

Human IL6 Signaling Pathway (PAHS-160Y)		Human TNF- α Signaling Pathway (PAHS-063Z)		Housekeeping gene	
Symbol	Description	Symbol	Description	Symbol	Description
<i>MAP2K1</i>	Mitogen-activated protein kinase kinase 1	<i>AGFG1</i>	ArfGAP with FG repeats 1	<i>ACADVL</i>	Acyl-CoA dehydrogenase, very long chain
<i>CCL4</i>	Chemokine (C-C motif) ligand 4	<i>ARHGDB1B</i>	Rho GDP dissociation inhibitor (GDI) beta	<i>ATP6V1F</i>	ATPase, H ⁺ transporting, lysosomal 14 kDa, V1 subunit F
<i>MAPK8</i>	Mitogen-activated protein kinase 8	<i>BAG4</i>	BCL2-associated athanogene 4	<i>BCAT2</i>	Branched chain amino acid transaminase 2, mitochondrial
<i>CASP4</i>	Caspase 4, apoptosis-related cysteine peptidase	<i>CAD</i>	Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	<i>ACSL3</i>	Acyl-CoA synthetase long-chain family member 3
<i>SRC</i>	V-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian)	<i>CASP2</i>	Caspase 2, apoptosis-related cysteine peptidase	<i>LDLR</i>	Low density lipoprotein receptor
<i>IL1A</i>	Interleukin 1, alpha	<i>CASP3</i>	Caspase 3, apoptosis-related cysteine peptidase		
<i>IL8</i>	Interleukin 8	<i>CASP8</i>	Caspase 8, apoptosis-related cysteine peptidase		
<i>CEBPδ</i>	CCAAT/enhancer binding protein (C/EBP), delta	<i>CD40</i>	CD40 molecule, TNF receptor superfamily member 5		
<i>TNFSF10</i>	Tumor necrosis factor (ligand) superfamily, member 10	<i>CD70</i>	CD70 molecule		
<i>GLRX</i>	Glutaredoxin (thioltransferase)	<i>CHUK</i>	Conserved helix-loop-helix ubiquitous kinase		
<i>MAPK3</i>	Mitogen-activated protein kinase 3	<i>CRADD</i>	CASP2 and RIPK1 domain containing adaptor with death domain		
<i>PHF21A</i>	PHD finger protein 21A	<i>DDIT3</i>	DNA fragmentation factor, 45kDa, alpha polypeptide		
<i>JUNB</i>	Jun B proto-oncogene	<i>DUSP1</i>	Dual specificity phosphatase 1		
<i>IL23A</i>	Interleukin 23, alpha subunit p19	<i>FADD</i>	Fas (TNFRSF6)-associated via death domain		
<i>BAX</i>	BCL2-associated X protein	<i>FAS</i>	Fas (TNF receptor superfamily, member 6)		
<i>SOCS1</i>	Suppressor of cytokine signaling 1	<i>IKBAP</i>	Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein		
<i>IL1B</i>	Interleukin 1, beta	<i>IKBKAP</i>	Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta		
<i>MAPK1</i>	Mitogen-activated protein kinase 1	<i>IKBKG</i>	Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma		
<i>IL6ST</i>	Interleukin 6 signal transducer (gp130, oncostatin M receptor)	<i>JUN</i>	Jun proto-oncogene		
<i>TNFRSF1B</i>	Tumor necrosis factor receptor superfamily, member 1B	<i>LMNA</i>	Lamin A/C		
<i>IL18</i>	Interleukin 18 (interferon-gamma-inducing factor)	<i>LMNB1</i>	Lamin B1		
<i>JAK2</i>	Janus kinase 2	<i>LMNB2</i>	Lamin B2		
<i>AKT1</i>	V-akt murine thymoma viral oncogene homolog 1	<i>LTB</i>	Lymphotoxin beta (TNF superfamily, member 3)		
<i>FAS</i>	Fas (TNF receptor superfamily, member 6)	<i>LTBR</i>	Lymphotoxin beta receptor (TNFR superfamily, member 3)		
<i>CXCL10</i>	Chemokine (C-X-C motif) ligand 10	<i>MADD</i>	MAP-kinase activating death domain		
<i>STAT3</i>	Signal transducer and activator of transcription 3 (acute-phase response factor)	<i>MAP2K4</i>	Mitogen-activated protein kinase kinase 4		
<i>PROS1</i>	Protein S (alpha)	<i>MAP3K1</i>	Mitogen-activated protein kinase kinase kinase 1		
<i>IL15</i>	Interleukin 15	<i>MAP3K7</i>	Mitogen-activated protein kinase kinase kinase 7		
<i>CCL2</i>	Chemokine (C-C motif) ligand 2	<i>MAPK8</i>	Mitogen-activated protein kinase 8		
<i>IL1R1</i>	Interleukin 1 receptor, type 1	<i>NFKB1</i>	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1		
<i>CD40</i>	CD40 molecule, TNF receptor superfamily member 5	<i>NFKBIA</i>	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha		
<i>IL18R1</i>	Interleukin 18 receptor 1	<i>NGFR</i>	Nerve growth factor receptor		
<i>LIF</i>	Leukemia inhibitory factor (cholinergic differentiation factor)	<i>PAK1</i>	P21 protein (Cdc42/Rac)-activated kinase 1		
<i>NRP1</i>	Neuropilin 1	<i>PAK2</i>	P21 protein (Cdc42/Rac)-activated kinase 2		
<i>MET</i>	Met proto-oncogene (hepatocyte growth factor receptor)	<i>PARP1</i>	Poly (ADP-ribose) polymerase 1		
<i>IFITM2</i>	Interferon induced transmembrane protein 2 (1-8D)	<i>PGLYRP1</i>	Peptidoglycan recognition protein 1		
<i>MYC</i>	V-myc myelocytomatosis viral oncogene homolog (avian)	<i>PRKDC</i>	Protein kinase, DNA-activated, catalytic polypeptide		
<i>OSM</i>	Oncostatin M	<i>PSMG2</i>	Proteasome (prosome, macropain) assembly chaperone 2		
<i>CSF3</i>	Colony stimulating factor 3 (granulocyte)	<i>RBI</i>	Retinoblastoma 1		
<i>LIFR</i>	Leukemia inhibitory factor receptor alpha	<i>RELT</i>	RELT tumor necrosis factor receptor		
<i>IL11</i>	Interleukin 11	<i>SPTAN1</i>	Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin)		
<i>TNFRSF10B</i>	Tumor necrosis factor receptor superfamily, member 10b	<i>TNF</i>	Tumor necrosis factor		
<i>EGFR</i>	Epidermal growth factor receptor	<i>TNFAIP3</i>	Tumor necrosis factor, alpha-induced protein 3		
<i>TNFRSF1A</i>	Tumor necrosis factor receptor superfamily, member 1A	<i>TNFRSF10A</i>	Tumor necrosis factor receptor superfamily, member 10a		
<i>BCL3</i>	B-cell CLL/lymphoma 3	<i>TNFRSF10B</i>	Tumor necrosis factor receptor superfamily, member 10b		
<i>NFKBIA</i>	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	<i>TNFRSF10D</i>	Tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain		
<i>MAPK14</i>	Mitogen-activated protein kinase 14	<i>TNFRSF11A</i>	Tumor necrosis factor receptor superfamily, member 11a, NFKB activator		
<i>NFKB1</i>	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	<i>TNFRSF11B</i>	Tumor necrosis factor receptor superfamily, member 11b		
<i>SOCS3</i>	Suppressor of cytokine signaling 3	<i>TNFRSF12A</i>	Tumor necrosis factor receptor superfamily, member 12A		
<i>IL6</i>	Interleukin 6 (interferon, beta 2)	<i>TNFRSF13C</i>	Tumor necrosis factor receptor superfamily, member 13C		
<i>CCL3</i>	Chemokine (C-C motif) ligand 3	<i>TNFRSF14</i>	Tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator)		
<i>MTOR</i>	Mechanistic target of rapamycin (serine/threonine kinase)	<i>TNFRSF18</i>	Tumor necrosis factor receptor superfamily, member 18		
<i>CSF3R</i>	Colony stimulating factor 3 receptor (granulocyte)	<i>TNFRSF19</i>	Tumor necrosis factor receptor superfamily, member 19		
<i>IL6R</i>	Interleukin 6 receptor	<i>TNFRSF1A</i>	Tumor necrosis factor receptor superfamily, member 1A		
<i>CCL5</i>	Chemokine (C-C motif) ligand 5	<i>TNFRSF1B</i>	Tumor necrosis factor receptor superfamily, member 1B		
<i>RELA</i>	V-rel reticulendotheliosis viral oncogene homolog A (avian)	<i>TNFRSF21</i>	Tumor necrosis factor receptor superfamily, member 21		
<i>CD4</i>	CD4 molecule	<i>TNFRSF6B</i>	Tumor necrosis factor receptor superfamily, member 6b, decoy		
<i>TLR4</i>	Toll-like receptor 4	<i>TNFRSF9</i>	Tumor necrosis factor receptor superfamily, member 9		
<i>CSF2</i>	Colony stimulating factor 2 (granulocyte-macrophage)	<i>TNFSF10</i>	Tumor necrosis factor (ligand) superfamily, member 10		
<i>TGM2</i>	Transglutaminase 2 (C, polypeptide, protein-glutamine-gamma-glutamyltransferase)	<i>TNFSF12</i>	Tumor necrosis factor (ligand) superfamily, member 12		
<i>JAK3</i>	Janus kinase 3	<i>TNFSF13</i>	Tumor necrosis factor (ligand) superfamily, member 13		
<i>PIM1</i>	Pim-1 oncogene	<i>TNFSF13B</i>	Tumor necrosis factor (ligand) superfamily, member 13b		
<i>TNF</i>	Tumor necrosis factor	<i>TNFSF14</i>	Tumor necrosis factor (ligand) superfamily, member 14		
<i>PNRL2</i>	Poliiovirus receptor-related 2 (herpesvirus entry mediator B)	<i>TNFSF15</i>	Tumor necrosis factor (ligand) superfamily, member 15		
<i>BCL2</i>	B-cell CLL/lymphoma 2	<i>TNFSF18</i>	Tumor necrosis factor (ligand) superfamily, member 18		
<i>TYK2</i>	Tyrosine kinase 2	<i>TNFSF4</i>	Tumor necrosis factor (ligand) superfamily, member 4		
<i>CSF1</i>	Colony stimulating factor 1 (macrophage)	<i>TNFSF9</i>	Tumor necrosis factor (ligand) superfamily, member 9		
<i>PLA3</i>	Protein inhibitor of activated STAT, 3	<i>TRADD</i>	TNFRSF1A-associated via death domain		
<i>TUBB2A</i>	Tubulin, beta 2A	<i>TRAF1</i>	TNF receptor-associated factor 1		
<i>CDKN1A</i>	Cyclin-dependent kinase inhibitor 1A (p21, Cip1)	<i>TRAF2</i>	TNF receptor-associated factor 2		
		<i>TRAF3</i>	TNF receptor-associated factor 3		