



















Confidence	ID	Symbol	Expr Log	Pathway
Moderate (predicted)	Atmin	ATMIN	-1.813	Role of CHK Proteins in Cell Cycle Checkpoint Control
Moderate (predicted)	Cmtm6	CMTM6	1.103	
Moderate (predicted)	Ctu1	CTU1	1.475	
Moderate (predicted)	Gas7	GAS7	2.578	
Moderate (predicted)	Isca2	ISCA2	3.039	
High (predicted)	Klhl31	KLHL31	-2.085	
High (predicted)	Lsr	LSR	3.283	
Moderate (predicted)	Ncmap	NCMAP	-1.852	
High (predicted)	Pdgfc	PDGFC	1.709	Actin Cytoskeleton Signaling,Amyotrophic Lateral Scler
Moderate (predicted)	Pex5l	PEX5L	1.075	
Moderate (predicted)	Slc36a1	SLC36A1	-1.224	
Moderate (predicted)	Urm1	URM1	1.328	
Moderate (predicted)	Wdr82	WDR82	-1.903	
Moderate (predicted)	Zscan12	ZSCAN12	1.652	
Moderate (predicted)	Arid3a	ARID3A	1.416	
High (predicted)	Ctdspl	CTDSPL	-2.221	
Moderate (predicted)	Cyp26b1	CYP26B1	-1.825	Histidine Degradation VI,Pregnenolone Biosynthesis,U
Moderate (predicted)	Efnb2	EFNB2	1.371	Axonal Guidance Signaling,Ephrin B Signaling,Ephrin F
Moderate (predicted)	Gdf11	GDF11	-1.839	
Moderate (predicted)	H2-Oa	HLA-DOA	-2.151	Allograft Rejection Signaling,Altered T Cell and B Cell S
Moderate (predicted)	Impdh1	IMPDH1	-1.681	Purine Nucleotides De Novo Biosynthesis II,Purine Nuc
Moderate (predicted)	Insm1	INSM1	2.04	
Moderate (predicted)	Kmo	KMO	-2.593	NAD biosynthesis II (from tryptophan),Tryptophan Degr
High (predicted)	Ppfia3	PPFIA3	1.492	3-phosphoinositide Biosynthesis,3-phosphoinositide De
Moderate (predicted)	Rac1	RAC1	1.4	Actin Cytoskeleton Signaling,Actin Nucleation by ARP-
Moderate (predicted)	Rasa3	RASA3	1.401	
High (predicted)	Rasgrp3	RASGRP3	1.752	Systemic Lupus Erythematosus In B Cell Signaling Pat
Moderate (predicted)	Sh3bp4	SH3BP4	1.092	Clathrin-mediated Endocytosis Signaling
High (predicted)	Spn	SPN	2.848	B Cell Development,Leukocyte Extravasation Signaling
Moderate (predicted)	St6gal2	ST6GAL2	1.709	
Moderate (predicted)	Tnfaip8l1	TNFAIP8L1	1.076	
Moderate (predicted)	Adam33	ADAM33	2.163	Axonal Guidance Signaling
Moderate (predicted)	Ado	ADO	2.819	
Moderate (predicted)	Atp13a2	ATP13A2	1.55	
Moderate (predicted)	Atp6v0e2	ATP6V0E2	3.274	Iron homeostasis signaling pathway,Phagosome Matur
Moderate (predicted)	Batf2	BATF2	2.99	
Moderate (predicted)	Bcat2	BCAT2	1.298	Isoleucine Degradation I,Leucine Degradation I,Valine
Experimentally Obser	Bckdk	BCKDK	2.929	
Moderate (predicted)	Ccnyl1	CCNYL1	-1.796	
Moderate (predicted)	Chrd	CHRD	2.64	BMP signaling pathway
High (predicted)	Cybrd1	CYBRD1	-1.853	Iron homeostasis signaling pathway
Moderate (predicted)	Cyp7b1	CYP7B1	-1.608	Hepatic Cholestasis,Histidine Degradation VI,Pregnenc
Moderate (predicted)	Eif4e3	EIF4E3	-2.21	
Moderate (predicted)	Gprc5c	GPRC5C	2.022	
Moderate (predicted)	Hectd3	HECTD3	2.673	
Moderate (predicted)	Idh3g	IDH3G	-3.021	Acute Myeloid Leukemia Signaling,Glioma Signaling,T
Moderate (predicted)	Igfbp4	IGFBP4	1.045	Hepatic Fibrosis / Hepatic Stellate Cell Activation,IGF-1
Moderate (predicted)	Irf5	IRF5	2.455	Systemic Lupus Erythematosus In B Cell Signaling Pat

Moderate (predicted)	Kcnj16	KCNJ16	1.254	Dopamine-DARPP32 Feedback in cAMP Signaling
Moderate (predicted)	Kctd14	KCTD14	-1.814	
Moderate (predicted)	Klhdc1	KLHDC1	2.674	
Moderate (predicted)	Lrp11	LRP11	1.778	
Moderate (predicted)	Lrrc10b	LRRC10B	-2.121	
Moderate (predicted)	Lrrtm2	LRRTM2	-2.685	Synaptogenesis Signaling Pathway
High (predicted)	Myl3	MYL3	2.623	Actin Cytoskeleton Signaling,Agranulocyte Adhesion ai
Moderate (predicted)	Nceh1	NCEH1	-2.141	
High (predicted)	Nphs1	NPHS1	1.219	
Experimentally Obser	Numbl	NUMBL	1.156	Notch Signaling
Moderate (predicted)	Opcml	OPCML	-1.941	
Moderate (predicted)	Olfir733	OR4N2	6.552	
Moderate (predicted)	Plxna2	PLXNA2	-1.101	Axonal Guidance Signaling
Moderate (predicted)	Prok2	PROK2	1.756	
High (predicted)	Rhoj	RHOJ	-1.151	Actin Nucleation by ARP-WASP Complex,Cardiac Hyp
Moderate (predicted)	Samd5	SAMD5	1.742	
High (predicted)	Sft2d1	SFT2D1	2.973	
Moderate (predicted)	Sh2d1b1	SH2D1B	-1.951	Natural Killer Cell Signaling
Moderate (predicted)	Shcbp1	SHCBP1	-1.149	
Moderate (predicted)	Slc39a8	SLC39A8	1.681	Osteoarthritis Pathway
Moderate (predicted)	Stx1b	STX1B	1.107	Synaptogenesis Signaling Pathway
Moderate (predicted)	Tacc1	TACC1	2.044	
Moderate (predicted)	Tead2	TEAD2	-1.014	HIPPO signaling
High (predicted)	Tmem211	TMEM211	1.532	
Moderate (predicted)	Tmem213	TMEM213	1.617	
Moderate (predicted)	Tmtc2	TMTC2	1.5	
Moderate (predicted)	Tnfrsf1b	TNFRSF1B	1.679	Acute Phase Response Signaling,Apoptosis Signaling,
Moderate (predicted)	Urm1	URM1	1.328	
Moderate (predicted)	Vim	VIM	-1.806	14-3-3-mediated Signaling,Endocannabinoid Cancer In
High (predicted)	Zfp827	ZNF827	-1.356	
Moderate (predicted)	Acsbg2	ACSBG2	1.13	Fatty Acid Activation,Fatty Acid $\beta$ -oxidation I,LPS/IL-1 I
Moderate (predicted)	Adamts14	ADAMTS14	-1.924	Axonal Guidance Signaling
Moderate (predicted)	Aen	AEN	-1.45	
Moderate (predicted)	Akap1	AKAP1	1.1	cAMP-mediated signaling,Cardiac $\beta$ -adrenergic Signali
Moderate (predicted)	Amer2	AMER2	3.313	
Moderate (predicted)	Ankmy1	ANKMY1	1.465	
Experimentally Obser	Arid3a	ARID3A	1.416	
Moderate (predicted)	Arsi	ARSI	2.674	
Moderate (predicted)	B3galnt2	B3GALNT2	1.082	
Moderate (predicted)	B4galt1	B4GALT1	-5.171	
Moderate (predicted)	Batf2	BATF2	2.99	
Moderate (predicted)	Bckdk	BCKDK	2.929	
Moderate (predicted)	Bcl2l12	BCL2L12	-2.214	
High (predicted)	Bdh1	BDH1	1.159	Ketogenesis,Ketolysis
Moderate (predicted)	Bloc1s3	BLOC1S3	-1.298	
Moderate (predicted)	C5ar2	C5AR2	-1.509	
High (predicted)	D17H6S53	C6orf47	2.464	
Moderate (predicted)	Cars2	CARS2	2.622	tRNA Charging
Experimentally Obser	Cbx7	CBX7	1.192	Senescence Pathway

Moderate (predicted)	Cd300e	CD300E	1.776	
Experimentally Obser	Cebpg	CEBPG	-2.79	Role of Macrophages, Fibroblasts and Endothelial Cell:
Moderate (predicted)	Champ1	CHAMP1	1.474	
Moderate (predicted)	Chtf8	CHTF8	1.705	
Moderate (predicted)	Copz1	COPZ1	-1.154	Caveolar-mediated Endocytosis Signaling
Moderate (predicted)	Crb2	CRB2	1.79	
Moderate (predicted)	Creb3l2	CREB3L2	1.613	
Moderate (predicted)	Ctdsp2	CTDSP2	-2.324	
Moderate (predicted)	Ctu1	CTU1	1.475	
High (predicted)	Cyp24a1	CYP24A1	1.655	VDR/RXR Activation
Moderate (predicted)	Dennd6a	DENND6A	-1.028	
Experimentally Obser	Dicer1	DICER1	1.503	
High (predicted)	Enpep	ENPEP	1.028	
Moderate (predicted)	Fam107b	FAM107B	-1.688	
Moderate (predicted)	Fam78a	FAM78A	1.742	
Moderate (predicted)	Galnt7	GALNT7	-2.563	
Moderate (predicted)	Gdf11	GDF11	-1.839	
Moderate (predicted)	Gmfb	GMFB	1.575	
Moderate (predicted)	Hif1an	HIF1AN	-3.331	Hypoxia Signaling in the Cardiovascular System,White
Moderate (predicted)	Iffo1	IFFO1	1.179	
Moderate (predicted)	Jmjd4	JMJD4	1.764	
High (predicted)	Klhl31	KLHL31	-2.085	
Moderate (predicted)	Lifr	LIFR	-1.07	CNTF Signaling,Mouse Embryonic Stem Cell Pluripote:
High (predicted)	Lrrc10b	LRRC10B	-2.121	
Moderate (predicted)	Lrrc25	LRRC25	1.314	
Moderate (predicted)	Lurap1l	LURAP1L	1.096	
High (predicted)	Lyzl6	LYZL6	1.655	
Experimentally Obser	Map2k7	MAP2K7	1.325	Acute Myeloid Leukemia Signaling,Acute Phase Respc
High (predicted)	Mapk12	MAPK12	1.73	14-3-3-mediated Signaling,4-1BB Signaling in T Lymph
Moderate (predicted)	Mark1	MARK1	-1.081	Amyloid Processing
Moderate (predicted)	Nckap5l	NCKAP5L	1.421	
Moderate (predicted)	Nfam1	NFAM1	1.629	
Moderate (predicted)	Nkx2-3	NKX2-3	2.296	
Moderate (predicted)	Nudt5	NUDT5	1.58	3-phosphoinositide Biosynthesis,3-phosphoinositide De
Moderate (predicted)	Nup210	NUP210	1.352	
Moderate (predicted)	Ogfr	OGFR	1.618	Opioid Signaling Pathway
High (predicted)	Pcbd2	PCBD2	1.973	Phenylalanine Degradation I (Aerobic),Tyrosine Biosyn
Moderate (predicted)	Pgap3	PGAP3	2.532	
Moderate (predicted)	Phactr3	PHACTR3	1.708	
High (predicted)	Ptpn18	PTPN18	-1.32	Protein Kinase A Signaling
Moderate (predicted)	Rapgef5	RAPGEF5	1.393	
Moderate (predicted)	Rasgrf1	RASGRF1	-3.081	Molecular Mechanisms of Cancer,Synaptogenesis Sigr
Moderate (predicted)	Rassf3	RASSF3	1.09	
Moderate (predicted)	Rbm24	RBM24	2.328	
Moderate (predicted)	Rcvrn	RCVRN	-1.674	Phototransduction Pathway
Moderate (predicted)	Sec14l2	SEC14L2	2.149	
Moderate (predicted)	Sfrp5	SFRP5	2.654	Role of Macrophages, Fibroblasts and Endothelial Cell:
Moderate (predicted)	Sh3bp4	SH3BP4	1.092	Clathrin-mediated Endocytosis Signaling
Moderate (predicted)	Slc24a2	SLC24A2	-5.141	

Moderate (predicted)	Slc27a4	SLC27A4	4.62	Fatty Acid Activation,Fatty Acid $\beta$ -oxidation I,LPS/IL-1 I
Moderate (predicted)	Slc39a8	SLC39A8	1.681	Osteoarthritis Pathway
Moderate (predicted)	Smcr8	SMCR8	1.707	
Experimentally Obser	Smo	SMO	1.168	Adipogenesis pathway,Aldosterone Signaling in Epithe
Moderate (predicted)	Snrpb	SNRPB	-1.924	Systemic Lupus Erythematosus Signaling
High (predicted)	Sstr3	SSTR3	2.457	cAMP-mediated signaling,G-Protein Coupled Receptor
High (predicted)	Syt2	SYT2	-1.826	Synaptogenesis Signaling Pathway,TR/RXR Activation
Moderate (predicted)	Tada2b	TADA2B	3.667	
High (predicted)	Themis2	THEMIS2	2.176	
Moderate (predicted)	Tmem86a	TMEM86A	2.261	
Moderate (predicted)	Tnfrsf1b	TNFRSF1B	1.679	Acute Phase Response Signaling,Apoptosis Signaling,
High (predicted)	Ttc7	TTC7A	3.271	
Moderate (predicted)	Ubt1	UBTD1	-1.083	
Moderate (predicted)	Usp12	USP12	1.977	Protein Ubiquitination Pathway
Moderate (predicted)	Usp46	USP46	1.06	Protein Ubiquitination Pathway
Moderate (predicted)	Wdr31	WDR31	2.246	
Moderate (predicted)	Zfp704	ZNF704	-1.717	
High (predicted)	Zswim4	ZSWIM4	1.439	
Moderate (predicted)	Camsap1	CAMSAP1	-1.467	
Moderate (predicted)	Egfl7	EGFL7	2.517	
Moderate (predicted)	Hoxa9	HOXA9	2.73	
Experimentally Obser	Irs1	IRS1	2.349	AMPK Signaling,Apelin Liver Signaling Pathway,Cardiac
Moderate (predicted)	Magix	MAGIX	-1.228	PTEN Signaling
Moderate (predicted)	Ormdl3	ORMDL3	2.978	
High (predicted)	Plk2	PLK2	2.895	Mitotic Roles of Polo-Like Kinase
Moderate (predicted)	Ptpn18	PTPN18	-1.32	Protein Kinase A Signaling
Experimentally Obser	Spred1	SPRED1	1.131	
Moderate (predicted)	Trim46	TRIM46	2.772	
Moderate (predicted)	Trpc4ap	TRPC4AP	-3.61	
Moderate (predicted)	Zfp131	ZNF131	1.383	
Moderate (predicted)	Arid3c	ARID3C	2.951	
Moderate (predicted)	Atad5	ATAD5	1.07	
Moderate (predicted)	Ate1	ATE1	-2.05	
Moderate (predicted)	Cacna2d1	CACNA2D1	1.498	Androgen Signaling,Calcium Signaling,CCR5 Signaling
Moderate (predicted)	Csad	CSAD	1.135	Taurine Biosynthesis
Moderate (predicted)	Ddost	DDOST	1.671	
Moderate (predicted)	Eef1a1	EEF1A1	-1.18	FAT10 Cancer Signaling Pathway
Moderate (predicted)	Fam107b	FAM107B	-1.688	
Moderate (predicted)	Kpna1	KPNA1	1.057	RAN Signaling
High (predicted)	Ldhd	LDHB	1.569	HIF1 $\alpha$ Signaling,Pyruvate Fermentation to Lactate,Sirt
High (predicted)	Mybpc1	MYBPC1	-1.038	
Moderate (predicted)	Pde10a	PDE10A	1.021	cAMP-mediated signaling,Cardiac Hypertrophy Signali
Moderate (predicted)	Prim2	PRIM2	1.21	Cell Cycle Control of Chromosomal Replication,NER P
Moderate (predicted)	Rgs10	RGS10	1.059	cAMP-mediated signaling,G-Protein Coupled Receptor
Moderate (predicted)	Rnf145	RNF145	-1.628	
Moderate (predicted)	Snap23	SNAP23	2.58	
Moderate (predicted)	Tbl2	TBL2	1.882	
Moderate (predicted)	Tpd52l1	TPD52L1	-1.138	
Moderate (predicted)	Ttl	TTL	1.504	

Moderate (predicted)	Zfp410	ZNF410	1.054
Moderate (predicted)	Zfp423	ZNF423	1.669 Adipogenesis pathway,BMP signaling pathway,TGF-β signaling pathway
Moderate (predicted)	Aars2	AARS2	1.056 tRNA Charging
High (predicted)	Abhd12	ABHD12	1.008 Triacylglycerol Degradation
Moderate (predicted)	Acaca	ACACA	1.375 AMPK Signaling,Biotin-carboxyl Carrier Protein Assembly
High (predicted)	Adam30	ADAM30	2.483 Axonal Guidance Signaling
Moderate (predicted)	Adamts7	ADAMTS7	-1.665 Axonal Guidance Signaling
Moderate (predicted)	Adat3	ADAT3	1.354 Adenine and Adenosine Salvage III,Adenosine Nucleotide Salvage
Moderate (predicted)	Adra2a	ADRA2A	3.533 AMPK Signaling,cAMP-mediated signaling,Cardiac Hypertrophy
High (predicted)	Ahdc1	AHDC1	-1.442
Moderate (predicted)	Akap1	AKAP1	1.1 cAMP-mediated signaling,Cardiac β-adrenergic Signaling
High (predicted)	Aldoc	ALDOC	2.432 Gluconeogenesis I,Glycolysis I,Sucrose Degradation V
High (predicted)	Ankrd52	ANKRD52	3.073
Moderate (predicted)	Ano7	ANO7	1.609
Moderate (predicted)	Arap3	ARAP3	1.113
Moderate (predicted)	Arhgap44	ARHGAP44	-1.119
Moderate (predicted)	Atp6v0e2	ATP6V0E2	3.274 Iron homeostasis signaling pathway,Phagosome Maturation
Moderate (predicted)	B4galnt4	B4GALNT4	2.424
Moderate (predicted)	Bahcc1	BAHCC1	1.566
Moderate (predicted)	Bcat2	BCAT2	1.298 Isoleucine Degradation I,Leucine Degradation I,Valine Degradation I
Moderate (predicted)	Bloc1s3	BLOC1S3	-1.298
Moderate (predicted)	D230025D	C16orf70	1.33
Moderate (predicted)	Cacna1s	CACNA1S	-1.112 Amyotrophic Lateral Sclerosis Signaling,Androgen Signaling
High (predicted)	Cc2d1a	CC2D1A	-1.347
Moderate (predicted)	Ccdc120	CCDC120	3.25
High (predicted)	Cd276	CD276	-1.905
Moderate (predicted)	Cd74	CD74	-1.732 Antigen Presentation Pathway,MIF Regulation of Innate Immunity
High (predicted)	Cdip1	CDIP1	-1.153
Moderate (predicted)	Chl1	CHL1	-1.105
Moderate (predicted)	Chst2	CHST2	4.256 Chondroitin Sulfate Biosynthesis,Chondroitin Sulfate Biosynthesis
Moderate (predicted)	Chtf8	CHTF8	1.705
Moderate (predicted)	Clcn7	CLCN7	1.795
Moderate (predicted)	Clip2	CLIP2	1.516
Moderate (predicted)	Clptm1	CLPTM1	-1.35
Moderate (predicted)	Cmklr1	CMKLR1	2.475
High (predicted)	Cmtm7	CMTM7	1.247
High (predicted)	Cnn2	CNN2	2.189
Moderate (predicted)	Cntfr	CNTFR	1.347 CNTF Signaling
Moderate (predicted)	Col1a1	COL1A1	-1.239 Apelin Liver Signaling Pathway,Atherosclerosis Signaling
Moderate (predicted)	Copz1	COPZ1	-1.154 Caveolar-mediated Endocytosis Signaling
High (predicted)	Csf1	CSF1	3.242 Altered T Cell and B Cell Signaling in Rheumatoid Arthritis
High (predicted)	Ctdsp1	CTDSP1	-2.744
High (predicted)	Ctdsp2	CTDSP2	-2.324
Moderate (predicted)	Cul4a	CUL4A	1.216 NER Pathway
Moderate (predicted)	Cyp2s1	CYP2S1	2.06 Acetone Degradation I (to Methylglyoxal),Bupropion Degradation
Moderate (predicted)	Dctd	DCTD	-1.518
Moderate (predicted)	Derl3	DERL3	2.995
Moderate (predicted)	Dhrs13	DHRS13	1.132
Moderate (predicted)	Dhx58	DHX58	2.41 Activation of IRF by Cytosolic Pattern Recognition Receptors

Moderate (predicted)	Dixdc1	DIXDC1	1.874	
High (predicted)	Dyrk1b	DYRK1B	-2.406	Sonic Hedgehog Signaling
Moderate (predicted)	Efnb2	EFNB2	1.371	Axonal Guidance Signaling,Ephrin B Signaling,Ephrin F
High (predicted)	Egfl7	EGFL7	2.517	
Moderate (predicted)	Ehd3	EHD3	3.139	
High (predicted)	Eif4a1	EIF4A1	-1.975	EIF2 Signaling,mTOR Signaling,Regulation of eIF4 anc
Moderate (predicted)	Endov	ENDOV	-3.585	
Moderate (predicted)	Epha8	EPHA8	2.141	Axonal Guidance Signaling,Ephrin A Signaling,Ephrin F
Moderate (predicted)	Ephb4	EPHB4	1.264	Axonal Guidance Signaling,Ephrin B Signaling,Ephrin F
Moderate (predicted)	Ephx1	EPHX1	2.263	NRF2-mediated Oxidative Stress Response
Moderate (predicted)	Epn2	EPN2	-2.78	Epithelial Adherens Junction Signaling,Germ Cell-Sertc
High (predicted)	Evx1	EVX1	2.229	
Moderate (predicted)	Fads6	FADS6	1.088	Oleate Biosynthesis II (Animals)
High (predicted)	Fbxo41	FBXO41	2.269	
Moderate (predicted)	Foxn4	FOXN4	-4.445	
High (predicted)	Foxp4	FOXP4	1.141	
Moderate (predicted)	Frmd3	FRMD3	-1.233	
Moderate (predicted)	Git1	GIT1	1.45	Actin Cytoskeleton Signaling,Axonal Guidance Signalir
Moderate (predicted)	Golga4	GOLGA4	1.19	
High (predicted)	Gpr173	GPR173	-1.86	
Moderate (predicted)	Grem2	GREM2	-1.65	
Moderate (predicted)	H2-Oa	HLA-DOA	-2.151	Allograft Rejection Signaling,Altered T Cell and B Cell
High (predicted)	Hnrnpul1	HNRNPUL1	1.43	
High (predicted)	Hpca	HPCA	2.613	
Moderate (predicted)	Icam5	ICAM5	1.573	
High (predicted)	Iffo1	IFFO1	1.179	
Moderate (predicted)	Ii27	IL27	4.255	Role of Cytokines in Mediating Communication betwee
High (predicted)	Impdh1	IMPDH1	-1.681	Purine Nucleotides De Novo Biosynthesis II,Purine Nuc
Moderate (predicted)	Irf2bp1	IRF2BP1	2.212	
High (predicted)	Itpa	ITPA	1.143	
Moderate (predicted)	Jph4	JPH4	2.658	
Moderate (predicted)	Kcns1	KCNS1	2.578	
Moderate (predicted)	Kctd5	KCTD5	1.307	
Moderate (predicted)	Lancl2	LANCL2	-1.406	
Moderate (predicted)	Lgals12	LGALS12	2.743	
High (predicted)	Lgi3	LGI3	-3.517	
Moderate (predicted)	Lhx6	LHX6	2.182	
High (predicted)	Limk1	LIMK1	1.196	Actin Cytoskeleton Signaling,Axonal Guidance Signalir
Moderate (predicted)	Lmf2	LMF2	3.458	
High (predicted)	Lmtk3	LMTK3	-3.005	IL-15 Production,Sperm Motility
Moderate (predicted)	Lrrc25	LRRC25	1.314	
Moderate (predicted)	Ltf	LTF	1.192	
High (predicted)	Maff	MAFF	1.463	NRF2-mediated Oxidative Stress Response
Moderate (predicted)	Mcf2	MCFD2	-2.745	
Moderate (predicted)	Mcidas	MCIDAS	2.888	
Moderate (predicted)	Mcm7	MCM7	-2.105	Aryl Hydrocarbon Receptor Signaling,Cell Cycle Contrc
High (predicted)	Mef2d	MEF2D	1.244	Apelin Endothelial Signaling Pathway,Calcium Signalin
High (predicted)	Micall1	MICALL1	-1.06	
High (predicted)	Mknk2	MKNK2	1.518	Cardiac Hypertrophy Signaling (Enhanced),ERK/MAPK

Moderate (predicted)	Mn1	MN1	2.291	
High (predicted)	Mrc2	MRC2	-1.198	Phagosome Formation
Moderate (predicted)	Mrto4	MRTO4	-5.274	
Moderate (predicted)	Myl3	MYL3	2.623	Actin Cytoskeleton Signaling,Agranulocyte Adhesion at
Moderate (predicted)	Naga	NAGA	-2.029	
Moderate (predicted)	Nceh1	NCEH1	-2.141	
High (predicted)	Nfam1	NFAM1	1.629	
High (predicted)	Nit1	NIT1	2.424	
Moderate (predicted)	Nptx2	NPTX2	1.691	
Moderate (predicted)	Numbl	NUMBL	1.156	Notch Signaling
Moderate (predicted)	Nup210	NUP210	1.352	
High (predicted)	Odc1	ODC1	1.833	Polyamine Regulation in Colon Cancer,Putrescine Bios
Moderate (predicted)	Olfml2b	OLFML2B	1.651	
Moderate (predicted)	Opcml	OPCML	-1.941	
Moderate (predicted)	Pacsin1	PACSIN1	1.674	Huntington's Disease Signaling
High (predicted)	Paqr8	PAQR8	-2.153	
Moderate (predicted)	Pbx2	PBX2	2.956	
Moderate (predicted)	Pdpk1	PDPK1	-1.205	Acute Phase Response Signaling,Aldosterone Signalin
Moderate (predicted)	Pex26	PEX26	1.476	
High (predicted)	Pgap3	PGAP3	2.532	
Moderate (predicted)	Pilra	PILRA	3.145	
Moderate (predicted)	Pim1	PIM1	2.501	Acute Myeloid Leukemia Signaling,GM-CSF Signaling,
Moderate (predicted)	Pitpnm2	PITPNM2	1.34	
Moderate (predicted)	Plekho2	PLEKHO2	1.023	
High (predicted)	Ppard	PPARD	-1.541	Osteoarthritis Pathway,PPAR Signaling,VDR/RXR Acti
High (predicted)	Prkaca	PRKACA	1.779	Adrenomedullin signaling pathway,AMPK Signaling,Arr
Moderate (predicted)	Prkd2	PRKD2	1.722	
High (predicted)	Prrg2	PRRG2	-1.675	
High (predicted)	Pycr2	PYCR2	-3.82	Arginine Degradation VI (Arginase 2 Pathway),Proline I
High (predicted)	Pygm	PYGM	1.155	Glycogen Degradation II,Glycogen Degradation III,Prot
High (predicted)	Rab11b	RAB11B	1.69	Clathrin-mediated Endocytosis Signaling,Fcy Receptor
Moderate (predicted)	Radil	RADIL	1.638	
High (predicted)	Rbpms2	RBPMS2	1.161	
Moderate (predicted)	Rccd1	RCCD1	1.973	
High (predicted)	Reep5	REEP5	1.926	
Moderate (predicted)	Rnf19b	RNF19B	1.808	
Moderate (predicted)	Samd4b	SAMD4B	1.449	
Moderate (predicted)	Sash3	SASH3	-2.877	
Moderate (predicted)	Scn1b	SCN1B	1.981	
Moderate (predicted)	Sec16b	SEC16B	2.018	
High (predicted)	Sept9	SEPTIN9	1.495	RhoA Signaling,Signaling by Rho Family GTPases
Moderate (predicted)	Slc24a4	SLC24A4	2.052	
Moderate (predicted)	Slc27a4	SLC27A4	4.62	Fatty Acid Activation,Fatty Acid $\beta$ -oxidation I,LPS/IL-1 I
Moderate (predicted)	Slc2a4	SLC2A4	2.123	Adipogenesis pathway,AMPK Signaling,Antioxidant Ac
High (predicted)	Slc30a2	SLC30A2	2.49	
Moderate (predicted)	Slc35c2	SLC35C2	-1.29	
Moderate (predicted)	Slc39a2	SLC39A2	3.662	
Moderate (predicted)	Smg9	SMG9	2.646	
High (predicted)	Smtnl1	SMTNL1	2.107	

Moderate (predicted)	Snta1	SNTA1	-1.209	nNOS Signaling in Skeletal Muscle Cells
Moderate (predicted)	Socs3	SOCS3	1.798	3-phosphoinositide Biosynthesis,3-phosphoinositide De
Moderate (predicted)	Sox13	SOX13	4.495	Wnt/ $\beta$ -catenin Signaling
High (predicted)	Spata2l	SPATA2L	4.121	
High (predicted)	Ssna1	SSNA1	-3.174	
Moderate (predicted)	Stk24	STK24	1.2	
Moderate (predicted)	Sufu	SUFU	1.055	Axonal Guidance Signaling,Basal Cell Carcinoma Sign
Moderate (predicted)	Syde2	SYDE2	1.408	
Moderate (predicted)	Syt2	SYT2	-1.826	Synaptogenesis Signaling Pathway,TR/RXR Activation
Moderate (predicted)	Tcaim	TCAIM	1.283	
High (predicted)	Tead2	TEAD2	-1.014	HIPPO signaling
High (predicted)	Thbs3	THBS3	1.481	Synaptogenesis Signaling Pathway
Moderate (predicted)	Tmbim6	TMBIM6	1.502	
High (predicted)	Tmem151t	TMEM151B	-1.011	
Moderate (predicted)	Tmem214	TMEM214	2.504	
High (predicted)	Tnfaip8l1	TNFAIP8L1	1.076	
Moderate (predicted)	Tnfrsf13c	TNFRSF13C	3.015	Altered T Cell and B Cell Signaling in Rheumatoid Arth
Moderate (predicted)	Tnfrsf14	TNFRSF14	3.796	Atherosclerosis Signaling,NF- $\kappa$ B Activation by Viruses,
Moderate (predicted)	Tns4	TNS4	-1.381	
Moderate (predicted)	Trp53inp2	TP53INP2	2.938	
Moderate (predicted)	Tpd52l1	TPD52L1	-1.138	
High (predicted)	Trim11	TRIM11	1.795	
Moderate (predicted)	Trim40	TRIM40	-2.325	
Moderate (predicted)	Trim46	TRIM46	2.772	
Moderate (predicted)	Trim58	TRIM58	2.18	
Moderate (predicted)	Trpc4ap	TRPC4AP	-3.61	
Moderate (predicted)	Tspan15	TSPAN15	1.18	
High (predicted)	Tubb6	TUBB6	2.136	14-3-3-mediated Signaling,Axonal Guidance Signaling,
Moderate (predicted)	Unc5a	UNC5A	1.082	Axonal Guidance Signaling,Netrin Signaling
Moderate (predicted)	Unc93b1	UNC93B1	1.947	
High (predicted)	Urm1	URM1	1.328	
High (predicted)	Vgf	VEGF	2.479	White Adipose Tissue Browning Pathway
Moderate (predicted)	Ydjc	YDJC	2.09	
Moderate (predicted)	Zbtb16	ZBTB16	1.535	RAR Activation
High (predicted)	Zfp1	ZFPL1	-2.433	
Moderate (predicted)	Zfp787	ZNF787	-1.576	



rosis Signaling,Atherosclerosis Signaling,Axonal Guidance Signaling,Bladder Cancer Signaling,Clathrin-mediat

biquinol-10 Biosynthesis (Eukaryotic)  
Receptor Signaling,Synaptogenesis Signaling Pathway

Signaling in Rheumatoid Arthritis,Antigen Presentation Pathway,Autoimmune Thyroid Disease Signaling,B Cell  
cleotides Degradation II (Aerobic),Urate Biosynthesis/Inosine 5'-phosphate Degradation

radation III (Eukaryotic),Tryptophan Degradation to 2-amino-3-carboxymuconate Semialdehyde  
egradation,D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthesis,D-myo-inositol (3,4,5,6)-tetrakisphosphate  
WASP Complex,Agrin Interactions at Neuromuscular Junction,Amyotrophic Lateral Sclerosis Signaling,Axonal

hway

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Degradation I

olone Biosynthesis,Ubiquinol-10 Biosynthesis (Eukaryotic)

CA Cycle II (Eukaryotic)  
I Signaling  
hway

nd Diapedesis,Apelin Cardiomyocyte Signaling Pathway,Axonal Guidance Signaling,Calcium Signaling,Cardiac

ertrophy Signaling,Cholecystokinin/Gastrin-mediated Signaling,Colorectal Cancer Metastasis Signaling,CXCR4

Cardiac Hypertrophy Signaling (Enhanced),Ceramide Signaling,Crosstalk between Dendritic Cells and Natural  
inhibition Pathway,HOTAIR Regulatory Pathway,ILK Signaling,Signaling by Rho Family GTPases

Mediated Inhibition of RXR Function,Mitochondrial L-carnitine Shuttle Pathway,Stearate Biosynthesis I (Animal

ng,Protein Kinase A Signaling

s in Rheumatoid Arthritis, Unfolded protein response

Adipose Tissue Browning Pathway

ncy, Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency

onse Signaling, Adrenomedullin signaling pathway, Apoptosis Signaling, April Mediated Signaling, B Cell Activation  
ocytes, Activation of IRF by Cytosolic Pattern Recognition Receptors, Acute Phase Response Signaling, Adrenoc

egradation, D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthesis, D-myo-inositol (3,4,5,6)-tetrakisphosphate

thesis IV

aling Pathway

s in Rheumatoid Arthritis, Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis, Wnt/ $\beta$ -cal

Mediated Inhibition of RXR Function, Mitochondrial L-carnitine Shuttle Pathway, Stearate Biosynthesis I (Animal  
lial Cells, Axonal Guidance Signaling, Basal Cell Carcinoma Signaling, Cardiac Hypertrophy Signaling (Enhanced  
Signaling, Gai Signaling

Cardiac Hypertrophy Signaling (Enhanced), Ceramide Signaling, Crosstalk between Dendritic Cells and Natural

ac Hypertrophy Signaling, GDNF Family Ligand-Receptor Interactions, Growth Hormone Signaling, IGF-1 Signali

j in Macrophages, Corticotropin Releasing Hormone Signaling, CREB Signaling in Neurons, Endocannabinoid Ne

lin Signaling Pathway, White Adipose Tissue Browning Pathway

ng (Enhanced), Cardiac  $\beta$ -adrenergic Signaling, G-Protein Coupled Receptor Signaling, Gustation Pathway, Prote  
athway  
Signaling, Gai Signaling, Opioid Signaling Pathway

Signaling

bly,LXR/RXR Activation,TR/RXR Activation

ides Degradation II,Purine Nucleotides Degradation II (Aerobic),Purine Ribonucleosides Degradation to Ribose  
ertrophy Signaling,Cardiac Hypertrophy Signaling (Enhanced),G-Protein Coupled Receptor Signaling,Gai Sig

ng,Protein Kinase A Signaling  
(Mammalian)

ation

Degradation I

aling,Calcium Signaling,Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (Enhanced),Cardiac  $\beta$ -

e Immunity,MIF-mediated Glucocorticoid Regulation

iosynthesis (Late Stages),Dermatan Sulfate Biosynthesis,Dermatan Sulfate Biosynthesis (Late Stages),Hepara

ng,Dendritic Cell Maturation,GP6 Signaling Pathway,Hepatic Fibrosis / Hepatic Stellate Cell Activation,Hepatic  
ritis,Atherosclerosis Signaling,Hematopoiesis from Multipotent Stem Cells,Hematopoiesis from Pluripotent Ster

egradation,Estrogen Biosynthesis,Glutaryl-CoA Degradation,Melatonin Degradation I,Nicotine Degradation II,Ni

eptors,Role of RIG1-like Receptors in Antiviral Innate Immunity

Receptor Signaling, Synaptogenesis Signaling Pathway

↓ p70S6K Signaling

Receptor Signaling, IL-15 Production, Sperm Motility, Synaptogenesis Signaling Pathway  
Receptor Signaling, IL-15 Production, Sperm Motility, Synaptogenesis Signaling Pathway

↓ Cell Junction Signaling, Sertoli Cell-Sertoli Cell Junction Signaling

↓ Integrin Signaling, PAK Signaling

Signaling in Rheumatoid Arthritis, Antigen Presentation Pathway, Autoimmune Thyroid Disease Signaling, B Cell

↓ Immune Cells, Th1 and Th2 Activation Pathway, Th1 Pathway  
↓ Peptides Degradation II (Aerobic), Urate Biosynthesis/Inosine 5'-phosphate Degradation

↓ Breast Cancer Regulation by Stathmin1, CCR3 Signaling in Eosinophils, Cdc42 Signaling, Chemokine Signaling

↓ of Chromosomal Replication  
↓ Calcium-induced T Lymphocyte Apoptosis, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Er

↓ Signaling, p38 MAPK Signaling

nd Diapedesis, Apelin Cardiomyocyte Signaling Pathway, Axonal Guidance Signaling, Calcium Signaling, Cardiac

ynthesis III

g in Epithelial Cells, AMPK Signaling, B Cell Receptor Signaling, CD28 Signaling in T Helper Cells, Docosahexae

Pyridoxal 5'-phosphate Salvage Pathway, Salvage Pathways of Pyrimidine Ribonucleotides, STAT3 Pathway

vation, Wnt/ $\beta$ -catenin Signaling

lyoid Processing, Androgen Signaling, Apelin Adipocyte Signaling Pathway, Apelin Pancreas Signaling Pathway

Biosynthesis I, Proline Biosynthesis II (from Arginine)

ein Kinase A Signaling,  $\alpha$ -Adrenergic Signaling

-mediated Phagocytosis in Macrophages and Monocytes

Mediated Inhibition of RXR Function, Mitochondrial L-carnitine Shuttle Pathway, Stearate Biosynthesis I (Animal  
tion of Vitamin C, Apelin Muscle Signaling Pathway, Growth Hormone Signaling, HIF1 $\alpha$  Signaling, Hypoxia Signa

egradation,Acute Phase Response Signaling,D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthesis,D-myo-ir

aling,Molecular Mechanisms of Cancer,Sonic Hedgehog Signaling

ritis,B Cell Activating Factor Signaling,Communication between Innate and Adaptive Immune Cells,Primary Imr  
T Cell Exhaustion Signaling Pathway

Breast Cancer Regulation by Stathmin1,Epithelial Adherens Junction Signaling,Gap Junction Signaling,Germ (



ed Endocytosis Signaling,Colorectal Cancer Metastasis Signaling,Endocannabinoid Cancer Inhibition Pathway

Development,Calcium-induced T Lymphocyte Apoptosis,CD28 Signaling in T Helper Cells,Cdc42 Signaling,De

Biosynthesis,D-myo-inositol-5-phosphate Metabolism,Superpathway of Inositol Phosphate Compounds  
Guidance Signaling,B Cell Receptor Signaling,Breast Cancer Regulation by Stathmin1,Cardiac Hypertrophy Si

: Hypertrophy Signaling, Cdc42 Signaling, Cellular Effects of Sildenafil (Viagra), CXCR4 Signaling, Epithelial Adh

l Signaling, Germ Cell-Sertoli Cell Junction Signaling, Glioblastoma Multiforme Signaling, Glioma Invasiveness S

Killer Cells, Death Receptor Signaling, Dendritic Cell Maturation, FAT10 Cancer Signaling Pathway, Granulocyte

s), Type II Diabetes Mellitus Signaling,  $\gamma$ -linolenate Biosynthesis II (Animals)

g Factor Signaling, B Cell Receptor Signaling, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Ei  
medullin signaling pathway, Agrin Interactions at Neuromuscular Junction, AMPK Signaling, Amyloid Processing

Biosynthesis, D-myo-inositol-5-phosphate Metabolism, Pyrimidine Ribonucleotides De Novo Biosynthesis, Pyrimi

tenin Signaling

s), Type II Diabetes Mellitus Signaling,  $\gamma$ -linolenate Biosynthesis II (Animals)

d), Colorectal Cancer Metastasis Signaling, Corticotropin Releasing Hormone Signaling, Factors Promoting Card

Killer Cells, Death Receptor Signaling, Dendritic Cell Maturation, FAT10 Cancer Signaling Pathway, Granulocyte

ng, IL-4 Signaling, IL-9 Signaling, ILK Signaling, Insulin Receptor Signaling, Molecular Mechanisms of Cancer, mT

neuronal Synapse Pathway, Fc $\gamma$ RIIB Signaling in B Lymphocytes, G Beta Gamma Signaling, GABA Receptor Sigr

ain Kinase A Signaling, Relaxin Signaling, tRNA Splicing

α-1-phosphate  
signaling, α-Adrenergic Signaling

α-Adrenergic Signaling, CCR5 Signaling in Macrophages, Cellular Effects of Sildenafil (Viagra), Corticotropin Release

in Sulfate Biosynthesis, Heparan Sulfate Biosynthesis (Late Stages), LPS/IL-1 Mediated Inhibition of RXR Function

Fibrosis Signaling Pathway, HOTAIR Regulatory Pathway, IL-6 Signaling, Intrinsic Prothrombin Activation Pathway  
in Cells, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Macropinocytosis Signaling, MSP-ROCK Signaling Pathway

Nicotine Degradation III, Prostanoid Biosynthesis, Superpathway of Melatonin Degradation, Tryptophan Degradation

Development, Calcium-induced T Lymphocyte Apoptosis, CD28 Signaling in T Helper Cells, Cdc42 Signaling, De

ng, Death Receptor Signaling, Ephrin A Signaling, Ephrin B Signaling, Ephrin Receptor Signaling, Germ Cell-Sertc

hanced), Cholecystinin/Gastrin-mediated Signaling, Corticotropin Releasing Hormone Signaling, ERK5 Signal

: Hypertrophy Signaling,Cdc42 Signaling,Cellular Effects of Sildenafil (Viagra),CXCR4 Signaling,Epithelial Adhe

:noic Acid (DHA) Signaling,EIF2 Signaling,Endometrial Cancer Signaling,eNOS Signaling,ErbB Signaling,ErbB

;Axonal Guidance Signaling,BMP signaling pathway,Breast Cancer Regulation by Stathmin1,Calcium Signaling

s),Type II Diabetes Mellitus Signaling, $\gamma$ -linolenate Biosynthesis II (Animals)  
ling in the Cardiovascular System,Insulin Receptor Signaling,Melatonin Signaling,Type II Diabetes Mellitus Sign

inositol (3,4,5,6)-tetrakisphosphate Biosynthesis,D-myo-inositol-5-phosphate Metabolism,Erythropoietin Signaling

inositol 3-phosphatase Deficiency Signaling,Systemic Lupus Erythematosus In B Cell Signaling Pathway,Systemic Lupus Erythematosus

Cell-Cell Junction Signaling,Phagosome Maturation,Remodeling of Epithelial Adherens Junctions,Sertoli Cell-Sertoli Cell Junction Signaling



,eNOS Signaling,Ephrin Receptor Signaling,Glioblastoma Multiforme Signaling,Glioma Signaling,Hepatic Fibro

ndritic Cell Maturation,Graft-versus-Host Disease Signaling,iCOS-iCOSL Signaling in T Helper Cells,IL-4 Signa

gnaling,CCR3 Signaling in Eosinophils,CD28 Signaling in T Helper Cells,Cholecystokinin/Gastrin-mediated Sig

arens Junction Signaling, Gα12/13 Signaling, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Hepatic Fibrosis

ignaling, Gαq Signaling, Hepatic Fibrosis Signaling Pathway, HMGB1 Signaling, IL-8 Signaling, ILK Signaling, Inte

Adhesion and Diapedesis, Hepatic Cholestasis, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Hepatic Fibro

enhanced),CD27 Signaling in Lymphocytes,CD40 Signaling,Death Receptor Signaling,EGF Signaling,Endocann  
,Antioxidant Action of Vitamin C,Apelin Adipocyte Signaling Pathway,Apelin Cardiomyocyte Signaling Pathway

idine Ribonucleotides Interconversion,Superpathway of Inositol Phosphate Compounds

ogenesis in Vertebrates, Glioblastoma Multiforme Signaling, Hepatic Fibrosis Signaling Pathway, Human Embryo

Adhesion and Diapedesis, Hepatic Cholestasis, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Hepatic Fibro

OR Signaling, p70S6K Signaling, PI3K Signaling in B Lymphocytes, PPAR $\alpha$ /RXR $\alpha$  Activation, Prolactin Signaling

aling, GNRH Signaling, GPCR-Mediated Nutrient Sensing in Enteroendocrine Cells, Gustation Pathway, Netrin S

ising Hormone Signaling, CREB Signaling in Neurons, Dopamine-DARPP32 Feedback in cAMP Signaling, Endo

ion, Xenobiotic Metabolism Signaling

ay, Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis

way, Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, Role of Osteoblasts, Oste

on III (Eukaryotic)

andritic Cell Maturation,Graft-versus-Host Disease Signaling,iCOS-iCOSL Signaling in T Helper Cells,IL-4 Signa

li Cell Junction Signaling,IL-8 Signaling,PAK Signaling,Pyridoxal 5'-phosphate Salvage Pathway,Rac Signaling

ing,Gα12/13 Signaling,Nur77 Signaling in T Lymphocytes,p38 MAPK Signaling,Phospholipase C Signaling,Rol

ens Junction Signaling, Gα12/13 Signaling, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Hepatic Fibrosis

2-ErbB3 Signaling, ErbB4 Signaling, Erythropoietin Signaling, FAK Signaling, Fc Epsilon RI Signaling, FcγRIIB Sig

g, cAMP-mediated signaling, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cardiac

galing, Vitamin-C Transport

ig, Growth Hormone Signaling, IGF-1 Signaling, IL-10 Signaling, IL-22 Signaling, IL-23 Signaling Pathway, IL-6 Sig

natosus Signaling

i Cell-Sertoli Cell Junction Signaling



sis / Hepatic Stellate Cell Activation, Hepatic Fibrosis Signaling Pathway, HIF1 $\alpha$  Signaling, Human Embryonic St

aling, Neuroinflammation Signaling Pathway, Nur77 Signaling in T Lymphocytes, OX40 Signaling Pathway, PD-1,

gnaling, Clathrin-mediated Endocytosis Signaling, Colorectal Cancer Metastasis Signaling, CXCR4 Signaling, End

Signaling Pathway,ILK Signaling,PAK Signaling,Phospholipase C Signaling,Protein Kinase A Signaling,Regula

grin Signaling,Molecular Mechanisms of Cancer,mTOR Signaling,Phagosome Formation,Phospholipase C Sig

sis Signaling Pathway,HMGB1 Signaling,IL-6 Signaling,Induction of Apoptosis by HIV1,Inhibition of ARE-Medic

abinoid Cancer Inhibition Pathway,Endocannabinoid Developing Neuron Pathway,Fc Epsilon RI Signaling,Ger  
,Apelin Endothelial Signaling Pathway,Apelin Liver Signaling Pathway,Apelin Pancreas Signaling Pathway,Apri

onic Stem Cell Pluripotency, Molecular Mechanisms of Cancer, Mouse Embryonic Stem Cell Pluripotency, Osteoc

sis Signaling Pathway, HMGB1 Signaling, IL-6 Signaling, Induction of Apoptosis by HIV1, Inhibition of ARE-Mediated

, Regulation of eIF4 and p70S6K Signaling, Role of JAK1 and JAK3 in  $\gamma$ c Cytokine Signaling, Role of JAK2 in Hc

signaling, nNOS Signaling in Skeletal Muscle Cells, Opioid Signaling Pathway, PKC $\theta$  Signaling in T Lymphocytes

cannabinoid Neuronal Synapse Pathway, FcγRIIB Signaling in B Lymphocytes, G Beta Gamma Signaling, GABA

Macrophages and Chondrocytes in Rheumatoid Arthritis, Role of Tissue Factor in Cancer

aling,Neuroinflammation Signaling Pathway,Nur77 Signaling in T Lymphocytes,OX40 Signaling Pathway,PD-1,

,Reelin Signaling in Neurons,Regulation of Actin-based Motility by Rho,RhoA Signaling,RhoGDI Signaling,Rok

le of NFAT in Cardiac Hypertrophy,Role of NFAT in Regulation of the Immune Response

Signaling Pathway,ILK Signaling,PAK Signaling,Phospholipase C Signaling,Protein Kinase A Signaling,Regula

gnaling in B Lymphocytes,FLT3 Signaling in Hematopoietic Progenitor Cells,G Beta Gamma Signaling,G-Protei

$\beta$ -adrenergic Signaling,CDK5 Signaling,Cellular Effects of Sildenafil (Viagra),Colorectal Cancer Metastasis Sig

signaling, IL-9 Signaling, Insulin Receptor Signaling, JAK/Stat Signaling, Leptin Signaling in Obesity, Prolactin Signa



em Cell Pluripotency,IL-8 Signaling,ILK Signaling,Macropinocytosis Signaling,mTOR Signaling,Nitric Oxide Sig

PD-L1 cancer immunotherapy pathway,PKC $\theta$  Signaling in T Lymphocytes,Role of NFAT in Regulation of the I

locannabinoid Developing Neuron Pathway,Ephrin A Signaling,Ephrin B Signaling,Ephrin Receptor Signaling,E

tion of Actin-based Motility by Rho,RhoA Signaling,RhoGDI Signaling,Signaling by Rho Family GTPases,Thror

naling,Production of Nitric Oxide and Reactive Oxygen Species in Macrophages,Regulation of Actin-based Mot

ated mRNA Degradation Pathway,LPS/IL-1 Mediated Inhibition of RXR Function,LXR/RXR Activation,NF- $\kappa$ B Sig

m Cell-Sertoli Cell Junction Signaling,Glucocorticoid Receptor Signaling,GNRH Signaling,G $\alpha$ 12/13 Signaling,Hil Mediated Signaling,ATM Signaling,B Cell Activating Factor Signaling,B Cell Receptor Signaling,BMP signalin

arthritis Pathway, Ovarian Cancer Signaling, PCP pathway, Protein Kinase A Signaling, Protein Ubiquitination Pa

ated mRNA Degradation Pathway, LPS/IL-1 Mediated Inhibition of RXR Function, LXR/RXR Activation, NF- $\kappa$ B Sig

ormone-like Cytokine Signaling, SAPK/JNK Signaling, Type II Diabetes Mellitus Signaling

s, Role of NFAT in Cardiac Hypertrophy, Synaptic Long Term Depression, Synaptogenesis Signaling Pathway, Ty

\ Receptor Signaling,GNRH Signaling,GPCR-Mediated Nutrient Sensing in Enteroendocrine Cells,Gustation Pa

PD-L1 cancer immunotherapy pathway,PKC $\theta$  Signaling in T Lymphocytes,Role of NFAT in Regulation of the I

e of Tissue Factor in Cancer,Salvage Pathways of Pyrimidine Ribonucleotides,Semaphorin Signaling in Neuror

tion of Actin-based Motility by Rho, RhoA Signaling, RhoGDI Signaling, Signaling by Rho Family GTPases, Throm

in Coupled Receptor Signaling, Germ Cell-Sertoli Cell Junction Signaling, GP6 Signaling Pathway, Growth Hormone

Signaling, Corticotropin Releasing Hormone Signaling, CREB Signaling in Neurons, Dopamine Receptor Signaling, I

ling, Role of JAK family kinases in IL-6-type Cytokine Signaling, Role of JAK1 and JAK3 in  $\gamma$ c Cytokine Signaling



signaling in the Cardiovascular System, Osteoarthritis Pathway, Ovarian Cancer Signaling, PAK Signaling, Pancreatic

Immune Response, Systemic Lupus Erythematosus In T Cell Signaling Pathway, T Cell Exhaustion Signaling Pathway

Epithelial Adherens Junction Signaling, ERK/MAPK Signaling, FAK Signaling, Fc Epsilon RI Signaling, Fc gamma Receptor

Integrin Signaling, Tight Junction Signaling

Cell Motility by Rho, RhoGDI Signaling, Semaphorin Signaling in Neurons, Signaling by Rho Family GTPases, Sphingosine

Signaling, Osteoarthritis Pathway, p38 MAPK Signaling, PD-1, PD-L1 cancer immunotherapy pathway, PPAR Signaling

epatic Fibrosis Signaling Pathway,HGF Signaling,HMGB1 Signaling,Huntington's Disease Signaling,IL-1 Signaling pathway,Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (Enhanced),CCR3 Signaling in Eosin

Pathway, Regulation of the Epithelial-Mesenchymal Transition Pathway, Role of Macrophages, Fibroblasts and En

gnaling, Osteoarthritis Pathway, p38 MAPK Signaling, PD-1, PD-L1 cancer immunotherapy pathway, PPAR Signa

Type II Diabetes Mellitus Signaling, White Adipose Tissue Browning Pathway

pathway, Hepatic Fibrosis Signaling Pathway, Maturity Onset Diabetes of Young (MODY) Signaling, Netrin Signaling

Immune Response, Systemic Lupus Erythematosus In T Cell Signaling Pathway, T Cell Exhaustion Signaling Pa

is, Signaling by Rho Family GTPases, Synaptogenesis Signaling Pathway

nbin Signaling,Tight Junction Signaling

one Signaling,Human Embryonic Stem Cell Pluripotency,Huntington's Disease Signaling,iCOS-iCOSL Signaling

Dopamine-DARPP32 Feedback in cAMP Signaling,Endocannabinoid Cancer Inhibition Pathway,Endocannabinoid

3, Role of JAK2 in Hormone-like Cytokine Signaling, Role of Macrophages, Fibroblasts and Endothelial Cells in F



tic Adenocarcinoma Signaling, PDGF Signaling, PPAR Signaling, Role of Macrophages, Fibroblasts and Endothel

thway, T Helper Cell Differentiation, Th1 and Th2 Activation Pathway, Th1 Pathway, Th2 Pathway, Type I Diabete

or-mediated Phagocytosis in Macrophages and Monocytes, FGF Signaling, fMLP Signaling in Neutrophils, GDNF

γe-1-phosphate Signaling, Sumoylation Pathway, Systemic Lupus Erythematosus In T Cell Signaling Pathway, T

aling, Production of Nitric Oxide and Reactive Oxygen Species in Macrophages, Role of Macrophages, Fibroblas

iling,IL-15 Production,IL-6 Signaling,Induction of Apoptosis by HIV1,LPS/IL-1 Mediated Inhibition of RXR Funct  
ophils,CCR5 Signaling in Macrophages,CD27 Signaling in Lymphocytes,CD28 Signaling in T Helper Cells,CD4

endothelial Cells in Rheumatoid Arthritis, Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency, Role of

aligning, Production of Nitric Oxide and Reactive Oxygen Species in Macrophages, Role of Macrophages, Fibroblasts

ng, Nitric Oxide Signaling in the Cardiovascular System, nNOS Signaling in Skeletal Muscle Cells, Opioid Signali

thway, T Helper Cell Differentiation, Th1 and Th2 Activation Pathway, Th1 Pathway, Th2 Pathway, Type I Diabete

g in T Helper Cells,IGF-1 Signaling,IL-7 Signaling Pathway,ILK Signaling,Insulin Receptor Signaling,Lymphoto)

oid Developing Neuron Pathway,Endocannabinoid Neuronal Synapse Pathway,eNOS Signaling,ERK/MAPK S

Rheumatoid Arthritis, STAT3 Pathway, Superpathway of Inositol Phosphate Compounds, Th1 and Th2 Activation



ial Cells in Rheumatoid Arthritis, Sphingosine-1-phosphate Signaling, VEGF Signaling

s Mellitus Signaling

= Family Ligand-Receptor Interactions, Germ Cell-Sertoli Cell Junction Signaling, Glioblastoma Multiforme Signa

ec Kinase Signaling,Thrombin Signaling

its and Endothelial Cells in Rheumatoid Arthritis,Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheum

ion, Melatonin Signaling, Neurotrophin/TRK Signaling, NF- $\kappa$ B Signaling, NRF2-mediated Oxidative Stress Respon  
t0 Signaling, Cdc42 Signaling, CDK5 Signaling, Chemokine Signaling, Cholecystokinin/Gastrin-mediated Signalin

of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis, Role of Wnt/GSK-3 $\beta$  Signaling in the Pat

sts and Endothelial Cells in Rheumatoid Arthritis, Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheum

ng Pathway,PKCθ Signaling in T Lymphocytes,Role of NFAT in Cardiac Hypertrophy,Senescence Pathway,Sy

s Mellitus Signaling

kin  $\beta$  Receptor Signaling, mTOR Signaling, Neuregulin Signaling, Neurotrophin/TRK Signaling, NGF Signaling, No

ignaling, G Beta Gamma Signaling, G-Protein Coupled Receptor Signaling, Gap Junction Signaling, Glucocortico

Pathway, Th1 Pathway, Th17 Activation Pathway, Th2 Pathway, Type I Diabetes Mellitus Signaling, Type II Diab



iling, Glioma Invasiveness Signaling, Glucocorticoid Receptor Signaling, GNRH Signaling, GP6 Signaling Pathwa

atoid Arthritis,T Helper Cell Differentiation,Tight Junction Signaling,TNFR2 Signaling,Type I Diabetes Mellitus S

ase, Opioid Signaling Pathway, PFKFB4 Signaling Pathway, PPAR $\alpha$ /RXR $\alpha$  Activation, Production of Nitric Oxide ;  
ig, Colorectal Cancer Metastasis Signaling, Corticotropin Releasing Hormone Signaling, CXCR4 Signaling, Dendr

thogenesis of Influenza, Sonic Hedgehog Signaling, Wnt/Ca<sup>+</sup> pathway, Wnt/ $\beta$ -catenin Signaling

atoid Arthritis, T Helper Cell Differentiation, Tight Junction Signaling, TNFR2 Signaling, Type I Diabetes Mellitus S

naptic Long Term Depression, Type II Diabetes Mellitus Signaling, White Adipose Tissue Browning Pathway

n-Small Cell Lung Cancer Signaling,p70S6K Signaling,PI3K Signaling in B Lymphocytes,PI3K/AKT Signaling,F

id Receptor Signaling,GNRH Signaling,GPCR-Mediated Integration of Enteroendocrine Signaling Exemplified I

etes Mellitus Signaling

y, Gαq Signaling, Hepatic Fibrosis Signaling Pathway, HGF Signaling, HMGB1 Signaling, iCOS-iCOSL Signaling i



signaling, Type II Diabetes Mellitus Signaling

and Reactive Oxygen Species in Macrophages, Rac Signaling, RANK Signaling in Osteoclasts, Reelin Signaling  
itic Cell Maturation, EGF Signaling, Endocannabinoid Developing Neuron Pathway, Endocannabinoid Neuronal :

signaling, Type II Diabetes Mellitus Signaling

Prolactin Signaling, Prostate Cancer Signaling, PTEN Signaling, RAR Activation, Regulation of eIF4 and p70S6K :

by an L Cell, GPCR-Mediated Nutrient Sensing in Enteroendocrine Cells, Gustation Pathway, G $\alpha$ i Signaling, Gas

in T Helper Cells,IL-3 Signaling,IL-8 Signaling,ILK Signaling,Integrin Signaling,Leukocyte Extravasation Signali

in Neurons, Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes, Regulation of the Epithelial-Synapse Pathway, Endothelin-1 Signaling, ErbB Signaling, Fc Epsilon RI Signaling, FcγRIIB Signaling in B Lymphocytes

Signaling, Systemic Lupus Erythematosus In B Cell Signaling Pathway, Telomerase Signaling, Thrombin Signaling

Signaling, Hepatic Cholestasis, Hepatic Fibrosis Signaling Pathway, IGF-1 Signaling, IL-1 Signaling, Inhibition of /

ng,LPS-stimulated MAPK Signaling,Macropinocytosis Signaling,Molecular Mechanisms of Cancer,mTOR Signa



-Mesenchymal Transition Pathway,Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, T Lymphocytes,FGF Signaling,FLT3 Signaling in Hematopoietic Progenitor Cells,FXR/RXR Activation,GDNF Family Ligands

19, Type II Diabetes Mellitus Signaling

ARE-Mediated mRNA Degradation Pathway, Insulin Receptor Signaling, Leptin Signaling in Obesity, Melanocyte

aling, Natural Killer Cell Signaling, Netrin Signaling, NGF Signaling, Opioid Signaling Pathway, Osteoarthritis Path

iritis, Role of MAPK Signaling in the Pathogenesis of Influenza, Role of NFAT in Cardiac Hypertrophy, Role of Osgand-Receptor Interactions, Germ Cell-Sertoli Cell Junction Signaling, Glucocorticoid Receptor Signaling, GNRH

Development and Pigmentation Signaling, Melatonin Signaling, Molecular Mechanisms of Cancer, Netrin Signali

way,PAK Signaling,Pancreatic Adenocarcinoma Signaling,Paxillin Signaling,PCP pathway,PEDF Signaling,Phc

osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis, SAPK/JNK Signaling, Senescence Pathway,  $\epsilon$  Signaling,  $G\alpha_{12/13}$  Signaling, Hepatic Cholestasis, Hepatic Fibrosis Signaling Pathway, HGF Signaling, HIF1 $\alpha$  S

ing,Neuropathic Pain Signaling In Dorsal Horn Neurons,Neuroprotective Role of THOP1 in Alzheimer's Disease



Autophagosome Formation, Phospholipase C Signaling, PI3K Signaling in B Lymphocytes, PKC $\theta$  Signaling in T Lympho

Sertoli Cell-Sertoli Cell Junction Signaling, Signaling by Rho Family GTPases, Sperm Motility, Systemic Lupus Erythematosus Signaling, HMGB1 Signaling, IL-1 Signaling, IL-10 Signaling, IL-12 Signaling and Production in Macrophages, IL-15

α, NF-κB Signaling, Nitric Oxide Signaling in the Cardiovascular System, Opioid Signaling Pathway, Ovarian Canc

cytes, Production of Nitric Oxide and Reactive Oxygen Species in Macrophages, PTEN Signaling, Rac Signaling

Mythomatosus In T Cell Signaling Pathway, Type I Diabetes Mellitus Signaling, Type II Diabetes Mellitus Signaling  
Signaling, IL-17 Signaling, IL-17A Signaling in Airway Cells, IL-17A Signaling in Fibroblasts, IL-17A Signaling in (

er Signaling,P2Y Purigenic Receptor Signaling Pathway,PFKFB4 Signaling Pathway,Phototransduction Pathw

,RAR Activation,Reelin Signaling in Neurons,Regulation of Actin-based Motility by Rho,Regulation of IL-2 Expr

,Unfolded protein response,Xenobiotic Metabolism Signaling  
Gastric Cells,IL-22 Signaling,IL-6 Signaling,IL-7 Signaling Pathway,IL-8 Signaling,ILK Signaling,Induction of Ap



ay,PPAR $\alpha$ /RXR $\alpha$  Activation,Protein Kinase A Signaling,PXR/RXR Activation,RAR Activation,Relaxin Signaling

expression in Activated and Anergic T Lymphocytes, Renal Cell Carcinoma Signaling, Renin-Angiotensin Signaling, F

,Renin-Angiotensin Signaling,Role of NFAT in Cardiac Hypertrophy,Sertoli Cell-Sertoli Cell Junction Signaling,€

RhoGDI Signaling, Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, Role of p14/1

Sonic Hedgehog Signaling, Sperm Motility, Synaptic Long Term Potentiation, Synaptogenesis Signaling Pathway

519ARF in Tumor Suppression, Role of Tissue Factor in Cancer, SAPK/JNK Signaling, Semaphorin Signaling in

;Tight Junction Signaling,White Adipose Tissue Browning Pathway, $\alpha$ -Adrenergic Signaling

Neurons, Sertoli Cell-Sertoli Cell Junction Signaling, Signaling by Rho Family GTPases, Sphingosine-1-phospha



te Signaling, STAT3 Pathway, Sumoylation Pathway, Synaptogenesis Signaling Pathway, Systemic Lupus Erythe

Systemic Lupus Erythematosus In B Cell Signaling Pathway, Systemic Lupus Erythematosus In T Cell Signaling Pathway, T Cell Receptor

Receptor Signaling, Tec Kinase Signaling, Thrombin Signaling, Tight Junction Signaling, Virus Entry via Endocytic Pathways







Confidenc	ID	Symbol	Expr Log F	Pathway
Moderate	(Atmin	ATMIN	-1.76	Role of CHK Proteins in Cell Cycle Checkpoint Control
Moderate	(Fam133b	FAM133B	-1.123	
Moderate	(Gata4	GATA4	1.839	Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (En
Moderate	(Ncmap	NCMAP	-3.618	
Moderate	(Pm20d2	PM20D2	1.99	
Moderate	(Ribc2	RIBC2	-1.619	
Moderate	(Slc36a1	SLC36A1	-2.042	
High (pred	Tfrc	TFRC	2.66	Clathrin-mediated Endocytosis Signaling,Hepatic Fibrosis Signalin
Moderate	(Wdr82	WDR82	-1.654	
Moderate	(Cyp26b1	CYP26B1	1.911	Histidine Degradation VI,Pregnenolone Biosynthesis,Ubiquinol-10
Moderate	(Gdf11	GDF11	-2.756	
Moderate	(Get4	GET4	1.764	
High (pred	Rasgrp3	RASGRP3	1.695	Systemic Lupus Erythematosus In B Cell Signaling Pathway
Moderate	(St6gal2	ST6GAL2	2.686	
Moderate	(Ubxn10	UBXN10	-2.612	
Moderate	(Zkscan17	ZNF496	-3.498	
Moderate	(Atp6v0e2	ATP6V0E2	2.325	Iron homeostasis signaling pathway,Phagosome Maturation
Moderate	(Batf2	BATF2	2.177	
Moderate	(Ccnyl1	CCNYL1	-2.045	
Moderate	(Cyp7b1	CYP7B1	1.025	Hepatic Cholestasis,Histidine Degradation VI,Pregnenolone Biosy
Moderate	(Gpr157	GPR157	2.212	
Moderate	(Hnrnpu	HNRNPU	-1.407	
Moderate	(Klhdc1	KLHDC1	1.407	
Moderate	(Nceh1	NCEH1	-1.538	
Moderate	(Opcml	OPCML	-1.954	
Moderate	(Pcyox1	PCYOX1	1.5	Atherosclerosis Signaling,Clathrin-mediated Endocytosis Signaling
Moderate	(Plag1	PLAG1	-1.656	
Moderate	(Plcb3	PLCB3	1.771	14-3-3-mediated Signaling,Adrenomedullin signaling pathway,Aldo
Moderate	(Plxna2	PLXNA2	-1.964	Axonal Guidance Signaling
Moderate	(Ribc2	RIBC2	-1.619	
Moderate	(Shcbp1	SHCBP1	1.965	
High (pred	Tbr1	TBR1	2.53	
Moderate	(Tfrc	TFRC	2.66	Clathrin-mediated Endocytosis Signaling,Hepatic Fibrosis Signalin
High (pred	Tmem211	TMEM211	1.936	
Moderate	(Tmtc2	TMTC2	1.795	
Moderate	(Adamts14	ADAMTS1	-3.638	Axonal Guidance Signaling
Moderate	(B4galt1	B4GALT1	-4.655	
Moderate	(Batf2	BATF2	2.177	
Moderate	(E130309D	C7orf26	-2.184	
Experimen	Cdk6	CDK6	-2.047	Aryl Hydrocarbon Receptor Signaling,Cell Cycle Control of Chrom
Moderate	(Cyth1	CYTH1	-1.168	
Moderate	(Fam107b	FAM107B	-1.146	
Moderate	(Gdf11	GDF11	-2.756	
Moderate	(Gpr157	GPR157	2.212	
Moderate	(Hist1h4n	H4C13	-3.363	DNA Methylation and Transcriptional Repression Signaling,NER F
Moderate	(Hif1an	HIF1AN	-4.268	Hypoxia Signaling in the Cardiovascular System,White Adipose Ti
Moderate	(Iba57	IBA57	-3.349	
Moderate	(Igsf11	IGSF11	-1.174	
Moderate	(Kif18b	KIF18B	-1.434	
High (pred	Mapk12	MAPK12	1.502	14-3-3-mediated Signaling,4-1BB Signaling in T Lymphocytes,Acti
Moderate	(Mdc1	MDC1	-1.952	ATM Signaling,Role of BRCA1 in DNA Damage Response,Role of
High (pred	Ms4a3	MS4A3	-3.47	
High (pred	Ptpn18	PTPN18	-2.395	Protein Kinase A Signaling
Moderate	(Rasal2	RASAL2	-1.787	
Moderate	(Rasgrf1	RASGRF1	-3.334	Molecular Mechanisms of Cancer,Synaptogenesis Signaling Path

Moderate (Rbm24	RBM24	2.519	
Moderate (Sel1l	SEL1L	-2.155	Unfolded protein response
Moderate (Slc24a2	SLC24A2	-4.493	
Moderate (Slc27a4	SLC27A4	2.963	Fatty Acid Activation,Fatty Acid $\beta$ -oxidation I,LPS/IL-1 Mediated In
Moderate (Slc45a3	SLC45A3	-1.427	
High (pred Syt2	SYT2	-1.147	Synaptogenesis Signaling Pathway,TR/RXR Activation
High (pred Wars	WARS1	3.026	EIF2 Signaling,tRNA Charging
Moderate (Zfp704	ZNF704	-2.822	
Moderate (Egfl7	EGFL7	-3.199	
Moderate (Kif18b	KIF18B	-1.434	
Moderate (Ptpn18	PTPN18	-2.395	Protein Kinase A Signaling
Experimen Slc45a3	SLC45A3	-1.427	
Experimen Spred1	SPRED1	1.08	
Moderate (Tmem132l	TMEM132	-1.172	
Moderate (Trpc4ap	TRPC4AP	-2.757	
Moderate (Angel2	ANGEL2	-1.733	
Moderate (Ate1	ATE1	-2.223	
Moderate (Fam107b	FAM107B	-1.146	
Moderate (Fn1	FN1	1.278	Actin Cytoskeleton Signaling,Acute Phase Response Signaling,A $\alpha$
Moderate (Hnrnpu	HNRNPU	-1.407	
Moderate (Ptbp2	PTBP2	-1.138	
Moderate (Rnf145	RNF145	-1.154	
Moderate (Tfrc	TFRC	2.66	Clathrin-mediated Endocytosis Signaling,Hepatic Fibrosis Signalin
Moderate (Tmem56	TLCD4	2.432	
Moderate (Tpd52l1	TPD52L1	-1.808	
Moderate (Wars	WARS1	3.026	EIF2 Signaling,tRNA Charging
Moderate (Adamts7	ADAMTS7	-1.614	Axonal Guidance Signaling
High (pred Ahdc1	AHDC1	-1.205	
Moderate (Arhgap44	ARHGAP4	-3.236	
Moderate (Atp6v0e2	ATP6V0E2	2.325	Iron homeostasis signaling pathway,Phagosome Maturation
Moderate (Bahcc1	BAHCC1	1.404	
Moderate (Bloc1s2	BLOC1S2	3.595	
Moderate (E130309D	C7orf26	-2.184	
Moderate (Chl1	CHL1	-1.612	
Moderate (Clcn7	CLCN7	1.689	
Moderate (Clip2	CLIP2	1.197	
Moderate (Cntfr	CNTFR	1.428	CNTF Signaling
High (pred Csf1	CSF1	3.156	Altered T Cell and B Cell Signaling in Rheumatoid Arthritis,Athero:
Moderate (Cyth1	CYTH1	-1.168	
Moderate (Dab2ip	DAB2IP	-1.133	
Moderate (Dctd	DCTD	-2.019	
Moderate (Dixdc1	DIXDC1	1.698	
High (pred Dyrk1b	DYRK1B	-2.137	Sonic Hedgehog Signaling
High (pred Egfl7	EGFL7	-3.199	
Moderate (Endov	ENDOV	-3.421	
Moderate (Epha10	EPHA10	-1.724	Axonal Guidance Signaling,Ephrin A Signaling,Ephrin Receptor Si
Moderate (Ephb4	EPHB4	1.58	Axonal Guidance Signaling,Ephrin B Signaling,Ephrin Receptor Si
Moderate (Foxn4	FOXN4	-3.316	
High (pred Gpr173	GPR173	-1.148	
High (pred Hpca	HPCA	3.613	
Moderate (Htr3a	HTR3A	2.235	Calcium Signaling,Serotonin Receptor Signaling
Moderate (Kcns1	KCNS1	3.47	
Moderate (Klhl38	KLHL38	-7.362	
Moderate (Lgals12	LGALS12	2.528	
Moderate (Lhx6	LHX6	2.259	
High (pred Lmtk3	LMTK3	-1.996	IL-15 Production,Sperm Motility



High (pred Map6d1	MAP6D1	3.681	
Moderate (Mcidas	MCIDAS	3.381	
Moderate (Mcm7	MCM7	-1.446	Aryl Hydrocarbon Receptor Signaling,Cell Cycle Control of Chrom
Moderate (Mn1	MN1	1.842	
High (pred Mrc2	MRC2	-2.088	Phagosome Formation
Moderate (Mrto4	MRTO4	-3.492	
Moderate (Mvk	MVK	-1.089	Mevalonate Pathway I,Superpathway of Cholesterol Biosynthesis,
Moderate (Naga	NAGA	-5.906	
Moderate (Nceh1	NCEH1	-1.538	
High (pred Ntn1	NTN1	1.08	Axonal Guidance Signaling,Netrin Signaling,Protein Kinase A Sigr
High (pred Odc1	ODC1	3.197	Polyamine Regulation in Colon Cancer,Putrescine Biosynthesis III
Moderate (Olfml2b	OLFML2B	1.641	
Moderate (Opcml	OPCML	-1.954	
High (pred Pacs1	PACS1	-1.279	
Moderate (Pacsin1	PACSIN1	1.672	Huntington's Disease Signaling
High (pred Paqr8	PAQR8	-2.205	
Moderate (Pcgf3	PCGF3	1.37	
Moderate (Pcyox1	PCYOX1	1.5	Atherosclerosis Signaling,Clathrin-mediated Endocytosis Signaling
Moderate (Pdgfrb	PDGFRB	-1.719	Apelin Liver Signaling Pathway,Glioblastoma Multiforme Signaling
Moderate (Pdpk1	PDPK1	-2.256	Acute Phase Response Signaling,Aldosterone Signaling in Epithe
High (pred Ppard	PPARD	-2.308	Osteoarthritis Pathway,PPAR Signaling,VDR/RXR Activation,Wnt/
High (pred Prkar1b	PRKAR1B	-1.269	Adrenomedullin signaling pathway,AMPK Signaling,Amyloid Proce
Moderate (Prkd2	PRKD2	1.588	
High (pred Rab11b	RAB11B	1.763	Clathrin-mediated Endocytosis Signaling,Fcy Receptor-mediated I
Moderate (Rasal2	RASAL2	-1.787	
Moderate (Rccd1	RCCD1	1.536	
Moderate (Rps6ka2	RPS6KA2	1.483	CNTF Signaling,ERK5 Signaling,FLT3 Signaling in Hematopoietic
Moderate (Sash3	SASH3	-3.46	
Moderate (Scara3	SCARA3	-2.066	Phagosome Formation
Moderate (Scn1b	SCN1B	1.964	
High (pred Scrt1	SCRT1	-1.68	
High (pred Sept9	SEPTIN9	1.267	RhoA Signaling,Signaling by Rho Family GTPases
Moderate (Slc27a4	SLC27A4	2.963	Fatty Acid Activation,Fatty Acid $\beta$ -oxidation I,LPS/IL-1 Mediated In
High (pred Slc30a2	SLC30A2	1.837	
Moderate (Slc35c2	SLC35C2	-1.194	
Moderate (Smad7	SMAD7	1.862	BMP signaling pathway,Hepatic Fibrosis / Hepatic Stellate Cell Ac
Moderate (Sox13	SOX13	3.797	Wnt/ $\beta$ -catenin Signaling
Moderate (Syt2	SYT2	-1.147	Synaptogenesis Signaling Pathway,TR/RXR Activation
Moderate (Tbr1	TBR1	2.53	
Moderate (Tgfrb2	TGFBR2	2.084	Antiproliferative Role of TOB in T Cell Signaling,Cardiac Hypertro
High (pred Tmem151	TMEM151	-1.541	
Moderate (Tnfrsf13c	TNFRSF1	5.591	Altered T Cell and B Cell Signaling in Rheumatoid Arthritis,B Cell ,
Moderate (Tpd52l1	TPD52L1	-1.808	
Moderate (Trim58	TRIM58	1.755	
Moderate (Trpc4ap	TRPC4AP	-2.757	
High (pred Wnt3a	WNT3A	-2.169	Axonal Guidance Signaling,Basal Cell Carcinoma Signaling,Cardi

Enhanced), Cardiomyocyte Differentiation via BMP Receptors, Embryonic Stem Cell Differentiation into Cardiac Li

ig Pathway, Iron homeostasis signaling pathway, Virus Entry via Endocytic Pathways

Biosynthesis (Eukaryotic)

ynthesis, Ubiquinol-10 Biosynthesis (Eukaryotic)

g, FXR/RXR Activation, IL-12 Signaling and Production in Macrophages, LXR/RXR Activation, Production of Nitric  
osterone Signaling in Epithelial Cells, Antioxidant Action of Vitamin C, Apelin Cardiomyocyte Signaling Pathway,

ig Pathway, Iron homeostasis signaling pathway, Virus Entry via Endocytic Pathways

somal Replication, Cell Cycle: G1/S Checkpoint Regulation, Chronic Myeloid Leukemia Signaling, Cyclins and C

Pathway, Transcriptional Regulatory Network in Embryonic Stem Cells  
ssue Browning Pathway

ivation of IRF by Cytosolic Pattern Recognition Receptors, Acute Phase Response Signaling, Adrenomedullin si  
f CHK Proteins in Cell Cycle Checkpoint Control

way

Inhibition of RXR Function, Mitochondrial L-carnitine Shuttle Pathway, Stearate Biosynthesis I (Animals), Type II D

Granulocyte Adhesion and Diapedesis, Hepatic Fibrosis / Hepatic Stellate Cell Activation, ILK Signaling, Osteoarthritis

ILK Signaling, Iron homeostasis signaling pathway, Virus Entry via Endocytic Pathways

Osteoarthritis Signaling, Hematopoiesis from Multipotent Stem Cells, Hematopoiesis from Pluripotent Stem Cells, Hepatic Fibrosis

ILK Signaling, Synaptogenesis Signaling Pathway

ILK Signaling, IL-15 Production, Sperm Motility, Synaptogenesis Signaling Pathway

osomal Replication

Superpathway of Geranylgeranyldiphosphate Biosynthesis I (via Mevalonate)

aling

g,FXR/RXR Activation,IL-12 Signaling and Production in Macrophages,LXR/RXR Activation,Production of Nitric  
l,Glioma Signaling,Hepatic Fibrosis / Hepatic Stellate Cell Activation,Hepatic Fibrosis Signaling Pathway,Huma  
lial Cells,AMPK Signaling,B Cell Receptor Signaling,CD28 Signaling in T Helper Cells,Docosahexaenoic Acid (  
'β-catenin Signaling  
essing,Androgen Signaling,Apelin Adipocyte Signaling Pathway,Apelin Pancreas Signaling Pathway,Axonal Gu

Phagocytosis in Macrophages and Monocytes

Progenitor Cells,Growth Hormone Signaling,Melanocyte Development and Pigmentation Signaling,MSP-RON

inhibition of RXR Function,Mitochondrial L-carnitine Shuttle Pathway,Stearate Biosynthesis I (Animals),Type II D

tivation,Hepatic Fibrosis Signaling Pathway,Human Embryonic Stem Cell Pluripotency,Molecular Mechanisms

ohy Signaling,Cardiac Hypertrophy Signaling (Enhanced),Chronic Myeloid Leukemia Signaling,Colorectal Canc

Activating Factor Signaling,Communication between Innate and Adaptive Immune Cells,Primary Immunodeficie

ac Hypertrophy Signaling (Enhanced),Colorectal Cancer Metastasis Signaling,Glioblastoma Multiforme Signalar

neages, Factors Promoting Cardiogenesis in Vertebrates, Role of NANOG in Mammalian Embryonic Stem Cell F

; Oxide and Reactive Oxygen Species in Macrophages

Apelin Endothelial Signaling Pathway, Axonal Guidance Signaling, Breast Cancer Regulation by Stathmin1, Carc

Cell Cycle Regulation, Glioblastoma Multiforme Signaling, Glioma Signaling, HER-2 Signaling in Breast Cancer, H

gnaling pathway, Agrin Interactions at Neuromuscular Junction, AMPK Signaling, Amyloid Processing, Antioxidan

Diabetes Mellitus Signaling,  $\gamma$ -linolenate Biosynthesis II (Animals)

Inflammation Signaling Pathway, Phagosome Formation, Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis

Hepatic Fibrosis / Hepatic Stellate Cell Activation, Macropinocytosis Signaling, MSP-ROK Signaling Pathway, Role of

; Oxide and Reactive Oxygen Species in Macrophages  
n Embryonic Stem Cell Pluripotency,IL-15 Production,Iron homeostasis signaling pathway,NF-κB Signaling,PAI  
DHA) Signaling,EIF2 Signaling,Endometrial Cancer Signaling,eNOS Signaling,ErbB Signaling,ErbB2-ErbB3 Si  
guidance Signaling,BMP signaling pathway,Breast Cancer Regulation by Stathmin1,Calcium Signaling,cAMP-me

Signaling Pathway,mTOR Signaling,NGF Signaling,Opioid Signaling Pathway,p38 MAPK Signaling,Role of IL-

diabetes Mellitus Signaling,γ-linolenate Biosynthesis II (Animals)

of Cancer,Osteoarthritis Pathway,RAR Activation,Senescence Pathway,TGF-β Signaling

er Metastasis Signaling,Epithelial Adherens Junction Signaling,Factors Promoting Cardiogenesis in Vertebrate  
ancy Signaling,Systemic Lupus Erythematosus In B Cell Signaling Pathway,Systemic Lupus Erythematosus Sig

ng,Hepatic Fibrosis Signaling Pathway,HOTAIR Regulatory Pathway,Human Embryonic Stem Cell Pluripotency

Pluripotency, Role of NFAT in Cardiac Hypertrophy, Role of NFAT in Regulation of the Immune Response, Senescence

Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), CCR3 Signaling in Eosinophils, Cellular Senescence

Hereditary Breast Cancer Signaling, Molecular Mechanisms of Cancer, Non-Small Cell Lung Cancer Signaling, Pyroptosis

Protective Action of Vitamin C, Apelin Adipocyte Signaling Pathway, Apelin Cardiomyocyte Signaling Pathway, Apelin Endothelial Cell Signaling



Arthritis

of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, Role of Osteoblasts, Osteoclasts and

K Signaling, PDGF Signaling, PPAR Signaling, PTEN Signaling, Regulation of the Epithelial-Mesenchymal Transition Signaling, ErbB4 Signaling, Erythropoietin Signaling, FAK Signaling, Fc Epsilon RI Signaling, FcγRIIB Signaling in B Cell-mediated signaling, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cardiac β-adrenergic

17F in Allergic Inflammatory Airway Diseases, Role of Tissue Factor in Cancer, UVA-Induced MAPK Signaling

s, FAT10 Cancer Signaling Pathway, Germ Cell-Sertoli Cell Junction Signaling, Glucocorticoid Receptor Signaling

r, Molecular Mechanisms of Cancer, Mouse Embryonic Stem Cell Pluripotency, Osteoarthritis Pathway, Ovarian C

science Pathway,Thrombin Signaling,Transcriptional Regulatory Network in Embryonic Stem Cells

Effects of Sildenafil (Viagra),Chemokine Signaling,Cholecystokinin/Gastrin-mediated Signaling,CREB Signaling

Adenosine 5'-phosphate Salvage Pathway,Regulation of Cellular Mechanics by Calpain Protease,Salvage Pathwa

Endothelial Signaling Pathway,Apelin Liver Signaling Pathway,Apelin Pancreas Signaling Pathway,Apelin Mediated

1 Chondrocytes in Rheumatoid Arthritis, Role of Tissue Factor in Cancer

tion Pathway, Sperm Motility, Sphingosine-1-phosphate Signaling, STAT3 Pathway  
; Lymphocytes, FLT3 Signaling in Hematopoietic Progenitor Cells, G Beta Gamma Signaling, G-Protein Coupled  
gic Signaling, CDK5 Signaling, Cellular Effects of Sildenafil (Viagra), Colorectal Cancer Metastasis Signaling, Cort

g, Hepatic Fibrosis / Hepatic Stellate Cell Activation, Hepatic Fibrosis Signaling Pathway, Human Embryonic Ste

ancer Signaling, PCP pathway, Regulation of the Epithelial-Mesenchymal Transition Pathway, Role of Macrophage

g in Neurons,CXCR4 Signaling,D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis,D-myo-inositol-5-phosphate I

ys of Pyrimidine Ribonucleotides,Senescence Pathway,Small Cell Lung Cancer Signaling

Signaling,ATM Signaling,B Cell Activating Factor Signaling,B Cell Receptor Signaling,BMP signaling pathway,I

Receptor Signaling, Germ Cell-Sertoli Cell Junction Signaling, GP6 Signaling Pathway, Growth Hormone Signaling, Luteinizing Hormone Releasing Hormone Signaling, CREB Signaling in Neurons, Dopamine Receptor Signaling, Dopamine-

m Cell Pluripotency, Inhibition of Angiogenesis by TSP1, Molecular Mechanisms of Cancer, Neuroinflammation S

ages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, Role of NANOG in Mammalian Embryonic Stem

Metabolism,Dendritic Cell Maturation,Dopamine-DARPP32 Feedback in cAMP Signaling,Endocannabinoid Neu

Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (Enhanced),CCR3 Signaling in Eosinophils,CCF



ng, Human Embryonic Stem Cell Pluripotency, Huntington's Disease Signaling, iCOS-iCOSL Signaling in T Help  
DARPP32 Feedback in cAMP Signaling, Endocannabinoid Cancer Inhibition Pathway, Endocannabinoid Develo

Signaling Pathway, NF- $\kappa$ B Signaling, Osteoarthritis Pathway, p38 MAPK Signaling, Pancreatic Adenocarcinoma S

Cell Pluripotency, Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis, Role of Wnt/GSI

Ironal Synapse Pathway,Endothelin-1 Signaling,fMLP Signaling in Neutrophils,G Protein Signaling Mediated by

CD25 Signaling in Macrophages,CD27 Signaling in Lymphocytes,CD28 Signaling in T Helper Cells,CD40 Signaling

er Cells, IGF-1 Signaling, IL-7 Signaling Pathway, ILK Signaling, Insulin Receptor Signaling, Lymphotoxin  $\beta$  Receptor Signaling, Endocannabinoid Neuronal Synapse Pathway, eNOS Signaling, ERK/MAPK Signaling, G

ignaling, PPAR $\alpha$ /RXR $\alpha$  Activation, Protein Kinase A Signaling, PTEN Signaling, Regulation of IL-2 Expression in

K-3 $\beta$  Signaling in the Pathogenesis of Influenza, Wnt/ $\beta$ -catenin Signaling

γ Tubby,G-Protein Coupled Receptor Signaling,Gap Junction Signaling,Glioblastoma Multiforme Signaling,GNF

γ,Cdc42 Signaling,CDK5 Signaling,Chemokine Signaling,Cholecystokinin/Gastrin-mediated Signaling,Colorectal

tor Signaling,mTOR Signaling,Neuregulin Signaling,Neurotrophin/TRK Signaling,NGF Signaling,Non-Small Ce  
Beta Gamma Signaling,G-Protein Coupled Receptor Signaling,Gap Junction Signaling,GNRH Signaling,GPCR

Activated and Anergic T Lymphocytes,Regulation of the Epithelial-Mesenchymal Transition Pathway,Role of N

GH Signaling, GPCR-Mediated Integration of Enteroendocrine Signaling Exemplified by an L Cell, GPCR-Mediat

al Cancer Metastasis Signaling, Corticotropin Releasing Hormone Signaling, CXCR4 Signaling, Dendritic Cell Ma

|| Lung Cancer Signaling,p70S6K Signaling,PI3K Signaling in B Lymphocytes,PI3K/AKT Signaling,Prolactin Signaling, GPCR-Mediated Integration of Enteroendocrine Signaling Exemplified by an L Cell,GPCR-Mediated Nutrient Sensing

FAT in Cardiac Hypertrophy,Senescence Pathway,SPINK1 Pancreatic Cancer Pathway,STAT3 Pathway,T Cell

ed Nutrient Sensing in Enteroendocrine Cells, Gαq Signaling, Huntington's Disease Signaling, Leptin Signaling in

ituration, EGF Signaling, Endocannabinoid Developing Neuron Pathway, Endocannabinoid Neuronal Synapse P:



gnaling, Prostate Cancer Signaling, PTEN Signaling, RAR Activation, Regulation of eIF4 and p70S6K Signaling, S  
; in Enteroendocrine Cells, Gustation Pathway, Gai Signaling, Gas Signaling, Hepatic Cholestasis, Hepatic Fibrosi

ll Exhaustion Signaling Pathway, T Helper Cell Differentiation, TGF- $\beta$  Signaling, Th1 and Th2 Activation Pathway

1 Obesity, Melatonin Signaling, Molecular Mechanisms of Cancer, Neuropathic Pain Signaling In Dorsal Horn Nei

athway, Endothelin-1 Signaling, ErbB Signaling, Fc Epsilon RI Signaling, FcγRIIB Signaling in B Lymphocytes, FG

ystemic Lupus Erythematosus In B Cell Signaling Pathway, Telomerase Signaling, Thrombin Signaling, Type II C  
is Signaling Pathway, IGF-1 Signaling, IL-1 Signaling, Inhibition of ARE-Mediated mRNA Degradation Pathway, Ir

; Th2 Pathway, Tight Junction Signaling, Wnt/ $\beta$ -catenin Signaling

Jrns,P2Y Purigenic Receptor Signaling Pathway,p70S6K Signaling,Phagosome Formation,Phospholipase C 8

F Signaling,FLT3 Signaling in Hematopoietic Progenitor Cells,FXR/RXR Activation,GDNF Family Ligand-Rece

Diabetes Mellitus Signaling

Insulin Receptor Signaling, Leptin Signaling in Obesity, Melanocyte Development and Pigmentation Signaling, Me

Signaling, Phospholipases, PI3K Signaling in B Lymphocytes, PPAR $\alpha$ /RXR $\alpha$  Activation, Protein Kinase A Signaling,

Receptor Interactions, Germ Cell-Sertoli Cell Junction Signaling, Glucocorticoid Receptor Signaling, GNRH Signaling, (

latonin Signaling, Molecular Mechanisms of Cancer, Netrin Signaling, Neuropathic Pain Signaling In Dorsal Horn

ig,Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis,Role of NFAT in Cardiac Hy

3 $\alpha$ 12/13 Signaling,Hepatic Cholestasis,Hepatic Fibrosis Signaling Pathway,HGF Signaling,HIF1 $\alpha$  Signaling,HM



| Neurons, Neuroprotective Role of THOP1 in Alzheimer's Disease, Nitric Oxide Signaling in the Cardiovascular :

ocytrophy, Role of NFAT in Regulation of the Immune Response, Sperm Motility, Sphingosine-1-phosphate Signa

14GB1 Signaling, IL-1 Signaling, IL-10 Signaling, IL-12 Signaling and Production in Macrophages, IL-15 Signaling, I

System,Opioid Signaling Pathway,Ovarian Cancer Signaling,P2Y Purigenic Receptor Signaling Pathway,PFKF

aling, Superpathway of Inositol Phosphate Compounds, Synaptic Long Term Depression, Synaptic Long Term Pc

IL-17 Signaling, IL-17A Signaling in Airway Cells, IL-17A Signaling in Fibroblasts, IL-17A Signaling in Gastric Cell

B4 Signaling Pathway, Phototransduction Pathway, PPAR $\alpha$ /RXR $\alpha$  Activation, Protein Kinase A Signaling, PXR/R

differentiation, Thrombin Signaling, UVA-Induced MAPK Signaling, Wnt/Ca<sup>+</sup> pathway

IL-1 Signaling, IL-22 Signaling, IL-6 Signaling, IL-7 Signaling Pathway, IL-8 Signaling, ILK Signaling, Induction of Apoptosis by

XR Activation,RAR Activation,Relaxin Signaling,Renin-Angiotensin Signaling,Role of NFAT in Cardiac Hypertro

rophy, Sertoli Cell-Sertoli Cell Junction Signaling, Sonic Hedgehog Signaling, Sperm Motility, Synaptic Long Term



Potentialiation,Synaptogenesis Signaling Pathway,Tight Junction Signaling,White Adipose Tissue Browning Path

way,  $\alpha$ -Adrenergic Sign

ID	Symbol	Expr Log F	Source	Confidenc	ID	Symbol
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Ahctf1	AHCTF1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Ammecr1	AMMECR1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Bend6	BEND6
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Clec5a	CLEC5A
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Cmtm6	CMTM6
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Cnih1	CNIH1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	High	(pred Ctsl	CTSV
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	High	(pred Exosc7	EXOSC7
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Fam133b	FAM133B
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Gas7	GAS7
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Glipr1	GLIPR1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Grb2	GRB2
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Letmd1	LETMD1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	High	(pred Lsr	LSR
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Mkrn1	MKRN1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Msh3	MSH3
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Nrg3	NRG3
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Ppp4r1	PPP4R1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Prkar1a	PRKAR1A
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Pwp1	PWP1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Rab2b	RAB2B
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Slc36a1	SLC36A1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Tmem117	TMEM117
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Tmem26	TMEM26
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Ttc9	TTC9
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Urm1	URM1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Wdr82	WDR82
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Zic1	ZIC1
mmu-let-7d-3p	let-7d-3p (miRNAs w	2.35	TargetSca	Moderate	(Zscan12	ZSCAN12
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Ammecr1	AMMECR1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Atp2b4	ATP2B4
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Cep85	CEP85
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Crocc	CROCC
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Dpy19l3	DPY19L3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Efnb2	EFNB2
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Fam163a	FAM163A
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Foxj3	FOXJ3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Gdf11	GDF11
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Gnl3l	GNL3L
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Grm6	GRM6
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Hs3st3b1	HS3ST3B1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Lrrc8b	LRRC8B
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Mbnl1	MBNL1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	Ingenuity	Experimen	Mtor	MTOR
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Nr1i3	NR1I3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Pcdh7	PCDH7
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Ppfia3	PPFIA3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Ppm1h	PPM1H
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Rasgrp3	RASGRP3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Raver2	RAVER2
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Scnn1g	SCNN1G
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Smarca4	SMARCA4
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Smarcd1	SMARCD1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	Moderate	(Snx8	SNX8
mmu-miR-99b-5p	miR-100-5p (and oth	1.491	TargetSca	High	(pred Spn	SPN

mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca Moderate (St6gal2	ST6GAL2
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca High (pred Suds3	SUDS3
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca High (pred Tbc	TBCB
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca Moderate (Tmem135	TMEM135
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca Moderate (Tmem236	TMEM236
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca High (pred Tmem30a	TMEM30A
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca High (pred Trib1	TRIB1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca High (pred Vnn1	VNN1
mmu-miR-99b-5p	miR-100-5p (and oth	1.491 TargetSca Moderate (Zzef1	ZZEF1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Abr	ABR
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Acbd7	ACBD7
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Adam33	ADAM33
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Ado	ADO
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Ankle1	ANKLE1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Arl2	ARL2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca ExperimenAtp1a2	ATP1A2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Atp6v0e2	ATP6V0E2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Batf2	BATF2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TarBase,r ExperimenBckdk	BCKDK
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Bicd1	BICD1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Canx	CANX
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca High (pred Ccar1	CCAR1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Ccnyl1	CCNYL1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca High (pred Cd40lg	CD40LG
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Cdh6	CDH6
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Cdkn2aipn	CDKN2AIF
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Cep55	CEP55
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Chmp4c	CHMP4C
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Chrd	CHRD
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Crcp	CRCP
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Cryaa	CRYAA/C
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Cxcr2	CXCR2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca High (pred Fam102a	FAM102A
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca ExperimenFoxj3	FOXJ3
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Frs3	FRS3
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Gpd2	GPD2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Gprc5c	GPRC5C
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Hectd3	HECTD3
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Hoxc8	HOXC8
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Ift140	IFT140
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Igsf5	IGSF5
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Kcnj2	KCNJ2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca High (pred Kctd7	KCTD7
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Kif5b	KIF5B
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Klhdc1	KLHDC1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Lrrc69	LRRC69
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Lrrtm2	LRRTM2
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Map1lc3b	MAP1LC3
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Map3k12	MAP3K12
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Max	MAX
mmu-mir-122	miR-122-5p (miRNAs	2.681 miRecordsExperimenMep1a	MEP1A
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Mettl8	METTL8
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Mob3b	MOB3B
mmu-mir-122	miR-122-5p (miRNAs	2.681 TarBase ExperimenNdr3	NDRG3
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca Moderate (Nkain1	NKAIN1
mmu-mir-122	miR-122-5p (miRNAs	2.681 TargetSca High (pred Nphs1	NPHS1

mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Experimen	Numbl	NUMBL
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Opa3	OPA3
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Osbp2	OSBP2
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred P4ha1	P4HA1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Pcyox1	PCYOX1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Pdk4	PDK4
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Pigs	PIGS
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Plxna2	PLXNA2
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Prاف2	PRAF2
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Prok2	PROK2
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Pycard	PYCARD
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Rab1b	RAB1B
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Rab44	RAB44
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Experimen	Rab6b	RAB6B
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Ralgapb	RALGAPB
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Rdh8	RDH8
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Rpl7l1	RPL7L1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Sema4d	SEMA4D
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Sft2d1	SFT2D1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Slc1a5	SLC1A5
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Slc41a1	SLC41A1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Smarcd1	SMARCD1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Smurf2	SMURF2
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Sned1	SNED1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Srf	SRF
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Stx1b	STX1B
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Tacc1	TACC1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Tmem213	TMEM213
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Tmtc2	TMTC2
mmu-mir-122	miR-122-5p (miRNAs	2.681	miRecords	Experimen	Trib1	TRIB1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Trim29	TRIM29
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	High	(pred Tuba1c	TUBA1C
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Urm1	URM1
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Usp8	USP8
mmu-mir-122	miR-122-5p (miRNAs	2.681	TargetSca	Moderate	(Wnt2b	WNT2B
mmu-mir-122	miR-122-5p (miRNAs	2.681	miRecords	Experimen	Xpo6	XPO6
mmu-mir-351	miR-125b-5p (and ot	2.672	TarBase	Experimen	Ajuba	AJUBA
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Arcn1	ARCN1
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	High	(pred Asb13	ASB13
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Asb4	ASB4
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(B3galnt2	B3GALNT:
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(B4galt1	B4GALT1
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Batf2	BATF2
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Bckdk	BCKDK
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Bend6	BEND6
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Brwd1	BRWD1
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Bsg	BSG
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Gm17455	C10orf105
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(C2	C2
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(E130309D	C7orf26
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Cabyr	CABYR
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Capn1	CAPN1
mmu-mir-351	miR-125b-5p (and ot	2.672	miRecords	Experimen	Casp7	CASP7
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Experimen	Cbx7	CBX7
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Ccdc126	CCDC126
mmu-mir-351	miR-125b-5p (and ot	2.672	TargetSca	Moderate	(Cd300e	CD300E

mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Cdc42se1	CDC42SE
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Cdk15	CDK15
mmu-mir-351	miR-125b-5p (and ot	2.672 miRecords Experimen	CDKN2A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Cep85	CEP85
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Champ1	CHAMP1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Chtf8	CHTF8
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Clec5a	CLEC5A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Cnmn1	CNNM1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Cnr2	CNR2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Copz1	COPZ1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Cox7a2l	COX7A2L
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Crcp	CRCP
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Cyp24a1	CYP24A1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Dctn5	DCTN5
mmu-mir-351	miR-125b-5p (and ot	2.672 TarBase Experimen	DDX19B
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Dnajc14	DNAJC14
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Dnal4	DNAL4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Duox1	DUOX1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Eif4ebp1	EIF4EBP1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Eil	ELL
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Emb	EMB
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Enpp1	ENPP1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Epm2a	EPM2A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Fam118a	FAM118A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Fam78a	FAM78A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Frat2	FRAT2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Galnt7	GALNT7
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Galp	GALP
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Gdf11	GDF11
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Gk5	GK5
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Gmfb	GMFB
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Gpc6	GPC6
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Gria4	GRIA4
mmu-mir-351	miR-125b-5p (and ot	2.672 Ingenuity Experimen	GSS
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Hif1an	HIF1AN
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Hoxc8	HOXC8
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ifnlr1	IFNLR1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Experimen	IGFBP3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Il16	IL16
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Il6ra	IL6R
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ippk	IPPK
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Irak1	IRAK1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Itga8	ITGA8
mmu-mir-351	miR-125b-5p (and ot	2.672 miRecords Experimen	JARID2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Kctd21	KCTD21
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Klhl6	KLHL6
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Kpna6	KPNA6
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Krtap5-2	KRTAP5-4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Leprot	LEPROT
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Lpar4	LPAR4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Lpcat4	LPCAT4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Lrrc25	LRRC25
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Lrrc8b	LRRC8B
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Lurap1l	LURAP1L
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Mapk12	MAPK12
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mapk14	MAPK14

mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mapkapk2	MAPKAPK
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mdc1	MDC1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mfn1	MFN1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mob3a	MOB3A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Msi1	MSI1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Mtus1	MTUS1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ndr3	NDRG3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Nedd9	NEDD9
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Nipal4	NIPAL4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Nop2	NOP2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Npl	NPL
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Nrxn1	NRXN1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Nup210	NUP210
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ogfr	OGFR
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Olfr459	OR9A2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Pcdh1	PCDH1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Pdzd3	PDZD3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Pgap3	PGAP3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Pgp	PGP
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Phactr3	PHACTR3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Phf20	PHF20
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ppara	PPARA
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ppme1	PPME1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ppp1r37	PPP1R37
mmu-mir-351	miR-125b-5p (and ot	2.672 TarBase ExperimenPpt2	PPT2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Prx	PRX
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Rab6b	RAB6B
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Rabep2	RABEP2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Reep3	REEP3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Rfc5	RFC5
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Rhot2	RHOT2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Rpp21	RPP21
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Rps6ka1	RPS6KA1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Ruffy3	RUFY3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Rybp	RYBP
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Sbno1	SBNO1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Scp2	SCP2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sec14l2	SEC14L2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sel1l	SEL1L
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Sema4d	SEMA4D
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sema4f	SEMA4F
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sfrp5	SFRP5
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Sfxn2	SFXN2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Slc24a2	SLC24A2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Slc25a15	SLC25A15
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Slc25a53	SLC25A53
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Slc27a4	SLC27A4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Slc45a3	SLC45A3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Slc4a4	SLC4A4
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Pqlc1	SLC66A2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Smarcd2	SMARCD2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Snx32	SNX32
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Socs2	SOCS2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Speg	SPEG
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sstr2	SSTR2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred St8sia4	ST8SIA4

mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Sult4a1	SULT4A1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Syt2	SYT2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Tbc1d1	TBC1D1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Themis2	THEMIS2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Tmem120I	TMEM120
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Tmem123	TMEM123
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Tmem135	TMEM135
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Tnip2	TNIP2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Trp53inp1	TP53INP1
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Trappc6b	TRAPPC6
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Trim12c	TRIM5
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca High (pred Ttc7	TTC7A
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ube2r2	UBE2R2
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Ulk3	ULK3
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Usp12	USP12
mmu-mir-351	miR-125b-5p (and ot	2.672 Ingenuity Experimen	UVRAG
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Vdr	VDR
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Wdr31	WDR31
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Zbtb34	ZBTB34
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Zcchc8	ZCCHC8
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Zfp12	ZNF12
mmu-mir-351	miR-125b-5p (and ot	2.672 TargetSca Moderate (Zswim3	ZSWIM3
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Antxr2	ANTXR2
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (1700066M	C2orf69
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Chst5	CHST6
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 miRecords Experimen	CRKL
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca High (pred Ddx11	DDX11
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Dip2c	DIP2C
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Erap1	ERAP1
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Fam118a	FAM118A
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Fbxl2	FBXL2
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Hoxa9	HOXA9
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 Ingenuity Experimen	IRS1
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca High (pred Kank2	KANK2
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca High (pred Kcnj1	KCNJ1
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca High (pred Larp6	LARP6
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Mei4	MEI4
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Pcdh7	PCDH7
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Sema4d	SEMA4D
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Slc15a4	SLC15A4
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TarBase Experimen	SLC45A3
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Trim46	TRIM46
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Trpc4ap	TRPC4AP
mmu-miR-126a-3p	miR-126a-3p (and ot	-6.324 TargetSca Moderate (Zfp131	ZNF131
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Ak7	AK7
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Angel2	ANGEL2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Atad5	ATAD5
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (9530068E	C5orf15
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Cacna2d1	CACNA2D
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Cdk14	CDK14
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Cdkl1	CDKL1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Csad	CSAD
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca High (pred F12	F12
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Fkbp14	FKBP14
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Frat1	FRAT1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca High (pred Gfm2	GFM2



mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Kpna1	KPNA1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Laptm4b	LAPTM4B
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Lctl	LCTL
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca High (pred Ldhb	LDHB
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Meox2	MEOX2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Mrap2	MRAP2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Prim2	PRIM2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Rbm48	RBM48
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Rhot2	RHOT2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Rrm1	RRM1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Rspo2	RSPO2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Ruvbl1	RUVBL1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca High (pred Scp2	SCP2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Sdhc	SDHC
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Pqlc1	SLC66A2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Tbl2	TBL2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Tm4sf5	TM4SF5
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Tpd52l1	TPD52L1
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Tuba1a	TUBA1A
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Vrk2	VRK2
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Ywhah	YWHAH
mmu-miR-6240	miR-330-3p (and oth	-3.804 TargetSca Moderate (Zfp410	ZNF410
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Aars2	AARS2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Abhd12	ABHD12
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Abhd2	ABHD2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Abr	ABR
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Acvr1b	ACVR1B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Adam11	ADAM11
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Adam30	ADAM30
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Adamts7	ADAMTS7
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Adra2a	ADRA2A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ak2	AK2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Akt2	AKT2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Aldh1a2	ALDH1A2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ankrd24	ANKRD24
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Arap3	ARAP3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Arhgef4	ARHGEF4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Asf1b	ASF1B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atg13	ATG13
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atp10b	ATP10B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atp5b	ATP5F1B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Atp5j2	ATP5MF
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atp6v0e2	ATP6V0E2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atp6v1e1	ATP6V1E1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Atxn7l3b	ATXN7L3E
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (B3gnt8	B3GNT8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Bcl2l1	BCL2L1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Bsdcl	BSDC1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Gm17455	C10orf105
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (D230025D	C16orf70
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (C1ql1	C1QL1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (C2	C2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (C2cd4c	C2CD4C
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (E130309D	C7orf26
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cactin	CACTIN
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cadm3	CADM3

mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Capn5	CAPN5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Carm1	CARM1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Casc3	CASC3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cbx8	CBX8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ccdc120	CCDC120
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ccdc85b	CCDC85B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cd209e	CD209
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cd99l2	CD99L2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cdc42ep4	CDC42EP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cdc42se1	CDC42SE
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cdcp2	CDCP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Celsr3	CELSR3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Chrnd	CHRND
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Chst2	CHST2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Chst5	CHST6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Chf8	CHTF8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Clec5a	CLEC5A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Clec7a	CLEC7A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Clip3	CLIP3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cmklr1	CMKLR1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cnbp	CNBP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cnn2	CNN2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cnppd1	CNPPD1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Cnpy3	CNPY3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Col20a1	COL20A1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Copz1	COPZ1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cpsf7	CPSF7
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Csf1	CSF1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Ctxn1	CTXN1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cul4a	CUL4A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Cxcl12	CXCL12
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Dagla	DAGLA
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ddx11	DDX11
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Dennd1a	DENND1A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Dgkd	DGKD
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Dhx58	DHX58
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Dmtn	DMTN
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Dnajc17	DNAJC17
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Duox2	DUOX2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Efnb1	EFNB1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Efnb2	EFNB2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Egr1	EGR1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ehd3	EHD3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Eif4ebp1	EIF4EBP1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Eln	ELN
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Elovl2	ELOVL2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Eml6	EML6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Epha10	EPHA10
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Epha8	EPHA8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Epn2	EPN2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ern1	ERN1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Esp2	ESRP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Eva1c	EVA1C
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Evx1	EVX1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Fam102a	FAM102A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Fam117a	FAM117A

mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Fam207a	FAM207A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Fbxo41	FBXO41
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Foxj3	FOXJ3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Foxk1	FOXK1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Foxm1	FOXM1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Frat1	FRAT1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Gabrr2	GABRR2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Gdpd5	GDPD5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ggps1	GGPS1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Git1	GIT1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Gk5	GK5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Gpc6	GPC6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Gpr20	GPR20
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Gss	GSS
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Gstm2	GSTM1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Hcfc1r1	HCFC1R1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Hcn4	HCN4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Hdac1	HDAC1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Hdgf	HDGF
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Hemk1	HEMK1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Hnrnpul1	HNRNPUL
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Hpca	HPCA
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Hpd	HPD
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Icam5	ICAM5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Il27	IL27
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Inpp1	INPPL1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Irf2bp1	IRF2BP1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Isy1	ISY1-RAB
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Itpa	ITPA
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Jph4	JPH4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Kcns1	KCNS1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Kctd21	KCTD21
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Kctd5	KCTD5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Laptm4b	LAPTM4B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Lgi3	LGI3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Lhx6	LHX6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Limk1	LIMK1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Lrfn4	LRFN4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Lrrc25	LRRC25
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Lrrc47	LRRC47
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Mapk13	MAPK13
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Mapkbp1	MAPKBP1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Mdm4	MDM4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Mef2d	MEF2D
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Midn	MIDN
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Mknk2	MKNK2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Morn3	MORN3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Mrc2	MRC2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Msi1	MSI1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Mtrf1l	MTRF1L
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Mvk	MVK
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Neurog1	NEUROG1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Nfatc4	NFATC4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Ngfr	NGFR
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Nlrp4c	NLRP4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Nop2	NOP2

mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ntf5	NTF4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Numb1	NUMBL
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Nup210	NUP210
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Odc1	ODC1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Ogdh	OGDH
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Olfml2b	OLFML2B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Osbp2	OSBP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pak6	PAK6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Panx2	PANX2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Paqr8	PAQR8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Pcbp3	PCBP3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Pcdh1	PCDH1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Pcif1	PCIF1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pcyox1	PCYOX1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pde6g	PDE6G
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pdgfrb	PDGFRB
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pdzd11	PDZD11
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Pgap3	PGAP3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pgp	PGP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Phf12	PHF12
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Phyhd1	PHYHD1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Phykpl	PHYKPL
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pik3r3	PIK3R3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pilra	PILRA
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pip5k1c	PIP5K1C
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Plcb1	PLCB1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Plcd3	PLCD3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Plekhg3	PLEKHG3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Plekho1	PLEKHO1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Plekho2	PLEKHO2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Pnmal2	PNMA8B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Polr1a	POLR1A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Ppard	PPARD
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ppib	PPIB
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ppil2	PPIL2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ppm1h	PPM1H
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ppme1	PPME1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Praf2	PRAF2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Prelp	PRELP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Prkaca	PRKACA
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Prx	PRX
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ptdss2	PTDSS2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred R3hdm4	R3HDM4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Rab11b	RAB11B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rab40c	RAB40C
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rab6a	RAB6A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rab8a	RAB8A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rabep2	RABEP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rad23a	RAD23A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Rad9b	RAD9B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rap1gap2	RAP1GAP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rnf38	RNF38
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rpl7l1	RPL7L1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Rrp1b	RRP1B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (S1pr3	S1PR3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Scn1a	SCN1A

mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sctr	SCTR
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sec16b	SEC16B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sema4f	SEMA4F
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sept11	SEPTIN11
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Serinc5	SERINC5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Serpind1	SERPIND1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sgip1	SGIP1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sh3glb2	SH3GLB2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Shank2	SHANK2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc24a4	SLC24A4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc25a13	SLC25A13
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc25a18	SLC25A18
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc27a4	SLC27A4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc2a4	SLC2A4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Slc30a2	SLC30A2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Slc45a4	SLC45A4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Slc52a3	SLC52A3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Slc9a8	SLC9A8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Smarca4	SMARCA4
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Smarcd1	SMARCD1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Smg9	SMG9
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Smim3	SMIM3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Snapc2	SNAPC2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Snx8	SNX8
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Sox12	SOX12
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sox13	SOX13
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Speg	SPEG
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Srf	SRF
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Sufu	SUFU
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Sypl	SYPL1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Syt2	SYT2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tbc1d9b	TBC1D9B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tbc	TBCB
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tfab2e	TFAP2E
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tmem120l	TMEM120
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tmem164	TMEM164
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tmem183	TMEM183
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tmem214	TMEM214
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tmem41a	TMEM41A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tnfrsf13c	TNFRSF1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tnfrsf14	TNFRSF14
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tnip2	TNIP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trp53inp2	TP53INP2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tpd52l1	TPD52L1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Trim11	TRIM11
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trim14	TRIM14
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trim46	TRIM46
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trim12c	TRIM5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trim58	TRIM58
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trpc4ap	TRPC4AP
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Trpm2	TRPM2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Trpv2	TRPV2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tspan15	TSPAN15
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Tspan5	TSPAN5
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Tubb6	TUBB6
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Ube2r2	UBE2R2

mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Unc119	UNC119
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Unc93b1	UNC93B1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Urm1	URM1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Usp18	USP18
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Vars	VARS
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Vdr	VDR
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Wbp1l	WBP1L
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Wipf2	WIPF2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Wnt2b	WNT2B
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Wnt3a	WNT3A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Xirp1	XIRP1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Yes1	YES1
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Yif1a	YIF1A
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Ywhae	YWHAE
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zbtb16	ZBTB16
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zbtb34	ZBTB34
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zbtb48	ZBTB48
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zc4h2	ZC4H2
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zcchc3	ZCCHC3
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca Moderate (Zfyve28	ZFYVE28
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Zfp865	ZNF865
mmu-miR-423-5p	miR-423-5p (and oth	1.133 TargetSca High (pred Zyx	ZYX

Expr Log F Pathway

-1.189  
-1.319  
-2.017  
1.483  
-1.76  
1.859  
-1.599 Autophagy, Phagosome Maturation  
1.282 Inhibition of ARE-Mediated mRNA Degradation Pathway  
-1.525  
2.047  
-1.204  
-1.138 14-3-3-mediated Signaling, Actin Cytoskeleton Signaling, Actin Nucleation by ARP-WASP Complex,  
-1.56  
3.563  
-2.149  
-1.47 Colorectal Cancer Metastasis Signaling, Mismatch Repair in Eukaryotes  
1.009 Agrin Interactions at Neuromuscular Junction, ErbB Signaling, ErbB2-ErbB3 Signaling, ErbB4 Signali  
-1.385 3-phosphoinositide Biosynthesis, 3-phosphoinositide Degradation, D-myo-inositol (1,4,5,6)-Tetrakisph  
-1.441 Adrenomedullin signaling pathway, AMPK Signaling, Amyloid Processing, Androgen Signaling, Apelin  
1.179  
-2.26  
-1.428  
-1.177  
-1.48  
1.032  
-1.078  
-1.271  
-2.454  
1.467  
-1.319  
-1.967 Calcium Signaling, Calcium Transport I  
-1.319  
-1.659  
-1.725  
1.02 Axonal Guidance Signaling, Ephrin B Signaling, Ephrin Receptor Signaling, Synaptogenesis Signaling,  
-1.745  
-1.667  
-4.205  
-1.165  
1.473 cAMP-mediated signaling, CREB Signaling in Neurons, G-Protein Coupled Receptor Signaling, Gluta  
1.124 Chondroitin Sulfate Biosynthesis, Chondroitin Sulfate Biosynthesis (Late Stages), Dermatan Sulfate  
1.287  
1.399  
-1.248 Acute Myeloid Leukemia Signaling, Acute Phase Response Signaling, AMPK Signaling, Apelin Endo  
-4.949 LPS/IL-1 Mediated Inhibition of RXR Function, PXR/RXR Activation, Xenobiotic Metabolism Signalin  
-1.056  
1.612 3-phosphoinositide Biosynthesis, 3-phosphoinositide Degradation, D-myo-inositol (1,4,5,6)-Tetrakisph  
1.609 3-phosphoinositide Biosynthesis, 3-phosphoinositide Degradation, AMPK Signaling, D-myo-inositol (‘  
1.347 Systemic Lupus Erythematosus In B Cell Signaling Pathway  
1.508  
1.28 Aldosterone Signaling in Epithelial Cells, Gustation Pathway, Insulin Receptor Signaling  
-1.321 AMPK Signaling, Aryl Hydrocarbon Receptor Signaling, Estrogen Receptor Signaling, Glucocorticoid  
-2.233 AMPK Signaling, Glucocorticoid Receptor Signaling, Hereditary Breast Cancer Signaling, RAR Active  
-2.486  
3.044 B Cell Development, Leukocyte Extravasation Signaling

1.755  
-2.104 DNA Methylation and Transcriptional Repression Signaling  
-1.213  
1.603  
1.106  
1.824  
1.305  
1.546  
1.081  
-1.728  
-1.34  
1.631 Axonal Guidance Signaling  
1.837  
2.249  
-2.041  
-1.282  
1.285 Iron homeostasis signaling pathway,Phagosome Maturation  
2.346  
2.01  
-1.404  
-2.305 Antigen Presentation Pathway,Lipid Antigen Presentation by CD1,Phagosome Maturation,Unfolded  
-1.152  
-1.433  
-2.734 Allograft Rejection Signaling,Altered T Cell and B Cell Signaling in Rheumatoid Arthritis,Atheroscler  
-1.573 Gα12/13 Signaling,RhoGDI Signaling,Signaling by Rho Family GTPases,Synaptogenesis Signaling  
-2.895  
-2.747  
-2.384 Mechanisms of Viral Exit from Host Cells  
1.104 BMP signaling pathway  
-1.262 Adrenomedullin signaling pathway  
-5.409 Aldosterone Signaling in Epithelial Cells,Protein Ubiquitination Pathway  
-3.106 Agranulocyte Adhesion and Diapedesis,cAMP-mediated signaling,Cardiac Hypertrophy Signaling (I  
-2.953  
-1.667  
1.68  
-1.01 Glycerol Degradation I,Glycerol-3-phosphate Shuttle,Mitochondrial Dysfunction,PPARα/RXRα Activ  
-1.268  
3.377  
2.81  
-1.185  
-1.589 Sertoli Cell-Sertoli Cell Junction Signaling,Tight Junction Signaling  
-3 Dopamine-DARPP32 Feedback in cAMP Signaling  
1.232  
-2.068  
1.808  
-1.072  
-5.978 Synaptogenesis Signaling Pathway  
-1.765 Autophagy,FAT10 Signaling Pathway,Sirtuin Signaling Pathway  
1.21 B Cell Receptor Signaling,Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (Enhancer  
1.552 Adrenomedullin signaling pathway,Cell Cycle: G1/S Checkpoint Regulation,Molecular Mechanisms  
-2.262  
-1.018  
-1.236  
-1.891  
-1.722  
-1.061



-1.289 Notch Signaling  
1.049  
-1.542  
1.025  
2.277 Atherosclerosis Signaling,Clathrin-mediated Endocytosis Signaling,FXR/RXR Activation,IL-12 Signaling  
1.819 Reelin Signaling in Neurons,Senescence Pathway  
1.241  
-1.575 Axonal Guidance Signaling  
-4.817  
1.063  
-4.598 Inflammasome pathway,Neuroinflammation Signaling Pathway  
1.292  
1.11  
-1.369  
-1.602  
2.042 RAR Activation,Retinoate Biosynthesis I,Retinol Biosynthesis,The Visual Cycle  
-1.097 EIF2 Signaling  
-1.224 Axonal Guidance Signaling,Semaphorin Signaling in Neurons  
4.377  
1.034  
1.219  
-2.233 AMPK Signaling,Glucocorticoid Receptor Signaling,Hereditary Breast Cancer Signaling,RAR Activation  
-1.535 Protein Ubiquitination Pathway,TGF- $\beta$  Signaling  
-1.276  
-1.176 Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (Enhanced),Cholecystokinin/Gastrin Signaling  
-1.318 Synaptogenesis Signaling Pathway  
1.302  
-1.9  
1.242  
1.305  
1.058 p53 Signaling  
-3.555 14-3-3-mediated Signaling,Axonal Guidance Signaling,Breast Cancer Regulation by Stathmin1,Epithelial Cell Signaling  
-1.078  
-1.948 Protein Ubiquitination Pathway  
-1.118 Axonal Guidance Signaling,Basal Cell Carcinoma Signaling,Cardiac Hypertrophy Signaling (Enhanced)  
-1.93  
1.05 HIPPO signaling  
-1.194 Caveolar-mediated Endocytosis Signaling  
-1.064  
-2.807  
-1.513  
-6.105  
2.346  
2.01  
-2.017  
-1.483  
1.096  
6.554  
-1.735 Acute Phase Response Signaling,Complement System  
-1.717  
-2.902  
-2.141 Amyloid Processing,Amyotrophic Lateral Sclerosis Signaling,Apoptosis Signaling,CDK5 Signaling,Cellular Senescence Signaling  
-1.761 Amyotrophic Lateral Sclerosis Signaling,Apoptosis Signaling,Cytotoxic T Lymphocyte-mediated Apoptosis Signaling  
-2.533 Senescence Pathway  
1.518  
-2.078

-1.337 Cdc42 Signaling  
 1.595 Cell Cycle Control of Chromosomal Replication,Molecular Mechanisms of Cancer  
 1.068 Aryl Hydrocarbon Receptor Signaling,Bladder Cancer Signaling,Cell Cycle: G1/S Checkpoint Regul  
 -1.319  
 -2.082  
 2.045  
 1.483  
 -1.834  
 -2.515 cAMP-mediated signaling,Endocannabinoid Cancer Inhibition Pathway,Endocannabinoid Developir  
 1.255 Caveolar-mediated Endocytosis Signaling  
 -2.898 Mitochondrial Dysfunction,Oxidative Phosphorylation  
 -1.262 Adrenomedullin signaling pathway  
 -1.33 VDR/RXR Activation  
 -1.94  
 -1.216  
 -1.243 Aldosterone Signaling in Epithelial Cells,NRF2-mediated Oxidative Stress Response,Protein Ubiqui  
 -1.881  
 1.173  
 -2.064 Acute Myeloid Leukemia Signaling,AMPK Signaling,Cardiac Hypertrophy Signaling (Enhanced),ER  
 -1.231  
 -2.305  
 1.5  
 -1.391 Protein Kinase A Signaling  
 -1.758  
 -1.07  
 -2.007  
 -1.663  
 -1.242  
 -4.205  
 -1.321 Glycerol Degradation I  
 -1.365  
 1.23  
 1.071 Amyotrophic Lateral Sclerosis Signaling,Calcium Signaling,CREB Signaling in Neurons,Endocanna  
 -1.034 Glutathione Biosynthesis, $\gamma$ -glutamyl Cycle  
 -1.484 Hypoxia Signaling in the Cardiovascular System,White Adipose Tissue Browning Pathway  
 2.81  
 1.185 Cardiac Hypertrophy Signaling (Enhanced),PI3K/AKT Signaling,STAT3 Pathway  
 -2.02 Growth Hormone Signaling,Hepatic Fibrosis / Hepatic Stellate Cell Activation,IGF-1 Signaling,RAR  
 -1.606 Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis  
 -1.72 Acute Phase Response Signaling,Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Signaling (E  
 -2.146 1D-myo-inositol Hexakisphosphate Biosynthesis II (Mammalian),1D-myo-inositol Hexakisphosphate  
 1.917 Acute Phase Response Signaling,Hepatic Cholestasis,Hepatic Fibrosis Signaling Pathway,IL-1 Sig  
 -1.555 Caveolar-mediated Endocytosis Signaling,Integrin Signaling,Paxillin Signaling  
 -1.823 HOTAIR Regulatory Pathway,Role of Oct4 in Mammalian Embryonic Stem Cell Pluripotency  
 1.368  
 1.419  
 -1.65 RAN Signaling  
 -7.965  
 1.815  
 2.49 eNOS Signaling,G $\alpha$ 12/13 Signaling,RhoA Signaling  
 1.539 CDP-diacylglycerol Biosynthesis I,Phosphatidylglycerol Biosynthesis II (Non-plastidic),Stearate Bio  
 -1.188  
 1.287  
 1.47  
 1.111 14-3-3-mediated Signaling,4-1BB Signaling in T Lymphocytes,Activation of IRF by Cytosolic Patter  
 -2.294 4-1BB Signaling in T Lymphocytes,Acute Phase Response Signaling,Adrenomedullin signaling pat

1.306 BAG2 Signaling Pathway, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced)  
-1.832 ATM Signaling, Role of BRCA1 in DNA Damage Response, Role of CHK Proteins in Cell Cycle Checkpoint  
1.161  
-1.254  
1.209  
1.201  
-1.891  
-1.188 Integrin Signaling  
-2.463  
-1.858  
-1.491  
1.056 Synaptogenesis Signaling Pathway  
1.13  
1.66 Opioid Signaling Pathway  
-5.55  
1.364  
3.989  
-1.12  
4.31 Protein Kinase A Signaling  
1.902  
-1.548  
-1.33 FXR/RXR Activation, Hepatic Cholestasis, LPS/IL-1 Mediated Inhibition of RXR Function, PPAR Signaling  
-1.832 Heparan Sulfate Biosynthesis, Heparan Sulfate Biosynthesis (Late Stages), Triacylglycerol Degradation  
1.182  
-2.128  
-1.203  
-1.369  
-1.942  
-1.106  
1.445 Hereditary Breast Cancer Signaling, Mismatch Repair in Eukaryotes, NER Pathway, Role of BRCA1 in DNA Damage Response  
2.31 Actin Nucleation by ARP-WASP Complex, Cardiac Hypertrophy Signaling, Cholecystokinin/Gastrin Receptor Signaling  
-4.505  
-1.606 14-3-3-mediated Signaling, Adipogenesis pathway, Antiproliferative Role of TOB in T Cell Signaling, Akt Signaling  
-1.284  
-1.676  
-1.353  
-1.376 Bile Acid Biosynthesis, Neutral Pathway, Fatty Acid  $\beta$ -oxidation I  
-1.592  
-1.678 Unfolded protein response  
-1.224 Axonal Guidance Signaling, Semaphorin Signaling in Neurons  
1.387 Axonal Guidance Signaling  
1.896 Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis, Role of Osteoblasts in Bone Remodeling  
-1.875  
-5.737  
1.363  
-2.308  
3.901 Fatty Acid Activation, Fatty Acid  $\beta$ -oxidation I, LPS/IL-1 Mediated Inhibition of RXR Function, Mitochondrial Dysfunction  
-2.678  
1.404  
-1.16  
-1.974 AMPK Signaling, Glucocorticoid Receptor Signaling, Hereditary Breast Cancer Signaling, RAR Activation  
-2.368  
-2.412 Acute Phase Response Signaling, Growth Hormone Signaling, IGF-1 Signaling, IL-9 Signaling, JAK/STAT Signaling  
-1.139  
2.653 Antiproliferative Role of Somatostatin Receptor 2  
1.513

-2.114 Chondroitin Sulfate Biosynthesis,Chondroitin Sulfate Biosynthesis (Late Stages),Dermatan Sulfate  
-1.386 Synaptogenesis Signaling Pathway,TR/RXR Activation  
-1.309 AMPK Signaling  
-1.995  
-1.104  
-1.277  
1.603  
-1.481  
-2.197 p53 Signaling  
-2.898  
1.479  
2.995  
-1.433 Hypoxia Signaling in the Cardiovascular System,Protein Ubiquitination Pathway  
2.324  
2.282 Protein Ubiquitination Pathway  
1.361  
1.02 TGF- $\beta$  Signaling,VDR/RXR Activation  
1.513  
-2.127  
-1.603  
-1.676  
-2.73  
-1.088  
-2.371  
-1.867  
-1.702 Actin Cytoskeleton Signaling,Axonal Guidance Signaling,Chronic Myeloid Leukemia Signaling,Ephr  
-2.635  
1.178  
-1.069  
-1.758  
-1.119  
3.313  
1.584 AMPK Signaling,Apelin Liver Signaling Pathway,Cardiac Hypertrophy Signaling,GDNF Family Ligand  
-2.425  
2.079 Dopamine-DARPP32 Feedback in cAMP Signaling  
1.679  
1.056  
-1.056  
-1.224 Axonal Guidance Signaling,Semaphorin Signaling in Neurons  
-2.238  
-2.678  
1.479  
-4.308  
-1.181  
-1.573 AMPK Signaling,Pyrimidine Deoxyribonucleotides De Novo Biosynthesis I,Pyrimidine Ribonucleotide  
-3.621  
-2.089  
-1.966  
1.647 Androgen Signaling,Calcium Signaling,CCR5 Signaling in Macrophages,Corticotropin Releasing Hormone  
-1.274 Cell Cycle Control of Chromosomal Replication,Molecular Mechanisms of Cancer  
1.361  
-1.12 Taurine Biosynthesis  
-1.88 Coagulation System,Extrinsic Prothrombin Activation Pathway,Intrinsic Prothrombin Activation Pathway  
-1.187  
-7.968 Wnt/ $\beta$ -catenin Signaling  
-1.842

-1.129 RAN Signaling  
-1.439  
-1.698  
-1.938 HIF1 $\alpha$  Signaling,Pyruvate Fermentation to Lactate,Sirtuin Signaling Pathway,White Adipose Tissue  
-1.309  
-1.715  
1.09 Cell Cycle Control of Chromosomal Replication,NER Pathway  
-1.015  
2.31 Actin Nucleation by ARP-WASP Complex,Cardiac Hypertrophy Signaling,Cholecystokinin/Gastrin-n  
-1.419 Pyrimidine Deoxyribonucleotides De Novo Biosynthesis I  
-1.008  
-1.969  
-1.376 Bile Acid Biosynthesis, Neutral Pathway,Fatty Acid  $\beta$ -oxidation I  
-2.446 Mitochondrial Dysfunction,Oxidative Phosphorylation,Sirtuin Signaling Pathway,TCA Cycle II (Euka  
-1.16  
-1.74  
-3.094  
-1.24  
-1.928 14-3-3-mediated Signaling,Axonal Guidance Signaling,Breast Cancer Regulation by Stathmin1,Epil  
1.479 ERK/MAPK Signaling  
1.774 14-3-3-mediated Signaling,Cell Cycle: G2/M DNA Damage Checkpoint Regulation,ERK/MAPK Sigr  
-2.82  
1.224 tRNA Charging  
1.082 Triacylglycerol Degradation  
1.453 Triacylglycerol Degradation  
-1.728  
1.111 Cardiac Hypertrophy Signaling (Enhanced),Epithelial Adherens Junction Signaling,Factors Promoti  
-1.119 Axonal Guidance Signaling  
4.988 Axonal Guidance Signaling  
-1.313 Axonal Guidance Signaling  
3.166 AMPK Signaling,cAMP-mediated signaling,Cardiac Hypertrophy Signaling,Cardiac Hypertrophy Sig  
-2.514 AMPK Signaling  
-1.456 14-3-3-mediated Signaling,Acute Myeloid Leukemia Signaling,Acute Phase Response Signaling,Ac  
-2.338 Aryl Hydrocarbon Receptor Signaling,Dopamine Degradation,Ethanol Degradation II,Ethanol Degr  
-1.33  
1.384  
-4.012 Actin Cytoskeleton Signaling,Breast Cancer Regulation by Stathmin1,Molecular Mechanisms of Ca  
-1.719  
1.031 Autophagy,mTOR Signaling,Sirtuin Signaling Pathway  
-1.966  
-2.259 Huntington's Disease Signaling,Mitochondrial Dysfunction,Oxidative Phosphorylation,Sirtuin Signali  
2.125 Mitochondrial Dysfunction,Oxidative Phosphorylation  
1.285 Iron homeostasis signaling pathway,Phagosome Maturation  
1.604 Iron homeostasis signaling pathway,Phagosome Maturation  
-2.065  
-5.503  
-2.029 Amyotrophic Lateral Sclerosis Signaling,Apoptosis Signaling,B Cell Receptor Signaling,CD27 Signa  
-2.404  
6.554  
-1.801  
1.337  
-1.735 Acute Phase Response Signaling,Complement System  
2.516  
-1.717  
1.501  
-1.572

-1.677 Amyloid Processing,Amyotrophic Lateral Sclerosis Signaling,Apoptosis Signaling,FAK Signaling,Hu  
-1.549 Estrogen Receptor Signaling,RAR Activation  
-1.184  
-1.179 Senescence Pathway  
1.419  
1.241  
1.589 Crosstalk between Dendritic Cells and Natural Killer Cells  
-1.55  
-2.291 RhoA Signaling,Signaling by Rho Family GTPases  
-1.337 Cdc42 Signaling  
-3.209  
1.1  
2.217 AMPK Signaling,Calcium Signaling,eNOS Signaling  
2.619 Chondroitin Sulfate Biosynthesis,Chondroitin Sulfate Biosynthesis (Late Stages),Dermatan Sulfate  
-1.867  
2.045  
1.483  
-1.56 Phagosome Formation,Role of Pattern Recognition Receptors in Recognition of Bacteria and Virus  
1.71  
1.521  
-1.919  
2.156  
1.059  
-2.157  
-2.802 GP6 Signaling Pathway,Hepatic Fibrosis / Hepatic Stellate Cell Activation  
1.255 Caveolar-mediated Endocytosis Signaling  
-2.442  
1.948 Altered T Cell and B Cell Signaling in Rheumatoid Arthritis,Atherosclerosis Signaling,Hematopoiesi  
-1.856  
-2.765 NER Pathway  
1.661 Agranulocyte Adhesion and Diapedesis,Atherosclerosis Signaling,Axonal Guidance Signaling,Cher  
-1.596 Endocannabinoid Neuronal Synapse Pathway  
-2.635  
-1.174  
-1.091 Adipogenesis pathway  
-1.497 Activation of IRF by Cytosolic Pattern Recognition Receptors,Role of RIG1-like Receptors in Antivir  
-2.06  
-2.464 Aldosterone Signaling in Epithelial Cells,NRF2-mediated Oxidative Stress Response,Protein Ubiqui  
-2.972  
1.104 Axonal Guidance Signaling,Ephrin B Signaling,Ephrin Receptor Signaling,PCP pathway,Synaptoge  
1.02 Axonal Guidance Signaling,Ephrin B Signaling,Ephrin Receptor Signaling,Synaptogenesis Signalin  
3.527 B Cell Receptor Signaling,CDK5 Signaling,CXCR4 Signaling,GNRH Signaling,Regulation of the Ep  
2.068  
-2.064 Acute Myeloid Leukemia Signaling,AMPK Signaling,Cardiac Hypertrophy Signaling (Enhanced),ER  
-1.39  
1.081 Stearate Biosynthesis I (Animals),Triacylglycerol Biosynthesis  
-1.272  
-1.538 Axonal Guidance Signaling,Ephrin A Signaling,Ephrin Receptor Signaling,Synaptogenesis Signalin  
1.406 Axonal Guidance Signaling,Ephrin A Signaling,Ephrin Receptor Signaling,IL-15 Production,Sperm I  
-1.624 Epithelial Adherens Junction Signaling,Germ Cell-Sertoli Cell Junction Signaling,Sertoli Cell-Sertoli  
-1.224 Apelin Pancreas Signaling Pathway,Endoplasmic Reticulum Stress Pathway,Unfolded protein respo  
-1.308 Regulation of the Epithelial-Mesenchymal Transition Pathway  
-1.91  
1.794  
-2.953  
1.022

-1.631  
1.105  
-1.667  
-2.242  
-1.944 HOTAIR Regulatory Pathway  
-7.968 Wnt/ $\beta$ -catenin Signaling  
-2.141 GABA Receptor Signaling,Neuroinflammation Signaling Pathway  
-1.801  
-1.001 Geranylgeranyldiphosphate Biosynthesis,Superpathway of Cholesterol Biosynthesis,Superpathway  
-1.079 Actin Cytoskeleton Signaling,Axonal Guidance Signaling,Integrin Signaling,PAK Signaling  
-1.321 Glycerol Degradation I  
1.23  
-1.62  
-1.034 Glutathione Biosynthesis, $\gamma$ -glutamyl Cycle  
-8.85 Apelin Adipocyte Signaling Pathway,Aryl Hydrocarbon Receptor Signaling,Glutathione Redox Reac  
2.376  
-2.873  
-1.556 Adipogenesis pathway,Calcium Signaling,Calcium-induced T Lymphocyte Apoptosis,Cardiac Hyper  
1.208  
1.623  
-1.18  
2.709  
1.007 Phenylalanine Degradation IV (Mammalian, via Side Chain),Tyrosine Degradation I  
-1.237  
3.806 Role of Cytokines in Mediating Communication between Immune Cells,Th1 and Th2 Activation Patt  
-2.315 1D-myo-inositol Hexakisphosphate Biosynthesis II (Mammalian),3-phosphoinositide Degradation,B  
1.816  
-1.021  
-2.607  
2.139  
3.714  
1.368  
-1.926  
-1.439  
-1.544  
1.704  
1.19 Actin Cytoskeleton Signaling,Axonal Guidance Signaling,Breast Cancer Regulation by Stathmin1,C  
3.614  
-1.188  
2.351  
1.636 4-1BB Signaling in T Lymphocytes,Acute Phase Response Signaling,Adrenomedullin signaling pat  
-1.266  
-1.175 ATM Signaling,Cell Cycle: G2/M DNA Damage Checkpoint Regulation,p53 Signaling  
-1.499 Apelin Endothelial Signaling Pathway,Calcium Signaling,Calcium-induced T Lymphocyte Apoptosis  
-1.348  
1.636 Cardiac Hypertrophy Signaling (Enhanced),ERK/MAPK Signaling,p38 MAPK Signaling  
-3.153  
-1.69 Phagosome Formation  
1.209  
-3.317  
-1.402 Mevalonate Pathway I,Superpathway of Cholesterol Biosynthesis,Superpathway of Geranylgeranyl  
-5.409 Transcriptional Regulatory Network in Embryonic Stem Cells  
-1.887 Adipogenesis pathway,April Mediated Signaling,Axonal Guidance Signaling,B Cell Activating Facto  
1.042 Acute Phase Response Signaling,Axonal Guidance Signaling,Cardiac Hypertrophy Signaling (Enha  
-1.032 TREM1 Signaling  
-1.858

2.411 Axonal Guidance Signaling,Human Embryonic Stem Cell Pluripotency,Neurotrophin/TRK Signaling,  
 -1.289 Notch Signaling  
 1.13  
 3.529 Polyamine Regulation in Colon Cancer,Putrescine Biosynthesis III  
 -1.79 2-ketoglutarate Dehydrogenase Complex,Mitochondrial Dysfunction,TCA Cycle II (Eukaryotic)  
 1.049  
 -1.542  
 -1.652 Actin Cytoskeleton Signaling,Agrin Interactions at Neuromuscular Junction,Angiopietin Signaling,  
 -1.931  
 -2.598  
 1.585  
 1.364  
 -1.082  
 2.277 Atherosclerosis Signaling,Clathrin-mediated Endocytosis Signaling,FXR/RXR Activation,IL-12 Signa  
 -3.386 cAMP-mediated signaling,Cardiac Hypertrophy Signaling (Enhanced),Cardiac  $\beta$ -adrenergic Signali  
 -1.541 Apelin Liver Signaling Pathway,Glioblastoma Multiforme Signaling,Glioma Signaling,Hepatic Fibros  
 -6.225  
 -1.12  
 4.31 Protein Kinase A Signaling  
 -2.272  
 -1.613  
 -2.44  
 -1.604 14-3-3-mediated Signaling,3-phosphoinositide Biosynthesis,Actin Cytoskeleton Signaling,Acute My  
 -1.536  
 1.153 3-phosphoinositide Biosynthesis,Actin Cytoskeleton Signaling,Aldosterone Signaling in Epithelial C  
 -1.041 14-3-3-mediated Signaling,Adrenomedullin signaling pathway,Aldosterone Signaling in Epithelial C  
 -2.135 14-3-3-mediated Signaling,Adrenomedullin signaling pathway,Aldosterone Signaling in Epithelial C  
 -2.274  
 -1.689  
 -2.901  
 2.323  
 1.483 Assembly of RNA Polymerase I Complex,Sirtuin Signaling Pathway  
 -1.338 Osteoarthritis Pathway,PPAR Signaling,VDR/RXR Activation,Wnt/ $\beta$ -catenin Signaling  
 -2.924 Activation of IRF by Cytosolic Pattern Recognition Receptors,NRF2-mediated Oxidative Stress Res  
 -1.489  
 1.609 3-phosphoinositide Biosynthesis,3-phosphoinositide Degradation,AMPK Signaling,D-myo-inositol ('  
 -1.832 Heparan Sulfate Biosynthesis,Heparan Sulfate Biosynthesis (Late Stages),Triacylglycerol Degradat  
 -4.817  
 1.75  
 -1.234 Adrenomedullin signaling pathway,AMPK Signaling,Amyloid Processing,Androgen Signaling,Apelin  
 -1.203  
 -2.11 Phosphatidylethanolamine Biosynthesis III  
 -1.797  
 1.192 Clathrin-mediated Endocytosis Signaling,Fcy Receptor-mediated Phagocytosis in Macrophages and  
 -1.378  
 -2.355 AMPK Signaling  
 -2.641 AMPK Signaling  
 -1.942  
 1.165  
 -1.525  
 1.444  
 -1.089  
 -1.097 EIF2 Signaling  
 1.109  
 -1.849 cAMP-mediated signaling,Ceramide Signaling,G-Protein Coupled Receptor Signaling,Gai Signaling  
 -1.305



-1.415  
1.26  
1.387 Axonal Guidance Signaling  
-1.91 RhoA Signaling, Signaling by Rho Family GTPases  
-1.656  
-1.293 Acute Phase Response Signaling, Coagulation System  
1.427  
-2.583 Clathrin-mediated Endocytosis Signaling, Mechanisms of Viral Exit from Host Cells  
1.378 Axonal Guidance Signaling  
1.048  
-1.194 Induction of Apoptosis by HIV1  
-2.438  
3.901 Fatty Acid Activation, Fatty Acid  $\beta$ -oxidation I, LPS/IL-1 Mediated Inhibition of RXR Function, Mitochondrial  
1.912 Adipogenesis pathway, AMPK Signaling, Antioxidant Action of Vitamin C, Apelin Muscle Signaling Pathway  
2.91  
-2.254  
1.039  
-1.358 Apelin Cardiomyocyte Signaling Pathway  
-1.321 AMPK Signaling, Aryl Hydrocarbon Receptor Signaling, Estrogen Receptor Signaling, Glucocorticoid  
-2.233 AMPK Signaling, Glucocorticoid Receptor Signaling, Hereditary Breast Cancer Signaling, RAR Activation  
1.415  
-2.327  
-3.768  
-2.486  
-1.871 Wnt/ $\beta$ -catenin Signaling  
3.365 Wnt/ $\beta$ -catenin Signaling  
-1.139  
-1.176 Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cholecystokinin/Gastrin  
-1.564 Axonal Guidance Signaling, Basal Cell Carcinoma Signaling, Molecular Mechanisms of Cancer, Sonic Hedgehog  
1.548  
-1.386 Synaptogenesis Signaling Pathway, TR/RXR Activation  
-1.718  
-1.213  
-2.596 Adrenomedullin signaling pathway  
-1.104  
-1.223  
-1.288  
1.524  
-1.488  
2.092 Altered T Cell and B Cell Signaling in Rheumatoid Arthritis, B Cell Activating Factor Signaling, Complement  
2.726 Atherosclerosis Signaling, NF- $\kappa$ B Activation by Viruses, T Cell Exhaustion Signaling Pathway  
-1.481  
1.93  
-1.24  
1.662  
1.513  
1.479  
1.479  
1.469  
-4.308  
1.486  
1.22  
1.535  
-1.064 Integrin Signaling  
-1.261 14-3-3-mediated Signaling, Axonal Guidance Signaling, Breast Cancer Regulation by Stathmin1, Epithelial  
-1.433 Hypoxia Signaling in the Cardiovascular System, Protein Ubiquitination Pathway

3.233  
1.525  
-1.078  
1.142 Protein Ubiquitination Pathway  
-1.739 tRNA Charging  
1.02 TGF- $\beta$  Signaling,VDR/RXR Activation  
-1.409  
-1.711  
-1.118 Axonal Guidance Signaling,Basal Cell Carcinoma Signaling,Cardiac Hypertrophy Signaling (Enhanc  
-1.701 Axonal Guidance Signaling,Basal Cell Carcinoma Signaling,Cardiac Hypertrophy Signaling (Enhanc  
1.066  
-1.611 Epithelial Adherens Junction Signaling,Fc $\gamma$  Receptor-mediated Phagocytosis in Macrophages and I  
-1.611  
-1.323 14-3-3-mediated Signaling,Cell Cycle: G2/M DNA Damage Checkpoint Regulation,ERK5 Signaling,  
1.802 RAR Activation  
-2.127  
-1.914  
-1.702  
2.821  
-1.311  
1.139  
1.055 Epithelial Adherens Junction Signaling,Germ Cell-Sertoli Cell Junction Signaling,Integrin Signaling,I

Acute Myeloid Leukemia Signaling,Acute Phase Response Signaling,Adrenomedullin signaling pathway,Angio

ng,Neuregulin Signaling

phosphate Biosynthesis,D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis,D-myo-inositol-5-phosphate Me  
Adipocyte Signaling Pathway,Apelin Pancreas Signaling Pathway,Axonal Guidance Signaling,BMP signaling p

g Pathway

imate Receptor Signaling,Gai Signaling,Neuropathic Pain Signaling In Dorsal Horn Neurons,Synaptic Long Ter  
Biosynthesis,Dermatan Sulfate Biosynthesis (Late Stages),Heparan Sulfate Biosynthesis,Heparan Sulfate Bios

thelial Signaling Pathway,Autophagy,B Cell Receptor Signaling,Cardiac Hypertrophy Signaling,Cardiac Hypertro  
g

phosphate Biosynthesis,D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis,D-myo-inositol-5-phosphate Me  
1,4,5,6)-Tetrakisphosphate Biosynthesis,D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis,D-myo-inosito

Receptor Signaling,Hereditary Breast Cancer Signaling,RAR Activation,Role of BRCA1 in DNA Damage Respo  
sition,Role of BRCA1 in DNA Damage Response

I protein response

osis Signaling,Autoimmune Thyroid Disease Signaling,Cardiac Hypertrophy Signaling (Enhanced),CD40 Signaling Pathway

Enhanced),G-Protein Coupled Receptor Signaling,Granulocyte Adhesion and Diapedesis,Gai Signaling,IL-8 Signaling

ration

d),CD27 Signaling in Lymphocytes,Germ Cell-Sertoli Cell Junction Signaling,GNRH Signaling,HGF Signaling,Notch Signaling in Lung Cancer,p38 MAPK Signaling,Polyamine Regulation in Colon Cancer,Small Cell Lung Cancer Signaling

aling and Production in Macrophages, LXR/RXR Activation, Production of Nitric Oxide and Reactive Oxygen Spe

tion, Role of BRCA1 in DNA Damage Response

-mediated Signaling, EGF Signaling, ERK/MAPK Signaling, Growth Hormone Signaling, HOTAIR Regulatory Pat

thelial Adherens Junction Signaling, Gap Junction Signaling, Germ Cell-Sertoli Cell Junction Signaling, Phagosor

ced), Colorectal Cancer Metastasis Signaling, Glioblastoma Multiforme Signaling, Hepatic Fibrosis Signaling Pat

AK Signaling, Huntington's Disease Signaling, Integrin Signaling, Mitotic Roles of Polo-Like Kinase, nNOS Signa  
ptosis of Target Cells, Death Receptor Signaling, Endocannabinoid Cancer Inhibition Pathway, Endoplasmic Re

lation, Cell Cycle: G2/M DNA Damage Checkpoint Regulation, Chronic Myeloid Leukemia Signaling, Cyclins and

ing Neuron Pathway, Endocannabinoid Neuronal Synapse Pathway, G-Protein Coupled Receptor Signaling, Gai 5

itination Pathway

K/MAPK Signaling, FLT3 Signaling in Hematopoietic Progenitor Cells, IL-8 Signaling, Insulin Receptor Signaling,

binoid Neuronal Synapse Pathway, Gap Junction Signaling, Glutamate Receptor Signaling, Neuropathic Pain Sig

Activation, VDR/RXR Activation

enhanced), Colorectal Cancer Metastasis Signaling, Hepatic Fibrosis / Hepatic Stellate Cell Activation, IL-6 Signal  
e Biosynthesis V (from Ins(1,3,4)P3), Inositol Pyrophosphates Biosynthesis, Superpathway of Inositol Phosphate  
naling, IL-8 Signaling, iNOS Signaling, LPS/IL-1 Mediated Inhibition of RXR Function, Neuroinflammation Signaling

synthesis I (Animals), Triacylglycerol Biosynthesis

1 Recognition Receptors, Acute Phase Response Signaling, Adrenomedullin signaling pathway, Agrin Interaction  
way, AMPK Signaling, Amyloid Processing, Antioxidant Action of Vitamin C, Apelin Adipocyte Signaling Pathway

1), CD40 Signaling, FGF Signaling, IL-17 Signaling, IL-6 Signaling, Inhibition of ARE-Mediated mRNA Degradation  
Checkpoint Control

Signaling, PPAR $\alpha$ /RXR $\alpha$  Activation, Production of Nitric Oxide and Reactive Oxygen Species in Macrophages, PXR/I  
Induction

in DNA Damage Response, Role of CHK Proteins in Cell Cycle Checkpoint Control, Sumoylation Pathway  
Mediated Signaling, Colorectal Cancer Metastasis Signaling, CXCR4 Signaling, Germ Cell-Sertoli Cell Junction S  
Apoptosis Signaling, cAMP-mediated signaling, Cardiac Hypertrophy Signaling, Cell Cycle: G2/M DNA Damage C

3, Osteoclasts and Chondrocytes in Rheumatoid Arthritis, Wnt/ $\beta$ -catenin Signaling

ndrial L-carnitine Shuttle Pathway, Stearate Biosynthesis I (Animals), Type II Diabetes Mellitus Signaling,  $\gamma$ -linole

Induction, Role of BRCA1 in DNA Damage Response

Stat Signaling, Prolactin Signaling, Role of JAK2 in Hormone-like Cytokine Signaling, STAT3 Pathway, Type I Diab

Biosynthesis, Dermatan Sulfate Biosynthesis (Late Stages), Heparan Sulfate Biosynthesis, Heparan Sulfate Biosynthesis

in Receptor Signaling, ERK/MAPK Signaling, FGF Signaling, HGF Signaling, IL-3 Signaling, Insulin Receptor Signaling

and Receptor Interactions, Growth Hormone Signaling, IGF-1 Signaling, IL-4 Signaling, IL-9 Signaling, ILK Signaling

De Novo Biosynthesis, Pyrimidine Ribonucleotides Interconversion, Salvage Pathways of Pyrimidine Ribonucleotides

Growth Hormone Signaling, CREB Signaling in Neurons, Endocannabinoid Neuronal Synapse Pathway, FcγRIIB Signaling

Pathway, MSP-ROCK Signaling Pathway



Browning Pathway

mediated Signaling, Colorectal Cancer Metastasis Signaling, CXCR4 Signaling, Germ Cell-Sertoli Cell Junction S

ryotic)

thelial Adherens Junction Signaling, Gap Junction Signaling, Germ Cell-Sertoli Cell Junction Signaling, Phagoso  
raling, ERK5 Signaling, Glucocorticoid Receptor Signaling, HIPPO signaling, IGF-1 Signaling, Inhibition of ARE-M

ng Cardiogenesis in Vertebrates, FAT10 Cancer Signaling Pathway, Hepatic Fibrosis Signaling Pathway, Neuroi

nalng (Enhanced), G-Protein Coupled Receptor Signaling, Gai Signaling,  $\alpha$ -Adrenergic Signaling

renomedullin signaling pathway, AMPK Signaling, Amyloid Processing, Angiopoietin Signaling, Apelin Cardiac Fi  
adation IV, Fatty Acid  $\alpha$ -oxidation, Histamine Degradation, LPS/IL-1 Mediated Inhibition of RXR Function, Noradre

ncer, Phospholipase C Signaling, Reelin Signaling in Neurons, RhoGDI Signaling, Signaling by Rho Family GTPa

ing Pathway

aling in Lymphocytes, Chronic Myeloid Leukemia Signaling, Colorectal Cancer Metastasis Signaling, Docosahexa

ington's Disease Signaling, Integrin Signaling, nNOS Signaling in Neurons, Regulation of Cellular Mechanics b

Biosynthesis, Dermatan Sulfate Biosynthesis (Late Stages), Heparan Sulfate Biosynthesis, Heparan Sulfate Bios

es

s from Multipotent Stem Cells, Hematopoiesis from Pluripotent Stem Cells, Hepatic Fibrosis / Hepatic Stellate Ce

tokine Signaling, CXCR4 Signaling, Ephrin B Signaling, Ephrin Receptor Signaling, Granulocyte Adhesion and D

al Innate Immunity

itination Pathway

nesis Signaling Pathway

g Pathway

ithelial-Mesenchymal Transition Pathway, Role of Tissue Factor in Cancer

K/MAPK Signaling, FLT3 Signaling in Hematopoietic Progenitor Cells, IL-8 Signaling, Insulin Receptor Signaling,

g Pathway

Motility, Synaptogenesis Signaling Pathway

Cell Junction Signaling

onse

of Geranylgeranyldiphosphate Biosynthesis I (via Mevalonate), Trans, trans-farnesyl Diphosphate Biosynthesis

tions I, Glutathione-mediated Detoxification, LPS/IL-1 Mediated Inhibition of RXR Function, NRF2-mediated Oxidative

trophy Signaling (Enhanced), Cell Cycle: G1/S Checkpoint Regulation, Chronic Myeloid Leukemia Signaling, Cytokine

way, Th1 Pathway

Cell Receptor Signaling, D-myo-inositol (1,3,4)-trisphosphate Biosynthesis, D-myo-inositol (1,4,5)-trisphosphate

: CR3 Signaling in Eosinophils, Cdc42 Signaling, Chemokine Signaling, Death Receptor Signaling, Ephrin A Signaling

way, AMPK Signaling, Amyloid Processing, Antioxidant Action of Vitamin C, Apelin Adipocyte Signaling Pathway

, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cholecystokinin/Gastrin-mediated Signaling

diphosphate Biosynthesis I (via Mevalonate)

r Signaling, B Cell Receptor Signaling, Calcium Signaling, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), CDK5 Signaling, Ceramide Signaling, Dendritic Cell Maturation, Ephrin A Signaling, FAT10 Cancer Signaling

,Thyroid Cancer Signaling

Axonal Guidance Signaling,CCR3 Signaling in Eosinophils,CXCR4 Signaling,Ephrin Receptor Signaling,ErbB S

aling and Production in Macrophages,LXR/RXR Activation,Production of Nitric Oxide and Reactive Oxygen Spe  
ng,G-Protein Coupled Receptor Signaling,Gustation Pathway,Phototransduction Pathway,Protein Kinase A Sig  
is / Hepatic Stellate Cell Activation,Hepatic Fibrosis Signaling Pathway,Human Embryonic Stem Cell Pluripoter

eloid Leukemia Signaling,Acute Phase Response Signaling,Adrenomedullin signaling pathway,Aldosterone Sig

ells,Clathrin-mediated Endocytosis Signaling,D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis,Rac Signaling,  
ells,Antioxidant Action of Vitamin C,Apelin Cardiomyocyte Signaling Pathway,Apelin Endothelial Signaling Path  
ells,Antioxidant Action of Vitamin C,Apelin Cardiomyocyte Signaling Pathway,Axonal Guidance Signaling,Cardi

ponse

1,4,5,6)-Tetrakisphosphate Biosynthesis,D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis,D-myo-inosito  
tion

Adipocyte Signaling Pathway,Apelin Pancreas Signaling Pathway,Axonal Guidance Signaling,BMP signaling p

d Monocytes

,Human Embryonic Stem Cell Pluripotency,Osteoarthritis Pathway,Sphingosine-1-phosphate Signaling,System

ndrial L-carnitine Shuttle Pathway, Stearate Biosynthesis I (Animals), Type II Diabetes Mellitus Signaling,  $\gamma$ -linoleic acid Pathway, Growth Hormone Signaling, HIF1 $\alpha$  Signaling, Hypoxia Signaling in the Cardiovascular System, Insulin Re

Receptor Signaling, Hereditary Breast Cancer Signaling, RAR Activation, Role of BRCA1 in DNA Damage Respon

sion, Role of BRCA1 in DNA Damage Response

-mediated Signaling, EGF Signaling, ERK/MAPK Signaling, Growth Hormone Signaling, HOTAIR Regulatory Pathway, Hedgehog Signaling

Communication between Innate and Adaptive Immune Cells, Primary Immunodeficiency Signaling, Systemic Lupus Eri

thelial Adherens Junction Signaling, Gap Junction Signaling, Germ Cell-Sertoli Cell Junction Signaling, Phagosome

ced), Colorectal Cancer Metastasis Signaling, Glioblastoma Multiforme Signaling, Hepatic Fibrosis Signaling Pathway, Colorectal Cancer Metastasis Signaling, Glioblastoma Multiforme Signaling, Hepatic Fibrosis Signaling Pathway

Monocytes, IL-15 Production, Opioid Signaling Pathway, Reelin Signaling in Neurons, Role of Tissue Factor in Calcium Signaling

, HIPPO signaling, IGF-1 Signaling, Inhibition of ARE-Mediated mRNA Degradation Pathway, Myc Mediated Apoptosis

Remodeling of Epithelial Adherens Junctions

coietin Signaling,Axonal Guidance Signaling,B Cell Receptor Signaling,BMP signaling pathway,Breast Cancer

etabolism,Superpathway of Inositol Phosphate Compounds  
athway,Breast Cancer Regulation by Stathmin1,Calcium Signaling,cAMP-mediated signaling,Cardiac Hypertrc

m Depression,Synaptic Long Term Potentiation,Synaptogenesis Signaling Pathway  
ynthesis (Late Stages),LPS/IL-1 Mediated Inhibition of RXR Function,Xenobiotic Metabolism Signaling

ophy Signaling (Enhanced),CNTF Signaling,EGF Signaling,Endocannabinoid Cancer Inhibition Pathway,Endoc

etabolism,Superpathway of Inositol Phosphate Compounds  
l-5-phosphate Metabolism,Superpathway of Inositol Phosphate Compounds

onse

aling,Communication between Innate and Adaptive Immune Cells,Crosstalk between Dendritic Cells and Nature

gnaling,Osteoarthritis Pathway,PI3K/AKT Signaling,STAT3 Pathway

IGF Signaling,PKC $\theta$  Signaling in T Lymphocytes,Production of Nitric Oxide and Reactive Oxygen Species in M



ancies in Macrophages

way, IGF-1 Signaling, IL-6 Signaling, LPS-stimulated MAPK Signaling, Opioid Signaling Pathway, p38 MAPK Signaling

ne Maturation, Remodeling of Epithelial Adherens Junctions, Sertoli Cell-Sertoli Cell Junction Signaling, Sirtuin Signaling

way, HOTAIR Regulatory Pathway, Human Embryonic Stem Cell Pluripotency, Molecular Mechanisms of Cancer

ling in Neurons, Regulation of Cellular Mechanics by Calpain Protease, Senescence Pathway, Endoplasmic Reticulum Stress Pathway, Endothelin-1 Signaling, Huntington's Disease Signaling, Molecular Mechanisms of Cancer

Cell Cycle Regulation, Glioblastoma Multiforme Signaling, Glioma Signaling, HGF Signaling, Melanoma Signaling

Signaling, Reelin Signaling in Neurons

mTOR Signaling, PI3K/AKT Signaling, Regulation of eIF4 and p70S6K Signaling, Senescence Pathway, Synaptic

Signaling In Dorsal Horn Neurons, Synaptic Long Term Depression, Synaptic Long Term Potentiation, Synaptogen

Signaling, Iron homeostasis signaling pathway, Neuroinflammation Signaling Pathway, PI3K/AKT Signaling, Role of JAK  
: Compounds  
g Pathway, NF- $\kappa$ B Signaling, p38 MAPK Signaling, Pyridoxal 5'-phosphate Salvage Pathway, Role of Macrophag

is at Neuromuscular Junction, AMPK Signaling, Amyloid Processing, Antioxidant Action of Vitamin C, Apelin Adip  
r, Apelin Cardiomyocyte Signaling Pathway, April Mediated Signaling, ATM Signaling, B Cell Activating Factor Sig

Pathway, p38 MAPK Signaling, RAR Activation, Role of IL-17A in Arthritis, Role of Macrophages, Fibroblasts and

RXR Activation, Sirtuin Signaling Pathway, Toll-like Receptor Signaling, White Adipose Tissue Browning Pathway

Signaling, Glioblastoma Multiforme Signaling, Glioma Invasiveness Signaling, Gαq Signaling, Hepatic Fibrosis Signaling, Checkpoint Regulation, CNTF Signaling, CREB Signaling in Neurons, ERK/MAPK Signaling, ERK5 Signaling, FLT

urate Biosynthesis II (Animals)

Diabetes Mellitus Signaling, Type II Diabetes Mellitus Signaling

ynthesis (Late Stages),LPS/IL-1 Mediated Inhibition of RXR Function,Xenobiotic Metabolism Signaling

aling,Integrin Signaling,Leukocyte Extravasation Signaling,Neuregulin Signaling,PDGF Signaling,Reelin Signa

g,Insulin Receptor Signaling,Molecular Mechanisms of Cancer,mTOR Signaling,p70S6K Signaling,PI3K Signal

cleotides

l in B Lymphocytes,G Beta Gamma Signaling,GABA Receptor Signaling,GNRH Signaling,GPCR-Mediated Nut

ignaling, Glioblastoma Multiforme Signaling, Glioma Invasiveness Signaling, Gαq Signaling, Hepatic Fibrosis Signaling

ne Maturation, Remodeling of Epithelial Adherens Junctions, Sertoli Cell-Sertoli Cell Junction Signaling, Sirtuin 6 Mediated mRNA Degradation Pathway, Myc Mediated Apoptosis Signaling, p70S6K Signaling, PI3K/AKT Signaling

nflammation Signaling Pathway, PPARα/RXRα Activation, Senescence Pathway, T Cell Exhaustion Signaling Pathway

roblast Signaling Pathway, Apelin Cardiomyocyte Signaling Pathway, Apelin Endothelial Signaling Pathway, Adrenaline and Adrenaline Degradation, Oxidative Ethanol Degradation III, Putrescine Degradation III, RAR Activation

ases, Thrombin Signaling

enoic Acid (DHA) Signaling, Glucocorticoid Receptor Signaling, GM-CSF Signaling, Huntington's Disease Signaling

by Calpain Protease, Senescence Pathway

ynthesis (Late Stages), LPS/IL-1 Mediated Inhibition of RXR Function, Xenobiotic Metabolism Signaling

cell Activation, Macropinocytosis Signaling, MSP-RON Signaling Pathway, Role of Macrophages, Fibroblasts and I  
diapedesis, Leukocyte Extravasation Signaling, Neuroinflammation Signaling Pathway, Role of Macrophages, Fibro

mTOR Signaling, PI3K/AKT Signaling, Regulation of eIF4 and p70S6K Signaling, Senescence Pathway, Synaptic

lative Stress Response,PXR/RXR Activation,Xenobiotic Metabolism Signaling

clins and Cell Cycle Regulation,DNA Methylation and Transcriptional Repression Signaling,Hereditary Breast C

Degradation,Fc Epsilon RI Signaling,IL-4 Signaling,Insulin Receptor Signaling,Natural Killer Cell Signaling,PD

ling,Ephrin B Signaling,Ephrin Receptor Signaling,Germ Cell-Sertoli Cell Junction Signaling,IL-8 Signaling,PAK

,Apelin Cardiomyocyte Signaling Pathway,Apelin Mediated Signaling,ATM Signaling,B Cell Activating Factor Sig

Signaling,Corticotropin Releasing Hormone Signaling,ERK5 Signaling,G $\alpha$ 12/13 Signaling,Nur77 Signaling in T

ignaling (Enhanced),CD28 Signaling in T Helper Cells,fMLP Signaling in Neutrophils,Glucocorticoid Receptor S  
ng Pathway,Granulocyte Adhesion and Diapedesis,Hepatic Cholestasis,Hepatic Fibrosis / Hepatic Stellate Cell

signaling, ERK/MAPK Signaling, FAK Signaling, Germ Cell-Sertoli Cell Junction Signaling, GNRH Signaling, Integrin

Species in Macrophages

signaling, Relaxin Signaling, tRNA Splicing, Wnt/Ca<sup>+</sup> pathway

cytokine, IL-15 Production, Iron homeostasis signaling pathway, NF-κB Signaling, PAK Signaling, PDGF Signaling, PPA

signaling in Epithelial Cells, AMPK Signaling, Amyotrophic Lateral Sclerosis Signaling, Angiotensin Signaling, Antip

Regulation of Actin-based Motility by Rho, RhoA Signaling, RhoGDI Signaling, Signaling by Rho Family GTPase: RhoA Signaling, Axonal Guidance Signaling, Breast Cancer Regulation by Stathmin1, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cellular Effects of Sildenafil (Viagra), CRE

Inositol 1,4,5-trisphosphate Metabolism, Superpathway of Inositol Phosphate Compounds

signaling pathway, Breast Cancer Regulation by Stathmin1, Calcium Signaling, cAMP-mediated signaling, Cardiac Hypertrophy

Systemic Lupus Erythematosus In T Cell Signaling Pathway



urate Biosynthesis II (Animals)

ceptor Signaling, Melatonin Signaling, Type II Diabetes Mellitus Signaling, Vitamin-C Transport

onse

way, IGF-1 Signaling, IL-6 Signaling, LPS-stimulated MAPK Signaling, Opioid Signaling Pathway, p38 MAPK Sig

rythematosus In B Cell Signaling Pathway, Systemic Lupus Erythematosus Signaling

ne Maturation, Remodeling of Epithelial Adherens Junctions, Sertoli Cell-Sertoli Cell Junction Signaling

way,HOTAIR Regulatory Pathway,Human Embryonic Stem Cell Pluripotency,Molecular Mechanisms of Cancer  
way,HOTAIR Regulatory Pathway,Human Embryonic Stem Cell Pluripotency,Molecular Mechanisms of Cancer  
ncer,Sperm Motility,Synaptogenesis Signaling Pathway,Systemic Lupus Erythematosus In B Cell Signaling Pa  
ptosis Signaling,Neuroprotective Role of THOP1 in Alzheimer's Disease,p70S6K Signaling,PI3K/AKT Signaling

Regulation by Stathmin1, Cardiac Hypertrophy Signaling, CD28 Signaling in T Helper Cells, Cholecystokinin/Gas

rophy Signaling, Cardiac Hypertrophy Signaling (Enhanced), Cardiac  $\beta$ -adrenergic Signaling, CDK5 Signaling, Cell

cannabinoid Developing Neuron Pathway, ErbB Signaling, FLT3 Signaling in Hematopoietic Progenitor Cells, Gli

al Killer Cells,Dendritic Cell Maturation,Hepatic Cholestasis,Hepatic Fibrosis / Hepatic Stellate Cell Activation,H

acrophages,RANK Signaling in Osteoclasts,SAPK/JNK Signaling,Sertoli Cell-Sertoli Cell Junction Signaling,Sig

nalng,PDGF Signaling,PEDF Signaling

gnaling Pathway

er,Ovarian Cancer Signaling,PCP pathway,Regulation of the Epithelial-Mesenchymal Transition Pathway,Role of

cer,Osteoarthritis Pathway,PEDF Signaling,Sphingosine-1-phosphate Signaling,Systemic Lupus Erythematosu

g,Molecular Mechanisms of Cancer,Myc Mediated Apoptosis Signaling,Non-Small Cell Lung Cancer Signaling,(

ogenesis Signaling Pathway,UVB-Induced MAPK Signaling

esis Signaling Pathway

K family kinases in IL-6-type Cytokine Signaling,Role of Macrophages, Fibroblasts and Endothelial Cells in Rhe  
ges, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis,Salvage Pathways of Pyrimidine Ribonucleotides,

ocyte Signaling Pathway,Apelin Cardiomyocyte Signaling Pathway,Apelin Endothelial Signaling Pathway,Apelin  
naling,B Cell Receptor Signaling,BAG2 Signaling Pathway,BMP signaling pathway,Cardiac Hypertrophy Signa

d Endothelial Cells in Rheumatoid Arthritis, Senescence Pathway

y

aling Pathway, HMGB1 Signaling, IL-8 Signaling, ILK Signaling, Integrin Signaling, Mitochondrial Dysfunction, Mol  
3 Signaling in Hematopoietic Progenitor Cells, G-Protein Coupled Receptor Signaling, Growth Hormone Signaling

ling in Neurons, Role of PI3K/AKT Signaling in the Pathogenesis of Influenza, SAPK/JNK Signaling, Synaptogen

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way,Synaptogenesis Signaling Pathway,TGF- $\beta$  Signaling,Thrombin Signaling,Toll-like Receptor Signaling,Type

↻,SAPK/JNK Signaling,Synaptogenesis Signaling Pathway,Systemic Lupus Erythematosus In B Cell Signaling |





Pathway, Systemic Lupus Erythematosus In T Cell Signaling Pathway, Systemic Lupus Erythematosus Signaling

in Arthritis,Role of JAK family kinases in IL-6-type Cytokine Signaling,Role of MAPK Signaling in the Pathogen-Induced  
MAPK Signaling,White Adipose Tissue Browning Pathway,Xenobiotic Metabolism Signaling

g, T Cell Receptor Signaling, Telomerase Signaling, TGF- $\beta$  Signaling, Th1 and Th2 Activation Pathway, Th1 Pathway

way, Th2 Pathway, Thrombin Signaling, Thrombopoietin Signaling, TREM1 Signaling, VEGF Family Ligand-Recep

Factor Interactions, VEGF