

**Supplementary Table 5: Principal component(PC) contribution genes**

	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
Proportion Variance										
Explained of PCs	0.3667	0.1848	0.1042	0.05686	0.02961	0.02268	0.02064	0.01754	0.01594	0.01484
Inflamed P Value	0.0002	2.48E-09	0.001379	0.296027	0.308976	0.769615	0.506565	0.231146	0.326685	0.249937
NOX1	0.8605	0.09661	0.21848	-0.15198	-0.1154	0.206932	-0.14965	-0.11014	-0.0248	0.088608
MPZL2	0.857037	0.054914	0.308314	-0.14426	-0.0653	0.084523	0.047112	-0.07686	0.111208	0.009134
HOXD13	0.816211	0.041069	-0.5596	-0.09248	0.001998	-0.03689	0.0319	0.030597	0.020023	-0.0572
MARCKSL1	0.811734	0.167062	0.09778	-0.05453	0.089585	0.19085	0.057716	-0.01459	-0.12399	-0.09533
FERMT1	0.774748	0.093006	0.317198	-0.25881	0.026602	0.268851	-0.09189	0.034626	-0.04954	-0.10628
CD9	0.773613	-0.15631	0.492401	-0.10452	-0.07829	0.047319	0.038298	0.007628	0.069259	-0.0435
TSPO	0.737351	0.199023	0.417693	-0.22173	-0.03099	-0.0118	0.086012	0.043032	-0.00855	-0.06022
TBL1X	0.734495	0.142789	0.160383	0.227944	-0.14657	-0.04337	0.14395	-0.04765	0.00455	0.026586
PPP1R1B	0.734415	-0.21896	0.351855	-0.1662	0.075596	0.329051	-0.0564	-0.01078	-0.05655	-0.19785
HMG A2	0.719018	-0.46279	0.236085	-0.02835	-0.00412	-0.00885	-0.00967	-0.03257	0.018836	-0.02938
BIK	0.683105	0.395971	0.350819	-0.18119	-0.07773	0.108992	-0.01059	-0.04997	0.044954	-0.01123
ST6GALNAC4	0.658073	0.363481	-0.07254	-0.04841	0.087068	0.006314	0.227624	0.08478	-0.05534	-0.02364
CD14	0.63263	0.327284	-0.02152	0.206087	-0.25151	-0.03018	0.262046	-0.09348	0.098557	0.0237
IER3	0.631516	0.464206	0.410561	-0.02598	-0.0691	-0.07116	0.303952	-0.02374	-0.04807	0.122812
CLDN4	0.608239	-0.2074	0.21725	-0.53348	-0.17849	0.204004	0.144904	0.126286	-0.11802	0.049247
GPX2	0.60799	0.395511	0.098253	-0.33583	0.031218	0.407665	-0.1225	-0.05652	-0.08846	-0.11194
BCL10	0.592079	0.242999	0.33566	-0.50763	-0.12767	0.019791	0.099852	-0.00472	0.0034	0.141601
PTP4A2	0.581147	0.08565	-0.01781	-0.24693	0.014993	-0.09546	0.079596	-0.05639	0.171726	0.127501
TPM1	0.568254	-0.27531	-0.1412	-0.28483	0.048861	0.058011	-0.08548	0.059271	-0.0151	0.155703
CCND1	0.50845	0.377958	-0.1376	-0.0372	0.347135	0.060078	0.233939	0.020935	-0.05571	-0.02483
ACTG1	0.495376	0.319502	0.363011	-0.20081	0.036643	-0.05709	0.100296	0.098817	-0.13618	0.083281
HMGCS2	0.463577	-0.57412	0.505095	0.121038	-0.12553	0.090229	0.195844	0.045254	0.095832	-0.15161
ABLIM1	0.459265	-0.13239	0.304718	-0.40102	0.23191	0.080447	-0.03012	0.097199	-0.07193	0.110055
SOX9	0.458157	-0.00053	0.070076	-0.36788	0.225932	0.46941	0.011656	-0.03359	-0.13505	-0.07331
SOX4	0.443248	-0.11182	0.054224	0.157952	0.16894	0.196911	-0.03236	-0.07297	0.064785	-0.15437
NR2F6	0.414055	-0.37191	0.304581	-0.4915	-0.09433	-0.00794	0.111288	0.173256	-0.12484	-0.13149
PTMA	0.406113	0.322387	0.446974	0.181713	0.031176	0.120127	-0.06185	0.005934	-0.00828	-0.12812
PAICS	0.404905	0.286078	0.198147	0.102358	0.345047	0.176406	-0.21259	-0.03141	-0.0977	-0.03754
NFIC	0.379594	0.191104	-0.0739	0.208117	0.2474	0.097595	0.030383	0.180552	-0.35789	-0.04843
NDUFA4	0.37726	0.141829	0.11202	-0.18398	0.102997	-0.00843	-0.02025	-0.03216	0.243327	-0.04091

RPL9	0.366768	-0.17801	0.12047	0.192606	-0.01744	0.096405	-0.01448	-0.10649	0.23556	-0.03476
CYBA	0.339195	0.592607	0.366487	0.094516	-0.15867	-0.02862	0.099991	-0.04114	-0.00129	-0.18081
FBXO32	0.310685	-0.43884	0.020207	-0.23292	-0.3451	-0.03613	0.176522	-0.0034	0.083804	0.181265
JUNB	0.286453	0.564086	0.042924	-0.19394	-0.03574	-0.09453	0.480248	0.005826	-0.2009	0.313493
SH3BGR	0.250605	-0.27218	-0.07481	0.148845	-0.02682	0.047337	-0.02747	0.101952	0.086584	-0.05141
GSTP1	0.248842	0.509341	0.37542	-0.15652	0.225967	0.163436	0.028613	0.060634	-0.00281	-0.21633
PLGRKT	0.245716	-0.22967	0.167498	-0.5297	-0.06677	-0.04086	-0.0424	-0.02132	0.184191	0.038876
S100A11	0.238805	0.747801	0.136317	-0.17228	0.233743	0.066061	0.122359	0.097808	-0.11398	-0.01935
IER2	0.238109	0.405823	0.042702	-0.12591	0.032733	-0.10795	0.503337	-0.03074	-0.16429	0.375635
NAV2	0.231269	0.129688	0.166724	-0.2351	0.199446	0.133696	-0.27566	0.008343	-0.33881	-0.08819
CD81	0.228316	0.575909	-0.06195	0.559592	-0.08571	0.191777	0.066098	0.015773	-0.08115	-0.11409
BOK	0.223567	0.295302	0.103725	0.057107	0.258373	0.17756	0.113992	0.240894	-0.1742	-0.02916
JUN	0.202962	-0.00419	-0.09405	-0.23949	-0.11932	-0.03807	0.470624	0.011544	-0.10436	0.321536
CLDN14	0.198814	0.708472	0.334624	-0.17455	0.008719	-0.16784	-0.0896	0.354837	0.327297	-0.01742
ZFAND5	0.186568	0.469518	0.192263	-0.18268	-0.20128	-0.17097	0.205571	-0.11146	0.100346	0.214545
CD47	0.142721	0.461246	-0.16662	0.225667	-0.25081	0.103214	-0.07725	-0.32263	0.192238	-0.14401
JPT1	0.135845	0.142942	0.499525	-0.57312	0.006878	-0.05347	0.112399	0.100994	0.046866	-0.02348
MYL12B	0.125609	-0.11756	0.33101	-0.6381	-0.1593	-0.1231	0.094045	0.08413	0.16909	0.055682
PCBP1	0.123264	0.367451	0.200839	-0.41947	0.053137	-0.107	0.126689	0.147456	-0.25422	0.015397
IDH1	0.121005	-0.41294	0.264202	-0.36192	0.176338	-0.05535	-0.13305	0.054562	0.13284	-0.14248
MMP15	0.102126	-0.34789	0.188677	-0.60742	0.082866	0.106704	0.100378	0.247607	-0.32991	-0.08421
PHLDA1	0.095068	0.797461	-0.09239	0.140671	0.158346	0.086916	0.164556	-0.00789	0.011019	0.220709
ISYNA1	0.049139	0.193	-0.25455	0.503173	-0.07533	0.210626	0.060409	0.062809	-0.19819	-0.07775
ACTB	0.041502	0.515675	0.333724	-0.24679	0.043194	-0.07846	0.17092	0.137984	-0.24169	-0.01435
CDO1	0.028264	0.067418	-0.37112	0.570286	-0.26092	0.417698	-0.11116	0.351571	0.068419	0.205762
CFL1	0.021352	-0.02834	0.467465	-0.511	0.011357	-0.09269	0.176967	0.18113	-0.1794	-0.12402
TMC4	-0.00183	-0.61443	0.052199	-0.53983	-0.02421	0.179896	0.085605	0.128813	-0.15566	-0.10419
TNIP3	-0.00739	0.835263	0.079608	-0.20422	-0.2301	-0.04983	-0.25621	-0.0592	-0.07856	0.091651
ENY2	-0.04444	-0.00801	0.039417	-0.01159	0.214131	-0.07102	-0.08916	-0.08282	0.192067	0.113284
MUC13	-0.0543	0.018535	-0.08395	-0.82321	-0.09298	0.286961	0.035808	0.100091	-0.08731	0.034467
IFITM3	-0.07233	0.824854	0.12197	0.005641	0.048964	0.112774	-0.03369	0.041319	-0.2183	-0.16719
BTG1	-0.07856	-0.20792	0.087626	0.002849	-0.33616	-0.15475	0.140514	-0.18082	0.233111	0.071505
SDHAF1	-0.09247	-0.23602	0.046723	-0.04401	0.138403	-0.01841	-0.05574	0.129411	-0.09463	-0.07108
ZYX	-0.09297	0.742611	0.076328	0.077201	0.139968	-0.00261	0.269521	0.106693	-0.25535	0.012871
NECTIN2	-0.10483	0.502989	0.08611	-0.54091	0.067253	-0.05302	0.299082	0.127279	-0.16946	-0.00726

TACSTD2	-0.12451	0.612215	0.225212	0.052743	0.091102	0.269098	0.191091	0.131593	0.11538	-0.1782
CBX3	-0.12851	0.348979	-0.22504	-0.00358	0.30983	0.048705	-0.13363	-0.10978	0.210306	-0.03512
ECSCR	-0.1638	0.605992	-0.14565	0.338227	0.155009	0.157885	-0.04045	0.130572	-0.03354	0.076579
ICAM1	-0.17326	0.848646	-0.0759	0.173317	-0.24612	0.080643	0.122173	-0.0937	-0.04814	-0.08938
PGLYRP1	-0.18751	0.231217	0.152882	0.132063	-0.03953	-0.16038	0.230816	0.068718	-0.12788	-0.19069
NCF4	-0.19504	0.608686	-0.0259	0.392778	-0.33014	0.02685	0.130876	-0.06703	0.023254	-0.13074
GPX1	-0.19606	0.57625	0.129382	0.221529	0.048344	-0.04716	0.183844	0.117711	-0.05096	-0.155
CTSB	-0.19829	0.654142	-0.03946	-0.02482	-0.1305	-0.17172	0.129735	0.030099	0.054853	-0.00681
NFKBIA	-0.21606	0.491024	-0.11058	-0.072	-0.38326	-0.21679	0.361031	-0.09016	0.009643	0.124444
GUCA2B	-0.22412	-0.74779	-0.11759	-0.21298	-0.38909	0.044341	0.057189	0.174615	-0.07261	0.16115
CEBDP	-0.22903	0.61266	0.013705	-0.17991	-0.00641	-0.04876	0.180987	-0.00845	-0.18955	0.099193
TIFA	-0.23722	0.628538	-0.15943	0.10524	-0.16791	0.111202	0.043289	-0.23188	0.084641	-0.10241
TCIM	-0.2389	0.520413	0.139878	-0.06848	0.221553	-0.00575	0.263774	0.050678	-0.08055	0.44853
CXCL16	-0.25254	0.559018	-0.25083	-0.30714	0.124888	0.002633	0.317081	0.124232	-0.09626	0.061587
PSMA6	-0.25546	0.375199	0.082824	-0.39111	-0.02975	-0.14314	-0.08998	0.0444	0.026933	-0.01492
TPD52L2	-0.27604	0.4781	0.064614	-0.24967	0.151913	-0.16477	0.090417	0.086872	-0.01247	0.107093
DAP	-0.27968	0.196142	-0.07664	-0.56796	0.340714	-0.03794	-0.04117	0.118884	-0.19045	0.069298
NFKB2	-0.2945	0.69032	-0.1454	0.125832	-0.22256	0.0686	0.266953	-0.09999	-0.0531	-0.0213
PSMB8	-0.32077	0.585242	0.21942	-0.32845	-0.12226	-0.05152	-0.12217	-0.08519	0.00887	-0.22004
CSAD	-0.32319	-0.25577	0.078666	-0.04547	0.097062	-0.15362	0.007527	0.063717	-0.19092	0.011237
PNRCl1	-0.33872	0.308079	-0.40513	0.286087	-0.26762	0.011018	0.176614	-0.12122	0.037804	-0.072
TMEM176B	-0.34373	-0.05064	-0.16129	-0.31947	-0.22502	0.079102	0.028318	0.014102	-0.18684	-0.07944
TAPBP	-0.3541	0.466842	0.032008	-0.32306	-0.14283	-0.05221	0.034359	-0.01453	-0.29213	-0.22232
LY6E	-0.3745	0.635718	-0.16863	0.350563	-0.06297	0.112856	0.052755	0.035441	-0.11405	-0.18373
TNF	-0.37884	0.554752	-0.14378	0.227326	-0.41781	0.079914	0.145	-0.13677	-0.02322	-0.17549
REEP3	-0.39792	-0.19709	-0.44114	-0.44017	0.161791	-0.09247	0.123785	0.074608	0.126549	0.248427
SOD1	-0.44804	0.308811	0.281855	-0.4652	-0.04125	0.028994	-0.2001	-0.04246	0.038217	-0.1336
GSDMD	-0.47219	0.390757	0.080116	-0.36322	-0.18202	-0.08855	0.01753	0.00545	-0.07739	-0.15997
IFNGR1	-0.50102	0.24699	-0.15201	-0.43628	-0.2409	-0.10767	0.157668	-0.04121	0.187562	0.177011
B2M	-0.52924	0.292061	-0.06782	-0.37996	-0.30649	-0.13606	-0.01332	-0.12179	0.162713	-0.04063
TNFSF10	-0.54079	-0.03106	-0.11443	-0.46866	-0.3478	-0.13691	-0.10038	-0.06534	0.100502	-0.04607
PSME1	-0.56242	0.464426	0.00421	-0.33112	-0.08344	-0.06544	-0.11979	-0.05633	0.016212	-0.1864
RELB	-0.56378	0.138442	0.060792	-0.06059	-0.40923	-0.11347	0.280215	0.046713	-0.08076	-0.06337
CD74	-0.62831	0.500024	-0.28357	0.05872	-0.16301	0.086274	-0.03572	-0.00347	-0.14122	-0.18386
ZFP36L1	-0.62842	0.326681	-0.17518	0.189575	-0.0433	-0.01194	0.233795	-0.06	-0.0697	0.022043

CTSH	-0.63047	0.48876	-0.23213	0.24025	-0.10264	0.015823	0.067923	-0.01183	0.043321	-0.08436
GSTO1	-0.63189	0.192616	-0.21993	-0.15797	0.215757	-0.15609	-0.04302	0.09654	0.003314	0.018222
PSME2	-0.63717	0.44633	-0.08829	-0.30904	0.045226	-0.02311	-0.09939	0.034991	-0.11967	-0.16051
TMEM176A	-0.64788	-0.16319	-0.14576	-0.22406	-0.14229	0.032084	0.016622	0.050821	-0.16544	-0.03815
NEURL3	-0.64882	-0.24086	-0.05296	-0.2455	-0.41973	-0.16397	-0.04411	0.145705	-0.07768	-0.21532
CNN3	-0.67232	0.088756	0.160368	0.137115	0.111898	-0.03811	-0.08715	0.034281	-0.03782	-0.0993
ENO3	-0.69144	-0.01714	-0.25004	0.018546	0.038825	-0.10248	0.060411	0.121095	-0.14353	-0.00123
CASP4	-0.74957	0.396291	-0.31468	0.014459	0.044381	-0.07217	0.015704	0.006093	0.057359	0.092649
SULT2B1	-0.75093	-0.11315	-0.03414	-0.09114	0.157609	0.025201	-0.04001	0.344426	-0.29005	-0.09473
BIRC3	-0.75166	0.396349	-0.17677	-0.21133	-0.22377	0.027525	-0.02067	-0.10961	0.07824	-0.02696
TM4SF20	-0.8781	-0.02663	-0.23443	-0.26981	0.077792	0.195122	0.098608	-0.05899	0.157184	-0.00411