A

Biological Process	Over/under representation	Fold Enrichment	p-val (FDR<0.05)
ATP synthesis coupled proton transport (GO:0015986)	+	6.06	0.0491
Carboxylic acid biosynthetic process (GO:0046394)	+	4.99	0.0194
Organelle localization (GO:0051640)	+	4.72	0.0339
Cellular amino acid metabolic process (GO:0006520)	+	4.65	0.0246
Protein folding (GO:0006457)	+	3.88	0.0352
Cytoskeleton organization (GO:0007010)	+	3.42	0.00507
Formation of translation initiation ternary complex (GO:0001677)	+	3.35	0.00879
Translational termination (GO:0006415)	+	3.35	0.008
Translational elongation (GO:0006414)	+	3.35	0.00733
Vesicle-mediated transport (GO:0016192)	+	2.12	0.0222
Regulation of transcription by RNA polymerase II (GO:0006357)	-	0.21	0.0496
Transcription by RNA polymerase II (GO:0006366)	-	0.18	0.00232
Reactome pathways	**Over/under representation**	**Fold Enrichment**	**p-val (FDR<0.05)**
Retrograde neurotrophin signalling (R-HSA-177504)	+	12.98	4.00E-02
WNT5A-dependent internalization of FZD4 (R-HSA-5099900)	+	12.12	4.35E-02
EPHB-mediated forward signaling (R-HSA-3928662)	+	7.76	1.10E-02
Cargo recognition for clathrin-mediated endocytosis (R-HSA-8856825)	+	4.17	3.86E-02
MHC class II antigen presentation (R-HSA-2132295)	+	4	1.86E-02
Response to elevated platelet cytosolic Ca2+ (R-HSA-76005)	+	3.79	2.42E-02
Fcgamma receptor (FCGR) dependent phagocytosis (R-HSA-2029480)	+	3.71	1.93E-02
Innate Immune System (R-HSA-168249)	+	2.47	1.60E-07
Neutrophil degranulation (R-HSA-6798695)	+	3.61	2.74E-08
Intra-Golgi and retrograde Golgi-to-ER traffic (R-HSA-6811442)	+	3.6	3.99E-03
ER to Golgi Anterograde Transport (R-HSA-199977)	+	3.54	2.41E-02
Translation (R-HSA-72766)	+	2.79	1.77E-02
RHO GTPase Effectors (R-HSA-195258)	+	2.78	2.33E-02
Infectious disease (R-HSA-5663205)	+	2.46	3.84E-02
Vesicle-mediated transport (R-HSA-5653656)	+	3.03	2.94E-08

B

Top canonical pathways	*p-value*	*Overlap*
Synaptogenesis Signaling Pathway	1.06×10^{-8}	8.5% (26/307)
Virus Entry via Endocytic Pathways	3.32×10^{-5}	10.3% (11/107)
Acute Phase Response Signaling	6.09×10^{-5}	7.9% (14/178)
Huntington's Disease Signaling	9.97×10^{-5}	6.8% (16/234)
Clathrin-mediated Endocytosis Signaling	1.37×10^{-4}	7.3% (14/192)
Diseases and disorders	***p-value***	***#Molecules***
Cancer	$2.28 \times 10^{-2} – 8.10 \times 10^{-19}$	450
Endocrine System Disorders	$2.28 \times 10^{-2} – 8.10 \times 10^{-19}$	388
Organismal Injury and Abnormalities	$2.28 \times 10^{-2} – 8.10 \times 10^{-19}$	455
Inflammatory response	$2.28 \times 10^{-2} – 1.64 \times 10^{-11}$	78
Gastrointestinal disease	$2.28 \times 10^{-2} – 2.77 \times 10^{-9}$	403
Molecular and cellular functions	**p-value**	***#Molecules***
Cellular compromise	$2.28 \times 10^{-2} – 1.64 \times 10^{-11}$	48
Cellular assembly and organisation	$2.28 \times 10^{-2} – 1.01 \times 10^{-10}$	75
Cellular function and maintenance	$2.07 \times 10^{-2} – 8.67 \times 10^{-9}$	104
Protein synthesis	$2.05 \times 10^{-2} – 6.42 \times 10^{-5}$	80
Post-translational modification	$2.28 \times 10^{-2} – 3.19 \times 10^{-4}$	24