

Table SI. List of genes in groups b and c in Fig. 3A.

Group	SUID	Gene name
b	3569	LIPG
b	4595	MCOLN1
b	1014	IGSF6
b	5110	CCR1
b	8183	LPCAT2
b	6139	FPR1
b	3579	TNC
b	5889	SIGLEC9
b	10753	SIGLEC7
b	3330	FKBP15
b	2051	CKLF
b	8195	CSK
b	2053	ARRB2
b	2054	COTL1
b	8202	TSPO
b	5901	LRRC25
b	4625	TMEM150B
b	2065	APOBR
b	5907	PIK3AP1
b	5399	AGTRAP
b	2071	PILRA
b	10780	AIF1
b	287	ATP6V0B
b	8224	MCEMP1
b	803	ITGAE
b	8232	CYBA
b	4392	OASL
b	4651	C1orf162
b	10796	CLEC7A
b	8236	CLEC4A
b	7983	RGS19
b	8239	VAV1
b	817	PRSS21
b	5684	GPSM3
b	821	IFNLR1
b	8245	LGALS9
b	10294	PYCARD
b	5688	PFKFB4
b	315	CLEC12A
b	2110	STXBP2
b	5951	GMIP
b	5695	MS4A7
b	8259	STAC3
b	4675	ITGB2
b	5956	BST1
b	3142	SDC4
b	8262	CYBB
b	2119	WAS
b	842	CD101
b	2122	ARL11
b	1611	PRR13
b	10827	TFEC
b	2124	SELPLG
b	333	CD52
b	2125	P2RY13
b	10830	PTPRO
b	2127	ALOX5AP
b	8019	DOCK8
b	4693	EMILIN2

Table SI. Continued.

Group	SUID	Gene name
b	8023	CSF2RA
b	5719	SIRPB2
b	2136	PLBD1
b	856	STAC
b	2137	ARHGAP30
b	2139	TLR8
b	8286	PTPN6
b	5983	RAC2
b	5987	SLC16A3
b	5731	SHKBP1
b	612	SIGLEC10
b	10852	SPN
b	8292	CD300LF
b	7781	CD33
b	1893	CD37
b	5734	QPCT
b	5993	GMFG
b	5739	NCF4
b	7787	PSTPIP1
b	623	NLRP12
b	3440	BTK
b	3441	PRAM1
b	625	FCER1G
b	626	LILRA6
b	884	MYD88
b	6775	MSR1
b	6263	AMICA1
b	637	LILRB4
b	5245	NCKAP1L
b	8835	NLRC4
b	7046	ACSL4
b	3720	SYK
b	5768	LAT2
b	399	LTA4H
b	8335	SNX20
b	4240	GPD1
b	5776	BIN2
b	5777	FERMT3
b	8338	SASH3
b	5779	ITGAM
b	8341	FCGR1B
b	5782	CORO1A
b	8342	FCGR1A
b	6808	CYP27A1
b	6040	C19orf38
b	1946	MYO1F
b	5787	ICAM3
b	668	AQP9
b	5793	TLR6
b	6050	LCP1
b	6818	FCGR3A
b	5797	TLR1
b	6054	HK3
b	678	FAM49B
b	8361	LST1
b	5803	MNDA
b	6828	SOWAHD
b	6062	MSRB1
b	6831	ACP5

Table SI. Continued.

Group	SUID	Gene name
b	5809	LILRA2
b	7347	HMGA1
b	3508	OSCAR
b	6068	GCA
b	6838	FBP1
b	5814	DOK3
b	10934	DBNL
b	6071	SELL
b	7607	C3AR1
b	6842	LAIR1
b	6844	TYROBP
b	5824	CEACAM4
b	6082	RASGRP4
b	5828	APBB1IP
b	6084	GLT1D1
b	6853	APOC1
b	6086	CR1
b	5832	CD53
b	10440	NAGK
b	9161	ADTRP
b	6090	CDA
b	6093	SPI1
b	9679	TRPM2
b	9425	NPL
b	8913	CSTA
b	5845	NAMPT
b	6870	GCHFR
b	6871	RMDN3
b	10200	FGD2
b	6114	BCL2A1
b	2532	ZFYVE26
b	6117	HCK
c	9968	PLAT
c	1778	NOCT
c	4596	ZFP36
c	10485	CCNH
c	1784	PLAUR
c	2296	RND3
c	4344	USP12
c	1017	PHLDA1
c	4602	TICAM1
c	7164	MT2A
c	4606	PROK2
c	4609	IRAK2
c	6659	TSC22D2
c	1797	NFKB1
c	5895	PLEK
c	4616	HIVEP2
c	4617	SSH1
c	1803	PFDN2
c	4620	ICAM1
c	4621	MACC1
c	5390	GEM
c	1551	IL7
c	1809	MT1A
c	6417	TNFRSF10D
c	1812	TNFAIP6
c	6420	TNFAIP8
c	4632	PPP1R18

Table SI. Continued.

Group	SUID	Gene name
c	4635	LRRC32
c	4636	G0S2
c	10015	BCL10
c	4639	RNF122
c	4385	IQSEC3
c	11810	RABGEF1
c	1828	CXCL8
c	6436	PLSCR1
c	1831	CXCL1
c	1576	RANGAP1
c	1835	TNFAIP3
c	1839	KDM6B
c	1842	SLC39A14
c	6453	SAT1
c	4664	BCL3
c	1850	PANX1
c	11066	PNPLA8
c	4667	RELB
c	1852	PNP
c	1853	NFKB2
c	1855	GADD45B
c	1602	EMP1
c	6979	C8orf4
c	4676	MED24
c	4679	TNIP1
c	4425	RALGDS
c	5706	ATP2B1
c	6474	FAS
c	1869	IVNS1ABP
c	9806	IFRD1
c	1870	NFKBIA
c	10062	OTULIN
c	334	ZBTB21
c	2383	FLNC
c	9298	ELL2
c	850	HBEGF
c	1620	NFKBIZ
c	1878	LIF
c	10071	MLKL
c	11609	ADM
c	7516	MSX1
c	1628	SOCS3
c	4446	STC2
c	1888	RND1
c	7011	EIF1B
c	1892	ZC3H12A
c	6245	EHD1
c	7525	IER3
c	7015	NCOA7
c	4456	DUSP5
c	6505	PITPNB
c	4462	PATL1
c	1646	PFKFB3
c	6513	AGO2
c	7540	TNFSF9
c	8309	BRAF
c	4471	NDUFS2
c	7544	REL
c	4473	LARP6

Table SI. Continued.

Group	SUID	Gene name
c	8570	AKAP12
c	6522	CREB5
c	11387	TRIB1
c	4476	ETS2
c	10109	SERPINH1
c	6271	CDC37
c	6272	DOCK2
c	9089	ITGA5
c	386	SPSB1
c	1922	HSPB8
c	10116	CHORDC1
c	6533	CSRP2
c	1926	TFPI2
c	1672	RELT
c	6284	ADGRG1
c	4492	CDKN1A
c	4494	CFLAR
c	9106	VMP1
c	146	ATF3
c	4499	CD83
c	8343	NR4A3
c	1944	IL32
c	7067	PTGES
c	1951	SERPINB9
c	4511	FGF2
c	7073	ELF3
c	1953	ABTB2
c	1698	LITAF
c	1954	ARID5A
c	7332	DNAJC25
c	1701	BIRC3
c	7078	IL1B
c	6568	ATP13A3
c	6569	RAB21
c	4521	MAP2K3
c	4523	BHLHE41
c	1708	LIMK2
c	7084	CCL20
c	6574	CHD1
c	6576	SBNO2
c	1968	IRF1
c	1970	GCH1
c	1715	GADD45A
c	1719	NINJ1
c	440	HIVEP3
c	4539	YBX3
c	1723	SELE
c	1726	RIPK2
c	1727	CH25H
c	10176	BAG3
c	10178	DNAJA4
c	1731	PLK3
c	453	UAP1
c	1735	RGS16
c	1738	PIM1
c	6604	PPRC1
c	1741	SEMA7A
c	4558	PPP1R15B
c	1742	RNF19B

Table SI. Continued.

Group	SUID	Gene name
c	4561	ARL5B
c	1746	C2CD4B
c	1747	STC1
c	9171	ITGA2
c	1752	UPP1
c	6104	HIST1H2BJ
c	6108	SOD2
c	4572	ACHE
c	1756	HAS2
c	4575	ADAMTS4
c	1761	CXCL3
c	4577	VCAM1
c	9186	UCK2
c	1764	DAPK3
c	9188	SPHK1
c	1765	ADAMTS9
c	485	RELL1
c	4582	UGCG
c	3559	FOSL1
c	1768	ELL
c	1770	NUAK2
c	4586	MAFF
c	1771	THBS1
c	4588	NFKBID
c	4589	NFKBIE
c	10478	RLF
c	1774	DCUN1D3

SUID, set user identification.

Table SII. The transcription factor affinity prediction table of the genes in group b and c in Fig. 3A.

Group	Rank	Matrix	Transcription factor	Association score	P-value
b	1	ETS_Q6	Elf-1, Elfr	11.744	0.00E+00
b	2	ETS_Q4	Erf, Elf-1	9.117	0.00E+00
b	3	ELF1_Q6	Elf-1, Elf-1	8.283	0.00E+00
b	4	PEA3_Q6	Pea3	7.47	0.00E+00
b	5	PU1_Q6	Pu.1	7.154	0.00E+00
b	6	ETS1_B	C-ets-1	7.069	0.00E+00
b	7	USF_01	Usf1	5.642	8.20E-05
b	8	USF2_Q6	Usf2a	5.624	8.30E-05
b	9	USF_C	Usf1	5.607	8.40E-05
b	10	STAT6_02	Stat6	5.502	1.12E-04
c	1	NFKB_Q6_01	Nf- kb1, Nf-kb2	9.879	0.00E+00
c	2	NFKAPPAB65_01	Rela	9.805	0.00E+00
c	3	NFKAPPAB_01	Rela	9.179	0.00E+00
c	4	CREL_01	C-rel	8.455	0.00E+00
c	5	CREBP1_Q2	Atf-2, Cre-bp1	6.13	2.20E-05
c	6	AP2_Q3	Ap-2 α , Ap-2 α	5.412	1.40E-04
c	7	CREB_Q2	Creb	5.408	1.40E-04
c	8	CREB_01	Creb, Δ creb	5.371	1.51E-04
c	9	AP2_Q6_01	Ap-2, Ap-2 α	5.317	1.74E-04
c	10	CREB_Q4	Creb	5.118	2.73E-04

Elf-1, ephrin A2; Pea3, ETS variant 4; Ou.1, Spi-1 proto-oncogene; Usf, upstream transcription factor; Stat6, signal transducer and activator of transcription 6; Nf, nuclear factor; Ap-2, activating enhancer-binding protein 2; CREB, cAMP response element-binding protein.