

S1 Table. The top 20 enriched pathways among 1890 tested proteins from overrepresentation test.

Pathways	fold Enrichment	raw P-value	FDR
<b>Reactome pathways</b>			
Immune System (R-HSA-168256)	2.41	2.67E-63	3.33E-60
Cytokine Signaling in Immune system (R-HSA-1280215)	3.09	1.49E-38	1.24E-35
Signaling by Interleukins (R-HSA-449147)	3.66	3.67E-36	2.29E-33
Innate Immune System (R-HSA-168249)	2.33	1.11E-29	5.52E-27
Neutrophil degranulation (R-HSA-6798695)	3.01	6.12E-25	2.54E-22
Signal Transduction (R-HSA-162582)	1.59	1.52E-17	5.4E-15
Extracellular matrix organization (R-HSA-1474244)	2.90	9.83E-15	3.06E-12
Hemostasis (R-HSA-109582)	2.13	8.98E-14	2.49E-11
Signaling by Receptor Tyrosine Kinases (R-HSA-9006934)	2.27	6.90E-13	1.72E-10
Interleukin-4 and Interleukin-13 signaling (R-HSA-6785807)	3.96	1.78E-11	4.03E-09
Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell (R-HSA-198933)	2.99	6.60E-11	1.37E-08
Interleukin-6 family signaling (R-HSA-6783589)	8.93	9.04E-11	1.73E-08
Platelet activation, signaling and aggregation (R-HSA-76002)	2.60	5.27E-10	9.38E-08
Metabolism of carbohydrates (R-HSA-71387)	2.47	9.91E-10	1.65E-07
Disease (R-HSA-1643685)	1.53	1.10E-09	1.71E-07
Interleukin-12 family signaling (R-HSA-447115)	4.98	2.04E-09	2.99E-07
Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs) (R-HSA-381426)	3.37	2.48E-09	3.44E-07
Interleukin-10 signaling (R-HSA-6783783)	5.48	4.21E-09	5.53E-07
Post-translational protein phosphorylation (R-HSA-8957275)	3.51	7.05E-09	8.78E-07
Axon guidance (R-HSA-422475)	1.93	1.18E-08	1.41E-06
<b>PANTEHR pathways</b>			
Angiogenesis (P00005)	3.61	6.80E-15	5.44E-13
Interleukin signaling pathway (P00036)	3.97	1.50E-09	8.00E-08
CCKR signaling map (P06959)	2.91	3.29E-09	1.32E-07
Inflammation mediated by chemokine and cytokine signaling pathway (P00031)	2.42	1.45E-08	4.62E-07
Apoptosis signaling pathway (P00006)	3.17	2.38E-08	5.45E-07
EGF receptor signaling pathway (P00018)	3.02	2.07E-08	5.53E-07
FGF signaling pathway (P00021)	2.87	6.25E-07	1.25E-05
Ras Pathway (P04393)	3.53	8.83E-07	1.57E-05
VEGF signaling pathway (P00056)	3.47	4.90E-06	7.84E-05
Integrin signalling pathway (P00034)	2.14	3.79E-05	5.52E-04
Blood coagulation (P00011)	3.73	4.60E-05	6.13E-04
Parkinson disease (P00049)	2.65	6.78E-05	8.35E-04
Gonadotropin-releasing hormone receptor pathway (P06664)	1.99	8.81E-05	1.01E-03
Interferon-gamma signaling pathway (P00035)	4.29	1.41E-04	1.50E-03
Axon guidance mediated by semaphorins (P00007)	5.1	1.67E-04	1.67E-03
B cell activation (P00010)	2.87	1.79E-04	1.68E-03
Insulin/IGF pathway-mitogen activated protein kinase kinase/MAP kinase cascade (P00032)	3.9	2.89E-04	2.57E-03
TGF-beta signaling pathway (P00052)	2.42	5.22E-04	4.39E-03
Endothelin signaling pathway (P00019)	2.52	5.98E-04	4.79E-03
PDGF signaling pathway (P00047)	2.07	9.05E-04	6.89E-03