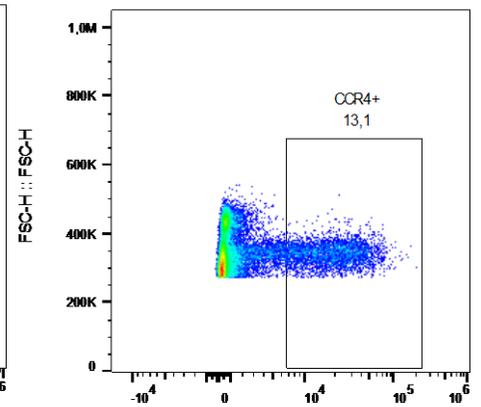
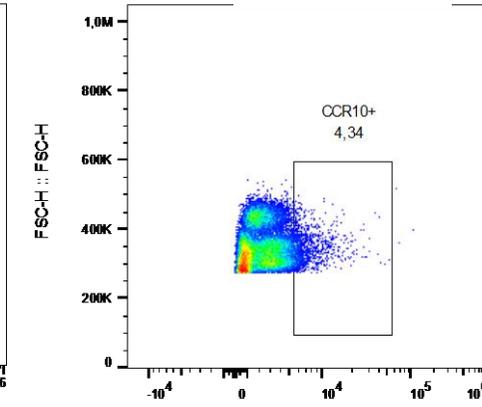
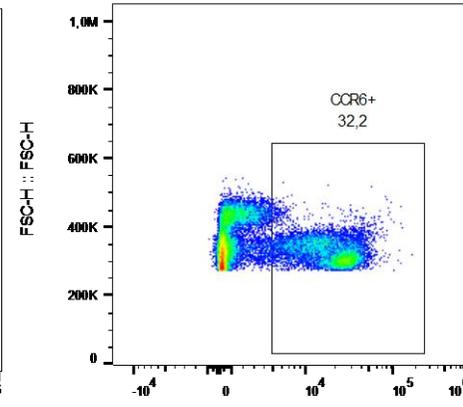
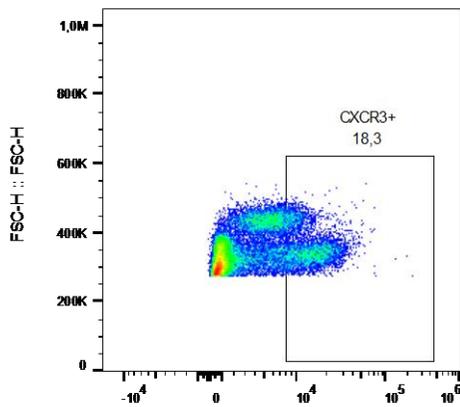


**CXCR3+**

**CXCR6+**

**CXCR10+**

**CXCR4+**

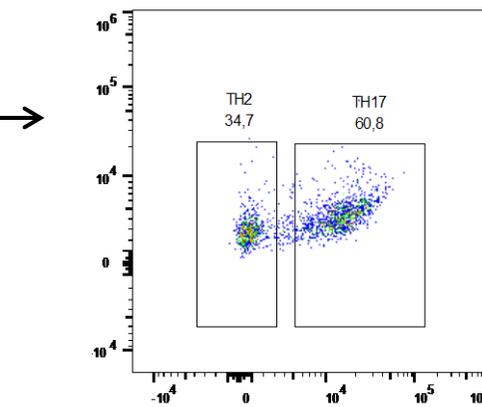
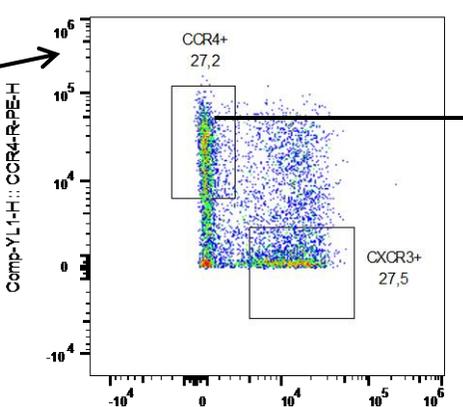
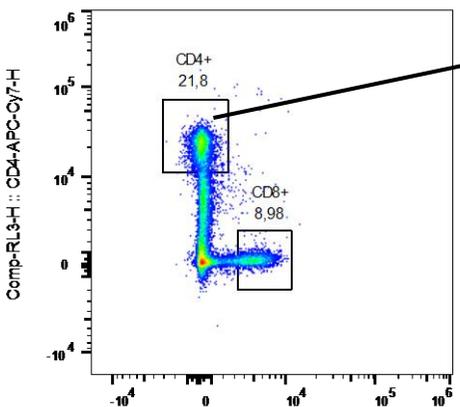


Comp-BL1-H :: CXCR3-FITC

Comp-YL4-H :: CCR6-PE-Cy7-H

Comp-RL1-H :: CCR10-APC-H

Comp-YL1-H :: CCR4-R-PE-H



Comp-BL3-H :: CD8-PerCP-Cy5.5-H

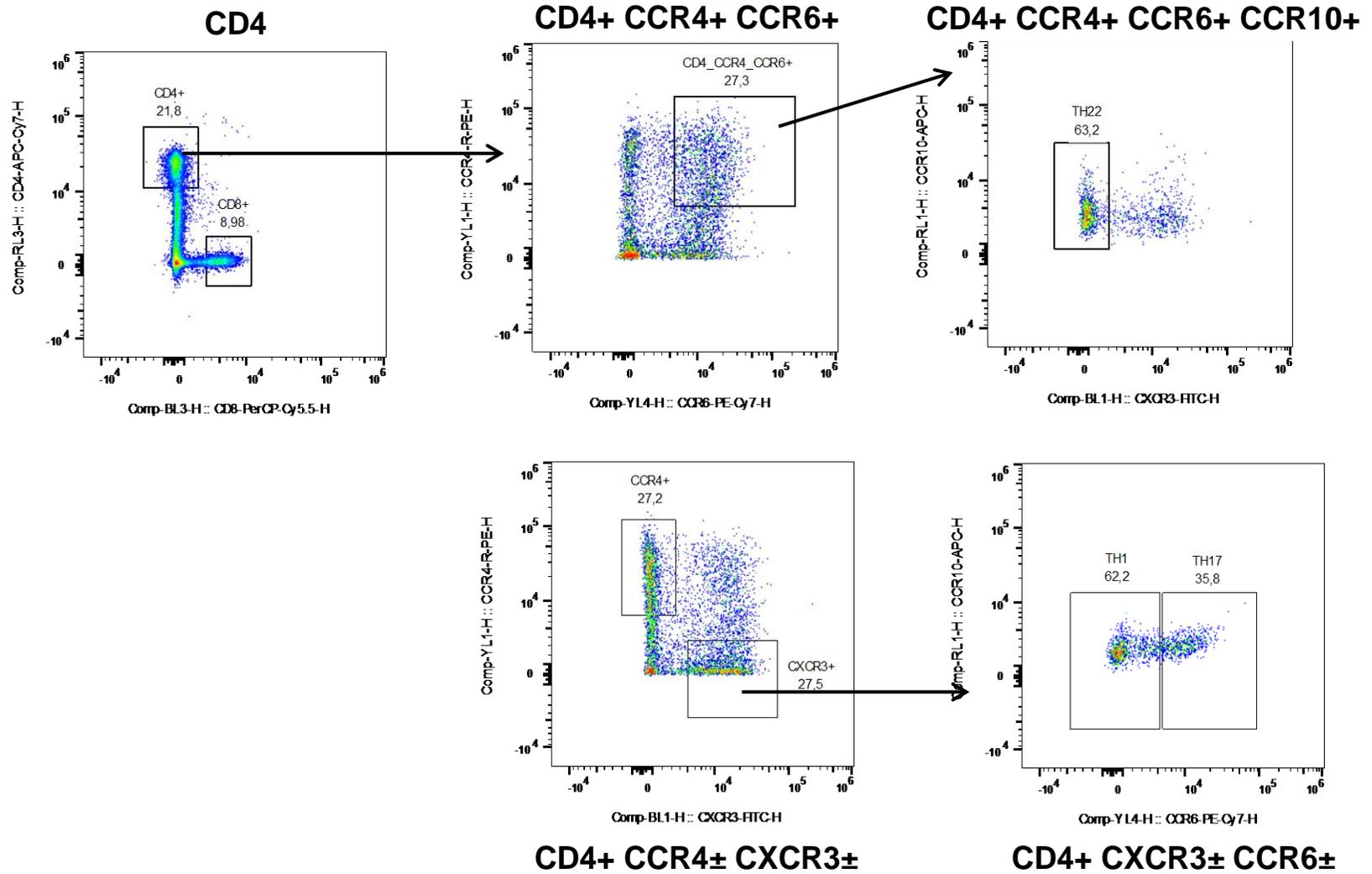
Comp-BL1-H :: CXCR3-FITC

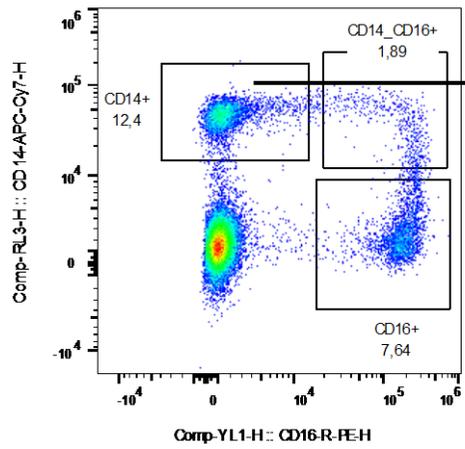
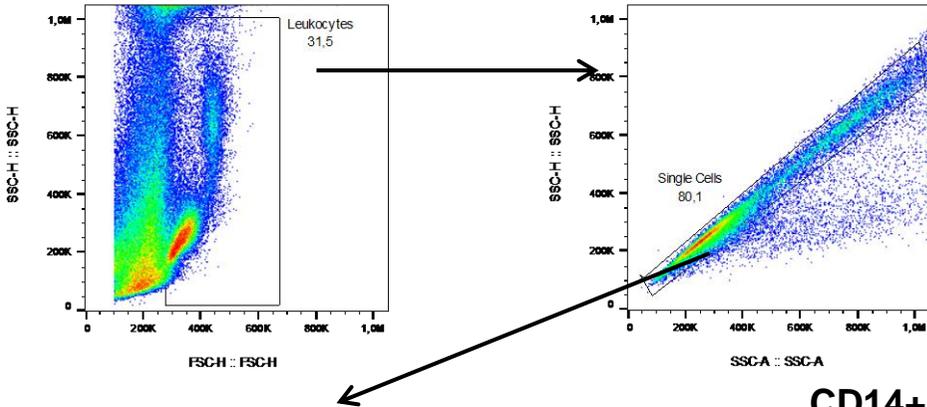
Comp-YL4-H :: CCR6-PE-Cy7-H

**CD4+ / CD8+**

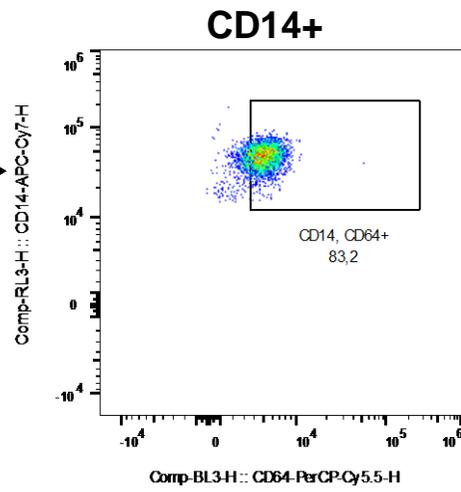
**CD4+ CCR4+**

**CD4+ CCR4+ CCR6±**

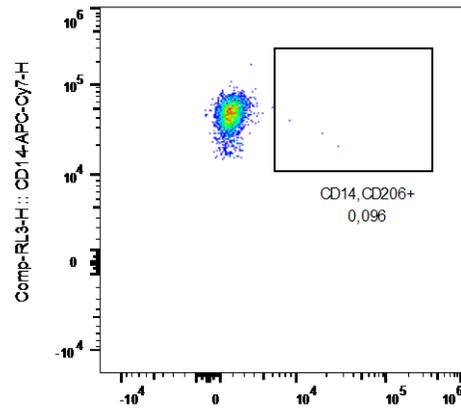




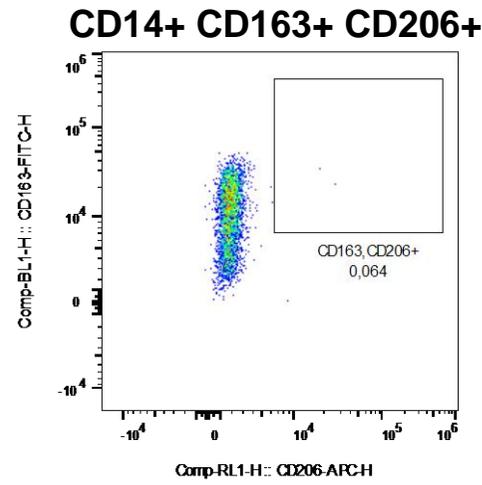
**CD14+ CD16+**



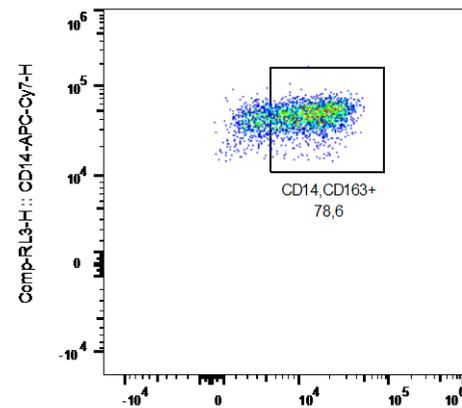
**CD14+**



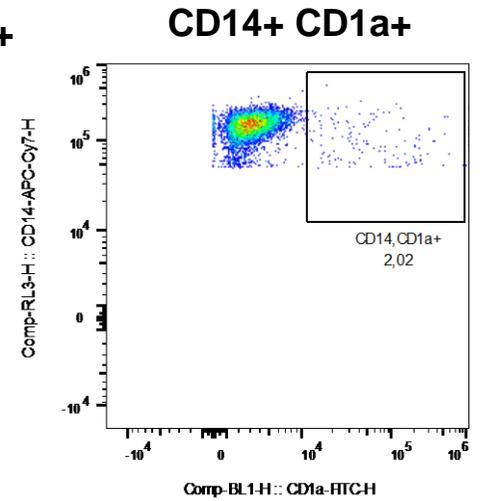
**CD14+ CD206+**



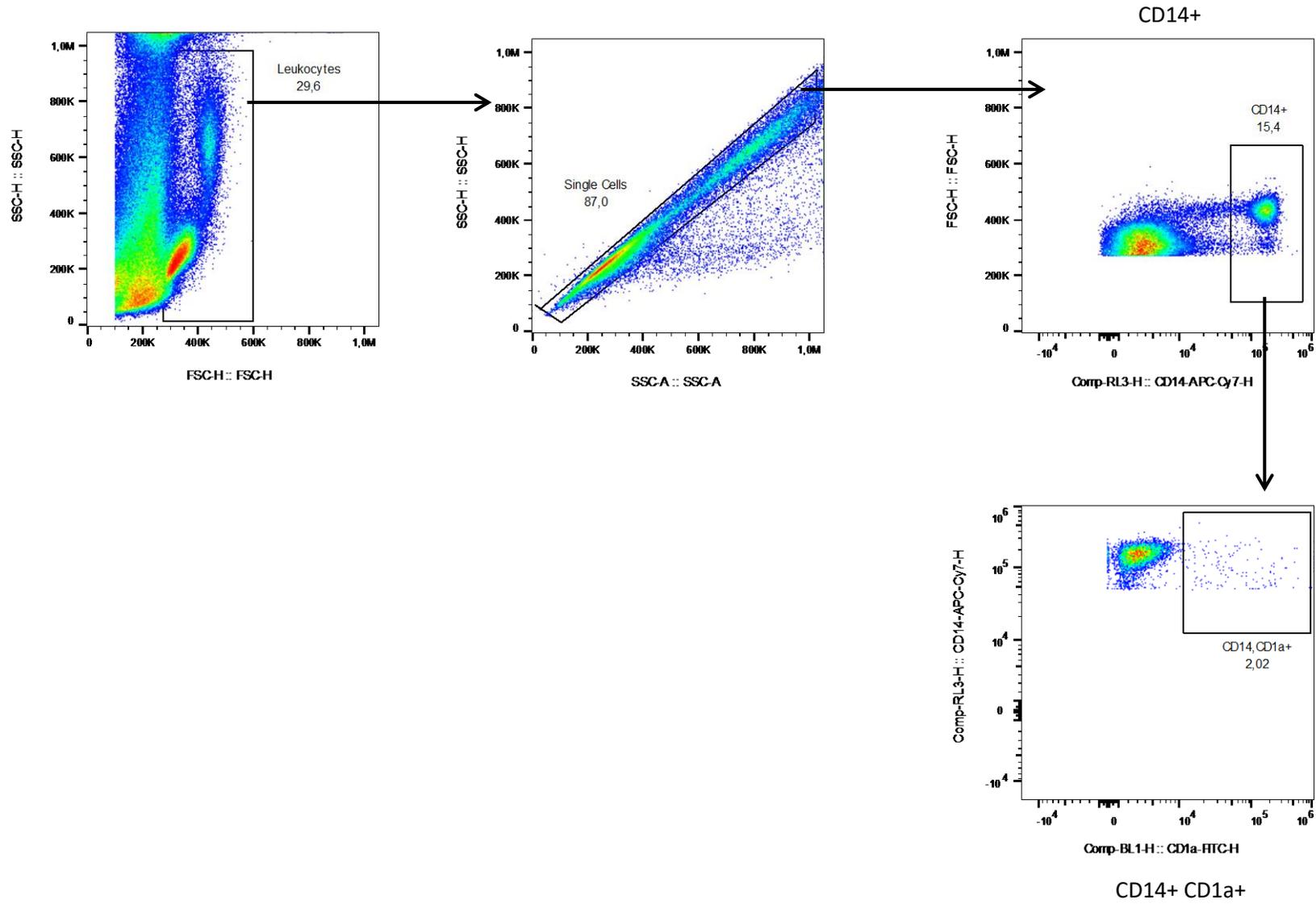
**CD14+ CD163+ CD206+**

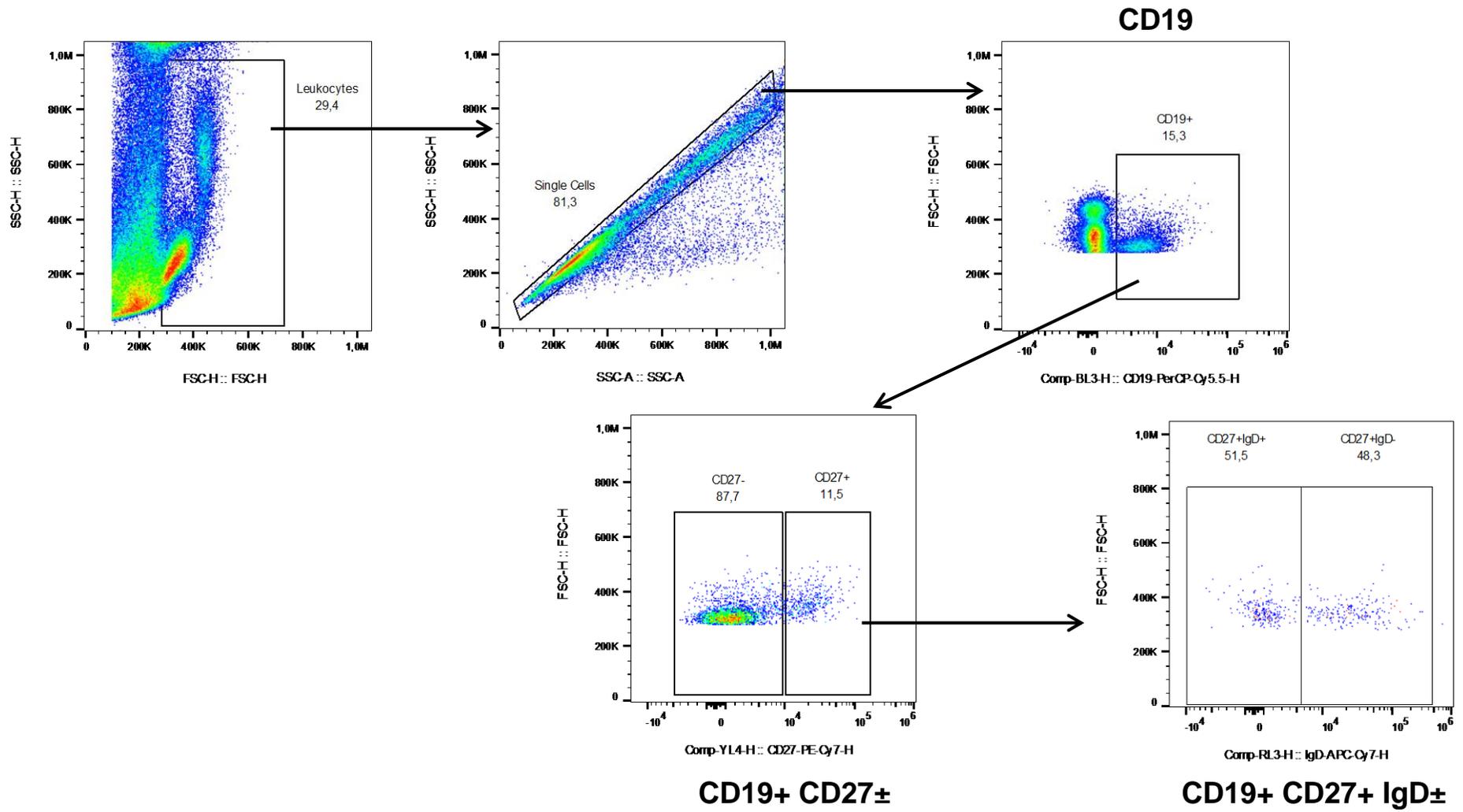


**CD14+ CD163+**

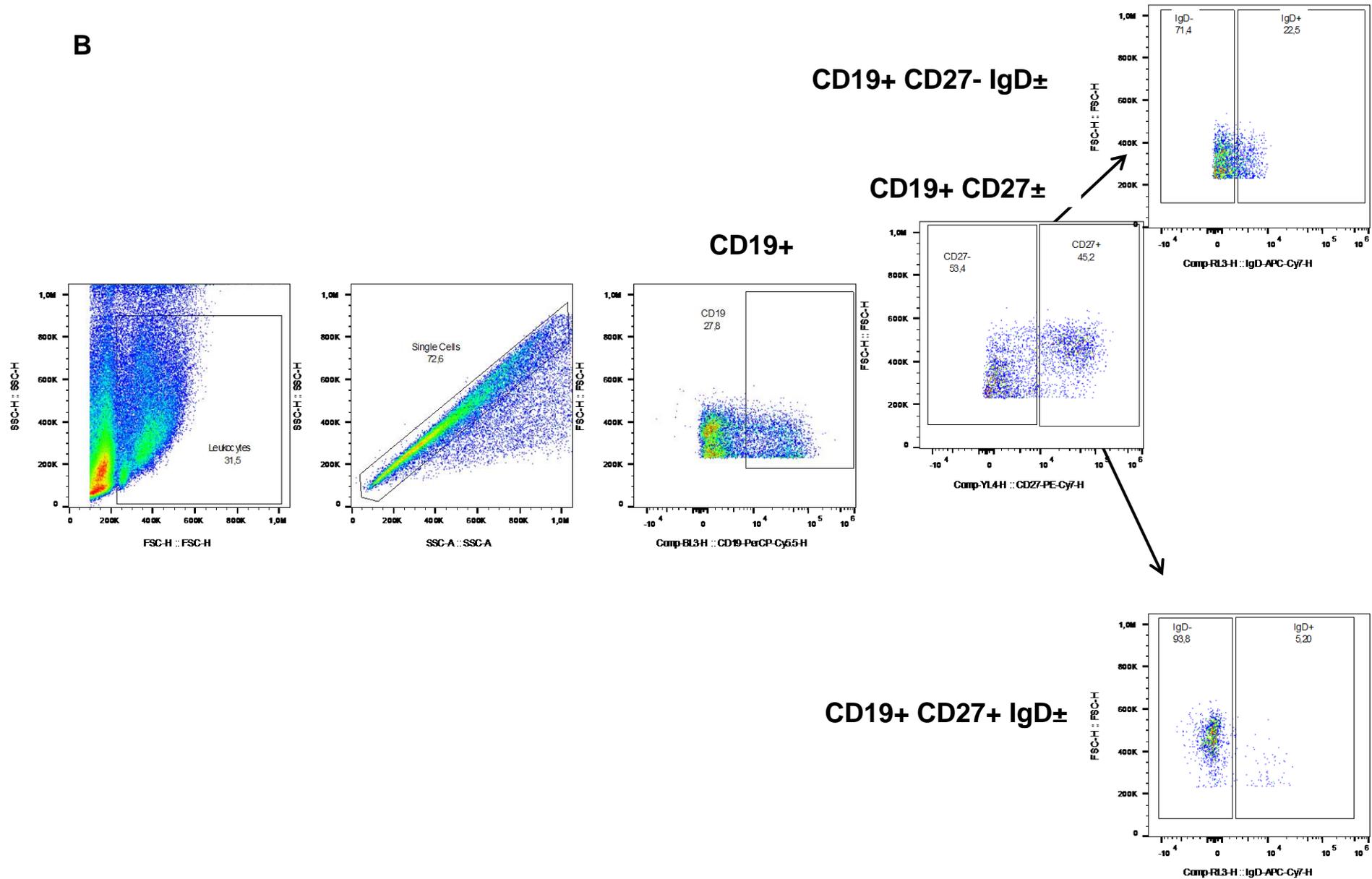


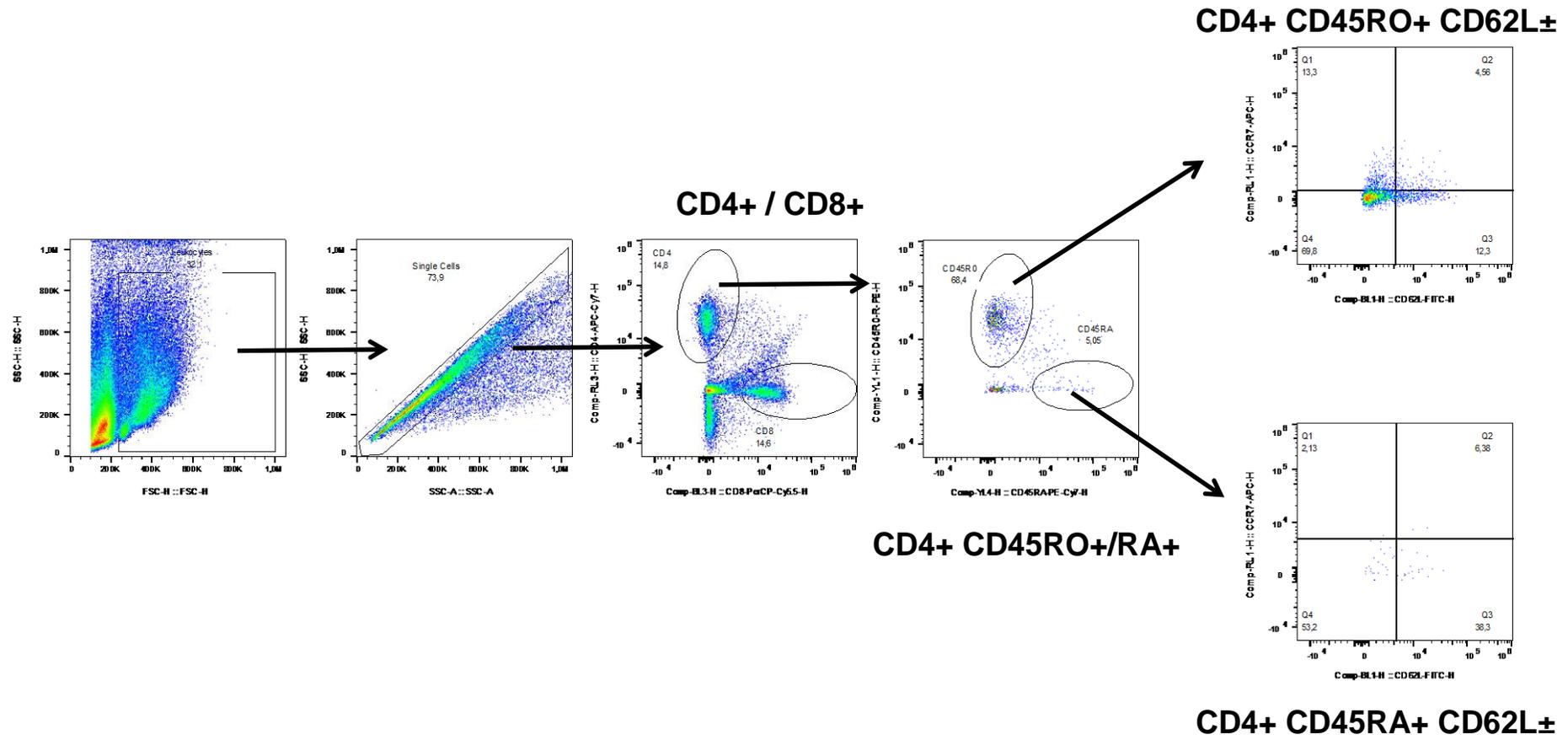
**CD14+ CD1a+**

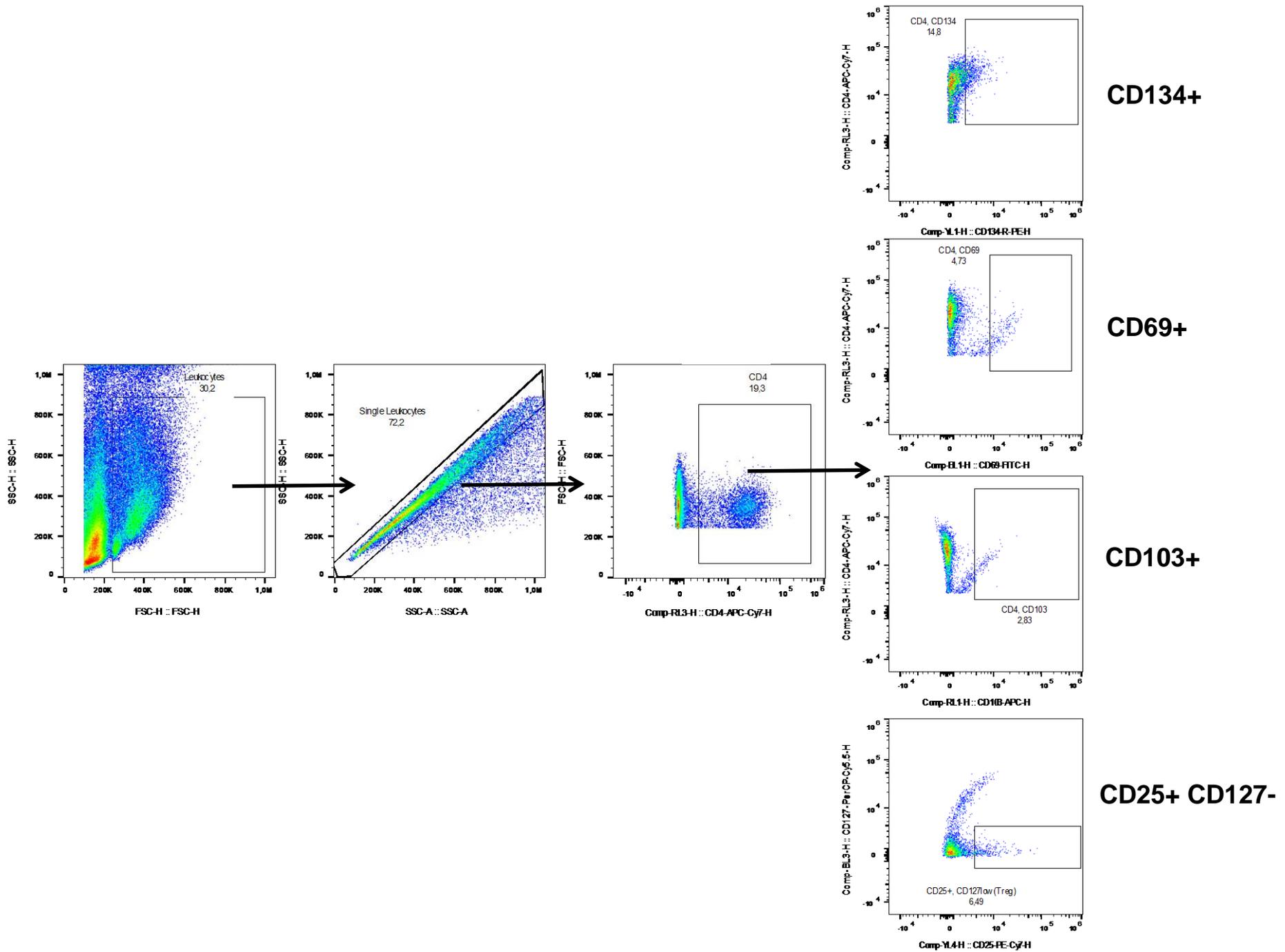


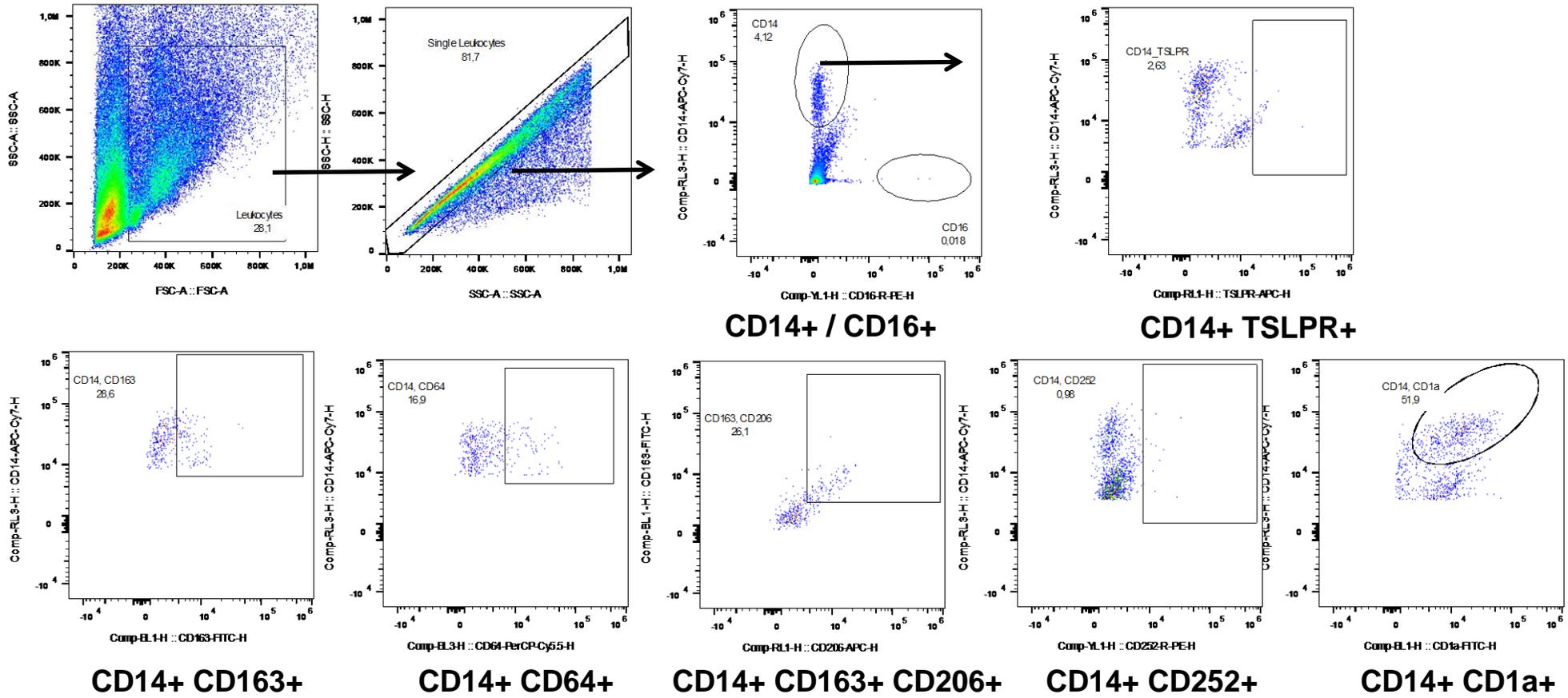


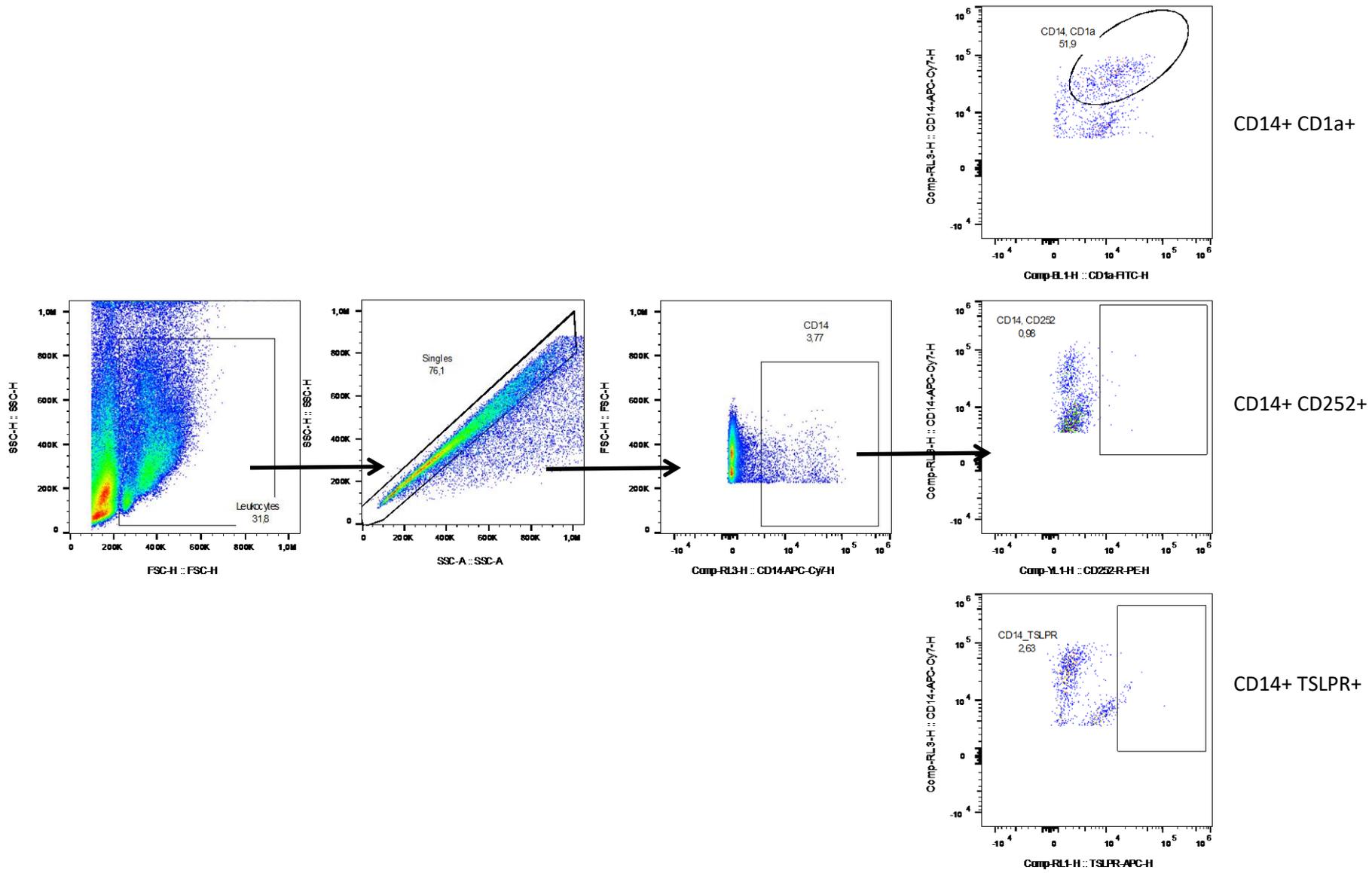
**B**











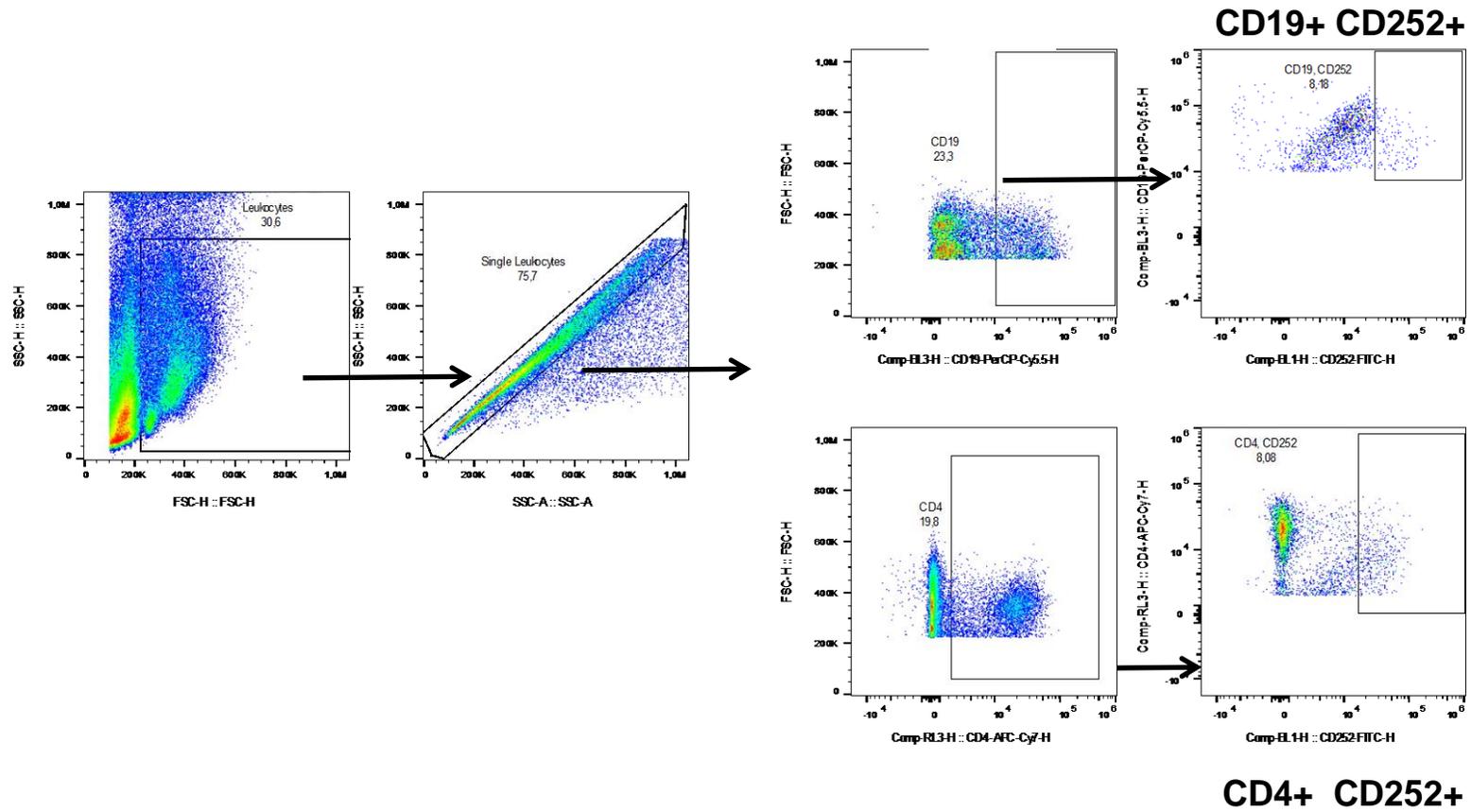
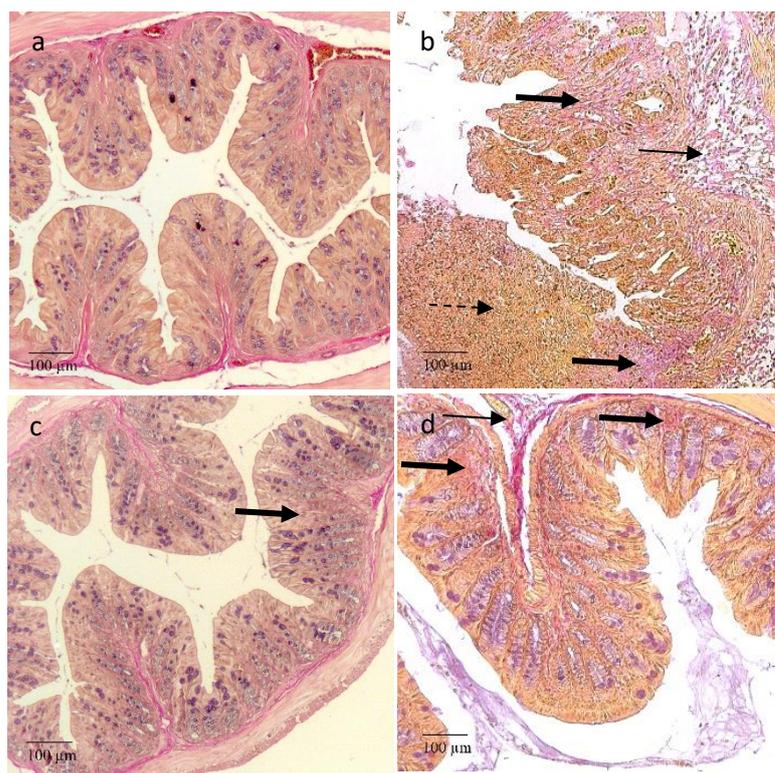


Figure S1 Gating Strategy. (A) human PBMC; (B) human leukocytes isolated from mouse spleen.



**Figure S2. Comparison of the efficacy of oxelumab and adalimumab *in vivo*.** Mice were treated as described in Figure 2. (A) Representative photomicrographs of Elastica-van-Gieson stained sections of distal parts of the colon from mice. (a) Unchallenged control, (b) ethanol challenged control treated with isotype, (c) ethanol challenged group treated with oxelumab, (d) ethanol challenged group treated with adalimumab. Arrows indicate edema and influx of inflammatory cells, dashed arrows indicate destruction of crypts and bold arrows fibrosis. (B) Histological scores depicted as boxplots. Boxes represent upper and lower quartiles, whiskers represent variability and outliers are plotted as individual points. For comparison of groups ANOVA followed by TukeyHSD was conducted. (0 '\*\*\*\*' 0.001 '\*\*\*' 0.01 '\*\*' 0.05).

**Table S1 Antibodies used to label human leukocytes**

Surfacemarker	Colour	Cat # RRID #
CD19	Peridine-chlorophyll-protein complex cyanine dye (PerCP-Cy™ 5.5)	BioLegend Cat# 302230, RRID:AB_2073119
CD38	Phycoerythrin (PE)	BioLegend Cat# 356603, RRID:AB_2561899
CD27	Pe-Cy7	BioLegend Cat# 356411, RRID:AB_2562257
IgD	APC/Cy7	BioLegend Cat# 348218, RRID:AB_11203722
CD4	Allophycocyanin (APC)-Cy7	BioLegend Cat# 317417, RRID:AB_571946
CD45RA	PE/Cy7	BioLegend Cat# 304126, RRID:AB_10708879
CD45RO	PE	BioLegend Cat# 304206, RRID:AB_314422
CD62L	FITC	BioLegend Cat# 304838, RRID:AB_2564162
CCR7	APC	BioLegend Cat# 353214, RRID:AB_10917387
CXCR3	FITC	BioLegend Cat# 353704, RRID:AB_10983066
CCR6	PE/Cy7	BioLegend Cat# 353405, RRID:AB_10918985
CCR10	APC	BioLegend Cat# 341505, RRID:AB_2291025
CD8	PerCP-Cy™ 5.5	BioLegend Cat# 344750, RRID:AB_2687201
CD103	APC	BioLegend Cat# 350215, RRID:AB_2563906
CD14	APC-Cy7	BioLegend Cat# 325619, RRID:AB_830692
CD16	PE	BioLegend Cat# 360703, RRID:AB_2562748
TSLPR	APC	BioLegend Cat# 322807, RRID:AB_2085327
CD1a (biotin)/secondary Ab streptavidin	FITC	BioLegend Cat# 300112, RRID:AB_389344
CD64	PerCP-Cy™ 5.5	BioLegend Cat# 305023, RRID:AB_2561585
CD163	FITC	BioLegend Cat# 333617, RRID:AB_2563093
CD206	APC	BioLegend Cat# 321109, RRID:AB_571884
CD16	PE	BioLegend Cat# 302007, RRID:AB_314207
CD11b	APC-Cy7	BioLegend Cat# 301341, RRID:AB_2563371

CD11c	PE-Cy7	<b>BioLegend Cat# 301607, RRID:AB_389350</b>
CD69	FITC	<b>BioLegend Cat# 310903, RRID:AB_314838</b>
CD25	PE/Cy7	<b>BioLegend Cat# 302611, RRID:AB_314281</b>
CD134 (Ox40)	PE	<b>BioLegend Cat# 350003, RRID:AB_10641708</b>
CD127	Per CP Cy5	<b>BioLegend Cat# 351321, RRID:AB_10900253</b>
CD252	PE	<b>BioLegend Cat# 108805, RRID:AB_313404)</b>

**Table S2 Cellular markers used to define immune cells**

Marker	Definition
CD19+ CD27+ IgD+	Unswitched memory B-cell
CD19+ CD27+ IgD-	Switched memory B-cell
CD19+ CD38+	Plasma cell
CD4+ CD45RO+ CD62L- CCR7-	Effector memory CD4+ T- cell
CD4+ CD45RO+ CD62L+, CCR7+	Central memory
CD4+ CD103+	Mucosal regulatory CD4+ T cell
CD4+ CCR4+	Th2, effector regulatory T- cell
CD4+ CD25+ CD127-	Regulatory T-cell
Th1	CD4+ CXCR3+
Th2	CD4+ CCR4+ CCR6-
Th17	CD4+ CCR4+ CCR6+
Th22	CD4+ CCR4+ CCR6+ CCR10+
CD4+ CD134+	Activated CD4+ T cell
CD4+ CD69+	Activated CD4+ T cell
CD4+ CD25+	Activated CD4+ T cell
CD14+	MC*
CD14+ TSLPR+	MC, expressing TSLPR
CD14+ CD64+	M1MC, FcγR1 expressing
CD14+ CD163+ CD206+	M2 MC, scavenging cells
CD14+ CD1a	MC CD1a expressing
CD11b+	cDC1**
CD11b+ CD80/86+	cDC1, mature
CD11b+ TSLPR+	cDC1 TSLPR expressing
CD11b+ CD1a+	cDC1 CD1a expressing

\*Monocyte

\*\*Conventional dendritic cell

TSLPR: Thymic stromal lymphopoietin receptor

**Table S3 Complete data set animal study**

Leukocytes from spleen [% FoP]	Mean				SD				n			
	Control	Isotype	Oxelumab	Adalimumab	Control	Challenge	Oxelumab	Adalimumab	Control	Challenge	Oxelumab	Adalimumab
CD4+	9,33	19	22,99	17,63	4,65	14,4	15,54	13,96	6	24	18	21
CD4+ CD69+	17,4	28,72	27,68	25,91	5,74	12,68	11,89	11,54	5	24	18	21
CD4+ CD134+	47,22	39,29	31	33,58	30,31	27,1	23,67	23,41	6	24	18	21
CD4+ CD103+	16,51	3,85	6,84	4,63	39,72	2,77	4,93	6,53	6	24	18	21
CD4+ central memory	3,34	13,75	9,21	13,59	2,28	11,66	10,39	17,11	6	24	18	22
CD4+ effector memory	73,55	52,99	57,92	60,1	4,98	30,22	25,12	25,58	6	24	18	22
CD4+ effector	60,85	24,16	27,52	30,82	7,93	30,25	41,39	35,38	6	24	18	23
CD4+ naive	2,24	30,09	32,63	34,24	1,11	32,01	33,07	35,79	6	24	18	23
CD8+ effector memory	63,31	29,32	8,47	28,5	9,17	22,26	2,31	20,67	6	13	6	11
CD8+ central memory	0,41	3,62	12,18	9,86	0,34	7,66	17,09	18,13	6	19	12	17
CD14+	4,68	16,72	52,6	28,07	0,69	19,7	34,41	30,62	6	23	18	21
CD14+ CD64+	6,98	13,65	20,96	14,56	3,01	11,03	15,61	14,04	6	23	18	21
CD14+ CD163+	2,93	16,38	22,65	14,83	1,83	20,65	18,25	16,23	6	23	18	21
CD14+ CD163+ CD206+	1,91	9,68	12,93	7,53	2,52	12,25	12,97	9,06	6	18	12	15
CD14+ TSLPR+*	3,55	4,52	4,46	6,84	4,45	3,65	3,19	9,4	6	17	12	15
CD19+	11,66	11,73	12,7	14,26	3,6	3,24	2,96	5,38	6	24	18	22
CD19+ CD27+ IgD+	7,85	37,12	61,02	43,78	3,41	36,8	34,46	38,68	6	24	18	22
CD19+ CD27+ IgD-	90,35	54,78	33,37	49,98	3,75	38,89	33,48	40,27	6	24	18	22
<b>Scores</b>												
Clinical Score	2,33	3,11	0,94	1,45	0,51	3,25	0,72	1,14	6	26	18	24
Histological Score	0,16	4,08	1,58	2,08	0,4	2,3	2,23	1,69	6	24	17	24
Colon Score	0,33	2,75	0,55	0,87	0,51	1,7	1,42	1,32	6	24	18	24
<b>Amino Acids [µmol / l]</b>												
Glutamic Acid	60,25	100,79	117,96	91,61	19,46	21,13	19,65	24,36	6	21	17	19
Aspartic Acid	20,61	67,53	77,34	68,34	4,41	69,64	71,31	69,98	6	21	17	19
<b>Cytokines [pg/ml]</b>												
ms IL-1β	4,23	12,53	14,3	15,12	2,41	12,2	10,6	19,64	6	19	11	17
ms IL-6	26,29	56,51	12,49	19,11	32,32	99,83	8,89	13,38	6	24	16	20
hu IFNγ		2,28	2,29	3,12		2,49	2,37	3,1		12	11	10
Hu IL-4	1,76	15,85	22,71	24,66	1,11	23,92	21,38	37,21	6	19	11	17
* Thymic stromal lymphopoietin receptor												

Leukocytes from spleen [% FoP]	Δ	p-value	95% CI		Δ	p-value	95% CI		Δ	p-value	95% CI	
	Isotype / Control		lower	upper	Oxelumab / Isotype		lower	upper	Oxelumab / Control		lower	upper
CD4+	9,67				3,99				13,66			
CD4+ CD69+	11,32				-1,04				10,28			
CD4+ CD134+	-7,93				-8,29				-16,22			
CD4+ CD103+	-12,66				2,99				-9,67			
CD4+ central memory	10,41				-4,54				5,87			
CD4+ effector memory	-20,56				4,93				-15,63			
CD4+ effector	-36,69				3,36				-33,33			
CD4+ naive	27,85				2,54				30,39			
CD8+ effector memory	-33,99	0,003	-58,41	-9,57	-20,85				-54,84	6E-05	-83,4	-26,27
CD8+ central memory	3,21				8,56				11,77			
CD14+	12,04				35,88				47,92			
CD14+ CD64+	6,67				7,31				13,98			
CD14+ CD163+	13,45				6,27				19,72	0,09	-2,49	41,93
CD14+ CD163+ CD206+	7,77				3,25				11,02			
CD14+ TSLPR+*	0,97				-0,06				0,91			
CD19+	0,07				0,97				1,04			
CD19+ CD27+ IgD+	29,27				23,9				53,17	0,01	9,14	97,19
CD19+ CD27+ IgD-	-35,57				-21,41				-56,98	0,008	-102,33	-11,61
<b>Scores</b>												
Clinical Score	0,78				-2,17	0,0006	-3,21	-0,1	-1,39			
Histological Score	3,92	3E-04	1,5	6,32	-2,5	0,001	-4,16	-0,82	1,42			
Colon Score	2,42	2E-03			-2,2	4E-05	-3,38	-1	0,22			
<b>Amino Acids [μmol / l]</b>												
Glutamic Acid	40,54	8E-04	14,02	67,06	17,17				57,71	3,00E-06	30,51	84,91
Aspartic Acid	46,92				9,81				56,73			
<b>Cytokines [pg/ml]</b>												
ms IL-1β	8,3				1,77				10,07			
ms IL-6	30,22				-44,02				-13,8			
hu IFNγ					0,01				2,29			
Hu IL-4	14,09				6,86				20,95			
* Thymic stromal lymphopoietin receptor												

	$\Delta$		95% CI		$\Delta$		95% CI	
Leukocytes from spleen [% FoP]	Adalimumab / Isotype	p-value	lower	upper	Oxelumab / Adalimumab	p-value	lower	upper
CD4+	-1,37				-5,36			
CD4+ CD69+	-2,81				-1,77			
CD4+ CD134+	-5,71				2,58			
CD4+ CD103+	0,78				-2,21			
CD4+ central memory	-0,16				4,38			
CD4+ effector memory	7,11				2,18			
CD4+ effector	6,66				3,3			
CD4+ naive	4,15				1,61			
CD8+ effector memory	-0,82				20,03			
CD8+ central memory	6,24				-2,32			
CD14+	11,35				-24,53			
CD14+ CD64+	0,91				-6,4			
CD14+ CD163+	-1,55				-7,82			
CD14+ CD163+ CD206+	-2,15				-5,4			
CD14+ TSLPR+*	2,32				2,38			
CD19+	2,53				1,56			
CD19+ CD27+ IgD+	6,66				-17,24			
CD19+ CD27+ IgD-	-4,8				16,61			
<b>Scores</b>								
Clinical Score	-1,66	0,03	-3,21	-0,1	0,51			
Histological Score	-2	5E-03	-3,52	-0,47	0,5			
Colon Score	-1,88	1E-04			0,32			
<b>Amino Acids [<math>\mu</math>mol / l]</b>								
Glutamic Acid	-9,18				-26,35			
Aspartic Acid	0,81				-9			
<b>Cytokines [pg/ml]</b>								
ms IL-1 $\beta$	2,59				0,82			
ms IL-6	-37,4				6,62			
hu IFN $\gamma$	0,84				0,83			
Hu IL-4	8,81				1,95			

**Table S4 Scores of individual mice**

Maus	Donor	Treatment	Clinical Score	Colon Score	Histological Score
1	A	Isotype	1	2	3
2	A	Isotype	1	2	4
3	A	Isotype	3	3	3
4	A	Isotype	1	4	5
5	A	Isotype	1	1	5
6	A	Isotype	2	5	3
7	A	Adalimumab	0	1	2
8	A	Adalimumab	3	3	8
9	A	Adalimumab	1	0	4
10	A	Adalimumab	2	0	2
11	A	Adalimumab	2	1	2
12	A	Adalimumab	1	1	0
13	A	Oxelumab	2	0	0
14	A	Oxelumab	2	0	2
15	A	Oxelumab	1	0	0
16	A	Oxelumab	0	1	1
17	A	Oxelumab	2	6	7
18	A	Oxelumab	1	1	0
1	B	Isotype	0	1	5
2	B	Isotype	1	1	2
3	B	Isotype	1	1	3
4	B	Isotype	1	6	5
5	B	Isotype	8	6	11
6	B	Isotype	4	3	9
7	B	Adalimumab	0	0	0
8	B	Adalimumab	1	0	2
9	B	Adalimumab	1	0	2
10	B	Adalimumab	2	1	1
11	B	Adalimumab	2	2	1
12	B	Adalimumab	0	1	3
13	B	Oxelumab	0	0	0
14	B	Oxelumab	0	0	3
15	B	Oxelumab	1	1	0
16	B	Oxelumab	1	0	3
17	B	Oxelumab	1	0	0
18	B	Oxelumab	0	0	1
25	B	Isotype	13		
1	C	Isotype	0	2	5
2	C	Isotype	2	2	5
3	C	Isotype	5	2	3
4	C	Isotype	0	2	3
5	C	Isotype	2	2	2
12	C	Oxelumab	1	0	

13	C	Oxelumab	1	0	0
14	C	Oxelumab	1	0	0
15	C	Oxelumab	0	0	0
16	C	Oxelumab	2	1	5
17	C	Oxelumab	1	0	5
18	C	Adalimumab	1	0	1
19	C	Adalimumab	1	0	2
20	C	Adalimumab	1	0	2
21	C	Adalimumab	3	0	2
22	C	Adalimumab	1	0	2
23	C	Adalimumab	2	0	2
24	C	Isotype	8		
1	D	Isotype	4	3	5
2	D	Isotype	10	5	6
3	D	Isotype	3	6	3
4	D	Isotype	3	1	0
5	D	Isotype	2	3	3
6	D	Isotype	2	1	3
7	D	Isotype	3	2	2
8	D	Adalimumab	2	1	1
9	D	Adalimumab	1	1	1
10	D	Adalimumab	2	1	1
11	D	Adalimumab	0	1	1
12	D	Adalimumab	1	1	3
13	D	Adalimumab	5	6	5
14	D	Control	2	0	0
15	D	Control	3	0	0
16	D	Control	2	0	0
17	D	Control	3	0	1
18	D	Control	2	1	0
19	D	Control	2	1	0