

Supplementary material

Liu C, Liu H, Sun Q, Zhang P. MicroRNA 1283 alleviates cardiomyocyte damage caused by hypoxia / reoxygenation via targeting GADD45A and inactivating the JNK and p38 MAPK signaling pathways. Kardiol Pol. 2021; 79: 147-155. doi:10.33963/KP.15696

Please note that the journal is not responsible for the scientific accuracy or functionality of any supplementary material submitted by the authors. Any queries (except missing content) should be directed to the corresponding author of the article.

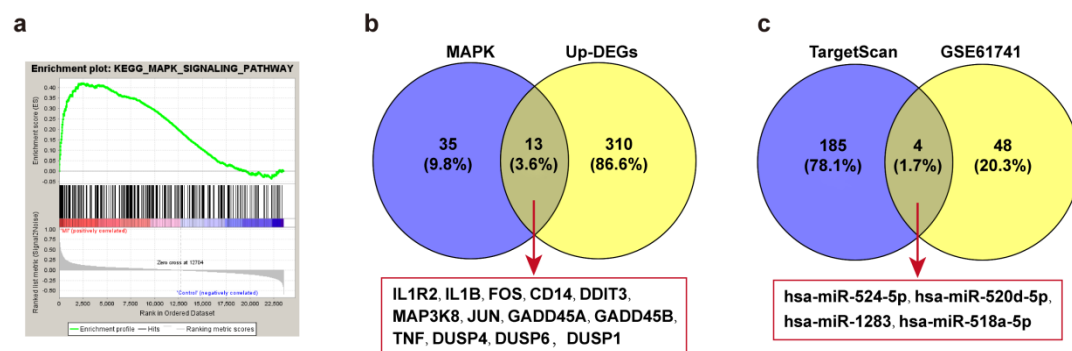


Figure S1

a) GSEA revealed the enrichment of the MAPK signaling pathway in MI according to the GSE66360 dataset. b) 323 upregulated DEGs and 48 MAPK signaling-related genes were intersected to identify common DEGs using Venn diagram according to the GSE66360 dataset. c) 189 miRNAs predicted by TargetScan and 52 downregulated miRNAs from GSE61741 were intersected to identify common miRNAs using Venn diagram. GSEA, gene set enrichment analysis; DEG, differently expressed gene.

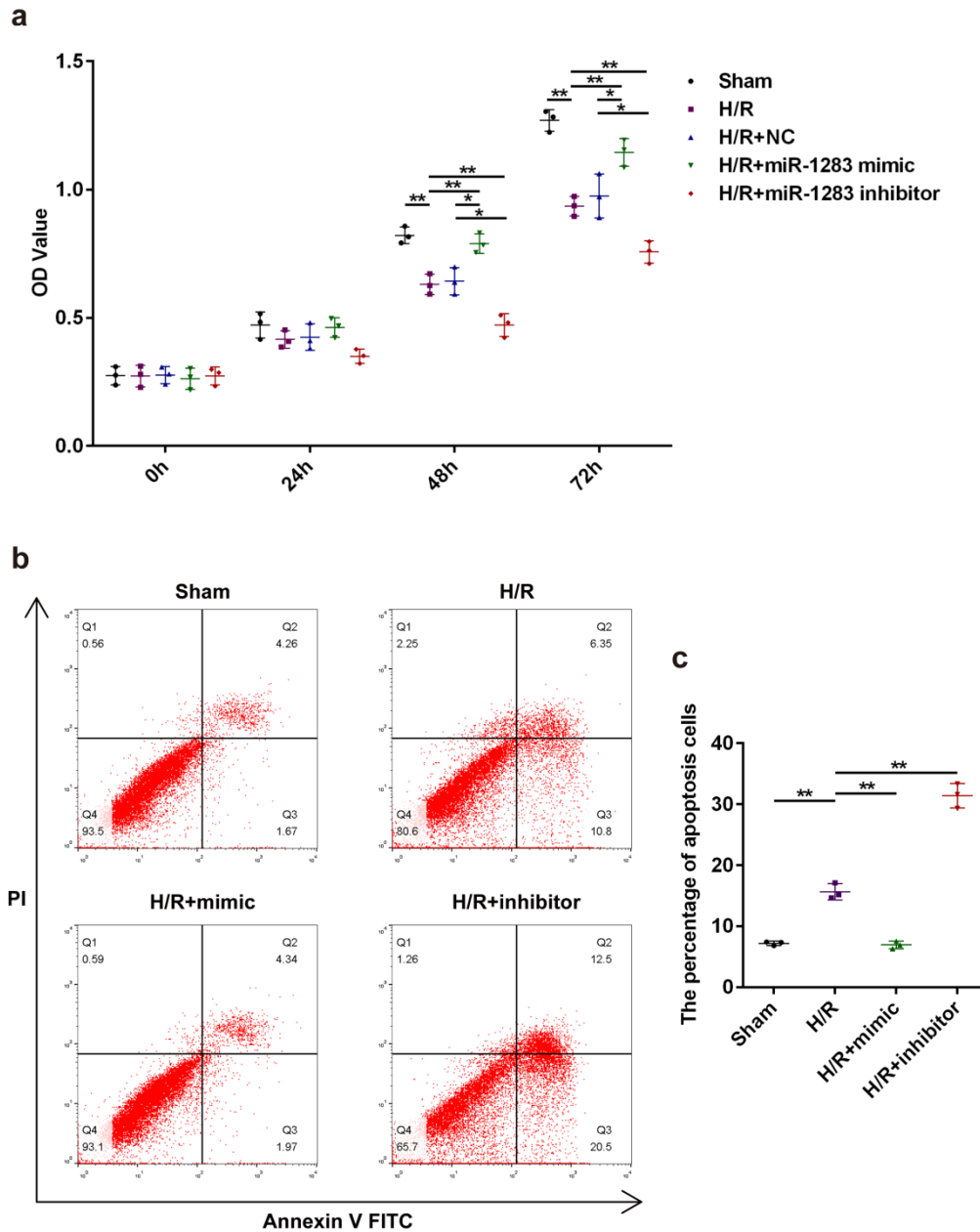


Figure S2

miR-1283 promoted viability and inhibited apoptosis of cardiomyocytes treated by H/R.

a) The OD values of cardiomyocytes with different treatments were determined by CCK-8 assays at 0, 24, 48, 72 hours. b) After treated with Sham, H/R, H/R+miR-1283 mimic, and H/R+miR-1283inhibitor, the apoptosis of cardiomyocytes was measured by flow cytometry. * $P < 0.05$, ** $P < 0.01$. H/R, hypoxia/reoxygenation; NC, negative control; OD, optical density; CCK-8, cell counting kit 8.

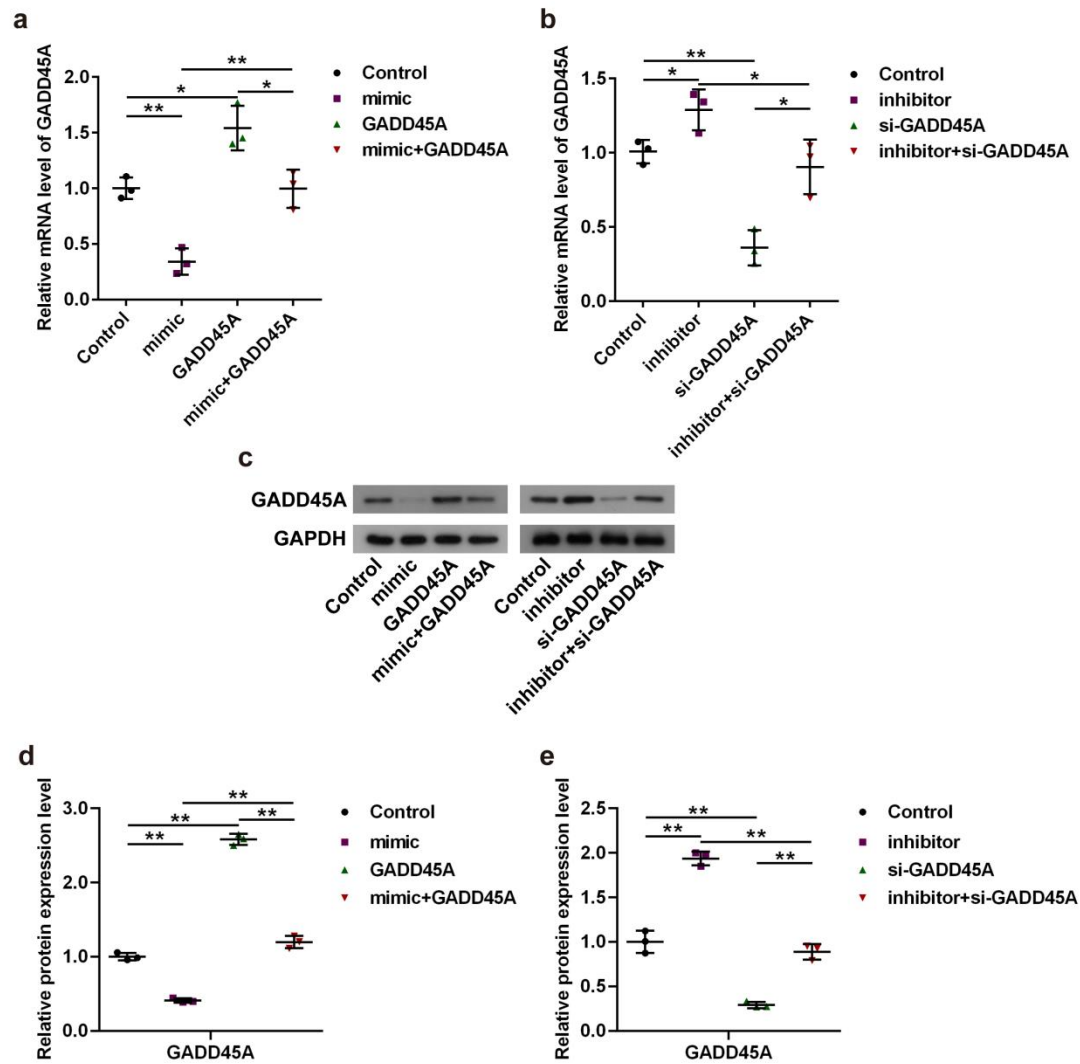


Figure S3

a-b) mRNA expression of GADD45A in cardiomyocytes was measured by real-time qPCR after transfected with NC, miR-1283 mimic / inhibitor, pcDNA3.1-GADD45A / si-GADD45A, and miR-1283 mimic+pcDNA3.1-GADD45A / miR-1283 inhibitor+si-GADD45A. c) Protein levels of GADD45A in cardiomyocytes were measured by Western blot in each group. d-e) Quantification of c. * $P < 0.05$, ** $P < 0.01$. NC, negative control.

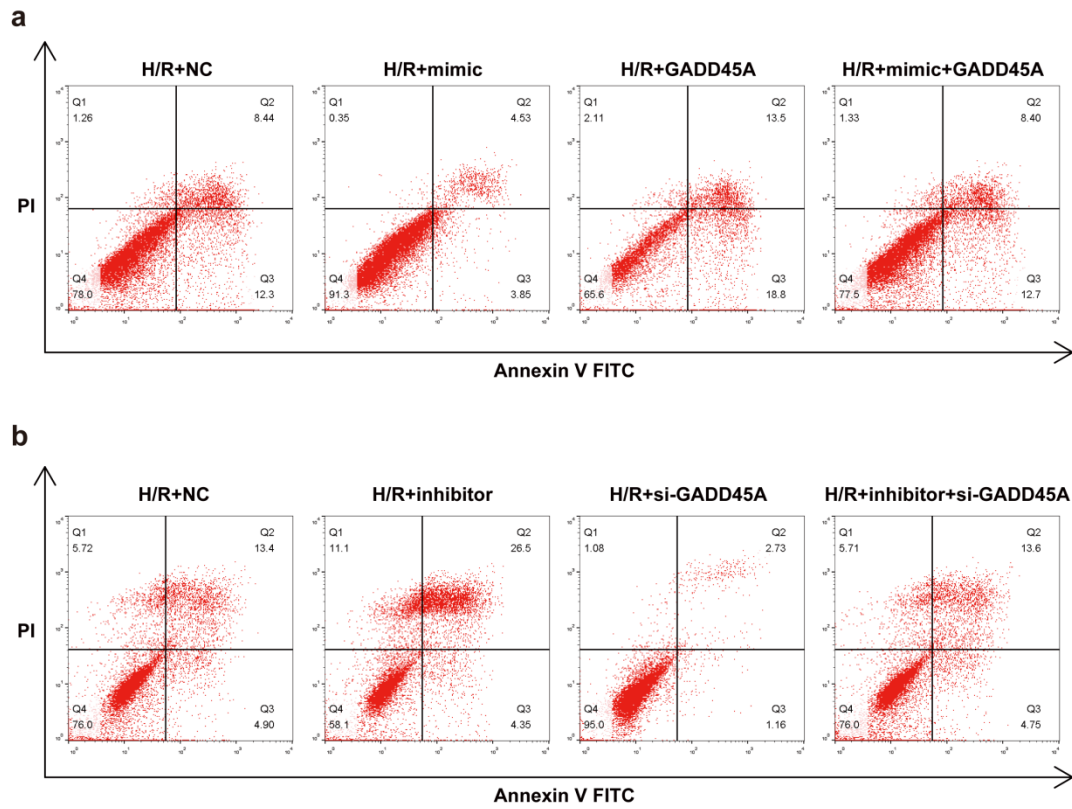


Figure S4

Representative apoptosis images. Under H/R conditions, the cells apoptosis was determined by flow cytometry in each group.

Table

Table S1 Results of analysis of GSE66360

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
1	NR4A2	3.088	7.947	11.632	$p < 0.001$	adj. $p < 0.001$	35.402	Up-Regulated
2	GABARAPL1	1.513	8.420	11.006	$p < 0.001$	adj. $p < 0.001$	32.397	Up-Regulated
3	THBD	2.575	6.249	9.654	$p < 0.001$	adj. $p < 0.001$	25.843	Up-Regulated
4	NFIL3	2.491	8.614	9.407	$p < 0.001$	adj. $p < 0.001$	24.642	Up-Regulated
5	IL1R2	2.608	7.511	9.314	$p < 0.001$	adj. $p < 0.001$	24.189	Up-Regulated
6	CLEC4E	1.903	7.268	9.306	$p < 0.001$	adj. $p < 0.001$	24.147	Up-Regulated
7	IRAK3	2.334	6.520	9.222	$p < 0.001$	adj. $p < 0.001$	23.739	Up-Regulated
8	SLC11A1	1.513	6.595	8.909	$p < 0.001$	adj. $p < 0.001$	22.223	Up-Regulated
9	HBEGF	1.070	5.769	8.872	$p < 0.001$	adj. $p < 0.001$	22.042	Up-Regulated
10	S100A12	2.982	7.880	8.794	$p < 0.001$	adj. $p < 0.001$	21.665	Up-Regulated
11	NR4A3	1.920	6.127	8.790	$p < 0.001$	adj. $p < 0.001$	21.642	Up-Regulated
12	ACSL1	2.144	8.276	8.607	$p < 0.001$	adj. $p < 0.001$	20.759	Up-Regulated
13	MAP3K8	1.510	7.683	8.548	$p < 0.001$	adj. $p < 0.001$	20.477	Up-Regulated
14	GLUL	1.583	7.216	8.545	$p < 0.001$	adj. $p < 0.001$	20.459	Up-Regulated
15	BCL6	1.966	6.850	8.474	$p < 0.001$	adj. $p < 0.001$	20.118	Up-Regulated
16	CCL20	2.696	8.510	8.366	$p < 0.001$	adj. $p < 0.001$	19.599	Up-Regulated
17	NLRP3	2.194	6.017	8.359	$p < 0.001$	adj. $p < 0.001$	19.566	Up-Regulated
18	CLEC4D	2.495	6.076	8.355	$p < 0.001$	adj. $p < 0.001$	19.545	Up-Regulated
19	IL1B	2.731	9.226	8.295	$p < 0.001$	adj. $p < 0.001$	19.257	Up-Regulated
20	PLAUR	2.190	7.445	8.224	$p < 0.001$	adj. $p < 0.001$	18.917	Up-Regulated
21	MAFB	2.135	7.496	8.171	$p < 0.001$	adj. $p < 0.001$	18.663	Up-Regulated
22	JDP2	1.234	5.973	8.161	$p < 0.001$	adj. $p < 0.001$	18.615	Up-Regulated
23	ITLN1	2.830	6.738	8.131	$p < 0.001$	adj. $p < 0.001$	18.471	Up-Regulated
24	ITPRIP	1.131	6.934	8.104	$p < 0.001$	adj. $p < 0.001$	18.339	Up-Regulated
25	SERPINA1	1.775	6.565	8.074	$p < 0.001$	adj. $p < 0.001$	18.195	Up-Regulated
26	TREM1	2.698	7.523	8.019	$p < 0.001$	adj. $p < 0.001$	17.932	Up-Regulated
27	PELI1	1.893	9.045	8.017	$p < 0.001$	adj. $p < 0.001$	17.925	Up-Regulated
28	LILRB2	2.091	7.454	7.927	$p < 0.001$	adj. $p < 0.001$	17.494	Up-Regulated
29	S100P	2.297	8.431	7.835	$p < 0.001$	adj. $p < 0.001$	17.059	Up-Regulated
30	TP53INP2	2.174	7.977	7.768	$p < 0.001$	adj. $p < 0.001$	16.738	Up-Regulated
31	PPP1R15A	1.980	8.232	7.755	$p < 0.001$	adj. $p < 0.001$	16.675	Up-Regulated
32	GAB2	1.308	7.576	7.747	$p < 0.001$	adj. $p < 0.001$	16.637	Up-Regulated
33	QPCT	2.204	6.930	7.724	$p < 0.001$	adj. $p < 0.001$	16.531	Up-Regulated
34	FCGR2A	1.472	7.618	7.695	$p < 0.001$	adj. $p < 0.001$	16.394	Up-Regulated
35	HAL	1.889	6.450	7.664	$p < 0.001$	adj. $p < 0.001$	16.248	Up-Regulated
36	APOBEC3A APOBEC3A_B	2.155	7.731	7.646	$p < 0.001$	adj. $p < 0.001$	16.163	Up-Regulated
37	FOSL2	1.495	6.739	7.627	$p < 0.001$	adj. $p < 0.001$	16.070	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
38	TLR2	2.057	7.192	7.623	$p < 0.001$	adj. $p < 0.001$	16.053	Up-Regulated
39	PHACTR1	2.021	6.962	7.622	$p < 0.001$	adj. $p < 0.001$	16.046	Up-Regulated
40	CDA	1.612	6.399	7.526	$p < 0.001$	adj. $p < 0.001$	15.596	Up-Regulated
41	FCER1G	2.659	8.588	7.523	$p < 0.001$	adj. $p < 0.001$	15.583	Up-Regulated
42	PDE4B	1.191	8.058	7.520	$p < 0.001$	adj. $p < 0.001$	15.567	Up-Regulated
43	SNORD89	1.507	6.502	7.519	$p < 0.001$	adj. $p < 0.001$	15.564	Up-Regulated
44	VCAN	2.303	6.952	7.503	$p < 0.001$	adj. $p < 0.001$	15.486	Up-Regulated
45	ZFP36	1.873	10.214	7.500	$p < 0.001$	adj. $p < 0.001$	15.472	Up-Regulated
46	FCN1	2.094	7.117	7.497	$p < 0.001$	adj. $p < 0.001$	15.460	Up-Regulated
47	BST1	2.080	6.645	7.469	$p < 0.001$	adj. $p < 0.001$	15.326	Up-Regulated
48	CD83	2.181	9.335	7.450	$p < 0.001$	adj. $p < 0.001$	15.240	Up-Regulated
49	CSTA	2.764	8.421	7.402	$p < 0.001$	adj. $p < 0.001$	15.014	Up-Regulated
50	NFKBIZ	1.386	10.613	7.396	$p < 0.001$	adj. $p < 0.001$	14.982	Up-Regulated
51	S100A9	2.080	9.307	7.345	$p < 0.001$	adj. $p < 0.001$	14.745	Up-Regulated
52	CMTM2	1.955	7.909	7.336	$p < 0.001$	adj. $p < 0.001$	14.706	Up-Regulated
53	CREB5 LOC401317	1.735	5.901	7.277	$p < 0.001$	adj. $p < 0.001$	14.429	Up-Regulated
54	AQP9	2.473	7.628	7.274	$p < 0.001$	adj. $p < 0.001$	14.414	Up-Regulated
55	ALDH2	2.008	6.906	7.248	$p < 0.001$	adj. $p < 0.001$	14.293	Up-Regulated
56	PYGL	1.987	7.202	7.245	$p < 0.001$	adj. $p < 0.001$	14.280	Up-Regulated
57	PMAIP1	1.568	9.203	7.218	$p < 0.001$	adj. $p < 0.001$	14.155	Up-Regulated
58	LYZ	2.214	9.169	7.184	$p < 0.001$	adj. $p < 0.001$	13.997	Up-Regulated
59	CXCL16	1.975	8.748	7.180	$p < 0.001$	adj. $p < 0.001$	13.977	Up-Regulated
60	FOSB	1.719	7.938	7.164	$p < 0.001$	adj. $p < 0.001$	13.900	Up-Regulated
61	ETS2	1.537	7.689	7.153	$p < 0.001$	adj. $p < 0.001$	13.852	Up-Regulated
62	SLC7A7	1.949	7.615	7.148	$p < 0.001$	adj. $p < 0.001$	13.829	Up-Regulated
63	SULF2	1.572	5.699	7.132	$p < 0.001$	adj. $p < 0.001$	13.755	Up-Regulated
64	CDKN1A	1.691	7.581	7.129	$p < 0.001$	adj. $p < 0.001$	13.741	Up-Regulated
65	GADD45A	1.403	9.244	7.118	$p < 0.001$	adj. $p < 0.001$	13.687	Up-Regulated
66	CH25H	1.562	4.750	7.102	$p < 0.001$	adj. $p < 0.001$	13.616	Up-Regulated
67	TRIB1	1.475	5.848	7.102	$p < 0.001$	adj. $p < 0.001$	13.613	Up-Regulated
68	NFKBIA	1.815	9.532	7.064	$p < 0.001$	adj. $p < 0.001$	13.438	Up-Regulated
69	CCL3 /// CCL3L1 /// CCL3L3	2.567	9.301	7.062	$p < 0.001$	adj. $p < 0.001$	13.429	Up-Regulated
70	CSF3R	2.175	7.360	7.061	$p < 0.001$	adj. $p < 0.001$	13.425	Up-Regulated
71	LRG1	1.463	5.982	7.057	$p < 0.001$	adj. $p < 0.001$	13.407	Up-Regulated
72	VNN1	1.932	5.476	7.027	$p < 0.001$	adj. $p < 0.001$	13.269	Up-Regulated
73	MMP9	1.509	6.660	7.022	$p < 0.001$	adj. $p < 0.001$	13.246	Up-Regulated
74	WDFY3	1.567	5.752	6.981	$p < 0.001$	adj. $p < 0.001$	13.056	Up-Regulated
75	FOS	2.043	8.735	6.979	$p < 0.001$	adj. $p < 0.001$	13.048	Up-Regulated
76	MAFF	1.582	8.256	6.961	$p < 0.001$	adj. $p < 0.001$	12.964	Up-Regulated
77	CCL4	2.114	9.133	6.947	$p < 0.001$	adj. $p < 0.001$	12.898	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
78	RBP7	1.739	7.802	6.900	$p < 0.001$	adj. $p < 0.001$	12.683	Up-Regulated
79	CREM	1.399	7.773	6.873	$p < 0.001$	adj. $p < 0.001$	12.562	Up-Regulated
80	TULP2	1.708	6.016	6.867	$p < 0.001$	adj. $p < 0.001$	12.532	Up-Regulated
81	CLEC7A	1.757	7.559	6.858	$p < 0.001$	adj. $p < 0.001$	12.491	Up-Regulated
82	C5AR1	2.298	9.205	6.820	$p < 0.001$	adj. $p < 0.001$	12.317	Up-Regulated
83	EPAS1	1.050	5.656	6.790	$p < 0.001$	adj. $p < 0.001$	12.183	Up-Regulated
84	FPR1	1.651	6.718	6.780	$p < 0.001$	adj. $p < 0.001$	12.134	Up-Regulated
85	NAMPT	1.866	9.882	6.777	$p < 0.001$	adj. $p < 0.001$	12.121	Up-Regulated
86	IL1RN	1.793	5.179	6.775	$p < 0.001$	adj. $p < 0.001$	12.113	Up-Regulated
87	MIR6883 /// PER1	1.475	8.350	6.763	$p < 0.001$	adj. $p < 0.001$	12.058	Up-Regulated
88	GPR97	1.267	6.013	6.738	$p < 0.001$	adj. $p < 0.001$	11.946	Up-Regulated
89	IL13RA1	1.615	5.672	6.731	$p < 0.001$	adj. $p < 0.001$	11.914	Up-Regulated
90	MCEMP1	1.383	6.955	6.717	$p < 0.001$	adj. $p < 0.001$	11.847	Up-Regulated
91	IER3	2.025	10.946	6.713	$p < 0.001$	adj. $p < 0.001$	11.830	Up-Regulated
92	MGP	1.498	5.962	6.711	$p < 0.001$	adj. $p < 0.001$	11.820	Up-Regulated
93	THBS1	1.448	5.775	6.702	$p < 0.001$	adj. $p < 0.001$	11.779	Up-Regulated
94	DYSF	1.800	7.156	6.685	$p < 0.001$	adj. $p < 0.001$	11.704	Up-Regulated
95	RAB32	1.417	5.738	6.669	$p < 0.001$	adj. $p < 0.001$	11.633	Up-Regulated
96	CCRL2	1.719	6.587	6.649	$p < 0.001$	adj. $p < 0.001$	11.540	Up-Regulated
97	MME	1.573	6.482	6.647	$p < 0.001$	adj. $p < 0.001$	11.530	Up-Regulated
98	AC079305.10	2.047	5.742	6.639	$p < 0.001$	adj. $p < 0.001$	11.493	Up-Regulated
99	KLF4	1.443	6.538	6.616	$p < 0.001$	adj. $p < 0.001$	11.389	Up-Regulated
100	JUN	1.689	9.627	6.578	$p < 0.001$	adj. $p < 0.001$	11.220	Up-Regulated
101	FAM198B	1.443	5.225	6.573	$p < 0.001$	adj. $p < 0.001$	11.197	Up-Regulated
102	MGAM	2.052	7.754	6.558	$p < 0.001$	adj. $p < 0.001$	11.129	Up-Regulated
103	PILRA	1.619	7.618	6.528	$p < 0.001$	adj. $p < 0.001$	10.992	Up-Regulated
104	LOC100129518 /// SOD2	1.703	9.758	6.526	$p < 0.001$	adj. $p < 0.001$	10.987	Up-Regulated
105	RGS1	1.707	8.654	6.509	$p < 0.001$	adj. $p < 0.001$	10.908	Up-Regulated
106	DDIT3	1.692	8.063	6.493	$p < 0.001$	adj. $p < 0.001$	10.839	Up-Regulated
107	CD163	1.940	5.957	6.486	$p < 0.001$	adj. $p < 0.001$	10.805	Up-Regulated
108	PTX3	2.615	6.857	6.421	$p < 0.001$	adj. $p < 0.001$	10.516	Up-Regulated
109	GADD45B	1.393	8.578	6.413	$p < 0.001$	adj. $p < 0.001$	10.480	Up-Regulated
110	EREG	1.825	6.457	6.406	$p < 0.001$	adj. $p < 0.001$	10.447	Up-Regulated
111	AIF1	1.926	8.972	6.385	$p < 0.001$	adj. $p < 0.001$	10.355	Up-Regulated
112	GLT1D1	1.640	6.216	6.371	$p < 0.001$	adj. $p < 0.001$	10.294	Up-Regulated
113	CD36	1.727	5.965	6.335	$p < 0.001$	adj. $p < 0.001$	10.133	Up-Regulated
114	SECTM1	1.273	6.184	6.302	$p < 0.001$	adj. $p < 0.001$	9.984	Up-Regulated
115	CD33	1.517	5.557	6.299	$p < 0.001$	adj. $p < 0.001$	9.973	Up-Regulated
116	LILRA2	1.381	6.210	6.283	$p < 0.001$	adj. $p < 0.001$	9.902	Up-Regulated
117	GPR84	1.189	4.291	6.273	$p < 0.001$	adj. $p < 0.001$	9.859	Up-Regulated
118	SAMSN1	1.722	8.253	6.264	$p < 0.001$	adj. $p < 0.001$	9.816	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
119	FPR2	1.556	5.959	6.259	$p < 0.001$	adj. $p < 0.001$	9.797	Up-Regulated
120	CPVL	1.941	6.009	6.244	$p < 0.001$	adj. $p < 0.001$	9.730	Up-Regulated
121	METRNL	1.096	6.549	6.207	$p < 0.001$	adj. $p < 0.001$	9.564	Up-Regulated
122	LILRA5	1.043	5.182	6.191	$p < 0.001$	adj. $p < 0.001$	9.498	Up-Regulated
123	PLBD1	2.086	8.322	6.183	$p < 0.001$	adj. $p < 0.001$	9.461	Up-Regulated
124	MIR22 MIR22HG	1.480	8.063	6.165	$p < 0.001$	adj. $p < 0.001$	9.382	Up-Regulated
125	SEC14L1	1.025	8.187	6.119	$p < 0.001$	adj. $p < 0.001$	9.180	Up-Regulated
126	CSRNP1	1.160	8.279	6.109	$p < 0.001$	adj. $p < 0.001$	9.137	Up-Regulated
127	TNFAIP2	1.205	6.605	6.095	$p < 0.001$	adj. $p < 0.001$	9.075	Up-Regulated
128	CD93	1.449	6.909	6.070	$p < 0.001$	adj. $p < 0.001$	8.965	Up-Regulated
129	CXCL2	1.578	5.464	6.059	$p < 0.001$	adj. $p < 0.001$	8.919	Up-Regulated
130	LINC00528	1.341	7.315	6.036	$p < 0.001$	adj. $p < 0.001$	8.820	Up-Regulated
131	TLR4	1.027	5.992	6.008	$p < 0.001$	adj. $p < 0.001$	8.696	Up-Regulated
132	TMCC3	1.211	6.553	6.007	$p < 0.001$	adj. $p < 0.001$	8.694	Up-Regulated
133	GNA15	1.015	6.403	5.996	$p < 0.001$	adj. $p < 0.001$	8.646	Up-Regulated
134	ZFAND5	1.121	8.323	5.993	$p < 0.001$	adj. $p < 0.001$	8.630	Up-Regulated
135	PDZD8	1.078	8.239	5.930	$p < 0.001$	adj. $p < 0.001$	8.361	Up-Regulated
136	RNF144B	1.105	6.622	5.923	$p < 0.001$	adj. $p < 0.001$	8.327	Up-Regulated
137	P2RY13	1.894	5.155	5.918	$p < 0.001$	adj. $p < 0.001$	8.309	Up-Regulated
138	ANXA3	1.816	5.466	5.881	$p < 0.001$	adj. $p < 0.001$	8.150	Up-Regulated
139	CRISPLD2	1.044	5.532	5.874	$p < 0.001$	adj. $p < 0.001$	8.120	Up-Regulated
140	PLXDC2	1.095	5.064	5.860	$p < 0.001$	adj. $p < 0.001$	8.056	Up-Regulated
141	C15orf48	1.936	7.621	5.857	$p < 0.001$	adj. $p < 0.001$	8.044	Up-Regulated
142	BCL10	1.694	7.114	5.855	$p < 0.001$	adj. $p < 0.001$	8.038	Up-Regulated
143	IGFBP7	1.597	5.600	5.852	$p < 0.001$	adj. $p < 0.001$	8.025	Up-Regulated
144	BCL2A1	1.827	10.477	5.840	$p < 0.001$	adj. $p < 0.001$	7.973	Up-Regulated
145	C9orf72	1.477	7.039	5.826	$p < 0.001$	adj. $p < 0.001$	7.912	Up-Regulated
146	ARL5B	1.104	7.465	5.826	$p < 0.001$	adj. $p < 0.001$	7.911	Up-Regulated
147	ICAM1	1.277	6.853	5.807	$p < 0.001$	adj. $p < 0.001$	7.831	Up-Regulated
148	ARHGEF40	1.160	7.205	5.792	$p < 0.001$	adj. $p < 0.001$	7.767	Up-Regulated
149	PPIF	1.121	7.683	5.792	$p < 0.001$	adj. $p < 0.001$	7.767	Up-Regulated
150	SKIL	1.520	7.140	5.790	$p < 0.001$	adj. $p < 0.001$	7.758	Up-Regulated
151	RNF175	1.439	7.933	5.770	$p < 0.001$	adj. $p < 0.001$	7.675	Up-Regulated
152	SLC2A14 SLC2A3	1.274	9.911	5.769	$p < 0.001$	adj. $p < 0.001$	7.671	Up-Regulated
153	LPCAT2	1.298	5.302	5.766	$p < 0.001$	adj. $p < 0.001$	7.659	Up-Regulated
154	RNASE2	1.966	6.508	5.747	$p < 0.001$	adj. $p < 0.001$	7.575	Up-Regulated
155	TNFAIP6	1.670	6.392	5.735	$p < 0.001$	adj. $p < 0.001$	7.525	Up-Regulated
156	EMR2	1.131	5.397	5.726	$p < 0.001$	adj. $p < 0.001$	7.487	Up-Regulated
157	ADM	1.890	8.564	5.721	$p < 0.001$	adj. $p < 0.001$	7.464	Up-Regulated
158	SLC15A3	1.153	6.074	5.707	$p < 0.001$	adj. $p < 0.001$	7.405	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
159	HCAR3	1.969	7.778	5.704	$p < 0.001$	adj. $p < 0.001$	7.393	Up-Regulated
160	CD300LF	1.732	5.688	5.702	$p < 0.001$	adj. $p < 0.001$	7.386	Up-Regulated
161	SCML1	1.129	6.231	5.678	$p < 0.001$	adj. $p < 0.001$	7.284	Up-Regulated
162	UHRF1BP1L	1.201	5.980	5.674	$p < 0.001$	adj. $p < 0.001$	7.268	Up-Regulated
163	CPD	1.076	8.640	5.637	$p < 0.001$	adj. $p < 0.001$	7.110	Up-Regulated
164	FOLR3	1.695	6.095	5.610	$p < 0.001$	adj. $p < 0.001$	6.999	Up-Regulated
165	BRE-AS1	1.137	5.079	5.607	$p < 0.001$	adj. $p < 0.001$	6.987	Up-Regulated
166	TM6SF1	1.625	5.768	5.573	$p < 0.001$	adj. $p < 0.001$	6.843	Up-Regulated
167	SULF1	1.682	5.177	5.555	$p < 0.001$	adj. $p < 0.001$	6.768	Up-Regulated
168	RP11-443B7.1	1.124	4.850	5.540	$p < 0.001$	adj. $p < 0.001$	6.706	Up-Regulated
169	ZEB2	1.250	5.891	5.522	$p < 0.001$	adj. $p < 0.001$	6.630	Up-Regulated
170	CYP4F3	1.431	6.072	5.504	$p < 0.001$	adj. $p < 0.001$	6.554	Up-Regulated
171	ELL2	1.103	7.173	5.504	$p < 0.001$	adj. $p < 0.001$	6.553	Up-Regulated
172	VNN2	1.293	9.021	5.495	$p < 0.001$	adj. $p < 0.001$	6.519	Up-Regulated
173	CD14	1.663	6.778	5.488	$p < 0.001$	adj. $p < 0.001$	6.490	Up-Regulated
174	SYTL3	1.063	7.605	5.482	$p < 0.001$	adj. $p < 0.001$	6.464	Up-Regulated
175	RP6-99M1.2	1.534	7.288	5.466	$p < 0.001$	adj. $p < 0.001$	6.397	Up-Regulated
176	SLC7A5	1.241	9.151	5.461	$p < 0.001$	adj. $p < 0.001$	6.376	Up-Regulated
177	FCGR2C	1.087	7.701	5.450	$p < 0.001$	adj. $p < 0.001$	6.332	Up-Regulated
178	FCGR2A FCGR2C	/// 1.160	5.325	5.449	$p < 0.001$	adj. $p < 0.001$	6.328	Up-Regulated
179	KCNJ2	1.823	8.247	5.438	$p < 0.001$	adj. $p < 0.001$	6.280	Up-Regulated
180	RIN2	1.071	5.789	5.435	$p < 0.001$	adj. $p < 0.001$	6.269	Up-Regulated
181	DMXL2	1.505	7.253	5.414	$p < 0.001$	adj. $p < 0.001$	6.183	Up-Regulated
182	LOC731424	1.219	5.884	5.414	$p < 0.001$	adj. $p < 0.001$	6.183	Up-Regulated
183	PLAU	1.008	5.441	5.410	$p < 0.001$	adj. $p < 0.001$	6.165	Up-Regulated
184	EFEMP1	1.529	4.170	5.409	$p < 0.001$	adj. $p < 0.001$	6.163	Up-Regulated
185	SIRPB1	1.573	5.639	5.403	$p < 0.001$	adj. $p < 0.001$	6.139	Up-Regulated
186	CXCL1	1.849	7.859	5.391	$p < 0.001$	adj. $p < 0.001$	6.088	Up-Regulated
187	DUSP1	1.055	7.491	5.313	$p < 0.001$	adj. $p < 0.001$	5.768	Up-Regulated
188	IDI2-AS1	1.028	6.909	5.274	$p < 0.001$	adj. $p < 0.001$	5.610	Up-Regulated
189	SLC24A4	1.224	5.583	5.252	$p < 0.001$	adj. $p < 0.001$	5.520	Up-Regulated
190	DUSP4	1.252	8.041	5.245	$p < 0.001$	adj. $p < 0.001$	5.491	Up-Regulated
191	CHI3L1	2.001	5.785	5.244	$p < 0.001$	adj. $p < 0.001$	5.490	Up-Regulated
192	LOC101928290 LOC101928317	/// 1.010	5.919	5.211	$p < 0.001$	adj. $p < 0.001$	5.354	Up-Regulated
193	SLC8A1-AS1	1.189	5.520	5.205	$p < 0.001$	adj. $p < 0.001$	5.331	Up-Regulated
194	AK026714 PELI1	/// 1.348	9.902	5.196	$p < 0.001$	adj. $p < 0.001$	5.295	Up-Regulated
195	OSCAR	1.094	5.057	5.195	$p < 0.001$	adj. $p < 0.001$	5.292	Up-Regulated
196	FN1	1.593	7.067	5.157	$p < 0.001$	adj. $p < 0.001$	5.140	Up-Regulated
197	TYROBP	1.736	9.562	5.149	$p < 0.001$	adj. $p < 0.001$	5.107	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
198	VNN3	1.093	5.061	5.145	$p < 0.001$	adj. $p < 0.001$	5.092	Up-Regulated
199	ALDH1A1	1.481	5.548	5.120	$p < 0.001$	adj. $p < 0.001$	4.989	Up-Regulated
200	PECAM1	1.017	6.973	5.116	$p < 0.001$	adj. $p < 0.001$	4.975	Up-Regulated
201	OGN	1.257	4.138	5.113	$p < 0.001$	adj. $p < 0.001$	4.961	Up-Regulated
202	PTGS1	1.214	6.325	5.083	$p < 0.001$	adj. $p < 0.001$	4.843	Up-Regulated
203	RASGEF1B	1.153	5.869	5.082	$p < 0.001$	adj. $p < 0.001$	4.840	Up-Regulated
204	FGD4	1.232	5.062	5.079	$p < 0.001$	adj. $p < 0.001$	4.825	Up-Regulated
205	DDX3Y	1.696	7.380	5.065	$p < 0.001$	adj. $p < 0.001$	4.771	Up-Regulated
206	MPEG1	1.817	7.916	5.058	$p < 0.001$	adj. $p < 0.001$	4.744	Up-Regulated
207	ZNF385A	1.077	5.830	5.037	$p < 0.001$	adj. $p < 0.001$	4.660	Up-Regulated
208	MPP1	1.251	7.348	5.032	$p < 0.001$	adj. $p < 0.001$	4.641	Up-Regulated
209	LGALS2	1.104	6.592	5.011	$p < 0.001$	adj. $p < 0.001$	4.559	Up-Regulated
210	FAM49A	1.074	6.344	5.005	$p < 0.001$	adj. $p < 0.001$	4.535	Up-Regulated
211	SIGLEC5	1.216	5.981	4.998	$p < 0.001$	adj. $p < 0.001$	4.506	Up-Regulated
212	CYP1B1	1.226	5.676	4.984	$p < 0.001$	adj. $p < 0.001$	4.452	Up-Regulated
213	FCGR3B	1.489	9.320	4.953	$p < 0.001$	adj. $p < 0.001$	4.332	Up-Regulated
214	FCGR1A FCGR1B FCGR1C	/// /// 1.093	6.768	4.932	$p < 0.001$	adj. $p < 0.001$	4.249	Up-Regulated
215	KIF13A	1.036	6.116	4.920	$p < 0.001$	adj. $p < 0.001$	4.200	Up-Regulated
216	TMEM176A	1.235	5.849	4.916	$p < 0.001$	adj. $p < 0.001$	4.186	Up-Regulated
217	IFNGR1	1.120	9.731	4.885	$p < 0.001$	adj. $p < 0.001$	4.064	Up-Regulated
218	PLA2G7	1.301	4.303	4.856	$p < 0.001$	adj. $p < 0.001$	3.953	Up-Regulated
219	EDN1	1.083	6.938	4.852	$p < 0.001$	adj. $p < 0.001$	3.938	Up-Regulated
220	DUSP6	1.379	8.369	4.851	$p < 0.001$	adj. $p < 0.001$	3.934	Up-Regulated
221	CXCL8	1.439	10.968	4.846	$p < 0.001$	adj. $p < 0.001$	3.914	Up-Regulated
222	RP11-373D23.2	1.363	8.975	4.842	$p < 0.001$	adj. $p < 0.001$	3.897	Up-Regulated
223	LOC645984	1.353	5.741	4.825	$p < 0.001$	adj. $p < 0.001$	3.832	Up-Regulated
224	CXCL3	1.430	6.511	4.818	$p < 0.001$	adj. $p < 0.001$	3.806	Up-Regulated
225	SLC2A3	1.137	10.498	4.793	$p < 0.001$	adj. $p < 0.001$	3.708	Up-Regulated
226	CEBPD	1.098	6.907	4.791	$p < 0.001$	adj. $p < 0.001$	3.702	Up-Regulated
227	STK17B	1.091	9.848	4.777	$p < 0.001$	adj. $p < 0.001$	3.650	Up-Regulated
228	CLEC4A	1.240	7.120	4.768	$p < 0.001$	adj. $p < 0.001$	3.613	Up-Regulated
229	MXD1	1.260	9.788	4.747	$p < 0.001$	adj. $p < 0.001$	3.533	Up-Regulated
230	KCTD12	1.399	7.810	4.733	$p < 0.001$	adj. $p < 0.001$	3.480	Up-Regulated
231	G0S2	1.305	10.337	4.725	$p < 0.001$	adj. $p < 0.001$	3.450	Up-Regulated
232	S100A8	1.736	10.956	4.718	$p < 0.001$	adj. $p < 0.001$	3.424	Up-Regulated
233	IGSF6	1.007	5.953	4.718	$p < 0.001$	adj. $p < 0.001$	3.424	Up-Regulated
234	FFAR2	1.088	5.936	4.710	$p < 0.001$	adj. $p < 0.001$	3.394	Up-Regulated
235	MS4A6A	1.446	7.038	4.694	$p < 0.001$	adj. $p < 0.001$	3.331	Up-Regulated
236	HAUS3	1.054	8.873	4.670	$p < 0.001$	adj. $p < 0.001$	3.240	Up-Regulated
237	RPH3A	1.082	4.465	4.667	$p < 0.001$	adj. $p < 0.001$	3.232	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
238	ARRDC4	1.326	5.803	4.666	$p < 0.001$	$\text{adj.}p < 0.001$	3.226	Up-Regulated
239	KIAA1598	1.103	6.404	4.657	$p < 0.001$	$\text{adj.}p < 0.001$	3.191	Up-Regulated
240	GZMB	1.823	7.136	4.654	$p < 0.001$	$\text{adj.}p < 0.001$	3.180	Up-Regulated
241	SPARCL1	1.377	5.513	4.649	$p < 0.001$	$\text{adj.}p < 0.001$	3.164	Up-Regulated
242	TLR8	1.285	5.495	4.643	$p < 0.001$	$\text{adj.}p < 0.001$	3.139	Up-Regulated
243	GCA	1.309	8.029	4.621	$p < 0.001$	$\text{adj.}p < 0.001$	3.057	Up-Regulated
244	RAB31	1.042	8.102	4.607	$p < 0.001$	$\text{adj.}p < 0.001$	3.004	Up-Regulated
245	TNF	1.266	7.993	4.602	$p < 0.001$	$\text{adj.}p < 0.001$	2.988	Up-Regulated
246	FGR	1.760	8.513	4.592	$p < 0.001$	$\text{adj.}p < 0.001$	2.950	Up-Regulated
247	CTB-31O20.2	1.345	7.825	4.586	$p < 0.001$	$\text{adj.}p < 0.001$	2.926	Up-Regulated
248	CTC-510F12.4	1.245	7.499	4.558	$p < 0.001$	$\text{adj.}p < 0.001$	2.821	Up-Regulated
249	PTPRE	1.216	6.851	4.550	$p < 0.001$	$\text{adj.}p < 0.001$	2.793	Up-Regulated
250	CEBPB	1.368	9.484	4.545	$p < 0.001$	$\text{adj.}p < 0.001$	2.772	Up-Regulated
251	GABARAPL1 GABARAPL3	1.273	10.829	4.544	$p < 0.001$	$\text{adj.}p < 0.001$	2.771	Up-Regulated
252	FCGR1B	1.239	6.172	4.527	$p < 0.001$	$\text{adj.}p < 0.001$	2.706	Up-Regulated
253	LIF	1.011	5.508	4.509	$p < 0.001$	$\text{adj.}p < 0.001$	2.641	Up-Regulated
254	LYN	1.167	8.465	4.494	$p < 0.001$	$\text{adj.}p < 0.001$	2.585	Up-Regulated
255	IRS2	1.259	10.648	4.489	$p < 0.001$	$\text{adj.}p < 0.001$	2.567	Up-Regulated
256	UTY	1.131	7.177	4.486	$p < 0.001$	$\text{adj.}p < 0.001$	2.556	Up-Regulated
257	TNFAIP3	1.389	10.950	4.485	$p < 0.001$	$\text{adj.}p < 0.001$	2.551	Up-Regulated
258	OR52K3P	1.207	3.745	4.478	$p < 0.001$	$\text{adj.}p < 0.001$	2.526	Up-Regulated
259	SAT1	1.218	11.131	4.468	$p < 0.001$	$\text{adj.}p < 0.001$	2.491	Up-Regulated
260	ORM1	1.018	6.348	4.416	$p < 0.001$	$\text{adj.}p < 0.01$	2.299	Up-Regulated
261	EGR3	1.356	7.792	4.414	$p < 0.001$	$\text{adj.}p < 0.01$	2.292	Up-Regulated
262	RTN1	1.132	4.747	4.414	$p < 0.001$	$\text{adj.}p < 0.01$	2.291	Up-Regulated
263	MARCKS	1.239	9.482	4.409	$p < 0.001$	$\text{adj.}p < 0.01$	2.274	Up-Regulated
264	HIST2H2BE	1.100	9.715	4.399	$p < 0.001$	$\text{adj.}p < 0.01$	2.240	Up-Regulated
265	KLF10	1.122	9.107	4.399	$p < 0.001$	$\text{adj.}p < 0.01$	2.239	Up-Regulated
266	CSF1R	1.071	5.404	4.392	$p < 0.001$	$\text{adj.}p < 0.01$	2.213	Up-Regulated
267	LOC101927069	1.250	6.817	4.387	$p < 0.001$	$\text{adj.}p < 0.01$	2.193	Up-Regulated
268	CCL14 CCL15-CCL14	1.187	5.317	4.369	$p < 0.001$	$\text{adj.}p < 0.01$	2.128	Up-Regulated
269	FCGR1A	1.014	3.846	4.307	$p < 0.001$	$\text{adj.}p < 0.01$	1.907	Up-Regulated
270	HCK	1.133	7.012	4.307	$p < 0.001$	$\text{adj.}p < 0.01$	1.907	Up-Regulated
271	NRGN	1.175	7.483	4.306	$p < 0.001$	$\text{adj.}p < 0.01$	1.902	Up-Regulated
272	CFP	1.251	6.804	4.297	$p < 0.001$	$\text{adj.}p < 0.01$	1.870	Up-Regulated
273	CLEC12A	1.080	5.295	4.296	$p < 0.001$	$\text{adj.}p < 0.01$	1.868	Up-Regulated
274	HES1	1.306	7.253	4.287	$p < 0.001$	$\text{adj.}p < 0.01$	1.834	Up-Regulated
275	EPB41L3	1.131	4.293	4.275	$p < 0.001$	$\text{adj.}p < 0.01$	1.790	Up-Regulated
276	MOP-1	1.119	4.726	4.266	$p < 0.001$	$\text{adj.}p < 0.01$	1.762	Up-Regulated
277	WLS	1.059	5.331	4.260	$p < 0.001$	$\text{adj.}p < 0.01$	1.740	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
278	EIF1AY	1.872	6.414	4.260	$p < 0.001$	$\text{adj.}p < 0.01$	1.738	Up-Regulated
279	NCF2	1.274	8.635	4.236	$p < 0.001$	$\text{adj.}p < 0.01$	1.654	Up-Regulated
280	CREB5	1.079	6.747	4.233	$p < 0.001$	$\text{adj.}p < 0.01$	1.644	Up-Regulated
281	CTA-29F11.1	1.139	8.020	4.186	$p < 0.001$	$\text{adj.}p < 0.01$	1.477	Up-Regulated
282	SLC31A2	1.046	8.089	4.179	$p < 0.001$	$\text{adj.}p < 0.01$	1.453	Up-Regulated
283	CD302 /// LY75 /// LY75-CD302	1.161	9.346	4.174	$p < 0.001$	$\text{adj.}p < 0.01$	1.437	Up-Regulated
284	NME8	1.062	5.310	4.162	$p < 0.001$	$\text{adj.}p < 0.01$	1.394	Up-Regulated
285	ZFY	1.145	4.342	4.136	$p < 0.001$	$\text{adj.}p < 0.01$	1.304	Up-Regulated
286	CD1D	1.245	6.206	4.117	$p < 0.001$	$\text{adj.}p < 0.01$	1.238	Up-Regulated
287	MS4A7	1.223	5.611	4.111	$p < 0.001$	$\text{adj.}p < 0.01$	1.215	Up-Regulated
288	GJB6	1.040	5.420	4.105	$p < 0.001$	$\text{adj.}p < 0.01$	1.196	Up-Regulated
289	TTY15	1.343	5.892	4.066	$p < 0.001$	$\text{adj.}p < 0.01$	1.062	Up-Regulated
290	TXLNGY	1.970	6.851	4.060	$p < 0.001$	$\text{adj.}p < 0.01$	1.039	Up-Regulated
291	SGK1	1.155	10.658	4.045	$p < 0.001$	$\text{adj.}p < 0.01$	0.987	Up-Regulated
292	PLEK	1.030	8.792	3.996	$p < 0.001$	$\text{adj.}p < 0.01$	0.822	Up-Regulated
293	USP9Y	1.848	6.176	3.984	$p < 0.001$	$\text{adj.}p < 0.01$	0.781	Up-Regulated
294	ZNF331	1.026	8.999	3.978	$p < 0.001$	$\text{adj.}p < 0.01$	0.759	Up-Regulated
295	DEFA1 /// DEFA1B /// DEFA3	1.694	7.639	3.946	$p < 0.001$	$\text{adj.}p < 0.01$	0.652	Up-Regulated
296	KDM5D	2.488	8.118	3.940	$p < 0.001$	$\text{adj.}p < 0.01$	0.632	Up-Regulated
297	mir-223	1.345	6.963	3.924	$p < 0.001$	$\text{adj.}p < 0.01$	0.580	Up-Regulated
298	PTGS2	1.473	7.863	3.915	$p < 0.001$	$\text{adj.}p < 0.01$	0.550	Up-Regulated
299	CLEC1A	1.022	3.362	3.910	$p < 0.001$	$\text{adj.}p < 0.01$	0.531	Up-Regulated
300	FGL2	1.129	7.917	3.902	$p < 0.001$	$\text{adj.}p < 0.01$	0.504	Up-Regulated
301	GJA1	1.531	7.583	3.894	$p < 0.001$	$\text{adj.}p < 0.01$	0.479	Up-Regulated
302	RPS4Y1	2.530	9.814	3.885	$p < 0.001$	$\text{adj.}p < 0.01$	0.450	Up-Regulated
303	LRRK2	1.377	8.830	3.834	$p < 0.001$	$\text{adj.}p < 0.01$	0.278	Up-Regulated
304	TUBB6	1.038	5.137	3.820	$p < 0.001$	$\text{adj.}p < 0.01$	0.232	Up-Regulated
305	SLPI	1.094	6.072	3.802	$p < 0.001$	$\text{adj.}p < 0.01$	0.176	Up-Regulated
306	RGS2	1.202	10.598	3.800	$p < 0.001$	$\text{adj.}p < 0.01$	0.167	Up-Regulated
307	SLC22A4	1.204	5.370	3.797	$p < 0.001$	$\text{adj.}p < 0.01$	0.159	Up-Regulated
308	FTH1	1.096	10.888	3.790	$p < 0.001$	$\text{adj.}p < 0.01$	0.136	Up-Regulated
309	IFI30 /// PIK3R2	1.073	9.603	3.769	$p < 0.001$	$\text{adj.}p < 0.01$	0.067	Up-Regulated
310	TIMP2	1.043	9.159	3.692	$p < 0.001$	$\text{adj.}p < 0.01$	-0.183	Up-Regulated
311	IER5	1.015	8.960	3.648	$p < 0.001$	$\text{adj.}p < 0.01$	-0.323	Up-Regulated
312	SERPINB2	1.272	4.560	3.625	$p < 0.001$	$\text{adj.}p < 0.01$	-0.395	Up-Regulated
313	CNTNAP3 /// CNTNAP3B /// CNTNAP3P2	1.156	6.213	3.589	$p < 0.001$	$\text{adj.}p < 0.05$	-0.508	Up-Regulated
314	PRKY	1.039	6.102	3.553	$p < 0.001$	$\text{adj.}p < 0.05$	-0.621	Up-Regulated
315	STEAP4	1.012	5.867	3.541	$p < 0.001$	$\text{adj.}p < 0.05$	-0.656	Up-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
316	LOC100130357	1.055	6.709	3.534	$p < 0.001$	adj. $p < 0.05$	-0.678	Up-Regulated
317	CREG1	1.025	8.708	3.525	$p < 0.001$	adj. $p < 0.05$	-0.706	Up-Regulated
318	TUBB2A	1.266	7.100	3.509	$p < 0.001$	adj. $p < 0.05$	-0.757	Up-Regulated
319	PFKFB3	1.054	11.684	3.481	$p < 0.001$	adj. $p < 0.05$	-0.841	Up-Regulated
320	MNDA	1.115	8.174	3.440	$p < 0.001$	adj. $p < 0.05$	-0.968	Up-Regulated
321	HLA-DQB1 /// HLA-DRB1 /// HLA-DRB3 /// HLA-DRB4 /// HLA-DRB5 /// HLA-DRB6 /// LOC100996809 /// LOC101060835	1.137	6.228	3.243	$p < 0.01$	adj. $p < 0.05$	-1.551	Up-Regulated
322	SRGN	1.023	11.038	3.204	$p < 0.01$	adj. $p < 0.05$	-1.662	Up-Regulated
323	ASH1L-AS1	1.014	7.167	2.968	$p < 0.01$	adj. $p < 0.05$	-2.320	Up-Regulated
324	CCR2	-1.596	7.445	-7.012	$p < 0.001$	adj. $p < 0.001$	13.201	Down-Regulated
325	PAQR8	-1.220	7.291	-6.935	$p < 0.001$	adj. $p < 0.001$	12.844	Down-Regulated
326	CCR5	-1.440	8.381	-6.615	$p < 0.001$	adj. $p < 0.001$	11.388	Down-Regulated
327	ZNF137P	-1.373	7.131	-6.486	$p < 0.001$	adj. $p < 0.001$	10.807	Down-Regulated
328	CISH	-1.607	8.317	-6.033	$p < 0.001$	adj. $p < 0.001$	8.803	Down-Regulated
329	GIMAP7	-1.611	10.230	-6.018	$p < 0.001$	adj. $p < 0.001$	8.738	Down-Regulated
330	CTD-2541M15.1	-1.427	8.502	-6.016	$p < 0.001$	adj. $p < 0.001$	8.731	Down-Regulated
331	CTD-2528L19.6	-1.673	5.685	-5.997	$p < 0.001$	adj. $p < 0.001$	8.648	Down-Regulated
332	LOC339988	-1.007	8.261	-5.915	$p < 0.001$	adj. $p < 0.001$	8.294	Down-Regulated
333	WDR86-AS1	-1.054	6.078	-5.913	$p < 0.001$	adj. $p < 0.001$	8.287	Down-Regulated
334	GIMAP6	-1.535	9.379	-5.871	$p < 0.001$	adj. $p < 0.001$	8.107	Down-Regulated
335	RP11-214K3.19	-1.152	8.037	-5.862	$p < 0.001$	adj. $p < 0.001$	8.068	Down-Regulated
336	RAD54B	-1.189	7.157	-5.729	$p < 0.001$	adj. $p < 0.001$	7.499	Down-Regulated
337	LOC100631377 /// LOC101928673	-1.171	8.115	-5.693	$p < 0.001$	adj. $p < 0.001$	7.349	Down-Regulated
338	ZNF420	-1.124	7.267	-5.685	$p < 0.001$	adj. $p < 0.001$	7.315	Down-Regulated
339	RP11-747H7.3	-1.193	8.180	-5.643	$p < 0.001$	adj. $p < 0.001$	7.135	Down-Regulated
340	GCSAM	-1.041	6.229	-5.585	$p < 0.001$	adj. $p < 0.001$	6.892	Down-Regulated
341	TSIX	-2.991	6.835	-5.532	$p < 0.001$	adj. $p < 0.001$	6.673	Down-Regulated
342	CRTAM	-1.442	6.666	-5.519	$p < 0.001$	adj. $p < 0.001$	6.617	Down-Regulated
343	LOC153682	-1.389	6.836	-5.518	$p < 0.001$	adj. $p < 0.001$	6.615	Down-Regulated
344	ELOVL4	-1.354	7.791	-5.499	$p < 0.001$	adj. $p < 0.001$	6.535	Down-Regulated
345	ZFP3	-1.274	5.833	-5.442	$p < 0.001$	adj. $p < 0.001$	6.300	Down-Regulated
346	XIST	-3.656	6.265	-5.427	$p < 0.001$	adj. $p < 0.001$	6.236	Down-Regulated
347	GIMAP8	-1.194	6.897	-5.416	$p < 0.001$	adj. $p < 0.001$	6.191	Down-Regulated
348	MGC40069	-1.031	5.993	-5.292	$p < 0.001$	adj. $p < 0.001$	5.682	Down-Regulated
349	HN1L	-1.079	8.183	-5.255	$p < 0.001$	adj. $p < 0.001$	5.533	Down-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
350	RP11-96D1.11	-1.022	7.111	-5.235	$p < 0.001$	adj. $p < 0.001$	5.453	Down-Regulated
351	GMPS	-1.051	7.312	-5.204	$p < 0.001$	adj. $p < 0.001$	5.328	Down-Regulated
352	B3GALT2	-1.509	6.192	-5.142	$p < 0.001$	adj. $p < 0.001$	5.077	Down-Regulated
353	LINC00260	-1.019	6.650	-5.136	$p < 0.001$	adj. $p < 0.001$	5.054	Down-Regulated
354	IL23R	-1.087	5.540	-5.132	$p < 0.001$	adj. $p < 0.001$	5.040	Down-Regulated
355	GIMAP4	-1.629	9.641	-5.125	$p < 0.001$	adj. $p < 0.001$	5.009	Down-Regulated
356	DENND2D	-1.231	8.706	-5.077	$p < 0.001$	adj. $p < 0.001$	4.821	Down-Regulated
357	RP11-53O19.3	-1.133	7.596	-5.063	$p < 0.001$	adj. $p < 0.001$	4.765	Down-Regulated
358	ZNF786	-1.077	7.076	-5.060	$p < 0.001$	adj. $p < 0.001$	4.751	Down-Regulated
359	SPON1	-1.095	6.468	-5.041	$p < 0.001$	adj. $p < 0.001$	4.676	Down-Regulated
360	FAM220A	-1.012	8.437	-5.029	$p < 0.001$	adj. $p < 0.001$	4.628	Down-Regulated
361	VSIG1	-1.092	6.413	-4.931	$p < 0.001$	adj. $p < 0.001$	4.245	Down-Regulated
362	TSPAN5	-1.006	8.302	-4.920	$p < 0.001$	adj. $p < 0.001$	4.200	Down-Regulated
363	EOMES	-1.404	9.666	-4.909	$p < 0.001$	adj. $p < 0.001$	4.158	Down-Regulated
364	LOC100996286	-1.024	8.753	-4.873	$p < 0.001$	adj. $p < 0.001$	4.018	Down-Regulated
365	ZNF623	-1.056	6.325	-4.838	$p < 0.001$	adj. $p < 0.001$	3.882	Down-Regulated
366	GIMAP1	-1.344	7.744	-4.804	$p < 0.001$	adj. $p < 0.001$	3.750	Down-Regulated
367	PTGDR	-1.015	7.194	-4.789	$p < 0.001$	adj. $p < 0.001$	3.696	Down-Regulated
368	ZNF260	-1.137	8.548	-4.781	$p < 0.001$	adj. $p < 0.001$	3.663	Down-Regulated
369	ACKR3 AK023507	/// -1.037	6.672	-4.773	$p < 0.001$	adj. $p < 0.001$	3.632	Down-Regulated
370	TGFBR1	-1.117	8.984	-4.755	$p < 0.001$	adj. $p < 0.001$	3.563	Down-Regulated
371	GVINP1	-1.220	8.408	-4.714	$p < 0.001$	adj. $p < 0.001$	3.409	Down-Regulated
372	ZNF382	-1.032	6.389	-4.705	$p < 0.001$	adj. $p < 0.001$	3.374	Down-Regulated
373	TNFAIP8L2	-1.223	8.091	-4.690	$p < 0.001$	adj. $p < 0.001$	3.316	Down-Regulated
374	CTD-3025N20.3	-1.125	4.704	-4.676	$p < 0.001$	adj. $p < 0.001$	3.264	Down-Regulated
375	GIMAP1-GIMAP5 /// GIMAP5	-1.472	11.247	-4.646	$p < 0.001$	adj. $p < 0.001$	3.151	Down-Regulated
376	MCTS1	-1.011	7.469	-4.639	$p < 0.001$	adj. $p < 0.001$	3.127	Down-Regulated
377	LOC283357	-1.353	8.179	-4.609	$p < 0.001$	adj. $p < 0.001$	3.010	Down-Regulated
378	METTL21B	-1.053	7.113	-4.607	$p < 0.001$	adj. $p < 0.001$	3.005	Down-Regulated
379	RP11-140I16.3	-1.269	6.039	-4.599	$p < 0.001$	adj. $p < 0.001$	2.975	Down-Regulated
380	NOG	-1.213	7.084	-4.579	$p < 0.001$	adj. $p < 0.001$	2.901	Down-Regulated
381	GIN1	-1.175	6.669	-4.570	$p < 0.001$	adj. $p < 0.001$	2.866	Down-Regulated
382	RP1-193H18.2	-1.011	7.086	-4.558	$p < 0.001$	adj. $p < 0.001$	2.824	Down-Regulated
383	AB488780	-1.453	8.341	-4.538	$p < 0.001$	adj. $p < 0.001$	2.749	Down-Regulated
384	HMG20A	-1.025	8.583	-4.489	$p < 0.001$	adj. $p < 0.001$	2.568	Down-Regulated
385	GZMA	-1.094	11.150	-4.476	$p < 0.001$	adj. $p < 0.001$	2.519	Down-Regulated
386	CCDC65	-1.153	8.385	-4.463	$p < 0.001$	adj. $p < 0.001$	2.472	Down-Regulated
387	LEO1	-1.006	7.427	-4.406	$p < 0.001$	adj. $p < 0.01$	2.263	Down-Regulated
388	ASF1A	-1.058	8.872	-4.386	$p < 0.001$	adj. $p < 0.01$	2.191	Down-Regulated
389	AMIGO2	-1.158	7.275	-4.252	$p < 0.001$	adj. $p < 0.01$	1.709	Down-Regulated

Number	row.names(tT)	Log ₂ FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
390	ZNF792	-1.223	6.349	-4.239	$p < 0.001$	$\text{adj.}p < 0.01$	1.663	Down-Regulated
391	TMEM60	-1.131	7.827	-4.235	$p < 0.001$	$\text{adj.}p < 0.01$	1.650	Down-Regulated
392	PRSS35	-1.229	5.415	-4.220	$p < 0.001$	$\text{adj.}p < 0.01$	1.596	Down-Regulated
393	LOC101927929	-1.029	8.813	-4.201	$p < 0.001$	$\text{adj.}p < 0.01$	1.530	Down-Regulated
394	POP5	-1.047	9.245	-4.193	$p < 0.001$	$\text{adj.}p < 0.01$	1.503	Down-Regulated
395	CETN3	-1.077	6.599	-4.186	$p < 0.001$	$\text{adj.}p < 0.01$	1.477	Down-Regulated
396	A2M-AS1	-1.236	8.821	-4.164	$p < 0.001$	$\text{adj.}p < 0.01$	1.402	Down-Regulated
397	PRPSAP2	-1.018	8.801	-4.155	$p < 0.001$	$\text{adj.}p < 0.01$	1.368	Down-Regulated
398	LOXL1-AS1	-1.071	7.680	-4.117	$p < 0.001$	$\text{adj.}p < 0.01$	1.236	Down-Regulated
399	GEMIN5	-1.049	6.386	-4.109	$p < 0.001$	$\text{adj.}p < 0.01$	1.210	Down-Regulated
400	ZMYM6 /// ZMYM6NB	-1.040	8.310	-4.086	$p < 0.001$	$\text{adj.}p < 0.01$	1.129	Down-Regulated
401	AX746755 /// RP11-774O3.3	-1.016	7.439	-4.008	$p < 0.001$	$\text{adj.}p < 0.01$	0.863	Down-Regulated
402	BTLA	-1.056	8.039	-3.953	$p < 0.001$	$\text{adj.}p < 0.01$	0.677	Down-Regulated
403	TARP /// TRGC2 /// TRGV9	-1.085	9.579	-3.936	$p < 0.001$	$\text{adj.}p < 0.01$	0.618	Down-Regulated
404	MEST	-1.011	5.315	-3.848	$p < 0.001$	$\text{adj.}p < 0.01$	0.327	Down-Regulated
405	C14orf119	-1.015	8.998	-3.844	$p < 0.001$	$\text{adj.}p < 0.01$	0.313	Down-Regulated
406	ZNF189	-1.037	7.023	-3.645	$p < 0.001$	$\text{adj.}p < 0.01$	-0.331	Down-Regulated
407	GZMK	-1.119	10.711	-3.626	$p < 0.001$	$\text{adj.}p < 0.01$	-0.391	Down-Regulated
408	ZNF559	-1.012	8.159	-3.440	$p < 0.001$	$\text{adj.}p < 0.05$	-0.967	Down-Regulated
409	LINC00094	-1.013	8.188	-3.377	$p < 0.01$	$\text{adj.}p < 0.05$	-1.157	Down-Regulated

Table S2 KEGG analysis of the differentially expressed genes

Number	NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val
1	KEGG_MAPK_SIGNALING_PATHWAY	254	0.42	1.97	$p < 0.001$	0.036	0.029
2	KEGG_BLADDER_CANCER	40	0.56	1.88	$p < 0.01$	0.045	0.064
3	KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	113	0.45	1.86	$p < 0.01$	0.044	0.087
4	KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	67	0.66	1.85	$p < 0.001$	0.034	0.089
5	KEGG_PATHWAYS_IN_CANCER	319	0.37	1.85	$p < 0.01$	0.030	0.094
6	KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	96	0.57	1.84	$p < 0.01$	0.025	0.095
7	KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	66	0.47	1.84	$p < 0.01$	0.023	0.099
8	KEGG_GAP_JUNCTION	86	0.47	1.80	$p < 0.01$	0.028	0.134
9	KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	246	0.51	1.80	$p < 0.001$	0.026	0.137
10	KEGG_HEMATOPOIETIC_CELL_LINEAGE	83	0.56	1.80	$p < 0.01$	0.024	0.141
11	KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS	93	0.55	1.78	$p < 0.05$	0.027	0.168
12	KEGG_GRAFT_VERSUS_HOST_DISEASE	35	0.71	1.78	$p < 0.01$	0.025	0.173
13	KEGG_LEISHMANIA_INFECTION	67	0.69	1.78	$p < 0.01$	0.024	0.181
14	KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	60	0.59	1.77	$p < 0.05$	0.024	0.195
15	KEGG_TYPE_I_DIABETES_MELLITUS	39	0.58	1.74	$p < 0.01$	0.031	0.253
16	KEGG_CHEMOKINE_SIGNALING_PATHWAY	180	0.45	1.71	$p < 0.05$	0.040	0.310
17	KEGG_PRION_DISEASES	34	0.50	1.71	$p < 0.05$	0.039	0.317
18	KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	127	0.49	1.70	$p < 0.05$	0.040	0.330
19	KEGG_P53_SIGNALING_PATHWAY	66	0.47	1.68	$p < 0.05$	0.046	0.384
20	KEGG_MELANOMA	71	0.44	1.66	$p < 0.05$	0.053	0.424
21	KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	96	0.50	1.65	$p < 0.05$	0.054	0.439
22	KEGG_FOCAL_ADHESION	195	0.36	1.65	$p < 0.01$	0.052	0.439
23	KEGG_JAK_STAT_SIGNALING_PATHWAY	149	0.40	1.64	$p < 0.001$	0.053	0.454
24	KEGG_TYPE_II_DIABETES_MELLITUS	44	0.40	1.62	$p < 0.05$	0.061	0.504
25	KEGG_LONG_TERM_DEPRESSION	64	0.42	1.62	$p < 0.01$	0.061	0.511
26	KEGG_ERBB_SIGNALING_PATHWAY	87	0.39	1.61	$p < 0.05$	0.063	0.537
27	KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	73	0.50	1.61	$p < 0.05$	0.063	0.549
28	KEGG_ARACHIDONIC_ACID_METABOLISM	50	0.54	1.59	$p < 0.05$	0.069	0.579
29	KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	209	0.31	1.58	$p < 0.05$	0.075	0.619
30	KEGG_GALACTOSE_METABOLISM	25	0.47	1.57	$p < 0.05$	0.084	0.658
31	KEGG_STARCH_AND_SUCROSE_METABOLISM	36	0.49	1.56	$p < 0.05$	0.084	0.667
32	KEGG_TGF_BETA_SIGNALING_PATHWAY	81	0.37	1.56	$p < 0.05$	0.081	0.668
33	KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	51	0.52	1.56	$p < 0.05$	0.080	0.669
34	KEGG_ARGININE_AND_PROLINE_METABOLISM	47	0.37	1.56	$p < 0.05$	0.080	0.677
35	KEGG_NITROGEN_METABOLISM	22	0.51	1.55	$p < 0.05$	0.083	0.692
36	KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION	106	0.35	1.52	$p < 0.05$	0.103	0.757
37	KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	68	0.41	1.51	$p < 0.05$	0.105	0.767
38	KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	0.47	1.51	$p < 0.05$	0.107	0.770
39	KEGG_PROSTATE_CANCER	89	0.38	1.48	$p < 0.05$	0.131	0.833

Number	NAME	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val
40	KEGG_AXON_GUIDANCE	128	0.35	1.48	$p < 0.05$	0.132	0.837
41	KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	14	0.58	1.45	$p < 0.05$	0.152	0.874
42	KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	51	0.43	1.43	$p < 0.05$	0.164	0.890

Table S3 The results of MAPK signaling pathway for the DEGs

NAME	PROBE	RANK IN GENE LIST	RANK METRIC SCORE	RUNNING ES	CORE ENRICHMENT
row_1	IL1R2	5	0.840	0.032	Yes
row_2	IL1B	14	0.739	0.060	Yes
row_3	FOS	77	0.584	0.080	Yes
row_4	CD14	106	0.538	0.100	Yes
row_5	DDIT3	119	0.524	0.120	Yes
row_6	MAP3K8	147	0.491	0.137	Yes
row_7	JUN	197	0.438	0.152	Yes
row_8	DUSP6	238	0.412	0.166	Yes
row_9	GADD45B	251	0.406	0.182	Yes
row_10	TNF	268	0.396	0.196	Yes
row_11	DUSP4	277	0.389	0.211	Yes
row_12	GADD45A	307	0.379	0.224	Yes
row_13	DUSP1	354	0.352	0.236	Yes
row_14	CACNA2D3	374	0.340	0.248	Yes
row_15	DUSP2	390	0.335	0.260	Yes
row_16	HSPA6	391	0.335	0.273	Yes
row_17	PLA2G4A	532	0.282	0.278	Yes
row_18	IL1A	543	0.280	0.289	Yes
row_19	DUSP10	586	0.267	0.297	Yes
row_20	FGF12	671	0.250	0.303	Yes
row_21	HSPA2	691	0.246	0.312	Yes
row_22	GADD45G	752	0.237	0.318	Yes
row_23	NFKB2	764	0.235	0.327	Yes
row_24	DUSP5	767	0.234	0.336	Yes
row_25	RASGRP4	844	0.225	0.341	Yes
row_26	PTPRR	962	0.208	0.344	Yes
row_27	MRAS	978	0.206	0.352	Yes
row_28	MECOM	1046	0.199	0.357	Yes
row_29	FGF2	1090	0.194	0.362	Yes
row_30	MAP3K2	1170	0.185	0.366	Yes
row_31	MAPKAPK2	1372	0.170	0.364	Yes
row_32	PAK1	1380	0.170	0.370	Yes
row_33	ARRB2	1389	0.169	0.376	Yes
row_34	MAPK14	1404	0.169	0.382	Yes
row_35	MAX	1469	0.164	0.386	Yes
row_36	FGF16	1568	0.160	0.388	Yes
row_37	JUND	1678	0.153	0.389	Yes
row_38	FGF1	1697	0.152	0.394	Yes
row_39	LAMTOR3	1713	0.151	0.399	Yes

NAME	PROBE	RANK IN GENE LIST	RANK METRIC SCORE	RUNNING ES	CORE ENRICHMENT
row_40	NR4A1	1753	0.149	0.403	Yes
row_41	RELB	1933	0.141	0.401	Yes
row_42	BRAF	1938	0.141	0.406	Yes
row_43	PLA2G5	1962	0.140	0.411	Yes
row_44	EGF	2015	0.138	0.414	Yes
row_45	CACNA2D1	2025	0.137	0.419	Yes
row_46	TGFB2	2154	0.132	0.418	Yes
row_47	FGF7	2272	0.128	0.418	Yes
row_48	CACNG7	2297	0.127	0.422	Yes

Table S4 Results of analysis of GSE61741

Number	row.names(tT)	Log2FC	AveExpr	t	P.Value	adj.P.Val	B	regulated
1	hsa-miR-1283	-1.820	5.088	-5.057	$p < 0.001$	adj. $p < 0.001$	5.185	Down-regulated
2	hsa-miR-31*	-1.793	6.138	-5.453	$p < 0.001$	adj. $p < 0.001$	6.909	Down-regulated
3	hsa-miR-200a	-1.756	5.015	-5.159	$p < 0.001$	adj. $p < 0.001$	5.619	Down-regulated
4	hsa-miR-1245	-1.618	4.003	-4.827	$p < 0.001$	adj. $p < 0.001$	4.225	Down-regulated
5	hsa-miR-155*	-1.551	4.360	-4.535	$p < 0.001$	adj. $p < 0.001$	3.058	Down-regulated
6	hsa-miR-515-5p	-1.528	6.606	-5.644	$p < 0.001$	adj. $p < 0.001$	7.770	Down-regulated
7	hsa-miR-21*	-1.520	5.161	-4.093	$p < 0.001$	adj. $p < 0.01$	1.394	Down-regulated
8	hsa-miR-488*	-1.512	5.536	-5.328	$p < 0.001$	adj. $p < 0.001$	6.353	Down-regulated
9	hsa-miR-545*	-1.467	2.782	-4.155	$p < 0.001$	adj. $p < 0.01$	1.618	Down-regulated
10	hsa-miR-519b-5p	-1.378	5.924	-4.535	$p < 0.001$	adj. $p < 0.001$	3.057	Down-regulated
11	hsa-miR-518d-5p	-1.278	5.968	-3.559	$p < 0.001$	adj. $p < 0.01$	-0.430	Down-regulated
12	hsa-miR-450b-5p	-1.278	4.495	-3.632	$p < 0.001$	adj. $p < 0.01$	-0.192	Down-regulated
13	hsa-miR-520d-5p	-1.256	4.370	-3.794	$p < 0.001$	adj. $p < 0.01$	0.347	Down-regulated
14	hsa-miR-589	-1.252	5.362	-3.995	$p < 0.001$	adj. $p < 0.01$	1.042	Down-regulated
15	hsa-miR-491-3p	-1.240	5.096	-3.628	$p < 0.001$	adj. $p < 0.01$	-0.205	Down-regulated
16	hsa-miR-889	-1.235	3.731	-3.303	$p < 0.01$	adj. $p < 0.01$	-1.228	Down-regulated
17	hsa-miR-136*	-1.229	4.544	-3.820	$p < 0.001$	adj. $p < 0.01$	0.435	Down-regulated
18	hsa-miR-564	-1.227	6.127	-3.843	$p < 0.001$	adj. $p < 0.01$	0.514	Down-regulated
19	hsa-miR-518d-3p	-1.201	4.796	-3.354	$p < 0.001$	adj. $p < 0.01$	-1.073	Down-regulated
20	hsa-miR-566	-1.199	6.018	-4.856	$p < 0.001$	adj. $p < 0.001$	4.346	Down-regulated
21	hsa-miR-568	-1.193	5.008	-3.538	$p < 0.001$	adj. $p < 0.01$	-0.498	Down-regulated
22	hsa-miR-10b*	-1.175	4.646	-3.459	$p < 0.001$	adj. $p < 0.01$	-0.747	Down-regulated
23	hsa-miR-520h	-1.166	3.686	-3.142	$p < 0.01$	adj. $p < 0.05$	-1.702	Down-regulated
24	hsa-miR-573	-1.132	4.833	-3.662	$p < 0.001$	adj. $p < 0.01$	-0.096	Down-regulated
25	hsa-miR-646	-1.123	7.203	-4.721	$p < 0.001$	adj. $p < 0.001$	3.794	Down-regulated
26	hsa-miR-489	-1.120	6.846	-4.984	$p < 0.001$	adj. $p < 0.001$	4.877	Down-regulated
27	hsa-miR-96*	-1.116	5.969	-3.527	$p < 0.001$	adj. $p < 0.01$	-0.532	Down-regulated
28	hsa-miR-933	-1.114	6.874	-3.784	$p < 0.001$	adj. $p < 0.01$	0.311	Down-regulated
29	hsa-miR-518a-5p	-1.101	6.808	-4.164	$p < 0.001$	adj. $p < 0.001$	1.650	Down-regulated
30	hsa-miR-31	-1.098	6.194	-4.162	$p < 0.001$	adj. $p < 0.001$	1.643	Down-regulated
31	hsa-miR-938	-1.097	5.408	-3.422	$p < 0.001$	adj. $p < 0.01$	-0.864	Down-regulated
32	hsa-miR-298	-1.094	5.944	-3.131	$p < 0.01$	adj. $p < 0.05$	-1.735	Down-regulated
33	hsa-miR-556-5p	-1.089	5.618	-3.232	$p < 0.01$	adj. $p < 0.01$	-1.441	Down-regulated
34	hsa-miR-518b	-1.085	5.477	-3.503	$p < 0.001$	adj. $p < 0.01$	-0.609	Down-regulated
35	hsa-miR-1291	-1.082	6.298	-4.449	$p < 0.001$	adj. $p < 0.001$	2.722	Down-regulated
36	hsa-miR-1278	-1.081	4.687	-3.216	$p < 0.01$	adj. $p < 0.01$	-1.487	Down-regulated
37	hsa-miR-639	-1.075	4.954	-3.479	$p < 0.001$	adj. $p < 0.01$	-0.684	Down-regulated
38	hsa-miR-548b-3p	-1.068	3.698	-2.693	$p < 0.01$	adj. $p < 0.05$	-2.916	Down-regulated
39	hsa-miR-33a	-1.061	5.893	-3.998	$p < 0.001$	adj. $p < 0.01$	1.053	Down-regulated
40	hsa-miR-302d*	-1.060	4.274	-3.223	$p < 0.01$	adj. $p < 0.01$	-1.468	Down-regulated

41	hsa-miR-549	-1.049	4.911	-3.287	$p < 0.001$	adj. $p < 0.01$	-1.277	Down-regulated
42	hsa-miR-455-3p	-1.048	6.709	-4.772	$p < 0.001$	adj. $p < 0.001$	4.003	Down-regulated
43	hsa-miR-130a*	-1.041	4.465	-2.829	$p < 0.01$	adj. $p < 0.05$	-2.567	Down-regulated
44	hsa-miR-373*	-1.041	3.894	-2.919	$p < 0.01$	adj. $p < 0.05$	-2.327	Down-regulated
45	hsa-miR-33b	-1.038	6.441	-3.999	$p < 0.001$	adj. $p < 0.01$	1.057	Down-regulated
46	hsa-miR-1471	-1.031	5.553	-2.783	$p < 0.01$	adj. $p < 0.05$	-2.686	Down-regulated
47	hsa-miR-487b	-1.024	5.003	-3.642	$p < 0.001$	adj. $p < 0.01$	-0.159	Down-regulated
48	hsa-miR-524-5p	-1.012	4.840	-3.449	$p < 0.001$	adj. $p < 0.01$	-0.779	Down-regulated
49	hsa-miR-518a-3p	-1.011	4.478	-2.871	$p < 0.01$	adj. $p < 0.05$	-2.456	Down-regulated
50	hsa-miR-196a*	-1.009	6.535	-4.286	$p < 0.001$	adj. $p < 0.001$	2.105	Down-regulated
51	hsa-miR-124	-1.007	5.545	-3.210	$p < 0.01$	adj. $p < 0.01$	-1.503	Down-regulated
52	hsa-miR-217	-1.005	6.707	-4.530	$p < 0.001$	adj. $p < 0.001$	3.039	Down-regulated
53	hsa-miR-507	1.003	2.920	2.512	$p < 0.05$	adj. $p < 0.05$	-3.358	Up-regulated
54	hsa-miR-30c-2*	1.006	4.585	2.597	$p < 0.05$	adj. $p < 0.05$	-3.155	Up-regulated
55	hsa-miR-125b-2*	1.009	5.220	3.005	$p < 0.01$	adj. $p < 0.05$	-2.090	Up-regulated
56	hsa-miR-548d-5p	1.015	2.133	2.608	$p < 0.01$	adj. $p < 0.05$	-3.128	Up-regulated
57	hsa-miR-22*	1.016	5.505	3.969	$p < 0.001$	adj. $p < 0.01$	0.953	Up-regulated
58	hsa-miR-1296	1.052	5.357	3.762	$p < 0.01$	adj. $p < 0.01$	0.239	Up-regulated
59	hsa-miR-548c-5p	1.053	2.794	2.615	$p < 0.01$	adj. $p < 0.05$	-3.111	Up-regulated
60	hsa-miR-548j	1.056	2.458	2.710	$p < 0.01$	adj. $p < 0.05$	-2.874	Up-regulated
61	hsa-miR-598	1.057	5.818	4.281	$p < 0.001$	adj. $p < 0.001$	2.086	Up-regulated
62	hsa-miR-632	1.066	4.382	3.018	$p < 0.01$	adj. $p < 0.05$	-2.055	Up-regulated
63	hsa-miR-637	1.066	3.667	2.722	$p < 0.01$	adj. $p < 0.05$	-2.844	Up-regulated
64	hsa-miR-140-5p	1.068	3.380	2.566	$p < 0.05$	adj. $p < 0.05$	-3.228	Up-regulated
65	hsa-miR-379	1.074	4.121	2.565	$p < 0.05$	adj. $p < 0.05$	-3.232	Up-regulated
66	hsa-miR-455-5p	1.084	4.537	2.693	$p < 0.01$	adj. $p < 0.05$	-2.917	Up-regulated
67	hsa-miR-651	1.090	3.657	2.575	$p < 0.05$	adj. $p < 0.05$	-3.208	Up-regulated
68	hsa-miR-1825	1.095	5.525	3.492	$p < 0.01$	adj. $p < 0.01$	-0.645	Up-regulated
69	hsa-miR-593	1.099	3.050	2.650	$p < 0.001$	adj. $p < 0.05$	-3.024	Up-regulated
70	hsa-miR-340*	1.101	3.304	2.961	$p < 0.01$	adj. $p < 0.05$	-2.211	Up-regulated
71	hsa-miR-9	1.119	2.492	2.664	$p < 0.01$	adj. $p < 0.05$	-2.989	Up-regulated
72	hsa-miR-615-3p	1.120	4.638	3.447	$p < 0.001$	adj. $p < 0.01$	-0.786	Up-regulated
73	hsa-miR-454*	1.134	4.159	2.974	$p < 0.01$	adj. $p < 0.05$	-2.178	Up-regulated
74	hsa-miR-135a	1.137	1.744	3.145	$p < 0.01$	adj. $p < 0.05$	-1.694	Up-regulated
75	hsa-miR-376a*	1.146	2.199	2.936	$p < 0.01$	adj. $p < 0.05$	-2.281	Up-regulated
76	hsa-miR-1279	1.163	1.808	3.289	$p < 0.01$	adj. $p < 0.01$	-1.271	Up-regulated
77	hsa-miR-133b	1.163	3.403	3.036	$p < 0.01$	adj. $p < 0.05$	-2.006	Up-regulated
78	hsa-miR-34a	1.166	3.185	3.044	$p < 0.01$	adj. $p < 0.05$	-1.982	Up-regulated
79	hsa-miR-30b*	1.170	3.060	2.872	$p < 0.01$	adj. $p < 0.05$	-2.452	Up-regulated
80	hsa-let-7f-2*	1.175	3.989	3.038	$p < 0.01$	adj. $p < 0.05$	-1.999	Up-regulated
81	hsa-miR-196b	1.181	1.710	3.291	$p < 0.01$	adj. $p < 0.01$	-1.265	Up-regulated
82	hsa-miR-330-5p	1.204	3.320	3.137	$p < 0.01$	adj. $p < 0.05$	-1.717	Up-regulated
83	hsa-miR-892b	1.206	4.553	3.461	$p < 0.001$	adj. $p < 0.01$	-0.741	Up-regulated

84	hsa-miR-130b*	1.212	1.583	3.677	$p < 0.001$	adj. $p < 0.01$	-0.045	Up-regulated
85	hsa-miR-302a	1.218	2.296	3.036	$p < 0.01$	adj. $p < 0.05$	-2.006	Up-regulated
86	hsa-miR-515-3p	1.221	2.816	3.225	$p < 0.01$	adj. $p < 0.01$	-1.462	Up-regulated
87	hsa-miR-335*	1.239	2.951	3.006	$p < 0.01$	adj. $p < 0.05$	-2.088	Up-regulated
88	hsa-miR-629	1.249	5.810	3.134	$p < 0.01$	adj. $p < 0.05$	-1.725	Up-regulated
89	hsa-miR-509-3p	1.261	2.463	3.141	$p < 0.01$	adj. $p < 0.05$	-1.707	Up-regulated
90	hsa-miR-581	1.280	4.184	2.893	$p < 0.01$	adj. $p < 0.05$	-2.397	Up-regulated
91	hsa-miR-23a*	1.280	3.122	3.152	$p < 0.01$	adj. $p < 0.05$	-1.673	Up-regulated
92	hsa-miR-29b-1*	1.285	2.094	3.528	$p < 0.001$	adj. $p < 0.01$	-0.531	Up-regulated
93	hsa-miR-1246	1.291	2.258	3.174	$p < 0.01$	adj. $p < 0.05$	-1.611	Up-regulated
94	hsa-miR-644	1.299	4.449	3.311	$p < 0.01$	adj. $p < 0.01$	-1.203	Up-regulated
95	hsa-miR-876-3p	1.312	3.344	3.346	$p < 0.01$	adj. $p < 0.01$	-1.097	Up-regulated
96	hsa-miR-133a	1.316	4.754	4.035	$p < 0.001$	adj. $p < 0.01$	1.185	Up-regulated
97	hsa-miR-613	1.322	3.438	3.146	$p < 0.01$	adj. $p < 0.05$	-1.692	Up-regulated
98	hsa-miR-1290	1.326	1.974	3.653	$p < 0.001$	adj. $p < 0.01$	-0.125	Up-regulated
99	hsa-miR-1262	1.328	1.753	3.875	$p < 0.001$	adj. $p < 0.01$	0.624	Up-regulated
100	hsa-miR-1299	1.337	4.564	3.431	$p < 0.001$	adj. $p < 0.01$	-0.835	Up-regulated
101	hsa-miR-26b*	1.339	3.203	3.339	$p < 0.01$	adj. $p < 0.01$	-1.118	Up-regulated
102	hsa-miR-26a-2*	1.347	1.942	3.581	$p < 0.001$	adj. $p < 0.01$	-0.358	Up-regulated
103	hsa-let-7b*	1.348	4.130	3.484	$p < 0.001$	adj. $p < 0.01$	-0.670	Up-regulated
104	hsa-miR-196a	1.358	2.557	3.242	$p < 0.01$	adj. $p < 0.01$	-1.410	Up-regulated
105	hsa-miR-1238	1.385	4.403	3.466	$p < 0.001$	adj. $p < 0.01$	-0.724	Up-regulated
106	hsa-miR-382	1.392	4.174	3.296	$p < 0.01$	adj. $p < 0.01$	-1.250	Up-regulated
107	hsa-miR-556-3p	1.395	2.931	3.351	$p < 0.01$	adj. $p < 0.01$	-1.081	Up-regulated
108	hsa-miR-520d-3p	1.402	3.698	2.652	$p < 0.01$	adj. $p < 0.05$	-3.019	Up-regulated
109	hsa-miR-199b-5p	1.402	4.191	3.788	$p < 0.001$	adj. $p < 0.01$	0.326	Up-regulated
110	hsa-miR-520f	1.410	2.225	3.633	$p < 0.001$	adj. $p < 0.01$	-0.191	Up-regulated
111	hsa-miR-126*	1.436	2.350	3.843	$p < 0.001$	adj. $p < 0.01$	0.512	Up-regulated
112	hsa-miR-450a	1.442	2.756	3.504	$p < 0.001$	adj. $p < 0.01$	-0.605	Up-regulated
113	hsa-miR-576-5p	1.475	1.675	4.426	$p < 0.001$	adj. $p < 0.001$	2.635	Up-regulated
114	hsa-miR-373	1.505	2.581	3.999	$p < 0.001$	adj. $p < 0.01$	1.058	Up-regulated
115	hsa-miR-578	1.508	3.408	3.545	$p < 0.001$	adj. $p < 0.01$	-0.475	Up-regulated
116	hsa-miR-302d	1.529	1.895	4.177	$p < 0.001$	adj. $p < 0.001$	1.700	Up-regulated
117	hsa-miR-98	1.534	3.467	3.452	$p < 0.001$	adj. $p < 0.01$	-0.771	Up-regulated
118	hsa-miR-483-3p	1.553	4.188	3.850	$p < 0.001$	adj. $p < 0.01$	0.538	Up-regulated
119	hsa-miR-135b	1.583	2.348	4.063	$p < 0.001$	adj. $p < 0.01$	1.286	Up-regulated
120	hsa-miR-522	1.602	3.454	4.056	$p < 0.001$	adj. $p < 0.01$	1.262	Up-regulated
121	hsa-miR-154	1.611	2.385	4.261	$p < 0.001$	adj. $p < 0.001$	2.009	Up-regulated
122	hsa-miR-190b	1.664	3.221	3.822	$p < 0.001$	adj. $p < 0.01$	0.443	Up-regulated
123	hsa-miR-942	1.689	3.952	4.124	$p < 0.001$	adj. $p < 0.01$	1.508	Up-regulated
124	hsa-miR-488	1.699	2.988	4.176	$p < 0.001$	adj. $p < 0.001$	1.695	Up-regulated
125	hsa-miR-508-3p	1.706	2.549	4.188	$p < 0.001$	adj. $p < 0.001$	1.740	Up-regulated
126	hsa-miR-1282	1.713	2.832	3.548	$p < 0.001$	adj. $p < 0.01$	-0.467	Up-regulated

127	hsa-miR-601	1.784	3.720	4.606	$p < 0.001$	adj. $p < 0.001$	3.336	Up-regulated
128	hsa-miR-609	1.862	2.954	4.310	$p < 0.001$	adj. $p < 0.01$	2.193	Up-regulated
129	hsa-miR-520c-3p	1.881	2.549	5.074	$p < 0.001$	adj. $p < 0.001$	5.256	Up-regulated
130	hsa-miR-204	1.888	1.907	5.066	$p < 0.001$	adj. $p < 0.001$	5.224	Up-regulated
131	hsa-miR-132*	1.903	1.998	5.588	$p < 0.001$	adj. $p < 0.001$	7.517	Up-regulated
132	hsa-miR-1468	1.934	2.410	4.844	$p < 0.001$	adj. $p < 0.001$	4.296	Up-regulated
133	hsa-miR-302b	2.046	3.315	4.964	$p < 0.001$	adj. $p < 0.001$	4.792	Up-regulated
134	hsa-miR-29c*	2.098	3.130	5.587	$p < 0.001$	adj. $p < 0.001$	7.510	Up-regulated
135	hsa-miR-1258	2.143	2.273	5.550	$p < 0.001$	adj. $p < 0.001$	7.347	Up-regulated
136	hsa-miR-142-3p	2.167	3.487	5.143	$p < 0.001$	adj. $p < 0.001$	5.553	Up-regulated
137	hsa-miR-375	2.263	3.704	5.602	$p < 0.001$	adj. $p < 0.001$	7.579	Up-regulated