

FIG. 1A

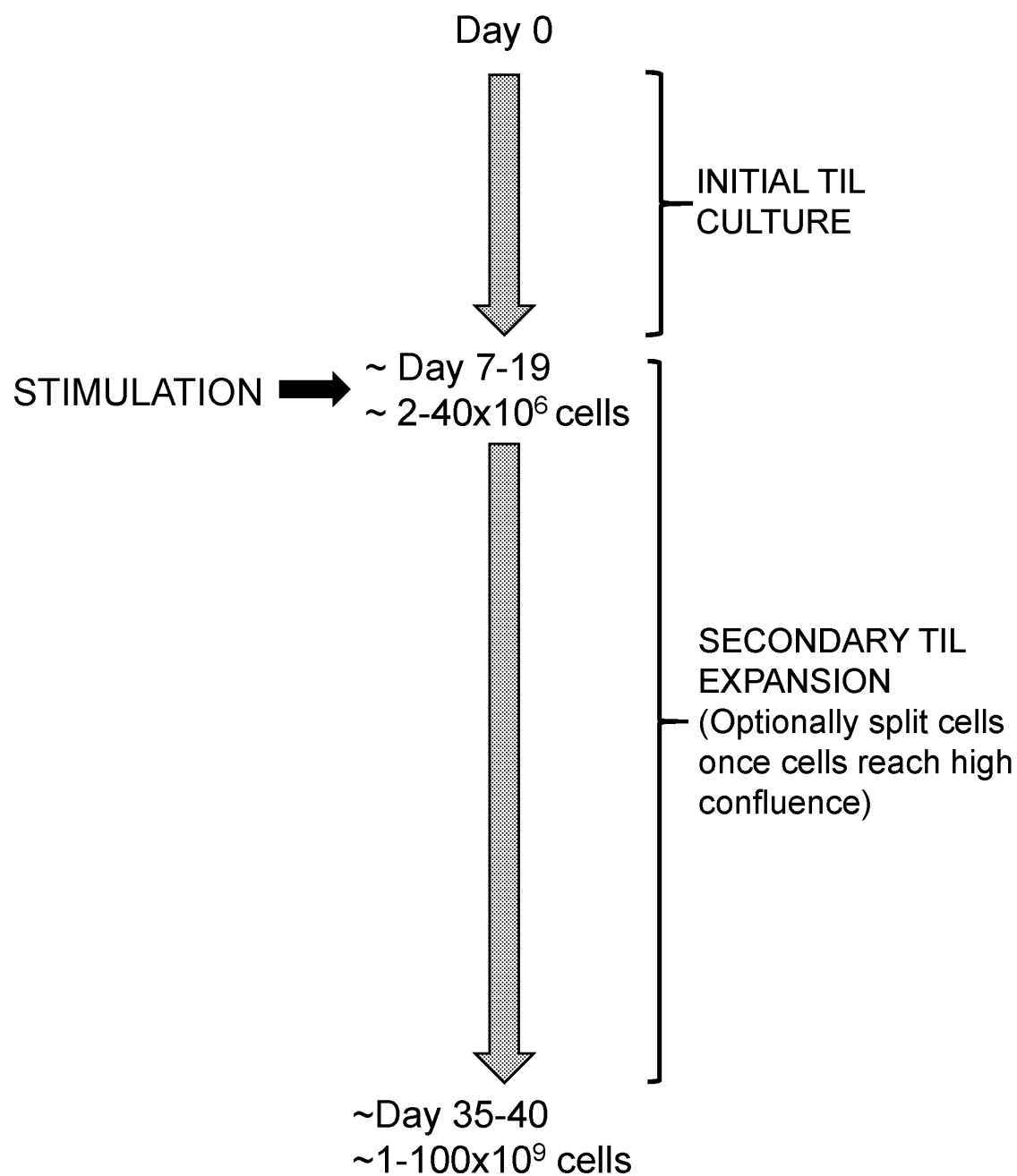


FIG. 1B

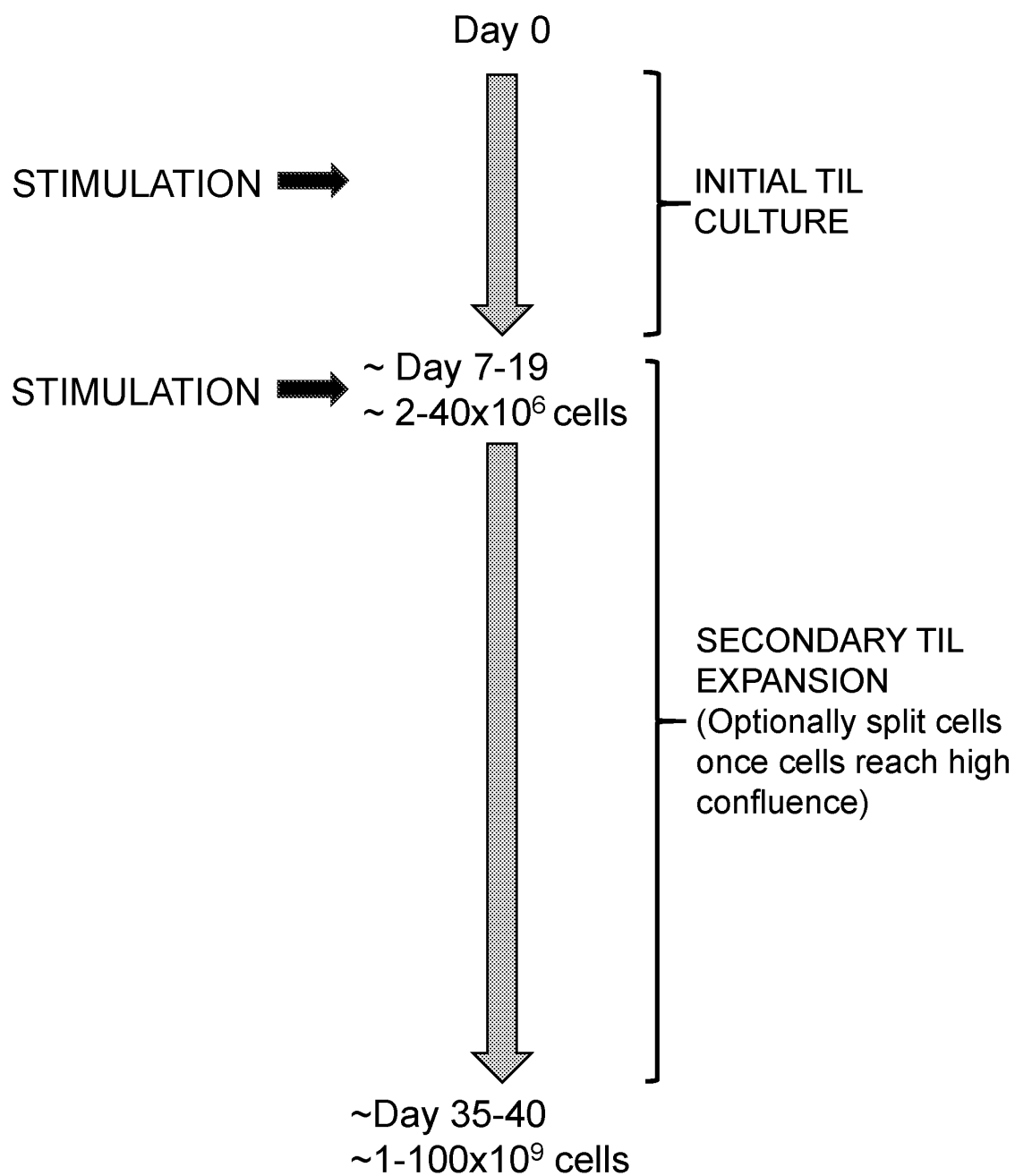


FIG. 1C

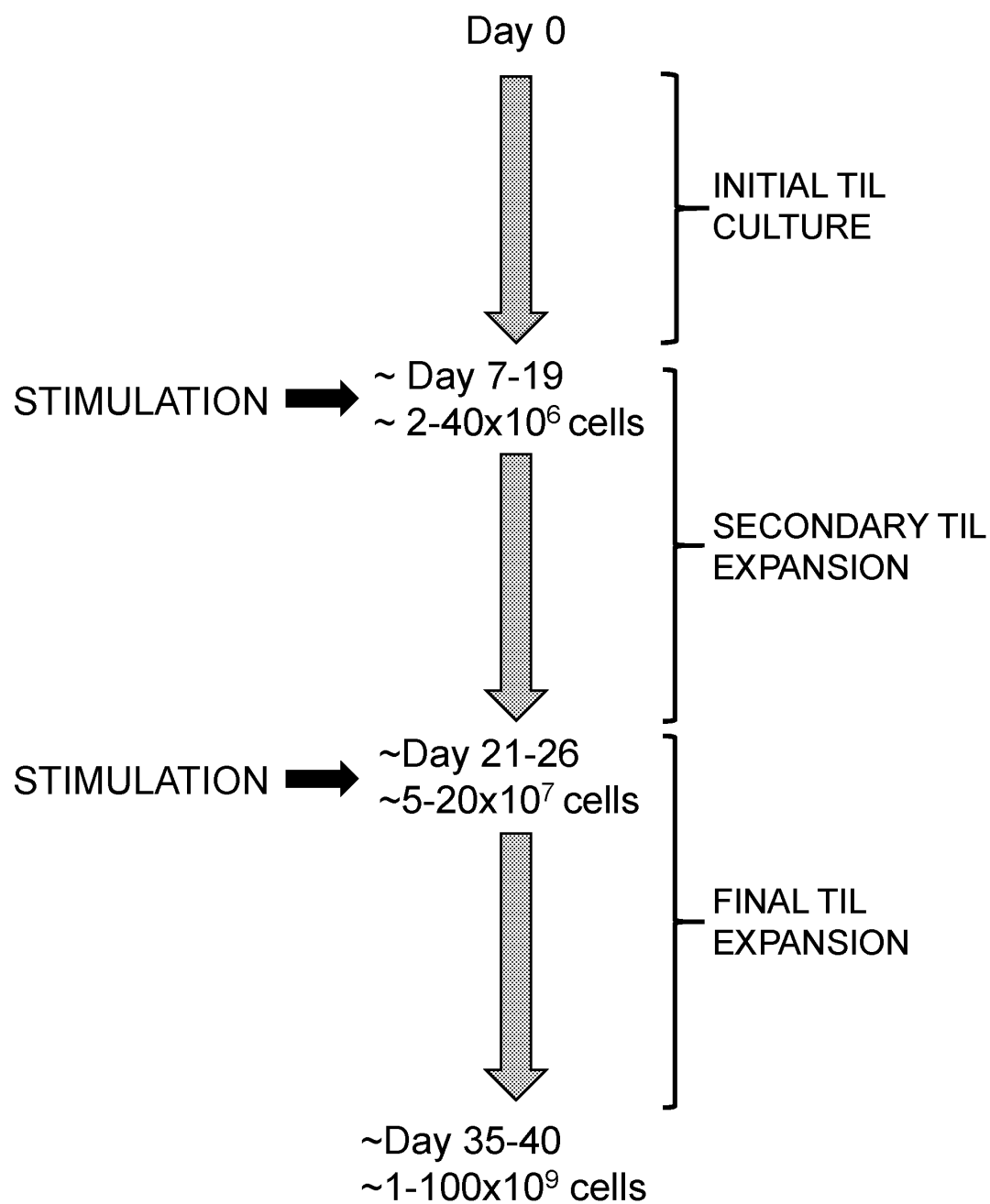


FIG. 1D

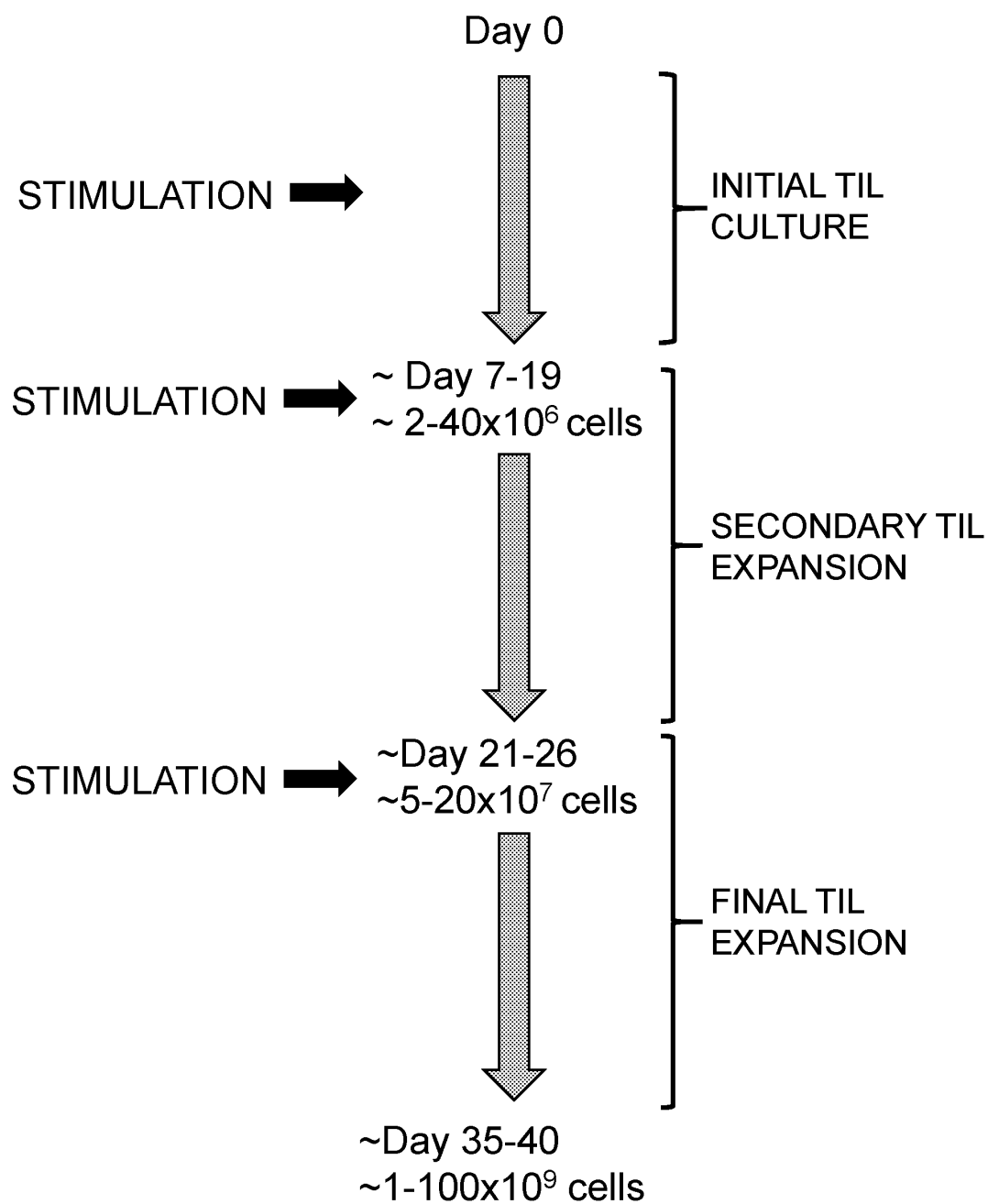


FIG. 1E

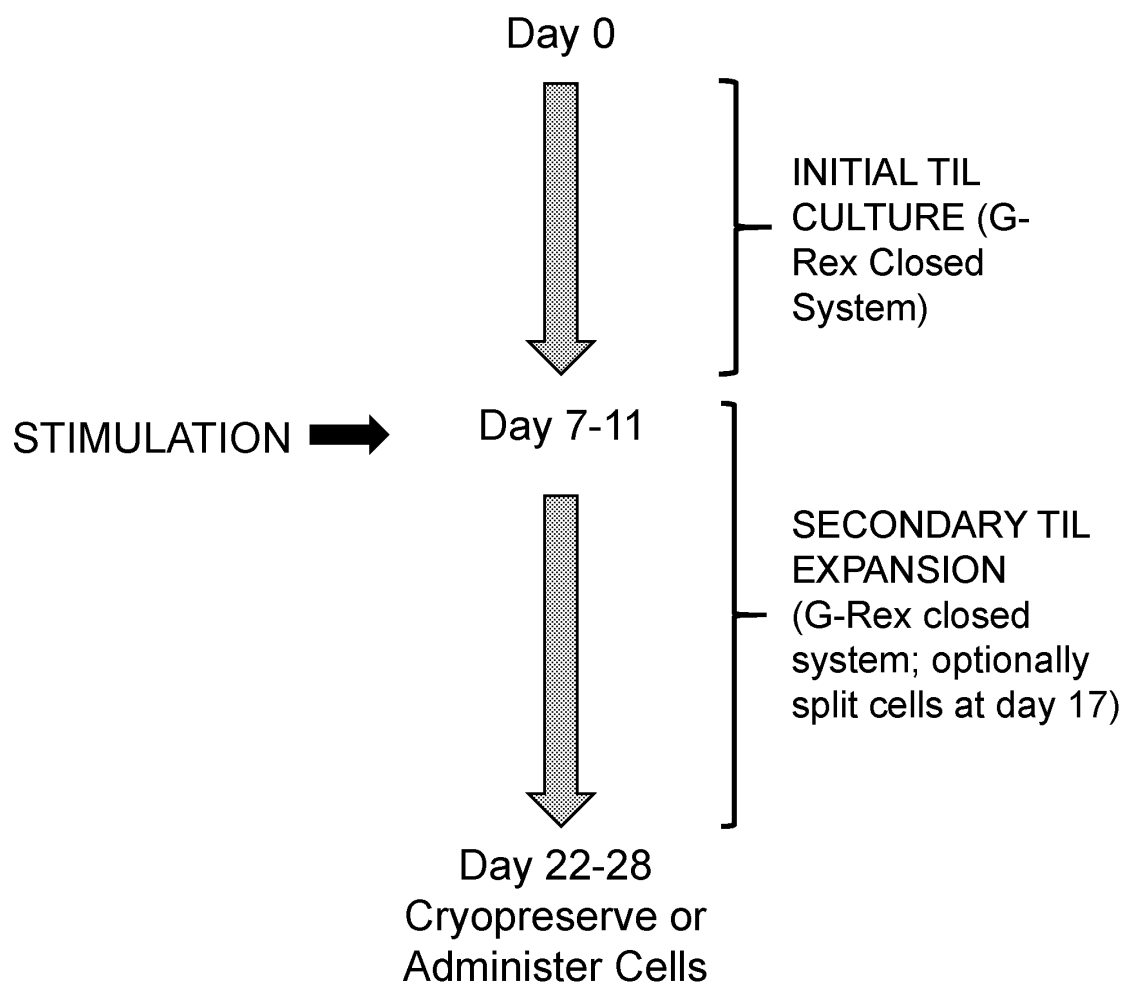


FIG. 1F

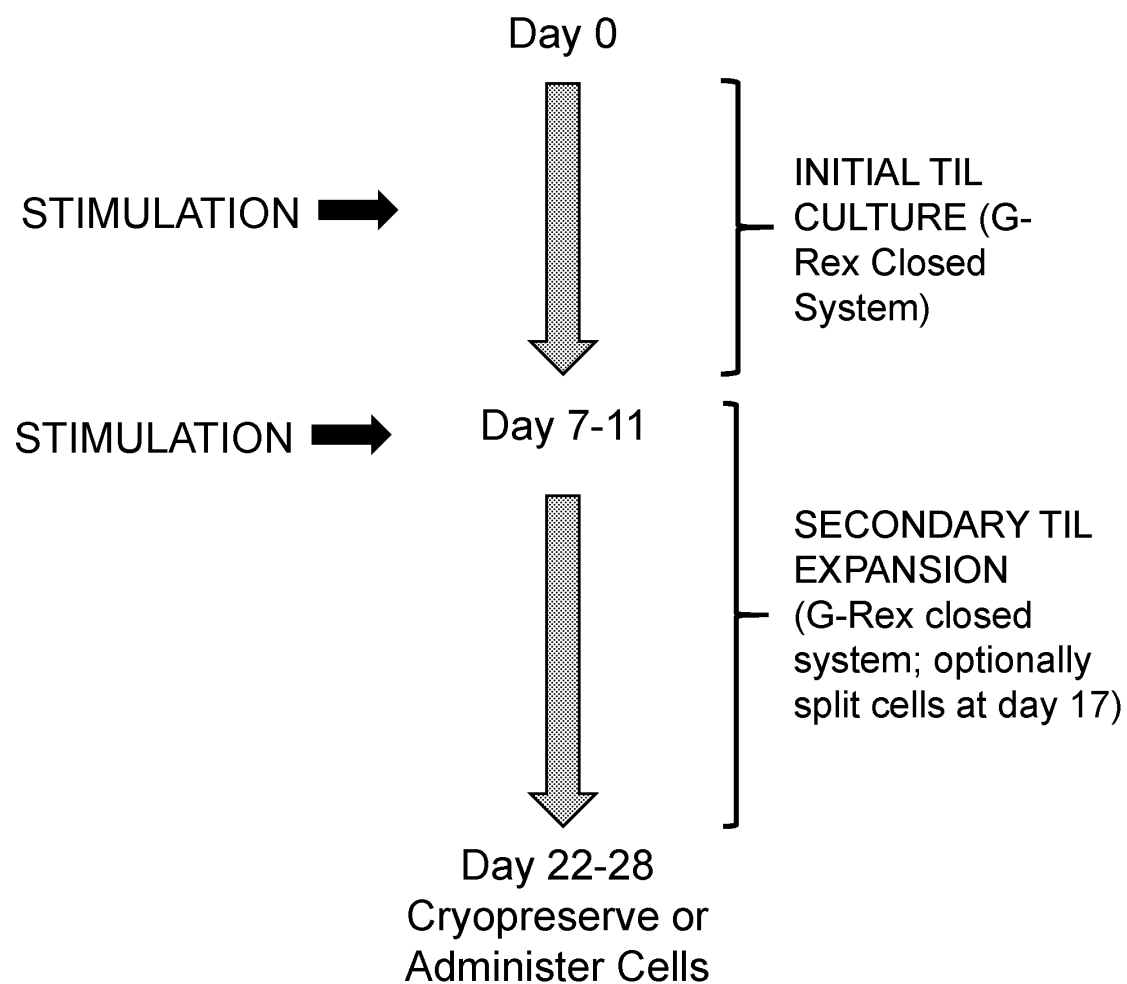


FIG. 2A Control media

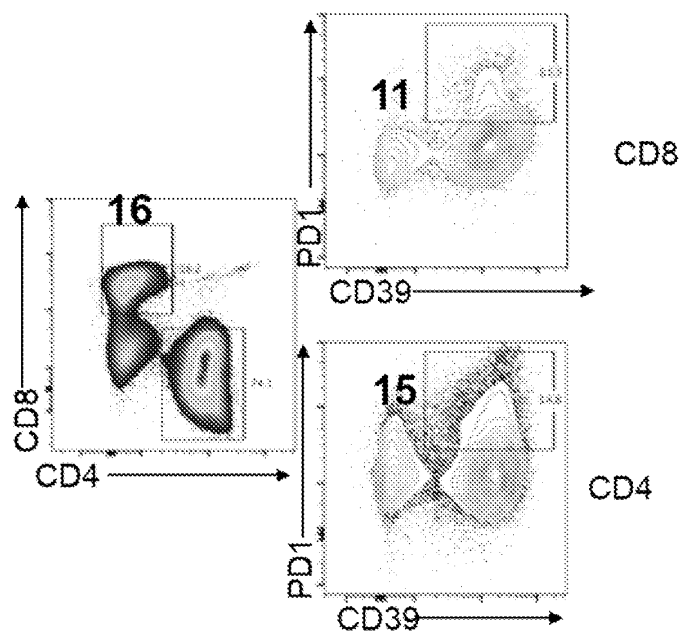


FIG. 2B Metabolic reprogramming media

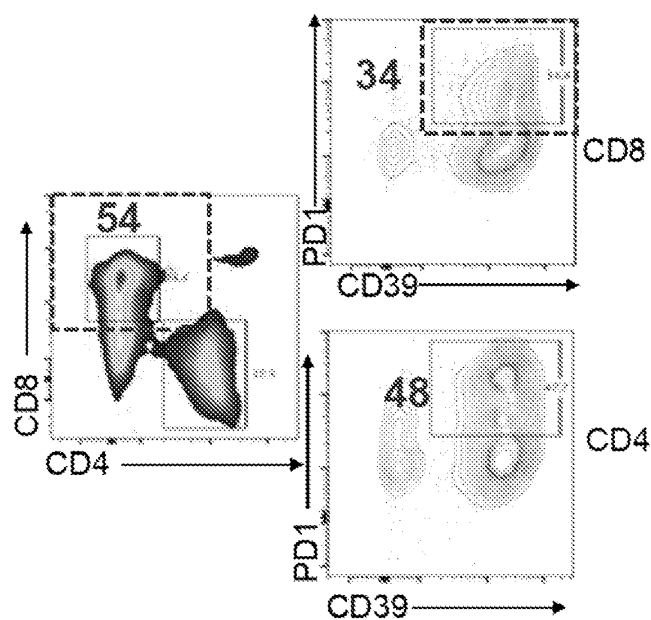
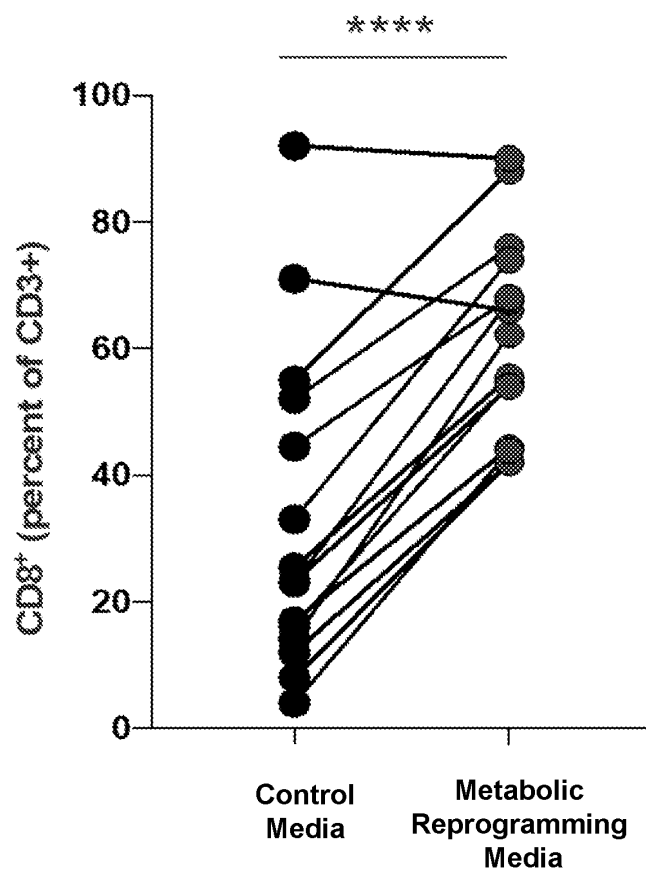


FIG. 2C



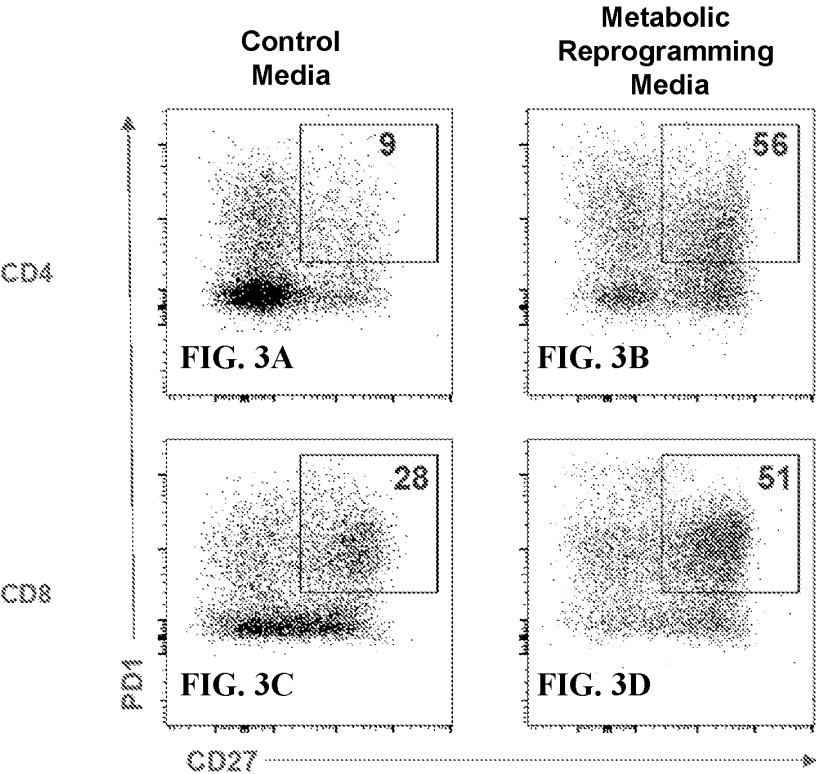


FIG. 3E

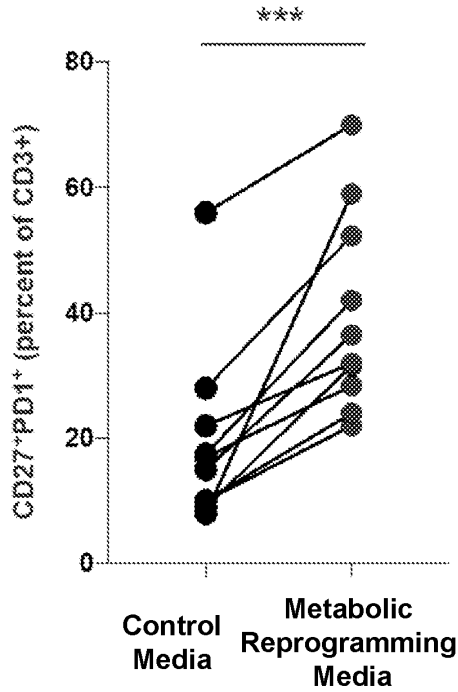


FIG. 4

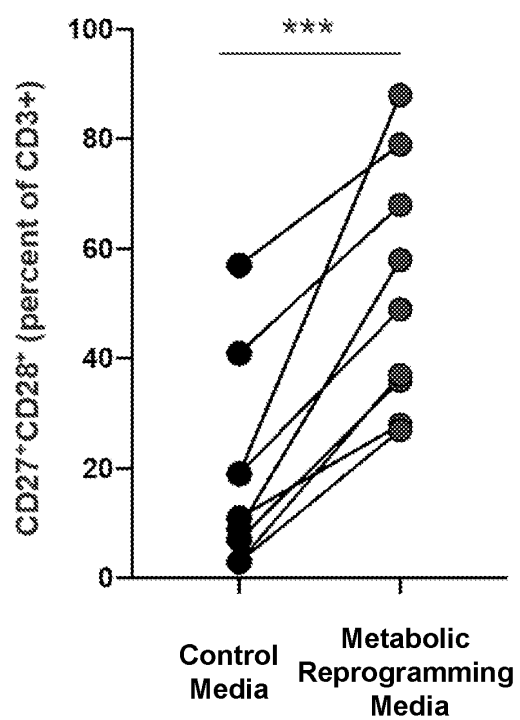


FIG. 5A

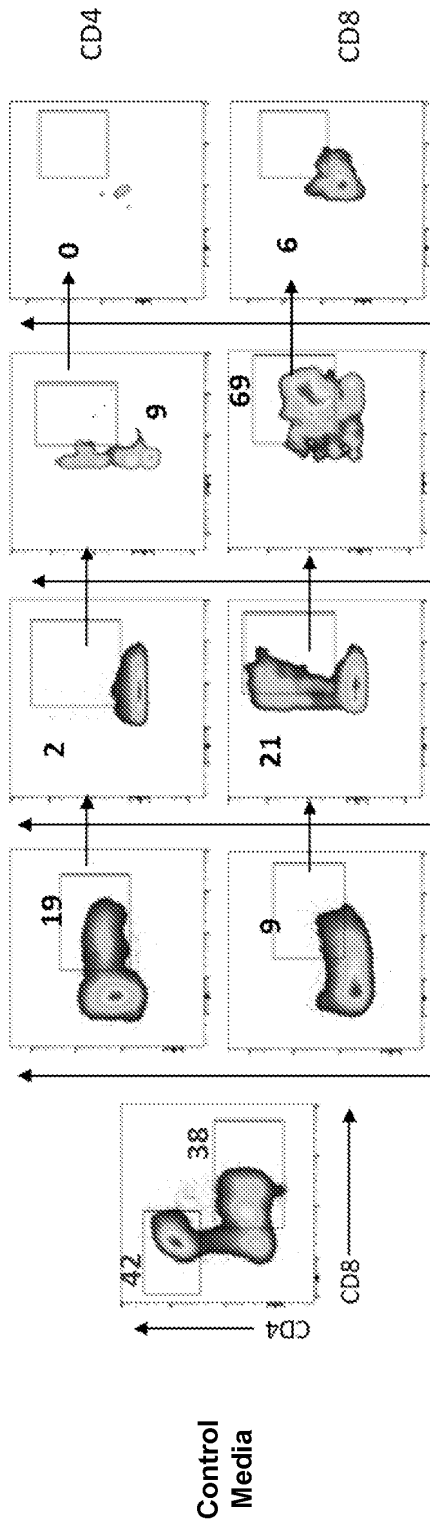


FIG. 5B

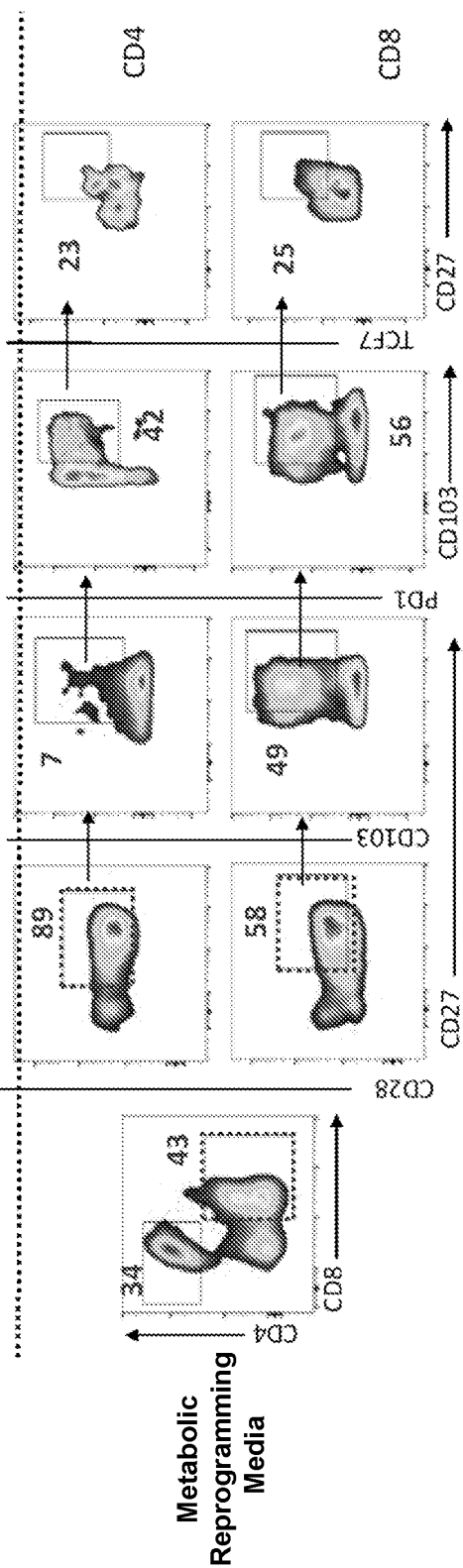
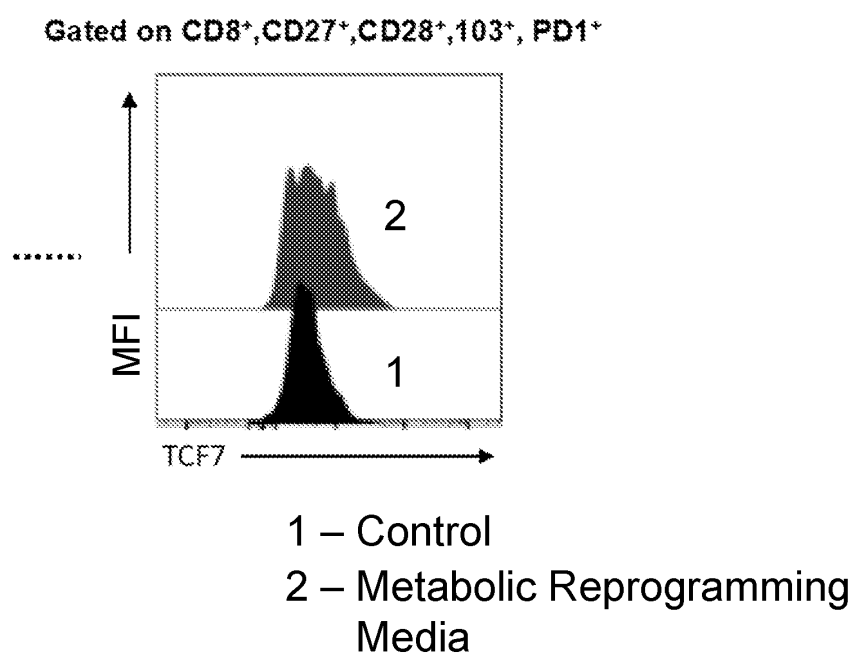
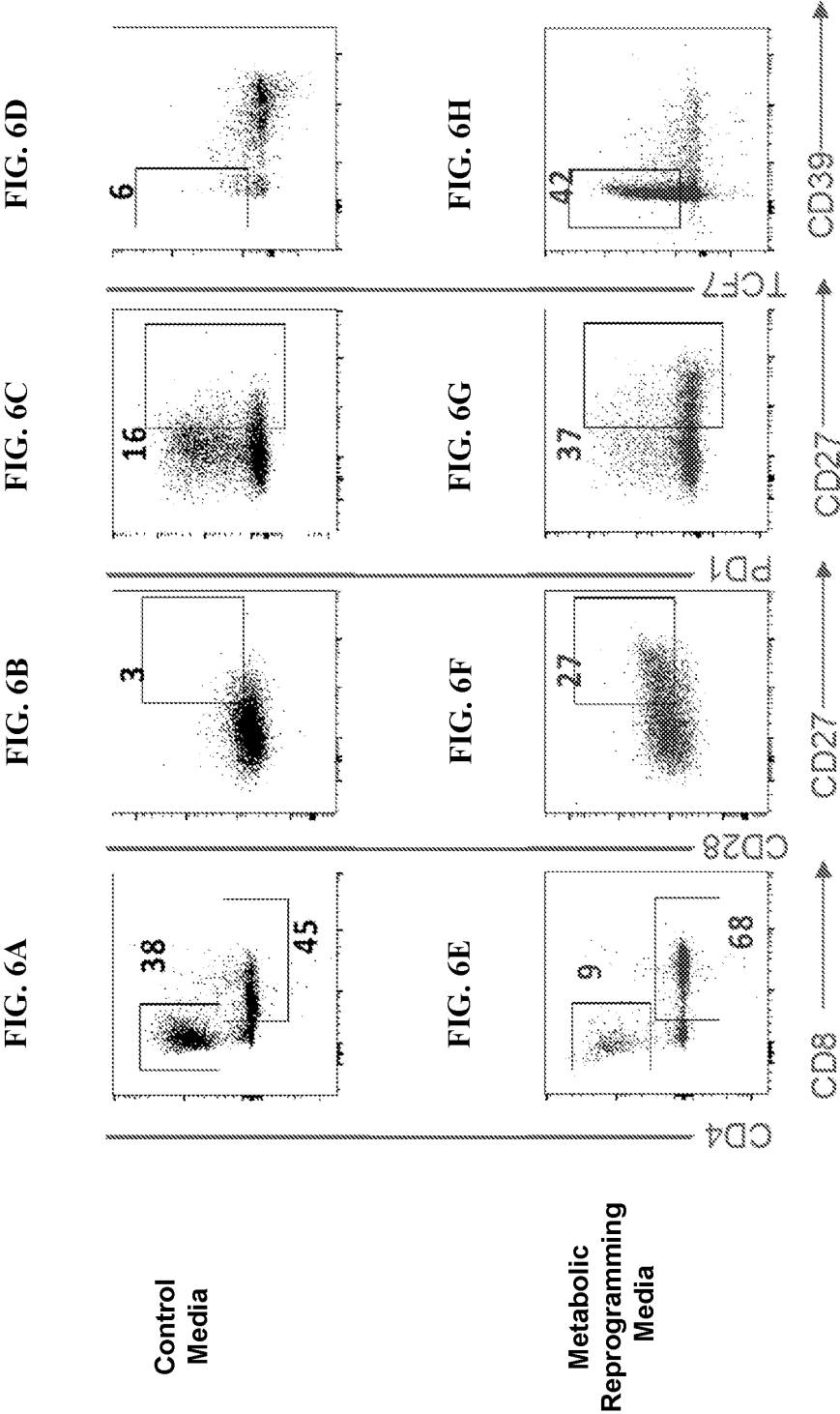
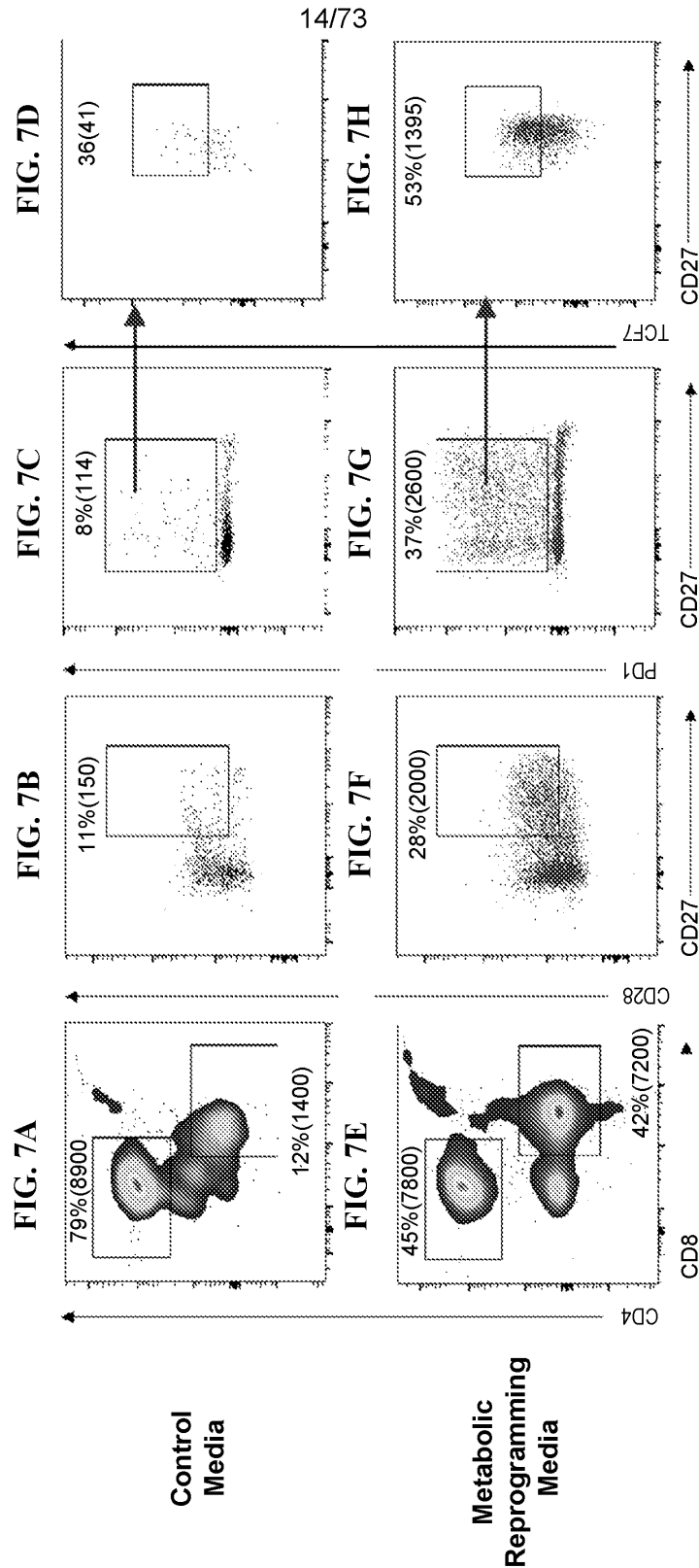


FIG. 5C





DC + KRAS pepmix (1ug/ml) (G12D / G12C / G12V)



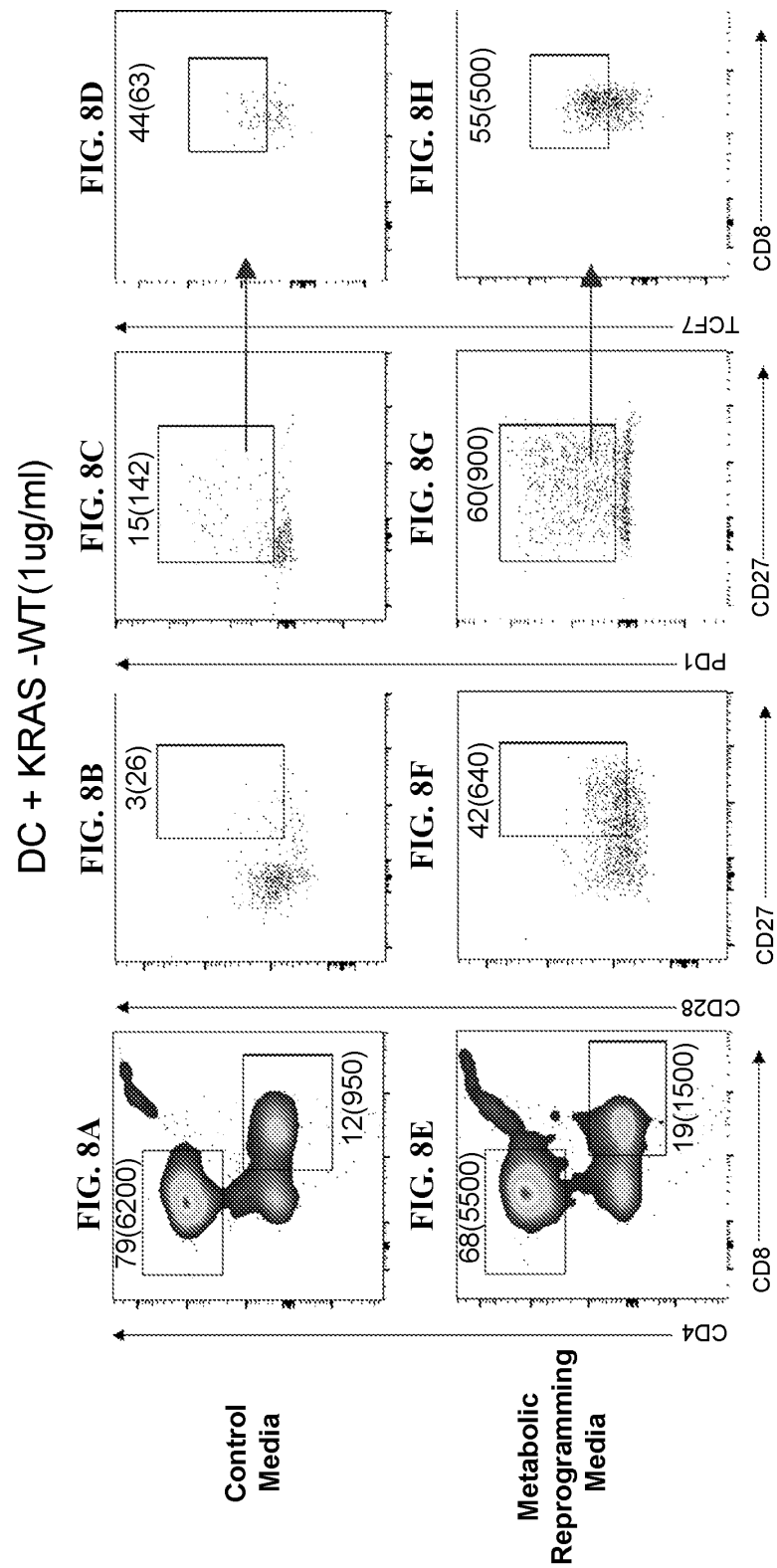


FIG. 9A

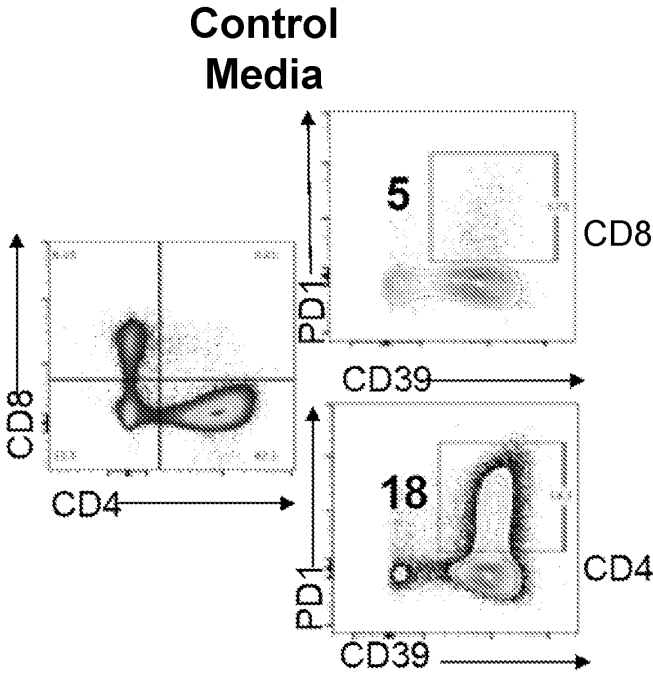


FIG. 9B

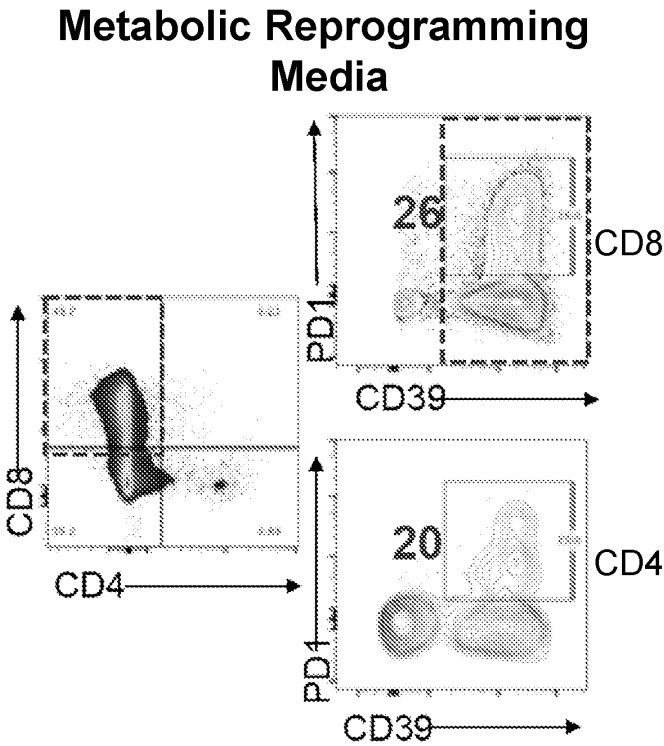
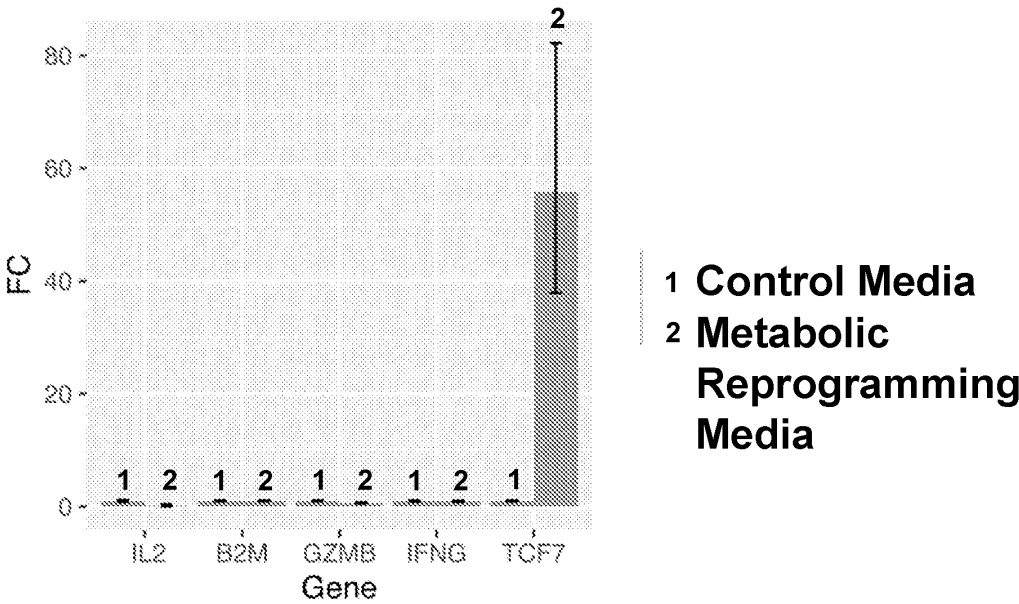


FIG. 10



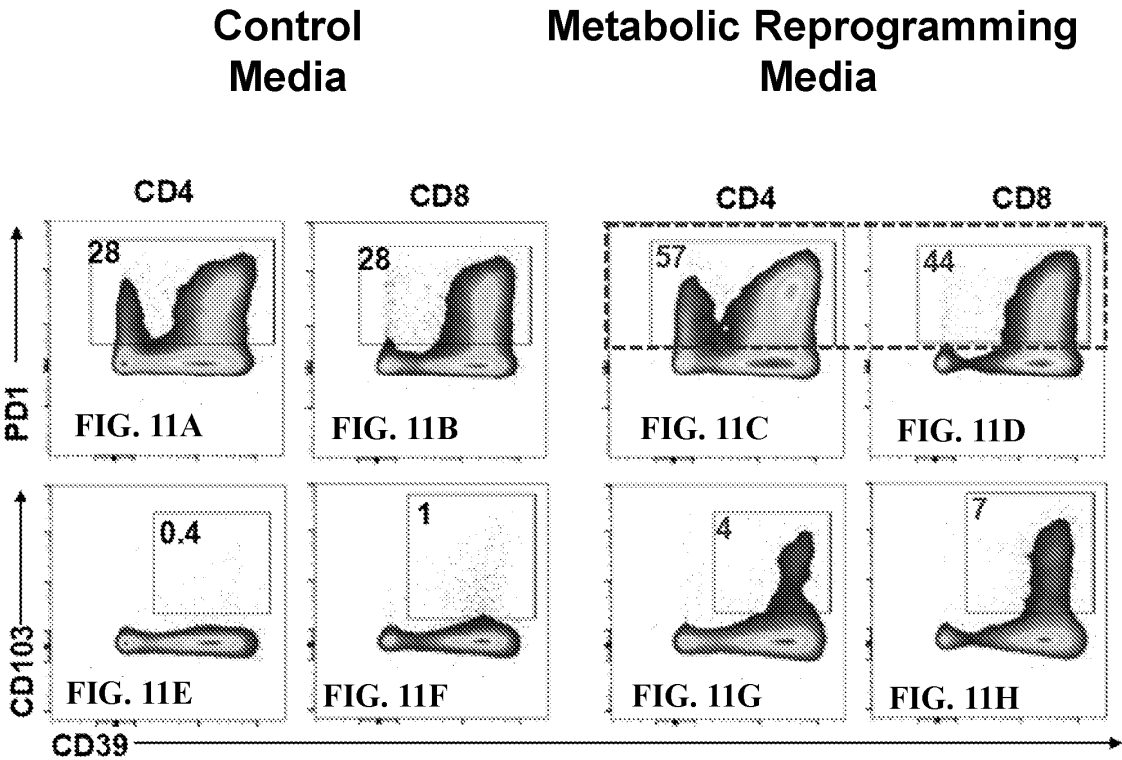
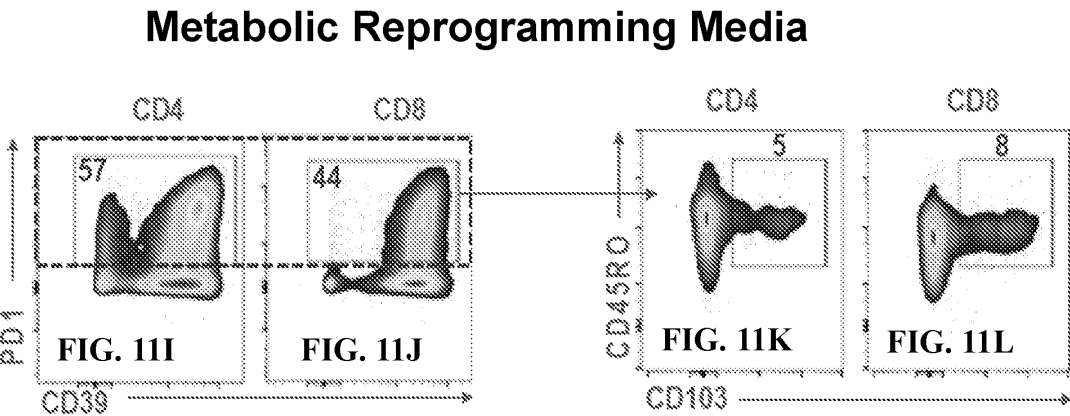


FIG. 12

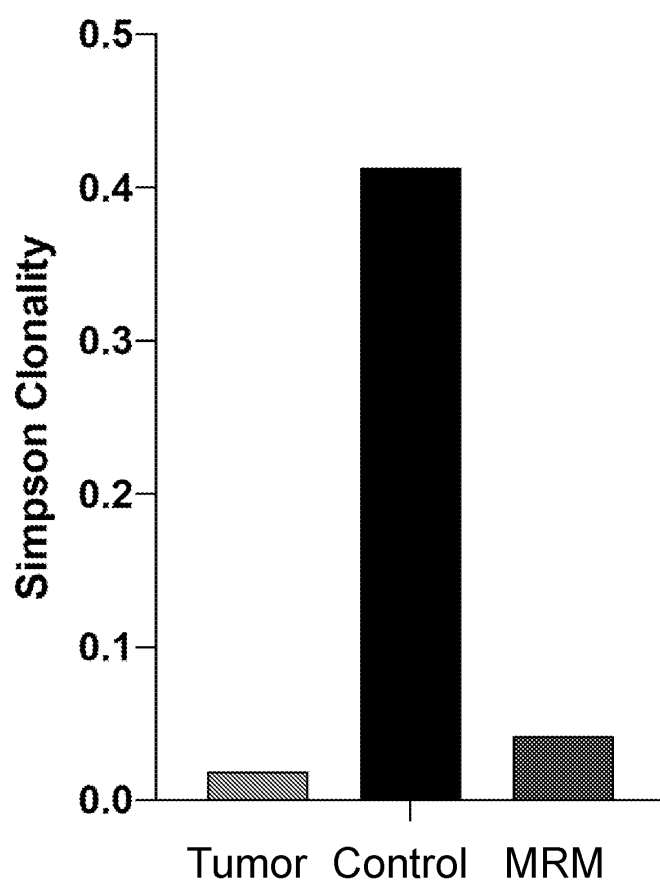


FIG. 13A

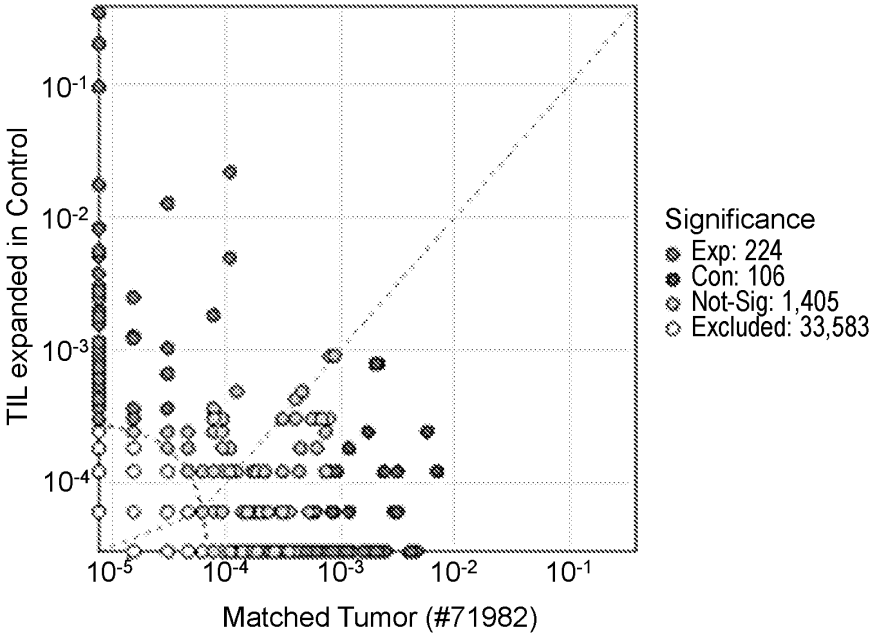


FIG. 13B

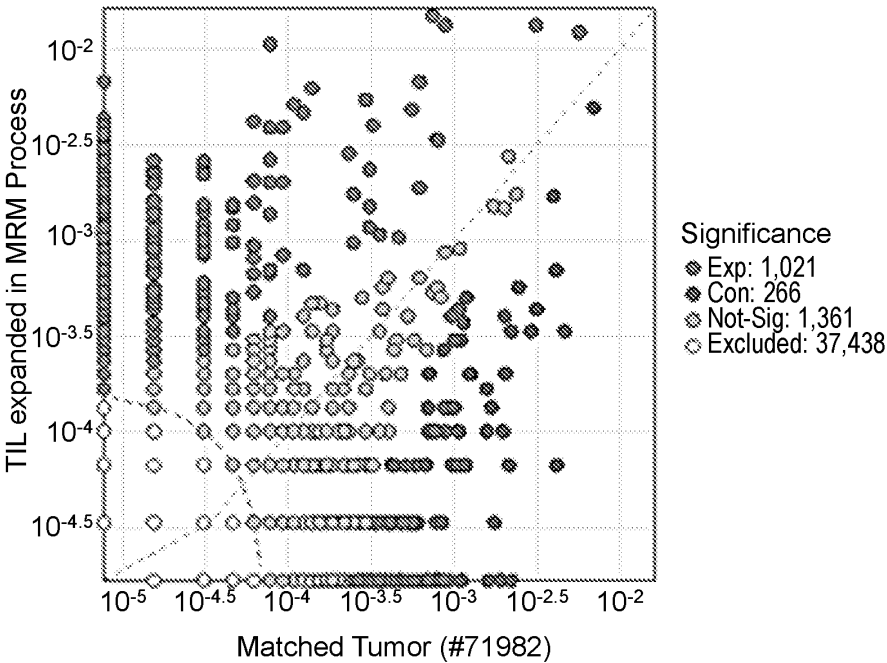


FIG. 13C

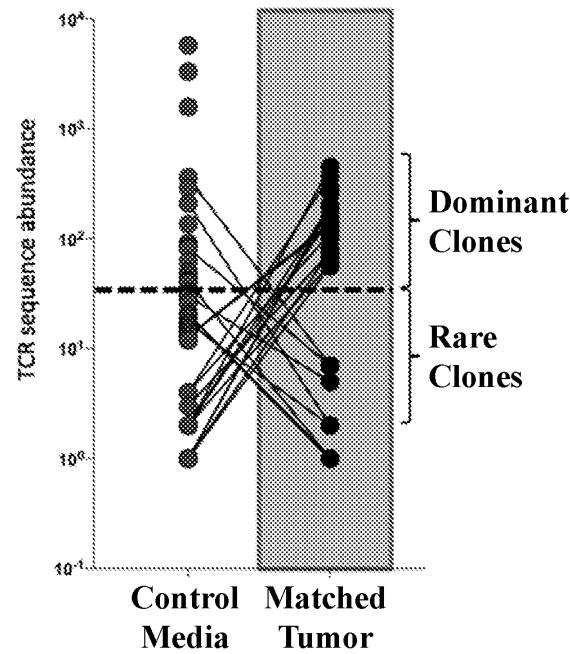


FIG. 13D

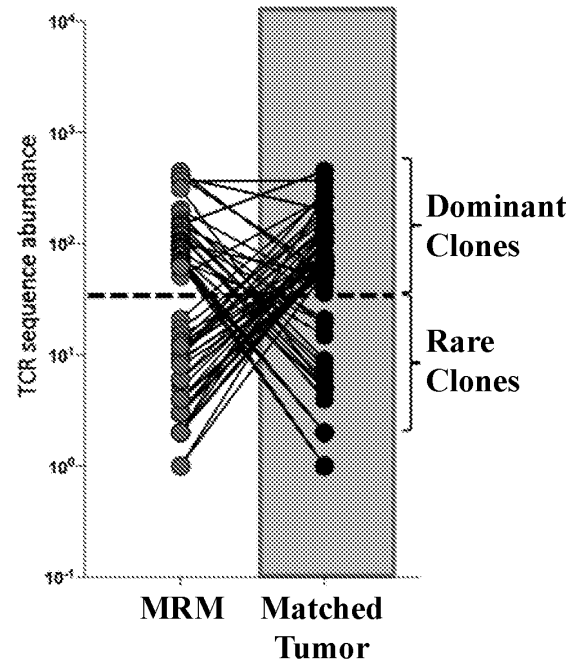


FIG. 14

Amino Acid	SUM (Productive Frequency)	PRESENT IN	Control	MRM	70703- TUMOR_TCRB
1 CASSLGTDQYF	0.000273449	3	2.85193E-05	0.000215095	2.98347E-05
2 CASSRGLNTIYF	0.000316628	2	0	0.000286793	2.98347E-05
3 CASSQNYGYTF	5.37341E-05	2	0	2.38994E-05	2.98347E-05
4 CASSLVGTEAFF	0.000286635	2	0	0.000167296	0.000119339
5 CASSLRGTEAFF	0.001272605	2	0	0.00124277	2.98347E-05
6 CASSGDSYGYTF	5.37341E-05	2	0	2.38994E-05	2.98347E-05
7 CASGETQYF	5.37341E-05	2	0	2.38994E-05	2.98347E-05

¹SEQ ID NO: 6; ²SEQ ID NO: 1; ³SEQ ID NO: 7; ⁴SEQ ID NO: 8; ⁵SEQ ID NO: 9;
⁶SEQ ID NO: 10; ⁷SEQ ID NO: 11.

FIG. 15A

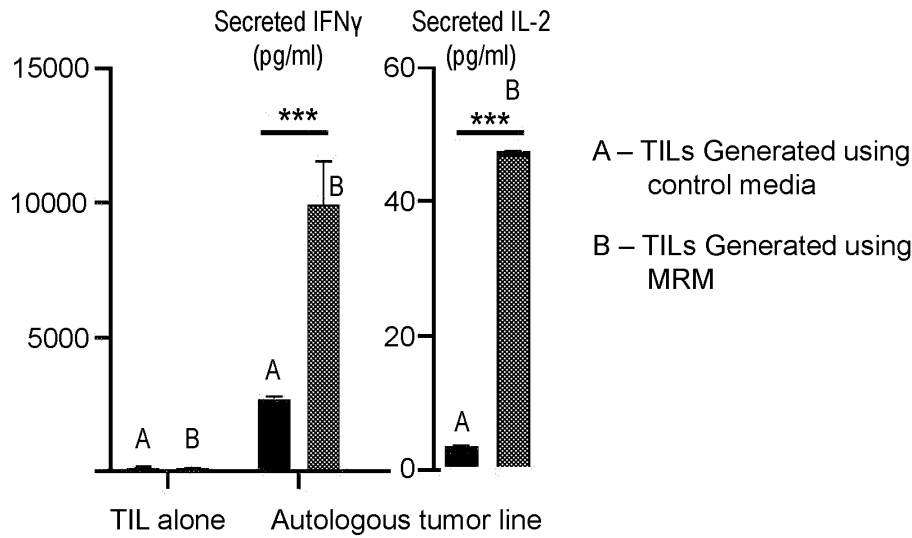


FIG. 15B

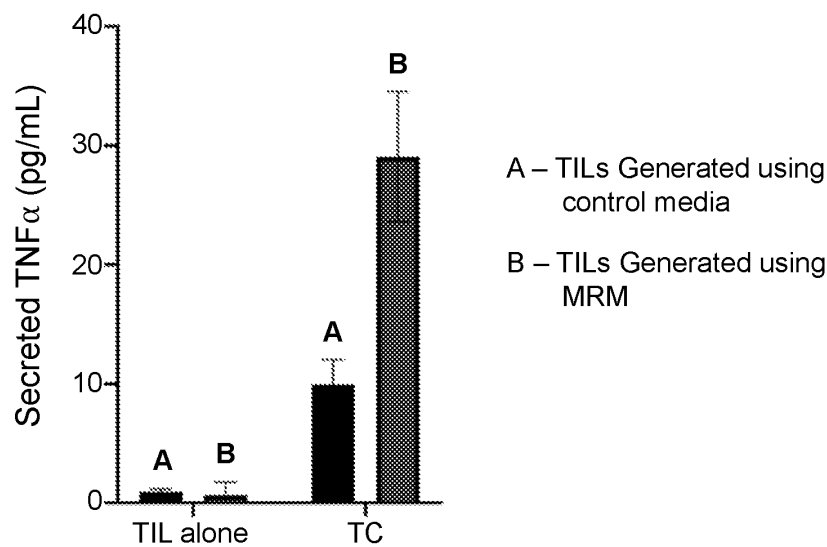


FIG. 15C

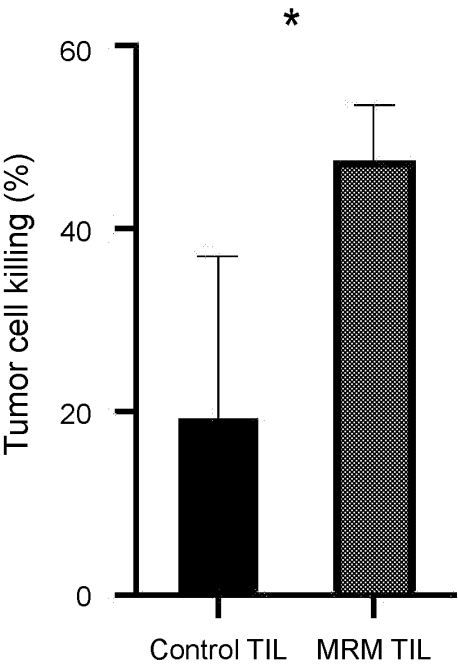


FIG. 15D

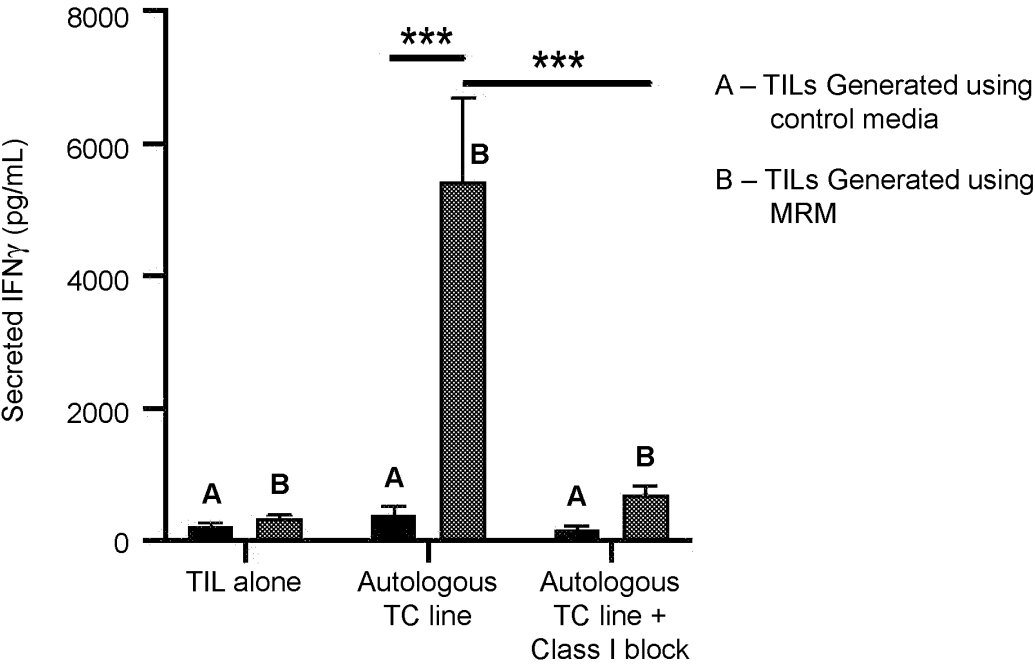
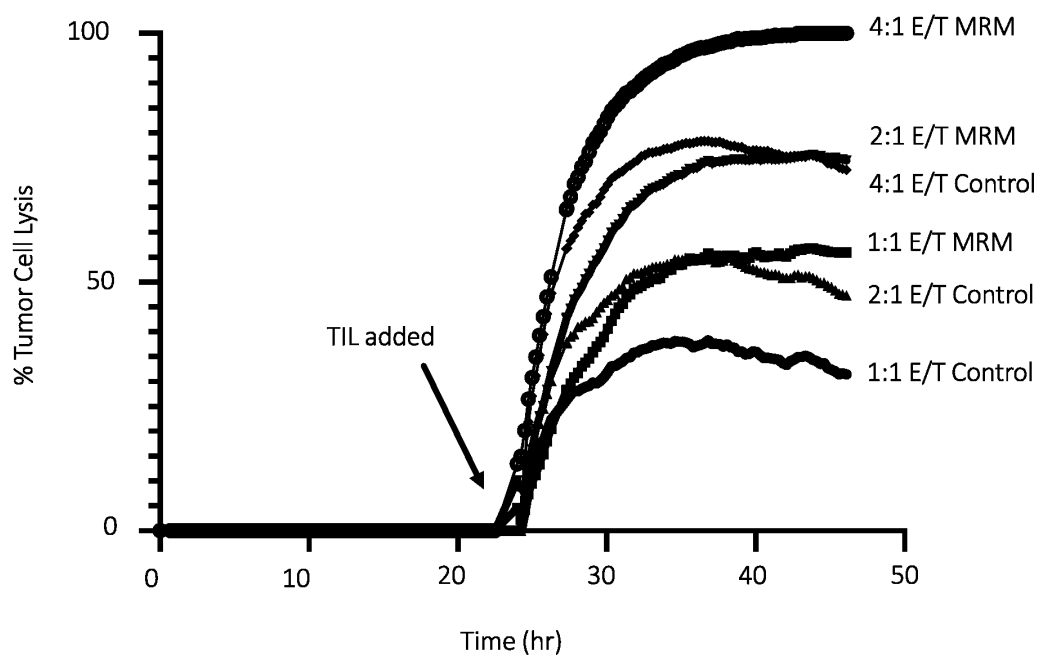
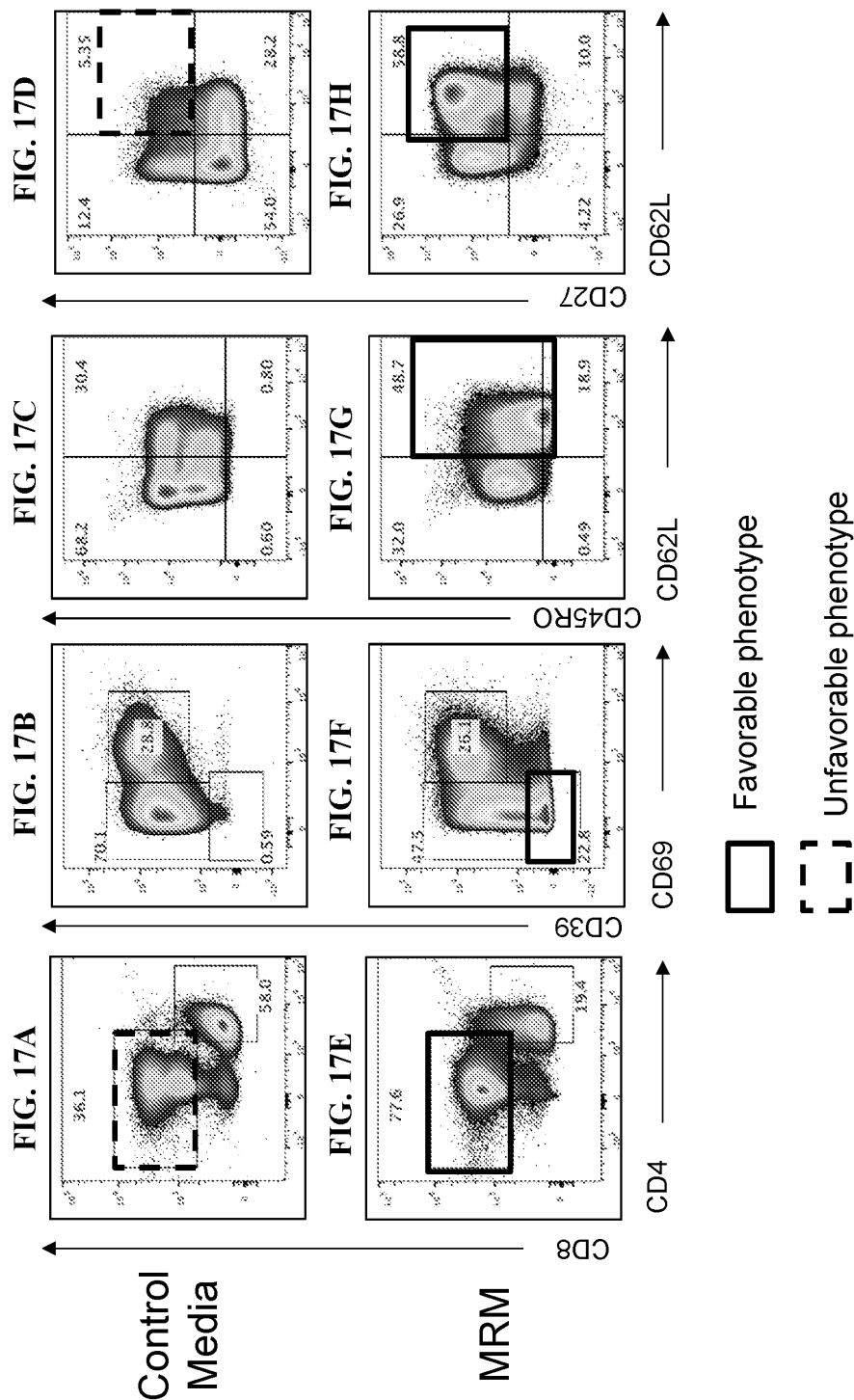
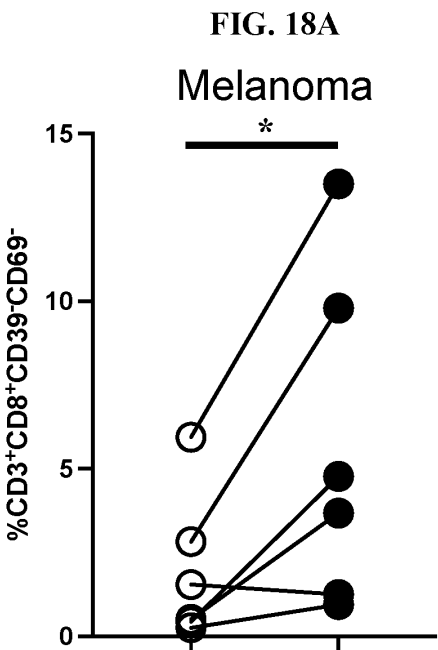
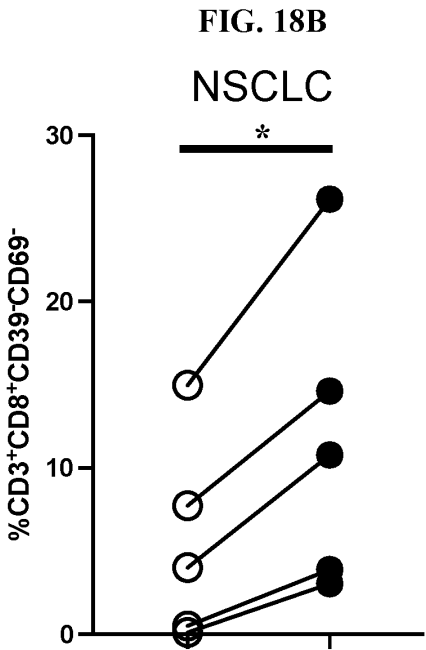
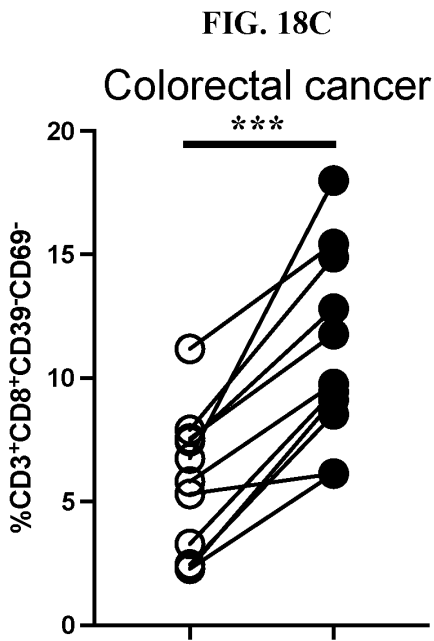


FIG. 16







○ Control Media
● MRM

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FIG. 19A

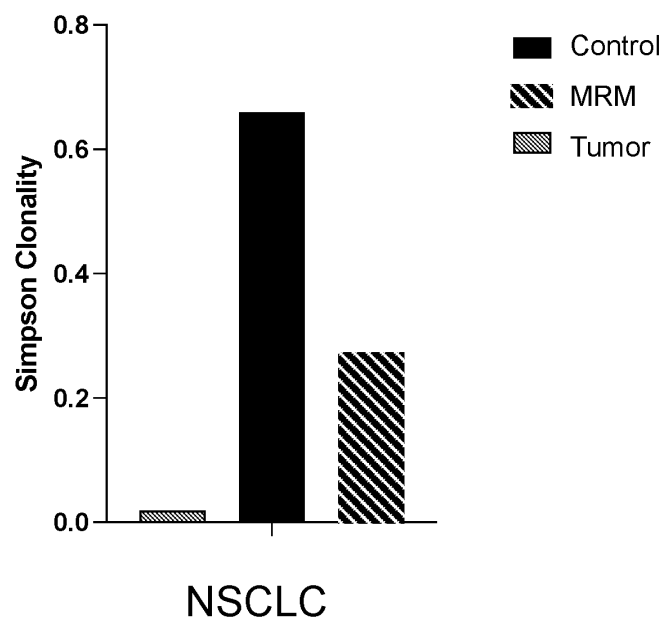


FIG. 19B

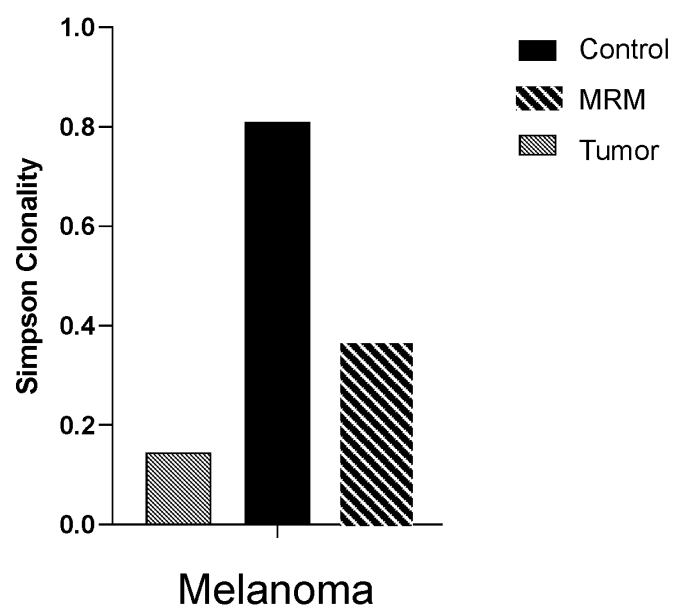


FIG. 20A

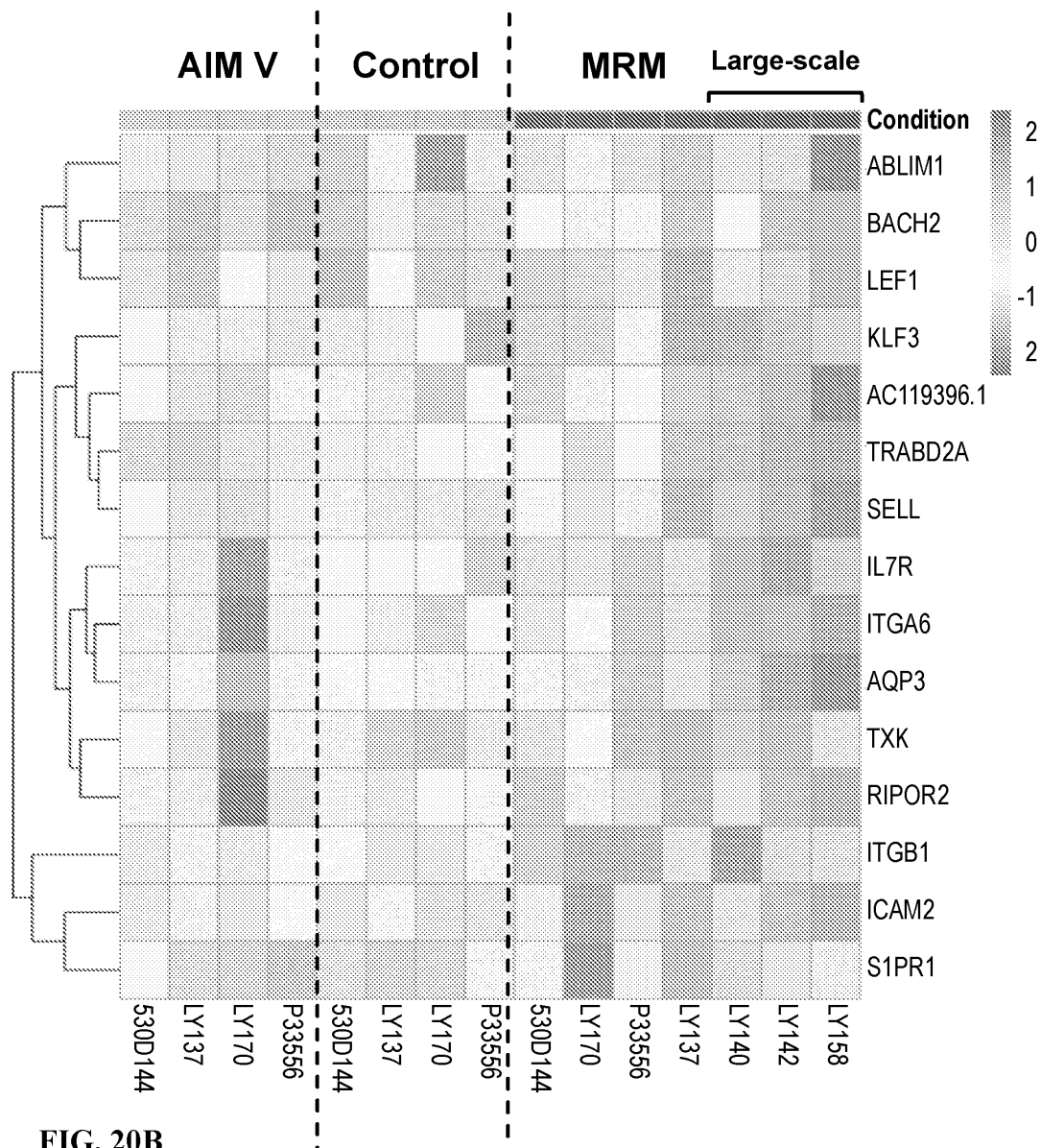


FIG. 20B

Genesets from literature	MRM vs AIMV		MRM vs Control	
	Adjusted p-val	NES Score	Adjusted p-val	NES Score
Caushi.Stem-like.memory	1.18e-04	2.03	1.50e-04	1.98
Rosenberg_DN_stem	1.49e-02	1.81	1.84e-02	1.75
Jansen_Stem.like	2.49e-03	1.90	0.10	1.46

FIG. 20C

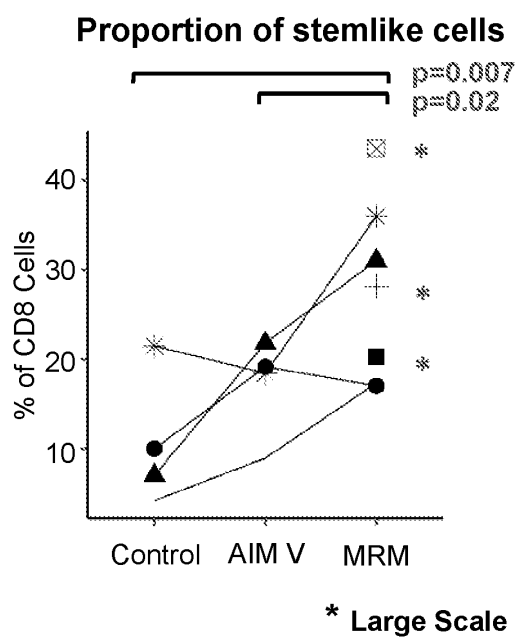


FIG. 20D

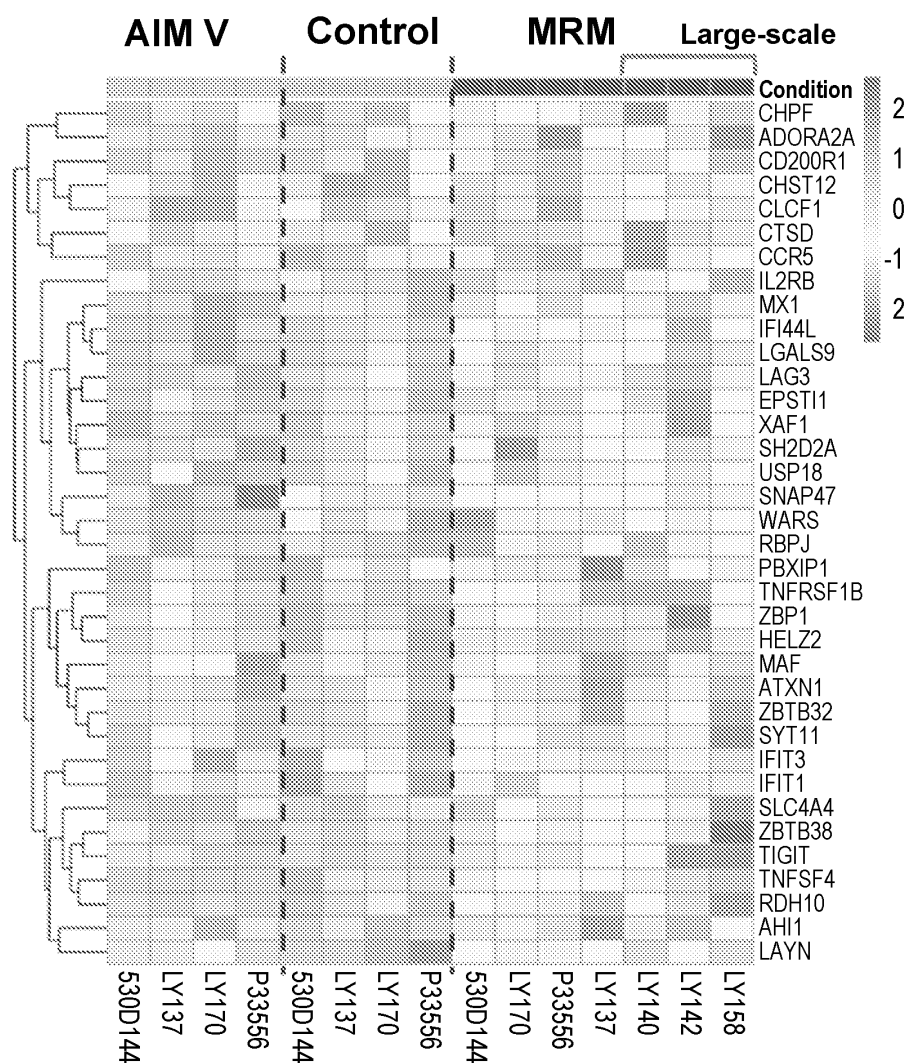
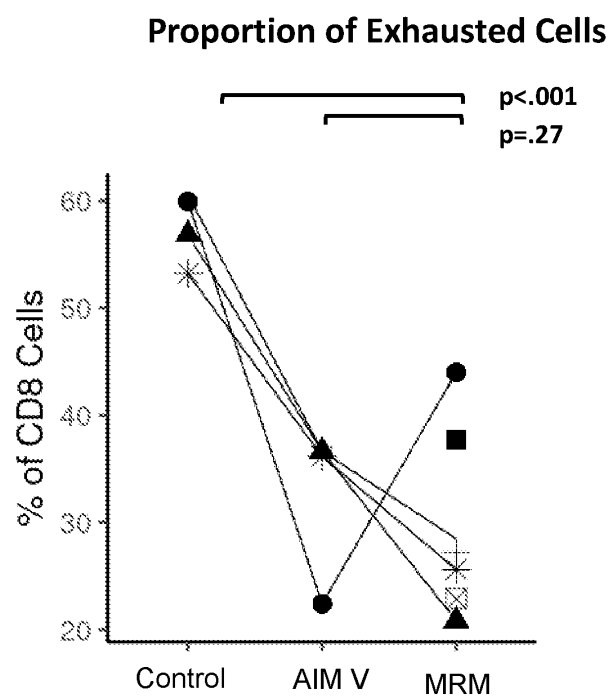


FIG. 20E

Genesets from literature	TMRM vs AIMV		TMRM vs TCM	
	Adjusted p-val	NES Score	Adjusted p-val	NES Score
Zhang_TEX_3Tumors	8.69E-03	-1.85	9.56E-05	-2.30
Zhang_TEX_onlyColon	3.71E-03	-1.84	9.56E-05	-2.47
SadeF_CD8_3_EXHAUST	1,18E-04	-2.31	9.56E-05	-2.68
EM.associated.GSE23321	1.66E-02	-1.43	9.56E-05	-1.93
Oliveira.TTE	1.81E-03	-1.81	9.56E-05	-2.35
Oliveira.Tumor-spec.TTE	1.08E-03	-1.85	9.56E-05	-2.14

FIG. 20F



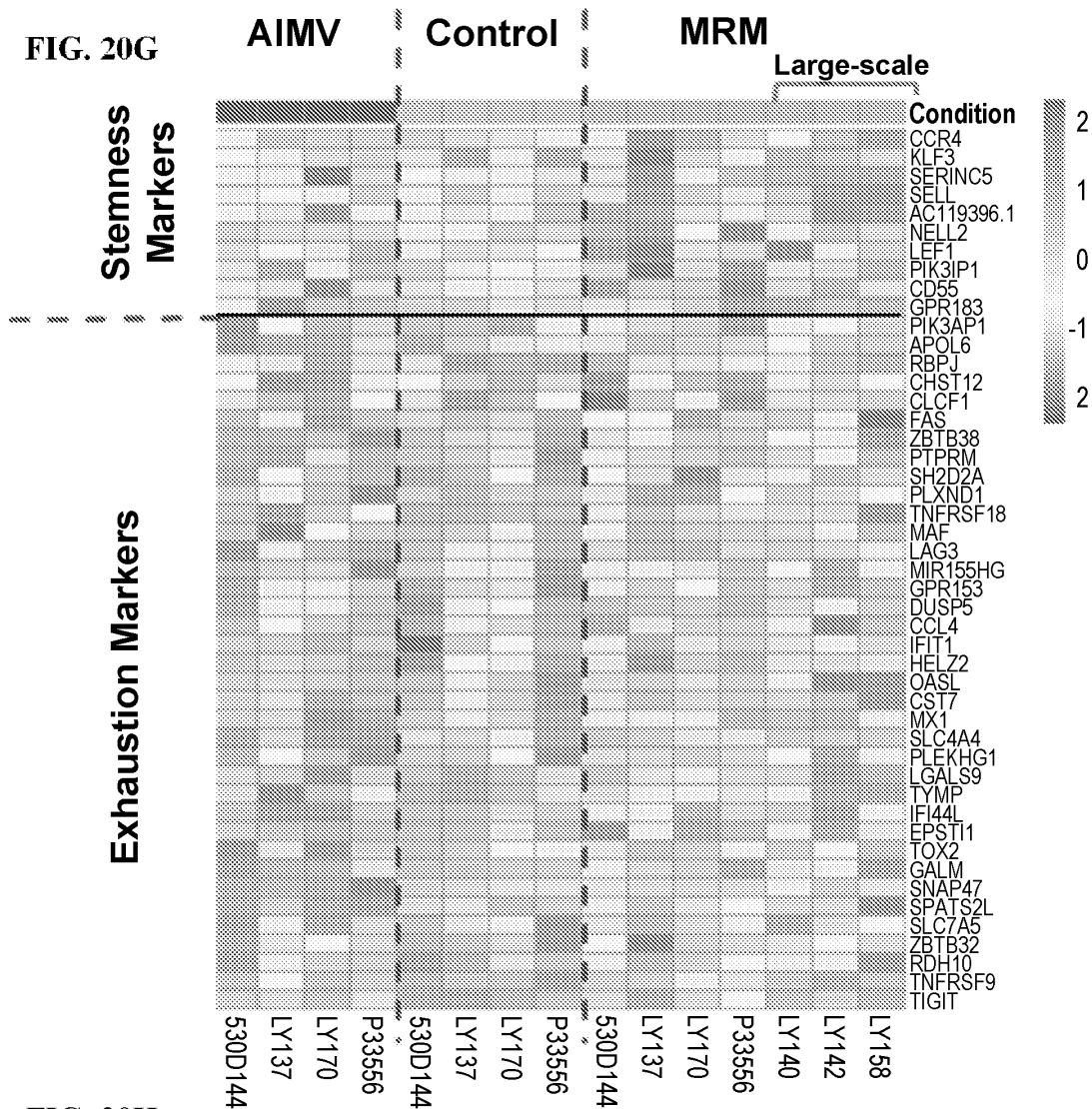


FIG. 20H

Genesets from literature	MRM vs AIMV		MRM vs Control	
	Adjusted p-val	NES Score	Adjusted p-val	NES Score
Rosenberg_DN_stem	1.05E-02	1.81	7.50E-04	2.05
Caushi.CD8.Stem-like.memory	8.91E-04	1.89	9.03E-05	2.20
Zhang_TEX_3Tumors	9.62E-03	-1.82	1.91E-04	-2.08
Zhang_TEX_onlyColon	1.69E-03	-1.88	6.53E-05	-2.38
SadeF_CD8_3_EXHAUST	7.71E-05	-1.97	6.53E-05	-2.11
EM.associated.GSE23321	7.71E-05	-2.01	6.53E-05	-2.08
Oliveira.TTE	1.62E-03	-1.79	6.53E-05	-2.19
Oliveira.Tumor-spec.TTE	2.89E-02	-1.53	6.53E-05	-2.14

FIG. 20I

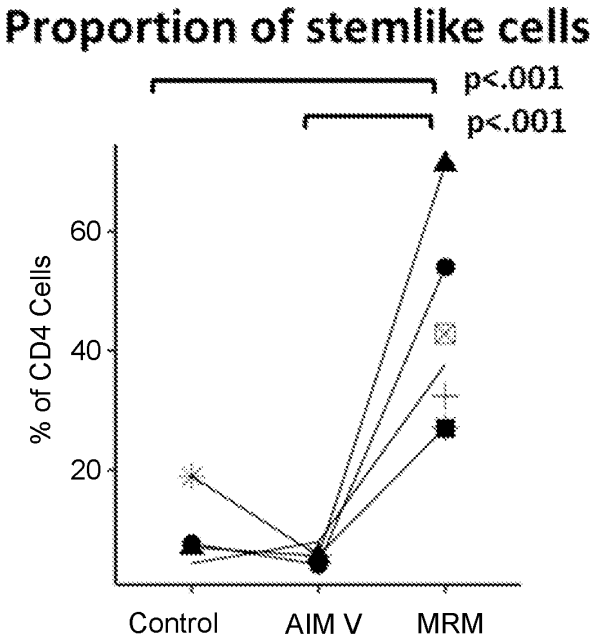


FIG. 20J

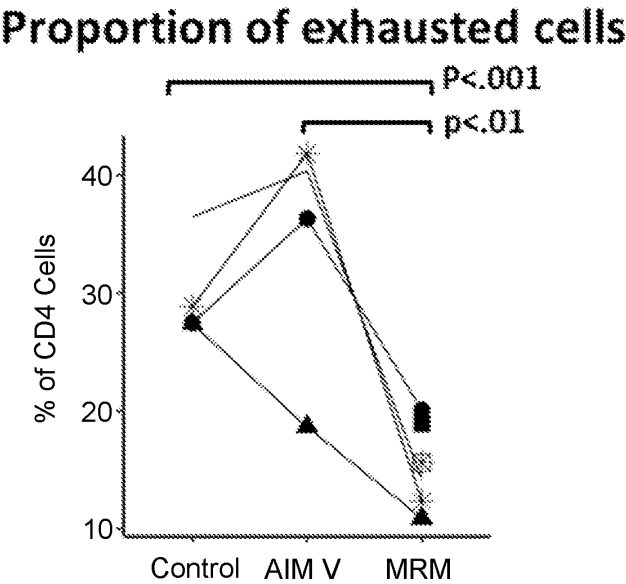


FIG. 21A

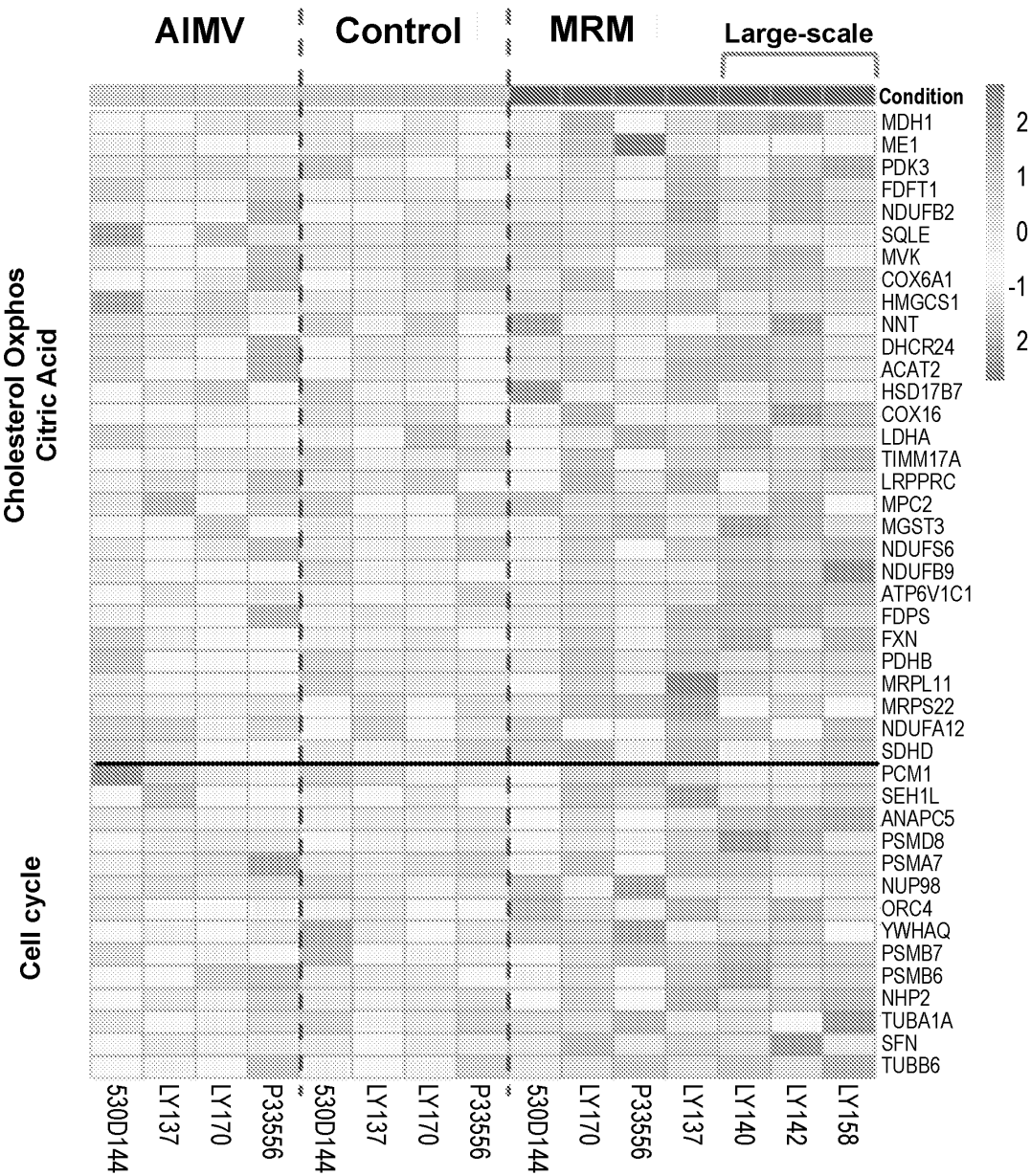


FIG. 21B

Genesets from literature	MRM vs AIMV		MRM vs Control	
	Adjusted p-val	NES Score	Adjusted p-val	NES Score
REACTOME_CHOLESTEROL_BIOSYNTHESIS	9.92E-05	2.49	1.87E-03	1.98
HALLMARK_OXIDATIVE_PHOSPHORYLATION	6.21E-03	1.57	8.56E-03	1.53
REACTOME_THE_CITRIC_ACID_TCA_CYCLE_AND_RESPIRATORY_ELECTRON_TRANSPORT	1.68E-04	1.81	4.62E-03	1.60
HALLMARK_GLYCOLYSIS	0.15	-1.26	0.075	-1.35
REACTOME_CELL_CYCLE	1.91E-03	1.52	6.85E-04	1.60
REACTOME_G2_M_CHECKPOINTS	9.92E-05	2.05	9.97E-05	1.98
REACTOME_MITOTIC_METAPHASE_AND_ANAPHASE	2.00E-03	1.76	9.52E-04	1.77
REACTOME_M_PHASE	1.63E-03	1.63	5.17E-04	1.69
REACTOME_THE_ROLE_OF_GTSE1_IN_G2_M_PROGRESSION_AFTER_G2_CHECKPOINT	6.77E-03	1.77	5.57E-04	1.92

FIG. 22A

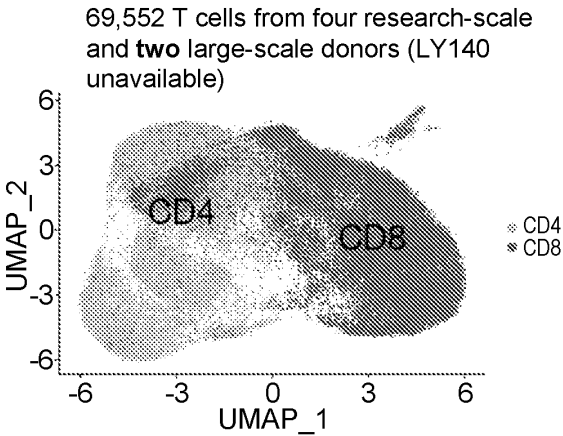


FIG. 22B

530D144

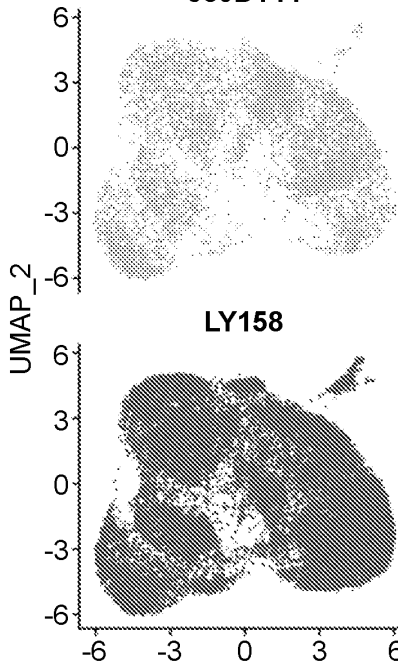


FIG. 22C

LY137

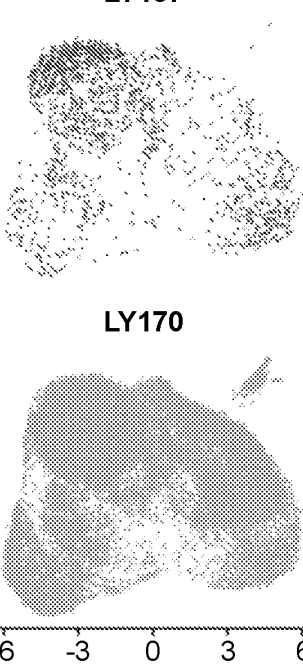
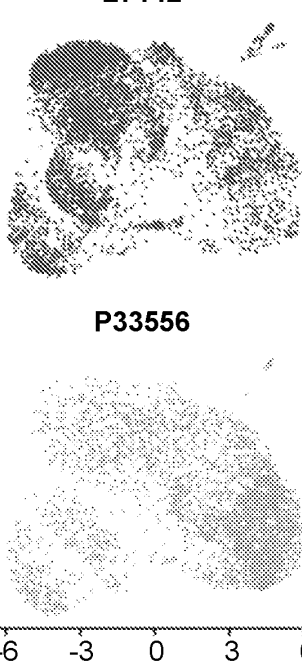
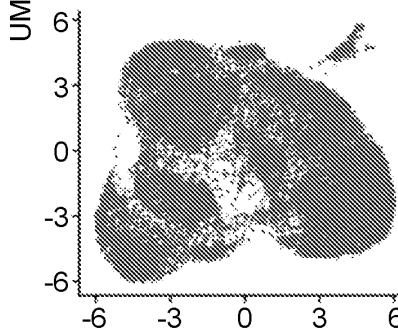


FIG. 22D

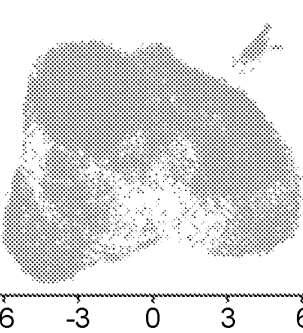
LY142



LY158



LY170



P33556

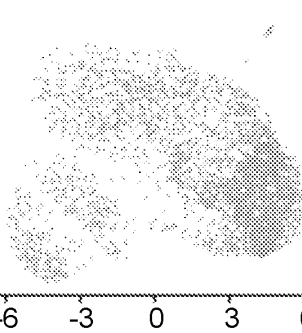
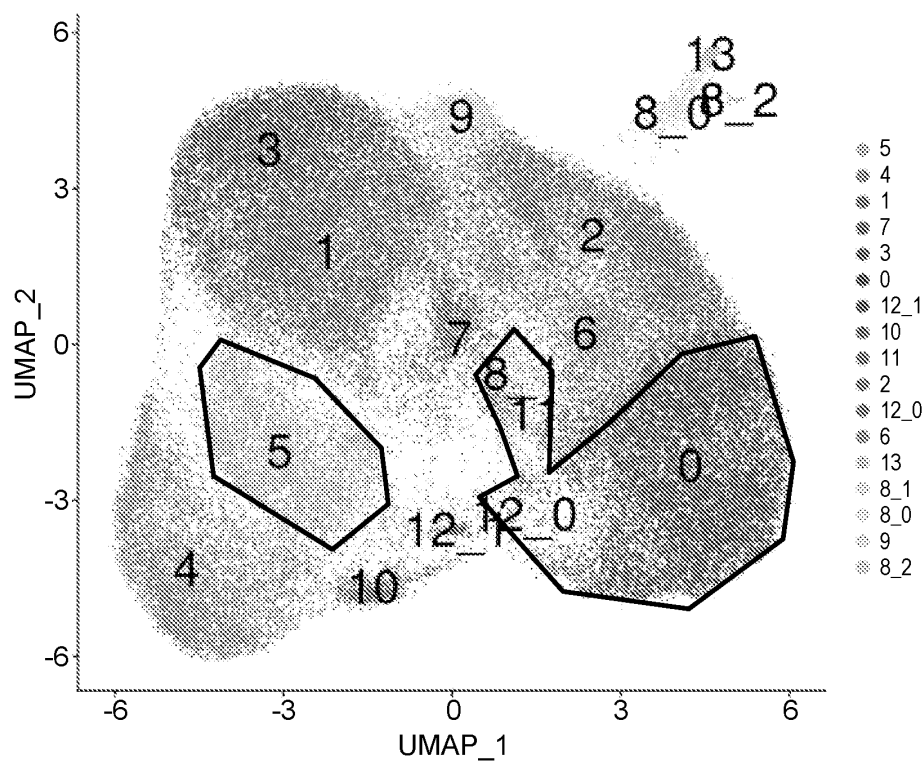


FIG. 22E

FIG. 22F

FIG. 22G

FIG. 22H



**Clones from 0, 5, 8_1 and 12_0 are
phenotype-based putative tumor
reactive**

FIG. 23A

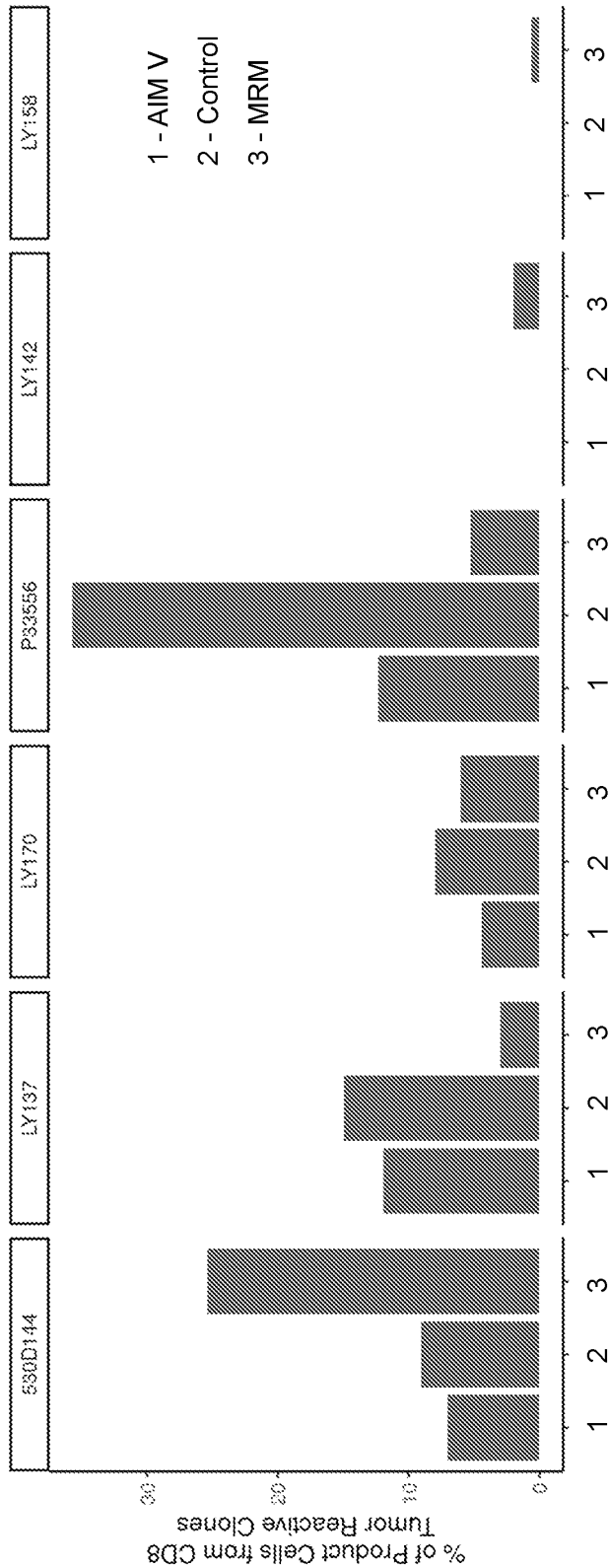


FIG. 23B

	Day 0		MRM		AIM V CD8		Control CD8	
	CD8 TR Clones (SC)		CD8 TR Clones (Bulk)		TR Clones (Bulk)		TR Clones (Bulk)	
530D144	57		54		55		46	
LY137	57		10		16		31	
LY170	66		53		56		60	
P33556	40		29		23		38	
LY142	51		33		x		x	
LY158	94		56		x		x	

FIG. 23C

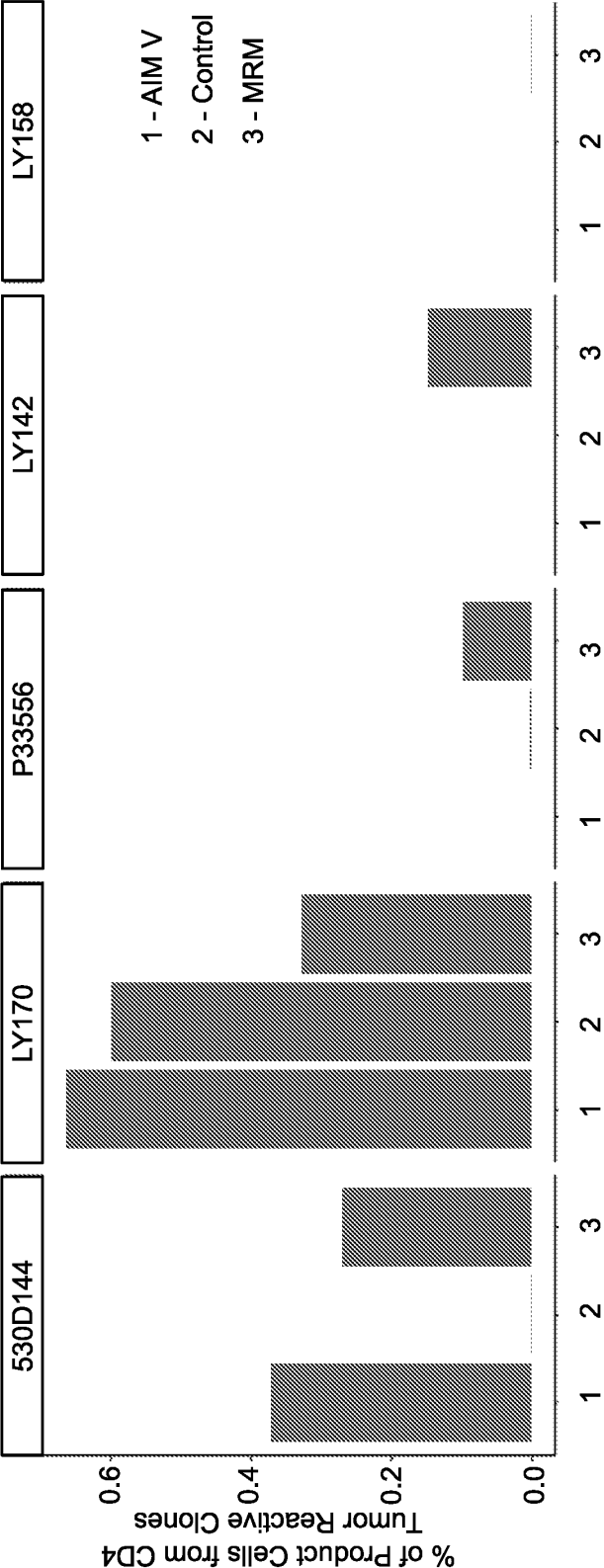


FIG. 23D

	Day 0 CD4 TR Clones (SC)	MRM CD4 TR Clones (Bulk)	AIM V CD4 TR Clones (Bulk)	Control CD4 TR Clones (Bulk)
530D144	2	2	2	1
LY137	0	0	0	0
LY170	16	9	15	10
P33556	1	1	0	1
LY142	5	3	x	x
LY158	2	1	x	x

FIG. 23E

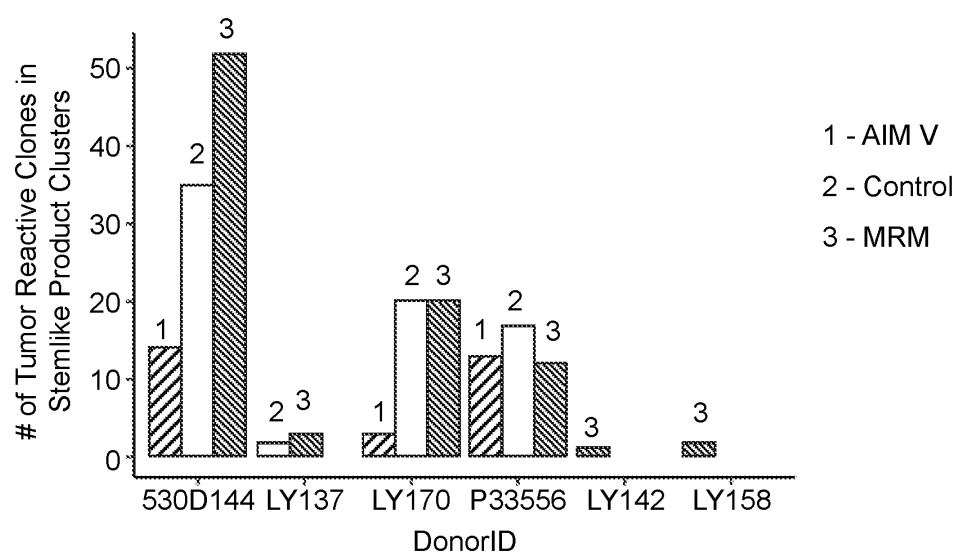


FIG. 24A

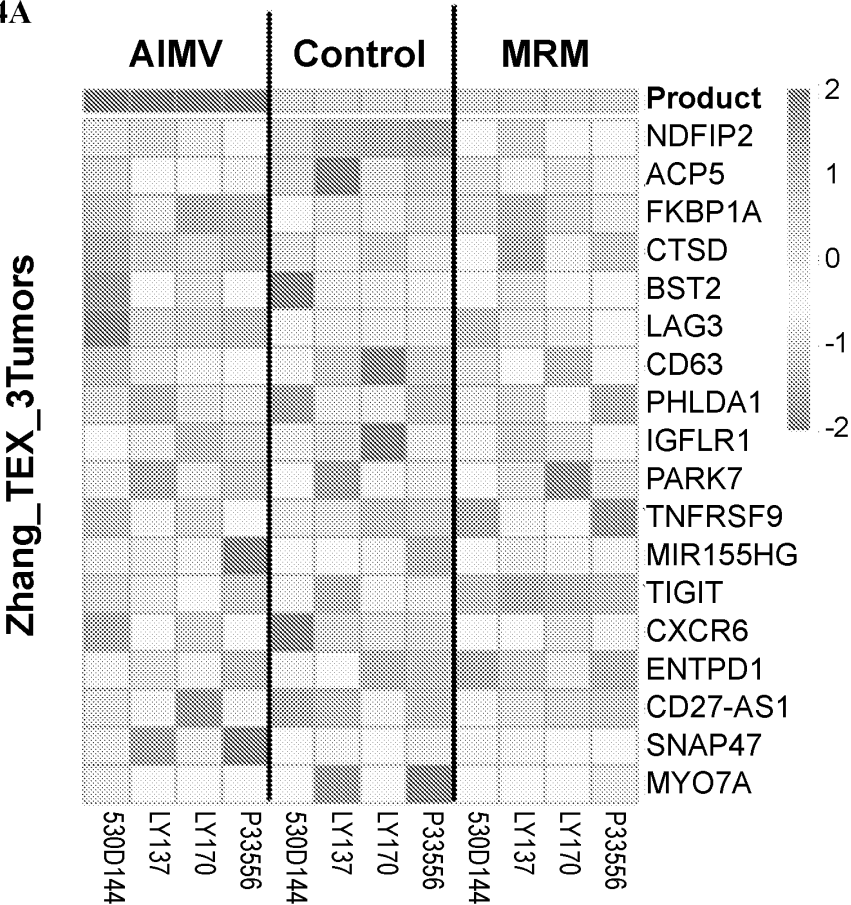


FIG. 24B

Genesets from literature	MRM vs AIMV		MRM vs Control	
	Adjusted p-val	NES Score	Adjusted p-val	NES Score
Zhang_TEX_3Tumors	.158	-1.49	1.1e-4	-2.22
Zhang_TEX_onlyColon	.14	-1.44	1.1e-4	-2.31
SadeF_CD8_3_EXHAUST	1.2e-4	-2.06	1.1e-4	-2.46
Oliveira.TTE	.1537	-1.37	1.1e-4	-2.09
Oliveira.Tumor-spec.TTE	1.2e-2	-1.69	4.4e-4	-1.96
Oliveira.TEM	2.6e-3	1.99	.02	1.81
Caushi.CD8-Effector(3)	1.0e-4	2.27	.07	1.55
SadeF_CD8_4_MEMORY_EFF	1e-4	2.68	1.8e-3	1.75

FIG. 24C

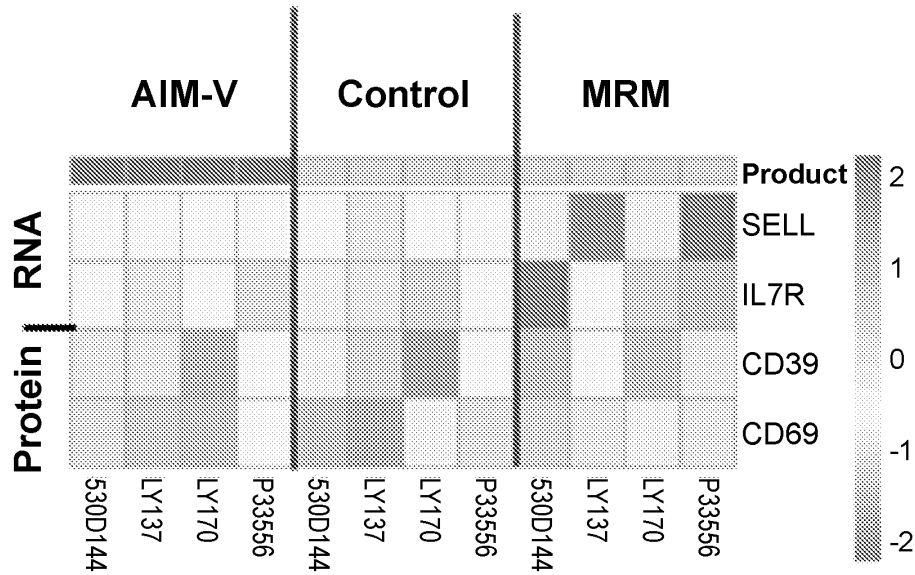


FIG. 24D

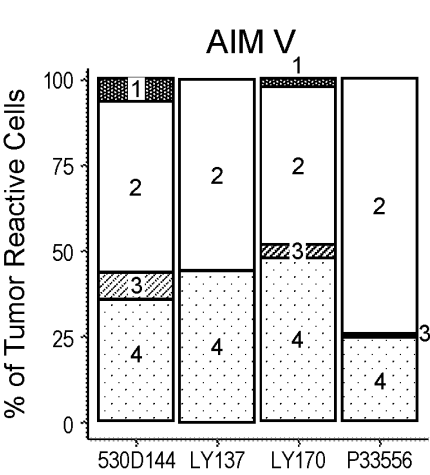


FIG. 24E

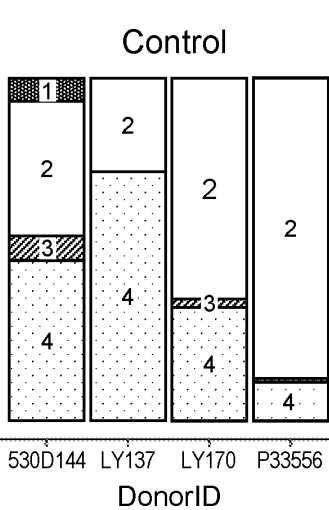
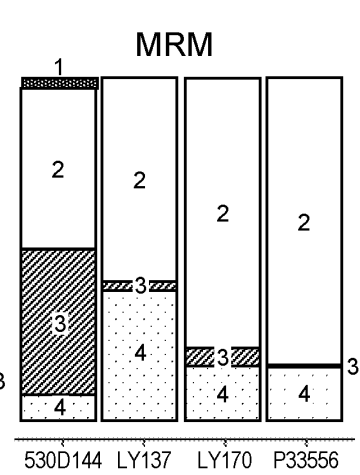


FIG. 24F



CD39CD69
1 CD39-CD69+
2 CD39+CD69-
3 DN
4 DP

FIG. 25A

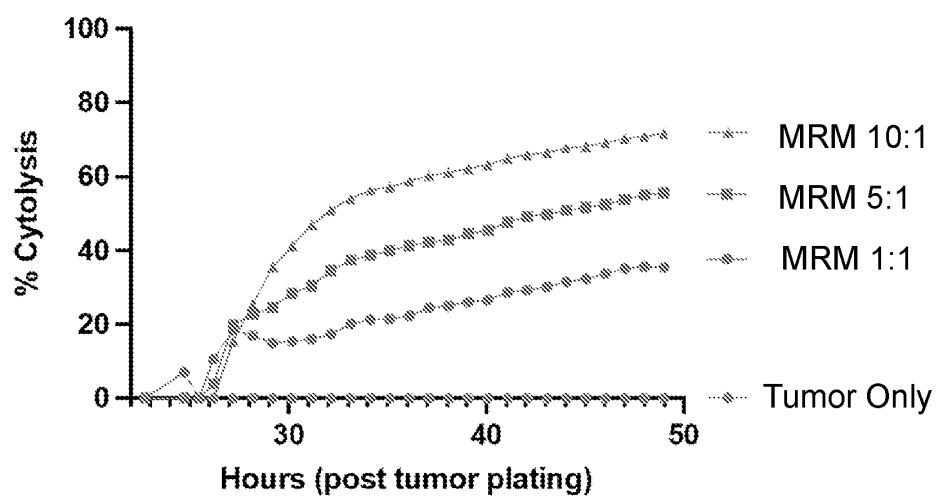


FIG. 25B

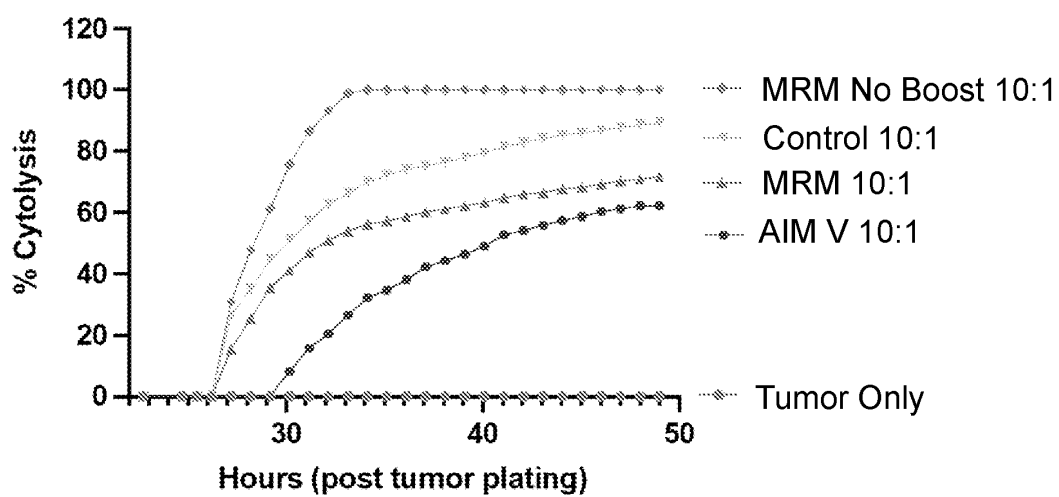


FIG. 26A

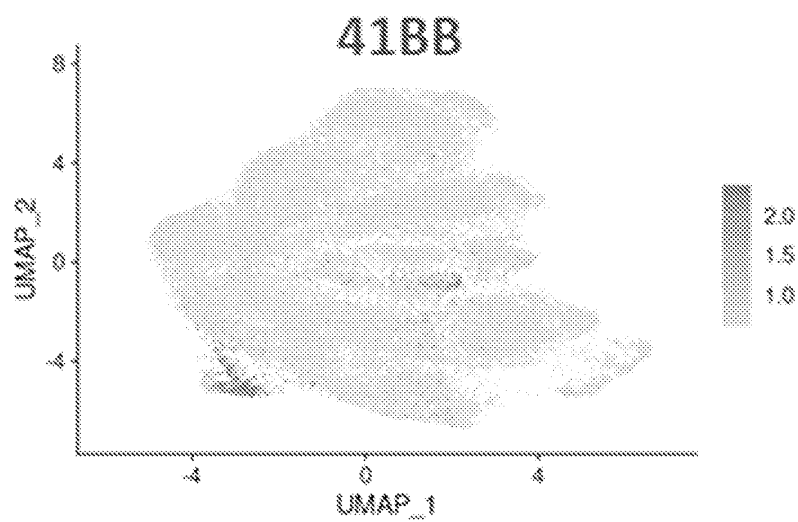


FIG. 26B

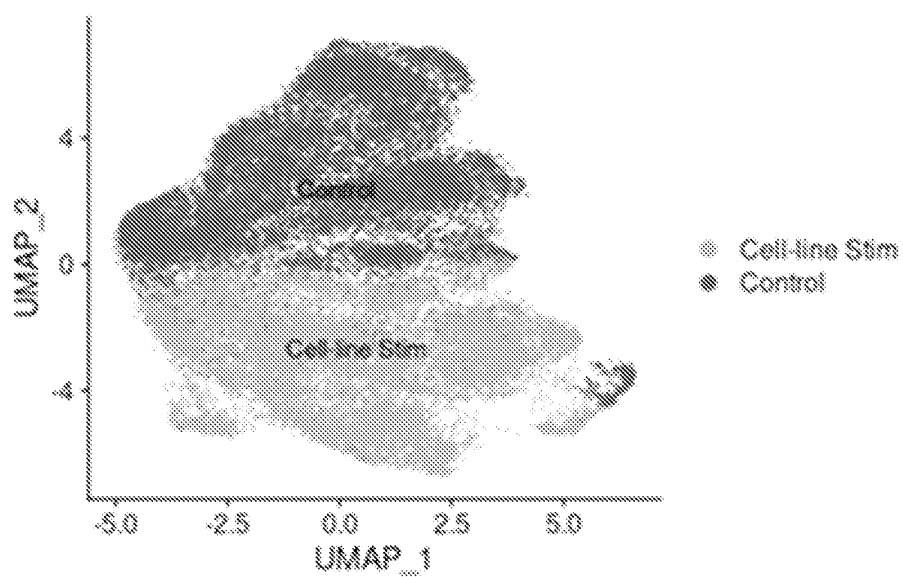
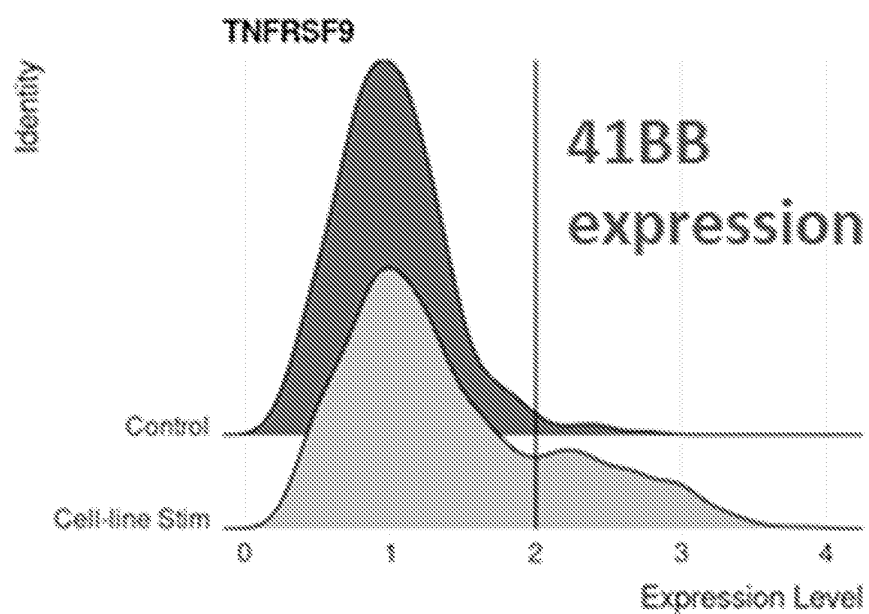


FIG. 26C



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1 1 1 2

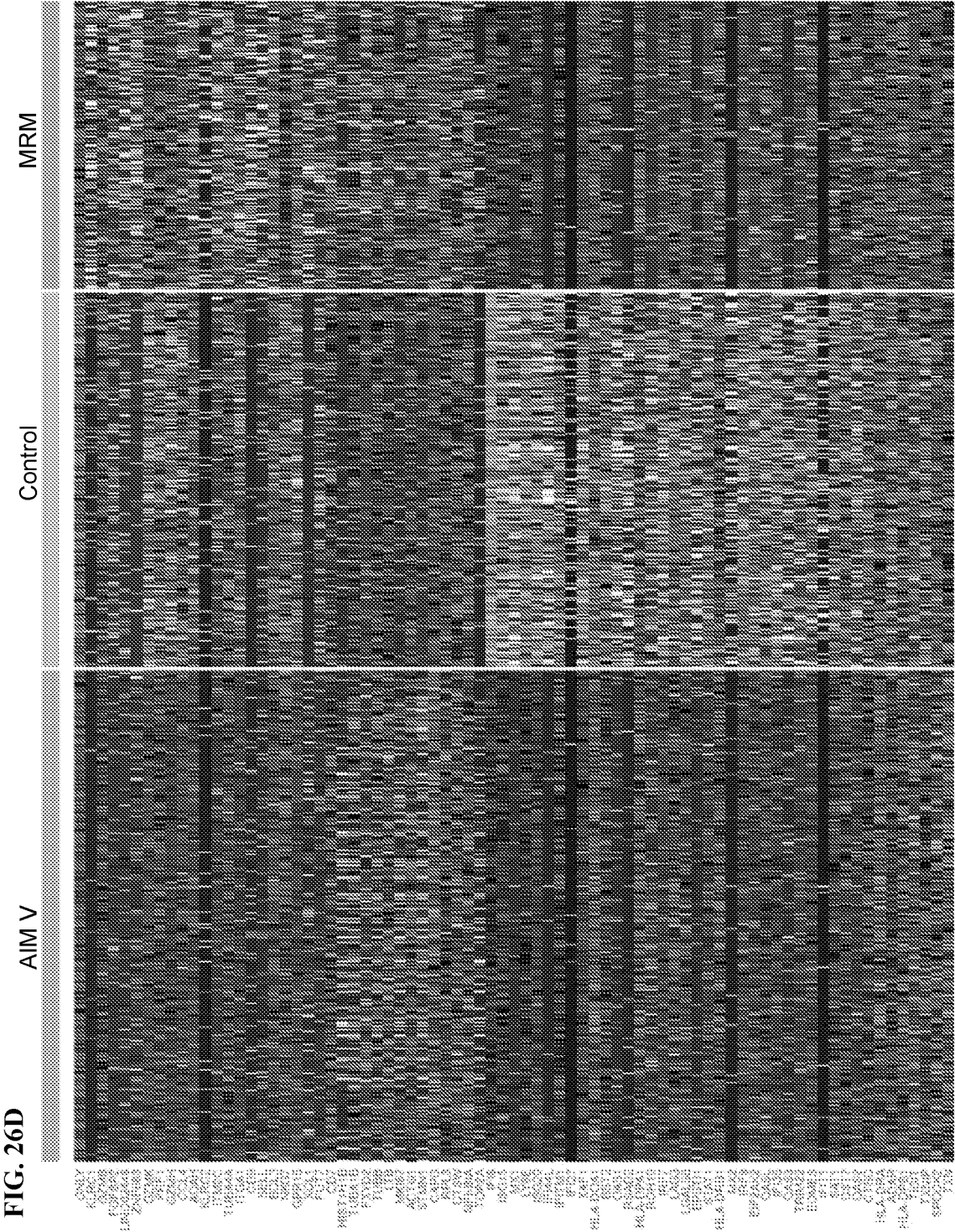


FIG. 26E**Tumor Reactive Clones in Stimulated Cells**

Product	# of 41BB+ Clones
AIM-V	13
MRM	29
Media Control	38
MRM-NoBoost	58
Total Unique Clones	115

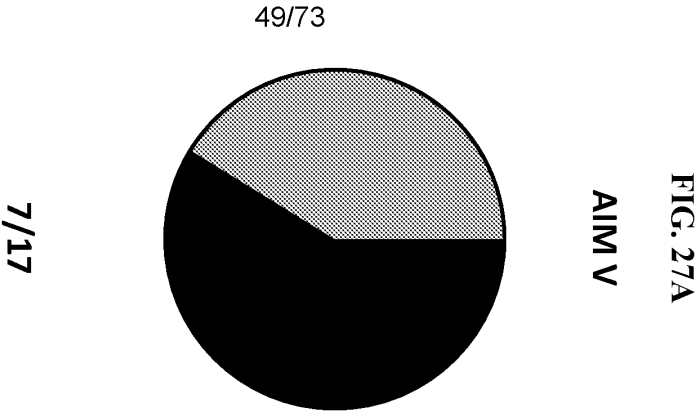
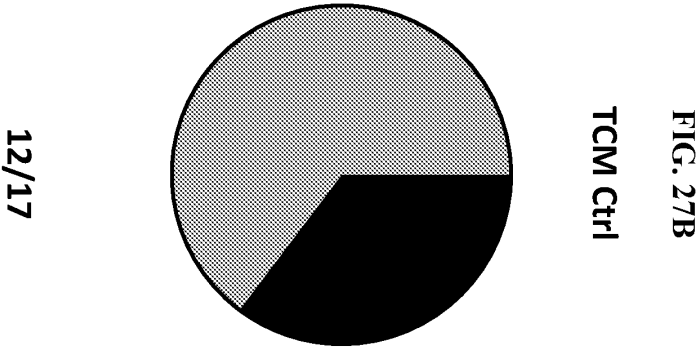
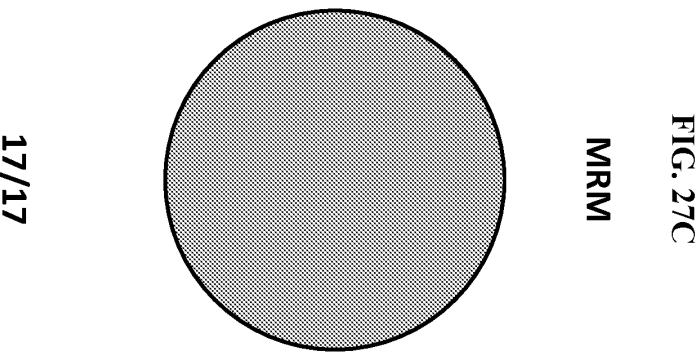
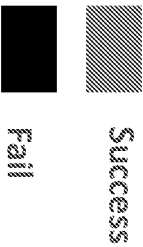


FIG. 27D
Metastatic Colon

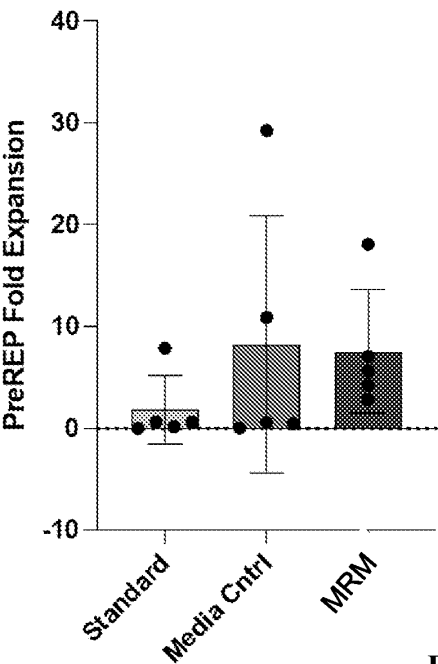


FIG. 27E
Metastatic Melanoma

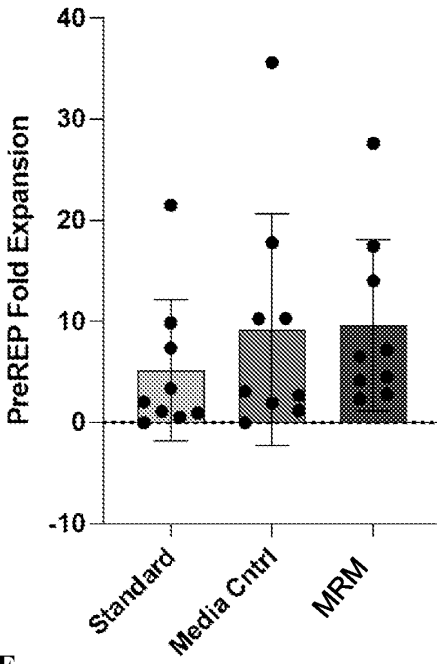


FIG. 27F
NSCLC

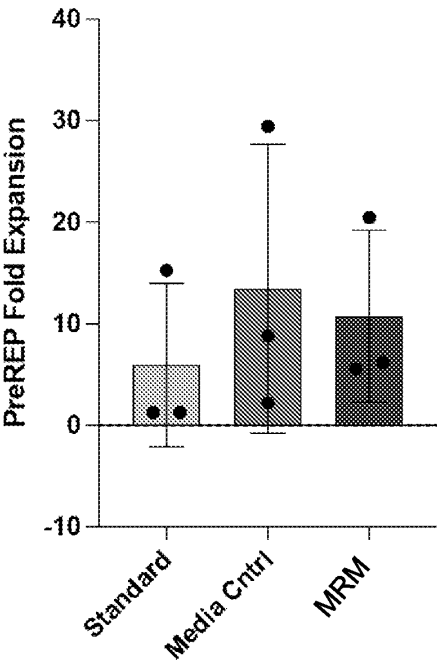


FIG. 27G

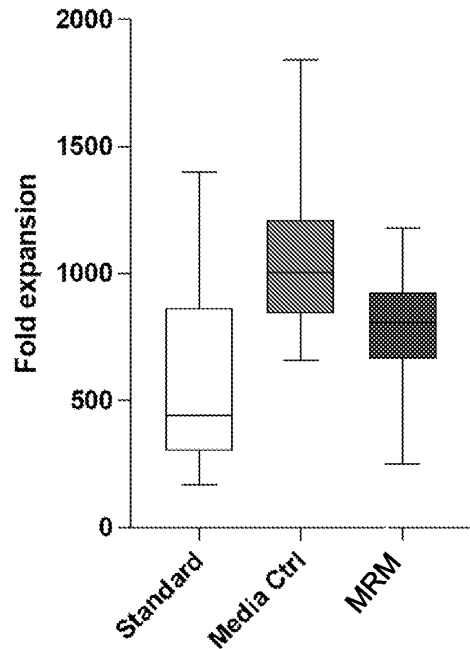
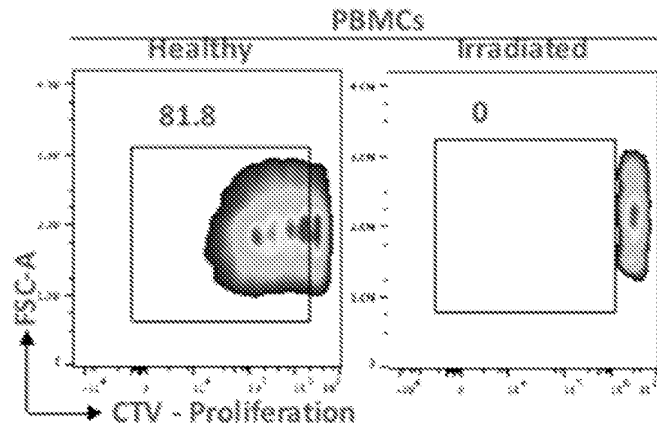


FIG. 27H

FIG. 27I

FIG. 28

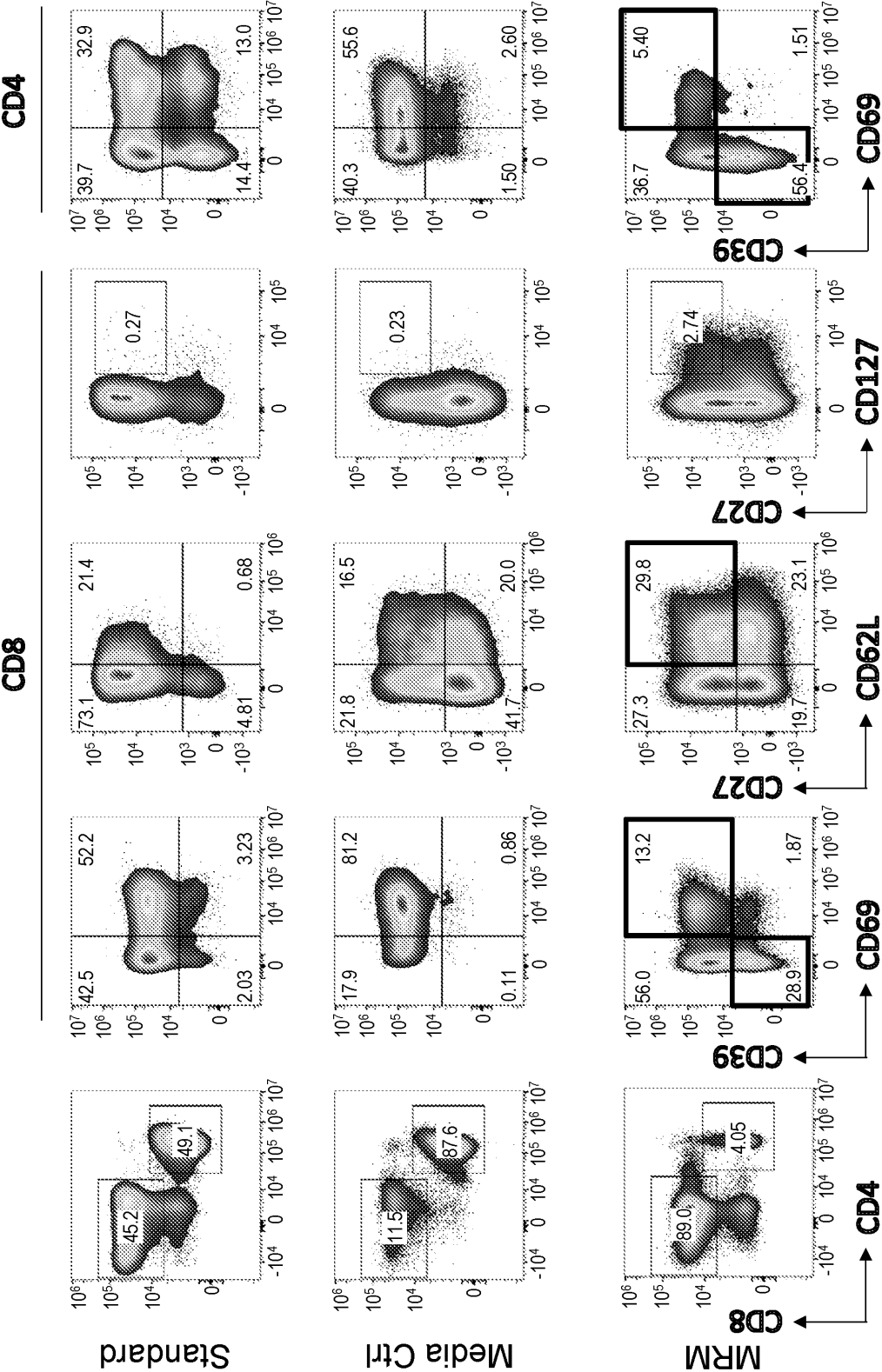


FIG. 29A

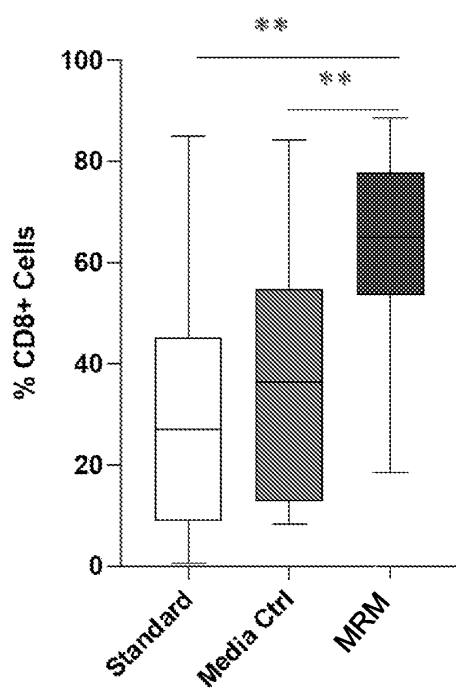
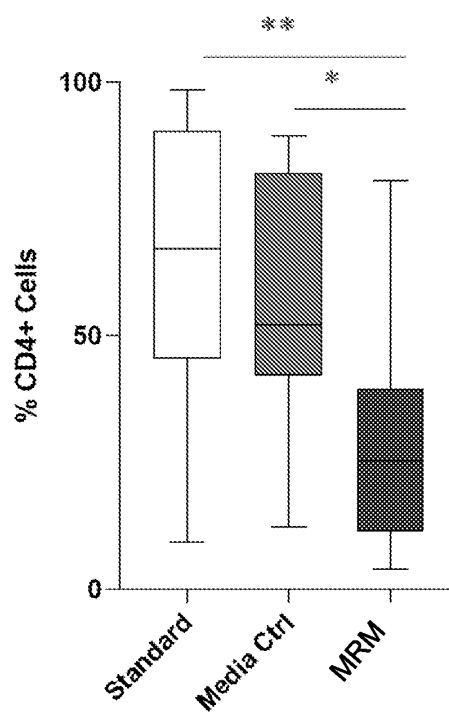


FIG. 29B



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FIG. 30A

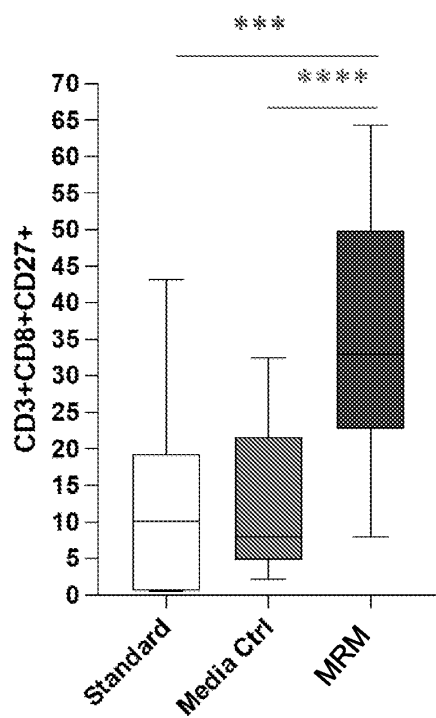


FIG. 30B

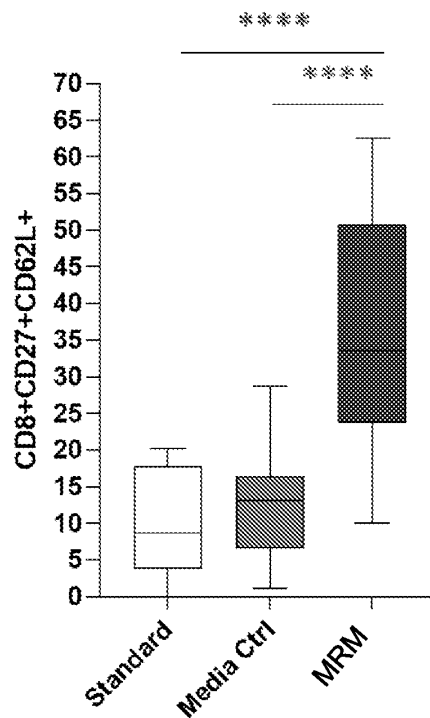


FIG. 30C

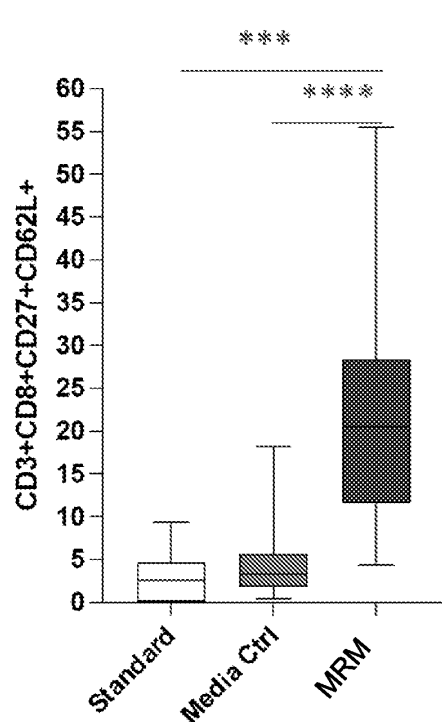


FIG. 30D

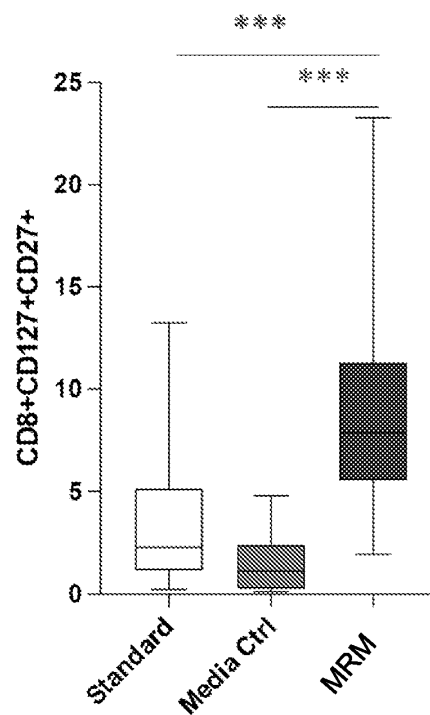


FIG. 31A

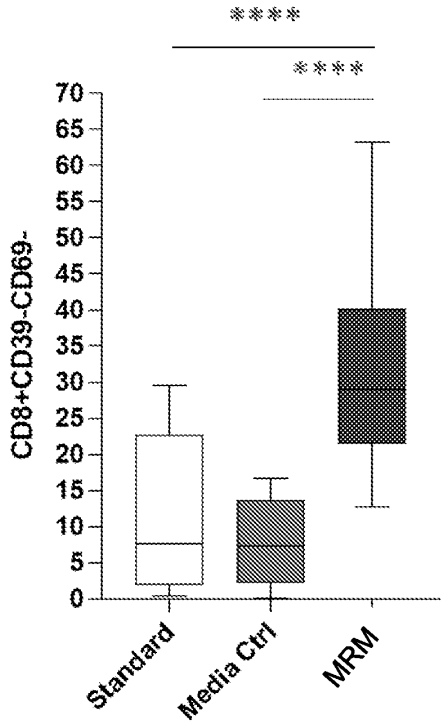


FIG. 31B

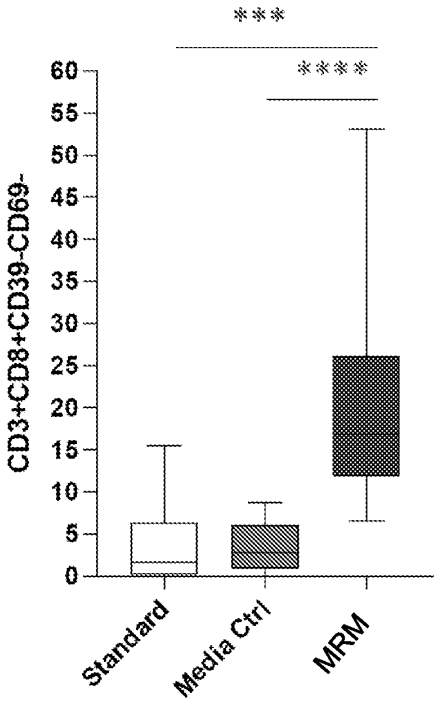


FIG. 31C

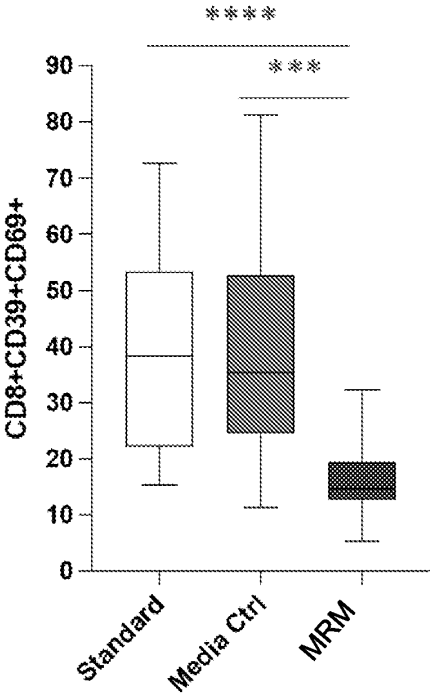


FIG. 32A

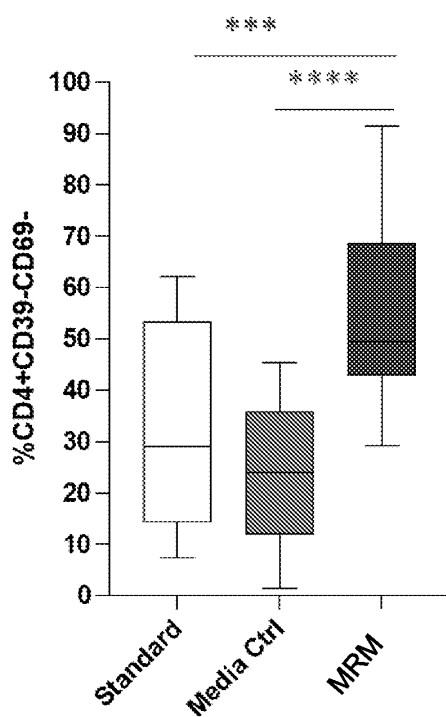
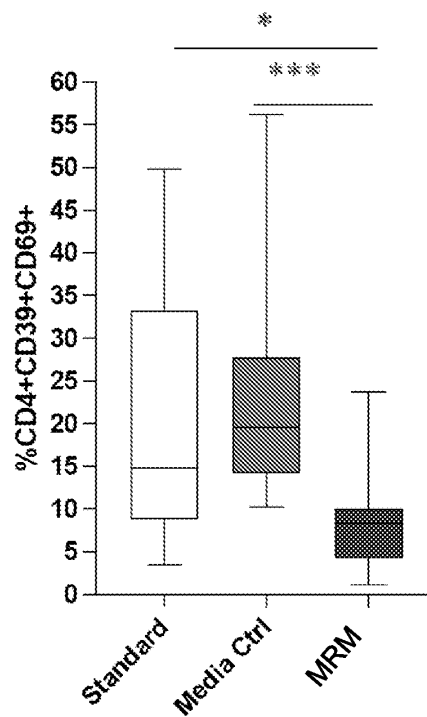


FIG. 32B



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FIG. 33

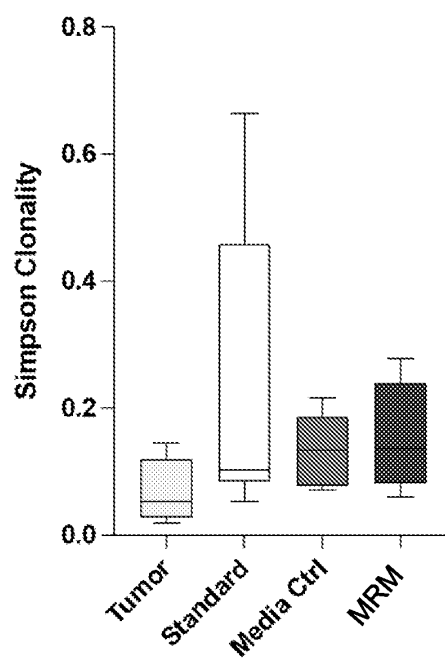


FIG. 34

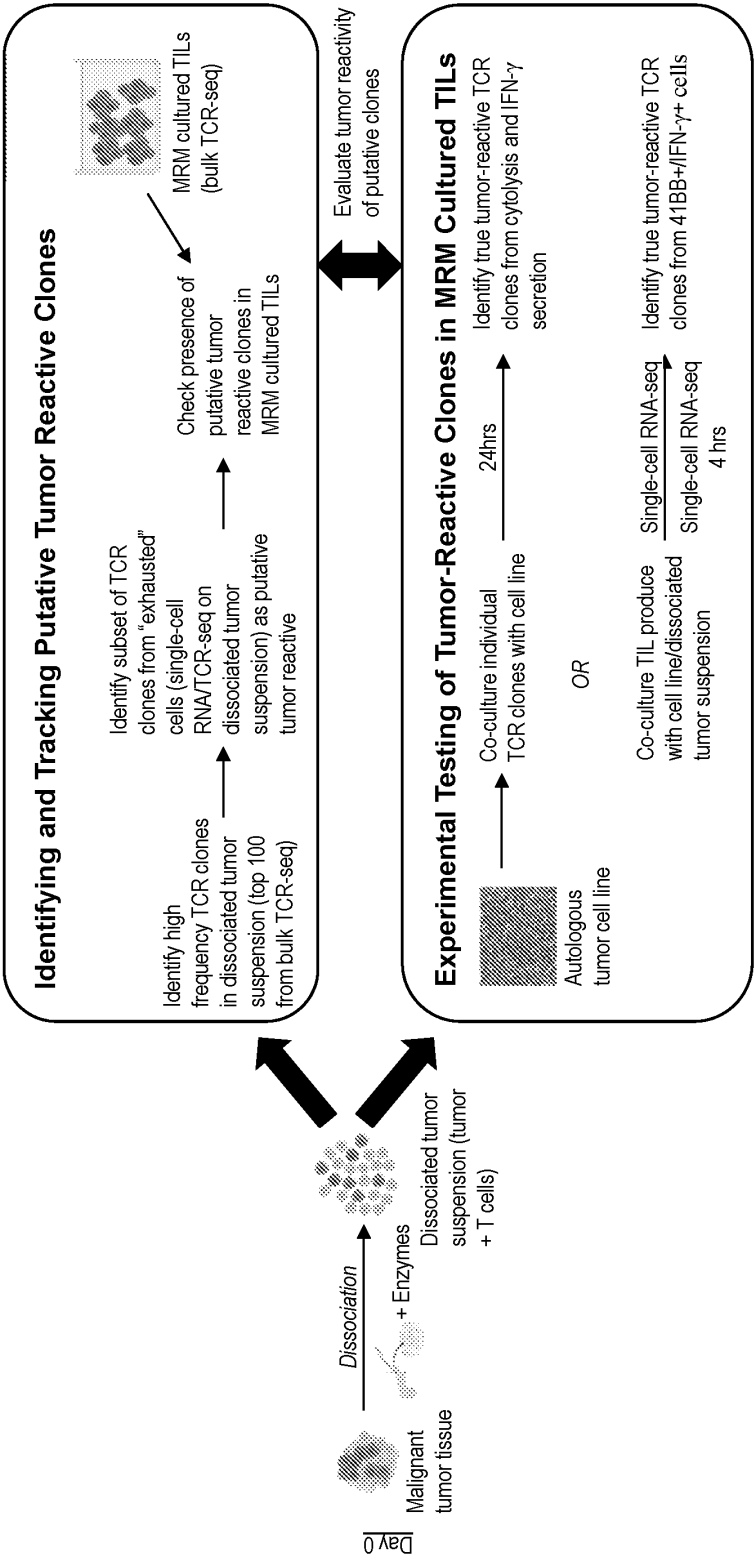


FIG. 35A

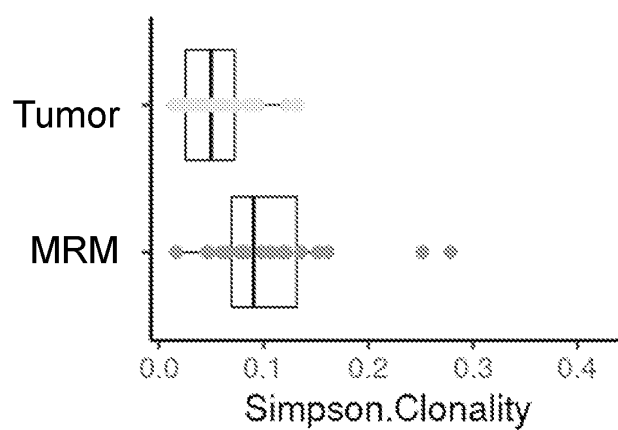


FIG. 35B

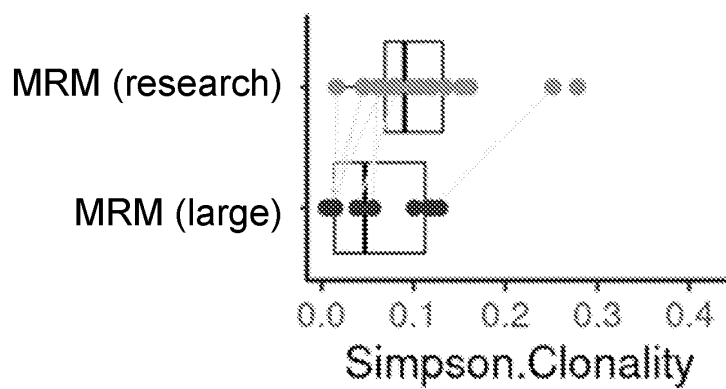
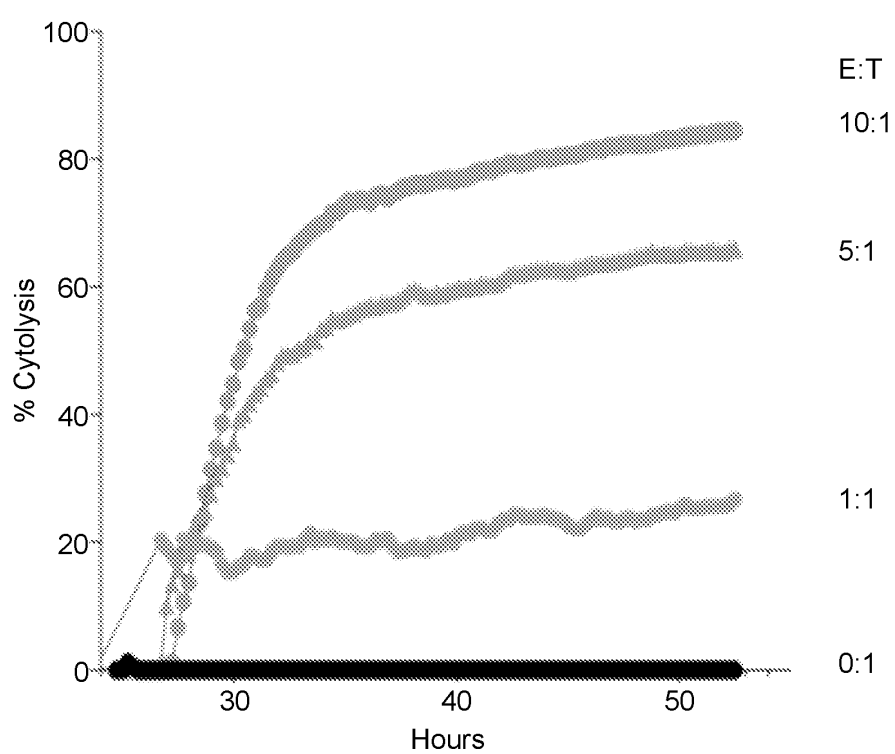


FIG. 36A



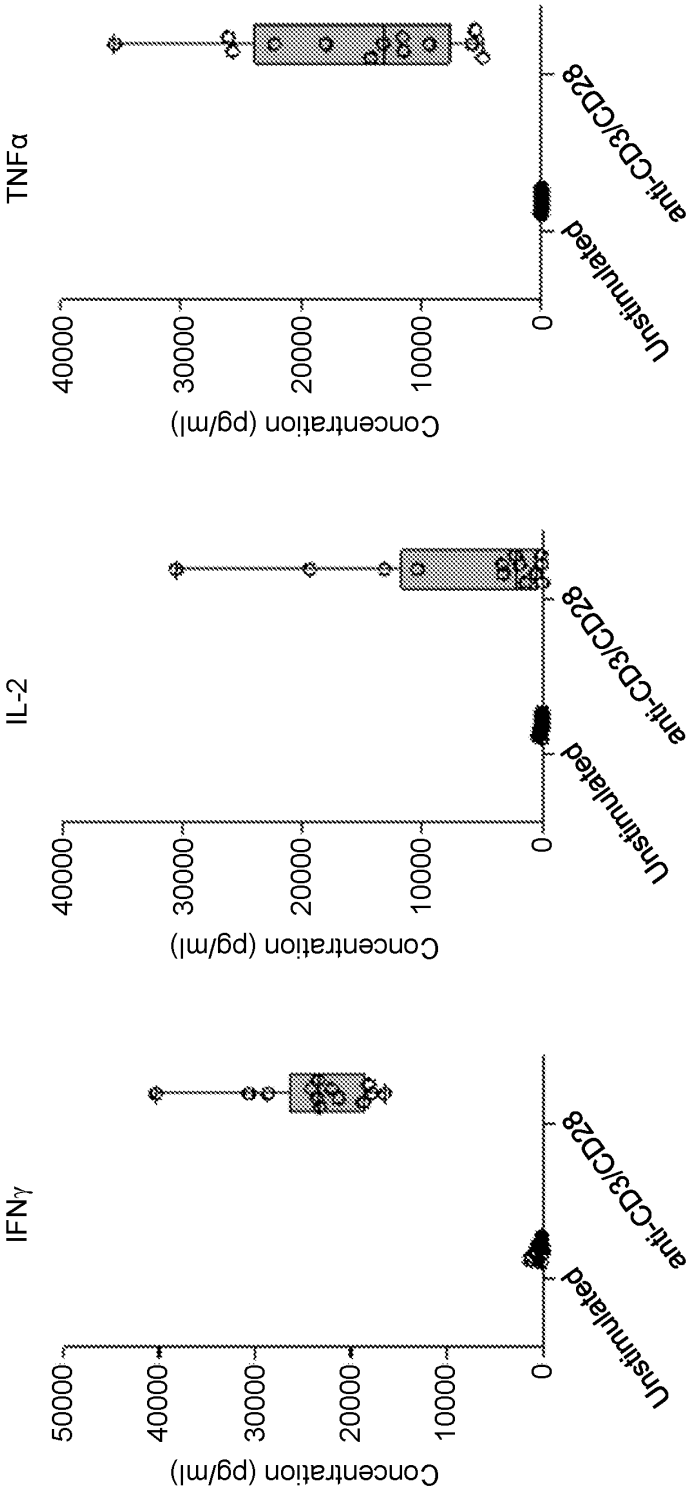


FIG. 36B

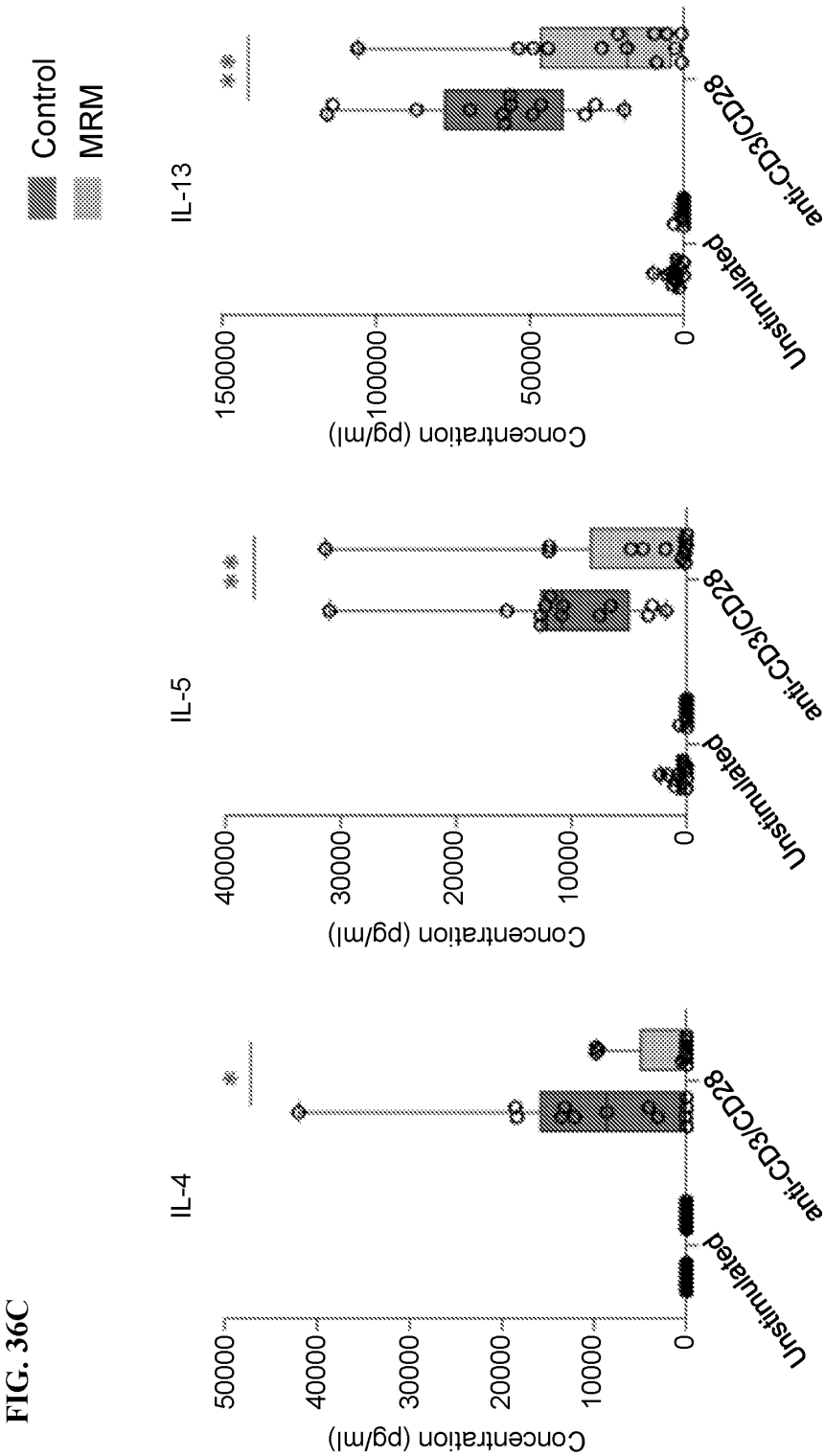


FIG. 37A

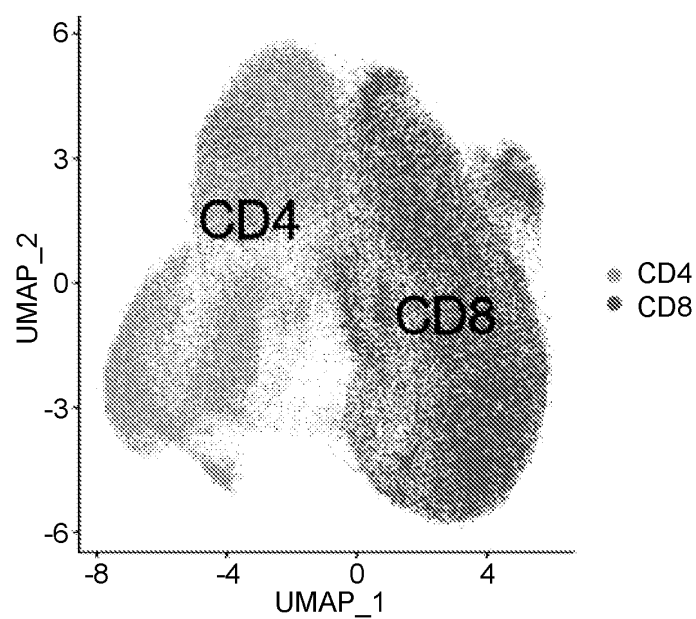


FIG. 37B

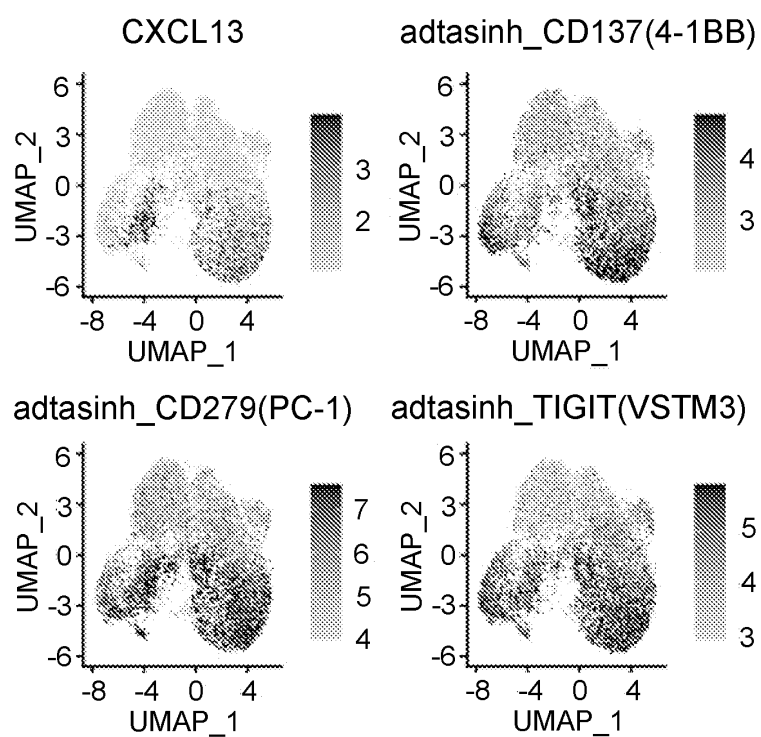


FIG. 37C

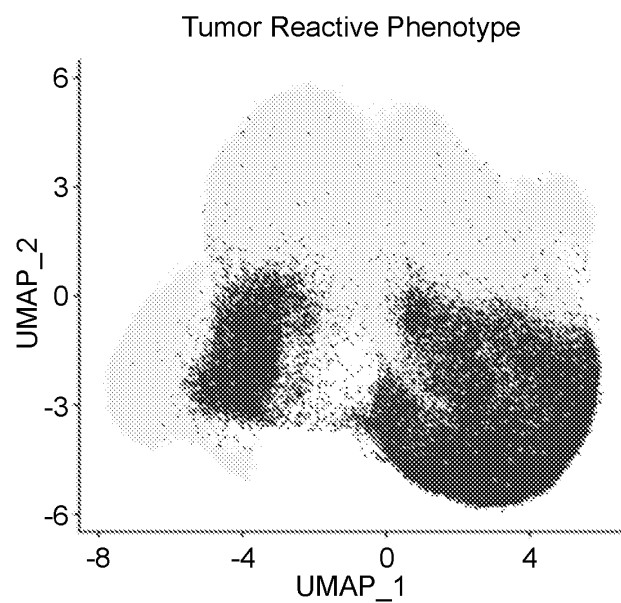


FIG. 37D

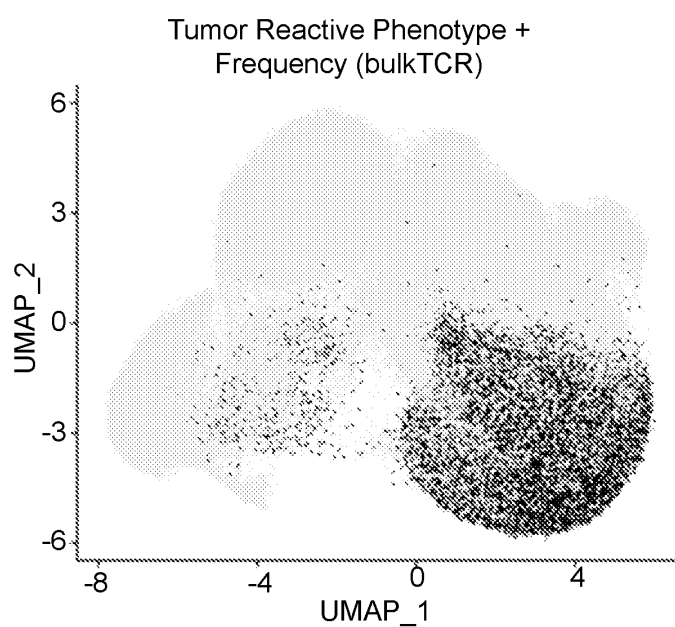


FIG. 38A

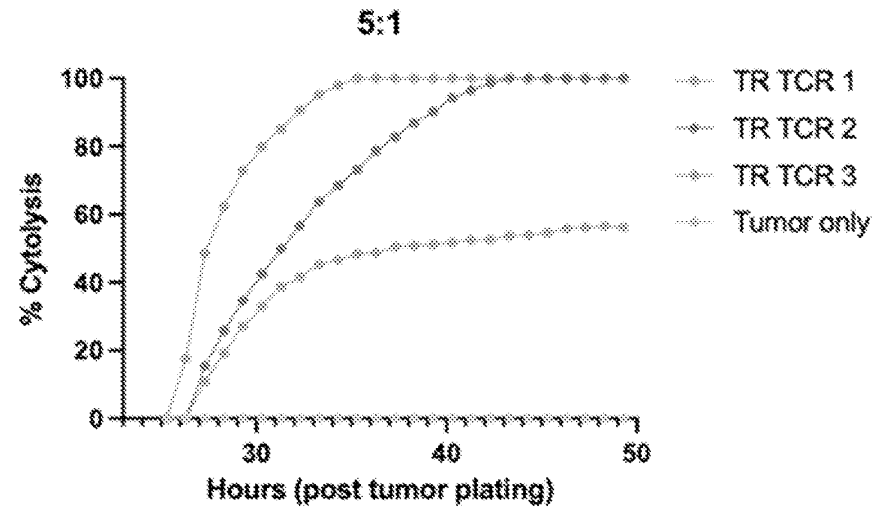


FIG. 38B

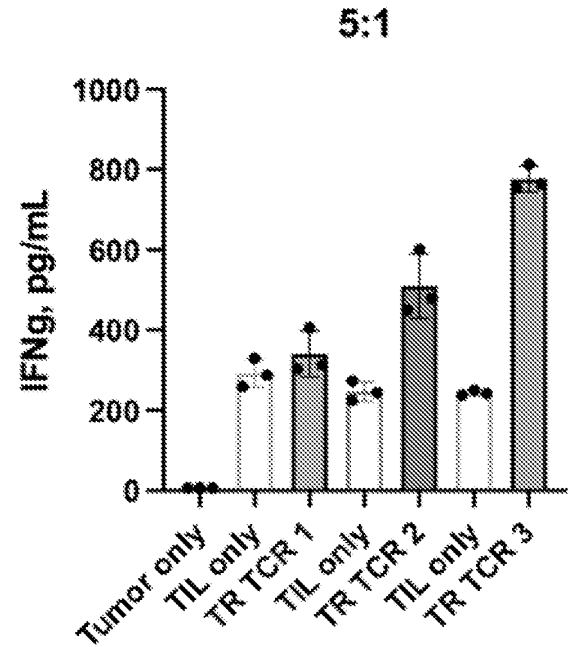


FIG. 39

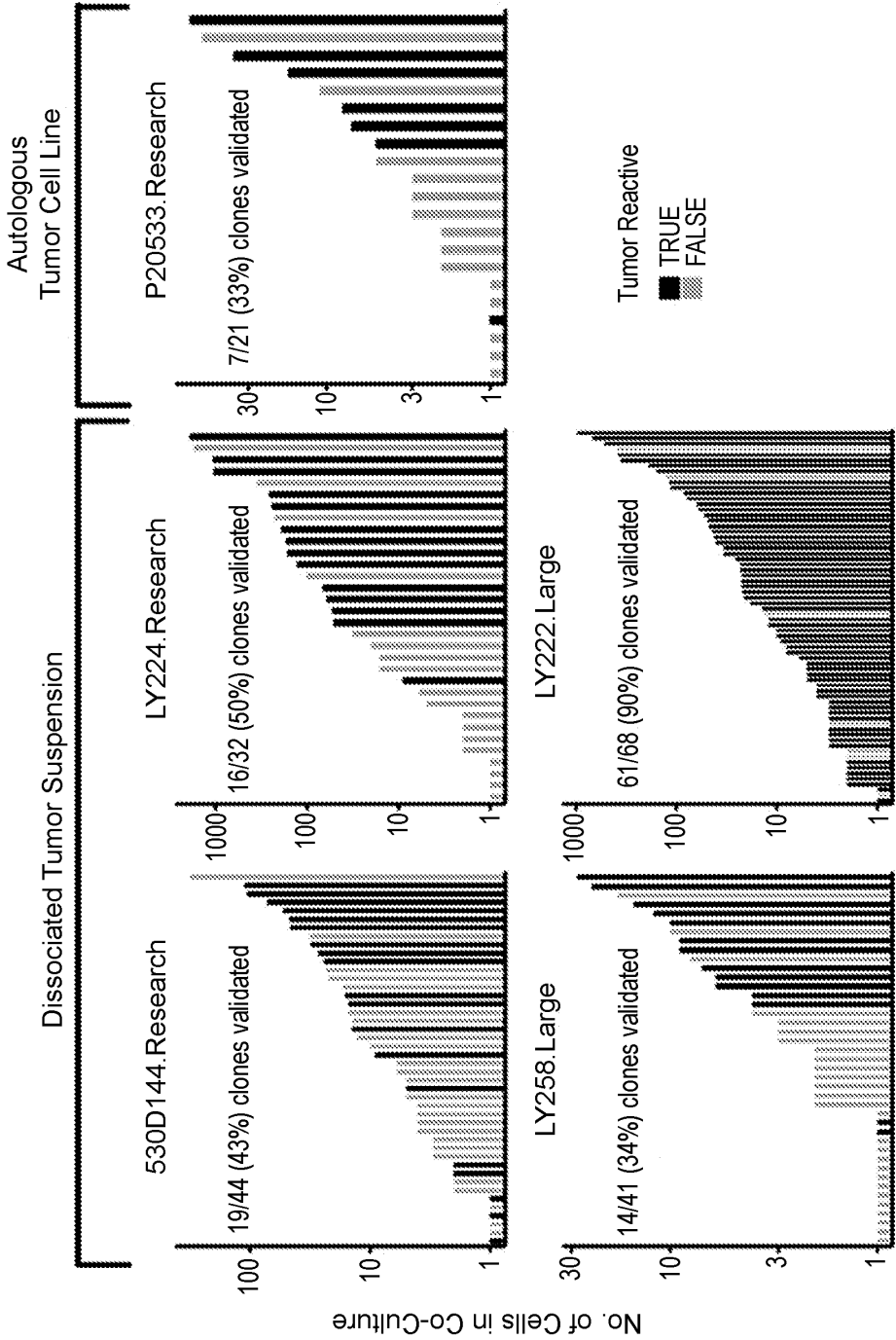


FIG. 40A

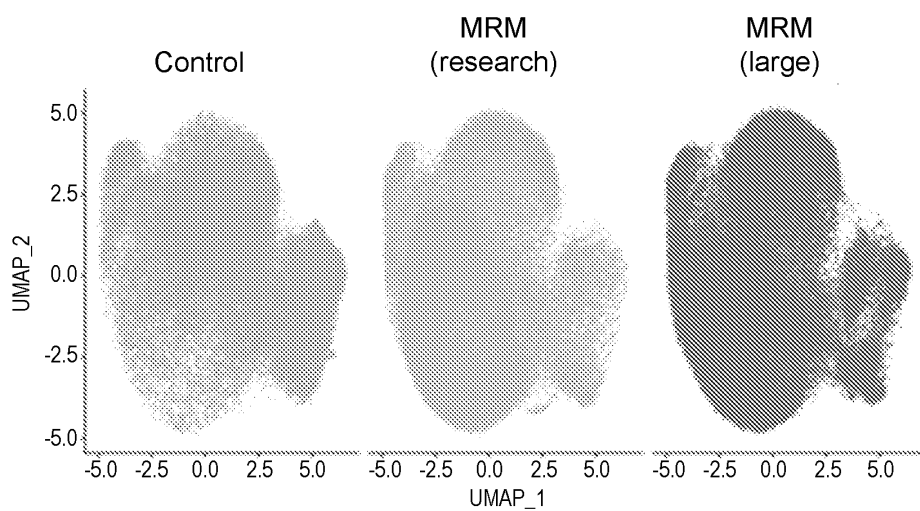


FIG. 40B

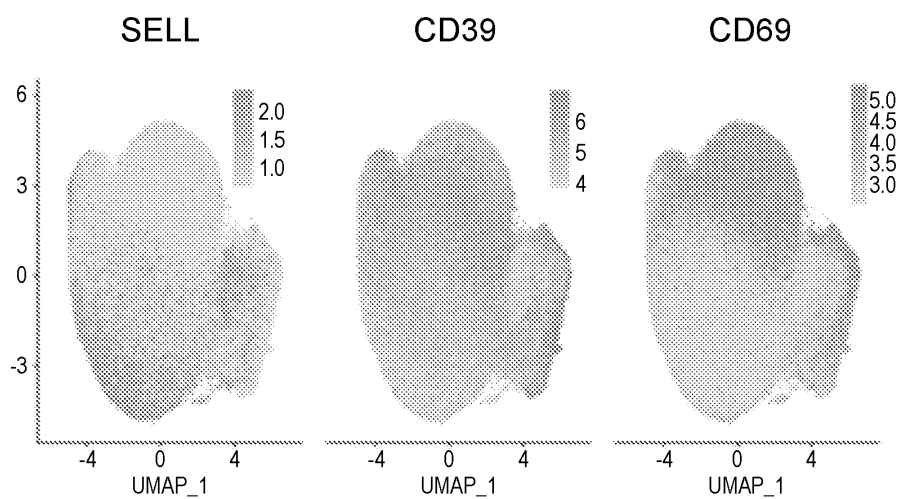


FIG. 40C

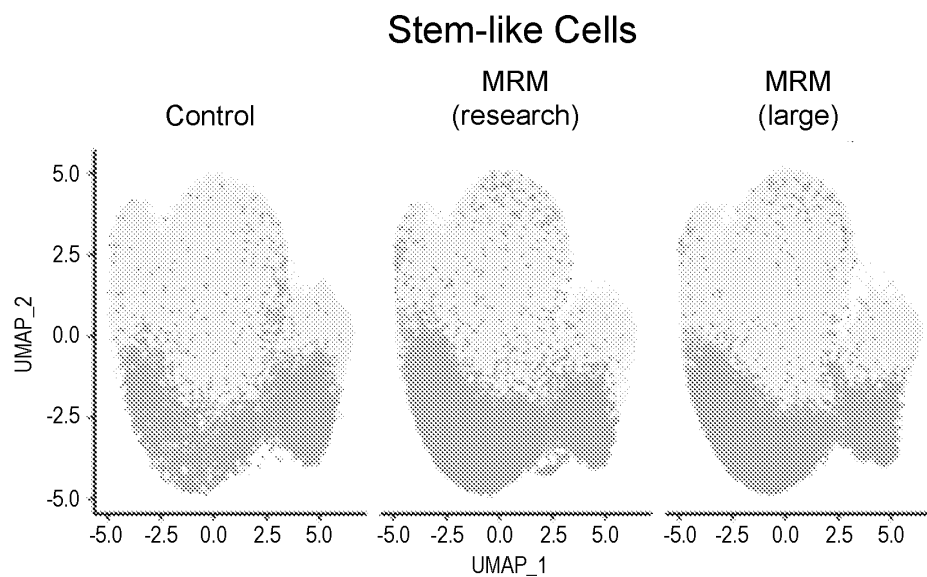


FIG. 40D

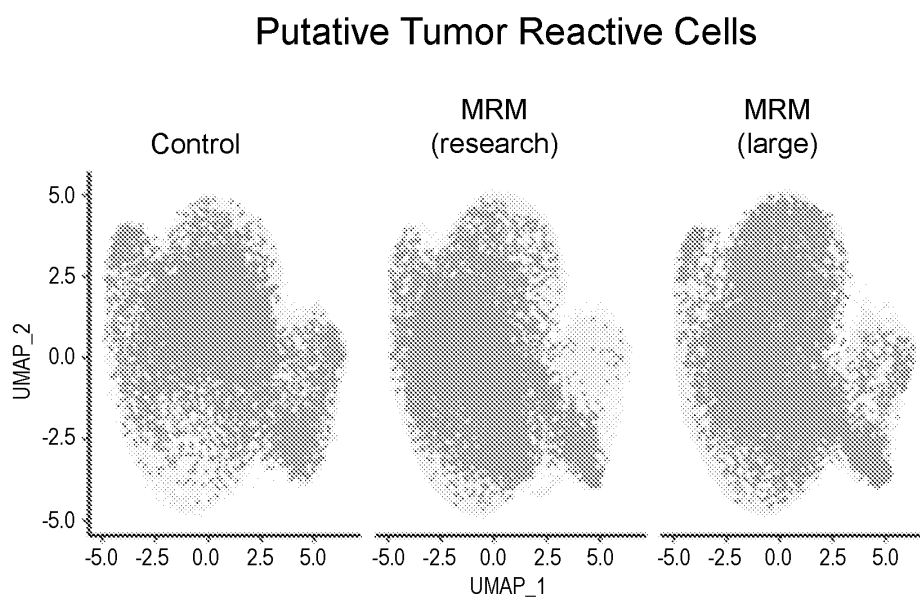


FIG. 41A

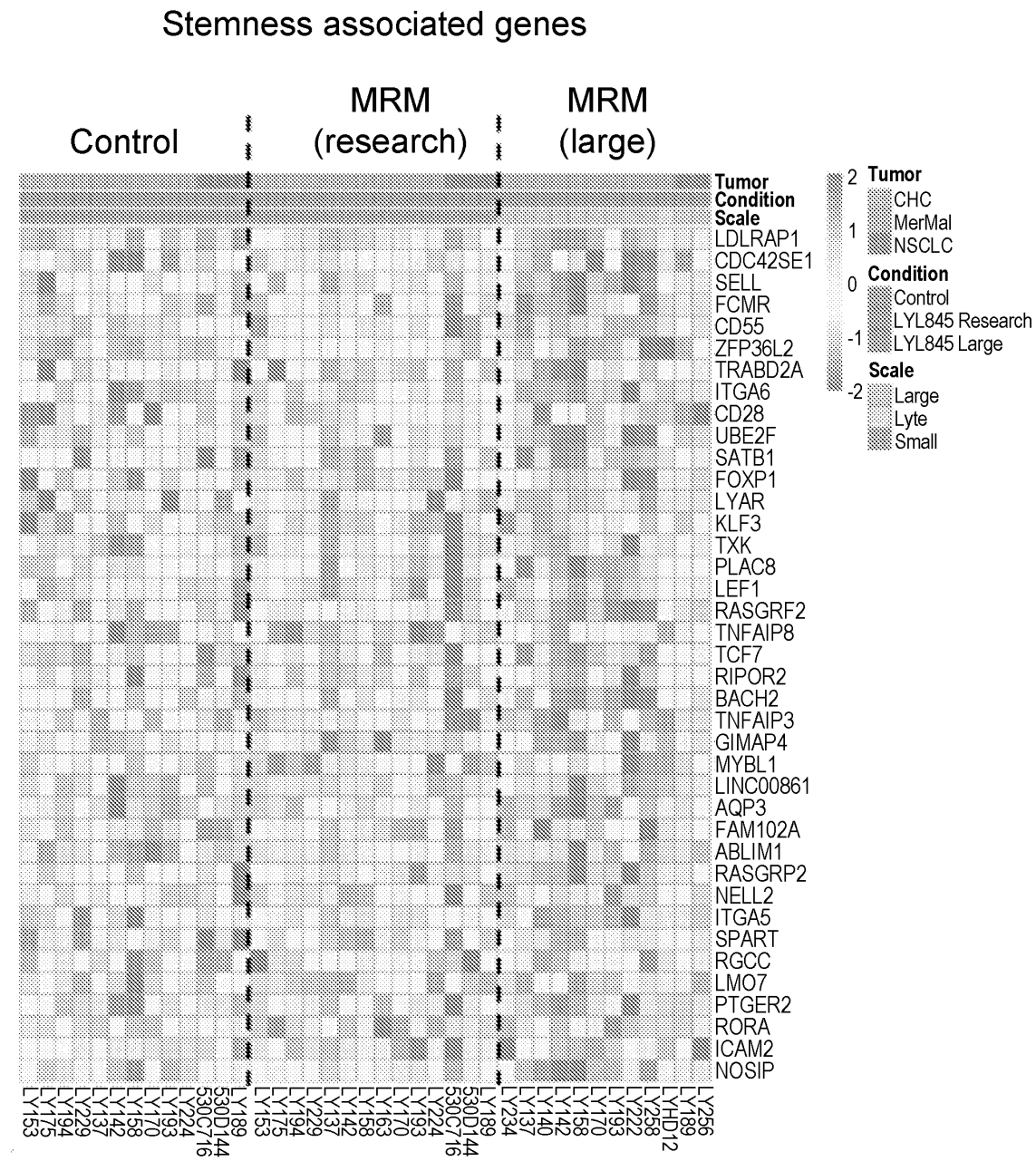


FIG. 41B

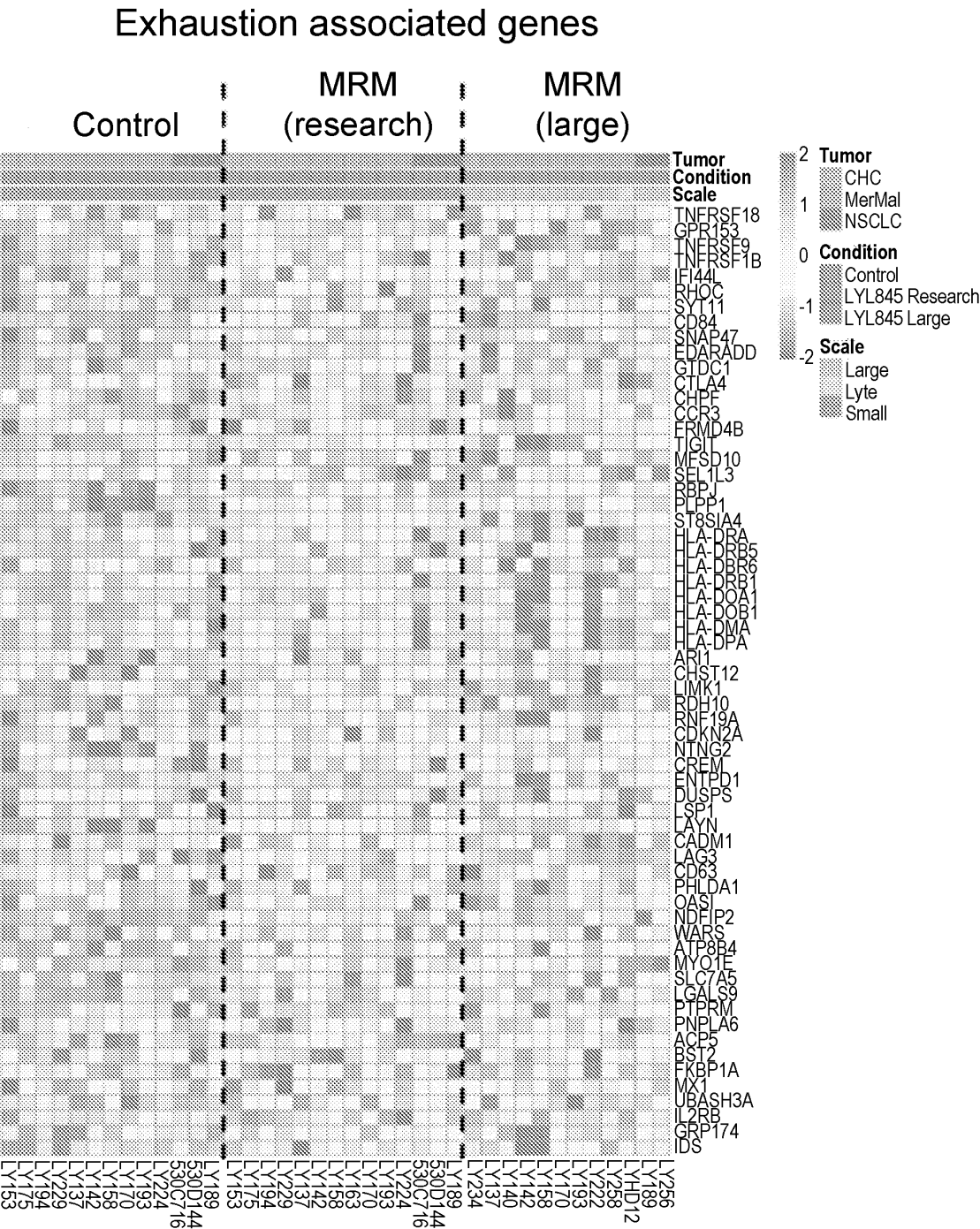


FIG. 41C

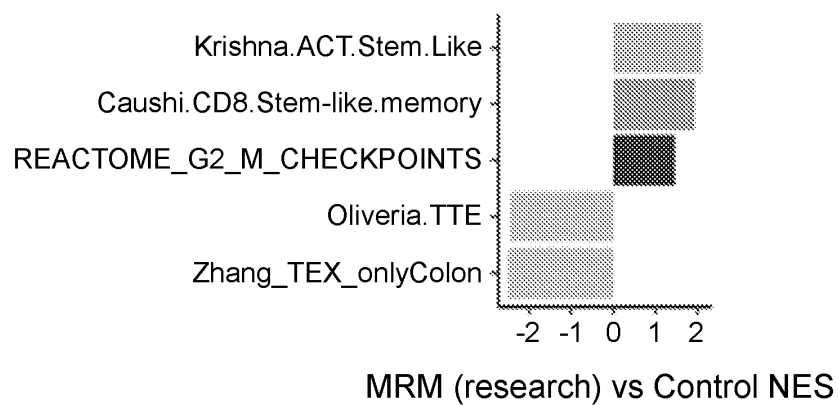


FIG. 41D

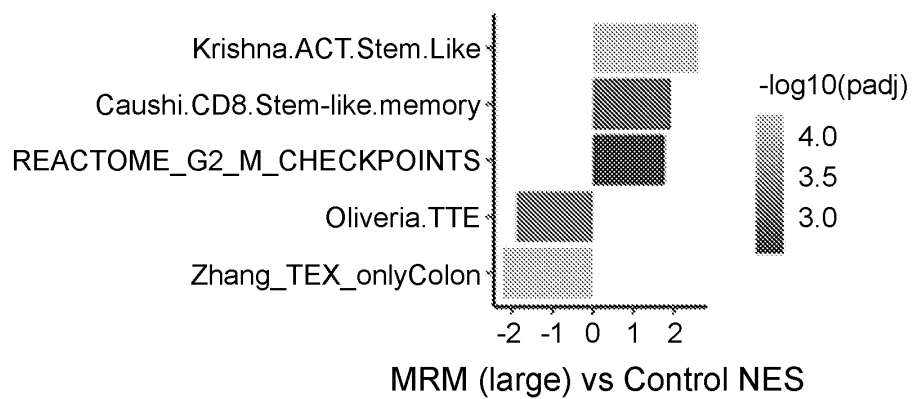


FIG. 42

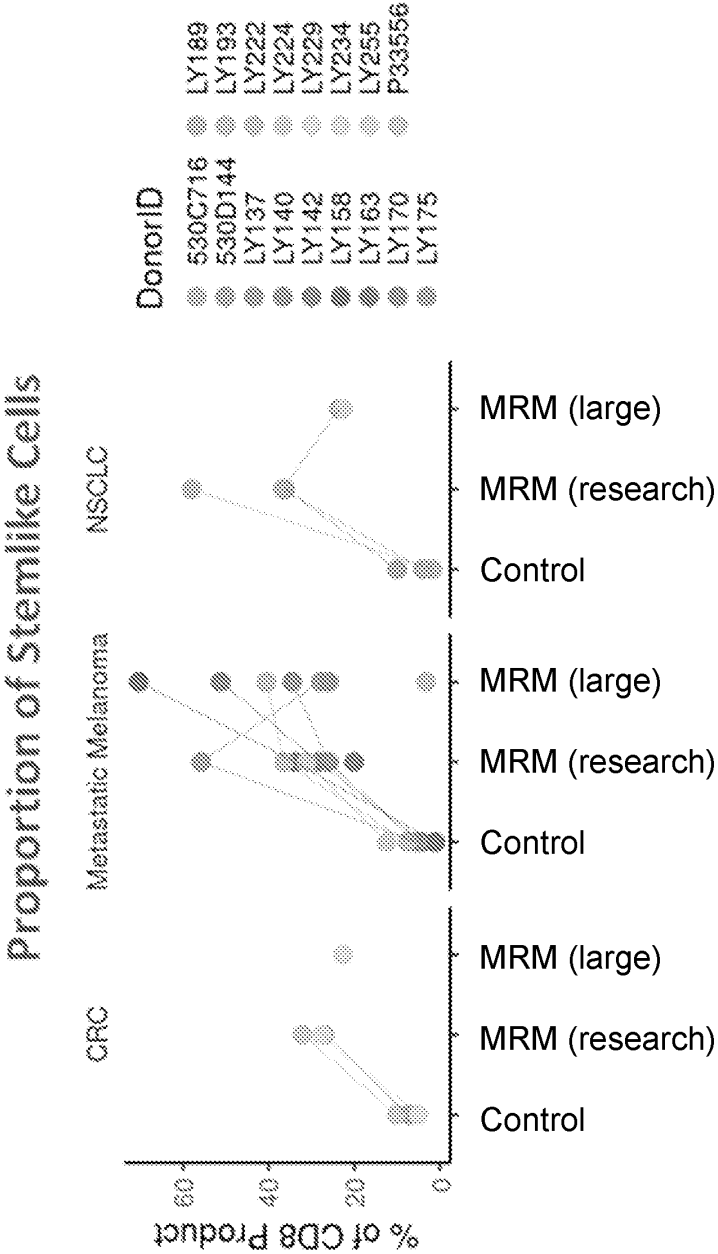


FIG. 43C

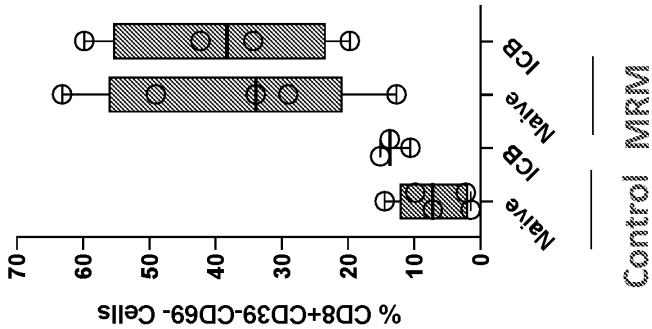


FIG. 43B

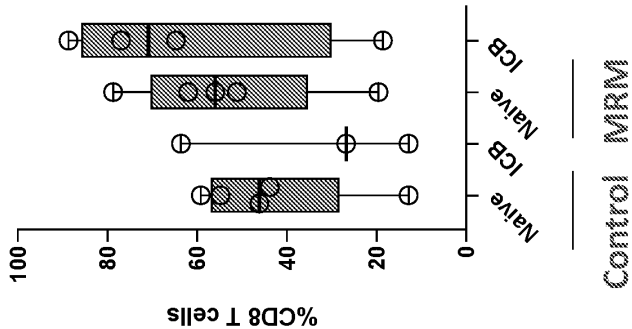


FIG. 43A

