

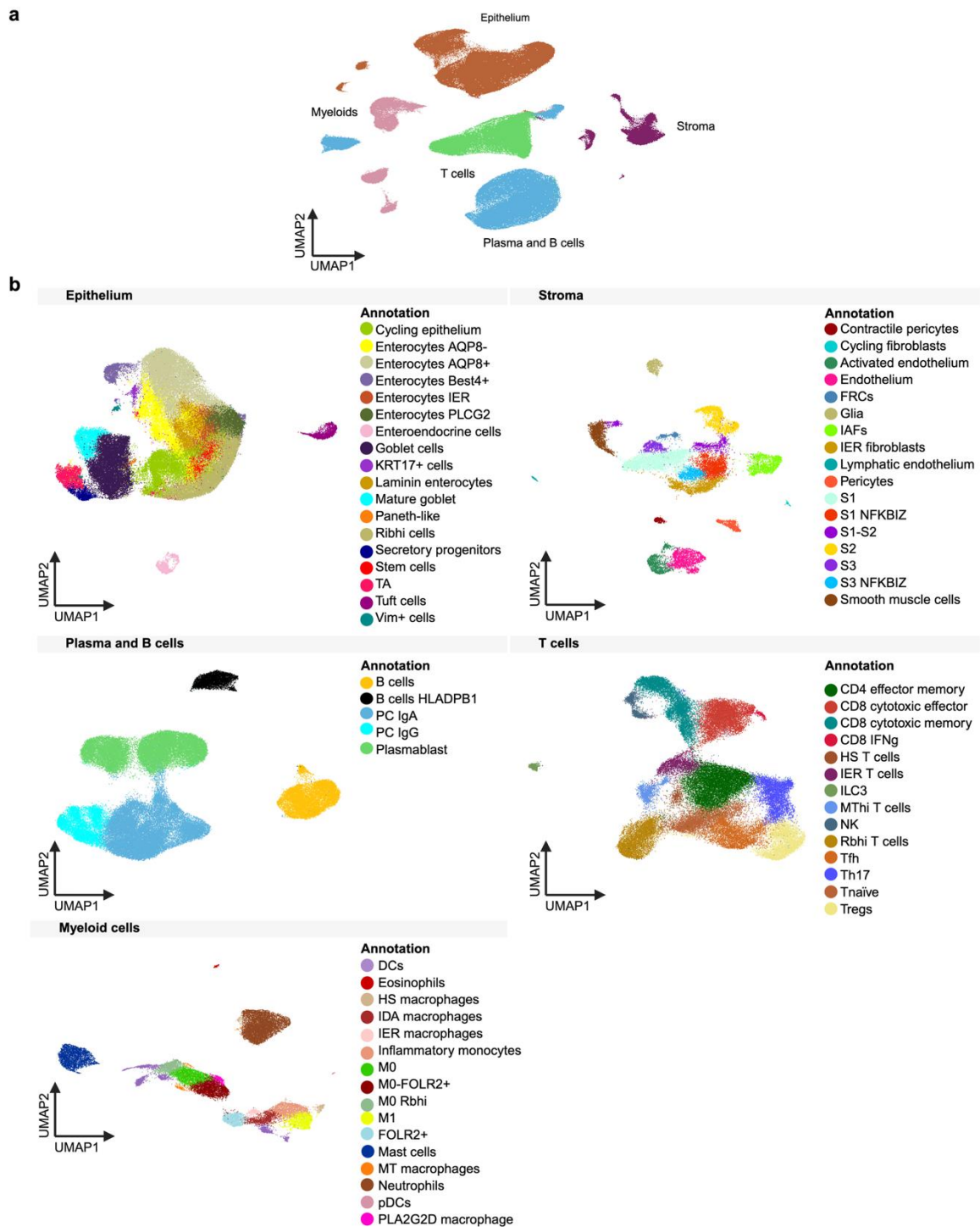


Figure S1. Annotation of scRNA-seq dataset from colonic biopsies used as reference.

(a) UMAP depicting the subset classification of 92 scRNA-seq gut biopsies, colored by major subset. (b) Individual UMAPs showing refined annotations for specific lineages: epithelium, stroma, plasma/B cells, T cells, and myeloid cells.

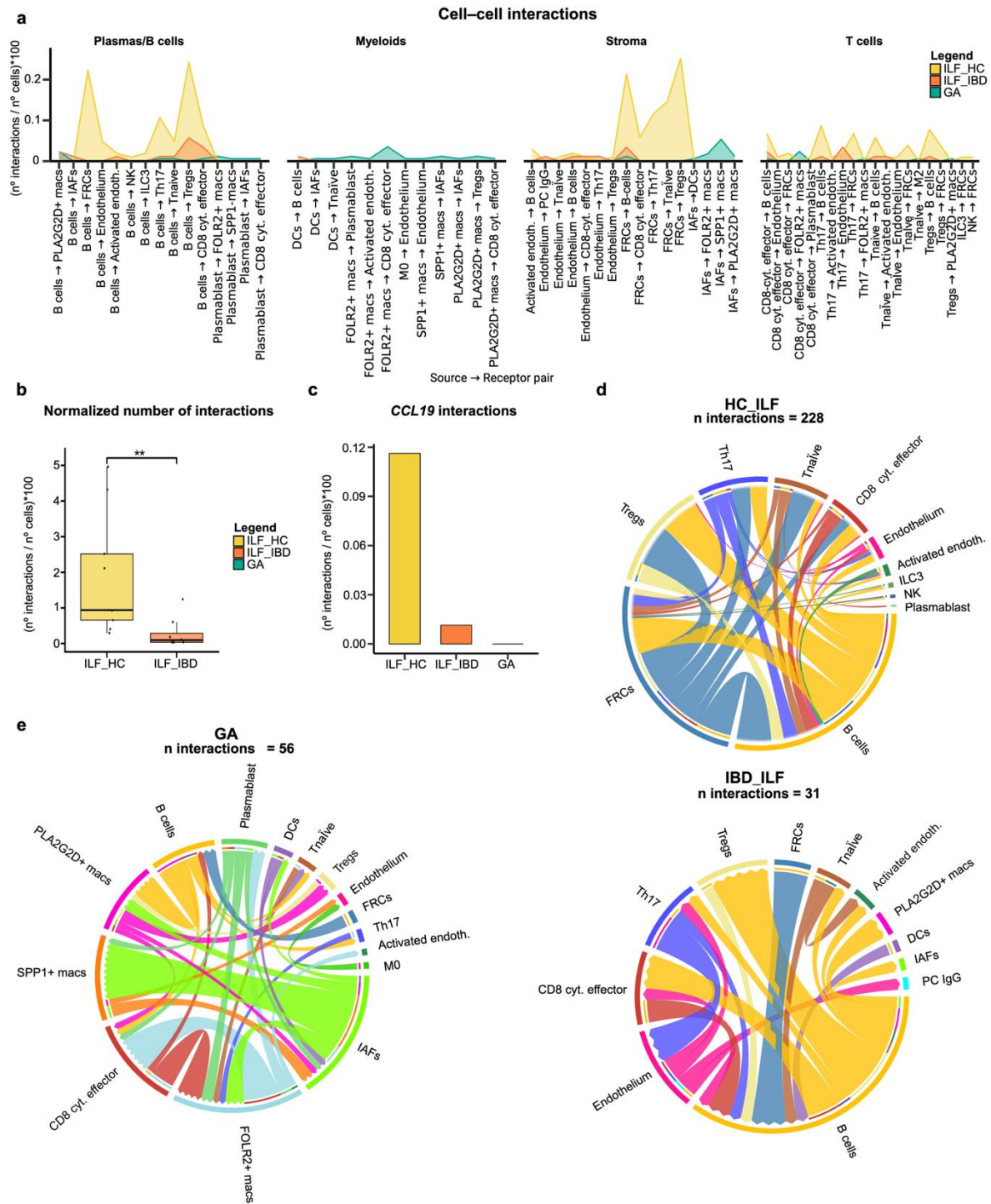


Figure S2. Receptor-ligand interaction analysis within spatially resolved neighborhoods.

(a) Density plot of source-to-target interactions (likelihood > 0.6). The y-axis displays the percentage of interactions relative to the cell count. Grouped by source subset and colored by neighborhood (ILF_HC, ILF_IBD and GA). **(b)** Boxplot showing the total normalized interactions (likelihood > 0.6) per FOV in ILF_HC versus ILF_IBD. Values represent the percentage of interactions relative to cell count. P-values were determined via Wilcoxon Rank

Sum test. **(c)** Bar plot comparing total *CCL19* interactions (likelihood > 0.6) in ILF_HC, ILF_IBD, and GA. Values on the y-axis represent the percentage of interactions relative to the total cell count. **(d)** Directed networks of all cell-to-cell interactions (likelihood > 0.6) between source and target cell types in ILF_HC, ILF_IBD and **(e)** GA. ILF: isolated lymphoid follicle; HC: healthy control; IBD: inflammatory bowel disease; GA: granuloma; FOV: field of view.

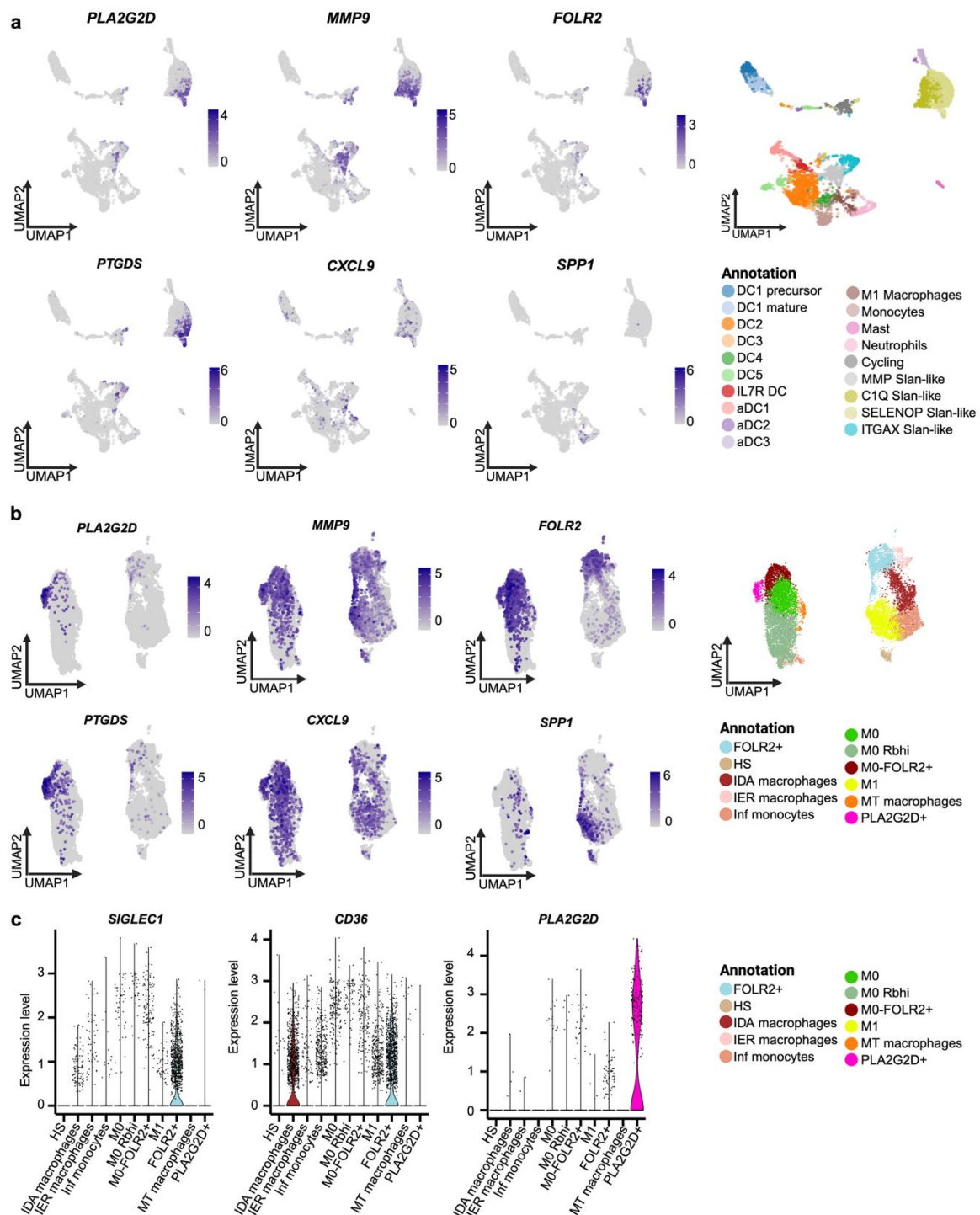


Figure S3. Expression of selected markers on macrophage scRNA-seq data from human tonsil and colon.

UMAP plots depicting expression of *PLA2G2D*, *MMP9*, *FOLR2*, *PTGDS*, *CXCL9*, and *SPP1* within the macrophage compartment in single-cell RNA sequencing data. Data are shown from a publicly available human tonsil atlas (a) and our in-house IBD single-cell atlas (b). Violin plots showing expression of *SIGLEC1*, *CD36* and *PLA2G2D* in intestinal macrophages from in-house IBD scRNA-seq data (c).

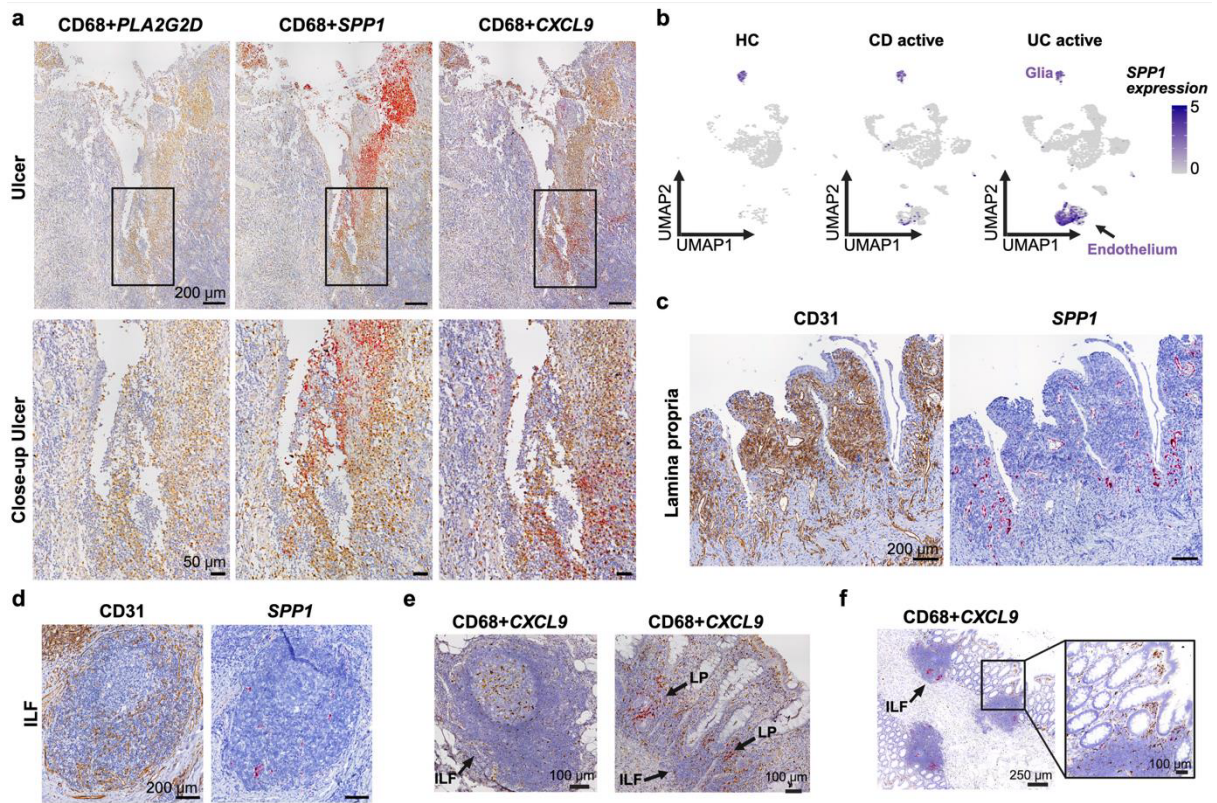


Figure S4. Gene and protein expression in human colonic tissues.

(a) Representative image from the ulcerated mucosa of a CD patient. Tissue was co-stained with an anti-CD68 (brown) in combination with detection of *PLA2G2D*, *SPP1* or *CXCL9* (shown in red) using in situ hybridization. **(b)** UMAP shows *SPP1* expression by intestinal stromal cells from HC, CD or UC colonic samples split by disease group. **(c)** Two consecutive images of a representative section from the colonic mucosa of a patient with active UC. Anti-CD31 immunohistochemistry identifies vessels (brown staining) and in situ hybridization for *SPP1* is shown in red. **(d)** Two consecutive images of a representative section from an ILF in the submucosa of a patient with active UC. Anti-CD31 immunohistochemistry identifies vessels (brown staining) and in situ hybridization for *SPP1* is shown in red. **(e)** Co-staining for CD68 (brown) and *CXCL9* (red). Images capture an intestinal lymphoid follicle (left) and the intestinal mucosa (right) from a patient with ulcerative colitis. **(f)** Healthy colonic tissue co-stained for CD68 (brown) and *CXCL9* (red). HC: healthy control; CD: Crohn's disease; UC: ulcerative colitis; ILF: isolated lymphoid follicle.

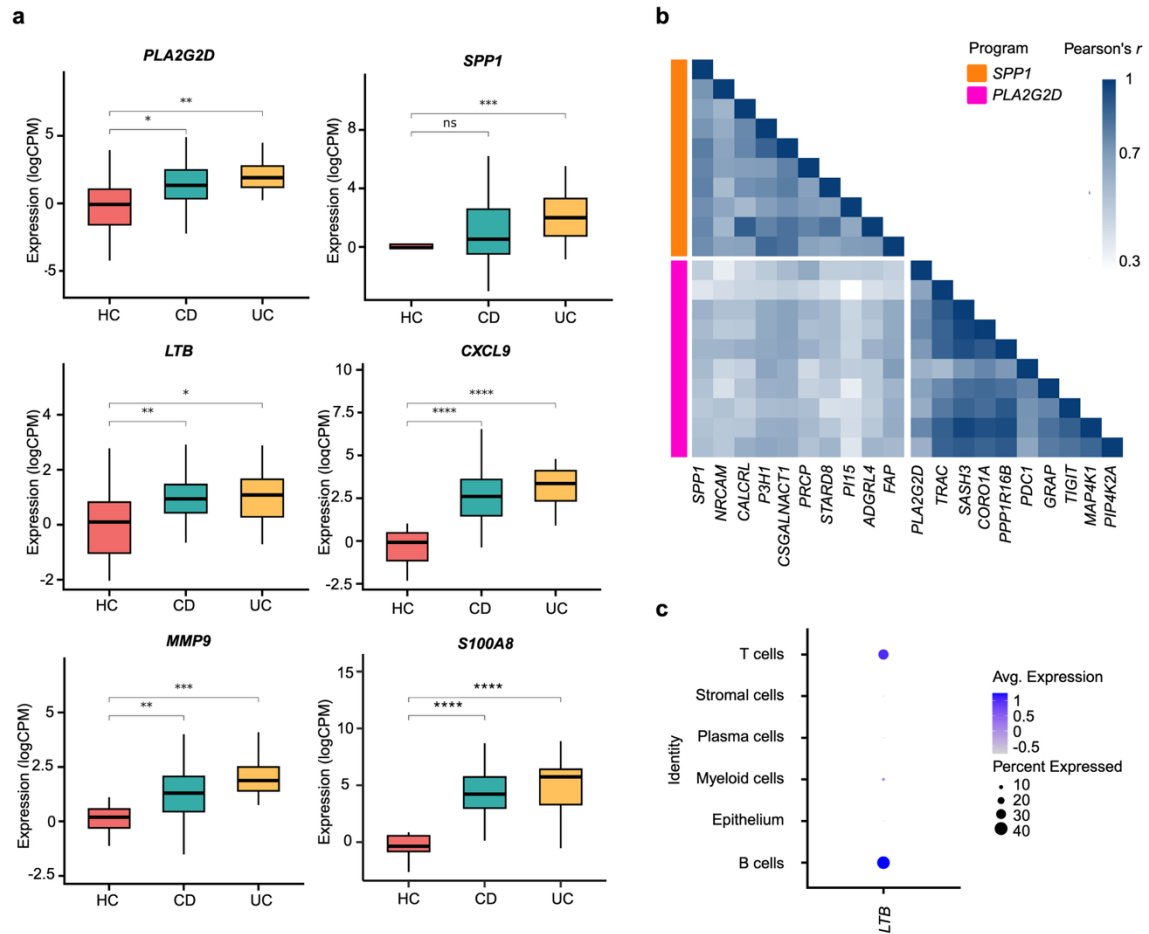


Figure S5. Gene expression in bulk RNA-seq from human intestinal colonic biopsies.

(a) Bulk RNA-seq expression levels (logCPM) per disease of *PLA2G2D*, *SPP1*, *LTB*, *CXCL9*, *MMP9*, and *S100A8*. N=13 HC, 26 active UC and 43 active CD patients. HC: healthy control; CD: Crohn's disease; UC: ulcerative colitis. **(b)** Heatmap showing pairwise Pearson correlation across bulk RNA-seq colonic samples from 26 active UC patients of top 10 genes correlated with *SPP1* and top 10 genes correlated with *PLA2G2D*. Color represents Pearson's $r > 0$. **(c)** Dot plot representing *LTB* expression in the main cell types found in the scRNAseq dataset. Color intensity corresponds to the average cell-type expression, and dot size indicates percentage of cells expressing the gene.

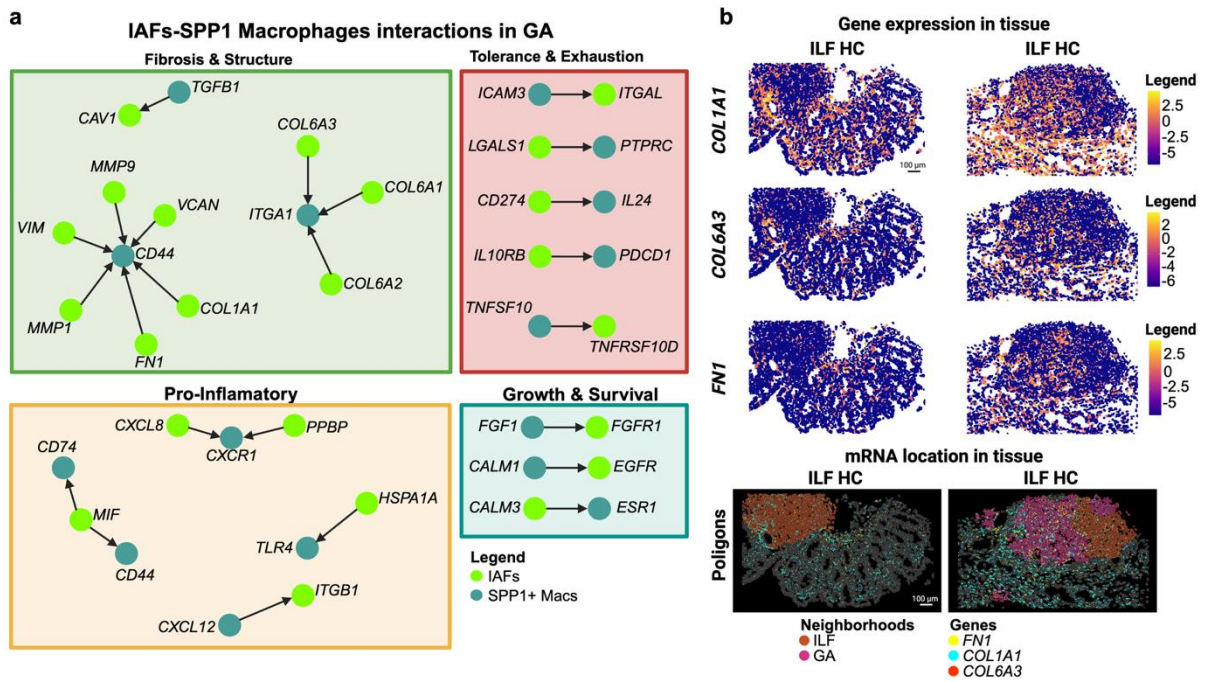


Figure S6. Receptor ligand interactions and gene expression based on spatial transcriptomics analysis.

(a) Panel detailing interactions taking place between SPP1⁺ macrophages and IAFs, classified by functional categories (Fibrosis & Structure, Tolerance & Exhaustion, Pro-Inflammatory, and Growth & Survival). **(b)** Top: Depicting expression in ILF HC and IBD GA the expression of *COL1A1*, *COL6A3*, *FN1*. Bottom: Depicting localization of mRNA of *FN1*, *COL1A1*, *COL6A3*, within the ILF and GA.

Table S2. Top six marker genes for each refined cell annotation within the CosMx-SMI dataset.

SUBSET	REFINED ANNOTATION	TOP MARKERS
Epithelial cells	Cycling epi	<i>HMGB2, TOP2A, PTTG1, TYMS, MKI67, HMGN2</i>
	Enterocytes AQP8-	<i>KRT19, LGALS3, CD24, HSPB1, S100A6, KRT20</i>
	Enterocytes AQP8+	<i>AQP8, SELENOP, CEACAM1, PLAC8, IL32, KRT20</i>
	Enterocytes BEST4+	<i>BEST4, MT2A, MT1X, KRT20, CEACAM6, NOTCH2</i>
	Enterocytes IER	<i>JUN, FOS, ZFP36, JUNB, DUSP1, GADD45B</i>
	Enteroendocrine cells	<i>CHGA, GCG, RGS2, DDC, SCG5, TTR</i>
	Goblet cells	<i>ITLN1, FCGBP, SERPINA1, FFAR4, AGR2, DLL1</i>
	Inf. enterocytes	<i>LCN2, DUOXA2, HLA-DRB5, LYZ, CD74, IDO1</i>
	Laminin enterocytes	<i>LAMA3, EPHA2, LDLR, AREG, IER3, THBS1</i>
	Paneth-like	<i>DEFA5, LYZ, REG1A, PRSS2, PLA2R, TTR</i>
	TA	<i>REG1A, OLFM4, CD74, HLA-DRA, DMBT1, HLA-DRB1</i>
	Tuft cells	<i>PTGS1, FYB1, HCK, BMX, COL27A1, HPGDS</i>
	Stem cells	<i>DEFA5, EPHB3, RNF43, LEFTY1, FN1</i>
B and plasma cells	B cells	<i>MS4A1, CIITA, CXCR4, CD37, HLA-DRA, HLA-DPB1</i>
	PC IgA	<i>JCHAIN, IGHA1, BMP6, DUSP5, IRF4, IGKC</i>
	PC IgG	<i>IGHG1, IGHG2, GAS6, HSPA1B, CAV1, MAP1LC3B</i>
	Plasmablast	<i>IGHM, IGHA1, JCHAIN, HSP90B1, DERL3, MZB1</i>
T cells/ILC	CD8 cyt. effector	<i>GZMK, CD8A, CCL5, KLRK1, CCL4, CD8B</i>
	IER Tcells	<i>FOS, HSPA1B, DUSP1, HSPA1A, JUN, CD69</i>
	Tnaïve	<i>SELL, CCR7, PLAC8, KLF2, NOSIP, IL7R</i>
	Tregs	<i>FOXP3, CTLA4, IL2RA, CD27, MAF, IL6R</i>
	ILC3	<i>AREG, KIT, XCL1, FOS, CD83</i>
	NK	<i>GNLY, PRF1, CCL3, CTSW, NKG7</i>
	Th17	<i>CCL20, IL17A, CHN1, KLRB1, CXCR6</i>
Myeloid cells	DCs	<i>IDO1, CCL19, LAMP3, CCL22, CCR7, IL7R</i>

	Eosinophils	<i>OSM, CLC, CXCL8, ADGRG3, AREG, S100P</i>
	IER macs	<i>VCAN, S100A8, IL1B, FOS, S100A9, DUSP1</i>
	M0	<i>JCHAIN, FABP5, RPL22, RPL37, SELENOP, HLA-DPA1</i>
	M1	<i>INHBA, IL1B, CXCL5, CCL4, ACOD1, CCL3</i>
	FOLR2+ macs	<i>CD163L1, CD163, MRC1, MAF, MERTK, SELENOP</i>
	Mast cells	<i>TPSB2, TPSAB1, CPA3, IL1RL1, KIT, CTSG</i>
	SPP1+ macs	<i>SPP1, MT1X, S100A8, MT2A, S100A9, IL1RN</i>
	Neutrophils	<i>CSF3R, CXCL8, HCAR2, S100A8, HCAR3, IL1R2</i>
	PLA2G2D+ macs	<i>PTGDS, CXCL9, MMP9, CCL18, LYZ, GPNMB</i>
	pDCs	<i>GZMB, LTB, SELL, KRT5, PLAC8, PTGDS</i>
Stromal cells	Contractile pericytes	<i>C11orf96, MYH11, TAGLN, ACTA2, GADD45B, MYL9</i>
	Activated endoth.	<i>ACKR1, VWF, RAMP3, PECAM1, CSF2RB, HLA-DRB1</i>
	Endothelium	<i>PECAM1, CDH5, KDR, FLT1, VWF, TM4SF1</i>
	FRCs	<i>CCL19, CCL21, PTGDS, CXCR4, TNFSF13B, CD74</i>
	Glia	<i>S100B, CRYAB, NRXN1, CLU, COL9A3, CD9</i>
	IAFs	<i>MMP1, CHI3L1, MMP3, MMP2, COL1A2, COL1A1</i>
	IER fibs	<i>FOS, MEG3, GADD45B, ZFP36, JUN, JUNB</i>
	Lymphatic endoth.	<i>CCL21, ADGRG3, MAF, MRC1, EFNA5, EPHB4</i>
	Pericytes	<i>RGS5, NOTCH3, COL5A3, PDGFRB, CYTOR, COL4A1</i>
	S1	<i>JCHAIN, ADAMDEC1, CCL13, CCL8, CFD, CXCL14</i>
	S2	<i>CXCL14, NRG1, PDGFRA, SOX6, HDS17B2, COL4A5</i>
	S3	<i>CFD, GSN, DCN, MGP, IGFBP6, CXCL12</i>
	SMC	<i>ACTG2, MYH11, TAGLN, ACTA2, MYL9, TPM1</i>

Table S3. Differential cell type abundance analysis across ILF_IBD, GA, and ILF_HC conditions. Pairwise comparisons, proportion ratios, and T-statistics were computed using propeller.

Cell Cluster	Proportion Ratio	FDR	Comparison	T-statistic
PC IgG	0.031	9.29e-07	ILF_HC vs ILF_IBD	-6.7
Plasmablast	0.058	3.20e-06	ILF_HC vs ILF_IBD	-6.14
IAFs	0.033	3.39e-04	ILF_HC vs ILF_IBD	-4.69
SMC	15.532	0.001	ILF_HC vs ILF_IBD	4.21
S3	105.182	0.006	ILF_HC vs ILF_IBD	3.62
FOLR2+ macs	0.249	0.025	ILF_HC vs ILF_IBD	-3.07
Lymphatic endoth.	1.761	0.028	ILF_HC vs ILF_IBD	2.98
PLA2G2D+ macs	0.512	0.041	ILF_HC vs ILF_IBD	-2.8
SPP1+ macs	0.176	0.041	ILF_HC vs ILF_IBD	-2.75
Pericytes	0.289	0.047	ILF_HC vs ILF_IBD	-2.66
ILC3	2.235	0.057	ILF_HC vs ILF_IBD	2.52
FRCs	1.745	0.057	ILF_HC vs ILF_IBD	2.51
Tnaïve	2.391	0.106	ILF_HC vs ILF_IBD	2.22
NK	1.75	0.538	ILF_HC vs ILF_IBD	-1.39
Glia	2.944	0.566	ILF_HC vs ILF_IBD	1.22
IER macs	30.272	0.566	ILF_HC vs ILF_IBD	-1.22
Stem cells	0.976	0.566	ILF_HC vs ILF_IBD	-1.21
pDCs	0.415	0.566	ILF_HC vs ILF_IBD	-1.2
Neutrophils	0.0	0.566	ILF_HC vs ILF_IBD	-1.13
Tregs	1.306	0.566	ILF_HC vs ILF_IBD	1.12
PC IgA	0.337	0.566	ILF_HC vs ILF_IBD	-1.09
Eosinophils	1.114	0.566	ILF_HC vs ILF_IBD	-1.07
Mast cells	0.788	0.566	ILF_HC vs ILF_IBD	-1.06
B cells	0.801	0.609	ILF_HC vs ILF_IBD	-0.97
M0	0.265	0.609	ILF_HC vs ILF_IBD	-0.95

Inf. enterocytes	0.286	0.630	ILF_HC vs ILF_IBD	-0.9
Th17	1.35	0.643	ILF_HC vs ILF_IBD	0.86
Enterocytes AQP8+	2.8	0.660	ILF_HC vs ILF_IBD	-0.81
Goblet cells	0.305	0.696	ILF_HC vs ILF_IBD	-0.73
IER fibs	51.453	0.696	ILF_HC vs ILF_IBD	0.68
Enterocytes BEST4+	6.627	0.696	ILF_HC vs ILF_IBD	-0.68
CD8 cyt. effector	0.847	0.696	ILF_HC vs ILF_IBD	0.66
Laminin enterocytes	inf	0.696	ILF_HC vs ILF_IBD	-0.62
Tuft cells	inf	0.696	ILF_HC vs ILF_IBD	-0.62
S2	0.862	0.713	ILF_HC vs ILF_IBD	-0.58
Activated endoth.	0.56	0.758	ILF_HC vs ILF_IBD	-0.48
S1	14.277	0.758	ILF_HC vs ILF_IBD	0.45
Endothelium	1.039	0.758	ILF_HC vs ILF_IBD	0.44
DCs	0.793	0.758	ILF_HC vs ILF_IBD	0.43
Cycling epi	3.22	0.786	ILF_HC vs ILF_IBD	0.35
Contractile pericytes	1.149	0.786	ILF_HC vs ILF_IBD	0.34
IER Tcells	4.917	0.898	ILF_HC vs ILF_IBD	0.18
TA	2.2	0.910	ILF_HC vs ILF_IBD	-0.14
Enterocytes AQP8-	3.21	1.000	ILF_HC vs ILF_IBD	-0.0
IAFs	-0.055	1.61e-10	ILF_HC vs GA	-8.91
SPP1+ macs	-0.052	5.17e-08	ILF_HC vs GA	-7.16
FOLR2+ macs	0.07	1.10e-07	ILF_HC vs GA	-6.85
Plasmablast	-0.0	2.05e-06	ILF_HC vs GA	-5.98
PC IgG	-0.029	4.71e-06	ILF_HC vs GA	-5.7
SMC	17.319	6.16e-04	ILF_HC vs GA	4.27
FRCs	2.653	0.001	ILF_HC vs GA	4.05
S3	-65.327	0.002	ILF_HC vs GA	3.81
Tnaïve	5.135	0.005	ILF_HC vs GA	3.5
ILC3	3.347	0.009	ILF_HC vs GA	3.26
Tregs	2.586	0.010	ILF_HC vs GA	3.18
PLA2G2D+ macs	0.141	0.010	ILF_HC vs GA	-3.15
B cells	2.608	0.010	ILF_HC vs GA	3.13
Lymphatic endoth.	4.597	0.010	ILF_HC vs GA	3.1

Activated endoth.	1.339	0.083	ILF_HC vs GA	2.26
Endothelium	1.537	0.146	ILF_HC vs GA	1.99
Cycling epi	4.254	0.188	ILF_HC vs GA	1.84
IER Tcells	91.585	0.244	ILF_HC vs GA	1.69
IER macs	7.095	0.266	ILF_HC vs GA	-1.61
Pericytes	0.282	0.266	ILF_HC vs GA	-1.59
IER fibs	25.083	0.268	ILF_HC vs GA	1.56
DCs	0.342	0.273	ILF_HC vs GA	-1.52
S2	0.317	0.328	ILF_HC vs GA	-1.4
M1	-0.067	0.414	ILF_HC vs GA	-1.24
M0	0.014	0.435	ILF_HC vs GA	-1.18
S1	14.313	0.452	ILF_HC vs GA	1.14
NK	1.463	0.537	ILF_HC vs GA	-1.0
Enterocytes AQP8-	1.948	0.597	ILF_HC vs GA	0.9
pDCs	0.795	0.597	ILF_HC vs GA	0.88
TA	2.71	0.614	ILF_HC vs GA	0.83
Contractile pericytes	0.463	0.640	ILF_HC vs GA	0.78
Mast cells	0.839	0.672	ILF_HC vs GA	-0.71
Enterocytes BEST4+	-32.0	0.672	ILF_HC vs GA	0.69
Laminin enterocytes	-32.0	0.701	ILF_HC vs GA	0.63
PC IgA	0.05	0.725	ILF_HC vs GA	-0.58
Goblet cells	12.935	0.735	ILF_HC vs GA	0.55
Enterocytes AQP8+	3.828	0.755	ILF_HC vs GA	0.5
Tuft cells	0.185	0.815	ILF_HC vs GA	0.39
Neutrophils	-0.067	0.815	ILF_HC vs GA	-0.36
Th17	0.892	0.815	ILF_HC vs GA	0.34
Stem cells	15.84	0.815	ILF_HC vs GA	0.33
Eosinophils	0.83	0.828	ILF_HC vs GA	0.26
CD8 cyt. effector	0.814	0.828	ILF_HC vs GA	0.25
Glia	0.667	0.828	ILF_HC vs GA	-0.24
Inf. enterocytes	-0.039	0.863	ILF_HC vs GA	0.17
B cells	8.652	0.117	ILF_IBD vs GA	2.81
Eosinophils	-7.443	0.117	ILF_IBD vs GA	2.3
Enterocytes BEST4+	-1.6	0.117	ILF_IBD vs GA	2.26
Cycling epi	0.679	0.117	ILF_IBD vs GA	2.19
IER Tcells	1.572	0.117	ILF_IBD vs GA	2.18
S3	0.514	0.117	ILF_IBD vs GA	2.17
Stem cells	1.592	0.117	ILF_IBD vs GA	2.15
TA	1.5	0.117	ILF_IBD vs GA	2.14
S1	1.494	0.117	ILF_IBD vs GA	2.14
Lymphatic endoth.	1.125	0.117	ILF_IBD vs GA	2.13
Enterocytes AQP8+	2.364	0.117	ILF_IBD vs GA	2.12
Goblet cells	1.5	0.117	ILF_IBD vs GA	2.11
FRCs	2.217	0.117	ILF_IBD vs GA	2.03
Tregs	10.81	0.117	ILF_IBD vs GA	2.01

IER fibs	-0.375	0.117	ILF_I BD vs GA	2.01
Contractile pericytes	0.24	0.117	ILF_I BD vs GA	1.99
Enterocytes AQP8-	-0.376	0.117	ILF_I BD vs GA	1.99
Tuft cells	0.294	0.117	ILF_I BD vs GA	1.98
Inf. enterocytes	-0.659	0.128	ILF_I BD vs GA	1.92
Neutrophils	-0.198	0.130	ILF_I BD vs GA	1.89
SMC	-0.432	0.133	ILF_I BD vs GA	1.85
pDCs	4.552	0.133	ILF_I BD vs GA	1.83
Mast cells	6.17	0.133	ILF_I BD vs GA	1.82
ILC3	1.394	0.134	ILF_I BD vs GA	1.79
Pericytes	6.145	0.154	ILF_I BD vs GA	1.69
PC IgA	0.267	0.154	ILF_I BD vs GA	1.68
Tnaïve	0.883	0.154	ILF_I BD vs GA	1.67
PC IgG	2.521	0.170	ILF_I BD vs GA	1.61
Activated endoth.	1.615	0.180	ILF_I BD vs GA	1.56
Endothelium	1.253	0.193	ILF_I BD vs GA	1.51
FOLR2+ macs	-0.079	0.199	ILF_I BD vs GA	-1.47
NK	0.493	0.263	ILF_I BD vs GA	1.31
SPP1+ macs	-0.204	0.314	ILF_I BD vs GA	-1.19
M0	-0.027	0.339	ILF_I BD vs GA	1.12
Glia	0.292	0.379	ILF_I BD vs GA	1.03
M1	-0.159	0.569	ILF_I BD vs GA	0.73
Plasmablast	5.791	0.621	ILF_I BD vs GA	0.64
DCs	0.166	0.665	ILF_I BD vs GA	-0.56
S2	-0.05	0.684	ILF_I BD vs GA	0.52
IAFs	-0.112	0.692	ILF_I BD vs GA	-0.48
IER macs	-0.478	0.739	ILF_I BD vs GA	0.4
CD8 cyt. effector	0.28	0.846	ILF_I BD vs GA	0.24
PLA2G2D+ macs	0.056	0.846	ILF_I BD vs GA	-0.22
Th17	0.236	0.889	ILF_I BD vs GA	0.14

Table S4. Cell interaction analysis performed with SCOTIA on ILF and GA with a likelihood higher than 0.6.

Likelihood	Ligand-Receptor Pair	Source Cell Type	Receptor Cell Type	Niche	Condition
0.613	ICAM3_CD209	Tregs	B cells	ILF	HC
0.752	TGFB1_ENG	Th17	Endothelium	ILF	HC
0.654	TGFB1_TGFB2	Th17	Activated endoth.	ILF	HC
0.752	TGFB1_TGFB2	Th17	Endothelium	ILF	HC
0.669	TGFB1_TGFB2	Lymphatic endoth.	Tregs	ILF	HC
0.649	SELPLG_SELL	FRCs	Tregs	ILF	HC
0.628	CLCF1_IL6ST	B cells	FRCs	ILF	HC
0.701	EFNA5_EPHA7	ILC3	Glia	ILF	HC
0.696	CD40LG_CD40	Th17	FRCs	ILF	HC
0.718	SPP1_CD44	Endothelium	Tregs	ILF	HC
0.617	LTB_TNFRSF1A	B cells	ILC3	ILF	HC
0.729	IFNL3_IL10RB	B cells	Tregs	ILF	HC
0.715	ICOSLG_ICOS	B cells	Tregs	ILF	HC
0.69	TNFSF14_TNFRSF14	FRCs	Tregs	ILF	HC
0.656	CD59_CD2	Glia	ILC3	ILF	HC
0.703	FGF1_FGFR1	Tnaïve	FRCs	ILF	HC
0.774	VIM_CD44	Glia	Tnaïve	ILF	HC
0.7	TGFB1_TGFB2	ILC3	Lymphatic endoth.	ILF	HC
0.745	HLA-E_KLRK1	Lymphatic endoth.	Tregs	ILF	HC
0.643	LEFTY2_ACVR2A	FRCs	Tregs	ILF	HC
0.695	CAMP_IGF1R	B cells	Activated endoth.	ILF	HC
0.725	COL18A1_ITGA5	FRCs	Tnaïve	ILF	HC
0.624	LTB_CD40	FRCs	B cells	ILF	HC
0.626	ICAM3_ITGB2	B cells	Tregs	ILF	HC
0.641	ICAM3_ITGB2	B cells	Tregs	ILF	HC
0.621	SELPLG_SELL	B cells	Tregs	ILF	HC
0.662	CD70_TNFRSF13B	CD8 cyt. effector	Plasmablast	ILF	HC
0.647	IL11_IL11RA	B cells	ILC3	ILF	HC
0.66	CLCF1_IL6ST	Th17	FRCs	ILF	HC
0.612	HLA-E_KLRK1	Lymphatic endoth.	Th17	ILF	HC
0.627	BGN_TLR2	B cells	Tnaïve	ILF	HC
0.661	PDGFD_PDGFRB	B cells	Tregs	ILF	HC
0.616	COL1A2_ITGA1	FRCs	CD8 cyt. effector	ILF	HC
0.755	ICAM2_ITGAL	Endothelium	CD8 cyt. effector	ILF	HC
0.621	TGFB2_TGFB2	CD8 cyt. effector	B cells	ILF	HC
0.656	CD58_CD2	B cells	Tregs	ILF	HC
0.755	CD58_CD2	B cells	Tregs	ILF	HC
0.602	VIM_CD44	B cells	Tregs	ILF	HC
0.697	VTN_CD47	B cells	FRCs	ILF	HC

0.843	VTN ITGAV	B cells	Endothelium	ILF	HC
0.62	IL11 IL6ST	B cells	Endothelium	ILF	HC
0.625	HLA-E KLRK1	B cells	Endothelium	ILF	HC
0.864	COL4A1_CD47	Endothelium	B cells	ILF	HC
0.663	NPPC_NPR1	Activated endoth.	B cells	ILF	HC
0.606	MIF_CD44	B cells	Th17	ILF	HC
0.755	LGALS1_PTPRC	B cells	Tregs	ILF	HC
0.607	LGALS1_PTPRC	FRCs	CD8 cyt. effector	ILF	HC
0.635	TGFB1_TGFB1	Tregs	FRCs	ILF	HC
0.637	TGFB1_ACVRL1	B cells	S2	ILF	HC
0.631	TGFB1_CXCR4	CD8 cyt. effector	B cells	ILF	HC
0.687	TGFB1_CXCR4	Tregs	B cells	ILF	HC
0.609	TGFB1_CXCR4	Th17	B cells	ILF	HC
0.66	TGFB1_CXCR4	Th17	B cells	ILF	HC
0.652	TGFB1_CXCR4	B cells	CD8 cyt. effector	ILF	HC
0.694	TGFB1_CXCR4	FRCs	B cells	ILF	HC
0.693	WNT3_RYK	FRCs	Tregs	ILF	HC
0.655	COL1A1_CD44	FRCs	Th17	ILF	HC
0.638	COL1A1_CD44	FRCs	Th17	ILF	HC
0.652	IL2_CD53	Th17	B cells	ILF	HC
0.676	IL23A_IL12RB1	FRCs	B cells	ILF	HC
0.636	TGFB3_TGFB2	Th17	B cells	ILF	HC
0.682	CCL21_CXCR3	FRCs	Th17	ILF	HC
0.704	COL8A1_ITGA1	Th17	FRCs	ILF	HC
0.668	ICAM1_ITGAL	FRCs	B cells	ILF	HC
0.734	IL18_CD48	Tregs	B cells	ILF	HC
0.682	CXCL16_CXCR6	S2	Th17	ILF	HC
0.701	VCAM1_ITGB2	FRCs	B cells	ILF	HC
0.676	COL1A2_CD44	S2	Tregs	ILF	HC
0.639	COL14A1_CD44	FRCs	Th17	ILF	HC
0.76	COL14A1_CD44	FRCs	CD8 cyt. effector	ILF	HC
0.603	IL12A_IL12RB1	FRCs	B cells	ILF	HC
0.656	IL12A_CD28	B cells	Tregs	ILF	HC
0.671	COL3A1_DDR2	B cells	Th17	ILF	HC
0.669	CCL19_CCR10	FRCs	Tnaïve	ILF	HC
0.621	CCL19_CXCR3	FRCs	Tnaïve	ILF	HC
0.682	CCL19_CXCR3	FRCs	Th17	ILF	HC
0.662	CCL19_CXCR3	FRCs	CD8 cyt. effector	ILF	HC
0.653	CLCF1_IL6ST	Tnaïve	FRCs	ILF	HC
0.695	CLCF1_IL6ST	B cells	CD8 cyt. effector	ILF	HC
0.614	CLCF1_IL6ST	FRCs	Tnaïve	ILF	HC
0.665	S100A8_ITGB2	CD8 cyt. effector	FRCs	ILF	HC
0.695	S100A9_ITGB2	B cells	Tregs	ILF	HC
0.698	S100A9_CD36	B cells	FRCs	ILF	HC
0.685	CD40LG_CD40	Tnaïve	B cells	ILF	HC

0.664	SPP1_CD44	FRCs	Th17	ILF	HC
0.617	LGALS9_CD44	B cells	Th17	ILF	HC
0.719	HLA-A_CD3G	B cells	S2	ILF	HC
0.646	HLA-A_CD3G	B cells	CD8 cyt. effector	ILF	HC
0.666	HLA-B_CD3G	B cells	Tregs	ILF	HC
0.617	HLA-B_CD3G	FRCs	CD8 cyt. effector	ILF	HC
0.694	IL16_CD4	Tnaïve	Glia	ILF	HC
0.644	IL16_CD4	B cells	FRCs	ILF	HC
0.601	FASLG_TNFRSF1A	CD8 cyt. effector	FRCs	ILF	HC
0.646	IL10_IL10RA	B cells	CD8 cyt. effector	ILF	HC
0.764	CLEC2D_KLRB1	B cells	Th17	ILF	HC
0.698	CLEC2D_KLRB1	B cells	Th17	ILF	HC
0.73	HLA-E_KLRK1	B cells	Th17	ILF	HC
0.614	HLA-E_KLRK1	B cells	NK	ILF	HC
0.743	CCL21_CCR7	FRCs	Tnaïve	ILF	HC
0.655	CCL21_CCR7	FRCs	Tnaïve	ILF	HC
0.62	CCL21_CCR7	FRCs	Tregs	ILF	HC
0.9	CCL21_CCR7	FRCs	Tregs	ILF	HC
0.64	CCL21_CCR7	FRCs	B cells	ILF	HC
0.697	CCL19_CCR7	FRCs	Tnaïve	ILF	HC
0.837	CCL19_CCR7	FRCs	Tnaïve	ILF	HC
0.62	CCL19_CCR7	FRCs	Tregs	ILF	HC
0.695	CCL19_CCR7	FRCs	Tregs	ILF	HC
0.806	CCL19_CCR7	FRCs	Tregs	ILF	HC
0.722	COL1A2_ITGAV	FRCs	B cells	ILF	HC
0.601	CXCL12_ACKR3	FRCs	Tregs	ILF	HC
0.738	COL5A2_ITGA1	Tnaïve	FRCs	ILF	HC
0.71	IL34_CSF1R	S1	Plasmablast	ILF	HC
0.647	CCL3L3_CCR5	CD8 cyt. effector	B cells	ILF	HC
0.649	IL16_CCR5	Th17	B cells	ILF	HC
0.699	COL6A2_ITGA2	S2	TA	ILF	HC
0.604	TSLP_IL7R	FRCs	Th17	ILF	HC
0.776	IFNB1_IFNAR2	Tregs	B cells	ILF	HC
0.618	TNFSF14_TNFRSF14	FRCs	Tregs	ILF	HC
0.601	CXCL12_DPP4	FRCs	Tregs	ILF	HC
0.836	COL4A1_CD47	Endothelium	B cells	ILF	HC
0.733	CD58_CD2	B cells	Th17	ILF	HC
0.674	TNFSF13B_CD40	B cells	Th17	ILF	HC
0.639	LTB_CD40	Tnaïve	B cells	ILF	HC
0.858	LTB_CD40	Tregs	B cells	ILF	HC
0.629	LTB_CD40	Th17	B cells	ILF	HC
0.664	LTB_CD40	Th17	B cells	ILF	HC
0.763	LTB_CD40	B cells	CD8 cyt. effector	ILF	HC
0.665	IL6_IL6ST	B cells	FRCs	ILF	HC
0.648	IL6_IL6ST	B cells	Tnaïve	ILF	HC
0.65	IL6_IL6ST	Endothelium	Tnaïve	ILF	HC
0.666	FGF12_FGFR1	NK	FRCs	ILF	HC
0.629	VIM_CD44	Th17	FRCs	ILF	HC

0.706	VIM_CD44	B cells	FRCs	ILF	HC
0.655	VIM_CD44	B cells	FRCs	ILF	HC
0.822	VIM_CD44	B cells	Tregs	ILF	HC
0.777	VIM_CD44	B cells	Tregs	ILF	HC
0.796	VIM_CD44	B cells	Tregs	ILF	HC
0.625	VIM_CD44	Lymphatic endoth.	CD8 cyt. effector	ILF	HC
0.682	VIM_CD44	FRCs	CD8 cyt. effector	ILF	HC
0.685	VIM_CD44	FRCs	Tregs	ILF	HC
0.674	VIM_CD44	Glia	Tregs	ILF	HC
0.835	VIM_CD44	FRCs	Th17	ILF	HC
0.671	VIM_CD44	S2	Tregs	ILF	HC
0.642	OSM_LIFR	Tnaïve	Activated endoth.	ILF	HC
0.633	TGFB1_ENG	B cells	Endothelium	ILF	HC
0.678	TGFB1_SMAD3	B cells	Endothelium	ILF	HC
0.729	TGFB1_TGFB2	B cells	Tnaïve	ILF	HC
0.698	TGFB1_TGFB2	B cells	Activated endoth.	ILF	HC
0.713	TGFB1_TGFB1	Tregs	B cells	ILF	HC
0.617	TGFB1_ITGAV	FRCs	Tnaïve	ILF	HC
0.669	TGFB1_CAV1	Tnaïve	Endothelium	ILF	HC
0.628	TGFB1_CXCR4	FRCs	B cells	ILF	HC
0.697	COL1A1_ITGAV	FRCs	Tnaïve	ILF	HC
0.645	EFNB2_EPHA3	IER Tcells	FRCs	ILF	HC
0.673	CD70_CD27	B cells	CD8 cyt. effector	ILF	HC
0.665	CCL19_CCR10	FRCs	Tnaïve	ILF	HC
0.722	CXCL14_CXCR4	FRCs	Tregs	ILF	HC
0.625	CXCL12_CXCR4	FRCs	Tnaïve	ILF	HC
0.654	IL15_IL2RB	B cells	Tregs	ILF	HC
0.664	HLA-E_KLRK1	B cells	CD8 cyt. effector	ILF	HC
0.864	HLA-E_KLRK1	Lymphatic endoth.	CD8 cyt. effector	ILF	HC
0.763	CCL21_CCR7	FRCs	Tregs	ILF	HC
0.767	CCL21_CCR7	FRCs	B cells	ILF	HC
0.888	CCL21_CCR7	Lymphatic endoth.	Tnaïve	ILF	HC
0.612	CCL21_CCR7	FRCs	Tnaïve	ILF	HC
0.787	CCL21_CCR7	FRCs	Tregs	ILF	HC
0.718	CCL21_CCR7	FRCs	Tnaïve	ILF	HC
0.637	CCL21_CCR7	FRCs	B cells	ILF	HC
0.666	CCL19_CCR7	FRCs	B cells	ILF	HC
0.666	BMP7_ACVR1	Tnaïve	B cells	ILF	HC
0.713	PGF_FLT1	Tnaïve	B cells	ILF	HC
0.883	ICOSLG_ICOS	B cells	Tregs	ILF	HC
0.642	LTB_CD40	B cells	Tnaïve	ILF	HC
0.618	IL6_IL6ST	FRCs	Tregs	ILF	HC
0.75	MIF_CXCR4	FRCs	Tregs	ILF	HC
0.889	MIF_CD44	FRCs	Tregs	ILF	HC
0.644	OSM_OSMR	Cycling epi	Th17	ILF	HC
0.705	TGFB1_CXCR4	CD8 cyt.	B cells	ILF	HC

		effector			
0.65	CCL13 CXCR3	Cycling epi	Th17	ILF	HC
0.611	CCL13 CCR5	B cells	Tregs	ILF	HC
0.684	COL1A1_CD44	B cells	FRCs	ILF	HC
0.669	VTN ITGAV	B cells	Tregs	ILF	HC
0.654	CXCL6 ACKR1	FRCs	Cycling epi	ILF	HC
0.601	TGFB3 ACVRL1	FRCs	Th17	ILF	HC
0.615	LIF IL6ST	Tregs	FRCs	ILF	HC
0.606	FGF2 FGFR2	FRCs	B cells	ILF	HC
0.676	FGF2_CD44	FRCs	Tregs	ILF	HC
0.715	ICAM1 ITGAL	B cells	Th17	ILF	HC
0.839	ICAM1 ITGAX	B cells	Cycling epi	ILF	HC
0.647	LUM ITGB1	Cycling epi	B cells	ILF	HC
0.669	IFNA1 IFNAR2	Tnaïve	B cells	ILF	HC
0.662	WIF1_RYK	FRCs	Th17	ILF	HC
0.761	COL1A2_CD44	Tregs	FRCs	ILF	HC
0.841	CXCL10 CXCR3	Cycling epi	Th17	ILF	HC
0.646	CCL19 CCR10	FRCs	B cells	ILF	HC
0.612	CXCL14 CXCR4	Th17	B cells	ILF	HC
0.73	CXCL14 CXCR4	FRCs	Tregs	ILF	HC
0.701	CXCL14 CXCR4	Activated endoth.	B cells	ILF	HC
0.62	FN1_CD44	FRCs	B cells	ILF	HC
0.655	LGALS9_CD44	CD8 cyt. effector	B cells	ILF	HC
0.838	LGALS9_CD44	B cells	FRCs	ILF	HC
0.719	LGALS9_CD44	FRCs	B cells	ILF	HC
0.646	SAA1_FPR1	FRCs	B cells	ILF	HC
0.682	HLA-B_CD3G	B cells	Th17	ILF	HC
0.658	MIF_CD74	Lymphatic endoth.	B cells	ILF	HC
0.617	CXCL12_CD4	B cells	FRCs	ILF	HC
0.642	IL16_CD4	B cells	FRCs	ILF	HC
0.711	CALM2_SELL	Tregs	FRCs	ILF	HC
0.738	HLA-E_KLRK1	Tnaïve	B cells	ILF	HC
0.732	ADM2_RAMP1	B cells	FRCs	ILF	HC
0.656	DLL1_NOTCH3	FRCs	Tregs	ILF	HC
0.666	MMP9_IFNAR1	B cells	FRCs	ILF	HC
0.666	VEGFD_FLT1	Cycling epi	Tregs	ILF	HC
0.682	HLA-C_CD3D	Th17	B cells	ILF	HC
0.834	HLA-C_CD3D	FRCs	Tregs	ILF	HC
0.617	HLA-B_CD3D	CD8 cyt. effector	Endothelium	ILF	HC
0.828	HLA-B_CD3D	FRCs	Tregs	ILF	HC
0.663	TNFSF18 TNFRSF18	Th17	Cycling epi	ILF	HC
0.654	CXCL1 ACKR1	FRCs	Cycling epi	ILF	HC
0.712	IL6_IL6R	CD8 cyt. effector	B cells	ILF	HC
0.722	IL6_IL6R	B cells	Tregs	ILF	HC
0.624	BMP7_BMPRI1A	FRCs	B cells	ILF	HC
0.706	LTB_CD40	B cells	FRCs	ILF	HC
0.844	VIM_CD44	B cells	FRCs	ILF	HC
0.625	VIM_CD44	B cells	Lymphatic endoth.	ILF	HC

0.65	GDF10_ACVR1B	Th17	Cycling epi	ILF	HC
0.631	DCN_EGFR	FRCs	Tnaïve	ILF	HC
0.746	ICAM3_ITGAL	ILC3	FRCs	ILF	HC
0.714	ST6GAL1_EGFR	B cells	FRCs	ILF	HC
0.637	TIMP1_CD63	FRCs	B cells	ILF	HC
0.645	WNT3_FZD1	Tnaïve	FRCs	ILF	HC
0.602	IL2_CD53	Th17	FRCs	ILF	HC
0.605	CD70_CD27	FRCs	Tregs	ILF	HC
0.657	IFNA1_IFNAR2	Tregs	B cells	ILF	HC
0.63	CXCL8_ACKR1	ILC3	Pericytes	ILF	HC
0.679	WNT2B_FZD4	Th17	FRCs	ILF	HC
0.741	MMP9_ITGB2	B cells	Tnaïve	ILF	HC
0.667	HLA-A_CD3G	B cells	Tregs	ILF	HC
0.667	HLA-B_CD3G	B cells	Tregs	ILF	HC
0.763	IL16_CD4	B cells	FRCs	ILF	HC
0.65	IL16_CD4	B cells	Tregs	ILF	HC
0.665	PDGFC_KDR	Tregs	B cells	ILF	HC
0.643	IFNA1_IFNAR1	B cells	Th17	ILF	HC
0.714	NRG4_EGFR	B cells	FRCs	ILF	HC
0.637	GSTP1_EGFR	B cells	FRCs	ILF	HC
0.648	VEGFC_FLT1	B cells	CD8 cyt. effector	ILF	HC
0.687	CCL5_CCR5	CD8 cyt. effector	B cells	ILF	HC
0.769	IL16_CCR5	B cells	Tregs	ILF	HC
0.679	COL6A1_ITGA2	FRCs	Th17	ILF	HC
0.656	S100A9_ALCAM	FRCs	Tregs	ILF	HC
0.721	RARRES2_CMKLR1	B cells	FRCs	ILF	HC
0.839	PTGS2_CAV1	FRCs	Th17	ILF	HC
0.758	CCL5_ACKR1	Th17	FRCs	ILF	HC
0.725	B2M_CD3G	B cells	CD8 cyt. effector	ILF	HC
0.875	CCL11_DPP4	Activated endoth.	B cells	ILF	HC
0.74	HLA-C_CD3G	B cells	S2	ILF	HC
0.74	HLA-B_CD3G	B cells	S2	ILF	HC
0.655	CLCF1_LIFR	B cells	FRCs	ILF	HC
0.666	PGF_FLT1	B cells	FRCs	ILF	HC
0.604	CCL11_CCR5	FRCs	B cells	ILF	HC
0.67	HLA-A_CD3D	FRCs	B cells	ILF	HC
0.67	HLA-C_CD3D	FRCs	B cells	ILF	HC
0.67	TNF_ICOS	B cells	S2	ILF	HC
0.628	CD34_SELL	Endothelium	PC IgG	ILF	HC
0.695	GDF9_ACVR2A	B cells	IAFs	ILF	HC
0.727	GZMB_IGF2R	CD8 cyt. effector	FOLR2+ macs	GA	HC
0.619	TGFB1_CXCR4	FOLR2+ macs	CD8 cyt. effector	GA	HC
0.826	TGFB1_CXCR4	FOLR2+ macs	CD8 cyt. effector	GA	HC
0.652	ICAM1_IL2RG	FOLR2+ macs	CD8 cyt. effector	GA	HC
0.695	XCL1_ADGRV1	FOLR2+ macs	CD8 cyt. effector	GA	HC

0.893	CXCL12_CXCR4	FOLR2+ macs	CD8 cyt. effector	GA	HC
0.643	CCL7_CCR5	CD8 cyt. effector	FOLR2+ macs	GA	HC
0.644	CD274_PDCD1	B cells	Th17	GA	HC
0.697	ICAM2_ITGAL	B cells	CD8 cyt. effector	GA	HC
0.604	CCL5_CCRL2	CD8 cyt. effector	FOLR2+ macs	GA	HC
0.606	CD58_CD2	Th17	FOLR2+ macs	GA	HC
0.839	TGFB1_TGFB2	PLA2G2D+ macs	CD8 cyt. effector	GA	HC
0.725	TGFB1_CXCR4	Tregs	B cells	ILF	HC
0.733	VTN_ITGB1	Th17	B cells	ILF	HC
0.669	IL12B_IL12RB1	DCs	B cells	ILF	HC
0.724	TGFB3_ENG	B cells	Activated endoth.	ILF	HC
0.669	ICAM1_IL2RG	FOLR2+ macs	CD8 cyt. effector	GA	HC
0.661	CALM3_ESR1	IAFs	PLA2G2D+ macs	GA	HC
0.652	CCL19_CCRL2	FRCs	B cells	ILF	HC
0.673	CLCF1_IL6ST	B cells	PLA2G2D+ macs	GA	HC
0.65	CLCF1_IL6ST	B cells	Tregs	ILF	HC
0.658	CLEC2D_KLRB1	B cells	Tregs	ILF	HC
0.629	IL24_IL10RB	CD8 cyt. effector	B cells	GA	HC
0.791	CCL5_CCR1	CD8 cyt. effector	B cells	ILF	HC
0.823	HLA-C_CD3D	PLA2G2D+ macs	Tregs	GA	HC
0.687	HLA-B_CD3D	PLA2G2D+ macs	Tregs	GA	HC
0.604	CALM1_INSR	Tnaïve	FOLR2+ macs	GA	HC
0.686	CALM1_FAS	CD8 cyt. effector	FOLR2+ macs	GA	HC
0.685	CCL7_CXCR3	Tregs	PLA2G2D+ macs	GA	HC
0.605	FGF1_FGFR1	SPP1+ macs	IAFs	GA	HC
0.652	IL23A_IL12RB1	IAFs	FOLR2+ macs	GA	HC
0.651	HLA-C_CD3G	FOLR2+ macs	Plasmablast	GA	HC
0.631	HLA-A_CD3G	FOLR2+ macs	Plasmablast	GA	HC
0.615	LTB_TNFRSF1A	Plasmablast	FOLR2+ macs	GA	HC
0.674	PPBP_CXCR1	IAFs	SPP1+ macs	GA	HC
0.602	FASLG_FAS	M0	Pericytes	GA	HC
0.757	CALM1_FAS	M0	Pericytes	GA	HC
0.76	MIF_CXCR4	B cells	Th17	ILF	HC
0.728	TGFB1_ENG	Th17	Endothelium	ILF	HC
0.796	TGFB1_TGFB2	B cells	Tregs	ILF	HC
0.638	TGFB1_CXCR4	B cells	CD8 cyt. effector	ILF	HC
0.675	WIF1_RYK	Tnaïve	Activated endoth.	ILF	HC

0.718	IL12A_CD28	B cells	Tregs	ILF	HC
0.676	ANGPT2_TEK	Endothelium	Th17	ILF	HC
0.716	CXCL14_CXCR4	FRCs	B cells	ILF	HC
0.603	CD40LG_CD40	Tnaïve	B cells	ILF	HC
0.766	CXCL12_CXCR4	Endothelium	CD8 cyt. effector	ILF	HC
0.641	IL16_CD4	B cells	Tnaïve	ILF	HC
0.615	CALM2_SELL	B cells	Tnaïve	GA	HC
0.722	CD34_SELL	Endothelium	B cells	ILF	HC
0.604	CALM1_SELL	B cells	Tregs	ILF	HC
0.603	CD55_ADGRE5	CD8 cyt. effector	B cells	ILF	HC
0.629	IL16_CCR5	B cells	CD8 cyt. effector	ILF	HC
0.725	IL16_CCR5	B cells	CD8 cyt. effector	ILF	HC
0.648	HLA-A_CD3D	Th17	Endothelium	ILF	HC
0.79	HLA-C_CD3D	Th17	Endothelium	ILF	HC
0.645	ICAM2_ITGAL	Plasmablast	CD8 cyt. effector	GA	HC
0.638	IL6_IL6ST	B cells	Mast cells	ILF	HC
0.665	CALM1_FAS	FRCs	B cells	ILF	HC
0.748	ICAM3_ITGB2	B cells	PLA2G2D+ macs	GA	HC
0.672	VTN_CD47	B cells	PLA2G2D+ macs	ILF	HC
0.696	VCAM1_ITGB2	B cells	PLA2G2D+ macs	GA	HC
0.64	IL16_CD4	B cells	PLA2G2D+ macs	ILF	HC
0.692	DCN_MET	IAFs	PLA2G2D+ macs	GA	HC
0.681	MIF_CD44	IAFs	SPP1+ macs	GA	HC
0.742	MIF_CD44	IAFs	SPP1+ macs	GA	HC
0.737	LGALS1_PTPRC	IAFs	SPP1+ macs	GA	HC
0.707	TGFB1_TGFBR2	SPP1+ macs	Endothelium	GA	HC
0.617	TGFB1_CAV1	DCs	Pericytes	GA	HC
0.603	TGFB1_CAV1	SPP1+ macs	IAFs	GA	HC
0.772	CALM2_INSR	M0	Endothelium	GA	HC
0.701	CALM3_ESR1	IAFs	SPP1+ macs	GA	HC
0.703	COL1A2_CD44	Pericytes	FOLR2+ macs	GA	HC
0.841	MMP1_CD44	IAFs	SPP1+ macs	GA	HC
0.742	MMP1_CD44	IAFs	SPP1+ macs	GA	HC
0.672	MMP9_CD44	IAFs	SPP1+ macs	GA	HC
0.601	MMP9_ITGB2	IAFs	DCs	GA	HC
0.708	LTB_TNFRSF1A	B cells	PLA2G2D+ macs	GA	HC
0.658	PDGFC_KDR	DCs	Pericytes	GA	HC
0.692	CALM1_EGFR	PLA2G2D+ macs	IAFs	GA	HC
0.626	VEGFD_FLT1	FOLR2+ macs	Activated endoth.	GA	HC
0.656	HLA-A_CD3D	FOLR2+ macs	S2	GA	HC
0.727	ICAM2_ITGB2	DCs	IAFs	GA	HC

0.683	VIM_CD44	IAFs	SPP1+ macs	GA	HC
0.782	VIM_CD44	Glia	FOLR2+ macs	GA	HC
0.636	TGFB1_TGFBR1	Plasmablast	Contractile pericytes	GA	HC
0.607	COL1A1_ITGA2	IAFs	FOLR2+ macs	GA	HC
0.645	COL6A2_ITGA2	IAFs	FOLR2+ macs	GA	HC
0.636	ICAM1_IL2RA	Plasmablast	SPP1+ macs	GA	HC
0.706	IL1RN_IL1R2	B cells	Lymphatic endoth.	GA	HC
0.752	IGF1_INSR	Plasmablast	IAFs	GA	HC
0.703	IL2_CD53	FRCs	B cells	GA	HC

Table S6. Gene panel from Molecular Cartography.

Species	Gene	Gene ID
Hs	<i>CDH1</i>	ENSG00000039068
Hs	<i>RELN</i>	ENSG00000189056
Hs	<i>DERL3</i>	ENSG00000099958
Hs	<i>MS4A1</i>	ENSG00000156738
Hs	<i>CD3E</i>	ENSG00000198851
Hs	<i>CD4</i>	ENSG00000010610
Hs	<i>CD8A</i>	ENSG00000153563
Hs	<i>CCL20</i>	ENSG00000115009
Hs	<i>IL17A</i>	ENSG00000112115
Hs	<i>CXCR6</i>	ENSG00000172215
Hs	<i>CXCL16</i>	ENSG00000161921
Hs	<i>GZMK</i>	ENSG00000113088
Hs	<i>FGFBP2</i>	ENSG00000137441
Hs	<i>KIR2DL4</i>	ENSG00000189013
Hs	<i>FOXP3</i>	ENSG00000049768
Hs	<i>MAGEH1</i>	ENSG00000187601
Hs	<i>IKZF2</i>	ENSG00000030419
Hs	<i>RTKN2</i>	ENSG00000182010
Hs	<i>KLRF1</i>	ENSG00000150045
Hs	<i>SPP1</i>	ENSG00000118785
Hs	<i>CD68</i>	ENSG00000129226
Hs	<i>CD163L1</i>	ENSG00000177675
Hs	<i>FOLR2</i>	ENSG00000165457
Hs	<i>NRG1</i>	ENSG00000157168
Hs	<i>CALHM6</i>	ENSG00000188820
Hs	<i>CD300E</i>	ENSG00000186407
Hs	<i>KDR</i>	ENSG00000128052
Hs	<i>ACOD1</i>	ENSG00000102794
Hs	<i>CLEC9A</i>	ENSG00000197992
Hs	<i>CD1C</i>	ENSG00000158481
Hs	<i>CCL22</i>	ENSG00000102962
Hs	<i>HCAR3</i>	ENSG00000255398
Hs	<i>IFIT2</i>	ENSG00000119922
Hs	<i>GBP1</i>	ENSG00000117228
Hs	<i>IL4</i>	ENSG00000113520
Hs	<i>FCGR3B</i>	ENSG00000162747
Hs	<i>CXCR2</i>	ENSG00000180871
Hs	<i>CXCR4</i>	ENSG00000121966
Hs	<i>SFRP1</i>	ENSG00000104332
Hs	<i>FABP4</i>	ENSG00000170323
Hs	<i>ADAMDEC1</i>	ENSG00000134028
Hs	<i>SOX6</i>	ENSG00000110693
Hs	<i>PDGFRA</i>	ENSG00000134853
Hs	<i>VSTM2A</i>	ENSG00000170419
Hs	<i>NPY</i>	ENSG00000122585
Hs	<i>OGN</i>	ENSG00000106809
Hs	<i>FAP</i>	ENSG00000078098
Hs	<i>SOSTDC1</i>	ENSG00000171243
Hs	<i>RGS5</i>	ENSG00000143248
Hs	<i>LYVE1</i>	ENSG00000133800
Hs	<i>CCL19</i>	ENSG00000172724

Hs	VWF	ENSG00000110799
Hs	ACKR1	ENSG00000213088
Hs	L1CAM	ENSG00000198910
Hs	IL11	ENSG00000095752
Hs	IL24	ENSG00000162892
Hs	INHBA	ENSG00000122641
Hs	MMP1	ENSG00000196611
Hs	TFPI2	ENSG00000105825
Hs	TGFB1	ENSG00000105329
Hs	TGFBR1	ENSG00000106799
Hs	TGFBR2	ENSG00000163513
Hs	TGFBR3	ENSG00000069702
Hs	SERPINE1	ENSG00000106366
Hs	IL6	ENSG00000136244
Hs	TNFSF13B	ENSG00000102524
Hs	WNT5A	ENSG00000114251
Hs	IL1B	ENSG00000125538
Hs	IL1R1	ENSG00000115594
Hs	MMP9	ENSG00000100985
Hs	COL7A1	ENSG00000114270
Hs	TNC	ENSG00000041982
Hs	CXCL9	ENSG00000138755
Hs	FGFR1	ENSG00000077782
Hs	FGF10	ENSG00000070193
Hs	CDH6	ENSG00000113361
Hs	NCAM1	ENSG00000149294
Hs	PLA2G2D	ENSG00000117215
Hs	CCR3	ENSG00000183625
Hs	IL13RA2	ENSG00000123496
Hs	TNFRSF11B	ENSG00000164761
Hs	CXCR3	ENSG00000186810
Hs	SDC1	ENSG00000115884
Hs	GFRA1	ENSG00000151892
Hs	CXCL10	ENSG00000169245
Hs	CXCL8	ENSG00000169429
Hs	VEGFA	ENSG00000112715
Hs	IL23R	ENSG00000162594
Hs	IL23A	ENSG00000110944
Hs	ERBB3	ENSG00000065361
Hs	IGF1	ENSG00000017427
Hs	IGF1R	ENSG00000140443
Hs	GREM1	ENSG00000166923
Hs	MMP7	ENSG00000137673
Hs	CXCL13	ENSG00000156234
Hs	ELAVL3	ENSG00000196361
Hs	CXCL5	ENSG00000163735
Hs	KRT6A	ENSG00000205420
Hs	CPA3	ENSG00000163751
Hs	PI3	ENSG00000124102