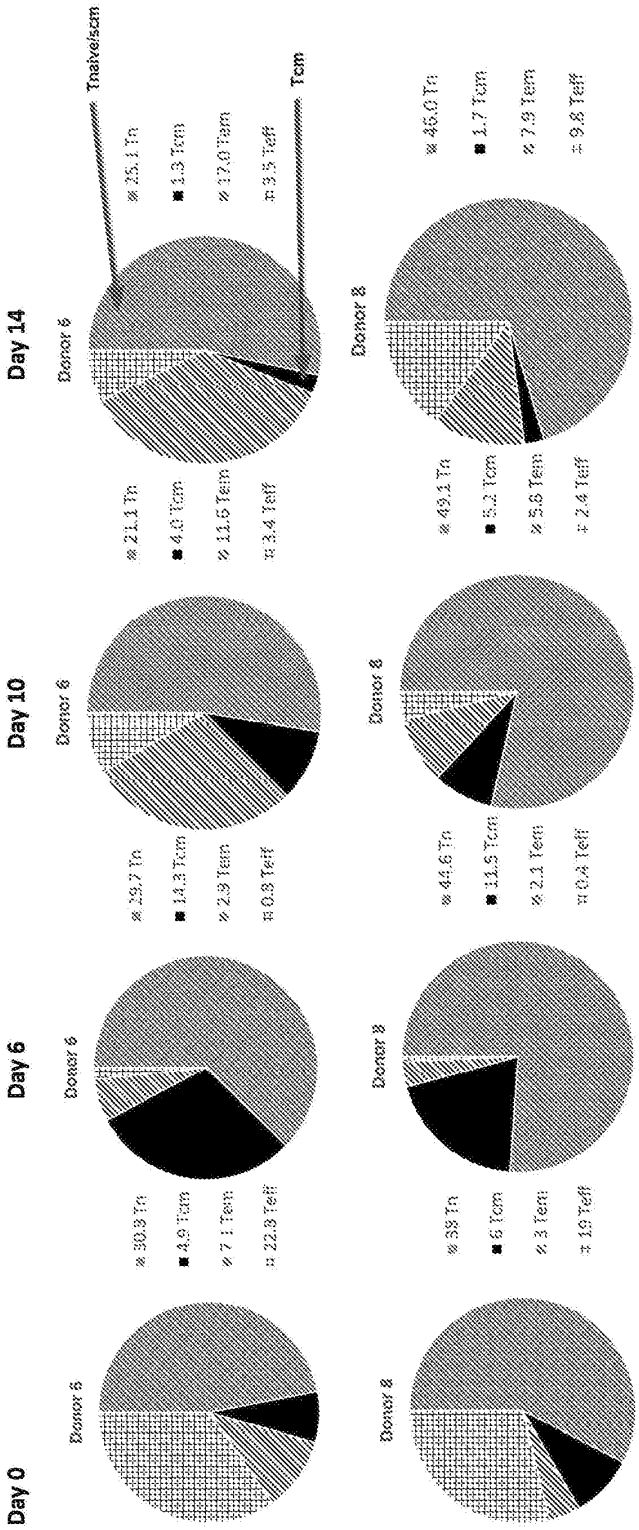

Day 0
Day 6
Day 10
Day 14
Donor 6
Donor 8
Tnaive/scm
Tcm
% 30.3 Tn
■ 4.9 Tcm
% 7.1 Tem
¤ 22.8 Teff
% 38 Tn
■ 6 Tcm
% 3 Tem
¤ 19 Teff
% 29.7 Tn
■ 14.3 Tcm
% 2.9 Tem
¤ 0.8 Teff
% 44.6 Tn
■ 11.5 Tcm
% 2.1 Tem
¤ 0.4 Teff
% 21.1 Tn
■ 4.0 Tcm
% 11.5 Tem
¤ 3.4 Teff
% 25.1 Tn
■ 1.3 Tcm
% 17.0 Tam
¤ 3.5 Teff
% 49.1 Tn
■ 5.2 Tcm
% 5.6 Tem
¤ 2.4 Teff
% 46.0 Tn
■ 1.7 Tcm
% 7.9 Tem
¤ 9.8 Teff

FIG. 1A

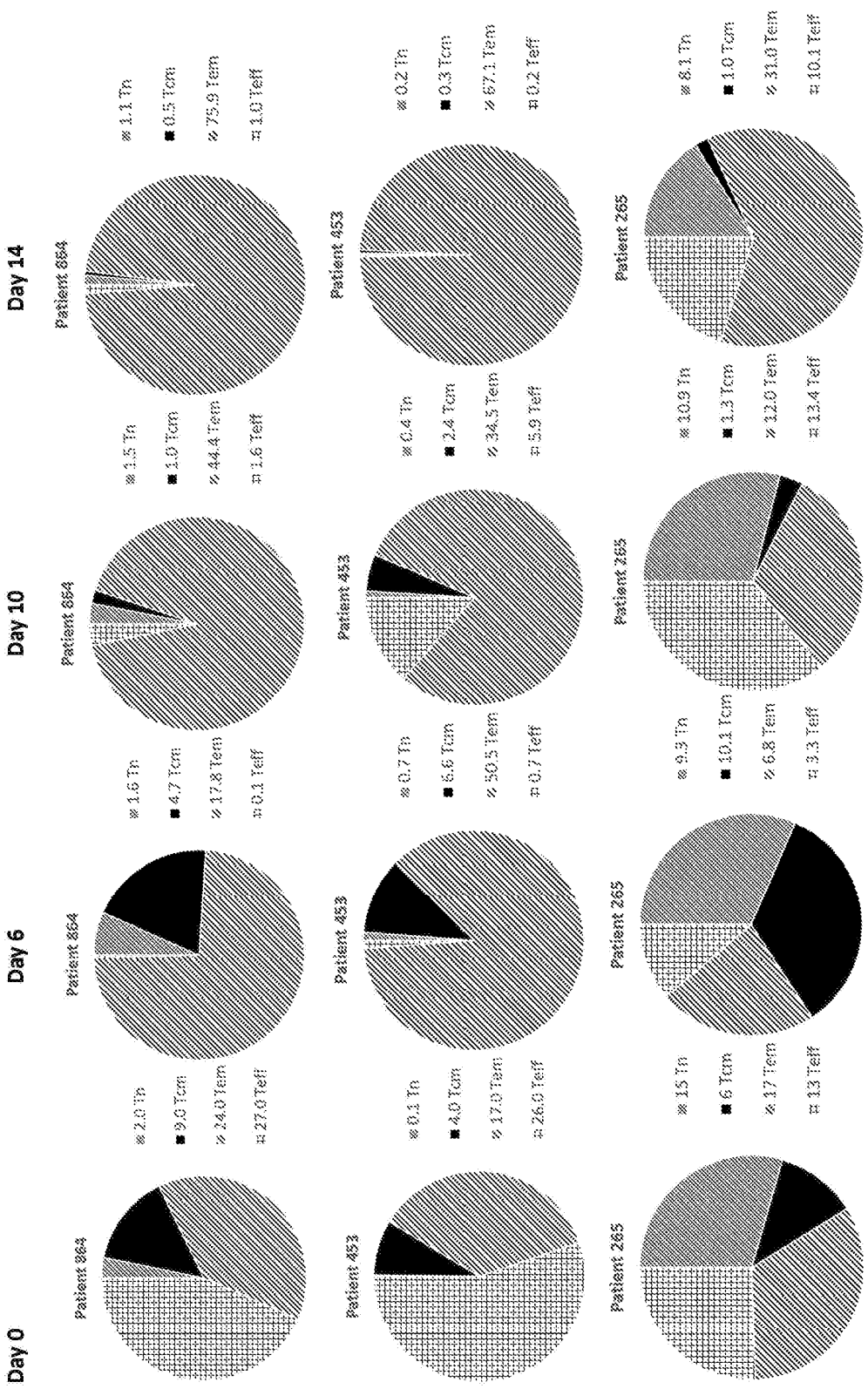

Day 0
Day 6
Day 10
Day 14
Patient 864
Patient 453
Patient 265
2.0 Tn
9.0 Tcm
24.0 Tem
27.0 Teff
1.6 Tn
4.7 Tcm
17.8 Tem
0.1 Teff
1.5 Tn
1.0 Tcm
44.4 Tem
1.6 Teff
1.1 Tn
0.5 Tcm
75.9 Tem
1.0 Teff
0.1 Tn
4.0 Tcm
17.0 Tem
26.0 Teff
0.7 Tn
6.6 Tcm
50.5 Tem
0.7 Teff
0.4 Tn
2.4 Tcm
34.5 Tem
5.9 Teff
0.2 Tn
0.3 Tcm
67.1 Tem
0.2 Teff
15 Tn
6 Tcm
17 Tem
13 Teff
9.3 Tn
10.1 Tcm
6.8 Tem
3.3 Teff
10.9 Tn
1.3 Tcm
12.0 Tem
13.4 Teff
8.1 Tn
1.0 Tcm
31.0 Tem
10.1 Teff

FIG. 1B

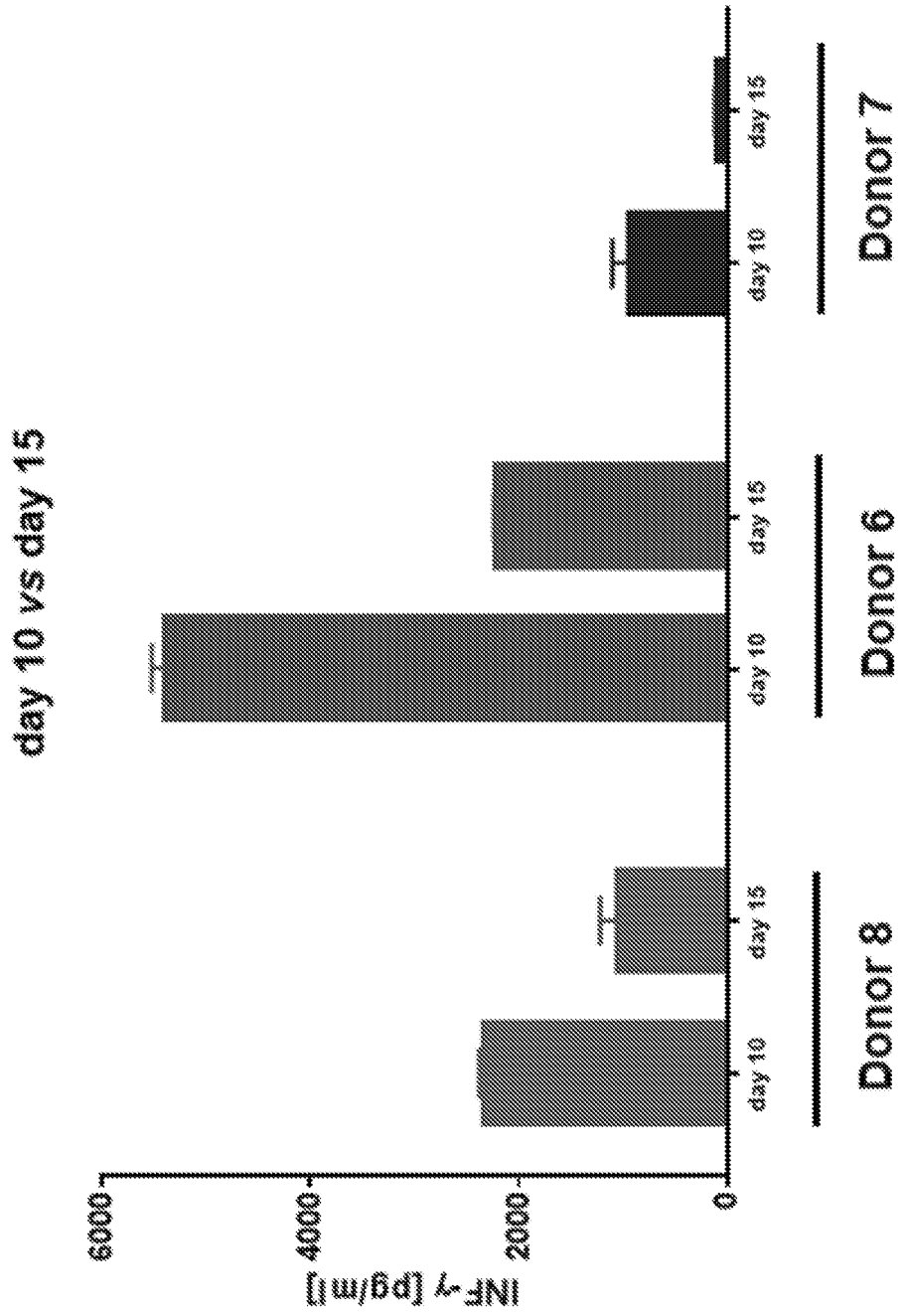

day 10 vs day 15
IFN-γ [pg/ml]
6000
4000
2000
0
day 10
day 15
Donor 8
Donor 6
Donor 7

FIG. 2

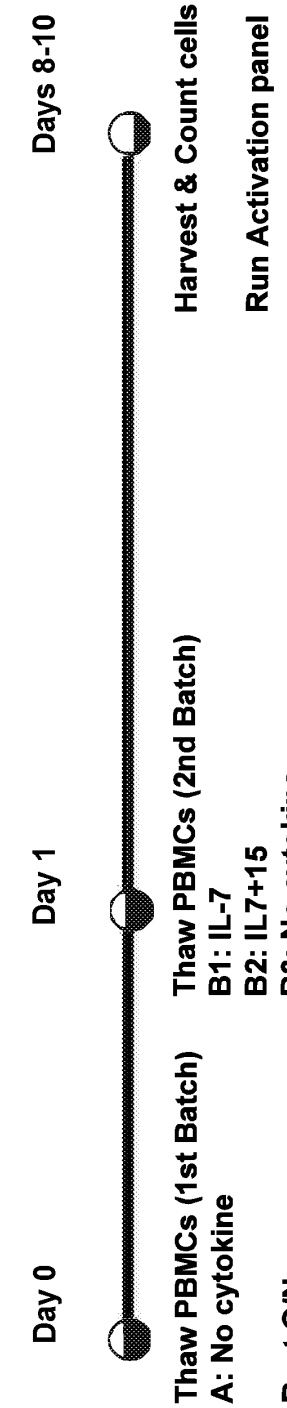

Day 0
Day 1
Days 8-10
Thaw PBMCs (1st Batch)
A: No cytokine
Rest O/N
Coat flasks
Thaw PBMCs (2nd Batch)
B1: IL-7
B2: IL7+15
B3: No cytokine
Rest 4-6h
Thaw PBMCs (3rd Batch)
C: No cytokine
Activate PBMCs from all resting conditions using plate-bound antibodies
Harvest & Count cells
Run Activation panel

FIG. 3

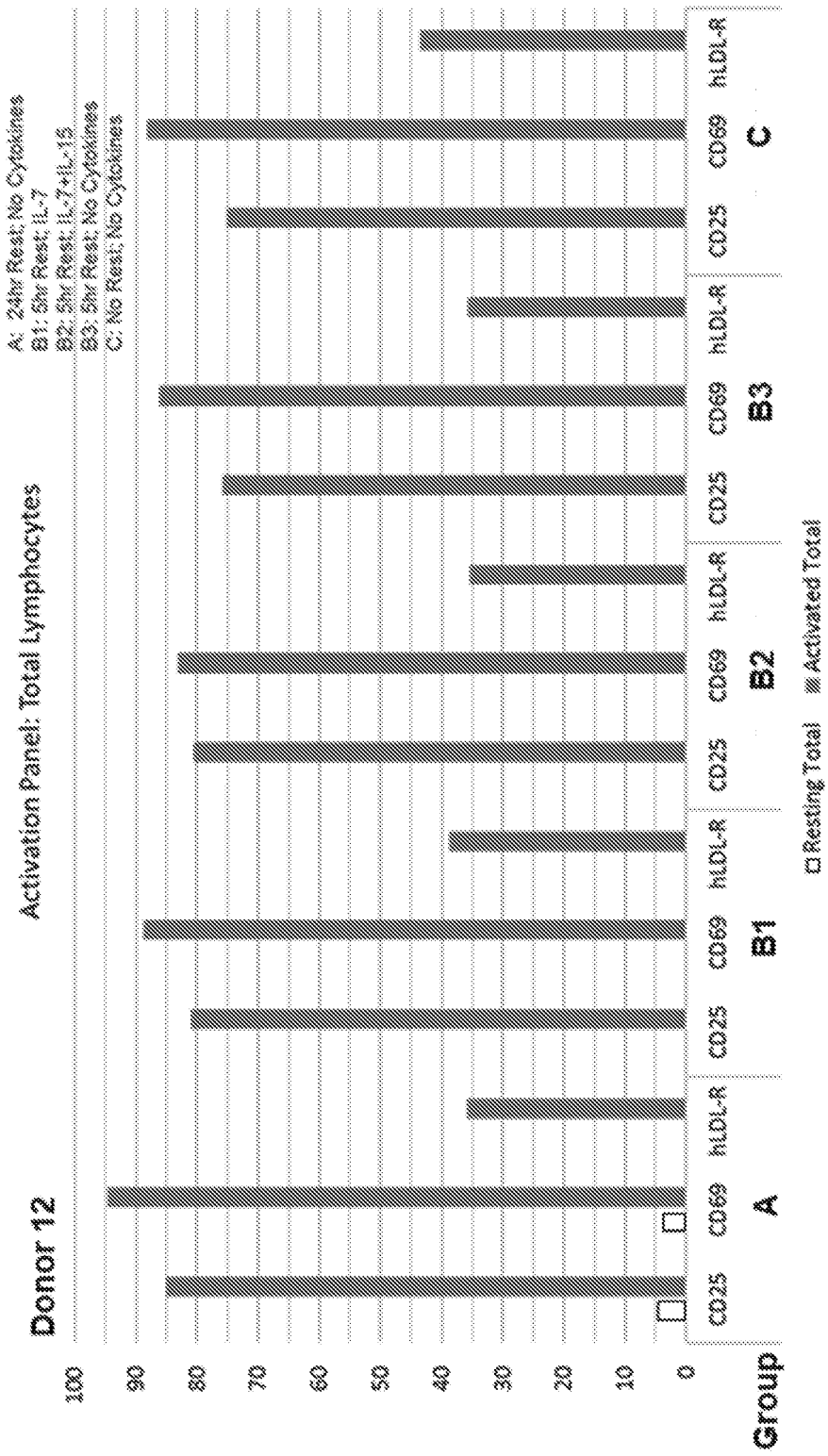

Donor 12
Activation Panel: Total Lymphocytes
A: 24hr Rest; No Cytokines
B1: 5hr Rest; IL-7
B2: 5hr Rest; IL-7+IL-15
B3: 5hr Rest; No Cytokines
C: No Rest; No Cytokines
Resting Total
Activated Total
Group
A
B1
B2
B3
C
CD25
CD69
hLDL-R
0
10
20
30
40
50
60
70
80
90
100

FIG. 4

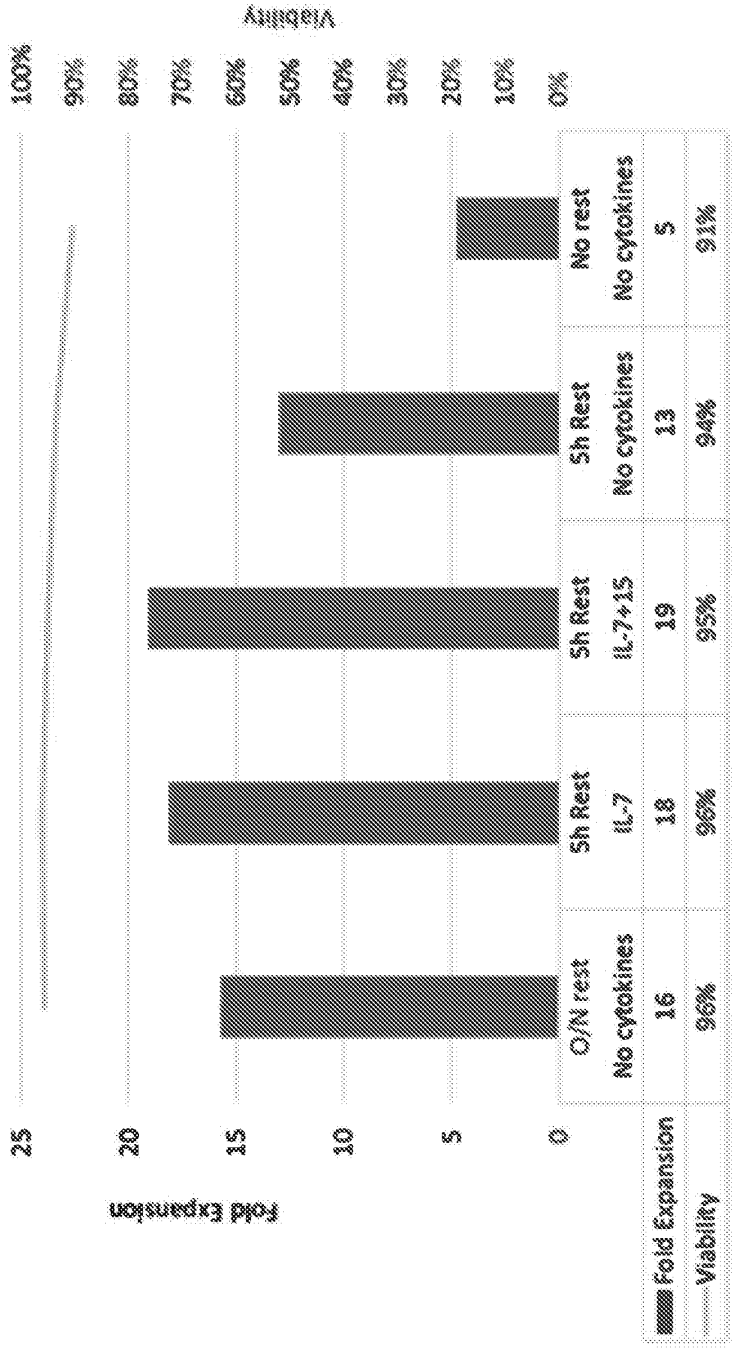

Viability
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Fold expansion
25
20
15
10
5
0
Fold Expansion
Viability
Group
A
B1
B2
B3
C
O/N rest
No cytokines
Sh Rest
IL-7
Sh Rest
IL-7+15
Sh Rest
No cytokines
No rest
No cytokines
16
18
19
13
5
96%
96%
95%
94%
91%

FIG. 5A

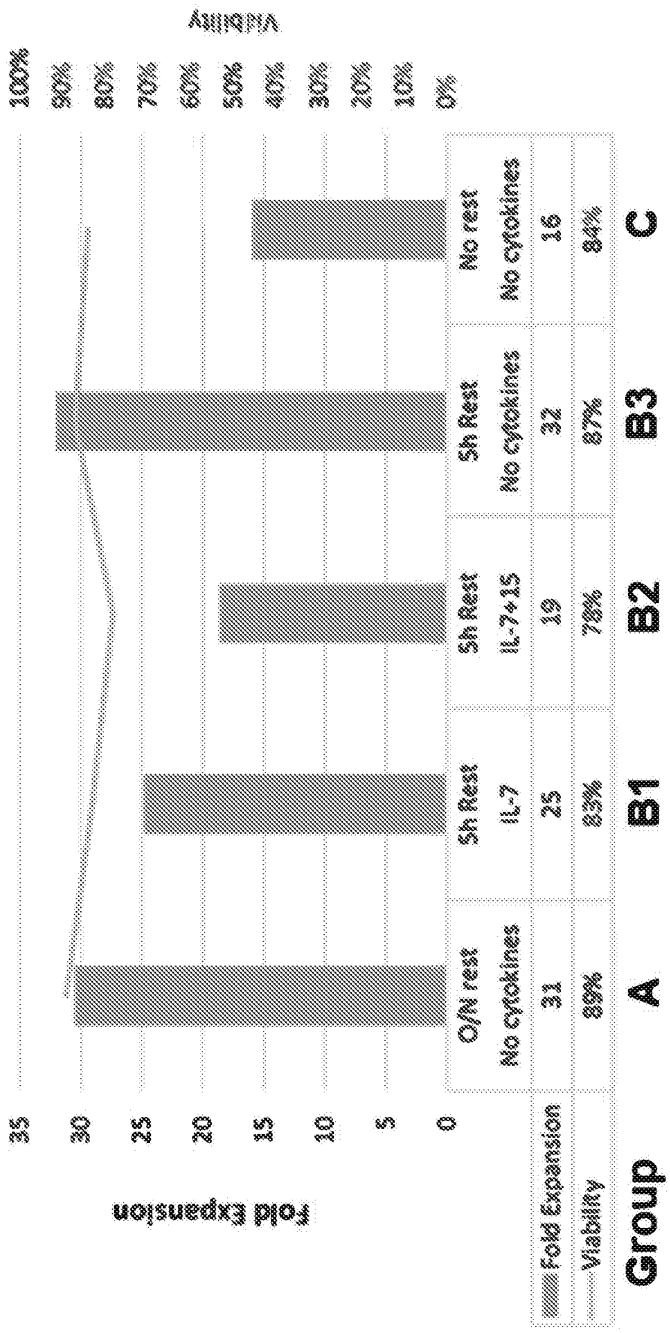

Viability
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
35
30
25
20
15
10
5
0
Fold Expansion
Group
Fold Expansion
Viability
O/N rest
No cytokines
31
89%
A
Sh Rest
IL-7
25
83%
B1
Sh Rest
IL-7+15
19
78%
B2
Sh Rest
No cytokines
32
87%
B3
No rest
No cytokines
16
84%
C

FIG. 5B

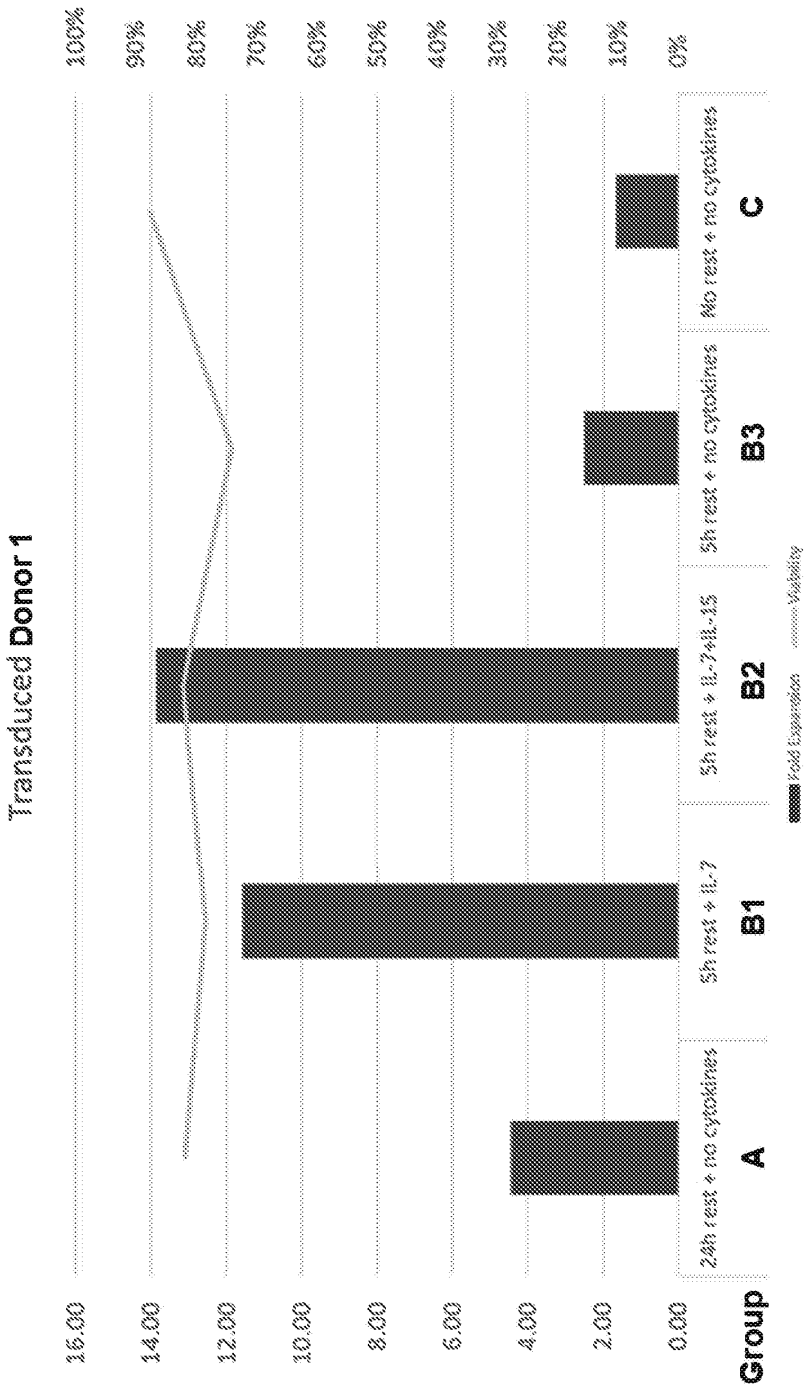

Transduced Donor 1
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Group
24h rest + no cytokines
A
5h rest + IL-7
B1
5h rest + IL-7+IL-15
B2
5h rest + no cytokines
B3
No rest + no cytokines
C
Fold Expansion
Viability

FIG. 6

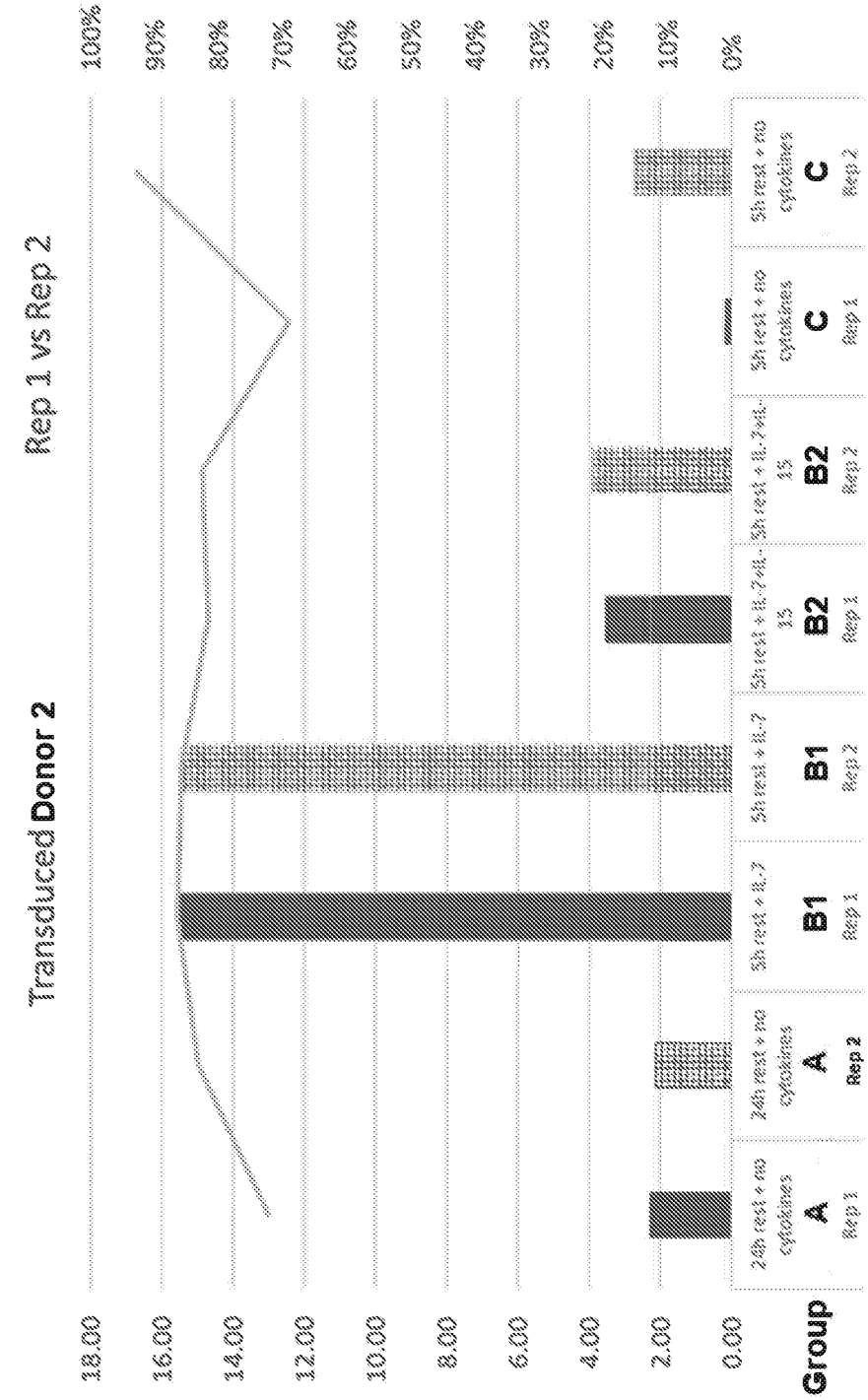

Transduced Donor 2
Rep 1 vs Rep 2
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Group
A
Rep 1
24h rest + no cytokines
A
Rep 2
24h rest + no cytokines
B1
Rep 1
5h rest + IL-7
B1
Rep 2
5h rest + IL-7
B2
Rep 1
5h rest + IL-7 +IL-15
B2
Rep 2
5h rest + IL-7 +IL-15
C
Rep 1
5h rest + no cytokines
C
Rep 2
5h rest + no cytokines
Fold Expansion
Viability

FIG. 7

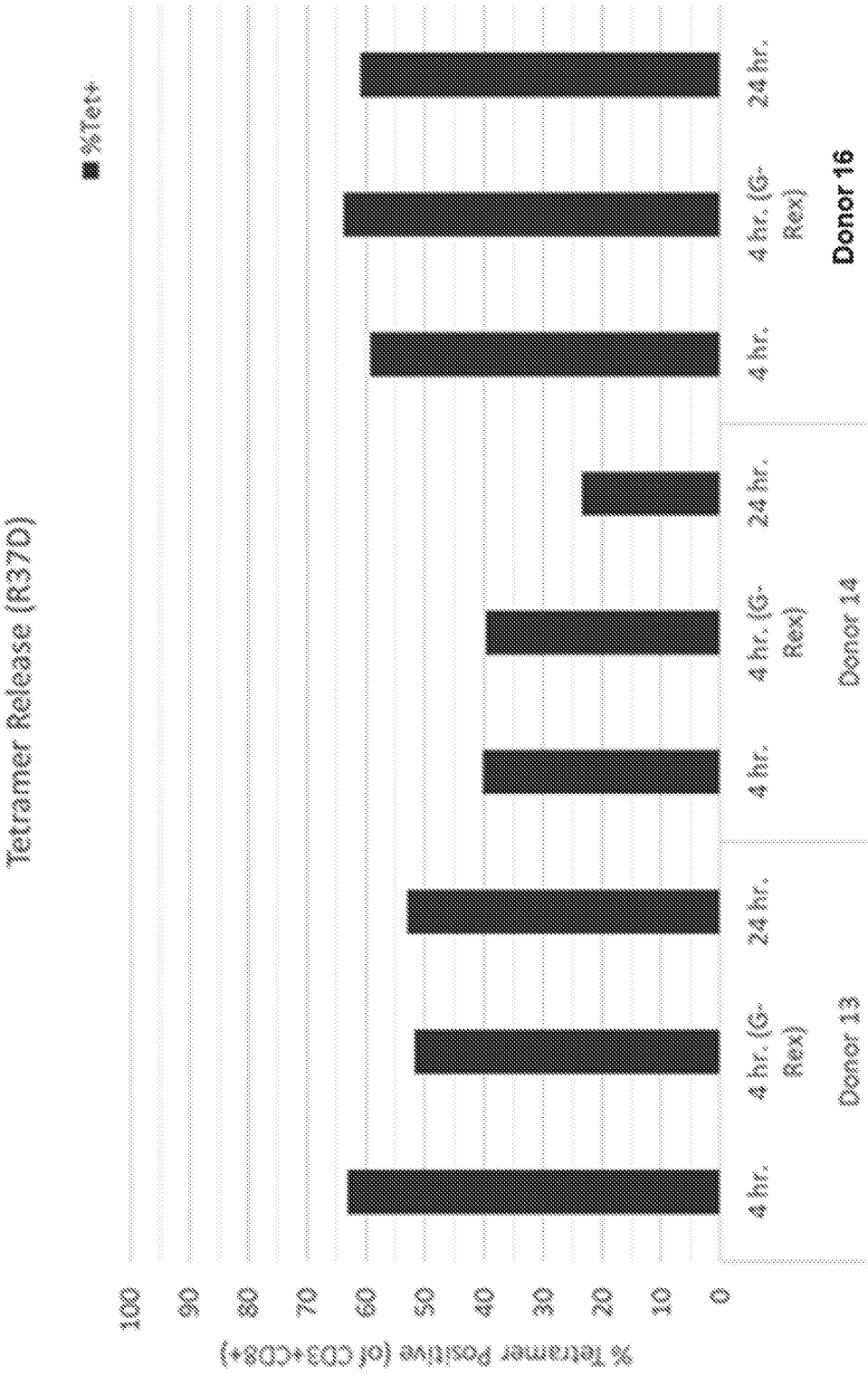

Tetramer Release (R37O)
%Tet+
% Tetramer Positive (of CD3+CD8+)
100
90
80
70
60
50
40
30
20
10
0
4 hr.
4 hr. (G-Rex)
24 hr.
Donor 13
4 hr.
4 hr. (G-Rex)
24 hr.
Donor 14
4 hr.
4 hr. (G-Rex)
24 hr.
Donor 16
Rest Condition

FIG. 8

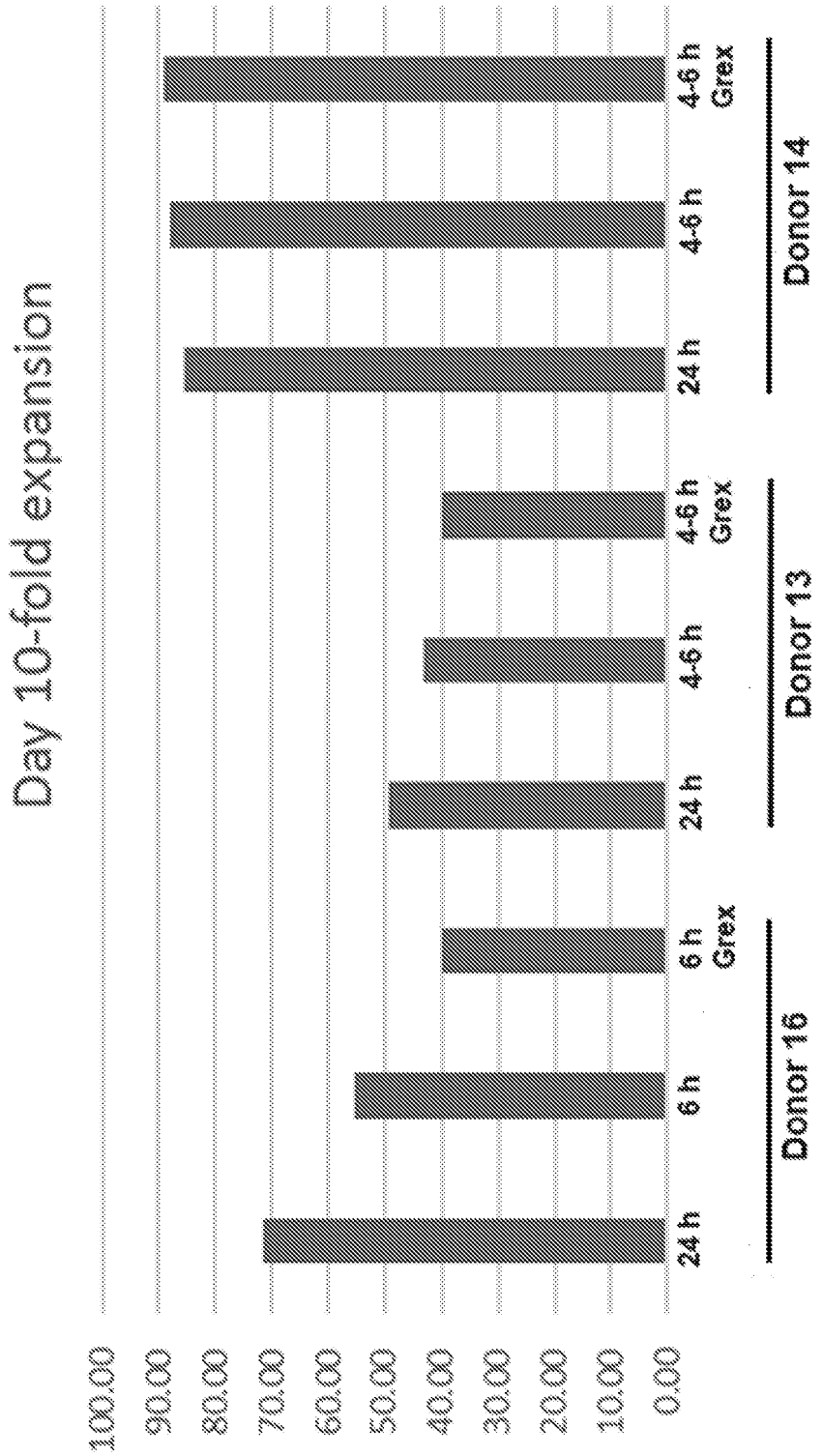

Day 10-fold expansion
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
24 h
6 h
6 h Grex
24 h
4-6 h
4-6 h Grex
24 h
4-6 h
4-6 h Grex
Donor 16
Donor 13
Donor 14

FIG. 9

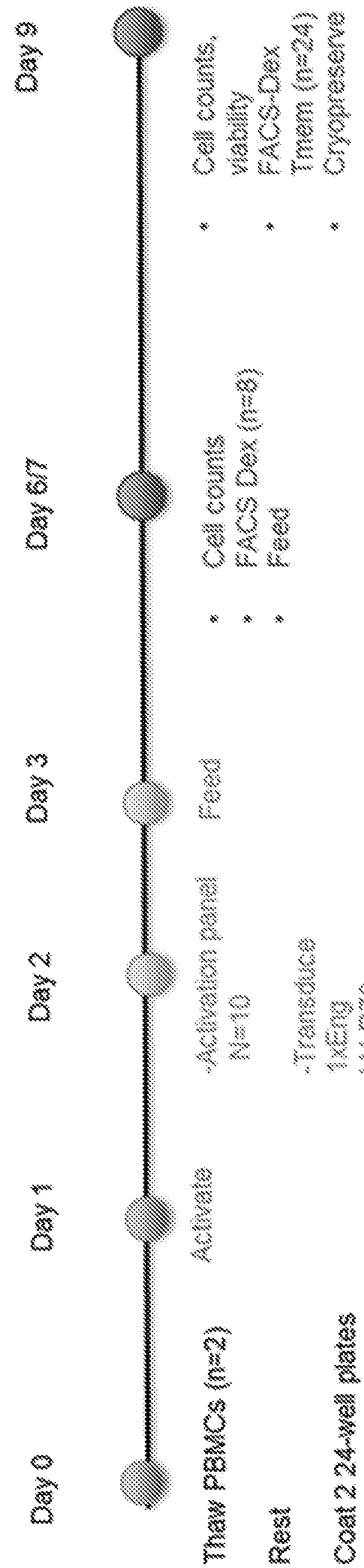

Day 0
Day 1
Day 2
Day 3
Day 6/7
Day 9
Thaw PBMCs (n=2)
Activate
Activation panel
N=10
Feed
Cell counts
FACS Dex (n=8)
Feed
Cell counts,
viability
FACS-Dex
Tmem (n=24)
Cryopreserve
Rest
Transduce
1XEng
LV-R73
Coat 2 24-well plates

FIG. 10

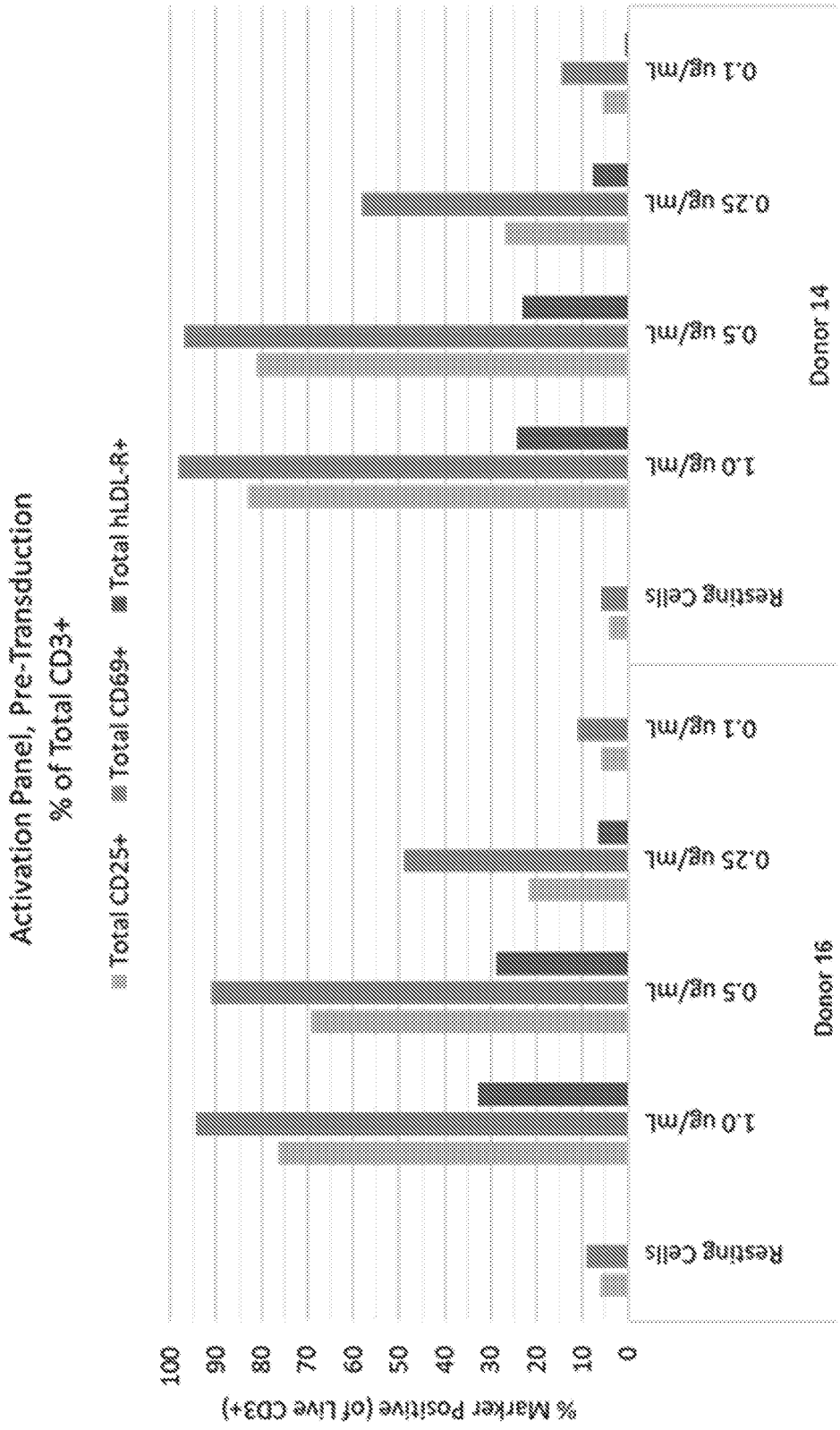

Activation Panel, Pre-Transduction
% of Total CD3+
Total CD25+
Total CD69+
Total hLDLR+
% Marker Positive (of Live CD3+)
100
90
80
70
60
50
40
30
20
10
0
Donor 16
Donor 14
Resting Cells
1.0 ug/mL
0.5 ug/mL
0.25 ug/mL
0.1 ug/mL
Resting Cells
1.0 ug/mL
0.5 ug/mL
0.25 ug/mL
0.1 ug/mL

FIG. 11

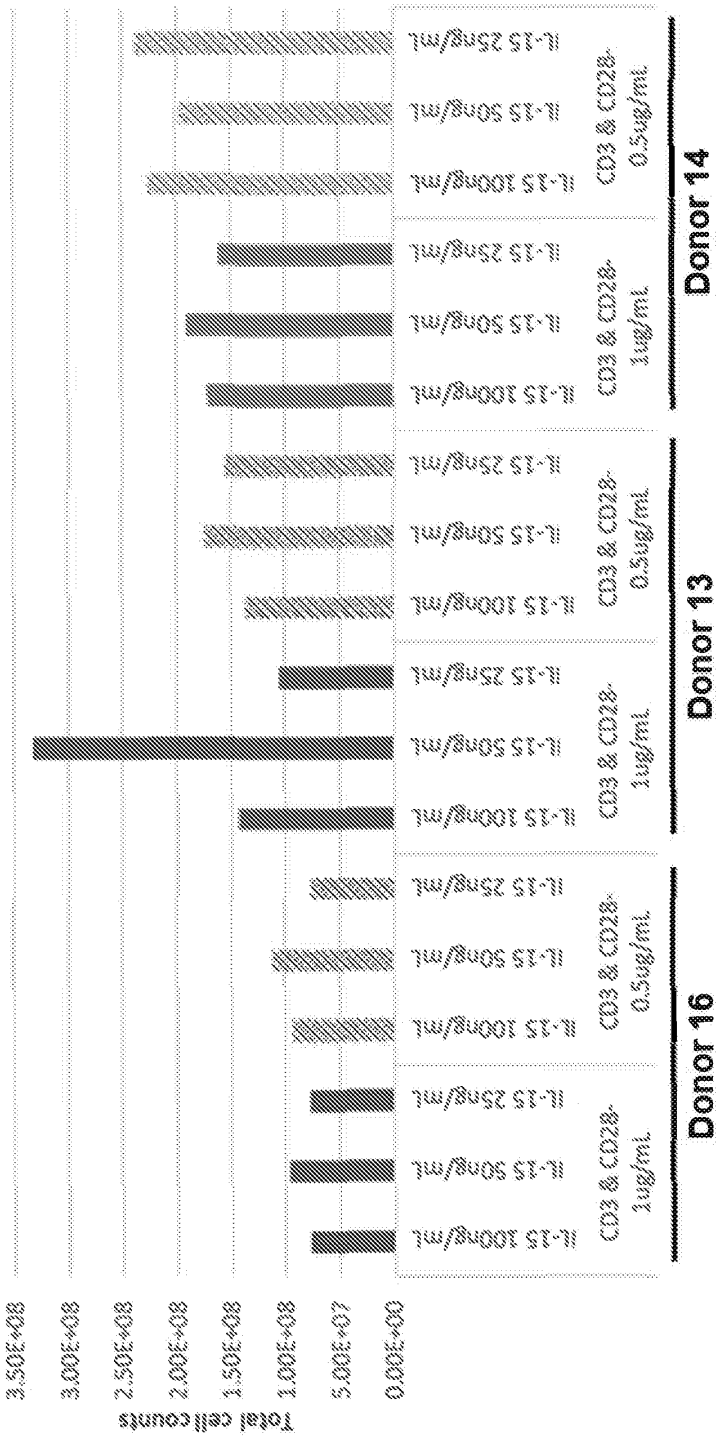

Total cell counts
3.50E+08
3.00E+08
2.50E+08
2.00E+08
1.50E+08
1.00E+08
5.00E+07
0.00E+00
Donor 16
Donor 13
Donor 14
CD3 & CD28-1ug/ml
CD3 & CD28-0.5ug/ml
IL-15 100ng/ml
IL-15 50ng/ml
IL-15 25ng/ml

FIG. 12

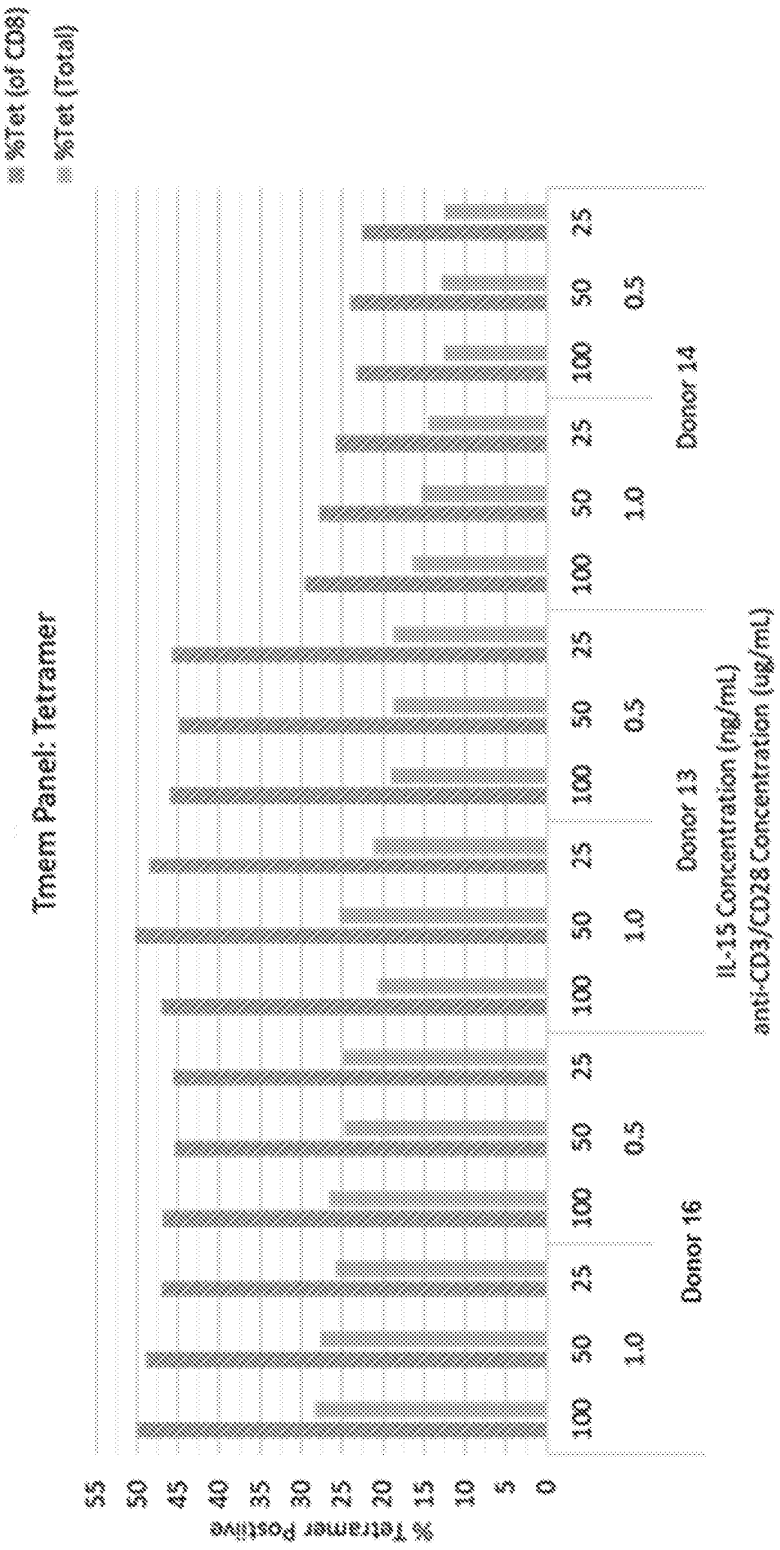

%Tet (of CD8)
%Tet (Total)
Tmem Panel: Tetramer
% Tetramer Positive
0
5
10
15
20
25
30
35
40
45
50
55
Donor 16
Donor 13
Donor 14
IL-15 Concentration (ng/mL)
anti-CD3/CD28 Concentration (ug/mL)
100
50
25
1.0
0.5

FIG. 13

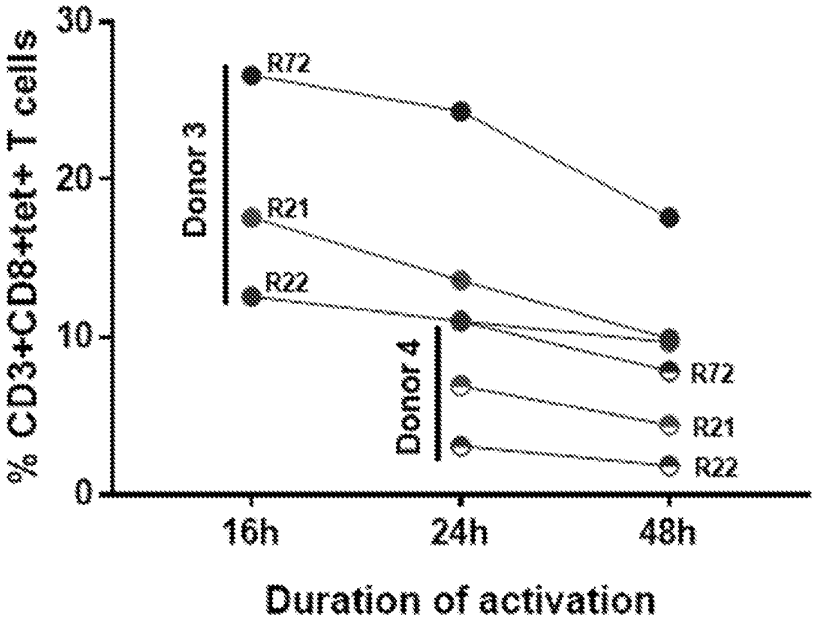


FIG. 14A

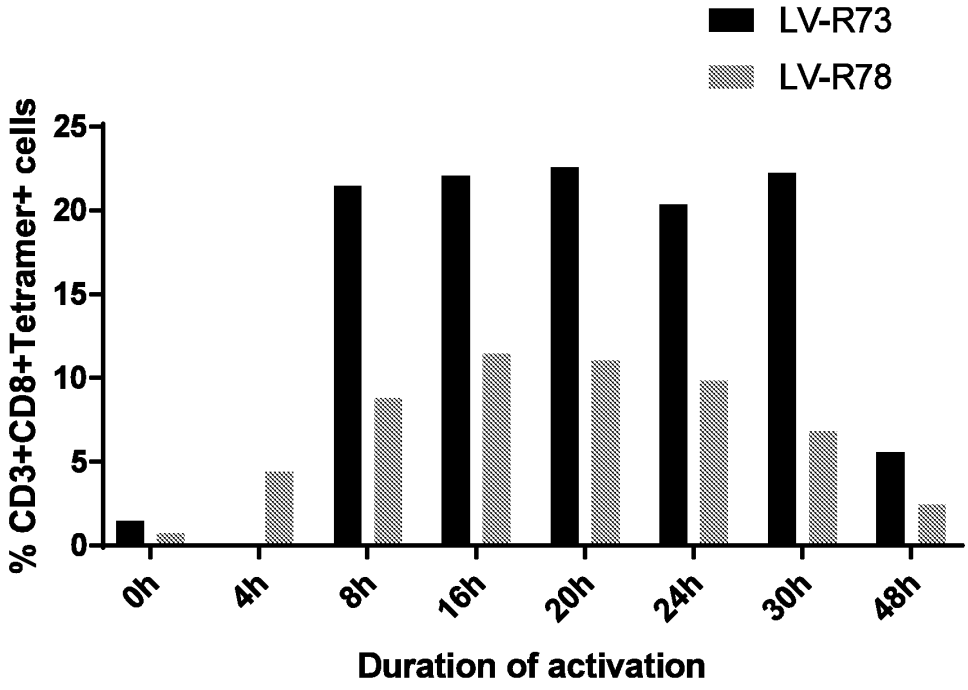


FIG. 14B

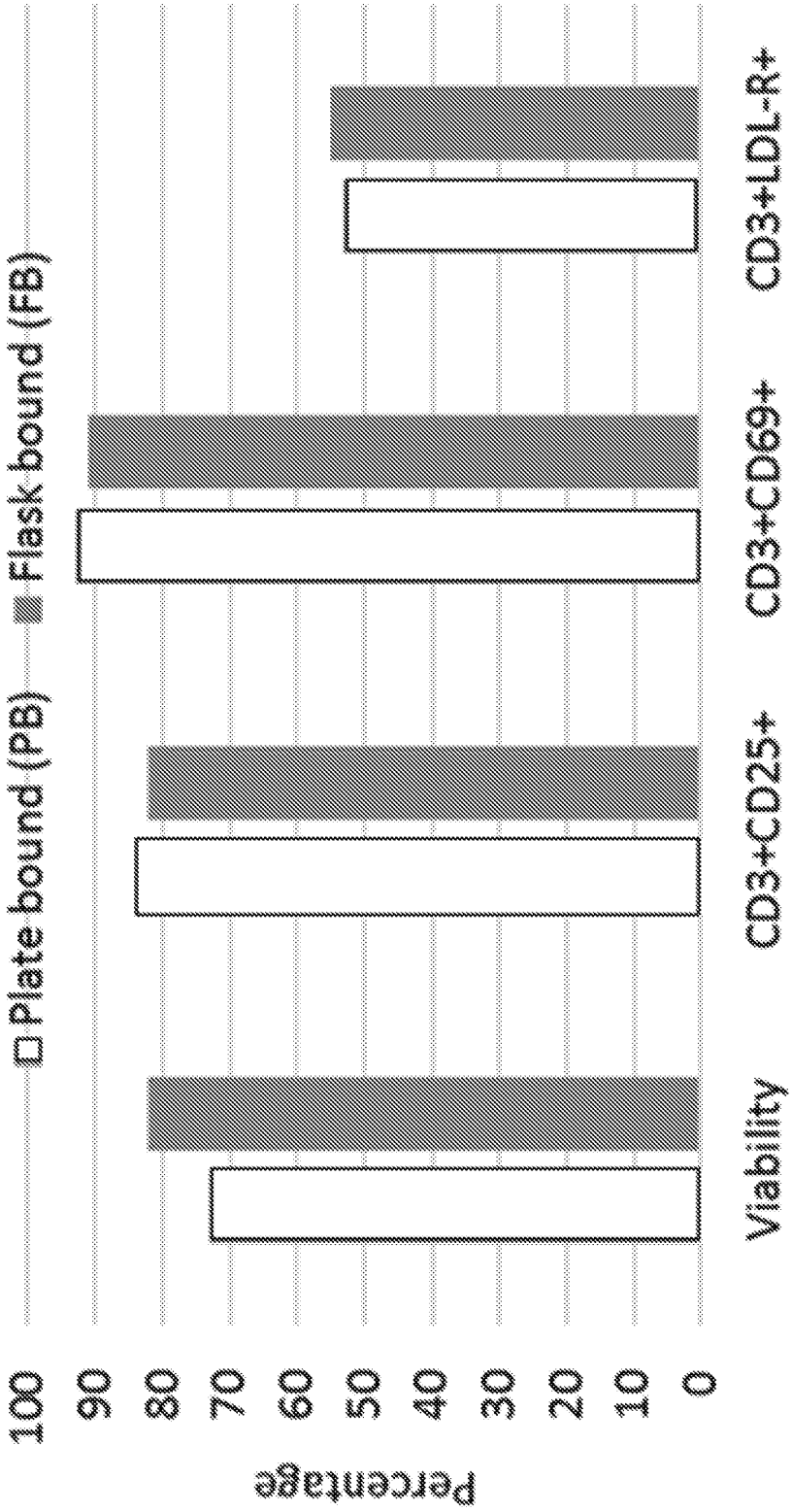

Plate bound (PB)
Flask bound (FB)
Percentage
100
90
80
70
60
50
40
30
20
10
0
Viability
CD3+CD25+
CD3+CD69+
CD3+LDL-R+

FIG. 15

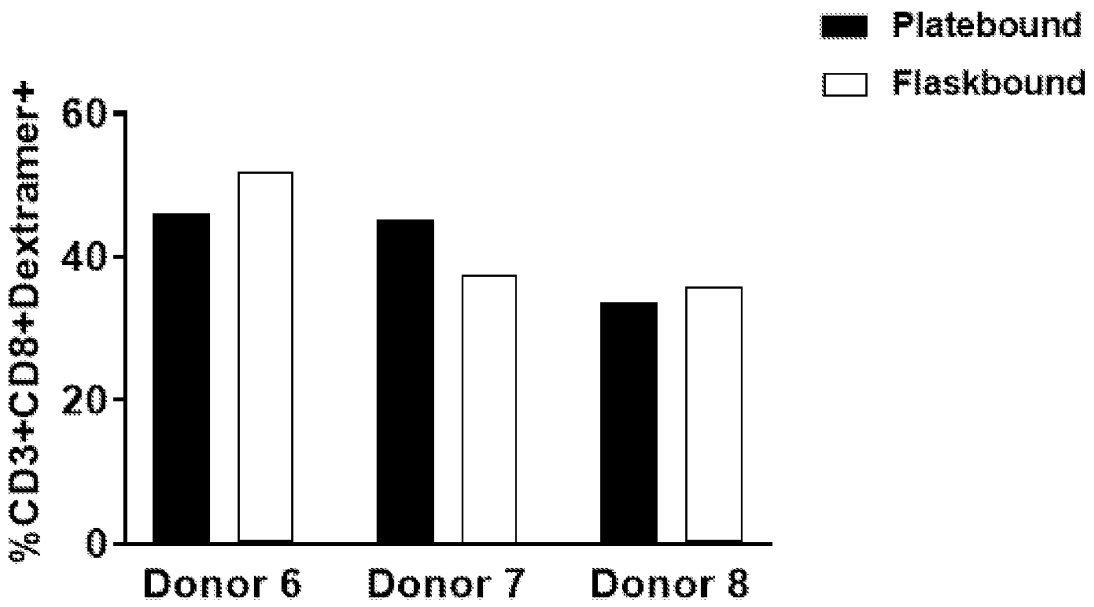


FIG. 16A

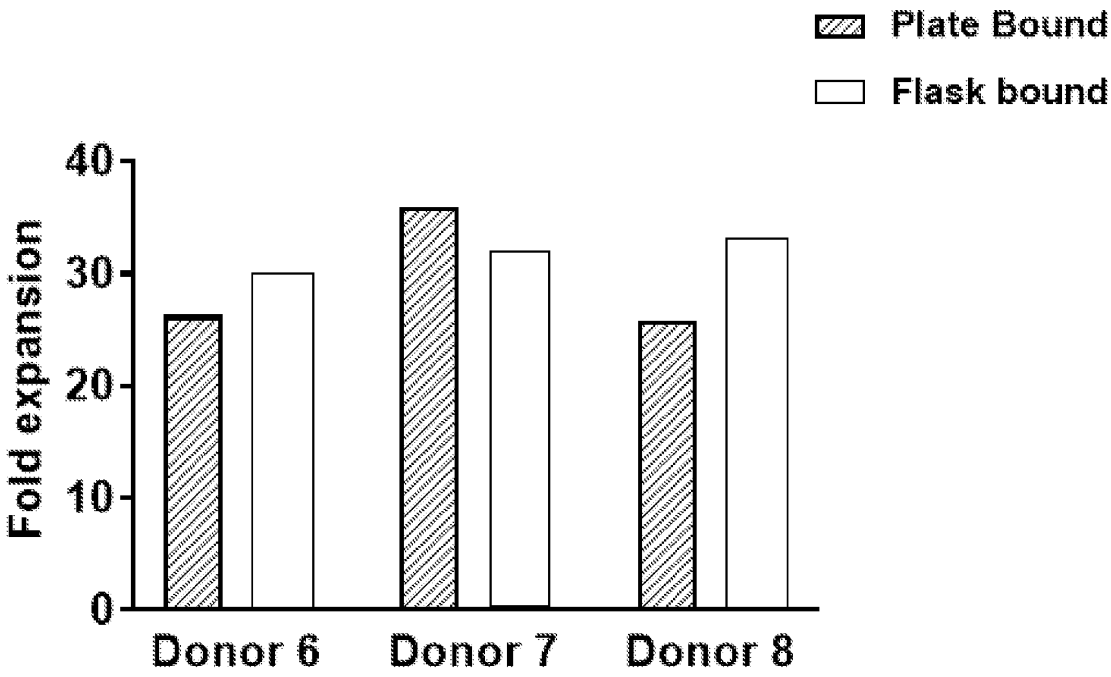


FIG. 16B

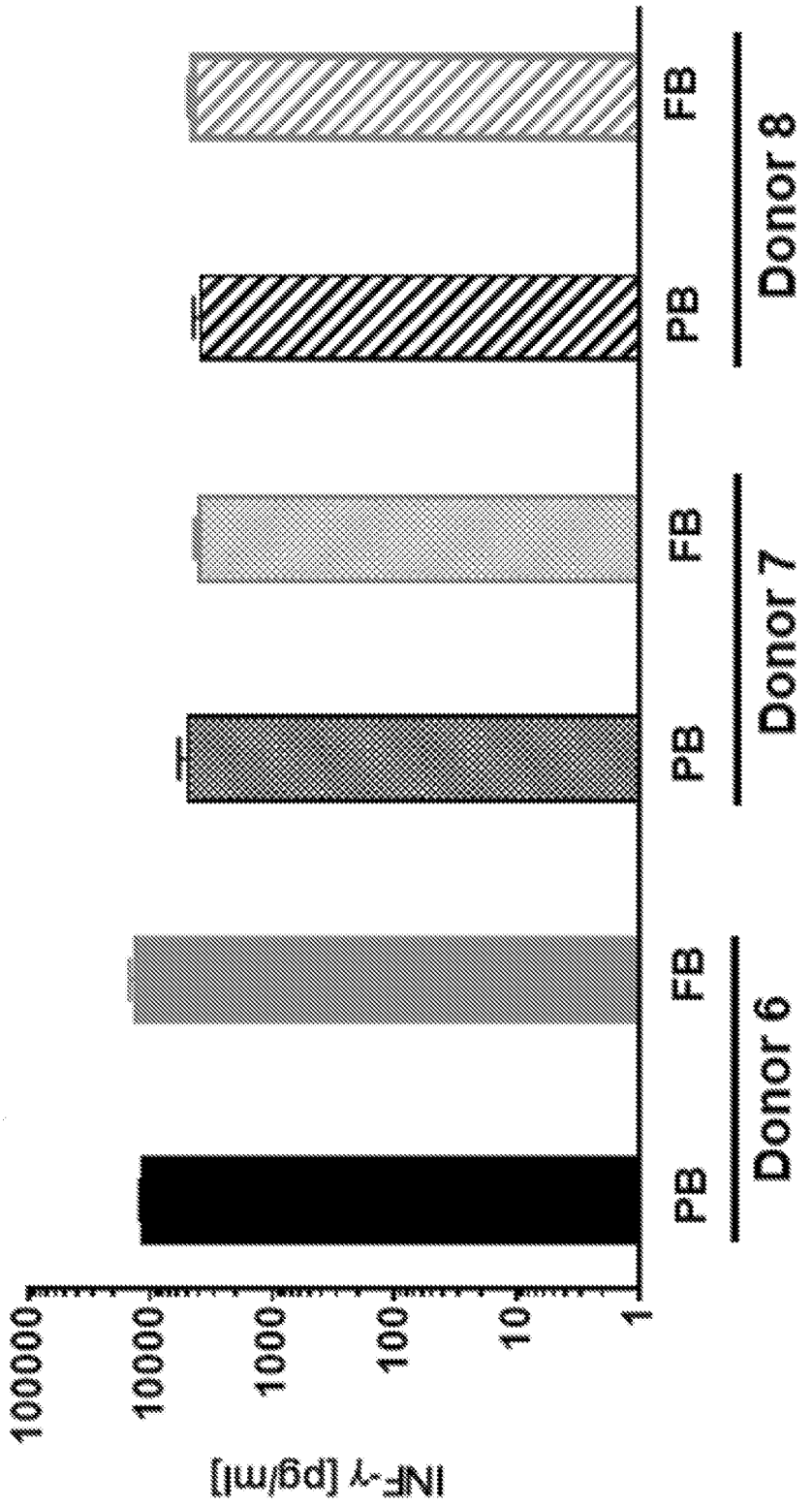

INF-γ [pg/ml]
100000
10000
1000
100
10
1
PB
FB
Donor 6
PB
FB
Donor 7
PB
FB
Donor 8

FIG. 17

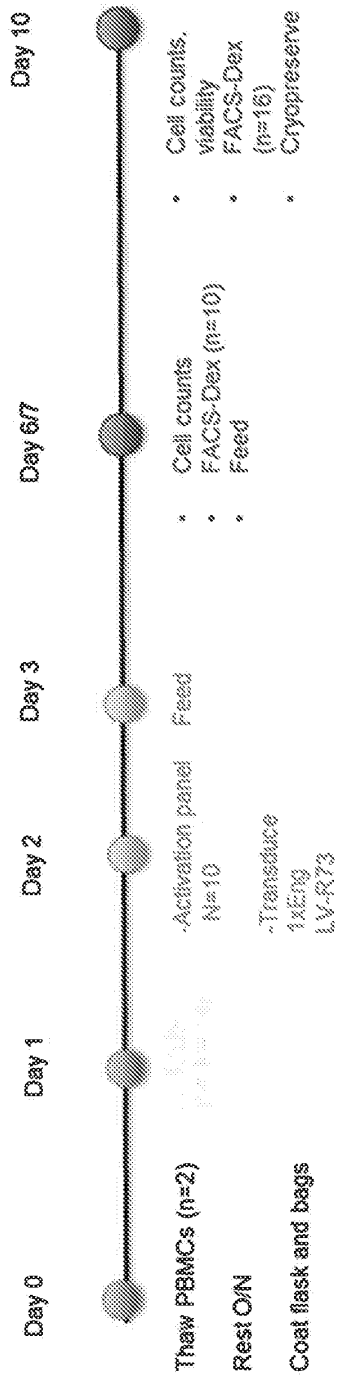

Day 0
Day 1
Day 2
Day 3
Day 6/7
Day 10
Thaw PBMCs (n=2)
Rest O/N
Coat flask and bags
Activation panel
N=10
-Transduce
1.MOI
LV-R73
Feed
Cell counts
FACS-Dex (n=10)
Feed
Cell counts,
viability
FACS-Dex
(n=16)
Cryopreserve

FIG. 18

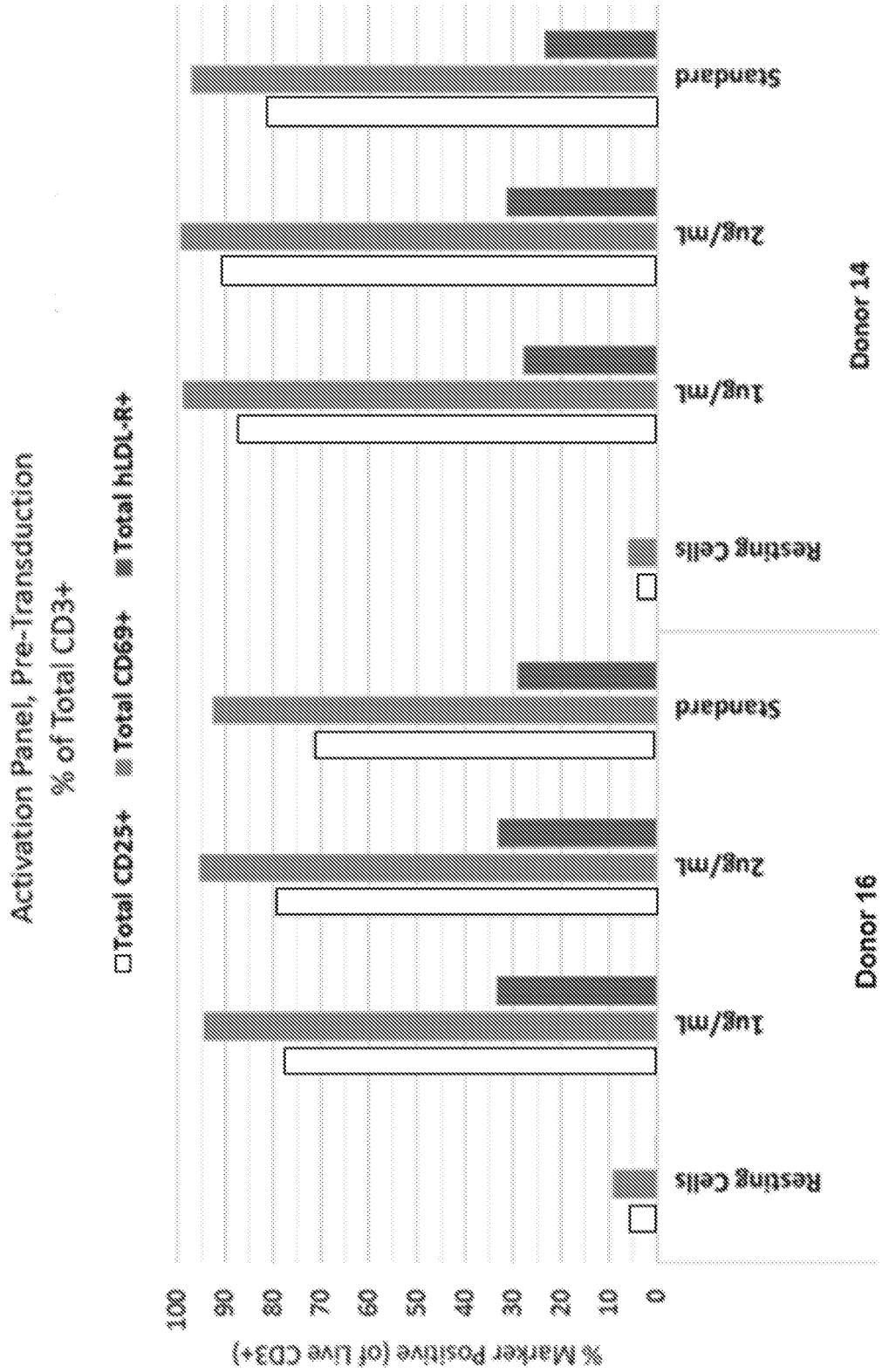

Activation Panel, Pre-Transduction
% of Total CD3+
Total CD25+
Total CD69+
Total hLDL-R+
% Marker Positive (of Live CD3+)
100
90
80
70
60
50
40
30
20
10
0
Resting Cells
1ug/mL
2ug/mL
Standard
Donor 16
Resting Cells
1ug/mL
2ug/mL
Standard
Donor 14

FIG. 19

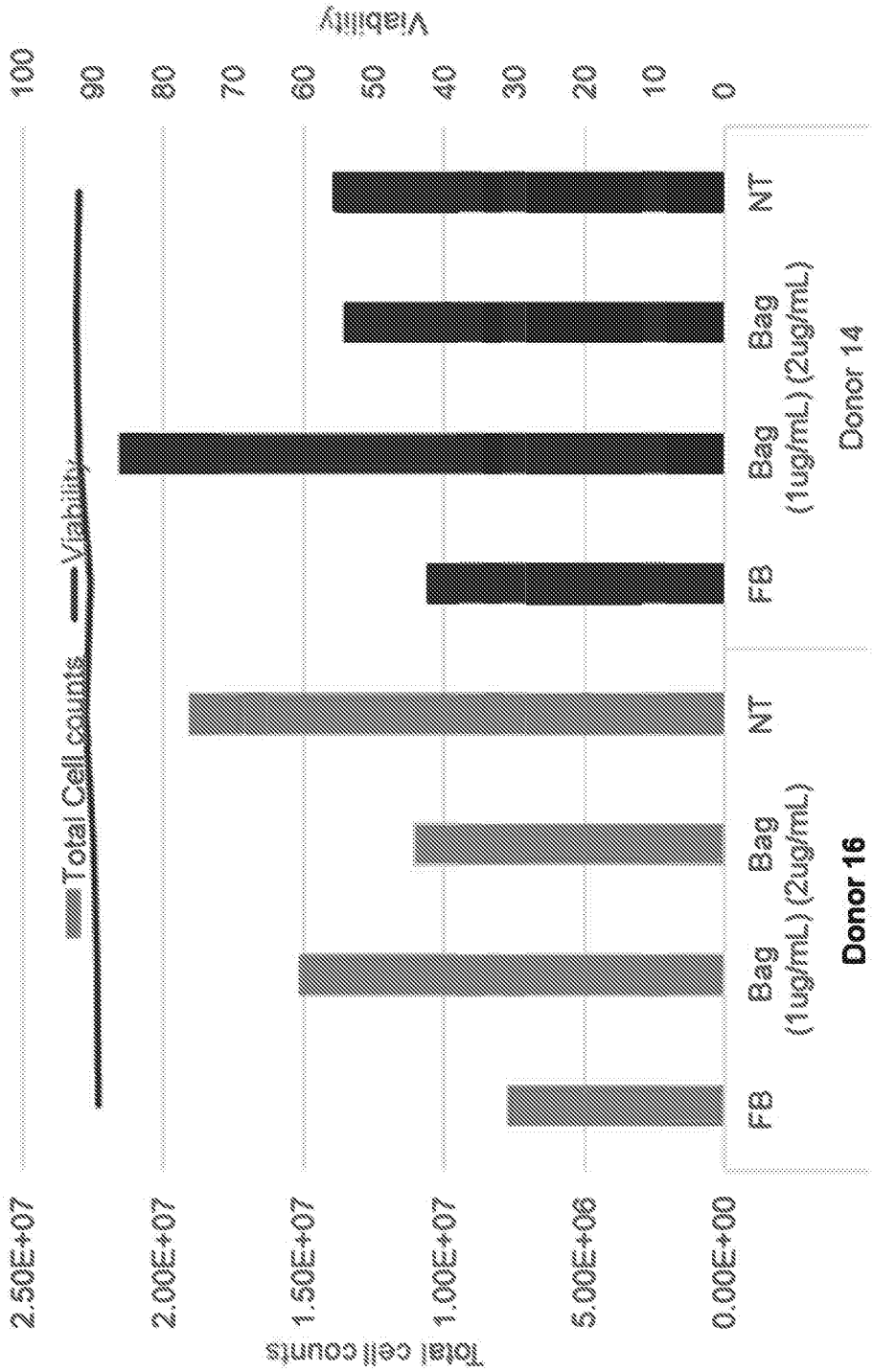

Viability
100
90
80
70
60
50
40
30
20
10
0
Total Cell counts
Viability
2.50E+07
2.00E+07
1.50E+07
1.00E+07
5.00E+06
0.00E+00
Total cell counts
FB
Bag (1ug/mL) (2ug/mL)
Bag
NT
Donor 16
FB
Bag (1ug/mL) (2ug/mL)
Bag
NT
Donor 14

FIG. 20

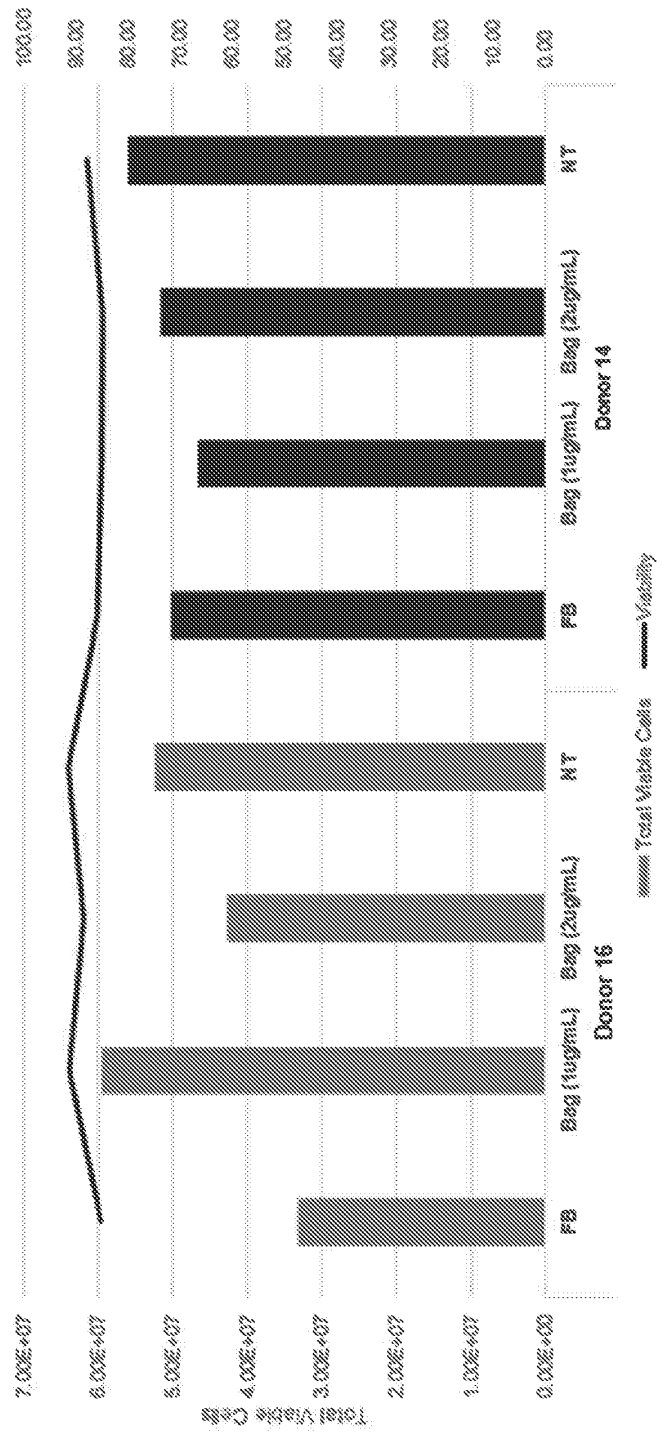

100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
7.00E+07
6.00E+07
5.00E+07
4.00E+07
3.00E+07
2.00E+07
1.00E+07
0.00E+00
Total Viable Cells
Total Viable Cells
Viability
FB
Beg (1ug/mL)
Beg (2ug/mL)
WT
Donor 16
FB
Beg (1ug/mL)
Beg (2ug/mL)
WT
Donor 14

FIG. 21

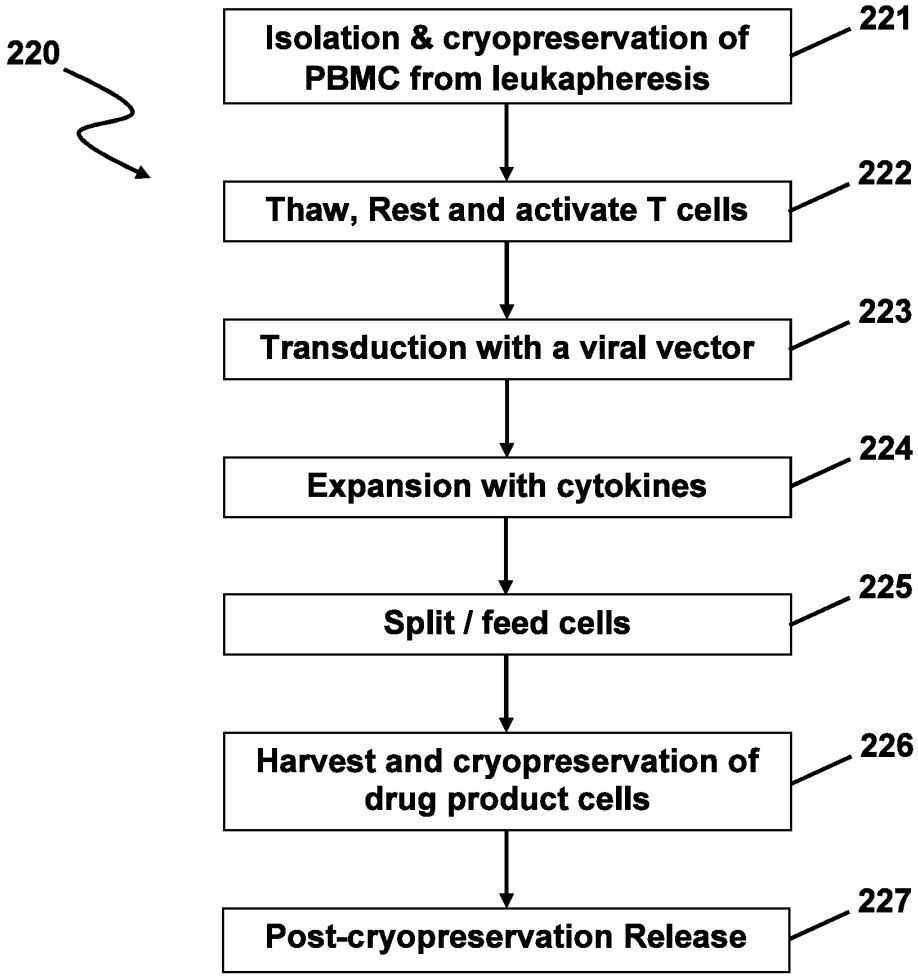

220
Isolation & cryopreservation of PBMC from leukapheresis
221
Thaw, Rest and activate T cells
222
Transduction with a viral vector
223
Expansion with cytokines
224
Split / feed cells
225
Harvest and cryopreservation of drug product cells
226
Post-cryopreservation Release
227

FIG. 22

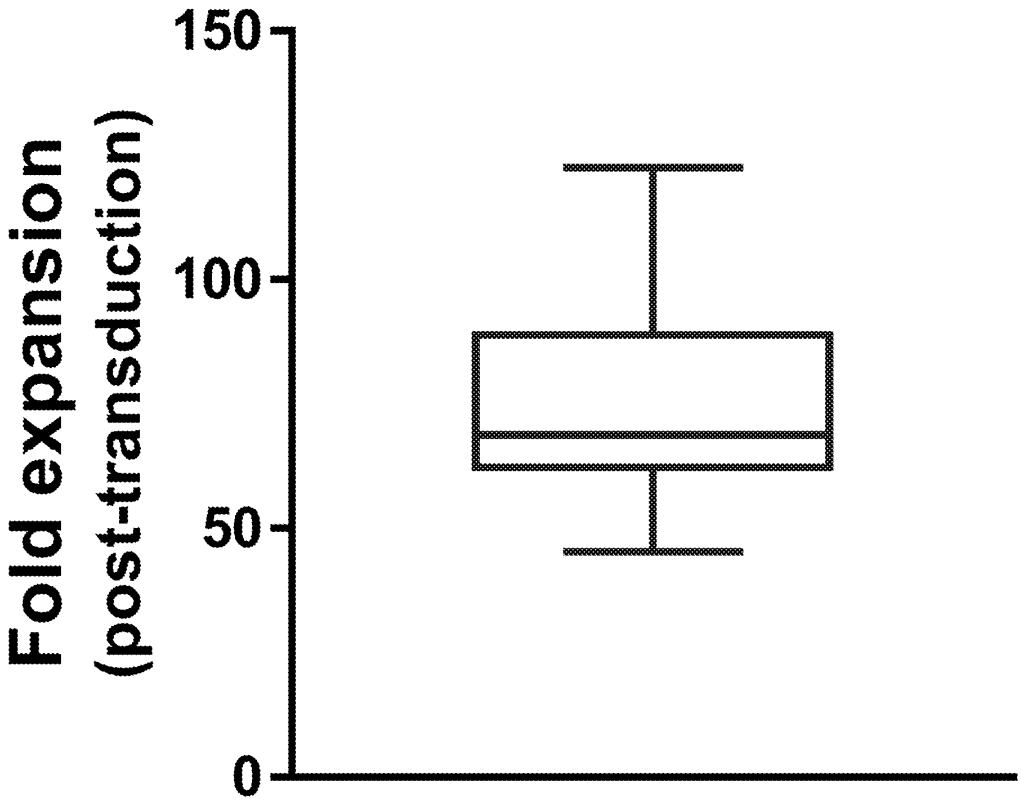


FIG. 23A

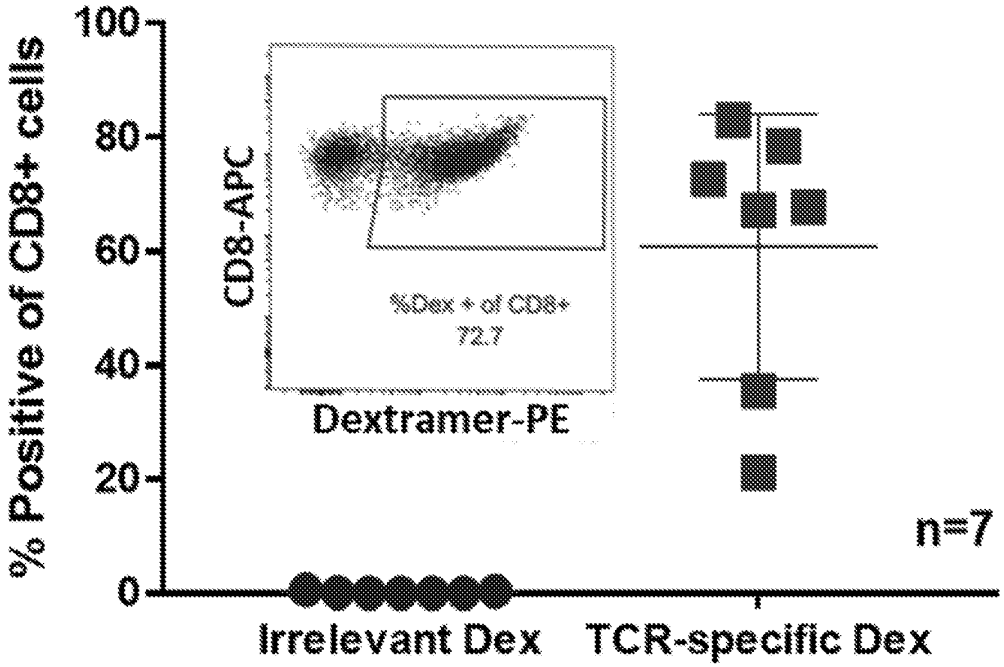

% Positive of CD8+ cells
100
80
60
40
20
0
CD8-APC
%Dex + of CD8+
72.7
Dextramer-PE
n=7
Irrelevant Dex
TCR-specific Dex

FIG. 23B

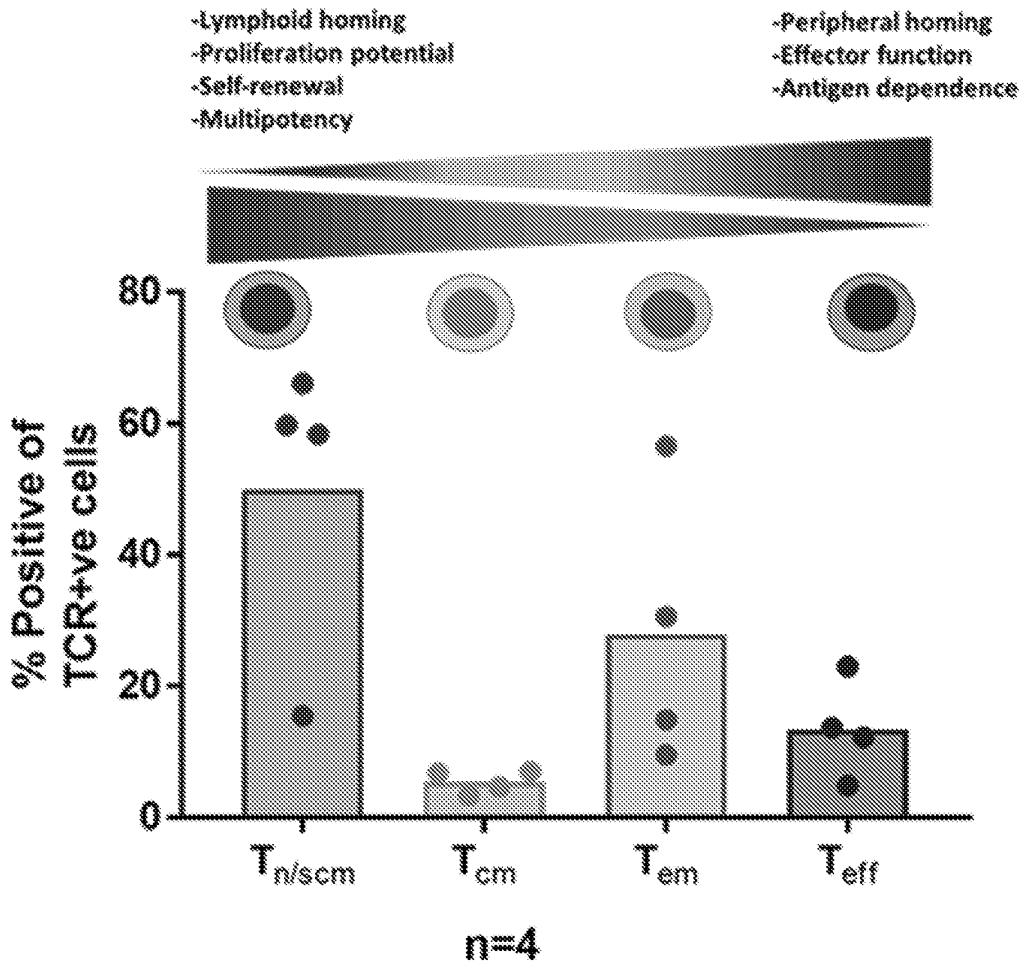

-Lymphoid homing
-Proliferation potential
-Self-renewal
-Multipotency
-Peripheral homing
-Effector function
-Antigen dependence
% Positive of TCR+ve cells
80
60
40
20
0
$T_{n/scm}$
T_{cm}
T_{em}
T_{eff}
n=4

FIG. 23C

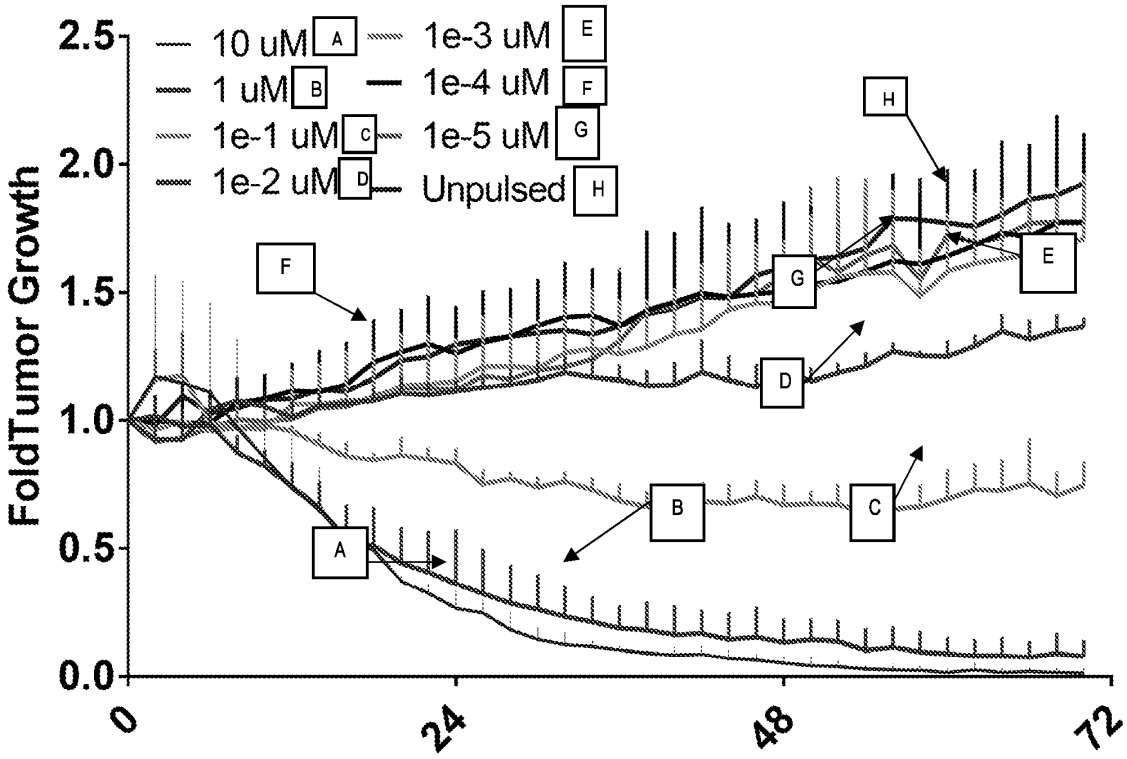

10 uM A
1 uM B
1e-1 uM C
1e-2 uM D
1e-3 uM E
1e-4 uM F
1e-5 uM G
Unpulsed H
FoldTumor Growth
2.5
2.0
1.5
1.0
0.5
0.0
0
24
48
72
A
B
C
D
E
F
G
H

FIG. 23D

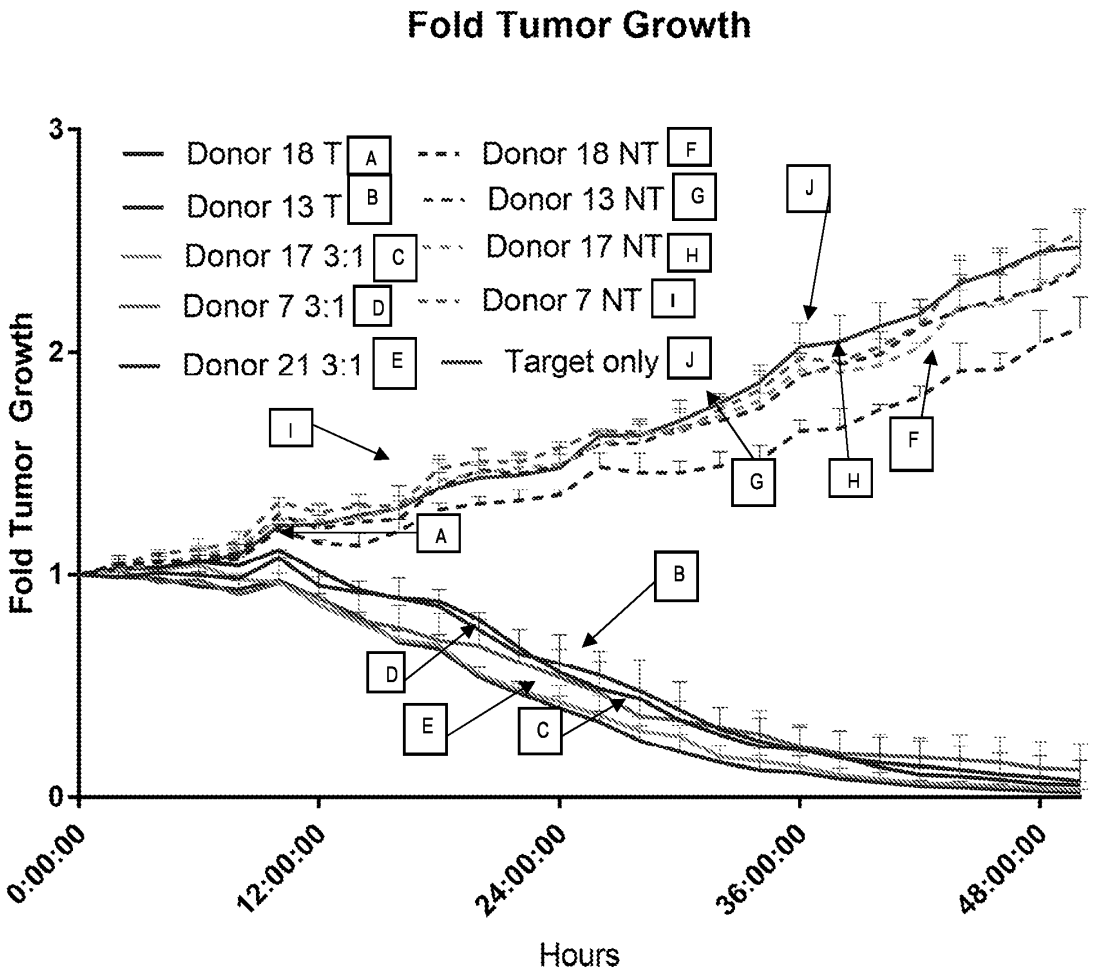

Fold Tumor Growth
Donor 18 T A
Donor 13 T B
Donor 17 3:1 C
Donor 7 3:1 D
Donor 21 3:1 E
Donor 18 NT F
Donor 13 NT G
Donor 17 NT H
Donor 7 NT I
Target only J
Fold Tumor Growth
0
1
2
3
0:00:00
12:00:00
24:00:00
36:00:00
48:00:00
Hours

FIG. 23E

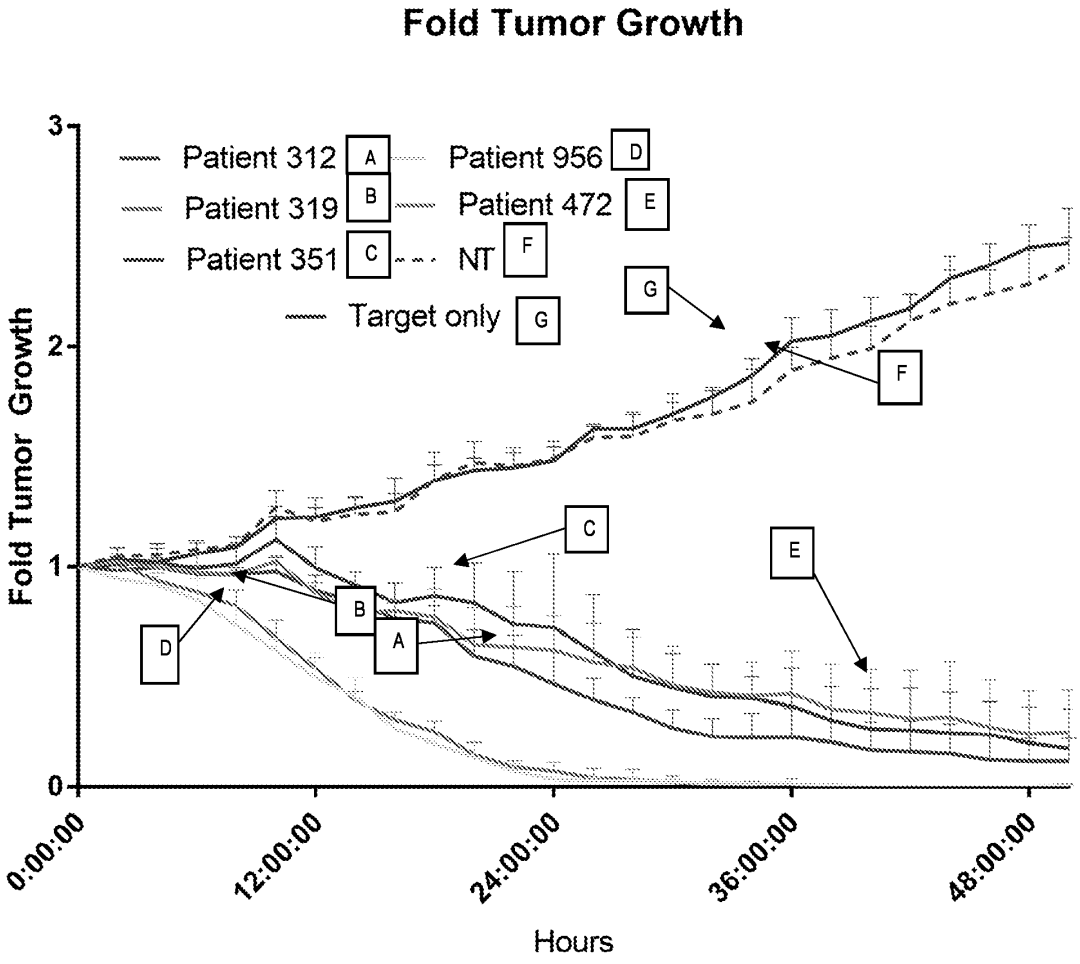

Fold Tumor Growth
Patient 312 A
Patient 319 B
Patient 351 C
Patient 956 D
Patient 472 E
NT F
Target only G
Fold Tumor Growth
3
2
1
0
0:00:00
12:00:00
24:00:00
36:00:00
48:00:00
Hours

FIG. 23F

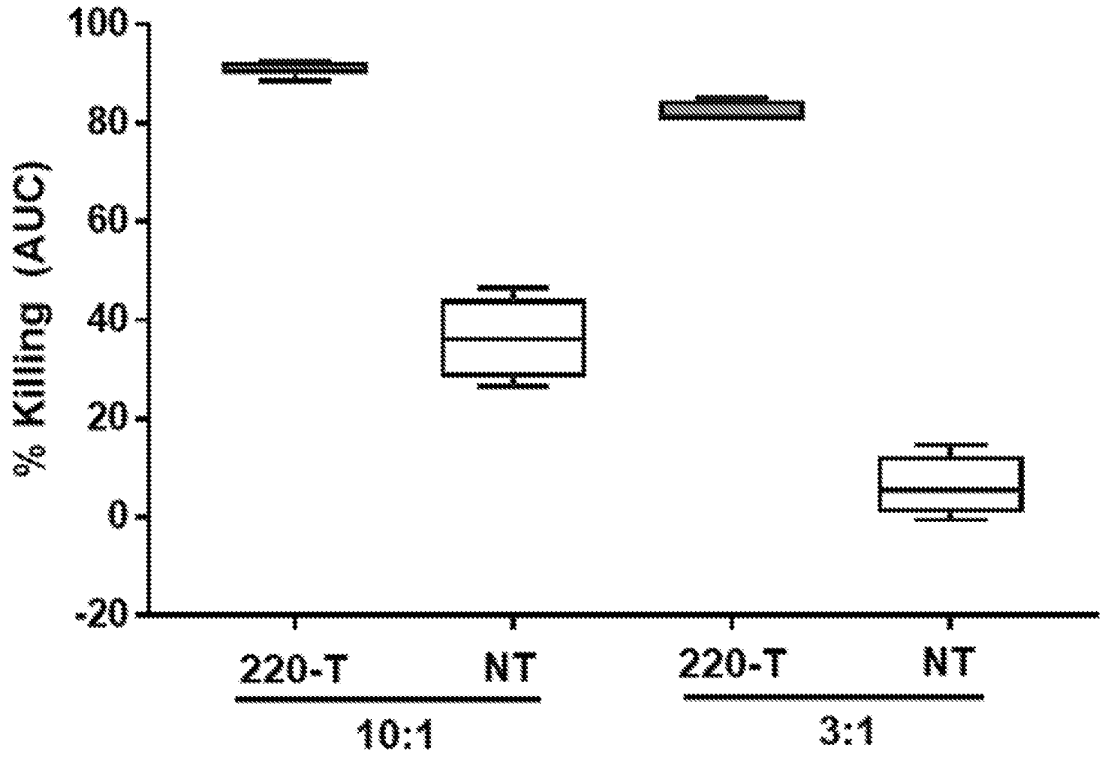


FIG. 23G

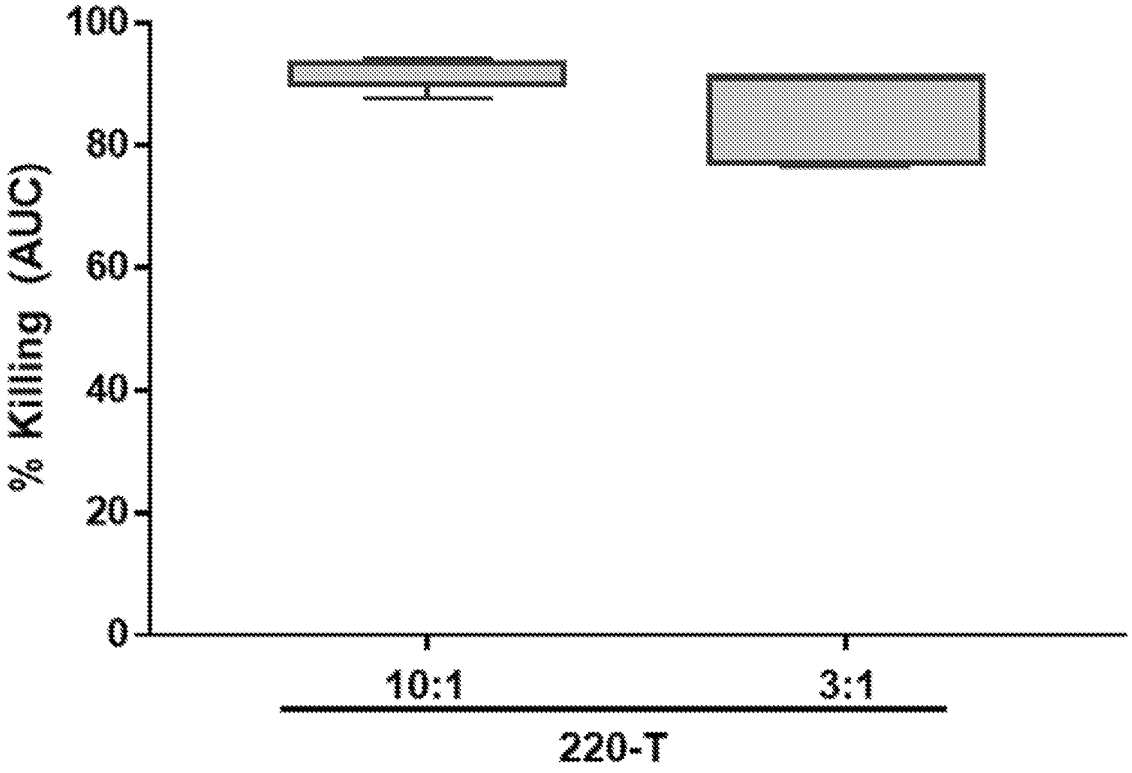


FIG. 23H

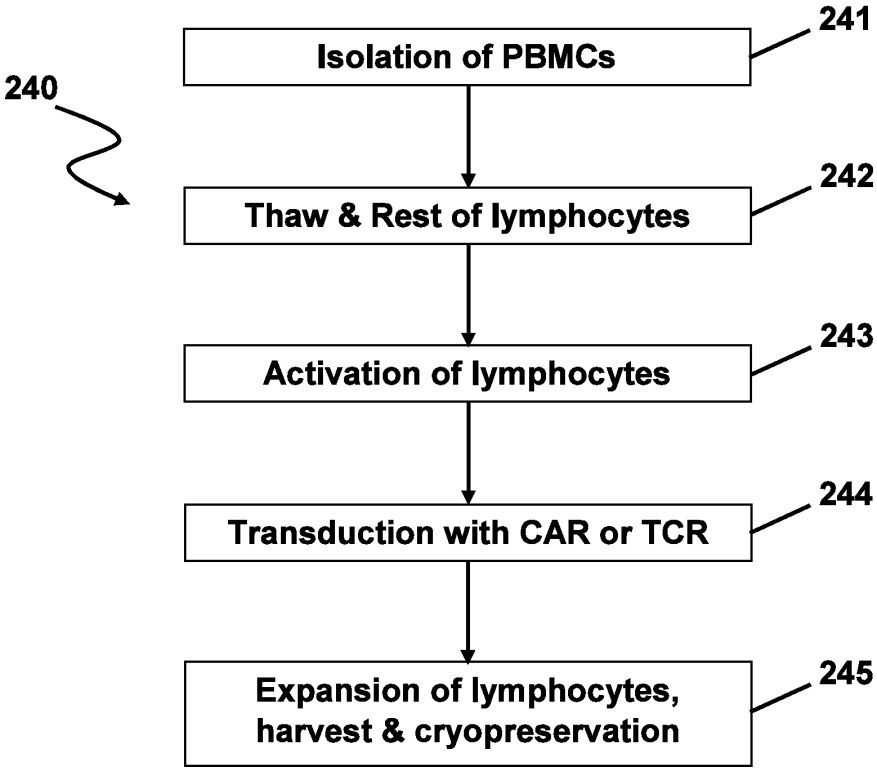

240
Isolation of PBMCs
241
Thaw & Rest of lymphocytes
242
Activation of lymphocytes
243
Transduction with CAR or TCR
244
Expansion of lymphocytes, harvest & cryopreservation
245

FIG. 24

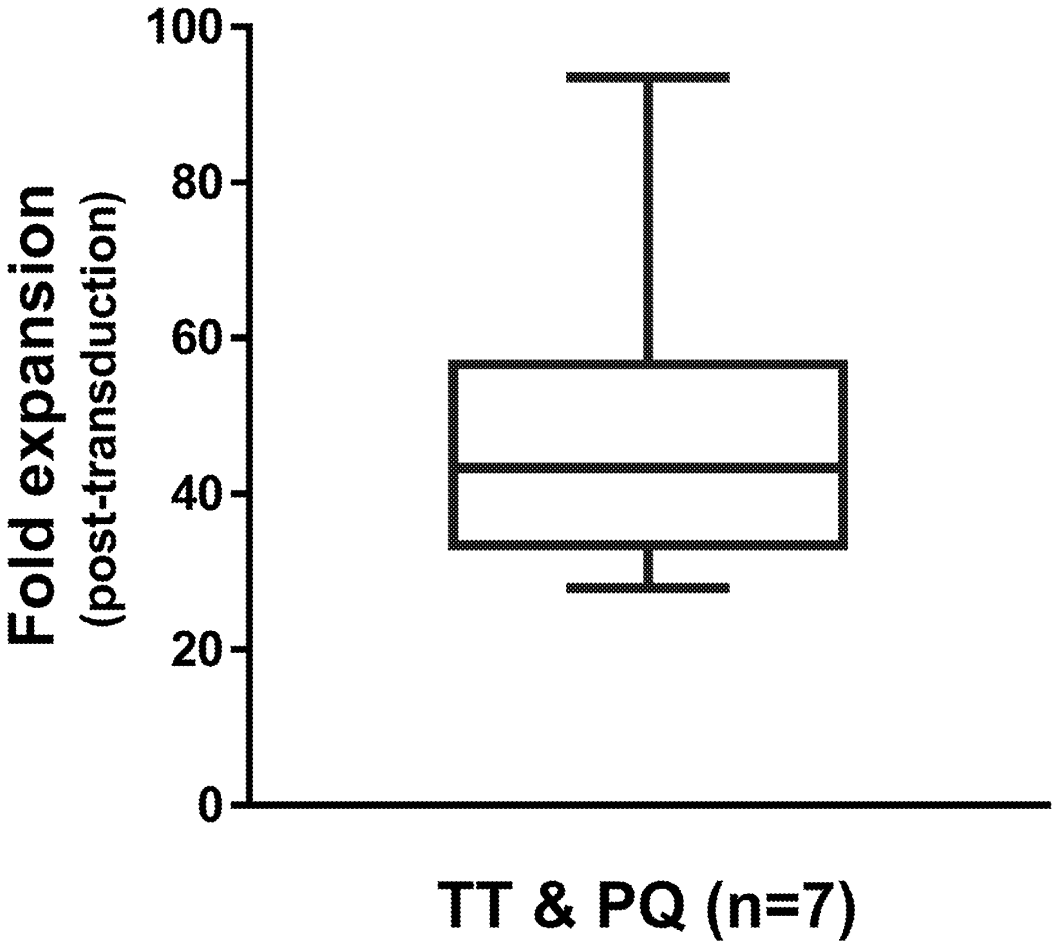


FIG. 25A

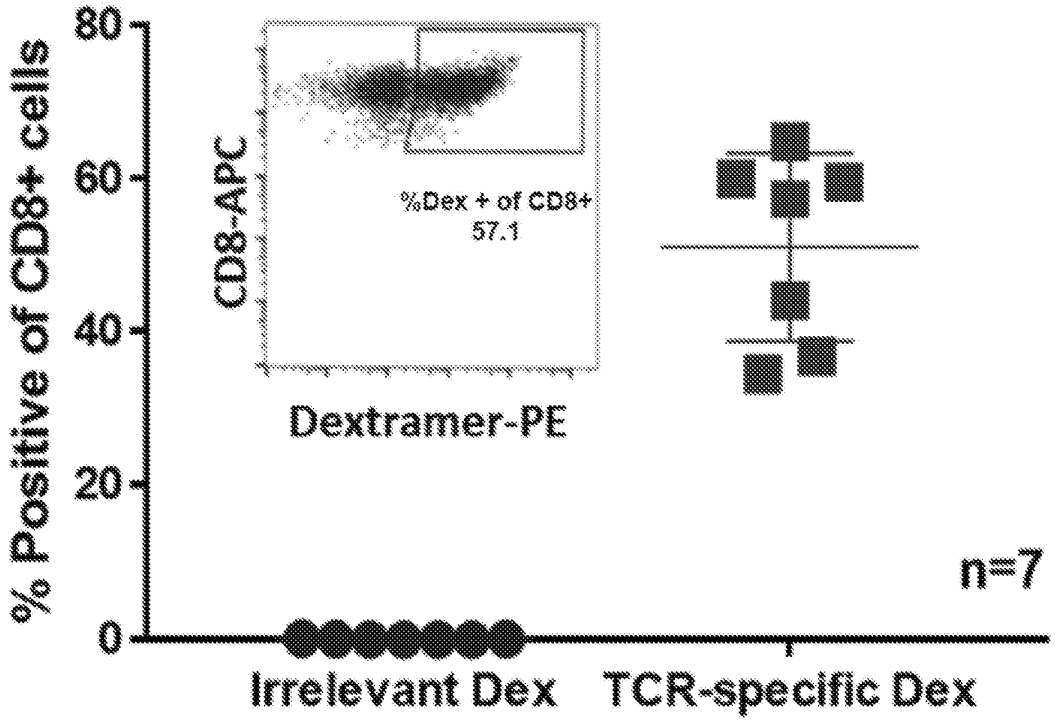

% Positive of CD8+ cells
80
60
40
20
0
CD8-APC
%Dex + of CD8+
57.1
Dextramer-PE
n=7
Irrelevant Dex
TCR-specific Dex

FIG. 25B

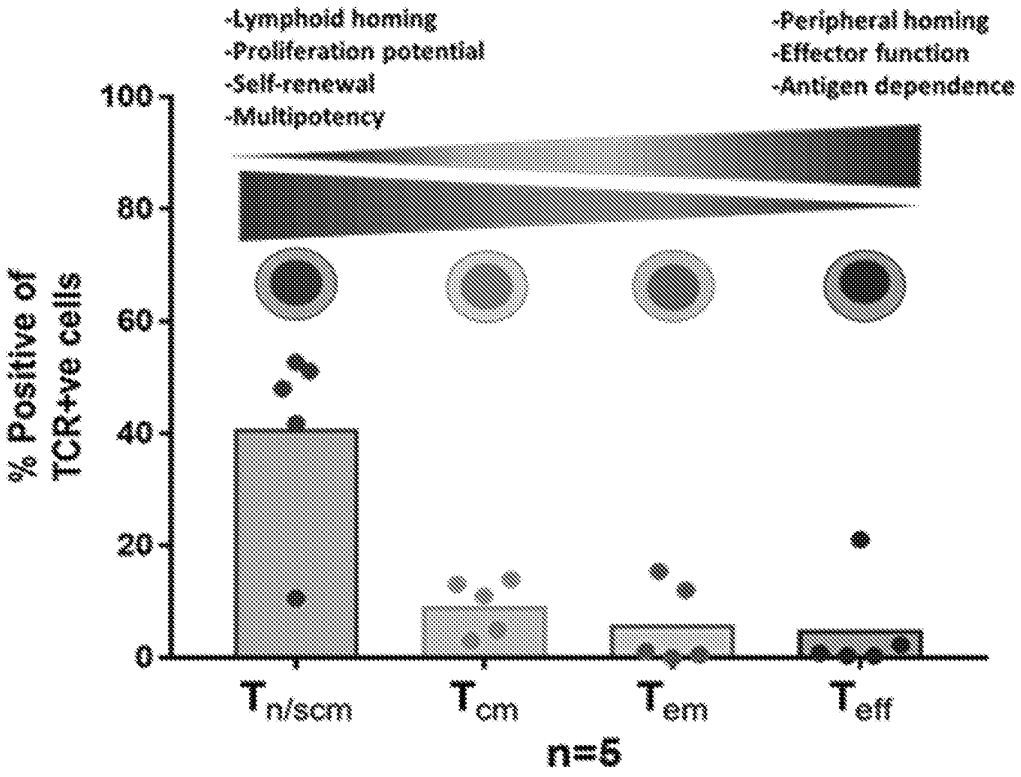

-Lymphoid homing
-Proliferation potential
-Self-renewal
-Multipotency
-Peripheral homing
-Effector function
-Antigen dependence
% Positive of TCR+ve cells
100
80
60
40
20
0
Tn/scm
Tcm
Tem
Teff
n=5

FIG. 25C

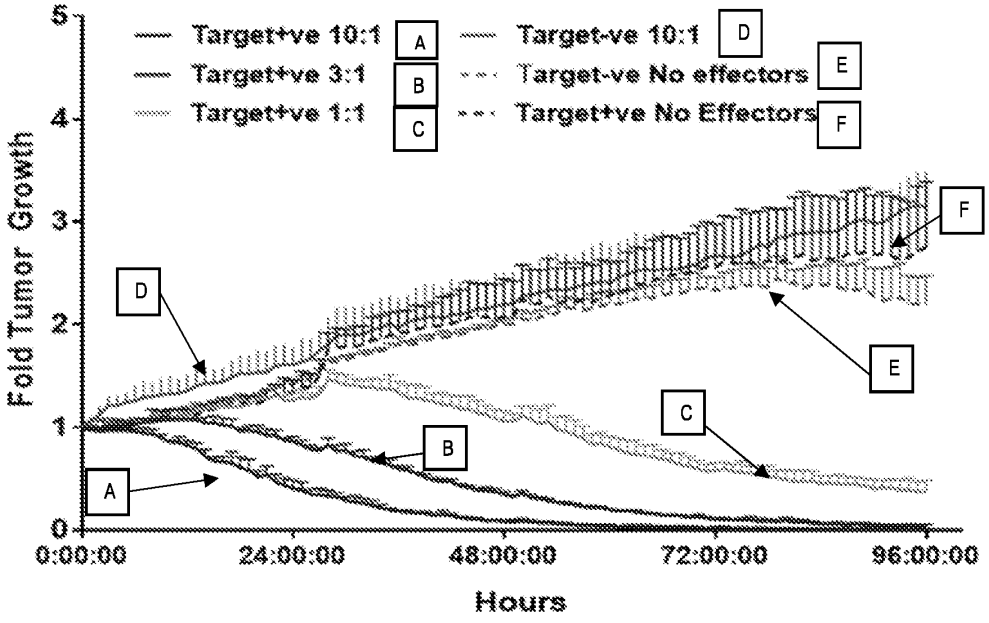

Target+ve 10:1
Target+ve 3:1
Target+ve 1:1
Target-ve 10:1
Target-ve No effectors
Target+ve No Effectors
A
B
C
D
E
F
Fold Tumor Growth
0
1
2
3
4
5
0:00:00
24:00:00
48:00:00
72:00:00
96:00:00
Hours

FIG. 25D

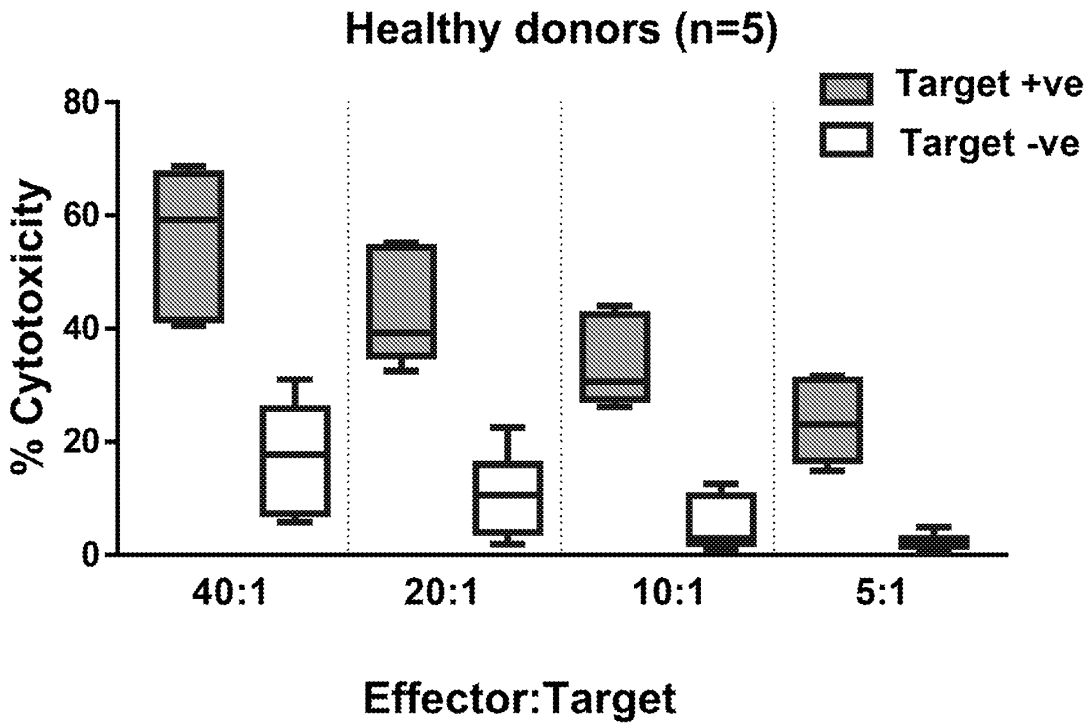

Healthy donors (n=5)
Target +ve
Target -ve
% Cytotoxicity
80
60
40
20
0
40:1
20:1
10:1
5:1
Effector:Target

FIG. 25E

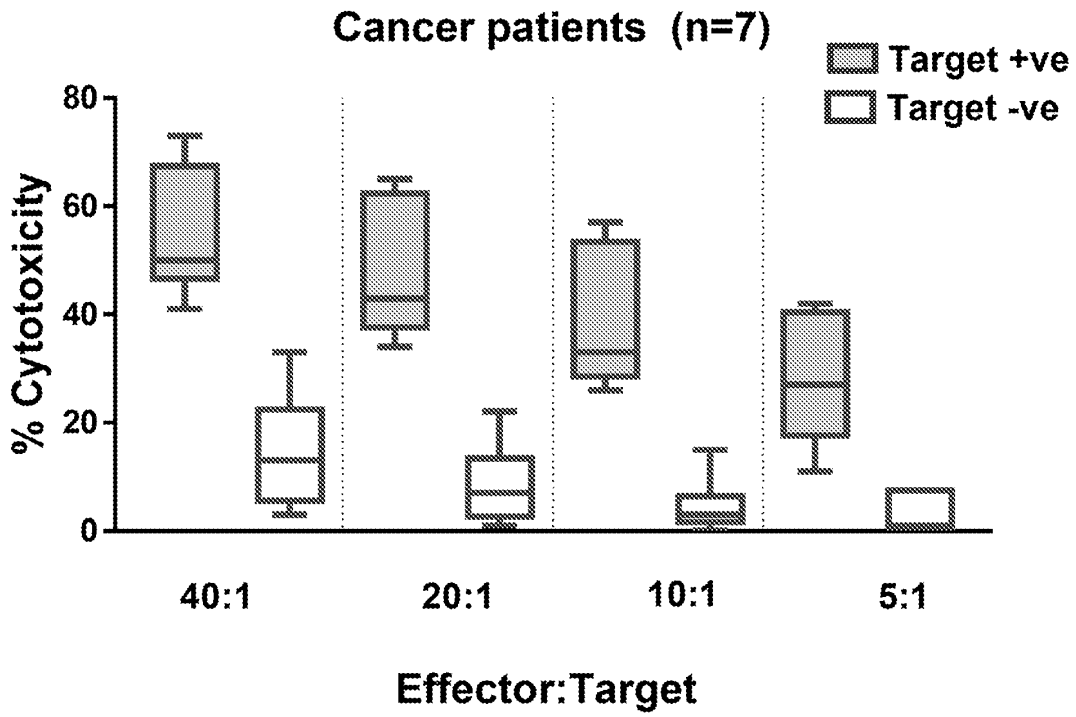

Cancer patients (n=7)
Target +ve
Target -ve
% Cytotoxicity
80
60
40
20
0
40:1
20:1
10:1
5:1
Effector:Target

FIG. 25F

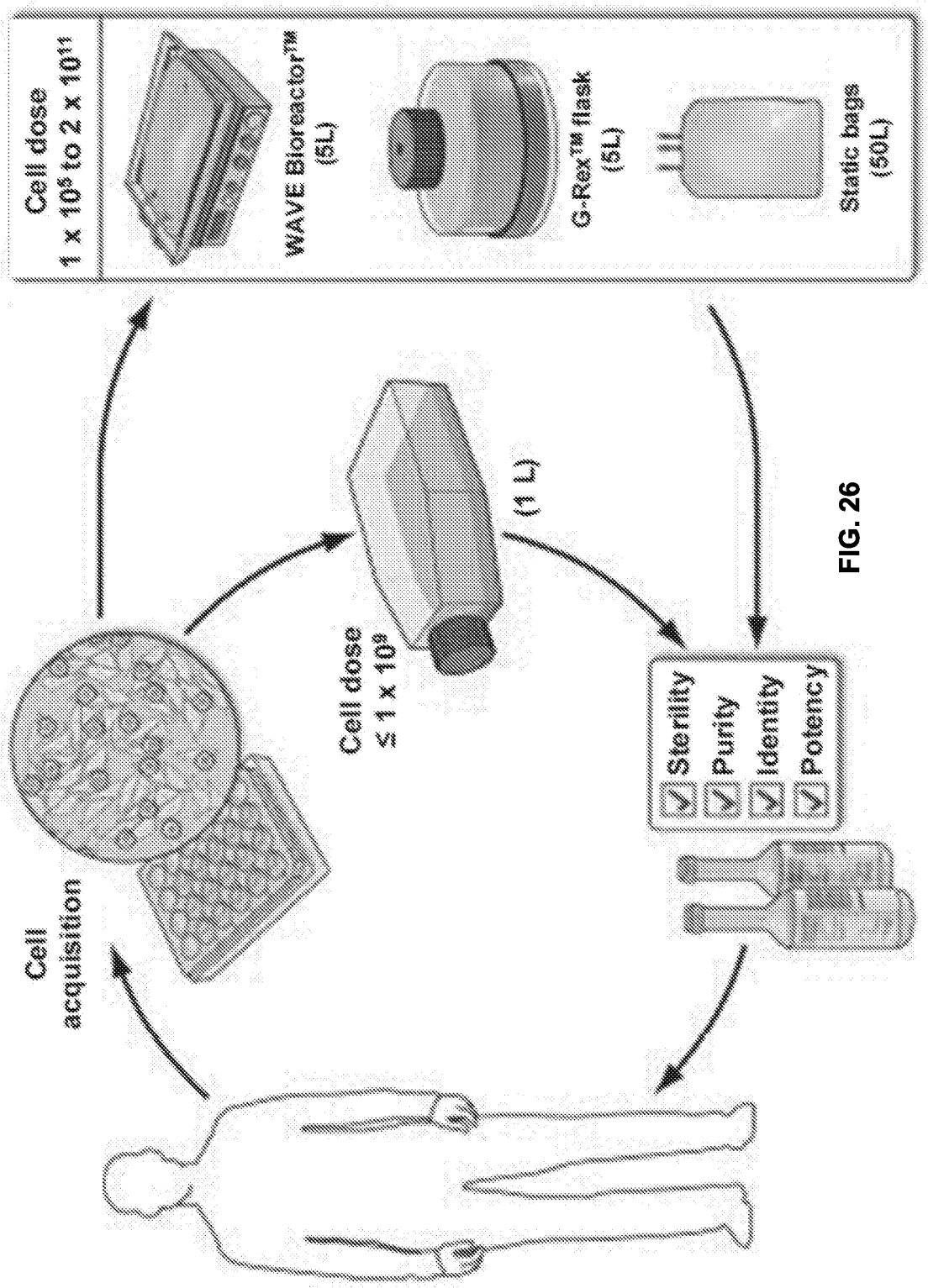

Cell dose
1 x 10^8 to 2 x 10^11
WAVE Bioreactor™ (5L)
G-Rex™ flask (5L)
Static bags (50L)
(1 L)
Cell dose
≤ 1 x 10^8
Sterility
Purity
Identity
Potency
Cell acquisition

FIG. 26

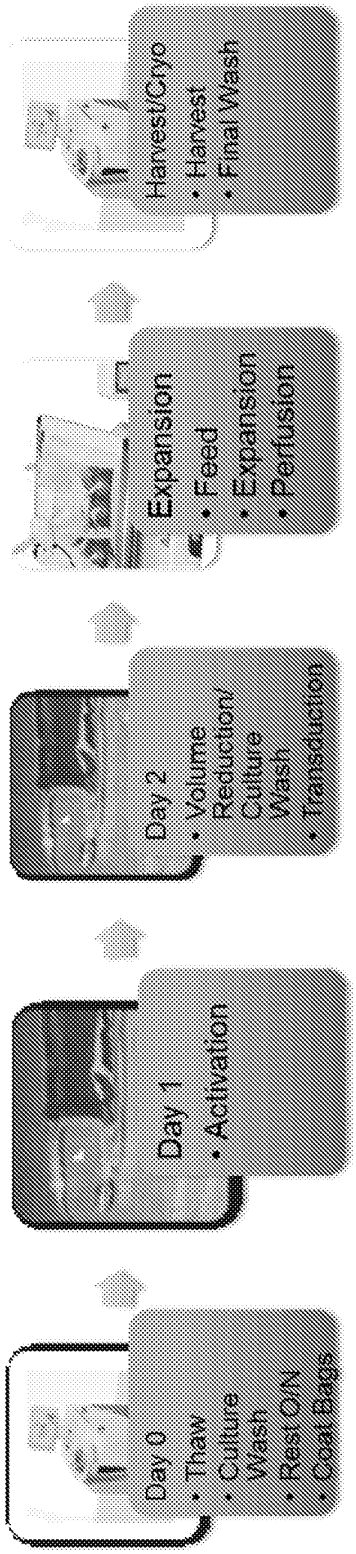

Day 0
• Thaw
• Culture Wash
• Rest O/N
• Coat Bags
Day 1
• Activation
Day 2
• Volume Reduction/ Culture Wash
• Transduction
Expansion
• Feed
• Expansion
• Perfusion
Harvest/Cryo
• Harvest
• Final Wash

FIG. 27

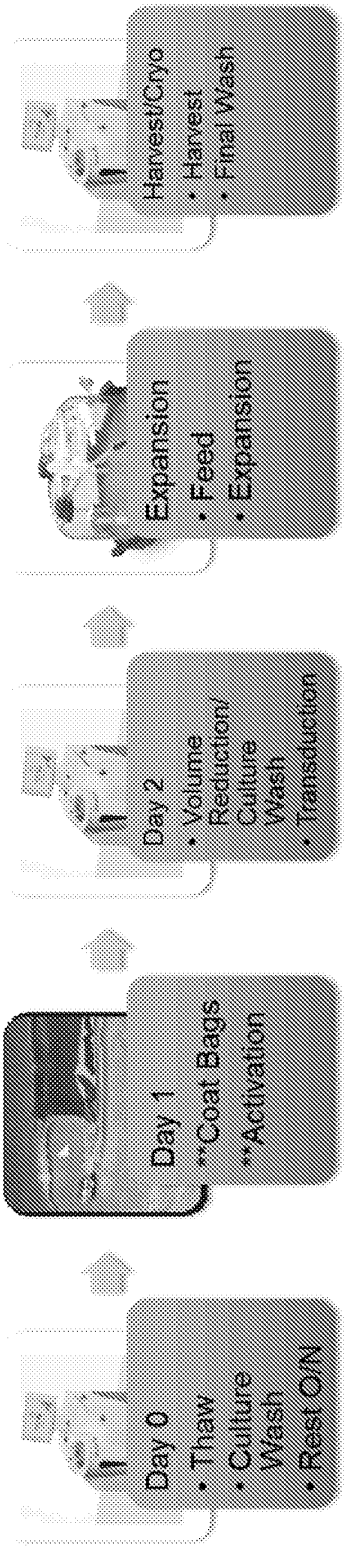

Day 0
• Thaw
• Culture
Wash
• Rest O/N
Day 1
**Coat Bags
**Activation
Day 2
• Volume
Reduction/
Culture
Wash
• Transduction
Expansion
• Feed
• Expansion
Harvest/Cryo
• Harvest
• Final Wash

FIG. 28

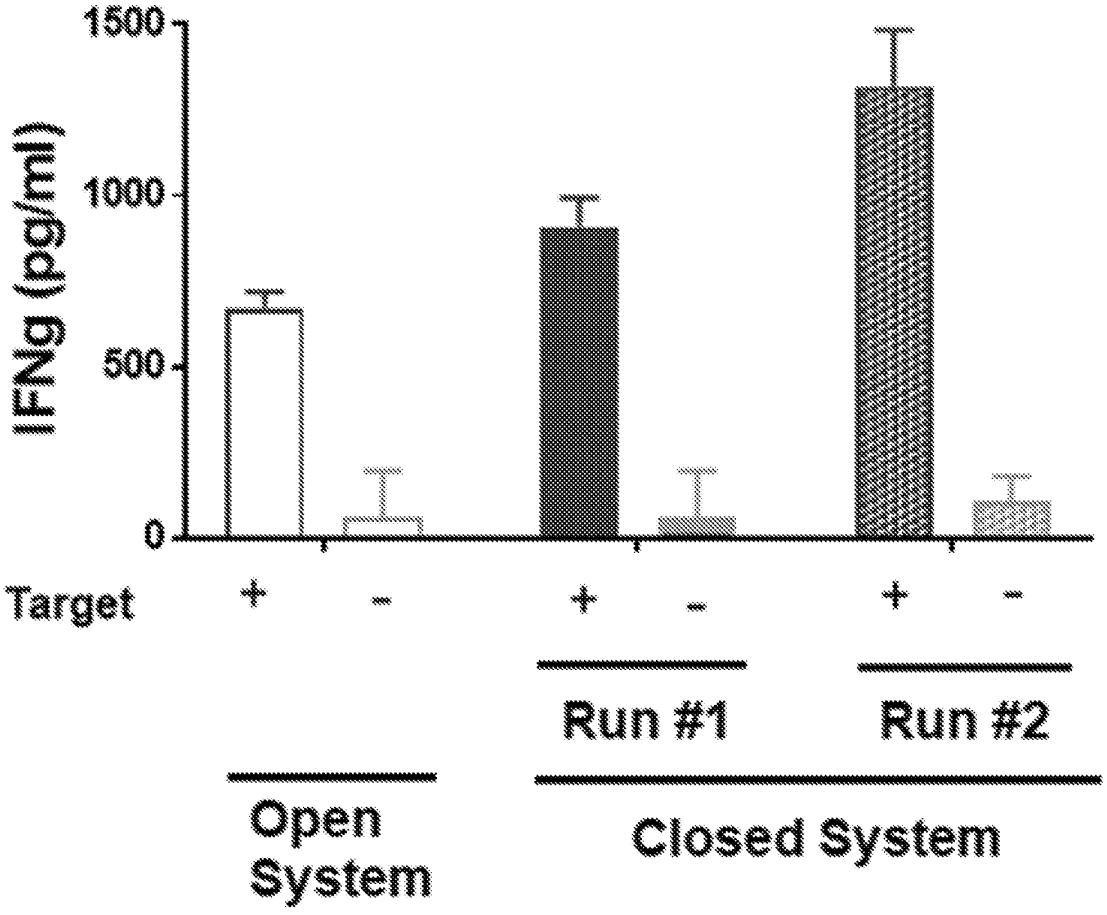

1500
1000
500
0
IFNg (pg/ml)
Target
+
-
+
-
+
-
Run #1
Run #2
Open System
Closed System

FIG. 29

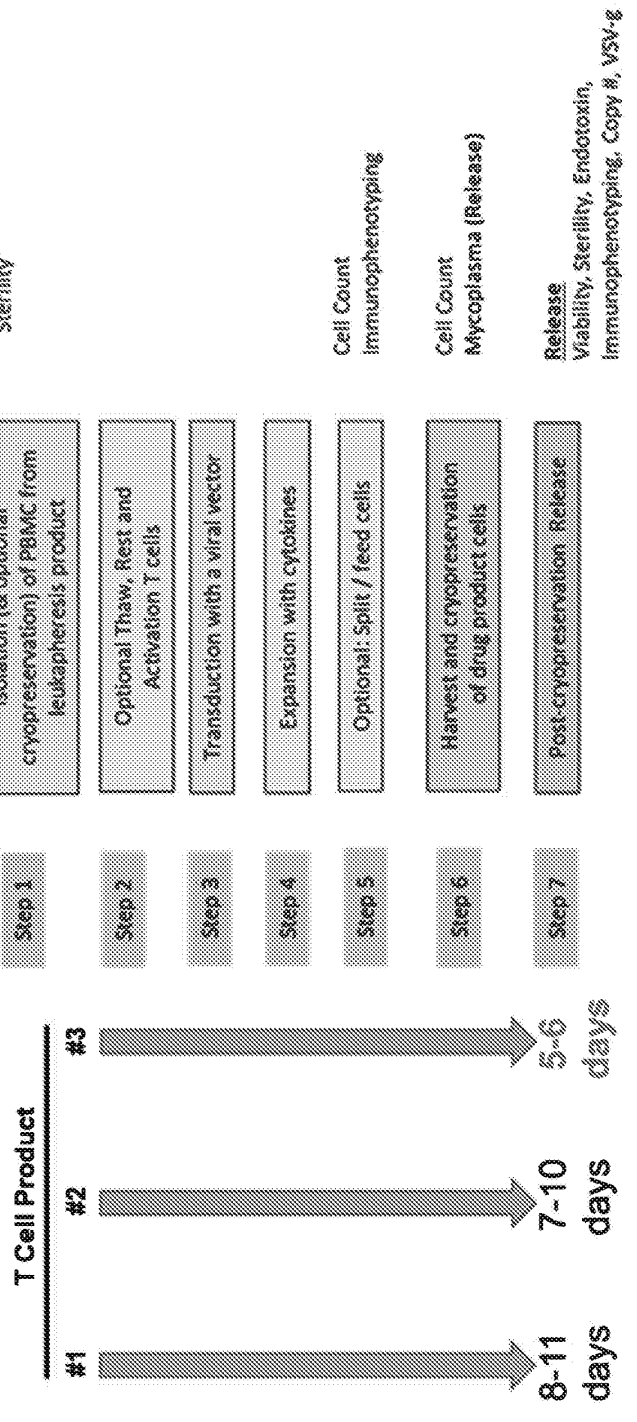

Process
Testing
In-process
Sterility
Isolation (& optional cryopreservation) of PBMC from leukapheresis product
Optional Thaw, Rest and Activation T cells
Transduction with a viral vector
Expansion with cytokines
Optional: Split / feed cells
Harvest and cryopreservation of drug product cells
Post-cryopreservation Release
Cell Count
Immunophenotyping
Cell Count
Mycoplasma (Release)
Release
Viability, Sterility, Endotoxin, Immunophenotyping, Copy #, VSV-g
Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Step 7
T Cell Product
#1
#2
#3
8-11 days
7-10 days
5-6 days
Open
Open
Semi-closed

FIG. 30

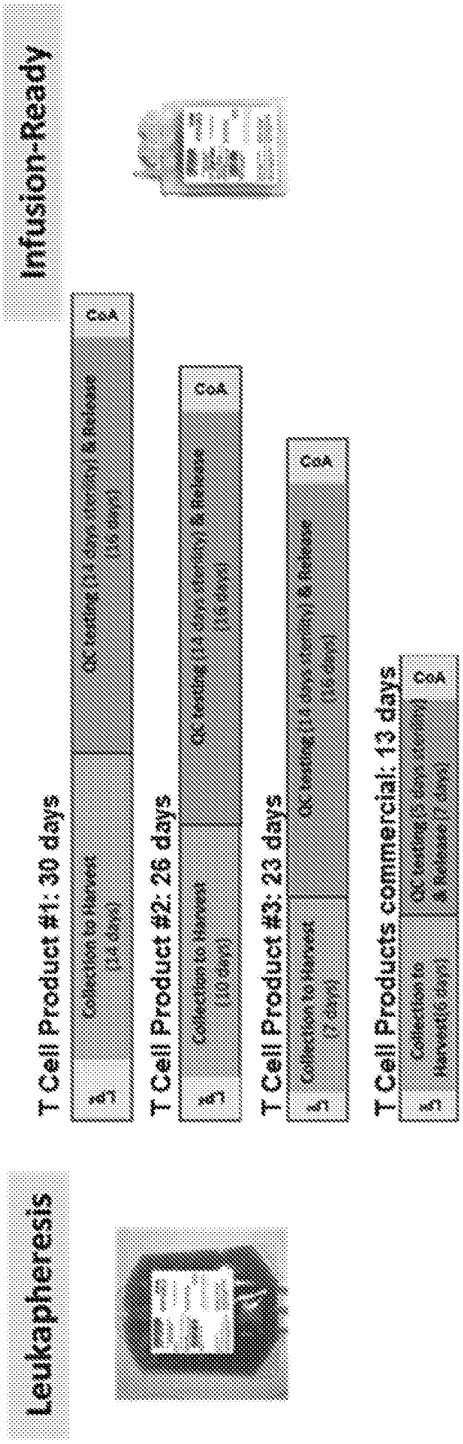

Infusion-Ready
T Cell Product #1: 30 days
Collection to Harvest
(14 days)
QC Testing (14 days, Harvest) & Release
(16 days)
CoA
T Cell Product #2: 26 days
Collection to Harvest
(10 days)
QC Testing (13 days, Harvest) & Release
(16 days)
CoA
T Cell Product #3: 23 days
Collection to Harvest
(7 days)
QC Testing (13 days, Harvest) & Release
(16 days)
CoA
T Cell Products commercial: 13 days
Collection to Harvest (6 days)
QC Testing (5 days, Harvest) & Release (7 days)
CoA
Leukapheresis

FIG. 31

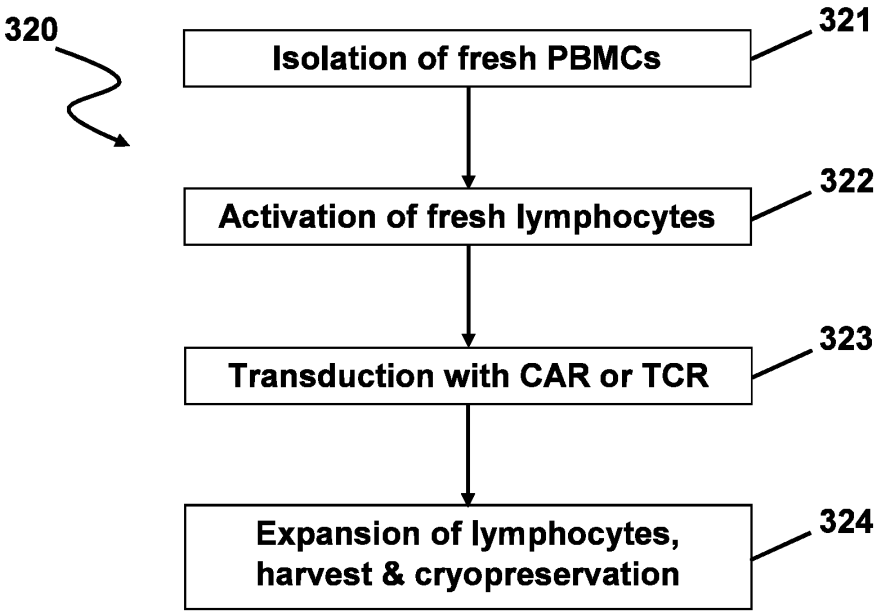

320
Isolation of fresh PBMCs
321
Activation of fresh lymphocytes
322
Transduction with CAR or TCR
323
Expansion of lymphocytes, harvest & cryopreservation
324

FIG. 32

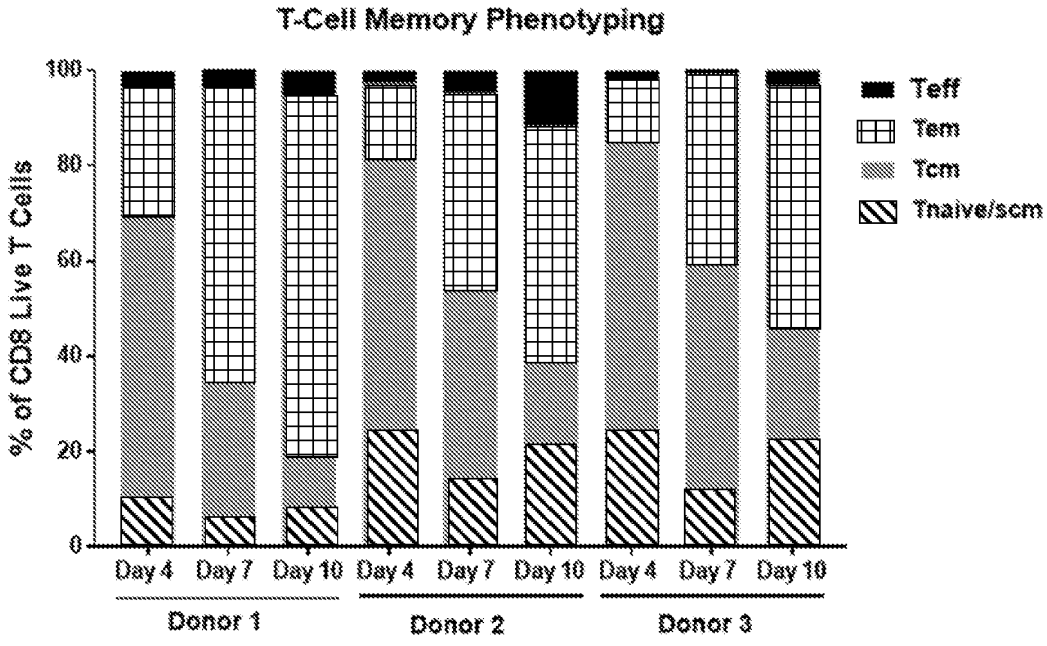

T-Cell Memory Phenotyping
% of CD8 Live T Cells
100
80
60
40
20
0
Day 4
Day 7
Day 10
Day 4
Day 7
Day 10
Day 4
Day 7
Day 10
Donor 1
Donor 2
Donor 3
Teff
Tem
Tcm
Tnaive/scm

FIG. 33

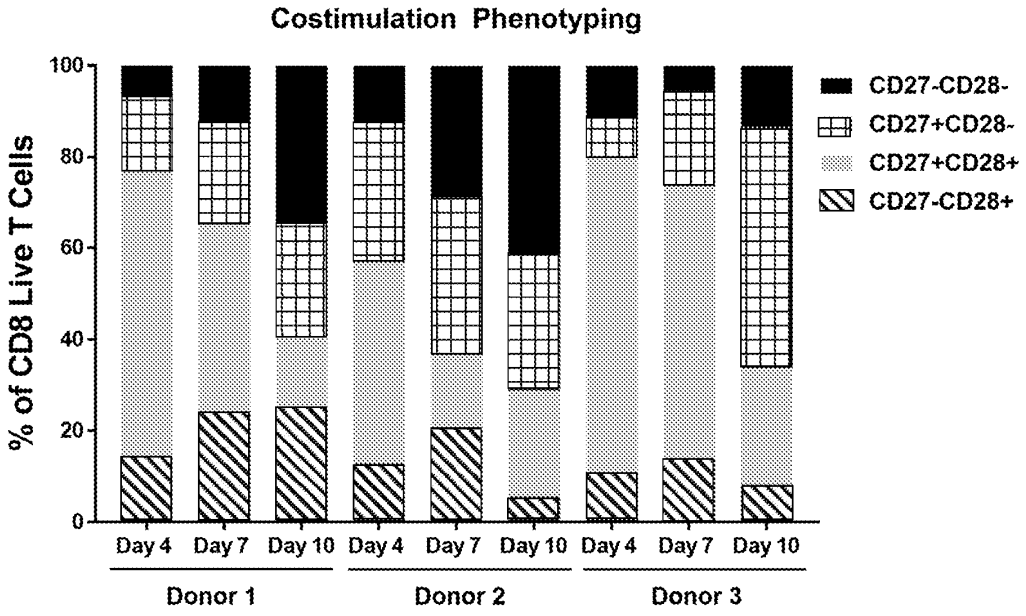

Costimulation Phenotyping
% of CD8 Live T Cells
100
80
60
40
20
0
Day 4
Day 7
Day 10
Donor 1
Donor 2
Donor 3
CD27-CD28-
CD27+CD28-
CD27+CD28+
CD27-CD28+

FIG. 34

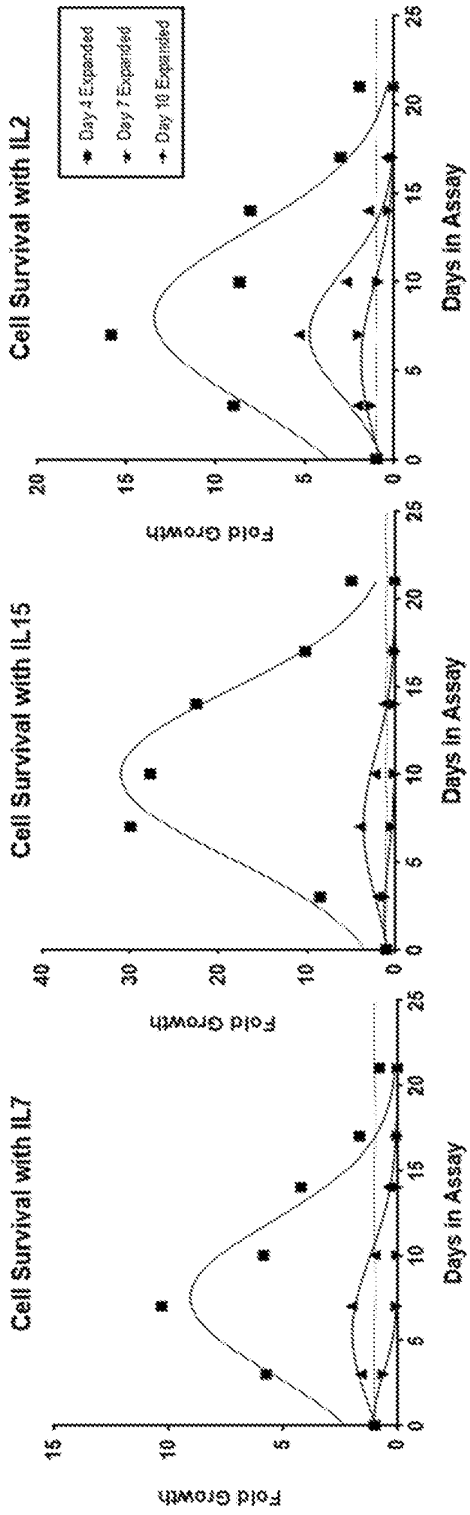

Cell Survival with IL2
Day 4 Expanded
Day 7 Expanded
Day 10 Expanded
Fold Growth
Days in Assay
Cell Survival with IL15
Fold Growth
Days in Assay
Cell Survival with IL7
Fold Growth
Days in Assay

FIG. 35

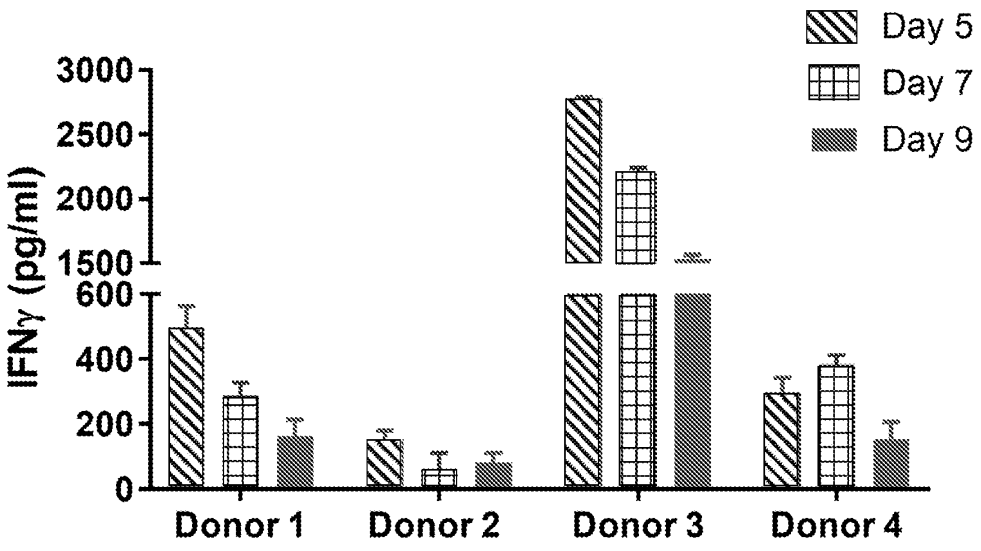
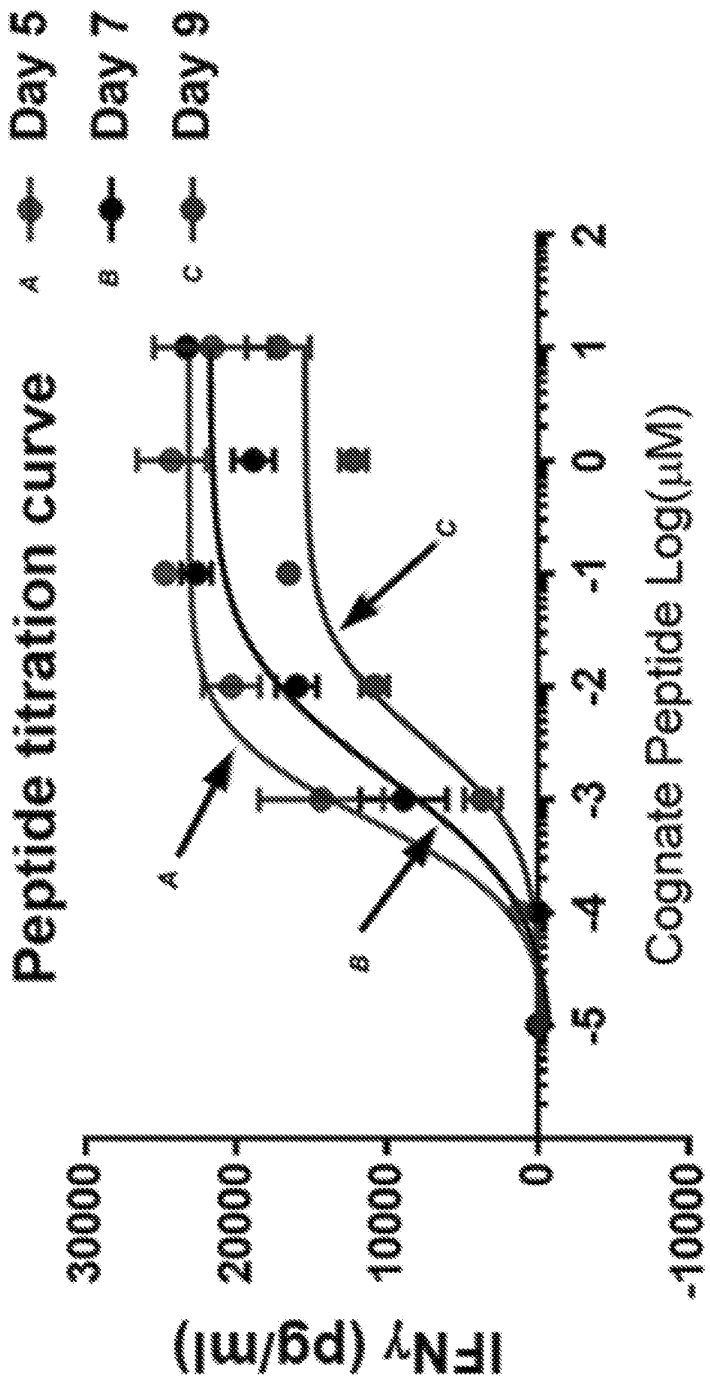

Day 5
Day 7
Day 9
IFNγ (pg/ml)
3000
2500
2000
1500
600
400
200
0
Donor 1
Donor 2
Donor 3
Donor 4

FIG. 36



	Day 5	Day 7	Day 9
EC50	0.0006667	0.001706	0.00347

FIG. 37

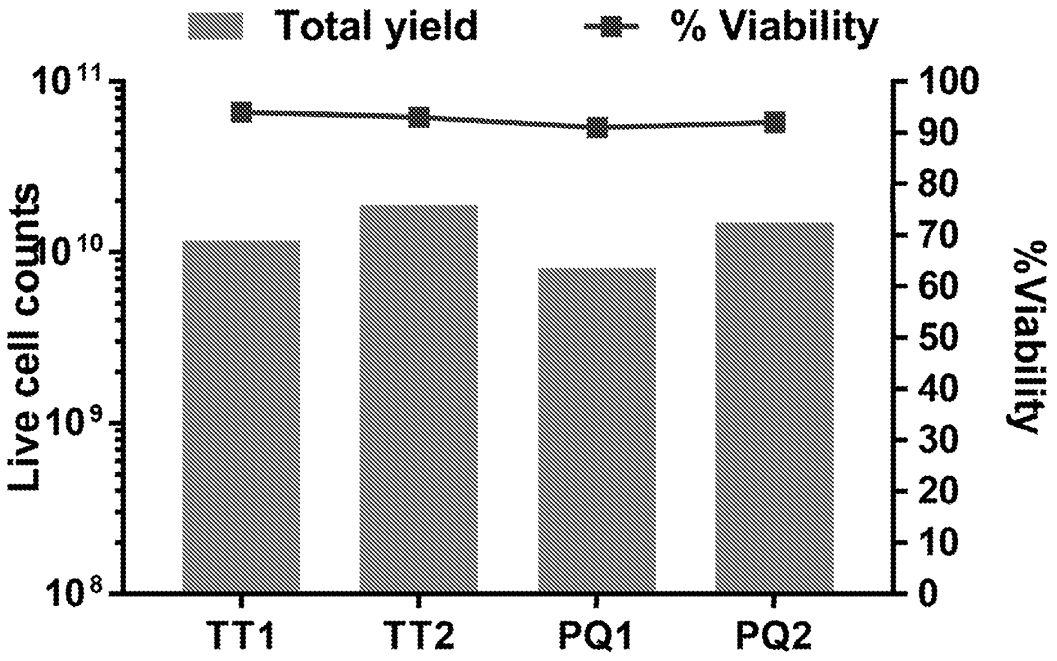

Total yield
% Viability
Live cell counts
10^{11}
10^{10}
10^{9}
10^{8}
100
90
80
70
60
50
40
30
20
10
0
%Viability
TT1
TT2
PQ1
PQ2

FIG. 38

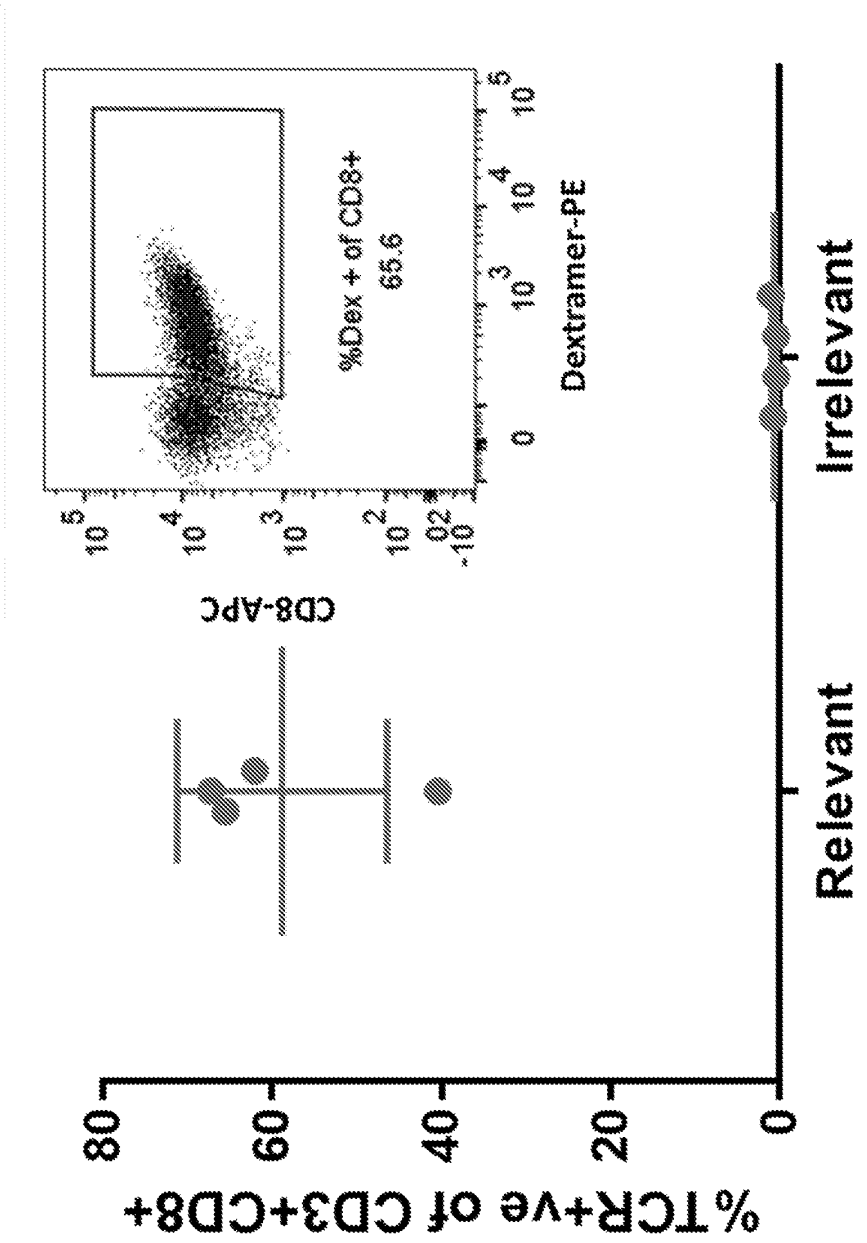

%TCR+ve of CD3+CD8+
80
60
40
20
0
Relevant
Irrelevant
CD8-APC
Dextramer-PE
%Dex + of CD8+
65.6

FIG. 39

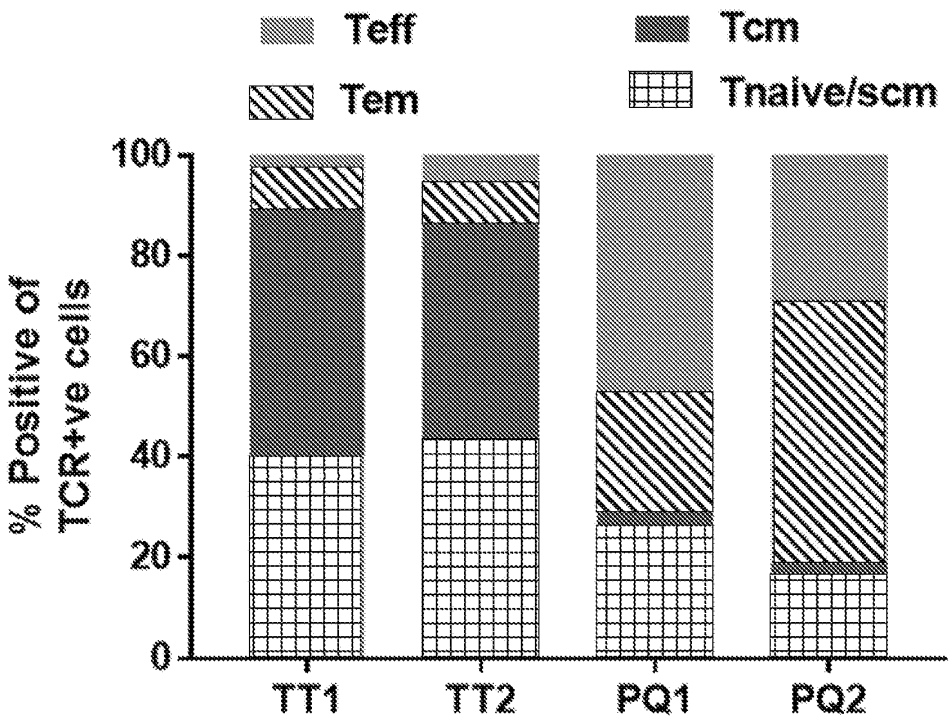

Teff
Tcm
Tem
Tnaive/scm
% Positive of TCR+ve cells
100
80
60
40
20
0
TT1
TT2
PQ1
PQ2

FIG. 40

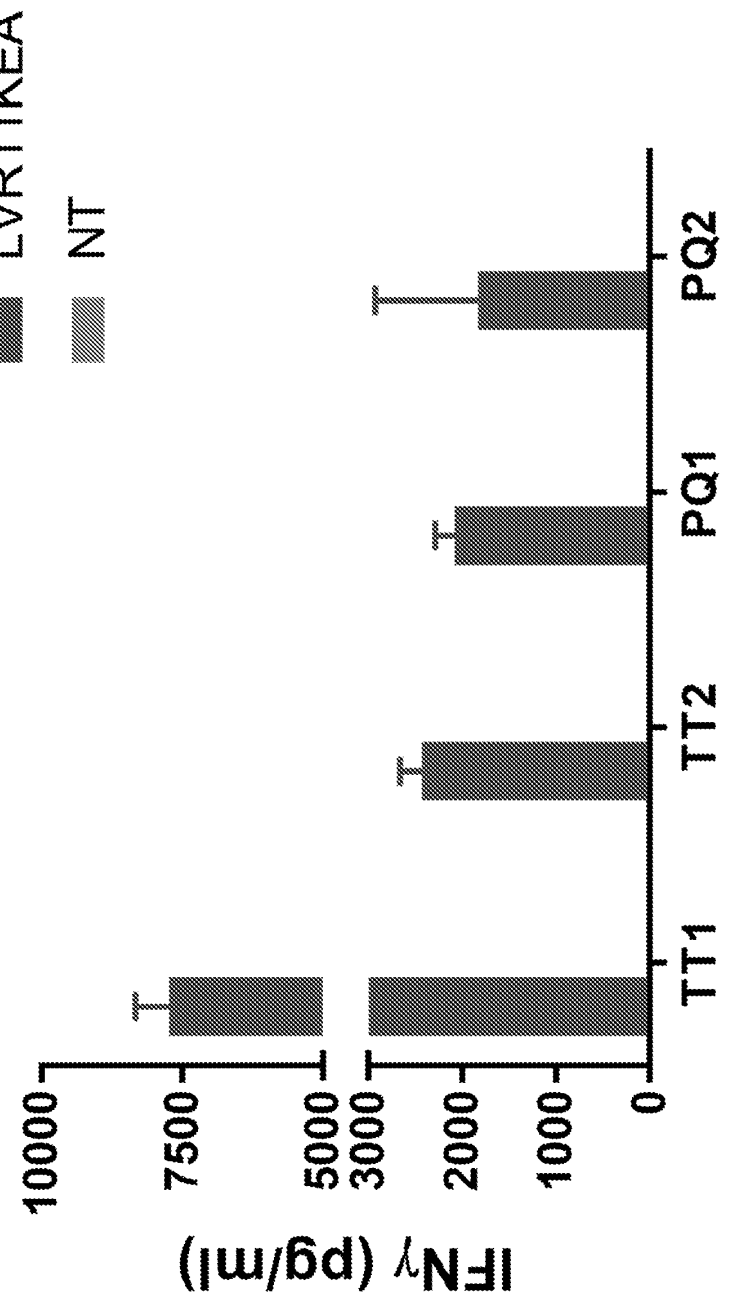

LVR11KEA
NT
IFNγ (pg/ml)
10000
7500
5000
3000
2000
1000
0
TT1
TT2
PQ1
PQ2
Donors

FIG. 41

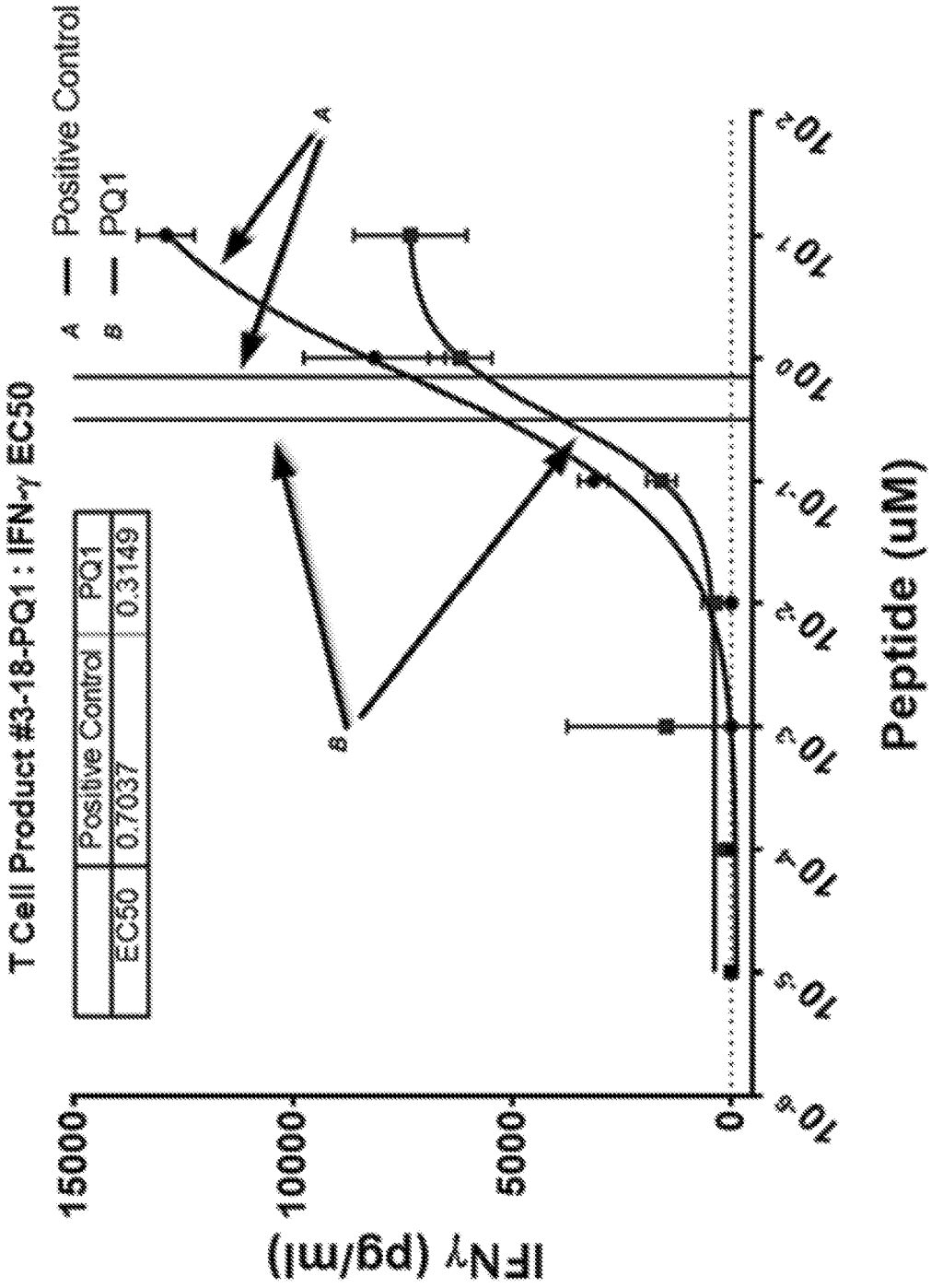

T Cell Product #3-18-PQ1 : IFN-γ EC50
EC50
Positive Control
0.7037
PQ1
0.3149
A — Positive Control
B — PQ1
A
B
IFNγ (pg/ml)
15000
10000
5000
0
Peptide (uM)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6

FIG. 42

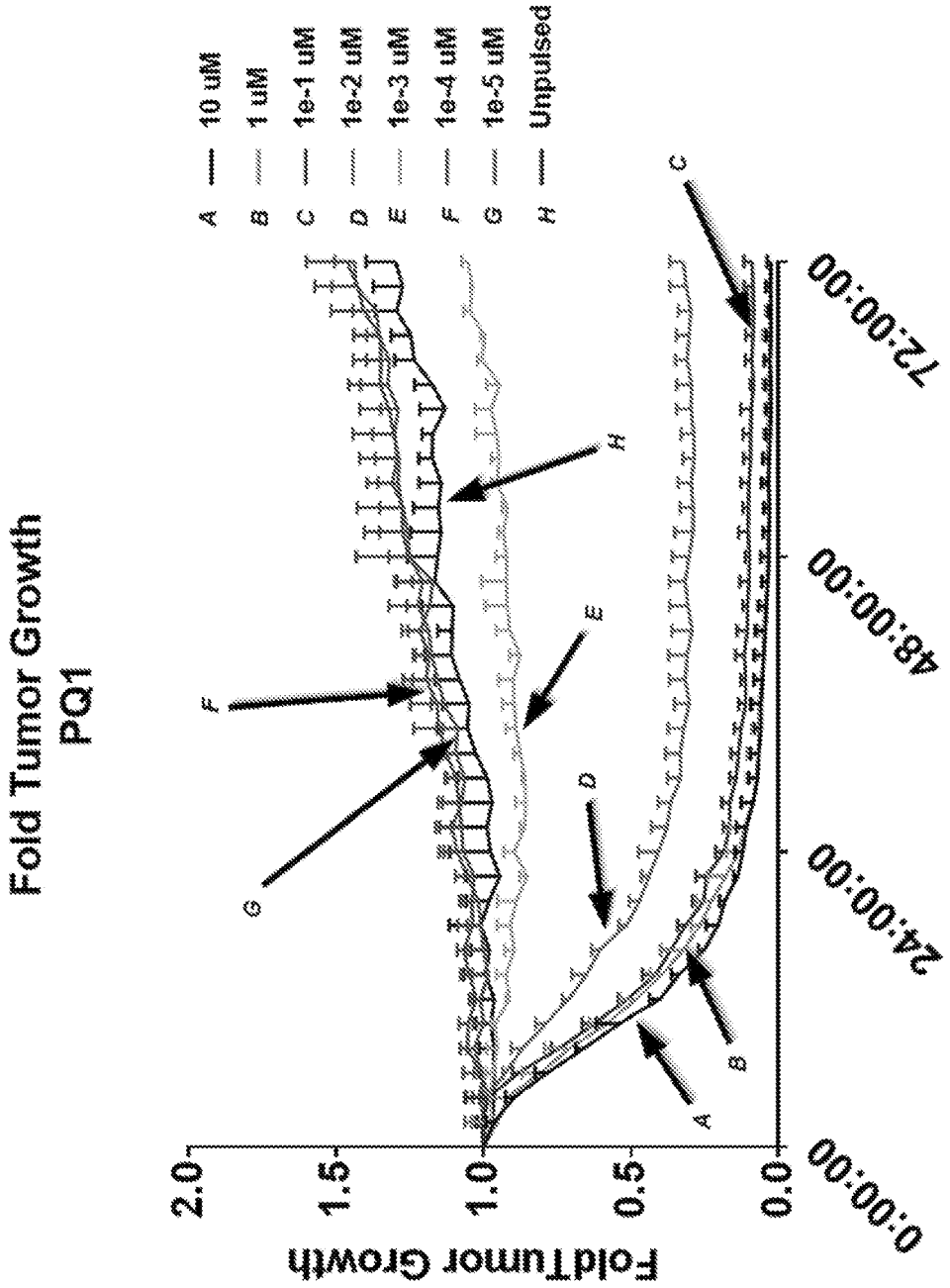

Fold Tumor Growth
PQ1
A — 10 uM
B — 1 uM
C — 1e-1 uM
D — 1e-2 uM
E — 1e-3 uM
F — 1e-4 uM
G — 1e-5 uM
H — Unpulsed
Fold Tumor Growth
2.0
1.5
1.0
0.5
0.0
0:00:00
24:00:00
48:00:00
72:00:00
A
B
C
D
E
F
G
H

FIG. 43

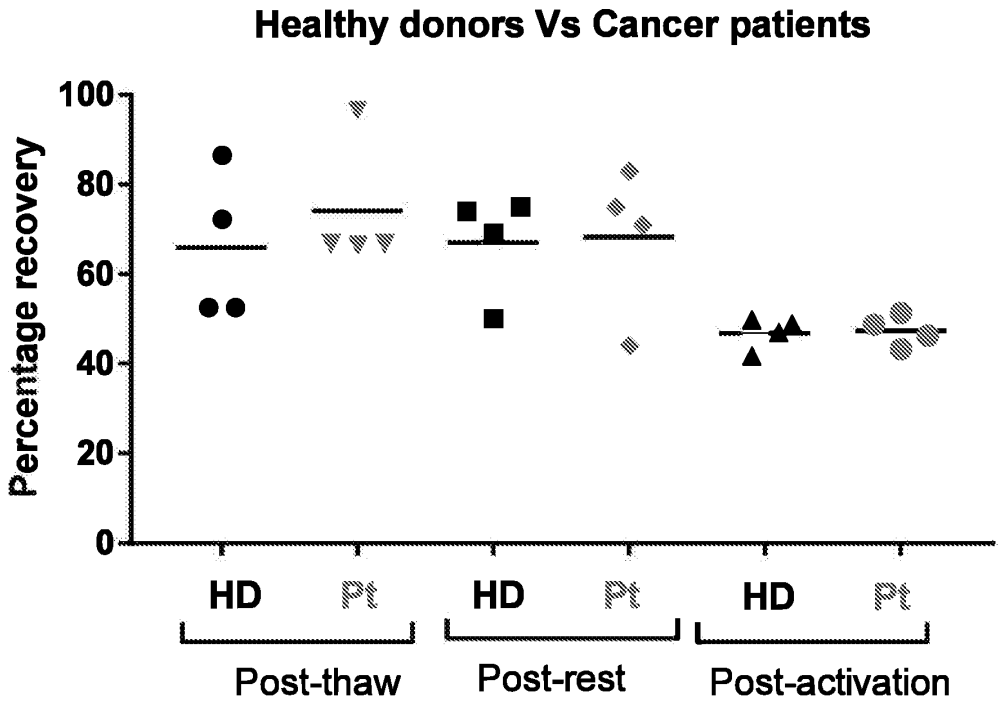

Healthy donors Vs Cancer patients
Percentage recovery
100
80
60
40
20
0
HD
Pt
HD
Pt
HD
Pt
Post-thaw
Post-rest
Post-activation

FIG. 44

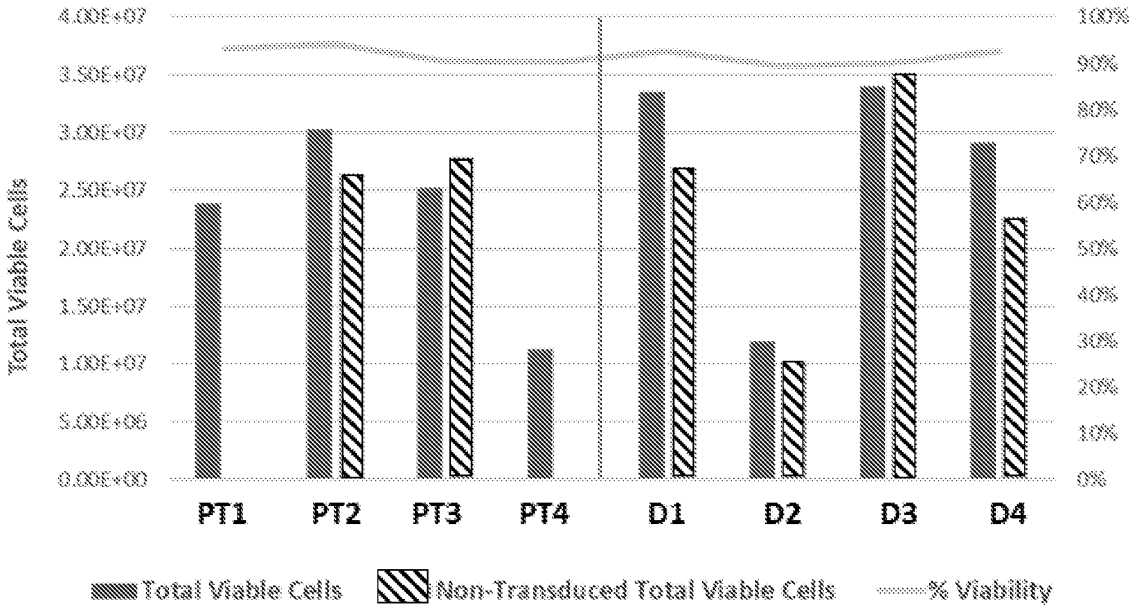

4.00E+07
3.50E+07
3.00E+07
2.50E+07
2.00E+07
1.50E+07
1.00E+07
5.00E+06
0.00E+00
Total Viable Cells
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
PT1
PT2
PT3
PT4
D1
D2
D3
D4
Total Viable Cells
Non-Transduced Total Viable Cells
% Viability

FIG. 45

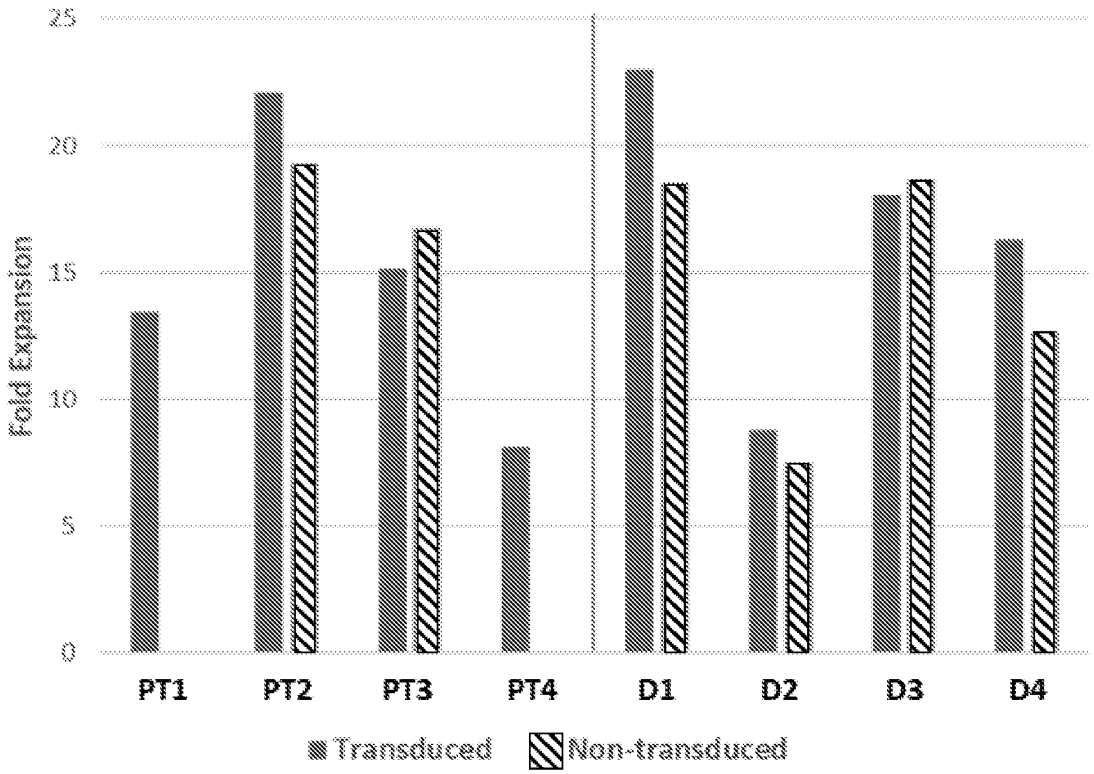

25
20
15
10
5
0
Fold Expansion
PT1
PT2
PT3
PT4
D1
D2
D3
D4
Transduced
Non-transduced

FIG. 46

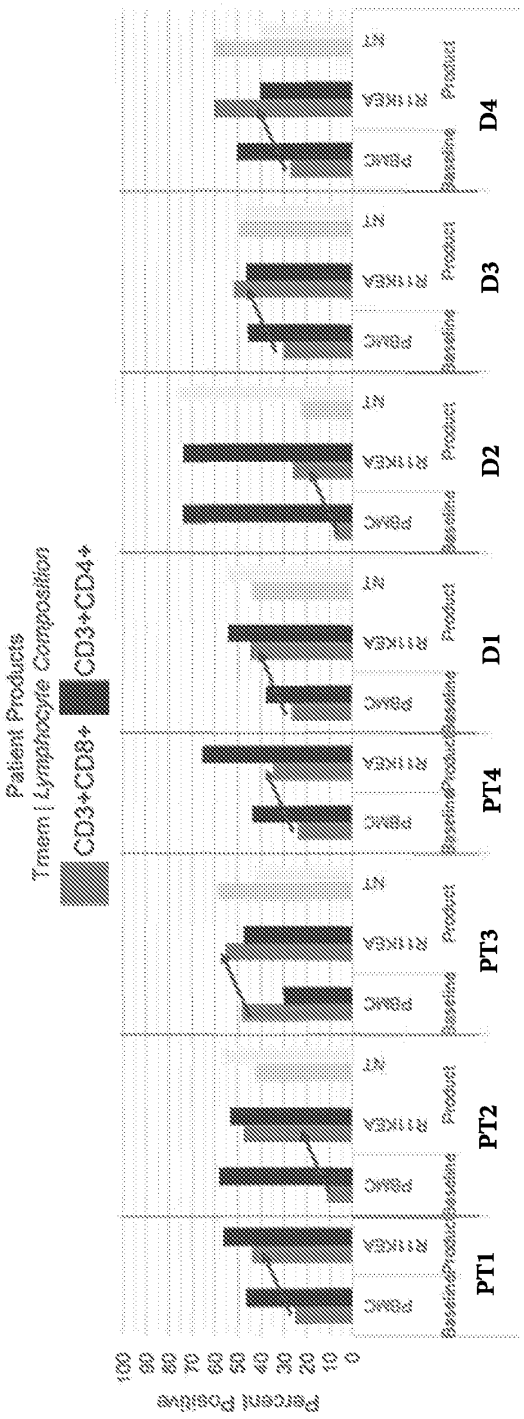

Patient Products
Tmem | Lymphocyte Composition
CD3+CD8+
CD3+CD4+
Percent Positive
100
90
80
70
60
50
40
30
20
10
0
PBMC
R11KEA
NT
Baseline
Product
PT1
PT2
PT3
PT4
D1
D2
D3
D4
Cell Population
Patient/Donor

FIG. 47

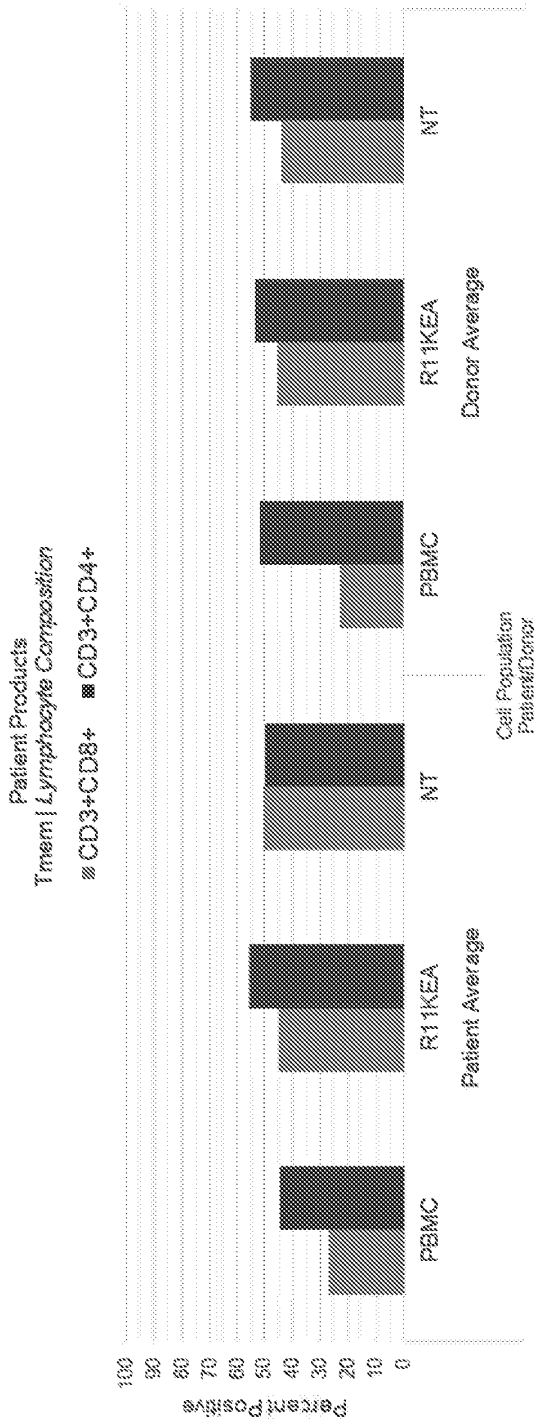

Patient Products
Tmem | Lymphocyte Composition
CD3+CD8+
CD3+CD4+
Percent Positive
100
90
80
70
60
50
40
30
20
10
0
PBMC
R11KEA
NT
PBMC
R11KEA
NT
Patient Average
Donor Average
Cell Population
Patient/Donor

FIG. 48

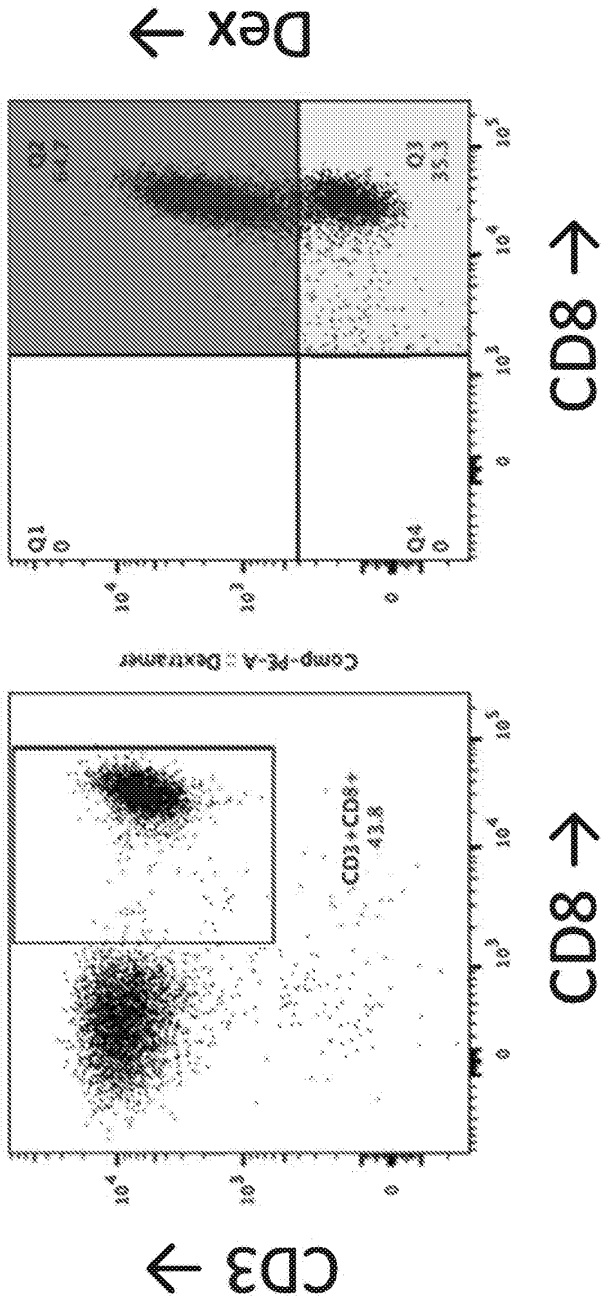


FIG. 49

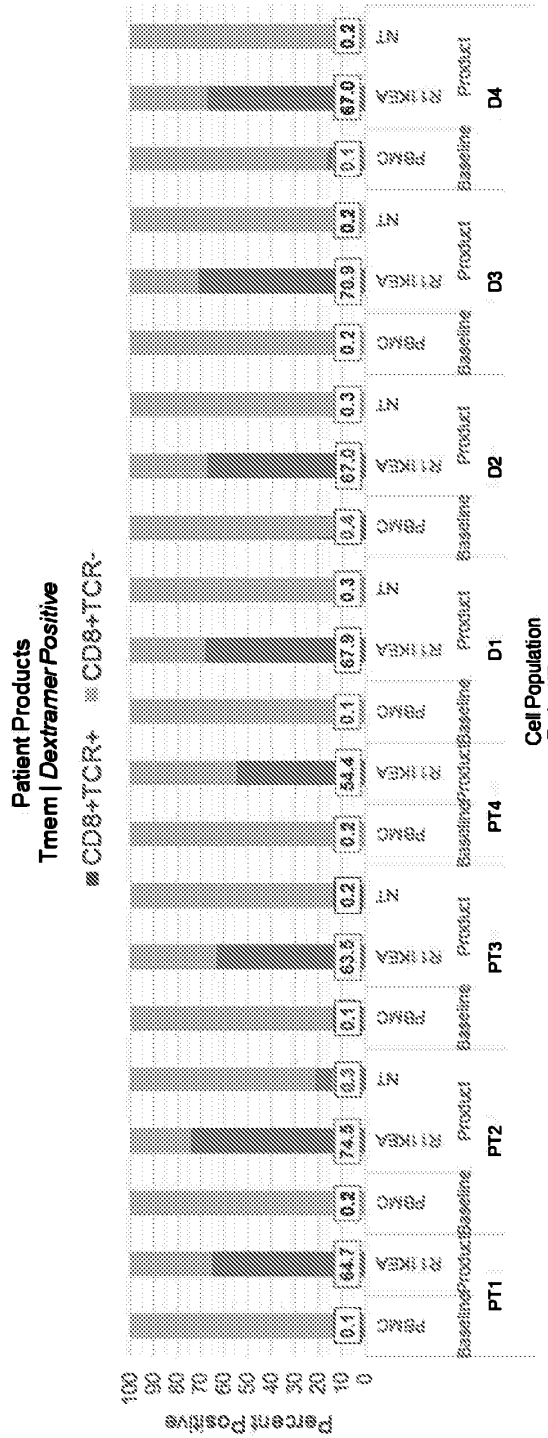

Patient Products
Tmem | Dextramer Positive
CD8+TCR+
CD8+TCR-
Percent Positive
100
90
80
70
60
50
40
30
20
10
0
PBMC
21 KEA
NT
Baseline
Product
PT1
PT2
PT3
PT4
D1
D2
D3
D4
0.1
64.7
0.2
74.3
0.3
0.1
63.8
0.2
0.2
54.4
0.1
67.9
0.3
0.4
67.6
0.3
0.2
78.9
0.2
0.1
67.0
0.2
Cell Population
Patient/Donor

FIG. 50

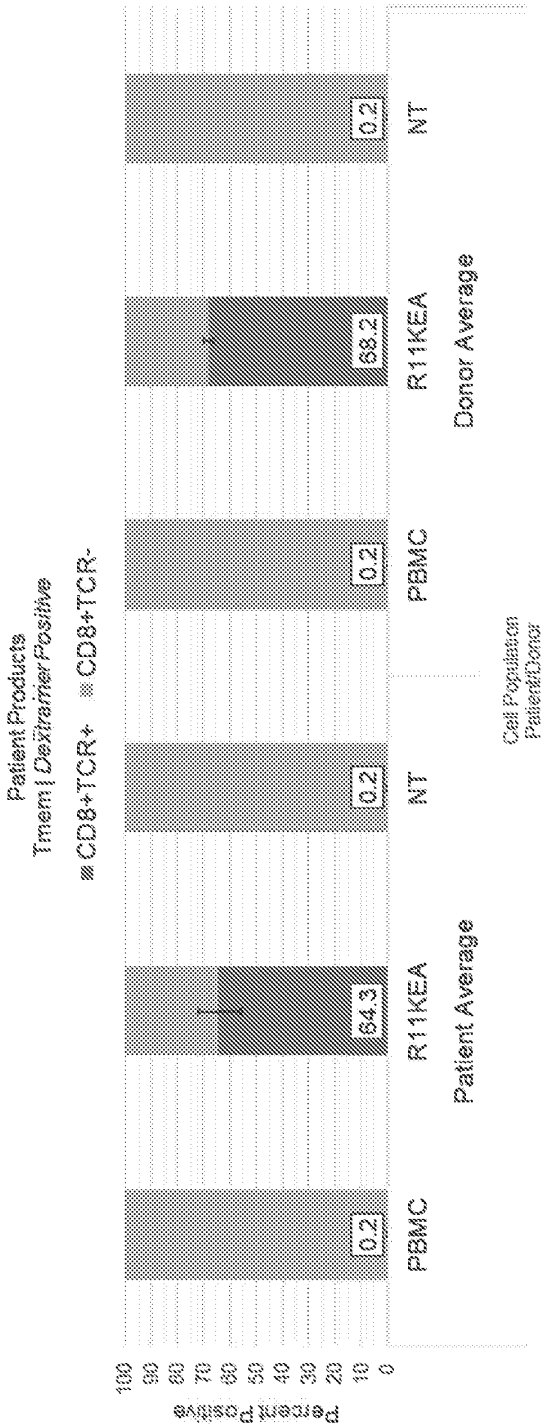

Patient Products
Tmem | DexTramer Positive
CD8+TCR+
CD8+TCR-
Percent Positive
100
90
80
70
60
50
40
30
20
10
0
0.2
64.3
0.2
0.2
68.2
0.2
PBMC
R11KEA
NT
PBMC
R11KEA
NT
Patient Average
Donor Average
Cell Population
Patient/Donor

FIG. 51

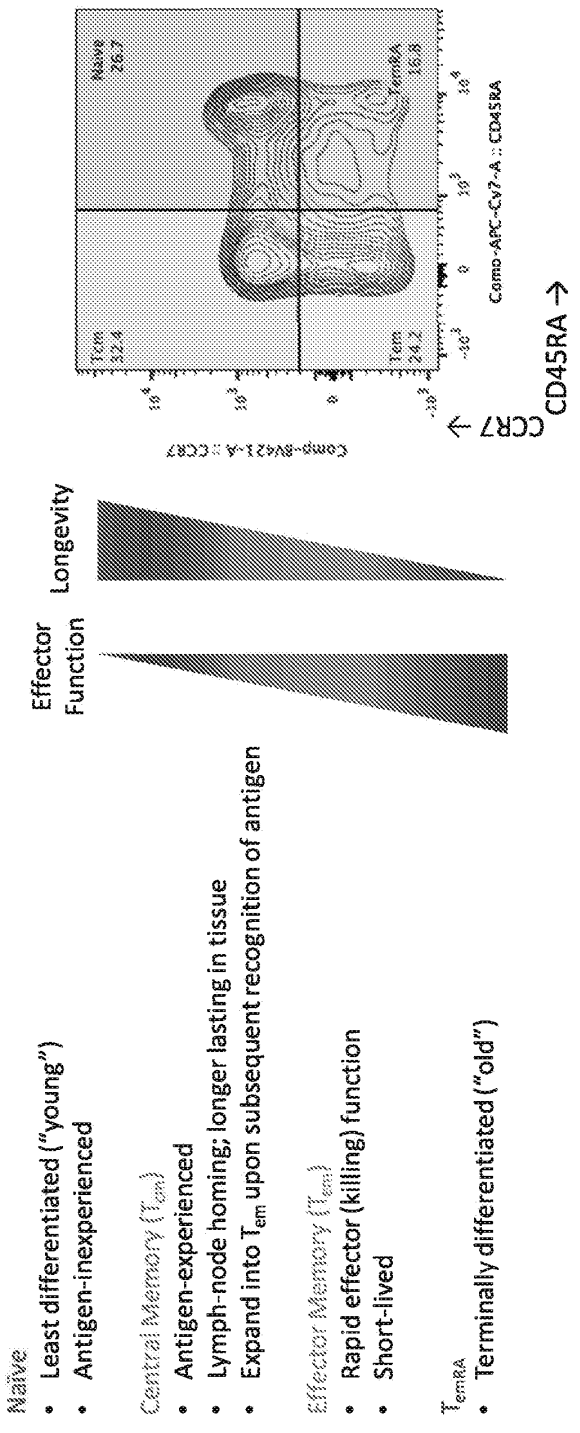

Naive
• Least differentiated ("young")
• Antigen-inexperienced
Central Memory (T_{cm})
• Antigen-experienced
• Lymph-node homing; longer lasting in tissue
• Expand into T_{em} upon subsequent recognition of antigen
Effector Memory (T_{em})
• Rapid effector (killing) function
• Short-lived
T_{emRA}
• Terminally differentiated ("old")
Effector Function
Longevity
Naive 26.7
Tcm 32.4
Tem 24.2
TemRA 16.8
Comp-BV421-A :: CCR7
Comp-APC-Cy7-A :: CD45RA
CCR7
CD45RA

FIG. 52

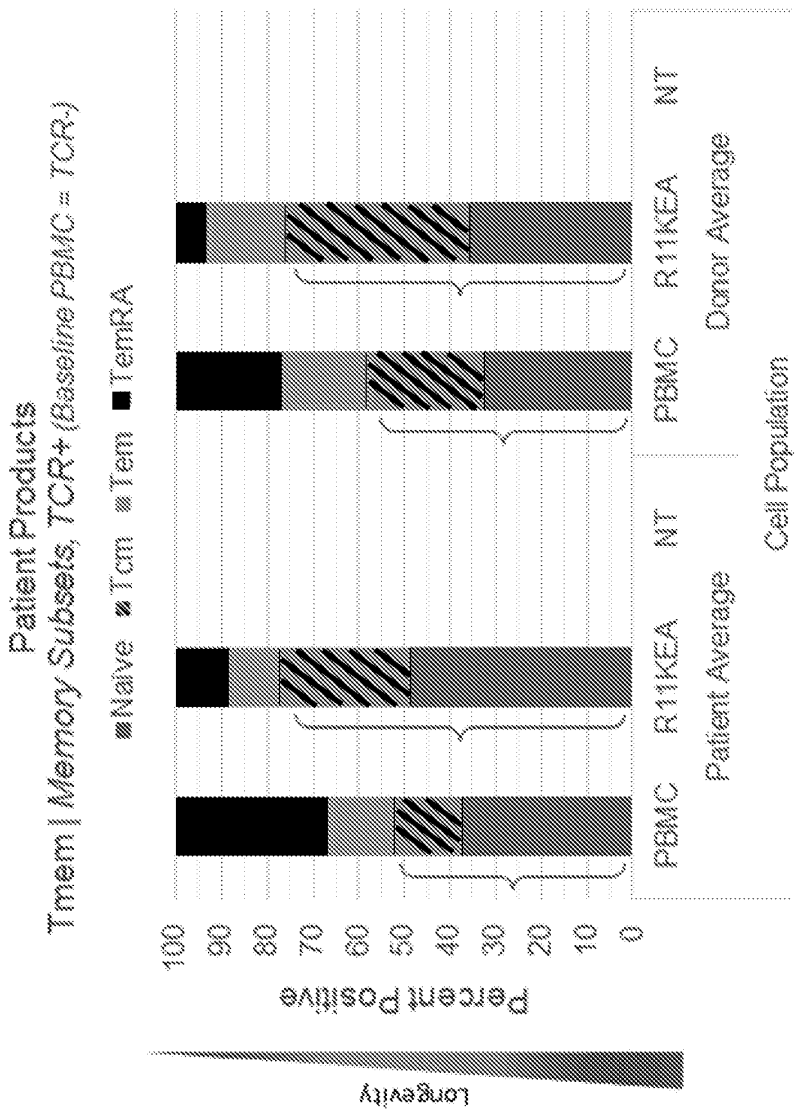

Patient Products
Tmem | Memory Subsets, TCR+ (Baseline PBMC = TCR-)
Naive
Tcm
Tem
TemRA
Percent Positive
100
90
80
70
60
50
40
30
20
10
0
Longevity
PBMC
R11KEA
NT
Patient Average
PBMC
R11KEA
NT
Donor Average
Cell Population
Patient/Donor

FIG. 53

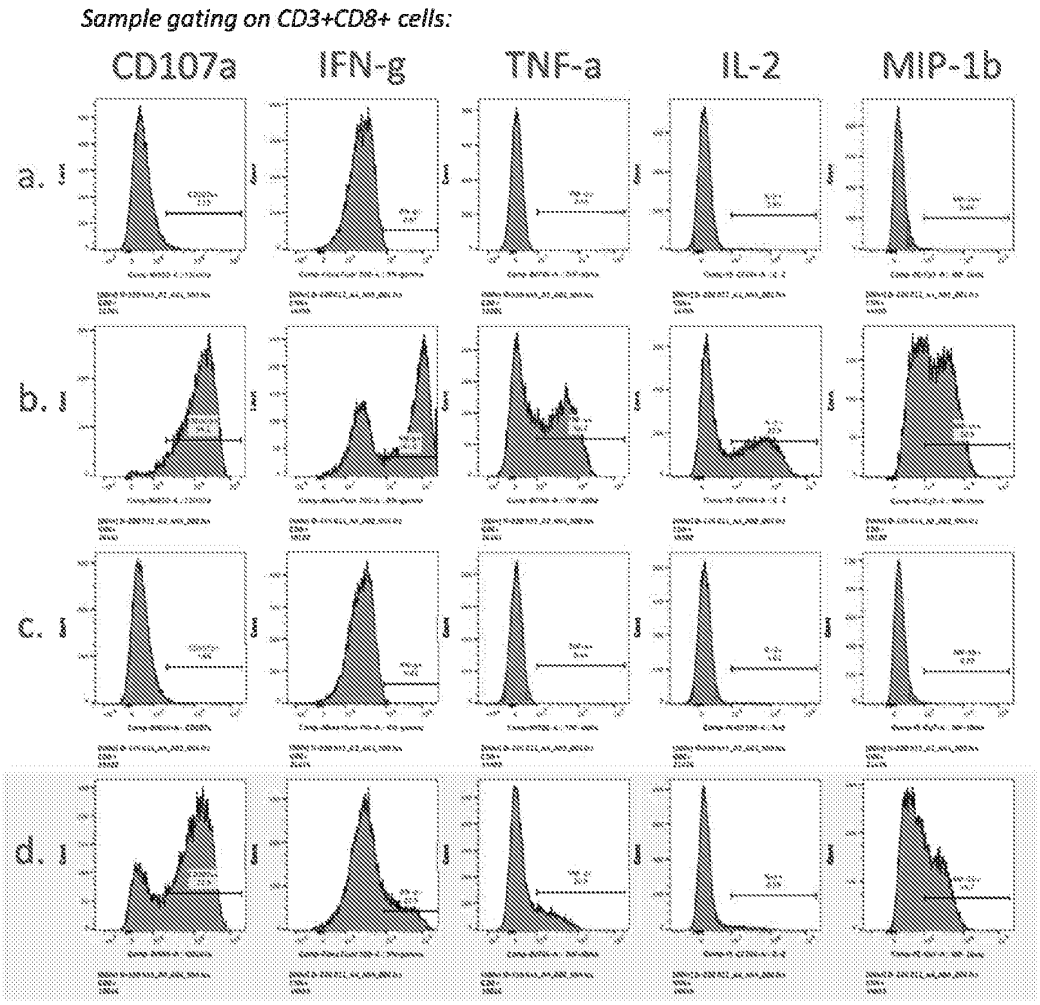

Sample gating on CD3+CD8+ cells:
CD107a
IFN-g
TNF-a
IL-2
MIP-1b
a.
b.
c.
d.

FIG. 54

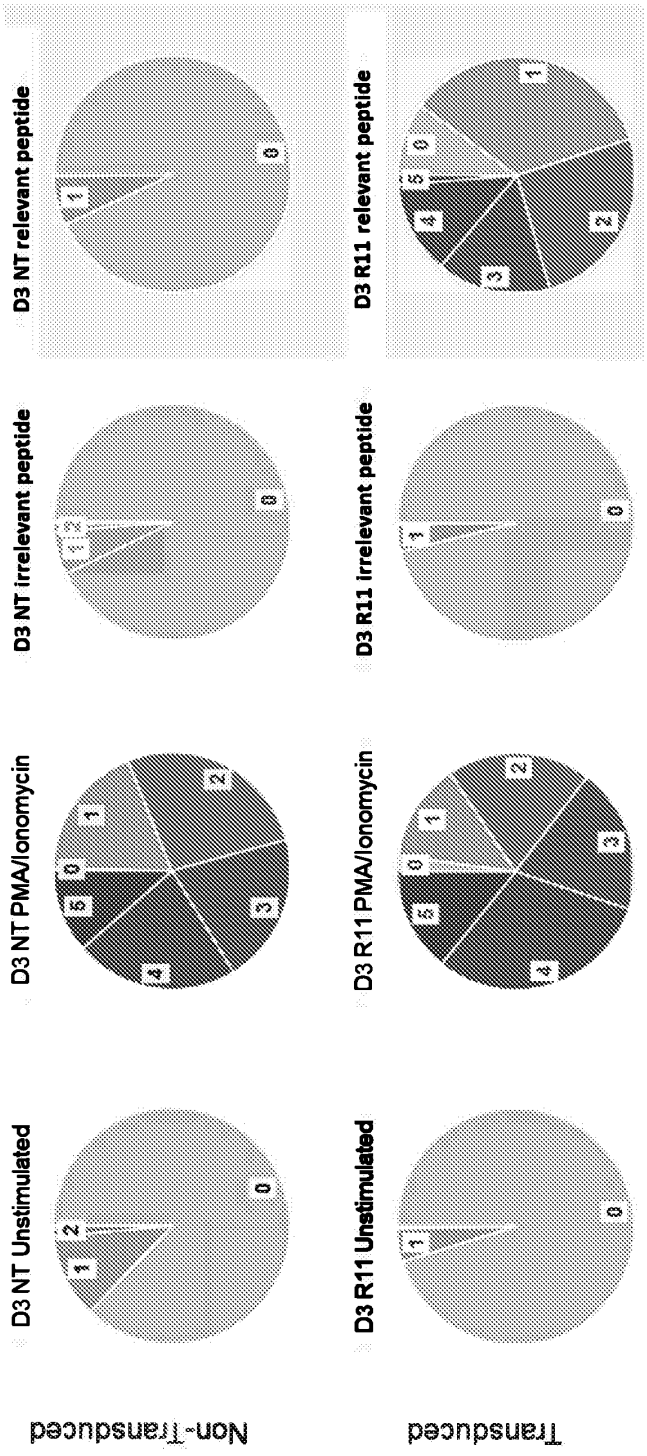

Non-Transduced
Transduced
D3 NT Unstimulated
D3 NT PMA/Ionomycin
D3 NT irrelevant peptide
D3 NT relevant peptide
D3 R11 Unstimulated
D3 R11 PMA/Ionomycin
D3 R11 irrelevant peptide
D3 R11 relevant peptide

FIG. 55

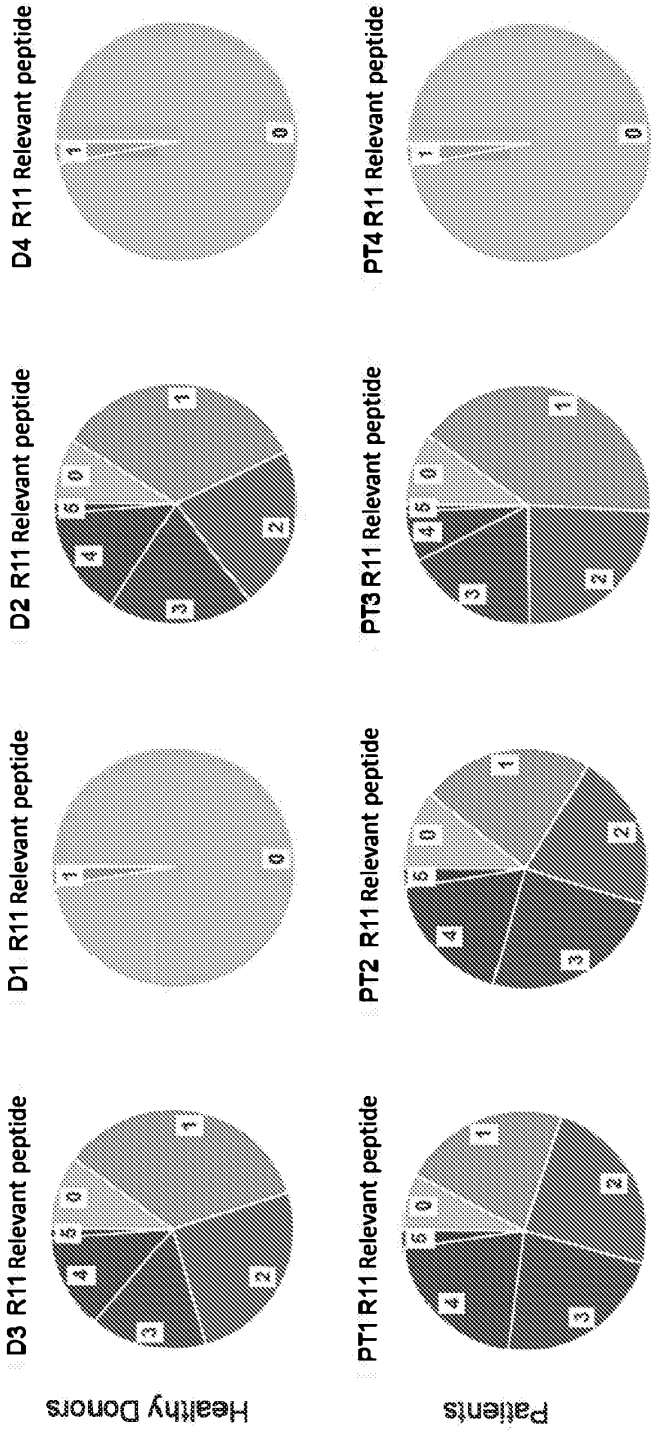

Healthy Donors
Patients
D3 R11 Relevant peptide
D1 R11 Relevant peptide
D2 R11 Relevant peptide
D4 R11 Relevant peptide
PT1 R11 Relevant peptide
PT2 R11 Relevant peptide
PT3 R11 Relevant peptide
PT4 R11 Relevant peptide

FIG. 56

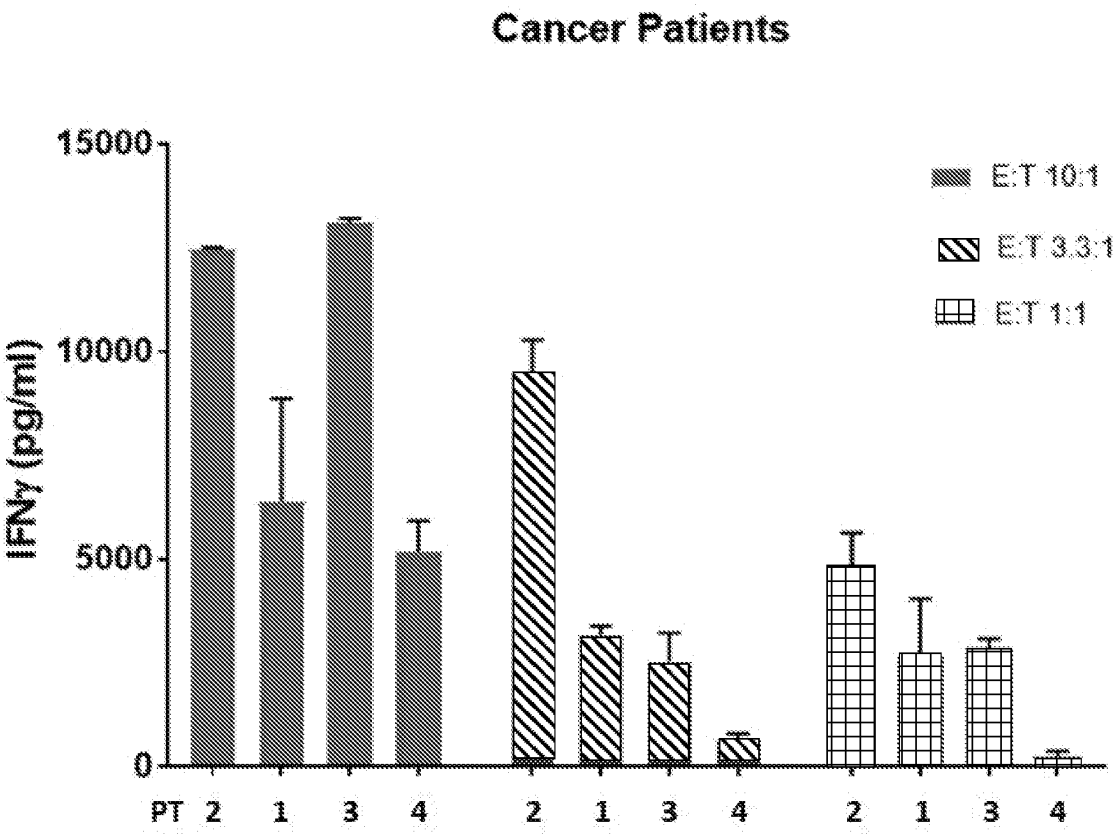

Cancer Patients
15000
10000
5000
0
IFNγ (pg/ml)
E:T 10:1
E:T 3.3:1
E:T 1:1
PT 2 1 3 4 2 1 3 4 2 1 3 4

FIG. 57

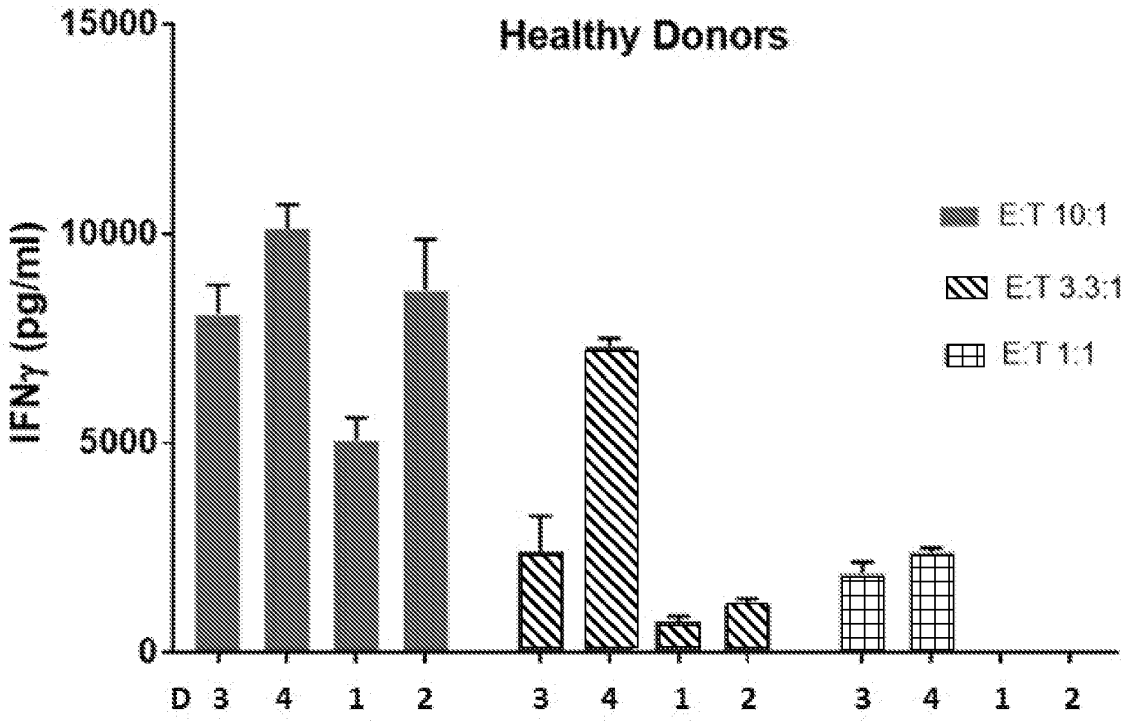

Healthy Donors
IFNγ (pg/ml)
15000
10000
5000
0
E:T 10:1
E:T 3.3:1
E:T 1:1
D 3 4 1 2 3 4 1 2 3 4 1 2

FIG. 58

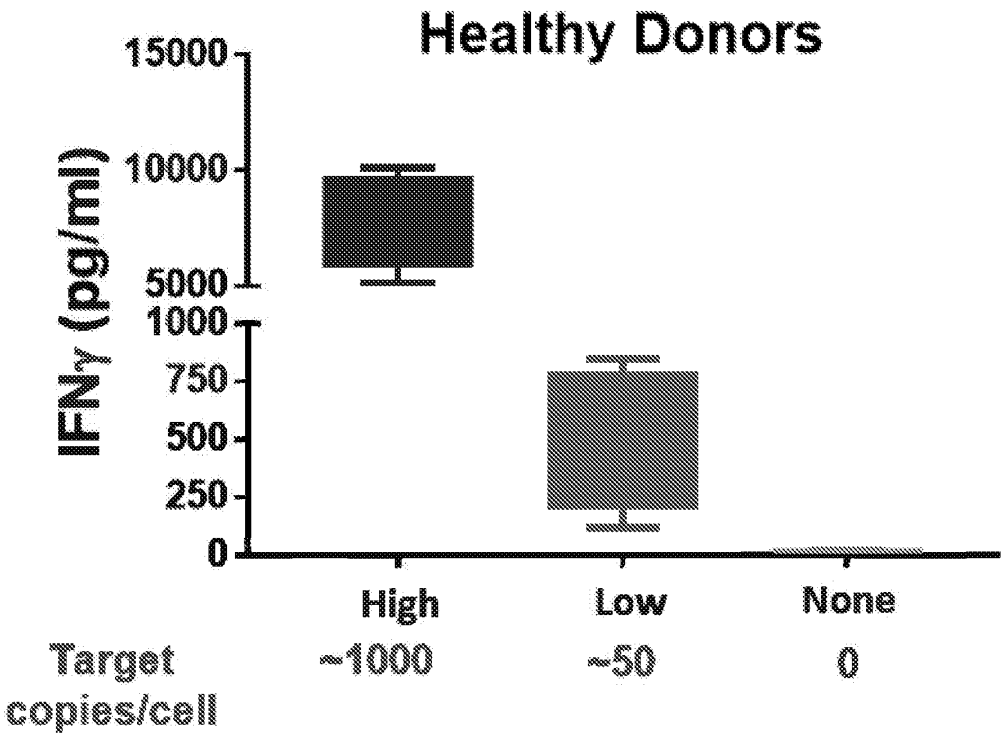

Healthy Donors
IFNγ (pg/ml)
15000
10000
5000
1000
750
500
250
0
High
Low
None
Target copies/cell
~1000
~50
0

FIG. 59

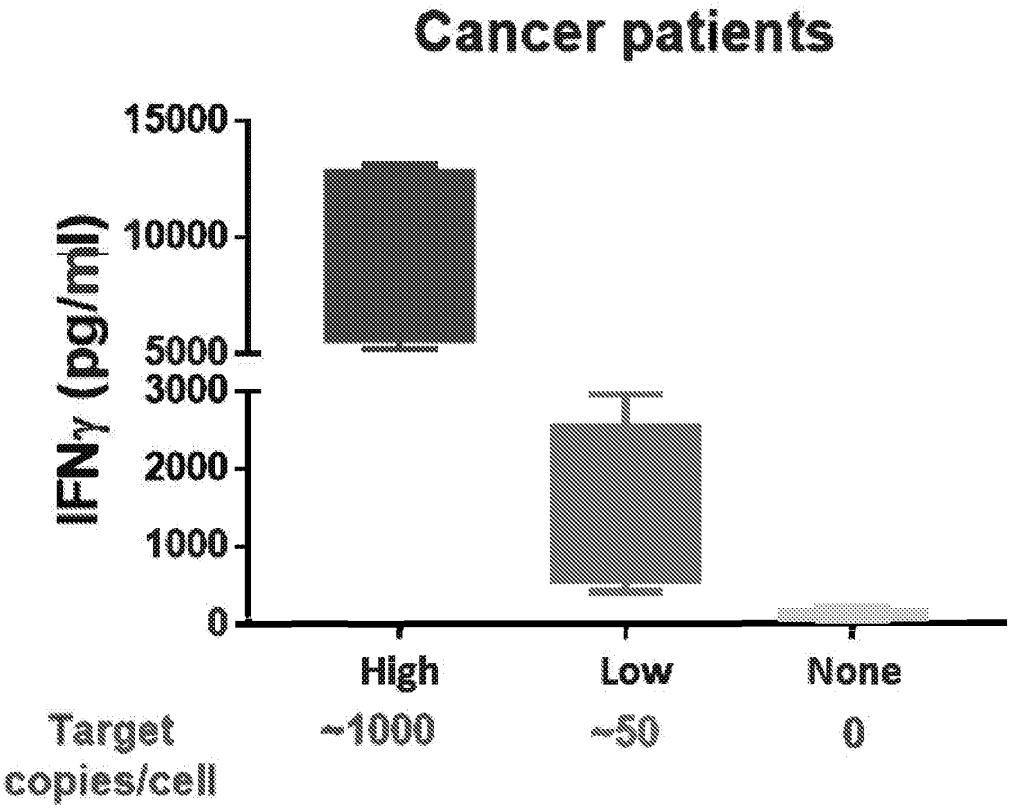

Cancer patients
15000
10000
5000
3000
2000
1000
0
IFNγ (pg/ml)
High
Low
None
Target copies/cell
~1000
~50
0

FIG. 60

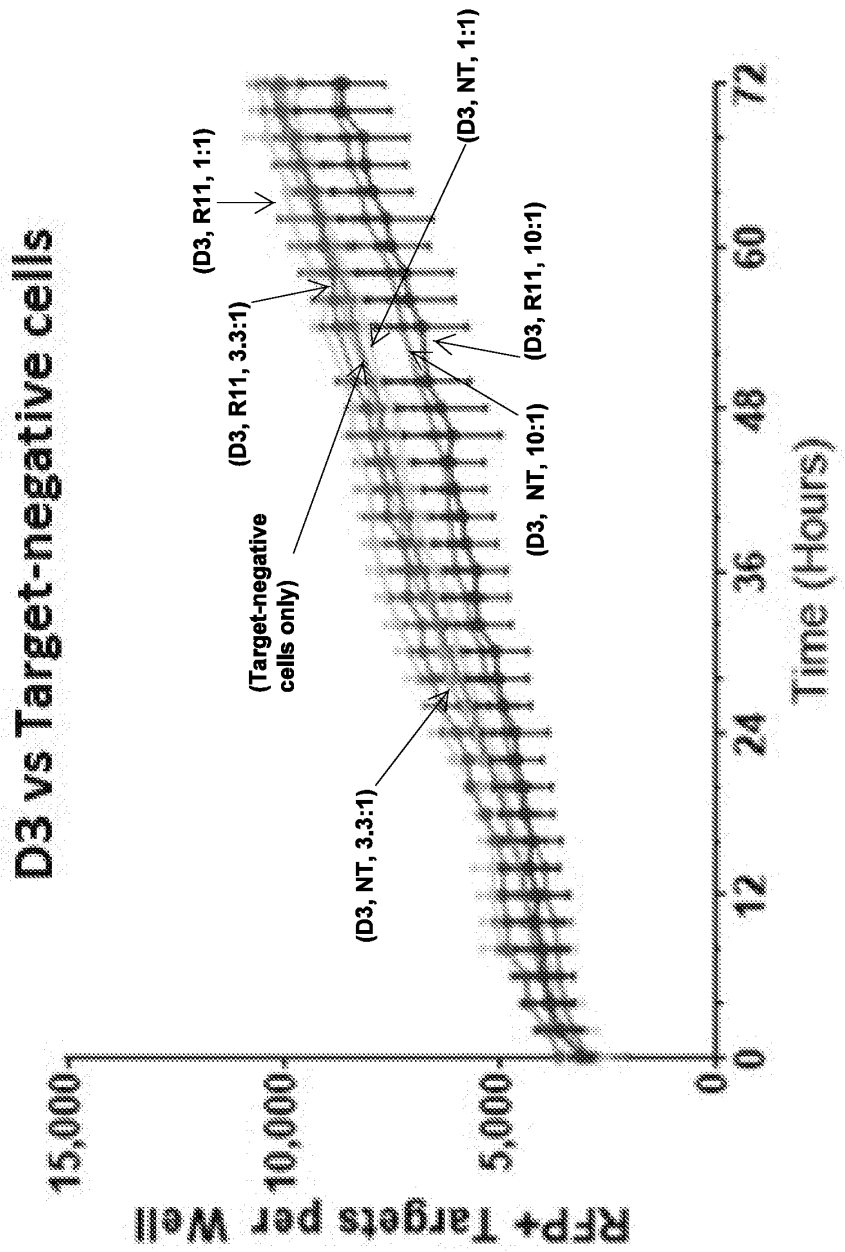

D3 vs Target-negative cells
RFP+ Targets per Well
15,000
10,000
5,000
0
0
12
24
36
48
60
72
Time (Hours)
(D3, R11, 1:1)
(D3, R11, 3.3:1)
(Target-negative cells only)
(D3, NT, 3.3:1)
(D3, NT, 1:1)
(D3, R11, 10:1)
(D3, NT, 10:1)

FIG. 61

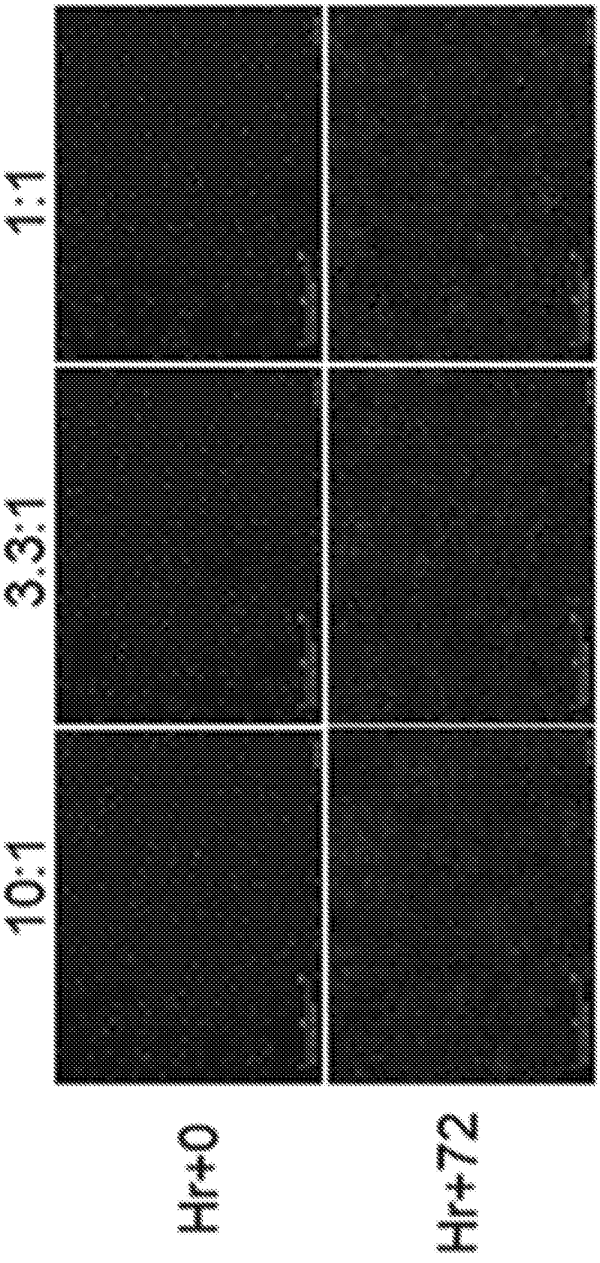


FIG. 61 (cont'd.)

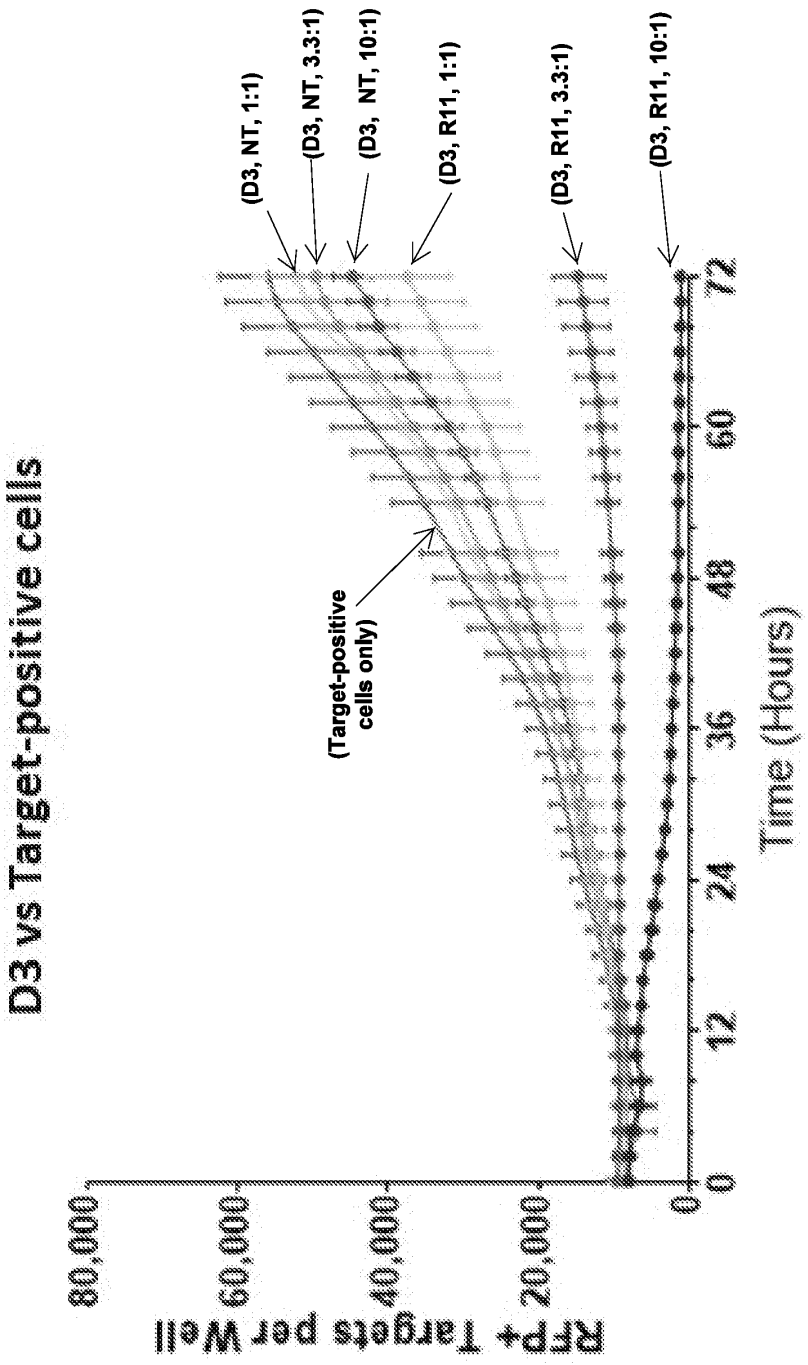

D3 vs Target-positive cells
RFP+ Targets per Well
80,000
60,000
40,000
20,000
0
0
12
24
36
48
60
72
Time (Hours)
(D3, NT, 1:1)
(D3, NT, 3.3:1)
(D3, NT, 10:1)
(D3, R11, 1:1)
(D3, R11, 3.3:1)
(D3, R11, 10:1)
(Target-positive cells only)

FIG. 62

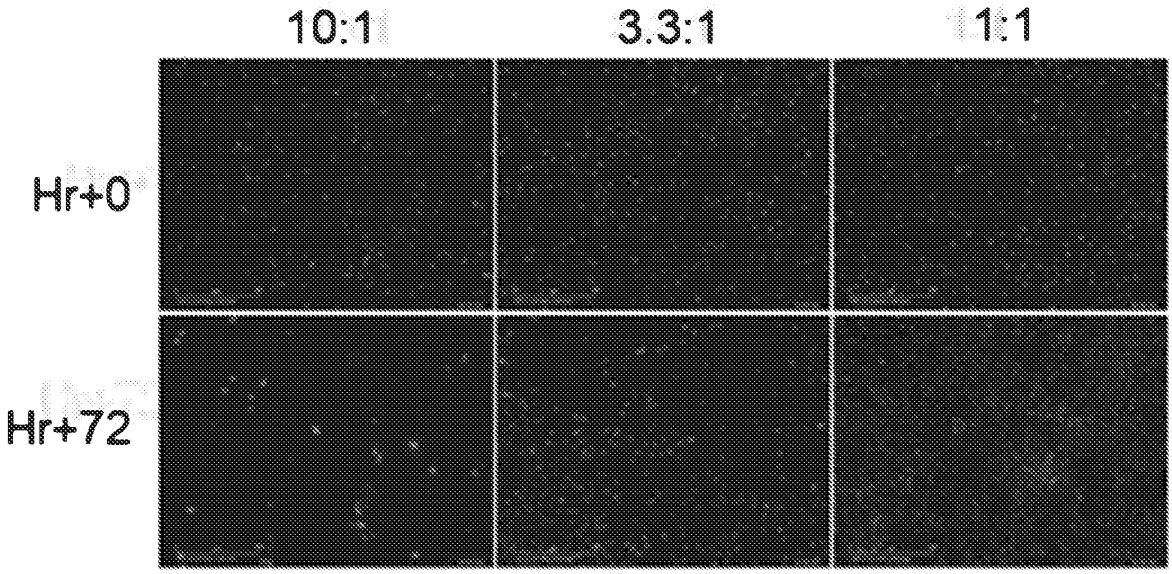


FIG. 62 (cont'd.)

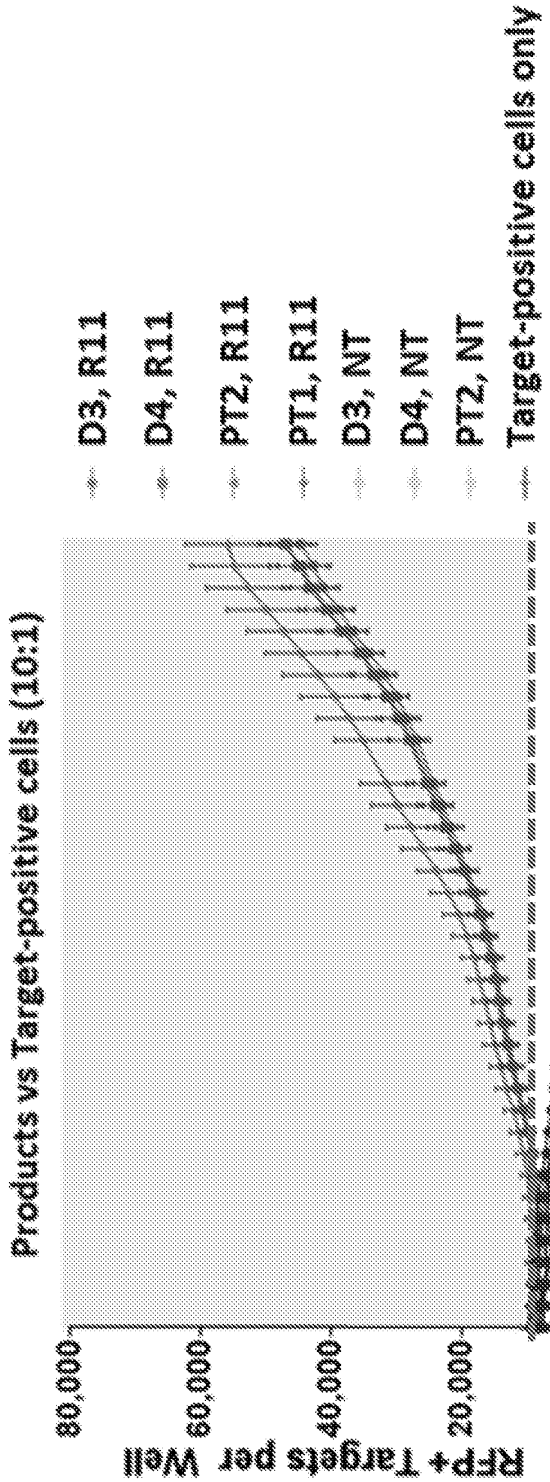

Products vs Target-positive cells (10:1)
D3, R11
D4, R11
PT2, R11
PT1, R11
D3, NT
D4, NT
PT2, NT
Target-positive cells only
RFP+ Targets per Well
80,000
60,000
40,000
20,000
0
0
Time (Hours)

FIG. 63A

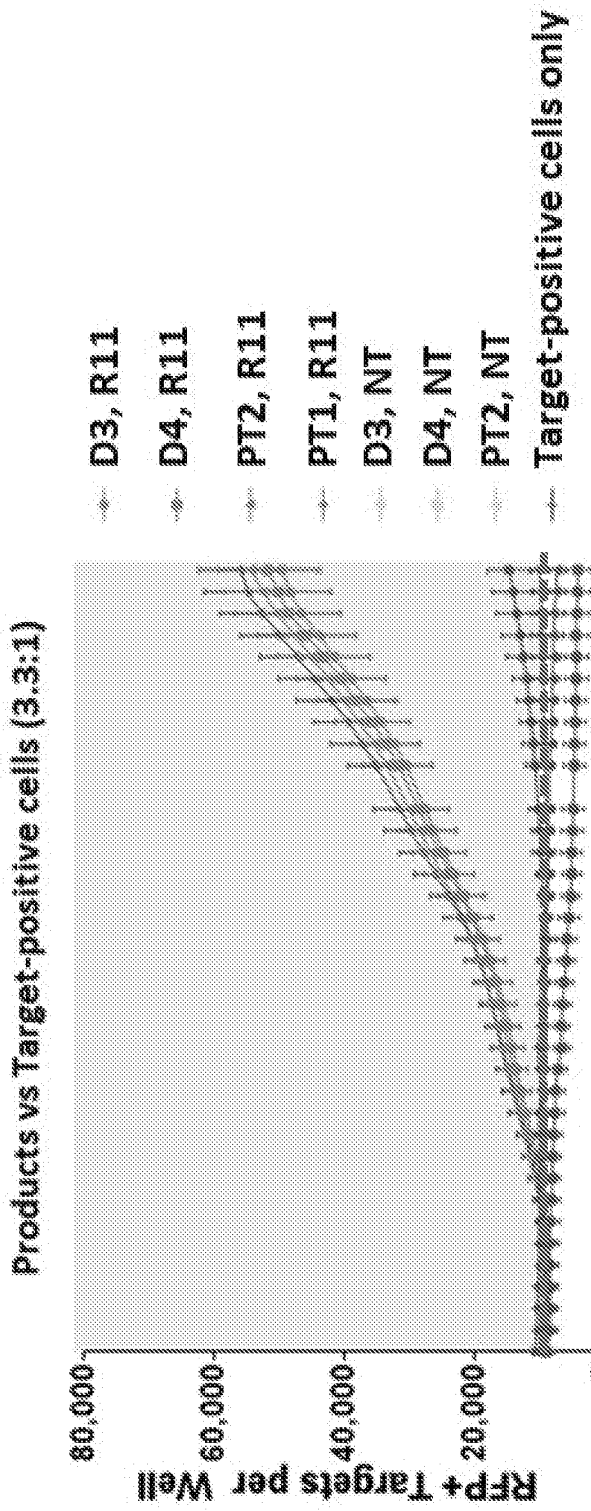

Products vs Target-positive cells (3.3:1)
D3, R11
D4, R11
PT2, R11
PT1, R11
D3, NT
D4, NT
PT2, NT
Target-positive cells only
RFP+ Targets per Well
80,000
60,000
40,000
20,000
0
0
Time (Hours)

FIG. 63B

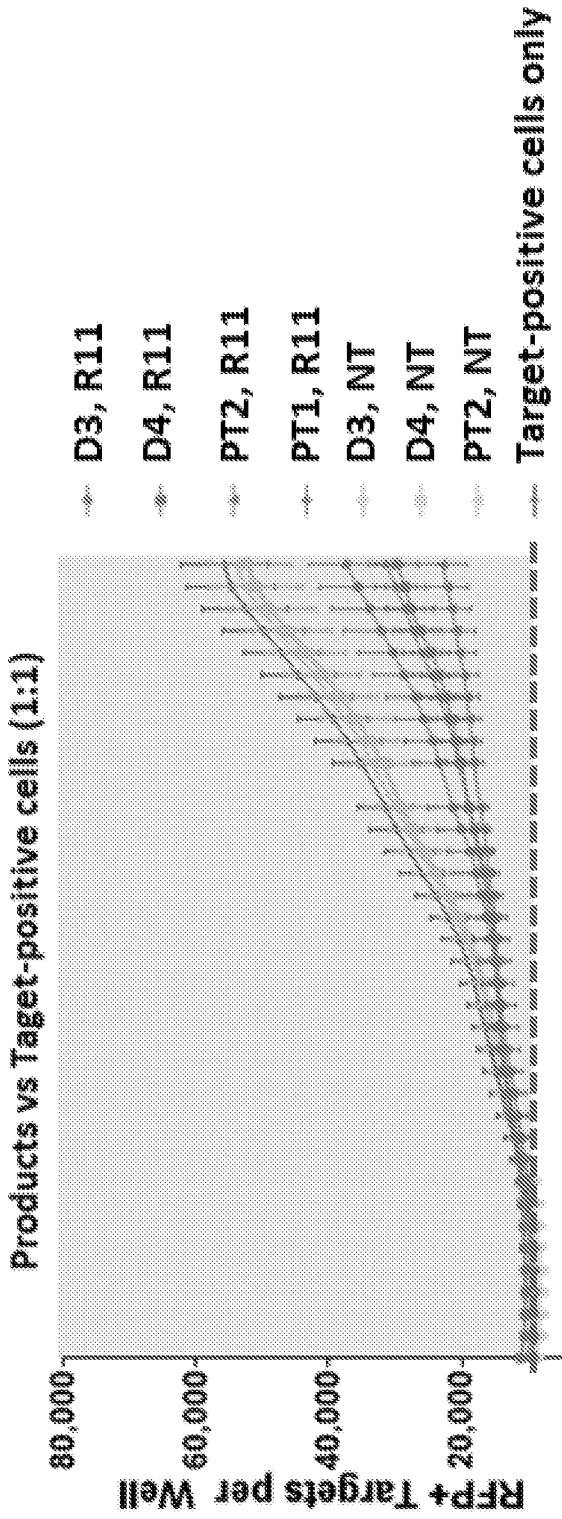

Products vs Taget-positive cells (1:1)
D3, R11
D4, R11
PT2, R11
PT1, R11
D3, NT
D4, NT
PT2, NT
Target-positive cells only
RFP+ Targets per Well
80,000
60,000
40,000
20,000
0
0
Time (Hours)

FIG. 63C