

List showing Canonical pathways associated with dataset from ELISA results

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Ingenuity Canonical Pathways	-log(p-value)	Ratio	Molecules
Glycolysis I	3.12E00	9.3E-02	PKM,PGAM2,PFKP,PFKL
Granzyme A Signaling	2.85E00	1.5E-01	H1F0,H1FX,SET
Phospholipases	2.29E00	6.06E-02	PLD4,PLA2G6,PLCB4,PLCL1
Phospholipase C Signaling	2.08E00	3.46E-02	PLD4,PLA2G6,LCK,PLCB4,SOS2,PPP1CB,ARHGEF1,RAP1A,ITGA4
Actin Cytoskeleton Signaling	1.78E00	3.36E-02	SOS2,PPP1CB,ARHGEF1,GSN,IQGAP1,SSH1,ACTA1,ITGA4
FAK Signaling	1.77E00	4.95E-02	ARHGAP26,CAPNS1,SOS2,ACTA1,ITGA4
Inhibition of Matrix Metalloproteases	1.67E00	7.5E-02	ADAM12,THBS2,ADAM10
T Helper Cell Differentiation	1.6E00	5.56E-02	IL6ST,IL6R,CXCR5,TNFRSF1B
ERK/MAPK Signaling	1.53E00	3.4E-02	PLA2G6,ARAF,ATF1,SOS2,PPP1CB,RAP1A,ITGA4
Endothelin-1 Signaling	1.39E00	3.21E-02	PLD4,PLA2G6,PLCB4,ARAF,MAPK6,PLCL1
Caveolar-mediated Endocytosis Signaling	1.38E00	4.71E-02	FLNB,PTPN1,ACTA1,ITGA4
Epoxyssqualene Biosynthesis	1.37E00	1.11E-01	FDFT1
Glycerol-3-phosphate Shuttle	1.37E00	1.11E-01	GPD1
D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis	1.3E00	5.26E-02	PLCB4,PI4K2A
Antioxidant Action of Vitamin C	1.3E00	3.74E-02	PLD4,PLA2G6,PLCB4,PLCL1
NF-κB Signaling	1.28E00	3.43E-02	SIGIRR,LCK,UBE2V1,TLR3,TNFRSF1B,IGF2R
Integrin Signaling	1.26E00	3.38E-02	ARHGAP26,CAPNS1,SOS2,PPP1CB,RAP1A,ACTA1,ITGA4
Toll-like Receptor Signaling	1.24E00	4.84E-02	SIGIRR,ECSIT,TLR3
Protein Kinase A Signaling	1.2E00	2.52E-02	H1F0,FLNB,PLCB4,ATF1,H1FX,PTPN1,ADD1,PPP1CB,PLCL1,RAP1A
Glycerol Degradation I	1.2E00	8.33E-02	GPD1
Rapoport-Luebering Glycolytic Shunt	1.2E00	1.11E-01	PGAM2
Role of NFAT in Cardiac Hypertrophy	1.14E00	2.9E-02	IL6ST,PLCB4,SOS2,RCAN3,PLCL1,RCAN2
Role of JAK family kinases in IL-6-type Cytokine Signaling	1.13E00	7.41E-02	IL6ST,IL6R
Chondroitin and Dermatan Biosynthesis	1.08E00	7.69E-02	CHPF
Ceramide Biosynthesis	1.08E00	6.25E-02	SPTLC1
Proline Biosynthesis I	1.08E00	7.14E-02	PYCRL
Citrulline-Nitric Oxide Cycle	1.08E00	6.25E-02	ASS1
IL-2 Signaling	1.08E00	5.17E-02	LCK,SOS2,JAK3
Synaptic Long Term Potentiation	1.06E00	3.1E-02	PLCB4,PPP1CB,PLCL1,RAP1A
Primary Immunodeficiency Signaling	1.06E00	3.23E-02	LCK,JAK3
Melatonin Signaling	1.04E00	3.85E-02	PLCB4,ARAF,PLCL1
G Protein Signaling Mediated by Tubby	1E00	4.76E-02	LCK,PLCB4
Remodeling of Epithelial Adherens Junctions	9.99E-01	4.41E-02	RAB7A,IQGAP1,ACTA1
Gap Junction Signaling	9.96E-01	2.84E-02	PLCB4,SP3,SOS2,PLCL1,ACTA1
Arginine Biosynthesis IV	9.88E-01	4.17E-02	ASS1
Proline Biosynthesis II (from Arginine)	9.88E-01	5E-02	PYCRL
Selenocysteine Biosynthesis II (Archaea and Eukaryotes)	9.88E-01	5.88E-02	SEPHS2
Cellular Effects of Sildenafil (Viagra)	9.75E-01	2.72E-02	PLCB4,PPP1CB,PLCL1,ACTA1
JAK/Stat Signaling	9.27E-01	4.29E-02	SOS2,PTPN1,JAK3
Superpathway of Inositol Phosphate Compounds	9.15E-01	2.2E-02	PLCB4,PI4K2A,PTPN1,SET,PMPCA
Urea Cycle	9.13E-01	5E-02	ASS1

Arginine Degradation VI (Arginase 2 Pathway)	9.13E-01	6.25E-02	PYCRL
GDP-mannose Biosynthesis	9.13E-01	7.69E-02	PMM2
RhoA Signaling	9.07E-01	3.33E-02	ARHGAP9,PPP1CB,ARHGEF1,ACTA1
RhoGDI Signaling	8.94E-01	2.53E-02	ARHGAP9,ARHGEF1,ESR2,ACTA1,ITGA4
Crosstalk between Dendritic Cells and Natural Killer Cells	8.93E-01	3.16E-02	TLR3,TNFRSF1B,ACTA1
Regulation of Actin-based Motility by Rho	8.77E-01	3.37E-02	PPP1CB,GSN,ACTA1
LXR/RXR Activation	8.69E-01	2.94E-02	FDFT1,MLXIPL,TLR3,TNFRSF1B
IL-6 Signaling	8.69E-01	3.23E-02	IL6ST,SOS2,IL6R,TNFRSF1B
Role of NFAT in Regulation of the Immune Response	8.62E-01	2.53E-02	LCK,PLCB4,SOS2,RCAN3,RCAN2
Leucine Degradation I	8.51E-01	3.85E-02	ACADM
Oncostatin M Signaling	8.47E-01	5.71E-02	IL6ST,JAK3
Salvage Pathways of Pyrimidine Ribonucleotides	8.46E-01	2.94E-02	PYCRL,ARAF,MAPK6
Reelin Signaling in Neurons	8.16E-01	3.66E-02	LCK,ARHGEF1,ITGA4
Acute Phase Response Signaling	8.13E-01	2.81E-02	ECSIT,IL6ST,SOS2,IL6R,TNFRSF1B
NF-κB Activation by Viruses	8.02E-01	3.66E-02	LCK,CXCR5,ITGA4
Assembly of RNA Polymerase III Complex	7.98E-01	6.25E-02	SF3A1
Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency	7.61E-01	2.63E-02	IL6ST,SOS2,JAK3
Choline Biosynthesis III	7.51E-01	4.55E-02	PLD4
Insulin Receptor Signaling	7.45E-01	2.82E-02	SOS2,PTPN1,PPP1CB,GRB10
PPAR Signaling	7.34E-01	2.86E-02	PPARD,SOS2,TNFRSF1B
Dopamine-DARPP32 Feedback in cAMP Signaling	7.25E-01	2.19E-02	PLCB4,ATF1,PPP1CB,PLCL1
Cholesterol Biosynthesis I	7.1E-01	2.5E-02	FDFT1
Cholesterol Biosynthesis II (via 24,25-dihydrolanosterol)	7.1E-01	2.5E-02	FDFT1
Cholesterol Biosynthesis III (via Desmosterol)	7.1E-01	2.5E-02	FDFT1
Mouse Embryonic Stem Cell Pluripotency	7.1E-01	3.03E-02	IL6ST,SOS2,JAK3
Apoptosis Signaling	6.74E-01	3.16E-02	CAPNS1,LMNA,TNFRSF1B
CDP-diacylglycerol Biosynthesis I	6.73E-01	3.7E-02	AGPAT1
Virus Entry via Endocytic Pathways	6.52E-01	3.03E-02	FLNB,ACTA1,ITGA4
p38 MAPK Signaling	6.52E-01	2.56E-02	PLA2G6,ATF1,TNFRSF1B
Phosphatidylglycerol Biosynthesis II (Non-plastidic)	6.4E-01	3.03E-02	AGPAT1
Dendritic Cell Maturation	6.23E-01	1.93E-02	PLCB4,TLR3,TNFRSF1B,PLCL1
Fcy Receptor-mediated Phagocytosis in Macrophages and Monocytes	6.19E-01	2.94E-02	PLD4,PLA2G6,ACTA1
Paxillin Signaling	6.19E-01	2.7E-02	SOS2,ACTA1,ITGA4
TREM1 Signaling	6.14E-01	2.82E-02	SIGIRR,TLR3
Mismatch Repair in Eukaryotes	6.09E-01	4.17E-02	POLD1
Superpathway of Citrulline Metabolism	6.09E-01	2.63E-02	ASS1
Calcium Signaling	6.07E-01	1.9E-02	RCAN3,RCAN2,RAP1A,ACTA1
Regulation of Cellular Mechanics by Calpain Protease	6E-01	2.78E-02	CAPNS1,ITGA4
CCR3 Signaling in Eosinophils	5.99E-01	2.36E-02	PLA2G6,PLCB4,PPP1CB
Bupropion Degradation	5.82E-01	3.03E-02	CYP2U1
1D-myo-inositol Hexakisphosphate Biosynthesis II (Mammalian)	5.82E-01	3.57E-02	PMPCA
D-myo-inositol (1,3,4)-trisphosphate Biosynthesis	5.82E-01	4E-02	PMPCA
Colanic Acid Building Blocks Biosynthesis	5.82E-01	2.78E-02	PMM2
Gai Signaling	5.8E-01	2.27E-02	SOS2,ADORA1,RAP1A
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	5.74E-01	1.81E-02	IL6ST,PLCB4,IL6R,TLR3,TNFRSF1B,PLCL1

Mitotic Roles of Polo-Like Kinase	5.73E-01	2.86E-02	KIF23,ESPL1
ErbB2-ErbB3 Signaling	5.73E-01	3.33E-02	SOS2,JAK3
Actin Nucleation by ARP-WASP Complex	5.6E-01	3.03E-02	SOS2,ITGA4
D-myo-inositol (1,4,5)-trisphosphate Degradation	5.56E-01	4.35E-02	PMPCA
Acetone Degradation I (to Methylglyoxal)	5.56E-01	2.78E-02	CYP2U1
Pyridoxal 5'-phosphate Salvage Pathway	5.36E-01	2.78E-02	ARAF,MAPK6
D-myo-inositol-5-phosphate Metabolism	5.34E-01	1.92E-02	PLCB4,PTPN1,SET
DNA Methylation and Transcriptional Repression Signaling	5.32E-01	4.35E-02	MTA2
Ephrin Receptor Signaling	5.3E-01	1.99E-02	SOS2,ADAM10,RAP1A,ITGA4
Synaptic Long Term Depression	5.25E-01	1.89E-02	PLA2G6,PLCB4,PLCL1
14-3-3-mediated Signaling	5.25E-01	2.48E-02	PLCB4,PLCL1,AKT1S1
Chemokine Signaling	5.24E-01	2.74E-02	PLCB4,PPP1CB
Cdc42 Signaling	5.17E-01	1.69E-02	PPP1CB,IQGAP1,ITGA4
IL-15 Signaling	5.12E-01	2.99E-02	LCK,JAK3
Agtrin Interactions at Neuromuscular Junction	5.12E-01	2.9E-02	ACTA1,ITGA4
Polyamine Regulation in Colon Cancer	5.11E-01	3.45E-02	PSMF1
Estrogen-mediated S-phase Entry	5.11E-01	3.57E-02	ESR2
Colorectal Cancer Metastasis Signaling	5.09E-01	1.94E-02	IL6ST,SOS2,IL6R,TLR3,JAK3
CD40 Signaling	4.91E-01	2.86E-02	ATF1,JAK3
IL-4 Signaling	4.91E-01	2.53E-02	SOS2,JAK3
IL-15 Production	4.9E-01	3.23E-02	JAK3
Melatonin Degradation I	4.9E-01	1.59E-02	CYP2U1
Chondroitin Sulfate Biosynthesis (Late Stages)	4.9E-01	1.85E-02	CHPF
PPAR α /RXR α Activation	4.89E-01	2.09E-02	PLCB4,GPD1,SOS2,PLCL1
Leptin Signaling in Obesity	4.8E-01	2.41E-02	PLCB4,PLCL1
Retinoate Biosynthesis I	4.71E-01	2.7E-02	RDH14
Nicotine Degradation III	4.71E-01	1.41E-02	CYP2U1
Superpathway of D-myo-inositol (1,4,5)-trisphosphate Metabolism	4.71E-01	3.03E-02	PMPCA
Gluconeogenesis I	4.71E-01	2.04E-02	PGAM2
VEGF Family Ligand-Receptor Interactions	4.7E-01	2.38E-02	PLA2G6,SOS2
3-phosphoinositide Biosynthesis	4.61E-01	1.71E-02	PI4K2A,PTPN1,SET
Renal Cell Carcinoma Signaling	4.6E-01	2.7E-02	SOS2,RAP1A
p70S6K Signaling	4.54E-01	2.33E-02	PLCB4,SOS2,PLCL1
MIF-mediated Glucocorticoid Regulation	4.53E-01	2.38E-02	PLA2G6
TCA Cycle II (Eukaryotic)	4.53E-01	2.44E-02	IDH3B
Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	4.51E-01	1.9E-02	PPP1CB,TNFRSF1B,JAK3,RAP1A
Breast Cancer Regulation by Stathmin1	4.51E-01	1.93E-02	PLCB4,SOS2,PPP1CB,ARHGEF1
PI3K Signaling in B Lymphocytes	4.47E-01	2.14E-02	PLCB4,ATF1,PLCL1
Transcriptional Regulatory Network in Embryonic Stem Cells	4.36E-01	2.5E-02	SET
Chondroitin Sulfate Biosynthesis	4.36E-01	1.43E-02	CHPF
PI3K/AKT Signaling	4.33E-01	2.08E-02	SOS2,JAK3,ITGA4
PTEN Signaling	4.26E-01	2.22E-02	SOS2,IGF2R,ITGA4
Neuropathic Pain Signaling In Dorsal Horn Neurons	4.23E-01	1.85E-02	PLCB4,PLCL1
Leukocyte Extravasation Signaling	4.22E-01	1.99E-02	ARHGAP9,RAP1A,ACTA1,ITGA4
Superpathway of Melatonin Degradation	4.2E-01	1.28E-02	CYP2U1

Axonal Guidance Signaling	4.19E-01	1.5E-02	PLCB4,ADAM12,SOS2,ADAM10,PLCL1,RAP1A,ITGA4
Glioblastoma Multiforme Signaling	4.19E-01	1.83E-02	PLCB4,SOS2,PLCL1
Thrombin Signaling	4.11E-01	1.94E-02	PLCB4,PPP1CB,ARHGEF1,PLCL1
TR/RXR Activation	4.05E-01	2.08E-02	PFKP,RCAN2
PDGF Signaling	4.05E-01	2.35E-02	SOS2,JAK3
TNFR2 Signaling	4.05E-01	3.03E-02	TNFRSF1B
Role of JAK2 in Hormone-like Cytokine Signaling	4.05E-01	2.78E-02	PTPN1
Estrogen Biosynthesis	4.05E-01	2.04E-02	CYP2U1
Dermatan Sulfate Biosynthesis	4.05E-01	1.41E-02	CHPF
Nicotine Degradation II	4.05E-01	1.2E-02	CYP2U1
Triacylglycerol Biosynthesis	4.05E-01	2.17E-02	AGPAT1
Superpathway of Cholesterol Biosynthesis	4.05E-01	1.16E-02	FDFT1
Fatty Acid β -oxidation I	3.91E-01	2.22E-02	ACADM
PAK Signaling	3.89E-01	1.89E-02	SOS2,ITGA4
Neuregulin Signaling	3.81E-01	1.96E-02	SOS2,ITGA4
Acute Myeloid Leukemia Signaling	3.81E-01	2.44E-02	ARAF,SOS2
Cell Cycle Control of Chromosomal Replication	3.78E-01	3.23E-02	MCM5
nNOS Signaling in Neurons	3.78E-01	1.92E-02	CAPNS1
Noradrenaline and Adrenaline Degradation	3.78E-01	1.92E-02	RDH14
Ethanol Degradation II	3.78E-01	2.33E-02	RDH14
SAPK/JNK Signaling	3.73E-01	1.96E-02	LCK,SOS2
Aldosterone Signaling in Epithelial Cells	3.64E-01	1.79E-02	PLCB4,SOS2,PLCL1
MIF Regulation of Innate Immunity	3.53E-01	2E-02	PLA2G6
IL-9 Signaling	3.53E-01	2.5E-02	JAK3
Serotonin Degradation	3.53E-01	1.33E-02	RDH14
Epithelial Adherens Junction Signaling	3.52E-01	2.04E-02	IQGAP1,RAP1A,ACTA1
Germ Cell-Sertoli Cell Junction Signaling	3.47E-01	1.83E-02	GSN,IQGAP1,ACTA1
T Cell Receptor Signaling	3.37E-01	1.83E-02	LCK,SOS2
Sphingosine-1-phosphate Signaling	3.31E-01	1.67E-02	PLCB4,PLCL1
Glioma Signaling	3.18E-01	1.79E-02	SOS2,IGF2R
CREB Signaling in Neurons	3.11E-01	1.48E-02	PLCB4,SOS2,PLCL1
iNOS Signaling	3.1E-01	1.89E-02	JAK3
Natural Killer Cell Signaling	3.05E-01	1.72E-02	LCK,SOS2
VEGF Signaling	3.05E-01	1.94E-02	SOS2,ACTA1
tRNA Charging	3E-01	1.23E-02	VARS
Cholecystokinin/Gastrin-mediated Signaling	2.99E-01	1.89E-02	PLCB4,SOS2
D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthesis	2.99E-01	1.44E-02	PTPN1,SET
D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis	2.99E-01	1.44E-02	PTPN1,SET
Signaling by Rho Family GTPases	2.95E-01	1.58E-02	ARHGEF1,IQGAP1,ACTA1,ITGA4
HGF Signaling	2.88E-01	1.9E-02	SOS2,RAP1A
Systemic Lupus Erythematosus Signaling	2.88E-01	1.21E-02	LCK,SOS2,IL6R
G-Protein Coupled Receptor Signaling	2.87E-01	1.47E-02	PLCB4,SOS2,ADORA1,RAP1A
Gcs Signaling	2.82E-01	1.65E-02	ADD1,RAP1A
MSP-RON Signaling Pathway	2.82E-01	2E-02	ACTA1
Eicosanoid Signaling	2.82E-01	1.25E-02	PLA2G6

Ephrin A Signaling	2.74E-01	1.92E-02	ADAM10
Fc Epsilon RI Signaling	2.72E-01	1.71E-02	PLA2G6,SOS2
IGF-1 Signaling	2.72E-01	1.9E-02	SOS2,GRB10
Atherosclerosis Signaling	2.66E-01	1.47E-02	PLA2G6,ITGA4
Role of PKR in Interferon Induction and Antiviral Response	2.65E-01	2.17E-02	TLR3
Pancreatic Adenocarcinoma Signaling	2.61E-01	1.67E-02	PLD4,JAK3
Rac Signaling	2.61E-01	1.64E-02	IQGAP1,ITGA4
NGF Signaling	2.61E-01	1.69E-02	SOS2,RAP1A
Mechanisms of Viral Exit from Host Cells	2.58E-01	2.22E-02	ACTA1
PKC θ Signaling in T Lymphocytes	2.56E-01	1.4E-02	LCK,SOS2
Type II Diabetes Mellitus Signaling	2.51E-01	1.24E-02	PKM,TNFRSF1B
CNTF Signaling	2.5E-01	1.82E-02	IL6ST
Amyloid Processing	2.5E-01	1.79E-02	CAPNS1
3-phosphoinositide Degradation	2.42E-01	1.27E-02	PTPN1,SET
eNOS Signaling	2.37E-01	1.32E-02	SLC7A1,ESR2
Calcium-induced T Lymphocyte Apoptosis	2.29E-01	1.43E-02	LCK
Assembly of RNA Polymerase II Complex	2.16E-01	1.79E-02	DR1
Role of BRCA1 in DNA Damage Response	2.1E-01	1.54E-02	ATF1
Endometrial Cancer Signaling	2.1E-01	1.75E-02	SOS2
Death Receptor Signaling	2.1E-01	1.56E-02	TNFRSF1B
Communication between Innate and Adaptive Immune Cells	2.05E-01	9.17E-03	TLR3
Role of MAPK Signaling in the Pathogenesis of Influenza	1.99E-01	1.45E-02	PLA2G6
Role of JAK1 and JAK3 in γ c Cytokine Signaling	1.99E-01	1.49E-02	JAK3