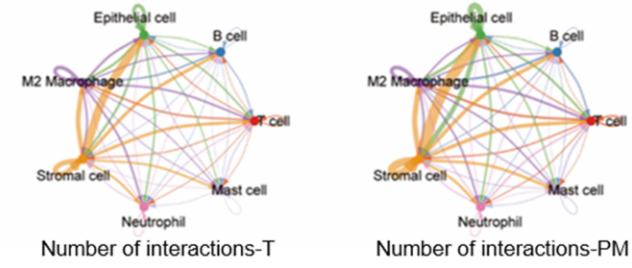


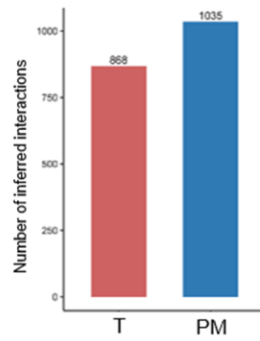
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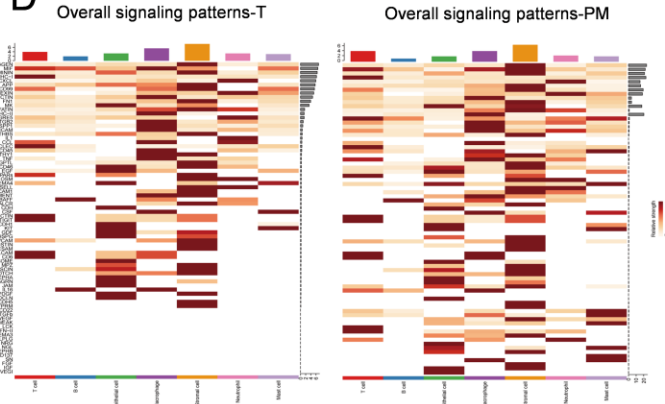
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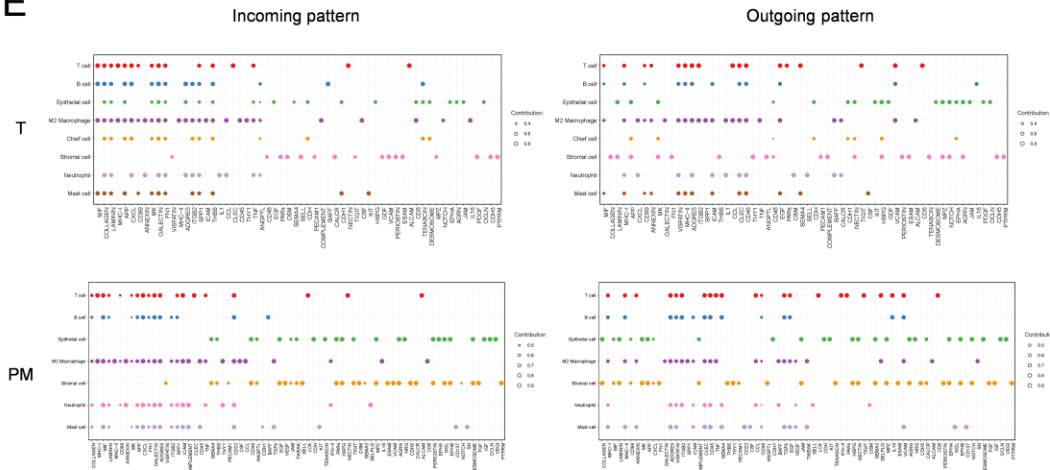
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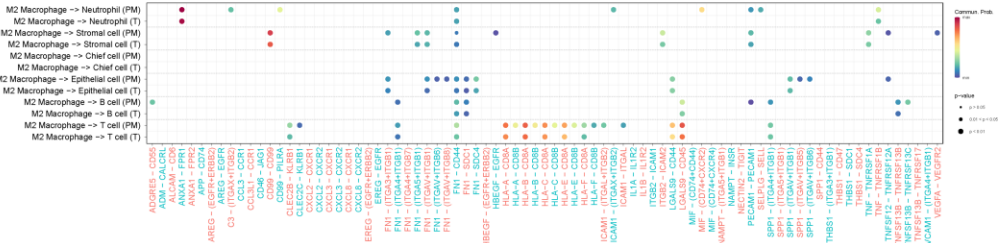
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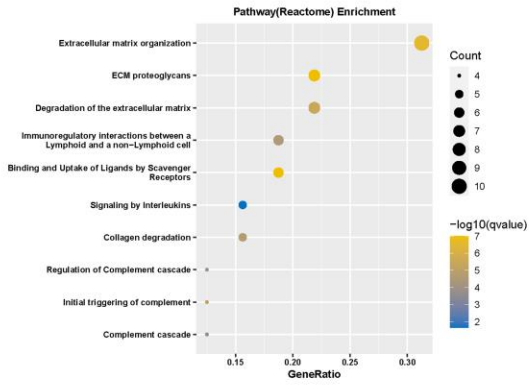
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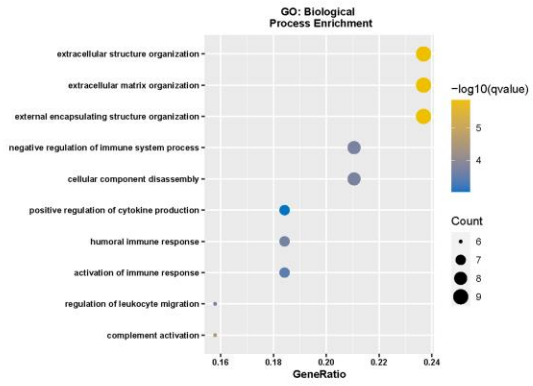
2 **Fig. S1: Cellular communication among distinct cell types within T and PM from GC**
3 **patients.** (A) Bubble plot of functional validation of M2 macrophage classification. (B) Overview of
4 the intercellular communication networks among distinct cell types. Nodes with different colors
5 represent different cell populations, and the line width represent the interactions or interaction
6 strength. (C) Bar plot of the overall difference of inferred cellular interactions (the total number of
7 interactions) among different specimen of GC patients. (D) Heatmaps reveals the relative
8 strength of signaling pathways among distinct cell types in the overall signaling patterns, and
9 gradual change in the color from white to dark red indicates the change in the relative interaction
10 strength from high to low. (E) Dot plot for the incoming and outgoing strength of distinct cell types
11 under T and PM, respectively. (F) Dot plot for the discrepancy of ligand–receptors pairs within M2
12 macrophages among T and PM. T, Primary Tumor; PM, Peritoneal Metastasis; GC, Gastric
13 Cancer.

- 15 **Fig. S2: Ligand–receptors pairs within distinct cell types from T and PM of GC patients.**
- 16 Dot plot for the discrepancy of ligand–receptors pairs from B cells (A), Epithelial cells (B), T cells
- 17 (C), Neutrophils (D) and Stromal cells (E). T, Primary Tumor; PM, Peritoneal Metastasis.

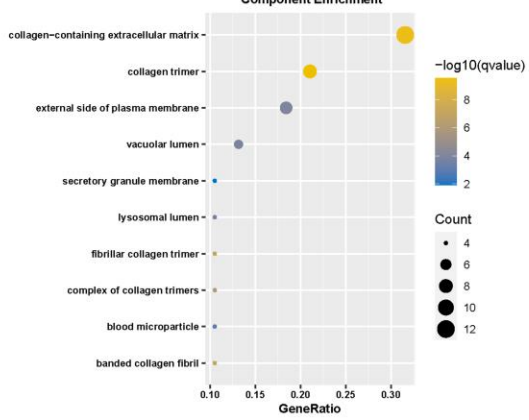
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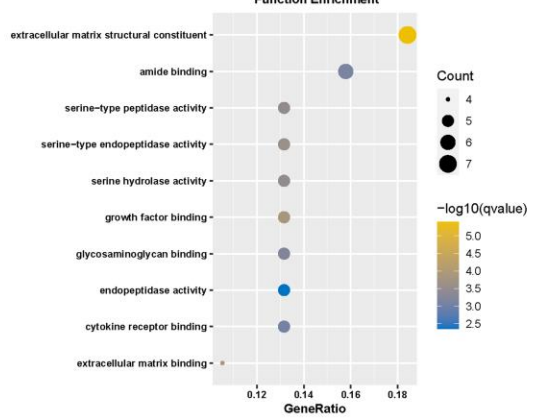
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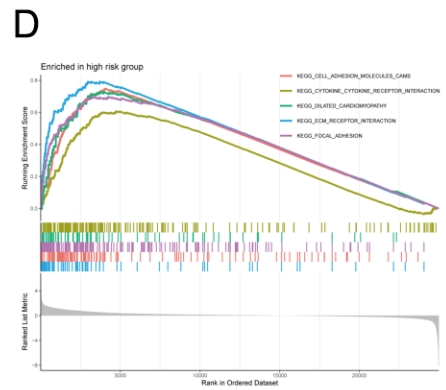
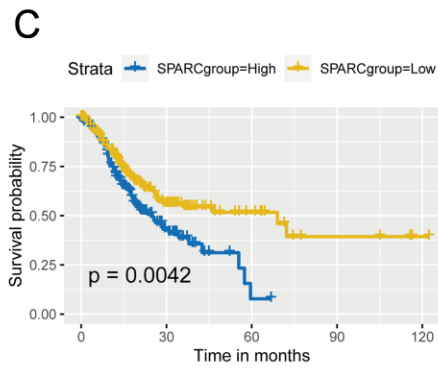
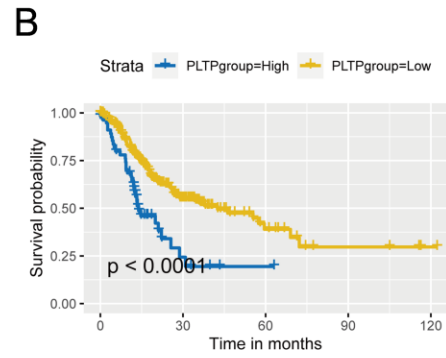
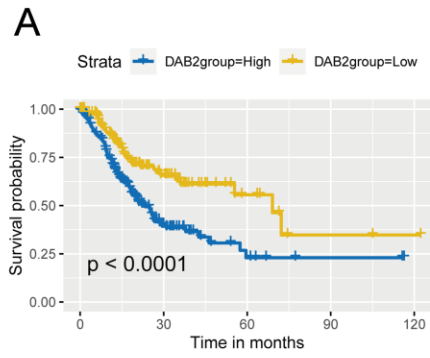
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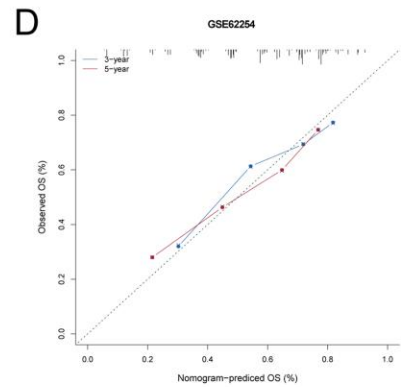
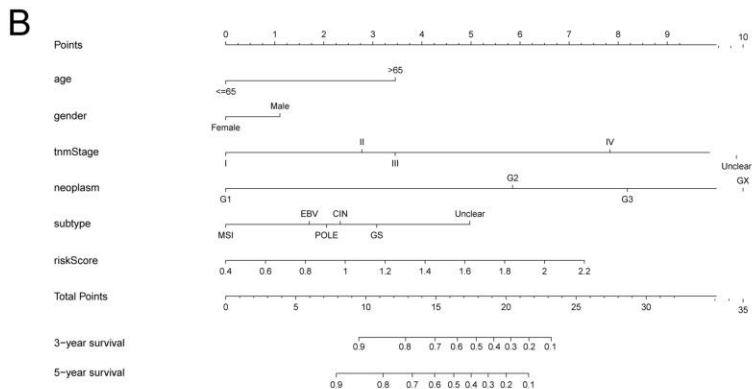
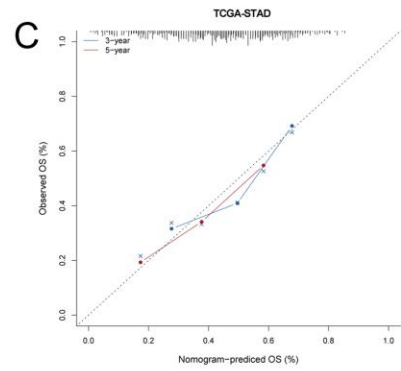
D



19 **Fig. S3: GO and KEGG analysis of M2 macrophage-related genes.** (A) Bubble plot of the
20 reactome pathway analysis of M2 macrophage-related genes. (B-D) Bubble plot of the Gene
21 Ontology (GO) function of M2 macrophage-related genes in biological process (BP), cellular
22 component (CC) and molecular function (MF). WGCNA, Weighted Gene Correlation Network
23 Analysis; GC, Gastric Cancer.

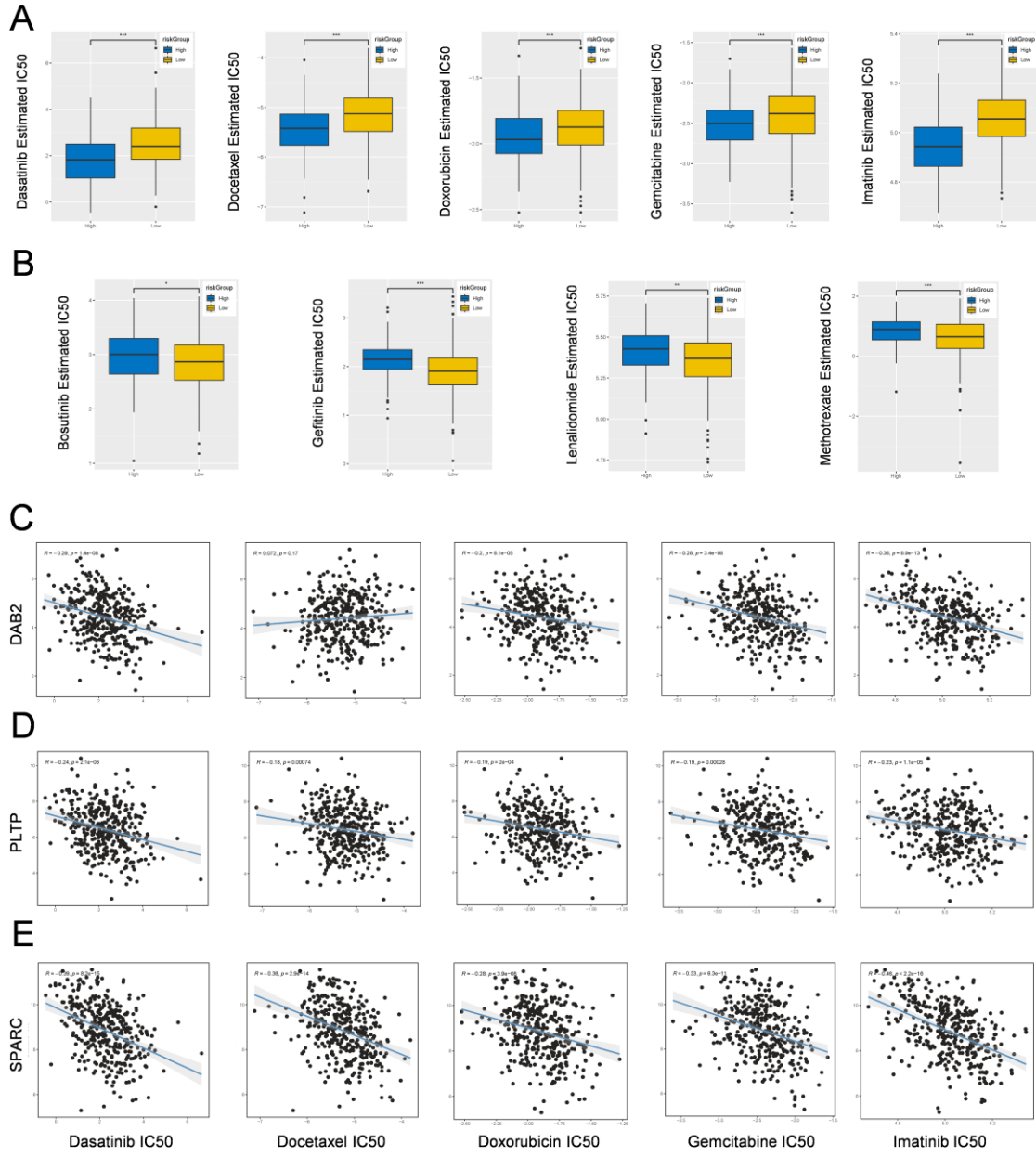


25 **Fig. S4: The expression levels and K-M survival analysis of the three prognostic genes**
26 **related to M2 macrophages.** (A-C) K-M survival analysis of four prognostic genes, including
27 DAB2 (A), PLTP (B) and SPARC (C). (D) GSEA showing the enriched pathways in high- and low-
28 risk groups. K-M, Kaplan–Meier; GSEA, Gene Set Enrichment Analysis.



30 **Fig. S5: Construction and verification of a nomogram utilizing an M2 macrophage-related**
31 **signature to evaluate its prognostic predictive capability in GC patients.** (A) A heatmap
32 showing the association between risk-Score and clinical characteristics. (B) Prognostic
33 nomogram with risk score for predicting 3- and 5-year OS in GC patients was constructed. (C)
34 The calibration curve for 3- and 5-year OS in the TCGA-STAD cohort. (D) The calibration curve
35 for 3- and 5-year OS in the GSE62254 cohort. GC, Gastric cancer; OS, Overall Survival; *p <
36 0.05; **p < 0.01; ***p < 0.001.

38 **Fig. S6: Correlation between M2 macrophage-related signature and immune landscape and**
39 **immunotherapy in IMvigor210 cohort.** (A) Kaplan–Meier survival analysis of high- and low-risk
40 groups in IMvigor210 cohort. (B) A heatmap showing the landscape of 28 tumor-infiltrating
41 immune cell types among high- and low-risk groups identified by ssGSEA. (C) Box plots showing
42 the difference of infiltrating immune cell among high- and low-risk groups. (D) Box plots showing
43 the difference of 28 tumor-infiltrating immune cell types or pathways in different risk groups. (E)
44 Box plots showing the relationship between risk-Score the expression levels of
45 immunosuppression checkpoint genes. (F) Box plots showing the response rate to
46 immunotherapy among high- and low-risk groups. (G) Box plots showing the relationship between
47 riskScore and the scores of TIDE, Dysfunction, Exclusion and IPS. ssGSEA, Single Sample Gene
48 Set Enrichment Analysis; *p < 0.05; **p < 0.01; ***p < 0.001; ****p < 0.0001; Not Statistically
49 Significant.



51 **Fig. S7: Drug sensitivity analysis based on high- and low-risk groups.** (A, B) The box chart
52 shows the difference in chemotherapy drug IC50 between high-risk and low-risk groups. (C-E)
53 The dot plot shows the correlation between the expression levels of individual genes and the
54 chemotherapeutic drug IC50. IC50, Half maximal inhibitory concentration; *p < 0.05; **p < 0.01;
55 ***p < 0.001.

Table S1 Differential expression genes (DEGs) of M2 macrophage subpopulation

gene	p_val	avg_log2F	pct.1	pct.2	p_val_adj
CCL18	0	2.455827	0.252	0.05	0
FABP4	0	-0.33753	0.232	0.083	0
SPP1	0	4.918206	0.387	0.152	0
MMP9	0	2.047661	0.36	0.103	0
APOC1	0	3.768105	0.554	0.213	0
CCL3L1	0	2.194695	0.526	0.165	0
IGFBP3	0	-1.02733	0.071	0.276	0
LTF	0	-0.68095	0.045	0.196	0
EREG	0	2.394456	0.391	0.114	0
CFD	0	0.939569	0.627	0.247	0
SERPINA1	0	1.529563	0.69	0.195	0
ACP5	0	1.935677	0.561	0.311	0
CCL4L2	0	1.712089	0.591	0.264	0
CCL20	0	2.546478	0.426	0.233	0
IL1A	0	1.282799	0.296	0.054	0
APOE	0	3.868439	0.623	0.267	0
MARCO	0	1.925248	0.281	0.039	0
HAMP	0	1.564673	0.367	0.088	0
HMOX1	0	2.136856	0.624	0.212	0
S100B	0	0.540177	0.246	0.056	0
GPNMB	0	2.215109	0.501	0.09	0
SPINK1	0	-1.91911	0.148	0.365	0
CCL3	0	3.481966	0.69	0.224	0
C1QB	0	4.637265	0.706	0.239	0
FCER1A	0	0.443959	0.196	0.007	0
CD1C	0	0.465317	0.269	0.041	0
C1QC	0	4.632196	0.703	0.238	0
C1QA	0	4.284933	0.707	0.227	0
DNASE1L3	0	0.93044	0.273	0.037	0
IL10	0	0.606914	0.289	0.093	0
IL1B	0	3.625203	0.684	0.148	0
IL1RN	0	1.769056	0.402	0.146	0
SDS	0	1.249274	0.375	0.087	0
PGC	0	-4.72119	0.343	0.592	0
TREM2	0	1.547275	0.468	0.016	0
LIPF	0	-4.12494	0.268	0.474	0
CD163	0	1.856347	0.557	0.054	0
PLA2G7	0	1.339327	0.382	0.022	0
CD1E	0	0.416063	0.243	0.037	0
PTGS2	0	1.102439	0.397	0.113	0
ADAMDEC	0	0.702712	0.277	0.037	0
CTSL	0	3.141735	0.703	0.269	0
AC020656	0	0.429815	0.262	0.071	0
TIMP1	0	2.48745	0.84	0.546	0
TGFBI	0	1.331453	0.57	0.195	0
THBS1	0	1.49627	0.463	0.3	0
MSR1	0	1.304282	0.443	0.021	0
TNF	0	1.203199	0.475	0.275	0
FCN1	0	1.835142	0.338	0.045	0
F13A1	0	1.354083	0.389	0.052	0
RETN	0	0.814556	0.234	0.033	0
LYVE1	0	0.624346	0.261	0.014	0
VCAN	0	1.310683	0.379	0.139	0
FABP3	0	0.261293	0.23	0.054	0
FCGR3A	0	2.105286	0.542	0.093	0
LGALS2	0	0.907326	0.355	0.145	0

MS4A7	0	2.584755	0.751	0.126	0
CLEC10A	0	1.205613	0.446	0.056	0
MS4A6A	0	2.77914	0.753	0.121	0
C15orf48	0	2.12431	0.625	0.262	0
MRC1	0	1.349688	0.425	0.051	0
CD14	0	2.759453	0.713	0.126	0
OLR1	0	1.833514	0.523	0.04	0
LIPA	0	1.776519	0.595	0.277	0
LYZ	0	1.906842	0.861	0.417	0
IL4I1	0	0.917885	0.354	0.169	0
EBI3	0	0.670988	0.332	0.074	0
ADIRF	0	-1.10207	0.155	0.361	0
PLTP	0	2.150673	0.515	0.286	0
VSIG4	0	1.510507	0.512	0.062	0
MS4A4A	0	1.788424	0.562	0.068	0
CXCL3	0	3.200893	0.579	0.267	0
CD93	0	0.51949	0.374	0.085	0
FOLR2	0	1.719831	0.468	0.092	0
CPVL	0	1.926947	0.668	0.129	0
PDIA2	0	-0.40066	0.01	0.228	0
CYP27A1	0	0.960189	0.356	0.146	0
MMP19	0	1.275623	0.382	0.084	0
MDK	0	-0.98632	0.161	0.361	0
CD68	0	3.159896	0.843	0.269	0
CTSB	0	3.588079	0.898	0.451	0
OLFML2B	0	0.399913	0.332	0.042	0
FCGR2B	0	1.900756	0.507	0.075	0
CSF1R	0	1.75005	0.638	0.078	0
IGFBP2	0	-1.13556	0.203	0.4	0
HLA-DQA	0	1.074788	0.39	0.11	0
FBP1	0	0.923766	0.43	0.246	0
S100A14	0	-0.73063	0.065	0.228	0
STAB1	0	1.599766	0.511	0.066	0
CXCL2	0	2.96846	0.67	0.265	0
LGMN	0	2.156105	0.628	0.312	0
LILRB4	0	1.354446	0.53	0.062	0
CLU	0	-1.16251	0.174	0.39	0
NLRP3	0	1.101018	0.421	0.112	0
CYBB	0	1.892363	0.649	0.065	0
CCL4	0	1.599874	0.717	0.377	0
TMIGD3	0	0.44798	0.278	0.031	0
TMEM176	0	1.246462	0.647	0.258	0
FPR3	0	1.009307	0.393	0.049	0
CLDN18	0	-1.23453	0.14	0.34	0
IFI30	0	1.791003	0.663	0.176	0
ASS1	0	-0.49831	0.051	0.266	0
PLIN2	0	1.975292	0.688	0.432	0
CTSD	0	1.747376	0.623	0.401	0
LAMA3	0	-0.35606	0.036	0.163	0
FCGR1A	0	1.134383	0.428	0.048	0
IGSF6	0	1.476866	0.589	0.053	0
C19orf33	0	-1.11078	0.14	0.363	0
RASSF4	0	1.248047	0.517	0.195	0
SLCO2B1	0	1.008318	0.37	0.128	0
FCER1G	0	3.30364	0.909	0.178	0
MAFB	0	1.851042	0.722	0.253	0
FCGR2A	0	1.97352	0.705	0.08	0
VMO1	0	0.988767	0.43	0.067	0

CTSZ	0	1.906023	0.667	0.242	0
AIF1	0	2.96553	0.892	0.159	0
S100A16	0	-0.82464	0.1	0.304	0
S100P	0	-2.0395	0.148	0.352	0
AKR7A3	0	-0.61938	0.107	0.301	0
MIR3945H	0	0.613615	0.243	0.017	0
PERP	0	-0.86444	0.148	0.415	0
MPEG1	0	1.18422	0.449	0.062	0
PLPP1	0	-0.87724	0.145	0.385	0
KRT19	0	-2.23532	0.172	0.403	0
LILRB5	0	0.6129	0.272	0.011	0
DAB2	0	1.362365	0.487	0.194	0
CD86	0	1.430182	0.592	0.084	0
TYROBP	0	3.362637	0.957	0.26	0
CD24	0	-1.31257	0.088	0.317	0
GPR34	0	0.826912	0.398	0.166	0
ADAP2	0	0.992424	0.448	0.11	0
MCTP1	0	0.5062	0.343	0.104	0
FXD3	0	-1.0224	0.079	0.296	0
AGR2	0	-2.59235	0.197	0.422	0
FGL2	0	1.526108	0.565	0.1	0
KRT18	0	-2.27903	0.204	0.457	0
KRT8	0	-2.42705	0.179	0.481	0
C1orf54	0	0.699746	0.433	0.248	0
IL18	0	0.805686	0.476	0.213	0
LRP1	0	0.594929	0.435	0.234	0
RAB25	0	-0.3798	0.046	0.178	0
HIST1H4C	0	-0.89296	0.379	0.577	0
PPIC	0	-0.39728	0.101	0.302	0
BCAT1	0	0.636381	0.326	0.097	0
CD209	0	0.388723	0.254	0.009	0
HLA-DPA1	0	3.544838	0.941	0.422	0
TNFAIP2	0	1.007817	0.492	0.172	0
HLA-DPB1	0	3.357664	0.927	0.393	0
ADM	0	0.484283	0.441	0.26	0
MUC1	0	-1.3057	0.098	0.341	0
IGHA1	0	-4.65812	0.337	0.535	0
S100A9	0	2.53375	0.613	0.125	0
CCL24	0	0.929225	0.269	0.059	0
JCHAIN	0	-3.95625	0.295	0.488	0
S100A8	0	1.537579	0.479	0.164	0
G0S2	0	2.088196	0.568	0.178	0
MZB1	0	-1.5868	0.114	0.34	0
FUCA1	0	0.978705	0.395	0.226	0
C5AR1	0	1.839379	0.631	0.091	0
CST3	0	2.368523	0.951	0.63	0
SLC16A10	0	0.713508	0.275	0.076	0
CD320	0	-0.87931	0.139	0.377	0
FTL	0	3.066659	0.999	0.959	0
CXCL8	0	2.804722	0.712	0.178	0
CPM	0	0.647791	0.367	0.162	0
BCL2A1	0	2.134174	0.738	0.2	0
NQO1	0	-0.90251	0.173	0.368	0
CSTB	0	1.749174	0.818	0.55	0
HLA-DRB5	0	2.570859	0.711	0.231	0
PLEK	0	1.524469	0.71	0.179	0
TREM1	0	0.947111	0.43	0.055	0
TMEM176I	0	1.511784	0.694	0.257	0

KYNU	0	1.161136	0.492	0.126	0
MISP	0	-0.37764	0.06	0.202	0
HLA-DQA	0	3.010746	0.825	0.27	0
C12orf75	0	-0.64853	0.16	0.382	0
PIGR	0	-1.4404	0.077	0.326	0
HLA-DQB1	0	2.715951	0.804	0.247	0
TSPAN8	0	-1.28457	0.108	0.322	0
PLD4	0	0.5198	0.305	0.036	0
ACSL1	0	0.987501	0.503	0.169	0
S100A10	0	0.640657	0.878	0.73	0
SPI1	0	2.029625	0.778	0.144	0
NRP2	0	0.560628	0.332	0.103	0
ID1	0	-1.31606	0.237	0.48	0
SMIM25	0	0.840681	0.413	0.056	0
SLC11A1	0	1.111875	0.412	0.081	0
SMS	0	0.586584	0.556	0.335	0
KCTD12	0	0.989939	0.512	0.171	0
AKR1C1	0	-0.26893	0.043	0.204	0
CFP	0	0.900622	0.386	0.126	0
AQP9	0	0.742886	0.286	0.062	0
GPR183	0	1.45574	0.606	0.252	0
RNASET2	0	1.489817	0.783	0.457	0
HLA-DOA	0	0.558552	0.367	0.081	0
PLAUR	0	2.641096	0.806	0.296	0
CD163L1	0	0.401332	0.253	0.047	0
EPHA2	0	-0.33072	0.062	0.168	0
PRCP	9.82E-308	0.401987	0.486	0.32	1.96E-304
CD300E	9.31E-284	0.921726	0.243	0.04	1.86E-280
FABP5	2.93E-283	0.649256	0.628	0.48	5.86E-280
TACSTD2	1.41E-282	-0.45973	0.076	0.207	2.82E-279
TMEM37	3.38E-279	0.250099	0.26	0.121	6.76E-276
MMP12	1.93E-277	2.214191	0.239	0.07	3.87E-274
LCN2	2.89E-273	-1.38565	0.063	0.242	5.78E-270
GZMA	5.36E-269	-1.50096	0.16	0.339	1.07E-265
TMEM54	4.49E-268	-0.39143	0.102	0.245	8.99E-265
CLDN4	4.00E-267	-1.41104	0.073	0.243	8.00E-264
NRP1	5.56E-266	0.452743	0.323	0.119	1.11E-262
SLC40A1	3.19E-263	1.317539	0.385	0.235	6.37E-260
CH25H	3.96E-263	0.766032	0.304	0.169	7.92E-260
SDC2	3.07E-258	0.304184	0.304	0.136	6.13E-255
NR1H3	1.63E-256	0.445449	0.295	0.139	3.27E-253
PGA3	8.26E-255	-4.72142	0.272	0.442	1.65E-251
SELENOP	1.05E-253	2.442699	0.494	0.377	2.10E-250
AKR1B10	1.45E-246	-0.70091	0.108	0.27	2.89E-243
TM4SF1	4.37E-243	-1.246	0.116	0.306	8.73E-240
CDC42EP5	7.47E-243	-0.30443	0.033	0.138	1.49E-239
CA9	6.95E-241	-0.3938	0.016	0.187	1.39E-237
CXCL17	1.25E-240	-0.75281	0.138	0.317	2.50E-237
FMOD	6.59E-238	-0.26806	0.052	0.181	1.32E-234
COL5A1	4.59E-237	-0.49791	0.031	0.206	9.17E-234
CRIP2	1.23E-233	-0.96707	0.175	0.34	2.46E-230
SLC2A5	2.54E-233	0.465357	0.252	0.076	5.08E-230
MMP14	5.96E-233	0.488353	0.353	0.183	1.19E-229
PGA4	1.38E-232	-0.99061	0.012	0.156	2.76E-229
SFN	1.43E-228	-0.87421	0.115	0.247	2.85E-225
REG1A	2.06E-223	-1.97664	0.225	0.377	4.13E-220
PRSS23	1.52E-221	-0.90569	0.155	0.298	3.03E-218
CALD1	4.00E-221	-1.63124	0.112	0.281	7.99E-218

S100A12	4.42E-220	0.675865	0.205	0.042	8.84E-217
EPCAM	2.47E-216	-0.94562	0.069	0.248	4.94E-213
IGHA2	2.63E-214	-3.70886	0.274	0.423	5.27E-211
DKK3	3.70E-211	-0.40191	0.055	0.228	7.40E-208
FSTL1	4.07E-208	-0.59001	0.045	0.207	8.13E-205
ADH1C	2.66E-206	-0.58519	0.085	0.238	5.31E-203
SOD3	8.85E-205	-0.6434	0.074	0.163	1.77E-201
PSMB3	1.13E-204	0.35589	0.678	0.526	2.26E-201
TINAGL1	9.31E-204	-0.46205	0.116	0.24	1.86E-200
LGALS4	1.25E-203	-1.26301	0.144	0.297	2.50E-200
PDZK1IP1	2.23E-203	-0.49788	0.031	0.158	4.47E-200
ADAMTS1	9.41E-200	-0.49676	0.031	0.17	1.88E-196
TNFAIP6	1.38E-199	0.828649	0.265	0.103	2.75E-196
GPX2	4.58E-199	-0.9926	0.108	0.26	9.15E-196
THAP2	1.95E-198	0.638485	0.416	0.288	3.90E-195
CLIC3	9.33E-198	-0.41953	0.151	0.309	1.87E-194
HES4	2.77E-197	0.382475	0.374	0.245	5.53E-194
AZGP1	6.98E-197	-0.46641	0.013	0.178	1.40E-193
VSIG2	2.08E-196	-0.85348	0.15	0.305	4.15E-193
TNFRSF17	5.45E-195	-0.28716	0.008	0.104	1.09E-191
IGLV8-61	5.68E-195	-0.75203	0.127	0.044	1.14E-191
PGA5	1.32E-193	-2.89452	0.207	0.348	2.63E-190
C2	1.47E-193	0.485529	0.29	0.127	2.93E-190
VWA1	1.71E-192	-0.43256	0.039	0.13	3.43E-189
ALDH1A1	5.46E-192	-0.32233	0.206	0.342	1.09E-188
SPRY1	2.86E-190	-0.81573	0.15	0.318	5.73E-187
TM4SF5	4.66E-190	-0.29371	0.069	0.197	9.32E-187
SERPINH1	1.18E-188	-0.76344	0.26	0.413	2.36E-185
ID3	5.30E-188	-1.04482	0.345	0.499	1.06E-184
ARL14	5.86E-186	-0.43553	0.075	0.185	1.17E-182
FHL2	3.63E-185	-0.53192	0.086	0.245	7.25E-182
PRSS3	6.29E-179	-0.36607	0.048	0.154	1.26E-175
CAV1	6.83E-179	-0.91103	0.098	0.236	1.37E-175
HOPX	2.75E-178	-0.62626	0.156	0.304	5.51E-175
MAL2	5.68E-178	-0.42622	0.049	0.159	1.14E-174
FBXO32	4.98E-172	-0.3511	0.16	0.3	9.95E-169
CAVIN1	6.00E-172	-0.71791	0.128	0.258	1.20E-168
CKB	3.82E-170	-0.82226	0.198	0.316	7.64E-167
AKR1C3	2.19E-169	-0.42678	0.141	0.273	4.39E-166
LINC02446	1.20E-168	-0.31311	0.03	0.158	2.39E-165
EFNA1	1.88E-163	-0.42377	0.079	0.215	3.77E-160
CTSE	5.51E-163	-0.90306	0.15	0.282	1.10E-159
IGLC3	8.38E-163	-4.36716	0.129	0.279	1.68E-159
HPGD	6.57E-162	-0.5773	0.196	0.327	1.31E-158
IFIT2	1.14E-160	0.30411	0.22	0.107	2.27E-157
C1S	1.48E-159	-0.944	0.081	0.194	2.96E-156
NFIB	1.58E-158	-0.50073	0.104	0.261	3.16E-155
CD248	2.52E-158	-0.29437	0.024	0.148	5.04E-155
CLEC5A	4.32E-158	0.576492	0.204	0.032	8.64E-155
PSCA	1.01E-157	-1.52455	0.209	0.352	2.03E-154
JSRP1	1.93E-157	-0.3743	0.03	0.175	3.86E-154
MUC6	2.02E-155	-1.84003	0.209	0.342	4.03E-152
MYL9	2.19E-155	-1.16858	0.175	0.299	4.38E-152
TFF1	7.08E-154	-3.38156	0.353	0.475	1.42E-150
KCNE2	2.57E-152	-0.43819	0.048	0.173	5.14E-149
MAP1B	1.67E-151	-0.34625	0.037	0.109	3.34E-148
MT1E	3.08E-150	-0.94181	0.349	0.496	6.16E-147
CDHR5	6.67E-150	-0.32131	0.096	0.192	1.33E-146

FAM167B	4.21E-148	-0.30796	0.026	0.136	8.41E-145
NID1	9.60E-147	-0.2766	0.115	0.19	1.92E-143
IL6	1.27E-145	0.836502	0.22	0.079	2.54E-142
LAMP3	6.89E-145	0.458567	0.221	0.115	1.38E-141
TFF2	8.87E-144	-2.80891	0.295	0.414	1.77E-140
SULT1C2	8.63E-142	-0.52837	0.071	0.198	1.73E-138
SPARCL1	1.59E-141	-1.73747	0.14	0.273	3.17E-138
CLDN7	4.78E-141	-0.58412	0.13	0.226	9.55E-138
TPM1	1.01E-138	-1.09018	0.233	0.383	2.02E-135
THBD	2.36E-138	0.546632	0.325	0.178	4.72E-135
MGP	7.82E-138	-1.81504	0.157	0.285	1.56E-134
MMP10	8.43E-138	0.395417	0.158	0.042	1.69E-134
IFNG	1.52E-135	-0.93551	0.099	0.226	3.03E-132
CAPN8	4.07E-135	-0.8484	0.181	0.301	8.14E-132
ITLN1	3.42E-134	-0.39647	0.071	0.129	6.84E-131
GZMK	5.01E-134	-0.65952	0.121	0.257	1.00E-130
ALDH3A1	6.03E-134	-0.52512	0.095	0.179	1.21E-130
DERL3	3.77E-133	-0.91611	0.155	0.302	7.55E-130
FOXQ1	3.88E-133	-0.30052	0.028	0.152	7.75E-130
IGHV2-5	6.85E-133	-1.52243	0.1	0.21	1.37E-129
FN1	1.50E-130	1.57508	0.272	0.152	3.00E-127
GPRC5A	2.90E-129	-0.53998	0.098	0.2	5.81E-126
WFDC2	2.92E-128	-0.3967	0.069	0.176	5.84E-125
MUC4	3.93E-128	-0.28223	0.061	0.101	7.86E-125
RARRES2	4.46E-128	-1.3234	0.17	0.285	8.91E-125
IGKC	1.46E-127	-4.72916	0.253	0.395	2.93E-124
LMCD1	1.58E-127	-0.32715	0.136	0.262	3.16E-124
MUC17	5.02E-127	-0.27848	0.094	0.176	1.00E-123
SDCBP2	2.45E-126	-0.52531	0.112	0.229	4.90E-123
LMO7	2.45E-126	-0.59101	0.088	0.226	4.90E-123
CTGF	4.43E-126	-1.32109	0.119	0.263	8.87E-123
TMC5	5.34E-126	-0.66308	0.081	0.217	1.07E-122
INHBA	2.38E-124	1.203571	0.2	0.042	4.76E-121
COL6A1	2.68E-124	-0.923	0.072	0.197	5.35E-121
CD9	2.68E-122	0.414145	0.503	0.403	5.37E-119
KLK11	4.34E-122	-0.30196	0.042	0.132	8.69E-119
IGKV1D-10	1.34E-120	-0.41066	0.106	0.042	2.69E-117
CYR61	1.09E-119	-1.20365	0.175	0.306	2.17E-116
PLA2G2A	1.24E-119	-0.99952	0.121	0.208	2.47E-116
IGLC2	9.17E-119	-4.87228	0.158	0.302	1.83E-115
EFEMP1	6.38E-118	-0.61756	0.099	0.183	1.28E-114
MUC5AC	4.80E-117	-2.50581	0.359	0.467	9.60E-114
LSR	1.71E-115	-0.60643	0.163	0.309	3.41E-112
CCL22	1.80E-115	0.974893	0.113	0.023	3.59E-112
ERO1A	1.04E-114	0.312906	0.285	0.181	2.08E-111
FSCN1	2.27E-114	0.506804	0.373	0.289	4.54E-111
MXRA8	2.73E-111	-0.32239	0.017	0.107	5.46E-108
ANXA10	6.88E-111	-0.86828	0.221	0.334	1.38E-107
IL33	2.87E-109	-0.25271	0.024	0.149	5.74E-106
EDN1	1.47E-108	-0.30379	0.07	0.162	2.93E-105
IGHV3-72	2.89E-107	-0.941	0.108	0.043	5.77E-104
MXRA5	4.92E-107	-0.34514	0.042	0.105	9.85E-104
TPM2	1.62E-106	-0.92441	0.157	0.285	3.25E-103
CDH1	5.46E-106	-0.40903	0.073	0.186	1.09E-102
TSPAN1	1.65E-105	-0.69479	0.12	0.217	3.30E-102
SLCO2A1	3.36E-105	-0.41343	0.03	0.148	6.72E-102
DMKN	9.25E-105	-0.2812	0.099	0.204	1.85E-101
GKN1	1.23E-104	-2.78075	0.288	0.382	2.46E-101

GOLM1	4.85E-104	-0.597	0.173	0.288	9.69E-101
PHLDA2	6.31E-104	0.259326	0.492	0.38	1.26E-100
PHGR1	7.80E-104	-1.95578	0.281	0.378	1.56E-100
GZMB	3.80E-103	-0.81021	0.149	0.255	7.60E-100
CCL19	1.05E-102	0.381398	0.129	0.035	2.10E-99
PTX3	4.67E-100	0.682752	0.209	0.065	9.35E-97
GIF	3.98E-98	-0.62756	0.065	0.198	7.96E-95
MYC	5.48E-98	-0.44686	0.228	0.336	1.10E-94
EPAS1	9.80E-98	-0.50124	0.236	0.35	1.96E-94
IGLL5	1.02E-97	-1.23745	0.099	0.181	2.05E-94
CNN3	2.60E-97	-0.64959	0.119	0.259	5.20E-94
KCNMA1	3.22E-97	0.396711	0.228	0.094	6.43E-94
IGFBP6	5.19E-97	-0.55485	0.138	0.237	1.04E-93
PRSS8	1.52E-96	-0.3992	0.084	0.192	3.04E-93
AREG	1.62E-95	0.983532	0.529	0.453	3.24E-92
IGKV3-15	1.76E-95	-2.82174	0.174	0.265	3.51E-92
KRT7	3.17E-94	-0.56806	0.099	0.188	6.34E-91
IGHV1-69I	1.12E-93	-2.00569	0.123	0.223	2.23E-90
SPON2	2.01E-93	-0.70226	0.192	0.296	4.03E-90
OLFM4	6.43E-91	-0.51854	0.075	0.159	1.29E-87
DUOX2	1.79E-88	-0.29957	0.05	0.14	3.58E-85
DSG2	4.85E-88	-0.32134	0.084	0.161	9.69E-85
CXCL5	1.05E-87	1.443559	0.168	0.077	2.10E-84
NSG1	1.81E-87	-0.26806	0.055	0.176	3.63E-84
PTPRF	4.51E-87	-0.27618	0.087	0.168	9.02E-84
CXCL9	8.22E-85	1.273005	0.153	0.036	1.64E-81
CXCL1	4.06E-83	0.940656	0.243	0.153	8.13E-80
CAMK2N1	7.10E-83	-0.27952	0.056	0.167	1.42E-79
MUCL3	8.67E-83	-1.15857	0.28	0.37	1.73E-79
REG4	1.53E-82	-1.02998	0.196	0.28	3.06E-79
FABP1	2.26E-82	-0.87968	0.17	0.269	4.51E-79
CRYAB	1.26E-81	-0.25391	0.06	0.137	2.52E-78
TESC	2.55E-81	-0.44673	0.279	0.375	5.09E-78
CFH	2.60E-81	-0.51884	0.103	0.203	5.19E-78
DCN	6.28E-81	-1.73455	0.106	0.216	1.26E-77
COL6A2	1.85E-80	-1.19559	0.121	0.242	3.71E-77
SMIM24	1.01E-79	-0.58899	0.21	0.289	2.01E-76
GSTA1	7.20E-79	-0.43132	0.1	0.192	1.44E-75
GKN2	7.94E-79	-1.80539	0.23	0.321	1.59E-75
RGS5	1.28E-78	-1.53576	0.162	0.24	2.57E-75
LINC01133	3.01E-77	-0.40338	0.114	0.198	6.01E-74
IGHG1	6.47E-77	-2.55088	0.169	0.261	1.29E-73
MFAP2	7.75E-77	-0.27701	0.079	0.128	1.55E-73
IGKV1D-3	1.77E-76	-1.33934	0.081	0.152	3.55E-73
ID4	1.88E-76	-0.26597	0.052	0.136	3.76E-73
UACA	4.23E-76	-0.25569	0.131	0.177	8.46E-73
MSMB	4.34E-76	-0.75089	0.107	0.19	8.69E-73
COL4A1	1.93E-74	-1.04329	0.099	0.195	3.86E-71
AC245595	2.25E-74	-0.27601	0.156	0.231	4.51E-71
IFI6	2.54E-74	0.469441	0.517	0.445	5.08E-71
IGLV3-10	3.23E-74	-2.38985	0.11	0.196	6.46E-71
FAM3B	3.78E-74	-0.36284	0.144	0.215	7.55E-71
FAM3D	4.52E-74	-0.40836	0.13	0.184	9.04E-71
LAMA4	5.11E-74	-0.47368	0.055	0.125	1.02E-70
MT1G	1.47E-73	-0.88984	0.318	0.431	2.94E-70
NNMT	3.59E-72	-0.95919	0.167	0.249	7.19E-69
IGFBP7	4.05E-69	-2.66854	0.283	0.375	8.11E-66
ESAM	1.37E-67	-0.44727	0.16	0.237	2.74E-64

PLAC9	4.67E-67	-0.45705	0.075	0.134	9.34E-64
IGFBP4	8.46E-67	-1.51874	0.225	0.326	1.69E-63
F2R	1.99E-66	-0.37571	0.099	0.214	3.98E-63
IGLV1-40	5.00E-66	-2.91955	0.168	0.258	1.00E-62
PDLIM3	1.32E-65	-0.30229	0.075	0.165	2.64E-62
LIFR	2.40E-65	-0.25236	0.027	0.156	4.80E-62
IGKV3-11	2.68E-65	-2.78447	0.189	0.267	5.35E-62
CYGB	1.27E-64	-0.48392	0.084	0.168	2.54E-61
CPE	2.10E-64	-0.33616	0.024	0.103	4.20E-61
XCL2	3.28E-63	-0.8975	0.13	0.201	6.55E-60
RASD1	1.51E-62	-0.33515	0.279	0.366	3.02E-59
CLDN3	2.19E-62	-0.50883	0.113	0.175	4.38E-59
RCAN1	3.47E-62	0.425641	0.272	0.19	6.93E-59
IGHV3-23	1.48E-61	-2.40748	0.141	0.214	2.96E-58
IGLV1-44	3.81E-61	-3.03696	0.196	0.274	7.61E-58
SERINC2	5.05E-61	-0.28198	0.187	0.233	1.01E-57
AGR3	2.06E-60	-0.37691	0.108	0.171	4.12E-57
TNIP3	2.11E-60	0.580502	0.192	0.103	4.22E-57
IGFBP5	1.03E-59	-1.24009	0.069	0.158	2.05E-56
GATM	2.10E-59	0.29658	0.295	0.181	4.20E-56
PCSK1N	1.89E-58	-0.72516	0.189	0.265	3.79E-55
CAVIN2	3.40E-58	-0.41897	0.185	0.107	6.80E-55
GSTM3	6.47E-58	-0.41956	0.268	0.364	1.29E-54
GNG11	1.27E-57	-0.89815	0.141	0.236	2.54E-54
COL3A1	2.04E-57	-2.05195	0.161	0.26	4.07E-54
GDF15	3.11E-57	-0.44436	0.202	0.266	6.22E-54
RGS16	1.10E-56	-0.40086	0.225	0.314	2.20E-53
BMP4	1.87E-56	-0.26612	0.06	0.119	3.74E-53
CEACAM5	2.53E-56	-0.36908	0.114	0.166	5.05E-53
COL1A2	1.78E-55	-1.95774	0.145	0.246	3.55E-52
VWF	4.60E-55	-0.75654	0.181	0.118	9.20E-52
APOBEC3/	1.19E-54	0.584406	0.156	0.07	2.38E-51
ZG16B	2.69E-54	-0.31798	0.115	0.163	5.38E-51
ANXA3	2.61E-53	-0.37599	0.123	0.187	5.22E-50
THY1	2.81E-53	-0.74947	0.093	0.192	5.62E-50
FKBP10	4.88E-53	-0.30067	0.091	0.165	9.76E-50
IGKV1-16	2.90E-52	-1.3001	0.081	0.13	5.79E-49
ERRFI1	3.88E-52	-0.25785	0.194	0.293	7.77E-49
RND3	5.81E-52	-0.4309	0.136	0.2	1.16E-48
IGHV3-48	2.12E-51	-1.78658	0.076	0.144	4.23E-48
COL18A1	7.53E-51	-0.72341	0.148	0.259	1.51E-47
LAMB1	3.00E-50	-0.40832	0.097	0.179	6.01E-47
HIST2H2A.	3.07E-49	0.316563	0.386	0.355	6.13E-46
TRIM31	5.74E-49	-0.27589	0.057	0.113	1.15E-45
GGT5	9.56E-49	-0.2657	0.102	0.102	1.91E-45
TRBV7-2	2.60E-48	-0.31076	0.074	0.13	5.19E-45
MIR155HC	3.03E-48	0.783079	0.38	0.319	6.07E-45
IGLV3-1	1.67E-47	-2.24396	0.199	0.266	3.33E-44
MYLK	1.70E-47	-0.31867	0.036	0.124	3.41E-44
ATP4B	2.99E-47	-0.40583	0.063	0.125	5.99E-44
C1R	1.07E-46	-0.66022	0.1	0.186	2.14E-43
IGKV2-30	7.43E-46	-1.32918	0.119	0.193	1.49E-42
MFGE8	7.96E-46	-0.49539	0.125	0.202	1.59E-42
POSTN	9.19E-46	-1.83994	0.043	0.116	1.84E-42
MCAM	1.95E-45	-0.40966	0.076	0.151	3.90E-42
SERPINB2	4.28E-45	1.216636	0.174	0.082	8.55E-42
HSPA6	4.49E-45	0.417712	0.478	0.406	8.98E-42
LDB2	1.46E-44	-0.26837	0.085	0.14	2.92E-41

SPINK4	1.84E-44	-0.98787	0.169	0.229	3.68E-41
NCOA7	3.65E-43	-0.3891	0.187	0.274	7.30E-40
XCL1	4.80E-43	-0.92732	0.173	0.23	9.59E-40
RHPN2	5.93E-43	-0.26417	0.124	0.176	1.19E-39
HSPG2	6.68E-43	-0.96772	0.172	0.252	1.34E-39
HSD17B2	4.34E-42	-0.28495	0.075	0.145	8.69E-39
IGHV3-7	9.15E-42	-2.51404	0.126	0.194	1.83E-38
RNASE1	2.36E-41	1.324617	0.445	0.415	4.72E-38
TIMP3	4.96E-41	-0.86014	0.167	0.227	9.93E-38
TNFRSF12L	9.98E-41	-0.33845	0.228	0.299	2.00E-37
MUC2	1.09E-40	-0.42632	0.203	0.137	2.18E-37
MT2A	2.20E-39	0.55669	0.687	0.658	4.41E-36
ANKRD36C	5.84E-39	-0.76032	0.154	0.242	1.17E-35
IGHM	7.84E-39	-3.17095	0.185	0.265	1.57E-35
CA2	8.90E-39	-0.74284	0.337	0.411	1.78E-35
EFEMP2	9.29E-39	-0.33968	0.132	0.164	1.86E-35
PLPP3	9.39E-39	-0.64102	0.115	0.167	1.88E-35
IGLV5-45	9.65E-39	-2.65725	0.146	0.098	1.93E-35
DEPP1	2.60E-38	-0.47484	0.124	0.164	5.20E-35
PTGDS	3.01E-38	-0.50305	0.119	0.135	6.02E-35
TMPRSS2	8.45E-38	-0.31111	0.057	0.151	1.69E-34
COL1A1	1.45E-37	-2.28332	0.163	0.252	2.91E-34
IGLV2-8	1.98E-37	-2.47317	0.183	0.244	3.96E-34
IGLV3-25	5.16E-37	-2.48759	0.205	0.267	1.03E-33
CCL2	1.29E-36	1.040962	0.274	0.195	2.59E-33
IGHV4-39	7.05E-36	-2.43353	0.161	0.225	1.41E-32
VSIG1	9.19E-36	-0.39658	0.14	0.222	1.84E-32
IGHV1-46	2.06E-35	-2.04089	0.171	0.228	4.13E-32
RAMP3	4.81E-35	-0.53763	0.071	0.118	9.62E-32
COL4A2	6.74E-35	-0.93188	0.177	0.226	1.35E-31
CRTAM	3.30E-34	-0.27002	0.172	0.129	6.60E-31
ATP4A	2.53E-33	-0.42099	0.084	0.133	5.06E-30
IGKV1-5	4.84E-33	-3.13908	0.251	0.31	9.68E-30
MT1M	1.19E-32	-0.45733	0.184	0.224	2.39E-29
COL15A1	8.53E-32	-0.5663	0.122	0.146	1.71E-28
EMP2	4.15E-30	-0.39473	0.205	0.232	8.30E-27
IGKV2D-2C	5.76E-30	-1.09215	0.069	0.13	1.15E-26
TCIM	6.18E-30	-0.6055	0.156	0.214	1.24E-26
IGHG2	3.02E-29	-1.38943	0.125	0.095	6.05E-26
ACTA2	5.42E-29	-1.18735	0.181	0.248	1.08E-25
TRBV20-1	6.48E-29	-0.36451	0.146	0.19	1.30E-25
SERPINE2	3.66E-28	-0.38179	0.075	0.146	7.33E-25
ARHGAP2C	1.12E-27	-0.34866	0.074	0.135	2.25E-24
AQP1	1.31E-27	-0.55886	0.132	0.146	2.62E-24
HIF1A-AS2	3.07E-27	0.415394	0.234	0.186	6.15E-24
IGKV3-20	3.99E-26	-3.53527	0.281	0.339	7.97E-23
EGR2	4.42E-26	0.427278	0.26	0.2	8.84E-23
MFAP4	7.93E-26	-0.99065	0.098	0.131	1.59E-22
IGLV3-21	7.96E-26	-2.48837	0.18	0.225	1.59E-22
KRT20	8.41E-26	-0.40699	0.189	0.231	1.68E-22
IGHV3-21	7.81E-25	-2.06369	0.097	0.151	1.56E-21
SFRP2	1.20E-24	-0.50578	0.108	0.076	2.41E-21
IGKV4-1	5.05E-24	-3.64035	0.24	0.302	1.01E-20
LAMB3	1.89E-23	-0.39524	0.168	0.208	3.79E-20
SPARC	2.10E-23	-1.99291	0.261	0.329	4.20E-20
CLEC14A	9.51E-23	-0.32621	0.1	0.072	1.90E-19
IGKV1D-3C	1.72E-22	-1.59869	0.079	0.116	3.43E-19
IGLV1-47	2.78E-22	-1.66826	0.202	0.239	5.57E-19

CD34	1.25E-21	-0.38653	0.088	0.132	2.49E-18
PXDN	1.92E-21	-0.26748	0.066	0.118	3.85E-18
MALL	2.13E-21	-0.26719	0.134	0.16	4.27E-18
ATP1B1	2.37E-21	-0.36913	0.326	0.374	4.74E-18
WWTR1	6.53E-21	-0.29725	0.064	0.151	1.31E-17
IGLV2-14	3.06E-20	-2.75641	0.25	0.299	6.12E-17
FBLN1	3.79E-20	-0.73674	0.105	0.154	7.58E-17
IGHV4-61	5.17E-20	-1.51088	0.075	0.107	1.03E-16
RAMP2	8.70E-20	-0.85873	0.146	0.195	1.74E-16
IGHV3-11	9.23E-20	-1.32928	0.069	0.104	1.85E-16
CXCL12	1.36E-19	-0.50822	0.145	0.145	2.71E-16
IGHV1-3	1.48E-19	-1.82571	0.124	0.179	2.96E-16
NUPR1	2.08E-19	0.783435	0.291	0.228	4.17E-16
IGLV4-69	3.43E-19	-1.67256	0.106	0.145	6.86E-16
PKIB	5.76E-19	0.304635	0.223	0.123	1.15E-15
IGHV5-51	7.79E-19	-2.70871	0.182	0.217	1.56E-15
COL6A3	1.03E-18	-0.58002	0.061	0.115	2.05E-15
GNLY	1.13E-18	-1.56757	0.101	0.168	2.27E-15
GAST	1.77E-18	-2.31132	0.188	0.228	3.55E-15
SLC9A3R2	4.46E-18	-0.72312	0.176	0.226	8.93E-15
NDUFA4L2	5.22E-18	-0.59008	0.128	0.179	1.04E-14
IGKV1-17	1.32E-16	-2.43548	0.183	0.207	2.64E-13
IGHV1-18	1.78E-16	-2.2238	0.147	0.186	3.55E-13
MUC3A	3.24E-16	-0.31083	0.173	0.205	6.48E-13
BPIFB1	5.59E-16	-0.41496	0.095	0.125	1.12E-12
GEM	2.01E-15	0.253375	0.317	0.28	4.01E-12
CCDC80	2.01E-15	-0.9532	0.163	0.197	4.02E-12
FCGBP	2.52E-15	-0.34132	0.214	0.251	5.03E-12
IGHV4-34	3.22E-15	-2.57825	0.135	0.178	6.45E-12
IGLV2-23	4.10E-15	-2.43242	0.239	0.273	8.20E-12
HTRA1	6.37E-15	-0.26836	0.16	0.176	1.27E-11
LUM	1.19E-13	-1.43575	0.087	0.148	2.37E-10
PRAP1	1.23E-13	-0.32495	0.136	0.156	2.46E-10
CXCL14	1.56E-13	-2.16862	0.17	0.196	3.11E-10
EGFL7	2.04E-13	-0.56457	0.222	0.18	4.07E-10
HYAL2	2.84E-13	-0.33533	0.174	0.192	5.69E-10
IGHV1-2	5.86E-13	-1.46623	0.129	0.113	1.17E-09
IGLV2-11	1.12E-12	-2.09281	0.219	0.26	2.23E-09
IGLV3-19	1.31E-12	-2.47967	0.198	0.229	2.62E-09
BCAS1	2.43E-12	-0.37861	0.179	0.242	4.85E-09
CCL11	2.81E-12	-0.94005	0.1	0.067	5.63E-09
IGKV2-28	7.04E-12	-1.43116	0.083	0.11	1.41E-08
IGHV3-33	9.99E-12	-1.09417	0.106	0.129	2.00E-08
IGLV1-51	1.36E-11	-2.52398	0.206	0.236	2.73E-08
FHL1	1.43E-11	-0.40602	0.174	0.226	2.85E-08
CTLA4	1.91E-11	-0.39917	0.113	0.108	3.83E-08
TFF3	2.93E-11	-1.30046	0.174	0.22	5.86E-08
FBN1	1.21E-10	-0.36093	0.064	0.103	2.43E-07
IGKV1-12	1.46E-10	-2.04055	0.112	0.137	2.93E-07
PCOLCE	4.02E-10	-0.52204	0.167	0.194	8.05E-07
LHFPL6	4.40E-10	-0.40344	0.161	0.11	8.79E-07
CES2	5.41E-10	-0.28894	0.216	0.261	1.08E-06
TFPI	6.43E-10	-0.29999	0.204	0.193	1.29E-06
APOA1	2.26E-09	-0.3795	0.154	0.132	4.52E-06
COL5A2	2.30E-09	-0.50766	0.06	0.14	4.60E-06
BCAM	4.09E-09	-0.43806	0.168	0.185	8.17E-06
PLAT	4.46E-09	-0.84407	0.061	0.124	8.93E-06
HEG1	5.28E-08	-0.2641	0.114	0.129	0.0001055

BGN	3.32E-07	-1.0456	0.157	0.184	0.0006645
IGLV7-46	8.43E-07	-2.24041	0.178	0.158	0.0016855
IGLV1-36	1.86E-06	-0.82521	0.08	0.101	0.0037261
EMILIN1	2.10E-06	-0.33247	0.135	0.124	0.0042019
REG3A	3.05E-06	-0.8175	0.172	0.192	0.0061045
EFNB2	4.21E-06	-0.36387	0.147	0.205	0.0084157
MMP2	7.68E-06	-0.69268	0.148	0.161	0.0153552
IGKV2D-21	8.07E-06	-1.94707	0.147	0.126	0.0161326
IDO1	1.83E-05	0.564135	0.105	0.046	0.0366556
TRBV28	2.18E-05	-0.32815	0.052	0.119	0.0435836
IGKV1-9	4.15E-05	-1.80604	0.199	0.206	0.0829069
LOXL2	0.0001616	-0.32942	0.107	0.143	0.3231074
BNIP3	0.0001862	0.32228	0.332	0.335	0.3724736
SLPI	0.0003408	-1.12855	0.241	0.286	0.6815558
SLC7A11	0.0009836	0.421071	0.163	0.126	1
IGHV3-20	0.0012195	-0.25698	0.09	0.109	1
GHRL	0.0014526	-2.45969	0.114	0.075	1
APOL1	0.0018895	-0.37188	0.114	0.159	1
TPSAB1	0.0020435	-1.38888	0.106	0.104	1
DUOXA2	0.0024184	-0.30993	0.075	0.105	1
PLVAP	0.0030291	-1.61696	0.183	0.175	1
RBP2	0.0052572	-0.33495	0.098	0.12	1
IGHV7-4-1	0.0054671	-1.70241	0.113	0.13	1
IGHV4-59	0.0091473	-1.85849	0.138	0.15	1
CXCL10	0.0193162	1.569762	0.162	0.126	1
MMP1	0.0250505	0.645817	0.159	0.106	1
AEBP1	0.032484	-0.45335	0.065	0.129	1
CFB	0.0382761	-0.30321	0.194	0.211	1
IGHG3	0.0834003	-1.91115	0.072	0.109	1
IGHV3-74	0.0843401	-1.34074	0.164	0.148	1
IGLV6-57	0.087204	-2.35818	0.176	0.183	1
SLC39A8	0.1222274	0.374719	0.286	0.287	1
COX7A1	0.1376985	-0.31432	0.118	0.116	1
IGHV3-30	0.1648455	-2.15688	0.129	0.124	1
CCL7	0.1692355	0.268333	0.103	0.034	1
PI3	0.2432074	-0.49806	0.09	0.113	1
TNFSF15	0.4541186	0.375168	0.142	0.096	1
TNFRSF4	0.4847671	-0.38566	0.234	0.241	1
APOA4	0.5756185	-0.32305	0.123	0.131	1
IGKV1-39	0.5866968	-2.52692	0.218	0.218	1
TAGLN	0.5946881	-1.34577	0.213	0.24	1
IGHG4	0.708795	-1.65234	0.114	0.131	1
IGKV1-27	0.8743168	-2.06461	0.188	0.189	1
FBLN5	0.9850894	-0.26481	0.128	0.171	1
ANPEP	0.9976293	0.381631	0.28	0.262	1

Table S2 Differential expression genes (DEGs) of cluster 2 and 5 in M2 macrophage subpopulation

gene	p_val	avg_log2F	pct.1	pct.2	p_val_adj	cluster
GZMB	5.08E-63	5.233832	1	0.142	1.02E-59	8
CCL22	3.68E-170	5.040539	0.863	0.094	7.36E-167	6
FN1	0	4.012416	0.91	0.185	0	3
CCL19	2.84E-107	3.979962	0.725	0.114	5.69E-104	6
FSCN1	5.62E-116	3.870675	0.963	0.359	1.12E-112	6
MARCO	0	3.753019	0.897	0.198	0	3
SPP1	0	3.656597	0.913	0.315	0	3
CCR7	3.73E-113	3.555058	0.875	0.218	7.45E-110	6
LAMP3	3.77E-152	3.438871	0.969	0.203	7.54E-149	6
CCL17	2.41E-87	3.428348	0.556	0.084	4.83E-84	6
HIST1H4C	9.14E-41	3.360642	0.947	0.372	1.83E-37	7
S100A8	0	3.261885	0.871	0.351	0	1
PLD4	2.19E-44	3.207492	0.945	0.299	4.38E-41	8
EBI3	7.06E-91	3.173182	0.875	0.319	1.41E-87	6
CCL18	9.88E-306	3.056614	0.534	0.128	1.98E-302	0
IDO1	1.93E-66	2.930133	0.688	0.091	3.86E-63	6
S100A9	0	2.869014	0.891	0.522	0	1
HAMP	1.12E-300	2.828479	0.808	0.308	2.25E-297	3
LILRA4	3.68E-64	2.818742	0.909	0.103	7.36E-61	8
TIMP1	0	2.810918	0.97	0.798	0	1
MKI67	5.22E-77	2.712964	0.934	0.066	1.04E-73	7
CXCL5	3.09E-92	2.694401	0.317	0.119	6.18E-89	1
C12orf75	3.96E-45	2.691591	0.891	0.154	7.92E-42	8
IL1RN	2.53E-190	2.686343	0.65	0.321	5.07E-187	1
UBD	7.15E-77	2.678301	0.7	0.178	1.43E-73	6
GPR183	1.80E-28	2.670364	0.964	0.603	3.59E-25	8
SERPINB2	7.01E-289	2.639373	0.464	0.079	1.40E-285	1
FCN1	0	2.630154	0.751	0.203	0	1
SPIB	9.84E-58	2.628692	0.909	0.084	1.97E-54	8
CLIC3	1.81E-51	2.527605	0.873	0.145	3.62E-48	8
MIR155HG	1.66E-45	2.485446	0.762	0.371	3.32E-42	6
TCF4	7.98E-44	2.453633	1	0.295	1.60E-40	8
NUPR1	2.15E-224	2.452425	0.713	0.234	4.31E-221	3
PLTP	1.34E-299	2.442386	0.928	0.459	2.69E-296	3
S100A12	0	2.438412	0.568	0.086	0	1
SELENOP	0	2.405241	0.828	0.347	0	0
EGLN3	1.95E-44	2.367136	0.927	0.169	3.91E-41	8
FCGR2B	5.48E-296	2.348972	0.922	0.451	1.10E-292	3
TOP2A	6.93E-80	2.342833	0.934	0.074	1.39E-76	7
CENPF	1.63E-73	2.338233	0.921	0.079	3.25E-70	7
PLAC8	1.84E-37	2.321222	0.927	0.27	3.69E-34	8
TYMS	2.02E-65	2.305735	0.868	0.136	4.04E-62	7
ACP5	0	2.275825	0.885	0.418	0	0
UBE2C	1.64E-68	2.258213	0.855	0.141	3.29E-65	7
DERL3	2.74E-63	2.255807	0.909	0.149	5.47E-60	8
MMP12	2.07E-120	2.255276	0.462	0.14	4.14E-117	0
EREG	0	2.2285	0.758	0.272	0	1
TPM2	2.06E-43	2.201701	0.873	0.151	4.12E-40	8
JCHAIN	3.84E-47	2.198009	0.982	0.289	7.67E-44	8
TCL1A	4.31E-58	2.185586	0.618	0.047	8.61E-55	8
SERPINF1	8.60E-35	2.183544	0.909	0.293	1.72E-31	8
SLC40A1	0	2.127864	0.795	0.205	0	0
CD1C	1.65E-107	2.090473	0.557	0.241	3.31E-104	4
C3	5.46E-212	2.071988	0.818	0.245	1.09E-208	5
CYP27A1	0	2.065292	0.832	0.292	0	3
AREG	1.71E-17	2.06382	0.927	0.526	3.42E-14	8

PTTG1	1.20E-49	2.036867	0.908	0.301	2.39E-46	7
VCAN	0	2.024427	0.73	0.264	0	1
IGHV2-5	0.0002239	1.988499	0.046	0.107	0.4478326	3
PTGS2	1.45E-85	1.96891	0.546	0.348	2.90E-82	1
RASD1	4.05E-30	1.96027	0.836	0.275	8.10E-27	8
CDK1	9.35E-63	1.960004	0.882	0.14	1.87E-59	7
FCER1A	1.10E-131	1.954343	0.514	0.165	2.21E-128	4
PLIN2	9.31E-183	1.940914	0.921	0.657	1.86E-179	3
IL1B	1.56E-191	1.917998	0.867	0.624	3.13E-188	1
NUSAP1	3.22E-60	1.905707	0.882	0.1	6.45E-57	7
LAMP5	3.67E-42	1.899542	0.782	0.167	7.33E-39	8
KRT5	1.20E-26	1.892095	0.418	0.004	2.40E-23	8
MZB1	6.67E-54	1.891301	0.855	0.108	1.33E-50	8
CFD	3.25E-193	1.891011	0.905	0.589	6.50E-190	3
IGLV2-14	6.96E-05	1.866252	0.166	0.258	0.1392408	4
THBS1	3.73E-145	1.839349	0.652	0.402	7.46E-142	1
IGLV2-14	3.98E-05	1.837327	0.19	0.258	0.0795213	2
RNASE1	4.25E-168	1.833962	0.667	0.348	8.49E-165	0
C15orf48	2.65E-127	1.817644	0.756	0.582	5.30E-124	1
CD300E	0	1.805813	0.628	0.117	0	1
CCL20	1.08E-108	1.805637	0.618	0.363	2.16E-105	1
HBB	5.31E-05	1.805516	0.199	0.27	0.106203	2
SCT	2.20E-150	1.777174	0.782	0.037	4.40E-147	8
HIST2H2A	3.27E-14	1.76842	0.709	0.383	6.54E-11	8
CTSD	0	1.76097	0.89	0.505	0	0
APOBEC3/	2.36E-177	1.739681	0.413	0.072	4.72E-174	1
IGLV2-23	0.0011379	1.726723	0.194	0.246	1	2
IGHM	0.0006593	1.705676	0.11	0.193	1	4
CKS1B	9.57E-54	1.699046	0.868	0.181	1.91E-50	7
PLAUR	1.35E-271	1.69541	0.946	0.76	2.70E-268	1
LYVE1	2.08E-173	1.688934	0.591	0.217	4.16E-170	3
RAMP1	1.54E-47	1.684009	0.606	0.223	3.09E-44	6
HMMR	1.25E-98	1.665471	0.789	0.064	2.50E-95	7
IGKV1-39	4.04E-18	1.658653	0.108	0.233	8.07E-15	2
STAB1	0	1.657469	0.846	0.364	0	0
TNFAIP6	2.05E-54	1.642732	0.435	0.21	4.11E-51	1
SLC2A5	8.89E-262	1.642477	0.681	0.194	1.78E-258	3
CXCL3	2.02E-146	1.633632	0.841	0.543	4.04E-143	3
AQP9	1.05E-234	1.631597	0.601	0.183	2.10E-231	1
BNIP3	3.86E-169	1.61943	0.654	0.289	7.71E-166	3
TPX2	1.96E-62	1.612019	0.737	0.058	3.92E-59	7
RNASET2	1.18E-227	1.601289	0.952	0.76	2.36E-224	3
S100B	7.13E-21	1.597552	0.346	0.237	1.43E-17	4
CD1E	4.37E-90	1.596504	0.498	0.219	8.75E-87	4
NCCRP1	1.81E-177	1.580741	0.488	0.014	3.62E-174	6
CCL3L1	6.31E-38	1.576678	0.626	0.493	1.26E-34	1
CCL20	5.13E-50	1.57169	0.569	0.407	1.03E-46	3
CXCL8	1.38E-88	1.561419	0.836	0.672	2.76E-85	1
IGHV4-39	0.0015693	1.555907	0.174	0.159	1	2
MMP9	6.39E-191	1.553258	0.628	0.242	1.28E-187	0
GSTP1	2.82E-46	1.551949	0.988	0.849	5.65E-43	6
FCGBP	5.94E-26	1.542492	0.349	0.203	1.19E-22	5
LGMN	1.05E-292	1.541937	0.872	0.521	2.11E-289	0
CXCL9	6.49E-44	1.54018	0.306	0.086	1.30E-40	0
ASPM	1.07E-100	1.527007	0.829	0.042	2.14E-97	7
FUCA1	3.12E-256	1.520091	0.66	0.278	6.24E-253	0
IGLC2	7.59E-16	1.512242	0.184	0.146	1.52E-12	0
IL1A	2.55E-53	1.50678	0.435	0.25	5.10E-50	1

TNIP3	2.32E-27	1.497918	0.311	0.153	4.64E-24	1
PLA2G7	0	1.491581	0.716	0.235	0	0
JCHAIN	4.14E-13	1.483529	0.185	0.31	8.28E-10	2
GZMA	4.82E-31	1.47747	0.302	0.14	9.63E-28	2
TK1	5.51E-52	1.475571	0.803	0.171	1.10E-48	7
AOC1	2.17E-60	1.474452	0.544	0.114	4.34E-57	6
LIPA	4.65E-308	1.464984	0.854	0.48	9.30E-305	0
RASSF4	1.05E-37	1.461217	0.844	0.51	2.09E-34	6
IGLC3	5.14E-63	1.457401	0.112	0.136	1.03E-59	0
CXCL2	9.81E-118	1.456529	0.859	0.644	1.96E-114	3
PCLAF	2.52E-43	1.448673	0.711	0.126	5.05E-40	7
HMOX1	1.83E-109	1.442267	0.839	0.595	3.67E-106	3
PGA3	1.00E-86	1.437373	0.437	0.199	2.01E-83	0
IGLV3-1	1.86E-41	1.436191	0.026	0.223	3.72E-38	3
BCL2A1	1.35E-253	1.433216	0.924	0.678	2.70E-250	1
CCL17	4.00E-20	1.427498	0.186	0.086	7.99E-17	4
GTSE1	5.67E-115	1.425044	0.868	0.043	1.13E-111	7
FCGR1A	2.54E-130	1.423041	0.84	0.395	5.08E-127	5
APOC1	5.20E-168	1.419251	0.911	0.506	1.04E-164	3
PKIB	3.59E-119	1.410866	0.547	0.191	7.19E-116	4
FCGR3A	6.28E-127	1.402449	0.943	0.51	1.26E-123	5
CLEC10A	1.11E-49	1.38876	0.607	0.43	2.23E-46	4
CDKN3	1.84E-58	1.385377	0.776	0.162	3.69E-55	7
PPP1R14A	1.56E-37	1.383882	0.818	0.212	3.12E-34	8
IGKV3-20	1.53E-51	1.382932	0.054	0.312	3.06E-48	3
HLA-DQB1	4.11E-153	1.381536	0.973	0.787	8.23E-150	4
CCNB1	7.98E-26	1.381161	0.645	0.169	1.60E-22	7
C1QB	0	1.379904	0.964	0.592	0	0
CLEC4C	2.03E-79	1.377653	0.564	0.018	4.06E-76	8
SPON2	3.01E-34	1.37167	0.764	0.187	6.02E-31	8
CDC20	1.83E-59	1.371012	0.75	0.133	3.67E-56	7
CD14	8.36E-154	1.370831	0.942	0.682	1.67E-150	3
HLA-DPB1	3.21E-174	1.358897	0.998	0.92	6.42E-171	4
GZMK	3.83E-10	1.352633	0.196	0.11	7.66E-07	2
BIRC5	5.75E-80	1.336242	0.842	0.086	1.15E-76	7
RRM2	2.64E-58	1.330367	0.645	0.028	5.29E-55	7
ADM	6.05E-127	1.329714	0.727	0.402	1.21E-123	3
IL4I1	3.60E-115	1.328838	0.632	0.316	7.21E-112	3
IGKV3-11	2.61E-140	1.320757	0.359	0.114	5.23E-137	0
CD200	1.56E-126	1.318866	0.619	0.047	3.13E-123	6
CCL24	3.61E-253	1.316413	0.517	0.16	7.22E-250	0
PPP1R14A	2.03E-22	1.305794	0.475	0.211	4.06E-19	6
MRC1	1.41E-248	1.301402	0.716	0.297	2.82E-245	0
C1QC	0	1.294578	0.965	0.588	0	0
SPARC	6.23E-30	1.287499	0.377	0.245	1.25E-26	2
GPR183	6.22E-18	1.282484	0.787	0.602	1.24E-14	6
CALCRL	1.69E-35	1.267366	0.544	0.193	3.39E-32	6
IGHA1	1.36E-35	1.255112	0.487	0.27	2.72E-32	0
PLAC8	2.62E-75	1.251679	0.537	0.25	5.24E-72	4
LGALS2	7.84E-80	1.250996	0.641	0.327	1.57E-76	4
CTSZ	1.44E-302	1.228903	0.908	0.561	2.89E-299	0
CKB	6.45E-21	1.223359	0.462	0.192	1.29E-17	6
COL1A1	5.00E-45	1.215364	0.302	0.144	1.00E-41	2
C1QA	0	1.210673	0.97	0.591	0	0
DLGAP5	4.57E-59	1.204824	0.658	0.055	9.14E-56	7
PPP1R14A	2.65E-82	1.189328	0.461	0.193	5.30E-79	4
HLA-DQA	3.84E-129	1.188652	0.985	0.809	7.68E-126	4
CD70	1.75E-46	1.185786	0.5	0.12	3.51E-43	6

CENPE	1.12E-33	1.165119	0.671	0.085	2.24E-30	7
TMEM106	7.69E-37	1.159083	0.737	0.207	1.54E-33	7
CD1E	1.28E-18	1.157688	0.475	0.238	2.56E-15	6
CCNA2	2.79E-57	1.150026	0.711	0.02	5.59E-54	7
AREG	2.02E-38	1.142013	0.705	0.512	4.04E-35	4
COL1A2	6.83E-64	1.131563	0.301	0.124	1.37E-60	2
HSPA6	1.29E-07	1.12045	0.522	0.474	0.0002585	4
CCL4L2	5.57E-28	1.11615	0.721	0.58	1.11E-24	5
TREM2	1.11E-84	1.087344	0.79	0.442	2.22E-81	5
IGKV2-30	8.28E-11	1.082495	0.035	0.127	1.66E-07	4
LTC4S	5.93E-124	1.063827	0.667	0.244	1.19E-120	5
NRP2	2.48E-19	1.061363	0.619	0.326	4.96E-16	6
COL3A1	1.29E-34	1.050528	0.274	0.145	2.58E-31	2
FOLR2	7.06E-22	1.041749	0.584	0.459	1.41E-18	5
TMEM176	6.06E-21	1.040388	0.85	0.642	1.21E-17	6
FILIP1L	3.30E-28	1.040157	0.438	0.25	6.61E-25	5
RASSF4	1.55E-92	1.039972	0.836	0.492	3.10E-89	5
SPINT2	4.02E-69	1.000057	0.757	0.545	8.05E-66	4
CD86	1.23E-12	0.9965	0.7	0.59	2.46E-09	6
CCL3L1	5.71E-30	0.994061	0.665	0.514	1.14E-26	5
HLA-DPA1	6.46E-110	0.989871	0.998	0.935	1.29E-106	4
CSF1R	3.58E-83	0.976135	0.915	0.616	7.17E-80	5
F13A1	0.0021496	0.975864	0.381	0.39	1	2
HBB	2.54E-11	0.975697	0.153	0.272	5.07E-08	4
CD207	8.73E-74	0.974801	0.261	0.064	1.75E-70	4
MSR1	4.27E-97	0.960924	0.834	0.412	8.54E-94	5
C3	1.12E-14	0.93818	0.338	0.28	2.25E-11	2
PLD4	2.15E-57	0.935087	0.549	0.285	4.29E-54	5
CD14	5.34E-40	0.920453	0.875	0.7	1.07E-36	5
IDO1	7.58E-34	0.91809	0.263	0.09	1.52E-30	4
GPR183	5.46E-32	0.915095	0.722	0.595	1.09E-28	4
SLPI	0.0025853	0.884626	0.26	0.239	1	2
F13A1	2.83E-74	0.87934	0.705	0.364	5.66E-71	5
DNASE1L3	4.27E-20	0.873765	0.401	0.26	8.53E-17	4
PLTP	2.64E-25	0.870473	0.663	0.503	5.29E-22	5
VSIG4	1.84E-47	0.862665	0.735	0.494	3.68E-44	5
CCL3	1.58E-38	0.854878	0.857	0.677	3.17E-35	5
EGR2	3.96E-30	0.827713	0.442	0.246	7.92E-27	5
GPR34	9.43E-68	0.804921	0.691	0.375	1.89E-64	5
CCL4	2.45E-30	0.802882	0.842	0.707	4.91E-27	5
HLA-DPA1	4.46E-76	0.798665	1	0.936	8.92E-73	5
C1QA	3.54E-45	0.794847	0.921	0.69	7.08E-42	5
MS4A6A	5.92E-60	0.791677	0.962	0.736	1.18E-56	5
IFNG	1.41E-17	0.660254	0.161	0.09	2.82E-14	2
HOPX	1.33E-20	0.638503	0.231	0.146	2.66E-17	2
APOE	4.24E-22	0.618679	0.765	0.604	8.47E-19	2
IGFBP7	0.0007477	0.613318	0.283	0.283	1	2
MYL9	3.32E-15	0.591665	0.224	0.168	6.64E-12	2
SPINK1	5.58E-18	0.589962	0.191	0.142	1.12E-14	2
ACTA2	0.0012119	0.583275	0.188	0.18	1	2
HIST1H4C	3.05E-05	0.574733	0.378	0.379	0.0609724	2
C1QA	5.77E-18	0.54061	0.848	0.688	1.15E-14	2
CTSK	8.05E-11	0.537554	0.072	0.168	1.61E-07	2

Table S3 Patients information and IHC scores for clinically validated specimens

Clinical information of patients			
Number	Sex	Days	PT or PM
1	Female	155	PM
2	Male	86	PM
3	Male	551	PM
4	Male	103	PM
5	Female	531	PM
6	Male	312	PM
7	Female	287	PM
8	Female	287	PM
9	Male	307	PM
10	Male	1045	PM
11	Female	156	PM
12	Female	1791	PM
13	Male	665	PM
14	Male	512	PM
15	Female	206	PM
16	Male	1641	PM
17	Male	296	PM
18	Male	781	PM
19	Female	523	PM
20	Male	158	PM
21	Male	440	PM
22	Male	450	PM
23	Male	280	PM
24	Female	473	PM
25	Male	581	PM
26	Female	799	PM
27	Male	388	PM
28	Male	81	PM
29	Female	828	PM
30	Female	201	PM
31	Female	453	PT
32	Female	854	PT
33	Male	1147	PT

34	Male	1473	PT
35	Female	1143	PT
36	Female	120	PT
37	Male	1112	PT
38	Male	2150	PT
39	Male	1802	PT
40	Female	471	PT
41	Male	528	PT
42	Female	412	PT
43	Male	1045	PT
44	Male	665	PT
45	Male	2343	PT

IHC_score

Number	CD163	DAB2	SPARC	PLTP	FOLR2
1	1.6842105	23.93939394	10.24077054	1.321585903	4.122137405
2	57.25689405	160.7995227	202.5795052	3.558718861	0.106157113
3	21.8666667	26.69117647	91.2790698	40.04901961	5.194805195
4	63.39370828	71.69201521	40.90566032	1.145038168	0.080256822
5	0.563204	36.22002821	1.11111111	2.141157811	8.555938886
6	176.5089722	199.3031359	78.99237935	35.19725557	0.660792952
7	8.4317032	6.557377049	5.0505051	6.576402321	0.260416667
8	5.3268765	11.38211382	141.6091953	2.021772939	0.098716683
9	58.08492928	106.2307944	131.6697247	1.927855711	0.071250445
10	2.3659306	2.209944751	0.234192	2.649006623	0.409836066
11	94.94607083	116.6024915	159.8377752	15.81395349	0.094517958
12	88.28072528	58.87169568	3.3613445	1.254275941	5.965714286
13	10.91431861	0.274273176	0.7010835	1.984564498	0.200501253
14	49.75340683	209.7297297	174.2071198	26.49233544	0.047687172
15	177.6249999	166.6465257	192.164179	33.09352518	2.906976744
16	15.8888889	79.12297426	20.44321332	1.085481682	0.074074074
17	0.0680735	7.356948229	24.07079642	1.255230126	0.042680324
18	75.48435165	218.3076923	142.3395446	2.73241206	0.040866367
19	136.1641392	178.7069864	95.49918165	44.61722488	2.429467085
20	50.55165504	116.7913938	66.80942184	15.59400231	0.393184797
21	155.2034884	145.4507042	138.7564766	8.844827586	0.235155791
22	28.22580648	46.34146341	10.6756757	4.389671362	3.127035831

23	4.176611	36.71919771	1.01884387	1.701507049	3.459993821
24	11.6766467	15.77060932	11.76724133	21.76322418	3.856749311
25	20.3773585	31.94029851	23.75838924	21.95845697	5.649122807
26	3.5767511	1.020092736	1.3348165	1.325966851	0.294985251
27	192.3275863	57.65281174	60.52173912	40.32051282	27.49354005
28	70.25316462	24.37710438	249.6280554	38.12351544	0.128205128
29	70.1960784	89.05660377	25.40322576	19.22196796	4.422604423
30	10.1515152	65.17799353	4.16909625	1.56046814	0.760043431
31	4.6214356	34.14634146	2.2288262	0.752508361	43.84020619
32	0.317029	0.430848772	0.0445038	0.045433894	22.00783546
33	2.3180593	3.337306317	0.3853565	0.392927308	74.72959685
34	0.1392758	2.529960053	1.0729614	0.124843945	5.886654479
35	0.0800213	0.057987823	6.33305064	0.026780932	0.137804318
36	3.0269058	76.17866005	6.6499373	1.5625	28.94197952
37	6.5767285	22.12765957	95.16339872	2.076677316	54.09984871
38	9.6091205	13.7973138	7.8172589	0.528169014	6.052173913
39	0.2113048	7.516848108	2.1621622	0.057240985	6.263213531
40	8.3243243	36.33170732	3.3386328	0.090415913	4.566635601
41	0.2868617	8.722566123	0.3757829	0.162601626	5.660377358
42	1.7816092	99.46517413	17.6705049	0.331785003	54.55555556
43	0.1757469	1.700404858	0.0765697	0.083056478	0.182815356
44	0.2917153	57.31958763	7.0762479	0.115473441	2.385861561
45	0.3875969	83.62249762	15.6981787	0.447427293	7.983870968

Number	Risk_score calculated based on the prognostic model	Risk_group classified by median of the Risk_score
1	6.405905519	Low
2	89.22697912	High
3	40.38555747	High
4	22.66747653	High
5	4.681289819	Low
6	55.76020781	High
7	3.475132418	Low
8	50.48314058	High
9	58.13824309	High
10	0.719117674	Low

11	71.12415354	High
12	8.054313658	Low
13	0.561664277	Low
14	88.55926974	High
15	90.60491768	High
16	16.46872565	Low
17	9.349681357	Low
18	75.05231388	High
19	60.38640035	High
20	39.00996041	High
21	66.19069662	High
22	9.660919623	Low
23	4.795670496	Low
24	9.010114249	Low
25	15.01403716	Low
26	0.767256079	Low
27	32.76800867	High
28	94.61223446	High
29	21.89590865	Low
30	9.272311431	Low

Box S1 M2 macrophage-related genes identified using WGCNA

Gene
ACKR3
ACP5
ADA2
ADAMDEC1
ADAMTS2
ADGRA2
AEBP1
AIF1
AIM2
AKR1B1
ANTXR1
ANXA5
APLNR
APOL1
APOL2
APOL6
ARID5B
ARL4C
ASAH1
ATP6V1B2
B2M
BATF
BATF2
BCL9L
BGN
BIRC3
BST2
BTN3A1
C1QA
C1QB
C1QC
C1QTNF1
C1R
C1S
C3
C5orf15
CALU
CASP1
CCDC3
CCL11
CCL18
CCL2
CCL4
CCL5
CCL8
CCN1
CCN2
CD14
CD163
CD2
CD248

CD274
CD276
CD38
CD3E
CD4
CD40
CD47
CD74
CD8A
CD93
CD99
CDC42SE2
CDH5
CEBPB
CERCAM
CFD
CHPF
CIC
CLEC11A
CLEC14A
CLSTN3
CMTM3
CNN2
COL10A1
COL12A1
COL15A1
COL16A1
COL18A1
COL1A1
COL1A2
COL3A1
COL4A1
COL4A2
COL5A1
COL5A2
COL6A1
COL6A2
COL6A3
COL8A1
COTL1
CPA3
CPXM1
CRIP2
CSF1
CSF1R
CTDSP1
CTHRC1
CTSC
CTSK
CTSL
CTSS
CX3CL1
CXCL10
CXCL11

CXCL9
CYBB
CYGB
DAB2
DBN1
DCN
DDX60
DIO2
DNASE2
DRAM1
DTX3L
DUT
ECE1
EFEMP1
EFEMP2
ELK3
ENG
EPAS1
EPSTI1
ERAP2
ESAM
ETV7
F2R
F2RL2
FAM20C
FBLIM1
FBLN2
FBN1
FBX06
FCER1G
FCGR2A
FCGR3A
FN1
FNDC1
FNDC3B
FOLR2
FOSL2
FPR3
FSTL1
FSTL3
FUCA1
GAA
GALNT2
GASK1B
GBP1
GBP2
GBP4
GBP5
GGT5
GIMAP4
GIMAP7
GLUL
GM2A
GNA12

GNAI2
GNLY
GPC1
GPNMB
GPX1
GPX3
GPX7
GRAMD1A
GZMA
GZMB
GZMH
H6PD
HAPLN3
HEG1
HERPUD1
HLA_A
HLA_B
HLA_C
HLA_DMA
HLA_DMB
HLA_DOA
HLA_DPA1
HLA_DPB1
HLA_DQB1
HLA_DRA
HLA_DRB1
HLA_DRB5
HLA_E
HLA_F
HMOX1
HSD3B7
HTRA1
HTRA3
ICAM1
ID3
IDO1
IFI16
IFI35
IFI44
IFI44L
IFIH1
IFIT1
IFIT3
IFITM1
IFITM3
IGFBP3
IGFBP5
IL18BP
IL1R1
IL2RB
IL2RG
IL32
INHBA
IRF1

IRF2
IRF8
ISLR
ITGAV
ITGB5
JAK2
JUNB
KDM6B
KIRREL1
KLF13
KLF6
LAMB1
LAP3
LBH
LEPROT
LGALS9
LGMN
LIPA
LITAF
LOX
LOXL1
LOXL2
LRP1
LRRC32
LTBP2
LUM
LXN
LY96
MAFB
MAGED2
MAN2B1
MAP1LC3B
MARCKS
MEDAG
MFAP2
MFAP5
MFGE8
MMP11
MMP12
MMP14
MMP2
MNDA
MRC2
MT_ATP8
MT_C03
MT_CYB
MX1
MXRA5
MXRA8
MYH10
MYH9
NBL1
NCOR2
NDST1

NES
NFIL3
NID1
NINJ1
NKG7
NMI
NNMT
NOTCH3
NPC2
NR4A1
NTN4
NUB1
OAF
OAS1
OAS2
OAS3
OASL
ODF3B
OLFML2B
OPTN
OR2I1P
OSMR
PARP14
PARP9
PCOLCE
PDGFRA
PDGFRB
PDPN
PECAM1
PHC2
PIM2
PKN1
PLA2G7
PLAAT4
PLAT
PLBD2
PLD3
PLEKHM2
PLEKHS1
PLSCR1
PLTP
PLVAP
PLXDC2
PML
PODXL
POSTN
PPP1R18
PPT1
PRPS2
PSAP
PSMA4
PSMA5
PSMB10
PSMB8

PSMB9
PSME1
PSME2
PXDC1
PXDN
RAB31
RAMP2
RAMP3
RARRES2
RCN3
RGS10
RHBDF2
RIPK2
RNASE6
RNF19B
RNF213
RSAD2
SAMD9L
SAMHD1
SCARF2
SCPEP1
SECTM1
SELENON
SELPLG
SEPTIN11
SERPINE1
SERPINE2
SERPINF1
SERPINH1
SFRP2
SFRP4
SFXN3
SH2B3
SH3PXD2A
SH3PXD2B
SHC1
SIRPA
SLAMF7
SLC2A3
SLC6A6
SLC9A3R2
SLCO2A1
SLCO2B1
SMIM3
SMPD1
SNX6
SOCS3
SORBS3
SOX18
SPARC
SPON2
SPRY1
SPSB1
SRGN

STAT1
STAT2
STING1
SULF1
SULF2
SUSD6
TAP1
TAPBP
TAPBPL
TBC1D2
TCN2
TGFB1
TGFB1
TGM2
THBS1
THBS2
THY1
TIMP1
TIMP2
TMEM119
TMEM127
TMEM158
TMEM184B
TMEM204
TNFAIP1
TNFRSF1A
TNFRSF1B
TNFSF10
TNKS1BP1
TPM4
TPP1
TRAM2
TREM2
TRIM21
TRIM22
TSPAN9
TYMP
TYROBP
UBA7
UBE2L6
UBTD1
UNC5B
VAMP3
VAMP5
VASN
VAT1
VCAN
VIM
VSIG4
VWF
WARS1
WNT5A
YWHAH