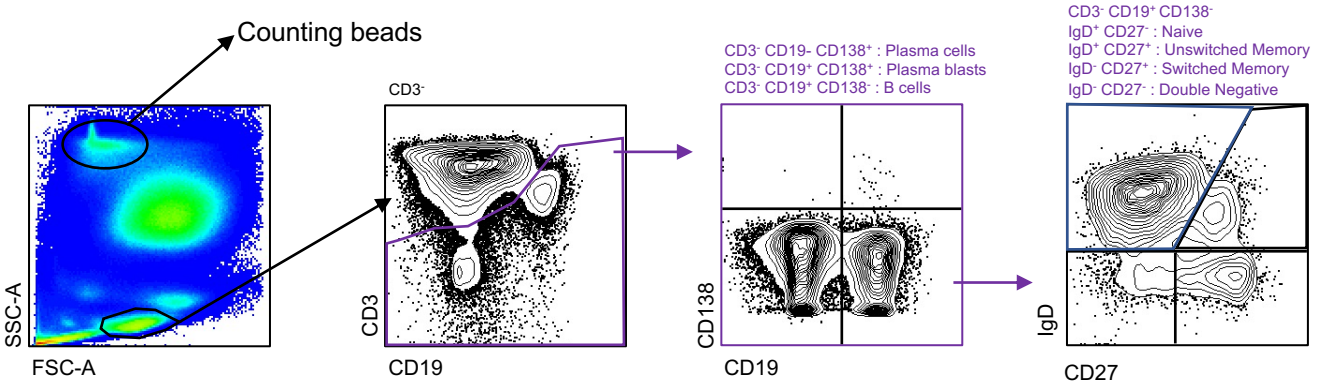
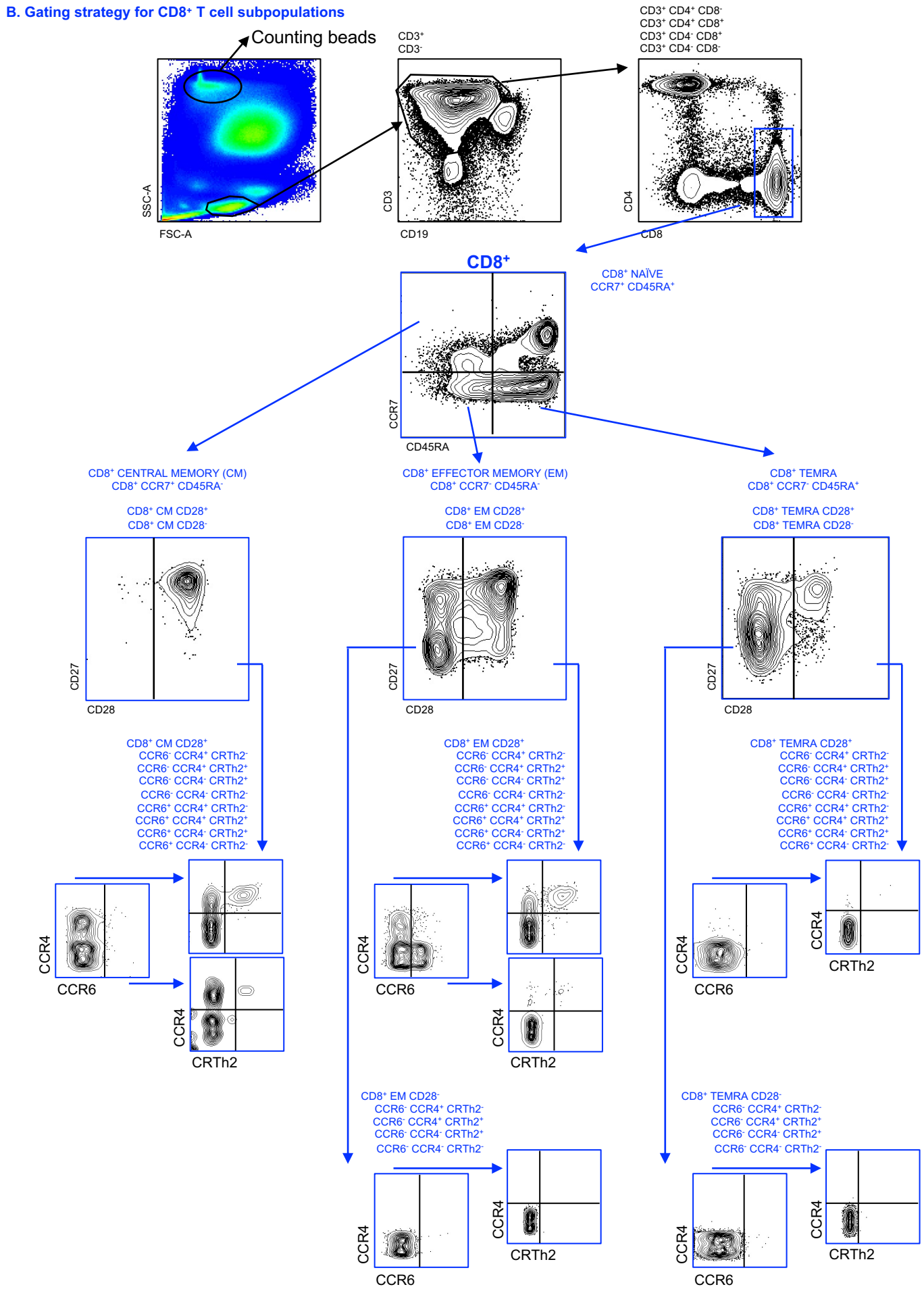
A. Gating strategy for B cell subpopulations



B. Gating strategy for CD8+ T cell subpopulations



C. Gating strategy for CD4⁺ T cell subpopulations

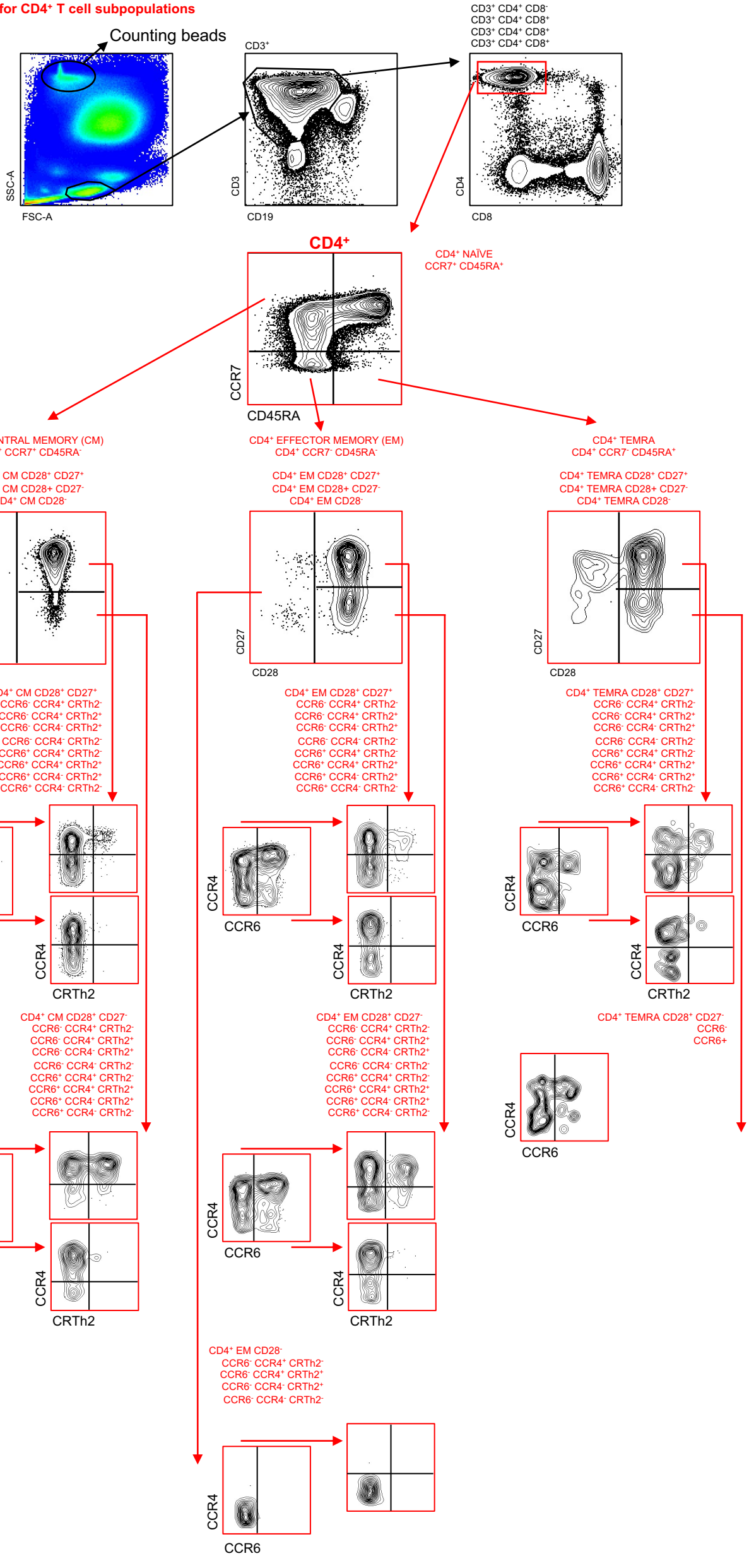


Figure S1. Gating strategy. (A-C) First doublets are excluded, followed by identification of lymphocytes by size. **A.** CD3- are identified and among them, plasma cells (CD19- CD138+), plasma blasts (CD19+ CD138+), B cells (CD19+ CD138-) and CD19- CD138- cells. Among B cells, naïve (IgD+ CD27-), unswitched memory (IgD+CD27+), switched memory (IgD- CD27+) and double negative (IgD- CD27-) B cell subsets are also identified. **B.** In CD3+ T cells, CD3+ CD8+ cells are first identified and then separated in CM (CCR7+ CD45RA-), EM (CCR7- CD45RA-), TEMRA (CCR7- CD45RA+) and naive (CCR7+ CD45RA+). CM, EM and TEMRA CD8+ T cells are then separated in CD28+ and CD28-. Each one of these CD8+ T cells are separated first in CCR6- and CCR6+ and then in Th1 (CCR6- CCR4- CRTH2-), Th2-A (CCR6- CCR4+ CRTH2-), Th2-B (CCR6- CCR4+ CRTH2+), CCR6- CCR4- CRTH2+, Th1* (CCR6+ CCR4- CRTH2-), Th17 (CCR6- CCR4+ CRTH2-), CCR6+ CCR4+ CRTH2+ and CCR6+ CCR4- CRTH2+ cells. **C.** In CD3+ T cells, CD3+ CD4+ cells are first identified and then separated in CM (CCR7+ CD45RA-), EM (CCR7- CD45RA-), TEMRA (CCR7- CD45RA+) and naive (CCR7+ CD45RA+). CM, EM and TEMRA CD4+ T cells are then separated in CD28+ CD27+, CD28+ CD27- and CD28-. Each one of these CD4+ T cells are separated first in CCR6- and CCR6+ and then in Th1 (CCR6- CCR4- CRTH2-), Th2-A (CCR6- CCR4+ CRTH2-), Th2-B (CCR6- CCR4+ CRTH2+), CCR6- CCR4- CRTH2+, Th1* (CCR6+ CCR4- CRTH2-), Th17 (CCR6- CCR4+ CRTH2-), CCR6+ CCR4+ CRTH2+ and CCR6+ CCR4- CRTH2+ cells. SPHEROTM AccuCount Particles have been used to determine absolute counts. Antibodies: anti-CD3 AF700, anti-CD4 PE TR, anti-CD8 BV510, anti-CD45RA BV711, anti-CCR7 BV421, anti-CD27 APC Cy7, anti-CD28 PE Cy7, anti-CCR4 APC, anti-CRTh2 PE, anti-CCR6 BV785, anti-CD19 PerCPCy5.5, anti-IgD BV605 and anti-CD138 FITC.

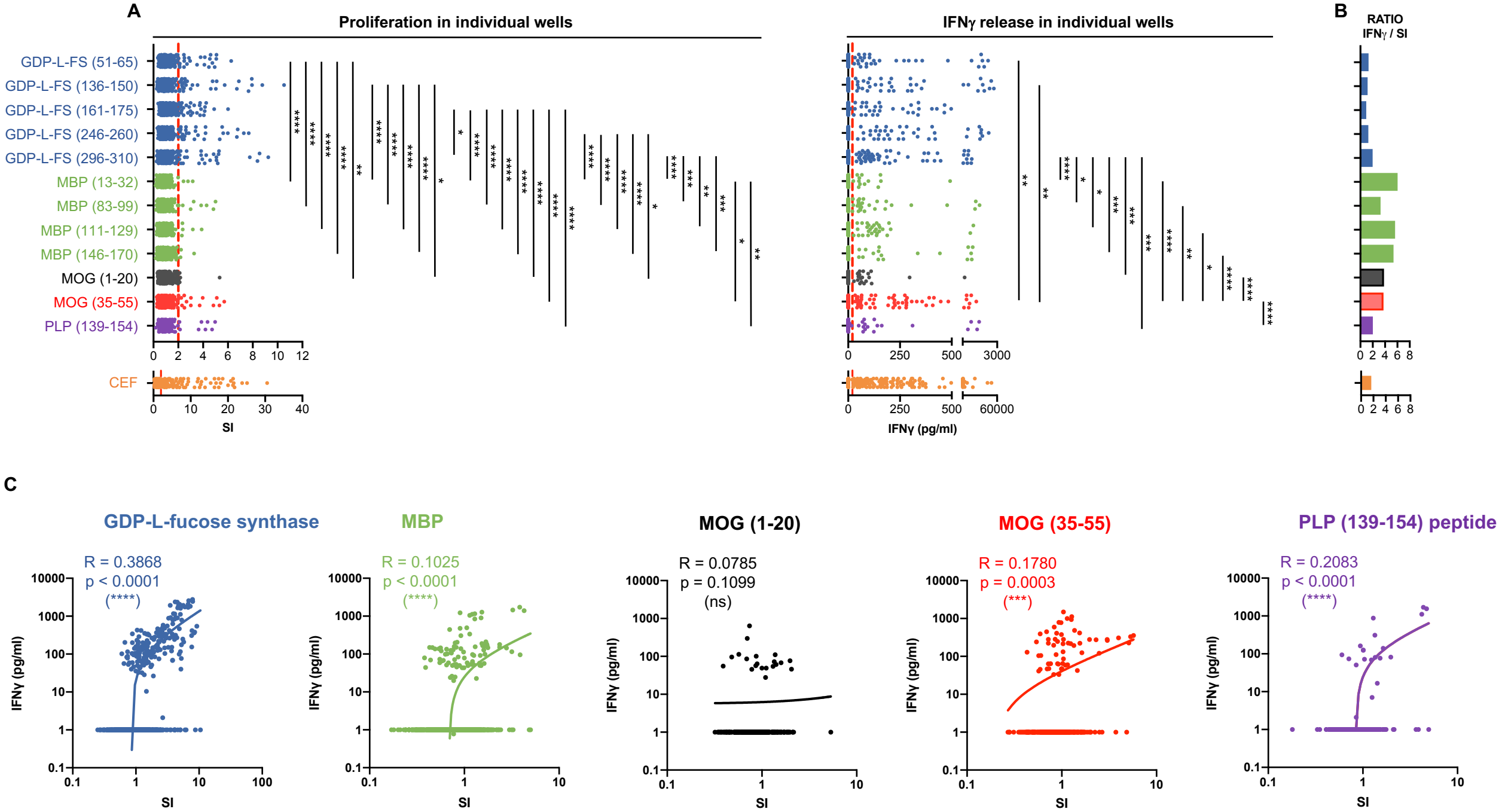
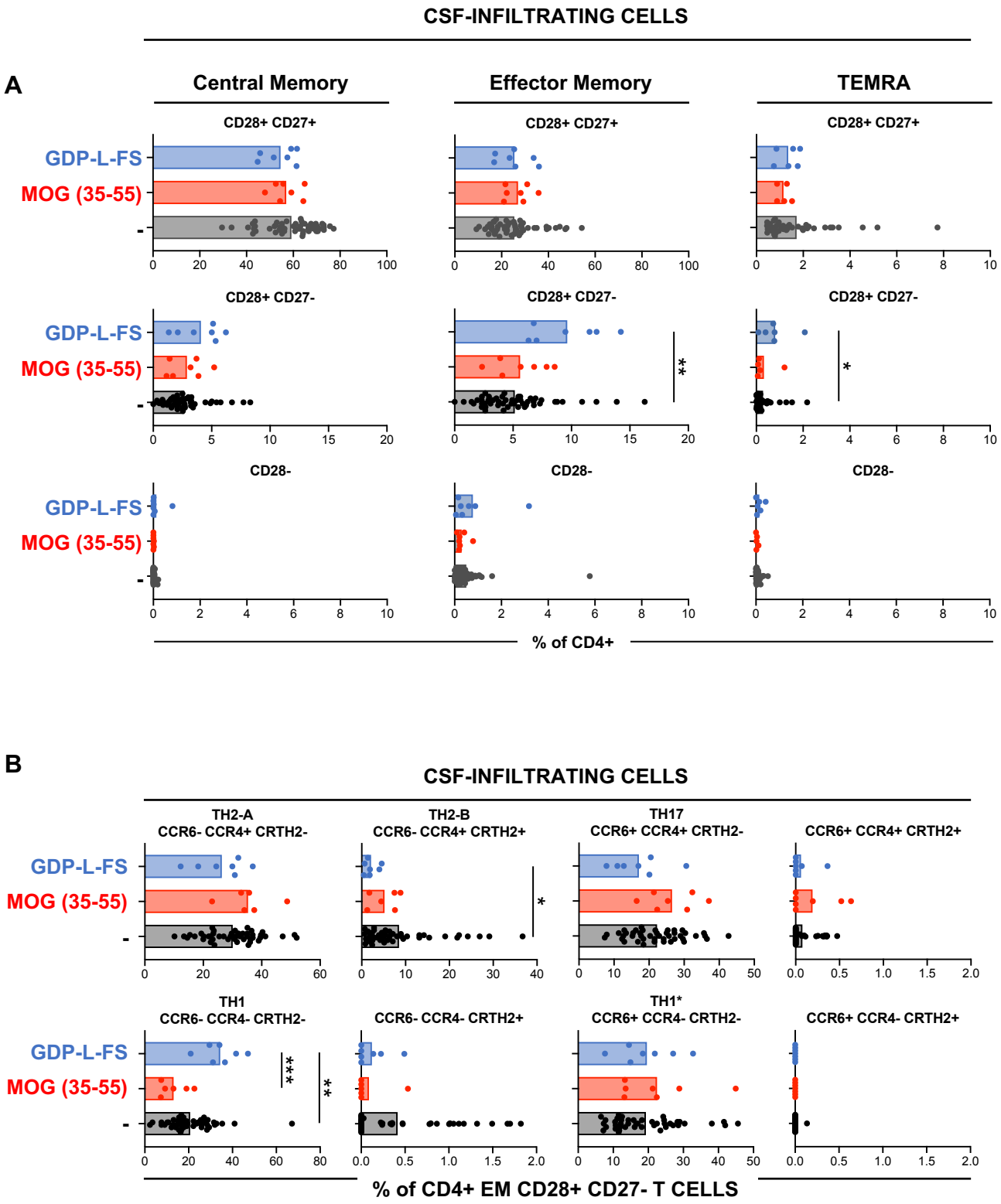
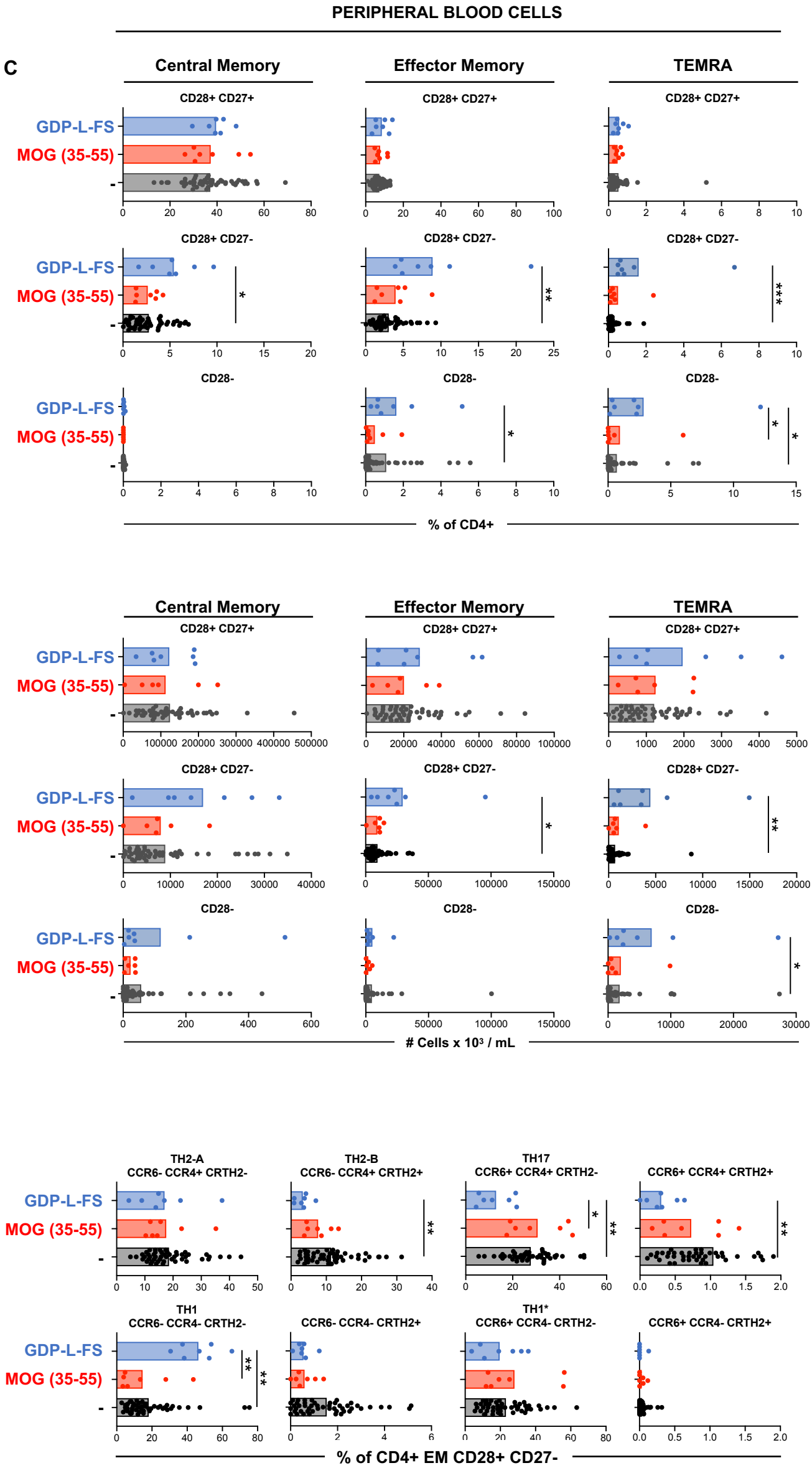

A
Proliferation in individual wells
GDP-L-FS (51-65)
GDP-L-FS (136-150)
GDP-L-FS (161-175)
GDP-L-FS (246-260)
GDP-L-FS (296-310)
MBP (13-32)
MBP (83-99)
MBP (111-129)
MBP (146-170)
MOG (1-20)
MOG (35-55)
PLP (139-154)
CEF
SI
IFNγ release in individual wells
IFNγ (pg/ml)
B
RATIO
IFNγ / SI
C
GDP-L-fucose synthase
R = 0.3868
p < 0.0001
(****)
MBP
R = 0.1025
p < 0.0001
(****)
MOG (1-20)
R = 0.0785
p = 0.1099
(ns)
MOG (35-55)
R = 0.1780
p = 0.0003
(***)
PLP (139-154) peptide
R = 0.2083
p < 0.0001
(****)
IFNγ (pg/ml)
SI

Figure S2. Recognition of GDP-L-FS and myelin derived peptides by CSF-infiltrating CD4+ T cells from patients with MS. A. Proliferative responses expressed as stimulation indexes (SI) and IFN-γ release expressed as (pg/ml) of PHA-expanded CSF-infiltrating CD4+ T cells against GDP-L-FS (blue), myelin (MBP (green), MOG(1-20) (black), MOG(35-55) (red), PLP (violet) and CEF (orange) peptides presented by autologous PBMCs. Each dot represents one well. Each peptide has been tested in quadruplicates (4 wells) in 105 MS patients (420 wells in total per peptide). Red dotted line shows the threshold for positivity (SI ≥ 2 for proliferation and pg/ml of IFN-γ ≥ 20 for IFN-γ release). We used Kruskal-Wallis test to compared peptide responses. Statistical significance of all comparisons (* $p<0.05$, ** $p<0.01$, *** $p<0.001$ and **** $p<0.0001$) is shown. **B.** Ratio of % of positive wells using IFN-γ release and proliferation for each peptide. **C.** Correlation between SIs and IFN-γ release (pg/ml) for GDP-L-FS, MBP, MOG(1-20), MOG(35-55) and PLP(139-154) peptides. We used Spearman r to test linear correlation between variables. R as well as p values are shown.


A
CSF-INFILTRATING CELLS
Central Memory
Effector Memory
TEMRA
CD28+ CD27+
CD28+ CD27-
CD28-
GDP-L-FS
MOG (35-55)
-
**
*
% of CD4+
B
CSF-INFILTRATING CELLS
TH2-A
CCR6- CCR4+ CRTH2-
TH2-B
CCR6- CCR4+ CRTH2+
TH17
CCR6+ CCR4+ CRTH2-
CCR6+ CCR4+ CRTH2+
TH1
CCR6- CCR4- CRTH2-
CCR6- CCR4- CRTH2+
TH1*
CCR6+ CCR4- CRTH2-
CCR6+ CCR4- CRTH2+
***
% of CD4+ EM CD28+ CD27- T CELLS


PERIPHERAL BLOOD CELLS
C
Central Memory
Effector Memory
TEMRA
CD28+ CD27+
CD28+ CD27-
CD28-
GDP-L-FS
MOG (35-55)
-
% of CD4+
# Cells x 10³ / mL
TH2-A
CCR6- CCR4+ CRTH2-
TH2-B
CCR6- CCR4+ CRTH2+
TH17
CCR6+ CCR4+ CRTH2-
CCR6+ CCR4+ CRTH2+
TH1
CCR6- CCR4- CRTH2-
CCR6- CCR4- CRTH2+
TH1*
CCR6+ CCR4- CRTH2-
CCR6+ CCR4- CRTH2+
% of CD4+ EM CD28+ CD27-

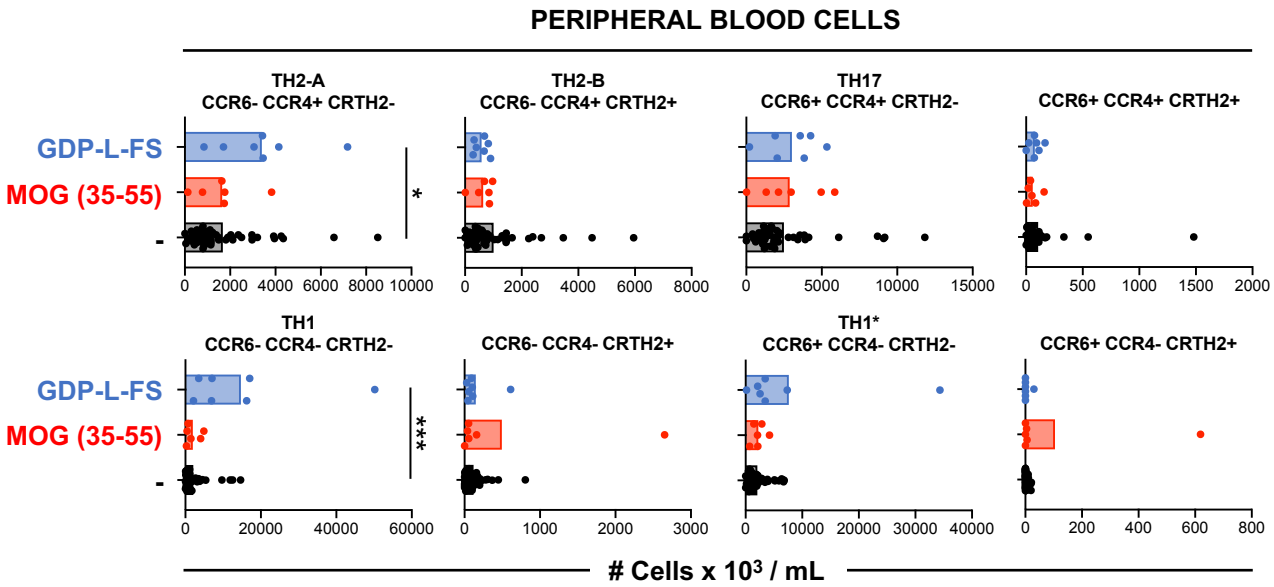


Figure S3. Ex-vivo flowcytometry immunophenotyping of CSF-infiltrating and circulating T lymphocytes. CSF-infiltrating **(A-B)** and peripheral circulating **(C)** frequencies as well as real counts of central memory (CM, CCR7+ CD45RA-), effector memory (EM, CCR7- CD45RA-) and TEMRA (CCR7- CD45RA+) CD4+ T cell subsets expressing CD28+CD27+, CD28+CD27- and CD28-, as well as EM CD28+ CD27- CD4+ T cells with the following functional phenotypes based on the chemokine receptor expression: Th2A (CCR6- CCR4+ CRth2-), Th2B (CCR6- CCR4+ CRth2+), CCR6- CCR4- CRth2+, Th1 (CCR6- CCR4- CRTh2-), Th17 (CCR6+ CCR4+ CRth2-), CCR6+ CCR4+ CRth2+, CCR6+ CCR4- CRth2+ and Th1* (CCR6+ CCR4- CRth2-). Each dot in the graphs correspond to a single patient and the bars show the mean. GDP-L-FS patients are shown in blue, MOG(35-55) in red and non-responder in black. Cell counts have been determined using SPHEROTM AccuCount Particles. Kruskal-Wallis test was used to compared GDP-L-FS, MOG 35-55 and non-responder patients. Statistical significance (* p<0.05, ** p<0.01, *** p<0.001 and **** p<0.0001) is shown.

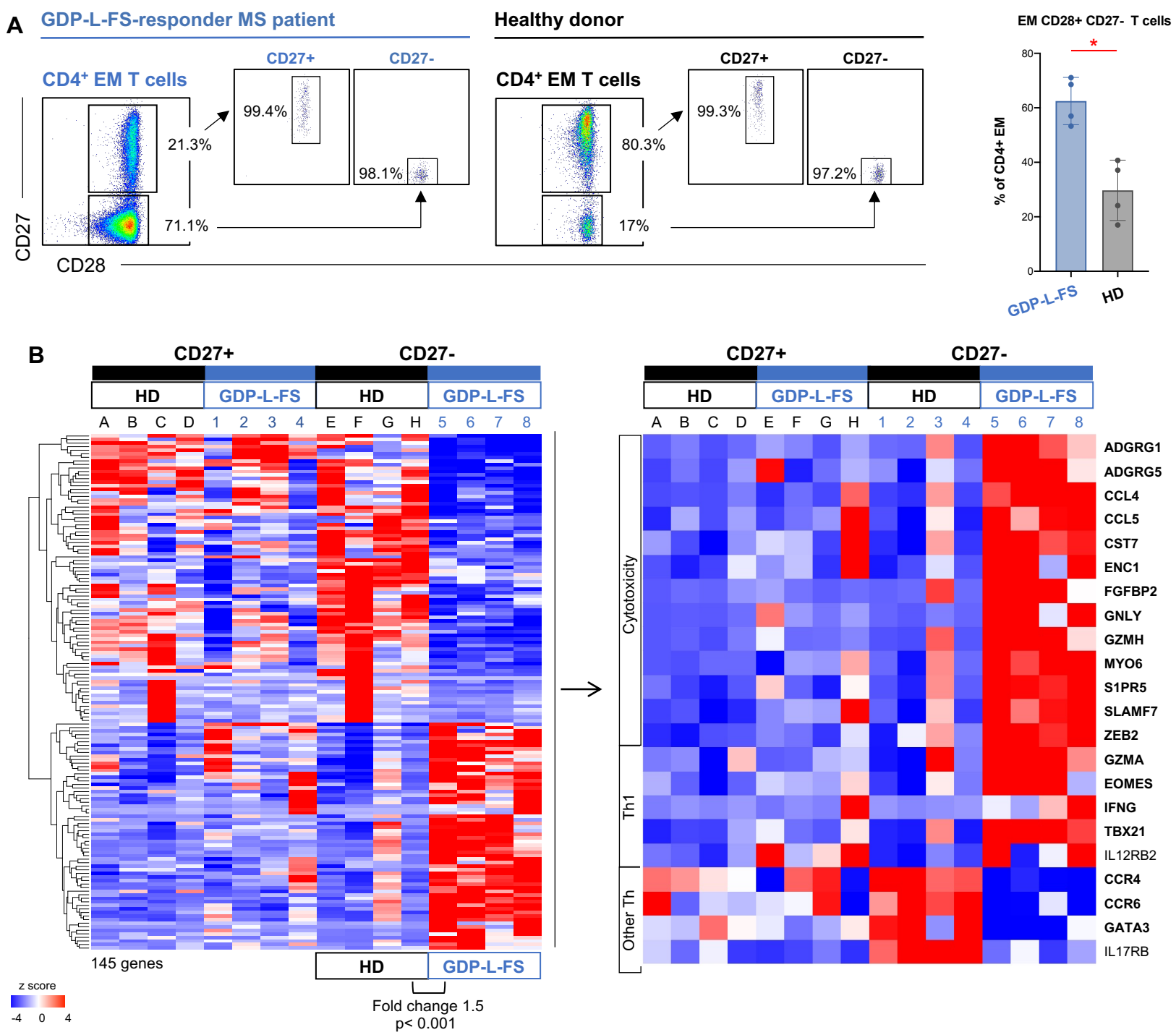


Figure S4. Purification and transcriptome analysis of EM CD27+/CD27- cells. A. Gating strategy used to isolate EM CD28+ CD4+ T cells expressing or not CD27 from four GDP-L-FS-responder MS patients and four HD. The frequencies of EM CD28+ CD4+ T cells expressing or not CD27 before and after cell sorting from one representative GDP-L-FS-responder MS patient and one HD are shown. Mann-Whitney test has been used to compare the frequency of EM CD27 cells in GDP-L-FS-responder patients and HD and statistical significance (* $p<0.05$) is shown. **B**. Heat map showing row-wise z scores of 145 differentially expressed transcripts identified by RNA-seq analysis and pairwise comparison of EM CD27- from GDP-L-FS responders (columns 5-8) versus EM CD27- from HD (columns E-H) (Log2Ratio > 0.5, $p< 0.001$). Heat map also shows the row-wise z scores of these 145 transcripts in EM CD27+ cells from GDP-L-FS-responders (columns 1-4) and HD (columns A-D). Row-wise z scores of selected transcripts associated with cytotoxicity, Th1 and other Th subsets are shown in detail. In bold are genes that also were identified as differentially expressed by RNA-seq analysis and pairwise comparison of EM CD27- versus EM CD27+ in GDP-L-FS patients (Log2Ratio > 0.5, $p< 0.001$).

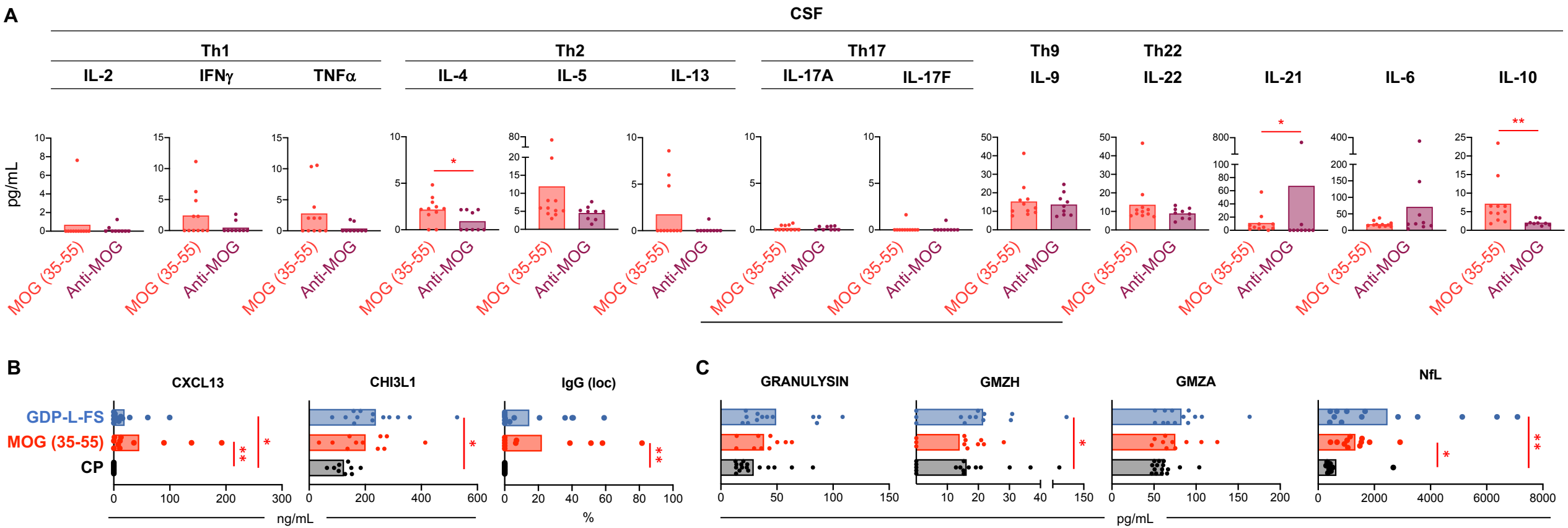


Figure S5. Additional characterization of CSF from patients and controls. A. Cytokines present in the CSF of MOG(35-55)-responders (red) and MOGAD patients. Cytokine release is expressed as pg/ml. **B-C.** Intrathecal abundance in GDP-L-FS- and MOG(35-55)-responders and CP of: **B**, CXCL13, Chitinase-3-like protein 1 (CHI3L1) and intrathecal IgG synthesis IgG(loc); **C**, granulysin, granzyme H (GZMH), granzyme A (GZMA) and Neurofilament Light Chain (NfL). Patient color code, GDP-L-FS-responders (blue), MOG(35-55)-responders (red) and CP (black). Each dot in the graphs correspond to a single patient and the bars show the mean. Mann-Whitney test was used to compared MOG(35-55)-responders and anti-MOG patients and Kruskal-Wallis to compared GDP-L-FS-responders, MOG(35-55)-responders and CP. Statistical significance (* $p<0.05$, ** $p<0.01$, *** $p<0.001$ and **** $p<0.0001$) is shown.

Table S1. Demographic and clinical features of patients and controls.

	MS PATIENTS							
	MAIN COHORT				SUB-COHORT			
	All	RIS/CIS	RRMS	PMS	All	RIS/CIS	RRMS	PMS
# of Patients	105	14	82	9	66	12	50	4
Female/Male Ratio	1.9	1.8	1,9	2.0	2.1	1.4	2.3	3.0
Age (y)**	35.7 ± 9.8	30.6 ± 10.3	35.3 ± 9.0	46,9 ± 8.0	35.6 ± 10.0	30.0 ± 8.4	35.9 ± 9.6	49.5 ± 4.0

MS PATIENTS PREVIOUSLY TREATED				
Previous treatment	**Steroids** (Not during the last 4 weeks prior to enrolment)	**IFN-beta-1a** (Not during the last 3 months prior to enrolment)	**Glatiramer acetate** (Not during the last 3 months prior to enrolment)	**Dimethyl fumarate** (Not during the last 3 months prior to enrolment)
# of Patients	14	1	3	3

	CONTROL PATIENTS			
	UWMA*	**Pseudotumors**	**MOGAD PATIENTS**	**HEALTHY DONORS**
# of Patients	6	5	10	4
Female/Male Ratio	1.5		4	1.5
Age (y)**	33.4 ± 6.9		36.2 ± 16.1	27.4 ± 6.3

* Mean ± standard deviation is shown, ** PMS, primary progressive and secondary progressive MS, *** undetectable white matter abnormalities.

Table S2. GDP-L-FS, myelin and CEF Peptides

GDP-L-fucose synthase	
GDP-L-fucose synthase 51-65	TAQTRALFEKVQPTH
GDP-L-fucose synthase 136-150	PHNSNFGYSYAKRMI
GDP-L-fucose synthase 161-175	YGCTFTAVIPTNVFG
GDP-L-fucose synthase 246-260	EEDEVSIKEAAEAVV
GDP-L-fucose synthase 296-310	FRFTPFKQAVKETCA
Myelin	
MBP 13-32	KYLATASTMDHARHGFLPRH
MBP 83-99	ENPVVHFFKNIVTPRT
MBP 111-129	LSRFSWGAEGQRPGFGYGG
MBP 146-170	AQGTLSKIFKLGGRDSRSGSPMARR
MOG 1-20	GQFRVIGPRHPIRALVGDEV
MOG 35-55	MEVGWYRPPFSRVVHLYRNGK
PLP 139-154	HCLGKWLGHPDKFVGI
CEFT2 Mix (CEF)	
Influenza A	FVFTLTVPSER
Influenza A	SGPLKAEIAQRLEDV
Influenza A	YDVPDYASLRSLVASS
Influenza B	PYYTGEHAKAIGN
Tetanus	GQIGNDPNRDIL
Influenza A	PKYVKQNTLKLA
Influenza A	PKYVKQNTLKLAT
Influenza A	DRLRRDQKS
EBV	AGLTLSLLVICSYLFISRG
Tetanus	QYIKANSKFIGITEL
Tetanus	QYIKANSKFIGITE
Tetanus	FNNFTVSFWLRVPKVSASHLE
EBV	TSLYNLRRGTALA
Tetanus	KFIIKRYTPNNEIDSF
Tetanus	VSIDKFRIFCKALNPK
EBV	VPGLYSPCRAFFNKEELL
HCMV	DKREMWMACIKELH
EBV	TGHGARTSTEPTTDY
EBV	KELKRQYEKKLRQ
Influenza A	RGYFKMRTGKSSIMRS
EBV	TVFYNIPPMPL
EBV	AEGLRALLARSHVER
EBV	PGPLRESIVCYFMVFLQTHI

Table S3. Summary results Ex-vivo immunophenotyping

		SPECIFICITY OF CSF-INFILTRATING CELLS						SPECIFICITY OF PERIPHERAL BLOOD CELLS											
		GDP-L FS % Mean ± STDEV	MOG 35-55 % Mean ± STDEV	- % Mean ± STDEV	p GDP-L-FS / MOG 35-55	p GDP-L-FS / -	p MOG 35-55 / -	GDP-L FS % Mean ± STDEV	MOG 35-55 % Mean ± STDEV	- % Mean ± STDEV	p GDP-L-FS / MOG 35-55	p GDP-L-FS / -	p MOG 35-55 / -	GDP-L FS # Cells x 10^3 / µL Mean ± STDEV	MOG 35-55 # Cells x 10^3 / µL Mean ± STDEV	- # Cells x 10^3 / µL Mean ± STDEV	p GDP-L-FS / MOG 35-55	p GDP-L-FS / -	p MOG 35-55 / -
CD3-	% of CD3-																		
CD138+ CD19-	PLASMA CELLS	0.07 ± 0.10	0.23 ± 0.43	0.08 ± 0.17	ns	ns	ns	0.009 ± 0.008	0.009 ± 0.01	0.01 ± 0.02	ns	ns	ns	15.32 ± 19.93	2.90 ± 6.89	26.27 ± 126.95	ns	ns	ns
CD138+ CD19+	PLASMA BLASTS	8.01 ± 10.88	9.02 ± 7.59	7.29 ± 7.46	ns	ns	ns	0.16 ± 0.11	0.18 ± 0.28	0.20 ± 0.40	ns	ns	ns	261.37 ± 296.72	105.08 ± 152.97	298.25 ± 729.04	ns	ns	ns
CD138- CD19+	B CELLS	19.27 ± 11.03	27.35 ± 14.71	26.12 ± 16.02	ns	ns	ns	30.90 ± 8.03	32.61 ± 16.08	39.54 ± 15.25	ns	ns	ns	53083.72 ± 40932.02	32307.25 ± 62233.92	58113.07 ± 76580.33	ns	ns	ns
CD138- CD19-	DOUBLE NEGATIVE	71.80 ± 16.73	62.88 ± 18.77	65.37 ± 19.80	ns	ns	ns	68.97 ± 8.06	67.21 ± 16.12	60.20 ± 15.36	ns	ns	ns	102816.97 ± 80320.93	47192.50 ± 85527.72	94448.76 ± 113926.22	ns	ns	ns
B CELLS	% of B CELLS																		
IgD+ CD27-	NAIVE	8.06 ± 1.80	13.01 ± 2.83	10.17 ± 6.39	ns	ns	ns	41.38 ± 15.56	48.58 ± 22.50	52.82 ± 14.89	ns	ns	ns	21096.74 ± 16294.37	22997.69 ± 49765.18	29804.04 ± 40391.43	ns	ns	ns
IgD+ CD27+	UNSWITCHED	18.02 ± 4.11	22.65 ± 9.75	13.34 ± 6.91	ns	ns	0.0329	16.66 ± 9.61	19.52 ± 10.78	15.16 ± 8.01	ns	ns	ns	7558.41 ± 9700.23	3199.52 ± 5064.35	9575.72 ± 15356.31	ns	ns	ns
IgD- CD27+	SWITCHED	64.34 ± 2.63	56.7 ± 9.40	61.55 ± 9.27	ns	ns	ns	31.55 ± 12.15	24.07 ± 11.52	22.16 ± 8.78	ns	0.0453	ns	17798.55 ± 19904.39	4293.15 ± 7019.73	13292.84 ± 20353.18	ns	ns	ns
IgD- CD27-	DOUBLE NEGATIVE	6.81 ± 1.31	7.53 ± 2.63	7.58 ± 4.89	ns	ns	ns	9.48 ± 5.09	6.39 ± 3.90	8.73 ± 6.56	ns	ns	ns	6136.05 ± 4407.49	1259.91 ± 1926.76	4951.65 ± 6677.24	ns	ns	ns
CD3+	% of CD3+																		
CD4+ CD8-	CD4+	72.05 ± 7.65	74.25 ± 6.72	74.71 ± 7.78	ns	ns	ns	51.5 ± 17.82	60.67 ± 13.95	59.38 ± 12.60	ns	ns	ns	302438.01 ± 150815.91	325058.19 ± 255529.97	326562.46 ± 165147.98	ns	ns	ns
CD4+ CD8+	DOUBLE POSITIVE	2.55 ± 1.34	1.34 ± 0.51	1.51 ± 1.05	ns	0.0307	ns	3.01 ± 2.44	1.23 ± 0.97	1.23 ± 1.19	0.0464	0.0058	ns	23138.21 ± 22770.18	9729.28 ± 7403.26	7982.66 ± 14986.90	ns	ns	ns
CD4- CD8+	CD8+	23.11 ± 7.69	21.88 ± 5.45	20.58 ± 6.85	ns	ns	ns	40.34 ± 18.53	32.97 ± 10.76	29.55 ± 7.19	ns	0.0158	ns	263369.82 ± 213177.15	152298.91 ± 98098.21	168825.72 ± 124686.35	ns	ns	ns
CD4- CD8-	DOUBLE NEGATIVE	2.24 ± 0.99	2.47 ± 2.25	3.16 ± 1.38	ns	ns	ns	5.12 ± 4.33	5.10 ± 2.39	9.80 ± 9.07	ns	ns	ns	26000.43 ± 16204.68	33960.24 ± 24485.77	47603.72 ± 41684.68	ns	ns	ns
CD4+	% of CD4+																		
CCR7+ CD45R-	CENTRAL MEMORY	58.71 ± 7.76	59.92 ± 6.03	61.90 ± 11.96	ns	ns	ns	45.07 ± 6.97	40.01 ± 11.30	39.93 ± 12.31	ns	ns	ns	139757.30 ± 73479.89	123309.49 ± 96681.00	133466.02 ± 87500.56	ns	ns	ns
CCR7+ CD45R+	NAIVE	3.83 ± 1.85	5.72 ± 2.24	5.39 ± 2.68	ns	ns	ns	31.01 ± 17.75	45.90 ± 14.30	47.36 ± 15.49	ns	0.0331	ns	86363.35 ± 65860.78	163976.28 ± 170801.83	152256.39 ± 95570.00	ns	ns	ns
CCR7- CD45R+	TEMRA	2.01 ± 1.26	1.56 ± 0.37	1.89 ± 1.67	ns	ns	ns	5.01 ± 6.39	1.93 ± 3.17	1.44 ± 2.07	ns	0.0043	ns	13373.41 ± 14352.04	18257.42 ± 32704.34	3756.73 ± 4753.06	ns	0.0182	ns
CCR7- CD45R-	EFFECTOR MEMORY	35.92 ± 8.48	33.07 ± 7.05	31.07 ± 11.14	ns	ns	ns	19.16 ± 11.19	12.19 ± 4.98	11.43 ± 4.67	ns	ns	ns	63590.86 ± 57522.41	30244.86 ± 17087.47	37783.18 ± 27289.45	ns	ns	ns
CD4+	% of CD4+																		
CENTRAL MEMORY	CD28+ CD27+	54.52 ± 7.13	56.97 ± 6.21	59.21 ± 11.14	ns	ns	ns	39.63 ± 5.72	37.35 ± 10.55	37.15 ± 11.06	ns	ns	ns	122671.05 ± 64792.74	112945.66 ± 93902.62	124464.77 ± 82211.91	ns	ns	ns
	CD28+ CD27-	4.08 ± 1.82	2.88 ± 1.52	2.66 ± 1.75	ns	ns	ns	5.41 ± 2.65	2.63 ± 1.22	2.75 ± 1.91	ns	0.0302	ns	16975.83 ± 10923.07	7964.07 ± 6103.33	8928.77 ± 8815.34	ns	ns	ns
	CD28-	0.13 ± 0.30	0.01 ± 0.01	0.02 ± 0.04	ns	ns	ns	0.03 ± 0.03	0.004 ± 0.003	0.01 ± 0.02	ns	ns	ns	119.95 ± 189.01	23.66 ± 16.78	57.66 ± 93.51	ns	ns	ns
EFFECTOR MEMORY	CD28+ CD27+	25.49 ± 7.35	27.01 ± 5.59	25.41 ± 10.15	ns	ns	ns	8.60 ± 3.99	7.70 ± 2.84	7.27 ± 2.93	ns	ns	ns	28575.05 ± 22380.66	20155.23 ± 13148.51	23426.92 ± 16827.66	ns	ns	ns
	CD28+ CD27-	9.64 ± 3.08	5.6 ± 2.46	5.14 ± 3.18	ns	0.0030	ns	8.89 ± 6.30	3.97 ± 2.67	3.06 ± 2.01	ns	0.0023	ns	29602.76 ± 30503.38	9374.57 ± 4832.61	9476.95 ± 8459.80	ns	0.0271	ns
	CD28-	0.77 ± 1.09	0.30 ± 0.23	0.49 ± 0.81	ns	ns	ns	1.63 ± 1.70	0.49 ± 0.69	1.09 ± 2.64	ns	ns	ns	5299.87 ± 7650.79	1937.77 ± 1977.42	4855.27 ± 14784.79	ns	ns	ns
TEMRA	CD28+ CD27+	1.36 ± 0.46	1.15 ± 0.27	1.71 ± 1.45	ns	ns	ns	0.56 ± 0.27	0.47 ± 0.17	0.52 ± 0.74	ns	ns	ns	1968.13 ± 1628.21	1246.80 ± 838.79	1212.02 ± 899.12	ns	ns	ns
	CD28+ CD27-	0.80 ± 0.67	0.32 ± 0.49	0.29 ± 0.44	ns	0.0476	ns	1.60 ± 2.26	0.51 ± 0.83	0.23 ± 0.32	ns	0.0004	ns	4442.44 ± 5033.58	1083.17 ± 1424.61	689.66 ± 1268.93	ns	0.0017	ns
	CD28-	0.14 ± 0.14	0.03 ± 0.04	0.07 ± 0.10	ns	ns	ns	2.83 ± 4.22	0.94 ± 2.23	0.70 ± 1.53	0.0210	0.0268	ns	6957.23 ± 9486.28	2048.47 ± 3862.47	1850.58 ± 4403.35	ns	0.0173	ns
CENTRAL MEMORY CD28+ CD27+	% of CD4+ CENTRAL MEMORY CD28+ CD27+																		
CCR6- CCR4+ CRTH2-	TH2-A	26.33 ± 9.19	28.73 ± 6.55	28.76 ± 9.52	ns	ns	ns	30.02 ± 12.28	30.97 ± 7.47	29.06 ± 8.44	ns	ns	ns	33736.74 ± 19300.39	36424.47 ± 36688.57	35327.89 ± 24571.12	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	0.28 ± 0.21	0.22 ± 0.23	0.39 ± 0.36	ns	ns	ns	1.21 ± 0.63	1.13 ± 1.07	1.47 ± 0.88	ns	ns	ns	1304.27 ± 868.89	1461.49 ± 1625.28	2129.62 ± 2761.28	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	0.01 ± 0.02	0.01 ± 0.02	0.04 ± 0.07	ns	ns	ns	0.10 ± 0.04	0.05 ± 0.10	0.09 ± 0.13	ns	ns	ns	121.87 ± 97.05	7521.33 ± 18202.00	110.99 ± 189.96	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	32.62 ± 4.38	29.27 ± 6.53	31.94 ± 9.77	ns	ns	ns	23.94 ± 8.83	18.79 ± 4.57	22.71 ± 9.27	ns	ns	ns	26974.64 ± 13745.59	24018.37 ± 15433.75	25391.13 ± 14777.98	ns	ns	ns
CCR6+ CCR4+ CRTH2-	TH17	19.95 ± 3.01	23.76 ± 6.91	20.48 ± 6.37	ns	ns	ns	25.30 ± 11.29	32.50 ± 6.38	29.07 ± 8.42	ns	ns	ns	33722.07 ± 19511.73	35245.56 ± 30899.62	39147.51 ± 30565.03	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.02	ns	ns	ns	0.10 ± 0.09	0.08 ± 0.08	0.13 ± 0.10	ns	ns	ns	121.43 ± 100.13	109.75 ± 96.01	219.85 ± 362.51	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	0.01 ± 0.02	0.01 ± 0.02	0.01 ± 0.01	ns	ns	ns	0.01 ± 0.02	0.004 ± 0.007	0.01 ± 0.03	ns	ns	ns	24.25 ± 39.01	155.42 ± 358.33	18.69 ± 22.13	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	20.81 ± 9.42	17.94 ± 6.02	18.22 ± 7.96	ns	ns	ns	19.04 ± 11.30	16.08 ± 7.27	17.32 ± 7.10	ns	ns	ns	26217.34 ± 21534.37	22064.52 ± 14112.66	22042.84 ± 17089.28	ns	ns	ns
CENTRAL MEMORY CD28+ CD27-	% of CD4+ CENTRAL MEMORY CD28+ CD27-																		
CCR6- CCR4+ CRTH2-	TH2-A	20.32 ± 11.63	26.21 ± 6.27	25.32 ± 7.44	ns	ns	ns	18.65 ± 11.61	19.75 ± 7.77	17.12 ± 6.62	ns	ns	ns	2514.67 ± 1802.18	2000.06 ± 2289.95	1490.97 ± 1576.19	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	1.63 ± 1.18	7.52 ± 6.74	8.58 ± 6.73	ns	0.0029	ns	7.75 ± 6.84	9.51 ± 4.54	13.08 ± 5.96	ns	ns	ns	912.60 ± 637.87	756.46 ± 676.97	1204.55 ± 13.66	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	0.00 ± 0.00	0.17 ± 0.30	0.42 ± 0.65	ns	ns	ns	0.29 ± 0.19	0.17 ± 0.25	0.61 ± 0.73	ns	ns	ns	44.40 ± 43.22	514.49 ± 1214.93	49.36 ± 74.33	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	27.05 ± 17.47	7.74 ± 2.09	14.44 ± 8.21	0.0392	ns	ns	18.02 ± 11.39	3.06 ± 1.54	4.90 ± 4.39	0.0028	0.0017	ns	2883.95 ± 2599.96	352.49 ± 159.11	529.49 ± 1010.01	ns	0.0013	ns
CCR6+ CCR4+ CRTH2-	TH17	25.58 ± 7.33	39.77 ± 7.31	31.81 ± 10.87	0.0299	ns	ns	35.72 ± 9.80	48.82 ± 9.67	45.19 ± 10.37	ns	ns	ns	6503.01 ± 2965.42	3717.37 ± 2678.69	4002.39 ± 3956.07	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	0.02 ± 0.05	0.28 ± 0.53	0.14 ± 0.30	ns	ns	ns	0.87 ± 0.76	1.63 ± 1.26	1.71 ± 1.10	ns	ns	ns	153.27 ± 91.17	121.24 ± 99.28	172.96 ± 239.58	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.04 ± 0.18	-	ns	ns	0.03 ± 0.04	0.00 ± 0.00	0.03 ± 0.06	ns	ns	ns	9.27 ± 10.71	0.00 ± 0.00	3.55 ± 5.46	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	31.65 ± 16.18	23.84 ± 9.78	26.10 ± 12.54	ns	ns	ns	26.84 ± 9.58	17.04 ± 10.02	18.11 ± 8.16	ns	ns	ns	5675.57 ± 4771.69	1398.20 ± 362.41	1680.63 ± 1837.16	ns	0.0045	ns
CENTRAL MEMORY CD28-	% of CD4+ CENTRAL MEMORY CD28-																		
CCR6- CCR4+ CRTH2-	TH2-A	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.86 ± 3.17	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	1.02 ± 5.31	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	-	-	-	-	-	-	-	-	-	-	-	-	102.08 ± 228.27	0.00 ± 0.00	34.88 ± 104.04	ns	ns	ns
CCR6+ CCR4+ CRTH2-	TH17	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
EFFECTOR MEMORY CD28+ CD27+	% of CD4+ EFFECTOR MEMORY CD28+ CD27+																		
CCR6- CCR4+ CRTH2-	TH2-A	37.16 ± 8.11	39.52 ± 8.39	36.21 ± 10.17	ns	ns	ns	25.99 ± 12.66	23.60 ± 8.97	23.12 ± 7.61	ns	ns	ns	6645.08 ± 6258.99	4128.13 ± 3247.34	5336.47 ± 4447.66	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	0.70 ± 0.64	0.50 ± 0.69	0.87 ± 0.81	ns	ns	ns	1.96 ± 1.19	1.95 ± 1.55	3.02 ± 1.59	ns	ns	ns	348.69 ± 159.20	350.23 ± 295.76	774.63 ± 864.98	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	0.14 ± 0.16	0.10 ± 0.23	0.07 ± 0.10	ns	ns	ns	0.56 ± 0.42	0.42 ± 0.72	0.56 ± 0.53	ns	ns	ns	168.64 ± 274.34	1506.33 ± 3406.73	127.35 ± 151.70	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	33.60 ± 6.49	30.32 ± 6.47	32.10 ± 11.11	ns	ns	ns	33.12 ± 10.30	22.64 ± 8.15	22.49 ± 9.64	ns	0.0355	ns	9668.26 ± 8030.68	5821.85 ± 4721.01	4786.57 ± 3444.85	ns	ns	ns
CCR6+ CCR4+ CRTH2-	TH17	15.56 ± 4.41	16.01 ± 3.49	16.15 ± 6.14	ns	ns	ns	18.53 ± 5.76	26.17 ± 7.63	27.87 ± 7.18	ns	0.0173	ns	5192.32 ± 2851.13	4477.00 ± 3109.12	6891.72 ± 5550.32	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	0.03 ± 0.07	0.002 ± 0.005	0.03 ± 0.07	ns	ns	ns	0.18 ± 0.12	0.20 ± 0.16	0.37 ± 0.33	ns	ns	ns	41.23 ± 23.37	37.98 ± 28.53	110.40 ± 181.61	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	0.01 ± 0.02	0.005 ± 0.01	0.02 ± 0.03	ns	ns	ns	3.00 ± 7.35	122.99 ± 295.70	4.73 ± 6.16	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	12.96 ± 5.68	13.42 ± 4.89	14.52 ± 7.31	ns	ns	ns	25.27 ± 13.04	24.86 ± 9.36	23.99 ± 9.48	ns	ns	ns	8328.18 ± 9211.50	5810.36 ± 3158.53	5617.11 ± 4102.68	ns	ns	ns
EFFECTOR MEMORY CD28+ CD27-	% of CD4+ EFFECTOR MEMORY CD28+ CD27-																		
CCR6- CCR4+ CRTH2-	TH2-A	26.37 ± 8.60	35.32 ± 8.28	30.08 ± 9.46	ns	ns	ns	16.99 ± 10.69	17.59 ± 8.77	18.57 ± 8.53	ns	ns	ns	3400.44 ± 2016.80	1644.60 ± 1251.77	1674.03 ± 1651.61	ns	0.0350	ns
CCR6- CCR4+ CRTH2+	TH2-B	2.11 ± 1.58	5.22 ± 3.23	8.50 ± 8.38	ns	0.0146	ns	3.34 ± 2.12	7.69 ± 3.72	11.35 ± 7.02	ns	0.0015	ns	584.49 ± 247.51	642.69 ± 354.88	1009.25 ± 1129.72	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	0.12 ± 0.18	0.08 ± 0.21	0.41 ± 0.55	ns	ns	ns	0.55 ± 0.34	0.59 ± 0.49	1.54 ± 1.28	ns	ns	ns	149.08 ± 205.91	493.47 ± 1058.16	119.53 ± 137.07	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	34.39 ± 8.50	13.11 ± 6.41	20.68 ± 10.86	0.0008	0.0057	ns	46.38 ± 11.90	14.69 ± 15.38	18.15 ± 15.22	0.0015	0.0012	ns	14727.28 ± 16678.59	1965.46 ± 2006.73	2102.29 ± 3246.79	ns	0.0009	ns
CCR6+ CCR4+ CRTH2-	TH17	17.11 ± 7.58	26.53 ± 7.19	22.27 ± 8.03	ns	ns	ns	12.91 ± 7.45	30.62 ± 12.21	27.70 ± 9.86	0.0184	0.0038	ns	3023.06 ± 1732.30	2876.95 ± 2208.84	2495.58 ± 2462.14	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	0.06 ± 0.13	0.19 ± 0.27	0.07 ± 0.13	ns	ns	ns	0.30 ± 0.22	0.72 ± 0.48	1.04 ± 0.82	ns	0.0486	ns	77.39 ± 55.63	59.15 ± 55.91	106.77 ± 217.31	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.003 ± 0.02	ns	ns	ns	0.01 ± 0.05	0.03 ± 0.04	0.03 ± 0.06	ns	ns	ns	4.28 ± 11.34	104.74 ± 251.83	3.10 ± 5.40	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	19.59 ± 8.43	22.50 ± 11.52	19.32 ± 9.88	ns	ns	ns	19.59 ± 12.40	28.02 ± 19.66	23.19 ± 12.77	ns	ns	ns	7634.76 ± 11969.29	2251.78 ± 1202.81	2063.20 ± 1892.06	ns	ns	ns
EFFECTOR MEMORY CD28-	% of CD4+ EFFECTOR MEMORY CD28-																		
CCR6- CCR4+ CRTH2-	TH2-A	-	-	-	-	-	-	2.79 ± 2.57	10.48 ± 14.33	8.72 ± 9.40	ns	ns	ns	78.78 ± 92.51	20.80 ± 22.99	212.48 ± 495.19	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	-	-	-	-	-	-	0.02 ± 0.07	0.00 ± 0.00	0.19 ± 0.56	ns	ns	ns	0.81 ± 2.15	0.00 ± 0.00	0.99 ± 2.56	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	-	-	-	-	-	-	0.00 ± 0,.00	0.03 ± 0.07	0.25 ± 1.04	ns	ns	ns	0.00 ± 0.00	1.61 ± 2.55	2.44 ± 11.91	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	-	-	-	-	-	-	96.70 ± 2.16	89.15 ± 14.15	90.24 ± 10.04	ns	ns	ns	5212.69 ± 7668.48	1029.83 ± 1337.89	5139.93 ± 15103.65	ns	ns	ns
CCR6+ CCR4+ CRTH2-	TH17	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	3.75 ± 19.14	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.10 ± 0.53	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	1.04 ± 5.31	ns	ns	ns
TEMRA CD28+ CD27+	% of CD4+ TEMRA CD28+ CD27+																		
CCR6- CCR4+ CRTH2-	TH2-A	20.80 ± 14.73	13.28 ± 6.61	24.04 ± 9.70	ns	ns	ns	8.51 ± 5.56	18.46 ± 14.36	15.15 ± 9.22	ns	ns	ns	181.14 ± 220.29	159.53 ± 110.02	184.33 ± 167.78	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	1.05 ± 1.28	0.52 ± 0.77	1.35 ± 1.73	ns	ns	ns	2.44 ± 2.66	2.95 ± 1.77	5.14 ± 3.94	ns	ns	ns	34.47 ± 30.15	42.30 ± 32.89	57.35 ± 59.42	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.12 ± 0.31	ns	ns	ns	1.44 ± 1.65	1.83 ± 2.59	1.85 ± 1.92	ns	ns	ns	14.59 ± 16.46	49.75 ± 60.06	19.32 ± 21.81	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	73.92 ± 14.10	70.99 ± 6.57	66.21 ± 10.92	ns	ns	ns	49.92 ± 21.24	48.02 ± 11.98	44.30 ± 14.63	ns	ns	ns	985.20 ± 731.39	686.21 ± 549.01	565.74 ± 459.97	ns	ns	ns
CCR6+ CCR4+ CRTH2-	TH17	-	-	-	-	-	-	6.21 ± 3.06	9.38 ± 6.32	10.58 ± 6.54	ns	ns	ns	100.81 ± 79.41	48.50 ± 67.28	142.15 ± 176.26	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	0.00 ± 0.00	0.20 ± 0.34	0.74 ± 1.50	ns	ns	ns	0.00 ± 0.00	1.27 ± 2.29	7.90 ± 13.12	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	0.00 ± 0.00	0.15 ± 0.34	0.02 ± 0.10	ns	ns	ns	0.00 ± 0.00	2.59 ± 4.18	0.23 ± 1.11	ns	ns	0.0337
CCR6+ CCR4- CRTH2-	TH1*	-	-	-	-	-	-	35.36 ± 29.00	26.25 ± 12.12	22.98 ± 12.64	ns	ns	ns	317.95 ± 207.21	210.04 ± 255.76	288.92 ± 333.22	ns	ns	ns
TEMRA CD28+ CD27-	% of CD4+ TEMRA CD28+ CD27-																		
CCR6- CCR4+ CRTH2-	TH2-A	-	-	-	-	-	-	6.02 ± 4.21	13.09 ± 11.89	10.83 ± 9.55	ns	ns	ns	263.85 ± 336.70	96.25 ± 111.14	59.22 ± 82.82	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	-	-	-	-	-	-	1.40 ± 1.60	5.21 ± 5.18	6.91 ± 5.72	ns	0.0239	ns	24.80 ± 22.76	43.73 ± 42.97	38.24 ± 61.15	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	-	-	-	-	-	-	0.65 ± 0.96	2.55 ± 4.36	3.06 ± 3.91	ns	ns	ns	11.63 ± 10.06	47.53 ± 59.56	13.83 ± 25.58	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	-	-	-	-	-	-	70.05 ± 24.86	33.36 ± 30.18	43.33 ± 26.41	ns	ns	ns	3467.48 ± 4998.87	650.89 ± 1329.03	452.70 ± 1226.26	ns	0.0013	ns
CCR6+ CCR4+ CRTH2-	TH17	-	-	-	-	-	-	4.67 ± 2.26	14.55 ± 12.14	15.73 ± 7.79	ns	ns	ns	104.04 ± 89.12	52.39 ± 73.01	83.28 ± 115.48	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	0.40 ± 0.27	1.06 ± 1.30	0.94 ± 1.20	ns	ns	ns	12.62 ± 13.10	4.13 ± 7.69	8.14 ± 19.34	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	0.00 ± 0.00	0.23 ± 0.47	0.06 ± 0.19	ns	ns	ns	0.00 ± 0.00	1.06 ± 2.60	0.30 ± 0.98	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	-	-	-	-	-	-	25.25 ± 28.56	31.80 ± 33.78	31.15 ± 19.58	ns	ns	ns	642.61 ± 1032.85	120.51 ± 157.67	146.10 ± 189.90	ns	ns	ns
TEMRA CD28-	% of CD4+ TEMRA CD28-																		
CCR6- CCR4+ CRTH2-	TH2-A	-	-	-	-	-	-	2.18 ± 2.08	1.88 ± 2.17	1.24 ± 1.63	ns	ns	ns	247.96 ± 454.86	10.68 ± 18.53	25.99 ± 71.94	ns	ns	ns
CCR6- CCR4+ CRTH2+	TH2-B	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.12 ± 0.40	ns	ns	ns	0.00 ± 0.00	0.00 ± 0.00	0.61 ± 2.05	ns	ns	ns
CCR6- CCR4- CRTH2+	CCR6- CCR4- CRTH2+	-	-	-	-	-	-	0.74 ± 1.87	0.96 ± 1.92	2.84 ± 8.82	ns	ns	ns	5.34 ± 7.62	3.14 ± 7.69	18.77 ± 96.18	ns	ns	ns
CCR6- CCR4- CRTH2-	TH1	-	-	-	-	-	-	92.55 ± 10.93	71.47 ± 47.69	88.51 ± 18.96	ns	ns	ns	6653.08 ± 9030.95	1875.18 ± 3818.10	2078.77 ± 4682.33	ns	0.0368	ns
CCR6+ CCR4+ CRTH2-	TH17	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.52 ± 2.75	ns	ns	ns
CCR6+ CCR4+ CRTH2+	CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.11 ± 0.60	ns	ns	ns
CCR6+ CCR4- CRTH2+	CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	54.89 ± 134.47	5.11 ± 25.82	ns	ns	ns
CCR6+ CCR4- CRTH2-	TH1*	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	44.54 ± 109.12	25.22 ± 64.34	ns	ns	ns
CD8+	% of CD8+																		
CCR7+ CD45R-	CENTRAL MEMORY	23.11 ± 16.93	19.42 ± 8.62	27.81 ± 9.44	ns	ns	ns	14.53 ± 11.67	12.16 ± 4.34	13.95 ± 6.67	ns	ns	ns	39156.57 ± 59768.03	22900.30 ± 10511.09	24701.28 ± 27698.37	ns	ns	ns
CCR7+ CD45R+	NAIVE	6.07 ± 3.71	8.61 ± 4.23	8.31 ± 4.36	ns	ns	ns	17.72 ± 11.07	33.80 ± 17.45	36.28 ± 18.26	ns	0.0287	ns	30844.24 ± 16047.70	49068.25 ± 39582.52	58011.09 ± 40641.74	ns	ns	ns
CCR7- CD45R+	TEMRA	14.99 ± 9.64	14.11 ± 8.04	10.83 ± 5.14	ns	ns	ns	42.07 ± 23.88	25.23 ± 15.48	22.16 ± 13.65	ns	ns	ns	128130.08 ± 187124.69	46523.12 ± 46236.78	39676.77 ± 54739.31	ns	ns	ns
CCR7- CD45R-	EFFECTOR MEMORY	55.98 ± 15.23	57.74 ± 7.25	53.06 ± 11.21	ns	ns	ns	25.78 ± 10.34	28.78 ± 7.46	27.63 ± 12.51	ns	ns	ns	65551.13 ± 63471.13	43625.28 ± 25046.45	46484.77 ± 41101.09	ns	ns	ns
CD8+	% of CD8+																		
CENTRAL MEMORY	CD28+	29.79 ± 14.09	18.99 ± 8.28	27.36 ± 9.11	ns	ns	ns	14.23 ± 11.61	11.59 ± 4.07	13.59 ± 6.58	ns	ns	ns	38571.33 ± 59440.80	17662.92 ± 12722.31	24135.85 ± 27436.62	ns	ns	ns
	CD28-	0.62 ± 0.76	0.42 ± 0.40	0.76 ± 0.63	ns	ns	ns	0.30 ± 0.19	0.57 ± 0.41	0.36 ± 0.22	ns	ns	ns	594.79 ± 379.26	2445.70 ± 3646.02	567.66 ± 437.92	ns	ns	ns
EFFECTOR MEMORY	CD28+	44.97 ± 15.35	50.81 ± 14.59	42.19 ± 9.82	ns	ns	ns	17.25 ± 9.58	18.25 ± 7.04	16.65 ± 6.80	ns	ns	ns	45914.13 ± 54470.19	25012.79 ± 8463.97	28301.55 ± 26328.85	ns	ns	ns
	CD28-	10.86 ± 6.13	13.54 ± 5.44	10.86 ± 6.14	ns	ns	ns	8.51 ± 4.50	10.55 ± 5.07	10.98 ± 9.04	ns	ns	ns	19506.99 ± 13178.35	19398.65 ± 18207.28	18190.65 ± 18275.09	ns	ns	ns
TEMRA	CD28+	7.80 ± 4.70	7.56 ± 5.48	5.56 ± 3.35	ns	ns	ns	5.34 ± 5.73	3.96 ± 3.06	2.02 ± 1.54	ns	ns	ns	20689.90 ± 40293.82	7360.37 ± 6424.28	3124.12 ± 2848.01	ns	0.0371	ns
	CD28-	7.22 ± 5.48	6.57 ± 2.82	5.54 ± 2.69	ns	ns	ns	36.81 ± 20.37	21.30 ± 13.33	20.13 ± 13.24	ns	ns	ns	107886.81 ± 148746.28	39006.57 ± 41433.70	36544.34 ± 52845.81	ns	ns	ns
CENTRAL MEMORY CD28+	% of CD8+ CENTRAL MEMORY CD28+																		
CCR6- CCR4+ CRTH2-		38.87 ± 17.76	33.62 ± 11.70	36.04 ± 13.48	ns	ns	ns	23.64 ± 7.65	24.28 ± 9.50	22.98 ± 8.02	ns	ns	ns	8906.28 ± 13410.74	4069.54 ± 2966.54	5764.16 ± 6621.50	ns	ns	ns
CCR6- CCR4+ CRTH2+		8.80 ± 17.16	3.71 ± 5.30	7.54 ± 11.27	ns	ns	ns	11.39 ± 12.72	5.83 ± 4.83	9.83 ± 10.45	ns	ns	ns	10105.13 ± 24370.07	1266.26 ± 1584.12	3775.55 ± 10575.05	ns	ns	ns
CCR6- CCR4- CRTH2+		0.76 ± 1.58	0.01 ± 0.01	0.38 ± 0.84	ns	ns	ns	0.62 ± 0.70	0.14 ± 0.09	0.47 ± 0.62	ns	ns	ns	573.69 ± 1374.27	358.94 ± 821.71	215.66 ± 797.59	ns	ns	ns
CCR6- CCR4- CRTH2-		49.30 ± 19.61	61.15 ± 11.27	53.03 ± 16.23	ns	ns	ns	54.37 ± 15.22	58.63 ± 9.95	54.61 ± 13.59	ns	ns	ns	16555.08 ± 19923.57	10749.94 ± 7722.48	11549.47 ± 9349.75	ns	ns	ns
CCR6+ CCR4+ CRTH2-		-	-	-	-	-	-	2.04 ± 1.04	1.47 ± 0.86	2.03 ± 1.14	ns	ns	ns	414.62 ± 340.15	280.35 ± 272.58	490.33 ± 628.24	ns	ns	ns
CCR6+ CCR4+ CRTH2+		-	-	-	-	-	-	0.16 ± 0.10	0.24 ± 0.26	0.31 ± 0.35	ns	ns	ns	48.84 ± 60.42	60.43 ± 77.35	125.27 ± 359.30	ns	ns	ns
CCR6+ CCR4- CRTH2+		-	-	-	-	-	-	0.04 ± 0.06	0.04 ± 0.05	0.03 ± 0.04	ns	ns	ns	10.30 ± 12.52	74.96 ± 168.85	9.57 ± 18.66	ns	ns	ns
CCR6+ CCR4- CRTH2-		-	-	-	-	-	-	10.34 ± 11.17	9.12 ± 5.50	10.41 ± 6.50	ns	ns	ns	2158.21 ± 2990.26	1479.73 ± 1931.23	2251.71 ± 2147.98	ns	ns	ns
CENTRAL MEMORY CD28-	% of CD8+ CENTRAL MEMORY CD28-																		
CCR6- CCR4+ CRTH2-		-	-	-	-	-	-	3.64 ± 2.91	0.26 ± 0.36	3.51 ± 3.15	ns	ns	0.0061	19.80 ± 34.03	2.06 ± 3.20	24.06 ± 34.90	ns	ns	ns
CCR6- CCR4+ CRTH2+		-	-	-	-	-	-	0.22 ± 0.45	0.00 ± 0.00	0.07 ± 0.22	ns	ns	ns	0.99 ± 2.63	0.00 ± 0.00	0.52 ± 1.91	ns	ns	ns
CCR6- CCR4- CRTH2+		-	-	-	-	-	-	0.67 ± 1.35	0.72 ± 1.77	0.59 ± 1.31	ns	ns	ns	2.99 ± 7.91	26.13 ± 56.06	4.60 ± 12.33	ns	ns	ns
CCR6- CCR4- CRTH2-		-	-	-	-	-	-	81.84 ± 12.73	66.08 ± 25.94	76.73 ± 15.83	ns	ns	ns	365.06 ± 381.31	414.68 ± 372.62	467.56 ± 400.64	ns	ns	ns
CCR6+ CCR4+ CRTH2-		-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	337.05 ± 825.62	80.86 ± 140.77	ns	ns	ns
CCR6+ CCR4+ CRTH2+		-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	3.27 ± 8.72	ns	ns	ns
CCR6+ CCR4- CRTH2+		-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
CCR6+ CCR4- CRTH2-		-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.33 ± 1.32	ns	ns	ns
EFFECTOR MEMORY CD28+	% of CD8+ EFFECTOR MEMORY CD28+																		
CCR6- CCR4+ CRTH2-		55.24 ± 11.00	51.90 ± 12.71	49.46 ± 13.98	ns	ns	ns	22.34 ± 9.32	20.06 ± 7.09	17.21 ± 8.25	ns	ns	ns	12500.16 ± 20173.63	4658.08 ± 3030.22	5185.12 ± 6154.80	ns	ns	ns
CCR6- CCR4+ CRTH2+		5.64 ± 12.45	1.03 ± 2.01	4.39 ± 8.85	ns	ns	ns	3.83 ± 4.65	1.44 ± 1.20	4.05 ± 5.65	ns	ns	ns	3716.75 ± 8528.80	438.65 ± 444.35	1228.89 ± 2343.65	ns	ns	ns
CCR6- CCR4- CRTH2+		0.52 ± 1.36	0.04 ± 0.11	0.28 ± 1.07	ns	ns	ns	0.51 ± 0.51	0.16 ± 0.19	0.40 ± 0.57	ns	ns	ns	456.23 ± 931.35	1930.53 ± 4591.05	143.60 ± 400.66	ns	ns	ns
CCR6- CCR4- CRTH2-		35.41 ± 11.98	43.7 ± 13.64	40.38 ± 13.49	ns	ns	ns	53.96 ± 15.56	45.71 ± 23.29	42.84 ± 14.43	ns	ns	ns	22565.44 ± 24127.82	13751.69 ± 8351.20	10963.70 ± 9354.49	ns	ns	ns
CCR6+ CCR4+ CRTH2-		-	-	-	-	-	-	0.85 ± 0.29	1.11 ± 1.15	1.49 ± 1.10	ns	ns	ns	350.27 ± 325.93	158.13 ± 157.41	477.19 ± 721.12	ns	ns	ns
CCR6+ CCR4+ CRTH2+		-	-	-	-	-	-	0.09 ± 0.04	0.09 ± 0.09	0.24 ± 0.62	ns	ns	ns	44.14 ± 44.77	29.80 ± 34.71	84.19 ± 236.62	ns	ns	ns
CCR6+ CCR4- CRTH2+		-	-	-	-	-	-	0.01 ± 0.02	0.02 ± 0.04	0.02 ± 0.03	ns	ns	ns	6.60 ± 7.81	9.68 ± 12.39	8.82 ± 25.36	ns	ns	ns
CCR6+ CCR4- CRTH2-		-	-	-	-	-	-	21.46 ± 19.57	31.20 ± 24.30	35.01 ± 16.24	ns	ns	ns	7317.77 ± 8509.77	4662.75 ± 4503.65	10408.34 ± 11013.29	ns	ns	ns

		% of CD8+ EFFECTOR MEMORY CD28-											
EFFECTOR MEMORY	CD28-	CCR6- CCR4+ CRTH2-	14.25 ± 6.81	13.34 ± 7.25	13.46 ± 8.72	ns	ns	ns	3.26 ± 2.17	2.49 ± 2.36	2.88 ± 2.78	ns	ns	ns	632.21 ± 747.33	255.82 ± 298.30	579.75 ± 940.96	ns	ns	ns
		CCR6- CCR4+ CRTH2+	0.23 ± 0.61	0.00 ± 0.00	0.05 ± 0.20	ns	ns	ns	0.02 ± 0.06	0.01 ± 0.02	0.02 ± 0.06	ns	ns	ns	7.94 ± 21.01	5.81 ± 6.94	4.83 ± 8.09	ns	ns	ns
		CCR6- CCR4- CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.04 ± 0.13	ns	ns	ns	0.08 ± 0.10	0.03 ± 0.03	0.06 ± 0.10	ns	ns	ns	12.91 ± 11.72	27.74 ± 80.92	13.74 ± 31.22	ns	ns	ns
		CCR6- CCR4- CRTH2-	76.82 ± 12.89	80.65 ± 10.98	80.07 ± 11.74	ns	ns	ns	96.11 ± 2.74	94.76 ± 4.71	95.11 ± 4.54	ns	ns	ns	18810.88 ± 12825.58	18059.29 ± 19081.36	17335.94 ± 17457.33	ns	ns	ns
		CCR6+ CCR4+ CRTH2-	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	6.10 ± 13.13	ns	ns	ns
		CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
		CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.64 ± 3.00	ns	ns	ns
		CCR6+ CCR4- CRTH2-	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	164.80 ± 403.69	293.37 ± 846.03	ns	ns	ns
TEMRA	CD28+	% of CD8+ TEMRA CD28+																		
		CCR6- CCR4+ CRTH2-	25.04 ± 15.35	21.84 ± 24.47	27.68 ± 12.75	ns	ns	ns	7.58 ± 3.85	10.23 ± 13.19	8.80 ± 6.58	ns	ns	ns	1424.69 ± 2734.69	301.06 ± 417.36	296.94 ± 414.66	ns	ns	ns
		CCR6- CCR4+ CRTH2+	3.56 ± 9.02	0.17 ± 0.23	4.20 ± 8.54	ns	ns	ns	1.53 ± 3.35	0.28 ± 0.52	2.98 ± 6.63	ns	ns	ns	141.06 ± 288.79	10.45 ± 13.85	90.98 ± 261.83	ns	ns	ns
		CCR6- CCR4- CRTH2+	0.74 ± 1.96	0.00 ± 0.00	0.26 ± 0.82	ns	ns	ns	0.26 ± 0.46	0.10 ± 0.16	0.45 ± 1.17	ns	ns	ns	46.40 ± 72.75	87.05 ± 201.92	9.15 ± 21.01	ns	ns	ns
		CCR6- CCR4- CRTH2-	66.71 ± 15.99	77.66 ± 24.45	67.64 ± 14.41	ns	ns	ns	85.98 ± 6.57	76.88 ± 15.39	78.09 ± 14.81	ns	ns	ns	18595.96 ± 37073.47	5139.90 ± 9412.65	2403.67 ± 2193.08	ns	0.0268	ns
		CCR6+ CCR4+ CRTH2-	-	-	-	-	-	-	0.23 ± 0.15	0.43 ± 0.47	0.32 ± 0.28	ns	ns	ns	38.39 ± 71.26	13.60 ± 24.30	7.82 ± 14.23	ns	ns	ns
		CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	0.00 ± 0.00	0.03 ± 0.06	0.00 ± 0.00	ns	ns	ns	0.00 ± 0.00	2.62 ± 5.82	0.00 ± 0.00	ns	ns	ns
		CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.02	ns	ns	ns	0.00 ± 0.00	1.46 ± 3.57	0.12 ± 0.48	ns	ns	ns
		CCR6+ CCR4- CRTH2-	-	-	-	-	-	-	7.45 ± 8.07	15.05 ± 14.40	17.71 ± 17.29	ns	ns	ns	591.68 ± 750.31	404.15 ± 444.37	392.27 ± 815.60	ns	ns	ns
TEMRA	CD28-	% of CD8+ TEMRA CD28-																		
		CCR6- CCR4+ CRTH2-	3.78 ± 3.03	12.69 ± 14.22	8.27 ± 9.73	ns	ns	ns	2.19 ± 1.52	1.54 ± 1.75	1.83 ± 2.40	ns	ns	ns	3480.26 ± 7183.57	372.84 ± 672.41	1071.10 ± 4186.63	ns	ns	ns
		CCR6- CCR4+ CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.04	ns	ns	ns	0.002 ± 0.004	0.00 ± 0.00	0.005 ± 0.01	ns	ns	ns	6.06 ± 13.69	1.33 ± 3.25	1.53 ± 4.83	ns	ns	ns
		CCR6- CCR4- CRTH2+	0.00 ± 0.00	0.00 ± 0.00	0.07 ± 0.34	ns	ns	ns	0.04 ± 0.03	0.06 ± 0.09	0.03 ± 0.04	ns	ns	ns	50.31 ± 92.96	19.74 ± 27.70	8.79 ± 14.69	ns	ns	ns
		CCR6- CCR4- CRTH2-	96.14 ± 3.08	86.47 ± 13.72	90.32 ± 9.83	ns	ns	ns	97.74 ± 1.56	98.32 ± 1.67	97.96 ± 2.48	ns	ns	ns	104372.84 ± 141699.41	38302.23 ± 41618.29	35399.23 ± 49028.68	ns	ns	ns
		CCR6+ CCR4+ CRTH2-	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.99 ± 3.37	ns	ns	ns
		CCR6+ CCR4+ CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	ns	ns	ns
		CCR6+ CCR4- CRTH2+	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.28 ± 0.70	0.07 ± 0.40	ns	ns	ns
		CCR6+ CCR4- CRTH2-	-	-	-	-	-	-	-	-	-	-	-	-	0.00 ± 0.00	0.00 ± 0.00	26.32 ± 80.00	ns	ns	ns

Ordinary one-way ANOVA
0.01 < p < 0.05
0.001 < p < 0.01
0.0001 < p < 0.001

Table S4. Anti-MOG antibodies in CSF and paired serum samples

	PATIENT ID	GDP-L-fucose synthase	MBP	MOG 1-20	MOG 35-55	PLP 139-154	CEF	CSF anti-MOG IgG	CSF anti-MOG IgM	SERUM anti-MOG IgG	SERUM anti-MOG IgM
GDP-L-FS-RESPONDERS	131							0		0	
	718							0		0	
	776							0		20	160
	816							0		20	80
	830							0		0	
	1081							0		80	80
	1129										
	1173							0		0	
	1440							0		0	
	1479							0		0	
	1489							0		0	
	1493							0		20	40
	1604							0		0	
	1841							0		0	
MBP-RESPONDERS	702							0		0	
	818							0		40	80
	973							0		0	
	1125							0		0	
MOG(35-55)-RESPONDERS	468							0		20	80
	748							0		0	
	1097							0		0	
	1188							0		160	80
	1283							0		0	
	1303							0		0	
	1444							0		20	80
	1474							0		0	
	1517							0		0	
	1560							0		0	
	1673							0		0	
NON-RESPONDERS	66							0		0	
	103							0		0	
	127							0		0	
	172							0		0	
	204							0		80	40
	247										
	373							0		0	
	381							0		0	
	474							0		0	
	697							0		0	
	740							0		0	
	780							0		0	
	800							0		40	20
	817							0		0	
	866							0		0	
	897							0		0	
	936							0		20	40
	956							0		0	
	959							0		0	
	971							0		0	
	996							2	0	0	
	1013							0		0	
	1036							0		0	
	1111							0		0	
	1143							0		0	
	1205							0		0	
	1206							0		0	
	1254							0		0	
	1290										
	1292							0		160	40
	1300							0		0	
	1326							0		20	40
	1332							0		20	80
	1346							0		20	80
	1358							0		40	40
	1371							0		0	
	1435							2	0	160	80
	1453							0		40	20
	1458							0		0	
	1460							0		0	
	1467							0		0	
	1515							0		0	
	1533							0		0	
	1542							0		0	
	1571							0		0	
	1586							0		0	
	1613							0		0	
	1617										
	1619							0		0	
	1640							0		0	
	1662							0		80	40
	1664							0		0	
	1690							0		0	
	1693							0		0	
	1701							0		0	
	1702							0		0	
	1712							0		80	40
	1717							0		0	
	1727							0		0	80

1753							0		20	80
1754							0		0	
1755							0		0	
1760							0		0	
1761							0		0	
1791							0		20	160
1799							0		0	
1823							0		0	
1824							0		0	
1840							0		20	160
1858							0		0	
1876							0		80	80
1883							0		20	160
1908							0		20	160
1911							0		0	
1915							0		0	
1916							0		0	

MOGAD-PT1	32	0	10240	1280
MOGAD-PT2	0		320	320
MOGAD-PT3	16	0	5120	40
MOGAD-PT4	1	0	640	20
MOGAD-PT5	1	0	640	40
MOGAD-PT6	256	0	20480	0
MOGAD-PT7	4	0	10240	160
MOGAD-PT9	512	0	20480	80
MOGAD-PT10	2	0	5120	40
MOGAD-PT11			640	

Positive anti-MOG IgG titers (≥ 320 for serum and ≥ 1 for CSF)

Table S5. HLA typing of MS patients.

	PATIENT ID	GDP-L-FS	MBP	MOG(1-20)	MOG(35-55)	PLP(139-154)	CEF	CLASS I				CLASS II											
												HLA DR								HLA DQ			
								A1	A2	B1	B2	DRB1	DRB1	DRB3	DRB3	DRB4	DRB4	DRB5	DRB5	DQA1	DQA1	DQB1	DQB1
GDP-L-FS-RESPONDERS	131							24:02	74:01	40:02	50:01	03:01	11:01	02:02	02:02					05:01	05:01	02:01	03:01
	718							03:01	24:03	50:01	51:01	03:01	15:01	02:02				01:01		05:01	05:01	02:01	03:01
	776							30:02	30:02	18:01	44:03	03:01	08:03	02:02						05:01	06:01	02:01	03:01
	816							24:02	25:01	18:01	51:01	13:01	15:01	02:02				01:01		01:03	01:02	06:02	06:03
	830							03:01	23:01	07:02	49:01	11:01	15:01	02:02				01:01		01:02	05:01	03:01	06:02
	1081							23:01	32:01	40:01	49:01	01:01	08:03							01:01	06:01	03:01	05:01
	1129							00:02	24:02	15:01	57:01	07:01	11:03	02:02		01:03				02:01	05:01	03:01	03:03
	1173							23:01	32:01	18:01	51:01	04:04	11:04	02:02		01:01				03:01	05:01	03:02	03:01
	1440							01:01	02:01	51:01	56:01	08:01	13:02	03:01						01:02	04:01	04:02	06:04
	1479							23:01	66:01	15:01	15:18	13:01	13:02	01:01	03:01					01:03	01:02	06:03	06:09
	1489							01:01	24:02	37:01	37:01	10:01	12:01	02:02						01:01	05:01	03:01	05:01
	1493							29:01	30:02	51:01	58:01	03:01	07:01	02:02		01:01				02:01	05:01	02:01	02:01
	1604							03:02	11:01	18:01	40:02	01:02	11:01	02:02						03:01	05:01	01:01	05:01
	1841							02:01	24:02	40:01	44:03	07:01	11:01	02:02		01:01				02:01	05:01	02:01	03:01
MBP-RESPONDERS	702							01:01	03:01	07:02	08:01	01:03	15:01					01:01		01:02	05:01	03:01	06:02
	818							03:01	03:01	40:01	51:01	03:01	04:07	01:01		01:01				03:01	05:01	02:01	03:01
	973							01:01	26:01	07:02	51:01	04:02	15:01			01:01		01:01		01:02	03:01	03:02	06:02
	1125							03:01	24:02	35:01	44:02	04:02	14:54	02:02		01:01				01:01	03:01	03:02	05:03
MOG(35-55)-RESPONDERS	468							03:01	31:01	18:01	39:01	03:01	16:01	02:02				02:02		01:02	05:01	02:01	05:02
	748							03:01	23:01	07:02	57:03	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
	1097							02:01	02:01	40:01	44:27	04:01	13:02	03:01		01:01				01:02	03:01	03:02	06:04
	1188							02:01	02:01	18:01	35:01	01:01	11:04	02:02						01:01	05:01	03:01	05:01
	1283							02:01	03:01	35:08	40:01	10:01	13:03	01:01						01:01	05:01	03:01	05:01
	1303							23:01	24:02	07:02	50:02	04:06	15:01			01:01		01:01		01:02	03:01	04:02	06:02
	1444							24:02	66:01	18:01	41:02	07:01	13:02	03:01		01:03				01:02	02:01	03:03	06:04
	1474							01:01	11:01	27:04	57:01	07:01	15:02			01:03		01:02		01:03	02:01	03:03	06:01
	1517							01:01	31:01	08:01	51:01	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
	1560							03:01	31:01	18:01	50:01	07:01	15:01			01:01		01:01		01:02	02:01	02:01	06:02
	1673							03:01	24:02	15:01	27:05	04:01	11:04	02:02		01:01				03:01	03:02	03:01	05:01
	66							02:01	24:02	07:02	07:02	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
	103							02:01	24:02	07:02	07:02	15:01	15:01					01:01	01:XX	01:02	01:02	06:02	06:02
	127							03:01	31:01	07:02	39:06	08:01	15:01					01:01		01:02	04:01	04:02	06:02
	172							01:01	11:01	15:01	57:01	14:54	14:54	02:02	02:02					01:01	01:01	05:03	05:03
	204							02:01	03:01	07:02	13:02	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
	247							24:02		07:02	40:02	15:01	07:01			01:03		01:01		01:02	02:01	06:02	03:03
	373							24:02	32:01	15:01	40:02	01:01	11:01	02:02						01:01	05:01	03:01	05:01
	381											15:01	04:01			00:00		01:01		01:02	03:XX	06:02	03:02
	474							24:02	26:01	14:01	44:02	11:04	07:01	02:02		01:01				02:01	05:01	02:01	03:01
	697							01:01	02:01	18:01	41:02	12:01	13:03	01:01	02:02					05:01	05:01	03:01	03:01
	740							02:01	03:01	44:03	44:02	04:01	07:01			01:01	01:01			02:01	03:01	02:01	03:01
	780							11:01	32:01	07:02	15:01	09:01	15:01			01:01		01:01		01:02	03:01	03:03	06:02
	800							11:01	24:02	07:02	44:02	11:04	15:01	02:02				01:01		01:02	05:01	03:01	06:02
	817							02:01	02:01	07:02	35:01	03:01	15:01	01:01				01:01		01:02	05:01	02:01	06:02
	866							30:01	32:01	35:01	51:01	11:01	13:01	01:01	02:02					01:03	05:01	03:01	06:03
	897							24:02	25:01	37:01	40:01	08:01	15:01					01:01		01:02	04:01	04:02	06:02
	936							02:01	24:02	07:02	07:02	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
	956							02:01	24:02	15:01	44:02	04:01	15:01			01:01		01:01		01:02	03:01	03:02	06:02
	959							02:01	02:05	49:01	51:01	04:02	13:02	03:01		01:01				01:02	03:01	03:02	06:04
	971							03:01	03:01	07:02	07:02	11:01	15:01	02:02				01:01		01:02	05:01	03:01	06:02
	996							01:01	30:23	08:01	13:02	07:01	15:01			01:01		01:01		01:02	02:01	02:01	06:02
	1013							29:02	68:01	40:01	44:03	07:01	15:01			01:01		01:01		01:02	02:01	02:01	06:02
	1036							02:05	68:02	15:01	58:01	11:04	13:02	02:02	03:01					01:02	05:01	03:01	06:09
	1111							02:01	32:01	15:01	40:01	11:01	13:02	02:02	03:01					01:02	05:01	03:01	06:04
	1143							02:01	02:01	15:01	44:02	04:01	04:01			01:01	01:01			03:01	03:01	03:02	03:01
	1205							03:01	23:01	07:02	49:01	01:01	15:01					01:01		01:02	01:02	05:04	06:02

NON-RESPONDERS

1206							02:01	03:01	07:02	44:02	04:01	15:01			01:01		01:01		01:02	03:01	03:02	06:02
1254							06:02	68:01	18:01	44:02	11:01	11:01	02:02	02:02					05:01	05:01	03:01	03:01
1290											15:01	04:04			01:00		01:01		03:02	06:02	01:02	03:XX
1292							01:01	66:01	40:02	41:02	15:01	16:01					01:01	02:02	01:02	01:02	05:02	06:02
1300							02:01	30:02	18:01	51:01	03:01	08:01	02:02						04:01	05:01	02:01	04:02
1326							01:01	01:01	08:01	08:01	03:01	03:01	01:01	01:01					05:01	05:01	02:01	02:01
1332							02:01	11:01	08:01	35:01	03:01	14:54	01:01	02:02					01:01	05:01	02:01	05:03
1346							02:01	68:01	13:02	40:01	07:01	13:01	01:01		01:01				01:03	02:01	02:01	06:03
1358							11:01	31:01	35:03	40:01	13:01	13:01	01:01	01:01					01:03	01:03	06:03	06:03
1371							03:01	33:03	14:02	35:08	01:02	13:03	01:01						01:01	05:01	03:01	05:01
1435							01:01	24:02	07:02	15:01	04:01	15:01			01:01		01:01		01:02	03:01	03:02	06:02
1453							02:01	23:01	49:01	57:01	04:02	11:01	02:02		01:01				03:01	05:01	03:02	03:01
1458							03:01	11:01	35:03	52:01	12:01	15:02	02:02				01:02		01:03	05:01	03:01	06:01
1460							24:02	30:01	07:02	08:01	03:01	15:01	01:01				01:01		01:02	05:01	02:01	06:02
1467							01:01	32:01	07:02	08:01	03:01	15:01	01:01				01:01		01:02	05:01	02:01	06:02
1515							29:02	68:01	07:02	40:01	13:01	15:01	01:01				01:01		01:03	01:02	06:03	06:02
1533							01:01	02:01	08:01	15:01	04:01	15:01			01:01		01:01		01:02	03:01	03:02	06:02
1542							03:01	11:01	15:01	35:01	08:01	15:01					01:01		01:02	04:01	04:02	06:02
1571							11:05	23:01	35:01	50:01	01:01	13:03	01:01						01:01	05:01	03:01	05:01
1586							02:01	31:01	18:01	40:01	03:01	15:01	01:01				01:01		01:02	05:01	02:01	06:02
1613							01:01	03:01	15:01	37:01	09:01	15:01			01:01		01:01		03:03	06:02	01:02	03:01
1617							23:01	29:02	39:10	41:02	11:01	11:01	02:02	02:02					06:02	06:02	01:02	01:02
1619							01:01	32:01	40:02	51:01	04:04	15:01			01:01		01:01		03:02	06:02	01:02	03:01
1640							01:01	03:0	07:02	08:01	04:03	15:01			01:01		01:01		01:02	03:01	03:02	06:02
1662							01:01	03:01	07:02	08:01	03:01	15:01	01:01				01:01		02:01	06:02	01:02	05:01
1664							03:01	32:01	07:02	15:01	04:04	15:01			01:01		01:01		03:02	06:02	01:02	03:01
1690							03:01	29:02	08:01	45:01	11:04	15:01	02:02				01:01		03:01	06:02	01:02	05:01
1693							03:01	26:01	35:01	51:01	04:02	10:01			01:01				03:02	05:01	01:01	03:01
1701							01:01	02:01	35:08	51:01	04:04	13:03	01:01		01:01				03:01	04:02	03:01	05:01
1702							24:02	68:01	14:02	45:01	04:05	15:01			01:01		01:01		03:02	06:02	01:02	03:01
1712							24:02	24:02	15:01	44:05	01:01	11:03	02:02						03:01	05:01	01:01	05:01
1717							01:01	32:01	08:01	40:01	03:01	15:01	01:01				01:01		02:01	06:02	01:02	05:01
1727							03:01	32:01	13:02	35:01	01:01	07:01			01:01				02:01	05:01	01:01	02:01
1753							02:01	03:01	07:02	15:01	04:01	15:01			01:01		01:01		03:02	06:02	01:02	03:01
1754							01:01	24:02	27:02	39:01	16:01	16:01					02:02	02:02	01:02	01:02	05:02	05:02
1755							02:01	03:01	35:03	40:01	04:02	13:02	03:01		01:01				01:02	03:01	03:02	06:04
1760							23:01	26:01	07:05	45:01	07:01	11:02	02:02		01:01				02:01	03:01	02:01	05:01
1761							01:01	11:01	27:04	57:01	07:01	15:02			01:03		01:02		01:03	02:01	03:03	06:01
1791							02:01	11:01	15:01	27:05	01:01	04:01			01:01				03:02	05:01	01:01	03:01
1799							03:01	26:01	07:02	07:02	07:01	13:02	03:01		01:01				02:01	06:04	01:02	02:01
1823							24:02	24:02	14:02	51:01	01:02	15:01					01:01		01:02	01:01	05:01	06:02
1824							03:01	23:01	27:05	44:03	07:01	08:01			01:01				02:01	04:01	02:01	04:02
1840							01:01	32:01	08:01	58:01	01:01	16:01					02:02		01:02	01:01	05:02	05:01
1858							24:02	30:01	07:02	08:01	03:01	15:01	01:01				01:01		01:02	05:01	02:01	06:02
1876							26:01	68:01	35:01	44:02	13:01	15:01	01:01				01:01		01:03	01:02	06:03	06:02
1883							02:01	24:02	15:01	35:03	01:01	04:01			01:01				01:01	03:01	03:02	05:01
1908							03:01	30:02	14:02	18:01	03:01	04:05	02:02		01:01				05:01	05:01	02:01	03:01
1911							26:01	32:01	27:09	45:01	11:01	11:01	02:21	02:02					05:01	05:01	03:01	03:01
1915							03:01	03:01	07:02	15:01	15:01	15:01					01:01	01:01	01:02	01:02	06:02	06:02
1916							32:01	68:02	51:01	53:01	09:01	15:01			01:01		01:01		01:02	03:01	03:03	06:02