

Immune-related genes list

Sym bol	ID	Name	Synonyms	Chro mos ome	Category
AZG P1	563	alpha-2-glycoprotein 1, zinc-binding	ZA2G ZAG	7	Antigen_Processing_and_Presentation
B2M	567	beta-2-microglobulin	IMD43	15	Antigen_Processing_and_Presentation
CAL R	811	calreticulin	CRT HEL-S-99n RO SSA cC1qR	19	Antigen_Processing_and_Presentation
CANX	821	calnexin	CNX IP90 P90	5	Antigen_Processing_and_Presentation
CD1 A	909	CD1a molecule	CD1 FCB6 HTA1 R4 T6	1	Antigen_Processing_and_Presentation
CD1 B	910	CD1b molecule	CD1 CD1A R1	1	Antigen_Processing_and_Presentation
CD1 C	911	CD1c molecule	BDCA1 CD1 CD1A R7	1	Antigen_Processing_and_Presentation
CD1 D	912	CD1d molecule	CD1A R3 R3G1	1	Antigen_Processing_and_Presentation
CD1 E	913	CD1e molecule	CD1A R2	1	Antigen_Processing_and_Presentation
CD4	920	CD4 molecule	CD4mut	12	Antigen_Processing_and_Presentation
CD8 A	925	CD8a molecule	CD8 Leu2 p32	2	Antigen_Processing_and_Presentation
CD8 B	926	CD8b molecule	CD8B1 LEU2 LY3 LYT3 P37	2	Antigen_Processing_and_Presentation
CD7 4	972	CD74 molecule	DHLAG HLADG III Ia-GAMMA p33	5	Antigen_Processing_and_P

					resentation
CRE B1	138 5	cAMP responsive element binding protein 1	CREB CREB-1	2	Antigen_Proc essing_and_P resentation
CTS B	150 8	cathepsin B	APPS CPSB RECEUP	8	Antigen_Proc essing_and_P resentation
CTS E	151 0	cathepsin E	CATE	1	Antigen_Proc essing_and_P resentation
CTS L	151 4	cathepsin L	CATL CTSL1 MEP	9	Antigen_Proc essing_and_P resentation
CTS S	152 0	cathepsin S	-	1	Antigen_Proc essing_and_P resentation
FCE R1G	220 7	Fc fragment of IgE receptor Ig	FCRG	1	Antigen_Proc essing_and_P resentation
FCG RT	221 7	Fc fragment of IgG receptor and transporter	FCRN alpha-chain	19	Antigen_Proc essing_and_P resentation
PDI A3	292 3	protein disulfide isomerase family A member 3	ER60 ERp57 ERp60 ERp61 GRP57 GRP58 HEL-S-269 HEL-S-93n HsT17083 P58 PI-PLC	15	Antigen_Proc essing_and_P resentation
HFE	307 7	homeostat ic iron regulator	HFE1 HH HLA-H MVCD7 TFQTL2	6	Antigen_Proc essing_and_P resentation
HLA -A	310 5	major histocomp atibility complex, class I, A	HLAA	6	Antigen_Proc essing_and_P resentation
HLA -B	310 6	major histocomp atibility	AS B-4901 HLAB	6	Antigen_Proc essing_and_P resentation

		complex, class I, B			
HLA -C	310 7	major histocomp atibility complex, class I, C	D6S204 HLA-JY3 HLAC HLC- C MHC PSORS1	6	Antigen_Proc essing_and_P resentation
HLA - DM A	310 8	major histocomp atibility complex, class II, DM alpha	D6S222E DMA HLADM RING6	6	Antigen_Proc essing_and_P resentation
HLA - DM B	310 9	major histocomp atibility complex, class II, DM beta	D6S221E RING7	6	Antigen_Proc essing_and_P resentation
HLA - DO A	311 1	major histocomp atibility complex, class II, DO alpha	HLA-DNA HLA-DZA HLADZ	6	Antigen_Proc essing_and_P resentation
HLA - DO B	311 2	major histocomp atibility complex, class II, DO beta	DOB HLA_DOB	6	Antigen_Proc essing_and_P resentation
HLA - DPA 1	311 3	major histocomp atibility complex, class II, DP alpha 1	DP(W3) DP(W4) DPA1 HLA- DP1A HLA-DPB1 HLADP HLASB PLT1	6	Antigen_Proc essing_and_P resentation
HLA - DPB 1	311 5	major histocomp atibility complex, class II, DP beta 1	DPB1 HLA-DP HLA-DP1B HLA-DPB	6	Antigen_Proc essing_and_P resentation
HLA	311	major	CELIAC1 DQ-A1 DQA1 HLA-DQA	6	Antigen_Proc

- DQ A1	7	histocomp atibility complex, class II, DQ alpha 1			essing_and_P resentation
HLA - DQ A2	311 8	major histocomp atibility complex, class II, DQ alpha 2	DC-alpha DX-ALPHA HLA-DCA HLA- DXA HLADQA2	6	Antigen_Proc essing_and_P resentation
HLA - DQ B1	311 9	major histocomp atibility complex, class II, DQ beta 1	CELIAC1 HLA-DQB IDDM1	6	Antigen_Proc essing_and_P resentation
HLA - DRA	312 2	major histocomp atibility complex, class II, DR alpha	HLA-DRA1	6	Antigen_Proc essing_and_P resentation
HLA - DRB 1	312 3	major histocomp atibility complex, class II, DR beta 1	DRB1 HLA-DR1B HLA-DRB SS1	6	Antigen_Proc essing_and_P resentation
HLA - DRB 3	312 5	major histocomp atibility complex, class II, DR beta 3	DRB3 HLA-DPB1 HLA-DR1B HLA- DR3B	6	Antigen_Proc essing_and_P resentation
HLA - DRB 4	312 6	major histocomp atibility complex, class II, DR beta 4	DR4 DRB4 HLA-DR4B HLA-DRB4*	6	Antigen_Proc essing_and_P resentation
HLA - DRB	312 7	major histocomp atibility	-	6	Antigen_Proc essing_and_P resentation

5		complex, class II, DR beta 5			
HLA -E	313 3	major histocomp atibility complex, class I, E	HLA-6.2 QA1	6	Antigen_Proc essing_and_P resentation
HLA -F	313 4	major histocomp atibility complex, class I, F	CDA12 HLA-5.4 HLA-CDA12 HLAF	6	Antigen_Proc essing_and_P resentation
HLA -G	313 5	major histocomp atibility complex, class I, G	MHC-G	6	Antigen_Proc essing_and_P resentation
HLA -H	313 6	major histocomp atibility complex, class I, H (pseudoge ne)	HLAHP	6	Antigen_Proc essing_and_P resentation
MR 1	314 0	major histocomp atibility complex, class I- related	HLALS	1	Antigen_Proc essing_and_P resentation
HSP A1A	330 3	heat shock protein family A (Hsp70) member 1A	HEL-S-103 HSP70-1 HSP70- 1A HSP70- 2 HSP70.1 HSP70.2 HSP70I HSP72 HSP A1	6	Antigen_Proc essing_and_P resentation
HSP A1B	330 4	heat shock protein family A (Hsp70) member 1B	HSP70-1 HSP70-1B HSP70- 2 HSP70.1 HSP70.2 HSP72 HSPA1 HSX 70	6	Antigen_Proc essing_and_P resentation
HSP	330	heat shock	HSP70-1L HSP70-	6	Antigen_Proc

A1L	5	protein family A (Hsp70) member 1 like	HOM HSP70T hum70t		essing_and_Presentation
HSP A2	3306	heat shock protein family A (Hsp70) member 2	HSP70-2 HSP70-3	14	Antigen_Processing_and_Presentation
HSP A4	3308	heat shock protein family A (Hsp70) member 4	APG-2 HEL-S-5a HS24/P52 HSPH2 RY hsp70 hsp70R Y	5	Antigen_Processing_and_Presentation
HSP A5	3309	heat shock protein family A (Hsp70) member 5	BIP GRP78 HEL-S-89n MIF2	9	Antigen_Processing_and_Presentation
HSP A6	3310	heat shock protein family A (Hsp70) member 6	HSP70B	1	Antigen_Processing_and_Presentation
HSP A8	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	Antigen_Processing_and_Presentation
HSP 90A A1	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	Antigen_Processing_and_Presentation
HSP 90A B1	3326	heat shock protein 90 alpha family class B member 1	D6S182 HSP84 HSP90B HSPC2 HSPCB	6	Antigen_Processing_and_Presentation
ICA M1	3383	intercellular adhesion	BB2 CD54 P3.58	19	Antigen_Processing_and_P

		molecule 1			resentation
IFN A1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFNA@ leIF D	9	Antigen_Processing_and_Presentation
IFN A2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9	Antigen_Processing_and_Presentation
IFN A4	3441	interferon alpha 4	IFN-alpha4a INFA4	9	Antigen_Processing_and_Presentation
IFN A5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9	Antigen_Processing_and_Presentation
IFN A6	3443	interferon alpha 6	IFN-alphaK	9	Antigen_Processing_and_Presentation
IFN A7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9	Antigen_Processing_and_Presentation
IFN A8	3445	interferon alpha 8	IFN-alphaB	9	Antigen_Processing_and_Presentation
IFN A10	3446	interferon alpha 10	IFN-alphaC	9	Antigen_Processing_and_Presentation
IFN A13	3447	interferon alpha 13	-	9	Antigen_Processing_and_Presentation
IFN A14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9	Antigen_Processing_and_Presentation
IFN A16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9	Antigen_Processing_and_Presentation
IFN A17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9	Antigen_Processing_and_Presentation
IFN A21	3452	interferon alpha 21	IFN-alphaI leIF F leIF-F	9	Antigen_Processing_and_Presentation
IFN G	3458	interferon gamma	IFG IFI	12	Antigen_Processing_and_Presentation
KIR2	380	killer cell	CD158A KIR-	19	Antigen_Proc

DL1	2	immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 1	K64 KIR221 KIR2DL3 NKAT NKAT-1 NKAT1 p58.1		essing_and_Presentation
KIR2DL2	3803	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	CD158B1 CD158b NKAT-6 NKAT6 p58.2	19	Antigen_Processing_and_Presentation
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	Antigen_Processing_and_Presentation
KIR2DL4	3805	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	CD158D G9P KIR-103AS KIR-2DL4 KIR103 KIR103AS	19	Antigen_Processing_and_Presentation
KIR2DS1	3806	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 1	CD158H CD158a p50.1	19	Antigen_Processing_and_Presentation

KIR2 DS3	380 8	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 3	NKAT7	19	Antigen_Processing_and_Presentation
KIR2 DS4	380 9	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4	CD158I KIR-2DS4 KIR1D KIR412 KKA3 NKAT-8 NKAT8	19	Antigen_Processing_and_Presentation
KIR2 DS5	381 0	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 5	CD158G NKAT9	19	Antigen_Processing_and_Presentation
KIR3 DL1	381 1	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1	CD158E1 KIR KIR3DL1/S1 NKAT-3 NKAT3 NKB1 NKB1B	19	Antigen_Processing_and_Presentation
KIR3 DL2	381 2	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic	3DL2 CD158K KIR-3DL2 NKAT-4 NKAT4 NKAT4B p140	19	Antigen_Processing_and_Presentation

		c tail 2			
KLR C1	382 1	killer cell lectin like receptor C1	CD159A NKG2 NKG2A	12	Antigen_Processing_and_Presentation
KLR C2	382 2	killer cell lectin like receptor C2	CD159c NKG2-C NKG2C	12	Antigen_Processing_and_Presentation
KLR C3	382 3	killer cell lectin like receptor C3	NKG2-E NKG2E	12	Antigen_Processing_and_Presentation
KLR D1	382 4	killer cell lectin like receptor D1	CD94	12	Antigen_Processing_and_Presentation
LTA	404 9	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6	Antigen_Processing_and_Presentation
CIITA	426 1	class II major histocompatibility complex transactivator	C2TA CIITAIV MHC2TA NLRA	16	Antigen_Processing_and_Presentation
MICA	100 507 436	MHC class I polypeptide-related sequence A	MIC-A PERB11.1	6	Antigen_Processing_and_Presentation
MICB	427 7	MHC class I polypeptide-related sequence B	PERB11.2	6	Antigen_Processing_and_Presentation
NFYA	480 0	nuclear transcription factor Y subunit alpha	CBF-A CBF-B HAP2 NF-YA	6	Antigen_Processing_and_Presentation

NFY B	480 1	nuclear transcripti on factor Y subunit beta	CBF-A CBF-B HAP3 NF-YB	12	Antigen_Proc essing_and_P resentation
NFY C	480 2	nuclear transcripti on factor Y subunit gamma	CBF-C CBFC H1TF2A HAP5 HSM NF-YC	1	Antigen_Proc essing_and_P resentation
LG MN	564 1	legumain	AEP LGMN1 PRSC1	14	Antigen_Proc essing_and_P resentation
PSM B8	569 6	proteasom e 20S subunit beta 8	ALDD D6S216 D6S216E JMP LMP7 NKJ O PRAAS1 PSMB5i RING10	6	Antigen_Proc essing_and_P resentation
PSM C1	570 0	proteasom e 26S subunit, ATPase 1	P26S4 S4 p56	14	Antigen_Proc essing_and_P resentation
PSM C2	570 1	proteasom e 26S subunit, ATPase 2	MSS1 Nbla10058 S7	7	Antigen_Proc essing_and_P resentation
PSM C3	570 2	proteasom e 26S subunit, ATPase 3	TBP1	11	Antigen_Proc essing_and_P resentation
PSM C4	570 4	proteasom e 26S subunit, ATPase 4	MIP224 RPT3 S6 TBP-7 TBP7	19	Antigen_Proc essing_and_P resentation
PSM C5	570 5	proteasom e 26S subunit, ATPase 5	S8 SUG-1 SUG1 TBP10 TRIP1 p45 p45/SUG	17	Antigen_Proc essing_and_P resentation
PSM C6	570 6	proteasom e 26S subunit, ATPase 6	SUG2 p42	14	Antigen_Proc essing_and_P resentation
PSM D1	570 7	proteasom e 26S subunit,	P112 Rpn2 S1	2	Antigen_Proc essing_and_P resentation

		non-ATPase 1			
PSM D2	5708	proteasome 26S subunit, non-ATPase 2	P97 RPN1 S2 TRAP2	3	Antigen_Processing_and_Presentation
PSM D3	5709	proteasome 26S subunit, non-ATPase 3	P58 RPN3 S3 TSTA2	17	Antigen_Processing_and_Presentation
PSM D4	5710	proteasome 26S subunit, non-ATPase 4	AF AF-1 ASF MCB1 Rpn10 S5A pUB-R5	1	Antigen_Processing_and_Presentation
PSM D5	5711	proteasome 26S subunit, non-ATPase 5	S5B	9	Antigen_Processing_and_Presentation
PSM D7	5713	proteasome 26S subunit, non-ATPase 7	MOV34 P40 Rpn8 S12	16	Antigen_Processing_and_Presentation
PSM D8	5714	proteasome 26S subunit, non-ATPase 8	HEL-S-91n HIP6 HYPF Nin1p Rpn12 S14 p31	19	Antigen_Processing_and_Presentation
PSM D10	5716	proteasome 26S subunit, non-ATPase 10	dJ889N15.2 p28 p28(GANK)	X	Antigen_Processing_and_Presentation
PSM D11	5717	proteasome 26S subunit, non-ATPase 11	Rpn6 S9 p44.5	17	Antigen_Processing_and_Presentation
PSM D13	5719	proteasome 26S	HSPC027 Rpn9 S11 p40.5	11	Antigen_Processing_and_P

		subunit, non- ATPase 13			resentation
PSM E1	572 0	proteasom e activator subunit 1	HEL-S- 129m IFI5111 PA28A PA28alpha REGal pha	14	Antigen_Proc essing_and_P resentation
PSM E1	572 0	proteasom e activator subunit 1	HEL-S- 129m IFI5111 PA28A PA28alpha REGal pha	14	Antigen_Proc essing_and_P resentation
PSM E2	572 1	proteasom e activator subunit 2	PA28B PA28beta REGbeta	14	Antigen_Proc essing_and_P resentation
PSM E2	572 1	proteasom e activator subunit 2	PA28B PA28beta REGbeta	14	Antigen_Proc essing_and_P resentation
REL B	597 1	RELB proto- oncogene, NF-kB subunit	I-REL IMD53 IREL REL-B	19	Antigen_Proc essing_and_P resentation
RFX 5	599 3	regulatory factor X5	-	1	Antigen_Proc essing_and_P resentation
RFX AP	599 4	regulatory factor X associated protein	-	13	Antigen_Proc essing_and_P resentation
SLC 10A 2	655 5	solute carrier family 10 member 2	ASBT IBAT ISBT NTCP2 PBAM	13	Antigen_Proc essing_and_P resentation
TAP 1	689 0	transporter 1, ATP binding cassette subfamily B member	ABC17 ABCB2 APT1 D6S114E PSF- 1 PSF1 RING4 TAP1*0102N TAP1N	6	Antigen_Proc essing_and_P resentation
TAP 2	689 1	transporter 2, ATP binding cassette subfamily B member	ABC18 ABCB3 APT2 D6S217E PSF- 2 PSF2 RING11	6	Antigen_Proc essing_and_P resentation
TAP	689	TAP	NGS17 TAPA TPN TPSN	6	Antigen_Proc

BP	2	binding protein			essing_and_Presentation
THBS1	7057	thrombospondin 1	THBS THBS-1 TSP TSP-1 TSP1	15	Antigen_Processing_and_Presentation
SEM1	7979	SEM1 26S proteasome complex subunit	C7orf76 DSS1 ECD SHFD1 SHFM1 SHSF1 Shfdg1	7	Antigen_Processing_and_Presentation
KLR C4	8302	killer cell lectin like receptor C4	NKG2-F NKG2F	12	Antigen_Processing_and_Presentation
AP3 B1	8546	adaptor related protein complex 3 subunit beta 1	ADTB3 ADTB3A HPS HPS2 PE	5	Antigen_Processing_and_Presentation
RFX ANK	8625	regulatory factor X associated ankyrin containing protein	ANKRA1 BLS F14150_1 RFX-B	19	Antigen_Processing_and_Presentation
PSM D6	9861	proteasome 26S subunit, non-ATPase 6	Rpn7 S10 SGA-113M p42A p44S10	3	Antigen_Processing_and_Presentation
PSM E3	10197	proteasome activator subunit 3	HEL-S-283 Ki PA28-gamma PA28G PA28gamma REG-GAMMA	17	Antigen_Processing_and_Presentation
PSM D14	10213	proteasome 26S subunit, non-ATPase 14	PAD1 POH1 RPN11	2	Antigen_Processing_and_Presentation
CLE C4 M	10332	C-type lectin domain family 4 member M	CD209L CD299 DC-SIGN2 DC-SIGNR DCSIGNR HP10347 L-SIGN LSIGN	19	Antigen_Processing_and_Presentation
IFI3	104	IFI30	GILT IFI-30 IP-30 IP30	19	Antigen_Proc

0	37	lysosomal thiol reductase			essing_and_Presentation
PROCR	10544	protein C receptor	CCCA CCD41 EPCR	20	Antigen_Processing_and_Presentation
ADRM1	11047	adhesion regulating molecule 1	ARM-1 ARM1 GP110	20	Antigen_Processing_and_Presentation
ECPAS	23392	Ecm29 proteasome adaptor and scaffold	ECM29 KIAA0368	9	Antigen_Processing_and_Presentation
TRPC4AP	26133	transient receptor potential cation channel subfamily C member 4 associated protein	C20orf188 PPP1R158 TRRP4AP TRUSS	20	Antigen_Processing_and_Presentation
CD209	30835	CD209 molecule	CDSIGN CLEC4L DC-SIGN DC-SIGN1	19	Antigen_Processing_and_Presentation
UBXN1	51035	UBX domain protein 1	2B28 SAKS1 UBXD10	11	Antigen_Processing_and_Presentation
ERAP1	51752	endoplasmic reticulum aminopeptidase 1	A-LAP ALAP APPILS ARTS-1 ARTS1 ERAAP ERAAP1 PILSAP PILSAP	5	Antigen_Processing_and_Presentation
TAPBPL	55080	TAP binding protein like	TAPBP-R TAPBPR	12	Antigen_Processing_and_Presentation
KIR2DL5A	57292	killer cell immunoglobulin like receptor, two Ig domains	CD158F KIR2DL5 KIR2DL5.1 KIR2DL5.3	19	Antigen_Processing_and_Presentation

		and long cytoplasmic tail 5A			
ERA P2	641 67	endoplasmic reticulum aminopeptidase 2	L-RAP LRAP	5	Antigen_Processing_and_Presentation
ULB P3	794 65	UL16 binding protein 3	N2DL-3 NKG2DL3 RAET1N	6	Antigen_Processing_and_Presentation
ULB P2	803 28	UL16 binding protein 2	ALCAN-alpha N2DL2 NKG2DL2 RAET1H RAET1L	6	Antigen_Processing_and_Presentation
ULB P1	803 29	UL16 binding protein 1	N2DL-1 NKG2DL1 RAET1I	6	Antigen_Processing_and_Presentation
KIR3 DL3	115 653	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 3	CD158Z KIR3DL7 KIR44 KIRC1	19	Antigen_Processing_and_Presentation
RAE T1E	135 250	retinoic acid early transcript 1E	LETAL N2DL-4 NKG2DL4 RAET1E2 RL-4 ULBP4 bA350J20.7	6	Antigen_Processing_and_Presentation
RAE T1L	154 064	retinoic acid early transcript 1L	ULBP6	6	Antigen_Processing_and_Presentation
UBR 1	197 131	ubiquitin protein ligase E3 component n-recognin 1	JBS	15	Antigen_Processing_and_Presentation
RAE T1G	353 091	retinoic acid early transcript 1G	ULBP5	6	Antigen_Processing_and_Presentation

PDI A2	647 14	protein disulfide isomerase family A member 2	PDA2 PDI PDIP PDIR	16	Antigen_Proc essing_and_P resentation
HA MP	578 17	hepcidin antimicrob ial peptide	HEPC HFE2B LEAP1 PLTR	19	Antimicrobial s
PI3	526 6	peptidase inhibitor 3	ESI SKALP WAP3 WFDC14 cementoin	20	Antimicrobial s
CA MP	820	cathelicidi n antimicrob ial peptide	CAP-18 CAP18 CRAMP FALL- 39 FALL39 HSD26 LL37	3	Antimicrobial s
DEF B4A	167 3	defensin beta 4A	BD-2 DEFB- 2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8	Antimicrobial s
PPB P	547 3	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 THBG B THBGB1	4	Antimicrobial s
REG 3G	130 120	regenerati ng family member 3 gamma	LPPM429 PAP IB PAP- 1B PAP1B PAPIB REG III REG- III UNQ429	2	Antimicrobial s
CXC L14	954 7	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP- 2g MIP2G NJAC SCYB14	5	Antimicrobial s
CXC L16	581 91	C-X-C motif chemokine ligand 16	CXCLG16 SR-PSOX SRPSOX	17	Antimicrobial s
SLPI	659 0	secretory leukocyte peptidase inhibitor	ALK1 ALP BLPI HUSI HUSI- I MPI WAP4 WFDC4	20	Antimicrobial s
CXC L8	357 6	C-X-C motif chemokine ligand 8	GCP- 1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4	Antimicrobial s
CXC L10	362 7	C-X-C motif chemokine	C7 IFI10 INP10 IP-10 SCYB10 crg- 2 gIP-10 mob-1	4	Antimicrobial s

		ligand 10			
CXC L9	428 3	C-X-C motif chemokine ligand 9	CMK Humig MIG SCYB9 crg-10	4	Antimicrobials
CXC L5	637 4	C-X-C motif chemokine ligand 5	ENA-78 SCYB5	4	Antimicrobials
CXC L11	637 3	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4	Antimicrobials
CXC L6	637 2	C-X-C motif chemokine ligand 6	CKA-3 GCP-2 GCP2 SCYB6	4	Antimicrobials
CXC L1	291 9	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSA MGSA-a NAP-3 SCYB1	4	Antimicrobials
CXC L12	638 7	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10	Antimicrobials
CXC L13	105 63	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BCA-1 BCA1 BLC BLR1L SCYB13	4	Antimicrobials
CXC L2	292 0	C-X-C motif chemokine ligand 2	CINC-2a GRO2 GROb MGSA-b MIP-2a MIP2 MIP2A SCYB2	4	Antimicrobials
PF4	519 6	platelet factor 4	CXCL4 PF-4 SCYB4	4	Antimicrobials
XCL 1	637 5	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM-1a SCM1 SCM1A SCYC1	1	Antimicrobials
CXC L3	292 1	C-X-C motif chemokine ligand 3	CINC-2b GRO3 GROg MIP-2b MIP2B SCYB3	4	Antimicrobials
DEF B10	558 94	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD-3 HBD3 HBP-3 HBP3	8	Antimicrobials

3B					
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17	Antimicrobials
CCL1	6346	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISe TCA3	17	Antimicrobials
DEFB1	1672	defensin beta 1	BD1 DEFB-1 DEFB101 HBD1	8	Antimicrobials
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17	Antimicrobials
ELANE	1991	elastase, neutrophil expressed	ELA2 GE HLE HNE NE PMN-E SCN1	19	Antimicrobials
DEFB103A	414325	defensin beta 103A	BD-3 DEFB-3 DEFB103 DEFB3 HBD3 HBP-3 HBP3	8	Antimicrobials
DEFA3	1668	defensin alpha 3	DEF3 HNP-3 HNP3 HP-3 HP3	8	Antimicrobials
DEFA1	1667	defensin alpha 1	DEF1 DEFA2 HNP-1 HP-1 HP1 MRS	8	Antimicrobials
TMSB10	9168	thymosin beta 10	MIG12 TB10	2	Antimicrobials
DEFA6	1671	defensin alpha 6	DEF6 HD-6	8	Antimicrobials
DEFA5	1670	defensin alpha 5	DEF5 HD-5	8	Antimicrobials
DEFA4	1669	defensin alpha 4	DEF4 HNP-4 HP-4 HP4	8	Antimicrobials
LCN2	3934	lipocalin 2	24p3 MSFI NGAL p25	9	Antimicrobials
LCN1	3933	lipocalin 1	PMFA TLC TP VEGP	9	Antimicrobials
COL10EC1	10584	collectin subfamily member 10	3MC3 CL-34 CLL1	8	Antimicrobials
BPI	671	bactericidal permeability increasing protein	BPIFD1 rBPI	20	Antimicrobials

S10 0A9	628 0	S100 calcium binding protein A9	60B8AG CAGB CFAG CGLB L1AG LIAG MAC387 MIF MRP14 NIF P14	1	Antimicrobial s
S10 0A8	627 9	S100 calcium binding protein A8	60B8AG CAGA CFAG CGLA CP- 10 L1Ag MA387 MIF MRP8 NIF P8	1	Antimicrobial s
DC D	117 159	dermcidin	AIDD DCD-1 DSEP HCAP PIF	12	Antimicrobial s
LCN 6	158 062	lipocalin 6	LCN5 UNQ643 hLcn5	9	Antimicrobial s
S10 0A1 2	628 3	S100 calcium binding protein A12	CAAF1 CAGC CGRP ENRAGE MRP- 6 MRP6 p6	1	Antimicrobial s
HTN 3	334 7	histatin 3	HIS2 HTN2 HTN5 PB	4	Antimicrobial s
LCN 8	138 307	lipocalin 8	EP17 LCN5	9	Antimicrobial s
DEF A1B	728 358	defensin alpha 1B	HNP-1 HP-1 HP1	8	Antimicrobial s
CCR 10	282 6	C-C motif chemokine receptor 10	GPR2	17	Antimicrobial s
CEL A1	199 0	chymotryp sin like elastase 1	ELA1	12	Antimicrobial s
DEF B10 6A	245 909	defensin beta 106A	BD-6 DEFB-6 DEFB106	8	Antimicrobial s
PEN K	517 9	proenkeph alin	PE PENK-A	8	Antimicrobial s
BPIF C	254 240	BPI fold containing family C	BPIL2	22	Antimicrobial s
MM P12	432 1	matrix metallope ptidase 12	HME ME MME MMP-12	11	Antimicrobial s
BPIF B6	128 859	BPI fold containing family B	BPIL3 LPLUNC6	20	Antimicrobial s

		member 6			
LEA P2	116 842	liver enriched antimicrob ial peptide 2	LEAP-2	5	Antimicrobial s
SFT PD	644 1	surfactant protein D	COLEC7 PSP-D SFTP4 SP-D	10	Antimicrobial s
LCN 9	392 399	lipocalin 9	HEL129	9	Antimicrobial s
BPIF B2	803 41	BPI fold containing family B member 2	BPIL1 C20orf184 LPLUNC2 RYSR dJ726 C3.2	20	Antimicrobial s
PTG DS	573 0	prostaglan din D2 synthase	L- PGDS LPGDS PDS PGD2 PGDS PGDS2	9	Antimicrobial s
TMS B4X	711 4	thymosin beta 4 X- linked	FX PTMB4 TB4X TMSB4	X	Antimicrobial s
PGL YRP 1	899 3	peptidogly can recognitio n protein 1	PGLYRP PGRP PGRP- S PGRPS TAG7 TNFSF3L	19	Antimicrobial s
ZC3 HAV 1	568 29	zinc finger CCCH- type containing, antiviral 1	ARTD13 FLB6421 PARP13 ZAP ZC3H2 ZC3HDC2	7	Antimicrobial s
TMS B15 A	110 13	thymosin beta 15a	TMSB15 TMSB15B TMSL8 TMSNB Tb1 5 TbNB	X	Antimicrobial s
S10 OB	628 5	S100 calcium binding protein B	NEF S100 S100-B S100beta	21	Antimicrobial s
S10 OA1 3	628 4	S100 calcium binding protein A13	-	1	Antimicrobial s
S10 OA6	627 7	S100 calcium binding	2A9 5B10 CABP CACY PRA S10A6	1	Antimicrobial s

		protein A6			
DEF B11 9	245 932	defensin beta 119	DEFB-19 DEFB- 20 DEFB120 DEFB20 ESC42- RELA ESC42-RELB	20	Antimicrobial s
DEF B10 7A	245 910	defensin beta 107A	BD-7 DEFB-7 DEFB107	8	Antimicrobial s
DEF B10 5A	245 908	defensin beta 105A	BD-5 DEFB-5 DEFB105	8	Antimicrobial s
SER PIN D1	305 3	serpin family D member 1	D22S673 HC2 HCF2 HCII HLS2 LS2 THP H10	22	Antimicrobial s
DEF B12 9	140 881	defensin beta 129	C2orf87 DEFB- 29 DEFB29 bA530N10.3 hBD-29	20	Antimicrobial s
DEF B12 7	140 850	defensin beta 127	C2orf73 DEF-27 DEFB- 27 DEFB27 bA530N10.2 hBD-27	20	Antimicrobial s
S10 OP	628 6	S100 calcium binding protein P	MIG9	4	Antimicrobial s
S10 0A7	627 8	S100 calcium binding protein A7	PSOR1 S100A7c	1	Antimicrobial s
DEF B10 4A	140 596	defensin beta 104A	BD-4 DEFB-4 DEFB104 DEFB4 hBD-4	8	Antimicrobial s
DEF B12 6	816 23	defensin beta 126	C2orf8 DEFB- 26 DEFB26 HBD26 bA530N10.1 hBD- 26	20	Antimicrobial s
DEF B10 6B	503 841	defensin beta 106B	BD-6 DEFB-6	8	Antimicrobial s
DEF B10 4B	503 618	defensin beta 104B	BD-4 DEFB-4 hBD-4	8	Antimicrobial s
DEF B10 7B	503 614	defensin beta 107B	HsT21816	8	Antimicrobial s
PGL YRP	114 771	peptidogly can	PGLYRPIalpha PGRP-lalpha PGRPIA	1	Antimicrobial s

3		recognitio n protein 3			
PGL YRP 2	114 770	peptidogly can recognitio n protein 2	HMFT0141 PGLYRPL PGRP- L PGRPL TAGL-like tagL tagL- alpha tagl-beta	19	Antimicrobial s
S10 OA1 0	628 1	S100 calcium binding protein A10	42C ANX2L ANX2LG CAL1L CLP11 Ca[1] GP11 P11 p10	1	Antimicrobial s
S10 OA2	627 3	S100 calcium binding protein A2	CAN19 S100L	1	Antimicrobial s
DEF B12 5	245 938	defensin beta 125	DEFB-25	20	Antimicrobial s
DEF B12 3	245 936	defensin beta 123	DEFB-23 DEFB23 ESC42-RELD	20	Antimicrobial s
DEF B10 5B	504 180	defensin beta 105B	BD-5 DEFB-5	8	Antimicrobial s
DEF B13 2	400 830	defensin beta 132	BD-32 DEFB-32 DEFB32 HEL- 75 KFL827 UNQ827	20	Antimicrobial s
BPIF B3	359 710	BPI fold containing family B member 3	C20orf185 LPLUNC3 RYA3	20	Antimicrobial s
LCN 12	286 256	lipocalin 12	-	9	Antimicrobial s
PGL YRP 4	571 15	peptidogly can recognitio n protein 4	PGLYRPIbeta PGRP- lbeta PGRPIB SBB167	1	Antimicrobial s
S10 OA1 1	628 2	S100 calcium binding protein A11	HEL-S-43 MLN70 S100C	1	Antimicrobial s
S10 OA5	627 6	S100 calcium	S100D	1	Antimicrobial s

		binding protein A5			
S10 0A3	627 4	S100 calcium binding protein A3	S100E	1	Antimicrobial s
S10 0A1	627 1	S100 calcium binding protein A1	S100 S100-alpha S100A	1	Antimicrobial s
DEF B12 8	245 939	defensin beta 128	DEFB-28 DEFB28 hBD-28	20	Antimicrobial s
DEF B10 8B	245 911	defensin beta 108B	DEFB-8 hBD-8	11	Antimicrobial s
HTN 1	334 6	histatin 1	HIS1	4	Antimicrobial s
LMB R1L	557 16	limb developm ent membrane protein 1 like	LIMR	12	Antimicrobial s
S10 0A7 A	338 324	S100 calcium binding protein A7A	NICE- 2 NICE2 S100A15 S100A7L1 S100A7f	1	Antimicrobial s
DEF B11 8	117 285	defensin beta 118	C20orf63 DEFB-18 ESC42 ESP13.6	20	Antimicrobial s
COL EC1 2	810 35	collectin subfamily member 12	CLP1 NSR2 SCARA4 SRCL	18	Antimicrobial s
TMS B4Y	908 7	thymosin beta 4 Y- linked	TB4Y	Y	Antimicrobial s
DEF B13 1A	644 414	defensin beta 131A	DEFB-31 DEFB131	4	Antimicrobial s
DEF B13	613 211	defensin beta 134	-	8	Antimicrobial s

4					
DEF B13 0A	245 940	defensin beta 130A	DEFB-30 DEFB130 DEFB130L DEFB30	8	Antimicrobial s
DEF B12 4	245 937	defensin beta 124	DEFB-24	20	Antimicrobial s
DEF B12 1	245 934	defensin beta 121	DEFB21 ESC42RELC	20	Antimicrobial s
DEF B11 6	245 930	defensin beta 116	DEFB-16	20	Antimicrobial s
DEF B11 5	245 929	defensin beta 115	DEFB-15	20	Antimicrobial s
DEF B11 4	245 928	defensin beta 114	DEFB-14 DEFB14	6	Antimicrobial s
DEF B11 3	245 927	defensin beta 113	DEFB-13	6	Antimicrobial s
DEF B11 2	245 915	defensin beta 112	DEFB-12	6	Antimicrobial s
DEF B11 0	245 913	defensin beta 110	DEFB-10 DEFB-11 DEFB111	6	Antimicrobial s
TMS B15 B	286 527	thymosin beta 15B	TMSB15A TMSL8 TMSNB Tbeta15b	X	Antimicrobial s
DEF B13 3	403 339	defensin beta 133	-	6	Antimicrobial s
S10 OZ	170 591	S100 calcium binding protein Z	Gm625 S100-zeta	5	Antimicrobial s
MA VS	575 06	mitochond rial antiviral signaling protein	CARDIF IPS-1 IPS1 VISA	20	Antimicrobial s
TMS	711	TMSB4X	TMSL3	4	Antimicrobial

B4XP8	7	pseudogene 8			s
S10OA14	57402	S100 calcium binding protein A14	BCMP84 S100A15	1	Antimicrobials
LCN10	414332	lipocalin 10	-	9	Antimicrobials
S10OA16	140576	S100 calcium binding protein A16	AAG13 DT1P1A7 S100F	1	Antimicrobials
DEFB136	613210	defensin beta 136	DEFB137	8	Antimicrobials
DEFB135	613209	defensin beta 135	DEFB136	8	Antimicrobials
DEFB117	245931	defensin beta 117 (pseudogene)	DEFB-17	20	Antimicrobials
DEFB110	245913	defensin beta 110	DEFB-10 DEFB-11 DEFB111	6	Antimicrobials
ZC3HAV1L	92092	zinc finger CCCH-type containing, antiviral 1 like	C7orf39	7	Antimicrobials
S10OA7L2	645922	S100 calcium binding protein A7 like 2	S100a7b	1	Antimicrobials
MBL3P	50639	mannose-binding lectin family member 3, pseudogene	COLEC2 MBL	10	Antimicrobials

		ne			
DEF B4B	100 289 462	defensin beta 4B	DEFB4P	8	Antimicrobial s
BPIF B4	149 954	BPI fold containing family B member 4	C20orf186 LPLUNC4 RY2G5 dJ726C3.5	20	Antimicrobial s
IFN AR1	345 4	interferon alpha and beta receptor subunit 1	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21	Antimicrobial s
AZU 1	566	azurocidin 1	AZAMP AZU CAP37 HBP HUMAZUR N AZC hHBP	19	Antimicrobial s
DEF B13 1B	100 129 216	defensin beta 131B	-	11	Antimicrobial s
DEF A1A 3	613 253	defensin alpha 1 and alpha 3, variable copy number locus	DEFA1 DEFA3 DEFT1P	8	Antimicrobial s
LCN 1P1	286 310	lipocalin 1 pseudoge ne 1	LCN1L1 bA430N14.2	9	Antimicrobial s
S10 OG	795	S100 calcium binding protein G	CABP CABP1 CABP9K CALB3	X	Antimicrobial s
DEF A7P	724 067	defensin alpha 7, pseudoge ne	DEFA7	8	Antimicrobial s
DEF B13 OB	100 133 267	defensin beta 130B	-	8	Antimicrobial s
DEF B10 8F	100 133 128	defensin beta 108F (pseudoge ne)	DEFB108P5	4	Antimicrobial s
DEF	100	defensin	-	8	Antimicrobial

B13 1C	128 174	beta 131C (pseudogene)			s
TCH HL1	126 637	trichohyalin like 1	S100A17 THHL1	1	Antimicrobials
TIN AGL 1	641 29	tubulointerstitial nephritis antigen like 1	ARG1 LCN7 LIECG3 TINAGRP	1	Antimicrobials
IFN GR1	345 9	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6	Antimicrobials
SLC 22A 17	513 10	solute carrier family 22 member 17	24p3R BOCT BOIT NGALR NGALR2 NGALR3 hBOIT	14	Antimicrobials
WFI KKN 1	117 166	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 1	C16orf12 RJD2 WFDC20A WFIKKN	16	Antimicrobials
WF DC2	104 06	WAP four-disulfide core domain 2	EDDM4 HE4 WAP5 dJ461P17.6	20	Antimicrobials
IL6	356 9	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7	Antimicrobials
UM ODL 1	897 66	uromodulin like 1	-	21	Antimicrobials
TGF B1	704 0	transforming growth factor beta 1	CED DPD1 BDIMDE LAP TGF-beta1 TGFB TGFBeta	19	Antimicrobials
PF4 V1	519 7	platelet factor 4 variant 1	CXCL4L1 CXCL4V1 PF4-ALT PF4A SCYB4V1	4	Antimicrobials

MM P9	4318	matrix metalloproteinase 9	CLG4B GELB MANDP2 MMP-9	20	Antimicrobials
AN OS1	3730	anosmin 1	ADMLX HH1 HHA KAL KAL1 KALIG-1 KMS WFDC19	X	Antimicrobials
TLR4	7099	toll like receptor 4	ARMD10 CD284 TLR-4 TOLL	9	Antimicrobials
IFNG	3458	interferon gamma	IFG IFI	12	Antimicrobials
SPAG11B	10407	sperm associated antigen 11B	EDDM2B EP2 EP2C EP2D HE2 HE2C SPAG11 SPAG11A	8	Antimicrobials
A2M	2	alpha-2-macroglobulin	A2MD CPAMD5 FWP007 S863-7	12	Antimicrobials
CTSL	1514	cathepsin L	CATL CTSL1 MEP	9	Antimicrobials
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	Antimicrobials
APOBEC3G	60489	apolipoprotein B mRNA editing enzyme catalytic subunit 3G	A3G ARCD ARP-9 ARP9 CEM-15 CEM15 MDS019 bK150C2.7 dJ494G10.1	22	Antimicrobials
FABP6	2172	fatty acid binding protein 6	I-15P I-BABP I-BALB I-BAP ILBP ILBP3 ILLBP	5	Antimicrobials
NOD2	64127	nucleotide binding oligomerization domain containing 2	ACUG BLAU BLAUS CARD15 CD CLR16.3 IBD1 NLRC2 NOD2B PSORAS1 YAOS	16	Antimicrobials
MBL2	4153	mannose binding lectin 2	COLEC1 HSMBPC MBL MBL2D MBP MBP-C MBP1 MBPD	10	Antimicrobials
SFTPA1	653509	surfactant protein A1	COLEC4 PSAP PSP-A PSPA SFTP1 SFTPA1B SP-A SP-	10	Antimicrobials

			A1 SP-A1 beta SP-A1 delta SP-A1 epsilon SP-A1 gamma SPA SPA1		
RBP1	5947	retinol binding protein 1	CRABP-I CRBP CRBP1 CRBPI RBPC	3	Antimicrobials
TLR2	7097	toll like receptor 2	CD282 TIL4	4	Antimicrobials
SLC40A1	30061	solute carrier family 40 member 1	FPN1 HFE4 IREG1 MST079 MSTP079 MT1 SLC11A3	2	Antimicrobials
PLAU	5328	plasminogen activator, urokinase	ATF BDPLT5 QPD UPA URK u-PA	10	Antimicrobials
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2	Antimicrobials
PAEP	5047	progestagen associated endometrial protein	GD GdA GdF GdS PAEG PEP PP14 ZIF-1	9	Antimicrobials
HJV	148738	hemojuvelin BMP co-receptor	HFE2 HFE2A JH RGMC	1	Antimicrobials
MUC5AC	4586	mucin 5AC, oligomeric mucus/gel-forming	MUC5 TBM leB mucin	11	Antimicrobials
CTS	1520	cathepsin S	-	1	Antimicrobials
OBP2A	29991	odorant binding protein 2A	LCN13 OBP OBP2C OBPIIa hOBPIIa	9	Antimicrobials
PLTP	5360	phospholipid transfer protein	BPIFE HDLCQ9	20	Antimicrobials
MX1	4599	MX dynamin like GTPase 1	IFI-78K IFI78 MX MxA IncMX1-215	21	Antimicrobials
DDX	235	DExD/H-	RIG-I RIG1 RIGI RLR-1 SGMRT2	9	Antimicrobials

58	86	box helicase 58			s
IFNL1	282 618	interferon lambda 1	IL-29 IL29	19	Antimicrobials
IRF3	366 1	interferon regulatory factor 3	I AE7	19	Antimicrobials
SFTPA2	729 238	surfactant protein A2	COLEC5 PSAP PSP-A PSPA SFTP1 SFTPA2B SP-2A SP-A SPA2 SPAII	10	Antimicrobials
LPA	401 8	lipoprotein (a)	AK38 APOA LP	6	Antimicrobials
LBP	392 9	lipopolysaccharide binding protein	BPIFD2	20	Antimicrobials
RBP4	595 0	retinol binding protein 4	MCOPCB10 RDCCAS	10	Antimicrobials
SFTPA1	653 509	surfactant protein A1	COLEC4 PSAP PSP-A PSPA SFTP1 SFTPA1B SP-A SP-A1 SP-A1 beta SP-A1 delta SP-A1 epsilon SP-A1 gamma SPA SPA1	10	Antimicrobials
NOX4	505 07	NADPH oxidase 4	KOX KOX-1 RENOX	11	Antimicrobials
LTF	405 7	lactotransferrin	GIG12 HEL110 HLF2 LF	3	Antimicrobials
IFNB1	345 6	interferon beta 1	IFB IFF IFN-beta IFNB	9	Antimicrobials
RBP5	837 58	retinol binding protein 5	CRBP-III CRBP3 CRBPIII HRBPiso	12	Antimicrobials
FABP7	217 3	fatty acid binding protein 7	B-FABP BLBP FABPB MRG	6	Antimicrobials
FABP5	217 1	fatty acid binding protein 5	E-FABP EFABP KFABP PA-FABP PAFABP	8	Antimicrobials
FABP3	217 0	fatty acid binding protein 3	FABP11 H-FABP M-FABP MDGI O-FABP	1	Antimicrobials
FABP2	216 9	fatty acid binding protein 2	FABPI I-FABP	4	Antimicrobials

FABP4	2167	fatty acid binding protein 4	A-FABP AFABP ALBP HEL-S-104 aP2	8	Antimicrobials
R3HDM L	140902	R3H domain containing like	dJ881L22.3	20	Antimicrobials
BPIFA3	128861	BPI fold containing family A member 3	C20orf71 SPLUNC3	20	Antimicrobials
BPIFB1	92747	BPI fold containing family B member 1	C20orf114 LPLUNC1	20	Antimicrobials
OASL	8638	2-5-oligoadenylate synthetase like	OASL1 OASLd TRIP-14 TRIP14 p59OASL p59-OASL p59OASL	12	Antimicrobials
CRA BP2	1382	cellular retinoic acid binding protein 2	CRABP-II RBP6	1	Antimicrobials
CRA BP1	1381	cellular retinoic acid binding protein 1	CRABP CRABP-I CRABPI RBP5	15	Antimicrobials
RBP7	116362	retinol binding protein 7	CRABP4 CRBP4 CRBP4V	1	Antimicrobials
DUOX1	53905	dual oxidase 1	LNOX1 NOXEF1 THOX1	15	Antimicrobials
OBP2B	29989	odorant binding protein 2B	LCN14 OBP11b	9	Antimicrobials
RBP2	5948	retinol binding protein 2	CRABP-II CRBP2 CRBP2II RBPC2	3	Antimicrobials
LCN15	389812	lipocalin 15	PRO6093 UNQ2541	9	Antimicrobials
CET	107	cholesteryl	BPIFF HDLCQ10	16	Antimicrobials

P	1	ester transfer protein			s
FAB P12	646 486	fatty acid binding protein 12	-	8	Antimicrobials
FAB P9	646 480	fatty acid binding protein 9	PERF PERF15 T-FABP TLBP	8	Antimicrobials
BPIFA1	512 97	BPI fold containing family A member 1	LUNX NASG PLUNC SPLUNC1 SPURT bA49G10.5	20	Antimicrobials
LCNL1	401 562	lipocalin like 1	-	9	Antimicrobials
C8G	733	complement C8 gamma chain	C8C	9	Antimicrobials
SPAG11A	653 423	sperm associated antigen 11A	EDDM2A HE2	8	Antimicrobials
PI15	510 50	peptidase inhibitor 15	CRISP8 P24TI P25TI	8	Antimicrobials
NOX1	270 35	NADPH oxidase 1	GP91-2 MOX1 NOH-1 NOH1	X	Antimicrobials
PM P2	537 5	peripheral myelin protein 2	CMT1G FABP8 M-FABP MP2 P2	8	Antimicrobials
APO D	347	apolipoprotein D	-	3	Antimicrobials
ORM2	500 5	orosomucoid 2	AGP-B AGP-B AGP2	9	Antimicrobials
ORM1	500 4	orosomucoid 1	AGP-A AGP1 HEL-S-153w ORM	9	Antimicrobials
TNF	712 4	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6	Antimicrobials
CTSG	151 1	cathepsin G	CATG CG	14	Antimicrobials
PRTN3	565 7	proteinase 3	ACPA AGP7 C-ANCA CANCA MBN MBT NP-	19	Antimicrobials

			4 NP4 P29 PR-3 PR3		
MA PK1	559 4	mitogen- activated protein kinase 1	ERK ERK- 2 ERK2 ERT1 MAPK2 P42MAPK PRKM1 PRKM2 p38 p40 p41 p41mapk p42- MAPK	22	Antimicrobial s
PML	537 1	PML nuclear body scaffold	MYL PP8675 RNF71 TRIM19	15	Antimicrobial s
AEN	647 82	apoptosis enhancing nuclease	ISG20L1 pp12744	15	Antimicrobial s
CYB B	153 6	cytochrom e b-245 beta chain	AMCBX2 CGD GP91-1 GP91- PHOX GP91PHOX IMD34 NOX2 p91- PHOX	X	Antimicrobial s
BPIF A2	140 683	BPI fold containing family A member 2	C20orf70 PSP SPLUNC2 bA49G10.1	20	Antimicrobial s
ISG 20	366 9	interferon stimulated exonucleas e gene 20	CD25 HEM45	15	Antimicrobial s
BCL 3	602	BCL3 transcripti on coactivator	BCL4 D19S37	19	Antimicrobial s
ISG 20L 2	818 75	interferon stimulated exonucleas e gene 20 like 2	HSD38	1	Antimicrobial s
NO X5	794 00	NADPH oxidase 5	-	15	Antimicrobial s
NO X3	505 08	NADPH oxidase 3	GP91-3 MOX-2	6	Antimicrobial s
DU OX2	505 06	dual oxidase 2	LNOX2 NOXEF2 P138- TOX TDH6 THOX2	15	Antimicrobial s
TLR 3	709 8	toll like receptor 3	CD283 IIAE2	4	Antimicrobial s
TFR C	703 7	transferrin receptor	CD71 IMD46 T9 TFR TFR1 TR TRFR p90	3	Antimicrobial s
IFIH 1	641 35	interferon induced	AGS7 Hlcd IDDM19 MDA- 5 MDA5 RLR-2 SGMRT1	2	Antimicrobial s

		with helicase C domain 1			
LRP1	4035	LDL receptor related protein 1	A2MR APOER APR CD91 IGFBP-3R IGFBP3R IGFBP3R1 KPA LRP LRP1A TGFB5	12	Antimicrobials
TRIM5	85363	tripartite motif containing 5	RNF88 TRIM5alpha	11	Antimicrobials
IDO1	3620	indoleamine 2,3-dioxygenase 1	IDO IDO-1 INDO	8	Antimicrobials
GDF15	9518	growth differentiation factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGFB	19	Antimicrobials
NEDD4	4734	NEDD4 E3 ubiquitin protein ligase	NEDD4-1 RPF1	15	Antimicrobials
ADIPOQ	9370	adiponectin, C1Q and collagen domain containing	ACDC ACRP30 ADIPQTL1 ADPN APM-1 APM1 GBP28	3	Antimicrobials
STAT3	6774	signal transducer and activator of transcription 3	ADMIO ADMIO1 APRF HIES	17	Antimicrobials
STAT1	6772	signal transducer and activator of transcription 1	CANDF7 IMD31A IMD31B IMD31C ISGF-3 STAT91	2	Antimicrobials
IFNL2	282616	interferon lambda 2	IL-28A IL28A	19	Antimicrobials
SOC3	9021	suppressor of cytokine	ATOD4 CIS3 Cish3 SOCS-3 SSI-3 SSI3	17	Antimicrobials

		signaling 3			
SEM G1	640 6	semenogel in 1	CT103 SEMG SGI dJ172H20.2	20	Antimicrobial s
TNF SF1 0	874 3	TNF superfamil y member 10	APO2L Apo- 2L CD253 TL2 TNLG6A TRAIL	3	Antimicrobial s
CCL 20	636 4	C-C motif chemokine ligand 20	CKb4 Exodus LARC MIP-3-alpha MIP- 3a MIP3A SCYA20 ST38	2	Antimicrobial s
SOC S1	865 1	suppressor of cytokine signaling 1	CIS1 CISH1 JAB SOCS-1 SSI- 1 SSI1 TIP-3 TIP3	16	Antimicrobial s
RNA SEL	604 1	ribonuclea se L	PRCA1 RNS4	1	Antimicrobial s
IRF1	365 9	interferon regulatory factor 1	IRF-1 MAR	5	Antimicrobial s
IL15	360 0	interleukin 15	IL-15	4	Antimicrobial s
APO BEC 3F	200 316	apolipopro tein B mRNA editing enzyme catalytic subunit 3F	A3F ARP8 BK150C2.4.MRNA KA6	22	Antimicrobial s
PLA AT4	592 0	phospholi pase A and acyltransfe rase 4	HRASLS4 HRSL4 PLA1/2-3 PLAAT- 4 RARRES3 RIG1 TIG3	11	Antimicrobial s
CHI T1	111 8	chitinase 1	CHI3 CHIT CHITD	1	Antimicrobial s
IFN A1	343 9	interferon alpha 1	IFL IFN IFN-ALPHA IFN- alphaD IFNA13 IFNA@ leIF D	9	Antimicrobial s
CD4 0	958	CD40 molecule	Bp50 CDW40 TNFRSF5 p50	20	Antimicrobial s
TLR 7	512 84	toll like receptor 7	TLR7-like	X	Antimicrobial s
PPI A	547 8	peptidylpr olyl isomerase A	CYPA CYPH HEL-S-69p	7	Antimicrobial s
HFE	307	homeostat	HFE1 HH HLA-H MVCD7 TFQTL2	6	Antimicrobial

	7	ic iron regulator			s
ZYX	779 1	zyxin	ESP-2 HED-2	7	Antimicrobial s
NLR X1	796 71	NLR family member X1	CLR11.3 DLNB26 NOD26 NOD5 NOD9	11	Antimicrobial s
PGC	522 5	progastrics in	PEPC PGII	6	Antimicrobial s
VEG FA	742 2	vascular endothelial growth factor A	MVCD1 VEGF VPF	6	Antimicrobial s
IKBK E	964 1	inhibitor of nuclear factor kappa B kinase subunit epsilon	IKK-E IKK-i IKKE IKKI	1	Antimicrobial s
ISG 15	963 6	ISG15 ubiquitin like modifier	G1P2 IFI15 IMD38 IP17 UCRP hUCRP	1	Antimicrobial s
DHX 58	791 32	DExH-box helicase 58	D11LGP2 D11lgp2e LGP2 RLR-3	17	Antimicrobial s
TNF AIP3	712 8	TNF alpha induced protein 3	A20 AISBL OTUD7C TNFA1P2	6	Antimicrobial s
TFR 2	703 6	transferrin receptor 2	HFE3 TFRC2	7	Antimicrobial s
FCN 2	222 0	ficolin 2	EBP-37 FCNL P35 ficolin-2	9	Antimicrobial s
MU C4	458 5	mucin 4, cell surface associated	ASGP HSA276359 MUC-4	3	Antimicrobial s
F2R	214 9	coagulation factor II thrombin receptor	CF2R HTR PAR-1 PAR1 TR	5	Antimicrobial s
ELN	200 6	elastin	ADCL1 SVAS WBS WS	7	Antimicrobial s
IL27	246 778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16	Antimicrobial s

MA PT	413 7	microtubul e associated protein tau	DDPAC FTDP- 17 MAPTL MSTD MTBT1 MTBT2 PPND PPP1R103 TAU	17	Antimicrobial s
LYZ	406 9	lysozyme	LYZF1 LZM	12	Antimicrobial s
CCL 5	635 2	C-C motif chemokine ligand 5	D17S136E RANTES SCYA5 SIS- delta SISd TCP228 eoCP	17	Antimicrobial s
LEP	395 2	leptin	LEPD OB OBS	7	Antimicrobial s
CYL D	154 0	CYLD lysine 63 deubiquiti nase	BRSS CDMT CYLD1 CYLDI EAC MFT MF T1 SBS TEM USPL2	16	Antimicrobial s
KLK B1	381 8	kallikrein B1	KLK3 PKK PKKD PPK	4	Antimicrobial s
CST 4	147 2	cystatin S	-	20	Antimicrobial s
CSR P1	146 5	cysteine and glycine rich protein 1	CRP CRP1 CSR CYRP D1S181E HEL- 141 HEL-S-286	1	Antimicrobial s
MA PK1 4	143 2	mitogen- activated protein kinase 14	CSBP CSBP1 CSBP2 CSPB1 EXIP Mxi2 P RKM14 PRKM15 RK SAPK2A p38 p38A LPHA	6	Antimicrobial s
JUN	372 5	Jun proto- oncogene, AP-1 transcripti on factor subunit	AP-1 AP1 c-Jun cJUN p39	1	Antimicrobial s
ITG AV	368 5	integrin subunit alpha V	CD51 MSK8 VNRA VTNR	2	Antimicrobial s
IRF5	366 3	interferon regulatory factor 5	SLEB10	7	Antimicrobial s
CCR 6	123 5	C-C motif chemokine receptor 6	BN-1 C-C CKR-6 CC-CKR-6 CCR- 6 CD196 CKR- L3 CKRL3 CMKBR6 DCR2 DRY6 GPR29 GPCRY4 STRL22	6	Antimicrobial s
IL12	359	interleukin	CLMF CLMF2 IL-	5	Antimicrobial

B	3	12B	12B IMD28 IMD29 NKSF NKSF2		s
TLR8	51311	toll like receptor 8	CD288	X	Antimicrobials
GNLY	10578	granulysin	D2S69E LAG-2 LAG2 NKG5 TLA519	2	Antimicrobials
CD81	975	CD81 molecule	CVID6 S5.7 TAPA1 TSPAN28	11	Antimicrobials
EIF2AK2	5610	eukaryotic translation initiation factor 2 alpha kinase 2	EIF2AK1 LEUDEN PKR PPP1R83 PRKR	2	Antimicrobials
APO M	55937	apolipoprotein M	G3a HSPC336 NG20 apo-M	6	Antimicrobials
CACYBP	27101	calcyclin binding protein	GIG5 PNAS-107 S100A6BP SIP	1	Antimicrobials
NOD1	10392	nucleotide binding oligomerization domain containing 1	CARD4 CLR7.1 NLRC1	7	Antimicrobials
MAPK8	5599	mitogen-activated protein kinase 8	JNK JNK-46 JNK1 JNK1A2 JNK21B1/2 PRKM8 SAPK1 SAPK1c	10	Antimicrobials
MAPK3	5595	mitogen-activated protein kinase 3	ERK-1 ERK1 ERT2 HS44KDAP HUMKER1A P44ERK1 P44MAPK PRKM3 p44-ERK1 p44-MAPK	16	Antimicrobials
BST2	684	bone marrow stromal cell antigen 2	CD317 TETHERIN	19	Antimicrobials
BPHL	670	biphenyl hydrolase like	BPH-RP MCNAA VACVASE	6	Antimicrobials
PLA2G2A	5320	phospholipase A2 group IIA	MOM1 PLA2 PLA2B PLA2L PLA2S PLAS1 sPLA2	1	Antimicrobials

GRN	2896	granulin precursor	CLN11 GEP GP88 PCDGF PEPI PGRN	17	Antimicrobials
NEWENTRY	192343	-	-	-	Antimicrobials
PDGFRA	5156	platelet derived growth factor receptor alpha	CD140A PDGFR-2 PDGFR2	4	Antimicrobials
GNAI1	2770	G protein subunit alpha i1	Gi	7	Antimicrobials
WNT5A	7474	Wnt family member 5A	hWNT5A	3	Antimicrobials
FURIN	5045	furin, paired basic amino acid cleaving enzyme	FUR PACE PCSK3 SPC1	15	Antimicrobials
ADAR	103	adenosine deaminase RNA specific	ADAR1 AGS6 DRADA DSH DSRAD G1P1 IFI-4 IFI4 K88DSRBP P136	1	Antimicrobials
TYK2	7297	tyrosine kinase 2	IMD35 JTK1	19	Antimicrobials
NOS2	4843	nitric oxide synthase 2	HEP-NOS INOS NOS NOS2A	17	Antimicrobials
TRAF3	7187	TNF receptor associated factor 3	CAP-1 CAP1 CD40bp CRAF1 IIAE5 LAP1 RN F118	14	Antimicrobials
TPT1	7178	tumor protein, translation ally-controlled 1	HRF TCTP p02 p23	13	Antimicrobials
TPM2	7169	tropomyosin 2	AMCD1 DA1 DA2B DA2B4 HEL-S-273 NEM4 TMSB	9	Antimicrobials

NEO1	4756	neogenin 1	IGDCC2 NGN NTN1R2	15	Antimicrobials
AHNAK	79026	AHNAK nucleoprotein	AHNAKRS PM227	11	Antimicrobials
TLR1	7096	toll like receptor 1	CD281 TIL TIL. LPRS5 rsc786	4	Antimicrobials
TK2	7084	thymidine kinase 2	MTDPS2 MTTK PEOB3 SCA31	16	Antimicrobials
PRDX2	7001	peroxiredoxin 2	HEL-S-2a NKEF-B NKEFB PRP PRX2 PRXII PTX1 TDPX1 TPX1 TSA	19	Antimicrobials
MX2	4600	MX dynamin like GTPase 2	MXB	21	Antimicrobials
FGF2	2247	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4	Antimicrobials
FGA	2243	fibrinogen alpha chain	Fib2	4	Antimicrobials
TCF7L2	6934	transcription factor 7 like 2	TCF-4 TCF4	10	Antimicrobials
F2RL1	2150	F2R like trypsin receptor 1	GPR11 PAR2	5	Antimicrobials
TKFC	26007	triokinase and FMN cyclase	DAK NET45 TKFCD	11	Antimicrobials
MSR1	4481	macrophage scavenger receptor 1	CD204 SCARA1 SR-A SR-AI SR-AII SR-AIII SRA phSR1 phSR2	8	Antimicrobials
NFKBIZ	64332	NFKB inhibitor zeta	IKBZ INAP MAIL	3	Antimicrobials
LMBR1	64327	limb development membrane protein 1	ACHP C7orf2 DIF14 LSS PPD2 THYP TPT ZRS	7	Antimicrobials
EPPI	571	epididymal	CT71 CT72 SPINLW1 WAP7 WFDC7 dJ	20	Antimicrobials

N	19	peptidase inhibitor	461P17.2		s
SRC	6714	SRC proto-oncogene, non-receptor tyrosine kinase	ASV SRC1 THC6 c-SRC p60-Src	20	Antimicrobials
MP O	4353	myeloperoxidase	-	17	Antimicrobials
ELA VL1	1994	ELAV like RNA binding protein 1	ELAV1 HUR Hua MeIG	19	Antimicrobials
ROB O3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPS RBIG1 RIG1	11	Antimicrobials
SP1	6667	Sp1 transcription factor	-	12	Antimicrobials
SOD 1	6647	superoxide dismutase 1	ALS ALS1 HEL-S-44 IPOA SOD STAHP hSod1 homodimer	21	Antimicrobials
PDF	64146	peptide deformylase, mitochondrial	-	16	Antimicrobials
DLL 4	54567	delta like canonical Notch ligand 4	AOS6 delta4 hdelta2	15	Antimicrobials
ECD	11319	ecdysoneless cell cycle regulator	GCR2 HSGT1 SGT1	10	Antimicrobials
SLC 11A 1	6556	solute carrier family 11 member 1	LSH NRAMP NRAMP1	2	Antimicrobials
DM BT1	1755	deleted in malignant	GP340 SAG SALSA muclin	10	Antimicrobials

		brain tumors 1			
STING1	340061	stimulator of interferon response cGAMP interactor 1	ERIS MITA MPYS NET23 SAVI STING STING-beta TMEM173 hMITA hSTING	5	Antimicrobials
SKIV2L	6499	Ski2 like RNA helicase	170A DDX13 HLP SKI2 SKI2W SKIV2 SKI2L1 THES2	6	Antimicrobials
SEMG2	6407	semenogelin 2	SGII	20	Antimicrobials
LTA	4049	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6	Antimicrobials
DES	1674	desmin	CDCD3 CSM1 CSM2 LGMD1D LGMD1E LGMD2R	2	Antimicrobials
DCK	1633	deoxycytidine kinase	-	4	Antimicrobials
DAXX	1616	death domain associated protein	BING2 DAP6 EAP1 SMIM40	6	Antimicrobials
TNFRSF10A	8797	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR-1 TRAILR1	8	Antimicrobials
TNFRSF10B	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAILR2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8	Antimicrobials
EED	8726	embryonic ectoderm development	COGIS HEED WAIT1	11	Antimicrobials
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	Antimicrobials
LIMS1	3987	LIM zinc finger domain	PINCH PINCH-1 PINCH1	2	Antimicrobials

		containing 1			
LAL BA	390 6	lactalbumin alpha	LYZG	12	Antimicrobials
APO BEC 3H	164 668	apolipoprotein B mRNA editing enzyme catalytic subunit 3H	A3H ARP-10 ARP10	22	Antimicrobials
TMP RSS 6	164 656	transmembrane serine protease 6	IRIDA MT2	22	Antimicrobials
SPI NK5	110 05	serine peptidase inhibitor Kazal type 5	LEKTI LETKI NETS NS VAKTI	5	Antimicrobials
MA RCO	868 5	macrophage receptor with collagenous structure	SCARA2 SR-A6	2	Antimicrobials
BEC N1	867 8	beclin 1	ATG6 VPS30 beclin1	17	Antimicrobials
TNF SF1 1	860	TNF superfamily member 11	CD254 ODF OPGL OPTB2 RANKL TNLG 6B TRANCE hRANKL2 sOdf	13	Antimicrobials
KNG 1	382 7	kininogen 1	BDK BK HMWK KNG	3	Antimicrobials
CSK	144 5	C-terminal Src kinase	-	15	Antimicrobials
KLR K1	229 14	killer cell lectin like receptor K1	CD314 D12S2489E KLR NKG2- D NKG2D	12	Antimicrobials
KCN H2	375 7	potassium voltage- gated channel	ERG-1 ERG1 H- ERG HERG HERG1 Kv11.1 LQT2 SQT1	7	Antimicrobials

		subfamily H member 2			
JUN D	372 7	JunD proto- oncogene, AP-1 transcripti on factor subunit	AP-1	19	Antimicrobial s
JAK 1	371 6	Janus kinase 1	JAK1A JAK1B JTK3	1	Antimicrobial s
CRE B1	138 5	cAMP responsive element binding protein 1	CREB CREB-1	2	Antimicrobial s
CLD N4	136 4	claudin 4	CPE- R CPE- R CPETR CPETR1 WBSCR8 hCPE- R	7	Antimicrobial s
CCL 28	564 77	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5	Antimicrobial s
RNA SE3	603 7	ribonuclea se A family member 3	ECP RAF1 RNS3	14	Antimicrobial s
RN7 SL1	602 9	RNA componen t of signal recognitio n particle 7SL1	7L1a 7SL RN7SL RNSRP1	14	Antimicrobial s
IRF7	366 5	interferon regulatory factor 7	IMD39 IRF-7 IRF- 7H IRF7A IRF7B IRF7C IRF7H	11	Antimicrobial s
IREB 2	365 8	iron responsive element binding protein 2	ACO3 IRE-BP BP2 IRP2 IRP2AD NDCAMA 2 IRE-	15	Antimicrobial s
ILK	361 1	integrin linked kinase	HEL-S-28 ILK-1 ILK-2 P59 p59ILK	11	Antimicrobial s
IL18	360	interleukin	IGIF IL-18 IL-1g IL1F4	11	Antimicrobial

	6	18			s
IL17A	3605	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6	Antimicrobials
LTB4R	1241	leukotriene B4 receptor	BLT1 BLTR CMKRL1 GPR16 LTB4R1 LTBR1 P2RY7 P2Y7	14	Antimicrobials
APOBEC3A	200315	apolipoprotein B mRNA editing enzyme catalytic subunit 3A	A3A ARP3 PHRBN bK150C2.1	22	Antimicrobials
MASP2	10747	mannan binding lectin serine peptidase 2	MAP19 MASP-2 MASP1P1 sMAP	1	Antimicrobials
TRIM27	5987	tripartite motif containing 27	RFP RNF76	6	Antimicrobials
RELA	5970	RELA proto-oncogene, NF-kB subunit	CMCU NFKB3 p65	11	Antimicrobials
IL7R	3575	interleukin 7 receptor	CD127 CDW127 IL-7R-alpha IL7RA ILRA	5	Antimicrobials
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2	Antimicrobials
PTX3	5806	pentraxin 3	TNFAIP5 TSG-14	3	Antimicrobials
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21	Antimicrobials
IFN1@	3438	-	IFNA	9	Antimicrobials
SYTL1	84958	synaptotagmin like 1	JFC1 SLP1	1	Antimicrobials
APO	273	apolipopro	A3C APOBEC1L ARDC2 ARDC4 ARP5 P	22	Antimicrobials

BEC3C	50	tein B mRNA editing enzyme catalytic subunit 3C	BI bK150C2.3		s
DDX17	10521	DEAD-box helicase 17	P72 RH70	22	Antimicrobials
PTGS2	5743	prostaglandin-endoperoxide synthase 2	COX-2 COX2 GRIPGHS PGG/HS PGHS-2 PHS-2 hCox-2	1	Antimicrobials
HTR1A	3350	5-hydroxytryptamine receptor 1A	5-HT-1A 5-HT1A 5HT1a ADRB2RL1 ADRBRL1 G-21 PFMCD	5	Antimicrobials
SEPTIN7	989	septin 7	CDC10 CDC3 NBLA02942 SEPT7 SEPT7A	7	Antimicrobials
CD40LG	959	CD40 ligand	CD154 CD40L HIGM1 IGM IMD3 TBAM TNFSF5 TRAP gp39 hCD40L	X	Antimicrobials
CD14	929	CD14 molecule	-	5	Antimicrobials
CD8A	925	CD8a molecule	CD8 Leu2 p32	2	Antimicrobials
CD4	920	CD4 molecule	CD4mut	12	Antimicrobials
MASP1	5648	mannan binding lectin serine peptidase 1	3MC1 CRARF CRARF1 MAP1 MASP MASP3 MAp44 PRSS5 RaRF	3	Antimicrobials
PROC	5624	protein C, inactivator of coagulation factors Va and VIIIa	APC PC PROC1 THPH3 THPH4	2	Antimicrobials
MAP2K	5605	mitogen-activated	CFC4 MAPKK2 MEK2 MKK2 PRKMK2	19	Antimicrobials

2		protein kinase kinase 2			
MAPK1	5604	mitogen-activated protein kinase kinase 1	CFC3 MAPKK1 MEK1 MKK1 PRKMK1	15	Antimicrobials
HRG	3273	histidine rich glycoprotein	HPRG HRGP THPH11	3	Antimicrobials
NDRG1	10397	N-myc downstream regulated 1	CAP43 CMT4D DRG-1 DRG1 GC4 HMSNL NDR1 NMSL PROXY1 RIT42 RTP TARG1 TDD5	8	Antimicrobials
IRF9	10379	interferon regulatory factor 9	IRF-9 ISGF3 ISGF3G p48	14	Antimicrobials
TRIM22	10346	tripartite motif containing 22	GPSTAF50 RNF94 STAF50	11	Antimicrobials
LANCL1	10314	LanC like 1	GPR69A p40	2	Antimicrobials
PPP4C	5531	protein phosphatase 4 catalytic subunit	PP-X PP4 PP4C PPH3 PPP4 PPX	16	Antimicrobials
HMOX1	3162	heme oxygenase 1	HMOX1D HO-1 HSP32 bK286B10	22	Antimicrobials
HMGGB1	3146	high mobility group box 1	HMG-1 HMG1 HMG3 SBP-1	13	Antimicrobials
HLA-B	3106	major histocompatibility complex, class I, B	AS B-4901 HLAB	6	Antimicrobials
RNA	846	ribonuclea	RAE1	14	Antimicrobials

SE7	59	se A family member 7			s
ABC C4	102 57	ATP binding cassette subfamily C member 4	MOAT-B MOATB MRP4	13	Antimicrobials
HGF	308 2	hepatocyte growth factor	DFNB39 F-TCF HGFB HPTA SF	7	Antimicrobials
HD AC1	306 5	histone deacetylase 1	GON-10 HD1 KDAC1 RPD3 RPD3L1	1	Antimicrobials
IFNL R1	163 702	interferon lambda receptor 1	CRF2/12 IFNLR IL-28R1 IL28RA LICR2	1	Antimicrobials
PLS CR1	535 9	phospholipid scramblase 1	MMTRA1B	3	Antimicrobials
B2M	567	beta-2-microglobulin	IMD43	15	Antimicrobials
BAC H2	604 68	BTB domain and CNC homolog 2	BTBD25 IMD60	6	Antimicrobials
TANK	100 10	TRAF family member associated NFKB activator	I-TRAF ITRAF TRAF2	2	Antimicrobials
PI3K CG	529 4	phosphatidylinositol -4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3 p110gamma p120-PI3K	7	Antimicrobials
ARR	408	arrestin	ARB1 ARR1	11	Antimicrobials

B1		beta 1			s
RSA D2	915 43	radical S-adenosyl methionine domain containing 2	2510004L01Rik cig33 cig5 vig1	2	Antimicrobials
STA B2	555 76	stabilin 2	FEEL2 FELE-2 FELL2 FEX2 HARE SCARH1	12	Antimicrobials
TBK 1	291 10	TANK binding kinase 1	FTDALS4 IIAE8 NAK T2K	12	Antimicrobials
PDY N	517 3	prodynorphin	ADCA PENKB SCA23	20	Antimicrobials
PDG FRB	515 9	platelet derived growth factor receptor beta	CD140B IBGC4 IMF1 JTK12 KOGS PDGFR PDGFR-1 PDGFR1 PENTT	5	Antimicrobials
PDC D1	513 3	programmed cell death 1	CD279 PD-1 PD1 SLEB2 hPD-1 hPD-1 hSLE1	2	Antimicrobials
PCS K2	512 6	proprotein convertase subtilisin/kexin type 2	NEC 2 NEC-2 NEC2 PC2 SPC2	20	Antimicrobials
PCS K1	512 2	proprotein convertase subtilisin/kexin type 1	BMIQ12 NEC1 PC1 PC3 SPC3	5	Antimicrobials
ARG 2	384	arginase 2	-	14	Antimicrobials
AQP 9	366	aquaporin 9	AQP-9 HsT17287 SSC1 T17287	15	Antimicrobials
FAS LG	356	Fas ligand	ALPS1B APT1LG1 APTL CD178 CD95-L CD95L FASL TNFSF6 TNLG1A	1	Antimicrobials
APO H	350	apolipoprotein H	B2G1 B2GP1 BG	17	Antimicrobials
BIR C5	332	baculoviral IAP repeat containing 5	API4 EPR-1	17	Antimicrobials
ANX	309	annexin A6	ANX6 CBP68 CPB-II p68 p70	5	Antimicrobials

A6					s
IL22	506 16	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL- 23 TIFa zcyto18	12	Antimicrobial s
VTN	744 8	vitronectin	V75 VN VNT	17	Antimicrobial s
VIM	743 1	vimentin	-	10	Antimicrobial s
VCA M1	741 2	vascular cell adhesion molecule 1	CD106 INCAM-100	1	Antimicrobial s
PRD X1	505 2	peroxiredo xin 1	MSP23 NKEF- A NKEFA PAG PAGA PAGB PRX1 PRXI T DPX2	1	Antimicrobial s
GFA P	267 0	glial fibrillary acidic protein	ALXDRD	17	Antimicrobial s
GBP 2	263 4	guanylate binding protein 2	-	1	Antimicrobial s
ALB	213	albumin	HSA PRO0883 PRO0903 PRO1341	4	Antimicrobial s
SLC 29A 3	553 15 3	solute carrier family 29 member 3	ENT3 HCLAP HJCD PHID	10	Antimicrobial s
OAS 1	493 8	2-5- oligoadeny late synthetase 1	E18/E16 IFI-4 OIAS OIASI	12	Antimicrobial s
AGE R	177	advanced glycosylati on end- product specific receptor	RAGE SCARJ1	6	Antimicrobial s
UN C93 B1	816 22	unc-93 homolog B1, TLR signaling regulator	IIAE1 UNC93 UNC93B Unc-93B1	11	Antimicrobial s
TNF	729	TNF	CD134L CD252 GP34 OX-	1	Antimicrobial

SF4	2	superfamily member 4	40L OX4OL TNLG2B TXGP1		s
NO S1	484 2	nitric oxide synthase 1	IHPS1 N-NOS NC-NOS NOS bNOS nNOS	12	Antimicrobials
ACT G1	71	actin gamma 1	ACT ACTG DFNA20 DFNA26 HEL-176	17	Antimicrobials
ACT A1	58	actin alpha 1, skeletal muscle	ACTA ASMA CFTD CFTD1 CFTDM MPFD NEM1 NEM2 NEM3 SHPM	1	Antimicrobials
AC O1	48	aconitase 1	ACONS HEL60 IREB1 IREBP IREBP1 IRP1	9	Antimicrobials
SER PIN A3	12	serpin family A member 3	AACT ACT GIG24 GIG25	14	Antimicrobials
CXC R1	357 7	C-X-C motif chemokine receptor 1	C-C C-C-CKR-1 CD128 CD181 CDw128a CKR-1 CMKAR1 IL8R1 IL8RA IL8RBA	2	Antimicrobials
CCL 15	635 9	C-C motif chemokine ligand 15	HCC-2 HMRP-2B LKN-1 LKN1 MIP-1 delta MIP-1D MIP-5 MRP-2B NCC-3 NCC3 SCYA15 SCYL3 SY15	17	Antimicrobials
CCL 14	635 8	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	Antimicrobials
CCL 4	635 1	C-C motif chemokine ligand 4	ACT2 AT744.1 G-26 HC21 LAG-1 LAG1 MIP-1-beta MIP1B MIP1B1 SCYA2 SCYA4	17	Antimicrobials
CCL 16	636 0	C-C motif chemokine ligand 16	CKb12 HCC-4 ILINCK LCC-1 LEC LMC Mtn-1 NCC-4 NCC4 SCYA16 SCYL4	17	Antimicrobials
CCL 19	636 3	C-C motif chemokine ligand 19	CKb11 ELC MIP-3b MIP3B SCYA19	9	Antimicrobials
CCL 13	635 7	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17	Antimicrobials
CCL 18	636 2	C-C motif chemokine ligand 18	AMAC-1 AMAC1 CKb7 DC-CK1 DCCK1 MIP-4 PARC SCYA18	17	Antimicrobials
CCL 17	636 1	C-C motif chemokine ligand 17	A-152E5.3 ABCD-2 SCYA17 TARC	16	Antimicrobials
CCL	103	C-C motif	IMAC MIP-4a MIP-	7	Antimicrobials

26	44	chemokine ligand 26	4alpha SCYA26 TSC-1		s
CCL 22	636 7	C-C motif chemokine ligand 22	A-152E5.1 ABCD-1 DC/B-CK MDC SCYA22 STCP-1	16	Antimicrobials
CCR 3	123 2	C-C motif chemokine receptor 3	C C CKR3 CC-CKR-3 CD193 CKR3 CKR3 CMKBR3	3	Antimicrobials
CCL 28	564 77	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5	Antimicrobials
CCL 4L1	388 372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LAG-1 LAG1 MIP-1-beta SCYA4L SCYA4L1 SCYA4L2	17	Antimicrobials
ACK R2	123 8	atypical chemokine receptor 2	CCBP2 CCR10 CCR9 CMKBR9 D6 hD6	3	Antimicrobials
CCR 7	123 6	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17	Antimicrobials
CCL 27	108 50	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESKY SCYA27	9	Antimicrobials
CCR 8	123 7	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBRL2 CY6 GPRCY6 TER1	3	Antimicrobials
ACK R4	515 54	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CCRL1 CCXCKR CCX-CKR CKR-11 PPR1 VSHK1	3	Antimicrobials
CCR 10	282 6	C-C motif chemokine receptor 10	GPR2	17	Antimicrobials
CCL 2	634 7	C-C motif chemokine ligand 2	GDCF-2 HC11 HSMCR30 MCAF MCP-1 MCP1 SCYA2 SMC-CF	17	Antimicrobials
CCL 21	636 6	C-C motif chemokine ligand 21	6Ckine CKb9 ECL SCYA21 SLC TCA4	9	Antimicrobials
CCL 7	635 4	C-C motif chemokine ligand 7	FIC MARC MCP-3 MCP3 NC28 SCYA6 SCYA7	17	Antimicrobials
CCL	635	C-C motif	D17S136E RANTES SCYA5 SIS-	17	Antimicrobials

5	2	chemokine ligand 5	delta SISd TCP228 eoCP		s
CCL 3	634 8	C-C motif chemokine ligand 3	GOS19-1 LD78ALPHA MIP-1- alpha MIP1A SCYA3	17	Antimicrobial s
CCL 20	636 4	C-C motif chemokine ligand 20	CKb4 Exodus LARC MIP-3-alpha MIP- 3a MIP3A SCYA20 ST38	2	Antimicrobial s
CCL 11	635 6	C-C motif chemokine ligand 11	SCYA11	17	Antimicrobial s
CCR 5	123 4	C-C motif chemokine receptor 5	CC-CKR-5 CCCKR5 CCR- 5 CD195 CKR- 5 CKR5 CMKBR5 IDDM22	3	Antimicrobial s
CCL 23	636 8	C-C motif chemokine ligand 23	CK-BETA-8 CKb8 Ckb-8 Ckb-8-1 MIP- 3 MIP3 MPIF-1 SCYA23 hmrp-2a	17	Antimicrobial s
CCL 25	637 0	C-C motif chemokine ligand 25	Ckb15 SCYA25 TECK	19	Antimicrobial s
CCL 1	634 6	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISe TCA3	17	Antimicrobial s
CCL 3L3	414 062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 GOS19- 2 LD78 LD78BETA SCYA3L SCYA3L1	17	Antimicrobial s
CCL 4L2	956 0	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SCYA4L SCYQ4L2	17	Antimicrobial s
CXC L12	638 7	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10	Antimicrobial s
XCL 1	637 5	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM- 1a SCM1 SCM1A SCYC1	1	Antimicrobial s
CCL 8	635 5	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17	Antimicrobial s
CCL 3L1	634 9	C-C motif chemokine ligand 3	464.2 D17S1718 GOS19-2 LD78 LD78- beta(1- 70) LD78BETA MIP1AP SCYA3L SCYA3L	17	Antimicrobial s

		like 1	1		
CCR1	1230	C-C motif chemokine receptor 1	CD191 CKR-1 CKR1 CMKBR1 HM145 MIP1aR SCYAR1	3	Antimicrobials
CCL24	6369	C-C motif chemokine ligand 24	Ckb-6 MPIF-2 MPIF2 SCYA24	7	Antimicrobials
XCL2	6846	X-C motif chemokine ligand 2	SCM-1b SCM1B SCYC2	1	Antimicrobials
CXC L1	2919	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSA MGSA-a NAP-3 SCYB1	4	Antimicrobials
CXC L10	3627	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg-2 gIP-10 mob-1	4	Antimicrobials
CXC R4	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	Antimicrobials
CXC L2	2920	C-X-C motif chemokine ligand 2	CINC-2a GRO2 GROb MGSA-b MIP-2a MIP2 MIP2A SCYB2	4	Antimicrobials
CXC R6	10663	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3	Antimicrobials
CCR4	1233	C-C motif chemokine receptor 4	CC-CKR-4 CD194 CKR4 CMKBR4 ChemR13 HGCN:14099 K5-5	3	Antimicrobials
CXC L11	6373	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4	Antimicrobials
TAF A5	25817	TAFA chemokine like family member 5	FAM19A5 QLLK5208 TAFA-5 UNQ5208	22	Antimicrobials
TAF A3	284467	TAFA chemokine like family	FAM19A3 TAFA-3	1	Antimicrobials

		member 3			
TAF A4	151 647	TAFA chemokine like family member 4	FAM19A4 TAFA-4	3	Antimicrobials
TAF A1	407 738	TAFA chemokine like family member 1	FAM19A1 TAFA-1	3	Antimicrobials
TAF A2	338 811	TAFA chemokine like family member 2	FAM19A2 TAFA-2	12	Antimicrobials
CCL 15- CCL 14	348 249	CCL15- CCL14 readthrough (NMD candidate)	CCL15 HCC-2 LKN-1 MIP-5 MIP5 Mrp-2b NCC-3 NCC3 SCYA15	17	Antimicrobials
IL6	356 9	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7	Antimicrobials
TNF	712 4	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6	Antimicrobials
IL1B	355 3	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2	Antimicrobials
IL18	360 6	interleukin 18	IGIF IL-18 IL-1g IL1F4	11	Antimicrobials
PTK 2B	218 5	protein tyrosine kinase 2 beta	CADTK CAKB FADK2 FAK2 PKB PTK PYK2 RAFTK	8	Antimicrobials
VEG FA	742 2	vascular endothelial growth factor A	MVCD1 VEGF VPF	6	Antimicrobials
IL4	356 5	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5	Antimicrobials
CD H1	999	cadherin 1	Arc-1 BCDS1 CD324 CDHE ECAD LCAM UVO	16	Antimicrobials
CD4 0	958	CD40 molecule	Bp50 CDW40 TNFRSF5 p50	20	Antimicrobials
DEF B10	558 94	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD-3 HBD3 HBP-3 HBP3	8	Antimicrobials

3B					
F2RL1	2150	F2R like trypsin receptor 1	GPR11 PAR2	5	Antimicrobials
MM9	4318	matrix metalloproteinase 9	CLG4B GELB MANDP2 MMP-9	20	Antimicrobials
LTBP1	4052	latent transforming growth factor beta binding protein 1	-	2	Antimicrobials
DEFB4A	1673	defensin beta 4A	BD-2 DEFB-2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8	Antimicrobials
TNFSF10	8743	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3	Antimicrobials
IL13	3596	interleukin 13	IL-13 P600	5	Antimicrobials
IL10	3586	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1	Antimicrobials
IL2	3558	interleukin 2	IL-2 TCGF lymphokine	4	Antimicrobials
PPARG	5468	peroxisome proliferator activated receptor gamma	CIMT1 GLM1 NR1C3 PPARG1 PPARG2 PPARG5 PPARgamma	3	Antimicrobials
FGR	2268	FGR proto-oncogene, Src family tyrosine kinase	SRC2 c-fgr c-src2 p55-Fgr p55c-fgr p58-Fgr p58c-fgr	1	Antimicrobials
MIF	4282	macrophage migration inhibitory factor	GIF GLIF MMIF	22	Antimicrobials
CRP	1401	C-reactive protein	PTX1	1	Antimicrobials

JAK2	3717	Janus kinase 2	JTK10 THCYT3	9	Antimicrobials
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2	Antimicrobials
PTK2	5747	protein tyrosine kinase 2	FADK FAK FAK1 FRNK PPP1R71 p125FAK pp125FAK	8	Antimicrobials
PTGDR	5729	prostaglandin D2 receptor	AS1 ASRT1 DP DP1 PTGDR1	14	Antimicrobials
CD86	942	CD86 molecule	B7-2 B7.2 B70 CD28LG2 LAB72	3	Antimicrobials
HCK	3055	HCK proto-oncogene, Src family tyrosine kinase	JTK9 p59Hck p61Hck	20	Antimicrobials
ARRB1	408	arrestin beta 1	ARB1 ARR1	11	Antimicrobials
GNAI1	2770	G protein subunit alpha i1	Gi	7	Antimicrobials
VDR	7421	vitamin D receptor	NR1I1 PPP1R163	12	Antimicrobials
OLR1	4973	oxidized low density lipoprotein receptor 1	CLEC8A LOX1 LOXIN SCARE1 SLOX1	12	Antimicrobials
GRK2	156	G protein-coupled receptor kinase 2	ADRBK1 BARK1 BETA-ARK1	11	Antimicrobials
TXK	7294	TXK tyrosine kinase	BTKL PSCTK5 PTK4 RLK TKL	4	Antimicrobials
RNASE2	6036	ribonuclease A family member 2	EDN RAF3 RNS2	14	Antimicrobials
CD79A	973	CD79a molecule	IGA MB-1	19	BCRSignaling Pathway
CD79B	974	CD79b molecule	AGM6 B29 IGB	17	BCRSignaling Pathway
LYN	406	LYN	JTK8 p53Lyn p56Lyn	8	BCRSignaling

	7	proto-oncogene, Src family tyrosine kinase			Pathway
SYK	6850	spleen associated tyrosine kinase	p72-Syk	9	BCR Signaling Pathway
BTK	695	Bruton tyrosine kinase	AGMX1 AT ATK BPK IGHD3 IMD1 PSCTK1 XLA	X	BCR Signaling Pathway
BLNK	29760	B cell linker	AGM4 BASH BLNK-S LY57 SLP-65 SLP65 bca	10	BCR Signaling Pathway
VAV3	10451	vav guanine nucleotide exchange factor 3	-	1	BCR Signaling Pathway
VAV1	7409	vav guanine nucleotide exchange factor 1	VAV	19	BCR Signaling Pathway
VAV2	7410	vav guanine nucleotide exchange factor 2	VAV-2	9	BCR Signaling Pathway
RAC1	5879	Rac family small GTPase 1	MIG5 MRD48 Rac-1 TC-25 p21-Rac1	7	BCR Signaling Pathway
RAC2	5880	Rac family small GTPase 2	EN-7 Gx HSPC022 p21-Rac2	22	BCR Signaling Pathway
RAC3	5881	Rac family small GTPase 3	-	17	BCR Signaling Pathway
PPP3CA	5530	protein phosphatase 3 catalytic subunit alpha	ACCIID CALN CALNA CALNA1 CCN1 CCNA1 IECEE IECEE1 PPP2B	4	BCR Signaling Pathway

PPP 3CB	553 2	protein phosphatase 3 catalytic subunit beta	CALNA2 CALNB CNA2 PP2Bbeta	10	BCR Signaling Pathway
PPP 3CC	553 3	protein phosphatase 3 catalytic subunit gamma	CALNA3 CNA3 PP2Bgamma	8	BCR Signaling Pathway
CHP 1	112 61	calcineurin like EF- hand protein 1	CHP SLC9A1BP SPAX9 Sid470p p22 p2 4	15	BCR Signaling Pathway
PPP 3R1	553 4	protein phosphatase 3 regulatory subunit B, alpha	CALNB1 CNB CNB1	2	BCR Signaling Pathway
PPP 3R2	553 5	protein phosphatase 3 regulatory subunit B, beta	PPP3RL	9	BCR Signaling Pathway
CHP 2	639 28	calcineurin like EF- hand protein 2	-	16	BCR Signaling Pathway
NFA T5	107 25	nuclear factor of activated T cells 5	NF- AT5 NFATL1 NFATZ OREBP TONEBP	16	BCR Signaling Pathway
NFA TC1	477 2	nuclear factor of activated T cells 1	NF-ATC NF-ATc1.2 NFAT2 NFATc	18	BCR Signaling Pathway
NFA TC2	477 3	nuclear factor of activated T cells 2	NFAT1 NFATP	20	BCR Signaling Pathway

NFA TC3	477 5	nuclear factor of activated T cells 3	NF-AT4c NFAT4 NFATX	16	BCRSignaling Pathway
NFA TC4	477 6	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3	14	BCRSignaling Pathway
HRA S	326 5	HRas proto- oncogene, GTPase	C-BAS/HAS C-H-RAS C-HA- RAS1 CTLO H- RASIDX HAMS HRAS1 RASH1 p21ras	11	BCRSignaling Pathway
KRA S	384 5	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	BCRSignaling Pathway
NRA S	489 3	NRAS proto- oncogene, GTPase	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1	BCRSignaling Pathway
FOS	235 3	Fos proto- oncogene, AP-1 transcripti on factor subunit	AP-1 C-FOS p55	14	BCRSignaling Pathway
JUN	372 5	Jun proto- oncogene, AP-1 transcripti on factor subunit	AP-1 AP1 c-Jun cJUN p39	1	BCRSignaling Pathway
CAR D11	844 33	caspase recruitmen t domain family member 11	BENTA BIMP3 CARMA1 IMD11 IMD11 A PPBL	7	BCRSignaling Pathway
BCL 10	891 5	BCL10 immune signaling adaptor	CARMEN CIPER CLAP IMD37 c- E10 mE10	1	BCRSignaling Pathway
MA	108	MALT1	IMD12 MLT MLT1 PCASP1	18	BCRSignaling

LT1	92	paracaspase			Pathway
CHUK	1147	component of inhibitor of nuclear factor kappa B kinase complex	IKBKA IKK-alpha IKK1 IKKA NFKBIKA TCF16	10	BCR Signaling Pathway
IKKB	3551	inhibitor of nuclear factor kappa B kinase subunit beta	IKK-beta IKK2 IKKB IMD15 IMD15A IMD15B NFKBIKB	8	BCR Signaling Pathway
IKBK	8517	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	AMCBX1 EDAID1 FIP-3 FIP3 Fip3p IKK-gamma IKKAP1 IKKG IMD33 IP IP1 IP2 IPD2 NEMO ZC2HC9	X	BCR Signaling Pathway
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	BCR Signaling Pathway
RELA	5970	RELA proto-oncogene, NF-kB subunit	CMCU NFKB3 p65	11	BCR Signaling Pathway
NFKBIA	4792	NFKB inhibitor alpha	EDAID2 IKBA MAD-3 NFKBI	14	BCR Signaling Pathway
NFKBIB	4793	NFKB inhibitor beta	IKBB TRIP9	19	BCR Signaling Pathway
NFKBIE	4794	NFKB inhibitor epsilon	IKBE	6	BCR Signaling Pathway
CD8	975	CD81	CVID6 S5.7 TAPA1 TSPAN28	11	BCR Signaling

1		molecule			Pathway
CD19	930	CD19 molecule	B4 CVID3	16	BCR Signaling Pathway
CR2	1380	complement C3d receptor 2	C3DR CD21 CR CVID7 SLEB9	1	BCR Signaling Pathway
PIK3R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038115Rik FOAP-2 P101-PI3K p101	17	BCR Signaling Pathway
PIK3R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD36 p85 p85-ALPHA	5	BCR Signaling Pathway
PIK3R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85B p85 p85-BETA	19	BCR Signaling Pathway
PIK3R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1	BCR Signaling Pathway
PIK3CA	5290	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3	BCR Signaling Pathway
PIK3CB	5291	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	P110BETA PI3K PI3KBETA PIK3C1	3	BCR Signaling Pathway

PIK3 CD	529 3	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	APDS IMD14 P110DELTA PI3K p110D	1	BCRSignaling Pathway
PIK3 CG	529 4	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3 p110gamma p120-PI3K	7	BCRSignaling Pathway
AKT 3	100 00	AKT serine/threonine kinase 3	MPPH MPPH2 PKB-GAMMA PKBG PRKBG RAC-PK-gamma RAC-gamma STK-2	1	BCRSignaling Pathway
AKT 1	207	AKT serine/threonine kinase 1	AKT CWS6 PKB PKB-ALPHA PRKBA RAC RAC-ALPHA	14	BCRSignaling Pathway
AKT 2	208	AKT serine/threonine kinase 2	HIHGHH PKBB PKBBETA PRKBB RAC-BETA	19	BCRSignaling Pathway
GSK 3B	293 2	glycogen synthase kinase 3 beta	-	3	BCRSignaling Pathway
INP P5D	363 5	inositol polyphosphate-5-phosphatase D	SHIP SHIP-1 SHIP1 SIP-145 hp51CN p150Ship	2	BCRSignaling Pathway
CD2 2	933	CD22 molecule	SIGLEC-2 SIGLEC2	19	BCRSignaling Pathway
CD7 2	971	CD72 molecule	CD72b LYB2	9	BCRSignaling Pathway
PTP	577	protein	HCP HCPH HPTP1C PTP-1C SH-	12	BCRSignaling

N6	7	tyrosine phosphatase non-receptor type 6	PTP1 SHP-1 SHP-1L SHP1		Pathway
LILRB3	110 25	leukocyte immunoglobulin like receptor B3	CD85A HL9 ILT-5 ILT5 LILRA6 LIR-3 LIR3 PIR-B PIRB	19	BCR Signaling Pathway
FCGR2B	221 3	Fc fragment of IgG receptor IIb	CD32 CD32B FCG2 FCGR2 FCGR2C FcRII-c IGFR2	1	BCR Signaling Pathway
RASGRP3	257 80	RAS guanyl releasing protein 3	GRP3	2	BCR Signaling Pathway
PLCG2	533 6	phospholipase C gamma 2	APLAID FCAS3 PLC-IV PLC-gamma-2	16	BCR Signaling Pathway
PRKCB	557 9	protein kinase C beta	PKC-beta PKCB PKCI(2) PKCbeta PRKCB1 PRKCB2	16	BCR Signaling Pathway
IFITM1	851 9	interferon induced transmembrane protein 1	9-27 CD225 DSPA2a IFI17 LEU13	11	BCR Signaling Pathway
IGH	349 2	immunoglobulin heavy locus	IGD1 IGH.1@ IGH@ IGHD@ IGHDY1 GHJ GHJ@ IGHV IGHV@	14	BCR Signaling Pathway
IGHA1	349 3	immunoglobulin heavy constant alpha 1	IgA1	14	BCR Signaling Pathway
IGHA2	349 4	immunoglobulin heavy constant alpha 2	-	14	BCR Signaling Pathway

		(A2m marker)			
IGH D	3495	immunoglobulin heavy constant delta	-	14	BCR Signaling Pathway
IGH D1-1	28510	immunoglobulin heavy diversity 1-1	IGHD11	14	BCR Signaling Pathway
IGH D1-14	28508	immunoglobulin heavy diversity 1-14 (non-functional)	DM2 IGHD114	14	BCR Signaling Pathway
IGH D1-20	28507	immunoglobulin heavy diversity 1-20	IGHD120	14	BCR Signaling Pathway
IGH D1-26	28506	immunoglobulin heavy diversity 1-26	IGHD126	14	BCR Signaling Pathway
IGH D1-7	28509	immunoglobulin heavy diversity 1-7	DM1 IGHD17	14	BCR Signaling Pathway
IGH D2-15	28503	immunoglobulin heavy diversity 2-15	D2 IGHD215	14	BCR Signaling Pathway
IGH D2-2	28505	immunoglobulin heavy diversity 2-2	IGHD22	14	BCR Signaling Pathway
IGH	285	immunoglobulin	IGHD221	14	BCR Signaling

D2-21	02	obulin heavy diversity 2-21			Pathway
IGH D2-8	285 04	immunogl obulin heavy diversity 2-8	DLR1 IGHD28	14	BCR Signaling Pathway
IGH D3-10	284 99	immunogl obulin heavy diversity 3-10	DXP1 IGHD310	14	BCR Signaling Pathway
IGH D3-16	284 98	immunogl obulin heavy diversity 3-16	IGHD316	14	BCR Signaling Pathway
IGH D3-22	284 97	immunogl obulin heavy diversity 3-22	IGHD322	14	BCR Signaling Pathway
IGH D3-3	285 01	immunogl obulin heavy diversity 3-3	DXP4 IGHD33	14	BCR Signaling Pathway
IGH D3-9	285 00	immunogl obulin heavy diversity 3-9	DXP1 IGHD39	14	BCR Signaling Pathway
IGH D4-11	284 95	immunogl obulin heavy diversity 4-11 (non-functional)	DA1 IGHD411	14	BCR Signaling Pathway
IGH D4-17	284 94	immunogl obulin heavy diversity 4-	IGHD417	14	BCR Signaling Pathway

		17			
IGH D4- 23	284 93	immunogl obulin heavy diversity 4- 23 (non- functional)	IGHD423	14	BCRSignaling Pathway
IGH D4- 4	284 96	immunogl obulin heavy diversity 4- 4	DA4 IGHD44	14	BCRSignaling Pathway
IGH D5- 12	284 91	immunogl obulin heavy diversity 5- 12	DK1 IGHD512	14	BCRSignaling Pathway
IGH D5- 18	284 90	immunogl obulin heavy diversity 5- 18	IGHD518	14	BCRSignaling Pathway
IGH D5- 24	284 89	immunogl obulin heavy diversity 5- 24 (non- functional)	IGHD524	14	BCRSignaling Pathway
IGH D5- 5	284 92	immunogl obulin heavy diversity 5- 5	DK4 IGHD55	14	BCRSignaling Pathway
IGH D6- 13	284 87	immunogl obulin heavy diversity 6- 13	DN1 IGHD613	14	BCRSignaling Pathway
IGH D6- 19	284 86	immunogl obulin heavy diversity 6- 19	IGHD619	14	BCRSignaling Pathway
IGH	284	immunogl	IGHD625	14	BCRSignaling

D6-25	85	obulin heavy diversity 6-25			Pathway
IGH D6-6	284 88	immunogl obulin heavy diversity 6-6	D(N4) IGHD66	14	BCRSignaling Pathway
IGH D7-27	284 84	immunogl obulin heavy diversity 7-27	DHQ52 IGHD727	14	BCRSignaling Pathway
IGH E	349 7	immunogl obulin heavy constant epsilon	IgE	14	BCRSignaling Pathway
IGH G1	350 0	immunogl obulin heavy constant gamma 1 (G1m marker)	-	14	BCRSignaling Pathway
IGH G2	350 1	immunogl obulin heavy constant gamma 2 (G2m marker)	-	14	BCRSignaling Pathway
IGH G3	350 2	immunogl obulin heavy constant gamma 3 (G3m marker)	IgG3	14	BCRSignaling Pathway
IGH G4	350 3	immunogl obulin heavy constant	-	14	BCRSignaling Pathway

		gamma 4 (G4m marker)			
IGHJ 1	284 83	immunogl obulin heavy joining 1	JH1	14	BCRSignaling Pathway
IGHJ 2	284 81	immunogl obulin heavy joining 2	JH2	14	BCRSignaling Pathway
IGHJ 3	284 79	immunogl obulin heavy joining 3	JH3b	14	BCRSignaling Pathway
IGHJ 4	284 77	immunogl obulin heavy joining 4	JH4b	14	BCRSignaling Pathway
IGHJ 5	284 76	immunogl obulin heavy joining 5	JH5b	14	BCRSignaling Pathway
IGHJ 6	284 75	immunogl obulin heavy joining 6	JH6b	14	BCRSignaling Pathway
IGH M	350 7	immunogl obulin heavy constant mu	AGM1 MU VH	14	BCRSignaling Pathway
IGH	349 2	immunogl obulin heavy locus	IGD1 IGH.1@ IGH@ IGHD@ IGHDY1 GHJ IGHJ@ IGHV IGHV@	14	BCRSignaling Pathway
IGH V1- 18	284 68	immunogl obulin heavy variable 1- 18	IGHV118	14	BCRSignaling Pathway
IGH V1- 2	284 74	immunogl obulin heavy	IGHV12 V35	14	BCRSignaling Pathway

		variable 1-2			
IGH V1-24	28467	immunoglobulin heavy variable 1-24	IGHV124 VH	14	BCR Signaling Pathway
IGH V1-3	28473	immunoglobulin heavy variable 1-3	IGHV13 V1-3B	14	BCR Signaling Pathway
IGH V1-45	28466	immunoglobulin heavy variable 1-45	IGHV145 VH	14	BCR Signaling Pathway
IGH V1-46	28465	immunoglobulin heavy variable 1-46	IGHV146	14	BCR Signaling Pathway
IGH V1-58	28464	immunoglobulin heavy variable 1-58	IGHV158 VH	14	BCR Signaling Pathway
IGH V1-69	28461	immunoglobulin heavy variable 1-69	IGHV1-E IGHV169 IGHV1E	14	BCR Signaling Pathway
IGH V1-8	28472	immunoglobulin heavy variable 1-8	IGHV18	14	BCR Signaling Pathway
IGH V1-38-4	28460	immunoglobulin heavy variable 1-38-4 (non-functional)	IGHV1-C IGHV1C	14	BCR Signaling Pathway
IGH	284	immunoglobulin	IGHV1-F IGHV1F	14	BCR Signaling

V1-69-2	58	obulin heavy variable 1-69-2			Pathway
IGH V2-26	284 55	immunogl obulin heavy variable 2-26	IGHV226 VH	14	BCRSignaling Pathway
IGH V2-5	284 57	immunogl obulin heavy variable 2-5	IGHV25 VH	14	BCRSignaling Pathway
IGH V2-70	284 54	immunogl obulin heavy variable 2-70	IGHV270 VH	14	BCRSignaling Pathway
IGH V3-11	284 50	immunogl obulin heavy variable 3-11	IGHV311 VH	14	BCRSignaling Pathway
IGH V3-13	284 49	immunogl obulin heavy variable 3-13	IGHV313	14	BCRSignaling Pathway
IGH V3-15	284 48	immunogl obulin heavy variable 3-15	IGHV315 VH	14	BCRSignaling Pathway
IGH V3-16	284 47	immunogl obulin heavy variable 3-16 (non-functional)	IGHV316 VH	14	BCRSignaling Pathway
IGH V3-20	284 45	immunogl obulin heavy variable 3-	IGHV320 VH	14	BCRSignaling Pathway

		20			
IGH V3- 21	284 44	immunogl obulin heavy variable 3- 21	IGHV321 VH	14	BCRSignaling Pathway
IGH V3- 23	284 42	immunogl obulin heavy variable 3- 23	DP47 IGHV323 V3-23 VH26	14	BCRSignaling Pathway
IGH V3- 30	284 39	immunogl obulin heavy variable 3- 30	IGHV330 VH	14	BCRSignaling Pathway
IGH V3- 30- 3	572 90	immunogl obulin heavy variable 3- 30-3	IGHV3-3 IGHV3303	14	BCRSignaling Pathway
IGH V3- 30- 5	897 70	immunogl obulin heavy variable 3- 30-5	IGHV3-3 IGHV3305	14	BCRSignaling Pathway
IGH V3- 33	284 34	immunogl obulin heavy variable 3- 33	IGHV333 VH	14	BCRSignaling Pathway
IGH V3- 35	284 32	immunogl obulin heavy variable 3- 35 (non- functional)	IGHV335 VH	14	BCRSignaling Pathway
IGH V3- 38	284 29	immunogl obulin heavy variable 3- 38 (non- functional)	IGHV338 VH	14	BCRSignaling Pathway
IGH	284	immunogl	IGHV343 VH	14	BCRSignaling

V3-43	26	obulin heavy variable 3-43			Pathway
IGH V3-48	284 24	immunogl obulin heavy variable 3-48	IGHV348 VH	14	BCRSignaling Pathway
IGH V3-49	284 23	immunogl obulin heavy variable 3-49	IGHV349 VH	14	BCRSignaling Pathway
IGH V3-53	284 20	immunogl obulin heavy variable 3-53	IGHV353 VH	14	BCRSignaling Pathway
IGH V3-64	284 14	immunogl obulin heavy variable 3-64	IGHV364 VH	14	BCRSignaling Pathway
IGH V3-66	284 12	immunogl obulin heavy variable 3-66	IGHV366 VH	14	BCRSignaling Pathway
IGH V3-7	284 52	immunogl obulin heavy variable 3-7	IGHV37 VH	14	BCRSignaling Pathway
IGH V3-72	284 10	immunogl obulin heavy variable 3-72	IGHV372 VH	14	BCRSignaling Pathway
IGH V3-73	284 09	immunogl obulin heavy variable 3-73	IGHV373 VH	14	BCRSignaling Pathway

IGH V3- 74	284 08	immunogl obulin heavy variable 3- 74	IGHV374 VH	14	BCRSignaling Pathway
IGH V3- 9	284 51	immunogl obulin heavy variable 3- 9	IGHV39 VH	14	BCRSignaling Pathway
IGH V3- 38- 3	284 04	immunogl obulin heavy variable 3- 38-3 (non- functional)	IGHV3-D IGHV3D	14	BCRSignaling Pathway
IGH V3- 69- 1	284 02	immunogl obulin heavy variable 3- 69-1 (pseudoge ne)	IGH IGHM IGHV IGHV3-11 IGHV3- H IGHV3H IgVH	14	BCRSignaling Pathway
IGH V4- 28	284 00	immunogl obulin heavy variable 4- 28	IGHV428 VH	14	BCRSignaling Pathway
IGH V4- 30- 1	283 99	immunogl obulin heavy variable 4- 30-1	IGHV4-3	14	BCRSignaling Pathway
IGH V4- 30- 2	283 98	immunogl obulin heavy variable 4- 30-2	IGHV4-3 IGHV4302	14	BCRSignaling Pathway
IGH V4- 30- 4	283 97	immunogl obulin heavy variable 4- 30-4	IGHV4-3 IGHV4304	14	BCRSignaling Pathway
IGH	283	immunogl	IGHV431	14	BCRSignaling

V4-31	96	obulin heavy variable 4-31			Pathway
IGH V4-34	283 95	immunogl obulin heavy variable 4-34	IGHV434 VH	14	BCRSignaling Pathway
IGH V4-39	283 94	immunogl obulin heavy variable 4-39	IGHV439 VH	14	BCRSignaling Pathway
IGH V4-4	284 01	immunogl obulin heavy variable 4-4	IGHV44 VH	14	BCRSignaling Pathway
IGH V4-59	283 92	immunogl obulin heavy variable 4-59	IGHV459 VH	14	BCRSignaling Pathway
IGH V4-61	283 91	immunogl obulin heavy variable 4-61	IGHV461 VH	14	BCRSignaling Pathway
IGH V4-38-2	283 89	immunogl obulin heavy variable 4-38-2	IGHV4-B IGHV4B	14	BCRSignaling Pathway
IGH V5-51	283 88	immunogl obulin heavy variable 5-51	IGHV551 VH	14	BCRSignaling Pathway
IGH V5-10-1	283 86	immunogl obulin heavy variable 5-10-1	IGHV5-A IGHV5A	14	BCRSignaling Pathway

IGH V6- 1	283 85	immunogl obulin heavy variable 6- 1	IGHV61 VH	14	BCRSignaling Pathway
IGH V7- 4-1	572 89	immunogl obulin heavy variable 7- 4-1	IGHV7-41 IGHV741	14	BCRSignaling Pathway
IGH V7- 81	283 78	immunogl obulin heavy variable 7- 81 (non- functional)	IGHV781	14	BCRSignaling Pathway
IGK	508 02	immunogl obulin kappa locus	IGK@	2	BCRSignaling Pathway
IGK C	351 4	immunogl obulin kappa constant	HCAK1 IGKCD Km	2	BCRSignaling Pathway
IGK DEL	351 5	immunogl obulin kappa deleting element or like	IGKDE	2	BCRSignaling Pathway
IGKJ	784 2	-	IGKJ@	2	BCRSignaling Pathway
IGKJ 1	289 50	immunogl obulin kappa joining 1	J1	2	BCRSignaling Pathway
IGKJ 2	289 49	immunogl obulin kappa joining 2	J2	2	BCRSignaling Pathway
IGKJ 3	289 48	immunogl obulin kappa joining 3	J3	2	BCRSignaling Pathway

IGKJ 4	289 47	immunogl obulin kappa joining 4	J4	2	BCRSignaling Pathway
IGKJ 5	289 46	immunogl obulin kappa joining 5	J5	2	BCRSignaling Pathway
IGK V@	351 9	-	IGKV IGKV1 IGKV1@ IGKV2 IGKV2@ IG KV3 IGKV3@	2	BCRSignaling Pathway
IGK V1- 12	289 40	immunogl obulin kappa variable 1- 12	IGKV112 L19	2	BCRSignaling Pathway
IGK V1- 13	289 39	immunogl obulin kappa variable 1- 13	IGKV113 L18	2	BCRSignaling Pathway
IGK V1- 16	289 38	immunogl obulin kappa variable 1- 16	IGKV116 L1	2	BCRSignaling Pathway
IGK V1- 17	289 37	immunogl obulin kappa variable 1- 17	A30 IGKV117	2	BCRSignaling Pathway
IGK V1- 27	289 35	immunogl obulin kappa variable 1- 27	A20 IGKV127	2	BCRSignaling Pathway
IGK V1- 33	289 33	immunogl obulin kappa variable 1- 33	IGKV133 O18	2	BCRSignaling Pathway
IGK V1- 37	289 31	immunogl obulin kappa variable 1-	IGKV137 O14	2	BCRSignaling Pathway

		37 (non-functional)			
IGK V1-39	28930	immunoglobulin kappa variable 1-39	IGKV139 O12 O12a	2	BCR Signaling Pathway
IGK V1-5	28999	immunoglobulin kappa variable 1-5	IGKV IGKV15 L12 L12a V1	2	BCR Signaling Pathway
IGK V1-6	28943	immunoglobulin kappa variable 1-6	IGKV16 L11	2	BCR Signaling Pathway
IGK V1-8	28942	immunoglobulin kappa variable 1-8	IGKV18 L9	2	BCR Signaling Pathway
IGK V1-9	28941	immunoglobulin kappa variable 1-9	IGKV19 L8	2	BCR Signaling Pathway
IGK V1D-12	28903	immunoglobulin kappa variable 1D-12	IGKV1D12 L19	2	BCR Signaling Pathway
IGK V1D-13	28902	immunoglobulin kappa variable 1D-13	IGKV1D13 L18	2	BCR Signaling Pathway
IGK V1D-16	28901	immunoglobulin kappa variable 1D-16	IGKV1D16 L15 L15a	2	BCR Signaling Pathway
IGK V1D00	28900	immunoglobulin	IGKV1D17 L14	2	BCR Signaling Pathway

-17		kappa variable 1D-17			
IGK V1D -33	288 96	immunogl obulin kappa variable 1D-33	IGKV1D33 O8	2	BCRSignaling Pathway
IGK V1D -37	288 94	immunogl obulin kappa variable 1D-37 (non- functional)	IGKV1D37 O4	2	BCRSignaling Pathway
IGK V1D -39	288 93	immunogl obulin kappa variable 1D-39	IGKV1D39 O2	2	BCRSignaling Pathway
IGK V1D -42	288 92	immunogl obulin kappa variable 1D-42 (non- functional)	IGKV1D42 L22	2	BCRSignaling Pathway
IGK V1D -43	288 91	immunogl obulin kappa variable 1D-43	IGKV1D43 L23 L23a	2	BCRSignaling Pathway
IGK V1D -8	289 04	immunogl obulin kappa variable 1D-8	IGKV1D8 L24 L24a	2	BCRSignaling Pathway
IGK V2- 24	289 23	immunogl obulin kappa variable 2- 24	A23 IGKV224	2	BCRSignaling Pathway
IGK V2- 21	289 21	immunogl obulin	A19 IGKV228	2	BCRSignaling Pathway

28		kappa variable 2- 28			
IGK V2- 30	289 19	immunogl obulin kappa variable 2- 30	A17 IGKV230	2	BCRSignaling Pathway
IGK V2- 40	289 16	immunogl obulin kappa variable 2- 40	IGKV240 O11 O11a	2	BCRSignaling Pathway
IGK V2D -24	288 85	immunogl obulin kappa variable 2D-24 (non- functional)	A7 IGKV2D24	2	BCRSignaling Pathway
IGK V2D -28	288 83	immunogl obulin kappa variable 2D-28	A3 IGKV2D28	2	BCRSignaling Pathway
IGK V2D -29	288 82	immunogl obulin kappa variable 2D-29	A2a A2c IGKV2D29	2	BCRSignaling Pathway
IGK V2D -30	288 81	immunogl obulin kappa variable 2D-30	A1 IGKV2D30	2	BCRSignaling Pathway
IGK V2D -40	288 78	immunogl obulin kappa variable 2D-40	IGKV2D40 O1	2	BCRSignaling Pathway
IGK V3- 11	289 14	immunogl obulin kappa variable 3-	IGKV311 L6	2	BCRSignaling Pathway

		11			
IGK V3- 15	289 13	immunogl obulin kappa variable 3- 15	IGKV315 L2	2	BCRSignaling Pathway
IGK V3- 20	289 12	immunogl obulin kappa variable 3- 20	13K18 A27 IGKV320	2	BCRSignaling Pathway
IGK V3- 7	289 15	immunogl obulin kappa variable 3- 7 (non- functional)	IGKV37 L10 L10a Vh	2	BCRSignaling Pathway
IGK V3D -11	288 76	immunogl obulin kappa variable 3D-11	IGKV3D11 L20	2	BCRSignaling Pathway
IGK V3D -15	288 75	immunogl obulin kappa variable 3D-15	IGKV3D15 L16 L16a L16b L16c	2	BCRSignaling Pathway
IGK V3D -20	288 74	immunogl obulin kappa variable 3D-20	A11 A11a IGKV3D20	2	BCRSignaling Pathway
IGK V3D -7	288 77	immunogl obulin kappa variable 3D-7	IGKV3D7 L25	2	BCRSignaling Pathway
IGK V4- 1	289 08	immunogl obulin kappa variable 4- 1	B3 IGKV41	2	BCRSignaling Pathway
IGK V5- 07	289 07	immunogl obulin	B2 IGKV52	2	BCRSignaling Pathway

2		kappa variable 5- 2			
IGK V6- 21	289 06	immunogl obulin kappa variable 6- 21 (non- functional)	A26 GKV621	2	BCRSignaling Pathway
IGK V6D -21	288 70	immunogl obulin kappa variable 6D-21 (non- functional)	A10 GKV6D21	2	BCRSignaling Pathway
IGK V6D -41	288 69	immunogl obulin kappa variable 6D-41 (non- functional)	A14	2	BCRSignaling Pathway
IGL	353 5	immunogl obulin lambda locus	IGL@ GLC6	22	BCRSignaling Pathway
IGL C1	353 7	immunogl obulin lambda constant 1	IGLC	22	BCRSignaling Pathway
IGL C2	353 8	immunogl obulin lambda constant 2	IGLC	22	BCRSignaling Pathway
IGL C3	353 9	immunogl obulin lambda constant 3 (Kern-Oz+ marker)	IGLC	22	BCRSignaling Pathway
IGL C6	354 2	immunogl obulin lambda	IGLC	22	BCRSignaling Pathway

		constant 6			
IGL C7	288 34	immunogl obulin lambda constant 7	C7	22	BCRSignaling Pathway
IGLJ	821 7	-	IGLJ@	22	BCRSignaling Pathway
IGLJ 1	288 33	immunogl obulin lambda joining 1	J1	22	BCRSignaling Pathway
IGLJ 2	288 32	immunogl obulin lambda joining 2	J2	22	BCRSignaling Pathway
IGLJ 3	288 31	immunogl obulin lambda joining 3	J3	22	BCRSignaling Pathway
IGLJ 4	288 30	immunogl obulin lambda joining 4 (non- functional)	-	22	BCRSignaling Pathway
IGLJ 5	288 29	immunogl obulin lambda joining 5 (non- functional)	-	22	BCRSignaling Pathway
IGLJ 6	288 28	immunogl obulin lambda joining 6	-	22	BCRSignaling Pathway
IGLJ 7	288 27	immunogl obulin lambda joining 7	J7	22	BCRSignaling Pathway
IGL V@	354 6	-	IGLV	22	BCRSignaling Pathway
IGL V1- 36	288 26	immunogl obulin lambda	IGLV136 V1-11	22	BCRSignaling Pathway

		variable 1-36			
IGL V1-40	288 25	immunoglobulin lambda variable 1-40	IGLV140 V1-13	22	BCR Signaling Pathway
IGL V1-44	288 23	immunoglobulin lambda variable 1-44	IGLV144 V1-16	22	BCR Signaling Pathway
IGL V1-47	288 22	immunoglobulin lambda variable 1-47	IGLV147 V1-17	22	BCR Signaling Pathway
IGL V1-50	288 21	immunoglobulin lambda variable 1-50 (non-functional)	IGLV150 V1-18	22	BCR Signaling Pathway
IGL V1-51	288 20	immunoglobulin lambda variable 1-51	IGLV151 V1-19	22	BCR Signaling Pathway
IGL V10-54	287 72	immunoglobulin lambda variable 10-54	IGLV1054 V1-20	22	BCR Signaling Pathway
IGL V11-55	287 70	immunoglobulin lambda variable 11-55 (non-functional)	IGLV1155 V4-6	22	BCR Signaling Pathway
IGL V2-11	288 16	immunoglobulin lambda variable 2-	IGLV211 V1-3	22	BCR Signaling Pathway

		11			
IGL V2- 14	288 15	immunogl obulin lambda variable 2- 14	IGLV214 V1-4	22	BCRSignaling Pathway
IGL V2- 18	288 14	immunogl obulin lambda variable 2- 18	IGLV218 V1-5	22	BCRSignaling Pathway
IGL V2- 23	288 13	immunogl obulin lambda variable 2- 23	IGLV223 V1-7	22	BCRSignaling Pathway
IGL V2- 33	288 11	immunogl obulin lambda variable 2- 33 (non- functional)	IGLV233 V1-9	22	BCRSignaling Pathway
IGL V2- 8	288 17	immunogl obulin lambda variable 2- 8	IGLV28 V1-2	22	BCRSignaling Pathway
IGL V3- 1	288 09	immunogl obulin lambda variable 3- 1	IGLV31 V2-1	22	BCRSignaling Pathway
IGL V3- 10	288 03	immunogl obulin lambda variable 3- 10	IGLV310 V2-7	22	BCRSignaling Pathway
IGL V3- 12	288 02	immunogl obulin lambda variable 3- 12	IGLV312 V2-8	22	BCRSignaling Pathway
IGL V3- 99	287 99	immunogl obulin	IGLV316 V2-11	22	BCRSignaling Pathway

16		lambda variable 3- 16			
IGL V3- 19	287 97	immunogl obulin lambda variable 3- 19	IGLV319 V2-13 VL3L	22	BCRSignaling Pathway
IGL V3- 21	287 96	immunogl obulin lambda variable 3- 21	IGLV321 V2-14	22	BCRSignaling Pathway
IGL V3- 22	287 95	immunogl obulin lambda variable 3- 22	IGLV322 V2-15	22	BCRSignaling Pathway
IGL V3- 25	287 93	immunogl obulin lambda variable 3- 25	IGLV325 V2-17	22	BCRSignaling Pathway
IGL V3- 27	287 91	immunogl obulin lambda variable 3- 27	IGLV327 V2-19	22	BCRSignaling Pathway
IGL V3- 32	287 87	immunogl obulin lambda variable 3- 32 (non- functional)	IGLV332 V2-23P	22	BCRSignaling Pathway
IGL V3- 9	288 04	immunogl obulin lambda variable 3- 9	IGLV39 V2-6	22	BCRSignaling Pathway
IGL V4- 3	287 86	immunogl obulin lambda variable 4- 3	IGLV43 V5-1	22	BCRSignaling Pathway

IGL V4- 60	287 85	immunogl obulin lambda variable 4- 60	IGLV460 V5-4	22	BCRSignaling Pathway
IGL V4- 69	287 84	immunogl obulin lambda variable 4- 69	IGLV469 V5-6	22	BCRSignaling Pathway
IGL V5- 37	287 83	immunogl obulin lambda variable 5- 37	IGLV537 V4-1	22	BCRSignaling Pathway
IGL V5- 39	287 82	immunogl obulin lambda variable 5- 39	IGLV539	22	BCRSignaling Pathway
IGL V5- 45	287 81	immunogl obulin lambda variable 5- 45	IGLV545 V4-2	22	BCRSignaling Pathway
IGL V5- 48	287 80	immunogl obulin lambda variable 5- 48 (non- functional)	IGLV548 V4-3	22	BCRSignaling Pathway
IGL V5- 52	287 79	immunogl obulin lambda variable 5- 52	IGLV552 V4-4	22	BCRSignaling Pathway
IGL V6- 57	287 78	immunogl obulin lambda variable 6- 57	IGLV657 V1-22	22	BCRSignaling Pathway
IGL V7- 43	287 76	immunogl obulin lambda	IGLV743 V3-2	22	BCRSignaling Pathway

		variable 7-43			
IGLV7-46	28775	immunoglobulin lambda variable 7-46	IGLV746 V3-3	22	BCR Signaling Pathway
IGLV8-61	28774	immunoglobulin lambda variable 8-61	IGLV861 V3-4	22	BCR Signaling Pathway
IGLV9-49	28773	immunoglobulin lambda variable 9-49	IGLV949 V5-2	22	BCR Signaling Pathway
C3	718	complement C3	AHUS5 ARMD9 ASP C3a C3b CPAMD1 HEL-S-62p	19	Chemokines
C5	727	complement C5	C5D C5a C5b CPAMD4 ECLZB	9	Chemokines
CAMP	820	cathelicidin antimicrobial peptide	CAP-18 CAP18 CRAMP FALL-39 FALL39 HSD26 LL37	3	Chemokines
CCL1	6346	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISE TCA3	17	Chemokines
CCL11	6356	C-C motif chemokine ligand 11	SCYA11	17	Chemokines
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17	Chemokines
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	Chemokines
CCL15-CCL14	348249	CCL15-CCL14 readthrough (NMD candidate)	CCL15 HCC-2 LKN-1 MIP-5 MIP5 Mrp-2b NCC-3 NCC3 SCYA15	17	Chemokines
CCL15	6359	C-C motif chemokine	HCC-2 HMRP-2B LKN-1 LKN1 MIP-1delta MIP-1D MIP-5 MRP-2B NCC-	17	Chemokines

		ligand 15	3 NCC3 SCYA15 SCYL3 SY15		
CCL 16	636 0	C-C motif chemokine ligand 16	CKb12 HCC-4 ILINCK LCC- 1 LEC LMC Mtn-1 NCC- 4 NCC4 SCYA16 SCYL4	17	Chemokines
CCL 17	636 1	C-C motif chemokine ligand 17	A-152E5.3 ABCD-2 SCYA17 TARC	16	Chemokines
CCL 18	636 2	C-C motif chemokine ligand 18	AMAC-1 AMAC1 CKb7 DC- CK1 DCCK1 MIP-4 PARC SCYA18	17	Chemokines
CCL 19	636 3	C-C motif chemokine ligand 19	CKb11 ELC MIP-3b MIP3B SCYA19	9	Chemokines
CCL 2	634 7	C-C motif chemokine ligand 2	GDCF-2 HC11 HSMCR30 MCAF MCP- 1 MCP1 SCYA2 SMC-CF	17	Chemokines
CCL 20	636 4	C-C motif chemokine ligand 20	CKb4 Exodus LARC MIP-3-alpha MIP- 3a MIP3A SCYA20 ST38	2	Chemokines
CCL 21	636 6	C-C motif chemokine ligand 21	6Ckine CKb9 ECL SCYA21 SLC TCA4	9	Chemokines
CCL 22	636 7	C-C motif chemokine ligand 22	A-152E5.1 ABCD-1 DC/B- CK MDC SCYA22 STCP-1	16	Chemokines
CCL 23	636 8	C-C motif chemokine ligand 23	CK-BETA-8 CKb8 Ckb-8 Ckb-8-1 MIP- 3 MIP3 MPIF-1 SCYA23 hmrp-2a	17	Chemokines
CCL 24	636 9	C-C motif chemokine ligand 24	Ckb-6 MPIF-2 MPIF2 SCYA24	7	Chemokines
CCL 25	637 0	C-C motif chemokine ligand 25	Ckb15 SCYA25 TECK	19	Chemokines
CCL 26	103 44	C-C motif chemokine ligand 26	IMAC MIP-4a MIP- 4alpha SCYA26 TSC-1	7	Chemokines
CCL 27	108 50	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESKY SC YA27	9	Chemokines
CCL 28	564 77	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5	Chemokines
CCL	634	C-C motif	GOS19-1 LD78ALPHA MIP-1-	17	Chemokines

3	8	chemokine ligand 3	alpha MIP1A SCYA3		
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	Chemokines
CCL3P1	390788	C-C motif chemokine ligand 3 pseudogene 1	CCL3L2 G0S19-3 LD78gamma SCYA3L2	17	Chemokines
CCL3L3	414062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 G0S19-2 LD78 LD78BETA SCYA3L SCYA3L1	17	Chemokines
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	Chemokines
CCL4L2	9560	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SCYA4L SCYQ4L2	17	Chemokines
CCL4L1	388372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LAG-1 LAG1 MIP-1-beta SCYA4L SCYA4L1 SCYA4L2	17	Chemokines
CCL5	6352	C-C motif chemokine ligand 5	D17S136E RANTES SCYA5 SIS-delta SISd TCP228 eoCP	17	Chemokines
CCL7	6354	C-C motif chemokine ligand 7	FIC MARC MCP-3 MCP3 NC28 SCYA6 SCYA7	17	Chemokines
CCL8	6355	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17	Chemokines
CKLF	51192	chemokine like factor	C32 CKLF1 CKLF2 CKLF3 CKLF4 HSPC224 UCK-1	16	Chemokines
CM1A1	1215	chymase 1	CYH MCT1 chymase	14	Chemokines
CTSG	1511	cathepsin G	CATG CG	14	Chemokines
CX3CL1	6376	C-X3-C motif chemokine	ABCD-3 C3Xkine CXC3 CXC3C NTN NTT SCYD1 fractalkine neurotactin	16	Chemokines

		ligand 1			
CXC L1	291 9	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSA MGSA-a NAP-3 SCYB1	4	Chemokines
CXC L10	362 7	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg-2 g P-10 mob-1	4	Chemokines
CXC L11	637 3	C-X-C motif chemokine ligand 11	H174 I-TAC IP-9 IP9 SCYB11 SCYB9B b-R1	4	Chemokines
CXC L12	638 7	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10	Chemokines
CXC L13	105 63	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BCA-1 BCA1 BLC BLR1L SCYB13	4	Chemokines
CXC L14	954 7	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP-2g MIP2G NJAC SCYB14	5	Chemokines
CXC L16	581 91	C-X-C motif chemokine ligand 16	CXCLG16 SR-PSOX SRPSOX	17	Chemokines
CXC L17	284 340	C-X-C motif chemokine ligand 17	DMC Dcip1 UNQ473 VCC-1 VCC1	19	Chemokines
CXC L2	292 0	C-X-C motif chemokine ligand 2	CINC-2a GRO2 GROb MGSA-b MIP-2a MIP2 MIP2A SCYB2	4	Chemokines
CXC L3	292 1	C-X-C motif chemokine ligand 3	CINC-2b GRO3 GROg MIP-2b MIP2B SCYB3	4	Chemokines
CXC L5	637 4	C-X-C motif chemokine	ENA-78 SCYB5	4	Chemokines

		ligand 5			
CXC L6	637 2	C-X-C motif chemokine ligand 6	CKA-3 GCP-2 GCP2 SCYB6	4	Chemokines
CXC L9	428 3	C-X-C motif chemokine ligand 9	CMK Humig MIG SCYB9 crg-10	4	Chemokines
CC N1	349 1	cellular communic ation network factor 1	CYR61 GIG1 IGFBP10	1	Chemokines
DEF A1	166 7	defensin alpha 1	DEF1 DEFA2 HNP-1 HP-1 HP1 MRS	8	Chemokines
DEF A3	166 8	defensin alpha 3	DEF3 HNP-3 HNP3 HP-3 HP3	8	Chemokines
DEF A5	167 0	defensin alpha 5	DEF5 HD-5	8	Chemokines
DEF B1	167 2	defensin beta 1	BD1 DEFB-1 DEFB101 HBD1	8	Chemokines
DEF B10 3B	558 94	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD- 3 HBD3 HBP-3 HBP3	8	Chemokines
DEF B10 4A	140 596	defensin beta 104A	BD-4 DEFB-4 DEFB104 DEFB4 hBD-4	8	Chemokines
DEF B4A	167 3	defensin beta 4A	BD-2 DEFB- 2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8	Chemokines
EDN 1	190 6	endothelin 1	ARCND3 ET1 HDLCQ7 PPET1 QME	6	Chemokines
EDN 2	190 7	endothelin 2	ET-2 ET2 PPET2	1	Chemokines
EDN 3	190 8	endothelin 3	ET-3 ET3 HSCR4 PPET3 WS4B	20	Chemokines
FGF 10	225 5	fibroblast growth factor 10	-	5	Chemokines
FGF 2	224 7	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4	Chemokines
HTN 3	334 7	histatin 3	HIS2 HTN2 HTN5 PB	4	Chemokines

CXC L8	357 6	C-X-C motif chemokine ligand 8	GCP- 1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4	Chemokines
LEC T2	395 0	leukocyte cell derived chemotaxi n 2	chm-II chm2	5	Chemokines
PF4	519 6	platelet factor 4	CXCL4 PF-4 SCYB4	4	Chemokines
PF4 V1	519 7	platelet factor 4 variant 1	CXCL4L1 CXCL4V1 PF4- ALT PF4A SCYB4V1	4	Chemokines
PLA U	532 8	plasminog en activator, urokinase	ATF BDPLT5 QPD UPA URK u-PA	10	Chemokines
PPB P	547 3	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 THBG B THBGB1	4	Chemokines
PPB PP1	728 045	pro- platelet basic protein pseudoge ne 1	PPBPL1 TGB2	4	Chemokines
PRO K2	606 75	prokinetici n 2	BV8 HH4 KAL4 MIT1 PK2	3	Chemokines
RNA SE2	603 6	ribonuclea se A family member 2	EDN RAF3 RNS2	14	Chemokines
SAA 1	628 8	serum amyloid A1	PIG4 SAA SAA2 TP53I4	11	Chemokines
SAA 2	628 9	serum amyloid A2	SAA SAA1	11	Chemokines
SBD S	511 19	SBDS ribosome maturation factor	CGI-97 SDS SWDS	7	Chemokines
SEM A3A	103 71	semaphori n 3A	COLL1 HH16 Hsema-II Hsema- III SEMA1 SEMAD SEMAIII SEMAL Sem	7	Chemokines

			D coll-1		
SEM A3B	786 9	semaphori n 3B	LUCA-1 SEMA5 SEMAA SemA semaV	3	Chemokines
SEM A3C	105 12	semaphori n 3C	SEMAE SemE	7	Chemokines
SEM A3D	223 117	semaphori n 3D	Sema-Z2 coll-2	7	Chemokines
SEM A3E	972 3	semaphori n 3E	M-SEMAH M-SemaK SEMAH coll-5	7	Chemokines
SEM A3F	640 5	semaphori n 3F	SEMA-IV SEMA4 SEMAK	3	Chemokines
SEM A3G	569 20	semaphori n 3G	sem2	3	Chemokines
SEM A4A	642 18	semaphori n 4A	CORD10 RP35 SEMAB SEMB	1	Chemokines
SEM A4B	105 09	semaphori n 4B	SEMAC SemC	15	Chemokines
SEM A4C	549 10	semaphori n 4C	M-SEMA-F SEMACL1 SEMAF SEMAI	2	Chemokines
SEM A4D	105 07	semaphori n 4D	A8 BB18 C9orf164 CD100 COLL4 GR3 M-sema-G SEMAJ coll-4	9	Chemokines
SEM A4F	105 05	ssemaphor in 4F	M- SEMA PRO2353 S4F SEMAM SEMAW m-Sema-M	2	Chemokines
SEM A4G	577 15	semaphori n 4G	-	10	Chemokines
SEM A5A	903 7	semaphori n 5A	SEMAF semF	5	Chemokines
SEM A5B	544 37	semaphori n 5B	SEMAG SemG	3	Chemokines
SEM A6A	575 56	semaphori n 6A	HT018 SEMA SEMA6A1 SEMAQ VIA	5	Chemokines
SEM A6B	105 01	semaphori n 6B	EPM11 SEM-SEMA-Y SEMA- VIB SEMAN semaZ	19	Chemokines
SEM A6C	105 00	semaphori n 6C	SEMAY m-SemaY m-SemaY2	1	Chemokines
SEM A6D	800 31	semaphori n 6D	-	15	Chemokines
SEM A7A	848 2	semaphori n 7A (John Milton Hagen blood group)	CD108 CDw108 H-SEMA-K1 H-Sema- L JMH SEMAK1 SEMAL	15	Chemokines

SLIT 1	658 5	slit guidance ligand 1	MEGF4 SLIL1 SLIT-1 SLIT3	10	Chemokines
SLIT 2	935 3	slit guidance ligand 2	SLIL3 Slit-2	4	Chemokines
TNC	337 1	tenascin C	150-225 DFNA56 GMEM GP HXB JI TN TN-C	9	Chemokines
TYM P	189 0	thymidine phosphorylase	ECGF ECGF1 MEDPS1 MNGIE MTDPS1 PDECGF TP hPD-ECGF	22	Chemokines
XCL 1	637 5	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM-1a SCM1 SCM1A SCYC1	1	Chemokines
XCL 2	684 6	X-C motif chemokine ligand 2	SCM-1b SCM1B SCYC2	1	Chemokines
C5A R1	728	complement C5a receptor 1	C5A C5AR C5R1 CD88	19	Chemokine_Receptors
ACK R2	123 8	atypical chemokine receptor 2	CCBP2 CCR10 CCR9 CMKBR9 D6 hD6	3	Chemokine_Receptors
CCR 1	123 0	C-C motif chemokine receptor 1	CD191 CKR-1 CKR1 CMKBR1 HM145 MIP1aR SCYAR1	3	Chemokine_Receptors
CCR 10	282 6	C-C motif chemokine receptor 10	GPR2	17	Chemokine_Receptors
CCR 3	123 2	C-C motif chemokine receptor 3	C C CKR3 CC-CKR-3 CD193 CKR3 CKR3 CMKBR3	3	Chemokine_Receptors
CCR 4	123 3	C-C motif chemokine receptor 4	CC-CKR-4 CD194 CKR4 CMKBR4 ChemR13 HG CN:14099 K5-5	3	Chemokine_Receptors
CCR 5	123 4	C-C motif chemokine receptor 5	CC-CKR-5 CCCKR5 CCR-5 CD195 CKR-5 CKR5 CMKBR5 IDDM22	3	Chemokine_Receptors
CCR 6	123 5	C-C motif chemokine receptor 6	BN-1 C-C CKR-6 CC-CKR-6 CCR-6 CD196 CKR-L3 CKRL3 CMKBR6 DCR2 DRY6 GPR29 GPRCY4 STRL22	6	Chemokine_Receptors

CCR7	1236	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17	Chemokine_Receptors
CCR8	1237	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBRL2 CY6 GPRCY6 TER1	3	Chemokine_Receptors
CCR9	10803	C-C motif chemokine receptor 9	CC-CKR-9 CDw199 GPR-9-6 GPR28	3	Chemokine_Receptors
ACKR4	51554	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CCRL1 CCXCKR CCX-CKR CKR-11 PPR1 VSHK1	3	Chemokine_Receptors
CCRL2	9034	C-C motif chemokine receptor like 2	ACKR5 CKRX CRAM CRAM-A CRAM-B HCR	3	Chemokine_Receptors
CMKLR1	1240	chemerin chemokine-like receptor 1	CHEMERINR ChemR23 DEZ RVER1	12	Chemokine_Receptors
CXCR1	1524	C-X-C motif chemokine receptor 1	CCRL1 CMKBRL1 CMKDR1 GPR13 GPRV28 V28	3	Chemokine_Receptors
CXCR3	2833	C-X-C motif chemokine receptor 3	CD182 CD183 CKR-L2 CMKAR3 GPR9 IP10-R Mig-R MigR	X	Chemokine_Receptors
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	Chemokine_Receptors
CXCR5	643	C-X-C motif chemokine receptor 5	BLR1 CD185 MDR15	11	Chemokine_Receptors
CXCR6	10663	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3	Chemokine_Receptors
ACKR3	57007	atypical chemokine receptor 3	CMKOR1 CXC-R7 CXCR-7 CXCR7 GPR159 RDC-1 RDC1	2	Chemokine_Receptors
CYS	108	cysteiny	CYSLT1 CYSLT1R CYSLTR HMTMF81	X	Chemokine_R

LTR 1	00	leukotriene receptor 1			ceptors
CYS LTR 2	571 05	cysteinyl leukotriene receptor 2	CYSLT2 CYSLT2R GPCR21 HG57 HPN321 KPG_011 PSEC0146 hGPCR21	13	Chemokine_Receptors
ACK R1	253 2	atypical chemokine receptor 1 (Duffy blood group)	CCBP1 CD234 DARC DARC/ACKR1 Dfy FY GPD GpFy WBCQ1	1	Chemokine_Receptors
EDN RA	190 9	endothelin receptor type A	ET-A ETA ETA-R ETAR ETRA MFDA hET-AR	4	Chemokine_Receptors
EDN RB	191 0	endothelin receptor type B	ABCDS ET-B ET-BR ETB ETB1 ETBR ETRB HSCR HSCR2 WS4A	13	Chemokine_Receptors
FPR 1	235 7	formyl peptide receptor 1	FMLP FPR	19	Chemokine_Receptors
FPR 2	235 8	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19	Chemokine_Receptors
FPR 2	235 8	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19	Chemokine_Receptors
GPR 17	284 0	G protein-coupled receptor 17	-	2	Chemokine_Receptors
GPR 32	285 4	G protein-coupled receptor 32	RVDR1	19	Chemokine_Receptors
GPR 33	285 6	G protein-coupled receptor 33	-	14	Chemokine_Receptors
PTG DR2	112 51	prostaglandin D2 receptor 2	CD294 CRTH2 DL1R DP2 GPR44	11	Chemokine_Receptors
C5A	272	complement	C5L2 GPF77 GPR77	19	Chemokine_Receptors

R2	02	nt componen t 5a receptor 2			ceptors
CXC R1	357 7	C-X-C motif chemokine receptor 1	C-C C-C-CKR- 1 CD128 CD181 CDw128a CKR- 1 CMKAR1 IL8R1 IL8RA IL8RBA	2	Chemokine_R ceptors
CXC R2	357 9	C-X-C motif chemokine receptor 2	CD182 CDw128b CMKAR2 IL8R2 IL8RA IL8RB	2	Chemokine_R ceptors
LTB 4R	124 1	leukotrien e B4 receptor	BLT1 BLTR CMKRL1 GPR16 LTB4R1 LTB R1 P2RY7 P2Y7	14	Chemokine_R ceptors
LTB 4R2	564 13	leukotrien e B4 receptor 2	BLT2 BLTR2 JULF2 KPG_004 LTB4-R 2 LTB4-R2 NOP9	14	Chemokine_R ceptors
PLA UR	532 9	plasminog en activator, urokinase receptor	CD87 U-PAR UPAR URKR	19	Chemokine_R ceptors
PLX NA1	536 1	plexin A1	NOV NOVP PLEXIN-A1 PLXN1	3	Chemokine_R ceptors
PLX NA2	536 2	plexin A2	OCT PLXN2	1	Chemokine_R ceptors
PLX NA3	555 58	plexin A3	6.3 HSSEXGENE PLXN3 PLXN4 XAP-6	X	Chemokine_R ceptors
PLX NA4	915 84	plexin A4	FAYV2820 PLEXA4 PLXNA4A PLXNA4B PRO34003	7	Chemokine_R ceptors
PLX NB1	536 4	plexin B1	PLEXIN-B1 PLXN5 SEP	3	Chemokine_R ceptors
PLX NB2	236 54	plexin B2	MM1 Nbla00445 PLEXB2 dJ402G11.3	22	Chemokine_R ceptors
PLX NB3	536 5	plexin B3	PLEXB3 PLEXR PLXN6	X	Chemokine_R ceptors
PLX NC1	101 54	plexin C1	CD232 PLXN-C1 VESPR	12	Chemokine_R ceptors
PLX ND1	231 29	plexin D1	PLEXD1	3	Chemokine_R ceptors
PTA FR	572 4	platelet activating factor	PAFR	1	Chemokine_R ceptors

		receptor			
ROB O1	6091	roundabout guidance receptor 1	DUTT1 SAX3	3	Chemokine_Receptors
ROB O2	6092	roundabout guidance receptor 2	SAX3	3	Chemokine_Receptors
ROB O3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPS RBIG1 RIG1	11	Chemokine_Receptors
RXP3	51289	relaxin family peptide receptor 3	GPCR135 RLN3R1 RXFPR3 SALPR	5	Chemokine_Receptors
XCR1	2829	X-C motif chemokine receptor 1	CCXCR1 GPR5	3	Chemokine_Receptors
ADIPOQ	9370	adiponectin, C1Q and collagen domain containing	ACDC ACRP30 ADIPQTL1 ADPN APM-1 APM1 GBP28	3	Cytokines
ADM	133	adrenomedullin	AM PAMP	11	Cytokines
ADM2	79924	adrenomedullin 2	AM2 dJ579N16.4	22	Cytokines
AGRP	181	agouti related neuropeptide	AGRT ART ASIP2	16	Cytokines
AGT	183	angiotensinogen	ANHU SERPINA8 hFLT1	1	Cytokines
AMBN	258	ameloblastin	AI1F	4	Cytokines
AMELX	265	amelogenin X-linked	AI1E AIH1 ALGN AMG AMGL AMGX	X	Cytokines
AMH	268	anti-Mullerian hormone	MIF MIS	19	Cytokines
ANGPT	253935	angiopoietin like 5	-	11	Cytokines

L5					
ANGPTL7	10218	angiopoietin like 7	AngX CDT6 dJ647M16.1	1	Cytokines
APLN	8862	apelin	APEL XNPEP2	X	Cytokines
AREG	374	amphiregulin	AR AREGB CRDGF SDGF	4	Cytokines
MANF	7873	mesencephalic astrocyte derived neurotrophic factor	ARMET ARP	3	Cytokines
CDNF	441549	cerebral dopamine neurotrophic factor	ARMETL1	10	Cytokines
ARTN	9048	artemin	ART ENOVIN EVN NBN	1	Cytokines
AVP	551	arginine vasopressin	ADH ARVP AVP-NPII AVRP VP	20	Cytokines
AZU1	566	azurocidin 1	AZAMP AZU CAP37 HBP HUMAZUR NAZC hHBP	19	Cytokines
BDNF	627	brain derived neurotrophic factor	ANON2 BULN2	11	Cytokines
BMP1	649	bone morphogenetic protein 1	OI13 PCOLC PCP PCP2 TLD	8	Cytokines
BMP10	27302	bone morphogenetic protein 10	-	2	Cytokines
BMP15	9210	bone morphogenetic protein 15	GDF9B ODG2 POF4	X	Cytokines
BMP2	650	bone morphogenetic	BDA2 BMP2A SSFSC	20	Cytokines

		protein 2			
BM P3	651	bone morphogenetic protein 3	BMP-3A	4	Cytokines
BM P4	652	bone morphogenetic protein 4	BMP2B BMP2B1 MCOPS6 OFC11 ZYM E	14	Cytokines
BM P5	653	bone morphogenetic protein 5	-	6	Cytokines
BM P6	654	bone morphogenetic protein 6	VGR VGR1	6	Cytokines
BM P7	655	bone morphogenetic protein 7	OP-1	20	Cytokines
BM P8A	353 500	bone morphogenetic protein 8a	OP-2	1	Cytokines
BM P8B	656	bone morphogenetic protein 8b	BMP8 OP2	1	Cytokines
BTC	685	betacellulin	-	4	Cytokines
MY DGF	560 05	myeloid derived growth factor	C19orf10 EUROIMAGE1875335 IL25 IL27 IL27w R33729_1 SF20	19	Cytokines
C3	718	complement C3	AHUS5 ARMD9 ASP C3a C3b CPAMD1 HEL-S-62p	19	Cytokines
C5	727	complement C5	C5D C5a C5b CPAMD4 ECLZB	9	Cytokines
CAL CA	796	calcitonin related polypeptide alpha	CALC1 CGRP CGRP-I CGRP-alpha CGRP1 CT KC PCT	11	Cytokines
CAL	797	calcitonin	CALC2 CGRP-II CGRP2	11	Cytokines

CB		related polypeptide beta			
CAMP	820	cathelicidin antimicrobial peptide	CAP-18 CAP18 CRAMP FALL-39 FALL39 HSD26 LL37	3	Cytokines
CAT	847	catalase	-	11	Cytokines
CCK	885	cholecystokinin	-	3	Cytokines
CCL1	6346	C-C motif chemokine ligand 1	I-309 P500 SCYA1 SISe TCA3	17	Cytokines
CCL11	6356	C-C motif chemokine ligand 11	SCYA11	17	Cytokines
CCL13	6357	C-C motif chemokine ligand 13	CKb10 MCP-4 NCC-1 NCC1 SCYA13 SCYL1	17	Cytokines
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	Cytokines
CCL15-CCL14	348249	CCL15-CCL14 readthrough (NMD candidate)	CCL15 HCC-2 LKN-1 MIP-5 MIP5 Mrp-2b NCC-3 NCC3 SCYA15	17	Cytokines
CCL15	6359	C-C motif chemokine ligand 15	HCC-2 HMRP-2B LKN-1 LKN1 MIP-1delta MIP-1D MIP-5 MRP-2B NCC-3 NCC3 SCYA15 SCYL3 SY15	17	Cytokines
CCL16	6360	C-C motif chemokine ligand 16	CKb12 HCC-4 ILINCK LCC-1 LEC LMC Mtn-1 NCC-4 NCC4 SCYA16 SCYL4	17	Cytokines
CCL17	6361	C-C motif chemokine ligand 17	A-152E5.3 ABCD-2 SCYA17 TARC	16	Cytokines
CCL18	6362	C-C motif chemokine ligand 18	AMAC-1 AMAC1 CKb7 DC-CK1 DCCK1 MIP-4 PARC SCYA18	17	Cytokines
CCL19	6363	C-C motif chemokine ligand 19	CKb11 ELC MIP-3b MIP3B SCYA19	9	Cytokines
CCL2	6347	C-C motif chemokine	GDCF-2 HC11 HSMCR30 MCAF MCP-1 MCP1 SCYA2 SMC-CF	17	Cytokines

		ligand 2			
CCL 20	636 4	C-C motif chemokine ligand 20	CKb4 Exodus LARC MIP-3-alpha MIP-3a MIP3A SCYA20 ST38	2	Cytokines
CCL 21	636 6	C-C motif chemokine ligand 21	6Ckine CKb9 ECL SCYA21 SLC TCA4	9	Cytokines
CCL 22	636 7	C-C motif chemokine ligand 22	A-152E5.1 ABCD-1 DC/B-CK MDC SCYA22 STCP-1	16	Cytokines
CCL 23	636 8	C-C motif chemokine ligand 23	CK-BETA-8 CKb8 Ckb-8 Ckb-8-1 MIP-3 MIP3 MPIF-1 SCYA23 hmrp-2a	17	Cytokines
CCL 24	636 9	C-C motif chemokine ligand 24	Ckb-6 MPIF-2 MPIF2 SCYA24	7	Cytokines
CCL 25	637 0	C-C motif chemokine ligand 25	Ckb15 SCYA25 TECK	19	Cytokines
CCL 26	103 44	C-C motif chemokine ligand 26	IMAC MIP-4a MIP-4alpha SCYA26 TSC-1	7	Cytokines
CCL 27	108 50	C-C motif chemokine ligand 27	ALP CTACK CTAK ESKINE ILC PESKY SCYA27	9	Cytokines
CCL 28	564 77	C-C motif chemokine ligand 28	CCK1 MEC SCYA28	5	Cytokines
CCL 3	634 8	C-C motif chemokine ligand 3	GOS19-1 LD78ALPHA MIP-1-alpha MIP1A SCYA3	17	Cytokines
CCL 3L1	634 9	C-C motif chemokine ligand 3 like 1	464.2 D17S1718 GOS19-2 LD78 LD78-beta(1-70) LD78BETA MIP1AP SCYA3L SCYA3L1	17	Cytokines
CCL 3P1	390 788	C-C motif chemokine ligand 3 pseudogene 1	CCL3L2 GOS19-3 LD78gamma SCYA3L2	17	Cytokines
CCL 3L3	414 062	C-C motif chemokine ligand 3 like 3	464.2 D17S1718 GOS19-2 LD78 LD78BETA SCYA3L SCYA3L1	17	Cytokines

CCL 4	635 1	C-C motif chemokine ligand 4	ACT2 AT744.1 G-26 HC21 LAG-1 LAG1 MIP-1-beta MIP1B MIP1B1 SCYA2 SCYA4	17	Cytokines
CCL 4L2	956 0	C-C motif chemokine ligand 4 like 2	AT744.2 CCL4L SCYA4L SCYQ4L2	17	Cytokines
CCL 4L1	388 372	C-C motif chemokine ligand 4 like 1	AT744.2 CCL4L LAG-1 LAG1 MIP-1-beta SCYA4L SCYA4L1 SCYA4L2	17	Cytokines
CCL 5	635 2	C-C motif chemokine ligand 5	D17S136E RANTES SCYA5 SIS-delta SISd TCP228 eoCP	17	Cytokines
CCL 7	635 4	C-C motif chemokine ligand 7	FIC MARC MCP-3 MCP3 NC28 SCYA6 SCYA7	17	Cytokines
CCL 8	635 5	C-C motif chemokine ligand 8	HC14 MCP-2 MCP2 SCYA10 SCYA8	17	Cytokines
CD3 20	512 93	CD320 molecule	8D6 8D6A TCBLR TCN2R	19	Cytokines
CD4 0LG	959	CD40 ligand	CD154 CD40L HIGM1 IGM IMD3 T-BAM TNFSF5 TRAP gp39 hCD40L	X	Cytokines
CD7 0	970	CD70 molecule	CD27-L CD27L CD27LG LPFS3 TNFSF7 TNLG8A	19	Cytokines
ADA 2	518 16	adenosine deaminase 2	ADGF CECR1 IDGFL PAN SNEDS VAIHS	22	Cytokines
CER 1	935 0	cerberus 1, DAN family BMP antagonist	DAND4	9	Cytokines
CGA	108 1	glycoprotein hormones, alpha polypeptide	CG-ALPHA FSHA GPA1 GPHA1 GPHa HCG LHA TSHA	6	Cytokines
CGB 3	108 2	chorionic gonadotropin subunit beta 3	CGB CGB5 CGB7 CGB8 hCGB	19	Cytokines

CGB 1	114 335	chorionic gonadotro pin subunit beta 1	-	19	Cytokines
CGB 2	114 336	chorionic gonadotro pin subunit beta 2	-	19	Cytokines
CGB 5	936 59	chorionic gonadotro pin subunit beta 5	CGB hCG hCGB	19	Cytokines
CGB 7	940 27	chorionic gonadotro pin subunit beta 7	CG-beta-a CGB6	19	Cytokines
CGB 8	941 15	chorionic gonadotro pin subunit beta 8	-	19	Cytokines
CH GA	111 3	chromogra nin A	CGA	14	Cytokines
CH GB	111 4	chromogra nin B	SCG1	20	Cytokines
CKL F	511 92	chemokine like factor	C32 CKLF1 CKLF2 CKLF3 CKLF4 HSPC2 24 UCK-1	16	Cytokines
CLC F1	235 29	cardiotrop hin like cytokine factor 1	BSF-3 BSF3 CISS2 CLC NNT- 1 NNT1 NR6	11	Cytokines
CLE C11 A	632 0	C-type lectin domain containing 11A	CLECSF3 LSLCL P47 SCGF	19	Cytokines
CM A1	121 5	chymase 1	CYH MCT1 chymase	14	Cytokines
CM TM1	113 540	CKLF like MARVEL transmem brane domain containing 1	CKLFH CKLFH1 CKLFSF1	16	Cytokines

CM TM2	146 225	CKLF like MARVEL transmem brane domain containing 2	CKLFSF2	16	Cytokines
CM TM3	123 920	CKLF like MARVEL transmem brane domain containing 3	BNAS2 CKLFSF3	16	Cytokines
CM TM4	146 223	CKLF like MARVEL transmem brane domain containing 4	CKLFSF4	16	Cytokines
CM TM5	116 173	CKLF like MARVEL transmem brane domain containing 5	CKLFSF5	14	Cytokines
CM TM6	549 18	CKLF like MARVEL transmem brane domain containing 6	CKLFSF6 PRO2219	3	Cytokines
CM TM7	112 616	CKLF like MARVEL transmem brane domain containing 7	CKLFSF7	3	Cytokines
CM TM8	152 189	CKLF like MARVEL	CKLFSF8 CKLFSF8-V2	3	Cytokines

		transmembrane domain containing 8			
CNTF	1270	ciliary neurotrophic factor	HCNTF	11	Cytokines
CORT	1325	cortistatin	CST-14 CST-17 CST-29	1	Cytokines
CRH	1392	corticotropin releasing hormone	CRF CRH1	8	Cytokines
CSF1	1435	colony stimulating factor 1	CSF-1 MCSF	1	Cytokines
CSF2	1437	colony stimulating factor 2	CSF GMCSF	5	Cytokines
CSF3	1440	colony stimulating factor 3	C17orf33 CSF3OS GCSF	17	Cytokines
CSH1	1442	chorionic somatomotropin hormone 1	CS-1 CSA CSMT GHB3 PL hCS-1 hCS-A	17	Cytokines
CSH2	1443	chorionic somatomotropin hormone 2	CS-2 CSB GHB1 PL hCS-B	17	Cytokines
CSHL1	1444	chorionic somatomotropin hormone like 1	CS-5 CSHP1 CSL GHB4 hCS-L	17	Cytokines
CSPG5	10675	chondroitin sulfate proteoglycan 5	NGC	3	Cytokines
CTF1	1489	cardiotropin 1	CT-1 CT1	16	Cytokines

CC N2	149 0	cellular communic ation network factor 2	CTGF HCS24 IGFBP8 NOV2	6	Cytokines
CTS G	151 1	cathepsin G	CATG CG	14	Cytokines
CX3 CL1	637 6	C-X3-C motif chemokine ligand 1	ABCD- 3 C3Xkine CXC3 CXC3C NTN NTT SCY D1 fractalkine neurotactin	16	Cytokines
CXC L1	291 9	C-X-C motif chemokine ligand 1	FSP GRO1 GROa MGSA MGSA-a NAP- 3 SCYB1	4	Cytokines
CXC L10	362 7	C-X-C motif chemokine ligand 10	C7 IFI10 INP10 IP-10 SCYB10 crg- 2 gIP-10 mob-1	4	Cytokines
CXC L11	637 3	C-X-C motif chemokine ligand 11	H174 I-TAC IP- 9 IP9 SCYB11 SCYB9B b-R1	4	Cytokines
CXC L12	638 7	C-X-C motif chemokine ligand 12	IRH PBSF SCYB12 SDF1 TLSF TPAR1	10	Cytokines
CXC L13	105 63	C-X-C motif chemokine ligand 13	ANGIE ANGIE2 BCA- 1 BCA1 BLC BLR1L SCYB13	4	Cytokines
CXC L14	954 7	C-X-C motif chemokine ligand 14	BMAC BRAK KEC KS1 MIP- 2g MIP2G NJAC SCYB14	5	Cytokines
CXC L16	581 91	C-X-C motif chemokine ligand 16	CXCLG16 SR-PSOX SRPSOX	17	Cytokines
CXC L17	284 340	C-X-C motif chemokine ligand 17	DMC Dcip1 UNQ473 VCC-1 VCC1	19	Cytokines
CXC	292	C-X-C	CINC-2a GRO2 GROb MGSA-b MIP-	4	Cytokines

L2	0	motif chemokine ligand 2	2a MIP2 MIP2A SCYB2		
CXC L3	292 1	C-X-C motif chemokine ligand 3	CINC-2b GRO3 GROg MIP- 2b MIP2B SCYB3	4	Cytokines
CXC L5	637 4	C-X-C motif chemokine ligand 5	ENA-78 SCYB5	4	Cytokines
CXC L6	637 2	C-X-C motif chemokine ligand 6	CKA-3 GCP-2 GCP2 SCYB6	4	Cytokines
CXC L9	428 3	C-X-C motif chemokine ligand 9	CMK Humig MIG SCYB9 crg-10	4	Cytokines
CC N1	349 1	cellular communic ation network factor 1	CYR61 GIG1 IGFBP10	1	Cytokines
DEF A1	166 7	defensin alpha 1	DEF1 DEFA2 HNP-1 HP-1 HP1 MRS	8	Cytokines
DEF A3	166 8	defensin alpha 3	DEF3 HNP-3 HNP3 HP-3 HP3	8	Cytokines
DEF A5	167 0	defensin alpha 5	DEF5 HD-5	8	Cytokines
DEF B1	167 2	defensin beta 1	BD1 DEFB-1 DEFB101 HBD1	8	Cytokines
DEF B10 3B	558 94	defensin beta 103B	BD-3 DEFB-3 DEFB103 DEFB3 HBD- 3 HBD3 HBP-3 HBP3	8	Cytokines
DEF B10 4A	140 596	defensin beta 104A	BD-4 DEFB-4 DEFB104 DEFB4 hBD-4	8	Cytokines
DEF B4A	167 3	defensin beta 4A	BD-2 DEFB- 2 DEFB102 DEFB2 DEFB4 HBD-2 SAP1	8	Cytokines
DKK 1	229 43	dickkopf WNT signaling pathway	DKK-1 SK	10	Cytokines

		inhibitor 1			
EBI3	101 48	Epstein-Barr virus induced 3	IL-27B IL27B IL35B	19	Cytokines
EDN1	190 6	endothelin 1	ARCND3 ET1 HDLCQ7 PPET1 QME	6	Cytokines
EDN2	190 7	endothelin 2	ET-2 ET2 PPET2	1	Cytokines
EDN3	190 8	endothelin 3	ET-3 ET3 HSCR4 PPET3 WS4B	20	Cytokines
EGF	195 0	epidermal growth factor	HOMG4 URG	4	Cytokines
EPGN	255 324	epithelial mitogen	ALGV3072 EPG PRO9904	4	Cytokines
EPO	205 6	erythropoietin	DBAL ECYT5 EP MVCD2	7	Cytokines
EREG	206 9	epiregulin	EPR ER Ep	4	Cytokines
ESM1	110 82	endothelial cell specific molecule 1	endocan	5	Cytokines
FAM3B	540 97	FAM3 metabolism regulating signaling molecule B	2-21 C21orf11 C21orf76 ORF9 PANDER PRED44	21	Cytokines
FAM3C	104 47	FAM3 metabolism regulating signaling molecule C	GS3786 ILEI	7	Cytokines
FAM3D	131 177	FAM3 metabolism regulating signaling molecule D	EF7 OIT1	3	Cytokines
FASLG	356	Fas ligand	ALPS1B APT1LG1 APTL CD178 CD95-L CD95L FASL TNFSF6 TNLG1A	1	Cytokines
FGF1	224 6	fibroblast growth	AFGF ECGF ECGF-beta ECGFA ECGFB FGF-1 FGF-	5	Cytokines

		factor 1	alpha FGFA GLIO703 HBGF-1 HBGF1		
FGF 10	225 5	fibroblast growth factor 10	-	5	Cytokines
FGF 11	225 6	fibroblast growth factor 11	FGF-11 FHF-3 FHF3	17	Cytokines
FGF 12	225 7	fibroblast growth factor 12	EIEE47 FGF12B FHF1	3	Cytokines
FGF 13	225 8	fibroblast growth factor 13	FGF-13 FGF2 FHF-2 FHF2 LINC00889	X	Cytokines
FGF 14	225 9	fibroblast growth factor 14	FGF-14 FHF-4 FHF4 SCA27	13	Cytokines
FGF 16	882 3	fibroblast growth factor 16	FGF-16 MF4	X	Cytokines
FGF 17	882 2	fibroblast growth factor 17	FGF-13 FGF-17 HH20	8	Cytokines
FGF 18	881 7	fibroblast growth factor 18	FGF-18 ZFGF5	5	Cytokines
FGF 19	996 5	fibroblast growth factor 19	-	11	Cytokines
FGF 2	224 7	fibroblast growth factor 2	BFGF FGF-2 FGFB HBGF-2	4	Cytokines
FGF 20	262 81	fibroblast growth factor 20	FGF-20 RHDA2	8	Cytokines
FGF 21	262 91	fibroblast growth factor 21	-	19	Cytokines
FGF 22	270 06	fibroblast growth factor 22	-	19	Cytokines
FGF 23	807 4	fibroblast growth factor 23	ADHR FGFN HFTC2 HPDR2 HYPF PHPT C	12	Cytokines
FGF	224	fibroblast	HBGF-3 INT2	11	Cytokines

3	8	growth factor 3			
FGF 4	224 9	fibroblast growth factor 4	FGF-4 HBGF-4 HST HST-1 HSTF-1 HSTF1 K-FGF KFGF	11	Cytokines
FGF 5	225 0	fibroblast growth factor 5	HBGF-5 Smag-82 TCMGLY	4	Cytokines
FGF 6	225 1	fibroblast growth factor 6	HBGF-6 HST2	12	Cytokines
FGF 7	225 2	fibroblast growth factor 7	HBGF-7 KGF	15	Cytokines
FGF 8	225 3	fibroblast growth factor 8	AIGF FGF-8 HBGF-8 HH6 KAL6	10	Cytokines
FGF 9	225 4	fibroblast growth factor 9	FGF-9 GAF HBFG-9 HBGF-9 SYNS3	13	Cytokines
VEGF D	227 7	vascular endothelial growth factor D	FIGF VEGF-D	X	Cytokines
FIG NL2	401 720	fidgetin like 2	-	12	Cytokines
FLT 3LG	232 3	fms related receptor tyrosine kinase 3 ligand	FL FLG3L FLT3L	19	Cytokines
FSH B	248 8	follicle stimulating hormone subunit beta	HH24	11	Cytokines
GAL	510 83	galanin and GMAP prepropeptide	ETL8 GAL-GMAP GALN GLNN GMAP	11	Cytokines
GAL P	855 69	galanin like peptide	-	19	Cytokines
GAS T	252 0	gastrin	GAS	17	Cytokines

GC G	264 1	glucagon	GLP-1 GLP1 GLP2 GRPP	2	Cytokines
GDF 1	265 7	growth differentiat ion factor 1	CERS1 CHTD6 DORV DTGA3 LAG1 LASS1 RAI UOG1	19	Cytokines
GDF 10	266 2	growth differentiat ion factor 10	BIP BMP-3b BMP3B	10	Cytokines
GDF 11	102 20	growth differentiat ion factor 11	BMP-11 BMP11	12	Cytokines
GDF 15	951 8	growth differentiat ion factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGFB	19	Cytokines
GDF 2	265 8	growth differentiat ion factor 2	BMP-9 BMP9 HHT5	10	Cytokines
GDF 3	957 3	growth differentiat ion factor 3	KFS3 MCOP7 MCOPCB6	12	Cytokines
GDF 5	820 0	growth differentiat ion factor 5	BDA1C BMP-14 BMP14 CDMP1 DUPANS LAP-4 LAP4 OS5 SYM1B SYNS2	20	Cytokines
GDF 6	392 255	growth differentiat ion factor 6	BMP-13 BMP13 CDMP2 KFM KFS KFS1 KFSL SGM1 SYNS4	8	Cytokines
GDF 7	151 449	growth differentiat ion factor 7	BMP12	2	Cytokines
GDF 9	266 1	growth differentiat ion factor 9	POF14	5	Cytokines
GD NF	266 8	glial cell derived neurotrop hic factor	ATF ATF1 ATF2 HFB1-GDNF HSCR3	5	Cytokines
GH1	268 8	growth hormone 1	GH GH-N GHB5 GHN IGHD1A IGHD1B IGHD2 hGH-N	17	Cytokines
GH2	268 9	growth hormone 2	GH-V GHB2 GHL GHV hGH-V	17	Cytokines

GHR H	269 1	growth hormone releasing hormone	GHRF GRF INN	20	Cytokines
GHR L	517 38	ghrelin and obestatin prepropep tide	MTLRP	3	Cytokines
GIP	269 5	gastric inhibitory polypeptid e	-	17	Cytokines
GKN 1	562 87	gastrokine 1	AMP18 BRICD1 CA11 FOV foveolin	2	Cytokines
GM FB	276 4	glia maturation factor beta	GMF	14	Cytokines
GM FG	953 5	glia maturation factor gamma	GMF-GAMMA	19	Cytokines
GN RH1	279 6	gonadotro pin releasing hormone 1	GNRH GRH LHRH LNRH	8	Cytokines
GN RH2	279 7	gonadotro pin releasing hormone 2	GnRH-II LH-RHII	20	Cytokines
GPH A2	170 589	glycoprote in hormone subunit alpha 2	A2 GPA2 ZSIG51	11	Cytokines
GPH B5	122 876	glycoprote in hormone subunit beta 5	B5 GPB5 ZLUT1	14	Cytokines
GPI	282 1	glucose- 6- phosphate isomerase	AMF GNPI NLK PGI PHI SA-36 SA36	19	Cytokines

GRE M1	265 85	gremlin 1, DAN family BMP antagonist	C15DUPq CKTSF1B1 CRAC1 CRCS4 D ND2 DRM DUP15q GREMLIN HMPS H MPS1 IHG-2 MPSH PIG2	15	Cytokines
GRE M2	643 88	gremlin 2, DAN family BMP antagonist	CKTSF1B2 DAND3 PRDC STHAG9	1	Cytokines
GR N	289 6	granulin precursor	CLN11 GEP GP88 PCDGF PEPI PGRN	17	Cytokines
GRP	292 2	gastrin releasing peptide	BN GRP-10 preproGRP proGRP	18	Cytokines
GU CA2 A	298 0	guanylate cyclase activator 2A	GCAP-1 GUCA2 STARA	1	Cytokines
HA MP	578 17	hepcidin antimicrob ial peptide	HEPC HFE2B LEAP1 PLTR	19	Cytokines
HBE GF	183 9	heparin binding EGF like growth factor	DTR DTS DTSF HEGFL	5	Cytokines
HD GF	306 8	heparin binding growth factor	HMG1L2	1	Cytokines
HD GFL 3	508 10 3	HDGF like 3	CGI-142 HDGF- 2 HDGF2 HDGFRP3 HRP-3	15	Cytokines
HGF	308 2	hepatocyte growth factor	DFNB39 F-TCF HGFB HPTA SF	7	Cytokines
HTN 3	334 7	histatin 3	HIS2 HTN2 HTN5 PB	4	Cytokines
IAP P	337 5	islet amyloid polypeptid e	DAP IAP	12	Cytokines
IFN A1	343 9	interferon alpha 1	IFL IFN IFN-ALPHA IFN- alphaD IFNA13 IFNA@ leIF D	9	Cytokines
IFN	344	interferon	IFN-alphaC	9	Cytokines

A10	6	alpha 10			
IFN A13	344 7	interferon alpha 13	-	9	Cytokines
IFN A14	344 8	interferon alpha 14	IFN-alphaH LEIF2H	9	Cytokines
IFN A16	344 9	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9	Cytokines
IFN A17	345 1	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9	Cytokines
IFN A2	344 0	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9	Cytokines
IFN A21	345 2	interferon alpha 21	IFN-alphaI leIF F leIF-F	9	Cytokines
IFN A4	344 1	interferon alpha 4	IFN-alpha4a INFA4	9	Cytokines
IFN A5	344 2	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9	Cytokines
IFN A6	344 3	interferon alpha 6	IFN-alphaK	9	Cytokines
IFN A7	344 4	interferon alpha 7	IFN-alphaJ IFNA-J	9	Cytokines
IFN A8	344 5	interferon alpha 8	IFN-alphaB	9	Cytokines
IFN B1	345 6	interferon beta 1	IFB IFF IFN-beta IFNB	9	Cytokines
IFNE	338 376	interferon epsilon	IFN-E IFNE1 IFNT1 INFE1 PRO655	9	Cytokines
IFN G	345 8	interferon gamma	IFG IFI	12	Cytokines
IFN K	568 32	interferon kappa	IFNT1 INFE1	9	Cytokines
IFN W1	346 7	interferon omega 1	-	9	Cytokines
IGF1	347 9	insulin like growth factor 1	IGF IGF-II IGFI MGF	12	Cytokines
IGF2	348 1	insulin like growth factor 2	C11orf43 GRDF IGF-II PP9974	11	Cytokines
IL10	358 6	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1	Cytokines
IL11	358 9	interleukin 11	AGIF IL-11	19	Cytokines
IL12	359	interleukin	CLMF IL-12A NFSK NKSF1 P35	3	Cytokines

A	2	12A			
IL12 B	359 3	interleukin 12B	CLMF CLMF2 IL- 12B IMD28 IMD29 NKSF NKSF2	5	Cytokines
IL13	359 6	interleukin 13	IL-13 P600	5	Cytokines
IL15	360 0	interleukin 15	IL-15	4	Cytokines
IL16	360 3	interleukin 16	LCF NIL16 PRIL16 prIL-16	15	Cytokines
IL17 A	360 5	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6	Cytokines
IL17 B	271 90	interleukin 17B	IL-17B IL-20 NIRF ZCYTO7	5	Cytokines
IL17 C	271 89	interleukin 17C	CX2 IL-17C	16	Cytokines
IL17 D	533 42	interleukin 17D	IL-17D	13	Cytokines
IL17 F	112 744	interleukin 17F	CANDF6 IL-17F ML-1 ML1	6	Cytokines
IL18	360 6	interleukin 18	IGIF IL-18 IL-1g IL1F4	11	Cytokines
IL19	299 49	interleukin 19	IL-10C MDA1 NG.1 ZMDA1	1	Cytokines
IL1A	355 2	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2	Cytokines
IL1B	355 3	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2	Cytokines
IL1F 10	846 39	interleukin 1 family member 10	FIL1-theta FKSG75 IL-1HY2 IL-38 IL1- theta IL1HY2	2	Cytokines
IL36 RN	265 25	interleukin 36 receptor antagonist	FIL1 FIL1(DELTA) FIL1D IL- 36Ra IL1F5 IL1HY1 IL1L1 IL1RP3 IL36RA PSORP PSORS14	2	Cytokines
IL36 A	271 79	interleukin 36 alpha	FIL1 FIL1(EPSILON) FIL1E IL- 1F6 IL1(EPSILON) IL1F6	2	Cytokines
IL37	271 78	interleukin 37	FIL1 FIL1(ZETA) FIL1Z IL-1F7 IL-1H IL- 1H4 IL-1RP1 IL-37 IL1F7 IL1H4 IL1RP1	2	Cytokines
IL36 B	271 77	interleukin 36 beta	FIL1 FIL1-(ETA) FIL1H FILI-(ETA) IL- 1F8 IL-1H2 IL1-ETA IL1F8 IL1H2	2	Cytokines
IL36 G	563 00	interleukin 36 gamma	IL-1F9 IL-1H1 IL- 1RP2 IL1E IL1F9 IL1H1 IL1RP2	2	Cytokines
IL1R	355	interleukin	DIRA ICIL-1RA IL-1RN IL-1ra IL-	2	Cytokines

N	7	1 receptor antagonist	1ra3 IL1F3 IL1RA IRAP MVCD4		
IL2	355 8	interleukin 2	IL-2 TCGF lymphokine	4	Cytokines
IL20	506 04	interleukin 20	IL-20 IL10D ZCYTO10	1	Cytokines
IL21	590 67	interleukin 21	CVID11 IL-21 Za11	4	Cytokines
IL22	506 16	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL-23 TIFa zcyto18	12	Cytokines
IL23 A	515 61	interleukin 23 subunit alpha	IL-23 IL-23A IL23P19 P19 SGRF	12	Cytokines
IL24	110 09	interleukin 24	C49A FISP IL10B MDA7 MOB5 ST16	1	Cytokines
IL25	648 06	interleukin 25	IL17E	14	Cytokines
IL26	558 01	interleukin 26	AK155 IL-26	12	Cytokines
IL27	246 778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16	Cytokines
IFNL 2	282 616	interferon lambda 2	IL-28A IL28A	19	Cytokines
IFNL 3	282 617	interferon lambda 3	IFN-lambda-3 IFN-lambda-4 IL-28B IL-28C IL28B IL28C	19	Cytokines
IFNL 1	282 618	interferon lambda 1	IL-29 IL29	19	Cytokines
IL3	356 2	interleukin 3	IL-3 MCGF MULTI-CSF	5	Cytokines
IL31	386 653	interleukin 31	IL-31	12	Cytokines
IL32	923 5	interleukin 32	IL-32alpha IL-32beta IL-32delta IL-32gamma NK4 TAIF TAIFa TAIFb TAIFc TAIFd	16	Cytokines
IL33	908 65	interleukin 33	C9orf26 DVS27 IL1F11 NF-HEV NFEHEV	9	Cytokines
IL34	146 433	interleukin 34	C16orf77 IL-34	16	Cytokines
IL4	356 5	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5	Cytokines
IL5	356 7	interleukin 5	EDF IL-5 TRF	5	Cytokines
IL6	356 9	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7	Cytokines

IL6S T	357 2	interleukin 6 signal transducer	CD130 CDW130 GP130 HIES4 IL- 6RB sGP130	5	Cytokines
IL7	357 4	interleukin 7	IL-7	8	Cytokines
CXC L8	357 6	C-X-C motif chemokine ligand 8	GCP- 1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4	Cytokines
IL9	357 8	interleukin 9	HP40 IL-9 P40	5	Cytokines
INH A	362 3	inhibin subunit alpha	-	2	Cytokines
INH BA	362 4	inhibin subunit beta A	EDF FRP	7	Cytokines
INH BB	362 5	inhibin subunit beta B	-	2	Cytokines
INH BC	362 6	inhibin subunit beta C	IHBC	12	Cytokines
INH BE	837 29	inhibin subunit beta E	-	12	Cytokines
INS	363 0	insulin	IDDM IDDM1 IDDM2 ILPR IRDN MODY 10 PNDM4	11	Cytokines
INS - IGF2	723 961	INS-IGF2 readthrou gh	INSIGF	11	Cytokines
INSL 3	364 0	insulin like 3	RLF RLNL ley-I-L	19	Cytokines
INSL 4	364 1	insulin like 4	EPIL PLACENTIN	9	Cytokines
INSL 5	100 22	insulin like 5	PRO182 UNQ156	1	Cytokines
INSL 6	111 72	insulin like 6	RIF1	9	Cytokines
JAG 1	182	jagged canonical Notch ligand 1	AGS AGS1 AHD AWS CD339 DCHE HJ1 JAGL1	20	Cytokines
JAG	371	jagged	HJ2 SER2	14	Cytokines

2	4	canonical Notch ligand 2			
FGF7P6	387 628	fibroblast growth factor 7 pseudogene 6	KGFLP1	9	Cytokines
FGF7P3	654 466	fibroblast growth factor 7 pseudogene 3	KGFLP2	9	Cytokines
KITLG	425 4	KIT ligand	DCUA DFNA69 FPH2 FPHH KL-1 Kitl MGF SCF SF SHEP7 SLF	12	Cytokines
KL	936 5	klotho	HFTC3	13	Cytokines
LACRT	900 70	lacritin	-	12	Cytokines
LECT2	395 0	leukocyte cell derived chemotaxin 2	chm-II chm2	5	Cytokines
LEFTY1	106 37	left-right determination factor 1	LEFTB LEFTYB	1	Cytokines
LEFTY2	704 4	left-right determination factor 2	EBAF LEFTA LEFTYA TGFB4	1	Cytokines
LEP	395 2	leptin	LEPD OB OBS	7	Cytokines
LHB	397 2	lutinizing hormone subunit beta	CGB4 HH23 LSH-B LSH-beta	19	Cytokines
LIF	397 6	LIF interleukin 6 family cytokine	CDF DIA HILDA MLPLI	22	Cytokines
LRSAM1	906 78	leucine rich repeat and sterile alpha	CMT2P RIFLE TAL	9	Cytokines

		motif containing 1			
LTA	4049	lymphotoxin alpha	LT TNFB TNFSF1 TNLG1E	6	Cytokines
LTB	4050	lymphotoxin beta	TNFC TNFSF3 TNLG1C p33	6	Cytokines
LTBP1	4052	latent transforming growth factor beta binding protein 1	-	2	Cytokines
LTBP2	4053	latent transforming growth factor beta binding protein 2	C14orf141 GLC3D LTBP3 MSPKA MSTP031 WMS3	14	Cytokines
LTBP3	4054	latent transforming growth factor beta binding protein 3	DASS GPHYSD3 LTBP-3 LTBP2 STHAG6 pp6425	11	Cytokines
LTBP4	8425	latent transforming growth factor beta binding protein 4	ARCL1C LTBP-4 LTBP4L LTBP4S	19	Cytokines
MDK	4192	midkine	ARAP MK NEGF2	11	Cytokines
MIA	8190	MIA SH3 domain containing	CD-RAP	19	Cytokines
MIF	4282	macrophage migration inhibitory factor	GIF GLIF MMIF	22	Cytokines
MLN	4295	motilin	-	6	Cytokines
MST	266	myostatin	GDF8 MSLHP	2	Cytokines

N	0				
NA MPT	101 35	nicotinami de phosphori bosyltransf erase	1110035O14Rik PBEF PBEF1 VF VISFAT IN	7	Cytokines
ND P	469 3	norrin cystine knot growth factor NDP	EVR2 FEVR ND	X	Cytokines
NEN F	299 37	neudesin neurotrop hic factor	CIR2 SCIRP10 SPUF	1	Cytokines
NGF	480 3	nerve growth factor	Beta-NGF HSAN5 NGFB	1	Cytokines
NM B	482 8	neuromedi n B	-	15	Cytokines
NO DAL	483 8	nodal growth differentiat ion factor	HTX5	10	Cytokines
CC N3	485 6	cellular communic ation network factor 3	IBP-9 IGFBP-9 IGFBP9 NOV NOVh	8	Cytokines
NPF F	862 0	neuropepti de FF- amide peptide precursor	FMRFAL	12	Cytokines
NPP A	487 8	natriuretic peptide A	ANF ANP ATFB6 ATRST2 CDD CDD- ANF CDP PND	1	Cytokines
NPP B	487 9	natriuretic peptide B	BNP	1	Cytokines
NPP C	488 0	natriuretic peptide C	CNP CNP2	2	Cytokines
NPY	485 2	neuropepti de Y	PYY4	7	Cytokines
NR G1	308 4	neuregulin 1	ARIA GGF GGF2 HGL HRG HRG1 HRGA MST131 MSTP131 NDF NRG1- IT2 SMDF	8	Cytokines

NR G2	954 2	neuregulin 2	DON1 HRG2 NTAK	5	Cytokines
NR G3	107 18	neuregulin 3	HRG3 pro-NRG3	10	Cytokines
NR G4	145 957	neuregulin 4	HRG4	15	Cytokines
NRT N	490 2	neurturin	NTN	19	Cytokines
NTF 3	490 8	neurotrop hin 3	HDNF NGF-2 NGF2 NT-3 NT3	12	Cytokines
NTF 4	490 9	neurotrop hin 4	GLC10 GLC1O NT-4 NT-4/5 NT-5 NT4 NT5 NTF5	19	Cytokines
NTS	492 2	neurotensi n	NMN-125 NN NT NT/N NTS1	12	Cytokines
NU DT6	111 62	nudix hydrolase 6	ASF2 FGF-AS FGF2AS GFG-1 GFG1	4	Cytokines
OG N	496 9	osteoglyci n	OG OIF SLRR3A	9	Cytokines
OSG IN1	299 48	oxidative stress induced growth inhibitor 1	BDGI OKL38	16	Cytokines
OS M	500 8	oncostatin M	-	22	Cytokines
OST N	344 901	osteocrin	MUSCLIN	3	Cytokines
OXT	502 0	oxytocin/n europhysin I prepropep tide	OT OT-NPI OXT-NPI	20	Cytokines
END OU	890 9	endonucle ase, poly(U) specific	P11 PP11 PRSS26	12	Cytokines
PDG FA	515 4	platelet derived growth factor subunit A	PDGF-A PDGF1	7	Cytokines
PDG FB	515 5	platelet derived	IBGC5 PDGF-2 PDGF2 SIS SSV c-sis	22	Cytokines

		growth factor subunit B			
PDG FC	560 34	platelet derived growth factor C	FALLOTEIN SCDGF	4	Cytokines
PDG FD	803 10	platelet derived growth factor D	IEGF MSTP036 SCDGF-B SCDGF-B	11	Cytokines
PDG FRA	515 6	platelet derived growth factor receptor alpha	CD140A PDGFR-2 PDGFR2	4	Cytokines
PDG FRB	515 9	platelet derived growth factor receptor beta	CD140B IBGC4 IMF1 JTK12 KOGS PDGFR PDGFR-1 PDGFR1 PENTT	5	Cytokines
PDG FRL	515 7	platelet derived growth factor receptor like	PDGRL PRLTS	8	Cytokines
PDYN	517 3	prodynorphin	ADCA PENKB SCA23	20	Cytokines
PENK	517 9	proenkephalin	PE PENK-A	8	Cytokines
PF4	519 6	platelet factor 4	CXCL4 PF-4 SCYB4	4	Cytokines
PF4 V1	519 7	platelet factor 4 variant 1	CXCL4L1 CXCL4V1 PF4-ALT PF4A SCYB4V1	4	Cytokines
PGF	522 8	placental growth factor	D12S1900 PGFL PIGF PLGF PIGF-2 SHGC-10760	14	Cytokines
PLAU	532 8	plasminogen activator,	ATF BDPLT5 QPD UPA URK u-PA	10	Cytokines

		urokinase			
PMCH	5367	pro-melanin concentrating hormone	MCH ppMCH	12	Cytokines
PNOC	5368	prepronociceptin	N/OFQ NOP OFQ PPNOC ppN/OFQ	8	Cytokines
POMC	5443	proopiome lanocortin	ACTH CLIP LPH MSH NPP OBAIRH POC	2	Cytokines
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 THGB THGB1	4	Cytokines
PPBPP1	728045	pro-platelet basic protein pseudogene 1	PPBPL1 TGB2	4	Cytokines
PPBPP2	10895	pro-platelet basic protein pseudogene 2	PPBPL2 SPBPBP	4	Cytokines
PPY	5539	pancreatic polypeptide	PNP PP	17	Cytokines
PRL	5617	prolactin	GHA1	6	Cytokines
PRLH	51052	prolactin releasing hormone	PRH PRRP	2	Cytokines
PROK1	84432	prokineticin 1	EGVEGF PK1 PRK1	1	Cytokines
PROK2	60675	prokineticin 2	BV8 HH4 KAL4 MIT1 PK2	3	Cytokines
PSPN	5623	persephin	PSP	19	Cytokines
PTH	5741	parathyroid hormone	FIH1 PTH1	11	Cytokines
PTH	113	parathyroid hormone	TIP39	19	Cytokines

2	091	d hormone 2			
PTH LH	574 4	parathyroid hormone like hormone	BDE2 HHM PLP PTHR PTHRP	12	Cytokines
PTN	576 4	pleiotrophin	HARP HB-GAM HBBM HBGF-8 HBGF8 HBNF HBNF-1 NEGF1 OSF-1	7	Cytokines
PYY	569 7	peptide YY	PYY-I PYY1	17	Cytokines
QRF P	347 148	pyroglutamylated RFamide peptide	26RFa P518	9	Cytokines
RAB EP1	913 5	rabaptin, RAB GTPase binding effector protein 1	RAB5EP RABPT5	17	Cytokines
RAB EP2	798 74	rabaptin, RAB GTPase binding effector protein 2	FRA	16	Cytokines
REG 1A	596 7	regenerating family member 1 alpha	ICRF P19 PSP PSPS PSPS1 PTP REG	2	Cytokines
RET N	567 29	resistin	ADSF FIZZ3 RETN1 RSTN XCP1	19	Cytokines
RET NLB	846 66	resistin like beta	FIZZ1 FIZZ2 HXCP2 RELM-beta RELMb RELMbeta XCP2	3	Cytokines
RLN 1	601 3	relaxin 1	H1 H1RLX RLXH1 bA12D24.3.1 bA12D24.3.2	9	Cytokines
RLN 2	601 9	relaxin 2	H2 H2-RLX RLXH2 bA12D24.1.1 bA12D24.1.2	9	Cytokines
RLN 3	117 579	relaxin 3	H3 RXN3 ZINS4 insl7	19	Cytokines
RNA SE2	603 6	ribonuclease A family member 2	EDN RAF3 RNS2	14	Cytokines
S10	627	S100	2A9 5B10 CABP CACY PRA S10A6	1	Cytokines

OA6	7	calcium binding protein A6			
SAA1	6288	serum amyloid A1	PIG4 SAA SAA2 TP53I4	11	Cytokines
SAA2	6289	serum amyloid A2	SAA SAA1	11	Cytokines
SBD S	51119	SBDS ribosome maturation factor	CGI-97 SDS SWDS	7	Cytokines
SCG2	7857	secretogranin II	CHGC EM66 SN SgII	2	Cytokines
SCGB3A1	92304	secretoglobin family 3A member 1	HIN-1 HIN1 LU105 PnSP-2 UGRP2	5	Cytokines
SCT	6343	secretin	-	11	Cytokines
AIMP1	9255	aminoacyl tRNA synthetase complex interacting multifunctional protein 1	EMAP2 EMAPII HLD3 SCYE1 p43	4	Cytokines
SECTM1	6398	secreted and transmembrane 1	K12 SECTM	17	Cytokines
SEMA3A	10371	semaphorin 3A	COLL1 HH16 Hsema-I Hsema-III SEMA1 SEMAD SEMAIII SEMAL SemD coll-1	7	Cytokines
SEMA3B	7869	semaphorin 3B	LUCA-1 SEMA5 SEMAA SemA semaV	3	Cytokines
SEMA3C	10512	semaphorin 3C	SEMAE SemE	7	Cytokines
SEMA3D	223117	semaphorin 3D	Sema-Z2 coll-2	7	Cytokines
SEMA3E	9723	semaphorin 3E	M-SEMAH M-SemaK SEMAH coll-5	7	Cytokines
SEMA3F	6405	semaphorin 3F	SEMA-IV SEMA4 SEMAK	3	Cytokines

SEM A3G	569 20	semaphori n 3G	sem2	3	Cytokines
SEM A4A	642 18	semaphori n 4A	CORD10 RP35 SEMAB SEMB	1	Cytokines
SEM A4B	105 09	semaphori n 4B	SEMAC SemC	15	Cytokines
SEM A4C	549 10	semaphori n 4C	M-SEMA-F SEMACL1 SEMAF SEMAI	2	Cytokines
SEM A4D	105 07	semaphori n 4D	A8 BB18 C9orf164 CD100 COLL4 GR3 M-sema-G SEMAJ coll-4	9	Cytokines
SEM A4F	105 05	ssemaphor in 4F	M- SEMA PRO2353 S4F SEMAM SEMAW m-Sema-M	2	Cytokines
SEM A4G	577 15	semaphori n 4G	-	10	Cytokines
SEM A5A	903 7	semaphori n 5A	SEMAF semF	5	Cytokines
SEM A5B	544 37	semaphori n 5B	SEMAG SemG	3	Cytokines
SEM A6A	575 56	semaphori n 6A	HT018 SEMA SEMA6A1 SEMAQ VIA	5	Cytokines
SEM A6B	105 01	semaphori n 6B	EPM11 SEM-SEMA-Y SEMA- VIB SEMAN semaZ	19	Cytokines
SEM A6C	105 00	semaphori n 6C	SEMAY m-SemaY m-SemaY2	1	Cytokines
SEM A6D	800 31	semaphori n 6D	-	15	Cytokines
SEM A7A	848 2	semaphori n 7A (John Milton Hagen blood group)	CD108 CDw108 H-SEMA-K1 H-Sema- L JMH SEMAK1 SEMAL	15	Cytokines
SLIT 1	658 5	slit guidance ligand 1	MEGF4 SLIL1 SLIT-1 SLIT3	10	Cytokines
SLIT 2	935 3	slit guidance ligand 2	SLIL3 Slit-2	4	Cytokines
SLU RP1	571 52	secreted LY6/PLAU R domain containing 1	ANUP ARS ArsB LY6-MT LY6LS MDM	8	Cytokines

SPP 1	669 6	secreted phosphopr otein 1	BNSP BSPI ETA-1 OPN	4	Cytokines
SST	675 0	somatostat in	SMST	3	Cytokines
STC 1	678 1	stanniocalc in 1	STC	8	Cytokines
STC 2	861 4	stanniocalc in 2	STC-2 STCRP	5	Cytokines
TAC 1	686 3	tachykinin precursor 1	Hs.2563 NK2 NKNA NPK TAC2	7	Cytokines
TDG F1	699 7	teratocarci noma- derived growth factor 1	CR CR-1 CRGF CRIPTO	3	Cytokines
TDG F1P 3	699 8	teratocarci noma- derived growth factor 1 pseudoge ne 3	CR-3 CRIPTO CRIPTO- 3 CRIPTO3 TDGF1 TDGF2 TDGF3	X	Cytokines
TG	703 8	thyroglobu lin	AITD3 TGN	8	Cytokines
TGF A	703 9	transformi ng growth factor alpha	TFGA	2	Cytokines
TGF B1	704 0	transformi ng growth factor beta 1	CED DPD1 BDIMDE LAP TGF- beta1 TGFB TGFBeta	19	Cytokines
TGF B2	704 2	transformi ng growth factor beta 2	G-TSF LDS4 TGF-beta2	1	Cytokines
TGF B3	704 3	transformi ng growth factor beta 3	ARVD ARVD1 LDS5 RNHF TGF-beta3	14	Cytokines
THP O	706 6	thrombop oietin	MGDF MKCSF ML MPLLG THCYT1 TPO	3	Cytokines

TNC	337 1	tenascin C	150- 225 DFNA56 GMEM GP HXB JI TN TN- C	9	Cytokines
TNF	712 4	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6	Cytokines
TNF RSF 11B	498 2	TNF receptor superfamil y member 11b	OCIF OPG PDB5 TR1	8	Cytokines
TNF SF1 0	874 3	TNF superfamil y member 10	APO2L Apo- 2L CD253 TL2 TNLG6A TRAIL	3	Cytokines
TNF SF1 1	860 0	TNF superfamil y member 11	CD254 ODF OPGL OPTB2 RANKL TNLG 6B TRANCE hRANKL2 sOdf	13	Cytokines
TNF SF1 2	874 2	TNF superfamil y member 12	APO3L DR3LG TNLG4A TWEAK	17	Cytokines
TNF SF1 3	874 1	TNF superfamil y member 13	APRIL CD256 TALL- 2 TALL2 TNLG7B TRDL- 1 UNQ383/PRO715 ZTNF2	17	Cytokines
TNF SF1 3B	106 73	TNF superfamil y member 13b	BAFF BLYS CD257 DTL TALL- 1 TALL1 THANK TNFSF20 TNLG7A ZTN F4	13	Cytokines
TNF SF1 4	874 0	TNF superfamil y member 14	CD258 HVEML LIGHT LTg	19	Cytokines
TNF SF1 5	996 6	TNF superfamil y member 15	TL1 TL1A TNLG1B VEGI VEGI192A	9	Cytokines
TNF SF1 8	899 5	TNF superfamil y member 18	AITRL GITRL TL6 TNLG2A hGITRL	1	Cytokines
TNF	729	TNF	CD134L CD252 GP34 OX-	1	Cytokines

SF4	2	superfamily member 4	40L OX40L TNLG2B TXGP1		
TNF SF8	944	TNF superfamily member 8	CD153 CD30L CD30LG TNLG3A	9	Cytokines
TNF SF9	874 4	TNF superfamily member 9	4-1BB-L CD137L TNLG5A	19	Cytokines
TOR 2A	274 33	torsin family 2 member A	TORP1	9	Cytokines
TRH	720 0	thyrotropin releasing hormone	Pro-TRH TRF	3	Cytokines
TSH B	725 2	thyroid stimulating hormone subunit beta	TSH-B TSH-BETA	1	Cytokines
TSL P	854 80	thymic stromal lymphopoietin	-	5	Cytokines
TXL NA	200 081	taxilin alpha	IL14 TXLN	1	Cytokines
TYM P	189 0	thymidine phosphorylase	ECGF ECGF1 MEDPS1 MNGIE MTDPS1 PDECGF TP hPD-ECGF	22	Cytokines
UC N	734 9	urocortin	UI UROC	2	Cytokines
UC N2	902 26	urocortin 2	SRP UCN-II UCNI UR URP	3	Cytokines
UC N3	114 131	urocortin 3	SCP SPC UCNIII	10	Cytokines
UTS 2	109 11	urotensin 2	PRO1068 U-II UCN2 UII	1	Cytokines
UTS 2B	257 313	urotensin 2B	U2B URP UTS2D	3	Cytokines
VEG FA	742 2	vascular endothelial growth	MVCD1 VEGF VPF	6	Cytokines

		factor A			
VEG FB	742 3	vascular endothelial growth factor B	VEGFL VRF	11	Cytokines
VEG FC	742 4	vascular endothelial growth factor C	Flt4-L LMPH1D LMPHM4 VRP	4	Cytokines
VGF	742 5	VGF nerve growth factor inducible	SCG7 SgVII	7	Cytokines
VIP	743 2	vasoactive intestinal peptide	PHM27	6	Cytokines
XCL 1	637 5	X-C motif chemokine ligand 1	ATAC LPTN LTN SCM-1 SCM-1a SCM1 SCM1A SCYC1	1	Cytokines
XCL 2	684 6	X-C motif chemokine ligand 2	SCM-1b SCM1B SCYC2	1	Cytokines
ACV R1B	91	activin A receptor type 1B	ACTRIB ACVRLK4 ALK4 SKR2	12	Cytokine_Rec eptors
ACV R1C	130 399	activin A receptor type 1C	ACVRLK7 ALK7	2	Cytokine_Rec eptors
ACV R2A	92	activin A receptor type 2A	ACTRII ACVR2	2	Cytokine_Rec eptors
ACV R2B	93	activin A receptor type 2B	ACTRIIB ActR-II HTX4	3	Cytokine_Rec eptors
ACV RL1	94	activin A receptor like type 1	ACVRLK1 ALK-1 ALK1 HHT HHT2 ORW2 SKR3 TSR-I	12	Cytokine_Rec eptors
ADC YAP 1R1	117	ADCYAP receptor type I	PAC1 PAC1R PACAPR PACAPRI	7	Cytokine_Rec eptors
ADI POR 1	510 94	adiponecti n receptor 1	ACDCR1 CGI-45 CGI45 PAQR1 TESBP1A	1	Cytokine_Rec eptors
ADI	796	adiponecti	ACDCR2 PAQR2	12	Cytokine_Rec

POR2	02	n receptor 2			eptors
ADRB1	153	adrenoceptor beta 1	ADRB1R B1AR BETA1AR FNSS2 RHR	10	Cytokine_Receptors
ADRB2	154	adrenoceptor beta 2	ADRB2R ADRB2R B2AR BAR BETA2AR	5	Cytokine_Receptors
AGTR1	185	angiotensin II receptor type 1	AG2S AGTR1B AT1 AT1AR AT1B AT1BR AT1R AT2R1 HAT1R	3	Cytokine_Receptors
AGTR2	186	angiotensin II receptor type 2	AT2 ATGR2 MRX88	X	Cytokine_Receptors
AMHR2	269	anti-Mullerian hormone receptor type 2	AMHR MISR2 MISRII MRII	12	Cytokine_Receptors
ANGPT1	284	angiopoietin 1	AGP1 AGPT ANG1	8	Cytokine_Receptors
ANGPT4	51378	angiopoietin 4	ANG3 ANG4	20	Cytokine_Receptors
ANGPTL1	9068	angiopoietin like 1	ANG3 ANGPT3 ARP1 AngY UNQ162 dJ595C2.2	1	Cytokine_Receptors
ANGPTL2	23452	angiopoietin like 2	ARP2 HARP	9	Cytokine_Receptors
ANGPTL3	27329	angiopoietin like 3	ANG-5 ANGPT5 ANL3 FHBL2	1	Cytokine_Receptors
ANGPTL4	51129	angiopoietin like 4	ARP4 FIAF HARP HFARP NL2 PGAR TGQTL UNQ171 pp1158	19	Cytokine_Receptors
ANGPTL6	83854	angiopoietin like 6	AGF ARP5	19	Cytokine_Receptors
APLR	187	apelin receptor	AGTRL1 APJ APJR HG11	11	Cytokine_Receptors
AR	367	androgen receptor	AIS AR8 DHTR HUMARA HYSP1 KD NR3C4 SBMA SMAX1 TFM	X	Cytokine_Receptors

AVP R1A	552	arginine vasopressi n receptor 1A	AVPR V1a AVPR1 V1aR	12	Cytokine_Rec eptors
AVP R1B	553	arginine vasopressi n receptor 1B	AVPR3 V1bR	1	Cytokine_Rec eptors
AVP R2	554	arginine vasopressi n receptor 2	ADHR D11 DIR DIR3 NDI V2R	X	Cytokine_Rec eptors
BM PR1 A	657	bone morphoge netic protein receptor type 1A	10q23del ACVRLK3 ALK3 CD292 SKR5	10	Cytokine_Rec eptors
BM PR1 B	658	bone morphoge netic protein receptor type 1B	ALK- 6 ALK6 AMDD BDA1D BDA2 CDw293	4	Cytokine_Rec eptors
BM PR2	659	bone morphoge netic protein receptor type 2	BMPR-II BMPR3 BMR2 BRK- 3 POVD1 PPH1 T-ALK	2	Cytokine_Rec eptors
BRD 8	109 02	bromodo main containing 8	SMAP SMAP2 p120	5	Cytokine_Rec eptors
C3A R1	719	compleme nt C3a receptor 1	AZ3B C3AR HNFAG09	12	Cytokine_Rec eptors
C5A R1	728	compleme nt C5a receptor 1	C5A C5AR C5R1 CD88	19	Cytokine_Rec eptors
CAL CR	799	calcitonin receptor	CRT CT-R CTR CTR1	7	Cytokine_Rec eptors
CAL CRL	102 03	calcitonin receptor	CGRPR CRLR LMPHM8	2	Cytokine_Rec eptors

		like receptor			
ACK R2	1238	atypical chemokine receptor 2	CCBP2 CCR10 CCR9 CMKBR9 D6 hD6	3	Cytokine_Receptors
CCR 1	1230	C-C motif chemokine receptor 1	CD191 CKR-1 CKR1 CMKBR1 HM145 MIP1aR SCYAR1	3	Cytokine_Receptors
CCR 10	2826	C-C motif chemokine receptor 10	GPR2	17	Cytokine_Receptors
CCR 3	1232	C-C motif chemokine receptor 3	C C CKR3 CC-CKR-3 CD193 CKR3 CKR3 CMKBR3	3	Cytokine_Receptors
CCR 4	1233	C-C motif chemokine receptor 4	CC-CKR-4 CD194 CKR4 CMKBR4 ChemR13 HGCN:14099 K5-5	3	Cytokine_Receptors
CCR 5	1234	C-C motif chemokine receptor 5	CC-CKR-5 CCCKR5 CCR-5 CD195 CKR-5 CKR5 CMKBR5 IDDM22	3	Cytokine_Receptors
CCR 6	1235	C-C motif chemokine receptor 6	BN-1 C-C CKR-6 CC-CKR-6 CCR-6 CD196 CKR-L3 CKRL3 CMKBR6 DCR2 DRY6 GPR29 GPRCY4 STRL22	6	Cytokine_Receptors
CCR 7	1236	C-C motif chemokine receptor 7	BLR2 CC-CKR-7 CCR-7 CD197 CDw197 CMKBR7 EBI1	17	Cytokine_Receptors
CCR 8	1237	C-C motif chemokine receptor 8	CC-CKR-8 CCR-8 CDw198 CKRL1 CMKBR8 CMKBRL2 CY6 GPRCY6 TER1	3	Cytokine_Receptors
CCR 9	10803	C-C motif chemokine receptor 9	CC-CKR-9 CDw199 GPR-9-6 GPR28	3	Cytokine_Receptors
ACK R4	51554	atypical chemokine receptor 4	CC-CKR-11 CCBP2 CCR-11 CCR10 CCR11 CCRL1 CCXCKR CCX-CKR CKR-11 PPR1 VSHK1	3	Cytokine_Receptors
CCR L2	9034	C-C motif chemokine receptor like 2	ACKR5 CKRX CRAM CRAM-A CRAM-B HCR	3	Cytokine_Receptors
CD40	958	CD40 molecule	Bp50 CDW40 TNFRSF5 p50	20	Cytokine_Receptors
CM	124	chemerin	CHEMERINR ChemR23 DEZ RVER1	12	Cytokine_Receptors

KLR1	0	chemokine-like receptor 1			eptors
CNTFR	1271	ciliary neurotrophic factor receptor	-	9	Cytokine_Receptors
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	Cytokine_Receptors
CRHR2	1395	corticotropin releasing hormone receptor 2	CRF-RB CRF2 CRFR2 HM-CRF	7	Cytokine_Receptors
CRIM1	51232	cysteine rich transmembrane BMP regulator 1	CRIM-1 S52	2	Cytokine_Receptors
CRLF1	9244	cytokine receptor like factor 1	CISS CISS1 CLF CLF-1 NR6 zcytor5	19	Cytokine_Receptors
CRLF2	64109	cytokine receptor like factor 2	CRL2 CRLF2Y TSLPR	X Y	Cytokine_Receptors
CRLF3	51379	cytokine receptor like factor 3	CREME-9 CREME9 CRLM9 CYTOR4 FRWS p48.2	17	Cytokine_Receptors
CSF1R	1436	colony stimulating factor 1 receptor	BANDDOS C-FMS CD115 CSF-1R CSFR FIM2 FMS HDLS M-CSF-R	5	Cytokine_Receptors
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 alphaGMR	X Y	Cytokine_Receptors

CSF 2RB	143 9	colony stimulating factor 2 receptor subunit beta	CD131 CDw131 IL3RB IL5RB SMDP5 betaGMR	22	Cytokine_Receptors
CSF 3R	144 1	colony stimulating factor 3 receptor	CD114 GCSFR SCN7	1	Cytokine_Receptors
CX3 CR1	152 4	C-X-C motif chemokine receptor 1	CCRL1 CMKBRL1 CMKDR1 GPR13 GPRV28 V28	3	Cytokine_Receptors
CXC R3	283 3	C-X-C motif chemokine receptor 3	CD182 CD183 CKR-L2 CMKAR3 GPR9 IP10-R Mig-R MigR	X	Cytokine_Receptors
CXC R4	785 2	C-X-C motif chemokine receptor 4	CD184 D2S201E FB22 HM89 HSY3RR LAP-3 LAP3 LCR1 LESTR NPY3R NPYR NPYRL NPYY3R WHIM WHIMS	2	Cytokine_Receptors
CXC R5	643	C-X-C motif chemokine receptor 5	BLR1 CD185 MDR15	11	Cytokine_Receptors
CXC R6	106 63	C-X-C motif chemokine receptor 6	BONZO CD186 STRL33 TYMSTR	3	Cytokine_Receptors
ACK R3	570 07	atypical chemokine receptor 3	CMKOR1 CXC-R7 CXCR-7 CXCR7 GPR159 RDC-1 RDC1	2	Cytokine_Receptors
CYS LTR 1	108 00	cysteinyl leukotriene receptor 1	CYSLT1 CYSLT1R CYSLTR HMTMF81	X	Cytokine_Receptors
CYS LTR 2	571 05	cysteinyl leukotriene receptor 2	CYSLT2 CYSLT2R GPCR21 HG57 HPN321 KPG_011 PSEC0146 hGPCR21	13	Cytokine_Receptors
ACK R1	253 2	atypical chemokine receptor 1	CCBP1 CD234 DARC DARC/ACKR1 Dfy FY GPD GpFy WBCQ1	1	Cytokine_Receptors

		(Duffy blood group)			
EDN RA	1909	endothelin receptor type A	ET-A ETA ETA-R ETAR ETRA MFDA hET-AR	4	Cytokine_Receptors
EDN RB	1910	endothelin receptor type B	ABCDS ET-B ET-BR ETB ETB1 ETBR ETRB HSCR HSCR2 WS4A	13	Cytokine_Receptors
EGF R	1956	epidermal growth factor receptor	ERBB ERBB1 HER1 NISBD2 PIG61 mEN A	7	Cytokine_Receptors
ENG	2022	endoglin	END HHT1 ORW1	9	Cytokine_Receptors
EPO R	2057	erythropoietin receptor	EPO-R	19	Cytokine_Receptors
ESR 1	2099	estrogen receptor 1	ER ESR ESRA ESTRR Era NR3A1	6	Cytokine_Receptors
ESR 2	2100	estrogen receptor 2	ER-BETA ESR-BETA ESRB ESTRB Erb NR3A2 ODG8	14	Cytokine_Receptors
ESR RA	2101	estrogen related receptor alpha	ERR1 ERRa ERRalpha ESRL1 NR3B1	11	Cytokine_Receptors
ESR RB	2103	estrogen related receptor beta	DFNB35 ERR beta-2 ERR2 ERRb ERRbeta2 ESRL2 NR3B2	14	Cytokine_Receptors
ESR RG	2104	estrogen related receptor gamma	ERR-gamma ERR3 ERRg ERRgamma NR3B3	1	Cytokine_Receptors
FGF R1	2260	fibroblast growth factor receptor 1	BFGFR CD331 CEK ECCL FGFBR FGFR-1 FLG FLT-2 FLT2 HBGFR HH2 HRTFDS KAL2 N-SAM OGD bFGF-R-1	8	Cytokine_Receptors
FGF R2	2263	fibroblast growth factor receptor 2	BBDS BEK BFR-1 CD332 CEK3 CFD1 ECT1 JWS K-SAM KGFR TK14 TK25	10	Cytokine_Receptors
FGF R3	2261	fibroblast growth	ACH CD333 CEK2 HSFGFR3EX JTK4	4	Cytokine_Receptors

		factor receptor 3			
FGFR4	2264	fibroblast growth factor receptor 4	CD334 JTK2 TKF	5	Cytokine_Receptors
FGFR1	53834	fibroblast growth factor receptor like 1	FGFR-5 FGFR5 FHFR	4	Cytokine_Receptors
FLT1	2321	fms related receptor tyrosine kinase 1	FLT FLT-1 VEGFR-1 VEGFR1	13	Cytokine_Receptors
FLT3	2322	fms related receptor tyrosine kinase 3	CD135 FLK-2 FLK2 STK1	13	Cytokine_Receptors
FLT4	2324	fms related receptor tyrosine kinase 4	CHTD7 FLT-4 FLT41 LMPH1A LMPHM1 PCL VEGFR-3 VEGFR3	5	Cytokine_Receptors
FPR1	2357	formyl peptide receptor 1	FMLP FPR	19	Cytokine_Receptors
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19	Cytokine_Receptors
FPR2	2358	formyl peptide receptor 2	ALXR FMLP-R-II FMLPX FPR2A FPRH1 FPRH2 FPRL1 HM63 LXA4R	19	Cytokine_Receptors
FSHR	2492	follicle stimulating hormone receptor	FSHR1 FSHRO LGR1 ODG1	2	Cytokine_Receptors
GALR2	8811	galanin receptor 2	GAL2-R GALNR2 GALR-2	17	Cytokine_Receptors
GALR3	8484	galanin receptor 3	-	22	Cytokine_Receptors
GCGR	2642	glucagon receptor	GGR GL-R	17	Cytokine_Receptors
GHR	2690	growth hormone	GHBP GHIP	5	Cytokine_Receptors

		receptor			
GHR HR	269 2	growth hormone releasing hormone receptor	GHRFR GRFR IGHD1B IGHD4	7	Cytokine_Rec eptors
GHS R	269 3	growth hormone secretagog ue receptor	GHDP	3	Cytokine_Rec eptors
GIP R	269 6	gastric inhibitory polypeptid e receptor	PGQTL2	19	Cytokine_Rec eptors
GLP 1R	274 0	glucagon like peptide 1 receptor	GLP-1 GLP-1-R GLP-1R	6	Cytokine_Rec eptors
GLP 2R	934 0	glucagon like peptide 2 receptor	-	17	Cytokine_Rec eptors
GN RHR	279 8	gonadotro pin releasing hormone receptor	GNRHR1 GRHR HH7 LHRHR LRHR	4	Cytokine_Rec eptors
GPE R1	285 2	G protein- coupled estrogen receptor 1	CEPR CMKRL2 DRY12 FEG-1 GPCR- Br GPER GPR30 LERGU LERGU2 LyGPR mER	7	Cytokine_Rec eptors
GPR 17	284 0	G protein- coupled receptor 17	-	2	Cytokine_Rec eptors
GPR 32	285 4	G protein- coupled receptor 32	RVDR1	19	Cytokine_Rec eptors
GPR 33	285 6	G protein- coupled receptor 33	-	14	Cytokine_Rec eptors

PTGDR2	11251	prostaglandin D2 receptor 2	CD294 CRTH2 DL1R DP2 GPR44	11	Cytokine_Receptors
C5AR2	27202	complement component 5a receptor 2	C5L2 GPF77 GPR77	19	Cytokine_Receptors
HNF4A	3172	hepatocyte nuclear factor 4 alpha	FRTS4 HNF4 HNF4a7 HNF4a8 HNF4a9 HNF4alpha MODY MODY1 NR2A1 NR2A21 TCF TCF14	20	Cytokine_Receptors
HNF4G	3174	hepatocyte nuclear factor 4 gamma	NR2A2 NR2A3	8	Cytokine_Receptors
HTR3A	3359	5-hydroxytryptamine receptor 3A	5-HT-3 5-HT3A 5-HT3R 5HT3R HTR3	11	Cytokine_Receptors
HTR3B	9177	5-hydroxytryptamine receptor 3B	5-HT3B	11	Cytokine_Receptors
HTR3C	170572	5-hydroxytryptamine receptor 3C	-	3	Cytokine_Receptors
HTR3D	200909	5-hydroxytryptamine receptor 3D	5HT3D	3	Cytokine_Receptors
HTR3E	285242	5-hydroxytryptamine receptor 3E	5-HT3-E 5-HT3E 5-HT3c1	3	Cytokine_Receptors
IFNAR1	3454	interferon alpha and beta	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21	Cytokine_Receptors

		receptor subunit 1			
IFN AR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21	Cytokine_Receptors
IFN GR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6	Cytokine_Receptors
IFN GR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21	Cytokine_Receptors
IGF1 R	3480	insulin like growth factor 1 receptor	CD221 IGFIR IGFR JTK13	15	Cytokine_Receptors
IGF2 R	3482	insulin like growth factor 2 receptor	CD222 CI-M6PR CIMPR M6P-R M6P/IGF2R MPR300 MPR1 MPR300 MPRI	6	Cytokine_Receptors
IL10 RA	3587	interleukin 10 receptor subunit alpha	CD210 CD210a CDW210A HIL-10R IL-10R1 IL10R	11	Cytokine_Receptors
IL10 RB	3588	interleukin 10 receptor subunit beta	CDW210B CRF2-4 CRFB4 D21S58 D21S66 IL-10R2	21	Cytokine_Receptors
IL11 RA	3590	interleukin 11 receptor subunit alpha	CRSDA	9	Cytokine_Receptors
IL12 RB1	3594	interleukin 12 receptor subunit beta 1	CD212 IL-12R-BETA1 IL12RB IMD30	19	Cytokine_Receptors
IL12 RB2	3595	interleukin 12 receptor	-	1	Cytokine_Receptors

		subunit beta 2			
IL13 RA1	359 7	interleukin 13 receptor subunit alpha 1	CD213A1 CT19 IL-13Ra NR4	X	Cytokine_Rec eptors
IL13 RA2	359 8	interleukin 13 receptor subunit alpha 2	CD213A2 CT19 IL-13R IL13BP	X	Cytokine_Rec eptors
IL15 RA	360 1	interleukin 15 receptor subunit alpha	CD215	10	Cytokine_Rec eptors
IL2R B	356 0	interleukin 2 receptor subunit beta	CD122 IL15RB IMD63 P70-75	22	Cytokine_Rec eptors
IL17 RA	237 65	interleukin 17 receptor A	CANDF5 CD217 CDw217 IL-17RA IL17R IMD51 hIL-17R	22	Cytokine_Rec eptors
IL17 RB	555 40	interleukin 17 receptor B	CRL4 EVI27 IL17BR IL17RH1	3	Cytokine_Rec eptors
IL17 RC	848 18	interleukin 17 receptor C	CANDF9 IL17-RL IL17RL	3	Cytokine_Rec eptors
IL17 RD	547 56	interleukin 17 receptor D	HH18 IL-17RD IL17RLM SEF	3	Cytokine_Rec eptors
IL17 RE	132 014	interleukin 17 receptor E	-	3	Cytokine_Rec eptors
IL18 R1	880 9	interleukin 18 receptor 1	CD218a CDw218a IL-18R-alpha IL-18Ralpha IL-1Rrp IL18RA IL18Ralpha2 IL1RRP	2	Cytokine_Rec eptors
IL18 RAP	880 7	interleukin 18 receptor accessory protein	ACPL CD218b CDw218b IL-18R-beta IL-18RAcP IL-18Rbeta IL-1R-7 IL-1R7 IL-1RAcPL IL18RB	2	Cytokine_Rec eptors

IL1R1	3554	interleukin 1 receptor type 1	CD121A D2S1473 IL-1R-alpha IL1R IL1RA P80	2	Cytokine_Receptors
IL1R2	7850	interleukin 1 receptor type 2	CD121b CDw121b IL-1R-2 IL-1RT-2 IL-1RT2 IL1R2c IL1RB	2	Cytokine_Receptors
IL1RAP	3556	interleukin 1 receptor accessory protein	C3orf13 IL-1RAcP IL1R3	3	Cytokine_Receptors
IL1RL1	9173	interleukin 1 receptor like 1	DER4 FIT-1 IL33R ST2 ST2L ST2V T1	2	Cytokine_Receptors
IL1RL2	8808	interleukin 1 receptor like 2	IL-1Rrp2 IL-36R IL1R-rp2 IL1RRP2	2	Cytokine_Receptors
IL20RA	53832	interleukin 20 receptor subunit alpha	CRF2-8 IL-20R-alpha IL-20R1 IL-20RA	6	Cytokine_Receptors
IL20RB	53833	interleukin 20 receptor subunit beta	DIRS1 FNDC6 IL-20R2	3	Cytokine_Receptors
IL21R	50615	interleukin 21 receptor	CD360 IMD56 NILR	16	Cytokine_Receptors
IL22RA1	58985	interleukin 22 receptor subunit alpha 1	CRF2-9 IL22R IL22R1	1	Cytokine_Receptors
IL22RA2	116379	interleukin 22 receptor subunit alpha 2	CRF2-10 CRF2-S1 CRF2X IL-22BP IL-22R-alpha-2 IL-22RA2 ZCYTOR16	6	Cytokine_Receptors
IL23R	149233	interleukin 23 receptor	-	1	Cytokine_Receptors
IL27RA	9466	interleukin 27	CRL1 IL-27RA IL27R TCCR WSX1 zcytor1	19	Cytokine_Receptors

		receptor subunit alpha			
IFNLR1	163 702	interferon lambda receptor 1	CRF2 12 IFNLR IL-28R1 IL28RA LICR2	1	Cytokine_Receptors
IL2RA	355 9	interleukin 2 receptor subunit alpha	CD25 IDDM10 IL2R IMD41 TCGFR p55	10	Cytokine_Receptors
IL2RB	356 0	interleukin 2 receptor subunit beta	CD122 IL15RB IMD63 P70-75	22	Cytokine_Receptors
IL2RG	356 1	interleukin 2 receptor subunit gamma	CD132 CIDX IL-2RG IMD4 P64 SCIDX SCIDX1	X	Cytokine_Receptors
IL31RA	133 396	interleukin 31 receptor A	CRL CRL3 GLM-R GLMR GPL IL-31RA PLCA2 PRO21384 hGLM-R	5	Cytokine_Receptors
IL3RA	356 3	interleukin 3 receptor subunit alpha	CD123 IL3R IL3RAY IL3RX IL3RY hIL-3Ra	X Y	Cytokine_Receptors
IL4R	356 6	interleukin 4 receptor	CD124 IL-4RA IL4RA	16	Cytokine_Receptors
IL5RA	356 8	interleukin 5 receptor subunit alpha	CD125 CDw125 HSIL5R3 IL5R	3	Cytokine_Receptors
IL6R	357 0	interleukin 6 receptor	CD126 IL-6R-1 IL-6RA IL6Q IL6RA IL6RQ gp80	1	Cytokine_Receptors
IL7R	357 5	interleukin 7 receptor	CD127 CDW127 IL-7R-alpha IL7RA ILRA	5	Cytokine_Receptors
CXCR1	357 7	C-X-C motif chemokine receptor 1	C-C C-C-CKR-1 CD128 CD181 CDw128a CKR-1 CMKAR1 IL8R1 IL8RA IL8RBA	2	Cytokine_Receptors
CXCR2	357 9	C-X-C motif chemokine receptor 2	CD182 CDw128b CMKAR2 IL8R2 IL8RA IL8RB	2	Cytokine_Receptors
IL9R	358	interleukin	CD129 IL-9R	X Y	Cytokine_Receptors

	1	9 receptor			eptors
INS R	364 3	insulin receptor	CD220 HHF5	19	Cytokine_Rec eptors
KDR	379 1	kinase insert domain receptor	CD309 FLK1 VEGFR VEGFR2	4	Cytokine_Rec eptors
LEP R	395 3	leptin receptor	CD295 LEP-R LEPRD OB-R OBR	1	Cytokine_Rec eptors
LGR 4	553 66	leucine rich repeat containing G protein- coupled receptor 4	BNMD17 GPR48	11	Cytokine_Rec eptors
LGR 5	854 9	leucine rich repeat containing G protein- coupled receptor 5	FEX GPR49 GPR67 GRP49 HG38	12	Cytokine_Rec eptors
LGR 6	593 52	leucine rich repeat containing G protein- coupled receptor 6	GPCR VTS20631	1	Cytokine_Rec eptors
LHC GR	397 3	luteinizing hormone/c horiogona dotropin receptor	HHG LCGR LGR2 LH/CG- R LH/CGR LHR LHRHR LSH-R ULG5	2	Cytokine_Rec eptors
LIFR	397 7	LIF receptor subunit alpha	CD118 LIF-R SJS2 STWS SWS	5	Cytokine_Rec eptors
LTB 4R	124 1	leukotrien e B4 receptor	BLT1 BLTR CMKRL1 GPR16 LTB4R1 LTB R1 P2RY7 P2Y7	14	Cytokine_Rec eptors
LTB 4R2	564 13	leukotrien e B4 receptor 2	BLT2 BLTR2 JULF2 KPG_004 LTB4-R 2 LTB4-R2 NOP9	14	Cytokine_Rec eptors
LTB R	405 5	lymphotoxi n beta	D12S370 LT-BETA-R TNF-R- III TNFCR TNFR-RP TNFR2-	12	Cytokine_Rec eptors

		receptor	RP TNFR3 TNFRSF3		
MC 1R	415 7	melanocor tin 1 receptor	CMM5 MSH-R SHEP2	16	Cytokine_Rec eptors
MC 2R	415 8	melanocor tin 2 receptor	ACTHR	18	Cytokine_Rec eptors
MC 3R	415 9	melanocor tin 3 receptor	BMIQ9 MC3 MC3-R OB20 OQTL	20	Cytokine_Rec eptors
MC 4R	416 0	melanocor tin 4 receptor	BMIQ20	18	Cytokine_Rec eptors
MC HR1	284 7	melanin concentrat ing hormone receptor 1	GPR24 MCH-1R MCH1R SLC-1 SLC1	22	Cytokine_Rec eptors
MC HR2	845 39	melanin concentrat ing hormone receptor 2	GPR145 GPRv17 MCH-2R MCH- R2 MCH2 MCH2R MCHR-2 SLT	6	Cytokine_Rec eptors
MET	423 3	MET proto- oncogene, receptor tyrosine kinase	AUTS9 DFNB97 HGFR RCCP2 c-Met	7	Cytokine_Rec eptors
ML NR	286 2	motilin receptor	GPR38 MTLR1	13	Cytokine_Rec eptors
MPL	435 2	MPL proto- oncogene, thrombop oietin receptor	C- MPL CD110 MPLV THCYT2 THPOR TP OR	1	Cytokine_Rec eptors
MT NR1 A	454 3	melatonin receptor 1A	MEL-1A-R MT1	4	Cytokine_Rec eptors
MT NR1 B	454 4	melatonin receptor 1B	FGQTL2 MEL-1B-R MT2	11	Cytokine_Rec eptors
NGF	480	nerve	CD271 Gp80-	17	Cytokine_Rec

R	4	growth factor receptor	LNGFR TNFRSF16 p75(NTR) p75NTR		eptors
NM BR	482 9	neuromedin B receptor	BB1 BB1R NMB-R	6	Cytokine_Receptors
NPR 1	488 1	natriuretic peptide receptor 1	ANPRA ANPa GUC2A GUCY2A NPRA	1	Cytokine_Receptors
NPR 3	488 3	natriuretic peptide receptor 3	ANP-C ANPR-C ANPRC C5orf23 GUCY2B NPR-C NPRC	5	Cytokine_Receptors
NRO B1	190	nuclear receptor subfamily 0 group B member 1	AHC AHCH AHX DAX-1 DAX1 DSS GTD HHG NROB1 SRXY2	X	Cytokine_Receptors
NRO B2	843 1	nuclear receptor subfamily 0 group B member 2	SHP SHP1	1	Cytokine_Receptors
NR1 D1	957 2	nuclear receptor subfamily 1 group D member 1	EAR1 REVERBA REVERBalpha THRA1 THRAL ear-1 hRev	17	Cytokine_Receptors
NR1 D2	997 5	nuclear receptor subfamily 1 group D member 2	BD73 EAR-1R REVERBB REVERBbeta RVR	3	Cytokine_Receptors
NR1 H2	737 6	nuclear receptor subfamily 1 group H member 2	LXR-b LXRB NER NER-I RIP15 UNR	19	Cytokine_Receptors
NR1 H3	100 62	nuclear receptor subfamily 1 group H member 3	LXR-a LXRA RLD-1	11	Cytokine_Receptors
NR1 H4	997 1	nuclear receptor	BAR FXR HRR-1 HRR1 PFIC5 RIP14	12	Cytokine_Receptors

		subfamily 1 group H member 4			
NR1 I2	885 6	nuclear receptor subfamily 1 group I member 2	BXR ONR1 PAR PAR1 PAR2 PARq PRR PXR SAR SXR	3	Cytokine_Rec eptors
NR1 I3	997 0	nuclear receptor subfamily 1 group I member 3	CAR CAR1 MB67	1	Cytokine_Rec eptors
NR2 C1	718 1	nuclear receptor subfamily 2 group C member 1	TR2	12	Cytokine_Rec eptors
NR2 C2	718 2	nuclear receptor subfamily 2 group C member 2	TAK1 TR4	3	Cytokine_Rec eptors
NR2 E1	710 1	nuclear receptor subfamily 2 group E member 1	TLL TLX XTLL	6	Cytokine_Rec eptors
NR2 E3	100 02	nuclear receptor subfamily 2 group E member 3	ESCS PNR RNR RP37 rd7	15	Cytokine_Rec eptors
NR2 F1	702 5	nuclear receptor subfamily 2 group F member 1	BBOAS BBSOAS COUP- TFI COUPTF1 EAR- 3 EAR3 ERBAL3 SVP44 TCFCOUP1 TFC OUP1	5	Cytokine_Rec eptors
NR2 F2	702 6	nuclear receptor subfamily 2 group F member 2	ARP- 1 ARP1 CHTD4 COUPTF2 COUPTFB CO UPTFII NF-E3 SVP40 TCFCOUP2	15	Cytokine_Rec eptors
NR2	206	nuclear	EAR-2 EAR2 ERBAL2	19	Cytokine_Rec

F6	3	receptor subfamily 2 group F member 6			eptors
NR3 C1	290 8	nuclear receptor subfamily 3 group C member 1	GCCR GCR GCRST GR GRL	5	Cytokine_Rec eptors
NR3 C2	430 6	nuclear receptor subfamily 3 group C member 2	MCR MLR MR NR3C2VIT	4	Cytokine_Rec eptors
NR4 A1	316 4	nuclear receptor subfamily 4 group A member 1	GFRP1 HMR N10 NAK-1 NGFIB NP10 NUR77 TR3	12	Cytokine_Rec eptors
NR4 A2	492 9	nuclear receptor subfamily 4 group A member 2	HZF-3 NOT NURR1 RNR1 TINUR	2	Cytokine_Rec eptors
NR4 A3	801 3	nuclear receptor subfamily 4 group A member 3	CHN CSMF MINOR NOR1 TEC	9	Cytokine_Rec eptors
NR5 A1	251 6	nuclear receptor subfamily 5 group A member 1	AD4BP ELP FTZ1 FTZF1 POF7 SF-1 SF1 SPGF8 SRXX4 SRXY3 hSF-1	9	Cytokine_Rec eptors
NR5 A2	249 4	nuclear receptor subfamily 5 group A member 2	B1F B1F2 CPF FTF FTZ-F1 FTZ-F1beta LRH-1 LRH1 hB1F-2	1	Cytokine_Rec eptors
NR6 A1	264 9	nuclear receptor subfamily 6 group A member 1	CT150 GCNF GCNF1 NR61 RTR hGCNF hRTR	9	Cytokine_Rec eptors

NRP1	8829	neuropilin 1	BDCA4 CD304 NP1 NRP VEGF165R	10	Cytokine_Receptors
NRP2	8828	neuropilin 2	NP2 NPN2 PRO2714 VEGF165R2	2	Cytokine_Receptors
OGFR	11054	opioid growth factor receptor	-	20	Cytokine_Receptors
OPRD1	4985	opioid receptor delta 1	DOP DOR DOR1 OPRD	1	Cytokine_Receptors
OPRK1	4986	opioid receptor kappa 1	K-OR-1 KOP KOR KOR-1 KOR1 OPRK	8	Cytokine_Receptors
OPRL1	4987	opioid related nociceptin receptor 1	KOR-3 KOR3 NOCIR NOP NOPr OOR OPRL ORL1	20	Cytokine_Receptors
OPRM1	4988	opioid receptor mu 1	LMOR M-OR-1 MOP MOR MOR1 OPRM	6	Cytokine_Receptors
OSMR	9180	oncostatin M receptor	IL-31R-beta IL-31RB OSMRB OSMRbeta PLCA1	5	Cytokine_Receptors
OXR	5021	oxytocin receptor	OT-R	3	Cytokine_Receptors
PGR	5241	progesterone receptor	NR3C3 PR	11	Cytokine_Receptors
PGRMC2	10424	progesterone receptor membrane component 2	DG6 PMBP	4	Cytokine_Receptors
PLAUR	5329	plasminogen activator, urokinase receptor	CD87 U-PAR UPAR URKR	19	Cytokine_Receptors
PLXNA1	5361	plexin A1	NOV NOVP PLEXIN-A1 PLXN1	3	Cytokine_Receptors
PLXNA2	5362	plexin A2	OCT PLXN2	1	Cytokine_Receptors
PLX	555	plexin A3	6.3 HSSEXGENE PLXN3 PLXN4 XAP-6	X	Cytokine_Receptors

NA3	58				eptors
PLX NA4	915 84	plexin A4	FAYV2820 PLEXA4 PLXNA4A PLXNA4B PRO34003	7	Cytokine_Rec eptors
PLX NB1	536 4	plexin B1	PLEXIN-B1 PLXN5 SEP	3	Cytokine_Rec eptors
PLX NB2	236 54	plexin B2	MM1 Nbla00445 PLEXB2 dJ402G11.3	22	Cytokine_Rec eptors
PLX NB3	536 5	plexin B3	PLEXB3 PLEXR PLXN6	X	Cytokine_Rec eptors
PLX NC1	101 54	plexin C1	CD232 PLXN-C1 VESPR	12	Cytokine_Rec eptors
PLX ND1	231 29	plexin D1	PLEXD1	3	Cytokine_Rec eptors
PPA RA	546 5	peroxisom e proliferato r activated receptor alpha	NR1C1 PPAR PPARalpha hPPAR	22	Cytokine_Rec eptors
PPA RD	546 7	peroxisom e proliferato r activated receptor delta	FAAR NR1C2 NUC1 NUCI NUCII PPARB	6	Cytokine_Rec eptors
PPA RG	546 8	peroxisom e proliferato r activated receptor gamma	CIMT1 GLM1 NR1C3 PPARG1 PPARG2 PPARG5 PPARgamma	3	Cytokine_Rec eptors
PRL HR	283 4	prolactin releasing hormone receptor	GPR10 GR3 PrRPR	10	Cytokine_Rec eptors
PRL R	561 8	prolactin receptor	HPRL MFAB RI-PRLR hPRLrI	5	Cytokine_Rec eptors
PTA FR	572 4	platelet activating factor receptor	PAFR	1	Cytokine_Rec eptors
PTG DR	572 9	prostaglan din D2 receptor	AS1 ASRT1 DP DP1 PTGDR1	14	Cytokine_Rec eptors

PTG DS	573 0	prostaglan din D2 synthase	L- PGDS LPGDS PDS PGD2 PGDS PGDS2	9	Cytokine_Rec eptors
PTG ER1	573 1	prostaglan din E receptor 1	EP1	19	Cytokine_Rec eptors
PTG ER2	573 2	prostaglan din E receptor 2	EP2	14	Cytokine_Rec eptors
PTG ER3	573 3	prostaglan din E receptor 3	EP3 EP3-I EP3-II EP3-III EP3-IV EP3- VI EP3e PGE2-R Inc003875	1	Cytokine_Rec eptors
PTG ER4	573 4	prostaglan din E receptor 4	EP4 EP4R	5	Cytokine_Rec eptors
PTG FR	573 7	prostaglan din F receptor	FP	1	Cytokine_Rec eptors
PTH 1R	574 5	parathyroi d hormone 1 receptor	EKNS PFE PTHR PTHR1	3	Cytokine_Rec eptors
PTH 2R	574 6	parathyroi d hormone 2 receptor	PTHR2	2	Cytokine_Rec eptors
RAR A	591 4	retinoic acid receptor alpha	NR1B1 RAR	17	Cytokine_Rec eptors
RAR B	591 5	retinoic acid receptor beta	HAP MCOPS12 NR1B2 RARBeta1 RRB2	3	Cytokine_Rec eptors
RAR G	591 6	retinoic acid receptor gamma	NR1B3 RARC	12	Cytokine_Rec eptors
ROB O1	609 1	roundabo ut guidance receptor 1	DUTT1 SAX3	3	Cytokine_Rec eptors
ROB O2	609 2	roundabo ut guidance receptor 2	SAX3	3	Cytokine_Rec eptors

ROBO3	64221	roundabout guidance receptor 3	HGPPS HGPPS1 HGPS RBIG1 RIG1	11	Cytokine_Receptors
RORA	6095	RAR related orphan receptor A	IDDECA NR1F1 ROR1 ROR2 ROR3 RZR-ALPHA RZRA	15	Cytokine_Receptors
RORB	6096	RAR related orphan receptor B	EIG15 NR1F2 ROR-BETA RZR-BETA RZRB bA133M9.1	9	Cytokine_Receptors
RORC	6097	RAR related orphan receptor C	IMD42 NR1F3 RORG RZR-GAMMA RZRG TOR	1	Cytokine_Receptors
RXF1	59350	relaxin family peptide receptor 1	LGR7 RXFPR1	4	Cytokine_Receptors
RXF2	122042	relaxin family peptide receptor 2	GPR106 GREAT INSL3R LGR8 LGR8.1 RXFPR2	13	Cytokine_Receptors
RXF3	51289	relaxin family peptide receptor 3	GPCR135 RLN3R1 RXFPR3 SALPR	5	Cytokine_Receptors
RXRA	6256	retinoid X receptor alpha	NR2B1	9	Cytokine_Receptors
RXRB	6257	retinoid X receptor beta	DAUDI6 H-2RIIBP NR2B2 RCoR-1	6	Cytokine_Receptors
RXRG	6258	retinoid X receptor gamma	NR2B3 RXRC	1	Cytokine_Receptors
S1P1	1901	sphingosine-1-phosphate receptor 1	CD363 CHEDG1 D1S3362 ECGF1 EDG-1 EDG1 S1P1	1	Cytokine_Receptors
S1P2	9294	sphingosine-1-phosphate	AGR16 DFNB68 EDG-5 EDG5 Gpcr13 H218 LPB2 S1P2	19	Cytokine_Receptors

		receptor 2			
SCT R	634 4	secretin receptor	SR	2	Cytokine_Rec eptors
SDC 1	638 2	syndecan 1	CD138 SDC SYND1 syndecan	2	Cytokine_Rec eptors
SDC 2	638 3	syndecan 2	CD362 HSPG HSPG1 SYND2	8	Cytokine_Rec eptors
SDC 3	967 2	syndecan 3	SDCN SYND3	1	Cytokine_Rec eptors
SDC 4	638 5	syndecan 4	SYND4	20	Cytokine_Rec eptors
SOR T1	627 2	sortilin 1	Gp95 LDLCQ6 NT3 NTR3	1	Cytokine_Rec eptors
SST R1	675 1	somatostat in receptor 1	SRIF-2 SS-1-R SS1-R SS1R	14	Cytokine_Rec eptors
SST R2	675 2	somatostat in receptor 2	-	17	Cytokine_Rec eptors
SST R5	675 5	somatostat in receptor 5	SS-5-R	16	Cytokine_Rec eptors
ST2	676 1	-	-	11	Cytokine_Rec eptors
TAC R1	686 9	tachykinin receptor 1	NK1R NKIR SPR TAC1R	2	Cytokine_Rec eptors
TEK	701 0	TEK receptor tyrosine kinase	CD202B GLC3E TIE- 2 TIE2 VMCM VMCM1	9	Cytokine_Rec eptors
TGF BR1	704 6	transformi ng growth factor beta receptor 1	AAT5 ACVRLK4 ALK- 5 ALK5 ESS1 LDS1 LDS1A LDS2A MSSE SKR4 TBR-i TBRi TGFR-1 tbetaR-I	9	Cytokine_Rec eptors
TGF BR2	704 8	transformi ng growth factor beta receptor 2	AAT3 FAA3 LDS1B LDS2 LDS2B MFS2 R IIC TAAD2 TBR-ii TBRii TGFR- 2 TGFbeta-RII	3	Cytokine_Rec eptors
TGF BR3	704 9	transformi ng growth factor beta receptor 3	BGCAN betaglycan	1	Cytokine_Rec eptors
THR A	706 7	thyroid hormone	AR7 CHNG6 EAR7 ERB-T- 1 ERBA ERBA1 NR1A1 THRA1 THRA2 c	17	Cytokine_Rec eptors

		receptor alpha	-ERBA-1		
THR B	7068	thyroid hormone receptor beta	C-ERBA-2 C-ERBA-BETA ERBA2 GRTH NR1A2 PRTH THR1 THRB1 THRB2	3	Cytokine_Receptors
TIE1	7075	tyrosine kinase with immunoglobulin like and EGF like domains 1	JTK14 TIE	1	Cytokine_Receptors
TNFRSF10A	8797	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR-1 TRAILR1	8	Cytokine_Receptors
TNFRSF10B	8795	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAILR2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8	Cytokine_Receptors
TNFRSF10C	8794	TNF receptor superfamily member 10c	CD263 DCR1 DCR1-TNFR LIT TRAILR3 TRAILR3 TRID	8	Cytokine_Receptors
TNFRSF10D	8793	TNF receptor superfamily member 10d	CD264 DCR2 TRAILR4 TRAILR4 TRUNDD	8	Cytokine_Receptors
TNFRSF11A	8792	TNF receptor superfamily member 11a	CD265 FEO LOH18CR1 ODFR OFE OPTB7 OSTS PDB2 RANK TRANCER	18	Cytokine_Receptors
TNFRSF12A	51330	TNF receptor superfamily member 12A	CD266 FN14 TWEAKR	16	Cytokine_Receptors
TNFRSF17	234	TNFRSF17	CD267 CVID CVID2 IGAD2 RYZN TACI	17	Cytokine_Receptors

RSF 13B	95	receptor superfamil y member 13B	TNFRSF14B		eptors
TNF RSF 13C	115 650	TNF receptor superfamil y member 13C	BAFF- R BAFFR BROMIX CD268 CVID4 prolixi n	22	Cytokine_Rec eptors
TNF RSF 14	876 4	TNF receptor superfamil y member 14	ATAR CD270 HVEA HVEM LIGHTR TR2	1	Cytokine_Rec eptors
TNF RSF 17	608	TNF receptor superfamil y member 17	BCM BCMA CD269 TNFRSF13A	16	Cytokine_Rec eptors
TNF RSF 18	878 4	TNF receptor superfamil y member 18	AITR CD357 ENERGEN GITR GITR-D	1	Cytokine_Rec eptors
TNF RSF 19	555 04	TNF receptor superfamil y member 19	TAJ TAJ-alpha TRADE TROY	13	Cytokine_Rec eptors
TNF RSF 1A	713 2	TNF receptor superfamil y member 1A	CD120a FPF TBP1 TNF-R TNF-R- II TNF- R55 TNFAR TNFR1 TNFR55 TNFR60 p5 5 p55-R p60	12	Cytokine_Rec eptors
TNF RSF 1B	713 3	TNF receptor superfamil y member 1B	CD120b TBPII TNF-R-III TNF- R75 TNFBR TNFR1B TNFR2 TNFR80 p7 5 p75TNFR	1	Cytokine_Rec eptors
TNF RSF 21	272 42	TNF receptor superfamil y member 21	BM-018 CD358 DR6	6	Cytokine_Rec eptors

TNF RSF 25	871 8	TNF receptor superfamil y member 25	APO- 3 DDR3 DR3 GEF720 LARD PLEKHG5 T NFRSF12 TR3 TRAMP WSL-1 WSL-LR	1	Cytokine_Rec eptors
TNF RSF 4	729 3	TNF receptor superfamil y member 4	ACT35 CD134 IMD16 OX40 TXGP1L	1	Cytokine_Rec eptors
TNF RSF 6B	877 1	TNF receptor superfamil y member 6b	DCR3 DJ583P15.1.1 M68 M68E TR6	20	Cytokine_Rec eptors
TNF RSF 8	943	TNF receptor superfamil y member 8	CD30 D1S166E Ki-1	1	Cytokine_Rec eptors
TNF RSF 9	360 4	TNF receptor superfamil y member 9	4-1BB CD137 CDw137 ILA	1	Cytokine_Rec eptors
TRH R	720 1	thyrotropi n releasing hormone receptor	CHNG7 TRH-R	8	Cytokine_Rec eptors
TSH R	725 3	thyroid stimulating hormone receptor	CHNG1 LGR3 hTSHR-I	14	Cytokine_Rec eptors
TUB B3	103 81	tubulin beta 3 class III	CDCBM CDCBM1 CFEOM3 CFEOM3A FEOM3 TUBB4 beta-4	16	Cytokine_Rec eptors
VDR	742 1	vitamin D receptor	NR111 PPP1R163	12	Cytokine_Rec eptors
VIP R1	743 3	vasoactive intestinal peptide receptor 1	HVR1 III PACAP-R-2 PACAP- R2 RDC1 V1RG VAPC1 VIP-R- 1 VIPR VIRG VPAC1 VPAC1R VPCAP1R	3	Cytokine_Rec eptors
VIP R2	743 4	vasoactive intestinal	C16DUPq36.3 DUP7q36.3 PACAP-R- 3 PACAP-R3 VIP-R-	7	Cytokine_Rec eptors

		peptide receptor 2	2 VPAC2 VPAC2R VPCAP2R		
XCR1	2829	X-C motif chemokine receptor 1	CCXCR1 GPR5	3	Cytokine_Receptors
IFNA10	3446	interferon alpha 10	IFN-alphaC	9	Interferons
IFNA13	3447	interferon alpha 13	-	9	Interferons
IFNA14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9	Interferons
IFNA16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9	Interferons
IFNA17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9	Interferons
IFNA2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9	Interferons
IFNA21	3452	interferon alpha 21	IFN-alphaI leIF F leIF-F	9	Interferons
IFNA4	3441	interferon alpha 4	IFN-alpha4a INFA4	9	Interferons
IFNA5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9	Interferons
IFNA6	3443	interferon alpha 6	IFN-alphaK	9	Interferons
IFNA7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9	Interferons
IFNA8	3445	interferon alpha 8	IFN-alphaB	9	Interferons
IFNB1	3456	interferon beta 1	IFB IFF IFN-beta IFNB	9	Interferons
IFNE	338376	interferon epsilon	IFN-E IFNE1 IFNT1 INFE1 PRO655	9	Interferons
IFNG	3458	interferon gamma	IFG IFI	12	Interferons
IFNK	56832	interferon kappa	IFNT1 INFE1	9	Interferons
IFNW1	3467	interferon omega 1	-	9	Interferons
IFNAR2	3455	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21	Interferon_Receptor

IFN GR1	3459	interferon gamma receptor 1	CD119 IFNGR IMD27A IMD27B	6	Interferon_Receptor
IFN GR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21	Interferon_Receptor
IL11	3589	interleukin 11	AGIF IL-11	19	Interleukins
IL12 A	3592	interleukin 12A	CLMF IL-12A NFSK NKSF1 P35	3	Interleukins
IL12 B	3593	interleukin 12B	CLMF CLMF2 IL-12B IMD28 IMD29 NKSF NKSF2	5	Interleukins
IL13	3596	interleukin 13	IL-13 P600	5	Interleukins
IL15	3600	interleukin 15	IL-15	4	Interleukins
IL16	3603	interleukin 16	LCF NIL16 PRIL16 prIL-16	15	Interleukins
IL17 A	3605	interleukin 17A	CTLA-8 CTLA8 IL-17 IL-17A IL17	6	Interleukins
IL17 B	27190	interleukin 17B	IL-17B IL-20 NIRF ZCYTO7	5	Interleukins
IL17 C	27189	interleukin 17C	CX2 IL-17C	16	Interleukins
IL17 D	53342	interleukin 17D	IL-17D	13	Interleukins
IL17 F	112744	interleukin 17F	CANDF6 IL-17F ML-1 ML1	6	Interleukins
IL18	3606	interleukin 18	IGIF IL-18 IL-1g IL1F4	11	Interleukins
IL19	29949	interleukin 19	IL-10C MDA1 NG.1 ZMDA1	1	Interleukins
IL1A	3552	interleukin 1 alpha	IL-1 alpha IL-1A IL1 IL1-ALPHA IL1F1	2	Interleukins
IL1B	3553	interleukin 1 beta	IL-1 IL1-BETA IL1F2 IL1beta	2	Interleukins
IL1F 10	84639	interleukin 1 family member 10	FIL1-theta FKSG75 IL-1HY2 IL-38 IL1-theta IL1HY2	2	Interleukins
IL36 RN	26525	interleukin 36 receptor antagonist	FIL1 FIL1(DELTA) FIL1D IL-36Ra IL1F5 IL1HY1 IL1L1 IL1RP3 IL36RA PSORP PSORS14	2	Interleukins

IL36 A	271 79	interleukin 36 alpha	FIL1 FIL1(EPSILON) FIL1E IL-1F6 IL1(EPSILON) IL1F6	2	Interleukins
IL37	271 78	interleukin 37	FIL1 FIL1(ZETA) FIL1Z IL-1F7 IL-1H IL-1H4 IL-1RP1 IL-37 IL1F7 IL1H4 IL1RP1	2	Interleukins
IL36 B	271 77	interleukin 36 beta	FIL1 FIL1-(ETA) FIL1H FILI-(ETA) IL-1F8 IL-1H2 IL1-ETA IL1F8 IL1H2	2	Interleukins
IL36 G	563 00	interleukin 36 gamma	IL-1F9 IL-1H1 IL-1RP2 IL1E IL1F9 IL1H1 IL1RP2	2	Interleukins
IL1R N	355 7	interleukin 1 receptor antagonist	DIRA CIL-1RA IL-1RN IL-1ra IL-1ra3 IL1F3 IL1RA IRAP MVCD4	2	Interleukins
IL2	355 8	interleukin 2	IL-2 TCGF lymphokine	4	Interleukins
IL20	506 04	interleukin 20	IL-20 IL10D ZCYTO10	1	Interleukins
IL21	590 67	interleukin 21	CVID11 IL-21 Za11	4	Interleukins
IL22	506 16	interleukin 22	IL-21 IL-22 IL-D110 IL-TIF ILTIF TIFIL-23 TIFa zcyto18	12	Interleukins
IL23 A	515 61	interleukin 23 subunit alpha	IL-23 IL-23A IL23P19 P19 SGRF	12	Interleukins
IL24	110 09	interleukin 24	C49A FISP IL10B MDA7 MOB5 ST16	1	Interleukins
IL25	648 06	interleukin 25	IL17E	14	Interleukins
IL26	558 01	interleukin 26	AK155 IL-26	12	Interleukins
IL27	246 778	interleukin 27	IL-27 IL-27A IL27A IL27p28 IL30 p28	16	Interleukins
IFNL 2	282 616	interferon lambda 2	IL-28A IL28A	19	Interleukins
IFNL 3	282 617	interferon lambda 3	IFN-lambda-3 IFN-lambda-4 IL-28B IL-28C IL28B IL28C	19	Interleukins
IFNL 1	282 618	interferon lambda 1	IL-29 IL29	19	Interleukins
IL3	356 2	interleukin 3	IL-3 MCGF MULTI-CSF	5	Interleukins
IL31	386 653	interleukin 31	IL-31	12	Interleukins
IL32	923 5	interleukin 32	IL-32alpha IL-32beta IL-32delta IL-32gamma NK4 TAIF TAIFa TAIFb TAIFc TAIFd	16	Interleukins
IL33	908	interleukin	C9orf26 DVS27 IL1F11 NF-	9	Interleukins

	65	33	HEV NFEHEV		
IL34	146 433	interleukin 34	C16orf77 IL-34	16	Interleukins
IL4	356 5	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5	Interleukins
IL5	356 7	interleukin 5	EDF IL-5 TRF	5	Interleukins
IL6	356 9	interleukin 6	BSF-2 BSF2 CDF HGF HSF IFN-beta-2 IFNB2 IL-6	7	Interleukins
IL6S T	357 2	interleukin 6 signal transducer	CD130 CDW130 GP130 HIES4 IL-6RB sGP130	5	Interleukins
IL7	357 4	interleukin 7	IL-7	8	Interleukins
CXC L8	357 6	C-X-C motif chemokine ligand 8	GCP-1 GCP1 IL8 LECT LUCT LYNAP MDNCF MONAP NAF NAP-1 NAP1 SCYB8	4	Interleukins
IL9	357 8	interleukin 9	HP40 IL-9 P40	5	Interleukins
TXL NA	200 081	taxilin alpha	IL14 TXLN	1	Interleukins
IL10 RA	358 7	interleukin 10 receptor subunit alpha	CD210 CD210a CDW210A HIL-10R IL-10R1 IL10R	11	Interleukins_R eceptor
IL10 RB	358 8	interleukin 10 receptor subunit beta	CDW210B CRF2-4 CRFB4 D21S58 D21S66 IL-10R2	21	Interleukins_R eceptor
IL11 RA	359 0	interleukin 11 receptor subunit alpha	CRSDA	9	Interleukins_R eceptor
IL12 RB1	359 4	interleukin 12 receptor subunit beta 1	CD212 IL-12R-BETA1 IL12RB IMD30	19	Interleukins_R eceptor
IL12 RB2	359 5	interleukin 12	-	1	Interleukins_R eceptor

		receptor subunit beta 2			
IL13 RA1	3597	interleukin 13 receptor subunit alpha 1	CD213A1 CT19 IL-13Ra NR4	X	Interleukins_Receptor
IL13 RA2	3598	interleukin 13 receptor subunit alpha 2	CD213A2 CT19 IL-13R IL13BP	X	Interleukins_Receptor
IL15 RA	3601	interleukin 15 receptor subunit alpha	CD215	10	Interleukins_Receptor
IL2R B	3560	interleukin 2 receptor subunit beta	CD122 IL15RB IMD63 P70-75	22	Interleukins_Receptor
IL17 RA	23765	interleukin 17 receptor A	CANDF5 CD217 CDw217 IL-17RA IL17R IMD51 hIL-17R	22	Interleukins_Receptor
IL17 RB	55540	interleukin 17 receptor B	CRL4 EVI27 IL17BR IL17RH1	3	Interleukins_Receptor
IL17 RC	84818	interleukin 17 receptor C	CANDF9 IL17-RL IL17RL	3	Interleukins_Receptor
IL17 RD	54756	interleukin 17 receptor D	HH18 IL-17RD IL17RLM SEF	3	Interleukins_Receptor
IL17 RE	132014	interleukin 17 receptor E	-	3	Interleukins_Receptor
IL18 R1	8809	interleukin 18 receptor 1	CD218a CDw218a IL-18R-alpha IL-18Ralpha IL-1Rrp IL18RA IL18Ralpha2 IL1RRP	2	Interleukins_Receptor
IL18 RAP	8807	interleukin 18 receptor accessory	ACPL CD218b CDw218b IL-18R-beta IL-18RAcP IL-18Rbeta IL-1R-7 IL-1R7 IL-1RAcPL IL18RB	2	Interleukins_Receptor

		protein			
IL1R1	3554	interleukin 1 receptor type 1	CD121A D2S1473 IL-1R-alpha IL1R IL1RA P80	2	Interleukins_Receptor
IL1R2	7850	interleukin 1 receptor type 2	CD121b CDw121b IL-1R-2 IL-1RT-2 IL-1RT2 IL1R2c IL1RB	2	Interleukins_Receptor
IL1RAP	3556	interleukin 1 receptor accessory protein	C3orf13 IL-1RAcP IL1R3	3	Interleukins_Receptor
IL1RL1	9173	interleukin 1 receptor like 1	DER4 FIT-1 IL33R ST2 ST2L ST2V T1	2	Interleukins_Receptor
IL1RL2	8808	interleukin 1 receptor like 2	IL-1Rrp2 IL-36R IL1R-rp2 IL1RRP2	2	Interleukins_Receptor
IL20RA	53832	interleukin 20 receptor subunit alpha	CRF2-8 IL-20R-alpha IL-20R1 IL-20RA	6	Interleukins_Receptor
IL20RB	53833	interleukin 20 receptor subunit beta	DIRS1 FNDC6 IL-20R2	3	Interleukins_Receptor
IL21R	50615	interleukin 21 receptor	CD360 IMD56 NILR	16	Interleukins_Receptor
IL22RA1	58985	interleukin 22 receptor subunit alpha 1	CRF2-9 IL22R IL22R1	1	Interleukins_Receptor
IL22RA2	116379	interleukin 22 receptor subunit alpha 2	CRF2-10 CRF2-S1 CRF2X IL-22BP IL-22R-alpha-2 IL-22RA2 ZCYTOR16	6	Interleukins_Receptor
IL23R	149233	interleukin 23 receptor	-	1	Interleukins_Receptor
IL27	946	interleukin	CRL1 IL-	19	Interleukins_R

RA	6	27 receptor subunit alpha	27RA IL27R TCCR WSX1 zcytor1		receptor
IFNL R1	163 702	interferon lambda receptor 1	CRF2/12 IFNLR IL-28R1 IL28RA LICR2	1	Interleukins_R receptor
IL2R A	355 9	interleukin 2 receptor subunit alpha	CD25 IDDM10 IL2R IMD41 TCGFR p55	10	Interleukins_R receptor
IL2R B	356 0	interleukin 2 receptor subunit beta	CD122 IL15RB IMD63 P70-75	22	Interleukins_R receptor
IL2R G	356 1	interleukin 2 receptor subunit gamma	CD132 CIDX IL- 2RG IMD4 P64 SCIDX SCIDX1	X	Interleukins_R receptor
IL31 RA	133 396	interleukin 31 receptor A	CRL CRL3 GLM-R GLMR GPL IL- 31RA PLCA2 PRO21384 hGLM-R	5	Interleukins_R receptor
IL3R A	356 3	interleukin 3 receptor subunit alpha	CD123 IL3R IL3RAY IL3RX IL3RY hIL- 3Ra	X Y	Interleukins_R receptor
IL4R	356 6	interleukin 4 receptor	CD124 IL-4RA IL4RA	16	Interleukins_R receptor
IL5R A	356 8	interleukin 5 receptor subunit alpha	CD125 CDw125 HSIL5R3 IL5R	3	Interleukins_R receptor
IL6R	357 0	interleukin 6 receptor	CD126 IL-6R-1 IL- 6RA IL6Q IL6RA IL6RQ gp80	1	Interleukins_R receptor
IL7R	357 5	interleukin 7 receptor	CD127 CDW127 IL-7R- alpha IL7RA ILRA	5	Interleukins_R receptor
CXC R1	357 7	C-X-C motif chemokine receptor 1	C-C C-C-CKR- 1 CD128 CD181 CDw128a CKR- 1 CMKAR1 IL8R1 IL8RA IL8RBA	2	Interleukins_R receptor
CXC R2	357 9	C-X-C motif chemokine receptor 2	CD182 CDw128b CMKAR2 IL8R2 IL8RA IL8RB	2	Interleukins_R receptor

IL9R	358 1	interleukin 9 receptor	CD129 IL-9R	X Y	Interleukins_R eceptor
ST2	676 1	-	-	11	Interleukins_R eceptor
HLA -A	310 5	major histocomp atibility complex, class I, A	HLAA	6	NaturalKiller_ Cell_Cytotoxi city
HLA -B	310 6	major histocomp atibility complex, class I, B	AS B-4901 HLAB	6	NaturalKiller_ Cell_Cytotoxi city
HLA -C	310 7	major histocomp atibility complex, class I, C	D6S204 HLA-JY3 HLAC HLC- C MHC PSORS1	6	NaturalKiller_ Cell_Cytotoxi city
HLA -E	313 3	major histocomp atibility complex, class I, E	HLA-6.2 QA1	6	NaturalKiller_ Cell_Cytotoxi city
HLA -G	313 5	major histocomp atibility complex, class I, G	MHC-G	6	NaturalKiller_ Cell_Cytotoxi city
KIR3 DL1	381 1	killer cell immunogl obulin like receptor, three Ig domains and long cytoplasmic tail 1	CD158E1 KIR KIR3DL1/S1 NKAT- 3 NKAT3 NKB1 NKB1B	19	NaturalKiller_ Cell_Cytotoxi city
KIR3 DL2	381 2	killer cell immunogl obulin like receptor, three Ig domains	3DL2 CD158K KIR-3DL2 NKAT- 4 NKAT4 NKAT4B p140	19	NaturalKiller_ Cell_Cytotoxi city

		and long cytoplasmic tail 2			
KIR2 DL1	380 2	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	NaturalKiller_Cell_Cytotoxicity
KIR2 DL2	380 3	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 2	CD158B1 CD158b NKAT-6 NKAT6 p58.2	19	NaturalKiller_Cell_Cytotoxicity
KIR2 DL3	380 4	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	NaturalKiller_Cell_Cytotoxicity
KIR2 DL4	380 5	killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4	CD158D G9P KIR-103AS KIR-2DL4 KIR103 KIR103AS	19	NaturalKiller_Cell_Cytotoxicity
KIR2 DL5 A	572 92	killer cell immunoglobulin like receptor, two Ig	CD158F KIR2DL5 KIR2DL5.1 KIR2DL5.3	19	NaturalKiller_Cell_Cytotoxicity

		domains and long cytoplasmic tail 5A			
KLR C1	3821	killer cell lectin like receptor C1	CD159A NKG2 NKG2A	12	NaturalKiller_Cell_Cytotoxicity
KLR C2	3822	killer cell lectin like receptor C2	CD159c NKG2-C NKG2C	12	NaturalKiller_Cell_Cytotoxicity
KLR C3	3823	killer cell lectin like receptor C3	NKG2-E NKG2E	12	NaturalKiller_Cell_Cytotoxicity
KLR D1	3824	killer cell lectin like receptor D1	CD94	12	NaturalKiller_Cell_Cytotoxicity
PTP N6	5777	protein tyrosine phosphatase non-receptor type 6	HCP HCPH HPTP1C PTP-1C SH-PTP1 SHP-1 SHP-1L SHP1	12	NaturalKiller_Cell_Cytotoxicity
PTP N11	5781	protein tyrosine phosphatase non-receptor type 11	BPTP3 CFC JMML METCDS NS1 PTP-1D PTP2C SH-PTP2 SH-PTP3 SHP2	12	NaturalKiller_Cell_Cytotoxicity
ICA M1	3383	intercellular adhesion molecule 1	BB2 CD54 P3.58	19	NaturalKiller_Cell_Cytotoxicity
ICA M2	3384	intercellular adhesion molecule 2	CD102	17	NaturalKiller_Cell_Cytotoxicity
ITG AL	3683	integrin subunit alpha L	CD11A LFA-1 LFA1A	16	NaturalKiller_Cell_Cytotoxicity
ITG B2	3689	integrin subunit beta 2	CD18 LAD LCAMB LFA-1 MAC-1 MF17 MF17	21	NaturalKiller_Cell_Cytotoxicity

PTK 2B	218 5	protein tyrosine kinase 2 beta	CADTK CAKB FADK2 FAK2 PKB PTK PY K2 RAFTK	8	NaturalKiller_ Cell_Cytotoxi city
VAV 3	104 51	vav guanine nucleotide exchange factor 3	-	1	NaturalKiller_ Cell_Cytotoxi city
VAV 1	740 9	vav guanine nucleotide exchange factor 1	VAV	19	NaturalKiller_ Cell_Cytotoxi city
VAV 2	741 0	vav guanine nucleotide exchange factor 2	VAV-2	9	NaturalKiller_ Cell_Cytotoxi city
RAC 1	587 9	Rac family small GTPase 1	MIG5 MRD48 Rac-1 TC-25 p21-Rac1	7	NaturalKiller_ Cell_Cytotoxi city
RAC 2	588 0	Rac family small GTPase 2	EN-7 Gx HSPC022 p21-Rac2	22	NaturalKiller_ Cell_Cytotoxi city
RAC 3	588 1	Rac family small GTPase 3	-	17	NaturalKiller_ Cell_Cytotoxi city
PAK 1	505 8	p21 (RAC1) activated kinase 1	IDDMSSD PAKalpha alpha-PAK p65- PAK	11	NaturalKiller_ Cell_Cytotoxi city
MA P2K 1	560 4	mitogen- activated protein kinase kinase 1	CFC3 MAPKK1 MEK1 MKK1 PRKMK1	15	NaturalKiller_ Cell_Cytotoxi city
MA P2K 2	560 5	mitogen- activated protein kinase kinase 2	CFC4 MAPKK2 MEK2 MKK2 PRKMK2	19	NaturalKiller_ Cell_Cytotoxi city
MA PK1	559 4	mitogen- activated protein	ERK ERK- 2 ERK2 ERT1 MAPK2 P42MAPK PRKM1 PRKM2 p38 p40 p41 p41mapk p42-	22	NaturalKiller_ Cell_Cytotoxi city

		kinase 1	MAPK		
MA PK3	559 5	mitogen- activated protein kinase 3	ERK- 1 ERK1 ERT2 HS44KDAP HUMKER1A P 44ERK1 P44MAPK PRKM3 p44- ERK1 p44-MAPK	16	NaturalKiller_ Cell_Cytotoxi city
TNF	712 4	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6	NaturalKiller_ Cell_Cytotoxi city
CSF 2	143 7	colony stimulating factor 2	CSF GMCSF	5	NaturalKiller_ Cell_Cytotoxi city
IFN G	345 8	interferon gamma	IFG IFI	12	NaturalKiller_ Cell_Cytotoxi city
KIR2 DS1	380 6	killer cell immunogl obulin like receptor, two Ig domains and short cytoplasmic tail 1	CD158H CD158a p50.1	19	NaturalKiller_ Cell_Cytotoxi city
KIR2 DS3	380 8	killer cell immunogl obulin like receptor, two Ig domains and short cytoplasmic tail 3	NKAT7	19	NaturalKiller_ Cell_Cytotoxi city
KIR2 DS4	380 9	killer cell immunogl obulin like receptor, two Ig domains and short cytoplasmic tail 4	CD158I KIR- 2DS4 KIR1D KIR412 KKA3 NKAT- 8 NKAT8	19	NaturalKiller_ Cell_Cytotoxi city
KIR2 DS5	381 0	killer cell immunogl obulin like	CD158G NKAT9	19	NaturalKiller_ Cell_Cytotoxi city

		receptor, two Ig domains and short cytoplasmic tail 5			
NCR 2	943 6	natural cytotoxicity triggering receptor 2	CD336 LY95 NK- p44 NKP44 dJ149M18.1	6	NaturalKiller_ Cell_Cytotoxicity
TYR OBP	730 5	transmembrane immune signaling adaptor TYROBP	DAP12 KARAP PLOSL PLOSL1	19	NaturalKiller_ Cell_Cytotoxicity
LCK	393 2	LCK proto- oncogene, Src family tyrosine kinase	IMD22 LSK YT16 p56lck pp58lck	1	NaturalKiller_ Cell_Cytotoxicity
FCG R3A	221 4	Fc fragment of IgG receptor IIIa	CD16 CD16A FCG3 FCGR3 FCGRIII FCR- 10 FCRIII FCRIIIA IGFR3 IMD20	1	NaturalKiller_ Cell_Cytotoxicity
FCG R3B	221 5	Fc fragment of IgG receptor IIIb	CD16 CD16A CD16b FCG3 FCGR3 FCG R3A FCR-10 FCRIII FCRIIIb	1	NaturalKiller_ Cell_Cytotoxicity
NCR 1	943 7	natural cytotoxicity triggering receptor 1	CD335 LY94 NK-p46 NKP46	19	NaturalKiller_ Cell_Cytotoxicity
NCR 3	259 197	natural cytotoxicity triggering receptor 3	1C7 CD337 LY117 MALS NKp30	6	NaturalKiller_ Cell_Cytotoxicity
FCE R1G	220 7	Fc fragment	FCRG	1	NaturalKiller_ Cell_Cytotoxicity

		of IgE receptor Ig			city
CD247	919	CD247 molecule	CD3-ZETA CD3H CD3Q CD3Z IMD25 T3Z TCRZ	1	NaturalKiller_Cell_Cytotoxicity
ZAP70	7535	zeta chain of T cell receptor associated protein kinase 70	ADMIO2 IMD48 SRK STCD STD TZK ZAP-70	2	NaturalKiller_Cell_Cytotoxicity
SYK	6850	spleen associated tyrosine kinase	p72-Syk	9	NaturalKiller_Cell_Cytotoxicity
LCP2	3937	lymphocyte cytosolic protein 2	SLP-76 SLP76	5	NaturalKiller_Cell_Cytotoxicity
LAT	27040	linker for activation of T cells	IMD52 LAT1 pp36	16	NaturalKiller_Cell_Cytotoxicity
PLCG1	5335	phospholipase C gamma 1	NCKAP3 PLC-II PLC1 PLC148 PLCgamma1	20	NaturalKiller_Cell_Cytotoxicity
PLCG2	5336	phospholipase C gamma 2	APLAID FCAS3 PLC-IV PLC-gamma-2	16	NaturalKiller_Cell_Cytotoxicity
SH3BP2	6452	SH3 domain binding protein 2	3BP-2 3BP2 CRBM CRPM RES4-23	4	NaturalKiller_Cell_Cytotoxicity
PIK3CA	5290	phosphatidylinositol -4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3	NaturalKiller_Cell_Cytotoxicity
PIK3CB	5291	phosphatidylinositol -4,5-bisphosph	P110BETA PI3K PI3KBETA PIK3C1	3	NaturalKiller_Cell_Cytotoxicity

		ate 3-kinase catalytic subunit beta			
PIK3 CD	5293	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	APDS IMD14 P110DELTA PI3K p110D	1	NaturalKiller_Cell_Cytotoxicity
PIK3 CG	5294	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3 p110gamma p120-PI3K	7	NaturalKiller_Cell_Cytotoxicity
PIK3 R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038115Rik FOAP-2 P101-PI3K p101	17	NaturalKiller_Cell_Cytotoxicity
PIK3 R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD36 p85 p85-ALPHA	5	NaturalKiller_Cell_Cytotoxicity
PIK3 R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85B p85 p85-BETA	19	NaturalKiller_Cell_Cytotoxicity
PIK3 R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1	NaturalKiller_Cell_Cytotoxicity
FYN	253	FYN	SLK SYN p59-FYN	6	NaturalKiller_

	4	proto-oncogene, Src family tyrosine kinase			Cell_Cytotoxicity
SHC2	25759	SHC adaptor protein 2	SCK SHCB SLI	19	NaturalKiller_Cell_Cytotoxicity
SHC4	399694	SHC adaptor protein 4	RaLP SHCD	15	NaturalKiller_Cell_Cytotoxicity
SHC3	53358	SHC adaptor protein 3	N-Shc NSHC RAI SHCC	9	NaturalKiller_Cell_Cytotoxicity
SHC1	6464	SHC adaptor protein 1	SHC SHCA	1	NaturalKiller_Cell_Cytotoxicity
GRB2	2885	growth factor receptor bound protein 2	ASH EGFRBP-GRB2 Grb3-3 MST084 MSTP084 NCKAP2	17	NaturalKiller_Cell_Cytotoxicity
SOS1	6654	SOS Ras/Rac guanine nucleotide exchange factor 1	GF1 GGF1 GINGF HGF NS4 SOS-1	2	NaturalKiller_Cell_Cytotoxicity
SOS2	6655	SOS Ras/Rho guanine nucleotide exchange factor 2	NS9 SOS-2	14	NaturalKiller_Cell_Cytotoxicity
HRAS	3265	HRas proto-oncogene, GTPase	C-BAS/HAS C-H-RAS C-HA-RAS1 CTLO H-RASIDX HAMS HRAS1 RASH1 p21ras	11	NaturalKiller_Cell_Cytotoxicity
KRAS	3845	KRAS proto-oncogene, GTPase	C-K-RAS C-K-RAS CFC2 K-RAS2A K-RAS2B K-RAS4A K-RAS4B K-Ras K-Ras2 KI-RAS KRAS1 KRAS2 NS NS3 OES RALD RASK2 c-Ki-ras c-Ki-ras2	12	NaturalKiller_Cell_Cytotoxicity
NRAS	489	NRAS	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1	NaturalKiller_Cell_Cytotoxicity

S	3	proto-oncogene, GTPase			Cell_Cytotoxicity
ARAF	369	A-Raf proto-oncogene, serine/threonine kinase	A-RAF ARAF1 PKS2 RAFA1	X	NaturalKiller_Cell_Cytotoxicity
BRAF	673	B-Raf proto-oncogene, serine/threonine kinase	B-RAF1 B-raf BRAF1 NS7 RAFB1	7	NaturalKiller_Cell_Cytotoxicity
RAF1	5894	Raf-1 proto-oncogene, serine/threonine kinase	CMD1NN CRAF NS5 Raf-1 c-Raf	3	NaturalKiller_Cell_Cytotoxicity
MICA	100507436	MHC class I polypeptide-related sequence A	MIC-A PERB11.1	6	NaturalKiller_Cell_Cytotoxicity
MICB	4277	MHC class I polypeptide-related sequence B	PERB11.2	6	NaturalKiller_Cell_Cytotoxicity
ULBP3	79465	UL16 binding protein 3	N2DL-3 NKG2DL3 RAET1N	6	NaturalKiller_Cell_Cytotoxicity
ULBP2	80328	UL16 binding protein 2	ALCAN-alpha N2DL2 NKG2DL2 RAET1H RAET1L	6	NaturalKiller_Cell_Cytotoxicity
ULBP1	80329	UL16 binding protein 1	N2DL-1 NKG2DL1 RAET1I	6	NaturalKiller_Cell_Cytotoxicity
KLRK1	22914	killer cell lectin like	CD314 D12S2489E KLR NKG2-D NKG2D	12	NaturalKiller_Cell_Cytotoxicity

		receptor K1			city
HCS T	108 70	hematopoietic cell signal transducer	DAP10 KAP10 PIK3AP	19	NaturalKiller_ Cell_Cytotoxicity
CD4 8	962	CD48 molecule	BCM1 BLAST BLAST1 MEM- 102 SLAMF2 hCD48 mCD48	1	NaturalKiller_ Cell_Cytotoxicity
CD2 44	517 44	CD244 molecule	2B4 NAIL NKR2B4 Nmrk SLAMF4	1	NaturalKiller_ Cell_Cytotoxicity
PPP 3CA	553 0	protein phosphatase 3 catalytic subunit alpha	ACCIID CALN CALNA CALNA1 CCN1 C NA1 IECEE IECEE1 PPP2B	4	NaturalKiller_ Cell_Cytotoxicity
PPP 3CB	553 2	protein phosphatase 3 catalytic subunit beta	CALNA2 CALNB CNA2 PP2Bbeta	10	NaturalKiller_ Cell_Cytotoxicity
PPP 3CC	553 3	protein phosphatase 3 catalytic subunit gamma	CALNA3 CNA3 PP2Bgamma	8	NaturalKiller_ Cell_Cytotoxicity
CHP 1	112 61	calcineurin like EF- hand protein 1	CHP SLC9A1BP SPAX9 Sid470p p22 p2 4	15	NaturalKiller_ Cell_Cytotoxicity
PPP 3R1	553 4	protein phosphatase 3 regulatory subunit B, alpha	CALNB1 CNB CNB1	2	NaturalKiller_ Cell_Cytotoxicity
PPP 3R2	553 5	protein phosphatase 3 regulatory	PPP3RL	9	NaturalKiller_ Cell_Cytotoxicity

		subunit B, beta			
CHP2	63928	calcineurin like EF-hand protein 2	-	16	NaturalKiller_Cell_Cytotoxicity
NFA T5	10725	nuclear factor of activated T cells 5	NF-AT5 NFATL1 NFATZ OREBP TONEBP	16	NaturalKiller_Cell_Cytotoxicity
NFA TC1	4772	nuclear factor of activated T cells 1	NF-ATC NF-ATc1.2 NFAT2 NFATc	18	NaturalKiller_Cell_Cytotoxicity
NFA TC2	4773	nuclear factor of activated T cells 2	NFAT1 NFATP	20	NaturalKiller_Cell_Cytotoxicity
NFA TC3	4775	nuclear factor of activated T cells 3	NF-AT4c NFAT4 NFATX	16	NaturalKiller_Cell_Cytotoxicity
NFA TC4	4776	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3	14	NaturalKiller_Cell_Cytotoxicity
PRK CA	5578	protein kinase C alpha	AAG6 PKC-alpha PKCA PKCI+/- PKCalpha PRKACA	17	NaturalKiller_Cell_Cytotoxicity
PRK CB	5579	protein kinase C beta	PKC-beta PKCB PKCI(2) PKCbeta PRKCB1 PRKCB2	16	NaturalKiller_Cell_Cytotoxicity
PRK CG	5582	protein kinase C gamma	PKC-gamma PKCC PKCG PKCI(3) PKCgamma SCA14	19	NaturalKiller_Cell_Cytotoxicity
SH2 D1B	117157	SH2 domain containing 1B	EAT2	1	NaturalKiller_Cell_Cytotoxicity
SH2 D1A	4068	SH2 domain containing 1A	DSHP EBVS IMD5 LYP MTCP1 SAP SAP/SH2D1A XLP XLPD XLPD1	X	NaturalKiller_Cell_Cytotoxicity
IFN	345	interferon	CD119 IFNGR IMD27A IMD27B	6	NaturalKiller_

GR1	9	gamma receptor 1			Cell_Cytotoxicity
IFN GR2	3460	interferon gamma receptor 2	AF-1 IFGR2 IFNGT1 IMD28	21	NaturalKiller_Cell_Cytotoxicity
IFN A1	3439	interferon alpha 1	IFL IFN IFN-ALPHA IFN-alphaD IFNA13 IFNA@ leIF D	9	NaturalKiller_Cell_Cytotoxicity
IFN A2	3440	interferon alpha 2	IFN-alpha-2 IFN-alphaA IFNA IFNA2B leIF A	9	NaturalKiller_Cell_Cytotoxicity
IFN A4	3441	interferon alpha 4	IFN-alpha4a INFA4	9	NaturalKiller_Cell_Cytotoxicity
IFN A5	3442	interferon alpha 5	IFN-alpha-5 IFN-alphaG INA5 INFA5 leIF G	9	NaturalKiller_Cell_Cytotoxicity
IFN A6	3443	interferon alpha 6	IFN-alphaK	9	NaturalKiller_Cell_Cytotoxicity
IFN A7	3444	interferon alpha 7	IFN-alphaJ IFNA-J	9	NaturalKiller_Cell_Cytotoxicity
IFN A8	3445	interferon alpha 8	IFN-alphaB	9	NaturalKiller_Cell_Cytotoxicity
IFN A10	3446	interferon alpha 10	IFN-alphaC	9	NaturalKiller_Cell_Cytotoxicity
IFN A13	3447	interferon alpha 13	-	9	NaturalKiller_Cell_Cytotoxicity
IFN A14	3448	interferon alpha 14	IFN-alphaH LEIF2H	9	NaturalKiller_Cell_Cytotoxicity
IFN A16	3449	interferon alpha 16	IFN-alpha-16 IFN-alphaO	9	NaturalKiller_Cell_Cytotoxicity
IFN A17	3451	interferon alpha 17	IFN-alphaI IFNA INFA LEIF2C1	9	NaturalKiller_Cell_Cytotoxicity
IFN A21	3452	interferon alpha 21	IFN-alphaI leIF F leIF-F	9	NaturalKiller_Cell_Cytotoxicity

IFN B1	345 6	interferon beta 1	IFB IFF IFN-beta IFNB	9	NaturalKiller_ Cell_Cytotoxicity
IFN AR1	345 4	interferon alpha and beta receptor subunit 1	AVP IFN-alpha-REC IFNAR IFNBR IFRC	21	NaturalKiller_ Cell_Cytotoxicity
IFN AR2	345 5	interferon alpha and beta receptor subunit 2	IFN-R IFN-alpha-REC IFNABR IFNARB IMD45	21	NaturalKiller_ Cell_Cytotoxicity
TNF SF10	874 3	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3	NaturalKiller_ Cell_Cytotoxicity
TNF RSF10D	879 3	TNF receptor superfamily member 10d	CD264 DCR2 TRAIL-R4 TRAILR4 TRUNDD	8	NaturalKiller_ Cell_Cytotoxicity
TNF RSF10C	879 4	TNF receptor superfamily member 10c	CD263 DCR1 DCR1-TNFR LIT TRAIL-R3 TRAILR3 TRID	8	NaturalKiller_ Cell_Cytotoxicity
TNF RSF10B	879 5	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAIL-R2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8	NaturalKiller_ Cell_Cytotoxicity
TNF RSF10A	879 7	TNF receptor superfamily member 10a	APO2 CD261 DR4 TRAILR-1 TRAILR1	8	NaturalKiller_ Cell_Cytotoxicity
FAS LG	356	Fas ligand	ALPS1B APT1LG1 APTL CD178 CD95-L CD95L FASL TNFSF6 TNLG1A	1	NaturalKiller_ Cell_Cytotoxicity
FAS	355	Fas cell surface death receptor	ALPS1A APO-1 APT1 CD95 FAS1 FASTM TNFRSF6	10	NaturalKiller_ Cell_Cytotoxicity

GZ MB	300 2	granzyme B	C11 CCPI CGL-1 CGL1 CSP- B CSPB CTLA1 CTSGL1 HLP SECT	14	NaturalKiller_ Cell_Cytotoxi city
PRF 1	555 1	perforin 1	HPLH2 P1 PFP	10	NaturalKiller_ Cell_Cytotoxi city
CAS P3	836	caspase 3	CPP32 CPP32B SCA-1	4	NaturalKiller_ Cell_Cytotoxi city
BID	637	BH3 interacting domain death agonist	FP497	22	NaturalKiller_ Cell_Cytotoxi city
CD3 D	915	CD3d molecule	CD3-DELTA IMD19 T3D	11	TCRsignaling Pathway
CD3 E	916	CD3e molecule	IMD18 T3E TCRE	11	TCRsignaling Pathway
CD3 G	917	CD3g molecule	CD3-GAMMA IMD17 T3G	11	TCRsignaling Pathway
CD2 47	919	CD247 molecule	CD3- ZETA CD3H CD3Q CD3Z IMD25 T3Z T CRZ	1	TCRsignaling Pathway
CD4	920	CD4 molecule	CD4mut	12	TCRsignaling Pathway
CD8 A	925	CD8a molecule	CD8 Leu2 p32	2	TCRsignaling Pathway
CD8 B	926	CD8b molecule	CD8B1 LEU2 LY3 LYT3 P37	2	TCRsignaling Pathway
PTP RC	578 8	protein tyrosine phosphata se receptor type C	B220 CD45 CD45R GP180 L- CA LCA LY5 T200	1	TCRsignaling Pathway
LCK	393 2	LCK proto- oncogene, Src family tyrosine kinase	IMD22 LSK YT16 p56lck pp58lck	1	TCRsignaling Pathway
FYN	253 4	FYN proto- oncogene, Src family tyrosine	SLK SYN p59-FYN	6	TCRsignaling Pathway

		kinase			
ZAP70	7535	zeta chain of T cell receptor associated protein kinase 70	ADMIO2 IMD48 SRK STCD STD TZK ZAP-70	2	TCRsignaling Pathway
LCP2	3937	lymphocyte cytosolic protein 2	SLP-76 SLP76	5	TCRsignaling Pathway
LAT	27040	linker for activation of T cells	IMD52 LAT1 pp36	16	TCRsignaling Pathway
ITK	3702	IL2 inducible T cell kinase	EMT LPFS1 LYK PSCTK2	5	TCRsignaling Pathway
TEC	7006	tec protein tyrosine kinase	PSCTK4	4	TCRsignaling Pathway
NCK1	4690	NCK adaptor protein 1	NCK NCKalpha nck-1	3	TCRsignaling Pathway
NCK2	8440	NCK adaptor protein 2	GRB4 NCKbeta	2	TCRsignaling Pathway
VAV3	10451	vav guanine nucleotide exchange factor 3	-	1	TCRsignaling Pathway
VAV1	7409	vav guanine nucleotide exchange factor 1	VAV	19	TCRsignaling Pathway
VAV2	7410	vav guanine nucleotide exchange factor 2	VAV-2	9	TCRsignaling Pathway
GRAP2	9402	GRB2 related adaptor protein 2	GADS GRAP-2 GRB2L GRBLG GRID GRPL GrbX Grf40 Mona P38	22	TCRsignaling Pathway

GRB 2	288 5	growth factor receptor bound protein 2	ASH EGFRBP-GRB2 Grb3- 3 MST084 MSTP084 NCKAP2	17	TCRsignaling Pathway
PAK 1	505 8	p21 (RAC1) activated kinase 1	IDDMSSD PAKalpha alpha-PAK p65- PAK	11	TCRsignaling Pathway
PAK 2	506 2	p21 (RAC1) activated kinase 2	PAK65 PAKgamma	3	TCRsignaling Pathway
PAK 3	506 3	p21 (RAC1) activated kinase 3	ARA MRX30 MRX47 OPHN3 PAK- 3 PAK3beta bPAK beta-PAK	X	TCRsignaling Pathway
PAK 4	102 98	p21 (RAC1) activated kinase 4	-	19	TCRsignaling Pathway
PAK 6	569 24	p21 (RAC1) activated kinase 6	PAK5	15	TCRsignaling Pathway
PAK 5	571 44	p21 (RAC1) activated kinase 5	PAK7	20	TCRsignaling Pathway
RH OA	387	ras homolog family member A	ARH12 ARHA EDFAOB RHO12 RHOH1 2	3	TCRsignaling Pathway
CDC 42	998	cell division cycle 42	CDC42Hs G25K TKS	1	TCRsignaling Pathway
PPP 3CA	553 0	protein phosphata se 3 catalytic subunit alpha	ACCIID CALN CALNA CALNA1 CCN1 C NA1 IECEE IECEE1 PPP2B	4	TCRsignaling Pathway
PPP 3CB	553 2	protein phosphata se 3 catalytic subunit beta	CALNA2 CALNB CNA2 PP2Bbeta	10	TCRsignaling Pathway
PPP 3CC	553 3	protein phosphata	CALNA3 CNA3 PP2Bgamma	8	TCRsignaling Pathway

		se catalytic subunit gamma 3			
CHP 1	112 61	calcineurin like EF- hand protein 1	CHP SLC9A1BP SPAX9 Sid470p p22 p2 4	15	TCRsignaling Pathway
PPP 3R1	553 4	protein phosphata se 3 regulatory subunit B, alpha	CALNB1 CNB CNB1	2	TCRsignaling Pathway
PPP 3R2	553 5	protein phosphata se 3 regulatory subunit B, beta	PPP3RL	9	TCRsignaling Pathway
CHP 2	639 28	calcineurin like EF- hand protein 2	-	16	TCRsignaling Pathway
NFA T5	107 25	nuclear factor of activated T cells 5	NF- AT5 NFATL1 NFATZ OREBP TONEBP	16	TCRsignaling Pathway
NFA TC1	477 2	nuclear factor of activated T cells 1	NF-ATC NF-ATc1.2 NFAT2 NFATc	18	TCRsignaling Pathway
NFA TC2	477 3	nuclear factor of activated T cells 2	NFAT1 NFATP	20	TCRsignaling Pathway
NFA TC3	477 5	nuclear factor of activated T cells 3	NF-AT4c NFAT4 NFATX	16	TCRsignaling Pathway
NFA TC4	477 6	nuclear factor of activated T cells 4	NF-AT3 NF-ATC4 NFAT3	14	TCRsignaling Pathway

SOS 1	665 4	SOS Ras/Rac guanine nucleotide exchange factor 1	GF1 GGF1 GINGF HGF NS4 SOS-1	2	TCRsignaling Pathway
SOS 2	665 5	SOS Ras/Rho guanine nucleotide exchange factor 2	NS9 SOS-2	14	TCRsignaling Pathway
HRA S	326 5	HRas proto- oncogene, GTPase	C-BAS HAS C-H-RAS C-HA- RAS1 CTLO H- RASIDX HAMSV HRAS1 RASH1 p21ras	11	TCRsignaling Pathway
KRA S	384 5	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	TCRsignaling Pathway
NRA S	489 3	NRAS proto- oncogene, GTPase	ALPS4 CMNS N-ras NCMS NRAS1 NS6	1	TCRsignaling Pathway
FOS	235 3	Fos proto- oncogene, AP-1 transcripti on factor subunit	AP-1 C-FOS p55	14	TCRsignaling Pathway
JUN	372 5	Jun proto- oncogene, AP-1 transcripti on factor subunit	AP-1 AP1 c-Jun cJUN p39	1	TCRsignaling Pathway
CAR D11	844 33	caspase recruitmen t domain family member 11	BENTA BIMP3 CARMA1 IMD11 IMD11 A PPBL	7	TCRsignaling Pathway
BCL	891	BCL10	CARMEN CIPER CLAP IMD37 c-	1	TCRsignaling

10	5	immune signaling adaptor	E10 mE10		Pathway
MAL LT1	108 92	MALT1 paracaspase	IMD12 MLT MLT1 PCASP1	18	TCRsignaling Pathway
CH UK	114 7	component of inhibitor of nuclear factor kappa B kinase complex	IKBKA IKK-alpha IKK1 IKKA NFKBIKA TCF16	10	TCRsignaling Pathway
IKBK B	355 1	inhibitor of nuclear factor kappa B kinase subunit beta	IKK-beta IKK2 IKKB IMD15 IMD15A IMD15B NFKBIKB	8	TCRsignaling Pathway
IKBK G	851 7	inhibitor of nuclear factor kappa B kinase regulatory subunit gamma	AMCBX1 EDAID1 FIP-3 FIP3 Fip3p IKK-gamma IKKAP1 IKKG IMD33 IP IP1 IP2 IPD2 NEMO ZC2HC9	X	TCRsignaling Pathway
NFK B1	479 0	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	TCRsignaling Pathway
REL A	597 0	RELA proto-oncogene, NF-kB subunit	CMCU NFKB3 p65	11	TCRsignaling Pathway
NFK BIA	479 2	NFKB inhibitor alpha	EDAID2 IKBA MAD-3 NFKBI	14	TCRsignaling Pathway
NFK BIB	479 3	NFKB inhibitor beta	IKBB TRIP9	19	TCRsignaling Pathway

NFKBIE	4794	NFKB inhibitor epsilon	IKBE	6	TCRsignaling Pathway
CD28	940	CD28 molecule	Tp44	2	TCRsignaling Pathway
ICOS	29851	inducible T cell costimulator	AILIM CD278 CVID1	2	TCRsignaling Pathway
CD40LG	959	CD40 ligand	CD154 CD40L HIGM1 IGM IMD3 T-BAM TNFSF5 TRAP gp39 hCD40L	X	TCRsignaling Pathway
PIK3R5	23533	phosphoinositide-3-kinase regulatory subunit 5	F730038I15Rik FOAP-2 P101-PI3K p101	17	TCRsignaling Pathway
PIK3R1	5295	phosphoinositide-3-kinase regulatory subunit 1	AGM7 GRB1 IMD36 p85 p85-ALPHA	5	TCRsignaling Pathway
PIK3R2	5296	phosphoinositide-3-kinase regulatory subunit 2	MPPH MPPH1 P85B p85 p85-BETA	19	TCRsignaling Pathway
PIK3R3	8503	phosphoinositide-3-kinase regulatory subunit 3	p55 p55-GAMMA p55PIK	1	TCRsignaling Pathway
PIK3CA	5290	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	CLAPO CLOVE CWS5 MCAP MCM MCMTC PI3K PI3K-alpha p110-alpha	3	TCRsignaling Pathway
PIK3CB	5291	phosphatidylinositol-4,5-bisphosph	P110BETA PI3K PI3KBETA PIK3C1	3	TCRsignaling Pathway

		ate 3-kinase catalytic subunit beta			
PIK3 CD	5293	phosphatidylinositol -4,5-bisphosphate 3-kinase catalytic subunit delta	APDS IMD14 P110DELTA PI3K p110D	1	TCRsignaling Pathway
PIK3 CG	5294	phosphatidylinositol -4,5-bisphosphate 3-kinase catalytic subunit gamma	PI3CG PI3K PI3Kgamma PIK3 p110gamma p120-PI3K	7	TCRsignaling Pathway
AKT 3	10000	AKT serine/threonine kinase 3	MPPH MPPH2 PKB-GAMMA PKBG PRKBG RAC-gamma RAC-gamma STK-2	1	TCRsignaling Pathway
AKT 1	207	AKT serine/threonine kinase 1	AKT CWS6 PKB PKB-ALPHA PRKBA RAC RAC-ALPHA	14	TCRsignaling Pathway
AKT 2	208	AKT serine/threonine kinase 2	HIHGHH PKBB PKBBETA PRKBB RAC-BETA	19	TCRsignaling Pathway
MA P3K 8	1326	mitogen-activated protein kinase kinase kinase 8	AURA2 COT EST ESTF MEKK8 TPL2 Tpl-2 c-COT	10	TCRsignaling Pathway
MA P3K 14	9020	mitogen-activated protein	FTDCR1B HS HSNIK NIK	17	TCRsignaling Pathway

		kinase kinase kinase 14			
PDC D1	513 3	programm ed cell death 1	CD279 PD-1 PD1 SLEB2 hPD-1 hPD- l hSLE1	2	TCRsignaling Pathway
CTL A4	149 3	cytotoxic T- lymphocyt e associated protein 4	ALPS5 CD CD152 CELIAC3 CTLA- 4 GRD4 GSE IDDM12	2	TCRsignaling Pathway
PTP N6	577 7	protein tyrosine phosphata se non- receptor type 6	HCP HCPH HPTP1C PTP-1C SH- PTP1 SHP-1 SHP-1L SHP1	12	TCRsignaling Pathway
CBL C	236 24	Cbl proto- oncogene C	CBL-3 CBL-SL RNF57	19	TCRsignaling Pathway
CBL	867	Cbl proto- oncogene	C-CBL CBL2 FRA11B NSLL RNF55	11	TCRsignaling Pathway
CBL B	868	Cbl proto- oncogene B	Cbl-b Nbla00127 RNF56	3	TCRsignaling Pathway
IL2	355 8	interleukin 2	IL-2 TCGF lymphokine	4	TCRsignaling Pathway
IL4	356 5	interleukin 4	BCGF-1 BCGF1 BSF-1 BSF1 IL-4	5	TCRsignaling Pathway
IL5	356 7	interleukin 5	EDF IL-5 TRF	5	TCRsignaling Pathway
IL10	358 6	interleukin 10	CSIF GVHDS IL-10 IL10A TGIF	1	TCRsignaling Pathway
IFN G	345 8	interferon gamma	IFG IFI	12	TCRsignaling Pathway
CSF 2	143 7	colony stimulating factor 2	CSF GMCSF	5	TCRsignaling Pathway
TNF	712 4	tumor necrosis factor	DIF TNF-alpha TNFA TNFSF2 TNLG1F	6	TCRsignaling Pathway
CDK 4	101 9	cyclin dependent	CMM3 PSK-J3	12	TCRsignaling Pathway

		kinase 4			
RAS GRP 1	101 25	RAS guanyl releasing protein 1	CALDAG-GEFI CALDAG-GEFII IMD64 RASGRP	15	TCRsignaling Pathway
PDK 1	516 3	pyruvate dehydroge nase kinase 1	-	2	TCRsignaling Pathway
PLC G1	533 5	phospholi pase C gamma 1	NCKAP3 PLC-III PLC1 PLC148 PLCgamma1	20	TCRsignaling Pathway
PRK CQ	558 8	protein kinase C theta	PRKCT nPKC-theta	10	TCRsignaling Pathway
TRA C	287 55	T cell receptor alpha constant	IMD7 TCRA TRA TRCA	14	TCRsignaling Pathway
TRA J1	287 54	T cell receptor alpha joining 1 (non-functional)	-	14	TCRsignaling Pathway
TRA J2	287 53	T cell receptor alpha joining 2 (non-functional)	-	14	TCRsignaling Pathway
TRA J3	287 52	T cell receptor alpha joining 3	-	14	TCRsignaling Pathway
TRA J4	287 51	T cell receptor alpha joining 4	-	14	TCRsignaling Pathway
TRA J5	287 50	T cell receptor alpha joining 5	-	14	TCRsignaling Pathway
TRA	287	T cell	-	14	TCRsignaling

J6	49	receptor alpha joining 6			Pathway
TRA J7	287 48	T cell receptor alpha joining 7	-	14	TCRsignaling Pathway
TRA J8	287 47	T cell receptor alpha joining 8	-	14	TCRsignaling Pathway
TRA J9	287 46	T cell receptor alpha joining 9	-	14	TCRsignaling Pathway
TRA J10	287 45	T cell receptor alpha joining 10	-	14	TCRsignaling Pathway
TRA J11	287 44	T cell receptor alpha joining 11	-	14	TCRsignaling Pathway
TRA J12	287 43	T cell receptor alpha joining 12	-	14	TCRsignaling Pathway
TRA J13	287 42	T cell receptor alpha joining 13	-	14	TCRsignaling Pathway
TRA J14	287 41	T cell receptor alpha joining 14	-	14	TCRsignaling Pathway
TRA J15	287 40	T cell receptor alpha joining 15	-	14	TCRsignaling Pathway
TRA J16	287 39	T cell receptor alpha joining 16	-	14	TCRsignaling Pathway
TRA	287	T cell	-	14	TCRsignaling

J17	38	receptor alpha joining 17			Pathway
TRA J18	287 37	T cell receptor alpha joining 18	-	14	TCRsignaling Pathway
TRA J19	287 36	T cell receptor alpha joining 19 (non- functional)	-	14	TCRsignaling Pathway
TRA J20	287 35	T cell receptor alpha joining 20	-	14	TCRsignaling Pathway
TRA J21	287 34	T cell receptor alpha joining 21	-	14	TCRsignaling Pathway
TRA J22	287 33	T cell receptor alpha joining 22	-	14	TCRsignaling Pathway
TRA J23	287 32	T cell receptor alpha joining 23	-	14	TCRsignaling Pathway
TRA J24	287 31	T cell receptor alpha joining 24	-	14	TCRsignaling Pathway
TRA J25	287 30	T cell receptor alpha joining 25 (non- functional)	-	14	TCRsignaling Pathway
TRA J26	287 29	T cell receptor alpha joining 26	-	14	TCRsignaling Pathway
TRA	287	T cell	-	14	TCRsignaling

J27	28	receptor alpha joining 27			Pathway
TRA J28	287 27	T cell receptor alpha joining 28	-	14	TCRsignaling Pathway
TRA J29	287 26	T cell receptor alpha joining 29	-	14	TCRsignaling Pathway
TRA J30	287 25	T cell receptor alpha joining 30	-	14	TCRsignaling Pathway
TRA J31	287 24	T cell receptor alpha joining 31	-	14	TCRsignaling Pathway
TRA J32	287 23	T cell receptor alpha joining 32	-	14	TCRsignaling Pathway
TRA J33	287 22	T cell receptor alpha joining 33	-	14	TCRsignaling Pathway
TRA J34	287 21	T cell receptor alpha joining 34	-	14	TCRsignaling Pathway
TRA J35	287 20	T cell receptor alpha joining 35 (non- functional)	-	14	TCRsignaling Pathway
TRA J36	287 19	T cell receptor alpha joining 36	-	14	TCRsignaling Pathway
TRA J37	287 18	T cell receptor alpha	-	14	TCRsignaling Pathway

		joining 37			
TRA J38	287 17	T cell receptor alpha joining 38	-	14	TCRsignaling Pathway
TRA J39	287 16	T cell receptor alpha joining 39	-	14	TCRsignaling Pathway
TRA J40	287 15	T cell receptor alpha joining 40	-	14	TCRsignaling Pathway
TRA J41	287 14	T cell receptor alpha joining 41	-	14	TCRsignaling Pathway
TRA J42	287 13	T cell receptor alpha joining 42	-	14	TCRsignaling Pathway
TRA J43	287 12	T cell receptor alpha joining 43	-	14	TCRsignaling Pathway
TRA J44	287 11	T cell receptor alpha joining 44	-	14	TCRsignaling Pathway
TRA J45	287 10	T cell receptor alpha joining 45	-	14	TCRsignaling Pathway
TRA J46	287 09	T cell receptor alpha joining 46	-	14	TCRsignaling Pathway
TRA J47	287 08	T cell receptor alpha joining 47	-	14	TCRsignaling Pathway
TRA J48	287 07	T cell receptor alpha	-	14	TCRsignaling Pathway

		joining 48			
TRA J49	287 06	T cell receptor alpha joining 49	-	14	TCRsignaling Pathway
TRA J50	287 05	T cell receptor alpha joining 50	-	14	TCRsignaling Pathway
TRA J52	287 03	T cell receptor alpha joining 52	-	14	TCRsignaling Pathway
TRA J53	287 02	T cell receptor alpha joining 53	-	14	TCRsignaling Pathway
TRA J54	287 01	T cell receptor alpha joining 54	-	14	TCRsignaling Pathway
TRA J56	286 99	T cell receptor alpha joining 56	-	14	TCRsignaling Pathway
TRA J57	286 98	T cell receptor alpha joining 57	-	14	TCRsignaling Pathway
TRA J58	286 97	T cell receptor alpha joining 58 (non- functional)	-	14	TCRsignaling Pathway
TRA J59	286 96	T cell receptor alpha joining 59 (non- functional)	-	14	TCRsignaling Pathway
TRA J61	286 94	T cell receptor alpha	-	14	TCRsignaling Pathway

		joining 61 (non- functional)			
TRA V1- 1	286 93	T cell receptor alpha variable 1- 1	TCRAV1S1 TCRAV7S1 TRAV11	14	TCRsignaling Pathway
TRA V1- 2	286 92	T cell receptor alpha variable 1- 2	TCRAV1S2 TCRAV7S2 TRAV12	14	TCRsignaling Pathway
TRA V2	286 91	T cell receptor alpha variable 2	TCRAV11S1 TCRAV2S1	14	TCRsignaling Pathway
TRA V3	286 90	T cell receptor alpha variable 3	TCRAV16S1 TCRAV3S1	14	TCRsignaling Pathway
TRA V4	286 89	T cell receptor alpha variable 4	TCRAV20S1 TCRAV4S1	14	TCRsignaling Pathway
TRA V5	286 88	T cell receptor alpha variable 5	TCRAV15S1 TCRAV5S1	14	TCRsignaling Pathway
TRA V7	286 86	T cell receptor alpha variable 7	TCRAV7S1	14	TCRsignaling Pathway
TRA V8- 1	286 85	T cell receptor alpha variable 8- 1	TCRAV1S1 TCRAV8S1 TRAV81	14	TCRsignaling Pathway
TRA V8- 2	286 84	T cell receptor alpha variable 8- 2	TCRAV1S5 TCRAV8S2 TRAV82	14	TCRsignaling Pathway
TRA	286	T cell	TCRAV1S4 TCRAV8S3 TRAV83	14	TCRsignaling

V8-3	83	receptor alpha variable 8-3			Pathway
TRA V8-4	286 82	T cell receptor alpha variable 8-4	TCRAV1S2 TCRAV8S4 TRAV84	14	TCRsignaling Pathway
TRA V8-6	286 80	T cell receptor alpha variable 8-6	TCRAV1S3 TCRAV8S6 TRAV86	14	TCRsignaling Pathway
TRA V8-7	286 79	T cell receptor alpha variable 8-7 (pseudogene)	TCRAV8S7 TRAV87	14	TCRsignaling Pathway
TRA V9-1	286 78	T cell receptor alpha variable 9-1	TCRAV9S1 TRAV91	14	TCRsignaling Pathway
TRA V9-2	286 77	T cell receptor alpha variable 9-2	TCRAV22S1 TCRAV9S2 TRAV92	14	TCRsignaling Pathway
TRA V10	286 76	T cell receptor alpha variable 10	TCRAV10S1 TCRAV24S1	14	TCRsignaling Pathway
TRA V12-1	286 74	T cell receptor alpha variable 12-1	TCRAV12S1 TCRAV2S3 TRAV121	14	TCRsignaling Pathway
TRA V12-2	286 73	T cell receptor alpha variable	TCRAV12S2 TCRAV2S1 TRAV122	14	TCRsignaling Pathway

		12-2			
TRA V12 -3	286 72	T cell receptor alpha variable 12-3	TCRAV12S3 TCRAV2S2 TRAV123	14	TCRsignaling Pathway
TRA V13 -1	286 71	T cell receptor alpha variable 13-1	TCRAV13S1 TCRAV8S1 TRAV131	14	TCRsignaling Pathway
TRA V13 -2	286 70	T cell receptor alpha variable 13-2	TCRAV13S2 TCRAV8S2 TRAV132	14	TCRsignaling Pathway
TRA V14 DV4	286 69	T cell receptor alpha variable 14/delta variable 4	TCRAV6S1- hDV104S1 TRAV14/DV4 hADV14S1	14	TCRsignaling Pathway
TRA V16	286 67	T cell receptor alpha variable 16	TCRAV16S1 TCRAV9S1	14	TCRsignaling Pathway
TRA V17	286 66	T cell receptor alpha variable 17	TCRAV17S1 TCRAV3S1	14	TCRsignaling Pathway
TRA V18	286 65	T cell receptor alpha variable 18	TCRAV18S1	14	TCRsignaling Pathway
TRA V19	286 64	T cell receptor alpha variable 19	TCRAV12S1 TCRAV19S1	14	TCRsignaling Pathway
TRA V20	286 63	T cell receptor alpha variable 20	TCRAV20S1 TCRAV30S1	14	TCRsignaling Pathway
TRA V21	286 62	T cell receptor	TCRAV21S1 TCRAV23S1	14	TCRsignaling Pathway

		alpha variable 21			
TRA V22	286 61	T cell receptor alpha variable 22	TCRAV13S1 TCRAV22S1	14	TCRsignaling Pathway
TRA V23 DV6	286 60	T cell receptor alpha variable 23/delta variable 6	TCRAV17S1 TRAV23/DV6 hADV23S1	14	TCRsignaling Pathway
TRA V24	286 59	T cell receptor alpha variable 24	TCRAV18S1 TCRAV24S1	14	TCRsignaling Pathway
TRA V25	286 58	T cell receptor alpha variable 25	TCRAV25S1 TCRAV32S1	14	TCRsignaling Pathway
TRA V26 -1	286 57	T cell receptor alpha variable 26-1	TCRAV26S1 TCRAV4S2 TRAV261	14	TCRsignaling Pathway
TRA V26 -2	286 56	T cell receptor alpha variable 26-2	TCRAV26S2 TCRAV4S1 TRAV262	14	TCRsignaling Pathway
TRA V27	286 55	T cell receptor alpha variable 27	TCRAV10S1 TCRAV27S1	14	TCRsignaling Pathway
TRA V29 DV5	286 53	T cell receptor alpha variable 29/delta variable 5	TCRA TCRAV21S1 TRAV29/DV5 hADV29S1	14	TCRsignaling Pathway
TRA V30	286 52	T cell receptor alpha variable 30	TCRAV29S1 TCRAV30S1	14	TCRsignaling Pathway

TRA V34	286 48	T cell receptor alpha variable 34	TCRAV26S1 TCRAV34S1	14	TCRsignaling Pathway
TRA V35	286 47	T cell receptor alpha variable 35	TCRAV25S1 TCRAV35S1	14	TCRsignaling Pathway
TRA V36 DV7	286 46	T cell receptor alpha variable 36/delta variable 7	TCRAV28S1 TRAV36/DV7 hADV36S1	14	TCRsignaling Pathway
TRA V38 -1	286 44	T cell receptor alpha variable 38-1	TCRAV14S2 TCRAV38S1 TRAV381	14	TCRsignaling Pathway
TRA V38 - 2DV 8	286 43	T cell receptor alpha variable 38-2/delta variable 8	TCRAV14S1 TRAV382DV8 hADV38S2	14	TCRsignaling Pathway
TRA V39	286 42	T cell receptor alpha variable 39	TCRAV27S1 TCRAV39S1	14	TCRsignaling Pathway
TRA V40	286 41	T cell receptor alpha variable 40	TCRAV31S1 TCRAV40S1	14	TCRsignaling Pathway
TRA V41	286 40	T cell receptor alpha variable 41	TCRAV19S1 TCRAV41S1	14	TCRsignaling Pathway
TRB C1	286 39	T cell receptor beta constant 1	BV05S1J2.2 TCRB TCRBC1	7	TCRsignaling Pathway
TRB C2	286 38	T cell receptor beta	TCRBC2	7	TCRsignaling Pathway

		constant 2			
TRB D1	286 37	T cell receptor beta diversity 1	TCRBD1	7	TCRsignaling Pathway
TRB D2	286 36	T cell receptor beta diversity 2	TCRBD2	7	TCRsignaling Pathway
TRB J1-1	286 35	T cell receptor beta joining 1-1	TCRBJ1S1 TRBJ11	7	TCRsignaling Pathway
TRB J1-2	286 34	T cell receptor beta joining 1-2	TCRBJ1S2 TRBJ12	7	TCRsignaling Pathway
TRB J1-3	286 33	T cell receptor beta joining 1-3	TCRBJ1S3 TRBJ13	7	TCRsignaling Pathway
TRB J1-4	286 32	T cell receptor beta joining 1-4	TCRBJ1S4 TRBJ14	7	TCRsignaling Pathway
TRB J1-5	286 31	T cell receptor beta joining 1-5	TCRBJ1S5 TRBJ15	7	TCRsignaling Pathway
TRB J1-6	286 30	T cell receptor beta joining 1-6	TCRBJ1S6 TRBJ16	7	TCRsignaling Pathway
TRB J2-1	286 29	T cell receptor beta joining 2-1	TCRBJ2S1 TRBJ21	7	TCRsignaling Pathway
TRB J2-2	286 28	T cell receptor beta joining 2-2	TCRBJ2S2 TRBJ22	7	TCRsignaling Pathway
TRB J2-3	286 26	T cell receptor beta	TCRBJ2S3 TRBJ23	7	TCRsignaling Pathway

		joining 2-3			
TRB J2-4	286 25	T cell receptor beta joining 2-4	TCRBJ2S4 TRBJ24	7	TCRsignaling Pathway
TRB J2-5	286 24	T cell receptor beta joining 2-5	TCRBJ2S5 TRBJ25	7	TCRsignaling Pathway
TRB J2-6	286 23	T cell receptor beta joining 2-6	TCRBJ2S6 TRBJ26	7	TCRsignaling Pathway
TRB J2-7	286 22	T cell receptor beta joining 2-7	TCRBJ2S7 TRBJ27	7	TCRsignaling Pathway
TRB V2	286 20	T cell receptor beta variable 2	TCRBV2S1A2N1T TCRBV2S1	7	TCRsignaling Pathway
TRB V3- 1	286 19	T cell receptor beta variable 3- 1	TCRBV3S1 TCRBV9S1A1T TRBV31	7	TCRsignaling Pathway
TRB V4- 1	286 17	T cell receptor beta variable 4- 1	BV07S1J2.7 TCRBV4S1 TCRBV7S1A1N2 T TRBV41	7	TCRsignaling Pathway
TRB V4- 2	286 16	T cell receptor beta variable 4- 2	TCRBV4S2 TCRBV7S3A2 TCRBV7S3A2T TRBV42	7	TCRsignaling Pathway
TRB V4- 3	286 15	T cell receptor beta variable 4- 3	TCRBV4S3 TCRBV7S2A1N4T TRBV43	7	TCRsignaling Pathway
TRB V5- 1	286 14	T cell receptor beta	TCRBV5S1 TCRBV5S1A1T TRBV51	7	TCRsignaling Pathway

		variable 5-1			
TRB V5-4	286 11	T cell receptor beta variable 5-4	TCRBV5S4 TCRBV5S6A3N2T TRBV54	7	TCRsignaling Pathway
TRB V5-5	286 10	T cell receptor beta variable 5-5	TCRBV5S3A2T TCRBV5S5 TRBV55	7	TCRsignaling Pathway
TRB V5-6	286 09	T cell receptor beta variable 5-6	TCRBV5S2 TCRBV5S6 TRBV56	7	TCRsignaling Pathway
TRB V5-7	286 08	T cell receptor beta variable 5-7 (non-functional)	TCRBV5S7 TCRBV5S7P TRBV57	7	TCRsignaling Pathway
TRB V5-8	286 07	T cell receptor beta variable 5-8	TCRBV5S4A2T TCRBV5S8 TRBV58	7	TCRsignaling Pathway
TRB V6-1	286 06	T cell receptor beta variable 6-1	TCRBV13S3 TCRBV6S1 TRBV61	7	TCRsignaling Pathway
TRB V6-2	286 05	T cell receptor beta variable 6-2	TCRBV13S2 TCRBV13S2A1T TCRBV6S2 TRBV62	7	TCRsignaling Pathway
TRB V6-3	286 04	T cell receptor beta variable 6-3	TCRBV13S9/13S2A1T TCRBV6S3 TRBV63	7	TCRsignaling Pathway
TRB	286	T cell	TCRBV13S5 TCRBV6S4 TRBV64	7	TCRsignaling

V6-4	03	receptor beta variable 6-4			Pathway
TRB V6-5	286 02	T cell receptor beta variable 6-5	TCRBV13S1 TCRBV6S5 TRBV65	7	TCRsignaling Pathway
TRB V6-6	286 01	T cell receptor beta variable 6-6	TCRBV13S6A2T TCRBV6S6 TRBV66	7	TCRsignaling Pathway
TRB V6-7	286 00	T cell receptor beta variable 6-7 (non-functional)	TCRBV13S8P TCRBV6S7 TRBV67	7	TCRsignaling Pathway
TRB V6-8	285 99	T cell receptor beta variable 6-8	TCRBV13S7P TCRBV6S8 TRBV68	7	TCRsignaling Pathway
TRB V6-9	285 98	T cell receptor beta variable 6-9	TCRBV13S4 TCRBV6S9 TRBV69	7	TCRsignaling Pathway
TRB V7-2	285 96	T cell receptor beta variable 7-2	TCRBV6S5A1N1 TCRBV6S5A2 TCRBV7S2 TRBV72	7	TCRsignaling Pathway
TRB V7-3	285 95	T cell receptor beta variable 7-3	TCRBV6S1A1N1 TCRBV7S3 TRBV73	7	TCRsignaling Pathway
TRB V7-4	285 94	T cell receptor beta variable 7-	TCRBV6S8A2T TCRBV7S4 TRBV74	7	TCRsignaling Pathway

		4			
TRB V7- 6	285 92	T cell receptor beta variable 7- 6	TCRBV6S3A1N1T TCRBV7S6 TRBV76	7	TCRsignaling Pathway
TRB V7- 7	285 91	T cell receptor beta variable 7- 7	TCRBV6S6A2T TCRBV7S7 TRBV77	7	TCRsignaling Pathway
TRB V7- 8	285 90	T cell receptor beta variable 7- 8	TCRBV6S2A1N1T TCRBV7S8 TRBV78	7	TCRsignaling Pathway
TRB V7- 9	285 89	T cell receptor beta variable 7- 9	TCRB TCRBV6S4A1 TCRBV7S9 TRBV79	7	TCRsignaling Pathway
TRB V9	285 86	T cell receptor beta variable 9	TCRBV1S1A1N1 TCRBV9S1	7	TCRsignaling Pathway
TRB V10 -1	285 85	T cell receptor beta variable 10-1	TCRBV10S1 TCRBV12S2 TCRBV12S2A1 T TRBV101	7	TCRsignaling Pathway
TRB V10 -2	285 84	T cell receptor beta variable 10-2	TCRBV10S2 TCRBV12S3 TRBV102	7	TCRsignaling Pathway
TRB V10 -3	285 83	T cell receptor beta variable 10-3	TCRBV10S3 TCRBV12S1A1N2 TRBV103	7	TCRsignaling Pathway
TRB V11 -1	285 82	T cell receptor beta variable	TCRBV11S1 TCRBV21S1 TRBV111	7	TCRsignaling Pathway

		11-1			
TRB V11 -2	285 81	T cell receptor beta variable 11-2	TCRBV11S2 TCRBV21S3A2N2T TRBV11 2	7	TCRsignaling Pathway
TRB V11 -3	285 80	T cell receptor beta variable 11-3	TCRBV11S3 TCRBV21S2A2 TRBV113	7	TCRsignaling Pathway
TRB V12 -3	285 77	T cell receptor beta variable 12-3	TCRBV12S3 TCRBV8S1 TRBV123	7	TCRsignaling Pathway
TRB V12 -4	285 76	T cell receptor beta variable 12-4	TCRBV12S4 TCRBV8S2A1T TRBV124	7	TCRsignaling Pathway
TRB V12 -5	285 75	T cell receptor beta variable 12-5	TCRBV12S5 TCRBV8S3 TRBV125	7	TCRsignaling Pathway
TRB V13	285 74	T cell receptor beta variable 13	TCRBV13S1 TCRBV23S1A2T	7	TCRsignaling Pathway
TRB V14	285 73	T cell receptor beta variable 14	TCRBV14S1 TCRBV16S1A1N1	7	TCRsignaling Pathway
TRB V15	285 72	T cell receptor beta variable 15	TCRBV15S1 TCRBV24S1A3T	7	TCRsignaling Pathway
TRB V16	285 71	T cell receptor beta variable 16	BV25S1J1.2 TCRB TCRBV16S1 TCRBV2 5S1 TCRBV25S1A2PT	7	TCRsignaling Pathway
TRB V17	285 70	T cell receptor	TCRBV17S1 TCRBV26S1P	7	TCRsignaling Pathway

		beta variable 17 (non-functional)			
TRB V18	285 69	T cell receptor beta variable 18	TCRBV18S1	7	TCRsignaling Pathway
TRB V19	285 68	T cell receptor beta variable 19	TCRBV17S1A1T TCRBV19S1	7	TCRsignaling Pathway
TRB V20 -1	285 67	T cell receptor beta variable 20-1	TCRBV20S1 TCRBV2S1 TRBV201	7	TCRsignaling Pathway
TRB V24 -1	285 63	T cell receptor beta variable 24-1	TCRBV15S1 TCRBV24S1 TRBV241	7	TCRsignaling Pathway
TRB V25 -1	285 62	T cell receptor beta variable 25-1	TCRBV11S1A1T TCRBV25S1 TRBV251	7	TCRsignaling Pathway
TRB V27	285 60	T cell receptor beta variable 27	TCRBV14S1 TCRBV27S1	7	TCRsignaling Pathway
TRB V28	285 59	T cell receptor beta variable 28	TCRBV28S1 TCRBV3S1	7	TCRsignaling Pathway
TRB V29 -1	285 58	T cell receptor beta variable 29-1	TCRBV29S1 TCRBV4S1A1T TRBV291	7	TCRsignaling Pathway
TRB V30	285 57	T cell receptor beta variable 30	TCRBV20S1A1N2 TCRBV30S1	7	TCRsignaling Pathway

TRD C	285 26	T cell receptor delta constant	TCRD	14	TCRsignaling Pathway
TRD D1	285 25	T cell receptor delta diversity 1	-	14	TCRsignaling Pathway
TRD D2	285 24	T cell receptor delta diversity 2	-	14	TCRsignaling Pathway
TRD D3	285 23	T cell receptor delta diversity 3	TCRD	14	TCRsignaling Pathway
TRD J1	285 22	T cell receptor delta joining 1	TCRD	14	TCRsignaling Pathway
TRD J2	285 21	T cell receptor delta joining 2	-	14	TCRsignaling Pathway
TRD J3	285 20	T cell receptor delta joining 3	-	14	TCRsignaling Pathway
TRD J4	285 19	T cell receptor delta joining 4	-	14	TCRsignaling Pathway
TRD V1	285 18	T cell receptor delta variable 1	hDV101S1	14	TCRsignaling Pathway
TRD V2	285 17	T cell receptor delta variable 2	hDV102S1	14	TCRsignaling Pathway
TRD V3	285 16	T cell receptor delta variable 3	hDV103S1	14	TCRsignaling Pathway

TRG V9	698 3	T cell receptor gamma variable 9	TCRGV9 TRGC1 V2	7	TCRsignaling Pathway
TRG V8	698 2	T cell receptor gamma variable 8	TCRGV8 V1S8	7	TCRsignaling Pathway
TRG V5	697 8	T cell receptor gamma variable 5	TCRGV5 V1S5	7	TCRsignaling Pathway
TRG V4	697 7	T cell receptor gamma variable 4	TCRGV4 V1S4	7	TCRsignaling Pathway
TRG V3	697 6	T cell receptor gamma variable 3	TCRGV3 V1S3	7	TCRsignaling Pathway
TRG V2	697 4	T cell receptor gamma variable 2	TCRGV2 V1S2	7	TCRsignaling Pathway
TRG JP2	697 2	T cell receptor gamma joining P2	JP2 TCRGJP2	7	TCRsignaling Pathway
TRG JP1	697 1	T cell receptor gamma joining P1	JP1 TCRGJP1	7	TCRsignaling Pathway
TRG JP	697 0	T cell receptor gamma joining P	JP TCRGJP	7	TCRsignaling Pathway
TRG J2	696 9	T cell receptor gamma joining 2	J2 TCRGJ2	7	TCRsignaling Pathway
TRG J1	696 8	T cell receptor gamma joining 1	J1 TCRGJ1	7	TCRsignaling Pathway

TRG C2	696 7	T cell receptor gamma constant 2	TCRGC2 TRGC2(2X) TRGC2(3X)	7	TCRsignaling Pathway
TRG C1	696 6	T cell receptor gamma constant 1	C1 TCRG TCRGC1	7	TCRsignaling Pathway
TRA V6	695 6	T cell receptor alpha variable 6	TCRAV5S1 TCRAV6S1	14	TCRsignaling Pathway
BM P1	649	bone morphoge netic protein 1	OI13 PCOLC PCP PCP2 TLD	8	TGFb_Family_ Member
BM P10	273 02	bone morphoge netic protein 10	-	2	TGFb_Family_ Member
BM P15	921 0	bone morphoge netic protein 15	GDF9B ODG2 POF4	X	TGFb_Family_ Member
BM P2	650	bone morphoge netic protein 2	BDA2 BMP2A SSFSC	20	TGFb_Family_ Member
BM P3	651	bone morphoge netic protein 3	BMP-3A	4	TGFb_Family_ Member
BM P4	652	bone morphoge netic protein 4	BMP2B BMP2B1 MCOPS6 OFC11 ZYM E	14	TGFb_Family_ Member
BM P5	653	bone morphoge netic protein 5	-	6	TGFb_Family_ Member
BM P6	654	bone morphoge netic protein 6	VGR VGR1	6	TGFb_Family_ Member

BM P7	655	bone morphogenetic protein 7	OP-1	20	TGFb_Family_Member
BM P8A	353 500	bone morphogenetic protein 8a	OP-2	1	TGFb_Family_Member
BM P8B	656	bone morphogenetic protein 8b	BMP8 OP2	1	TGFb_Family_Member
GDF 1	265 7	growth differentiation factor 1	CERS1 CHTD6 DORV DTGA3 LAG1 LASS1 RAI UOG1	19	TGFb_Family_Member
GDF 10	266 2	growth differentiation factor 10	BIP BMP-3b BMP3B	10	TGFb_Family_Member
GDF 11	102 20	growth differentiation factor 11	BMP-11 BMP11	12	TGFb_Family_Member
GDF 15	951 8	growth differentiation factor 15	GDF-15 MIC-1 MIC1 NAG-1 PDF PLAB PTGFB	19	TGFb_Family_Member
GDF 2	265 8	growth differentiation factor 2	BMP-9 BMP9 HHT5	10	TGFb_Family_Member
GDF 3	957 3	growth differentiation factor 3	KFS3 MCOP7 MCOPCB6	12	TGFb_Family_Member
GDF 5	820 0	growth differentiation factor 5	BDA1C BMP-14 BMP14 CDMP1 DUPANS LAP-4 LAP4 OS5 SYM1B SYNS2	20	TGFb_Family_Member
GDF 6	392 255	growth differentiation factor 6	BMP-13 BMP13 CDMP2 KFM KFS KFS1 KFSL SGM1 SYNS4	8	TGFb_Family_Member
GDF 7	151 449	growth differentiation factor 7	BMP12	2	TGFb_Family_Member
GDF 9	266 1	growth differentiation	POF14	5	TGFb_Family_Member

		ion factor 9			
GD NF	266 8	glial cell derived neurotrop hic factor	ATF ATF1 ATF2 HFB1-GDNF HSCR3	5	TGFb_Family_ Member
INH A	362 3	inhibin subunit alpha	-	2	TGFb_Family_ Member
INH BA	362 4	inhibin subunit beta A	EDF FRP	7	TGFb_Family_ Member
INH BB	362 5	inhibin subunit beta B	-	2	TGFb_Family_ Member
INH BC	362 6	inhibin subunit beta C	IHBC	12	TGFb_Family_ Member
INH BE	837 29	inhibin subunit beta E	-	12	TGFb_Family_ Member
LEFT Y1	106 37	left-right determinat ion factor 1	LEFTB LEFTYB	1	TGFb_Family_ Member
LEFT Y2	704 4	left-right determinat ion factor 2	EBAF LEFTA LEFTYA TGFB4	1	TGFb_Family_ Member
NO DAL	483 8	nodal growth differentiat ion factor	HTX5	10	TGFb_Family_ Member
TGF B1	704 0	transformi ng growth factor beta 1	CED DPD1 BDIMDE LAP TGF- beta1 TGFB TGFbeta	19	TGFb_Family_ Member
TGF B2	704 2	transformi ng growth factor beta 2	G-TSF LDS4 TGF-beta2	1	TGFb_Family_ Member
TGF B3	704 3	transformi ng growth factor beta 3	ARVD ARVD1 LDS5 RNHF TGF-beta3	14	TGFb_Family_ Member
ACV R1B	91	activin A receptor	ACTRIB ACVRLK4 ALK4 SKR2	12	TGFb_Family_ Member_Rec

		type 1B			eptor
ACV R1C	130 399	activin A receptor type 1C	ACVRLK7 ALK7	2	TGFb_Family_ Member_Rec eptor
ACV R2A	92	activin A receptor type 2A	ACTRII ACVR2	2	TGFb_Family_ Member_Rec eptor
ACV R2B	93	activin A receptor type 2B	ACTRIIB ActR-II HTX4	3	TGFb_Family_ Member_Rec eptor
ACV RL1	94	activin A receptor like type 1	ACVRLK1 ALK- 1 ALK1 HHT HHT2 ORW2 SKR3 TSR-I	12	TGFb_Family_ Member_Rec eptor
AM HR2	269	anti- Mullerian hormone receptor type 2	AMHR MISR2 MISRII MRII	12	TGFb_Family_ Member_Rec eptor
BM PR1 A	657	bone morphoge netic protein receptor type 1A	10q23del ACVRLK3 ALK3 CD292 SKR5	10	TGFb_Family_ Member_Rec eptor
BM PR1 B	658	bone morphoge netic protein receptor type 1B	ALK- 6 ALK6 AMDD BDA1D BDA2 CDw293	4	TGFb_Family_ Member_Rec eptor
BM PR2	659	bone morphoge netic protein receptor type 2	BMPR-II BMPR3 BMR2 BRK- 3 POVD1 PPH1 T-ALK	2	TGFb_Family_ Member_Rec eptor
TGF BR1	704 6	transfomi ng growth factor beta receptor 1	AAT5 ACVRLK4 ALK- 5 ALK5 ESS1 LDS1 LDS1A LDS2A MSSE SKR4 TBR-i TBRI TGFR-1 tbetaR-I	9	TGFb_Family_ Member_Rec eptor
TGF BR2	704 8	transfomi ng growth factor beta receptor 2	AAT3 FAA3 LDS1B LDS2 LDS2B MFS2 R IIC TAAD2 TBR-ii TBRII TGFR- 2 TGFbeta-RII	3	TGFb_Family_ Member_Rec eptor

TGF BR3	704 9	transforming growth factor beta receptor 3	BGCAN betaglycan	1	TGFb_Family_Member_Receptor
TNF RSF 11B	498 2	TNF receptor superfamily member 11b	OCIF OPG PDB5 TR1	8	TNF_Family_Members
TNF SF1 0	874 3	TNF superfamily member 10	APO2L Apo-2L CD253 TL2 TNLG6A TRAIL	3	TNF_Family_Members
TNF SF1 1	860 0	TNF superfamily member 11	CD254 ODF OPGL OPTB2 RANKL TNLG6B TRANCE hRANKL2 sOdf	13	TNF_Family_Members
TNF SF1 2	874 2	TNF superfamily member 12	APO3L DR3LG TNLG4A TWEAK	17	TNF_Family_Members
TNF SF1 3	874 1	TNF superfamily member 13	APRIL CD256 TALL-2 TALL2 TNLG7B TRDL-1 UNQ383/PRO715 ZTNF2	17	TNF_Family_Members
TNF SF1 3B	106 73	TNF superfamily member 13b	BAFF BLYS CD257 DTL TALL-1 TALL1 THANK TNFSF20 TNLG7A ZTNF4	13	TNF_Family_Members
TNF SF1 4	874 0	TNF superfamily member 14	CD258 HVEML LIGHT LTg	19	TNF_Family_Members
TNF SF1 5	996 6	TNF superfamily member 15	TL1 TL1A TNLG1B VEGI VEGI192A	9	TNF_Family_Members
TNF SF1 8	899 5	TNF superfamily member 18	AITRL GITRL TL6 TNLG2A hGITRL	1	TNF_Family_Members
TNF SF4	729 2	TNF superfamily member	CD134L CD252 GP34 OX-40L OX40L TNLG2B TXGP1	1	TNF_Family_Members

		4			
TNF SF8	944	TNF superfamily member 8	CD153 CD30L CD30LG TNLG3A	9	TNF_Family_Members
TNF SF9	874 4	TNF superfamily member 9	4-1BB-L CD137L TNLG5A	19	TNF_Family_Members
TNF RSF 10B	879 5	TNF receptor superfamily member 10b	CD262 DR5 KILLER KILLER/DR5 TRAIL-R2 TRAILR2 TRICK2 TRICK2A TRICK2B TRICKB ZTNFR9	8	TNF_Family_Members_Receptors
TNF RSF 10C	879 4	TNF receptor superfamily member 10c	CD263 DCR1 DCR1-TNFR LIT TRAIL-R3 TRAILR3 TRID	8	TNF_Family_Members_Receptors
TNF RSF 10D	879 3	TNF receptor superfamily member 10d	CD264 DCR2 TRAIL-R4 TRAILR4 TRUNDD	8	TNF_Family_Members_Receptors
TNF RSF 11A	879 2	TNF receptor superfamily member 11a	CD265 FEO LOH18CR1 ODFR OFE OPTB7 OSTS PDB2 RANK TRANCER	18	TNF_Family_Members_Receptors
TNF RSF 12A	513 30	TNF receptor superfamily member 12A	CD266 FN14 TWEAKR	16	TNF_Family_Members_Receptors
TNF RSF 13B	234 95	TNF receptor superfamily member 13B	CD267 CVID CVID2 IGAD2 RYZN TACI TNFRSF14B	17	TNF_Family_Members_Receptors
TNF RSF 13C	115 650	TNF receptor superfamily member 13C	BAFF-R BAFFR BROMIX CD268 CVID4 prolixin	22	TNF_Family_Members_Receptors

TNF RSF 14	876 4	TNF receptor superfamil y member 14	ATAR CD270 HVEA HVEM LIGHTR TR2	1	TNF_Family_ Members_Re ceptors
TNF RSF 17	608	TNF receptor superfamil y member 17	BCM BCMA CD269 TNFRSF13A	16	TNF_Family_ Members_Re ceptors
TNF RSF 18	878 4	TNF receptor superfamil y member 18	AITR CD357 ENERGEN GITR GITR-D	1	TNF_Family_ Members_Re ceptors
TNF RSF 19	555 04	TNF receptor superfamil y member 19	TAJ TAJ-alpha TRADE TROY	13	TNF_Family_ Members_Re ceptors
TNF RSF 1A	713 2	TNF receptor superfamil y member 1A	CD120a FPF TBP1 TNF-R TNF-R- I TNF- R55 TNFAR TNFR1 TNFR55 TNFR60 p5 5 p55-R p60	12	TNF_Family_ Members_Re ceptors
TNF RSF 1B	713 3	TNF receptor superfamil y member 1B	CD120b TBPII TNF-R-II TNF- R75 TNFBR TNFR1B TNFR2 TNFR80 p7 5 p75TNFR	1	TNF_Family_ Members_Re ceptors
TNF RSF 21	272 42	TNF receptor superfamil y member 21	BM-018 CD358 DR6	6	TNF_Family_ Members_Re ceptors
TNF RSF 25	871 8	TNF receptor superfamil y member 25	APO- 3 DDR3 DR3 GEF720 LARD PLEKHG5 T NFRSF12 TR3 TRAMP WSL-1 WSL-LR	1	TNF_Family_ Members_Re ceptors
TNF RSF 4	729 3	TNF receptor superfamil y member	ACT35 CD134 IMD16 OX40 TXGP1L	1	TNF_Family_ Members_Re ceptors

		4			
TNF RSF 6B	877 1	TNF receptor superfamil y member 6b	DCR3 DJ583P15.1.1 M68 M68E TR6	20	TNF_Family_ Members_Re ceptors
TNF RSF 8	943	TNF receptor superfamil y member 8	CD30 D1S166E Ki-1	1	TNF_Family_ Members_Re ceptors
TNF RSF 9	360 4	TNF receptor superfamil y member 9	4-1BB CD137 CDw137 ILA	1	TNF_Family_ Members_Re ceptors