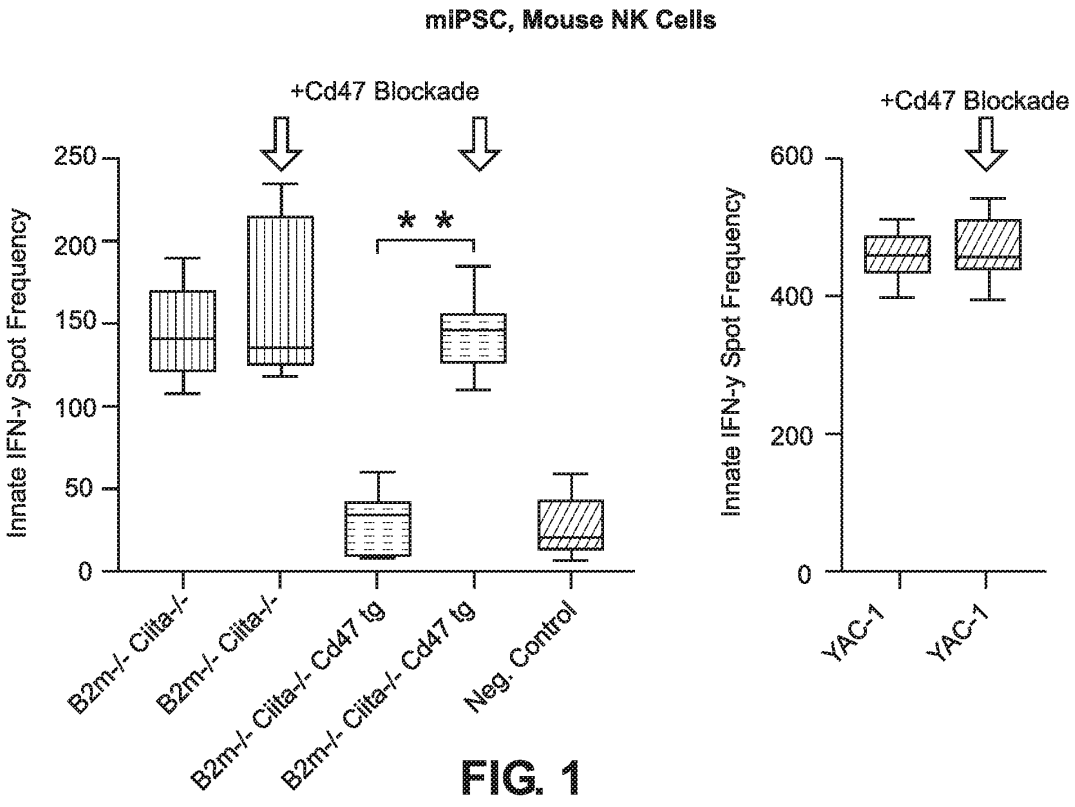

miPSC, Mouse NK Cells
+Cd47 Blockade
Innate IFN-γ Spot Frequency
250
200
150
100
50
0
* *
B2m-/- Cilta-/-
B2m-/- Cilta-/-
B2m-/- Cilta-/- Cd47 tg
B2m-/- Cilta-/- Cd47 tg
Neg. Control
+Cd47 Blockade
Innate IFN-γ Spot Frequency
600
400
200
0
YAC-1
YAC-1

FIG. 1

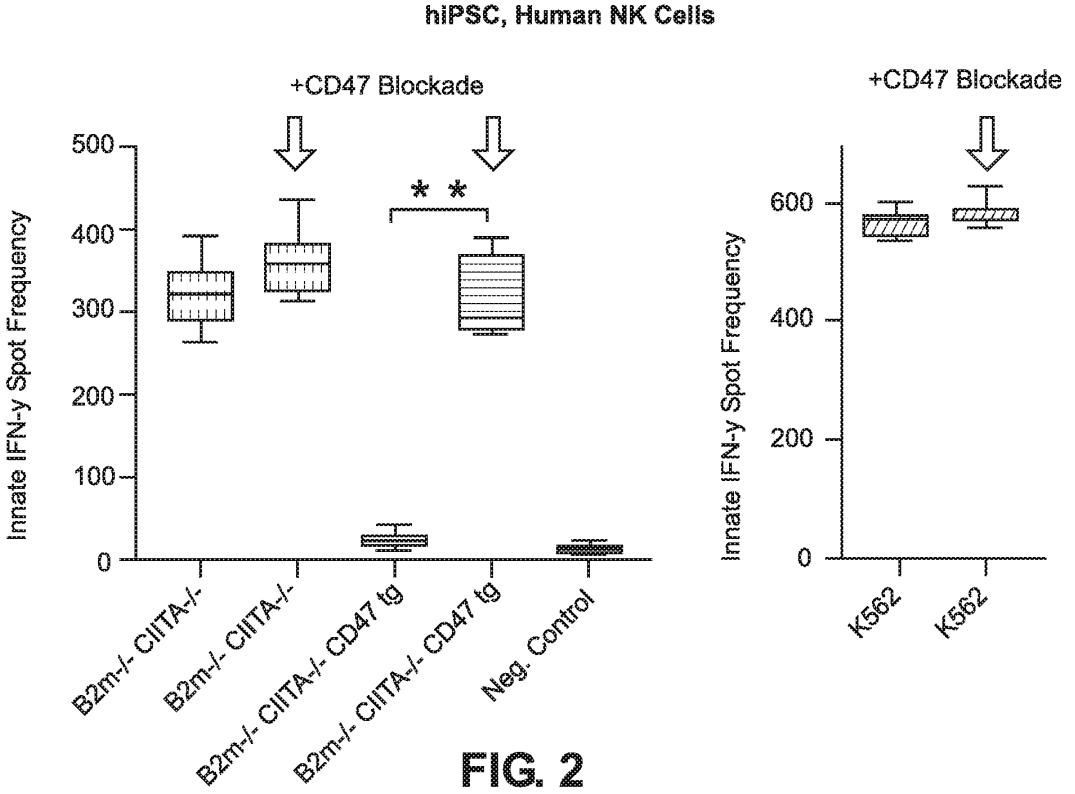

hiPSC, Human NK Cells
+CD47 Blockade
Innate IFN-γ Spot Frequency
500
400
300
200
100
0
* *
B2m-/- CIITA-/-
B2m-/- CIITA-/-
B2m-/- CIITA-/- CD47 tg
B2m-/- CIITA-/- CD47 tg
Neg. Control
+CD47 Blockade
Innate IFN-γ Spot Frequency
600
400
200
0
K562
K562

FIG. 2

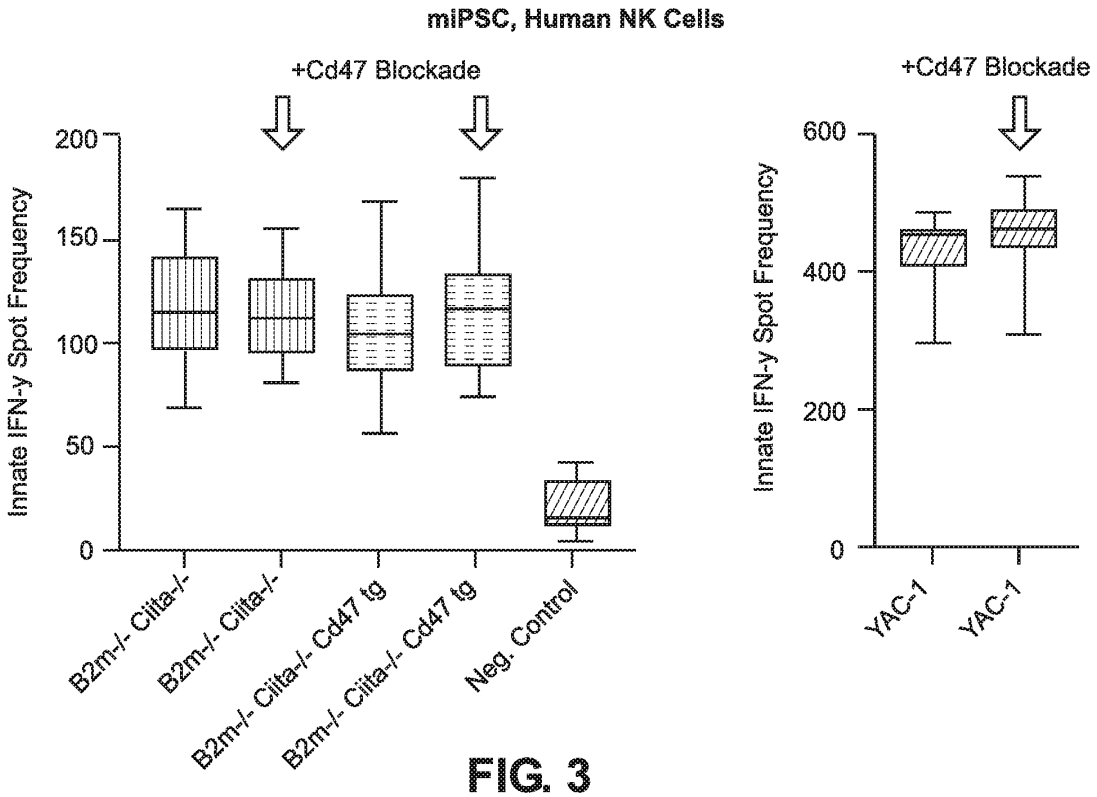

miPSC, Human NK Cells
+Cd47 Blockade
Innate IFN-γ Spot Frequency
200
150
100
50
0
B2m-/- Ciita-/-
B2m-/- Ciita-/-
B2m-/- Ciita-/- Cd47 tg
B2m-/- Ciita-/- Cd47 tg
Neg. Control
+Cd47 Blockade
Innate IFN-γ Spot Frequency
600
400
200
0
YAC-1
YAC-1

FIG. 3

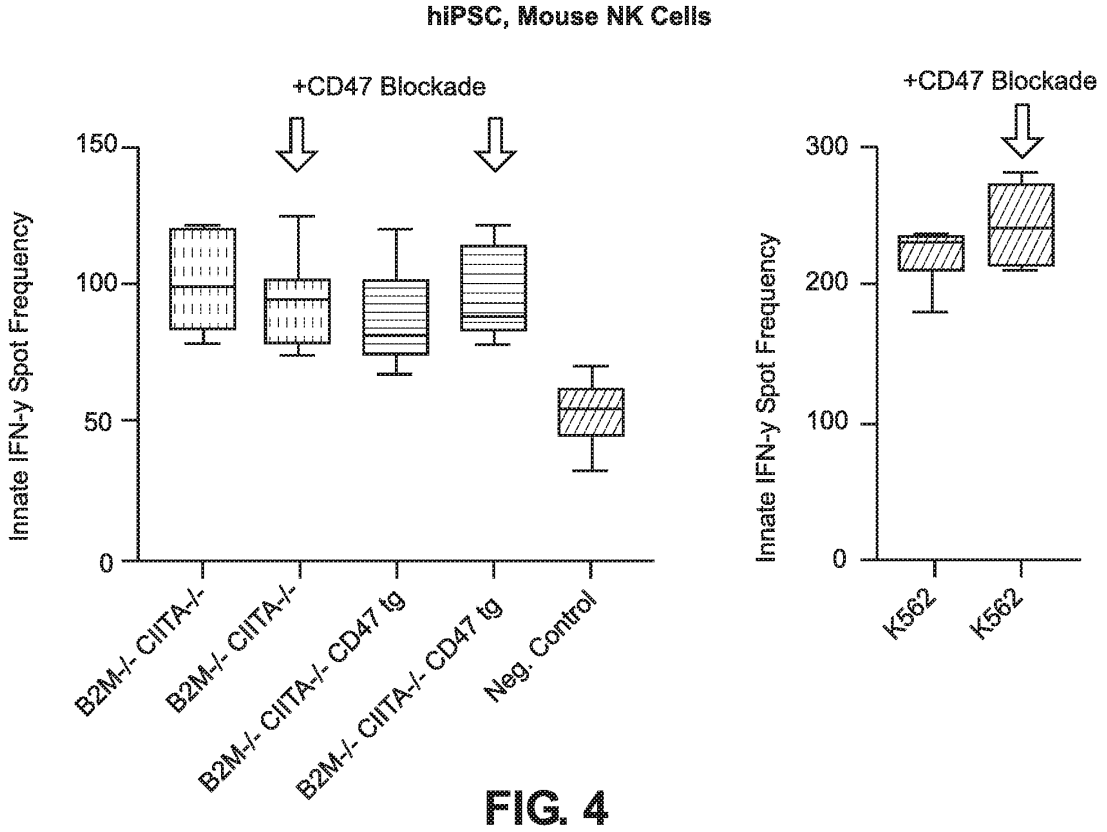

hiPSC, Mouse NK Cells
+CD47 Blockade
Innate IFN-γ Spot Frequency
150
100
50
0
B2M-/- CIITA-/-
B2M-/- CIITA-/-
B2M-/- CIITA-/- CD47 tg
B2M-/- CIITA-/- CD47 tg
Neg. Control
+CD47 Blockade
Innate IFN-γ Spot Frequency
300
200
100
0
K562
K562

FIG. 4

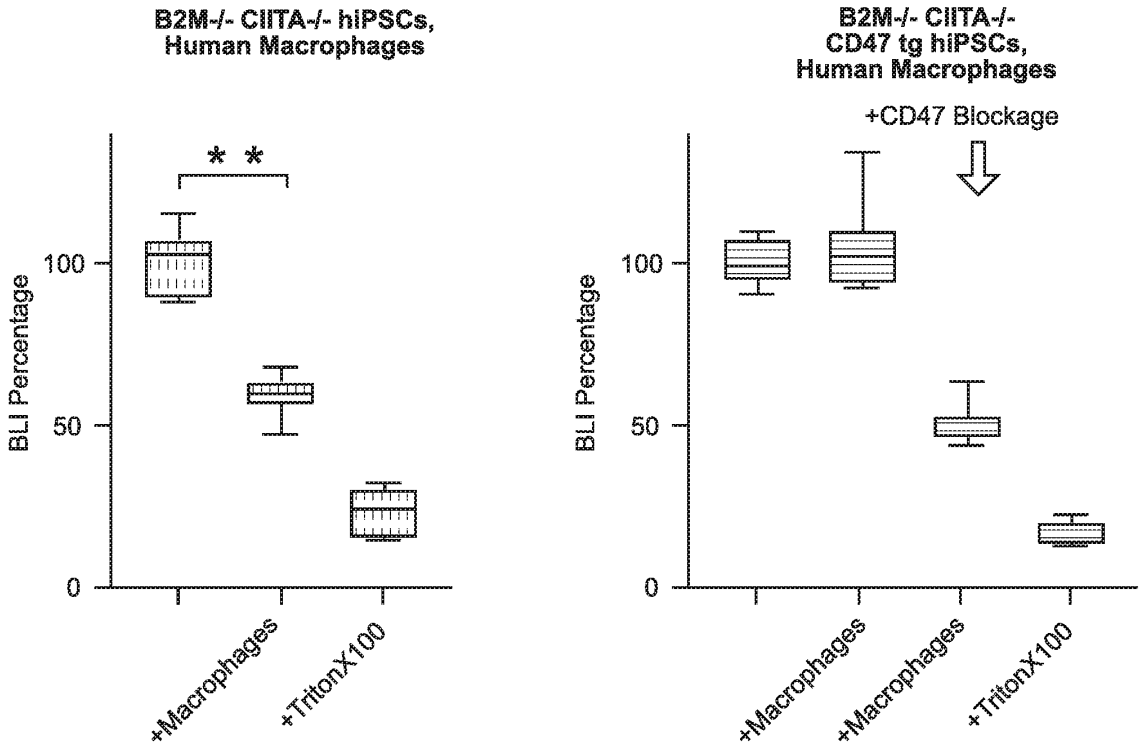

B2M-/- CIITA-/- hiPSCs,
Human Macrophages
B2M-/- CIITA-/-
CD47 tg hiPSCs,
Human Macrophages
+CD47 Blockage
BLI Percentage
100
50
0
* *
+Macrophages
+TritonX100
+Macrophages
+Macrophages
+TritonX100

FIG. 5

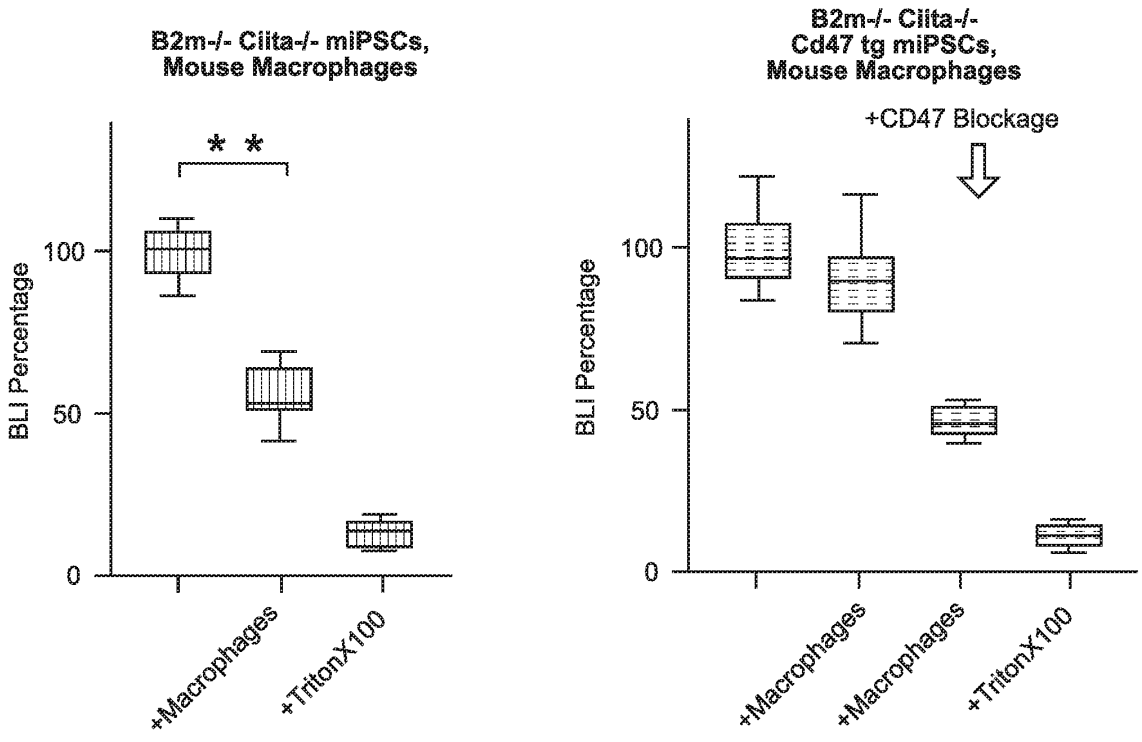

B2m-/- Ciita-/- miPSCs,
Mouse Macrophages
B2m-/- Ciita-/-
Cd47 tg miPSCs,
Mouse Macrophages
+CD47 Blockage
BLI Percentage
100
50
0
* *
+Macrophages
+TritonX100
+Macrophages
+Macrophages
+TritonX100

FIG. 6

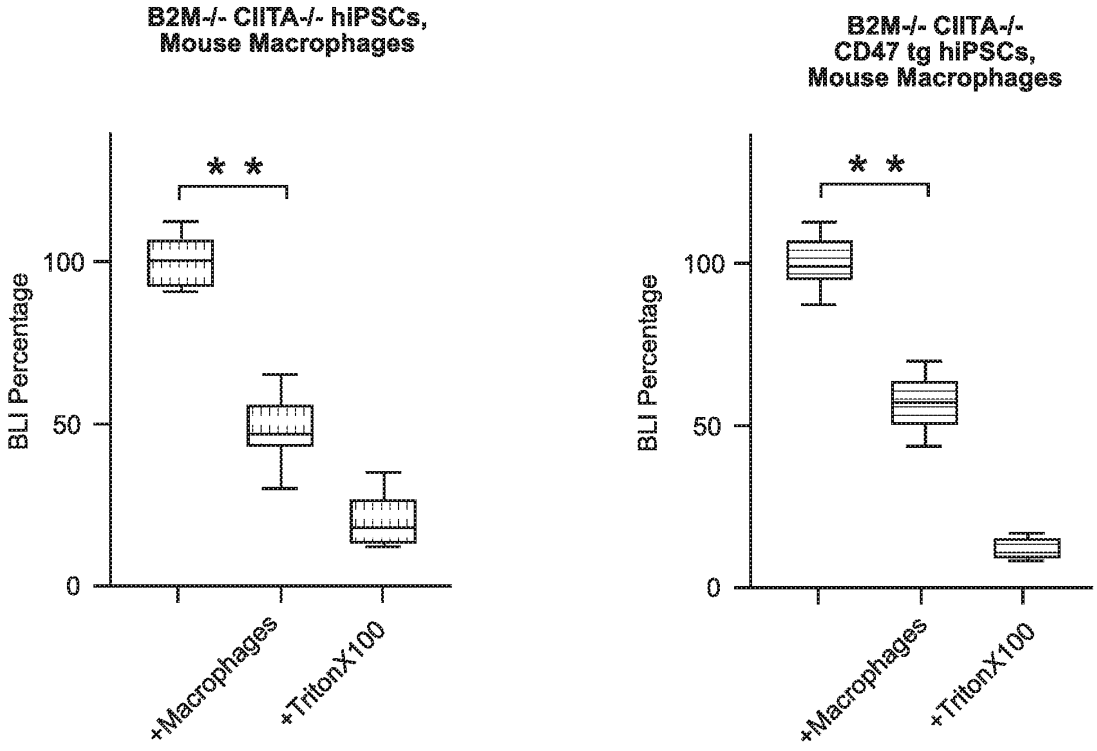

B2M-/- CIITA-/- hiPSCs,
Mouse Macrophages
B2M-/- CIITA-/-
CD47 tg hiPSCs,
Mouse Macrophages
BLI Percentage
100
50
0
* *
+Macrophages
+TritonX100

FIG. 7

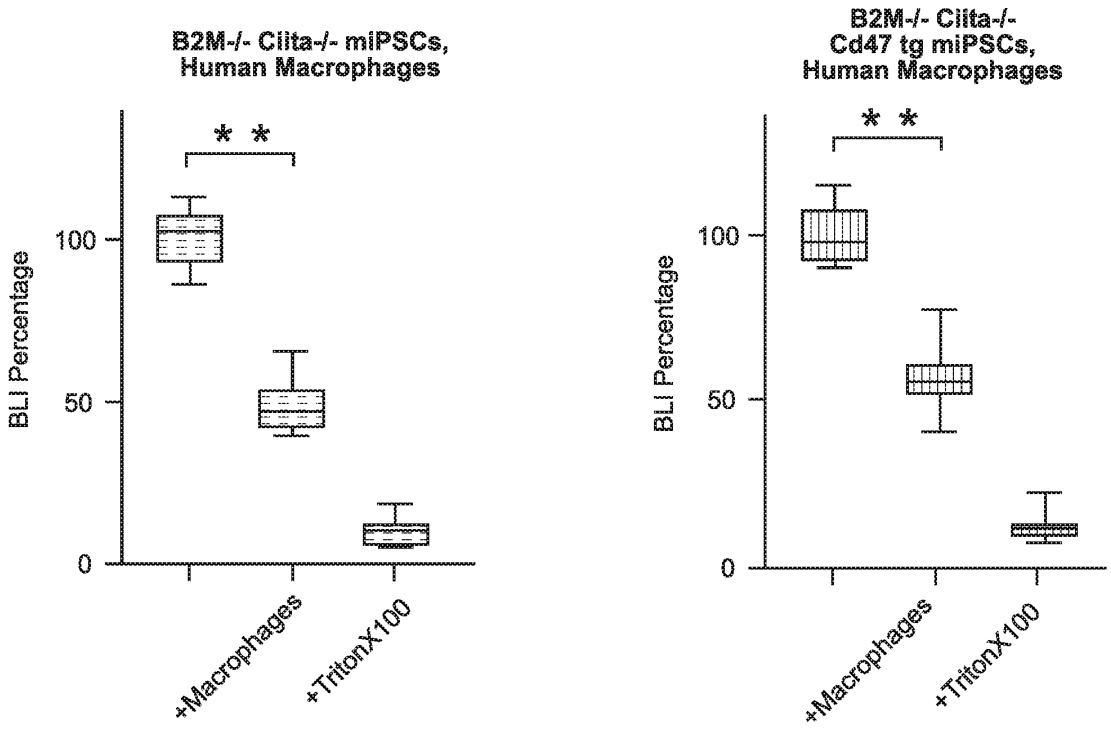

B2M-/- Ciita-/- miPSCs,
Human Macrophages
B2M-/- Ciita-/-
Cd47 tg miPSCs,
Human Macrophages
BLI Percentage
100
50
0
* *
+Macrophages
+TritonX100

FIG. 8

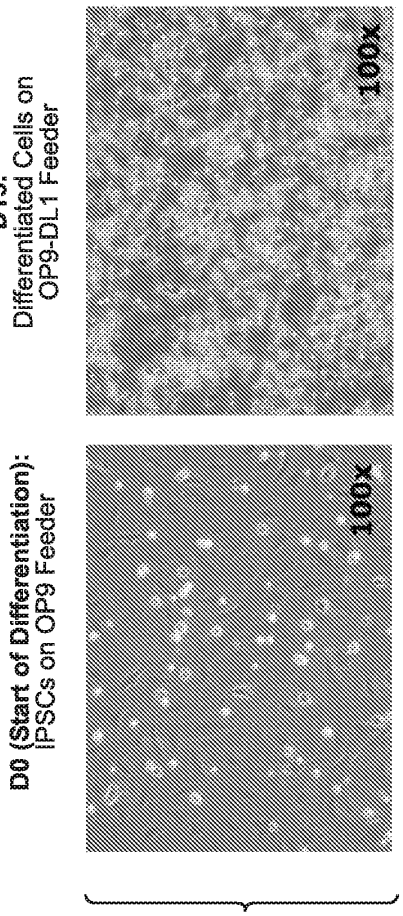

D0 (Start of Differentiation):
PSCs on OP9 Feeder
100x
D15:
Differentiated Cells on
OP9-DL1 Feeder
100x

FIG. 9

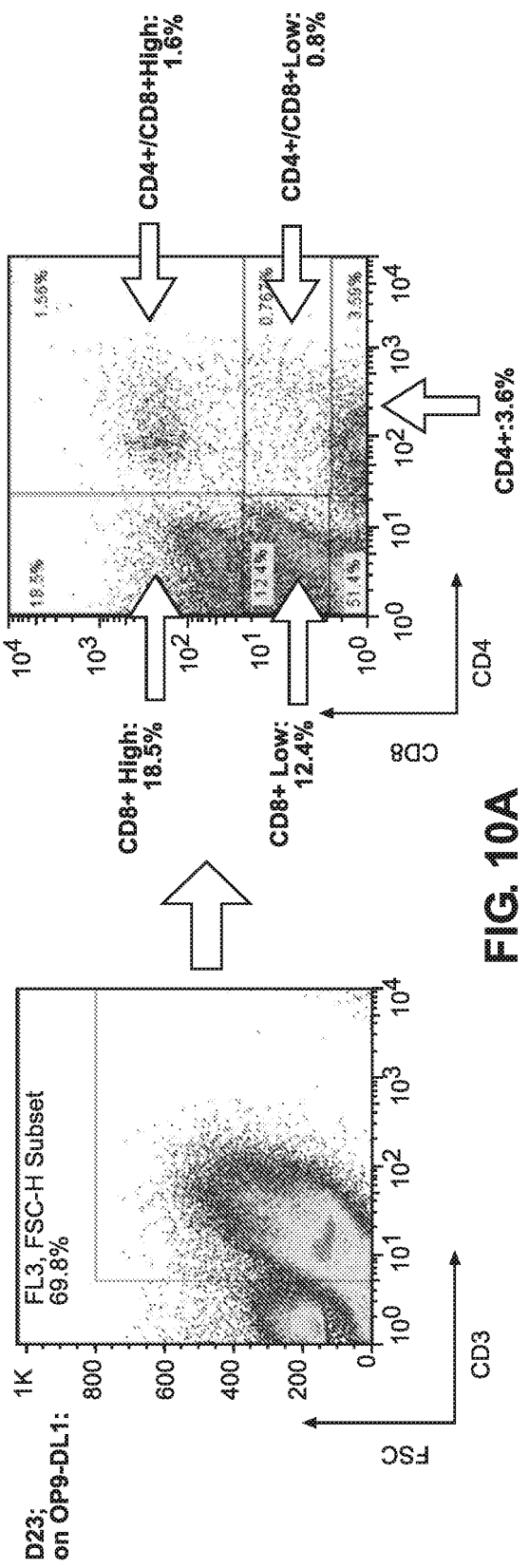

D23;
on OP9-DL1:
CD3+ Cells: 69.8%
FL3, FSC-H Subset
69.8%
FSC
CD3
CD8+ High:
18.5%
CD8+ Low:
12.4%
CD4+/CD8+High:
1.6%
CD4+/CD8+Low:
0.8%
CD4+:3.6%
CD8
CD4

FIG. 10A

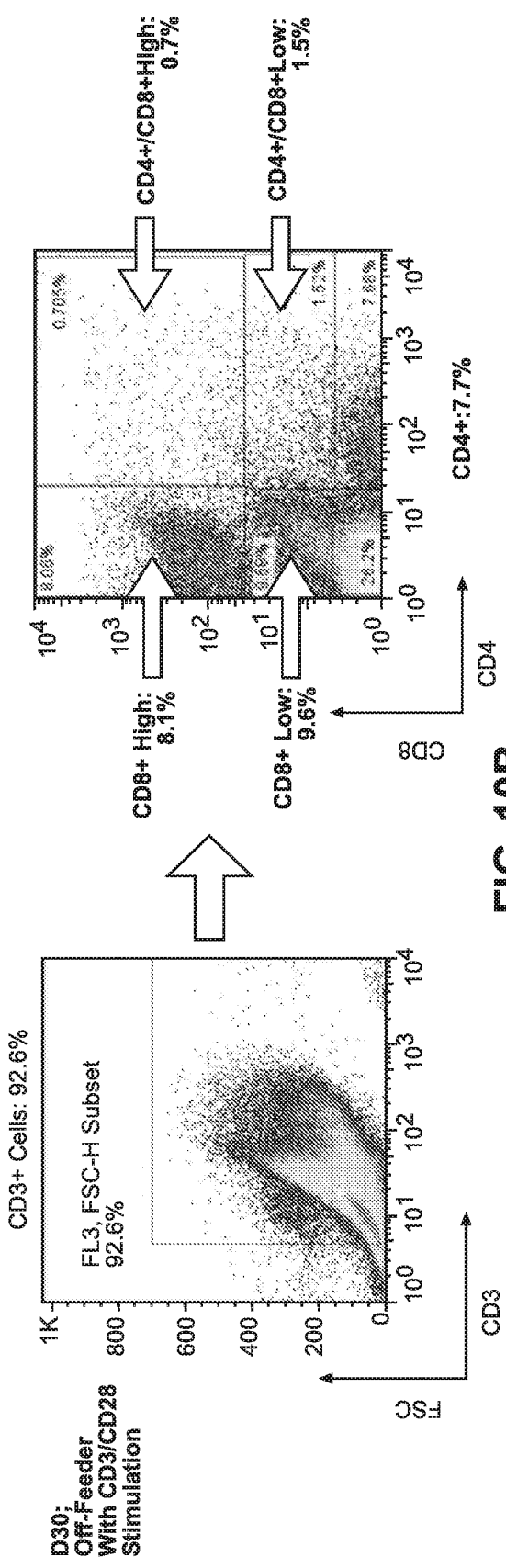


FIG. 10B

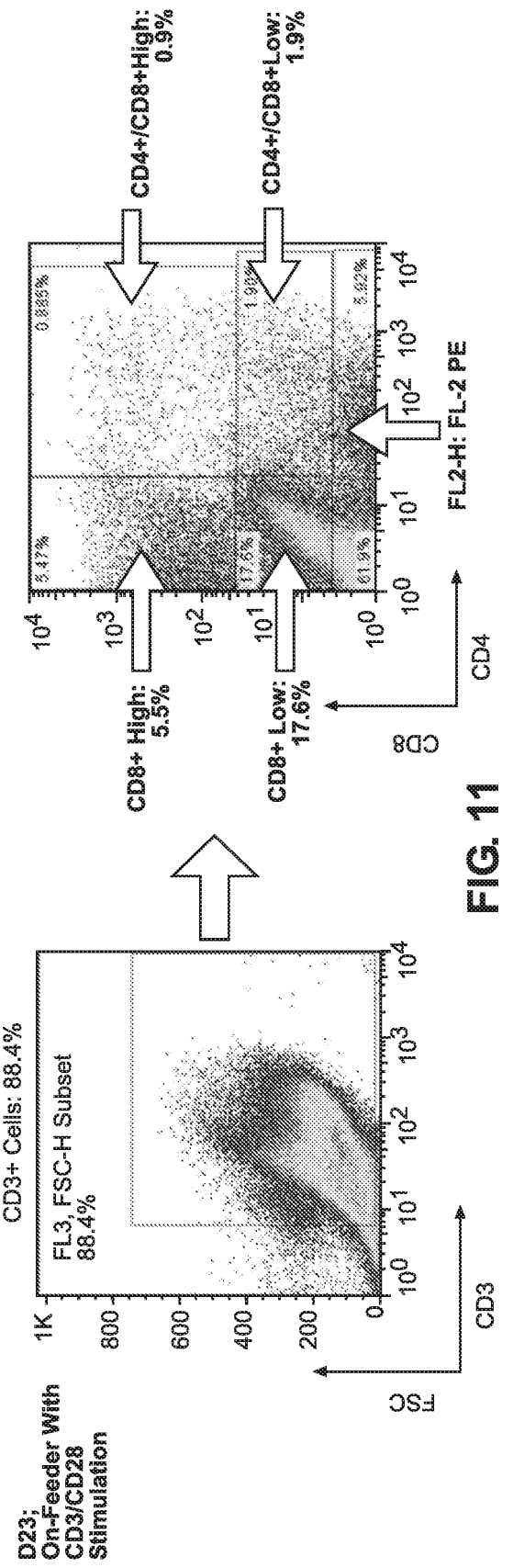


FIG. 11

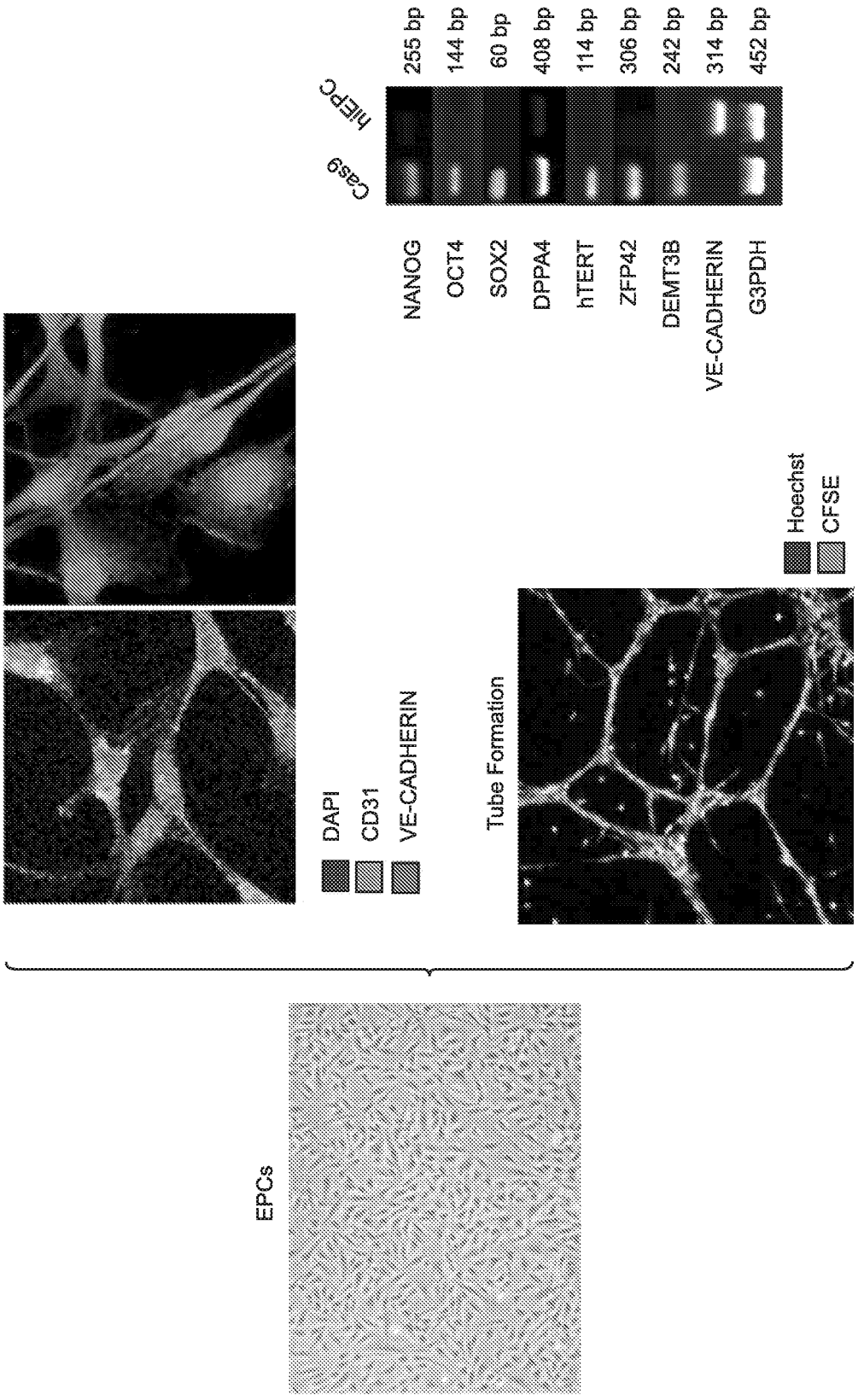

hiEPC
Cas9
255 bp
144 bp
60 bp
408 bp
114 bp
306 bp
242 bp
314 bp
452 bp
NANOG
OCT4
SOX2
DPPA4
hTERT
ZFP42
DEMT3B
VE-CADHERIN
G3PDH
DAPI
CD31
VE-CADHERIN
Tube Formation
Hoechst
CFSE
EPCs

FIG. 12

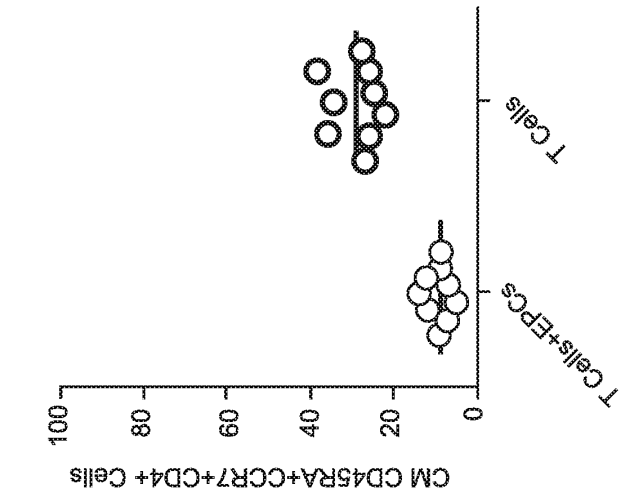


FIG. 13C

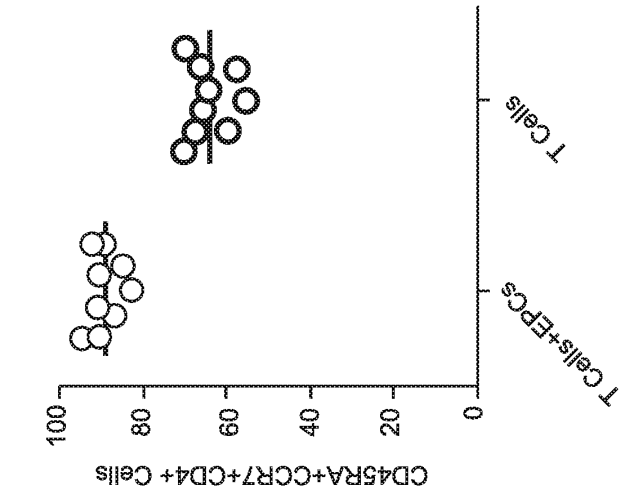


FIG. 13B

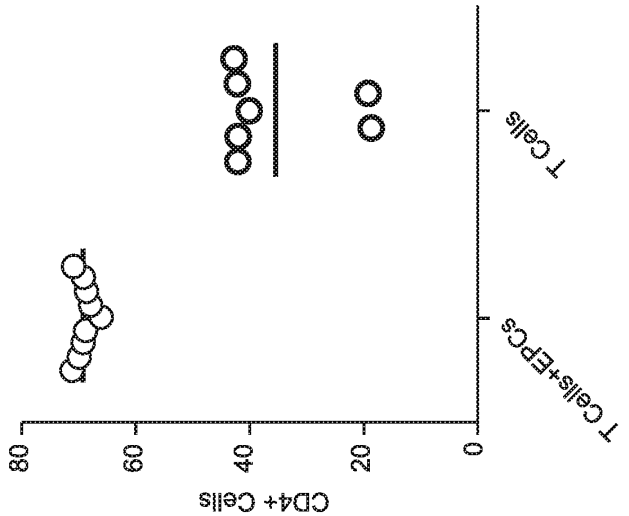


FIG. 13A

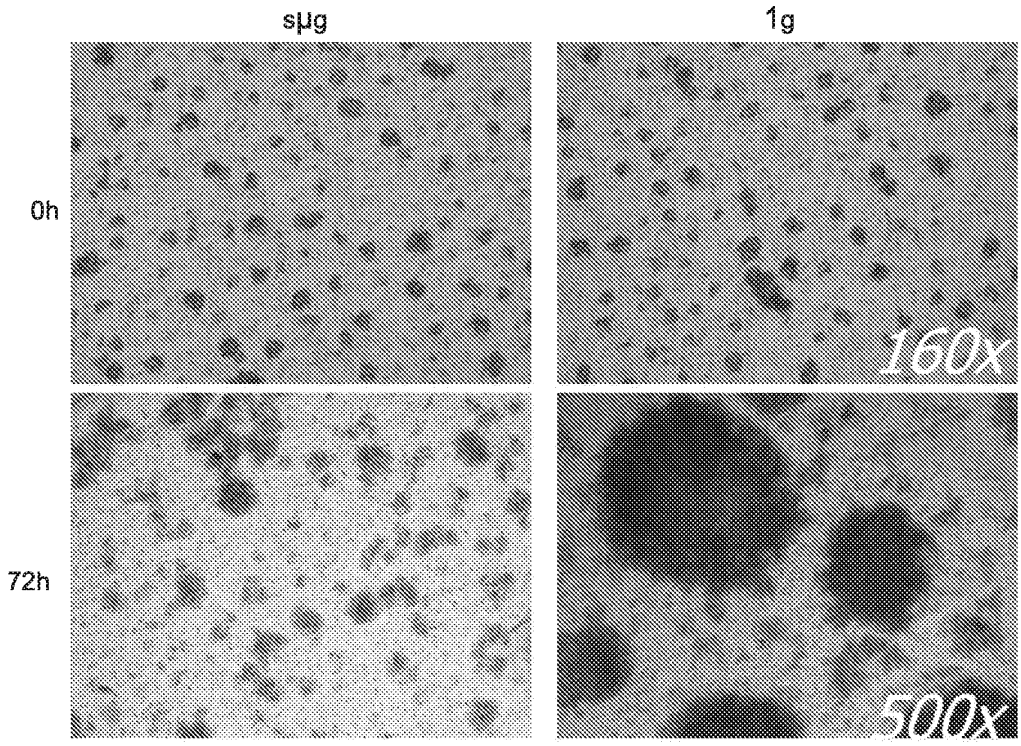


FIG. 14A

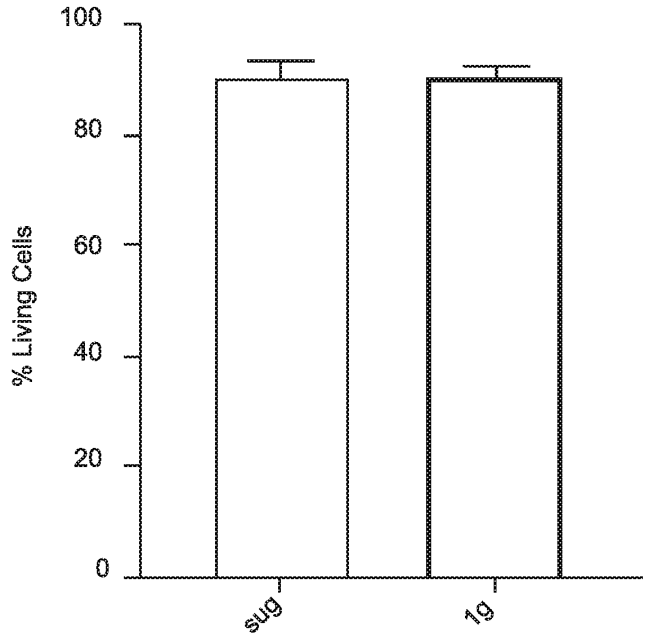


FIG. 14B

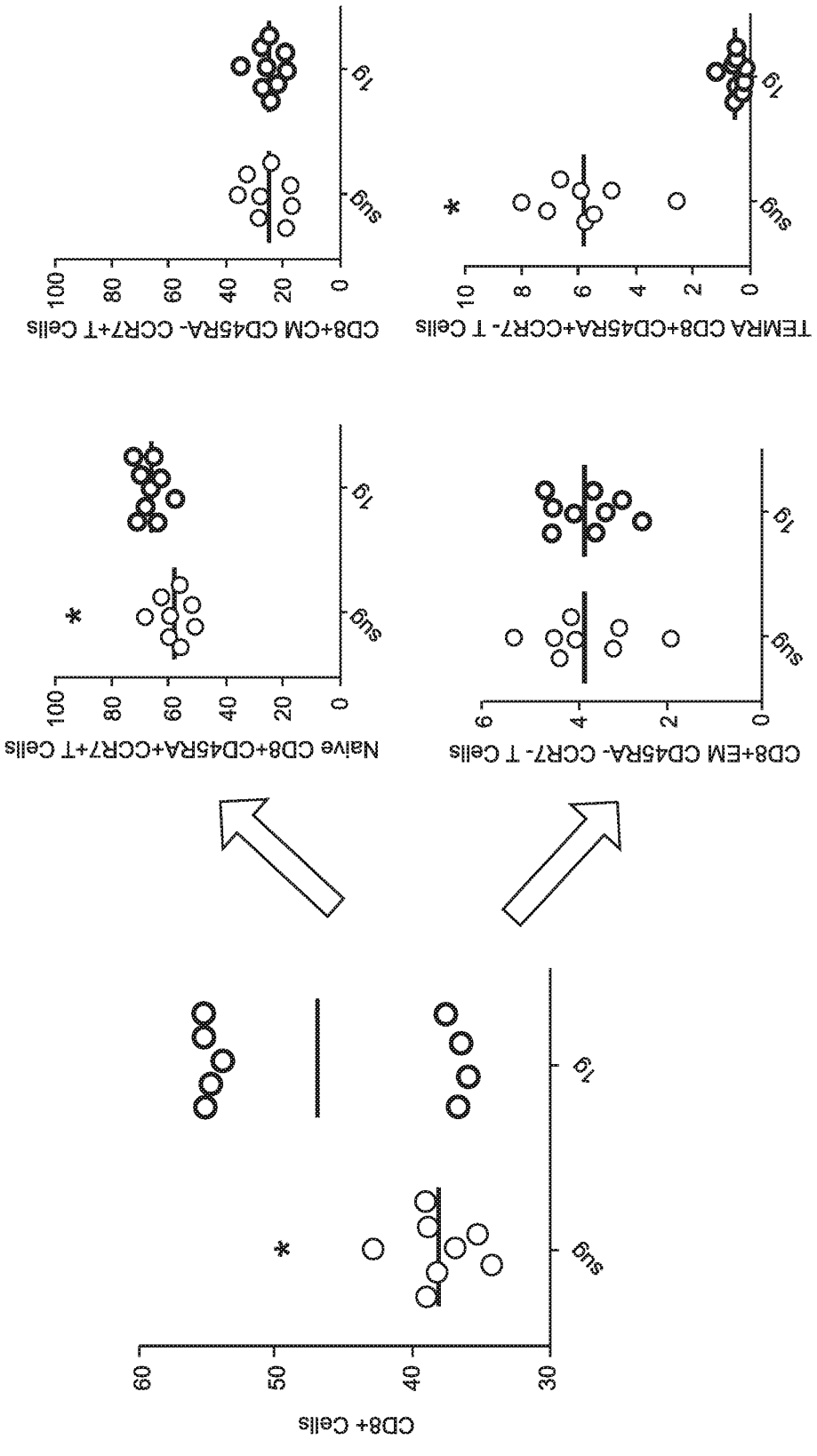

CD8+ Cells
60
50
40
30
sug
1g
Naive CD8+CD45RA+CCR7+T Cells
100
80
60
40
20
0
*
sug
1g
CD8+EM CD45RA- CCR7- T Cells
6
4
2
0
sug
1g
CD8+CM CD45RA- CCR7+T Cells
100
80
60
40
20
0
*
sug
1g
TEMRA CD8+CD45RA+CCR7- T Cells
10
8
6
4
2
0
*
sug
1g

FIG. 15

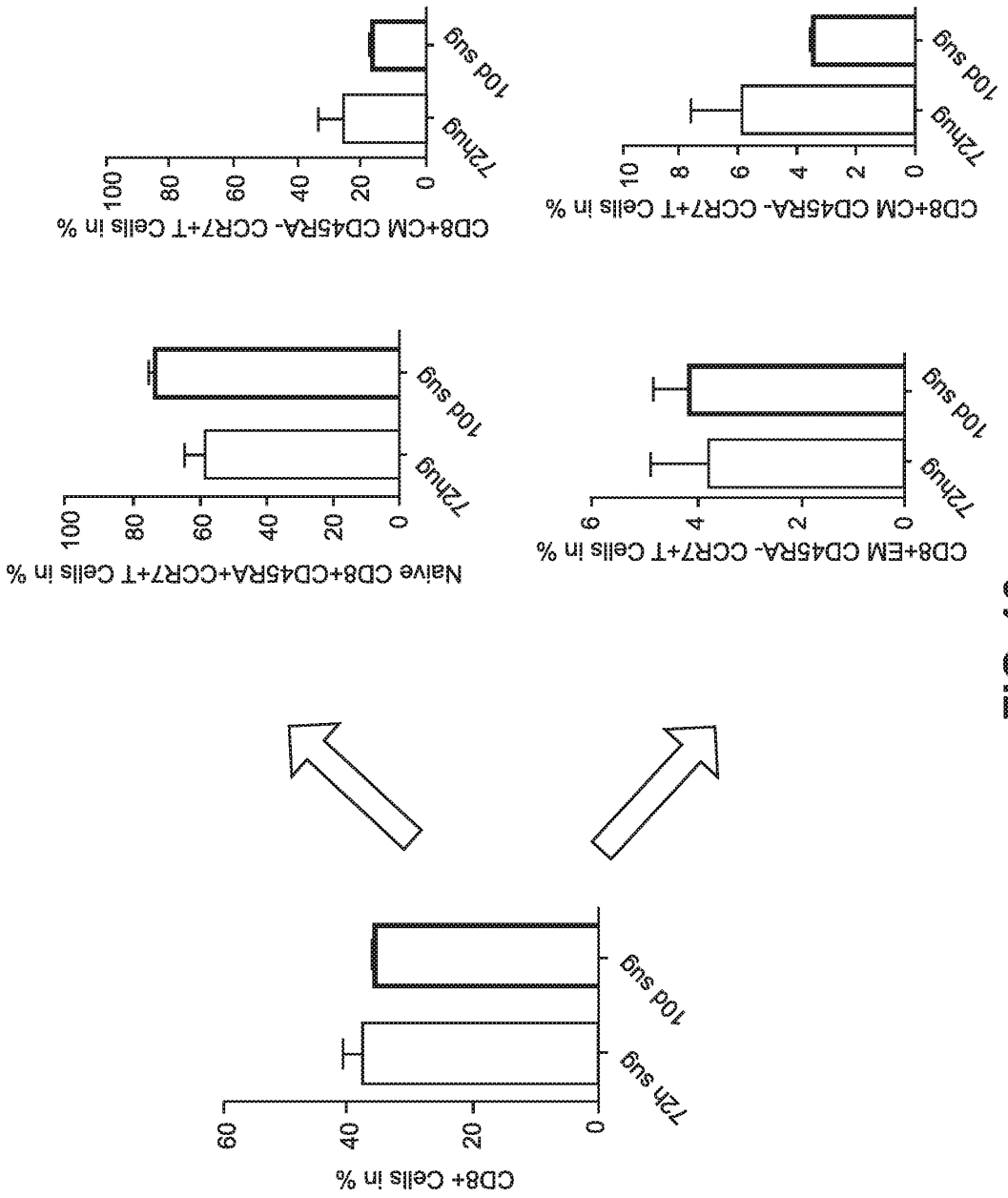

CD8+ Cells in %
0
20
40
60
72h sug
10d sug
Naive CD8+CD45RA+CCR7+T Cells in %
0
20
40
60
80
100
72hsug
10d sug
CD8+EM CD45RA- CCR7+T Cells in %
0
2
4
6
72hsug
10d sug
CD8+CM CD45RA- CCR7+T Cells in %
0
2
4
6
8
10
72hsug
10d sug
CD8+CM CD45RA- CCR7+T Cells in %
0
20
40
60
80
100
72hsug
10d sug

FIG. 16

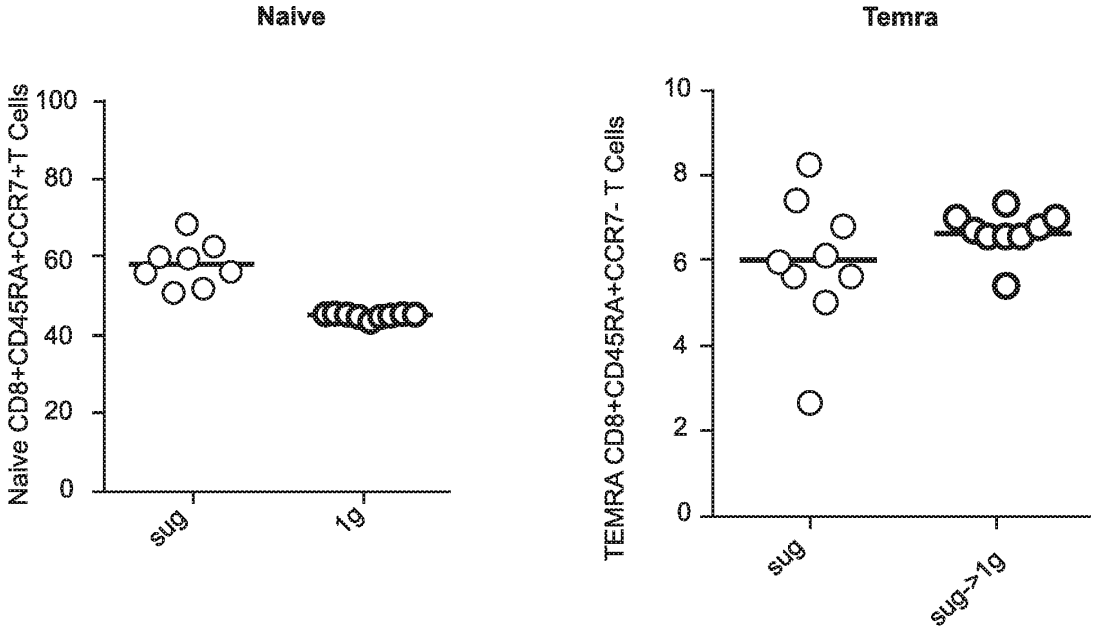

Naive
Temra
Naive CD8+CD45RA+CCR7+T Cells
100
80
60
40
20
0
sug
1g
TEMRA CD8+CD45RA+CCR7- T Cells
10
8
6
4
2
0
sug
sug->1g

FIG. 17

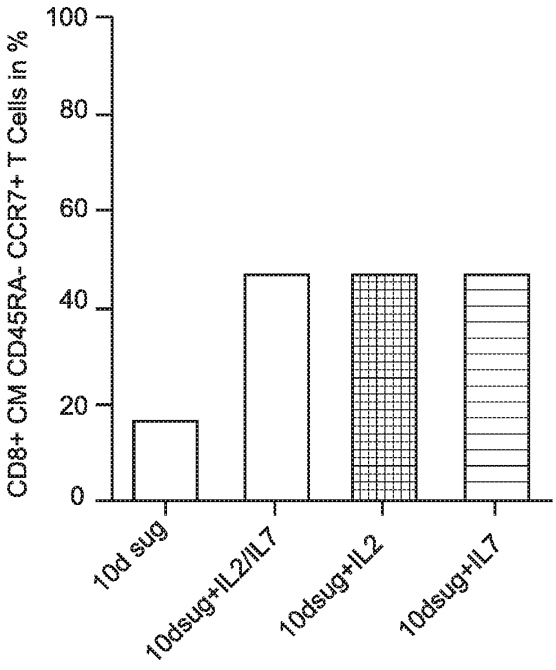

CD8+ CM CD45RA- CCR7+ T Cells in %
100
80
60
40
20
0
10d sug
10dsug+IL2/IL7
10dsug+IL2
10dsug+IL7

FIG. 18