

Supplementary Table 3. Detailed information of the immune-related genes in ImmPort database.

Symbol	Database ID	Name	Synonyms	Chromosome
AZGP1	563	alpha-2-glycoprotein 1, zinc-binding	ZA2G ZAG	7
B2M	567	beta-2-microglobulin	IMD43	15
CALR	811	calreticulin	CRT HEL-S-99n RO SSA cC1qR	19
CANX	821	calnexin	CNX IP90 P90	5
CD1A	909	CD1a molecule	CD1 FCB6 HTA1 R4 T6	1
CD1B	910	CD1b molecule	CD1 CD1A R1	1
CD1C	911	CD1c molecule	BDCA1 CD1 CD1A R7	1
CD1D	912	CD1d molecule	CD1A R3 R3G1	1
CD1E	913	CD1e molecule	CD1A R2	1
CD4	920	CD4 molecule	CD4mut	12
CD8A	925	CD8a molecule	CD8 Leu2 p32	2
CD8B	926	CD8b molecule	CD8B1 LEU2 LY3 LYT3 P37	2
CD74	972	CD74 molecule	DHLAG HLADG II Ia-GAMMA p33	5
CREB1	1385	cAMP responsive element binding protein 1	CREB CREB-1	2
CTSB	1508	cathepsin B	APPS CPSB RECEUP	8
CTSE	1510	cathepsin E	CATE	1
CTSL	1514	cathepsin L	CATL CTSL1 MEP	9
CTSS	1520	cathepsin S	-	1
FCER1G	2207	Fc fragment of IgE receptor Ig	FCRG	1
FCGRT	2217	Fc fragment of IgG receptor and transporter	FCRN alpha-chain	19
PDIA3	2923	protein disulfide isomerase family A member 3	ER60 ERp57 ERp60 ERp61 GRP57 GRP58 HEL-S-269 HEL-S-93n HsT17083 P58 PI-PLC	15
HFE	3077	homeostatic iron regulator	HFE1 HH HLA-H MVC7 TFQTL2	6
HLA-A	3105	major histocompatibility complex, class I, A	HLAA	6

HLA-B	3106	major histocompatibility complex, class I, B	AS B-4901 HLAB	6
HLA-C	3107	major histocompatibility complex, class I, C	D6S204 HLA-JY3 HLAC HLC-C MHC PSORS1	6
HLA-DMA	3108	major histocompatibility complex, class II, DM alpha	D6S222E DMA HLADM RING6	6
HLA-DMB	3109	major histocompatibility complex, class II, DM beta	D6S221E RING7	6
HLA-DOA	3111	major histocompatibility complex, class II, DO alpha	HLA-DNA HLA-DZA HLADZ	6
HLA-DOB	3112	major histocompatibility complex, class II, DO beta	DOB HLA_DOB	6
HLA-DPA1	3113	major histocompatibility complex, class II, DP alpha 1	DP(W3) DP(W4) DPA1 HLA-DP1A HLA-DPB1 HLADP HLASB PLT1	6
HLA-DPB1	3115	major histocompatibility complex, class II, DP beta 1	DPB1 HLA-DP HLA-DP1B HLA-DPB	6
HLA-DQA1	3117	major histocompatibility complex, class II, DQ alpha 1	CELIAC1 DQA1 DQA1 HLA-DQA	6
HLA-DQA2	3118	major histocompatibility complex, class II, DQ alpha 2	DC-alpha DX-ALPHA HLA-DCA HLA-DXA HLADQA2	6
HLA-DQB1	3119	major histocompatibility complex, class II, DQ beta 1	CELIAC1 HLA-DQB IDDM1	6
HLA-DRA	3122	major histocompatibility complex, class II, DR alpha	HLA-DRA1	6
HLA-DRB1	3123	major histocompatibility complex, class II, DR beta 1	DRB1 HLA-DR1B HLA-DRB SS1	6

HLA-DRB3	3125	major histocompatibility complex, class II, DR beta 3	DRB3 HLA-DPB1 HLA-DR1B HLA-DR3B	6
HLA-DRB4	3126	major histocompatibility complex, class II, DR beta 4	DR4 DRB4 HLA-DR4B HLA-DRB4*	6
HLA-DRB5	3127	major histocompatibility complex, class II, DR beta 5	-	6
HLA-E	3133	major histocompatibility complex, class I, E	HLA-6.2 QA1	6
HLA-F	3134	major histocompatibility complex, class I, F	CDA12 HLA-5.4 HLA-CDA12 HLAF	6
HLA-G	3135	major histocompatibility complex, class I, G	MHC-G	6
HLA-H	3136	major histocompatibility complex, class I, H (pseudogene)	HLAHP	6
MR1	3140	major histocompatibility complex, class I-related	HLALS	1
HSPA1A	3303	heat shock protein family A (Hsp70) member 1A	HEL-S-103 HSP70-1 HSP70-1A HSP70-2 HSP70.1 HSP70.2 HSP70I HSP72 HSPA1	6
HSPA1B	3304	heat shock protein family A (Hsp70) member 1B	HSP70-1 HSP70-1B HSP70-2 HSP70.1 HSP70.2 HSP72 HSPA1 HSX70	6
HSPA1L	3305	heat shock protein family A (Hsp70) member 1 like	HSP70-1L HSP70-HOM HSP70T hum70t	6
HSPA2	3306	heat shock protein family A (Hsp70) member 2	HSP70-2 HSP70-3	14
HSPA4	3308	heat shock protein family A (Hsp70) member 4	APG-2 HEL-S-5a HS24/P52 HSPH2 RY hsp70 hsp70R	5

HSPA5	3309	heat shock protein family A (Hsp70) member 5	BIP GRP78 HEL-S-89n MIF2	9
HSPA6	3310	heat shock protein family A (Hsp70) member 6	HSP70B'	1
HSPA8	3312	heat shock protein family A (Hsp70) member 8	HEL-33 HEL-S-72p HSC54 HSC70 HSC71 HSP71 HSP73 HSPA10 LAP-1 LAP1 NIP71	11
HSP90AA1	3320	heat shock protein 90 alpha family class A member 1	EL52 HEL-S-65p HSP86 HSP89A HSP90A HSP90N HSPC1 HSPCA HSPCAL1 HSPCAL4 HSPN Hsp103 Hsp89 Hsp90 LAP-2 LAP2	14
HSP90AB1	3326	heat shock protein 90 alpha family class B member 1	D6S182 HSP84 HSP90B HSPC2 HSPCB	6
ICAM1	3383	intercellular adhesion molecule 1	BB2 CD54 P3.58	19
IFNA1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFNA@ leIF D	9
IFNA2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9
IFNA4	3441	interferon alpha 4	IFN-alpha4a INFA4	9
IFNA5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9
IFNA6	3443	interferon alpha 6	IFN-alphaK	9
IFNA7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9
IFNA8	3445	interferon alpha 8	IFN-alphaB	9
IFNA10	3446	interferon alpha 10	IFN-alphaC	9
IFNA13	3447	interferon alpha 13	-	9
IFNA14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9
IFNA16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9
IFNA17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9
IFNA21	3452	interferon alpha 21	IFN-alphaI LeIF F leIF-F	9

IFNG	3458	interferon gamma killer cell	IFG IFI	12
KIR2DL1	3802	immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 1	CD158A KIR- K64 KIR221 KIR2D L3 NKAT NKAT- 1 NKAT1 p58.1	19
KIR2DL2	3803	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	CD158B1 CD158b NKAT- 6 NKAT6 p58.2	19
KIR2DL3	3804	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 3	CD158B2 CD158b GL183 KIR- 023GB KIR- K7b KIR- K7c KIR2DL KIR2 DS5 KIRCL23 NKA T NKAT2 NKAT2A NKAT2B p58	19
KIR2DL4	3805	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	CD158D G9P KIR- 103AS KIR- 2DL4 KIR103 KIR1 03AS	19
KIR2DS1	3806	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 1	CD158H CD158a p5 0.1	19
KIR2DS3	3808	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3	NKAT7	19
KIR2DS4	3809	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4	CD158I KIR- 2DS4 KIR1D KIR41 2 KKA3 NKAT- 8 NKAT8	19
KIR2DS5	3810	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 5	CD158G NKAT9	19

KIR3DL1	3811	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1	CD158E1 KIR KIR3DL1/S1 NKAT-3 NKAT3 NKB1 NKB1B	19
KIR3DL2	3812	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 2	3DL2 CD158K KIR-3DL2 NKAT-4 NKAT4 NKAT4B p140	19
KLRC1	3821	killer cell lectin like receptor C1	CD159A NKG2 NKG2A	12
KLRC2	3822	killer cell lectin like receptor C2	CD159c NKG2-C NKG2C	12
KLRC3	3823	killer cell lectin like receptor C3	NKG2-E NKG2E	12
KLRD1	3824	killer cell lectin like receptor D1	CD94	12
LTA	4049	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6
CIITA	4261	class II major histocompatibility complex transactivator	C2TA CIITAIV MH2C2TA NLRA	16
MICA	100507436	MHC class I polypeptide-related sequence A	MIC-A PERB11.1	6
MICB	4277	MHC class I polypeptide-related sequence B	PERB11.2	6
NFYA	4800	nuclear transcription factor Y subunit alpha	CBF-A CBF-B HAP2 NF-YA	6
NFYB	4801	nuclear transcription factor Y subunit beta	CBF-A CBF-B HAP3 NF-YB	12
NFYC	4802	nuclear transcription factor Y subunit gamma	CBF-C CBFC H1TF2A HAP5 HSM NF-YC	1
LGMN	5641	legumain	AEP LGMN1 PRSC1	14
PSMB8	5696	proteasome 20S subunit beta 8	ALDD D6S216 D6S216E JMP LMP7 NKJO PRAAS1 PSMB5i RING10	6
PSMC1	5700	proteasome 26S subunit, ATPase 1	P26S4 S4 p56	14
PSMC2	5701	proteasome 26S subunit, ATPase 2	MSS1 Nbla10058 S7	7

PSMC3	5702	proteasome 26S subunit, ATPase 3	TBP1	11
PSMC4	5704	proteasome 26S subunit, ATPase 4	MIP224 RPT3 S6 TBP-7 TBP7	19
PSMC5	5705	proteasome 26S subunit, ATPase 5	S8 SUG-1 SUG1 TBP10 TRIP1 p45 p45/SUG	17
PSMC6	5706	proteasome 26S subunit, ATPase 6	SUG2 p42	14
PSMD1	5707	proteasome 26S subunit, non-ATPase 1	P112 Rpn2 S1	2
PSMD2	5708	proteasome 26S subunit, non-ATPase 2	P97 RPN1 S2 TRAP2	3
PSMD3	5709	proteasome 26S subunit, non-ATPase 3	P58 RPN3 S3 TSTA2	17
PSMD4	5710	proteasome 26S subunit, non-ATPase 4	AF AF-1 ASF MCB1 Rpn10 S5A pUB-R5	1
PSMD5	5711	proteasome 26S subunit, non-ATPase 5	S5B	9
PSMD7	5713	proteasome 26S subunit, non-ATPase 7	MOV34 P40 Rpn8 S12	16
PSMD8	5714	proteasome 26S subunit, non-ATPase 8	HEL-S-91n HIP6 HYPF Nin1p Rpn12 S14 p31	19
PSMD10	5716	proteasome 26S subunit, non-ATPase 10	dJ889N15.2 p28 p28 (GANK)	X
PSMD11	5717	proteasome 26S subunit, non-ATPase 11	Rpn6 S9 p44.5	17
PSMD13	5719	proteasome 26S subunit, non-ATPase 13	HSPC027 Rpn9 S11 p40.5	11
PSME1	5720	proteasome activator subunit 1	HEL-S-129m IFI5111 PA28A PA28alpha REGal pha	14
PSME1	5720	proteasome activator subunit 1	HEL-S-129m IFI5111 PA28A PA28alpha REGal pha	14
PSME2	5721	proteasome activator subunit 2	PA28B PA28beta REGbeta	14
PSME2	5721	proteasome activator subunit 2	PA28B PA28beta REGbeta	14

RELB	5971	RELB proto-oncogene, NF-kB subunit	I-REL IMD53 IREL R EL-B	19
RFX5	5993	regulatory factor X5	-	1
RFXAP	5994	regulatory factor X associated protein	-	13
SLC10A2	6555	solute carrier family 10 member 2	ASBT IBAT ISBT N TCP2 PBAM	13
TAP1	6890	transporter 1, ATP binding cassette subfamily B member	ABC17 ABCB2 AP T1 D6S114E PSF- 1 PSF1 RING4 TAP 1*0102N TAP1N	6
TAP2	6891	transporter 2, ATP binding cassette subfamily B member	ABC18 ABCB3 AP T2 D6S217E PSF- 2 PSF2 RING11	6
TAPBP	6892	TAP binding protein	NGS17 TAPA TPN TPSN	6
THBS1	7057	thrombospondin 1	THBS THBS- 1 TSP TSP-1 TSP1	15
SEM1	7979	SEM1 26S proteasome complex subunit	C7orf76 DSS1 ECD SHFD1 SHFM1 SH SF1 Shfdg1	7
KLRC4	8302	killer cell lectin like receptor C4	NKG2-F NKG2F	12
AP3B1	8546	adaptor related protein complex 3 subunit beta 1	ADTB3 ADTB3A H PS HPS2 PE	5
RFXANK	8625	regulatory factor X associated ankyrin containing protein	ANKRA1 BLS F141 50_1 RFX-B	19
PSMD6	9861	proteasome 26S subunit, non-ATPase 6	Rpn7 S10 SGA- 113M p42A p44S10	3
PSME3	10197	proteasome activator subunit 3	HEL-S- 283 Ki PA28- gamma PA28G PA2 8gamma REG- GAMMA	17
PSMD14	10213	proteasome 26S subunit, non-ATPase 14	PAD1 POH1 RPN11	2
CLEC4M	10332	C-type lectin domain family 4 member M	CD209L CD299 DC -SIGN2 DC- SIGNR DCSIGNR HP10347 L- SIGN LSIGN	19
IFI30	10437	IFI30 lysosomal thiol reductase	GILT IFI-30 IP- 30 IP30	19

PROCR	10544	protein C receptor	CCCA CCD41 EPCR	20
ADRM1	11047	adhesion regulating molecule 1	ARM-1 ARM1 GP110	20
ECPAS	23392	Ecm29 proteasome adaptor and scaffold	ECM29 KIAA0368	9
TRPC4AP	26133	transient receptor potential cation channel subfamily C member 4 associated protein	C20orf188 PPP1R158 TRRP4AP TRUSS	20
CD209	30835	CD209 molecule	CDSIGN CLEC4L DC-SIGN DC-SIGN1	19
UBXN1	51035	UBX domain protein 1	2B28 SAKS1 UBXD10	11
ERAP1	51752	endoplasmic reticulum aminopeptidase 1	A-LAP ALAP APPILS ARTS-1 ARTS1 ERAAP ERAAP1 PILS-AP PILSAP	5
TAPBPL	55080	TAP binding protein like	TAPBP-R TAPBPR	12
KIR2DL5A	57292	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 5A	CD158F KIR2DL5 KIR2DL5.1 KIR2DL5.3	19
ERAP2	64167	endoplasmic reticulum aminopeptidase 2	L-RAP LRAP	5
ULBP3	79465	UL16 binding protein 3	N2DL-3 NKG2DL3 RAET1N	6
ULBP2	80328	UL16 binding protein 2	ALCAN-alpha N2DL2 NKG2DL2 RAET1H RAET1L	6
ULBP1	80329	UL16 binding protein 1	N2DL-1 NKG2DL1 RAET1I	6
KIR3DL3	115653	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 3	CD158Z KIR3DL7 KIR44 KIRC1	19

RAET1E	135250	retinoic acid early transcript 1E	LETAL N2DL-4 NKG2DL4 RAET1E2 RL-4 ULBP4 bA350J20.7	6
RAET1L	154064	retinoic acid early transcript 1L	ULBP6	6
UBR1	197131	ubiquitin protein ligase E3 component n-recognin 1	JBS	15
RAET1G	353091	retinoic acid early transcript 1G	ULBP5	6
PDIA2	64714	protein disulfide isomerase family A member 2	PDA2 PDI PDIP PDIR	16
HAMP	57817	hepcidin antimicrobial peptide	HEPC HFE2B LEAP1 PLTR	19
PI3	5266	peptidase inhibitor 3	ESI SKALP WAP3 WFDC14 cementoin	20
CAMP	820	cathelicidin antimicrobial peptide	CAP-18 CAP18 CRAMP FALL-39 FALL39 HSD26 LL37	3
DEFB4A	1673	defensin beta 4A	BD-2 DEFB-2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8
PPBP	5473	pro-platelet basic protein	B-TG1 Beta-TG CTAP-III CTAP3 CTAPIII CXCL7 LA-PF4 LDGF MDGF NAP-2 PBP SCYB7 TC1 TC2 TGB TGB1 THBGB THBGB1	4
REG3G	130120	regenerating family member 3 gamma	LPPM429 PAPIB PAP-1B PAP1B PAPIB REG III REG-III UNQ429	2
CXCL14	9547	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP-2g MIP2G NJAC SCYB14	5
CXCL16	58191	C-X-C motif chemokine ligand 16	CXCLG16 SR-PSOX SRPSOX	17

SLPI	6590	secretory leukocyte peptidase inhibitor	ALK1 ALP BLPI HUSI HUSI-I MPI WAP4 WFDC4	20
CXCL8	3576	C-X-C motif chemokine ligand 8	GCP-1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4
CXCL10	3627	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg-2 gIP-10 mob-1	4
CXCL9	4283	C-X-C motif chemokine ligand 9	CMK Humig MIG SCYB9 crg-10	4
CXCL5	6374	C-X-C motif chemokine ligand 5	ENA-78 SCYB5	4
CXCL11	6373	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4
CXCL6	6372	C-X-C motif chemokine ligand 6	CKA-3 GCP-2 GCP2 SCYB6	4
CXCL1	2919	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSa MGSA-a NAP-3 SCYB1	4
CXCL12	6387	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10
CXCL13	10563	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BCA-1 BCA1 BLC BLR1L SCYB13	4
CXCL2	2920	C-X-C motif chemokine ligand 2	CINC-2a GRO2 GROb MGSA-b MIP-2a MIP2 MIP2A SCYB2	4
PF4	5196	platelet factor 4	CXCL4 PF-4 SCYB4	4
XCL1	6375	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM-1a SCM1 SCM1A SCYC1	1
CXCL3	2921	C-X-C motif chemokine ligand 3	CINC-2b GRO3 GROg MIP-2b MIP2B SCYB3	4

DEFB103B	55894	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD-3 HBD3 HBP-3 HBP3	8
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17
CCL1	6346	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISe TCA3	17
DEFB1	1672	defensin beta 1	BD1 DEFB-1 DEFB101 HBD1	8
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17
ELANE	1991	elastase, neutrophil expressed	ELA2 GE HLE HNE NE PMN-E SCN1	19
DEFB103A	414325	defensin beta 103A	BD-3 DEFB-3 DEFB103 DEFB3 HBD3 HBP-3 HBP3	8
DEFA3	1668	defensin alpha 3	DEF3 HNP-3 HNP3 HP-3 HP3	8
DEFA1	1667	defensin alpha 1	DEF1 DEFA2 HNP-1 HP-1 HP1 MRS	8
TMSB10	9168	thymosin beta 10	MIG12 TB10	2
DEFA6	1671	defensin alpha 6	DEF6 HD-6	8
DEFA5	1670	defensin alpha 5	DEF5 HD-5	8
DEFA4	1669	defensin alpha 4	DEF4 HNP-4 HP-4 HP4	8
LCN2	3934	lipocalin 2	24p3 MSFI NGAL p25	9
LCN1	3933	lipocalin 1	PMFA TLC TP VEGP	9
COLEC10	10584	collectin subfamily member 10	3MC3 CL-34 CLL1	8
BPI	671	bactericidal permeability increasing protein	BPIFD1 rBPI	20
S100A9	6280	S100 calcium binding protein A9	60B8AG CAGB CFAG CGLB L1AG LIAG MAC387 MIF MRP14 NIF P14	1
S100A8	6279	S100 calcium binding protein A8	60B8AG CAGA CFAG CGLA CP-10 L1Ag MA387 MIF MRP8 NIF P8	1
DCD	117159	dermcidin	AIDD DCD-1 DSEP HCAP PIF	12

LCN6	158062	lipocalin 6	LCN5 UNQ643 hLcn5	9
S100A12	6283	S100 calcium binding protein A12	CAAF1 CAGC CGRP ENRAGE MRP6 MRP6 p6	1
HTN3	3347	histatin 3	HIS2 HTN2 HTN5 PB	4
LCN8	138307	lipocalin 8	EP17 LCN5	9
DEFA1B	728358	defensin alpha 1B C-C motif	HNP-1 HP-1 HP1	8
CCR10	2826	chemokine receptor 10	GPR2	17
CELA1	1990	chymotrypsin like elastase 1	ELA1	12
DEFB106A	245909	defensin beta 106A	BD-6 DEFB-6 DEFB106	8
PENK	5179	proenkephalin BPI fold	PE PENK-A	8
BPIFC	254240	containing family C	BPIL2	22
MMP12	4321	matrix metalloproteinase 12	HME ME MME MP-12	11
BPIFB6	128859	BPI fold containing family B member 6	BPIL3 LPLUNC6	20
LEAP2	116842	liver enriched antimicrobial peptide 2	LEAP-2	5
SFTPD	6441	surfactant protein D	COLEC7 PSP-D SFTP4 SP-D	10
LCN9	392399	lipocalin 9	HEL129	9
BPIFB2	80341	BPI fold containing family B member 2	BPIL1 C20orf184 PLUNC2 RYSR dJ726C3.2	20
PTGDS	5730	prostaglandin D2 synthase	L-PGDS LPGDS PDS PGD2 PGDS PGDS2	9
TMSB4X	7114	thymosin beta 4 X-linked	FX PTMB4 TB4X TMSB4	X
PGLYRP1	8993	peptidoglycan recognition protein 1	PGLYRP PGRP PGRP-S PGRPS TAG7 TNFSF3L	19
ZC3HAV1	56829	zinc finger CCCH-type containing, antiviral 1	ARTD13 FLB6421 PARP13 ZAP ZC3H2 ZC3HDC2	7
TMSB15A	11013	thymosin beta 15a	TMSB15 TMSB15B TMSL8 TMSNB Tb15 TbNB	X

S100B	6285	S100 calcium binding protein B	NEF S100 S100-B S100beta	21
S100A13	6284	S100 calcium binding protein A13	-	1
S100A6	6277	S100 calcium binding protein A6	2A9 5B10 CABP CACY PRA S10A6	1
DEFB119	245932	defensin beta 119	DEFB-19 DEFB-20 DEFB120 DEFB20 ESC42-RELA ESC42-RELB	20
DEFB107A	245910	defensin beta 107A	BD-7 DEFB-7 DEFB107	8
DEFB105A	245908	defensin beta 105A	BD-5 DEFB-5 DEFB105	8
SERPIND1	3053	serpin family D member 1	D22S673 HC2 HCF2 HCII HLS2 LS2 T HPH10	22
DEFB129	140881	defensin beta 129	C20orf87 DEFB-29 DEFB29 bA530N10.3 hBD-29	20
DEFB127	140850	defensin beta 127	C20orf73 DEF-27 DEFB-27 DEFB27 bA530N10.2 hBD-27	20
S100P	6286	S100 calcium binding protein P	MIG9	4
S100A7	6278	S100 calcium binding protein A7	PSOR1 S100A7c	1
DEFB104A	140596	defensin beta 104A	BD-4 DEFB-4 DEFB104 DEFB4 hBD-4	8
DEFB126	81623	defensin beta 126	C20orf8 DEFB-26 DEFB26 HBD26 bA530N10.1 hBD-26	20
DEFB106B	503841	defensin beta 106B	BD-6 DEFB-6	8
DEFB104B	503618	defensin beta 104B	BD-4 DEFB-4 hBD-4	8
DEFB107B	503614	defensin beta 107B	HsT21816	8
PGLYRP3	114771	peptidoglycan recognition protein 3	PGLYRPIalpha PGRP-Ialpha PGRPIA	1
PGLYRP2	114770	peptidoglycan recognition protein 2	HMFT0141 PGLYRPL PGRP-L PGRPL TAGL-like tagL tagL-alpha tagL-beta	19

S100A10	6281	S100 calcium binding protein A10	42C ANX2L ANX2LG CAL1L CLP11 Ca[1] GP11 P11 p10	1
S100A2	6273	S100 calcium binding protein A2	CAN19 S100L	1
DEFB125	245938	defensin beta 125	DEFB-25	20
DEFB123	245936	defensin beta 123	DEFB-23 DEFB23 ESC42-RELD	20
DEFB105B	504180	defensin beta 105B	BD-5 DEFB-5BD-32 DEFB-	8
DEFB132	400830	defensin beta 132	32 DEFB32 HEL-75 KFL827 UNQ827	20
BPIFB3	359710	BPI fold containing family B member 3	C20orf185 LPLUNC3 RYA3	20
LCN12	286256	lipocalin 12	-	9
PGLYRP4	57115	peptidoglycan recognition protein 4	PGLYRPIbeta PGRP-beta PGRPIB SBB167	1
S100A11	6282	S100 calcium binding protein A11	HEL-S-43 MLN70 S100C	1
S100A5	6276	S100 calcium binding protein A5	S100D	1
S100A3	6274	S100 calcium binding protein A3	S100E	1
S100A1	6271	S100 calcium binding protein A1	S100 S100-alpha S100A	1
DEFB128	245939	defensin beta 128	DEFB-28 DEFB28 hBD-28	20
DEFB108B	245911	defensin beta 108B	DEFB-8 hBD-8	11
HTN1	3346	histatin 1	HIS1	4
LMBR1L	55716	limb development membrane protein 1 like	LIMR	12
S100A7A	338324	S100 calcium binding protein A7A	NICE-2 NICE2 S100A15 S100A7L1 S100A7f	1
DEFB118	117285	defensin beta 118	C20orf63 DEFB-18 ESC42 ESP13.6	20
COLEC12	81035	collectin subfamily member 12	CLP1 NSR2 SCARA4 SRCL	18
TMSB4Y	9087	thymosin beta 4 Y-linked	TB4Y	Y
DEFB131A	644414	defensin beta 131A	DEFB-31 DEFB131	4

DEFB134	613211	defensin beta 134	-	8
DEFB130A	245940	defensin beta 130A	DEFB-30 DEFB130 DEFB130L DEFB30	8
DEFB124	245937	defensin beta 124	DEFB-24	20
DEFB121	245934	defensin beta 121	DEFB21 ESC42RELC	20
DEFB116	245930	defensin beta 116	DEFB-16	20
DEFB115	245929	defensin beta 115	DEFB-15	20
DEFB114	245928	defensin beta 114	DEFB-14 DEFB14	6
DEFB113	245927	defensin beta 113	DEFB-13	6
DEFB112	245915	defensin beta 112	DEFB-12	6
DEFB110	245913	defensin beta 110	DEFB-10 DEFB-11 DEFB111	6
TMSB15B	286527	thymosin beta 15B	TMSB15A TMSL8 TMSNB Tbeta15b	X
DEFB133	403339	defensin beta 133	-	6
S100Z	170591	S100 calcium binding protein Z	Gm625 S100-zeta	5
MAVS	57506	mitochondrial antiviral signaling protein	CARDIF IPS-1 IPS1 VISA	20
TMSB4XP1	7117	TMSB4X pseudogene 8	TMSL3	4
S100A14	57402	S100 calcium binding protein A14	BCMP84 S100A15	1
LCN10	414332	lipocalin 10	-	9
S100A16	140576	S100 calcium binding protein A16	AAG13 DT1P1A7 S100F	1
DEFB136	613210	defensin beta 136	DEFB137	8
DEFB135	613209	defensin beta 135	DEFB136	8
DEFB117	245931	defensin beta 117 (pseudogene)	DEFB-17	20
DEFB110	245913	defensin beta 110	DEFB-10 DEFB-11 DEFB111	6
ZC3HAV1I	92092	zinc finger CCCH-type containing, antiviral 1 like	C7orf39	7
S100A7L2	645922	S100 calcium binding protein A7 like 2	S100a7b	1
MBL3P	50639	mannose-binding lectin family member 3, pseudogene	COLEC2 MBL	10
DEFB4B	100289462	defensin beta 4B	DEFB4P	8

BPIFB4	149954	BPI fold containing family B member 4	C20orf186 LPLUNC4 RY2G5 dJ726C3.5	20
IFNAR1	3454	interferon alpha and beta receptor subunit 1	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21
AZU1	566	azurocidin 1	AZAMP AZU CAP37 HBP HUMAZUR NAZC hHBP	19
DEFB131B	100129216	defensin beta 131B	-	11
DEFA1A3	613253	defensin alpha 1 and alpha 3, variable copy number locus	DEFA1 DEFA3 DEFT1P	8
LCN1P1	286310	lipocalin 1 pseudogene 1	LCN1L1 bA430N14.2	9
S100G	795	S100 calcium binding protein G	CABP CABP1 CABP9K CALB3	X
DEFA7P	724067	defensin alpha 7, pseudogene	DEFA7	8
DEFB130B	100133267	defensin beta 130B	-	8
DEFB108F	100133128	defensin beta 108F (pseudogene)	DEFB108P5	4
DEFB131C	100128174	defensin beta 131C (pseudogene)	-	8
TCHHL1	126637	trichohyalin like 1	S100A17 THHL1	1
TINAGL1	64129	tubulointerstitial nephritis antigen like 1	ARG1 LCN7 LIECG3 TINAGRP	1
IFNGR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6
SLC22A17	51310	solute carrier family 22 member 17	24p3R BOCT BOIT NGALR NGALR2 NGALR3 hBOIT	14
WFIKKN1	117166	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 1	C16orf12 RJD2 WFD20A WFIKKN	16
WFDC2	10406	WAP four-disulfide core domain 2	EDDM4 HE4 WAP5 dJ461P17.6	20
IL6	3569	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7
UMODL1	89766	uromodulin like 1	-	21

TGFB1	7040	transforming growth factor beta 1	CED DPD1 IBDIM DE LAP TGF- beta1 TGFB TGFbet a	19
PF4V1	5197	platelet factor 4 variant 1	CXCL4L1 CXCL4V 1 PF4- ALT PF4A SCYB4 V1	4
MMP9	4318	matrix metalloproteinase 9	CLG4B GELB MA NDP2 MMP-9	20
ANOS1	3730	anosmin 1	ADMLX HH1 HHA KAL KAL1 KALIG- 1 KMS WFDC19	X
TLR4	7099	toll like receptor 4	ARMD10 CD284 T LR-4 TOLL	9
IFNG	3458	interferon gamma	IFG IFI	12
SPAG11B	10407	sperm associated antigen 11B	EDDM2B EP2 EP2 C EP2D HE2 HE2C SPAG11 SPAG11A	8
A2M	2	alpha-2-macroglobulin	A2MD CPAMD5 F WP007 S863-7	12
CTSL	1514	cathepsin L	CATL CTSL1 MEP CVID12 EBP- 1 KBF1 NF-kB NF- kB1 NF-kappa- B1 NF-kappaB NF- kappabeta NFKB- p105 NFKB- p50 NFkappaB	9
NFKB1	4790	nuclear factor kappa B subunit 1	A3G ARCD ARP- 9 ARP9 CEM- 15 CEM15 MDS019 bK150C2.7 dJ494G 10.1	4
APOBEC3C	60489	apolipoprotein B mRNA editing enzyme catalytic subunit 3G	I-15P I-BABP I- BALB I- BAP ILBP ILBP3 IL LBP	22
FABP6	2172	fatty acid binding protein 6	ACUG BLAU BLA US CARD15 CD CL R16.3 IBD1 NLRC2 NOD2B PSORAS1 YAOS	5
NOD2	64127	nucleotide binding oligomerization domain containing 2	COLEC1 HSMBPC MBL MBL2D MBP MBP- C MBP1 MBPD	16
MBL2	4153	mannose binding lectin 2		10

			COLEC4 PSAP PSP	
			-	
SFTP A1	653509	surfactant protein A1	A PSPA SFTP1 SFTP A1B SP-A SP-A1 SP-A1 beta SP-A1 delta SP-A1 epsilon SP-A1 gamma SPA SPA1	10
RBP1	5947	retinol binding protein 1	CRABP-I CRBP CRBP1 CRBPI RBPC	3
TLR2	7097	toll like receptor 2	CD282 TIL4	4
SLC40A1	30061	solute carrier family 40 member 1	FPN1 HFE4 IREG1 MST079 MSTP079 MTP1 SLC11A3	2
PLAU	5328	plasminogen activator, urokinase	ATF BDPLT5 QPD UPA URK u-PA	10
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2
PAEP	5047	progesterone associated endometrial protein 1	GD GdA GdF GdS PAEG PEP PP14 ZIF-	9
HJV	148738	hemojuvelin BMP co-receptor	HFE2 HFE2A JH RGM C	1
MUC5AC	4586	mucin 5AC, oligomeric mucus/gel-forming	MUC5 TBM leB mucin	11
CTSS	1520	cathepsin S	-	1
OBP2A	29991	odorant binding protein 2A	LCN13 OBP OBP2C OBPIIa hOBPIIa	9
PLTP	5360	phospholipid transfer protein	BPIFE HDL CQ9	20
MX1	4599	MX dynamin like GTPase 1	IFI-78K IFI78 MX MxA IncMX1-215	21
DDX58	23586	DEXD/H-box helicase 58	RIG-I RIG1 RIGI RLR-1 SGMRT2	9
IFNL1	282618	interferon lambda 1	IL-29 IL29	19
IRF3	3661	interferon regulatory factor 3	I IAE7	19
			COLEC5 PSAP PSP	
			-	
SFTP A2	729238	surfactant protein A2	A PSPA SFTP1 SFTP A2B SP-2A SP-A SPA2 SPAII	10
LPA	4018	lipoprotein(a)	AK38 APOA LP	6

LBP	3929	lipopolysaccharide binding protein	BPIFD2	20
RBP4	5950	retinol binding protein 4	MCOPCB10 RDCCAS COLEC4 PSAP PSP -	10
SFTPA1	653509	surfactant protein A1	A PSPA SFTP1 SFTPA1B SP-A SP-A1 SP-A1 beta SP-A1 delta SP-A1 epsilon SP-A1 gamma SPA SPA1	10
NOX4	50507	NADPH oxidase 4	KOX KOX-1 RENOX	11
LTF	4057	lactotransferrin	GIG12 HEL110 HLF2 LF	3
IFNB1	3456	interferon beta 1	IFB IFF IFN-beta IFNB	9
RBP5	83758	retinol binding protein 5	CRBP-III CRBP3 CRBP3III HRBPiso	12
FABP7	2173	fatty acid binding protein 7	B-FABP BLBP FABPB MRG	6
FABP5	2171	fatty acid binding protein 5	E-FABP EFABP KFA BP PA-FABP PAFABP	8
FABP3	2170	fatty acid binding protein 3	FABP11 H-FABP M-FABP MDGI O-FABP	1
FABP2	2169	fatty acid binding protein 2	FABPI I-FABP	4
FABP4	2167	fatty acid binding protein 4	A-FABP AFABP ALBP HEL-S-104 aP2	8
R3HDML	140902	R3H domain containing like	dJ881L22.3	20
BPIFA3	128861	BPI fold containing family A member 3	C20orf71 SPLUNC3	20
BPIFB1	92747	BPI fold containing family B member 1	C20orf114 LPLUNC1	20
OASL	8638	2'-5'-oligoadenylate synthetase like	OASL1 OASLd TRIP-14 TRIP14 p59 OASL p59-OASL p59OASL	12
CRABP2	1382	cellular retinoic acid binding protein 2	CRABP-II RBP6	1

CRABP1	1381	cellular retinoic acid binding protein 1	CRABP CRABP-I CRABPI RBP5	15
RBP7	116362	retinol binding protein 7	CRABP4 CRBP4 C RBPIV	1
DUOX1	53905	dual oxidase 1	LNOX1 NOXEF1 T HOX1	15
OBP2B	29989	odorant binding protein 2B	LCN14 OBPIIb	9
RBP2	5948	retinol binding protein 2	CRABP- II CRBP2 CRBPII R BPC2	3
LCN15	389812	lipocalin 15	PRO6093 UNQ2541	9
CETP	1071	cholesteryl ester transfer protein	BPIFF HDLCQ10	16
FABP12	646486	fatty acid binding protein 12	-	8
FABP9	646480	fatty acid binding protein 9	PERF PERF15 T- FABP TLBP	8
BPIFA1	51297	BPI fold containing family A member 1	LUNX NASG PLU NC SPLUNC1 SPU RT bA49G10.5	20
LCNL1	401562	lipocalin like 1	-	9
C8G	733	complement C8 gamma chain	C8C	9
SPAG11A	653423	sperm associated antigen 11A	EDDM2A HE2	8
PI15	51050	peptidase inhibitor 15	CRISP8 P24TI P25T I GP91-	8
NOX1	27035	NADPH oxidase 1	2 MOX1 NOH- 1 NOH1	X
PMP2	5375	peripheral myelin protein 2	CMT1G FABP8 M- FABP MP2 P2	8
APOD	347	apolipoprotein D	-	3
ORM2	5005	orosomucoid 2	AGP-B AGP- B' AGP2	9
ORM1	5004	orosomucoid 1	AGP-A AGP1 HEL- S-153w ORM	9
TNF	7124	tumor necrosis factor	DIF TNF- alpha TNFA TNFSF 2 TNLG1F	6
CTSG	1511	cathepsin G	CATG CG	14
PRTN3	5657	proteinase 3	ACPA AGP7 C- ANCA CANCA MB N MBT NP- 4 NP4 P29 PR- 3 PR3	19

MAPK1	5594	mitogen-activated protein kinase 1	ERK ERK-2 ERK2 ERT1 MAPK2 P42MAPK PRKM1 PRKM2 p38 p40 p41 p41mapk p42-MAPK	22
PML	5371	PML nuclear body scaffold	MYL PP8675 RNF71 TRIM19	15
AEN	64782	apoptosis enhancing nuclease	ISG20L1 pp12744	15
CYBB	1536	cytochrome b-245 beta chain	AMCBX2 CGD GP91-1 GP91-PHOX GP91PHOX IMD34 NOX2 p91-PHOX	X
BPIFA2	140683	BPI fold containing family A member 2	C20orf70 PSP SPLUNC2 bA49G10.1	20
ISG20	3669	interferon stimulated exonuclease gene 20	CD25 HEM45	15
BCL3	602	BCL3 transcription coactivator	BCL4 D19S37	19
ISG20L2	81875	interferon stimulated exonuclease gene 20 like 2	HSD38	1
NOX5	79400	NADPH oxidase 5	-	15
NOX3	50508	NADPH oxidase 3	GP91-3 MOX-2	6
DUOX2	50506	dual oxidase 2	LNOX2 NOXEF2 P138-TOX TDH6 THOX2	15
TLR3	7098	toll like receptor 3	CD283 IIAE2	4
TFRC	7037	transferrin receptor	CD71 IMD46 T9 TFR TFR1 TR TRFR p90	3
IFIH1	64135	interferon induced with helicase C domain 1	AGS7 Hlcd IDDM19 MDA-5 MDA5 RLR-2 SGMRT1	2
LRP1	4035	LDL receptor related protein 1	A2MR APOER APR CD91 IGFBP-3R IGFBP3R IGFBP3R1 KPA LRP LRP1A TGFB5	12
TRIM5	85363	tripartite motif containing 5	RNF88 TRIM5alpha	11
IDO1	3620	indoleamine 2,3-dioxygenase 1	IDO IDO-1 INDO	8

GDF15	9518	growth differentiation factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGFB	19
NEDD4	4734	NEDD4 E3 ubiquitin protein ligase	NEDD4-1 RPF1	15
ADIPOQ	9370	adiponectin, C1Q and collagen domain containing	ACDC ACRP30 ADIPQTL1 ADPN APM-1 APM1 GBP28	3
STAT3	6774	signal transducer and activator of transcription 3	ADMIO ADMIO1 APRF HIES	17
STAT1	6772	signal transducer and activator of transcription 1	CANDF7 IMD31A IMD31B IMD31C ISGF-3 STAT91	2
IFNL2	282616	interferon lambda 2	IL-28A IL28A	19
SOCS3	9021	suppressor of cytokine signaling 3	ATOD4 CIS3 Cish3 SOCS-3 SSI-3 SSI3	17
SEMG1	6406	semenogelin 1	CT103 SEMG SGI dJ172H20.2	20
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3
CCL20	6364	C-C motif chemokine ligand 20	CKb4 Exodus LARC MIP-3-alpha MIP-3a MIP3A SCYA20 ST38	2
SOCS1	8651	suppressor of cytokine signaling 1	CIS1 CISH1 JAB SOCS-1 SSI-1 SSI1 TIP-3 TIP3	16
RNASEL	6041	ribonuclease L	PRCA1 RNS4	1
IRF1	3659	interferon regulatory factor 1	IRF-1 MAR	5
IL15	3600	interleukin 15	IL-15	4
APOBEC3I	200316	apolipoprotein B mRNA editing enzyme catalytic subunit 3F	A3F ARP8 BK150C2.4.MRNA KA6	22
PLAAT4	5920	phospholipase A and acyltransferase 4	HRASLS4 HRSL4 PLA1/2-3 PLAAT-4 RARRES3 RIG1 TIG3	11
CHIT1	1118	chitinase 1	CHI3 CHIT CHITD	1

IFNA1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFNA@ leIF D	9
CD40	958	CD40 molecule	Bp50 CDW40 TNFRSF5 p50	20
TLR7	51284	toll like receptor 7	TLR7-like	X
PPIA	5478	peptidylprolyl isomerase A	CYPA CYPH HELS-69p	7
HFE	3077	homeostatic iron regulator	HFE1 HH HLA-H MVC7 TFQTL2	6
ZYX	7791	zyxin	ESP-2 HED-2	7
NLRX1	79671	NLR family member X1	CLR11.3 DLNB26 NOD26 NOD5 NOD9	11
PGC	5225	progastricin	PEPC PGII	6
VEGFA	7422	vascular endothelial growth factor A	MVCD1 VEGF VPF	6
IKBKE	9641	inhibitor of nuclear factor kappa B kinase subunit epsilon	IKK-E IKK-i IKKE IKKI	1
ISG15	9636	ISG15 ubiquitin like modifier	G1P2 IFI15 IMD38 P17 UCRP hUCRP	1
DHX58	79132	DExH-box helicase 58	D11LGP2 D11lgp2e LGP2 RLR-3	17
TNFAIP3	7128	TNF alpha induced protein 3	A20 AISBL OTUD7C TNFA1P2	6
TFR2	7036	transferrin receptor 2	HFE3 TFRC2	7
FCN2	2220	ficolin 2	EBP-37 FCNL P35 ficolin-2	9
MUC4	4585	mucin 4, cell surface associated	ASGP HSA276359 MUC-4	3
F2R	2149	coagulation factor II thrombin receptor	CF2R HTR PAR-1 PAR1 TR	5
ELN	2006	elastin	ADCL1 SVAS WBS WS	7
IL27	246778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16
MAPT	4137	microtubule associated protein tau	DDPAC FTDP-17 MAPTL MSTD MTBT1 MTBT2 PPND PPP1R103 TAU	17
LYZ	4069	lysozyme	LYZF1 LZM	12

CCL5	6352	C-C motif chemokine ligand 5	D17S136E RANTE S SCYA5 SIS-delta SISd TCP228 e oCP	17
LEP	3952	leptin	LEPD OB OBS	7
CYLD	1540	CYLD lysine 63 deubiquitinase	BRSS CDMT CYL D1 CYLDI EAC MF T MFT1 SBS TEM USPL2	16
KLKB1	3818	kallikrein B1	KLK3 PKK PKKD P PK	4
CST4	1472	cystatin S	-	20
CSRP1	1465	cysteine and glycine rich protein 1	CRP CRP1 CSRP C YRP D1S181E HEL -141 HEL-S-286	1
MAPK14	1432	mitogen-activated protein kinase 14	CSBP CSBP1 CSBP 2 CSPB1 EXIP Mxi 2 PRKM14 PRKM1 5 RK SAPK2A p38 p38ALPHA	6
JUN	3725	Jun proto-oncogene, AP-1 transcription factor subunit	AP-1 AP1 c- Jun cJUN p39	1
ITGAV	3685	integrin subunit alpha V	CD51 MSK8 VNRA VTNR	2
IRF5	3663	interferon regulatory factor 5	SLEB10	7
CCR6	1235	C-C motif chemokine receptor 6	BN-1 C-C CKR- 6 CC-CKR-6 CCR- 6 CD196 CKR- L3 CKRL3 CMKBR 6 DCR2 DRY6 GPR 29 GPRCY4 STRL2 2	6
IL12B	3593	interleukin 12B	CLMF CLMF2 IL- 12B IMD28 IMD29 NKSF NKSF2	5
TLR8	51311	toll like receptor 8	CD288	X
GNLY	10578	granulysin	D2S69E LAG- 2 LAG2 NKG5 TLA 519	2
CD81	975	CD81 molecule	CVID6 S5.7 TAPA1 TSPAN28	11
EIF2AK2	5610	eukaryotic translation initiation factor 2 alpha kinase 2	EIF2AK1 LEUDEN PKR PPP1R83 PRK R	2
APOM	55937	apolipoprotein M	G3a HSPC336 NG2 0 apo-M	6

CACYBP	27101	calcyclin binding protein	GIG5 PNAS-107 S100A6BP SIP	1
NOD1	10392	nucleotide binding oligomerization domain containing 1	CARD4 CLR7.1 NLRC1	7
MAPK8	5599	mitogen-activated protein kinase 8	JNK JNK-46 JNK1 JNK1A2 JNK21B1/2 PRKM8 SAPK1 SAPK1c	10
MAPK3	5595	mitogen-activated protein kinase 3	ERK-1 ERK1 ERT2 HS44KDAP HUMKER1A P44ERK1 P44MAPK PRKM3 p44-ERK1 p44-MAPK	16
BST2	684	bone marrow stromal cell antigen 2	CD317 TETHERIN	19
BPHL	670	biphenyl hydrolase like	BPH-RP MCNAA VACVASE	6
PLA2G2A	5320	phospholipase A2 group IIA	MOM1 PLA2 PLA2B PLA2L PLA2S PLAS1 sPLA2	1
GRN	2896	granulin precursor	CLN11 GEP GP88 PCDGF PEPI PGRN	17
NEWENTR	192343	-	-	-
PDGFRA	5156	platelet derived growth factor receptor alpha	CD140A PDGFR-2 PDGFR2	4
GNAI1	2770	G protein subunit alpha i1	Gi	7
WNT5A	7474	Wnt family member 5A	hWNT5A	3
FURIN	5045	furin, paired basic amino acid cleaving enzyme	FUR PACE PCSK3 SPC1	15
ADAR	103	adenosine deaminase RNA specific	ADAR1 AGS6 DRADA DSH DSRAD G1P1 IFI-4 IFI4 K88DSRBP P136	1
TYK2	7297	tyrosine kinase 2	IMD35 JTK1	19
NOS2	4843	nitric oxide synthase 2	HEP-NOS INOS NOS NOS2A	17

TRAF3	7187	TNF receptor associated factor 3	CAP-1 CAP1 CD40bp CR AF1 IIAE5 LAP1 RN F118	14
TPT1	7178	tumor protein, translationally-controlled 1	HRF TCTP p02 p23	13
TPM2	7169	tropomyosin 2	AMCD1 DA1 DA2B DA2B4 HEL-S-273 NEM4 TMSB	9
NEO1	4756	neogenin 1	IGDCC2 NGN NTN 1R2	15
AHNAK	79026	AHNAK nucleoprotein	AHNAKRS PM227	11
TLR1	7096	toll like receptor 1	CD281 TIL TIL. LPRS5 rsc786	4
TK2	7084	thymidine kinase 2	MTDPS2 MTTK PE OB3 SCA31	16
PRDX2	7001	peroxiredoxin 2	HEL-S-2a NKEF-B NKEFB PRP PRX 2 PRXII PTX1 TDP X1 TPX1 TSA	19
MX2	4600	MX dynamin like GTPase 2	MXB	21
FGF2	2247	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4
FGA	2243	fibrinogen alpha chain	Fib2	4
TCF7L2	6934	transcription factor 7 like 2	TCF-4 TCF4	10
F2RL1	2150	F2R like trypsin receptor 1	GPR11 PAR2	5
TKFC	26007	triokinase and FMN cyclase	DAK NET45 TKFC D	11
MSR1	4481	macrophage scavenger receptor 1	CD204 SCARA1 SR -A SR-AI SR-AII SR-AIII SRA phSR1 ph SR2	8
NFKBIZ	64332	NFKB inhibitor zeta	IKBZ INAP MAIL	3
LMBR1	64327	limb development membrane protein 1	ACHP C7orf2 DIF1 4 LSS PPD2 THYP TPT ZRS	7
EPPIN	57119	epididymal peptidase inhibitor	CT71 CT72 SPINL W1 WAP7 WFDC7 dJ461P17.2	20
SRC	6714	SRC proto-oncogene, non-receptor tyrosine kinase	ASV SRC1 THC6 c-SRC p60-Src	20

MPO	4353	myeloperoxidase	-	17
ELAVL1	1994	ELAV like RNA binding protein 1	ELAV1 HUR Hua MeiG	19
ROBO3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPPS2 RBI1 RBI2 GPS RBI1 RBI2	11
SP1	6667	Sp1 transcription factor	-	12
SOD1	6647	superoxide dismutase 1	ALS ALS1 HEL-S-44 IPOA SOD STAH HP hSod1 homodimer	21
PDF	64146	peptide deformylase, mitochondrial	-	16
DLL4	54567	delta like canonical Notch ligand 4	AOS6 delta4 hdelta2	15
ECD	11319	ecdysoneless cell cycle regulator	GCR2 HSGT1 SGT1	10
SLC11A1	6556	solute carrier family 11 member 1	LSH NRAMP NRAMP1	2
DMBT1	1755	deleted in malignant brain tumors 1	GP340 SAG SALSA muclin	10
STING1	340061	stimulator of interferon response cGAMP interactor 1	ERIS MITA MPYS NET23 SAVI STING STING-beta TMEM173 hMITA hSTING	5
SKIV2L	6499	Ski2 like RNA helicase	170A DDX13 HLP SKI2 SKI2W SKIV2 SKIV2L1 THES2	6
SEMG2	6407	semenogelin 2	SGII	20
LTA	4049	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6
DES	1674	desmin	CDCD3 CSM1 CSM2 LGMD1D LGMD1E LGMD2R	2
DCK	1633	deoxycytidine kinase	-	4
DAXX	1616	death domain associated protein	BING2 DAP6 EAP1 SMIM40	6
TNFRSF10	8797	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR-1 TRAILR1	8

TNFRSF10	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAIL-2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8
EED	8726	embryonic ectoderm development	COGIS HEED WAI1	11
CCL4	6351	C-C motif chemokine ligand 4	ACT2 AT744.1 G-26 HC21 LAG-1 LAG1 MIP-1-beta MIP1B MIP1B1 SCYA2 SCYA4	17
LIMS1	3987	LIM zinc finger domain containing 1	PINCH PINCH-1 PINCH1	2
LALBA	3906	lactalbumin alpha	LYZG	12
APOBEC3I	164668	apolipoprotein B mRNA editing enzyme catalytic subunit 3H	A3H ARP-10 ARP10	22
TMPRSS6	164656	transmembrane serine protease 6	IRIDA MT2	22
SPINK5	11005	serine peptidase inhibitor Kazal type 5	LEKTI LETKI NETS NS VAKTI	5
MARCO	8685	macrophage receptor with collagenous structure	SCARA2 SR-A6	2
BECN1	8678	beclin 1	ATG6 VPS30 beclin 1	17
TNFSF11	8600	TNF superfamily member 11	CD254 ODF OPGL OPTB2 RANKL TNLG6B TRANCE hRANKL2 sOdf	13
KNG1	3827	kininogen 1	BDK BK HMWK KNG	3
CSK	1445	C-terminal Src kinase	-	15
KLRK1	22914	killer cell lectin like receptor K1	CD314 D12S2489E KLR NKG2-D NKG2D	12
KCNH2	3757	potassium voltage-gated channel subfamily H member 2	ERG-1 ERG1 HERG HERG1 Kv11.1 LQT2 SQT1	7

JUND	3727	JunD proto-oncogene, AP-1 transcription factor subunit	AP-1	19
JAK1	3716	Janus kinase 1	JAK1A JAK1B JTK3	1
CREB1	1385	cAMP responsive element binding protein 1	CREB CREB-1	2
CLDN4	1364	claudin 4	CPE-R CPEP CPETR CPETR1 WBSCR8 hCPE-R	7
CCL28	56477	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5
RNASE3	6037	ribonuclease A family member 3	ECP RAF1 RNS3	14
RN7SL1	6029	RNA component of signal recognition particle 7SL1	7L1a 7SL RN7SL RNSRP1	14
IRF7	3665	interferon regulatory factor 7	IMD39 IRF-7 IRF-7H IRF7A IRF7B IRF7C IRF7H	11
IREB2	3658	iron responsive element binding protein 2	ACO3 IRE-BP2 IRE-BP2 IRP2 IRP2AD NDCAMA	15
ILK	3611	integrin linked kinase	HEL-S-28 ILK-1 ILK-2 P59 p59ILK	11
IL18	3606	interleukin 18	IGIF IL-18 IL-1g IL1F4	11
IL17A	3605	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6
LTB4R	1241	leukotriene B4 receptor	BLT1 BLTR CMKR1 GPR16 LTB4R1 LTBR1 P2RY7 P2Y7	14
APOBEC3L	200315	apolipoprotein B mRNA editing enzyme catalytic subunit 3A	A3A ARP3 PHRBN bK150C2.1	22
MASP2	10747	mannan binding lectin serine peptidase 2	MAP19 MASP-2 MASP1P1 sMAP	1
TRIM27	5987	tripartite motif containing 27	RFP RNF76	6

RELA	5970	RELA proto-oncogene, NF-kB subunit	CMCU NFKB3 p65	11
IL7R	3575	interleukin 7 receptor	CD127 CDW127 IL-7R-alpha IL7RA ILRA	5
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2
PTX3	5806	pentraxin 3	TNFAIP5 TSG-14	3
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21
IFN1@	3438	-	IFNA	9
SYTL1	84958	synaptotagmin like 1	JFC1 SLP1	1
APOBEC3C	27350	apolipoprotein B mRNA editing enzyme catalytic subunit 3C	A3C APOBEC1L ARDC2 ARDC4 ARP5 PBI bK150C2.3	22
DDX17	10521	DEAD-box helicase 17	P72 RH70	22
PTGS2	5743	prostaglandin-endoperoxide synthase 2	COX-2 COX2 GRIPGHS PGG/HS PGHS-2 PHS-2 hCox-2	1
HTR1A	3350	5-hydroxytryptamine receptor 1A	5-HT-1A 5-HT1A 5HT1a ADRB2RL1 ADRBRL1 G-21 PFMCD	5
SEPTIN7	989	septin 7	CDC10 CDC3 NBLA02942 SEPT7 SEPT7A	7
CD40LG	959	CD40 ligand	CD154 CD40L HIGM1 IGM IMD3 TBAM TNFSF5 TRAP gp39 hCD40L	X
CD14	929	CD14 molecule	-	5
CD8A	925	CD8a molecule	CD8 Leu2 p32	2
CD4	920	CD4 molecule	CD4mut	12
MASP1	5648	mannan binding lectin serine peptidase 1	3MC1 CRARF CARRF1 MAP1 MASP MASP3 MAp44 PRSS5 RaRF	3
PROC	5624	protein C, inactivator of coagulation factors Va and VIIIa	APC PC PROC1 THPH3 THPH4	2
MAP2K2	5605	mitogen-activated protein kinase kinase 2	CFC4 MAPKK2 MEK2 MKK2 PRKMK2	19

MAP2K1	5604	mitogen-activated protein kinase kinase 1	CFC3 MAPKK1 MEK1 MKK1 PRKMK1	15
HRG	3273	histidine rich glycoprotein	HPRG HRGP THPH11 CAP43 CMT4D DRG-1 DRG1 GC4 HMSNL NDR1 NMSL PROXY1 RIT42 RTP TARG1 TDD5	3
NDRG1	10397	N-myc downstream regulated 1	IRF-9 ISGF3 ISGF3G p48	8
IRF9	10379	interferon regulatory factor 9	GPSTAF50 RNF94 STAF50	14
TRIM22	10346	tripartite motif containing 22	GPR69A p40	11
LANCL1	10314	LanC like 1	PPX-PP4 PP4C PPH3 PP4 PPX	2
PPP4C	5531	phosphatase 4 catalytic subunit	HMOX1D HO-1 HSP32 bK286B10	16
HMOX1	3162	heme oxygenase 1	HMG-1 HMG1 HMG3 SBP-1	22
HMGB1	3146	high mobility group box 1	AS B-4901 HLAB	13
HLA-B	3106	major histocompatibility complex, class I, B	RAE1	6
RNASE7	84659	ribonuclease A family member 7	MOAT-B MOATB MRP4	14
ABCC4	10257	ATP binding cassette subfamily C member 4	DFNB39 F-TCF HGFB HPTA SF	13
HGF	3082	hepatocyte growth factor	GON-10 HD1 KDAC1 RPD3 RPD3L1	7
HDAC1	3065	histone deacetylase 1	CRF2/12 IFNLR IL-28R1 IL28RA LICR2	1
IFNLR1	163702	interferon lambda receptor 1	MMTRA1B	1
PLSCR1	5359	phospholipid scramblase 1	IMD43	3
B2M	567	beta-2-microglobulin	BTBD25 IMD60	15
BACH2	60468	BTB domain and CNC homolog 2		6

TANK	10010	TRAF family member associated NFKB activator	I-TRAF ITRAF TRAF2	2
PIK3CG	5294	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3p110gamma p120-PI3K	7
ARRB1	408	arrestin beta 1	ARB1 ARR1	11
RSAD2	91543	radical S-adenosyl methionine domain containing 2	2510004L01Rik cig33 cig5 vig1	2
STAB2	55576	stabilin 2	FEEL2 FELE-2 FELL2 FEX2 HARE SCARH1	12
TBK1	29110	TANK binding kinase 1	FTDALS4 IIAE8 NAK T2K	12
PDYN	5173	prodynorphin	ADCA PENKB SCA23	20
PDGFRB	5159	platelet derived growth factor receptor beta	CD140B IBGC4 IMF1 JTK12 KOGS PDGFR PDGFR-1 PDGFR1 PENTT	5
PDCD1	5133	programmed cell death 1	CD279 PD-1 PD1 SLEB2 hPD-1 hPD-1 hSLE1	2
PCSK2	5126	proprotein convertase subtilisin/kexin type 2	NEC 2 NEC-2 NEC2 PC2 SPC2	20
PCSK1	5122	proprotein convertase subtilisin/kexin type 1	BMIQ12 NEC1 PC1 PC3 SPC3	5
ARG2	384	arginase 2	-	14
AQP9	366	aquaporin 9	AQP-9 HsT17287 SSC1 T17287	15
FASLG	356	Fas ligand	ALPS1B APT1LG1 APTL CD178 CD95L CD95L FASL TNFSF6 TNLG1A	1
APOH	350	apolipoprotein H	B2G1 B2GP1 BG	17
BIRC5	332	baculoviral IAP repeat containing 5	API4 EPR-1	17
ANXA6	309	annexin A6	ANX6 CBP68 CPB-II p68 p70	5

IL22	50616	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL-23 TIFa zcyto18	12
VTN	7448	vitronectin	V75 VN VNT	17
VIM	7431	vimentin	-	10
VCAM1	7412	vascular cell adhesion molecule 1	CD106 INCAM-100	1
PRDX1	5052	peroxiredoxin 1	MSP23 NKEFA NKEFA PAG PAGA PAGB PRX1 PRXI TDPX2	1
GFAP	2670	glial fibrillary acidic protein	ALXDRD	17
GBP2	2634	guanylate binding protein 2	-	1
ALB	213	albumin	HSA PRO0883 PRO0903 PRO1341	4
SLC29A3	55315	solute carrier family 29 member 3	ENT3 HCLAP HJD PHID	10
OAS1	4938	2'-5'-oligoadenylate synthetase 1	E18/E16 IFI-4 OIAS OIASI	12
AGER	177	advanced glycosylation end-product specific receptor	RAGE SCARJ1	6
UNC93B1	81622	unc-93 homolog B1, TLR signaling regulator	IIAE1 UNC93 UNC93B Unc-93B1	11
TNFSF4	7292	TNF superfamily member 4	CD134L CD252 GP34 OX-40L OX40L TNLG2B TXGP1	1
NOS1	4842	nitric oxide synthase 1	IHPS1 N-NOS NC-NOS NOS bNOS nNOS	12
ACTG1	71	actin gamma 1	ACT ACTG DFNA20 DFNA26 HEL-176	17
ACTA1	58	actin alpha 1, skeletal muscle	ACTA ASMA CFTD CFTD1 CFTDM MPFD NEM1 NEM2 NEM3 SHPM	1
ACO1	48	aconitase 1	ACONS HEL60 IREB1 IREBP IREBP1 IRP1	9
SERPINA3	12	serpin family A member 3	AACT ACT GIG24 GIG25	14

CXCR1	3577	C-X-C motif chemokine receptor 1	C-C C-C-CKR- 1 CD128 CD181 CD w128a CKR- 1 CMKAR1 IL8R1 I L8RA IL8RBA HCC-2 HMRP- 2B LKN- 1 LKN1 MIP-1 delta MIP-1D MIP- 5 MRP-2B NCC- 3 NCC3 SCYA15 S CYL3 SY15 CC-1 CC- 3 CKB1 HCC- 1 HCC-1(1- 74) HCC-1/HCC- 3 HCC- 3 MCIF NCC- 2 NCC2 SCYA14 S CYL2 SY14 ACT2 AT744.1 G- 26 HC21 LAG- 1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	2
CCL15	6359	C-C motif chemokine ligand 15	1 LKN1 MIP-1 delta MIP-1D MIP- 5 MRP-2B NCC- 3 NCC3 SCYA15 S CYL3 SY15 CC-1 CC- 3 CKB1 HCC- 1 HCC-1(1- 74) HCC-1/HCC- 3 HCC- 3 MCIF NCC- 2 NCC2 SCYA14 S CYL2 SY14 ACT2 AT744.1 G- 26 HC21 LAG- 1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	17
CCL14	6358	C-C motif chemokine ligand 14	1 LKN1 MIP-1 delta MIP-1D MIP- 5 MRP-2B NCC- 3 NCC3 SCYA15 S CYL3 SY15 CC-1 CC- 3 CKB1 HCC- 1 HCC-1(1- 74) HCC-1/HCC- 3 HCC- 3 MCIF NCC- 2 NCC2 SCYA14 S CYL2 SY14 ACT2 AT744.1 G- 26 HC21 LAG- 1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	17
CCL4	6351	C-C motif chemokine ligand 4	1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	17
CCL16	6360	C-C motif chemokine ligand 16	1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	17
CCL19	6363	C-C motif chemokine ligand 19	CKb11 ELC MIP- 3b MIP3B SCYA19	9
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP- 4 NCC- 1 NCC1 SCYA13 S CYL1	17
CCL18	6362	C-C motif chemokine ligand 18	AMAC- 1 AMAC1 CKb7 DC -CK1 DCCK1 MIP- 4 PARC SCYA18	17
CCL17	6361	C-C motif chemokine ligand 17	A-152E5.3 ABCD- 2 SCYA17 TARC	16
CCL26	10344	C-C motif chemokine ligand 26	IMAC MIP-4a MIP- 4alpha SCYA26 TS C-1	7

CCL22	6367	C-C motif chemokine ligand 22	A-152E5.1 ABCD-1 DC/B-CK MDC SCYA22 STCP-1	16
CCR3	1232	C-C motif chemokine receptor 3	C C CKR3 CC-CKR-3 CD193 CKR3 CKR3 CMKBR3	3
CCL28	56477	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5
CCL4L1	388372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LAG-1 LAG1 MIP-1-beta SCYA4L SCYA4L1 SCYA4L2	17
ACKR2	1238	atypical chemokine receptor 2	CCBP2 CCR10 CCR9 CMKBR9 D6 hD6	3
CCR7	1236	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17
CCL27	10850	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESKY SCYA27	9
CCR8	1237	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBRL2 CY6 GPRCY6 TER1	3
ACKR4	51554	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CRL1 CCXCKR CCX-CKR CKR-11 PPR1 VSHK1	3
CCR10	2826	C-C motif chemokine receptor 10	GPR2	17
CCL2	6347	C-C motif chemokine ligand 2	GDCF-2 HC11 HSMCR30 MCAF MCP-1 MCP1 SCYA2 SMC-CF	17
CCL21	6366	C-C motif chemokine ligand 21	6Ckine CKb9 ECL SCYA21 SLC TCA4	9
CCL7	6354	C-C motif chemokine ligand 7	FIC MARC MCP-3 MCP3 NC28 SCYA6 SCYA7	17

CCL5	6352	C-C motif chemokine ligand 5	D17S136E RANTE S SCYA5 SIS- delta SISd TCP228 e oCP	17
CCL3	6348	C-C motif chemokine ligand 3	G0S19- 1 LD78ALPHA MIP -1- alpha MIP1A SCYA 3	17
CCL20	6364	C-C motif chemokine ligand 20	CKb4 Exodus LAR C MIP-3-alpha MIP- 3a MIP3A SCYA20 ST38	2
CCL11	6356	C-C motif chemokine ligand 11	SCYA11	17
CCR5	1234	C-C motif chemokine receptor 5	CC-CKR- 5 CCCKR5 CCR- 5 CD195 CKR- 5 CKR5 CMKBR5 I DDM22	3
CCL23	6368	C-C motif chemokine ligand 23	CK-BETA- 8 CKb8 Ckb-8 Ckb- 8-1 MIP- 3 MIP3 MPIF- 1 SCYA23 hmrp-2a	17
CCL25	6370	C-C motif chemokine ligand 25	Ckb15 SCYA25 TE CK	19
CCL1	6346	C-C motif chemokine ligand 1	I- 309 P500 SCYA1 SI Se TCA3	17
CCL3L3	414062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 G0 S19- 2 LD78 LD78BETA SCYA3L SCYA3L1	17
CCL4L2	9560	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SC YA4L SCYQ4L2	17
CXCL12	6387	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10
XCL1	6375	X-C motif chemokine ligand 1	ATAC LPTN LTN S CM-1 SCM- 1a SCM1 SCM1A S CYC1	1
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP- 2 MCP2 SCYA10 S CYA8	17

CCL3L1	6349	C-C motif chemokine ligand 3 like 1	464.2 D17S1718 G0S19-2 LD78 LD78-beta(1-70) LD78BETA MIP1AP SCYA3L SCYA3L1	17
CCR1	1230	C-C motif chemokine receptor 1	CD191 CKR-1 CKR1 CMKBR1 HM145 MIP1aR SCYAR1	3
CCL24	6369	C-C motif chemokine ligand 24	Ckb-6 MPIF-2 MPIF2 SCYA24	7
XCL2	6846	X-C motif chemokine ligand 2	SCM-1b SCM1B SCYC2	1
CXCL1	2919	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSa MGSa-a NAP-3 SCYB1	4
CXCL10	3627	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg-2 gIP-10 mob-1	4
CXCR4	7852	C-X-C motif chemokine receptor 4	CD184 D2S201E FB22 HM89 HSY3RR LAP-3 LAP3 LCR1 LESTR NPY3R NPYR NPYRL NPYY3R WHIM WHIMS	2
CXCL2	2920	C-X-C motif chemokine ligand 2	CINC-2a GRO2 GROb MGSA-b MIP-2a MIP2 MIP2A SCYB2	4
CXCR6	10663	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3
CCR4	1233	C-C motif chemokine receptor 4	CC-CKR-4 CD194 CKR4 CMKBR4 ChemR13 HGCN:14099 K5-5	3
CXCL11	6373	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4
TAFA5	25817	TAFA chemokine like family member 5	FAM19A5 QLLK5208 TAFA-5 UNQ5208	22
TAFA3	284467	TAFA chemokine like family member 3	FAM19A3 TAFA-3	1

TAFA4	151647	TAFA chemokine like family member 4	FAM19A4 TAFA-4	3
TAFA1	407738	TAFA chemokine like family member 1	FAM19A1 TAFA-1	3
TAFA2	338811	TAFA chemokine like family member 2	FAM19A2 TAFA-2	12
CCL15-CC	348249	CCL15-CCL14 readthrough (NMD candidate)	CCL15 HCC-2 LKN-1 MIP-5 MIP5 Mrp-2b NCC-3 NCC3 SCYA15	17
IL6	3569	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7
TNF	7124	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2
IL18	3606	interleukin 18	IGIF IL-18 IL-1g IL1F4	11
PTK2B	2185	protein tyrosine kinase 2 beta	CADTK CAKB FAK2 FAK2 PKB PTK PYK2 RAF TK	8
VEGFA	7422	vascular endothelial growth factor A	MVCD1 VEGF VPF	6
IL4	3565	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5
CDH1	999	cadherin 1	Arc-1 BCDS1 CD324 CDHE ECAD LCAM UVO	16
CD40	958	CD40 molecule	Bp50 CDW40 TNFRSF5 p50	20
DEFB103B	55894	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD-3 HBD3 HBP-3 HBP3	8
F2RL1	2150	F2R like trypsin receptor 1	GPR11 PAR2	5
MMP9	4318	matrix metalloproteinase 9	CLG4B GELB MMP2 NDP2 MMP-9	20

LTBP1	4052	latent transforming growth factor beta binding protein 1	-	2
DEFB4A	1673	defensin beta 4A	BD-2 DEFB-2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3
IL13	3596	interleukin 13	IL-13 P600	5
IL10	3586	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1
IL2	3558	interleukin 2	IL-2 TCGF lymphokine	4
PPARG	5468	peroxisome proliferator activated receptor gamma	CIMT1 GLM1 NR1C3 PPARG1 PPARG2 PPARG5 PPARGgamma	3
FGR	2268	FGR proto-oncogene, Src family tyrosine kinase	SRC2 c-fgr c-src2 p55-Fgr p55c-fgr p58-Fgr p58c-fgr	1
MIF	4282	macrophage migration inhibitory factor	GIF GLIF MMIF	22
CRP	1401	C-reactive protein	PTX1	1
JAK2	3717	Janus kinase 2	JTK10 THCYT3	9
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2
PTK2	5747	protein tyrosine kinase 2	FADK FAK FAK1 FRNK PPP1R71 p125FAK pp125FAK	8
PTGDR	5729	prostaglandin D2 receptor	AS1 ASRT1 DP DP1 PTGDR1	14
CD86	942	CD86 molecule	B7-2 B7.2 B70 CD28LG2 LAB72	3
HCK	3055	HCK proto-oncogene, Src family tyrosine kinase	JTK9 p59Hck p61Hck	20
ARRB1	408	arrestin beta 1	ARB1 ARR1	11
GNAI1	2770	G protein subunit alpha i1	Gi	7
VDR	7421	vitamin D receptor	NR1I1 PPP1R163	12
OLR1	4973	oxidized low density lipoprotein receptor 1	CLEC8A LOX1 LOXIN SCARE1 SLOX1	12

GRK2	156	G protein-coupled receptor kinase 2	ADRBK1 BARK1 BETA-ARK1	11
TXK	7294	TXK tyrosine kinase	BTKL PSCTK5 PTK4 RLK TKL	4
RNASE2	6036	ribonuclease A family member 2	EDN RAF3 RNS2	14
CD79A	973	CD79a molecule	IGA MB-1	19
CD79B	974	CD79b molecule	AGM6 B29 IGB	17
LYN	4067	LYN proto-oncogene, Src family tyrosine kinase	JTK8 p53Lyn p56Lyn	8
SYK	6850	spleen associated tyrosine kinase	p72-Syk	9
BTK	695	Bruton tyrosine kinase	AGMX1 AT ATK BPK IGHD3 IMD1 PSCDK1 XLA	X
BLNK	29760	B cell linker	AGM4 BASH BLNK-S LY57 SLP-65 SLP65 bca	10
VAV3	10451	vav guanine nucleotide exchange factor 3	-	1
VAV1	7409	vav guanine nucleotide exchange factor 1	VAV	19
VAV2	7410	vav guanine nucleotide exchange factor 2	VAV-2	9
RAC1	5879	Rac family small GTPase 1	MIG5 MRD48 Rac1 TC-25 p21-Rac1	7
RAC2	5880	Rac family small GTPase 2	EN-7 Gx HSPC022 p21-Rac2	22
RAC3	5881	Rac family small GTPase 3	-	17
PPP3CA	5530	protein phosphatase 3 catalytic subunit alpha	ACCIID CALN CALNA CALNA1 CCN1 CNA1 IECEE IECEE1 PPP2B	4
PPP3CB	5532	protein phosphatase 3 catalytic subunit beta	CALNA2 CALNB CALNA2 PP2Bbeta	10
PPP3CC	5533	protein phosphatase 3 catalytic subunit gamma	CALNA3 CNA3 PPP2Bgamma	8
CHP1	11261	calcineurin like EF-hand protein 1	CHP SLC9A1BP SPAX9 Sid470p p22 p24	15

PPP3R1	5534	protein phosphatase 3 regulatory subunit B, alpha	CALNB1 CNB CNB1	2
PPP3R2	5535	protein phosphatase 3 regulatory subunit B, beta	PPP3RL	9
CHP2	63928	calcineurin like EF-hand protein 2	-	16
NFAT5	10725	nuclear factor of activated T cells 5	NF-AT5 NFATL1 NFATZ OREBP TONEBP	16
NFATC1	4772	nuclear factor of activated T cells 1	NF-ATC NF-ATc1.2 NFAT2 NFATc	18
NFATC2	4773	nuclear factor of activated T cells 2	NFAT1 NFATP	20
NFATC3	4775	nuclear factor of activated T cells 3	NF-AT4c NFAT4 NFATX	16
NFATC4	4776	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3	14
HRAS	3265	HRas proto-oncogene, GTPase	C-BAS/HAS C-H-RAS C-HA-RAS1 CTLO H-RASIDX HAMSV HRAS1 RASH1 p21ras	11
KRAS	3845	KRAS proto-oncogene, GTPase	'C-K-RAS C-K-RAS CFC2 K-RAS2A K-RAS2B K-RAS4A K-RAS4B K-Ras K-Ras 2 KI-RAS KRAS1 KRAS2 NS NS3 OES RALD RASK2 c-Ki-ras c-Ki-ras2	12
NRAS	4893	NRAS proto-oncogene, GTPase	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1
FOS	2353	Fos proto-oncogene, AP-1 transcription factor subunit	AP-1 C-FOS p55	14
JUN	3725	Jun proto-oncogene, AP-1 transcription factor subunit	AP-1 AP1 c-Jun cJUN p39	1

CARD11	84433	caspase recruitment domain family member 11	BENTA BIMP3 CARMA1 IMD11 IMD11A PPBL	7
BCL10	8915	BCL10 immune signaling adaptor	CARMEN CIPER CLAP IMD37 c-E10 mE10	1
MALT1	10892	MALT1 paracaspase	IMD12 MLT MLT1 PCASP1	18
CHUK	1147	component of inhibitor of nuclear factor kappa B kinase complex	IKBKA IKK-alpha IKK1 IKKA NFKBIKA TCF16	10
IKBKB	3551	inhibitor of nuclear factor kappa B kinase subunit beta	IKK-beta IKK2 IKKB IMD15 IMD15A IMD15B NFKBIKB AMCBX1 EDAID1 FIP-	8
IKBKG	8517	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	3 FIP3 Fip3p IKK-gamma IKKAP1 IKKG IMD33 IP IP1 IP2 IPD2 NEMO ZC2HC9	X
NFKB1	4790	nuclear factor kappa B subunit 1	CVID12 EBP-1 KBF1 NF-kB NF-kB1 NF-kappa-B1 NF-kappaB NF-kappabeta NFKB-p105 NFKB-p50 NFkappaB	4
RELA	5970	RELA proto-oncogene, NF-kB subunit	CMCU NFKB3 p65	11
NFKBIA	4792	NFKB inhibitor alpha	EDAID2 IKBA MAD-3 NFKBI	14
NFKBIB	4793	NFKB inhibitor beta	IKBB TRIP9	19
NFKBIE	4794	NFKB inhibitor epsilon	IKBE	6
CD81	975	CD81 molecule	CVID6 S5.7 TAPA1 TSPAN28	11
CD19	930	CD19 molecule	B4 CVID3	16
CR2	1380	complement C3d receptor 2	C3DR CD21 CR CVID7 SLEB9	1
PIK3R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038I15Rik FOAP-2 P101-PI3K p101	17
PIK3R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD36 p85 p85-ALPHA	5

PIK3R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85B p85 p85-BETA	19
PIK3R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1
PIK3CA	5290	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3
PIK3CB	5291	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	P110BETA PI3K PI3KBETA PIK3C1	3
PIK3CD	5293	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	APDS IMD14 P110DELTA PI3K p110D	1
PIK3CG	5294	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3 p110gamma p120-PI3K	7
AKT3	10000	AKT serine/threonine kinase 3	MPPH MPPH2 PKB-GAMMA PKBG PRKBG RAC-PK-gamma RAC-gamma STK-2	1
AKT1	207	AKT serine/threonine kinase 1	AKT CWS6 PKB PKB-ALPHA PRKBA RAC RAC-ALPHA	14
AKT2	208	AKT serine/threonine kinase 2	HIHGHH PKBB PKBBETA PRKBB RAC-BETA	19
GSK3B	2932	glycogen synthase kinase 3 beta	-	3
INPP5D	3635	inositol polyphosphate-5-phosphatase D	SHIP SHIP-1 SHIP1 SIP-145 hp51CN p150Ship	2
CD22	933	CD22 molecule	SIGLEC-2 SIGLEC2	19
CD72	971	CD72 molecule	CD72b LYB2	9
PTPN6	5777	protein tyrosine phosphatase non-receptor type 6	HCP HCPH HPTP1C PTP-1C SH-PTP1 SHP-1 SHP-1L SHP1	12

LILRB3	11025	leukocyte immunoglobulin like receptor B3	CD85A HL9 ILT-5 ILT5 LILRA6 LIR-3 LIR3 PIR-B PIRB	19
FCGR2B	2213	Fc fragment of IgG receptor IIb	CD32 CD32B FCG2 FCGR2 FCGR2C FcRII-c IGFR2	1
RASGRP3	25780	RAS guanyl releasing protein 3	GRP3	2
PLCG2	5336	phospholipase C gamma 2	APLAID FCAS3 PLC-IV PLC-gamma-2	16
PRKCB	5579	protein kinase C beta	PKC-beta PKCB PKCI(2) PKCbeta PRKCB1 PRKCB2	16
IFITM1	8519	interferon induced transmembrane protein 1	9-27 CD225 DSPA2a IFI17 LEU13	11
IGH	3492	immunoglobulin heavy locus	IGD1 IGH.1@ IGH@ IGHD@ IGHDY1 IGHJ IGHJ@ IGHV IGHV@	14
IGHA1	3493	immunoglobulin heavy constant alpha 1	IgA1	14
IGHA2	3494	immunoglobulin heavy constant alpha 2 (A2m marker)	-	14
IGHD	3495	immunoglobulin heavy constant delta	-	14
IGHD1-1	28510	immunoglobulin heavy diversity 1-1	IGHD11	14
IGHD1-14	28508	immunoglobulin heavy diversity 1-14 (non-functional)	DM2 IGHD114	14
IGHD1-20	28507	immunoglobulin heavy diversity 1-20	IGHD120	14
IGHD1-26	28506	immunoglobulin heavy diversity 1-26	IGHD126	14
IGHD1-7	28509	immunoglobulin heavy diversity 1-7	DM1 IGHD17	14
IGHD2-15	28503	immunoglobulin heavy diversity 2-15	D2 IGHD215	14
IGHD2-2	28505	immunoglobulin heavy diversity 2-2	IGHD22	14

IGHD2-21	28502	immunoglobulin heavy diversity 2-21	IGHD221	14
IGHD2-8	28504	immunoglobulin heavy diversity 2-8	DLR1 IGHD28	14
IGHD3-10	28499	immunoglobulin heavy diversity 3-10	DXP'1 IGHD310	14
IGHD3-16	28498	immunoglobulin heavy diversity 3-16	IGHD316	14
IGHD3-22	28497	immunoglobulin heavy diversity 3-22	IGHD322	14
IGHD3-3	28501	immunoglobulin heavy diversity 3-3	DXP4 IGHD33	14
IGHD3-9	28500	immunoglobulin heavy diversity 3-9	DXP1 IGHD39	14
IGHD4-11	28495	immunoglobulin heavy diversity 4-11 (non-functional)	DA1 IGHD411	14
IGHD4-17	28494	immunoglobulin heavy diversity 4-17	IGHD417	14
IGHD4-23	28493	immunoglobulin heavy diversity 4-23 (non-functional)	IGHD423	14
IGHD4-4	28496	immunoglobulin heavy diversity 4-4	DA4 IGHD44	14
IGHD5-12	28491	immunoglobulin heavy diversity 5-12	DK1 IGHD512	14
IGHD5-18	28490	immunoglobulin heavy diversity 5-18	IGHD518	14
IGHD5-24	28489	immunoglobulin heavy diversity 5-24 (non-functional)	IGHD524	14
IGHD5-5	28492	immunoglobulin heavy diversity 5-5	DK4 IGHD55	14
IGHD6-13	28487	immunoglobulin heavy diversity 6-13	DN1 IGHD613	14
IGHD6-19	28486	immunoglobulin heavy diversity 6-19	IGHD619	14
IGHD6-25	28485	immunoglobulin heavy diversity 6-25	IGHD625	14
IGHD6-6	28488	immunoglobulin heavy diversity 6-6	D(N4) IGHD66	14

IGHD7-27	28484	immunoglobulin heavy diversity 7-27	DHQ52 IGHD727	14
IGHE	3497	immunoglobulin heavy constant epsilon	IgE	14
IGHG1	3500	immunoglobulin heavy constant gamma 1 (G1m marker)	-	14
IGHG2	3501	immunoglobulin heavy constant gamma 2 (G2m marker)	-	14
IGHG3	3502	immunoglobulin heavy constant gamma 3 (G3m marker)	IgG3	14
IGHG4	3503	immunoglobulin heavy constant gamma 4 (G4m marker)	-	14
IGHJ1	28483	immunoglobulin heavy joining 1	JH1	14
IGHJ2	28481	immunoglobulin heavy joining 2	JH2	14
IGHJ3	28479	immunoglobulin heavy joining 3	JH3b	14
IGHJ4	28477	immunoglobulin heavy joining 4	JH4b	14
IGHJ5	28476	immunoglobulin heavy joining 5	JH5b	14
IGHJ6	28475	immunoglobulin heavy joining 6	JH6b	14
IGHM	3507	immunoglobulin heavy constant mu	AGM1 MU VH	14
IGH	3492	immunoglobulin heavy locus	IGD1 IGH.1@ IGH@ IGHD@ IGHDY1 IGHJ IGHJ@ IGHV IGHV@	14
IGHV1-18	28468	immunoglobulin heavy variable 1-18	IGHV118	14
IGHV1-2	28474	immunoglobulin heavy variable 1-2	IGHV12 V35	14
IGHV1-24	28467	immunoglobulin heavy variable 1-24	IGHV124 VH	14
IGHV1-3	28473	immunoglobulin heavy variable 1-3	IGHV13 VI-3B	14

IGHV1-45	28466	immunoglobulin heavy variable 1-45	IGHV145 VH	14
IGHV1-46	28465	immunoglobulin heavy variable 1-46	IGHV146	14
IGHV1-58	28464	immunoglobulin heavy variable 1-58	IGHV158 VH	14
IGHV1-69	28461	immunoglobulin heavy variable 1-69	IGHV1-E IGHV169 IGHV1E	14
IGHV1-8	28472	immunoglobulin heavy variable 1-8	IGHV18	14
IGHV1-38-4	28460	immunoglobulin heavy variable 1-38-4 (non-functional)	IGHV1-C IGHV1C	14
IGHV1-69-2	28458	immunoglobulin heavy variable 1-69-2	IGHV1-F IGHV1F	14
IGHV2-26	28455	immunoglobulin heavy variable 2-26	IGHV226 VH	14
IGHV2-5	28457	immunoglobulin heavy variable 2-5	IGHV25 VH	14
IGHV2-70	28454	immunoglobulin heavy variable 2-70	IGHV270 VH	14
IGHV3-11	28450	immunoglobulin heavy variable 3-11	IGHV311 VH	14
IGHV3-13	28449	immunoglobulin heavy variable 3-13	IGHV313	14
IGHV3-15	28448	immunoglobulin heavy variable 3-15	IGHV315 VH	14
IGHV3-16	28447	immunoglobulin heavy variable 3-16 (non-functional)	IGHV316 VH	14
IGHV3-20	28445	immunoglobulin heavy variable 3-20	IGHV320 VH	14
IGHV3-21	28444	immunoglobulin heavy variable 3-21	IGHV321 VH	14
IGHV3-23	28442	immunoglobulin heavy variable 3-23	DP47 IGHV323 V3-23 VH26	14

IGHV3-30	28439	immunoglobulin heavy variable 3- 30	IGHV330 VH	14
IGHV3-30-3	57290	immunoglobulin heavy variable 3- 30-3	IGHV3-3 IGHV3303	14
IGHV3-30-5	89770	immunoglobulin heavy variable 3- 30-5	IGHV3-3 IGHV3305	14
IGHV3-33	28434	immunoglobulin heavy variable 3- 33	IGHV333 VH	14
IGHV3-35	28432	immunoglobulin heavy variable 3- 35 (non-functional)	IGHV335 VH	14
IGHV3-38	28429	immunoglobulin heavy variable 3- 38 (non-functional)	IGHV338 VH	14
IGHV3-43	28426	immunoglobulin heavy variable 3- 43	IGHV343 VH	14
IGHV3-48	28424	immunoglobulin heavy variable 3- 48	IGHV348 VH	14
IGHV3-49	28423	immunoglobulin heavy variable 3- 49	IGHV349 VH	14
IGHV3-53	28420	immunoglobulin heavy variable 3- 53	IGHV353 VH	14
IGHV3-64	28414	immunoglobulin heavy variable 3- 64	IGHV364 VH	14
IGHV3-66	28412	immunoglobulin heavy variable 3- 66	IGHV366 VH	14
IGHV3-7	28452	immunoglobulin heavy variable 3-7	IGHV37 VH	14
IGHV3-72	28410	immunoglobulin heavy variable 3- 72	IGHV372 VH	14
IGHV3-73	28409	immunoglobulin heavy variable 3- 73	IGHV373 VH	14
IGHV3-74	28408	immunoglobulin heavy variable 3- 74	IGHV374 VH	14
IGHV3-9	28451	immunoglobulin heavy variable 3-9	IGHV39 VH	14

IGHV3-38-1	28404	immunoglobulin heavy variable 3-38-3 (non-functional)	IGHV3-D IGHV3D	14
IGHV3-69-1	28402	immunoglobulin heavy variable 3-69-1 (pseudogene)	IGH IGHM IGHV IGHV3-11 IGHV3-H IGHV3H IgVH	14
IGHV4-28	28400	immunoglobulin heavy variable 4-28	IGHV428 VH	14
IGHV4-30-1	28399	immunoglobulin heavy variable 4-30-1	IGHV4-3	14
IGHV4-30-2	28398	immunoglobulin heavy variable 4-30-2	IGHV4-3 IGHV4302	14
IGHV4-30-4	28397	immunoglobulin heavy variable 4-30-4	IGHV4-3 IGHV4304	14
IGHV4-31	28396	immunoglobulin heavy variable 4-31	IGHV431	14
IGHV4-34	28395	immunoglobulin heavy variable 4-34	IGHV434 VH	14
IGHV4-39	28394	immunoglobulin heavy variable 4-39	IGHV439 VH	14
IGHV4-4	28401	immunoglobulin heavy variable 4-4	IGHV44 VH	14
IGHV4-59	28392	immunoglobulin heavy variable 4-59	IGHV459 VH	14
IGHV4-61	28391	immunoglobulin heavy variable 4-61	IGHV461 VH	14
IGHV4-38-2	28389	immunoglobulin heavy variable 4-38-2	IGHV4-B IGHV4B	14
IGHV5-51	28388	immunoglobulin heavy variable 5-51	IGHV551 VH	14
IGHV5-10-1	28386	immunoglobulin heavy variable 5-10-1	IGHV5-A IGHV5A	14
IGHV6-1	28385	immunoglobulin heavy variable 6-1	IGHV61 VH	14
IGHV7-4-1	57289	immunoglobulin heavy variable 7-4-1	IGHV7-41 IGHV741	14

IGHV7-81	28378	immunoglobulin heavy variable 7-81 (non-functional)	IGHV781	14
IGK	50802	immunoglobulin kappa locus	IGK@	2
IGKC	3514	immunoglobulin kappa constant	HCAK1 IGKCD Km	2
IGKDEL	3515	immunoglobulin kappa deleting element or like	IGKDE	2
IGKJ	7842	-	IGKJ@	2
IGKJ1	28950	immunoglobulin kappa joining 1	J1	2
IGKJ2	28949	immunoglobulin kappa joining 2	J2	2
IGKJ3	28948	immunoglobulin kappa joining 3	J3	2
IGKJ4	28947	immunoglobulin kappa joining 4	J4	2
IGKJ5	28946	immunoglobulin kappa joining 5	J5	2
IGKV@	3519	-	IGKV IGKV1 IGKV1@ IGKV2 IGKV2@ IGKV3 IGKV3@	2
IGKV1-12	28940	immunoglobulin kappa variable 1-12	IGKV112 L19	2
IGKV1-13	28939	immunoglobulin kappa variable 1-13	IGKV113 L18	2
IGKV1-16	28938	immunoglobulin kappa variable 1-16	IGKV116 L1	2
IGKV1-17	28937	immunoglobulin kappa variable 1-17	A30 IGKV117	2
IGKV1-27	28935	immunoglobulin kappa variable 1-27	A20 IGKV127	2
IGKV1-33	28933	immunoglobulin kappa variable 1-33	IGKV133 O18	2
IGKV1-37	28931	immunoglobulin kappa variable 1-37 (non-functional)	IGKV137 O14	2
IGKV1-39	28930	immunoglobulin kappa variable 1-39	IGKV139 O12 O12a	2
IGKV1-5	28299	immunoglobulin kappa variable 1-5	IGKV IGKV15 L12 L12a V1	2

IGKV1-6	28943	immunoglobulin kappa variable 1-6	IGKV16 L11	2
IGKV1-8	28942	immunoglobulin kappa variable 1-8	IGKV18 L9	2
IGKV1-9	28941	immunoglobulin kappa variable 1-9	IGKV19 L8	2
IGKV1D-12	28903	immunoglobulin kappa variable 1D- 12	IGKV1D12 L19	2
IGKV1D-13	28902	immunoglobulin kappa variable 1D- 13	IGKV1D13 L18	2
IGKV1D-16	28901	immunoglobulin kappa variable 1D- 16	IGKV1D16 L15 L15 a	2
IGKV1D-17	28900	immunoglobulin kappa variable 1D- 17	IGKV1D17 L14	2
IGKV1D-33	28896	immunoglobulin kappa variable 1D- 33	IGKV1D33 O8	2
IGKV1D-37	28894	immunoglobulin kappa variable 1D- 37 (non-functional)	IGKV1D37 O4	2
IGKV1D-39	28893	immunoglobulin kappa variable 1D- 39	IGKV1D39 O2	2
IGKV1D-42	28892	immunoglobulin kappa variable 1D- 42 (non-functional)	IGKV1D42 L22	2
IGKV1D-43	28891	immunoglobulin kappa variable 1D- 43	IGKV1D43 L23 L23 a	2
IGKV1D-8	28904	immunoglobulin kappa variable 1D- 8	IGKV1D8 L24 L24a	2
IGKV2-24	28923	immunoglobulin kappa variable 2- 24	A23 IGKV224	2
IGKV2-28	28921	immunoglobulin kappa variable 2- 28	A19 IGKV228	2
IGKV2-30	28919	immunoglobulin kappa variable 2- 30	A17 IGKV230	2
IGKV2-40	28916	immunoglobulin kappa variable 2- 40	IGKV240 O11 O11a	2
IGKV2D-24	28885	immunoglobulin kappa variable 2D- 24 (non-functional)	A7 IGKV2D24	2

IGKV2D-28	28883	immunoglobulin kappa variable 2D-28	A3 IGKV2D28	2
IGKV2D-29	28882	immunoglobulin kappa variable 2D-29	A2a A2c IGKV2D29	2
IGKV2D-30	28881	immunoglobulin kappa variable 2D-30	A1 IGKV2D30	2
IGKV2D-40	28878	immunoglobulin kappa variable 2D-40	IGKV2D40 O1	2
IGKV3-11	28914	immunoglobulin kappa variable 3-11	IGKV311 L6	2
IGKV3-15	28913	immunoglobulin kappa variable 3-15	IGKV315 L2	2
IGKV3-20	28912	immunoglobulin kappa variable 3-20	13K18 A27 IGKV320	2
IGKV3-7	28915	immunoglobulin kappa variable 3-7 (non-functional)	IGKV37 L10 L10a Vh	2
IGKV3D-11	28876	immunoglobulin kappa variable 3D-11	IGKV3D11 L20	2
IGKV3D-15	28875	immunoglobulin kappa variable 3D-15	IGKV3D15 L16 L16a L16b L16c	2
IGKV3D-20	28874	immunoglobulin kappa variable 3D-20	A11 A11a IGKV3D20	2
IGKV3D-7	28877	immunoglobulin kappa variable 3D-7	IGKV3D7 L25	2
IGKV4-1	28908	immunoglobulin kappa variable 4-1	B3 IGKV41	2
IGKV5-2	28907	immunoglobulin kappa variable 5-2	B2 IGKV52	2
IGKV6-21	28906	immunoglobulin kappa variable 6-21 (non-functional)	A26 IGKV621	2
IGKV6D-21	28870	immunoglobulin kappa variable 6D-21 (non-functional)	A10 IGKV6D21	2
IGKV6D-41	28869	immunoglobulin kappa variable 6D-41 (non-functional)	A14	2
IGL	3535	immunoglobulin lambda locus	IGL@ IGLC6	22

IGLC1	3537	immunoglobulin lambda constant 1	IGLC	22
IGLC2	3538	immunoglobulin lambda constant 2	IGLC	22
IGLC3	3539	immunoglobulin lambda constant 3 (Kern-Oz+ marker)	IGLC	22
IGLC6	3542	immunoglobulin lambda constant 6	IGLC	22
IGLC7	28834	immunoglobulin lambda constant 7	C7	22
IGLJ	8217	-	IGLJ@	22
IGLJ1	28833	immunoglobulin lambda joining 1	J1	22
IGLJ2	28832	immunoglobulin lambda joining 2	J2	22
IGLJ3	28831	immunoglobulin lambda joining 3	J3	22
IGLJ4	28830	immunoglobulin lambda joining 4 (non-functional)	-	22
IGLJ5	28829	immunoglobulin lambda joining 5 (non-functional)	-	22
IGLJ6	28828	immunoglobulin lambda joining 6	-	22
IGLJ7	28827	immunoglobulin lambda joining 7	J7	22
IGLV@	3546	-	IGLV	22
IGLV1-36	28826	immunoglobulin lambda variable 1- 36	IGLV136 V1-11	22
IGLV1-40	28825	immunoglobulin lambda variable 1- 40	IGLV140 V1-13	22
IGLV1-44	28823	immunoglobulin lambda variable 1- 44	IGLV144 V1-16	22
IGLV1-47	28822	immunoglobulin lambda variable 1- 47	IGLV147 V1-17	22
IGLV1-50	28821	immunoglobulin lambda variable 1- 50 (non-functional)	IGLV150 V1-18	22
IGLV1-51	28820	immunoglobulin lambda variable 1- 51	IGLV151 V1-19	22
IGLV10-54	28772	immunoglobulin lambda variable 10-54	IGLV1054 V1-20	22

IGLV11-55	28770	immunoglobulin lambda variable 11-55 (non- functional)	IGLV1155 V4-6	22
IGLV2-11	28816	immunoglobulin lambda variable 2- 11	IGLV211 V1-3	22
IGLV2-14	28815	immunoglobulin lambda variable 2- 14	IGLV214 V1-4	22
IGLV2-18	28814	immunoglobulin lambda variable 2- 18	IGLV218 V1-5	22
IGLV2-23	28813	immunoglobulin lambda variable 2- 23	IGLV223 V1-7	22
IGLV2-33	28811	immunoglobulin lambda variable 2- 33 (non-functional)	IGLV233 V1-9	22
IGLV2-8	28817	immunoglobulin lambda variable 2- 8	IGLV28 V1-2	22
IGLV3-1	28809	immunoglobulin lambda variable 3- 1	IGLV31 V2-1	22
IGLV3-10	28803	immunoglobulin lambda variable 3- 10	IGLV310 V2-7	22
IGLV3-12	28802	immunoglobulin lambda variable 3- 12	IGLV312 V2-8	22
IGLV3-16	28799	immunoglobulin lambda variable 3- 16	IGLV316 V2-11	22
IGLV3-19	28797	immunoglobulin lambda variable 3- 19	IGLV319 V2- 13 VL3L	22
IGLV3-21	28796	immunoglobulin lambda variable 3- 21	IGLV321 V2-14	22
IGLV3-22	28795	immunoglobulin lambda variable 3- 22	IGLV322 V2-15	22
IGLV3-25	28793	immunoglobulin lambda variable 3- 25	IGLV325 V2-17	22
IGLV3-27	28791	immunoglobulin lambda variable 3- 27	IGLV327 V2-19	22
IGLV3-32	28787	immunoglobulin lambda variable 3- 32 (non-functional)	IGLV332 V2-23P	22

IGLV3-9	28804	immunoglobulin lambda variable 3- 9	IGLV39 V2-6	22
IGLV4-3	28786	immunoglobulin lambda variable 4- 3	IGLV43 V5-1	22
IGLV4-60	28785	immunoglobulin lambda variable 4- 60	IGLV460 V5-4	22
IGLV4-69	28784	immunoglobulin lambda variable 4- 69	IGLV469 V5-6	22
IGLV5-37	28783	immunoglobulin lambda variable 5- 37	IGLV537 V4-1	22
IGLV5-39	28782	immunoglobulin lambda variable 5- 39	IGLV539	22
IGLV5-45	28781	immunoglobulin lambda variable 5- 45	IGLV545 V4-2	22
IGLV5-48	28780	immunoglobulin lambda variable 5- 48 (non-functional)	IGLV548 V4-3	22
IGLV5-52	28779	immunoglobulin lambda variable 5- 52	IGLV552 V4-4	22
IGLV6-57	28778	immunoglobulin lambda variable 6- 57	IGLV657 V1-22	22
IGLV7-43	28776	immunoglobulin lambda variable 7- 43	IGLV743 V3-2	22
IGLV7-46	28775	immunoglobulin lambda variable 7- 46	IGLV746 V3-3	22
IGLV8-61	28774	immunoglobulin lambda variable 8- 61	IGLV861 V3-4	22
IGLV9-49	28773	immunoglobulin lambda variable 9- 49	IGLV949 V5-2	22
C3	718	complement C3	AHUS5 ARMD9 AS P C3a C3b CPAMD 1 HEL-S-62p	19
C5	727	complement C5	C5D C5a C5b CPA MD4 ECLZB	9
CAMP	820	cathelicidin antimicrobial peptide	CAP- 18 CAP18 CRAMP FALL- 39 FALL39 HSD26 LL37	3

CCL1	6346	C-C motif chemokine ligand 1	I- 309 P500 SCYA1 SI Se TCA3	17
CCL11	6356	C-C motif chemokine ligand 11	SCYA11	17
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP- 4 NCC- 1 NCC1 SCYA13 S CYL1 CC-1 CC- 3 CKB1 HCC- 1 HCC-1(1- 74) HCC-1/HCC- 3 HCC- 3 MCIF NCC- 2 NCC2 SCYA14 S CYL2 SY14 CCL15 HCC- 2 LKN-1 MIP- 5 MIP5 Mrp- 2b NCC- 3 NCC3 SCYA15 HCC-2 HMRP- 2B LKN- 1 LKN1 MIP-1 delta MIP-1D MIP- 5 MRP-2B NCC- 3 NCC3 SCYA15 S CYL3 SY15 CKb12 HCC- 4 ILINCK LCC- 1 LEC LMC Mtn- 1 NCC- 4 NCC4 SCYA16 S CYL4	17
CCL14	6358	C-C motif chemokine ligand 14		17
CCL15-CC	348249	CCL15-CCL14 readthrough (NMD candidate)		17
CCL15	6359	C-C motif chemokine ligand 15		17
CCL16	6360	C-C motif chemokine ligand 16		17
CCL17	6361	C-C motif chemokine ligand 17	A-152E5.3 ABCD- 2 SCYA17 TARC	16
CCL18	6362	C-C motif chemokine ligand 18	AMAC- 1 AMAC1 CKb7 DC -CK1 DCCK1 MIP- 4 PARC SCYA18	17
CCL19	6363	C-C motif chemokine ligand 19	CKb11 ELC MIP- 3b MIP3B SCYA19	9
CCL2	6347	C-C motif chemokine ligand 2	GDCF- 2 HC11 HSMCR30 MCAF MCP- 1 MCP1 SCYA2 SM C-CF	17

CCL20	6364	C-C motif chemokine ligand 20	CKb4 Exodus LAR C MIP-3-alpha MIP-3a MIP3A SCYA20 ST38	2
CCL21	6366	C-C motif chemokine ligand 21	6Ckine CKb9 ECL SCYA21 SLC TCA4	9
CCL22	6367	C-C motif chemokine ligand 22	A-152E5.1 ABCD-1 DC/B-CK MDC SCYA22 STCP-1	16
CCL23	6368	C-C motif chemokine ligand 23	CK-BETA-8 CKb8 Ckb-8 Ckb-8-1 MIP-3 MIP3 MPIF-1 SCYA23 hmrp-2a	17
CCL24	6369	C-C motif chemokine ligand 24	Ckb-6 MPIF-2 MPIF2 SCYA24	7
CCL25	6370	C-C motif chemokine ligand 25	Ckb15 SCYA25 TECK	19
CCL26	10344	C-C motif chemokine ligand 26	IMAC MIP-4a MIP-4alpha SCYA26 TSC-1	7
CCL27	10850	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESKY SCYA27	9
CCL28	56477	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5
CCL3	6348	C-C motif chemokine ligand 3	G0S19-1 LD78ALPHA MIP-1-alpha MIP1A SCYA3	17
CCL3L1	6349	C-C motif chemokine ligand 3 like 1	464.2 D17S1718 G0S19-2 LD78 LD78-beta(1-70) LD78BETA MIP1AP SCYA3L SCYA3L1	17
CCL3P1	390788	C-C motif chemokine ligand 3 pseudogene 1	CCL3L2 G0S19-3 LD78gamma SCYA3L2	17
CCL3L3	414062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 G0S19-2 LD78 LD78BETA SCYA3L SCYA3L1	17

CCL4	6351	C-C motif chemokine ligand 4	ACT2 AT744.1 G- 26 HC21 LAG- 1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4	17
CCL4L2	9560	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SC YA4L SCYQ4L2	17
CCL4L1	388372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LA G-1 LAG1 MIP-1- beta SCYA4L SCY A4L1 SCYA4L2	17
CCL5	6352	C-C motif chemokine ligand 5	D17S136E RANTE S SCYA5 SIS- delta SISd TCP228 e oCP	17
CCL7	6354	C-C motif chemokine ligand 7	FIC MARC MCP- 3 MCP3 NC28 SCY A6 SCYA7	17
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP- 2 MCP2 SCYA10 S CYA8	17
CKLF	51192	chemokine like factor	C32 CKLF1 CKLF2 CKLF3 CKLF4 HSP C224 UCK-1	16
CMA1	1215	chymase 1	CYH MCT1 chymas e	14
CTSG	1511	cathepsin G	CATG CG	14
CX3CL1	6376	C-X3-C motif chemokine ligand 1	ABCD- 3 C3Xkine CXC3 C XC3C NTN NTT SC YD1 fractalkine neur otactin	16
CXCL1	2919	C-X-C motif chemokine ligand 1	FSP GRO1 GROa M GSA MGSA-a NAP- 3 SCYB1	4
CXCL10	3627	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP- 10 SCYB10 crg- 2 gIP-10 mob-1	4
CXCL11	6373	C-X-C motif chemokine ligand 11	H174 I-TAC IP- 9 IP9 SCYB11 SCY B9B b-R1	4
CXCL12	6387	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10
CXCL13	10563	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BC A- 1 BCA1 BLC BLR1 L SCYB13	4

CXCL14	9547	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP- 2g MIP2G NJAC SC YB14	5
CXCL16	58191	C-X-C motif chemokine ligand 16	CXCLG16 SR- PSOX SRPSOX	17
CXCL17	284340	C-X-C motif chemokine ligand 17	DMC Dcip1 UNQ47 3 VCC-1 VCC1	19
CXCL2	2920	C-X-C motif chemokine ligand 2	CINC- 2a GRO2 GROb MG SA-b MIP- 2a MIP2 MIP2A SC YB2	4
CXCL3	2921	C-X-C motif chemokine ligand 3	CINC- 2b GRO3 GROg MI P-2b MIP2B SCYB3	4
CXCL5	6374	C-X-C motif chemokine ligand 5	ENA-78 SCYB5	4
CXCL6	6372	C-X-C motif chemokine ligand 6	CKA-3 GCP- 2 GCP2 SCYB6	4
CXCL9	4283	C-X-C motif chemokine ligand 9	CMK Humig MIG S CYB9 crg-10	4
CCN1	3491	cellular communication network factor 1	CYR61 GIG1 IGFB P10	1
DEFA1	1667	defensin alpha 1	DEF1 DEFA2 HNP- 1 HP-1 HP1 MRS	8
DEFA3	1668	defensin alpha 3	DEF3 HNP- 3 HNP3 HP-3 HP3	8
DEFA5	1670	defensin alpha 5	DEF5 HD-5	8
DEFB1	1672	defensin beta 1	BD1 DEFB- 1 DEFB101 HBD1	8
DEFB103B	55894	defensin beta 103B	BD-3 DEFB- 3 DEFB103 DEFB3 HBD-3 HBD3 HBP- 3 HBP3	8
DEFB104A	140596	defensin beta 104A	BD-4 DEFB- 4 DEFB104 DEFB4 hBD-4	8
DEFB4A	1673	defensin beta 4A	BD-2 DEFB- 2 DEFB102 DEFB2 DEFB4 HBD- 2 SAP1	8
EDN1	1906	endothelin 1	ARCND3 ET1 HDL CQ7 PPET1 QME	6

EDN2	1907	endothelin 2	ET-2 ET2 PPET2	1
EDN3	1908	endothelin 3	ET-3 ET3 HSCR4 PPET3 WS4B	20
FGF10	2255	fibroblast growth factor 10	-	5
FGF2	2247	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4
HTN3	3347	histatin 3	HIS2 HTN2 HTN5 PB	4
CXCL8	3576	C-X-C motif chemokine ligand 8	GCP-1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4
LECT2	3950	leukocyte cell derived chemotaxin 2	chm-II chm2	5
PF4	5196	platelet factor 4	CXCL4 PF-4 SCYB4	4
PF4V1	5197	platelet factor 4 variant 1	CXCL4L1 CXCL4V1 PF4-ALT PF4A SCYB4V1	4
PLAU	5328	plasminogen activator, urokinase	ATF BDPLT5 QPD UPA URK u-PA	10
PPBP	5473	pro-platelet basic protein	B-TG1 Beta-TG CTAP-III CTAP3 CTAPIII CXCL7 LA-PF4 LDGF MDGF NAP-2 PBP SCYB7 TC1 TC2 TGB TGB1 THBGB THBGB1	4
PPBPP1	728045	pro-platelet basic protein pseudogene 1	PPBPL1 TGB2	4
PROK2	60675	prokineticin 2	BV8 HH4 KAL4 MIT1 PK2	3
RNASE2	6036	ribonuclease A family member 2	EDN RAF3 RNS2	14
SAA1	6288	serum amyloid A1	PIG4 SAA SAA2 TP5314	11
SAA2	6289	serum amyloid A2	SAA SAA1	11
SBDS	51119	SBDS ribosome maturation factor	CGI-97 SDS SWDS	7

SEMA3A	10371	semaphorin 3A	COLL1 HH16 Hsem a-I Hsema- III SEMA1 SEMAD SEMIII SEMAL S emD coll-1	7
SEMA3B	7869	semaphorin 3B	LUCA- 1 SEMA5 SEMAA SemA semaV	3
SEMA3C	10512	semaphorin 3C	SEMAE SemE	7
SEMA3D	223117	semaphorin 3D	Sema-Z2 coll-2	7
SEMA3E	9723	semaphorin 3E	M-SEMAH M- SemaK SEMAH coll -5	7
SEMA3F	6405	semaphorin 3F	SEMA- IV SEMA4 SEMAK	3
SEMA3G	56920	semaphorin 3G	sem2	3
SEMA4A	64218	semaphorin 4A	CORD10 RP35 SE MAB SEMB	1
SEMA4B	10509	semaphorin 4B	SEMAG SemG	15
SEMA4C	54910	semaphorin 4C	M-SEMA- F SEMACL1 SEMA F SEMAI	2
SEMA4D	10507	semaphorin 4D	A8 BB18 C9orf164 CD100 COLL4 GR3 M-sema- G SEMAJ coll-4	9
SEMA4F	10505	ssemaphorin 4F	M- SEMA PRO2353 S4 F SEMAM SEMAW m-Sema-M	2
SEMA4G	57715	semaphorin 4G	-	10
SEMA5A	9037	semaphorin 5A	SEMAF semF	5
SEMA5B	54437	semaphorin 5B	SEMAG SemG	3
SEMA6A	57556	semaphorin 6A	HT018 SEMA SEM A6A1 SEMAQ VIA	5
SEMA6B	10501	semaphorin 6B	EPM11 SEM- SEMA-Y SEMA- VIB SEMAN semaZ	19
SEMA6C	10500	semaphorin 6C	SEMAY m- SemaY m-SemaY2	1
SEMA6D	80031	semaphorin 6D	-	15
SEMA7A	8482	semaphorin 7A (John Milton Hagen blood group)	CD108 CDw108 H- SEMA-K1 H-Sema- L JMH SEMAK1 SE MAL	15
SLIT1	6585	slit guidance ligand 1	MEGF4 SLIL1 SLIT -1 SLIT3	10

SLIT2	9353	slit guidance ligand 2	SLIL3 Slit-2	4
TNC	3371	tenascin C	150- 225 DFNA56 GME M GP HXB JI TN T N-C	9
TYMP	1890	thymidine phosphorylase	ECGF ECGF1 MED PS1 MNGIE MTDP S1 PDECGF TP hP D-ECGF	22
XCL1	6375	X-C motif chemokine ligand 1	ATAC LPTN LTN S CM-1 SCM- 1a SCM1 SCM1A S CYC1	1
XCL2	6846	X-C motif chemokine ligand 2	SCM- 1b SCM1B SCYC2	1
C5AR1	728	complement C5a receptor 1	C5A C5AR C5R1 C D88	19
ACKR2	1238	atypical chemokine receptor 2	CCBP2 CCR10 CC R9 CMKBR9 D6 hD 6	3
CCR1	1230	C-C motif chemokine receptor 1	CD191 CKR- 1 CKR1 CMKBR1 HM145 MIP1aR SC YAR1	3
CCR10	2826	C-C motif chemokine receptor 10	GPR2	17
CCR3	1232	C-C motif chemokine receptor 3	C C CKR3 CC- CKR-3 CD193 CKR 3 CKR3 CMKBR3	3
CCR4	1233	C-C motif chemokine receptor 4	CC-CKR- 4 CD194 CKR4 CM KBR4 ChemR13 H GCN:14099 K5-5	3
CCR5	1234	C-C motif chemokine receptor 5	CC-CKR- 5 CCCKR5 CCR- 5 CD195 CKR- 5 CKR5 CMKBR5 I DDM22	3
CCR6	1235	C-C motif chemokine receptor 6	BN-1 C-C CKR- 6 CC-CKR-6 CCR- 6 CD196 CKR- L3 CKRL3 CMKBR 6 DCR2 DRY6 GPR 29 GPRCY4 STRL2 2	6

CCR7	1236	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17
CCR8	1237	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBR L2 CY6 GPRCY6 TER1	3
CCR9	10803	C-C motif chemokine receptor 9	CC-CKR-9 CDw199 GPR-9-6 GPR28	3
ACKR4	51554	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CRL1 CCX-CKR CCX-CKR CKR-11 PPR1 VSHK1	3
CCRL2	9034	C-C motif chemokine receptor like 2	ACKR5 CKRX CRAM CRAM-A CRAM-B HCR	3
CMKLR1	1240	chemerin chemokine-like receptor 1	CHEMERINR ChemR23 DEZ RVER1	12
CX3CR1	1524	C-X3-C motif chemokine receptor 1	CCRL1 CMKBRL1 CMKDR1 GPR13 GPRV28 V28	3
CXCR3	2833	C-X-C motif chemokine receptor 3	CD182 CD183 CKR-L2 CMKAR3 GPR9 IP10-R Mig-R MigR	X
CXCR4	7852	C-X-C motif chemokine receptor 4	CD184 D2S201E FB22 HM89 HSY3RR LAP-3 LAP3 LCR1 LESTR NPY3R NPYR NPYRL NPYY3R WHIM WHIMS	2
CXCR5	643	C-X-C motif chemokine receptor 5	BLR1 CD185 MDR15	11
CXCR6	10663	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3
ACKR3	57007	atypical chemokine receptor 3	CMKOR1 CXC-R7 CXCR-7 CXCR7 GPR159 RDC-1 RDC1	2

CYSLTR1	10800	cysteinyl leukotriene receptor 1	CYSLT1 CYSLT1R CYSLTR HMTMF8 1	X
CYSLTR2	57105	cysteinyl leukotriene receptor 2	CYSLT2 CYSLT2R GPCR21 HG57 HP N321 KPG_011 PSE C0146 hGPCR21	13
ACKR1	2532	atypical chemokine receptor 1 (Duffy blood group)	CCBP1 CD234 DA RC DARC/ACKR1 Dfy FY GPD GpFy WBCQ1	1
EDNRA	1909	endothelin receptor type A	ET-A ETA ETA- R ETAR ETRA MF DA hET-AR	4
EDNRB	1910	endothelin receptor type B	ABCDS ET-B ET- BR ETB ETB1 ETB R ETRB HSCR HS CR2 WS4A	13
FPR1	2357	formyl peptide receptor 1	FMLP FPR	19
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R- II FMLPX FPR2A F PRH1 FPRH2 FPRL 1 HM63 LXA4R	19
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R- II FMLPX FPR2A F PRH1 FPRH2 FPRL 1 HM63 LXA4R	19
GPR17	2840	G protein-coupled receptor 17	-	2
GPR32	2854	G protein-coupled receptor 32	RVDR1	19
GPR33	2856	G protein-coupled receptor 33	-	14
PTGDR2	11251	prostaglandin D2 receptor 2	CD294 CRTH2 DL1 R DP2 GPR44	11
C5AR2	27202	complement component 5a receptor 2	C5L2 GPF77 GPR7 7	19
CXCR1	3577	C-X-C motif chemokine receptor 1	C-C C-C-CKR- 1 CD128 CD181 CD w128a CKR- 1 CMKAR1 IL8R1 I L8RA IL8RBA	2
CXCR2	3579	C-X-C motif chemokine receptor 2	CD182 CDw128b C MKAR2 IL8R2 IL8 RA IL8RB	2
LTB4R	1241	leukotriene B4 receptor	BLT1 BLTR CMKR L1 GPR16 LTB4R1 LTBR1 P2RY7 P2Y 7	14

LTB4R2	56413	leukotriene B4 receptor 2	BLT2 BLTR2 JULF2 KPG_004 LTB4-R2 LTB4-R2 NOP9	14
PLAUR	5329	plasminogen activator, urokinase receptor	CD87 U-PAR UPAR URKR	19
PLXNA1	5361	plexin A1	NOV NOVP PLEXIN-A1 PLXN1	3
PLXNA2	5362	plexin A2	OCT PLXN2	1
PLXNA3	55558	plexin A3	6.3 HSSEXGENE PLXN3 PLXN4 XAP-6	X
PLXNA4	91584	plexin A4	FAYV2820 PLEXA4 PLXNA4A PLXNA4B PRO34003	7
PLXNB1	5364	plexin B1	PLEXIN-B1 PLXN5 SEP	3
PLXNB2	23654	plexin B2	MM1 Nbla00445 PLEXB2 dJ402G11.3	22
PLXNB3	5365	plexin B3	PLEXB3 PLEXR PLXN6	X
PLXNC1	10154	plexin C1	CD232 PLXNC1 VESPR	12
PLXND1	23129	plexin D1	PLEXD1	3
PTAFR	5724	platelet activating factor receptor	PAFR	1
ROBO1	6091	roundabout guidance receptor 1	DUTT1 SAX3	3
ROBO2	6092	roundabout guidance receptor 2	SAX3	3
ROBO3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPPS2 GPS RBIG1 RIG1	11
RXFP3	51289	relaxin family peptide receptor 3	GPCR135 RLN3R1 RXFPR3 SALPR	5
XCR1	2829	X-C motif chemokine receptor 1	CCXCR1 GPR5	3
ADIPOQ	9370	adiponectin, C1Q and collagen domain containing	ACDC ACRP30 ADIPQTL1 ADPN APM1 GBP28	3
ADM	133	adrenomedullin	AM PAMP	11
ADM2	79924	adrenomedullin 2	AM2 dJ579N16.4	22
AGRP	181	agouti related neuropeptide	AGRT ART ASIP2	16
AGT	183	angiotensinogen	ANHU SERPINA8 hFLT1	1
AMBN	258	ameloblastin	AI1F	4

AMELX	265	amelogenin X-linked	AI1E AIH1 ALGN AMG AMGL AMGX	X
AMH	268	anti-Mullerian hormone	MIF MIS	19
ANGPTL5	253935	angiopoietin like 5	-	11
ANGPTL7	10218	angiopoietin like 7	AngX CDT6 dJ647M16.1	1
APLN	8862	apelin	APEL XNPEP2	X
AREG	374	amphiregulin	AR AREGB CRDGF SDGF	4
MANF	7873	mesencephalic astrocyte derived neurotrophic factor	ARMET ARP	3
CDNF	441549	cerebral dopamine neurotrophic factor	ARMETL1	10
ARTN	9048	artemin	ART ENOVIN EVN NBN	1
AVP	551	arginine vasopressin	ADH ARVP AVP-NPII AVRP VP	20
AZU1	566	azurocidin 1	AZAMP AZU CAP37 HBP HUMAZUR NAZC hHBP	19
BDNF	627	brain derived neurotrophic factor	ANON2 BULN2	11
BMP1	649	bone morphogenetic protein 1	OI13 PCOLC PCP PCP2 TLD	8
BMP10	27302	bone morphogenetic protein 10	-	2
BMP15	9210	bone morphogenetic protein 15	GDF9B ODG2 POF4	X
BMP2	650	bone morphogenetic protein 2	BDA2 BMP2A SSFSC	20
BMP3	651	bone morphogenetic protein 3	BMP-3A	4
BMP4	652	bone morphogenetic protein 4	BMP2B BMP2B1 MCOPS6 OFC11 ZYME	14
BMP5	653	bone morphogenetic protein 5	-	6
BMP6	654	bone morphogenetic protein 6	VGR VGR1	6

BMP7	655	bone morphogenetic protein 7	OP-1	20
BMP8A	353500	bone morphogenetic protein 8a	OP-2	1
BMP8B	656	bone morphogenetic protein 8b	BMP8 OP2	1
BTC	685	betacellulin	-	4
MYDGF	56005	myeloid derived growth factor	C19orf10 EUROIM AGE1875335 IL25 IL27 IL27w R33729_1 SF20	19
C3	718	complement C3	AHUS5 ARMD9 ASP C3a C3b CPAMD1 HEL-S-62p	19
C5	727	complement C5	C5D C5a C5b CPAMD4 ECLZB	9
CALCA	796	calcitonin related polypeptide alpha	CALC1 CGRP CGRP-I CGRP-alpha CGRP1 CT KC PCT	11
CALCB	797	calcitonin related polypeptide beta	CALC2 CGRP-II CGRP2	11
CAMP	820	cathelicidin antimicrobial peptide	CAP-18 CAP18 CRAMP FALL-39 FALL39 HSD26 LL37	3
CAT	847	catalase	-	11
CCK	885	cholecystokinin	-	3
CCL1	6346	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISe TCA3	17
CCL11	6356	C-C motif chemokine ligand 11	SCYA11	17
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17
CCL14	6358	C-C motif chemokine ligand 14	CC-1 CC-3 CKB1 HCC-1 HCC-1(1-74) HCC-1/HCC-3 HCC-3 MCIF NCC-2 NCC2 SCYA14 SCYL2 SY14	17

CCL15-CC	348249	CCL15-CCL14 readthrough (NMD candidate)	CCL15 HCC-2 LKN-1 MIP-5 MIP5 Mrp-2b NCC-3 NCC3 SCYA15 HCC-2 HMRP-2B LKN-1 LKN1 MIP-1	17
CCL15	6359	C-C motif chemokine ligand 15	delta MIP-1D MIP-5 MRP-2B NCC-3 NCC3 SCYA15 SCYL3 SY15 CKb12 HCC-4 ILINCK LCC-1 LEC LMC Mtn-1 NCC-4 NCC4 SCYA16 SCYL4	17
CCL16	6360	C-C motif chemokine ligand 16	A-152E5.3 ABCD-2 SCYA17 TARC	17
CCL17	6361	C-C motif chemokine ligand 17	AMAC-1 AMAC1 CKb7 DC-CK1 DCCK1 MIP-4 PARC SCYA18	16
CCL18	6362	C-C motif chemokine ligand 18	CKb11 ELC MIP-3b MIP3B SCYA19	9
CCL19	6363	C-C motif chemokine ligand 19	GDCF-2 HC11 HSMCR30 MCAF MCP-1 MCP1 SCYA2 SMC-CF	17
CCL2	6347	C-C motif chemokine ligand 2	CKb4 Exodus LARC MIP-3-alpha MIP-3a MIP3A SCYA20 ST38	2
CCL20	6364	C-C motif chemokine ligand 20	6Ckine CKb9 ECL SCYA21 SLC TCA4	9
CCL21	6366	C-C motif chemokine ligand 21	A-152E5.1 ABCD-1 DC/B-CK MDC SCYA22 STCP-1	16
CCL22	6367	C-C motif chemokine ligand 22	CK-BETA-8 CKb8 Ckb-8 Ckb-8-1 MIP-3 MIP3 MPIF-1 SCYA23 hmrp-2a	17
CCL23	6368	C-C motif chemokine ligand 23		

CCL24	6369	C-C motif chemokine ligand 24	Ckb-6 MPIF- 2 MPIF2 SCYA24	7
CCL25	6370	C-C motif chemokine ligand 25	Ckb15 SCYA25 TE CK	19
CCL26	10344	C-C motif chemokine ligand 26	IMAC MIP-4a MIP- 4alpha SCYA26 TS C-1	7
CCL27	10850	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESK Y SCYA27	9
CCL28	56477	C-C motif chemokine ligand 28	CCK1 MEC SCYA2 8	5
CCL3	6348	C-C motif chemokine ligand 3	G0S19- 1 LD78ALPHA MIP -1- alpha MIP1A SCYA 3	17
CCL3L1	6349	C-C motif chemokine ligand 3 like 1	464.2 D17S1718 G0 S19-2 LD78 LD78- beta(1- 70) LD78BETA MIP 1AP SCYA3L SCY A3L1	17
CCL3P1	390788	C-C motif chemokine ligand 3 pseudogene 1	CCL3L2 G0S19- 3 LD78gamma SCY A3L2	17
CCL3L3	414062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 G0 S19- 2 LD78 LD78BETA SCYA3L SCYA3L1	17
CCL4	6351	C-C motif chemokine ligand 4	ACT2 AT744.1 G- 26 HC21 LAG- 1 LAG1 MIP-1- beta MIP1B MIP1B 1 SCYA2 SCYA4	17
CCL4L2	9560	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SC YA4L SCYQ4L2	17
CCL4L1	388372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LA G-1 LAG1 MIP-1- beta SCYA4L SCY A4L1 SCYA4L2	17
CCL5	6352	C-C motif chemokine ligand 5	D17S136E RANTE S SCYA5 SIS- delta SISd TCP228 e oCP	17

CCL7	6354	C-C motif chemokine ligand 7	FIC MARC MCP-3 MCP3 NC28 SCYA6 SCYA7	17
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17
CD320	51293	CD320 molecule	8D6 8D6A TCBLR TCN2R	19
CD40LG	959	CD40 ligand	CD154 CD40L HIGM1 IGM IMD3 TBAM TNFSF5 TRAP gp39 hCD40L	X
CD70	970	CD70 molecule	CD27-L CD27L CD27LG LPFS3 TNFSF7 TNLG8A	19
ADA2	51816	adenosine deaminase 2	ADGF CECR1 IDGFL PAN SNEDS VAIHS	22
CER1	9350	cerberus 1, DAN family BMP antagonist	DAND4	9
CGA	1081	glycoprotein hormones, alpha polypeptide	CG-ALPHA FSHA GPA1 GPHA1 GPHa HCG LHA TSHA	6
CGB3	1082	chorionic gonadotropin subunit beta 3	CGB CGB5 CGB7 CGB8 hCGB	19
CGB1	114335	chorionic gonadotropin subunit beta 1	-	19
CGB2	114336	chorionic gonadotropin subunit beta 2	-	19
CGB5	93659	chorionic gonadotropin subunit beta 5	CGB HCG hCGB	19
CGB7	94027	chorionic gonadotropin subunit beta 7	CG-beta-a CGB6	19
CGB8	94115	chorionic gonadotropin subunit beta 8	-	19
CHGA	1113	chromogranin A	CGA	14
CHGB	1114	chromogranin B	SCG1	20
CKLF	51192	chemokine like factor	C32 CKLF1 CKLF2 CKLF3 CKLF4 HSPC224 UCK-1	16

CLCF1	23529	cardiotrophin like cytokine factor 1	BSF-3 BSF3 CISS2 CLC NNT-1 NNT1 NR6	11
CLEC11A	6320	C-type lectin domain containing 11A	CLECSF3 LSLCL P47 SCGF	19
CMA1	1215	chymase 1	CYH MCT1 chymase	14
CMTM1	113540	CKLF like MARVEL transmembrane domain containing 1	CKLFH CKLFH1 CKLFSF1	16
CMTM2	146225	CKLF like MARVEL transmembrane domain containing 2	CKLFSF2	16
CMTM3	123920	CKLF like MARVEL transmembrane domain containing 3	BNAS2 CKLFSF3	16
CMTM4	146223	CKLF like MARVEL transmembrane domain containing 4	CKLFSF4	16
CMTM5	116173	CKLF like MARVEL transmembrane domain containing 5	CKLFSF5	14
CMTM6	54918	CKLF like MARVEL transmembrane domain containing 6	CKLFSF6 PRO2219	3
CMTM7	112616	CKLF like MARVEL transmembrane domain containing 7	CKLFSF7	3
CMTM8	152189	CKLF like MARVEL transmembrane domain containing 8	CKLFSF8 CKLFSF8-V2	3
CNTF	1270	ciliary neurotrophic factor	HCNTF	11
CORT	1325	cortistatin	CST-14 CST-17 CST-29	1

CRH	1392	corticotropin releasing hormone	CRF CRH1	8
CSF1	1435	colony stimulating factor 1	CSF-1 MCSF	1
CSF2	1437	colony stimulating factor 2	CSF GMCSF	5
CSF3	1440	colony stimulating factor 3	C17orf33 CSF3OS GCSF	17
CSH1	1442	chorionic somatomammotropin hormone 1	CS-1 CSA CSMT GHB3 PL hCS-1 hCS-A	17
CSH2	1443	chorionic somatomammotropin hormone 2	CS-2 CSB GHB1 PL hCS-B	17
CSHL1	1444	chorionic somatomammotropin hormone like 1	CS-5 CSHP1 CSL GHB4 hCS-L	17
CSPG5	10675	chondroitin sulfate proteoglycan 5	NGC	3
CTF1	1489	cardiotrophin 1	CT-1 CT1	16
CCN2	1490	cellular communication network factor 2	CTGF HCS24 IGFBP8 NOV2	6
CTSG	1511	cathepsin G	CATG CG	14
CX3CL1	6376	C-X3-C motif chemokine ligand 1	ABCD-3 C3Xkine CXC3 CX3C NTN NTT SCYD1 fractalkine neurotactin	16
CXCL1	2919	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSa MGSa-a NAP-3 SCYB1	4
CXCL10	3627	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg-2 gIP-10 mob-1	4
CXCL11	6373	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4
CXCL12	6387	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10
CXCL13	10563	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BCA-1 BCA1 BLC BLR1L SCYB13	4
CXCL14	9547	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP-2g MIP2G NJAC SCYB14	5

CXCL16	58191	C-X-C motif chemokine ligand 16	CXCLG16 SR- PSOX SRPSOX	17
CXCL17	284340	C-X-C motif chemokine ligand 17	DMC Dcip1 UNQ47 3 VCC-1 VCC1	19
CXCL2	2920	C-X-C motif chemokine ligand 2	CINC- 2a GRO2 GROb MG SA-b MIP- 2a MIP2 MIP2A SC YB2	4
CXCL3	2921	C-X-C motif chemokine ligand 3	CINC- 2b GRO3 GROg MI P-2b MIP2B SCYB3	4
CXCL5	6374	C-X-C motif chemokine ligand 5	ENA-78 SCYB5	4
CXCL6	6372	C-X-C motif chemokine ligand 6	CKA-3 GCP- 2 GCP2 SCYB6	4
CXCL9	4283	C-X-C motif chemokine ligand 9	CMK Humig MIG S CYB9 crg-10	4
CCN1	3491	cellular communication network factor 1	CYR61 GIG1 IGFB P10	1
DEFA1	1667	defensin alpha 1	DEF1 DEFA2 HNP- 1 HP-1 HP1 MRS	8
DEFA3	1668	defensin alpha 3	DEF3 HNP- 3 HNP3 HP-3 HP3	8
DEFA5	1670	defensin alpha 5	DEF5 HD-5	8
DEFB1	1672	defensin beta 1	BD1 DEFB- 1 DEFB101 HBD1	8
DEFB103B	55894	defensin beta 103B	BD-3 DEFB- 3 DEFB103 DEFB3 HBD-3 HBD3 HBP- 3 HBP3	8
DEFB104A	140596	defensin beta 104A	BD-4 DEFB- 4 DEFB104 DEFB4 hBD-4	8
DEFB4A	1673	defensin beta 4A	BD-2 DEFB- 2 DEFB102 DEFB2 DEFB4 HBD- 2 SAP1	8
DKK1	22943	dickkopf WNT signaling pathway inhibitor 1	DKK-1 SK	10
EBI3	10148	Epstein-Barr virus induced 3	IL- 27B IL27B IL35B	19

EDN1	1906	endothelin 1	ARCND3 ET1 HDL CQ7 PPET1 QME	6
EDN2	1907	endothelin 2	ET-2 ET2 PPET2	1
EDN3	1908	endothelin 3	ET- 3 ET3 HSCR4 PPET 3 WS4B	20
EGF	1950	epidermal growth factor	HOMG4 URG	4
EPGN	255324	epithelial mitogen	ALGV3072 EPG PR O9904	4
EPO	2056	erythropoietin	DBAL ECYT5 EP MVCD2	7
EREG	2069	epiregulin	EPR ER Ep	4
ESM1	11082	endothelial cell specific molecule 1	endocan	5
FAM3B	54097	FAM3 metabolism regulating signaling molecule B	2- 21 C21orf11 C21orf 76 ORF9 PANDER PRED44	21
FAM3C	10447	FAM3 metabolism regulating signaling molecule C	GS3786 ILEI	7
FAM3D	131177	FAM3 metabolism regulating signaling molecule D	EF7 OIT1	3
FASLG	356	Fas ligand	ALPS1B APT1LG1 APTL CD178 CD95 - L CD95L FASL TN FSF6 TNLG1A	1
FGF1	2246	fibroblast growth factor 1	AFGF ECGF ECGF- beta ECGFA ECGF B FGF-1 FGF- alpha FGFA GLIO7 03 HBGF-1 HBGF1	5
FGF10	2255	fibroblast growth factor 10	-	5
FGF11	2256	fibroblast growth factor 11	FGF-11 FHF- 3 FHF3	17
FGF12	2257	fibroblast growth factor 12	EIEE47 FGF12B FH F1	3
FGF13	2258	fibroblast growth factor 13	FGF-13 FGF2 FHF- 2 FHF2 LINC00889	X
FGF14	2259	fibroblast growth factor 14	FGF-14 FHF- 4 FHF4 SCA27	13
FGF16	8823	fibroblast growth factor 16	FGF-16 MF4	X

FGF17	8822	fibroblast growth factor 17	FGF-13 FGF-17 HH20	8
FGF18	8817	fibroblast growth factor 18	FGF-18 ZFGF5	5
FGF19	9965	fibroblast growth factor 19	-	11
FGF2	2247	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4
FGF20	26281	fibroblast growth factor 20	FGF-20 RHDA2	8
FGF21	26291	fibroblast growth factor 21	-	19
FGF22	27006	fibroblast growth factor 22	-	19
FGF23	8074	fibroblast growth factor 23	ADHR FGFN HFTC2 HPDR2 HYPF PHPTC	12
FGF3	2248	fibroblast growth factor 3	HBGF-3 INT2	11
FGF4	2249	fibroblast growth factor 4	FGF-4 HBGF-4 HST HST-1 HSTF-1 HSTF1 K-FGF KFGF	11
FGF5	2250	fibroblast growth factor 5	HBGF-5 Smag-82 TCMGLY	4
FGF6	2251	fibroblast growth factor 6	HBGF-6 HST2	12
FGF7	2252	fibroblast growth factor 7	HBGF-7 KGF	15
FGF8	2253	fibroblast growth factor 8	AIGF FGF-8 HBGF-8 HH6 KAL6	10
FGF9	2254	fibroblast growth factor 9	FGF-9 GAF HBFG-9 HBGF-9 SYNS3	13
VEGFD	2277	vascular endothelial growth factor D	FIGF VEGF-D	X
FIGNL2	401720	fidetin like 2	-	12
FLT3LG	2323	fms related receptor tyrosine kinase 3 ligand	FL FLG3L FLT3L	19
FSHB	2488	follicle stimulating hormone subunit beta	HH24	11
GAL	51083	galanin and GMAP prepropeptide	ETL8 GAL-GMAP GALN GLNN GMAP	11
GALP	85569	galanin like peptide	-	19
GAST	2520	gastrin	GAS	17

GCG	2641	glucagon	GLP-1 GLP1 GLP2 GRPP	2
GDF1	2657	growth differentiation factor 1	CERS1 CHTD6 DO RV DTGA3 LAG1 L ASS1 RAI UOG1	19
GDF10	2662	growth differentiation factor 10	BIP BMP-3b BMP3B	10
GDF11	10220	growth differentiation factor 11	BMP-11 BMP11	12
GDF15	9518	growth differentiation factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGF B	19
GDF2	2658	growth differentiation factor 2	BMP-9 BMP9 HHT5	10
GDF3	9573	growth differentiation factor 3	KFS3 MCOP7 MCO PCB6	12
GDF5	8200	growth differentiation factor 5	BDA1C BMP-14 BMP14 CDMP1 DUPANS LAP-4 LAP4 OS5 SYM1 B SYNS2	20
GDF6	392255	growth differentiation factor 6	BMP-13 BMP13 CDMP2 KFM KFS KFS1 KFSL SGM1 SYNS4	8
GDF7	151449	growth differentiation factor 7	BMP12	2
GDF9	2661	growth differentiation factor 9	POF14	5
GDNF	2668	glial cell derived neurotrophic factor	ATF ATF1 ATF2 H FB1-GDNF HSCR3	5
GH1	2688	growth hormone 1	GH GH-N GHB5 GHN IGH D1A IGHD1B IGHD 2 hGH-N	17
GH2	2689	growth hormone 2	GH-V GHB2 GHL GHV hGH-V	17
GHRH	2691	growth hormone releasing hormone	GHRF GRF INN	20
GHRL	51738	ghrelin and obestatin prepropeptide	MTLRP	3

GIP	2695	gastric inhibitory polypeptide	-	17
GKN1	56287	gastrokine 1	AMP18 BRICD1 CA11 FOV foveolin	2
GMFB	2764	glia maturation factor beta	GMF	14
GMFG	9535	glia maturation factor gamma	GMF-GAMMA	19
GNRH1	2796	gonadotropin releasing hormone 1	GNRH GRH LHRH LNRH	8
GNRH2	2797	gonadotropin releasing hormone 2	GnRH-II LH-RHII	20
GPHA2	170589	glycoprotein hormone subunit alpha 2	A2 GPA2 ZSIG51	11
GPHB5	122876	glycoprotein hormone subunit beta 5	B5 GPB5 ZLUT1	14
GPI	2821	glucose-6-phosphate isomerase	AMF GNPI NLK PGI PHI SA-36 SA36	19
GREM1	26585	gremlin 1, DAN family BMP antagonist	C15DUPq CKTSF1B1 CRAC1 CRCS4 DAND2 DRM DUP15q GREMLIN HMPS HMPS1 IHG-2 MPSH PIG2	15
GREM2	64388	gremlin 2, DAN family BMP antagonist	CKTSF1B2 DAND3 PRDC STHAG9	1
GRN	2896	granulin precursor	CLN11 GEP GP88 PCDGF PEPI PGRN	17
GRP	2922	gastrin releasing peptide	BN GRP-10 preproGRP proGRP	18
GUCA2A	2980	guanylate cyclase activator 2A	GCAP-I GUCA2 STARA	1
HAMP	57817	hepcidin antimicrobial peptide	HEPC HFE2B LEAP1 PLTR	19
HBEGF	1839	heparin binding EGF like growth factor	DTR DTS DTSF HEGFL	5
HDGF	3068	heparin binding growth factor	HMG1L2	1
HDGFL3	50810	HDGF like 3	CGI-142 HDGF-2 HDGF2 HDGFRP3 HRP-3	15

HGF	3082	hepatocyte growth factor	DFNB39 F-TCF HGFB HPTA S F	7
HTN3	3347	histatin 3	HIS2 HTN2 HTN5 P B	4
IAPP	3375	islet amyloid polypeptide	DAP IAP	12
IFNA1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFN A@ leIF D	9
IFNA10	3446	interferon alpha 10	IFN-alphaC	9
IFNA13	3447	interferon alpha 13	-	9
IFNA14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9
IFNA16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9
IFNA17	3451	interferon alpha 17	IFN-alphaI IFNA INFA L EIF2C1	9
IFNA2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2 B leIF A	9
IFNA21	3452	interferon alpha 21	IFN-alphaI LeIF F leIF-F	9
IFNA4	3441	interferon alpha 4	IFN-alpha4a INFA4	9
IFNA5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9
IFNA6	3443	interferon alpha 6	IFN-alphaK	9
IFNA7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9
IFNA8	3445	interferon alpha 8	IFN-alphaB	9
IFNB1	3456	interferon beta 1	IFB IFF IFN-beta IFNB	9
IFNE	338376	interferon epsilon	IFN- E IFNE1 IFNT1 INF E1 PRO655	9
IFNG	3458	interferon gamma	IFG IFI	12
IFNK	56832	interferon kappa	IFNT1 INFE1	9
IFNW1	3467	interferon omega 1	-	9
IGF1	3479	insulin like growth factor 1	IGF IGF-I IGFI MGF	12
IGF2	3481	insulin like growth factor 2	C11orf43 GRDF IG F-II PP9974	11
IL10	3586	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1
IL11	3589	interleukin 11	AGIF IL-11	19
IL12A	3592	interleukin 12A	CLMF IL-12A NFSK NKSF1 P35	3

IL12B	3593	interleukin 12B	CLMF CLMF2 IL-12B IMD28 IMD29 NKSF NKSF2	5
IL13	3596	interleukin 13	IL-13 P600	5
IL15	3600	interleukin 15	IL-15	4
IL16	3603	interleukin 16	LCF NIL16 PRIL16 prIL-16	15
IL17A	3605	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6
IL17B	27190	interleukin 17B	IL-17B IL-20 NIRF ZCYTO7	5
IL17C	27189	interleukin 17C	CX2 IL-17C	16
IL17D	53342	interleukin 17D	IL-17D	13
IL17F	112744	interleukin 17F	CANDF6 IL-17F ML-1 ML1	6
IL18	3606	interleukin 18	IGIF IL-18 IL-1g IL1F4	11
IL19	29949	interleukin 19	IL-10C MDA1 NG.1 ZMDA1	1
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2
IL1F10	84639	interleukin 1 family member 10	FIL1-theta FKSG75 IL-1HY2 IL-38 IL1-theta IL1HY2	2
IL36RN	26525	interleukin 36 receptor antagonist	FIL1 FIL1(Delta) FIL1D IL-36Ra IL1F5 IL1HY1 IL1L1 IL1RP3 IL36RA PSORP PSORS14	2
IL36A	27179	interleukin 36 alpha	FIL1 FIL1(EPSILON) FIL1E IL-1F6 IL1(EPSILON) IL1F6	2
IL37	27178	interleukin 37	FIL1 FIL1(ZETA) FIL1Z IL-1F7 IL-1H IL-1H4 IL-1RP1 IL-37 IL1F7 IL1H4 IL1RP1	2

IL36B	27177	interleukin 36 beta	FIL1 FIL1-(ETA) FIL1H FILI-(ETA) IL-1F8 IL-1H2 IL1-ETA IL1F8 IL1H2	2
IL36G	56300	interleukin 36 gamma	IL-1F9 IL-1H1 IL-1RP2 IL1E IL1F9 IL1H1 IL1RP2	2
IL1RN	3557	interleukin 1 receptor antagonist	DIRA ICIL-1RA IL-1RN IL-1ra IL-1ra3 IL1F3 IL1RA IRAP MVCD4	2
IL2	3558	interleukin 2	IL-2 TCGF lymphokine	4
IL20	50604	interleukin 20	IL-20 IL10D ZCYTO10	1
IL21	59067	interleukin 21	CVID11 IL-21 Za11	4
IL22	50616	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL-23 TIFa zycto18	12
IL23A	51561	interleukin 23 subunit alpha	IL-23 IL-23A IL23P19 P19 SGRF	12
IL24	11009	interleukin 24	C49A FISP IL10B MDA7 MOB5 ST16	1
IL25	64806	interleukin 25	IL17E	14
IL26	55801	interleukin 26	AK155 IL-26	12
IL27	246778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16
IFNL2	282616	interferon lambda 2	IL-28A IL28A	19
IFNL3	282617	interferon lambda 3	IFN-lambda-3 IFN-lambda-4 IL-28B IL-28C IL28B IL28C	19
IFNL1	282618	interferon lambda 1	IL-29 IL29	19
IL3	3562	interleukin 3	IL-3 MCGF MULTI-CSF	5
IL31	386653	interleukin 31	IL-31	12

IL32	9235	interleukin 32	IL-32alpha IL-32beta IL-32delta IL-32gamma NK4 TAIF TAIFa TAIFb TAIFc TAIFd	16
IL33	90865	interleukin 33	C9orf26 DVS27 IL1F11 NF-HEV NFEHEV	9
IL34	146433	interleukin 34	C16orf77 IL-34	16
IL4	3565	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5
IL5	3567	interleukin 5	EDF IL-5 TRF	5
IL6	3569	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7
IL6ST	3572	interleukin 6 signal transducer	CD130 CDW130 GP130 HIES4 IL-6RB sGP130	5
IL7	3574	interleukin 7	IL-7	8
CXCL8	3576	C-X-C motif chemokine ligand 8	GCP-1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4
IL9	3578	interleukin 9	HP40 IL-9 P40	5
INHAI	3623	inhibin subunit alpha	-	2
INHBA	3624	inhibin subunit beta A	EDF FRP	7
INHBB	3625	inhibin subunit beta B	-	2
INHBC	3626	inhibin subunit beta C	IHBC	12
INHBE	83729	inhibin subunit beta E	-	12
INS	3630	insulin	IDDM IDDM1 IDDM2 ILPR IRDN MODY10 PNDM4	11
INS-IGF2	723961	INS-IGF2 readthrough	INSIGF	11
INSL3	3640	insulin like 3	RLF RLNL Iey-I-L	19
INSL4	3641	insulin like 4	EPIL PLACENTIN	9
INSL5	10022	insulin like 5	PRO182 UNQ156	1
INSL6	11172	insulin like 6	RIF1	9

JAG1	182	jagged canonical Notch ligand 1	AGS AGS1 AHD AWS CD339 DCHE HJ1 JAGL1	20
JAG2	3714	jagged canonical Notch ligand 2	HJ2 SER2	14
FGF7P6	387628	fibroblast growth factor 7 pseudogene 6	KGFLP1	9
FGF7P3	654466	fibroblast growth factor 7 pseudogene 3	KGFLP2	9
KITLG	4254	KIT ligand	DCUA DFNA69 FP H2 FPHH KL-1 Kitl MGF SCF SF SHEP7 SLF	12
KL	9365	klotho	HFTC3	13
LACRT	90070	lacritin	-	12
LECT2	3950	leukocyte cell derived chemotaxin 2	chm-II chm2	5
LEFTY1	10637	left-right determination factor 1	LEFTB LEFTYB	1
LEFTY2	7044	left-right determination factor 2	EBAF LEFTA LEFTYA TGFB4	1
LEP	3952	leptin	LEPD OB OBS	7
LHB	3972	luteinizing hormone subunit beta	CGB4 HH23 LSH-B LSH-beta	19
LIF	3976	LIF interleukin 6 family cytokine	CDF DIA HILDA MLPLI	22
LRSAM1	90678	leucine rich repeat and sterile alpha motif containing 1	CMT2P RIFLE TAL	9
LTA	4049	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6
LTB	4050	lymphotoxin beta	TNFC TNFSF3 TNLG1C p33	6
LTBP1	4052	latent transforming growth factor beta binding protein 1	-	2
LTBP2	4053	latent transforming growth factor beta binding protein 2	C14orf141 GLC3D LTBP3 MSPKA MS TP031 WMS3	14
LTBP3	4054	latent transforming growth factor beta binding protein 3	DASS GPHYSD3 LTBP-3 LTBP2 STHAG6 p6425	11

LTBP4	8425	latent transforming growth factor beta binding protein 4	ARCL1C LTBP-4 LTBP4L LTBP4S	19
MDK	4192	midkine	ARAP MK NEGF2	11
MIA	8190	MIA SH3 domain containing macrophage	CD-RAP	19
MIF	4282	migration inhibitory factor	GIF GLIF MMIF	22
MLN	4295	motilin	-	6
MSTN	2660	myostatin	GDF8 MSLHP	2
NAMPT	10135	nicotinamide phosphoribosyltransferase	1110035O14Rik PBEF1 VF VISFATIN	7
NDP	4693	norrin cystine knot growth factor NDP	EVR2 FEVR ND	X
NENF	29937	neudesin neurotrophic factor	CIR2 SCIRP10 SPUF	1
NGF	4803	nerve growth factor	Beta-NGF HSAN5 NGFB	1
NMB	4828	neuromedin B	-	15
NODAL	4838	nodal growth differentiation factor	HTX5	10
CCN3	4856	cellular communication network factor 3	IBP-9 IGFBP-9 IGFBP9 NOV NOVh	8
NPFF	8620	neuropeptide FF-amide peptide precursor	FMRFAL	12
NPPA	4878	natriuretic peptide A	ANF ANP ATFB6 ATRST2 CDD CDD-ANF CDP PND	1
NPPB	4879	natriuretic peptide B	BNP	1
NPPC	4880	natriuretic peptide C	CNP CNP2	2
NPY	4852	neuropeptide Y	PYY4	7
NRG1	3084	neuregulin 1	ARIA GGF GGF2 HGL HRG HRG1 HRGA MST131 MSTP131 NDF NRG1-IT2 SMDF	8
NRG2	9542	neuregulin 2	DON1 HRG2 NTAK	5
NRG3	10718	neuregulin 3	HRG3 pro-NRG3	10
NRG4	145957	neuregulin 4	HRG4	15
NRTN	4902	neurturin	NTN	19

NTF3	4908	neurotrophin 3	HDNF NGF-2 NGF2 NT-3 NT3	12
NTF4	4909	neurotrophin 4	GLC10 GLC10 NT-4 NT-4/5 NT-5 NT4 NT5 NTF5	19
NTS	4922	neurotensin	NMN-125 NN NT NT/N NTS1	12
NUDT6	11162	nudix hydrolase 6	ASF2 FGF-AS FGF2AS GFG-1 GFG1	4
OGN	4969	osteoglycin	OG OIF SLRR3A	9
OSGIN1	29948	oxidative stress induced growth inhibitor 1	BDGI OKL38	16
OSM	5008	oncostatin M	-	22
OSTN	344901	osteocrin	MUSCLIN	3
OXT	5020	oxytocin/neurophysin I prepropeptide	OT OT-NPI OXT-NPI	20
ENDOU	8909	endonuclease, poly(U) specific	P11 PP11 PRSS26	12
PDGFA	5154	platelet derived growth factor subunit A	PDGF-A PDGF1	7
PDGFB	5155	platelet derived growth factor subunit B	IBGC5 PDGF-2 PDGF2 SIS SSV c-sis	22
PDGFC	56034	platelet derived growth factor C	FALLOTEIN SCDGF	4
PDGFD	80310	platelet derived growth factor D	IEGF MSTP036 SCDGF-B SCDGF	11
PDGFRA	5156	platelet derived growth factor receptor alpha	CD140A PDGFR-2 PDGFR2	4
PDGFRB	5159	platelet derived growth factor receptor beta	CD140B IBGC4 IMF1 JTK12 KOGS PDGFR PDGFR-1 PDGFR1 PENTT	5
PDGFRL	5157	platelet derived growth factor receptor like	PDGRL PRLTS	8
PDYN	5173	prodynorphin	ADCA PENKB SCA23	20
PENK	5179	proenkephalin	PE PENK-A	8
PF4	5196	platelet factor 4	CXCL4 PF-4 SCYB4	4
PF4V1	5197	platelet factor 4 variant 1	CXCL4L1 CXCL4V1 PF4-ALT PF4A SCYB4V1	4

PGF	5228	placental growth factor	D12S1900 PGFL PIGF PLGF PIGF-2 SHGC-10760	14
PLAU	5328	plasminogen activator, urokinase	ATF BDPLT5 QPD UPA URK u-PA	10
PMCH	5367	pro-melanin concentrating hormone	MCH ppMCH	12
PNOC	5368	prepronociceptin	N/OFQ NOP OFQ PNOC ppN/OFQ	8
POMC	5443	proopiomelanocortin	ACTH CLIP LPH MSH NPP OBAIRH POMC	2
PPBP	5473	pro-platelet basic protein	B-TG1 Beta-TG CTAP-III CTAP3 CTAPIII CXCL7 LA-PF4 LDGF MDGF NAP-2 PBP SCYB7 TC1 TC2 TGB TGB1 THBGB THBGB1	4
PPBPP1	728045	pro-platelet basic protein pseudogene 1	PPBPL1 TGB2	4
PPBPP2	10895	pro-platelet basic protein pseudogene 2	PPBPL2 SPBPBP	4
PPY	5539	pancreatic polypeptide	PNP PP	17
PRL	5617	prolactin	GHA1	6
PRLH	51052	prolactin releasing hormone	PRH PRRP	2
PROK1	84432	prokineticin 1	EGVEGF PK1 PRK1	1
PROK2	60675	prokineticin 2	BV8 HH4 KAL4 MIT1 PK2	3
PSPN	5623	persephin	PSP	19
PTH	5741	parathyroid hormone	FIH1 PTH1	11
PTH2	113091	parathyroid hormone 2	TIP39	19
PTHLH	5744	parathyroid hormone like hormone	BDE2 HHM PLP PTHR PTHRP	12

PTN	5764	pleiotrophin	HARP HB-GAM HBBM HBGF - 8 HBGF8 HBNF HBNF-1 NEGF1 OSF-1	7
PYY	5697	peptide YY	PYY-I PYY1	17
QRFP	347148	pyroglutamylated RFamide peptide	26RFa P518	9
RABEP1	9135	rabaptin, RAB GTPase binding effector protein 1	RAB5EP RABPT5	17
RABEP2	79874	rabaptin, RAB GTPase binding effector protein 2	FRA	16
REG1A	5967	regenerating family member 1 alpha	ICRF P19 PSP PSPS PSPS1 PTP REG	2
RETN	56729	resistin	ADSF FIZZ3 RETN1 RSTN XCP1 FIZZ1 FIZZ2 HXCP	19
RETNLB	84666	resistin like beta	2 RELM-beta RELMb RELMbeta XCP2	3
RLN1	6013	relaxin 1	H1 H1RLX RLXH1 bA12D24.3.1 bA12D24.3.2	9
RLN2	6019	relaxin 2	H2 H2-RLX RLXH2 bA12D24.1.1 bA12D24.1.2	9
RLN3	117579	relaxin 3	H3 RXN3 ZINS4 ins17	19
RNASE2	6036	ribonuclease A family member 2	EDN RAF3 RNS2	14
S100A6	6277	S100 calcium binding protein A6	2A9 5B10 CABP CACY PRA S10A6	1
SAA1	6288	serum amyloid A1	PIG4 SAA SAA2 TP53I4	11
SAA2	6289	serum amyloid A2	SAA SAA1	11
SBDS	51119	SBDS ribosome maturation factor	CGI-97 SDS SWDS	7
SCG2	7857	secretogranin II	CHGC EM66 SN SgII	2
SCGB3A1	92304	secretoglobin family 3A member 1	HIN-1 HIN1 LU105 PnSP-2 UGRP2	5
SCT	6343	secretin	-	11

AIMP1	9255	aminoacyl tRNA synthetase complex interacting multifunctional protein 1	EMAP2 EMAPII HL D3 SCYE1 p43	4
SECTM1	6398	secreted and transmembrane 1	K12 SECTM	17
SEMA3A	10371	semaphorin 3A	COLL1 HH16 Hsema-a-I Hsema-III SEMA1 SEMAD SEMAIII SEMAL SemD coll-1	7
SEMA3B	7869	semaphorin 3B	LUCA-1 SEMA5 SEMAA SemA semaV	3
SEMA3C	10512	semaphorin 3C	SEMAE SemE	7
SEMA3D	223117	semaphorin 3D	Sema-Z2 coll-2	7
SEMA3E	9723	semaphorin 3E	M-SEMAH M-SemaK SEMAH coll-5	7
SEMA3F	6405	semaphorin 3F	SEMA-IV SEMA4 SEMAK	3
SEMA3G	56920	semaphorin 3G	sem2	3
SEMA4A	64218	semaphorin 4A	CORD10 RP35 SEMAB SEMA	1
SEMA4B	10509	semaphorin 4B	SEMAG SemC	15
SEMA4C	54910	semaphorin 4C	M-SEMA-F SEMAF SEMAI	2
SEMA4D	10507	semaphorin 4D	A8 BB18 C9orf164 CD100 COLL4 GR3 M-sema-G SEMAJ coll-4	9
SEMA4F	10505	ssemaphorin 4F	M-SEMA PRO2353 S4F SEMAM SEMAW m-Sema-M	2
SEMA4G	57715	semaphorin 4G	-	10
SEMA5A	9037	semaphorin 5A	SEMAF semF	5
SEMA5B	54437	semaphorin 5B	SEMAG SemG	3
SEMA6A	57556	semaphorin 6A	HT018 SEMA SEMA6A1 SEMAQ VIA	5
SEMA6B	10501	semaphorin 6B	EPM11 SEM-SEMA-Y SEMA-VIB SEMAN semaZ	19
SEMA6C	10500	semaphorin 6C	SEMAY m-SemaY m-SemaY2	1

SEMA6D	80031	semaphorin 6D	-	15
SEMA7A	8482	semaphorin 7A (John Milton Hagen blood group)	CD108 CDw108 H-SEMA-K1 H-Sema-L JMH SEMAK1 SEMAL	15
SLIT1	6585	slit guidance ligand 1	MEGF4 SLIL1 SLIT-1 SLIT3	10
SLIT2	9353	slit guidance ligand 2	SLIL3 Slit-2	4
SLURP1	57152	secreted LY6/PLAUR domain containing 1	ANUP ARS ArsB LY6-MT LY6LS MDM	8
SPP1	6696	secreted phosphoprotein 1	BNSP BSPI ETA-1 OPN	4
SST	6750	somatostatin	SMST	3
STC1	6781	stanniocalcin 1	STC	8
STC2	8614	stanniocalcin 2	STC-2 STCRP	5
TAC1	6863	tachykinin precursor 1	Hs.2563 NK2 NKN A NPK TAC2	7
TDGF1	6997	teratocarcinoma-derived growth factor 1	CR CR-1 CRGF CRIPTO	3
TDGF1P3	6998	teratocarcinoma-derived growth factor 1 pseudogene 3	CR-3 CRIPTO CRIPTO-3 CRIPTO3 TDGF1 TDGF2 TDGF3	X
TG	7038	thyroglobulin	AITD3 TGN	8
TGFA	7039	transforming growth factor alpha	TFGA	2
TGFB1	7040	transforming growth factor beta 1	CED DPD1 IBDIM DE LAP TGF-beta1 TGFB TGFbeta	19
TGFB2	7042	transforming growth factor beta 2	G-TSF LDS4 TGF-beta2	1
TGFB3	7043	transforming growth factor beta 3	ARVD ARVD1 LDS5 RNHF TGF-beta3	14
THPO	7066	thrombopoietin	MGDF MKCSF ML MPLLG THCYT1 TPO	3
TNC	3371	tenascin C	150-225 DFNA56 GME M GP HXB JI TN TN-C	9
TNF	7124	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6

TNFRSF11	4982	TNF receptor superfamily member 11b	OCIF OPG PDB5 TR1	8
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3
TNFSF11	8600	TNF superfamily member 11	CD254 ODF OPGL OPTB2 RANKL TNLG6B TRANCE hRANKL2 sOdf	13
TNFSF12	8742	TNF superfamily member 12	APO3L DR3LG TNLG4A TWEAK	17
TNFSF13	8741	TNF superfamily member 13	APRIL CD256 TALL-2 TALL2 TNLG7B TRDL-1 UNQ383/PRO715 ZTNF2	17
TNFSF13B	10673	TNF superfamily member 13b	BAFF BLYS CD257 DTL TALL-1 TALL1 THANK TNFSF20 TNLG7A ZTNF4	13
TNFSF14	8740	TNF superfamily member 14	CD258 HVEM LIGHT LTg	19
TNFSF15	9966	TNF superfamily member 15	TL1 TL1A TNLG1B VEGI VEGI192A	9
TNFSF18	8995	TNF superfamily member 18	AITRL GITRL TL6 TNLG2A hGITRL	1
TNFSF4	7292	TNF superfamily member 4	CD134L CD252 GP34 OX-40L OX40L TNLG2B TXGP1	1
TNFSF8	944	TNF superfamily member 8	CD153 CD30L CD30LG TNLG3A	9
TNFSF9	8744	TNF superfamily member 9	4-1BB-L CD137L TNLG5A	19
TOR2A	27433	torsin family 2 member A	TORP1	9
TRH	7200	thyrotropin releasing hormone	Pro-TRH TRF	3
TSHB	7252	thyroid stimulating hormone subunit beta	TSH-B TSH-BETA	1
TSLP	85480	thymic stromal lymphopoietin	-	5
TXLNA	200081	taxilin alpha	IL14 TXLN	1
TYMP	1890	thymidine phosphorylase	ECGF ECGF1 MEDPS1 MNGIE MTDPS1 PDECGF TP hPD-ECGF	22

UCN	7349	urocortin	UI UROC	2
UCN2	90226	urocortin 2	SRP UCN-II UCNI UR URP	3
UCN3	114131	urocortin 3	SCP SPC UCNIII	10
UTS2	10911	urotensin 2	PRO1068 U-II UCN2 UII	1
UTS2B	257313	urotensin 2B	U2B URP UTS2D	3
VEGFA	7422	vascular endothelial growth factor A	MVCD1 VEGF VPF	6
VEGFB	7423	vascular endothelial growth factor B	VEGFL VRF	11
VEGFC	7424	vascular endothelial growth factor C	Flt4-L LMPH1D LMPH M4 VRP	4
VEGF	7425	VGF nerve growth factor inducible	SCG7 SgVII	7
VIP	7432	vasoactive intestinal peptide	PHM27	6
XCL1	6375	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM-1a SCM1 SCM1A SCYC1	1
XCL2	6846	X-C motif chemokine ligand 2	SCM-1b SCM1B SCYC2	1
ACVR1B	91	activin A receptor type 1B	ACTRIB ACVRLK4 ALK4 SKR2	12
ACVR1C	130399	activin A receptor type 1C	ACVRLK7 ALK7	2
ACVR2A	92	activin A receptor type 2A	ACTRII ACVR2	2
ACVR2B	93	activin A receptor type 2B	ACTRIIB ActR-IIB HTX4	3
ACVRL1	94	activin A receptor like type 1	ACVRLK1 ALK-1 ALK1 HHT HHT2 ORW2 SKR3 TSR-I	12
ADCYAP1	117	ADCYAP receptor type I	PAC1 PAC1R PACAPR PACAPRI	7
ADIPOR1	51094	adiponectin receptor 1	ACDCR1 CGI-45 CGI45 PAQR1 TESBP1A	1
ADIPOR2	79602	adiponectin receptor 2	ACDCR2 PAQR2	12
ADRB1	153	adrenoceptor beta 1	ADRB1R B1AR BE TA1AR FNSS2 RH R	10

ADRB2	154	adrenoceptor beta 2	ADRB2R ADRBR B2AR BAR BETA2AR	5
AGTR1	185	angiotensin II receptor type 1	AG2S AGTR1B AT1 AT1AR AT1B AT1BR AT1R AT2R1 HAT1R	3
AGTR2	186	angiotensin II receptor type 2	AT2 ATGR2 MRX88	X
AMHR2	269	anti-Mullerian hormone receptor type 2	AMHR MISR2 MISRII MRII	12
ANGPT1	284	angiopoietin 1	AGP1 AGPT ANG1	8
ANGPT4	51378	angiopoietin 4	ANG3 ANG4	20
ANGPTL1	9068	angiopoietin like 1	ANG3 ANGPT3 ARP1 AngY UNQ162 dJ595C2.2	1
ANGPTL2	23452	angiopoietin like 2	ARP2 HARP	9
ANGPTL3	27329	angiopoietin like 3	ANG-5 ANGPT5 ANL3 FHBL2	1
ANGPTL4	51129	angiopoietin like 4	ARP4 FIAF HARP HFARP NL2 PGAR TGQTL UNQ171 pp1158	19
ANGPTL6	83854	angiopoietin like 6	AGF ARP5	19
APLNR	187	apelin receptor	AGTRL1 APJ APJR HG11	11
AR	367	androgen receptor	AIS AR8 DHTR HUMARA HYSP1 KD NR3C4 SBMA SMAX1 TFM	X
AVPR1A	552	arginine vasopressin receptor 1A	AVPRV1a AVPR1 V1aR	12
AVPR1B	553	arginine vasopressin receptor 1B	AVPR3 V1bR	1
AVPR2	554	arginine vasopressin receptor 2	ADHR DI1 DIR DIR3 NDI V2R	X
BMPR1A	657	bone morphogenetic protein receptor type 1A	10q23del ACVRLK3 ALK3 CD292 SKR5	10
BMPR1B	658	bone morphogenetic protein receptor type 1B	ALK-6 ALK6 AMDD BDA1D BDA2 CDw293	4

BMPR2	659	bone morphogenetic protein receptor type 2	BMPR-II BMPR3 BMR2 BRK-3 POVD1 PPH1 T-ALK	2
BRD8	10902	bromodomain containing 8	SMAP SMAP2 p120	5
C3AR1	719	complement C3a receptor 1	AZ3B C3AR HNFA G09	12
C5AR1	728	complement C5a receptor 1	C5A C5AR C5R1 CD88	19
CALCR	799	calcitonin receptor	CRT CTR CTR1	7
CALCRL	10203	calcitonin receptor like receptor	CGRPR CRLR LMP HM8	2
ACKR2	1238	atypical chemokine receptor 2	CCBP2 CCR10 CCR9 CMKBR9 D6 hD6	3
CCR1	1230	C-C motif chemokine receptor 1	CD191 CKR-1 CKR1 CMKBR1 HM145 MIP1aR SCYAR1	3
CCR10	2826	C-C motif chemokine receptor 10	GPR2	17
CCR3	1232	C-C motif chemokine receptor 3	CCCKR3 CC-CKR-3 CD193 CKR3 CKR3 CMKBR3	3
CCR4	1233	C-C motif chemokine receptor 4	CC-CKR-4 CD194 CKR4 CMKBR4 ChemR13 HGCN:14099 K5-5	3
CCR5	1234	C-C motif chemokine receptor 5	CC-CKR-5 CCCKR5 CCR-5 CD195 CKR-5 CKR5 CMKBR5 IDDM22	3
CCR6	1235	C-C motif chemokine receptor 6	BN-1 C-C CKR-6 CC-CKR-6 CCR-6 CD196 CKR-6 DCCR2 DRY6 GPR29 GPRCY4 STRL22	6
CCR7	1236	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17

CCR8	1237	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBR L2 CY6 GPRCY6 TER1	3
CCR9	10803	C-C motif chemokine receptor 9	CC-CKR-9 CDw199 GPR-9-6 GPR28	3
ACKR4	51554	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CRL1 CCX CKR CCX-CKR CKR-11 PPR1 VSHK1	3
CCRL2	9034	C-C motif chemokine receptor like 2	ACKR5 CKRX CRAM CRAM-B HCR Bp50 CDW40 TNF RSF5 p50	3
CD40	958	CD40 molecule		20
CMKLR1	1240	chemerin chemokine-like receptor 1	CHEMERINR ChemR23 DEZ RVER1	12
CNTFR	1271	ciliary neurotrophic factor receptor	-	9
CRHR1	1394	corticotropin releasing hormone receptor 1	CRF-R CRF-R-1 CRF-R1 CRF1 CRFR-1 CRFR1 CRH-R-1 CRH-R1 CRHR CRHR1L	17
CRHR2	1395	corticotropin releasing hormone receptor 2	CRF-RB CRF2 CRFR2 HM-CRF	7
CRIM1	51232	cysteine rich transmembrane BMP regulator 1	CRIM-1 S52	2
CRLF1	9244	cytokine receptor like factor 1	CISS CISS1 CLF CLF-1 NR6 zcytor5	19
CRLF2	64109	cytokine receptor like factor 2	CRL2 CRLF2Y TSLPR	X Y
CRLF3	51379	cytokine receptor like factor 3	CREME-9 CREME9 CRLM9 CYTOR4 FRWS p48.2	17
CSF1R	1436	colony stimulating factor 1 receptor	BANDDOS CFMS CD115 CSF-1R CSFR FIM2 FMS HDLS M-CSF-R	5

CSF2RA	1438	colony stimulating factor 2 receptor subunit alpha	CD116 CDw116 CSF2R CSF2RAX CSF2RAY CSF2RX CSF2RY GM-CSF-R-alpha GMCSFR GMCSFR-alpha GMR GMR-alpha SMDP4 alpha GMR	X Y
CSF2RB	1439	colony stimulating factor 2 receptor subunit beta	CD131 CDw131 IL3RB IL5RB SMDP5 betaGMR	22
CSF3R	1441	colony stimulating factor 3 receptor	CD114 GCSFR SCN7	1
CX3CR1	1524	C-X3-C motif chemokine receptor 1	CCRL1 CMKBRL1 CMKDR1 GPR13 GPRV28 V28	3
CXCR3	2833	C-X-C motif chemokine receptor 3	CD182 CD183 CKR-L2 CMKAR3 GPR9 IP10-R Mig-R MigR	X
CXCR4	7852	C-X-C motif chemokine receptor 4	CD184 D2S201E FB22 HM89 HSY3RR LAP-3 LAP3 LCR1 LESTR NPY3R NPYR NPYRL NPYY3R WHIM WHIMS	2
CXCR5	643	C-X-C motif chemokine receptor 5	BLR1 CD185 MDR15	11
CXCR6	10663	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3
ACKR3	57007	atypical chemokine receptor 3	CMKOR1 CXC-R7 CXCR-7 CXCR7 GPR159 RDC-1 RDC1	2
CYSLTR1	10800	cysteinyl leukotriene receptor 1	CYSLT1 CYSLT1R CYSLTR HMTMF81	X
CYSLTR2	57105	cysteinyl leukotriene receptor 2	CYSLT2 CYSLT2R GPCR21 HG57 HPN321 KPG_011 PSEC0146 hGPCR21	13
ACKR1	2532	atypical chemokine receptor 1 (Duffy blood group)	CCBP1 CD234 DARC DARC/ACKR1 Dfy FY GPD GpFy WBCQ1	1

EDNRA	1909	endothelin receptor type A	ET-A ETA ETA-R ETAR ETRA MFDA hET-AR	4
EDNRB	1910	endothelin receptor type B	ABCDS ET-B ET-BR ETB ETB1 ETBR ETRB HSCR HSCR2 WS4A	13
EGFR	1956	epidermal growth factor receptor	ERBB ERBB1 HER1 NISBD2 PIG61 mENA	7
ENG	2022	endoglin	END HHT1 ORW1	9
EPOR	2057	erythropoietin receptor	EPO-R	19
ESR1	2099	estrogen receptor 1	ER ESR ESRA ESTRR Era NR3A1	6
ESR2	2100	estrogen receptor 2	ER-BETA ESR-BETA ESRB ESTRB Erb NR3A2 ODG8	14
ESRRA	2101	estrogen related receptor alpha	ERR1 ERRa ERRalpha ESRL1 NR3B1	11
ESRRB	2103	estrogen related receptor beta	DFNB35 ERR beta-2 ERR2 ERRb ERR beta2 ESRL2 NR3B2	14
ESRRG	2104	estrogen related receptor gamma	ERR-gamma ERR3 ERRgamma ERRgamma NR3B3	1
FGFR1	2260	fibroblast growth factor receptor 1	BFGFR CD331 CEK ECCL FGFBR FGFR-1 FLG FLT-2 FLT2 HBGFR HH2 HRTFDS KAL2 N-SAM OGD bFGFR-1	8
FGFR2	2263	fibroblast growth factor receptor 2	BBDS BEK BFR-1 CD332 CEK3 CFD1 ECT1 JWS K-SAM KGFR TK14 TK25	10
FGFR3	2261	fibroblast growth factor receptor 3	ACH CD333 CEK2 HSFGFR3EX JTK4	4
FGFR4	2264	fibroblast growth factor receptor 4	CD334 JTK2 TKF	5
FGFRL1	53834	fibroblast growth factor receptor like 1	FGFR-5 FGFR5 FHFR	4
FLT1	2321	fms related receptor tyrosine kinase 1	FLT FLT-1 VEGFR-1 VEGFR1	13

FLT3	2322	fms related receptor tyrosine kinase 3	CD135 FLK-2 FLK2 STK1	13
FLT4	2324	fms related receptor tyrosine kinase 4	CHTD7 FLT-4 FLT41 LMPH1A LMPHM1 PCL VEGFR-3 VEGFR3	5
FPR1	2357	formyl peptide receptor 1	FMLP FPR	19
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19
FSHR	2492	follicle stimulating hormone receptor	FSHR1 FSHRO LGR1 ODG1	2
GALR2	8811	galanin receptor 2	GAL2-R GALNR2 GALR-2	17
GALR3	8484	galanin receptor 3	-	22
GCGR	2642	glucagon receptor	GGR GL-R	17
GHR	2690	growth hormone receptor	GHBP GHIP	5
GHRHR	2692	growth hormone releasing hormone receptor	GHRFR GRFR IGHD1B IGHD4	7
GHSR	2693	growth hormone secretagogue receptor	GHDP	3
GIPR	2696	gastric inhibitory polypeptide receptor	PGQTL2	19
GLP1R	2740	glucagon like peptide 1 receptor	GLP-1 GLP-1-R GLP-1R	6
GLP2R	9340	glucagon like peptide 2 receptor	-	17
GNRHR	2798	gonadotropin releasing hormone receptor	GNRHR1 GRHR HH7 LHRHR LRHR	4
GPER1	2852	G protein-coupled estrogen receptor 1	CEPR CMKRL2 DRY12 FEG-1 GPCR-Br GPER GPR30 LERGU LERGU2 LyGPR mER	7
GPR17	2840	G protein-coupled receptor 17	-	2

GPR32	2854	G protein-coupled receptor 32	RVDR1	19
GPR33	2856	G protein-coupled receptor 33	-	14
PTGDR2	11251	prostaglandin D2 receptor 2	CD294 CRTH2 DL1R DP2 GPR44	11
C5AR2	27202	complement component 5a receptor 2	C5L2 GPF77 GPR77	19
HNF4A	3172	hepatocyte nuclear factor 4 alpha	FRTS4 HNF4 HNF4a7 HNF4a8 HNF4a9 HNF4alpha MODY MODY1 NR2A1 NR2A21 TCF TCF14	20
HNF4G	3174	hepatocyte nuclear factor 4 gamma	NR2A2 NR2A3	8
HTR3A	3359	5-hydroxytryptamine receptor 3A	5-HT-3 5-HT3A 5-HT3R 5HT3R HTR3	11
HTR3B	9177	5-hydroxytryptamine receptor 3B	5-HT3B	11
HTR3C	170572	5-hydroxytryptamine receptor 3C	-	3
HTR3D	200909	5-hydroxytryptamine receptor 3D	5HT3D	3
HTR3E	285242	5-hydroxytryptamine receptor 3E	5-HT3-E 5-HT3E 5-HT3c1	3
IFNAR1	3454	interferon alpha and beta receptor subunit 1	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21
IFNGR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6
IFNGR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21
IGF1R	3480	insulin like growth factor 1 receptor	CD221 IGFIR IGFR JTK13	15
IGF2R	3482	insulin like growth factor 2 receptor	CD222 CIMPR M6PR M6PR M6P R M6P IGF2R MPR300 MPR1 MPR300 MPRI	6

IL10RA	3587	interleukin 10 receptor subunit alpha	CD210 CD210a CD W210A HIL-10R IL- 10R1 IL10R	11
IL10RB	3588	interleukin 10 receptor subunit beta	CDW210B CRF2- 4 CRFB4 D21S58 D 21S66 IL-10R2	21
IL11RA	3590	interleukin 11 receptor subunit alpha	CRSDA	9
IL12RB1	3594	interleukin 12 receptor subunit beta 1	CD212 IL-12R- BETA1 IL12RB IM D30	19
IL12RB2	3595	interleukin 12 receptor subunit beta 2	-	1
IL13RA1	3597	interleukin 13 receptor subunit alpha 1	CD213A1 CT19 IL- 13Ra NR4	X
IL13RA2	3598	interleukin 13 receptor subunit alpha 2	CD213A2 CT19 IL- 13R IL13BP	X
IL15RA	3601	interleukin 15 receptor subunit alpha	CD215	10
IL2RB	3560	interleukin 2 receptor subunit beta	CD122 IL15RB IM D63 P70-75	22
IL17RA	23765	interleukin 17 receptor A	CANDF5 CD217 C Dw217 IL- 17RA IL17R IMD51 hIL-17R	22
IL17RB	55540	interleukin 17 receptor B	CRL4 EVI27 IL17B R IL17RH1	3
IL17RC	84818	interleukin 17 receptor C	CANDF9 IL17- RL IL17RL	3
IL17RD	54756	interleukin 17 receptor D	HH18 IL- 17RD IL17RLM SE F	3
IL17RE	132014	interleukin 17 receptor E	-	3
IL18R1	8809	interleukin 18 receptor 1	CD218a CDw218a I L-18R-alpha IL- 18Ralpha IL- 1Rrp IL18RA IL18R alpha2 IL1RRP ACPL CD218b CD w218b IL-18R- beta IL-18RAcP IL- 18Rbeta IL-1R-7 IL- 1R7 IL- 1RAcPL IL18RB	2
IL18RAP	8807	interleukin 18 receptor accessory protein		2

IL1R1	3554	interleukin 1 receptor type 1	CD121A D2S1473 IL-1R-alpha IL1R IL1RA P80	2
IL1R2	7850	interleukin 1 receptor type 2	CD121b CDw121b IL-1R-2 IL-1RT-2 IL-1RT2 IL1R2c IL1RB	2
IL1RAP	3556	interleukin 1 receptor accessory protein	C3orf13 IL-1RAcP IL1R3	3
IL1RL1	9173	interleukin 1 receptor like 1	DER4 FIT-1 IL33R ST2 ST2L ST2V T1	2
IL1RL2	8808	interleukin 1 receptor like 2	IL-1Rrp2 IL-36R IL1R-rp2 IL1RRP2	2
IL20RA	53832	interleukin 20 receptor subunit alpha	CRF2-8 IL-20R-alpha IL-20R1 IL-20RA	6
IL20RB	53833	interleukin 20 receptor subunit beta	DIRS1 FNDC6 IL-20R2	3
IL21R	50615	interleukin 21 receptor	CD360 IMD56 NILR	16
IL22RA1	58985	interleukin 22 receptor subunit alpha 1	CRF2-9 IL22R IL22R1	1
IL22RA2	116379	interleukin 22 receptor subunit alpha 2	CRF2-10 CRF2-S1 CRF2X IL-22BP IL-22R-alpha-2 IL-22RA2 ZCYTOR16	6
IL23R	149233	interleukin 23 receptor	-	1
IL27RA	9466	interleukin 27 receptor subunit alpha	CRL1 IL-27RA IL27R TCCR WSX1 zcytor1	19
IFNLR1	163702	interferon lambda receptor 1	CRF2/12 IFNLR IL-28R1 IL28RA LICR2	1
IL2RA	3559	interleukin 2 receptor subunit alpha	CD25 IDDM10 IL2R IMD41 TCGFR p55	10
IL2RB	3560	interleukin 2 receptor subunit beta	CD122 IL15RB IMD63 P70-75	22
IL2RG	3561	interleukin 2 receptor subunit gamma	CD132 CIDX IL-2RG IMD4 P64 SCIDX SCIDX1	X

IL31RA	133396	interleukin 31 receptor A	CRL CRL3 GLM-R GLMR GPL IL-31RA PLCA2 PRO21384 hGLM-R	5
IL3RA	3563	interleukin 3 receptor subunit alpha	CD123 IL3R IL3RAY IL3RX IL3RY hIL-3Ra	X Y
IL4R	3566	interleukin 4 receptor	CD124 IL-4RA IL4RA	16
IL5RA	3568	interleukin 5 receptor subunit alpha	CD125 CDw125 HSIL5R3 IL5R	3
IL6R	3570	interleukin 6 receptor	CD126 IL-6R-1 IL-6RA IL6Q IL6RA IL6RQ gp80	1
IL7R	3575	interleukin 7 receptor	CD127 CDW127 IL-7R-alpha IL7RA ILRA	5
CXCR1	3577	C-X-C motif chemokine receptor 1	C-C C-C-CKR-1 CD128 CD181 CDw128a CKR-1 CMKAR1 IL8R1 IL8RA IL8RBA	2
CXCR2	3579	C-X-C motif chemokine receptor 2	CD182 CDw128b CMKAR2 IL8R2 IL8RA IL8RB	2
IL9R	3581	interleukin 9 receptor	CD129 IL-9R	X Y
INSR	3643	insulin receptor	CD220 HHF5	19
KDR	3791	kinase insert domain receptor	CD309 FLK1 VEGFR VEGFR2	4
LEPR	3953	leptin receptor	CD295 LEPR LEPRD OBR OBR	1
LGR4	55366	leucine rich repeat containing G protein-coupled receptor 4	BNMD17 GPR48	11
LGR5	8549	leucine rich repeat containing G protein-coupled receptor 5	FEX GPR49 GPR67 GRP49 HG38	12
LGR6	59352	leucine rich repeat containing G protein-coupled receptor 6	GPCR VTS20631	1
LHCGR	3973	luteinizing hormone/choriogonadotropin receptor	HHG LCGR LGR2 LH/CGR LH/CGR LHR LHRHR LSH-R ULG5	2

LIFR	3977	LIF receptor subunit alpha	CD118 LIF-R SJS2 STWS SWS	5
LTB4R	1241	leukotriene B4 receptor	BLT1 BLTR CMKR L1 GPR16 LTB4R1 LTBR1 P2RY7 P2Y7	14
LTB4R2	56413	leukotriene B4 receptor 2	BLT2 BLTR2 JULF2 KPG_004 LTB4-R2 LTB4-R2 NOP9	14
LTBR	4055	lymphotoxin beta receptor	D12S370 LT-BETA-R TNF-R-III TNFCR TNFR-RP TNFR2-RP TNFR3 TNFRSF3	12
MC1R	4157	melanocortin 1 receptor	CMM5 MSH-R SHEP2	16
MC2R	4158	melanocortin 2 receptor	ACTHR	18
MC3R	4159	melanocortin 3 receptor	BMIQ9 MC3 MC3-R OB20 OQTL	20
MC4R	4160	melanocortin 4 receptor	BMIQ20	18
MCHR1	2847	melanin concentrating hormone receptor 1	GPR24 MCH-1R MCH1R SLC-1 SLC1	22
MCHR2	84539	melanin concentrating hormone receptor 2	GPR145 GPRv17 MCH-2R MCH-2R MCH2R MCHR-2 SLT	6
MET	4233	MET proto-oncogene, receptor tyrosine kinase	AUTS9 DFNB97 HGFR RCCP2 c-Met	7
MLNR	2862	motilin receptor	GPR38 MTLR1	13
MPL	4352	MPL proto-oncogene, thrombopoietin receptor	C-MPL CD110 MPLV THCYT2 THPOR TPOR	1
MTNR1A	4543	melatonin receptor 1A	MEL-1A-R MT1	4
MTNR1B	4544	melatonin receptor 1B	FGQTL2 MEL-1B-R MT2	11
NGFR	4804	nerve growth factor receptor	CD271 Gp80-LNGFR TNFRSF16 p75(NTR) p75NTR	17
NMBR	4829	neuromedin B receptor	BB1 BB1R NMB-R	6
NPR1	4881	natriuretic peptide receptor 1	ANPRA ANPa GUC2A GUCY2A NPRA	1

NPR3	4883	natriuretic peptide receptor 3	ANP-C ANPR-C ANPRC C5orf23 GUCY2B NPR-C NPRC	5
NR0B1	190	nuclear receptor subfamily 0 group B member 1	AHC AHCH AHX DAX-1 DAX1 DSS GTD HHG NROB1 SRXY2	X
NR0B2	8431	nuclear receptor subfamily 0 group B member 2	SHP SHP1	1
NR1D1	9572	nuclear receptor subfamily 1 group D member 1	EAR1 REVERBA REVERBalpha THR1 THRAL ear-1 hRev	17
NR1D2	9975	nuclear receptor subfamily 1 group D member 2	BD73 EAR-1R REVERBB REVERBbeta RVR	3
NR1H2	7376	nuclear receptor subfamily 1 group H member 2	LXR-b LXRB NER NER-1 RIP15 UNR	19
NR1H3	10062	nuclear receptor subfamily 1 group H member 3	LXR-a LXRA RLD-1	11
NR1H4	9971	nuclear receptor subfamily 1 group H member 4	BAR FXR HRR-1 HRR1 PFIC5 RIP14	12
NR1I2	8856	nuclear receptor subfamily 1 group I member 2	BXR ONR1 PAR PAR1 PAR2 PARq PARR PXR SAR SXR	3
NR1I3	9970	nuclear receptor subfamily 1 group I member 3	CAR CAR1 MB67	1
NR2C1	7181	nuclear receptor subfamily 2 group C member 1	TR2	12
NR2C2	7182	nuclear receptor subfamily 2 group C member 2	TAK1 TR4	3
NR2E1	7101	nuclear receptor subfamily 2 group E member 1	TLL TLX XTLL	6
NR2E3	10002	nuclear receptor subfamily 2 group E member 3	ESCS PNR RNR RP37 rd7	15

NR2F1	7025	nuclear receptor subfamily 2 group F member 1	BBOAS BBSOAS COUP- TFI COUPTF1 EAR3 EAR3 ERBAL3 SVP44 TCFCOUP1 TFCOUP1 ARP-1 ARP1 CHTD4 COUPTF2 COUPTFB COUPTFII NF-E3 SVP40 TFCOUP2	5
NR2F2	7026	nuclear receptor subfamily 2 group F member 2	EAR-2 EAR2 ERBAL2	15
NR2F6	2063	nuclear receptor subfamily 2 group F member 6	GCCR GCR GCRST GR GRL	19
NR3C1	2908	nuclear receptor subfamily 3 group C member 1	MCR MLR MR NR3C2VIT	5
NR3C2	4306	nuclear receptor subfamily 3 group C member 2	GFRP1 HMR N10 N	4
NR4A1	3164	nuclear receptor subfamily 4 group A member 1	AK-1 NGFIB NP10 NUR77 TR3	12
NR4A2	4929	nuclear receptor subfamily 4 group A member 2	HZF-3 NOT NURR1 RN	2
NR4A3	8013	nuclear receptor subfamily 4 group A member 3	R1 TINUR	9
NR5A1	2516	nuclear receptor subfamily 5 group A member 1	CHN CSMF MINOR NOR1 TEC	9
NR5A2	2494	nuclear receptor subfamily 5 group A member 2	AD4BP ELP FTZ1 FTZ1 POF7 SF-1 SF1 SPGF8 SRXX4 SRXY3 hSF-1	9
NR6A1	2649	nuclear receptor subfamily 6 group A member 1	B1F B1F2 CPF FTF FTZ-F1 FTZ-F1beta LRH-1 LRH1 hB1F-2	1
NRP1	8829	neuropilin 1	CT150 GCNF GCNF1 NR61 RTR hGCNF hRTR	9
NRP2	8828	neuropilin 2	BDCA4 CD304 NP1 NRP VEGF165R	10
OGFR	11054	opioid growth factor receptor	NP2 NPN2 PRO2714 VEGF165R2	2
OPRD1	4985	opioid receptor delta 1	-	20
			DOP DOR DOR1 OPRD	1

OPRK1	4986	opioid receptor kappa 1	K-OR- 1 KOP KOR KOR- 1 KOR1 OPRK	8
OPRL1	4987	opioid related nociceptin receptor 1	KOR- 3 KOR3 NOCIR NO P NOPr OOR OPRL ORL1	20
OPRM1	4988	opioid receptor mu 1	LMOR M-OR- 1 MOP MOR MOR1 OPRM	6
OSMR	9180	oncostatin M receptor	IL-31R-beta IL- 31RB OSMRB OS MRbeta PLCA1	5
OXTR	5021	oxytocin receptor	OT-R	3
PGR	5241	progesterone receptor	NR3C3 PR	11
PGRMC2	10424	progesterone receptor membrane component 2	DG6 PMBP	4
PLAUR	5329	plasminogen activator, urokinase receptor	CD87 U- PAR UPAR URKR	19
PLXNA1	5361	plexin A1	NOV NOVP PLEXI N-A1 PLXN1	3
PLXNA2	5362	plexin A2	OCT PLXN2	1
PLXNA3	55558	plexin A3	6.3 HSSEXGENE P LXN3 PLXN4 XAP- 6	X
PLXNA4	91584	plexin A4	FAYV2820 PLEXA 4 PLXNA4A PLXN A4B PRO34003	7
PLXNB1	5364	plexin B1	PLEXIN- B1 PLXN5 SEP	3
PLXNB2	23654	plexin B2	MM1 Nbla00445 PL EXB2 dJ402G11.3	22
PLXNB3	5365	plexin B3	PLEXB3 PLEXR PL XN6	X
PLXNC1	10154	plexin C1	CD232 PLXN- C1 VESPR	12
PLXND1	23129	plexin D1	PLEXD1	3
PPARA	5465	peroxisome proliferator activated receptor alpha	NR1C1 PPAR PPA Ralpha hPPAR	22
PPARD	5467	peroxisome proliferator activated receptor delta	FAAR NR1C2 NUC 1 NUCI NUCII PPA RB	6

PPARG	5468	peroxisome proliferator activated receptor gamma	CIMT1 GLM1 NR1C3 PPARG1 PPARG2 PPARG5 PPARgamma	3
PRLHR	2834	prolactin releasing hormone receptor	GPR10 GR3 PrRPR	10
PRLR	5618	prolactin receptor	HPRL MFAB RI-PRLR hPRLrI	5
PTAFR	5724	platelet activating factor receptor	PAFR	1
PTGDR	5729	prostaglandin D2 receptor	AS1 ASRT1 DP DP1 PTGDR1	14
PTGDS	5730	prostaglandin D2 synthase	L-PGDS LPGDS PDS PGD2 PGDS PGDS2	9
PTGER1	5731	prostaglandin E receptor 1	EP1	19
PTGER2	5732	prostaglandin E receptor 2	EP2	14
PTGER3	5733	prostaglandin E receptor 3	EP3 EP3-I EP3-II EP3-III EP3-IV EP3-VI EP3e PGE2-R lnc003875	1
PTGER4	5734	prostaglandin E receptor 4	EP4 EP4R	5
PTGFR	5737	prostaglandin F receptor	FP	1
PTH1R	5745	parathyroid hormone 1 receptor	EKNS PFE PTHR PTH1R	3
PTH2R	5746	parathyroid hormone 2 receptor	PTHR2	2
RARA	5914	retinoic acid receptor alpha	NR1B1 RAR	17
RARB	5915	retinoic acid receptor beta	HAP MCOPS12 NR1B2 RARBeta1 RRB2	3
RARG	5916	retinoic acid receptor gamma	NR1B3 RARC	12
ROBO1	6091	roundabout guidance receptor 1	DUTT1 SAX3	3
ROBO2	6092	roundabout guidance receptor 2	SAX3	3
ROBO3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPS RBIG1 RIG1	11
RORA	6095	RAR related orphan receptor A	IDDECA NR1F1 ROR1 ROR2 ROR3 RZR-ALPHA RZRA	15

RORB	6096	RAR related orphan receptor B	EIG15 NR1F2 ROR-BETA RZR-BETA RZRB bA133M9.1	9
RORC	6097	RAR related orphan receptor C	IMD42 NR1F3 RORG RZR-GAMMA RZRG TOR	1
RXFP1	59350	relaxin family peptide receptor 1	LGR7 RXFPR1	4
RXFP2	122042	relaxin family peptide receptor 2	GPR106 GREAT INSL3R LGR8 LGR8.1 RXFPR2	13
RXFP3	51289	relaxin family peptide receptor 3	GPCR135 RLN3R1 RXFPR3 SALPR	5
RXRA	6256	retinoid X receptor alpha	NR2B1	9
RXRB	6257	retinoid X receptor beta	DAUDI6 H-2RIIBP NR2B2 RCOR-1	6
RXRG	6258	retinoid X receptor gamma	NR2B3 RXRC	1
S1PR1	1901	sphingosine-1-phosphate receptor 1	CD363 CHEDG1 D1S3362 ECGF1 EDG-1 EDG1 S1P1	1
S1PR2	9294	sphingosine-1-phosphate receptor 2	AGR16 DFNB68 EDG-5 EDG5 Gper13 H218 LPB2 S1P2	19
SCTR	6344	secretin receptor	SR	2
SDC1	6382	syndecan 1	CD138 SDC SYND1 syndecan	2
SDC2	6383	syndecan 2	CD362 HSPG HSPG1 SYND2	8
SDC3	9672	syndecan 3	SDCN SYND3	1
SDC4	6385	syndecan 4	SYND4	20
SORT1	6272	sortilin 1	Gp95 LDLCQ6 NT3 NTR3	1
SSTR1	6751	somatostatin receptor 1	SRIF-2 SS-1-R SS1-R SS1R	14
SSTR2	6752	somatostatin receptor 2	-	17
SSTR5	6755	somatostatin receptor 5	SS-5-R	16
ST2	6761	-	-	11
TACR1	6869	tachykinin receptor 1	NK1R NKIR SPR TAC1R	2
TEK	7010	TEK receptor tyrosine kinase	CD202B GLC3E TIE-2 TIE2 VMCM VMCM1	9

TGFBR1	7046	transforming growth factor beta receptor 1	AAT5 ACVRLK4 ALK-5 ALK5 ESS1 LDS1 LDS1A LDS2A MSSE SKR4 TBR-i TBR1 TGFR-1 tbetaR-I	9
TGFBR2	7048	transforming growth factor beta receptor 2	AAT3 FAA3 LDS1B LDS2 LDS2B MFS2 RIIC TAAD2 TBR-i TBR2 TGFR-2 TGFbeta-RII	3
TGFBR3	7049	transforming growth factor beta receptor 3	BGCAN betaglycan	1
THRA	7067	thyroid hormone receptor alpha	AR7 CHNG6 EAR7 ERB-T-1 ERBA ERBA1 NR1A1 THRA1 THRA2 c-ERBA-1	17
THRB	7068	thyroid hormone receptor beta	C-ERBA-2 C-ERBA-BETA ERBA2 GRT H NR1A2 PRTH THR1 THRB1 THRB2	3
TIE1	7075	tyrosine kinase with immunoglobulin like and EGF like domains 1	JTK14 TIE	1
TNFRSF10	8797	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR-1 TRAILR1	8
TNFRSF10	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAIL- R2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8
TNFRSF10	8794	TNF receptor superfamily member 10c	CD263 DCR1 DCR1-TNFR LIT TRAILR3 TRAILR3 TRID	8
TNFRSF10	8793	TNF receptor superfamily member 10d	CD264 DCR2 TRAIL- R4 TRAILR4 TRUND	8

TNFRSF11	8792	TNF receptor superfamily member 11a	CD265 FEO LOH18 CR1 ODFR OFE OP TB7 OSTS PDB2 R ANK TRANCER	18
TNFRSF12	51330	TNF receptor superfamily member 12A	CD266 FN14 TWEA KR	16
TNFRSF13	23495	TNF receptor superfamily member 13B	CD267 CVID CVID 2 IGAD2 RYZN TA CI TNFRSF14B	17
TNFRSF13	115650	TNF receptor superfamily member 13C	BAFF- R BAFFR BROMIX CD268 CVID4 proli xin	22
TNFRSF14	8764	TNF receptor superfamily member 14	ATAR CD270 HVE A HVEM LIGHTR TR2	1
TNFRSF17	608	TNF receptor superfamily member 17	BCM BCMA CD26 9 TNFRSF13A	16
TNFRSF18	8784	TNF receptor superfamily member 18	AITR CD357 ENER GEN GITR GITR-D	1
TNFRSF19	55504	TNF receptor superfamily member 19	TAJ TAJ- alpha TRADE TRO Y	13
TNFRSF1A	7132	TNF receptor superfamily member 1A	CD120a FPF TBP1 TNF-R TNF-R- I TNF- R55 TNFAR TNFR1 TNFR55 TNFR60 p 55 p55-R p60	12
TNFRSF1E	7133	TNF receptor superfamily member 1B	CD120b TBPII TNF -R-II TNF- R75 TNFBR TNFR1 B TNFR2 TNFR80 p 75 p75TNFR	1
TNFRSF21	27242	TNF receptor superfamily member 21	BM- 018 CD358 DR6	6
TNFRSF25	8718	TNF receptor superfamily member 25	APO- 3 DDR3 DR3 GEF7 20 LARD PLEKHG 5 TNFRSF12 TR3 T RAMP WSL- 1 WSL-LR	1
TNFRSF4	7293	TNF receptor superfamily member 4	ACT35 CD134 IMD 16 OX40 TXGP1L	1

TNFRSF6E	8771	TNF receptor superfamily member 6b	DCR3 DJ583P15.1.1 M68 M68E TR6	20
TNFRSF8	943	TNF receptor superfamily member 8	CD30 D1S166E Ki-1	1
TNFRSF9	3604	TNF receptor superfamily member 9	4-1BB CD137 CDw137 ILA	1
TRHR	7201	thyrotropin releasing hormone receptor	CHNG7 TRH-R	8
TSHR	7253	thyroid stimulating hormone receptor	CHNG1 LGR3 hTS HR-I	14
TUBB3	10381	tubulin beta 3 class III	CDCBM CDCBM1 CFEOM3 CFEOM3A FEOM3 TUBB4 beta-4	16
VDR	7421	vitamin D receptor	NR1H1 PPP1R163	12
VIPR1	7433	vasoactive intestinal peptide receptor 1	HVR1 II PACAP-R-2 PACAP-R2 RDC1 V1RG VAPC1 VIP-R-1 VIPR VIRG VPAC1 VPAC1R VPAC1R	3
VIPR2	7434	vasoactive intestinal peptide receptor 2	C16DUPq36.3 DUP7q36.3 PACAP-R-3 PACAP-R3 VIP-R-2 VPAC2 VPAC2R VPCAP2R	7
XCR1	2829	X-C motif chemokine receptor 1	CCXCR1 GPR5	3
IFNA10	3446	interferon alpha 10	IFN-alphaC	9
IFNA13	3447	interferon alpha 13	-	9
IFNA14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9
IFNA16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9
IFNA17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9
IFNA2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9
IFNA21	3452	interferon alpha 21	IFN-alphaI leIF F leIF-F	9
IFNA4	3441	interferon alpha 4	IFN-alpha4a INFA4	9

IFNA5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9
IFNA6	3443	interferon alpha 6	IFN-alphaK	9
IFNA7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9
IFNA8	3445	interferon alpha 8	IFN-alphaB	9
IFNB1	3456	interferon beta 1	IFB IFF IFN-beta IFNB	9
IFNE	338376	interferon epsilon	IFN-E IFNE1 IFNT1 INFE1 PRO655	9
IFNG	3458	interferon gamma	IFG IFI	12
IFNK	56832	interferon kappa	IFNT1 INFE1	9
IFNW1	3467	interferon omega 1	-	9
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21
IFNGR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6
IFNGR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21
IL11	3589	interleukin 11	AGIF IL-11	19
IL12A	3592	interleukin 12A	CLMF IL-12A NFSK NKSF1 P35	3
IL12B	3593	interleukin 12B	CLMF CLMF2 IL-12B IMD28 IMD29 NKSF NKSF2	5
IL13	3596	interleukin 13	IL-13 P600	5
IL15	3600	interleukin 15	IL-15	4
IL16	3603	interleukin 16	LCF NIL16 PRIL16 prIL-16	15
IL17A	3605	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6
IL17B	27190	interleukin 17B	IL-17B IL-20 NIRF ZCYTO7	5
IL17C	27189	interleukin 17C	CX2 IL-17C	16
IL17D	53342	interleukin 17D	IL-17D	13
IL17F	112744	interleukin 17F	CANDF6 IL-17F ML-1 ML1	6
IL18	3606	interleukin 18	IGIF IL-18 IL-1g IL1F4	11
IL19	29949	interleukin 19	IL-10C MDA1 NG.1 ZMDA1	1

IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2
IL1F10	84639	interleukin 1 family member 10	FIL1-theta FKSG75 IL-1HY2 IL-38 IL1-theta IL1HY2	2
IL36RN	26525	interleukin 36 receptor antagonist	FIL1 FIL1(DELTA) FIL1D IL-36Ra IL1F5 IL1HY1 IL1L1 IL1RP3 IL36RA PSORP PSORS14	2
IL36A	27179	interleukin 36 alpha	FIL1 FIL1(EPSILON) FIL1E IL-1F6 IL1(EPSILON) IL1F6	2
IL37	27178	interleukin 37	FIL1 FIL1(ZETA) FIL1Z IL-1F7 IL-1H IL-1H4 IL-1RP1 IL-37 IL1F7 IL1H4 IL1RP1	2
IL36B	27177	interleukin 36 beta	FIL1 FIL1-(ETA) FIL1H FIL1-(ETA) IL-1F8 IL-1H2 IL1-ETA IL1F8 IL1H2	2
IL36G	56300	interleukin 36 gamma	IL-1F9 IL-1H1 IL-1RP2 IL1E IL1F9 IL1H1 IL1RP2	2
IL1RN	3557	interleukin 1 receptor antagonist	DIRA ICIL-1RA IL-1RN IL-1ra IL-1ra3 IL1F3 IL1RA IRAP MVCD4	2
IL2	3558	interleukin 2	IL-2 TCGF lymphokine	4
IL20	50604	interleukin 20	IL-20 IL10D ZCYTO10	1
IL21	59067	interleukin 21	CVID11 IL-21 Za11	4
IL22	50616	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL-23 TIFa zcyto18	12

IL23A	51561	interleukin 23 subunit alpha	IL-23 IL-23A IL23P19 P19 S GRF	12
IL24	11009	interleukin 24	C49A FISP IL10B MDA7 MOB5 ST16	1
IL25	64806	interleukin 25	IL17E	14
IL26	55801	interleukin 26	AK155 IL-26	12
IL27	246778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16
IFNL2	282616	interferon lambda 2	IL-28A IL28A	19
IFNL3	282617	interferon lambda 3	IFN-lambda-3 IFN-lambda-4 IL-28B IL-28C IL28B IL28C	19
IFNL1	282618	interferon lambda 1	IL-29 IL29	19
IL3	3562	interleukin 3	IL-3 MCGF MULTI-CSF	5
IL31	386653	interleukin 31	IL-31	12
IL32	9235	interleukin 32	IL-32alpha IL-32beta IL-32delta IL-32gamma NK4 TAIF TAIFa TAIFb TAIFc TAIFd	16
IL33	90865	interleukin 33	C9orf26 DVS27 IL1F11 NF-HEV NFEHEV	9
IL34	146433	interleukin 34	C16orf77 IL-34	16
IL4	3565	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5
IL5	3567	interleukin 5	EDF IL-5 TRF	5
IL6	3569	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7
IL6ST	3572	interleukin 6 signal transducer	CD130 CDW130 GP130 HIES4 IL-6RB sGP130	5
IL7	3574	interleukin 7	IL-7	8
CXCL8	3576	C-X-C motif chemokine ligand 8	GCP-1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4

IL9	3578	interleukin 9	HP40 IL-9 P40	5
TXLNA	200081	taxilin alpha	IL14 TXLN	1
IL10RA	3587	interleukin 10 receptor subunit alpha	CD210 CD210a CD W210A HIL-10R IL- 10R1 IL10R	11
IL10RB	3588	interleukin 10 receptor subunit beta	CDW210B CRF2- 4 CRFB4 D21S58 D 21S66 IL-10R2	21
IL11RA	3590	interleukin 11 receptor subunit alpha	CRSDA	9
IL12RB1	3594	interleukin 12 receptor subunit beta 1	CD212 IL-12R- BETA1 IL12RB IM D30	19
IL12RB2	3595	interleukin 12 receptor subunit beta 2	-	1
IL13RA1	3597	interleukin 13 receptor subunit alpha 1	CD213A1 CT19 IL- 13Ra NR4	X
IL13RA2	3598	interleukin 13 receptor subunit alpha 2	CD213A2 CT19 IL- 13R IL13BP	X
IL15RA	3601	interleukin 15 receptor subunit alpha	CD215	10
IL2RB	3560	interleukin 2 receptor subunit beta	CD122 IL15RB IM D63 P70-75	22
IL17RA	23765	interleukin 17 receptor A	CANDF5 CD217 C Dw217 IL- 17RA IL17R IMD51 hIL-17R	22
IL17RB	55540	interleukin 17 receptor B	CRL4 EVI27 IL17B R IL17RH1	3
IL17RC	84818	interleukin 17 receptor C	CANDF9 IL17- RL IL17RL	3
IL17RD	54756	interleukin 17 receptor D	HH18 IL- 17RD IL17RLM SE F	3
IL17RE	132014	interleukin 17 receptor E	-	3
IL18R1	8809	interleukin 18 receptor 1	CD218a CDw218a I L-18R-alpha IL- 18Ralpha IL- 1Rrp IL18RA IL18R alpha2 IL1RRP	2

IL18RAP	8807	interleukin 18 receptor accessory protein	ACPL CD218b CDw218b IL-18R-beta IL-18RAcP IL-18Rbeta IL-1R-7 IL-1R7 IL-1RAcPL IL18RB	2
IL1R1	3554	interleukin 1 receptor type 1	CD121A D2S1473 IL-1R-alpha IL1R IL1RA P80	2
IL1R2	7850	interleukin 1 receptor type 2	CD121b CDw121b IL-1R-2 IL-1RT-2 IL-1RT2 IL1R2c IL1RB	2
IL1RAP	3556	interleukin 1 receptor accessory protein	C3orf13 IL-1RAcP IL1R3	3
IL1RL1	9173	interleukin 1 receptor like 1	DER4 FIT-1 IL33R ST2 ST2L ST2V T1	2
IL1RL2	8808	interleukin 1 receptor like 2	IL-1Rrp2 IL-36R IL1R-rp2 IL1RRP2	2
IL20RA	53832	interleukin 20 receptor subunit alpha	CRF2-8 IL-20R-alpha IL-20RA	6
IL20RB	53833	interleukin 20 receptor subunit beta	DIRS1 FNDC6 IL-20R2	3
IL21R	50615	interleukin 21 receptor	CD360 IMD56 NILR	16
IL22RA1	58985	interleukin 22 receptor subunit alpha 1	CRF2-9 IL22R IL22R1	1
IL22RA2	116379	interleukin 22 receptor subunit alpha 2	CRF2-10 CRF2-S1 CRF2X IL-22BP IL-22R-alpha-2 IL-22RA2 ZCYTOR16	6
IL23R	149233	interleukin 23 receptor	-	1
IL27RA	9466	interleukin 27 receptor subunit alpha	CRL1 IL-27RA IL27R TCCR WSX1 zcytor1	19
IFNLR1	163702	interferon lambda receptor 1	CRF2/12 IFNLR IL-28R1 IL28RA LICR2	1
IL2RA	3559	interleukin 2 receptor subunit alpha	CD25 IDDM10 IL2R IMD41 TCGFR p55	10

IL2RB	3560	interleukin 2 receptor subunit beta	CD122 IL15RB IM D63 P70-75	22
IL2RG	3561	interleukin 2 receptor subunit gamma	CD132 CIDX IL- 2RG IMD4 P64 SCI DX SCIDX1 CRL CRL3 GLM- R GLMR GPL IL- 31RA PLCA2 PRO2 1384 hGLM-R	X
IL31RA	133396	interleukin 31 receptor A	CD123 IL3R IL3RA Y IL3RX IL3RY hIL -3Ra	5
IL3RA	3563	interleukin 3 receptor subunit alpha	CD124 IL- 4RA IL4RA	X Y
IL4R	3566	interleukin 4 receptor	CD125 CDw125 HS IL5R3 IL5R	16
IL5RA	3568	interleukin 5 receptor subunit alpha	CD126 IL-6R-1 IL- 6RA IL6Q IL6RA IL 6RQ gp80	3
IL6R	3570	interleukin 6 receptor	CD127 CDW127 IL- 7R- alpha IL7RA ILRA C-C C-C-CKR- 1 CD128 CD181 CD w128a CKR- 1 CMKAR1 IL8R1 I L8RA IL8RBA	1
IL7R	3575	interleukin 7 receptor	CD182 CDw128b C MKAR2 IL8R2 IL8 RA IL8RB	5
CXCR1	3577	C-X-C motif chemokine receptor 1	CD129 IL-9R	2
CXCR2	3579	C-X-C motif chemokine receptor 2	-	2
IL9R	3581	interleukin 9 receptor	CD129 IL-9R	X Y
ST2	6761	-	-	11
HLA-A	3105	major histocompatibility complex, class I, A	HLAA	6
HLA-B	3106	major histocompatibility complex, class I, B	AS B-4901 HLAB	6
HLA-C	3107	major histocompatibility complex, class I, C	D6S204 HLA- JY3 HLAC HLC- C MHC PSORS1	6
HLA-E	3133	major histocompatibility complex, class I, E	HLA-6.2 QA1	6
HLA-G	3135	major histocompatibility complex, class I, G	MHC-G	6

KIR3DL1	3811	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1	CD158E1 KIR KIR3DL1/S1 NKAT-3 NKAT3 NKB1 NKB1B	19
KIR3DL2	3812	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 2	3DL2 CD158K KIR-3DL2 NKAT-4 NKAT4 NKAT4B p140	19
KIR2DL1	3802	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 1	CD158A KIR-K64 KIR221 KIR2DL3 NKAT NKAT-1 NKAT1 p58.1	19
KIR2DL2	3803	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	CD158B1 CD158b NKAT-6 NKAT6 p58.2	19
KIR2DL3	3804	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 3	CD158B2 CD158b GL183 KIR-023GB KIR-K7b KIR-K7c KIR2DL KIR2DS5 KIRCL23 NKAT NKAT2 NKAT2A NKAT2B p58	19
KIR2DL4	3805	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	CD158D G9P KIR-103AS KIR-2DL4 KIR103 KIR103AS	19
KIR2DL5A	57292	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 5A	CD158F KIR2DL5 KIR2DL5.1 KIR2DL5.3	19
KLRC1	3821	killer cell lectin like receptor C1	CD159A NKG2 NKG2A	12
KLRC2	3822	killer cell lectin like receptor C2	CD159c NKG2-C NKG2C	12
KLRC3	3823	killer cell lectin like receptor C3	NKG2-E NKG2E	12
KLRD1	3824	killer cell lectin like receptor D1	CD94	12

PTPN6	5777	protein tyrosine phosphatase non-receptor type 6	HCP HCPH HPTP1 C PTP-1C SH- PTP1 SHP-1 SHP- 1L SHP1 BPTP3 CFC JMML METCDS NS1 PTP- 1D PTP2C SH- PTP2 SH- PTP3 SHP2	12
PTPN11	5781	protein tyrosine phosphatase non-receptor type 11	HCP HCPH HPTP1 C PTP-1C SH- PTP1 SHP-1 SHP- 1L SHP1 BPTP3 CFC JMML METCDS NS1 PTP- 1D PTP2C SH- PTP2 SH- PTP3 SHP2	12
ICAM1	3383	intercellular adhesion molecule 1	BB2 CD54 P3.58	19
ICAM2	3384	intercellular adhesion molecule 2	CD102	17
ITGAL	3683	integrin subunit alpha L	CD11A LFA- 1 LFA1A	16
ITGB2	3689	integrin subunit beta 2	CD18 LAD LCAMB LFA-1 MAC- 1 MF17 MFI7	21
PTK2B	2185	protein tyrosine kinase 2 beta	CADTK CAKB FA DK2 FAK2 PKB PT K PYK2 RAFTK	8
VAV3	10451	vav guanine nucleotide exchange factor 3	-	1
VAV1	7409	vav guanine nucleotide exchange factor 1	VAV	19
VAV2	7410	vav guanine nucleotide exchange factor 2	VAV-2	9
RAC1	5879	Rac family small GTPase 1	MIG5 MRD48 Rac- 1 TC-25 p21-Rac1	7
RAC2	5880	Rac family small GTPase 2	EN- 7 Gx HSPC022 p21- Rac2	22
RAC3	5881	Rac family small GTPase 3	-	17
PAK1	5058	p21 (RAC1) activated kinase 1	IDDMSSD PAKalph a alpha-PAK p65- PAK	11
MAP2K1	5604	mitogen-activated protein kinase 1	CFC3 MAPKK1 ME K1 MKK1 PRKMK 1	15
MAP2K2	5605	mitogen-activated protein kinase 2	CFC4 MAPKK2 ME K2 MKK2 PRKMK 2	19

MAPK1	5594	mitogen-activated protein kinase 1	ERK ERK-2 ERK2 ERT1 MAPK2 P42MAPK PRKM1 PRKM2 p38 p40 p41 p41mapk p42-MAPK	22
MAPK3	5595	mitogen-activated protein kinase 3	ERK-1 ERK1 ERT2 HS44KDAP HUMKER1A P44ERK1 P44MAPK PRKM3 p44-ERK1 p44-MAPK	16
TNF	7124	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6
CSF2	1437	colony stimulating factor 2	CSF GMCSF	5
IFNG	3458	interferon gamma	IFG IFI	12
KIR2DS1	3806	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 1	CD158H CD158a p50.1	19
KIR2DS3	3808	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3	NKAT7	19
KIR2DS4	3809	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4	CD158I KIR-2DS4 KIR1D KIR412 KKA3 NKAT-8 NKAT8	19
KIR2DS5	3810	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 5	CD158G NKAT9	19
NCR2	9436	natural cytotoxicity triggering receptor 2	CD336 LY95 NK-p44 NKP44 dJ149M18.1	6
TYROBP	7305	transmembrane immune signaling adaptor TYROBP	DAP12 KARAP PLOS PLOS1	19
LCK	3932	LCK proto-oncogene, Src family tyrosine kinase	IMD22 LSK YT16 p56lck pp58lck	1

FCGR3A	2214	Fc fragment of IgG receptor IIIa	CD16 CD16A FCG3 FCGR3 FCGR3III FCR-10 FCR3III FCR3IIIA IGFR3 IMD20	1
FCGR3B	2215	Fc fragment of IgG receptor IIIb	CD16 CD16A CD16b FCG3 FCGR3 FCGR3A FCR-10 FCR3III FCR3IIIb	1
NCR1	9437	natural cytotoxicity triggering receptor 1	CD335 LY94 NKp46 NKP46	19
NCR3	259197	natural cytotoxicity triggering receptor 3	1C7 CD337 LY117 MALS NKp30	6
FCER1G	2207	Fc fragment of IgE receptor Ig	FCRG	1
CD247	919	CD247 molecule	CD3-ZETA CD3H CD3Q CD3Z IMD25 T3Z TCRZ	1
ZAP70	7535	zeta chain of T cell receptor associated protein kinase 70	ADMIO2 IMD48 SRK STCD STD TZK ZAP-70	2
SYK	6850	spleen associated tyrosine kinase	p72-Syk	9
LCP2	3937	lymphocyte cytosolic protein 2	SLP-76 SLP76	5
LAT	27040	linker for activation of T cells	IMD52 LAT1 pp36	16
PLCG1	5335	phospholipase C gamma 1	NCKAP3 PLC-II PLC1 PLC148 PLCgamma1	20
PLCG2	5336	phospholipase C gamma 2	APLAID FCAS3 PLC-IV PLC-gamma-2	16
SH3BP2	6452	SH3 domain binding protein 2	3BP-2 3BP2 CRBM CRPM RES4-23	4
PIK3CA	5290	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3
PIK3CB	5291	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	P110BETA PI3K PI3KBETA PIK3C1	3

PIK3CD	5293	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	APDS IMD14 P110 DELTA PI3K p110 D	1
PIK3CG	5294	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PI3K p110gamma p120-PI3K	7
PIK3R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038I15Rik FO AP-2 P101-PI3K p101	17
PIK3R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD3 6 p85 p85-ALPHA	5
PIK3R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85 B p85 p85-BETA	19
PIK3R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1
FYN	2534	FYN proto-oncogene, Src family tyrosine kinase	SLK SYN p59-FYN	6
SHC2	25759	SHC adaptor protein 2	SCK SHCB SLI	19
SHC4	399694	SHC adaptor protein 4	RaLP SHCD	15
SHC3	53358	SHC adaptor protein 3	N-Shc NSHC RAI SHCC	9
SHC1	6464	SHC adaptor protein 1	SHC SHCA	1
GRB2	2885	growth factor receptor bound protein 2	ASH EGFRBP-GRB2 Grb3-3 MST084 MSTP084 NCKAP2	17
SOS1	6654	SOS Ras/Rac guanine nucleotide exchange factor 1	GF1 GGF1 GINGF HGF NS4 SOS-1	2
SOS2	6655	SOS Ras/Rho guanine nucleotide exchange factor 2	NS9 SOS-2	14
HRAS	3265	HRas proto-oncogene, GTPase	C-BAS/HAS C-H-RAS C-HA-RAS1 CTLO H-RASIDX HAMSV HRAS1 RASH1 p21ras	11

KRAS	3845	KRAS proto-oncogene, GTPase	'C-K-RAS C-K-RAS CFC2 K-RAS2A K-RAS2B K-RAS4A K-RAS4B K-Ras K-Ras 2 KI-RAS KRAS1 KRAS 2 NS NS3 OES RALD RASK2 c-Ki-ras c-Ki-ras2	12
NRAS	4893	NRAS proto-oncogene, GTPase	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1
ARAF	369	A-Raf proto-oncogene, serine/threonine kinase	A-RAF ARAF1 PKS2 RAFA1	X
BRAF	673	B-Raf proto-oncogene, serine/threonine kinase	B-RAF1 B-raf BRAF1 NS7 RAFB1	7
RAF1	5894	Raf-1 proto-oncogene, serine/threonine kinase	CMD1NN CRAF NS5 Raf-1 c-Raf	3
MICA	100507436	MHC class I polypeptide-related sequence A	MIC-A PERB11.1	6
MICB	4277	MHC class I polypeptide-related sequence B	PERB11.2	6
ULBP3	79465	UL16 binding protein 3	N2DL-3 NKG2DL3 RAET1N	6
ULBP2	80328	UL16 binding protein 2	ALCAN-alpha N2DL2 NKG2DL2 RAET1H RAET1L	6
ULBP1	80329	UL16 binding protein 1	N2DL-1 NKG2DL1 RAET1I	6
KLRK1	22914	killer cell lectin like receptor K1	CD314 D12S2489E KLR NKG2D NKG2D	12
HCST	10870	hematopoietic cell signal transducer	DAP10 KAP10 PIK3AP	19
CD48	962	CD48 molecule	BCM1 BLAST BLAST1 MEM-102 SLAMF2 hCD48 mCD48	1

CD244	51744	CD244 molecule	2B4 NAIL NKR2B4 Nmrk SLAMF4	1
PPP3CA	5530	protein phosphatase 3 catalytic subunit alpha	ACCIID CALN CALNA CALNA1 CCN1 CNA1 IECEE IECEE1 PPP2B	4
PPP3CB	5532	protein phosphatase 3 catalytic subunit beta	CALNA2 CALNB CALNA2 PP2Bbeta	10
PPP3CC	5533	protein phosphatase 3 catalytic subunit gamma	CALNA3 CNA3 PP2Bgamma	8
CHP1	11261	calcineurin like EF-hand protein 1	CHP SLC9A1BP SPAX9 Sid470p p22 p24	15
PPP3R1	5534	protein phosphatase 3 regulatory subunit B, alpha	CALNB1 CNB CNB1	2
PPP3R2	5535	protein phosphatase 3 regulatory subunit B, beta	PPP3RL	9
CHP2	63928	calcineurin like EF-hand protein 2	-	16
NFAT5	10725	nuclear factor of activated T cells 5	NF-AT5 NFATL1 NFATZ OREBP TONEBP	16
NFATC1	4772	nuclear factor of activated T cells 1	NF-ATc1.2 NFAT2 NFATc	18
NFATC2	4773	nuclear factor of activated T cells 2	NFAT1 NFATP	20
NFATC3	4775	nuclear factor of activated T cells 3	NF-AT4c NFAT4 NFATX	16
NFATC4	4776	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3AAG6 PKC-alpha PKCA PKCI+/-	14
PRKCA	5578	protein kinase C alpha	- PKCalpha PRKACA	17
PRKCB	5579	protein kinase C beta	PKC-beta PKCB PKCI(2) PKCbeta PRKCB1 PRKCB2	16

PRKCG	5582	protein kinase C gamma	PKC-gamma PKCC PKCG PKCI(3) PKCgamma SCA14	19
SH2D1B	117157	SH2 domain containing 1B	EAT2	1
SH2D1A	4068	SH2 domain containing 1A	DSHP EBVS IMD5 LYP MTCP1 SAP SAP/SH2D1A XLP XLPD XLPD1	X
IFNGR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6
IFNGR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21
IFNA1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFNA@ leIF D	9
IFNA2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9
IFNA4	3441	interferon alpha 4	IFN-alpha4a INFA4	9
IFNA5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9
IFNA6	3443	interferon alpha 6	IFN-alphaK	9
IFNA7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9
IFNA8	3445	interferon alpha 8	IFN-alphaB	9
IFNA10	3446	interferon alpha 10	IFN-alphaC	9
IFNA13	3447	interferon alpha 13	-	9
IFNA14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9
IFNA16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9
IFNA17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9
IFNA21	3452	interferon alpha 21	IFN-alphaI LeIF F leIF-F	9
IFNB1	3456	interferon beta 1	IFB IFF IFN-beta IFNB	9
IFNAR1	3454	interferon alpha and beta receptor subunit 1	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3

TNFRSF10	8793	TNF receptor superfamily member 10d	CD264 DCR2 TRAIL- R4 TRAILR4 TRUN DD	8
TNFRSF10	8794	TNF receptor superfamily member 10c	CD263 DCR1 DCR1 -TNFR LIT TRAIL- R3 TRAILR3 TRID	8
TNFRSF10	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLE R KILLER/DR5 TR AIL- R2 TRAILR2 TRIC K2 TRICK2A TRIC K2B TRICKB ZTN FR9	8
TNFRSF10	8797	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR- 1 TRAILR1 ALPS1B APT1LG1 APTL CD178 CD95	8
FASLG	356	Fas ligand	- L CD95L FASL TN FSF6 TNLG1A	1
FAS	355	Fas cell surface death receptor	ALPS1A APO- 1 APT1 CD95 FAS1 FASTM TNFRSF6	10
GZMB	3002	granzyme B	C11 CCPI CGL- 1 CGL1 CSP- B CSPB CTLA1 CT SGL1 HLP SECT	14
PRF1	5551	perforin 1	HPLH2 P1 PFP	10
CASP3	836	caspase 3	CPP32 CPP32B SC A-1	4
BID	637	BH3 interacting domain death agonist	FP497	22
CD3D	915	CD3d molecule	CD3- DELTA IMD19 T3D	11
CD3E	916	CD3e molecule	IMD18 T3E TCRE	11
CD3G	917	CD3g molecule	CD3- GAMMA IMD17 T3 G	11
CD247	919	CD247 molecule	CD3- ZETA CD3H CD3Q CD3Z IMD25 T3Z T CRZ	1
CD4	920	CD4 molecule	CD4mut	12
CD8A	925	CD8a molecule	CD8 Leu2 p32	2

CD8B	926	CD8b molecule	CD8B1 LEU2 LY3 LYT3 P37	2
PTPRC	5788	protein tyrosine phosphatase receptor type C	B220 CD45 CD45R GP180 L-CA LCA LY5 T200	1
LCK	3932	LCK proto-oncogene, Src family tyrosine kinase	IMD22 LSK YT16 p56lck pp58lck	1
FYN	2534	FYN proto-oncogene, Src family tyrosine kinase	SLK SYN p59-FYN	6
ZAP70	7535	zeta chain of T cell receptor associated protein kinase 70	ADMIO2 IMD48 SRK STCD STD TZK ZAP-70	2
LCP2	3937	lymphocyte cytosolic protein 2	SLP-76 SLP76	5
LAT	27040	linker for activation of T cells	IMD52 LAT1 pp36	16
ITK	3702	IL2 inducible T cell kinase	EMT LPFS1 LYK PSCTK2	5
TEC	7006	tec protein tyrosine kinase	PSCTK4	4
NCK1	4690	NCK adaptor protein 1	NCK NCKalpha nck-1	3
NCK2	8440	NCK adaptor protein 2	GRB4 NCKbeta	2
VAV3	10451	vav guanine nucleotide exchange factor 3	-	1
VAV1	7409	vav guanine nucleotide exchange factor 1	VAV	19
VAV2	7410	vav guanine nucleotide exchange factor 2	VAV-2	9
GRAP2	9402	GRB2 related adaptor protein 2	GADS GRAP-2 GRB2L GRBLG GRID GRPL GrbX Grf40 Mona P38	22
GRB2	2885	growth factor receptor bound protein 2	ASH EGFRBP-GRB2 Grb3-3 MST084 MSTP084 NCKAP2	17
PAK1	5058	p21 (RAC1) activated kinase 1	IDDMSSD PAKalpha alpha-PAK p65-PAK	11
PAK2	5062	p21 (RAC1) activated kinase 2	PAK65 PAKgamma	3

PAK3	5063	p21 (RAC1) activated kinase 3	ARA MRX30 MRX 47 OPHN3 PAK- 3 PAK3beta bPAK b eta-PAK	X
PAK4	10298	p21 (RAC1) activated kinase 4	-	19
PAK6	56924	p21 (RAC1) activated kinase 6	PAK5	15
PAK5	57144	p21 (RAC1) activated kinase 5	PAK7	20
RHOA	387	ras homolog family member A	ARH12 ARHA EDF AOB RHO12 RHOH 12	3
CDC42	998	cell division cycle 42	CDC42Hs G25K TK S	1
PPP3CA	5530	protein phosphatase 3 catalytic subunit alpha	ACCIID CALN CA LNA CALNA1 CCN 1 CNA1 IECEE IEC EE1 PPP2B	4
PPP3CB	5532	protein phosphatase 3 catalytic subunit beta	CALNA2 CALNB C NA2 PP2Bbeta	10
PPP3CC	5533	protein phosphatase 3 catalytic subunit gamma	CALNA3 CNA3 PP 2Bgamma	8
CHP1	11261	calcineurin like EF-hand protein 1	CHP SLC9A1BP SP AX9 Sid470p p22 p2 4	15
PPP3R1	5534	protein phosphatase 3 regulatory subunit B, alpha	CALNB1 CNB CNB 1	2
PPP3R2	5535	protein phosphatase 3 regulatory subunit B, beta	PPP3RL	9
CHP2	63928	calcineurin like EF-hand protein 2	-	16
NFAT5	10725	nuclear factor of activated T cells 5	NF- AT5 NFATL1 NFA TZ OREBP TONEB P	16
NFATC1	4772	nuclear factor of activated T cells 1	NF-ATC NF- ATc1.2 NFAT2 NF ATc	18
NFATC2	4773	nuclear factor of activated T cells 2	NFAT1 NFATP	20
NFATC3	4775	nuclear factor of activated T cells 3	NF- AT4c NFAT4 NFAT X	16

NFATC4	4776	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3	14
SOS1	6654	SOS Ras/Rac guanine nucleotide exchange factor 1	GF1 GGF1 GINGF HGF NS4 SOS-1	2
SOS2	6655	SOS Ras/Rho guanine nucleotide exchange factor 2	NS9 SOS-2	14
HRAS	3265	HRas proto-oncogene, GTPase	C-BAS/HAS C-H-RAS C-HA-RAS1 CTLO H-RASIDX HAMS H-RAS1 RASH1 p21ras	11
KRAS	3845	KRAS proto-oncogene, GTPase	'C-K-RAS C-K-RAS CFC2 K-RAS2A K-RAS2B K-RAS4A K-RAS4B K-Ras K-Ras 2 KI-RAS KRAS1 KRAS2 NS NS3 OES RALD RASK2 c-Ki-ras c-Ki-ras2	12
NRAS	4893	NRAS proto-oncogene, GTPase	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1
FOS	2353	Fos proto-oncogene, AP-1 transcription factor subunit	AP-1 C-FOS p55	14
JUN	3725	Jun proto-oncogene, AP-1 transcription factor subunit	AP-1 AP1 c-Jun cJUN p39	1
CARD11	84433	caspase recruitment domain family member 11	BENTA BIMP3 CARMA1 IMD11 IMD11A PPBL	7
BCL10	8915	BCL10 immune signaling adaptor	CARMEN CIPER CLAP IMD37 c-E10 mE10	1
MALT1	10892	MALT1 paracaspase component of inhibitor of nuclear factor kappa B kinase complex	IMD12 MLT MLT1 PCASP1	18
CHUK	1147	component of inhibitor of nuclear factor kappa B kinase complex	IKBKA IKK-alpha IKK1 IKKA NFKB1A TCF16	10

IKBKB	3551	inhibitor of nuclear factor kappa B kinase subunit beta	IKK-beta IKK2 IKKB IMD15 IMD15A IMD15B NFKBIKB AMCBX1 EDAID1 FIP-3 FIP3 Fip3p IKK-gamma IKKAP1 IKKG IMD33 IP IP1 IP2 IPD2 NEMO ZC2HC9	8
IKBKG	8517	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	CVID12 EBP-1 KBF1 NF-kB NF-kB1 NF-kappa-B1 NF-kappaB NF-kappabeta NFKB-p105 NFKB-p50 NFkappaB	X
NFKB1	4790	nuclear factor kappa B subunit 1	CMCU NFKB3 p65	4
RELA	5970	RELA proto-oncogene, NF-kB subunit	EDAID2 IKBA MAD-3 NFKBI	11
NFKBIA	4792	NFKB inhibitor alpha	IKBB TRIP9	14
NFKBIB	4793	NFKB inhibitor beta	IKBE	19
NFKBIE	4794	NFKB inhibitor epsilon	IKBE	6
CD28	940	CD28 molecule	Tp44	2
ICOS	29851	inducible T cell costimulator	AILIM CD278 CVI D1	2
CD40LG	959	CD40 ligand	CD154 CD40L HIG M1 IGM IMD3 T-BAM TNFSF5 TRAP gp39 hCD40L	X
PIK3R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038I15Rik FO AP-2 P101-PI3K p101	17
PIK3R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD36 p85 p85-ALPHA	5
PIK3R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85B p85 p85-BETA	19
PIK3R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1
PIK3CA	5290	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3

PIK3CB	5291	phosphatidylinosit ol-4,5- bisphosphate 3- kinase catalytic subunit beta	P110BETA PI3K PI 3KBETA PIK3C1	3
PIK3CD	5293	phosphatidylinosit ol-4,5- bisphosphate 3- kinase catalytic subunit delta	APDS IMD14 P110 DELTA PI3K p110 D	1
PIK3CG	5294	phosphatidylinosit ol-4,5- bisphosphate 3- kinase catalytic subunit gamma	PI3CG PI3K PI3Kga mma PIK3 p110gam ma p120-PI3K	7
AKT3	10000	AKT serine/threonine kinase 3	MPPH MPPH2 PKB - GAMMA PKBG PR KBG RAC-PK- gamma RAC- gamma STK-2	1
AKT1	207	AKT serine/threonine kinase 1	AKT CWS6 PKB P KB- ALPHA PRKBA R AC RAC-ALPHA	14
AKT2	208	AKT serine/threonine kinase 2	HIHGHH PKBB PK BBETA PRKBB RA C-BETA	19
MAP3K8	1326	mitogen-activated protein kinase kinase kinase 8	AURA2 COT EST E STF MEKK8 TPL2 Tpl-2 c-COT	10
MAP3K14	9020	mitogen-activated protein kinase kinase kinase 14	FTDCR1B HS HSNI K NIK	17
PDCD1	5133	programmed cell death 1	CD279 PD- 1 PD1 SLEB2 hPD- 1 hPD-1 hSLE1	2
CTLA4	1493	cytotoxic T- lymphocyte associated protein 4	ALPS5 CD CD152 CELIAC3 CTLA- 4 GRD4 GSE IDDM 12	2
PTPN6	5777	protein tyrosine phosphatase non- receptor type 6	HCP HCPH HPTP1 C PTP-1C SH- PTP1 SHP-1 SHP- 1L SHP1	12
CBLC	23624	Cbl proto- oncogene C	CBL-3 CBL- SL RNF57	19
CBL	867	Cbl proto- oncogene	C- CBL CBL2 FRA11 B NSLL RNF55	11

CBLB	868	Cbl proto-oncogene B	Cbl-b Nbla00127 RNF56	3
IL2	3558	interleukin 2	IL-2 TCGF lymphokine	4
IL4	3565	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5
IL5	3567	interleukin 5	EDF IL-5 TRF	5
IL10	3586	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1
IFNG	3458	interferon gamma	IFG IFI	12
CSF2	1437	colony stimulating factor 2	CSF GMCSF	5
TNF	7124	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6
CDK4	1019	cyclin dependent kinase 4	CMM3 PSK-J3	12
RASGRP1	10125	RAS guanyl releasing protein 1	CALDAG-GEFI CALDAG-GEFII IMD64 RAS GRP	15
PDK1	5163	pyruvate dehydrogenase kinase 1	-	2
PLCG1	5335	phospholipase C gamma 1	NCKAP3 PLC-II PLC1 PLC148 PLCgamma1	20
PRKCQ	5588	protein kinase C theta	PRKCT nPKC-theta	10
TRAC	28755	T cell receptor alpha constant	IMD7 TCRA TRA TRCA	14
TRAJ1	28754	T cell receptor alpha joining 1 (non-functional)	-	14
TRAJ2	28753	T cell receptor alpha joining 2 (non-functional)	-	14
TRAJ3	28752	T cell receptor alpha joining 3	-	14
TRAJ4	28751	T cell receptor alpha joining 4	-	14
TRAJ5	28750	T cell receptor alpha joining 5	-	14
TRAJ6	28749	T cell receptor alpha joining 6	-	14
TRAJ7	28748	T cell receptor alpha joining 7	-	14

TRAJ8	28747	T cell receptor alpha joining 8	-	14
TRAJ9	28746	T cell receptor alpha joining 9	-	14
TRAJ10	28745	T cell receptor alpha joining 10	-	14
TRAJ11	28744	T cell receptor alpha joining 11	-	14
TRAJ12	28743	T cell receptor alpha joining 12	-	14
TRAJ13	28742	T cell receptor alpha joining 13	-	14
TRAJ14	28741	T cell receptor alpha joining 14	-	14
TRAJ15	28740	T cell receptor alpha joining 15	-	14
TRAJ16	28739	T cell receptor alpha joining 16	-	14
TRAJ17	28738	T cell receptor alpha joining 17	-	14
TRAJ18	28737	T cell receptor alpha joining 18	-	14
TRAJ19	28736	T cell receptor alpha joining 19 (non-functional)	-	14
TRAJ20	28735	T cell receptor alpha joining 20	-	14
TRAJ21	28734	T cell receptor alpha joining 21	-	14
TRAJ22	28733	T cell receptor alpha joining 22	-	14
TRAJ23	28732	T cell receptor alpha joining 23	-	14
TRAJ24	28731	T cell receptor alpha joining 24	-	14
TRAJ25	28730	T cell receptor alpha joining 25 (non-functional)	-	14
TRAJ26	28729	T cell receptor alpha joining 26	-	14
TRAJ27	28728	T cell receptor alpha joining 27	-	14
TRAJ28	28727	T cell receptor alpha joining 28	-	14
TRAJ29	28726	T cell receptor alpha joining 29	-	14
TRAJ30	28725	T cell receptor alpha joining 30	-	14
TRAJ31	28724	T cell receptor alpha joining 31	-	14

TRAJ32	28723	T cell receptor alpha joining 32	-	14
TRAJ33	28722	T cell receptor alpha joining 33	-	14
TRAJ34	28721	T cell receptor alpha joining 34	-	14
TRAJ35	28720	T cell receptor alpha joining 35 (non-functional)	-	14
TRAJ36	28719	T cell receptor alpha joining 36	-	14
TRAJ37	28718	T cell receptor alpha joining 37	-	14
TRAJ38	28717	T cell receptor alpha joining 38	-	14
TRAJ39	28716	T cell receptor alpha joining 39	-	14
TRAJ40	28715	T cell receptor alpha joining 40	-	14
TRAJ41	28714	T cell receptor alpha joining 41	-	14
TRAJ42	28713	T cell receptor alpha joining 42	-	14
TRAJ43	28712	T cell receptor alpha joining 43	-	14
TRAJ44	28711	T cell receptor alpha joining 44	-	14
TRAJ45	28710	T cell receptor alpha joining 45	-	14
TRAJ46	28709	T cell receptor alpha joining 46	-	14
TRAJ47	28708	T cell receptor alpha joining 47	-	14
TRAJ48	28707	T cell receptor alpha joining 48	-	14
TRAJ49	28706	T cell receptor alpha joining 49	-	14
TRAJ50	28705	T cell receptor alpha joining 50	-	14
TRAJ52	28703	T cell receptor alpha joining 52	-	14
TRAJ53	28702	T cell receptor alpha joining 53	-	14
TRAJ54	28701	T cell receptor alpha joining 54	-	14
TRAJ56	28699	T cell receptor alpha joining 56	-	14
TRAJ57	28698	T cell receptor alpha joining 57	-	14

TRAJ58	28697	T cell receptor alpha joining 58 (non-functional)	-	14
TRAJ59	28696	T cell receptor alpha joining 59 (non-functional)	-	14
TRAJ61	28694	T cell receptor alpha joining 61 (non-functional)	-	14
TRAV1-1	28693	T cell receptor alpha variable 1-1	TCRAV1S1 TCRA V7S1 TRAV11	14
TRAV1-2	28692	T cell receptor alpha variable 1-2	TCRAV1S2 TCRA V7S2 TRAV12	14
TRAV2	28691	T cell receptor alpha variable 2	TCRAV11S1 TCRA V2S1	14
TRAV3	28690	T cell receptor alpha variable 3	TCRAV16S1 TCRA V3S1	14
TRAV4	28689	T cell receptor alpha variable 4	TCRAV20S1 TCRA V4S1	14
TRAV5	28688	T cell receptor alpha variable 5	TCRAV15S1 TCRA V5S1	14
TRAV7	28686	T cell receptor alpha variable 7	TCRAV7S1	14
TRAV8-1	28685	T cell receptor alpha variable 8-1	TCRAV1S1 TCRA V8S1 TRAV81	14
TRAV8-2	28684	T cell receptor alpha variable 8-2	TCRAV1S5 TCRA V8S2 TRAV82	14
TRAV8-3	28683	T cell receptor alpha variable 8-3	TCRAV1S4 TCRA V8S3 TRAV83	14
TRAV8-4	28682	T cell receptor alpha variable 8-4	TCRAV1S2 TCRA V8S4 TRAV84	14
TRAV8-6	28680	T cell receptor alpha variable 8-6	TCRAV1S3 TCRA V8S6 TRAV86	14
TRAV8-7	28679	T cell receptor alpha variable 8-7 (pseudogene)	TCRAV8S7 TRAV8 7	14
TRAV9-1	28678	T cell receptor alpha variable 9-1	TCRAV9S1 TRAV9 1	14
TRAV9-2	28677	T cell receptor alpha variable 9-2	TCRAV22S1 TCRA V9S2 TRAV92	14
TRAV10	28676	T cell receptor alpha variable 10	TCRAV10S1 TCRA V24S1	14
TRAV12-1	28674	T cell receptor alpha variable 12-1	TCRAV12S1 TCRA V2S3 TRAV121	14
TRAV12-2	28673	T cell receptor alpha variable 12-2	TCRAV12S2 TCRA V2S1 TRAV122	14
TRAV12-3	28672	T cell receptor alpha variable 12-3	TCRAV12S3 TCRA V2S2 TRAV123	14
TRAV13-1	28671	T cell receptor alpha variable 13-1	TCRAV13S1 TCRA V8S1 TRAV131	14

TRAV13-2	28670	T cell receptor alpha variable 13-2	TCRAV13S2 TCRA V8S2 TRAV132	14
TRAV14D ¹	28669	T cell receptor alpha variable 14/delta variable 4	TCRAV6S1- hDV104S1 TRAV14 /DV4 hADV14S1	14
TRAV16	28667	T cell receptor alpha variable 16	TCRAV16S1 TCRA V9S1	14
TRAV17	28666	T cell receptor alpha variable 17	TCRAV17S1 TCRA V3S1	14
TRAV18	28665	T cell receptor alpha variable 18	TCRAV18S1	14
TRAV19	28664	T cell receptor alpha variable 19	TCRAV12S1 TCRA V19S1	14
TRAV20	28663	T cell receptor alpha variable 20	TCRAV20S1 TCRA V30S1	14
TRAV21	28662	T cell receptor alpha variable 21	TCRAV21S1 TCRA V23S1	14
TRAV22	28661	T cell receptor alpha variable 22	TCRAV13S1 TCRA V22S1	14
TRAV23D ¹	28660	T cell receptor alpha variable 23/delta variable 6	TCRAV17S1 TRAV 23/DV6 hADV23S1	14
TRAV24	28659	T cell receptor alpha variable 24	TCRAV18S1 TCRA V24S1	14
TRAV25	28658	T cell receptor alpha variable 25	TCRAV25S1 TCRA V32S1	14
TRAV26-1	28657	T cell receptor alpha variable 26-1	TCRAV26S1 TCRA V4S2 TRAV261	14
TRAV26-2	28656	T cell receptor alpha variable 26-2	TCRAV26S2 TCRA V4S1 TRAV262	14
TRAV27	28655	T cell receptor alpha variable 27	TCRAV10S1 TCRA V27S1	14
TRAV29D ¹	28653	T cell receptor alpha variable 29/delta variable 5	TCRA TCRAV21S1 TRAV29/DV5 hAD V29S1	14
TRAV30	28652	T cell receptor alpha variable 30	TCRAV29S1 TCRA V30S1	14
TRAV34	28648	T cell receptor alpha variable 34	TCRAV26S1 TCRA V34S1	14
TRAV35	28647	T cell receptor alpha variable 35	TCRAV25S1 TCRA V35S1	14
TRAV36D ¹	28646	T cell receptor alpha variable 36/delta variable 7	TCRAV28S1 TRAV 36/DV7 hADV36S1	14
TRAV38-1	28644	T cell receptor alpha variable 38-1	TCRAV14S2 TCRA V38S1 TRAV381	14
TRAV38-2 ¹	28643	T cell receptor alpha variable 38- 2/delta variable 8	TCRAV14S1 TRAV 382DV8 hADV38S2	14
TRAV39	28642	T cell receptor alpha variable 39	TCRAV27S1 TCRA V39S1	14

TRAV40	28641	T cell receptor alpha variable 40	TCRAV31S1 TCRAV40S1	14
TRAV41	28640	T cell receptor alpha variable 41	TCRAV19S1 TCRAV41S1	14
TRBC1	28639	T cell receptor beta constant 1	BV05S1J2.2 TCRB TCRBC1	7
TRBC2	28638	T cell receptor beta constant 2	TCRBC2	7
TRBD1	28637	T cell receptor beta diversity 1	TCRBD1	7
TRBD2	28636	T cell receptor beta diversity 2	TCRBD2	7
TRBJ1-1	28635	T cell receptor beta joining 1-1	TCRBJ1S1 TRBJ11	7
TRBJ1-2	28634	T cell receptor beta joining 1-2	TCRBJ1S2 TRBJ12	7
TRBJ1-3	28633	T cell receptor beta joining 1-3	TCRBJ1S3 TRBJ13	7
TRBJ1-4	28632	T cell receptor beta joining 1-4	TCRBJ1S4 TRBJ14	7
TRBJ1-5	28631	T cell receptor beta joining 1-5	TCRBJ1S5 TRBJ15	7
TRBJ1-6	28630	T cell receptor beta joining 1-6	TCRBJ1S6 TRBJ16	7
TRBJ2-1	28629	T cell receptor beta joining 2-1	TCRBJ2S1 TRBJ21	7
TRBJ2-2	28628	T cell receptor beta joining 2-2	TCRBJ2S2 TRBJ22	7
TRBJ2-3	28626	T cell receptor beta joining 2-3	TCRBJ2S3 TRBJ23	7
TRBJ2-4	28625	T cell receptor beta joining 2-4	TCRBJ2S4 TRBJ24	7
TRBJ2-5	28624	T cell receptor beta joining 2-5	TCRBJ2S5 TRBJ25	7
TRBJ2-6	28623	T cell receptor beta joining 2-6	TCRBJ2S6 TRBJ26	7
TRBJ2-7	28622	T cell receptor beta joining 2-7	TCRBJ2S7 TRBJ27	7
TRBV2	28620	T cell receptor beta variable 2	TCRBV22S1A2N1T TCRBV2S1	7
TRBV3-1	28619	T cell receptor beta variable 3-1	TCRBV3S1 TCRBV9S1A1T TRBV31	7
TRBV4-1	28617	T cell receptor beta variable 4-1	BV07S1J2.7 TCRBV4S1 TCRBV7S1A1N2T TRBV41	7
TRBV4-2	28616	T cell receptor beta variable 4-2	TCRBV4S2 TCRBV7S3A2 TCRBV7S3A2T TRBV42	7
TRBV4-3	28615	T cell receptor beta variable 4-3	TCRBV4S3 TCRBV7S2A1N4T TRBV43	7

TRBV5-1	28614	T cell receptor beta variable 5-1	TCRBV5S1 TCRBV5S1A1T TRBV51	7
TRBV5-4	28611	T cell receptor beta variable 5-4	TCRBV5S4 TCRBV5S6A3N2T TRBV54	7
TRBV5-5	28610	T cell receptor beta variable 5-5	TCRBV5S3A2T TCRBV5S5 TRBV55	7
TRBV5-6	28609	T cell receptor beta variable 5-6	TCRBV5S2 TCRBV5S6 TRBV56	7
TRBV5-7	28608	T cell receptor beta variable 5-7 (non-functional)	TCRBV5S7 TCRBV5S7P TRBV57	7
TRBV5-8	28607	T cell receptor beta variable 5-8	TCRBV5S4A2T TCRBV5S8 TRBV58	7
TRBV6-1	28606	T cell receptor beta variable 6-1	TCRBV13S3 TCRBV6S1 TRBV61	7
TRBV6-2	28605	T cell receptor beta variable 6-2	TCRBV13S2 TCRBV13S2A1T TCRBV6S2 TRBV62	7
TRBV6-3	28604	T cell receptor beta variable 6-3	TCRBV13S9/13S2A1T TCRBV6S3 TRBV63	7
TRBV6-4	28603	T cell receptor beta variable 6-4	TCRBV13S5 TCRBV6S4 TRBV64	7
TRBV6-5	28602	T cell receptor beta variable 6-5	TCRBV13S1 TCRBV6S5 TRBV65	7
TRBV6-6	28601	T cell receptor beta variable 6-6	TCRBV13S6A2T TCRBV6S6 TRBV66	7
TRBV6-7	28600	T cell receptor beta variable 6-7 (non-functional)	TCRBV13S8P TCRBV6S7 TRBV67	7
TRBV6-8	28599	T cell receptor beta variable 6-8	TCRBV13S7P TCRBV6S8 TRBV68	7
TRBV6-9	28598	T cell receptor beta variable 6-9	TCRBV13S4 TCRBV6S9 TRBV69	7
TRBV7-2	28596	T cell receptor beta variable 7-2	TCRBV6S5A1N1 TCRBV6S5A2 TCRBV7S2 TRBV72	7
TRBV7-3	28595	T cell receptor beta variable 7-3	TCRBV6S1A1N1 TCRBV7S3 TRBV73	7
TRBV7-4	28594	T cell receptor beta variable 7-4	TCRBV6S8A2T TCRBV7S4 TRBV74	7
TRBV7-6	28592	T cell receptor beta variable 7-6	TCRBV6S3A1N1T TCRBV7S6 TRBV76	7

TRBV7-7	28591	T cell receptor beta variable 7-7	TCRBV6S6A2T TCRBV7S7 TRBV77	7
TRBV7-8	28590	T cell receptor beta variable 7-8	TCRBV6S2A1N1T TCRBV7S8 TRBV78	7
TRBV7-9	28589	T cell receptor beta variable 7-9	TCRB TCRBV6S4A1 TCRBV7S9 TRBV79	7
TRBV9	28586	T cell receptor beta variable 9	TCRBV1S1A1N1 TCRBV9S1	7
TRBV10-1	28585	T cell receptor beta variable 10-1	TCRBV10S1 TCRBV12S2 TCRBV12S2A1T TRBV101	7
TRBV10-2	28584	T cell receptor beta variable 10-2	TCRBV10S2 TCRBV12S3 TRBV102	7
TRBV10-3	28583	T cell receptor beta variable 10-3	TCRBV10S3 TCRBV12S1A1N2 TRBV103	7
TRBV11-1	28582	T cell receptor beta variable 11-1	TCRBV11S1 TCRBV21S1 TRBV111	7
TRBV11-2	28581	T cell receptor beta variable 11-2	TCRBV11S2 TCRBV21S3A2N2T TRBV112	7
TRBV11-3	28580	T cell receptor beta variable 11-3	TCRBV11S3 TCRBV21S2A2 TRBV113	7
TRBV12-3	28577	T cell receptor beta variable 12-3	TCRBV12S3 TCRBV8S1 TRBV123	7
TRBV12-4	28576	T cell receptor beta variable 12-4	TCRBV12S4 TCRBV8S2A1T TRBV124	7
TRBV12-5	28575	T cell receptor beta variable 12-5	TCRBV12S5 TCRBV8S3 TRBV125	7
TRBV13	28574	T cell receptor beta variable 13	TCRBV13S1 TCRBV23S1A2T	7
TRBV14	28573	T cell receptor beta variable 14	TCRBV14S1 TCRBV16S1A1N1	7
TRBV15	28572	T cell receptor beta variable 15	TCRBV15S1 TCRBV24S1A3T	7
TRBV16	28571	T cell receptor beta variable 16	BV25S1J1.2 TCRB TCRBV16S1 TCRBV25S1 TCRBV25S1A2PT	7
TRBV17	28570	T cell receptor beta variable 17 (non-functional)	TCRBV17S1 TCRBV26S1P	7
TRBV18	28569	T cell receptor beta variable 18	TCRBV18S1	7
TRBV19	28568	T cell receptor beta variable 19	TCRBV17S1A1T TCRBV19S1	7

TRBV20-1	28567	T cell receptor beta variable 20-1	TCRBV20S1 TCRB V2S1 TRBV201	7
TRBV24-1	28563	T cell receptor beta variable 24-1	TCRBV15S1 TCRB V24S1 TRBV241	7
TRBV25-1	28562	T cell receptor beta variable 25-1	TCRBV11S1A1T TCRBV25S1 TRBV251	7
TRBV27	28560	T cell receptor beta variable 27	TCRBV14S1 TCRB V27S1	7
TRBV28	28559	T cell receptor beta variable 28	TCRBV28S1 TCRB V3S1	7
TRBV29-1	28558	T cell receptor beta variable 29-1	TCRBV29S1 TCRB V4S1A1T TRBV291	7
TRBV30	28557	T cell receptor beta variable 30	TCRBV20S1A1N2 TCRBV30S1	7
TRDC	28526	T cell receptor delta constant	TCRD	14
TRDD1	28525	T cell receptor delta diversity 1	-	14
TRDD2	28524	T cell receptor delta diversity 2	-	14
TRDD3	28523	T cell receptor delta diversity 3	TCRD	14
TRDJ1	28522	T cell receptor delta joining 1	TCRD	14
TRDJ2	28521	T cell receptor delta joining 2	-	14
TRDJ3	28520	T cell receptor delta joining 3	-	14
TRDJ4	28519	T cell receptor delta joining 4	-	14
TRDV1	28518	T cell receptor delta variable 1	hDV101S1	14
TRDV2	28517	T cell receptor delta variable 2	hDV102S1	14
TRDV3	28516	T cell receptor delta variable 3	hDV103S1	14
TRGV9	6983	T cell receptor gamma variable 9	TCRGV9 TRGC1 V2	7
TRGV8	6982	T cell receptor gamma variable 8	TCRGV8 V1S8	7
TRGV5	6978	T cell receptor gamma variable 5	TCRGV5 V1S5	7
TRGV4	6977	T cell receptor gamma variable 4	TCRGV4 V1S4	7
TRGV3	6976	T cell receptor gamma variable 3	TCRGV3 V1S3	7
TRGV2	6974	T cell receptor gamma variable 2	TCRGV2 V1S2	7

TRGJP2	6972	T cell receptor gamma joining P2	JP2 TCRGJP2	7
TRGJP1	6971	T cell receptor gamma joining P1	JP1 TCRGJP1	7
TRGJP	6970	T cell receptor gamma joining P	JP TCRGJP	7
TRGJ2	6969	T cell receptor gamma joining 2	J2 TCRGJ2	7
TRGJ1	6968	T cell receptor gamma joining 1	J1 TCRGJ1	7
TRGC2	6967	T cell receptor gamma constant 2	TCRGC2 TRGC2(2 X) TRGC2(3X)	7
TRGC1	6966	T cell receptor gamma constant 1	C1 TCRG TCRGC1	7
TRAV6	6956	T cell receptor alpha variable 6	TCRAV5S1 TCRA V6S1	14
BMP1	649	bone morphogenetic protein 1	OI13 PCOLC PCP P CP2 TLD	8
BMP10	27302	bone morphogenetic protein 10	-	2
BMP15	9210	bone morphogenetic protein 15	GDF9B ODG2 POF 4	X
BMP2	650	bone morphogenetic protein 2	BDA2 BMP2A SSF SC	20
BMP3	651	bone morphogenetic protein 3	BMP-3A	4
BMP4	652	bone morphogenetic protein 4	BMP2B BMP2B1 M COPS6 OFC11 ZY ME	14
BMP5	653	bone morphogenetic protein 5	-	6
BMP6	654	bone morphogenetic protein 6	VGR VGR1	6
BMP7	655	bone morphogenetic protein 7	OP-1	20
BMP8A	353500	bone morphogenetic protein 8a	OP-2	1
BMP8B	656	bone morphogenetic protein 8b	BMP8 OP2	1
GDF1	2657	growth differentiation factor 1	CERS1 CHTD6 DO RV DTGA3 LAG1 L ASS1 RAI UOG1	19

GDF10	2662	growth differentiation factor 10	BIP BMP-3b BMP3B	10
GDF11	10220	growth differentiation factor 11	BMP-11 BMP11	12
GDF15	9518	growth differentiation factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGF B	19
GDF2	2658	growth differentiation factor 2	BMP-9 BMP9 HHT5	10
GDF3	9573	growth differentiation factor 3	KFS3 MCOP7 MCO PCB6	12
GDF5	8200	growth differentiation factor 5	BDA1C BMP-14 BMP14 CDMP1 DUPANS LAP-4 LAP4 OS5 SYM1 B SYNS2	20
GDF6	392255	growth differentiation factor 6	BMP-13 BMP13 CDMP2 KFM KFS KFS1 KFSL SGM1 SYNS4	8
GDF7	151449	growth differentiation factor 7	BMP12	2
GDF9	2661	growth differentiation factor 9	POF14	5
GDNF	2668	glial cell derived neurotrophic factor	ATF ATF1 ATF2 HFB1-GDNF HSCR3	5
INH A	3623	inhibin subunit alpha	-	2
INHBA	3624	inhibin subunit beta A	EDF FRP	7
INHBB	3625	inhibin subunit beta B	-	2
INHBC	3626	inhibin subunit beta C	IHBC	12
INHBE	83729	inhibin subunit beta E	-	12
LEFTY1	10637	left-right determination factor 1	LEFTB LEFTYB	1
LEFTY2	7044	left-right determination factor 2	EBAF LEFTA LEFTYA TGFB4	1
NODAL	4838	nodal growth differentiation factor	HTX5	10

TGFB1	7040	transforming growth factor beta 1	CED DPD1 IBDIM DE LAP TGF-beta1 TGFB TGFbeta	19
TGFB2	7042	transforming growth factor beta 2	G-TSF LDS4 TGF-beta2	1
TGFB3	7043	transforming growth factor beta 3	ARVD ARVD1 LDS5 RNHF TGF-beta3	14
ACVR1B	91	activin A receptor type 1B	ACTRIB ACVRLK4 ALK4 SKR2	12
ACVR1C	130399	activin A receptor type 1C	ACVRLK7 ALK7	2
ACVR2A	92	activin A receptor type 2A	ACTRII ACVR2	2
ACVR2B	93	activin A receptor type 2B	ACTRIIB ActR-IIB HTX4	3
ACVRL1	94	activin A receptor like type 1	ACVRLK1 ALK-1 ALK1 HHT HHT2 ORW2 SKR3 TSR-I	12
AMHR2	269	anti-Mullerian hormone receptor type 2	AMHR MISR2 MISRII MRII	12
BMPR1A	657	bone morphogenetic protein receptor type 1A	10q23del ACVRLK3 ALK3 CD292 SKR5	10
BMPR1B	658	bone morphogenetic protein receptor type 1B	ALK-6 ALK6 AMDD BDA1D BDA2 CDw293	4
BMPR2	659	bone morphogenetic protein receptor type 2	BMPR-II BMPR3 BMR2 BKR-3 POVD1 PPH1 T-ALK	2
TGFBR1	7046	transforming growth factor beta receptor 1	AAT5 ACVRLK4 ALK-5 ALK5 ESS1 LDS1 LDS1A LDS2A MSSE SKR4 TBR-i TBRI TGFR-1 tbetaR-I	9
TGFBR2	7048	transforming growth factor beta receptor 2	AAT3 FAA3 LDS1B LDS2 LDS2B MFS2 RIIC TAAD2 TBR-i TBRII TGFR-2 TGFbeta-RII	3

TGFBR3	7049	transforming growth factor beta receptor 3	BGCAN betaglycan	1
TNFRSF11	4982	TNF receptor superfamily member 11b	OCIF OPG PDB5 TR1	8
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3
TNFSF11	8600	TNF superfamily member 11	CD254 ODF OPGL OPTB2 RANKL TNLG6B TRANCE hRANKL2 sOdf	13
TNFSF12	8742	TNF superfamily member 12	APO3L DR3LG TNLG4A TWEAK	17
TNFSF13	8741	TNF superfamily member 13	APRIL CD256 TALL-2 TALL2 TNLG7B TRDL-1 UNQ383/PRO715 ZTNF2	17
TNFSF13B	10673	TNF superfamily member 13b	BAFF BLYS CD257 DTL TALL-1 TALL1 THANK TNFSF20 TNLG7A ZTNF4	13
TNFSF14	8740	TNF superfamily member 14	CD258 HVEM LIGHT LTg	19
TNFSF15	9966	TNF superfamily member 15	TL1 TL1A TNLG1B VEGI VEGI192A	9
TNFSF18	8995	TNF superfamily member 18	AITRL GITRL TL6 TNLG2A hGITRL	1
TNFSF4	7292	TNF superfamily member 4	CD134L CD252 GP34 OX-40L OX40L TNLG2B TXGP1	1
TNFSF8	944	TNF superfamily member 8	CD153 CD30L CD30LG TNLG3A	9
TNFSF9	8744	TNF superfamily member 9	4-1BB-L CD137L TNLG5A	19
TNFRSF10	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAIL-2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8
TNFRSF10	8794	TNF receptor superfamily member 10c	CD263 DCR1 DCR1-TNFR LIT TRAIL-R3 TRAILR3 TRID	8

TNFRSF10	8793	TNF receptor superfamily member 10d	CD264 DCR2 TRAIL-R4 TRAILR4 TRUND	8
TNFRSF11	8792	TNF receptor superfamily member 11a	CD265 FEO LOH18CR1 ODFR OFE OPTB7 OSTS PDB2 RANK TRANCER	18
TNFRSF12	51330	TNF receptor superfamily member 12A	CD266 FN14 TWEAKR	16
TNFRSF13	23495	TNF receptor superfamily member 13B	CD267 CVID CVID2 IGAD2 RYZN TACI TNFRSF14B	17
TNFRSF13	115650	TNF receptor superfamily member 13C	BAFF-R BAFFR BROMIX CD268 CVID4 prolixin	22
TNFRSF14	8764	TNF receptor superfamily member 14	ATAR CD270 HVEA HVEM LIGHTR TR2	1
TNFRSF17	608	TNF receptor superfamily member 17	BCM BCMA CD269 TNFRSF13A	16
TNFRSF18	8784	TNF receptor superfamily member 18	AITR CD357 ENERGEN GITR GITR-D	1
TNFRSF19	55504	TNF receptor superfamily member 19	TAJ TAJ-alpha TRADE TROY	13
TNFRSF1A	7132	TNF receptor superfamily member 1A	CD120a FPF TBP1 TNF-R TNF-R-I TNF-R55 TNFAR TNFR1 TNFR55 TNFR60 p55 p55-R p60	12
TNFRSF1E	7133	TNF receptor superfamily member 1B	CD120b TBPII TNF-R-II TNF-R75 TNFBR TNFR1B TNFR2 TNFR80 p75 p75TNFR	1
TNFRSF21	27242	TNF receptor superfamily member 21	BM-018 CD358 DR6	6
TNFRSF25	8718	TNF receptor superfamily member 25	APO-3 DDR3 DR3 GEF720 LARD PLEKHG5 TNFRSF12 TR3 TRAMP WSL-1 WSL-LR	1

TNFRSF4	7293	TNF receptor superfamily member 4	ACT35 CD134 IMD16 OX40 TXGP1L	1
TNFRSF6E	8771	TNF receptor superfamily member 6b	DCR3 DJ583P15.1.1 M68 M68E TR6	20
TNFRSF8	943	TNF receptor superfamily member 8	CD30 D1S166E Ki-1	1
TNFRSF9	3604	TNF receptor superfamily member 9	4-1BB CD137 CDw137 ILA	1

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