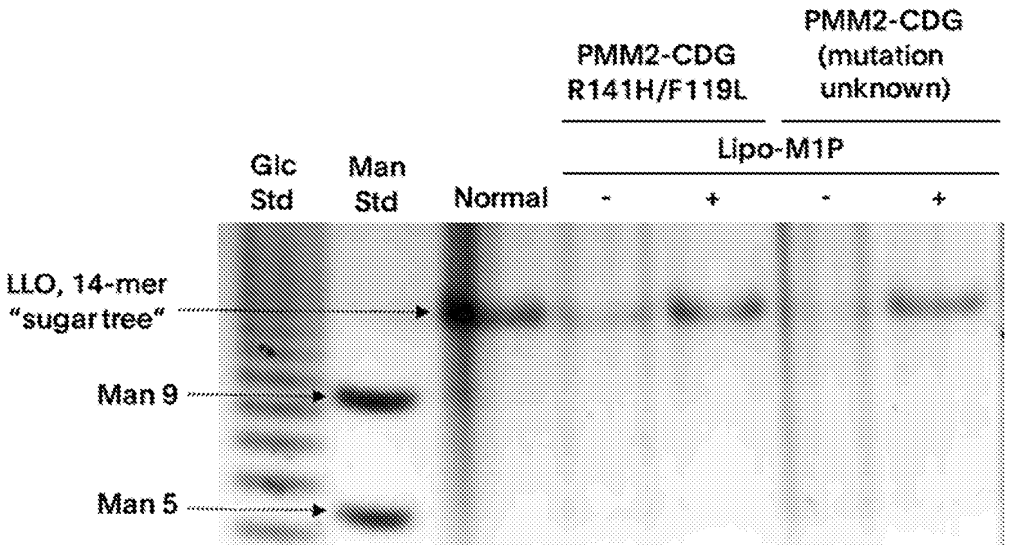

PMM2-CDG
R141H/F119L
PMM2-CDG
(mutation
unknown)
Lipo-M1P
Glc
Std
Man
Std
Normal
-
+
-
+
LLO, 14-mer
"sugar tree"
Man 9
Man 5

FIG. 4

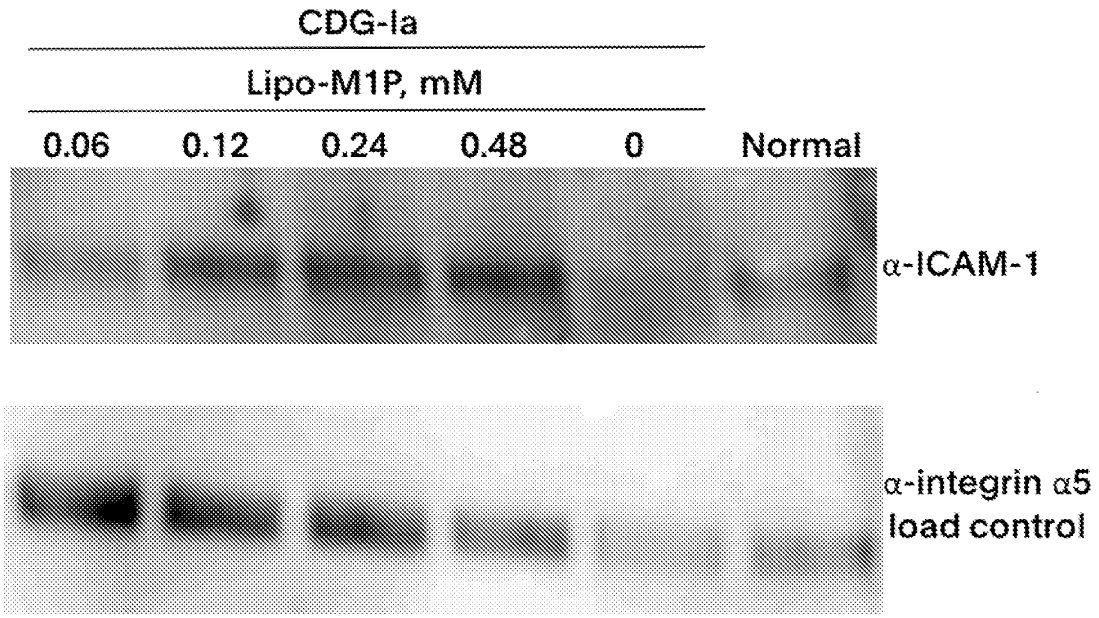

CDG-Ia
Lipo-M1P, mM
0.06
0.12
0.24
0.48
0
Normal
α-ICAM-1
α-integrin α5
load control

FIG. 5

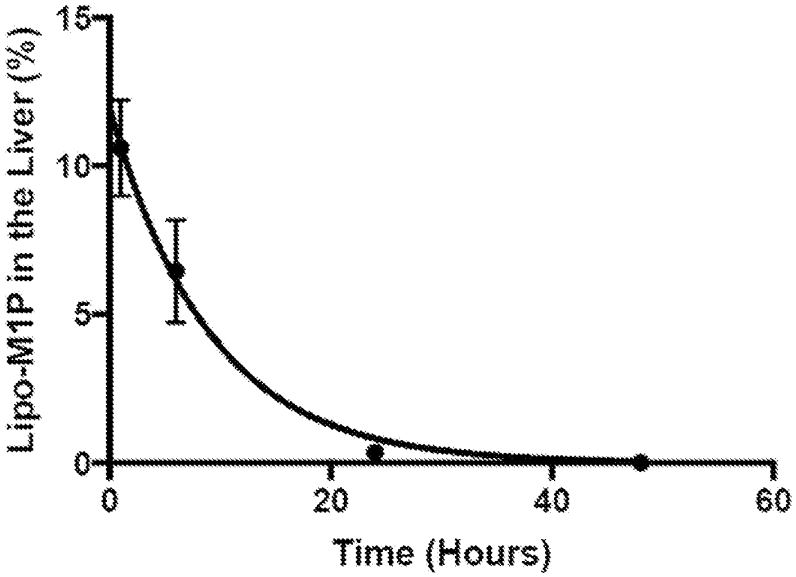

Lipo-M1P in the Liver (%)
15
10
5
0
0
20
40
60
Time (Hours)

FIG. 6A

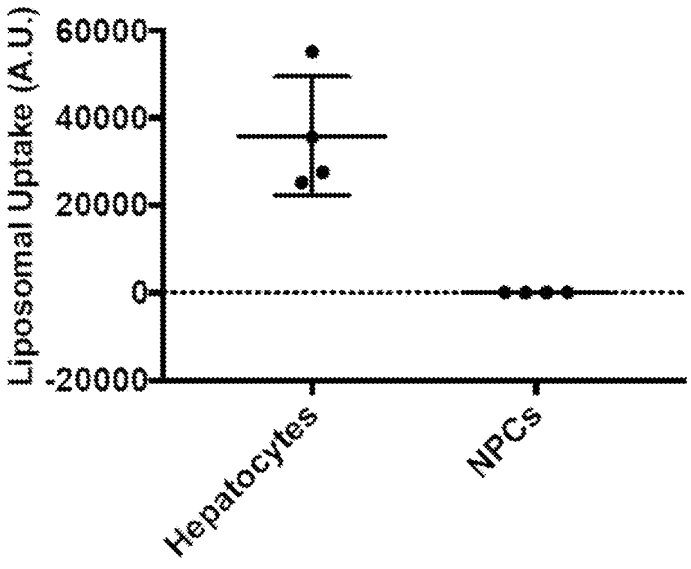

Liposomal Uptake (A.U.)
60000
40000
20000
0
-20000
Hepatocytes
NPCs

FIG. 6B