

domain	term_id	term_name	term_size(T)	query_size(Q)	overlap_size(Q&T)	adjusted_p-value	Q(-)/T	Q(+)/Q	local_hierarchy_depth	participated_genes
leg	KEGG-05166	HTLV-1 infection	276	84	14	0.00000225	0.167	0.051	1	H2-M2, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, H2-QA, IL2RG, H2-Q4, H2-K1, ITGAL, H2-D1, H2-DMB1, H2-T23 C3, FCGR4, H2-AB1, H2-AA, CYBB, H2-EB1, H2-Q6, H2-DMB1, ITGB2, IL2, NCF1, FCGR3, FCGR1, PTPN6, NCF4, H2- DMA, STA1, NCF2, IL1A
leg	KEGG-05140	Leishmaniasis	65	269	19	1.66E-15	0.071	0.292	1	CLEC4E, C3, CD74, FCGR4, H2-AB1, H2-AA, ITGAX, H2-EB1, H2-QA, H2- DMB1, IL1R1, CTSS, ITGB2, IL2, FCGR3, FCGR1, FCER1G, IL13, IL10RA, FCGR2B, H2- DMA, STA1, IL1R1, IL1A, CD14, CASP9
leg	KEGG-05152	Tuberculosis	175	293	26	6.15E-13	0.089	0.149	1	LAT, RAC2, LCP2, FCER1G, VAV1, ALOXSAP, PLCG2, INPP5D, BTK
leg	KEGG-04664	Fc epsilon RI signaling pathway	67	322	9	0.00306	0.028	0.134	1	CCL5, H2-AB1, H2-AA, H2-EB1, CCL12, H2-QA, IRF7, H2-DMB1, ICAM1, TAM1, IL7, OAS2, PYCARD, OAS1A, H2- DMA, FAS, STA1, IKKBE1, IL1A, RSAD2
leg	KEGG-05164	Influenza A	168	302	20	0.000000113	0.066	0.119	1	CCL1, CCL5, CXCL8, CXCL10, CXCL12, CSF2RB, CCL12, CSF2RB, IL2RG, IL12RB1, CCR2, IL21R1, CSF3R, CCL6, CXCL12, P NSF13B, IL10RA, TNFRSF1B, FAS, IL1A, IL6RA, CCR5, CSF1R, IL1R1, IL1RA, OSMR, NCFR, CCL9, IL3RA, CCL17, CCL2
leg	KEGG-04658	Th1 and Th2 cell differentiation	87	464	16	0.000000695	0.034	0.184	1	H2-AB1, H2-AA, H2-EB1, CD4, H2-QA, IL2RG, IL12RB1, H2-DMB1, LAT, H2- DMA, STA1, LCK, IL4RA, NFKBIE, FOS, CD247
leg	KEGG-04630	Jak-STAT signaling pathway	161	427	16	0.00172	0.037	0.099	1	CSF2RB, CSF2RB, IL2RG, IL12RB1, IL13R, CSF3R, IL10RA, PTPN6, STAT1, GFAP, IL6RA, IL4RA, IRF9, OSMR, PIM1, IL3R A
leg	KEGG-04514	Cell adhesion molecules (CAMs)	161	218	25	1.67E-15	0.115	0.155	1	H2-M2, CD8B1, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, CD22, CD4, H2-QA, H2-Q4, H2-K1, ITGAL, H2-D1, H2- DMB1, H2-T23, ITGB2, ITGB7, CD274, ICAM1, PTPRC, ICOSL, H2-M3, CD86, H2-DMA
leg	KEGG-051340	Primary immunodeficiency	25	423	10	0.00000382	0.023	0.11	1	CD8B1, CD4, IL2, TAP1, PTPRC, BLNK, TAP2, LCK, BTK, ICOS
leg	KEGG-04668	TNF signaling pathway	108	480	12	0.0164	0.025	0.111	1	CCL5, CXCL10, CCL12, IFI47, ICAM1, TNFRSF1B, FAS, BIRC3, FOS, TNFRSF3, BCL3, CCL2
leg	KEGG-04659	Th17 cell differentiation	102	464	19	2.05E-08	0.041	0.186	1	H2-AB1, H2-AA, H2-EB1, CD4, H2-QA, IL2RG, IL12RB1, H2-DMB1, LAT, IL21R1, H2- DMA, STA1, IL6RA, LCK, IL1R1, IL4RA, NFKBIE, FOS, CD247
leg	KEGG-05320	Autoimmune thyroid disease	70	84	13	4.5E-14	0.155	0.186	1	H2-M2, CD86, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, H2-QA, H2-Q4, H2-K1, H2-D1, H2-DMB1, H2-T23
leg	KEGG-05142	Chagas disease (American trypanosomiasis)	102	225	9	0.00518	0.04	0.088	1	CCL5, CCL12, IL1R1, C1QA, C1QB, C1QC, TLR5, C1QC, FAS
leg	KEGG-04672	Intestinal immune network for IgA production	42	218	10	0.00000148	0.046	0.238	1	H2-AB1, H2-AA, H2-EB1, H2-QA, H2-DMB1, ITGB7, TNFSF13B, ICOSL, CD86, H2-DMA
leg	KEGG-05321	Inflammatory bowel disease (IBD)	59	326	13	0.00000137	0.04	0.22	1	H2-AB1, H2-AA, H2-EB1, H2-QA, IL2RG, IL12RB1, H2-DMB1, IL2R1, IL21R1, H2-DMA, STA1, IL1A, IL4RA
leg	KEGG-04940	Type 1 diabetes mellitus	61	84	13	6.5E-15	0.155	0.213	1	H2-M2, CD86, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, H2-QA, H2-Q4, H2-K1, H2-D1, H2-DMB1, H2-T23
leg	KEGG-05310	Asthma	23	218	7	0.00000722	0.032	0.304	1	H2-AB1, H2-AA, H2-EB1, H2-QA, H2-DMB1, FCER1G, H2-DMA
leg	KEGG-04933	AGE-RAGE signaling pathway in diabetic complications	101	480	11	0.0364	0.023	0.109	1	CYBB, CCL12, ICAM1, STA1, PLCG2, PRKCD, IL1A, PIM1, CCL1A1, MMP2, CCL2
leg	KEGG-04610	Complement and coagulation cascades	86	474	20	1.36E-10	0.042	0.233	1	C3, ITGAX, AZM, CSAR1, C4B, C1RA, ITGB2, CSAR1, C1QA, C1S1, C1QB, C1QC, F13A1, SERPING1, VWF, PLAU, CFB, PLA UR, F10, C2
leg	KEGG-05169	Ebola-Barr virus infection	207	229	14	0.00162	0.065	0.088	1	H2-M2, H2-Q7, H2-Q6, H2-Q4, H2-K1, ITGAL, H2-D1, H2-T23, ICAM1, CD4, IL10RA, SP11, H2-M3, PLCG2
leg	KEGG-04666	Fc gamma R-mediated phagocytosis	88	279	13	0.00000278	0.047	0.148	1	LAT, RAC2, HCK, NCF1, PTPRC, FCGR1, WAS, FCGR2B, VAV1, DOCK1, PLCG2, PRKCD, INPP5D
leg	KEGG-05168	Herpes simplex infection	205	341	32	8.21E-15	0.094	0.156	1	H2-M2, CCL5, C3, H2-Q7, CD74, H2-AB1, H2-AA, H2-Q6, H2-EB1, CCL12, H2-QA, H2-Q4, H2-K1, H2-D1, TAP1, IRF7, H2- DMB1, H2-T23, IL2, OAS2, OAS1A, TLR9, H2-M3, H2-DMA, FAS, STA1, IKKBE1, TAP2, H2-T22, IFI1, IRF9, SP100
leg	KEGG-05162	Measles	136	425	15	0.000853	0.035	0.11	1	C2, H5, IFI1, TLR2, TLR4, OAS2, OAS1A, TLR9, FCGR2B, FAS, STA1, IKKBE1, IL1A, IRF9, TNFRSF1, DDY1
leg	KEGG-04621	NOD-like receptor signaling pathway	167	489	29	7.28E-12	0.059	0.174	1	CCL5, IFI204, CYBB, IFI207, CCL12, GBP2, IRF7, NAIP2, GBP5, OAS2, PYCARD, OAS1A, NAIMP5, GSDMD, GBP3, STA1, G BP7, IKKBE1, PRKCD, BIRC3, CARD9, IRF9, TMEM173, PSTPIP1, TNFAIP3, CASP2, CAMP, CASP12
leg	KEGG-04640	Hematopoietic cell lineage	93	326	20	6.9E-12	0.061	0.215	1	CD8B1, H2-AB1, H2-AA, H2-EB1, CD22, CD4, H2-QA, H2-DMB1, CSF3R, FCGR1, CD44, H2- DMA, CD37, IL1A, CD35, CD14, IL6RA, CSF1R, IL1R1, IL4RA
leg	KEGG-04064	NF-kappa B signaling pathway	100	494	15	0.00000748	0.03	0.15	1	BCL2L1, LAT, ITB, ICAM1, TNFSF13B, PLCG2, BLNK, BIRC3, CD14, PLAU, LCK, BTK, IL1R1, TNFAIP3, BCL2A1A H2-AB1, H2-AA, H2-EB1, JGP7, H2-QA, H2-DMB1, IRGM1, TLR2, IL10RA, PIK3R5, H2- DMA, STA1, PIK3CG, BIRC3, PIK3R6, CCR5
leg	KEGG-05145	Toxoplasmosis	107	319	16	0.000000439	0.05	0.15	1	CCL5, CXCL9, CXCL10, IRF7, IL1R1, TLR2, TLR4, TLR9, CD86, STA1, IKKBE1, CD14
leg	KEGG-04620	Toll-like receptor signaling pathway	100	389	12	0.000154	0.042	0.12	1	H2-M2, C3, H2-Q7, FCGR4, H2-AB1, H2-AA, CYBB, H2-Q6, H2-EB1, H2-QA, H2-Q4, H2-K1, H2-D1, TAP1, H2-DMB1, H2- T23, CTSS, C1RA, ITGB2, TLR2, NCF1, FCGR3, FCGR1, FCGR2B, H2-M3, NCF4, H2-DMA, NCF2, CD14, TAP2, H2-T22
leg	KEGG-04145	Phagosome	167	318	31	1.67E-17	0.097	0.186	1	C3, CAB, C1RA, ITGB2, C1QA, PIVCARD, C1S1, C1QB, C1QC, IRF1, IL1A, SERPING1, CD14
leg	KEGG-05133	Pertussis	74	289	13	0.000000522	0.045	0.176	1	CYBB, ITGAL, ITGB2, ICAM1, NCF1, IRM9, VAV1, WFS4, PLCG2, NCF2
leg	KEGG-04670	Leukocyte transendothelial migration	116	267	31	0.00207	0.041	0.095	1	C3, FCGR4, H2-AB1, H2-AA, H2-EB1, H2-QA, H2-DMB1, C4B, C1A, C1DA, C1S1, FCGR1, C1QB, C1QC, CD86, H2- DMA, HST14H4
leg	KEGG-05322	Systemic lupus erythematosus	136	256	17	8.97E-08	0.066	0.125	1	CCL5, H2-AB1, H2-AA, H2-EB1, CCL12, H2-QA, ITGAL, H2- DMB1, ITGB2, TLR2, ITB, ICAM1, TNFSF13B, ACPS, CD86, H2-DMA
leg	KEGG-05323	Rheumatoid arthritis	83	218	16	4.75E-11	0.073	0.193	1	H2-M2, CD8B1, H2-Q7, CD74, H2-AB1, H2-AA, H2-Q6, H2-EB1, CD4, H2-QA, H2-Q4, H2-K1, H2-D1, TAP1, B2M, H2- DMB1, H2-T23, CTSS
leg	KEGG-04612	Antigen processing and presentation	81	86	18	2.63E-21	0.209	0.222	1	H2-M2, CD8B1, H2-Q7, CD74, H2-AB1, H2-AA, H2-Q6, H2-EB1, CD4, H2-QA, H2-Q4, H2-K1, H2-D1, TAP1, B2M, H2- DMB1, H2-T23, CTSS
leg	KEGG-04662	B cell receptor signaling pathway	71	375	13	0.00000639	0.035	0.183	1	PIR8, CD22, RAC2, FCGR2B, PTPN6, VAV1, PLCG2, BLNK, PIK3AP1, INPP5D, BTK, NFKBIE, FOS
leg	KEGG-05150	Staphylococcus aureus infection	49	218	23	1.61E-26	0.106	0.469	1	C3, FCGR4, H2-AB1, H2-AA, H2-EB1, H2-QA, H2-DMB1, C4B, C1A, ICAM1, C1S1, FCGR3, FCGR1, C1QB, FCGR2B, C1QC, PAFR, H2-DMA
leg	KEGG-04660	T cell receptor signaling pathway	106	464	12	0.00936	0.026	0.113	1	CD8B1, CD4, LAT, PTPRC, LCP2, PTPN6, VAV1, LCK, NFKBIE, FOS, ICOS, CD247
leg	KEGG-04380	Osteoclast differentiation	127	375	23	5.78E-11	0.061	0.181	1	FCGR4, PIR8, NCF1, FCGR3, FCGR1, LCP2, FCGR2B, SP11, ACPS, NCF4, STA1, PLCG2, BLNK, NCF2, IL1A, TREM2, TYRO BP, LCK, BTK, CSF1R, IL1R1, IRF9, FOS
leg	KEGG-05167	Kaposi's sarcoma-associated herpesvirus infection	194	333	20	0.00000854	0.06	0.103	1	H2-M2, C3, H2-Q7, H2-Q6, H2-Q4, H2-K1, ITGAL, H2-D1, H2-T23, ICAM1, CD4, IL10RA, SP11, H2-M3, PLCG2
leg	KEGG-04210	Apoptosis	137	494	15	0.000385	0.03	0.109	1	M3, CD86, FAS, STA1, PLCG2, IKKBE1, H2-T22, CSX8, IRF9
leg	KEGG-05416	Viral myocarditis	78	218	19	2.44E-15	0.087	0.244	1	GZMB, CSF2RB, CSF2RB, BCL2A1B, CTSS, CTSC, FOS, PARG, PARG, BIRC3, CTSC, FOS, IL3RA, CASP12, BCL2A1A
leg	KEGG-04062	Chemokine signaling pathway	195	227	17	0.00000457	0.075	0.087	1	CCL1, CCL5, CXCL9, CCL8, CXCL10, CCL12, CCR2, RAC2, HCK, NCF1, CCL6, CXCL16, WAS, ADCY7, VAV1, DOK2, STA11
leg	KEGG-05203	Viral carcinogenesis	221	84	9	0.0014	0.107	0.041	1	H2-M2, C3, H2-Q7, H2-Q6, H2-Q4, H2-K1, H2-D1, IRF7, H2-T23
leg	KEGG-04144	Endocytosis	277	84	9	0.00825	0.107	0.032	1	H2-M2, H2-Q7, H2-Q6, IL2RG, H2-Q4, H2-K1, H2-D1, ACAP1, H2-T23
leg	KEGG-05144	Malaria	47	165	6	0.00312	0.036	0.138	1	CCL12, ITGAL, ITGB2, ITB, ICAM1, TLR9
leg	KEGG-05134	Legionellosis	57	179	6	0.0157	0.104	0.105	1	C3, ITGB2, TLR2, NAIP2, PYCARD, NAIP5
leg	KEGG-05332	Graft-versus-host disease	56	318	19	1.32E-15	0.06	0.339	1	H2-M2, GZMB, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, H2-QA, H2-Q4, H2-K1, H2-D1, H2-DMB1, H2-T23, H2- M3, CD86, H2-DMA, FAS, IL1A, H2-T22
leg	KEGG-05330	Allograft rejection	54	84	13	1.13E-15	0.155	0.241	1	H2-M2, CD86, H2-Q7, H2-AB1, H2-AA, H2-Q6, H2-EB1, H2-QA, H2-Q4, H2-K1, H2-D1, H2-DMB1, H2-T23
leg	KEGG-04650	Natural killer cell mediated cytotoxicity	115	229	17	1.27E-09	0.074	0.148	1	GZMB, FCGR4, H2-K1, ITGAL, H2-D1, H2- T23, LAT, ITGB2, CD48, RAC2, ICAM1, LCP2, FCER1G, PTPN6, VAV1, FAS, PLCG2