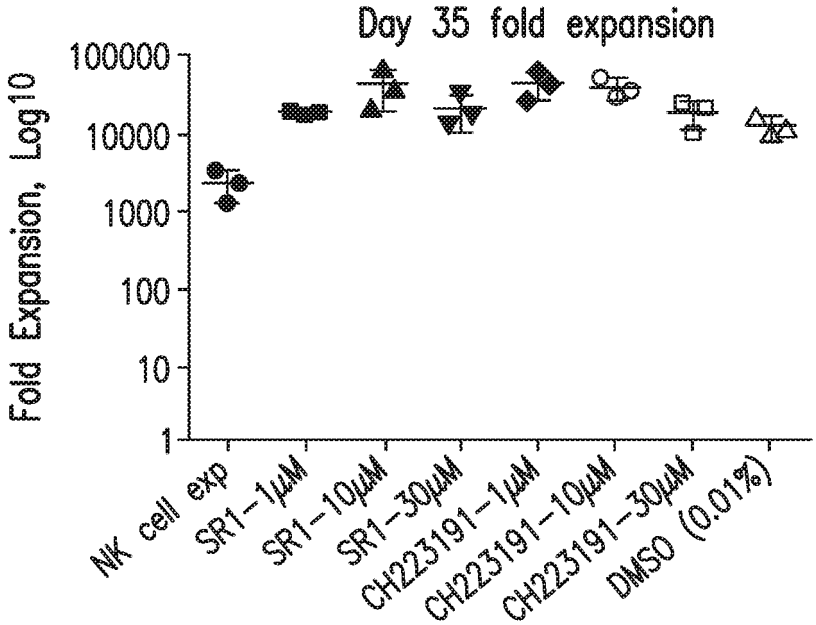


FIG. 1A

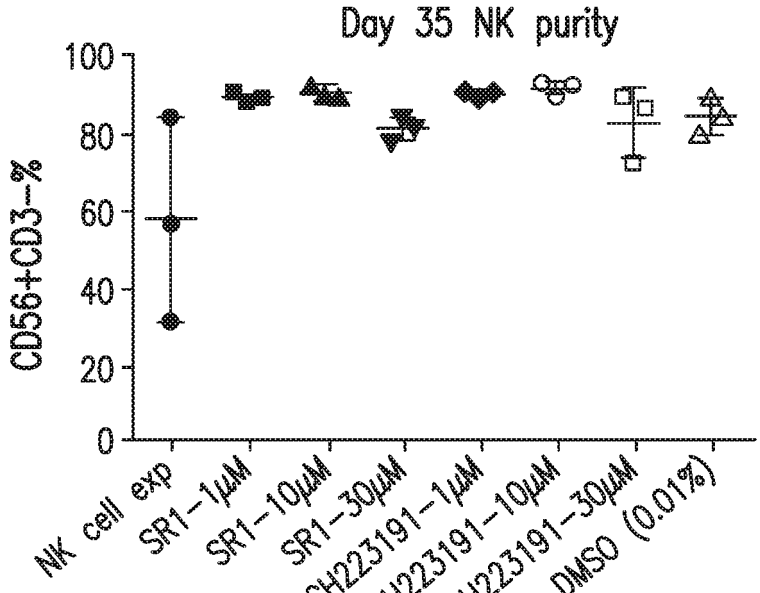


FIG. 1B

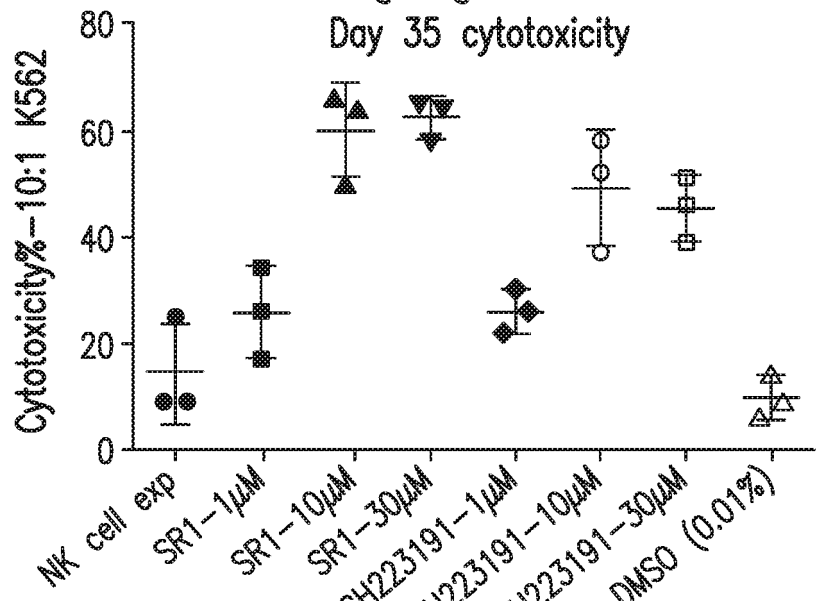


FIG. 1C

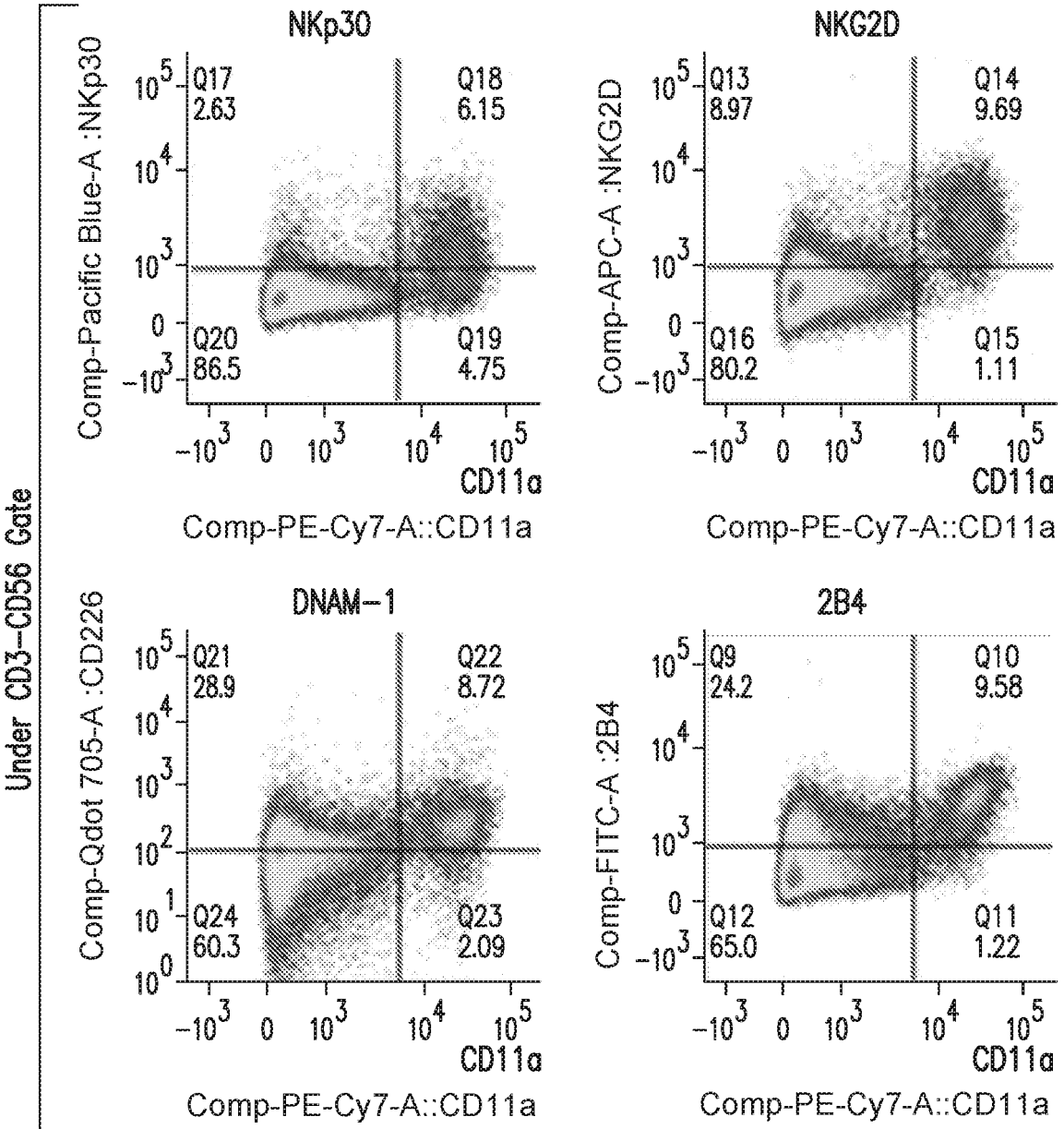

Under CD3-CD56 Gate
NKp30
Comp-Pacific Blue-A :NKp30
Q17
2.63
Q18
6.15
Q20
86.5
Q19
4.75
CD11a
Comp-PE-Cy7-A::CD11a
NKG2D
Comp-APC-A :NKG2D
Q13
8.97
Q14
9.69
Q16
80.2
Q15
1.11
CD11a
Comp-PE-Cy7-A::CD11a
DNAM-1
Comp-Qdot 705-A :CD226
Q21
28.9
Q22
8.72
Q24
60.3
Q23
2.09
CD11a
Comp-PE-Cy7-A::CD11a
2B4
Comp-FITC-A :2B4
Q9
24.2
Q10
9.58
Q12
65.0
Q11
1.22
CD11a
Comp-PE-Cy7-A::CD11a

FIG. 2

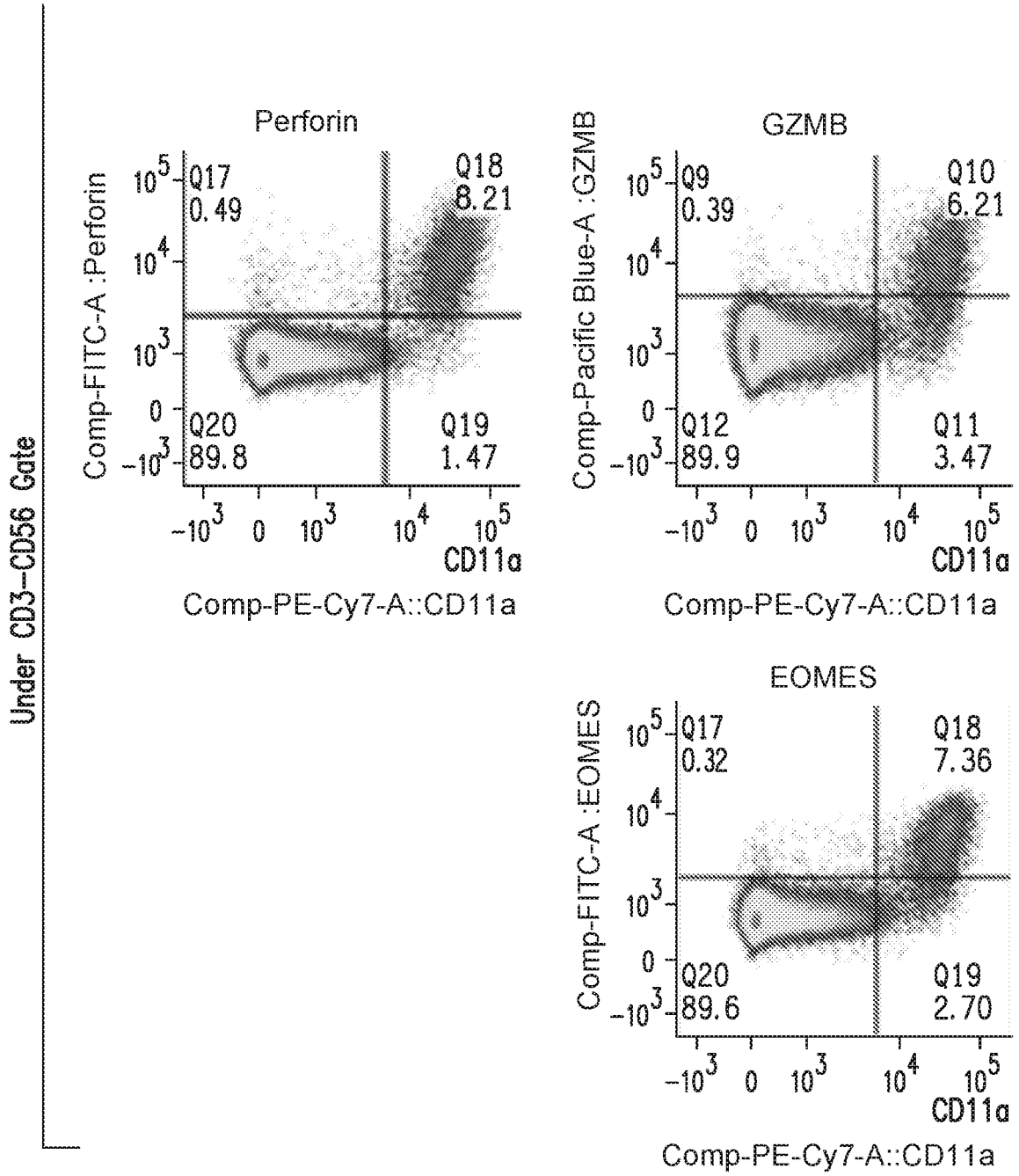

Under CD3-CD56 Gate
Perforin
Comp-FITC-A :Perforin
Q17
0.49
Q18
8.21
Q20
89.8
Q19
1.47
CD11a
Comp-PE-Cy7-A::CD11a
GZMB
Comp-Pacific Blue-A :GZMB
Q9
0.39
Q10
6.21
Q12
89.9
Q11
3.47
CD11a
Comp-PE-Cy7-A::CD11a
EOMES
Comp-FITC-A :EOMES
Q17
0.32
Q18
7.36
Q20
89.6
Q19
2.70
CD11a
Comp-PE-Cy7-A::CD11a

FIG. 2 Cont.

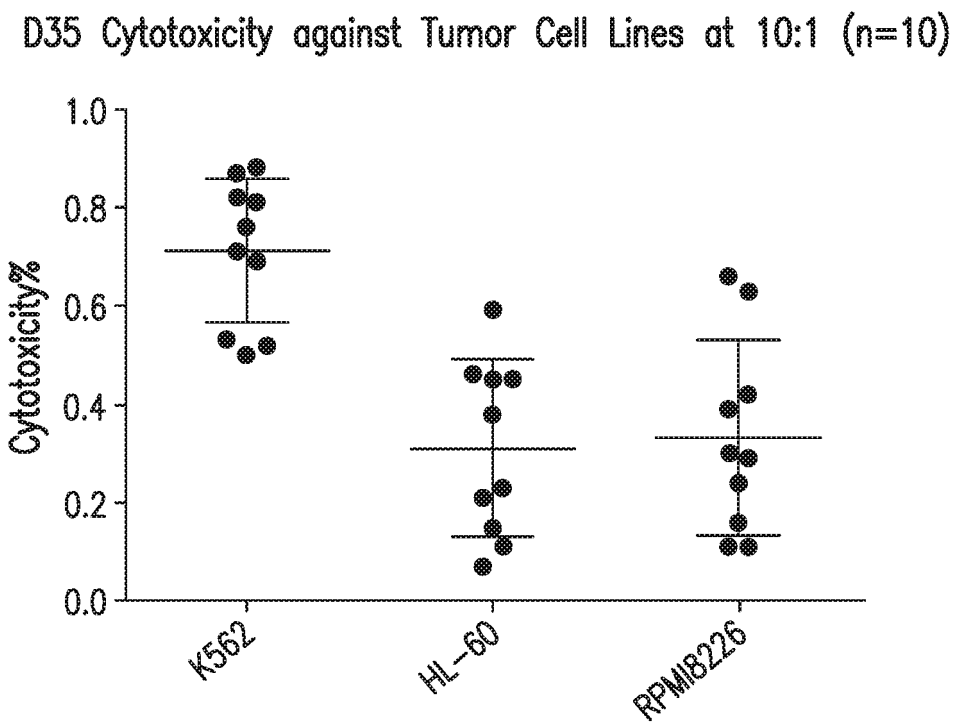

D35 Cytotoxicity against Tumor Cell Lines at 10:1 (n=10)
Cytotoxicity%
1.0
0.8
0.6
0.4
0.2
0.0
K562
HL-60
RPMI8226

FIG. 3

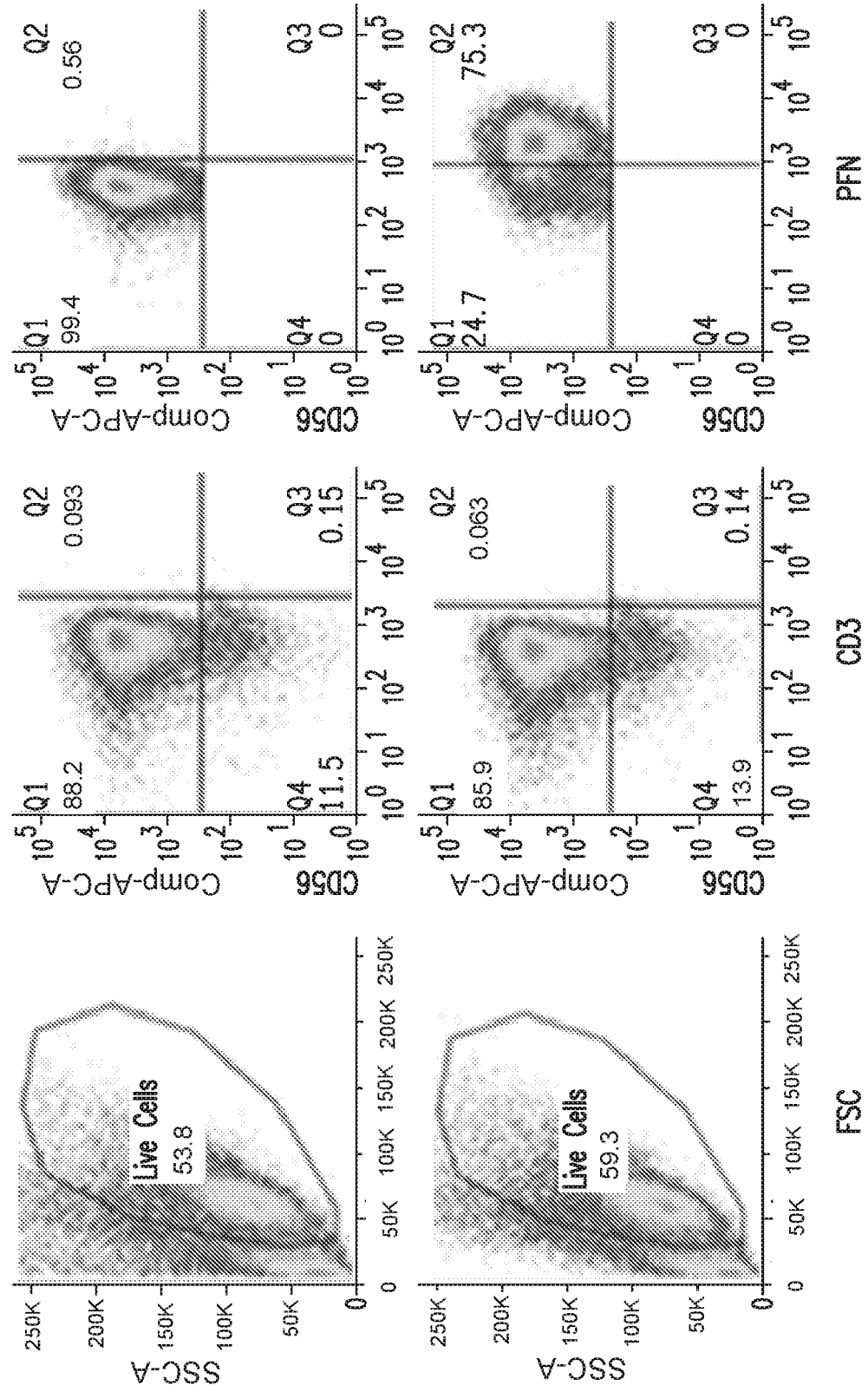

Intracellular Perforin Production
Live Cells
53.8
Live Cells
59.3
SSC-A
FSC
Comp-APC-A
CD56
CD3
PFN
Q1
88.2
Q2
0.093
Q3
0.15
Q4
11.5
Q1
85.9
Q2
0.063
Q3
0.14
Q4
13.9
Q1
99.4
Q2
0.56
Q3
0
Q4
0
Q1
24.7
Q2
75.3
Q3
0
Q4
0

FIG. 4

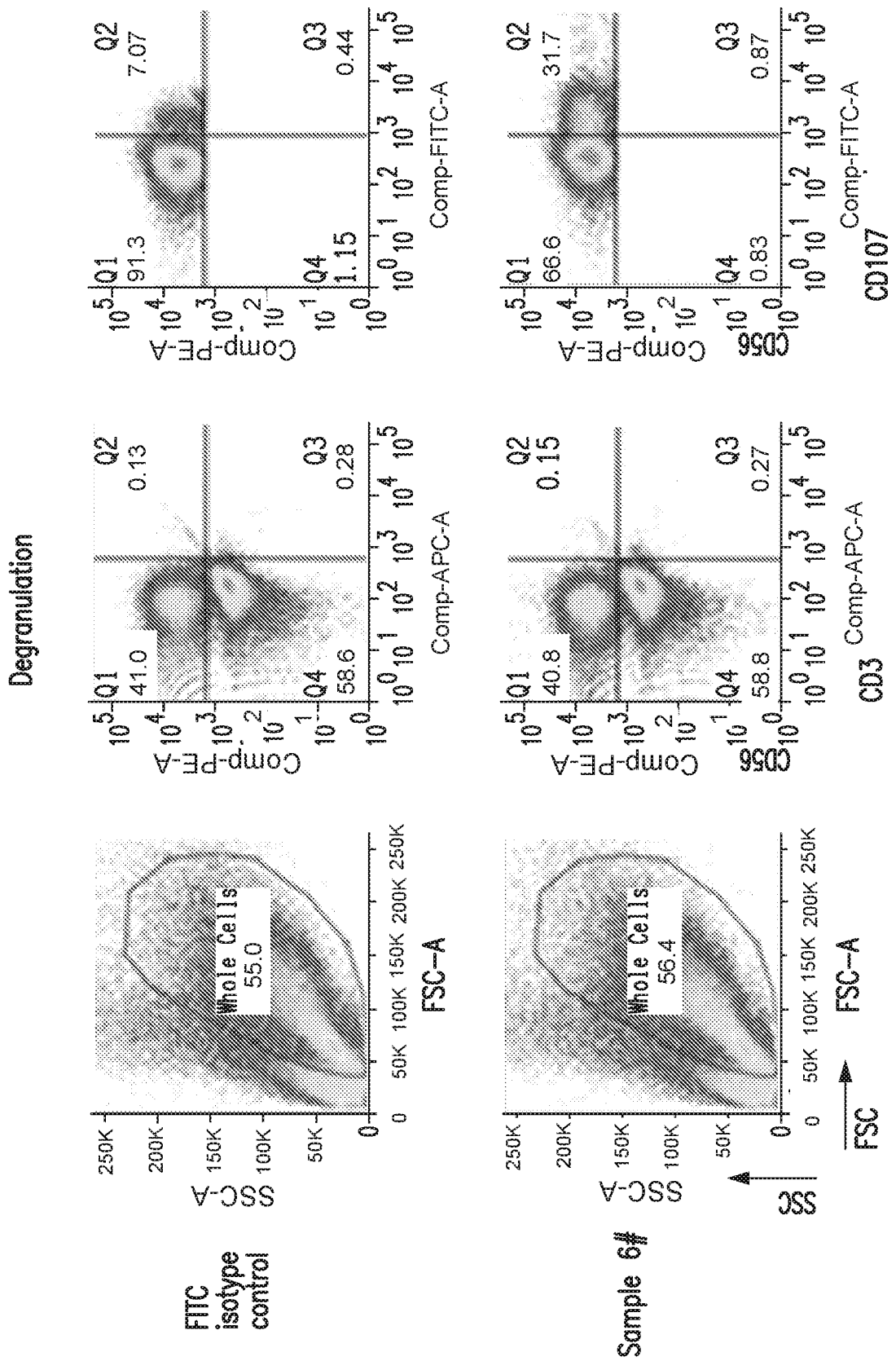

Degranulation
FITC isotype control
Sample 6#
SSC-A
FSC-A
Whole Cells
55.0
56.4
Comp-PE-A
Comp-APC-A
Comp-FITC-A
CD56
CD3
CD107
Q1
Q2
Q3
Q4
41.0
0.13
0.28
58.6
91.3
7.07
0.44
1.15
40.8
0.15
0.27
58.8
66.6
31.7
0.87
0.83

FIG. 4 Cont.

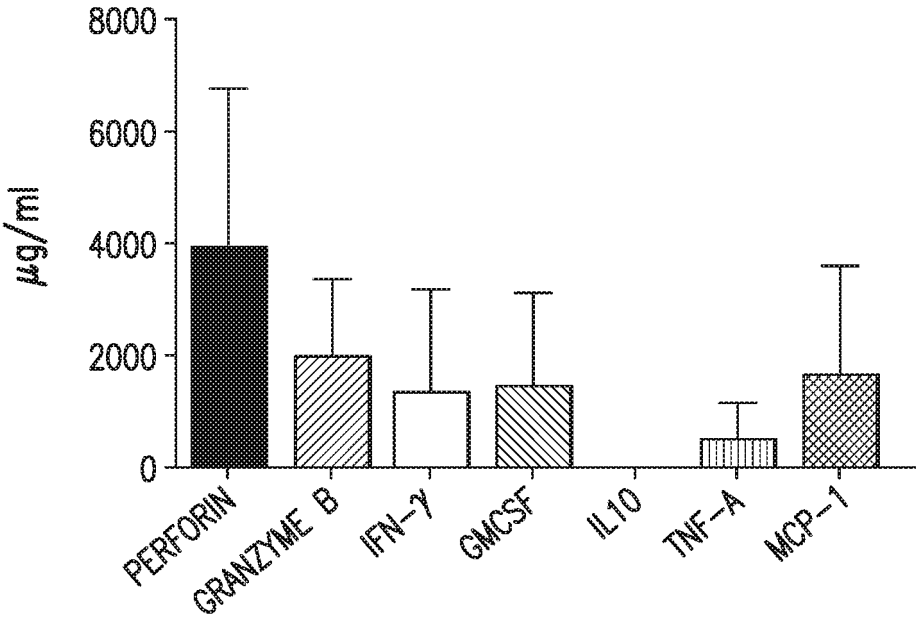

8000
6000
4000
2000
0
μg/ml
PERFORIN
GRANZYME B
IFN-γ
GMCSF
IL10
TNF-A
MCP-1

FIG. 5

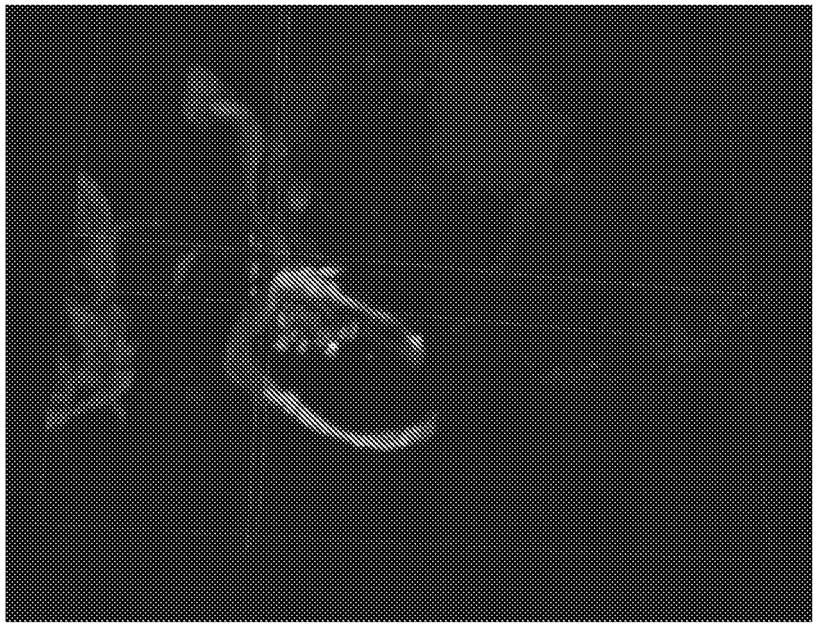


FIG. 6A

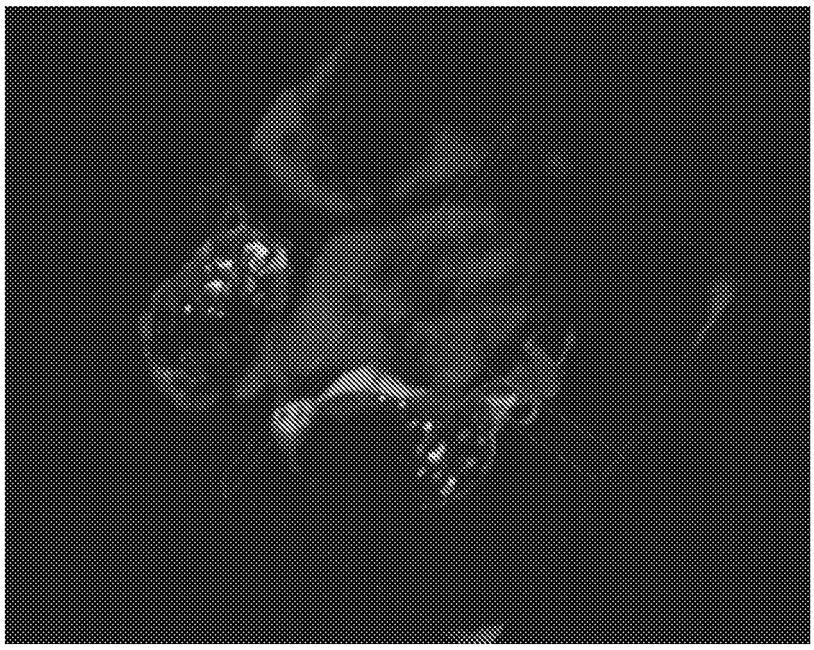


FIG. 6B

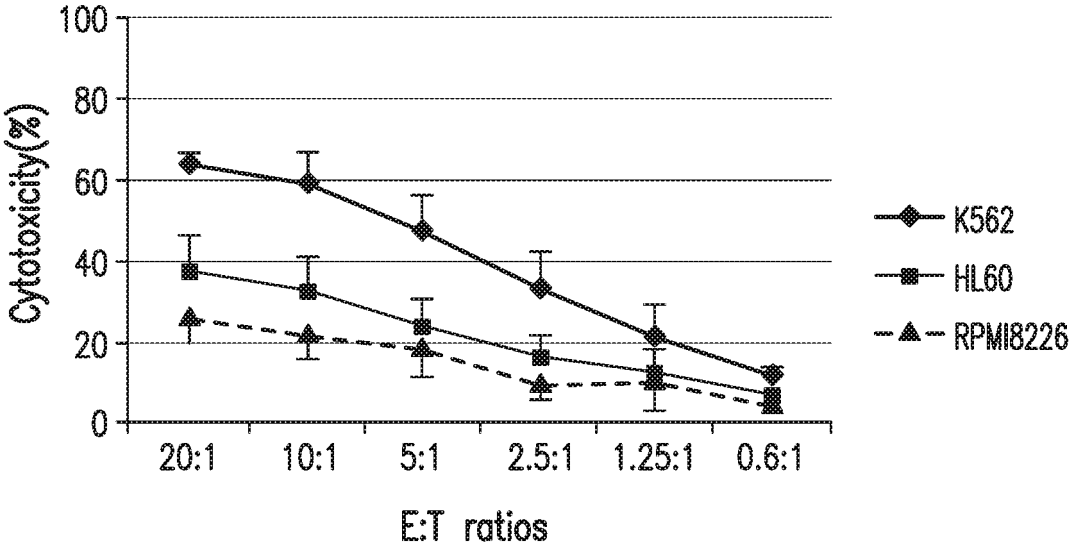

100
80
60
40
20
0
Cytotoxicity(%)
20:1
10:1
5:1
2.5:1
1.25:1
0.6:1
E:T ratios
K562
HL60
RPMI8226

FIG. 7

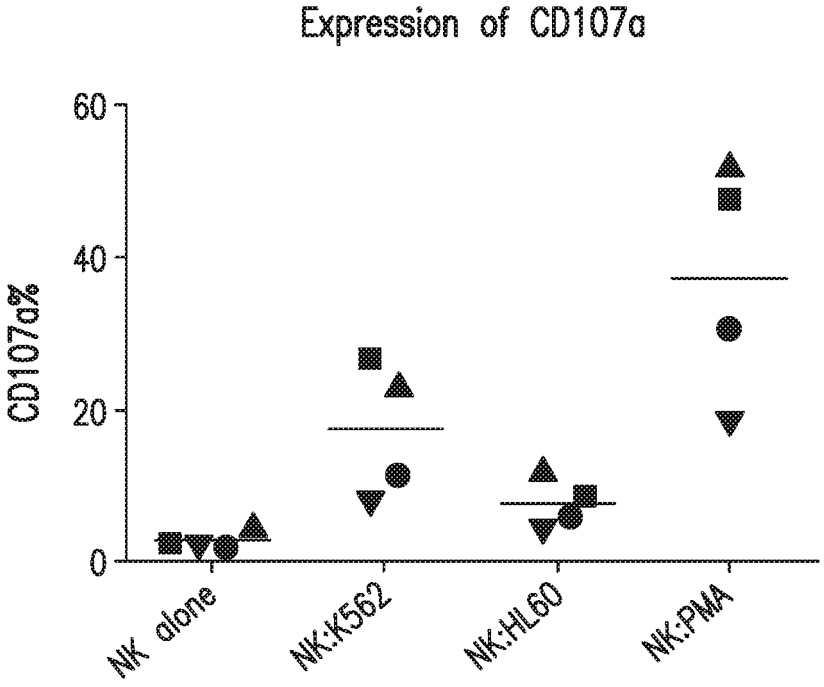

Expression of CD107a
CD107a%
60
40
20
0
NK alone
NK:K562
NK:HL60
NK:PMA

FIG. 8

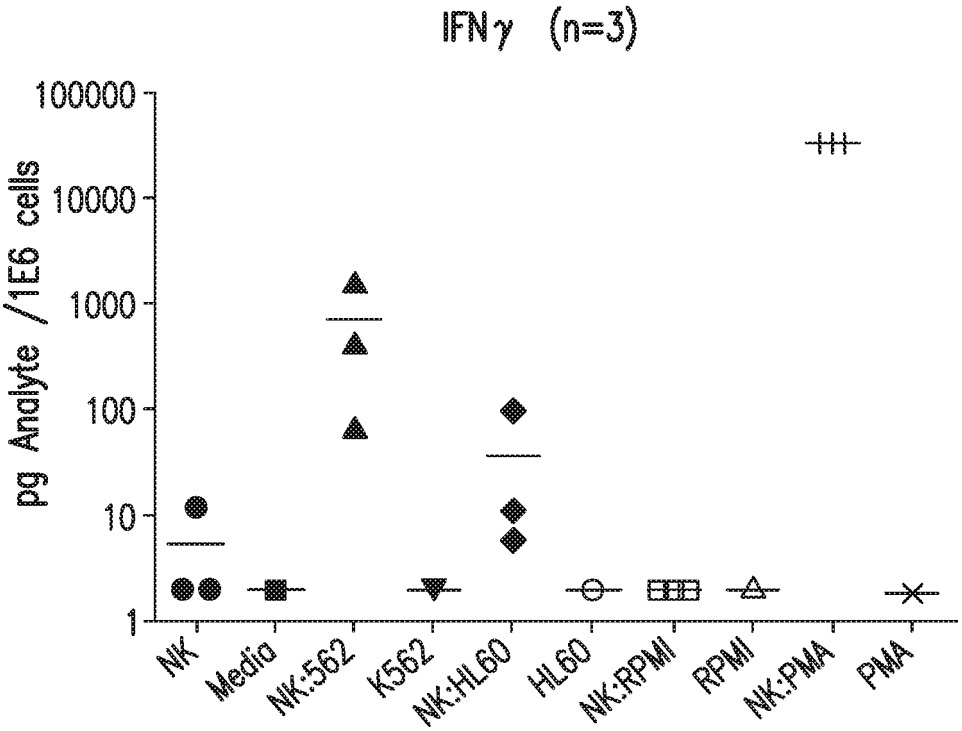

IFNγ (n=3)
pg Analyte /1E6 cells
100000
10000
1000
100
10
1
NK
Media
NK:562
K562
NK:HL60
HL60
NK:RPMI
RPMI
NK:PMA
PMA

FIG. 9

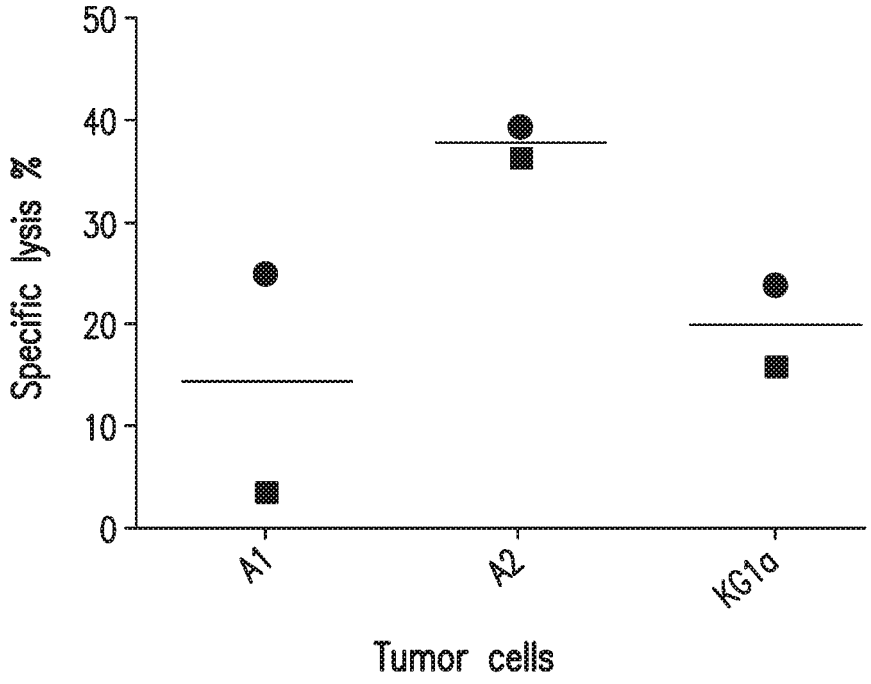


FIG. 10

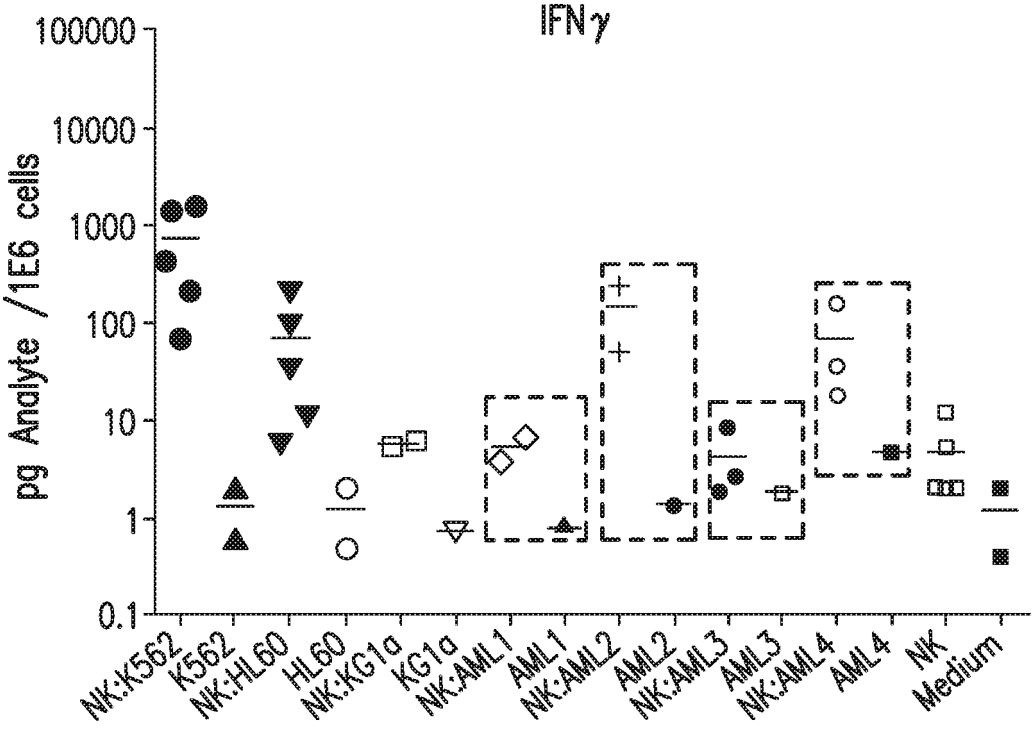

IFNγ
pg Analyte /1E6 cells
100000
10000
1000
100
10
1
0.1
NK:K562
K562
NK:HL60
HL60
NK:KG1a
KG1a
NK:AML1
AML1
NK:AML2
AML2
NK:AML3
AML3
NK:AML4
AML4
NK
Medium

FIG. 11

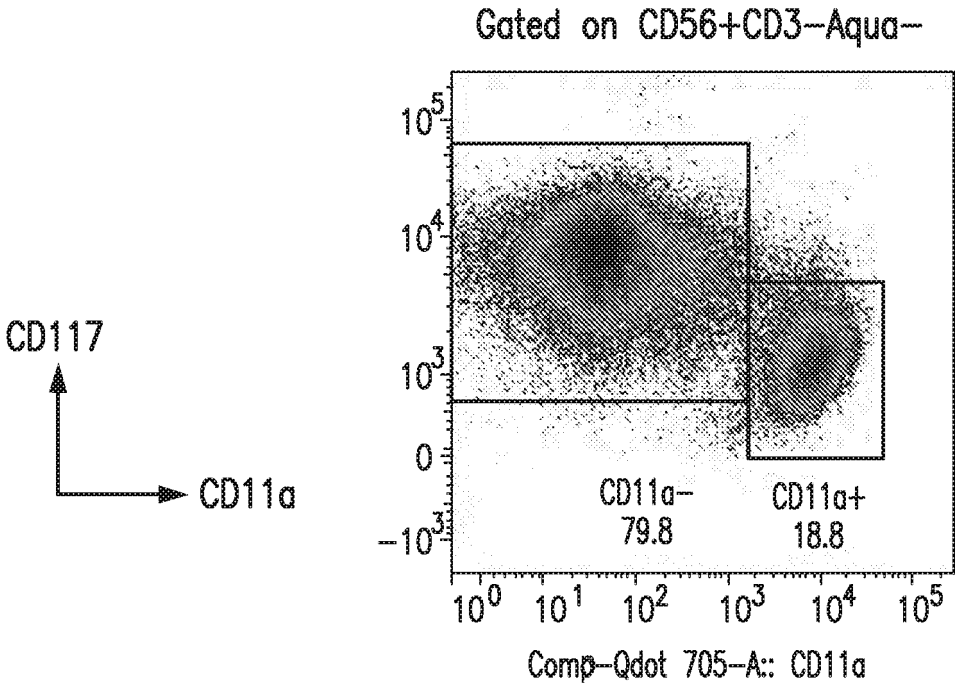

Gated on CD56+CD3-Aqua-
CD117
CD11a
10^5
10^4
10^3
0
-10^3
CD11a-
79.8
CD11a+
18.8
10^0
10^1
10^2
10^3
10^4
10^5
Comp-Qdot 705-A:: CD11a

FIG. 12

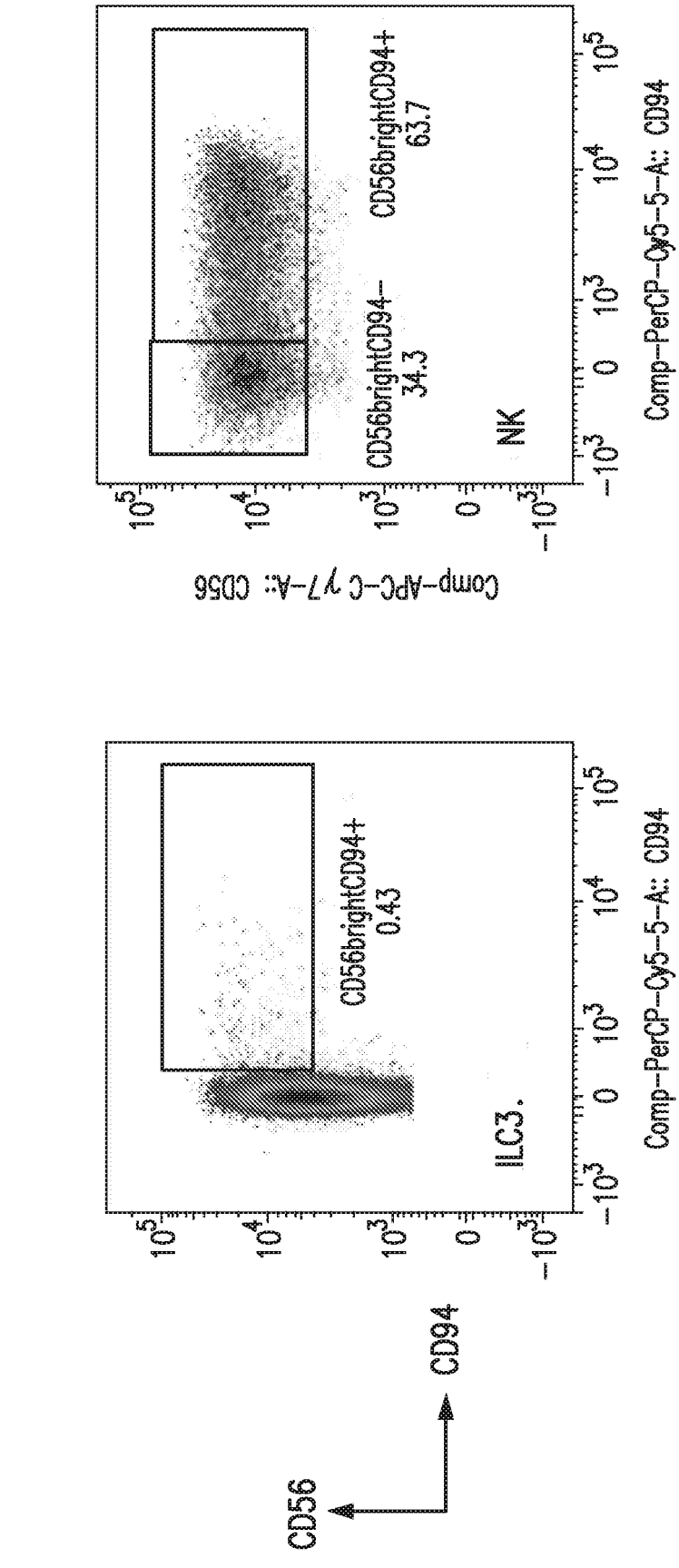

CD56
CD94
ILC3.
CD56brightCD94+
0.43
Comp-PerCP-Cy5-5-A:: CD94
Comp-APC-Cy7-A:: CD56
CD56brightCD94-
34.3
NK
CD56brightCD94+
63.7
Comp-PerCP-Cy5-5-A:: CD94

FIG. 13

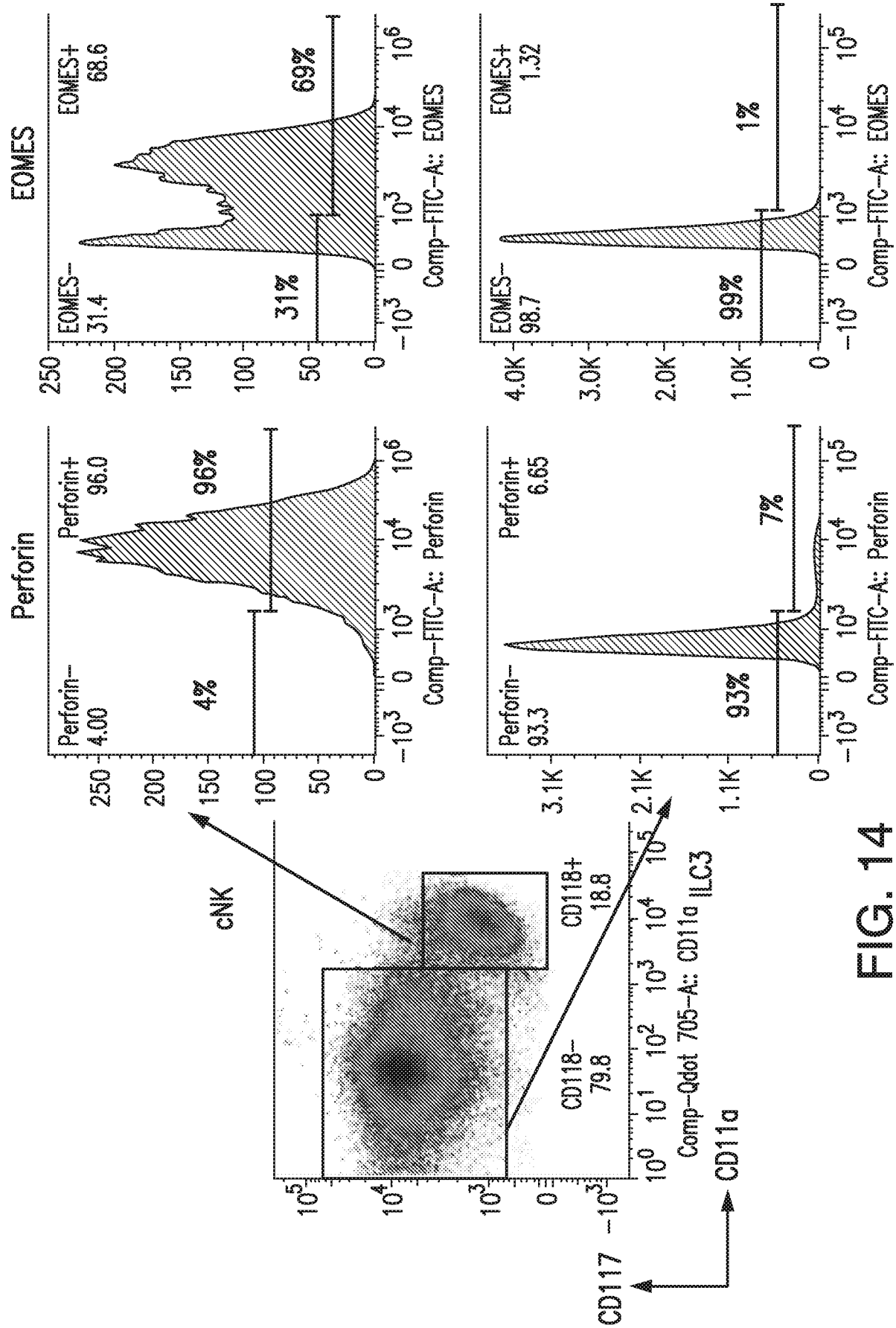

CD117
CD11a
Comp-Qdot 705-A:: CD11a
CD118-
79.8
CD118+
18.8
ILC3
cNK
Perforin
Perforin-
4.00
4%
Perforin+
96.0
96%
Comp-FITC-A:: Perforin
Perforin-
93.3
93%
Perforin+
6.65
7%
Comp-FITC-A:: Perforin
EOMES
EOMES-
31.4
31%
EOMES+
68.6
69%
Comp-FITC-A:: EOMES
EOMES-
98.7
99%
EOMES+
1.32
1%
Comp-FITC-A:: EOMES

FIG. 14

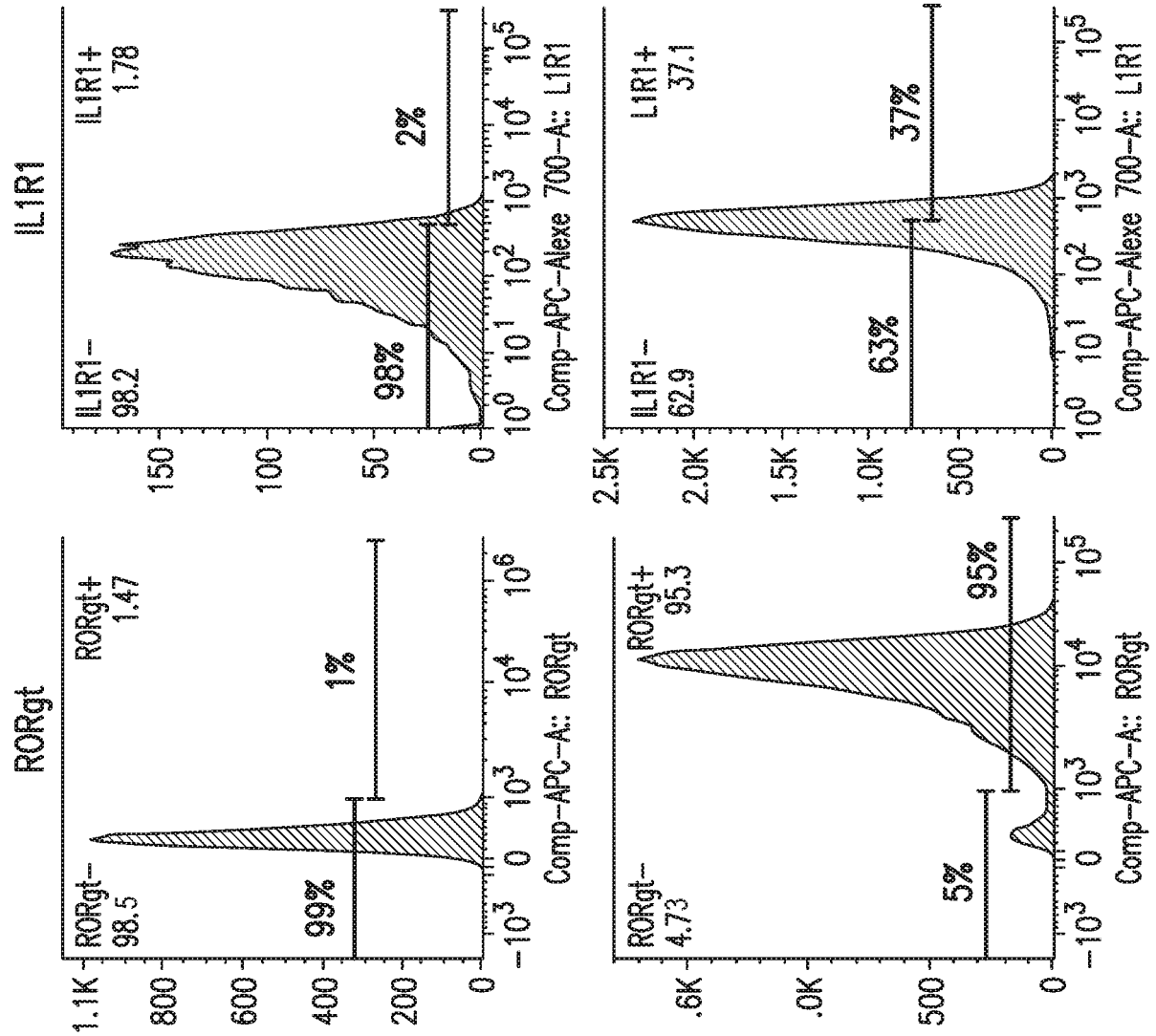


FIG. 14 (continued)

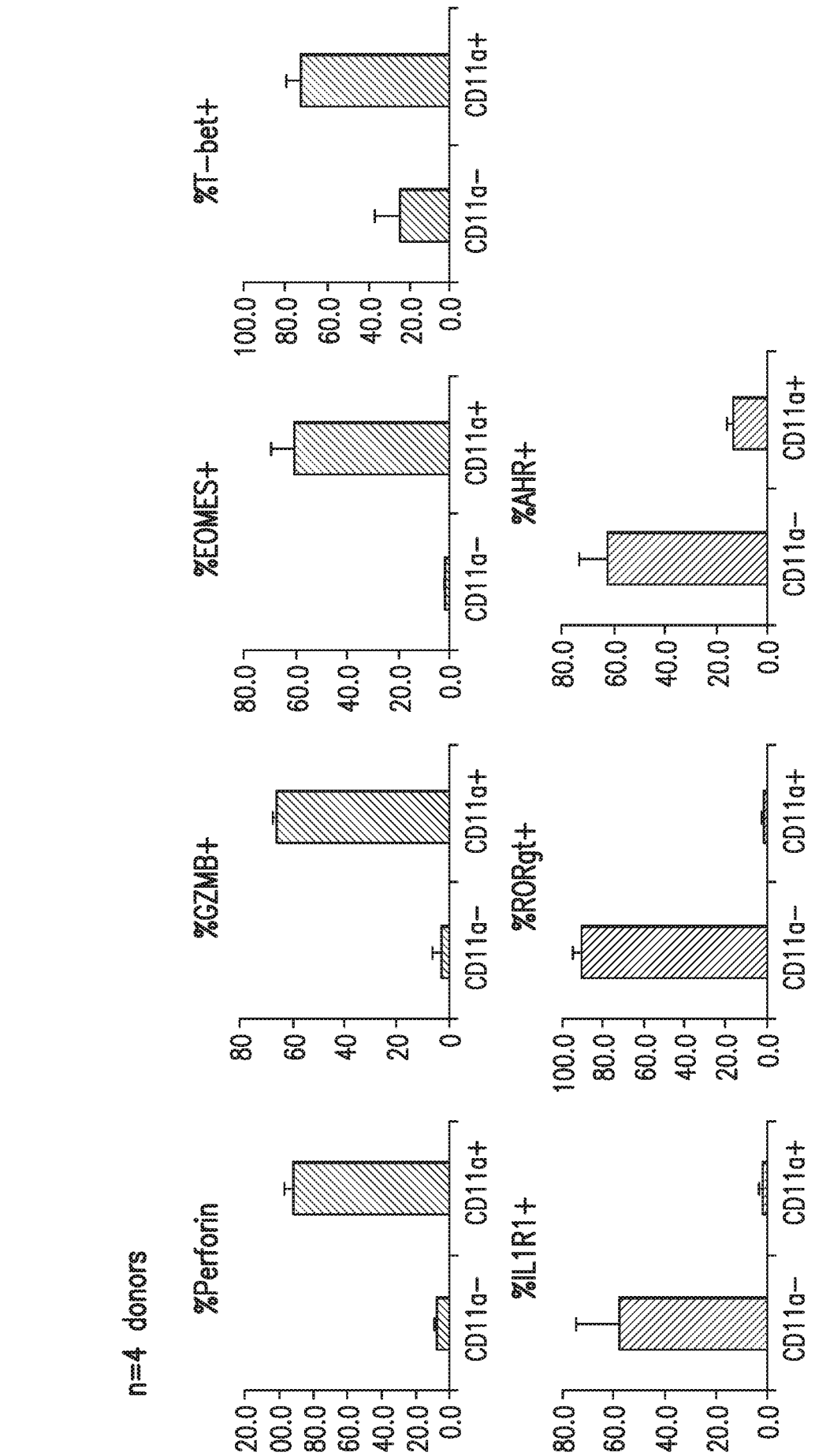

n=4 donors
%Perforin
%GZMB+
%EOMES+
%T-bet+
%IL1R1+
%RORgt+
%AHR+
CD11a−
CD11a+

FIG. 15

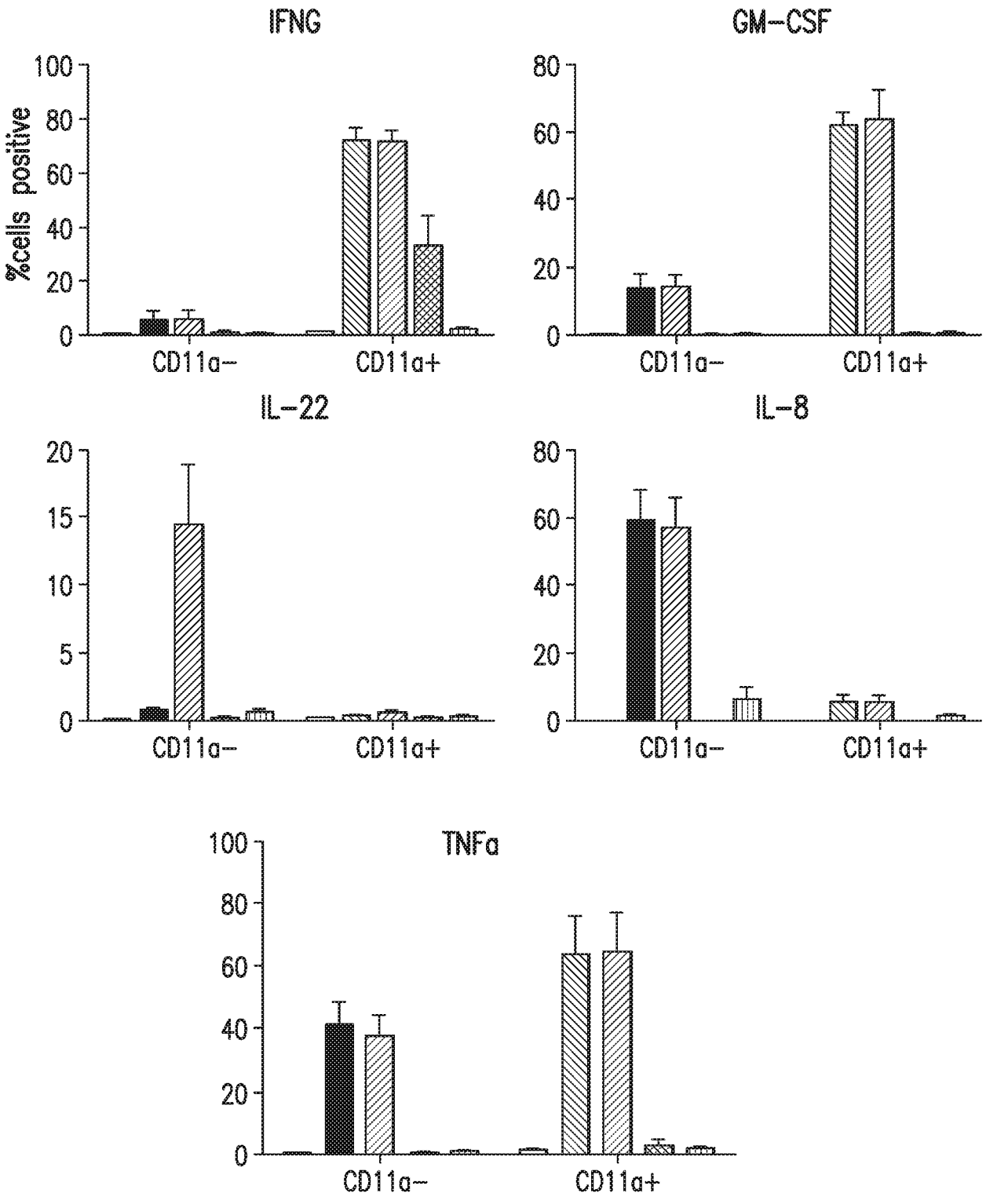

IFNG
%cells positive
100
80
60
40
20
0
CD11a−
CD11a+
GM−CSF
80
60
40
20
0
CD11a−
CD11a+
IL−22
20
15
10
5
0
CD11a−
CD11a+
IL−8
80
60
40
20
0
CD11a−
CD11a+
TNFa
100
80
60
40
20
0
CD11a−
CD11a+

FIG. 16

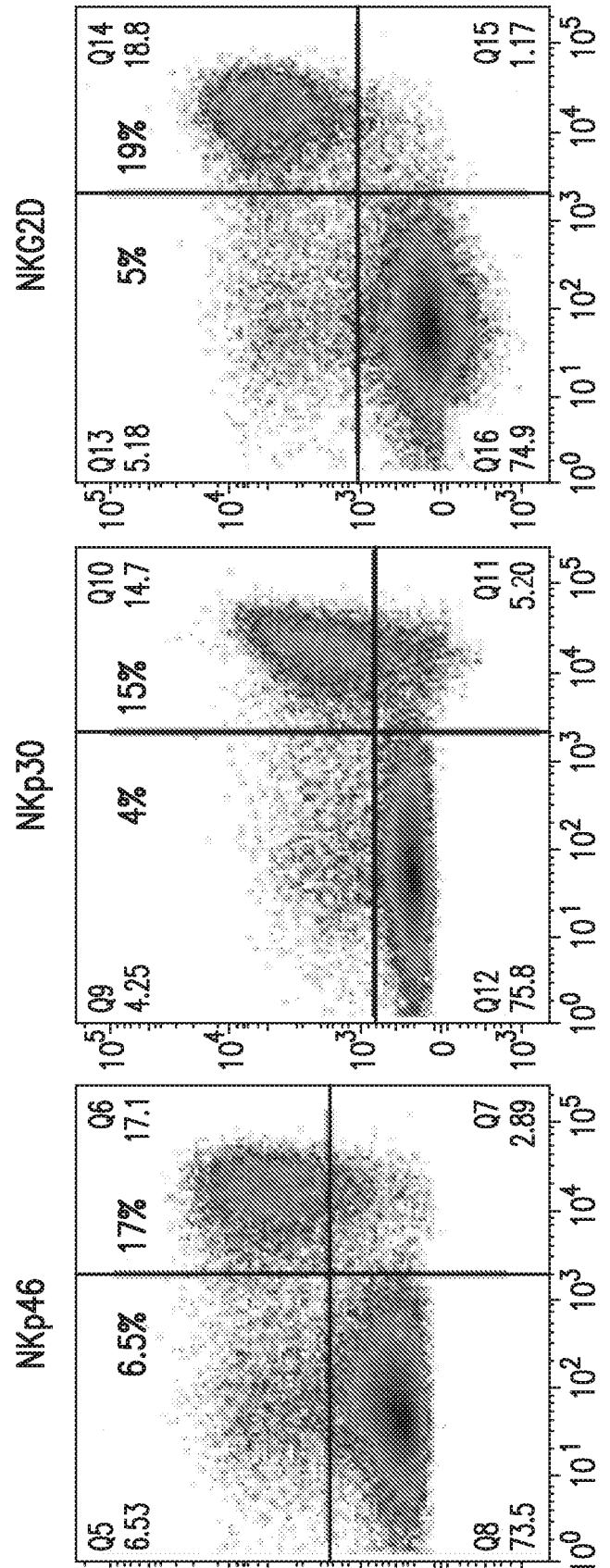

NKp46
NKp30
NKG2D
CD11a
Q5 6.53
6.5%
Q6 17.1
17%
Q8 73.5
Q7 2.89
Q9 4.25
4%
Q10 14.7
15%
Q12 75.8
Q11 5.20
Q13 5.18
5%
Q14 18.8
19%
Q16 74.9
Q15 1.17

FIG. 17

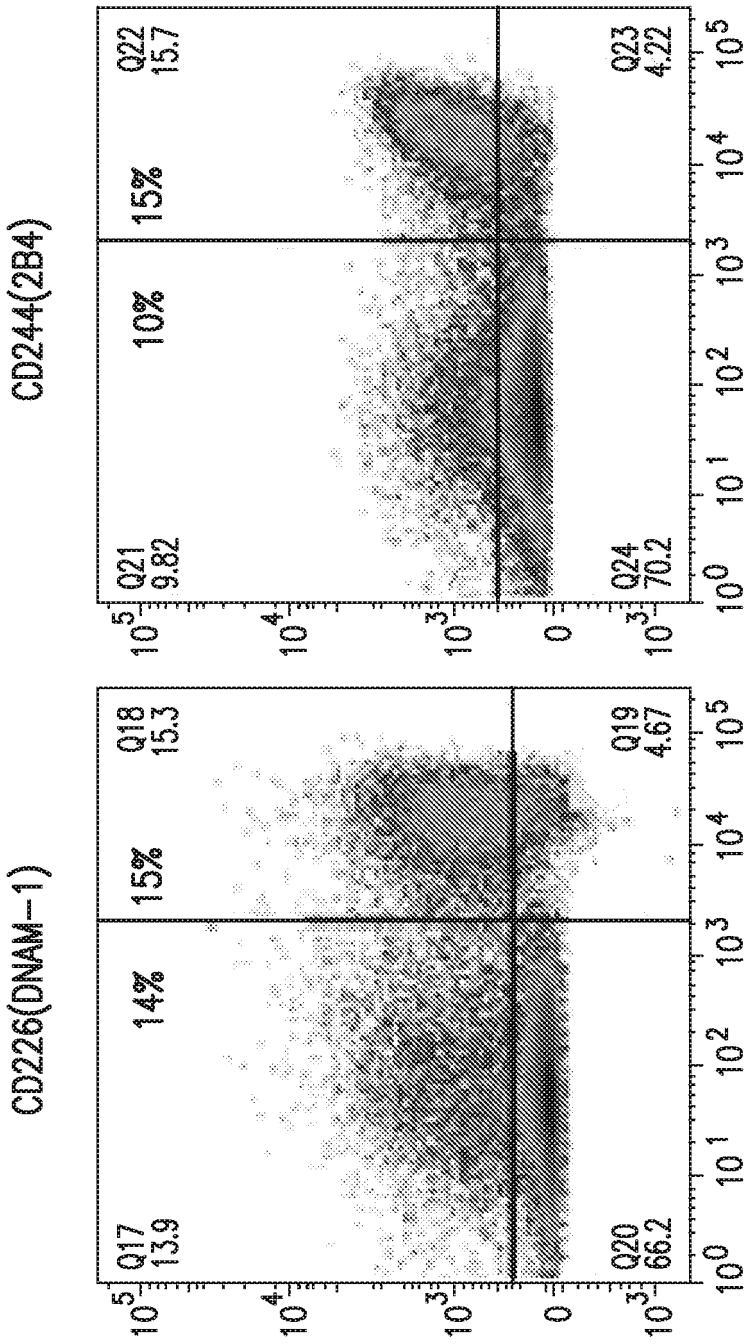

CD244(2B4)
CD226(DNAM-1)
Q21
9.82
10%
Q22
15.7
15%
Q24
70.2
Q23
4.22
Q17
13.9
14%
Q18
15.3
15%
Q20
66.2
Q19
4.67

FIG. 18

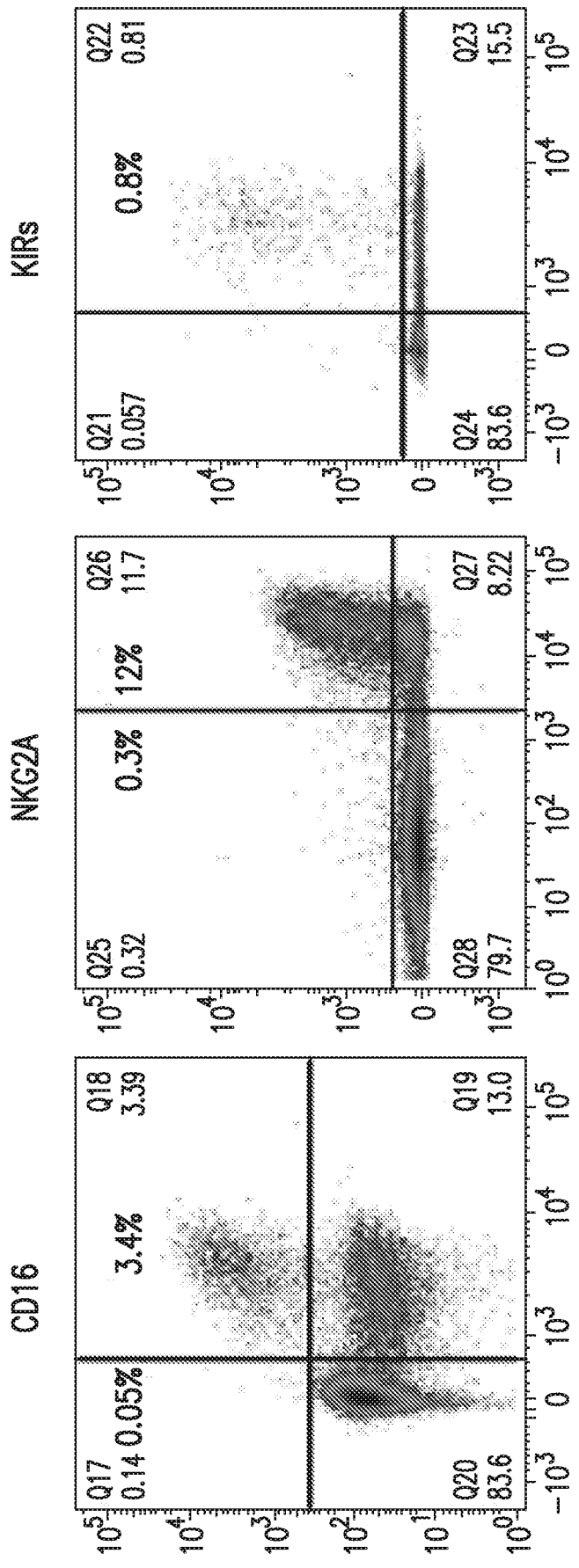

CD16
NKG2A
KIRs
Q17
0.14
0.05%
Q18
3.39
3.4%
Q20
83.6
Q19
13.0
Q25
0.32
0.3%
Q26
11.7
12%
Q28
79.7
Q27
8.22
Q21
0.057
0.8%
Q22
0.81
Q24
83.6
Q23
15.5

FIG. 19

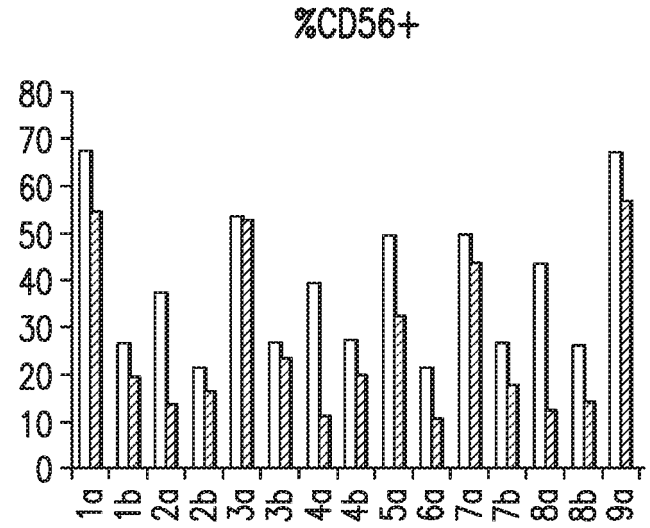


FIG. 20A

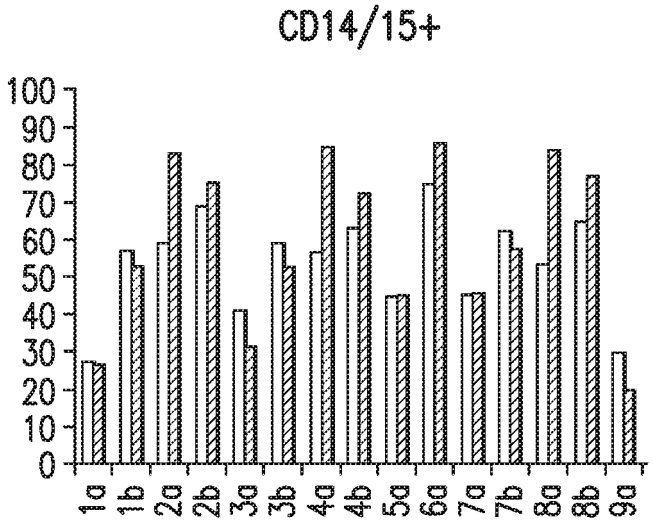


FIG. 20B

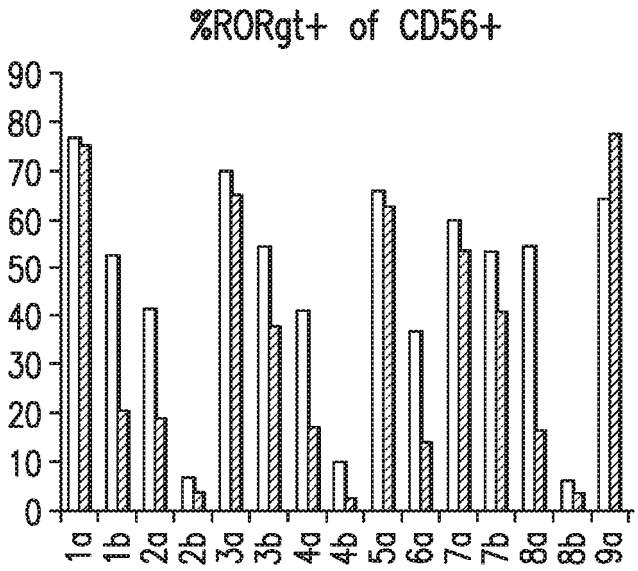


FIG. 20C

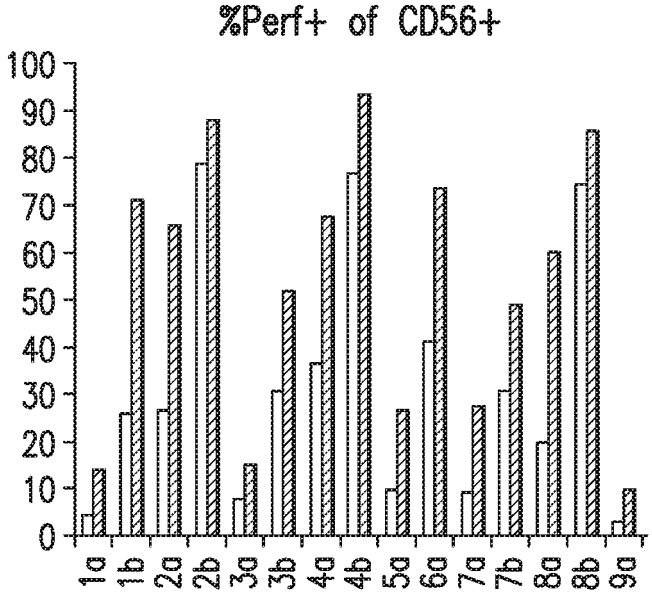


FIG. 20D

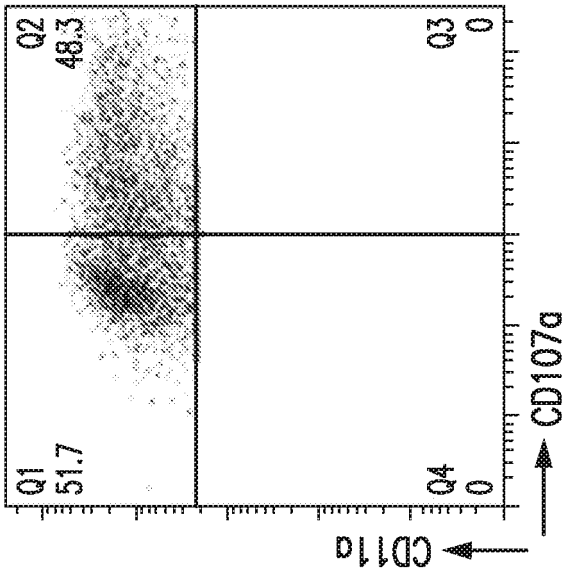


FIG. 21A

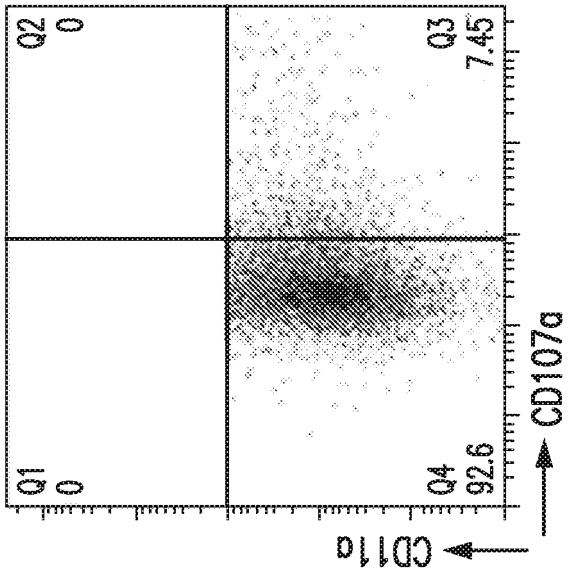


FIG. 21B

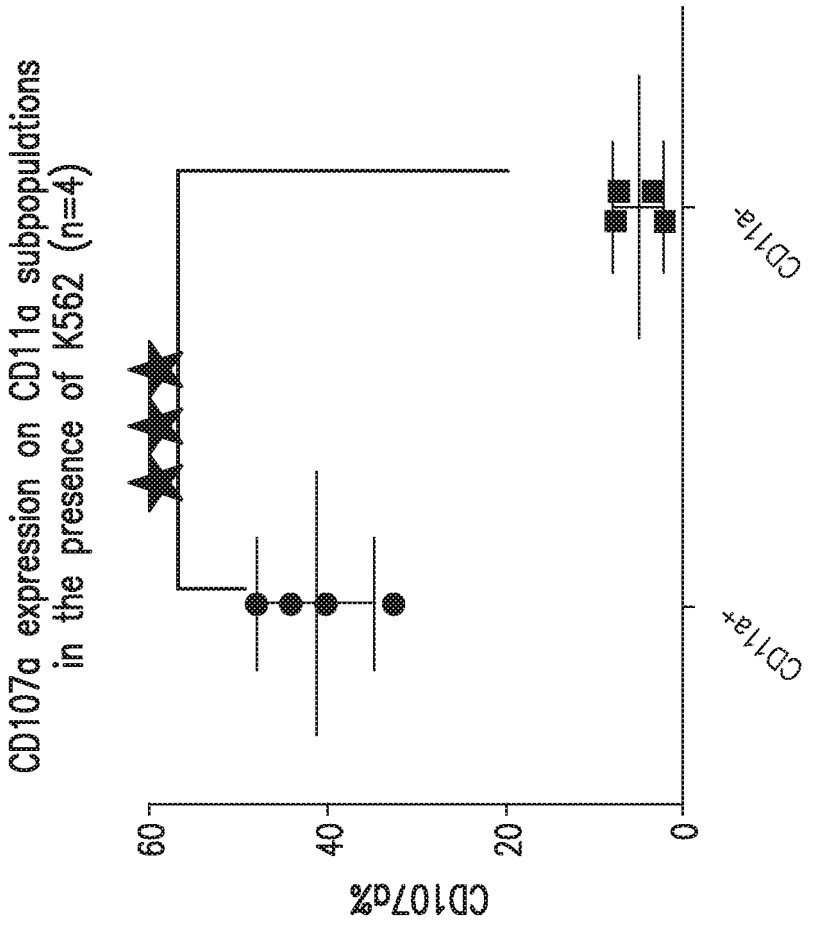


FIG. 21C

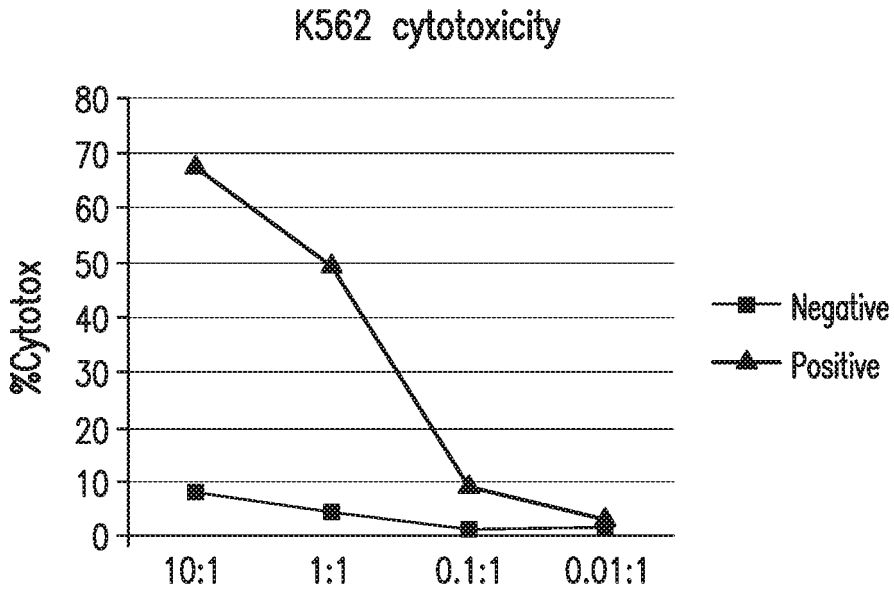

K562 cytotoxicity
%Cytotox
80
70
60
50
40
30
20
10
0
10:1
1:1
0.1:1
0.01:1
Negative
Positive

FIG. 22

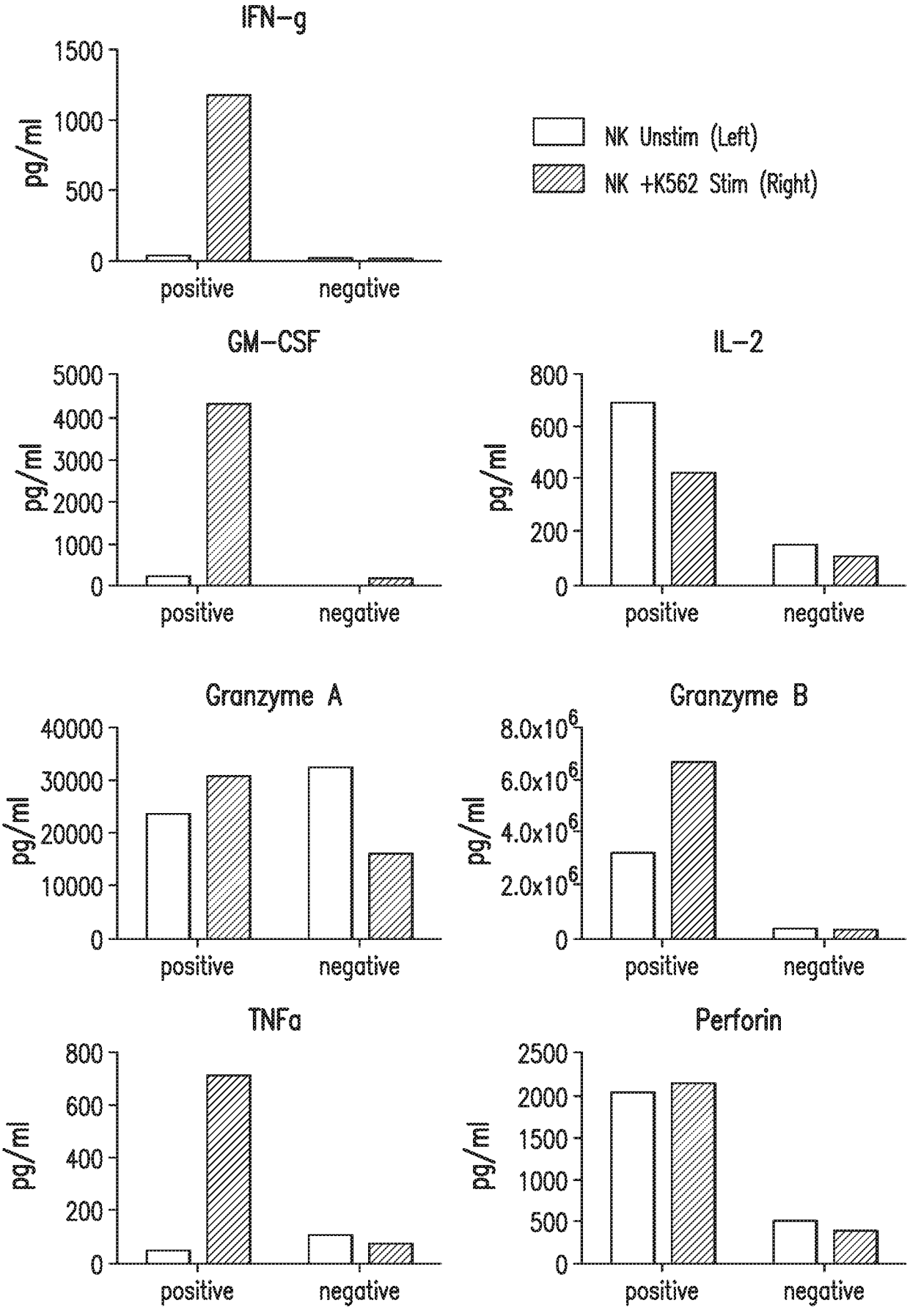

IFN-g
1500
1000
500
0
pg/ml
positive
negative
NK Unstim (Left)
NK +K562 Stim (Right)
GM-CSF
5000
4000
3000
2000
1000
0
pg/ml
positive
negative
IL-2
800
600
400
200
0
pg/ml
positive
negative
Granzyme A
40000
30000
20000
10000
0
pg/ml
positive
negative
Granzyme B
8.0x10^6
6.0x10^6
4.0x10^6
2.0x10^6
0
pg/ml
positive
negative
TNFa
800
600
400
200
0
pg/ml
positive
negative
Perforin
2500
2000
1500
1000
500
0
pg/ml
positive
negative

FIG. 23