

Enriched Pathways

Pathway Name	Resource Identifier	Adjusted p-value	Genes Mapped	Pathway Size
Neutrophil degranulation	R-HSA-6798695	0.0	9	479
Immune System	R-HSA-168256	0.0	15	2050
Innate Immune System	R-HSA-168249	0.0	10	1109
mRNA Splicing - Major Pathway	R-HSA-72163	0.0011	4	180
Metabolism of RNA	R-HSA-8953854	0.0	10	666
mRNA Splicing	R-HSA-72172	0.0012	4	188
Processing of Capped Intron-Containing Pre-mRNA	R-HSA-72203	0.0002	5	240
Apoptosis	R-HSA-109581	0.0066	3	168
Programmed Cell Death	R-HSA-5357801	0.0069	3	171
Regulation of Apoptosis	R-HSA-169911	0.0108	2	53
Platelet degranulation	R-HSA-114608	0.0036	3	128
Platelet activation, signaling and aggregation	R-HSA-76002	0.0184	3	261
Response to elevated platelet cytosolic Ca2+	R-HSA-76005	0.004	3	133
Hemostasis	R-HSA-109582	0.0308	4	675
rRNA modification in the nucleus and cytosol	R-HSA-6790901	0.0133	2	60
rRNA processing	R-HSA-72312	0.0014	4	203
rRNA processing in the nucleus and cytosol	R-HSA-8868773	0.0012	4	193
Major pathway of rRNA processing in the nucleolus and cytosol	R-HSA-6791226	0.0011	4	183
Metabolism	R-HSA-1430728	0.0	16	2095
Metabolism of carbohydrates	R-HSA-71387	0.0029	4	274
Purine salvage	R-HSA-74217	0.0462	1	13
Metabolism of nucleotides	R-HSA-15869	0.0253	2	102
Binding and Uptake of Ligands by Scavenger Receptors	R-HSA-2173782	0.025	2	101
Scavenging by Class A Receptors	R-HSA-3000480	0.0023	2	19
Glucose metabolism	R-HSA-70326	0.002	3	91
Gluconeogenesis	R-HSA-70263	0.0051	2	34
Glycolysis	R-HSA-70171	0.0012	3	71
TRAF6 mediated NF-kB activation	R-HSA-933542	0.0034	2	26
Toll Like Receptor 3 (TLR3) Cascade	R-HSA-168164	0.0248	2	99
MyD88 cascade initiated on plasma membrane	R-HSA-975871	0.0211	2	85
Activation of DNA fragmentation factor	R-HSA-211227	0.0462	1	13
MyD88-independent TLR4 cascade	R-HSA-166166	0.0248	2	100
Cytosolic sensors of pathogen-associated DNA	R-HSA-1834949	0.0159	2	68
Toll Like Receptor 2 (TLR2) Cascade	R-HSA-181438	0.0246	2	98
TRAF6 mediated induction of NFkB and MAP kinases upon TLR7/8 or 9 activation	R-HSA-975138	0.0233	2	92
Interleukin-1 family signaling	R-HSA-446652	0.0043	3	139
Toll Like Receptor TLR1:TLR2 Cascade	R-HSA-168179	0.0246	2	98
MyD88:Mal cascade initiated on plasma membrane	R-HSA-166058	0.024	2	95
Advanced glycosylation endproduct receptor signaling	R-HSA-879415	0.0462	1	13
Toll Like Receptor 10 (TLR10) Cascade	R-HSA-168142	0.0211	2	85
Toll Like Receptor 9 (TLR9) Cascade	R-HSA-168138	0.0246	2	98

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Signaling by Interleukins	R-HSA-449147	0.002	5	451
MyD88 dependent cascade initiated on endosome	R-HSA-975155	0.0239	2	94
Apoptosis induced DNA fragmentation	R-HSA-140342	0.0462	1	13
RIP-mediated NFkB activation via ZBP1	R-HSA-1810476	0.0029	2	23
DDX58/IFIH1-mediated induction of interferon-alpha/beta	R-HSA-168928	0.0211	2	82
TAK1 activates NFkB by phosphorylation and activation of IKKs complex	R-HSA-445989	0.0051	2	34
ZBP1(DAI) mediated induction of type I IFNs	R-HSA-1606322	0.0036	2	27
DEx/H-box helicases activate type I IFN and inflammatory cytokines production	R-HSA-3134963	0.0015	2	13
Cytokine Signaling in Immune system	R-HSA-1280215	0.0019	6	677
Toll Like Receptor 5 (TLR5) Cascade	R-HSA-168176	0.0211	2	85
Toll Like Receptor 7/8 (TLR7/8) Cascade	R-HSA-168181	0.0239	2	94
Interleukin-1 signaling	R-HSA-9020702	0.0024	3	103
Toll-Like Receptors Cascades	R-HSA-168898	0.0455	2	155
TRIF(TICAM1)-mediated TLR4 signaling	R-HSA-937061	0.0248	2	100
Toll Like Receptor TLR6:TLR2 Cascade	R-HSA-168188	0.024	2	95
Toll Like Receptor 4 (TLR4) Cascade	R-HSA-166016	0.0353	2	129
Metabolism of proteins	R-HSA-392499	0.0	13	2048
Post-translational protein modification	R-HSA-597592	0.0064	7	1354
SUMOylation	R-HSA-2990846	0.0031	3	119
SUMOylation of DNA damage response and repair proteins	R-HSA-3108214	0.0184	2	76
SUMO E3 ligases SUMOylate target proteins	R-HSA-3108232	0.0029	3	113
HDR through MMEJ (alt-NHEJ)	R-HSA-5685939	0.0387	1	10
POLB-Dependent Long Patch Base Excision Repair	R-HSA-110362	0.0334	1	8
Interleukin-12 signaling	R-HSA-9020591	0.0086	2	47
Interleukin-12 family signaling	R-HSA-447115	0.0123	2	57
Gene and protein expression by JAK-STAT signaling after Interleukin-12 stimulation	R-HSA-8950505	0.0061	2	38
SRP-dependent cotranslational protein targeting to membrane	R-HSA-1799339	0.0029	3	113
Eukaryotic Translation Termination	R-HSA-72764	0.002	3	94
Activation of the mRNA upon binding of the cap-binding complex and eIFs, and subsequent binding to 43S	R-HSA-72662	0.0	4	60
Metabolism of amino acids and derivatives	R-HSA-71291	0.0001	6	370
Disease	R-HSA-1643685	0.0006	8	1048
Selenocysteine synthesis	R-HSA-2408557	0.002	3	94
Nonsense-Mediated Decay (NMD)	R-HSA-927802	0.0029	3	116
Axon guidance	R-HSA-422475	0.0001	7	553
Translation initiation complex formation	R-HSA-72649	0.0	4	59
Influenza Infection	R-HSA-168254	0.0	5	155
Viral mRNA Translation	R-HSA-192823	0.002	3	90
Signaling by ROBO receptors	R-HSA-376176	0.0	6	218
Nonsense Mediated Decay (NMD) independent of the Exon Junction Complex (EJC)	R-HSA-975956	0.0021	3	96

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Nonsense Mediated Decay (NMD) enhanced by the Exon Junction Complex (EJC)	R-HSA-975957	0.0029	3	116
Cap-dependent Translation Initiation	R-HSA-72737	0.0003	4	120
Infectious disease	R-HSA-5663205	0.0002	6	381
Developmental Biology	R-HSA-1266738	0.0021	7	1045
Eukaryotic Translation Elongation	R-HSA-156842	0.0021	3	95
Formation of a pool of free 40S subunits	R-HSA-72689	0.0023	3	102
Translation	R-HSA-72766	0.0	6	294
Influenza Viral RNA Transcription and Replication	R-HSA-168273	0.0004	4	135
Ribosomal scanning and start codon recognition	R-HSA-72702	0.0	4	59
Eukaryotic Translation Initiation	R-HSA-72613	0.0003	4	120
L13a-mediated translational silencing of Ceruloplasmin expression	R-HSA-156827	0.0002	4	112
Peptide chain elongation	R-HSA-156902	0.002	3	90
Formation of the ternary complex, and subsequently, the 43S complex	R-HSA-72695	0.0006	3	52
Regulation of expression of SLITs and ROBOs	R-HSA-9010553	0.0009	4	172
Influenza Life Cycle	R-HSA-168255	0.0	5	144
Selenoamino acid metabolism	R-HSA-2408522	0.0003	4	118
GTP hydrolysis and joining of the 60S ribosomal subunit	R-HSA-72706	0.0002	4	113
ATF6 (ATF6-alpha) activates chaperones	R-HSA-381033	0.0446	1	12
Virus Assembly and Release	R-HSA-168268	0.0133	1	2
ATF6 (ATF6-alpha) activates chaperone genes	R-HSA-381183	0.0387	1	10
Antigen processing-Cross presentation	R-HSA-1236975	0.0248	2	100
ER-Phagosome pathway	R-HSA-1236974	0.0211	2	84
Scavenging by Class F Receptors	R-HSA-3000484	0.0271	1	6
Assembly of Viral Components at the Budding Site	R-HSA-168316	0.0133	1	2
DNA Replication	R-HSA-69306	0.0345	2	127
DNA Replication Pre-Initiation	R-HSA-69002	0.0211	2	85
Metabolism of polyamines	R-HSA-351202	0.0211	2	85
Assembly of the pre-replicative complex	R-HSA-68867	0.0159	2	68
Host Interactions of HIV factors	R-HSA-162909	0.0353	2	130
M/G1 Transition	R-HSA-68874	0.0211	2	85
TCR signaling	R-HSA-202403	0.0334	2	124
Mitotic G1-G1/S phases	R-HSA-453279	0.0428	2	148
Switching of origins to a post-replicative state	R-HSA-69052	0.0227	2	90
S Phase	R-HSA-69242	0.0463	2	160
G1/S Transition	R-HSA-69206	0.0353	2	130
Synthesis of DNA	R-HSA-69239	0.0325	2	119
Diseases of signal transduction	R-HSA-5663202	0.0343	3	374
Orc1 removal from chromatin	R-HSA-68949	0.0169	2	71
G2/M Checkpoints	R-HSA-69481	0.0442	2	151
Cellular responses to stress	R-HSA-2262752	0.0387	3	398
tRNA Aminoacylation	R-HSA-379724	0.0071	2	42
Cytosolic tRNA aminoacylation	R-HSA-379716	0.003	2	24
SeMet incorporation into proteins	R-HSA-2408517	0.042	1	11

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Creatine metabolism	R-HSA-71288	0.0387	1	10
Regulation of HSF1-mediated heat shock response	R-HSA-3371453	0.0166	2	70
Cellular response to heat stress	R-HSA-3371556	0.0227	2	90
Folding of actin by CCT/TriC	R-HSA-390450	0.0387	1	10
ChREBP activates metabolic gene expression	R-HSA-163765	0.0334	1	8
Dissolution of Fibrin Clot	R-HSA-75205	0.0462	1	13
Role of ABL in ROBO-SLIT signaling	R-HSA-428890	0.0334	1	8
Unwinding of DNA	R-HSA-176974	0.0446	1	12
SUMOylation of transcription cofactors	R-HSA-3899300	0.0181	1	3