

PC1 uncorrected

Database	Gene Set	FDR_95Pct	FDR_75Pct
PANTHER_BIOLOGICAL	Fatty_acid_biosynthesis	1.00E+00	1.64E-01
KEGG	KEGG_FOCAL_ADHESION	8.82E-01	2.09E-01
PANTHER_MOLECULAR_	Cell_adhesion_molecule	9.66E-01	2.33E-01
PANTHER_MOLECULAR_	ATP_synthase	1.00E+00	2.43E-01
KEGG	KEGG_OOCYTE_MEIOSIS	9.93E-01	2.50E-01
PANTHER_MOLECULAR_	Amylase	1.00E+00	2.52E-01
KEGG	KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	7.33E-01	2.67E-01
PANTHER_MOLECULAR_	Adenylate_cyclase	1.00E+00	3.28E-01
PANTHER_MOLECULAR_	Isomerase	7.73E-01	3.44E-01
GOTERM	positive regulation of osteoblast differentiation	8.88E-01	3.75E-01
REACTOME	FORMATION_OF_FIBRIN_CLOT_CLOTTING_CASCADE	1.00E+00	3.96E-01
REACTOME	TRANSMISSION_ACROSS_CHEMICAL_SYNAPSES	9.22E-01	3.97E-01
REACTOME	INHIBITION_OF_INSULIN_SECRETION_BY_ADRENALINE_NORADRENALIN	9.31E-01	4.06E-01
PANTHER_MOLECULAR_	Lyase	1.00E+00	4.07E-01
REACTOME	ELONGATION_AND_PROCESSING_OF_CAPPED_TRANSCRIPTS	1.00E+00	4.12E-01
REACTOME	CREB_PHOPHORYLATION_THROUGH_THE_ACTIVATION_OF_RAS	9.88E-01	4.13E-01
REACTOME	THROMBOXANE_SIGNALLING_THROUGH_TP_RECEPTOR	9.45E-01	4.13E-01
REACTOME	PLATELET_ACTIVATION	9.36E-01	4.18E-01
REACTOME	AMINE_COMPOUND_SLC_TRANSPORTERS	1.00E+00	4.19E-01
REACTOME	SIGNALLING_TO_RAS	9.83E-01	4.23E-01
PANTHER_MOLECULAR_	Tyrosine_protein_kinase_receptor	6.94E-01	4.23E-01
REACTOME	ACTIVATION_OF_NMDA_RECEPTOR_UPON_GLUTAMATE_BINDING_ANI	1.00E+00	4.24E-01
GOTERM	very-long-chain fatty acid metabolic process	7.84E-01	4.24E-01
GOTERM	arachidonic acid secretion	2.72E-02	8.86E-01
PANTHER_BIOLOGICAL	MHCI-mediated_immunity	2.20E-01	9.67E-01
GOTERM	cilium membrane	2.41E-01	9.46E-01
GOTERM	neurotransmitter:sodium symporter activity	2.53E-01	5.52E-01
Panther	Adrenaline_and_noradrenaline_biosynthesis	2.59E-01	9.64E-01
GOTERM	morphogenesis of embryonic epithelium	2.88E-01	8.92E-01
BIOCARTA	MONOCYTE_PATHWAY	4.82E-01	1.00E+00
Panther	Huntington_disease	4.86E-01	7.52E-01
Panther	Formyltetrahydroformate_biosynthesis	4.94E-01	7.95E-01
KEGG	KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	4.95E-01	8.56E-01
PANTHER_MOLECULAR_	Interferon	5.24E-01	9.29E-01
PANTHER_BIOLOGICAL	Cell_cycle_control	5.25E-01	9.89E-01
Panther	Interleukin_signaling_pathway	5.30E-01	9.26E-01
Panther	Opioid_proopiomelanocortin_pathway	5.39E-01	1.00E+00
Panther	Heterotrimeric_G-protein_signaling_pathway-Gi_alpha_and_Gs_alpha_I	5.54E-01	9.12E-01
Panther	Blood_coagulation	5.58E-01	9.13E-01
PANTHER_MOLECULAR_	Translation_elongation_factor	5.67E-01	9.22E-01
Panther	P53_pathway_feedback_loops_1	5.68E-01	8.96E-01
Panther	Glycolysis	5.69E-01	8.52E-01
Panther	5HT3_type_receptor_mediated_signaling_pathway	5.79E-01	9.36E-01
GOTERM	peptidyl-tyrosine phosphorylation	5.89E-01	7.22E-01

Panther	Vitamin_D_metabolism_and_pathway	6.02E-01	9.14E-01
PANTHER_BIOLOGICAL	Steroid_hormone-mediated_signaling	6.09E-01	9.46E-01
GOTERM	ER-associated protein catabolic process	6.10E-01	9.49E-01
Panther	EGF_receptor_signaling_pathway	6.21E-01	7.37E-01

PC2 uncorrected

Database	Gene Set	FDR_95Pct	FDR_75Pct
PANTHER_BIOLOGICAL	Receptor_protein_tyrosine_kinase_signaling_pathway	1.00E+00	2.88E-01
Ingenuity	Cell.Cycle.G1.S.Checkpoint.Regulation	9.36E-01	3.07E-01
PANTHER_BIOLOGICAL	Cell_communication	1.00E+00	3.11E-01
PANTHER_BIOLOGICAL	Gametogenesis	2.16E-01	3.23E-01
PANTHER_BIOLOGICAL	Endocytosis	1.00E+00	3.25E-01
PANTHER_BIOLOGICAL	Other_metabolism	2.44E-01	3.30E-01
PANTHER_BIOLOGICAL	Protein_folding	1.00E+00	3.51E-01
Ingenuity	Axonal.Guidance.Signaling	9.25E-01	3.90E-01
Ingenuity	Hepatic.Cholestasis	9.82E-01	3.94E-01
Ingenuity	p38.MAPK.Signaling	1.00E+00	4.00E-01
Ingenuity	Neurotrophin.TRK.Signaling	5.57E-01	4.00E-01
Ingenuity	PDGF.Signaling	9.42E-01	4.11E-01
PANTHER_BIOLOGICAL	Non-vertebrate_process	1.00E+00	4.22E-01
Ingenuity	G-Protein.Coupled.Receptor.Signaling	8.78E-01	4.23E-01
Ingenuity	Hepatic.Fibrosis.Hepatic.Stellate.Cell.Activation	8.85E-01	4.26E-01
PANTHER_BIOLOGICAL	Cytokinesis	1.00E+00	4.27E-01
PANTHER_BIOLOGICAL	Protein_targeting_and_localization	1.00E+00	4.32E-01
PANTHER_BIOLOGICAL	Granulocyte-mediated_immunity	1.00E+00	4.37E-01
Ingenuity	IL-6.Signaling	9.25E-01	4.37E-01
Ingenuity	Death.Receptor.Signaling	8.71E-01	4.39E-01
Ingenuity	LPS.IL-1.Mediated.Inhibition.of.RXR.Function	9.09E-01	4.39E-01
PANTHER_BIOLOGICAL	Cytokine_and_chemokine_mediated_signaling_pathway	1.00E+00	4.44E-01
Ingenuity	BMP.Signaling.pathway	9.90E-01	4.48E-01
Ingenuity	Toll-like.Receptor.Signaling	8.90E-01	4.51E-01
Ingenuity	Dopamine.Receptor.Signaling	1.00E+00	4.59E-01
KEGG	KEGG_REGULATION_OF_AUTOPHAGY	1.54E-01	8.95E-01
PANTHER_MOLECULAR_	Aspartic_protease	1.90E-01	6.41E-01
GOTERM	autophagic vacuole assembly	1.99E-01	9.26E-01
REACTOME	TRANSFORMATION_OF_LANOSTEROL_TO_CHOLESTEROL	2.11E-01	7.09E-01
PANTHER_BIOLOGICAL	Gametogenesis	2.16E-01	3.23E-01
KEGG	KEGG_STEROID_BIOSYNTHESIS	2.39E-01	8.60E-01
PANTHER_BIOLOGICAL	Other_metabolism	2.44E-01	3.30E-01
GOTERM	aspartic-type endopeptidase activity	2.57E-01	9.51E-01
PANTHER_BIOLOGICAL	mRNA_transcription	2.85E-01	5.42E-01
PANTHER_BIOLOGICAL	Amino_acid_catabolism	2.92E-01	7.89E-01
PANTHER_BIOLOGICAL	T-cell_mediated_immunity	3.11E-01	5.70E-01
PANTHER_BIOLOGICAL	NO_mediated_signal_transduction	3.14E-01	4.80E-01
PANTHER_BIOLOGICAL	Signal_transduction	3.18E-01	5.74E-01
GOTERM	positive regulation of cellular protein metabolic process	3.22E-01	1.00E+00

PANTHER_BIOLOGICAL	Cell_cycle_control	3.51E-01	5.63E-01
REACTOME	CHOLESTEROL_BIOSYNTHESIS	3.79E-01	7.02E-01
GOTERM	T cell differentiation in the thymus	3.84E-01	7.35E-01
PANTHER_BIOLOGICAL	Cholesterol_metabolism	4.32E-01	6.87E-01
PANTHER_BIOLOGICAL	Gluconeogenesis	4.53E-01	7.90E-01
KEGG	KEGG_PEROXISOME	4.54E-01	5.77E-01
KEGG	KEGG_MTOR_SIGNALING_PATHWAY	4.65E-01	6.20E-01
KEGG	KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	4.73E-01	9.07E-01
KEGG	KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	4.73E-01	8.91E-01
PANTHER_MOLECULAR_	Other_cytokine_receptor	4.87E-01	1.00E+00
KEGG	KEGG_TYPE_I_DIABETES_MELLITUS	4.89E-01	8.75E-01

PC3 uncorrected

Database	Gene Set	FDR_95Pct	FDR_75Pct
KEGG	KEGG_TGF_BETA_SIGNALING_PATHWAY	1.00E+00	1.46E-02
REACTOME	SPHINGOLIPID_METABOLISM	1.00E+00	1.51E-01
PANTHER_BIOLOGICAL	Lipid_and_fatty_acid_binding	8.43E-01	2.31E-01
PANTHER_BIOLOGICAL	Other_oncogenesis	6.40E-01	2.89E-01
PANTHER_BIOLOGICAL	Angiogenesis	6.98E-01	2.96E-01
PANTHER_BIOLOGICAL	Developmental_processes	6.91E-01	2.97E-01
PANTHER_BIOLOGICAL	Vision	8.35E-01	3.07E-01
PANTHER_BIOLOGICAL	Other_transport	9.85E-01	3.15E-01
PANTHER_BIOLOGICAL	Lipid_metabolism	8.60E-01	3.28E-01
PANTHER_BIOLOGICAL	Other_receptor_mediated_signaling_pathway	7.82E-01	3.38E-01
PANTHER_BIOLOGICAL	Steroid_hormone-mediated_signaling	6.97E-01	3.42E-01
PANTHER_BIOLOGICAL	Cell_cycle	6.20E-01	3.52E-01
PANTHER_BIOLOGICAL	Cell_motility	6.10E-01	3.93E-01
PANTHER_BIOLOGICAL	Blood_clotting	1.00E+00	4.05E-01
REACTOME	PP2A_MEDIATED_DEPHOSPHORYLATION_OF_KEY_METABOLIC_FACTOR	1.00E+00	4.63E-01
PANTHER_MOLECULAR_	Membrane-bound_signaling_molecule	5.99E-01	4.74E-01
GOTERM	synaptosome	6.26E-01	4.76E-01
GOTERM	phospholipid efflux	7.97E-01	4.89E-01
PANTHER_BIOLOGICAL	Other_amino_acid_metabolism	9.84E-01	4.94E-01
GOTERM	protein tyrosine kinase activity	7.94E-01	4.96E-01
KEGG	KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	1.00E+00	4.99E-01
PANTHER_MOLECULAR_	Glutamate_receptor	6.48E-01	4.99E-01
GOTERM	fatty acid beta-oxidation	6.53E-01	5.00E-01
PANTHER_BIOLOGICAL	DNA_replication	9.33E-01	5.03E-01
GOTERM	antioxidant activity	6.56E-01	5.11E-01
Panther	P53_pathway_feedback_loops_1	8.22E-02	7.28E-01
BIOCARTA	41BB_PATHWAY	1.07E-01	1.00E+00
Panther	TGF-beta_signaling_pathway	1.08E-01	9.79E-01
GOTERM	Rac GTPase binding	1.72E-01	8.20E-01
GOTERM	hydrolase activity, acting on acid anhydrides, in phosphoru	3.04E-01	8.12E-01
GOTERM	negative regulation of gene expression	3.48E-01	8.00E-01
GOTERM	heme biosynthetic process	3.52E-01	7.95E-01

BIOCARTA	RNA_PATHWAY	3.52E-01	1.00E+00
GOTERM	determination of left/right symmetry	3.62E-01	8.17E-01
GOTERM	decidualization	3.71E-01	8.25E-01
GOTERM	protein transport	3.72E-01	9.09E-01
GOTERM	post-embryonic development	3.79E-01	8.20E-01
BIOCARTA	VIP_PATHWAY	3.79E-01	1.00E+00
GOTERM	cilium axoneme	4.05E-01	7.98E-01
GOTERM	synaptic transmission, cholinergic	4.06E-01	8.02E-01
GOTERM	cholesterol catabolic process	4.10E-01	7.85E-01
GOTERM	low-density lipoprotein particle	4.11E-01	8.65E-01
GOTERM	glucose homeostasis	4.15E-01	8.36E-01
GOTERM	Golgi membrane	4.18E-01	8.63E-01
GOTERM	trophectodermal cell differentiation	4.21E-01	8.56E-01
GOTERM	blastocyst development	4.33E-01	9.18E-01
GOTERM	neuromuscular synaptic transmission	4.33E-01	7.95E-01
GOTERM	cholesterol transport	4.35E-01	8.20E-01
GOTERM	fatty acid binding	4.40E-01	7.67E-01
BIOCARTA	ATM_PATHWAY	4.41E-01	1.00E+00

PC1 adjusted for covariates

Database	Gene Set	FDR_95Pct	FDR_75Pct
KEGG	KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	1	0.0721
KEGG	KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS	0.9954833	0.074
Ingenuity	RAR.Activation	1	0.0792
Panther	5HT2_type_receptor_mediated_signaling_pathway	9.45E-01	1.63E-01
PANTHER_MOLECULAR_	Complement_component	9.99E-01	1.73E-01
PANTHER_MOLECULAR_	Histone	1.00E+00	1.82E-01
PANTHER_MOLECULAR_	Cytokine	8.77E-01	1.86E-01
PANTHER_MOLECULAR_	Interferon	5.96E-01	2.21E-01
Panther	Coenzyme_A_biosynthesis	9.41E-01	2.28E-01
PANTHER_MOLECULAR_	Non-motor_actin_binding_protein	8.14E-01	3.13E-01
KEGG	KEGG_JAK_STAT_SIGNALING_PATHWAY	1.00E+00	3.21E-01
KEGG	KEGG_CIRCADIAN_RHYTHM_MAMMAL	1.00E+00	3.54E-01
KEGG	KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	1.00E+00	3.62E-01
KEGG	KEGG_FOLATE_BIOSYNTHESIS	1.00E+00	3.82E-01
KEGG	KEGG_PANCREATIC_CANCER	1.00E+00	3.86E-01
Panther	Muscarinic_acetylcholine_receptor_1_and_3_signaling_pathway	7.37E-01	3.99E-01
Panther	Proline_biosynthesis	9.64E-01	4.05E-01
KEGG	KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	1.00E+00	4.05E-01
PANTHER_MOLECULAR_	Amylase	1.00E+00	4.36E-01
PANTHER_MOLECULAR_	Other_transferase	9.26E-01	4.48E-01
PANTHER_MOLECULAR_	Phosphodiesterase	1.00E+00	4.48E-01
Panther	Circadian_clock_system	1.00E+00	4.78E-01
KEGG	KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_A	1.00E+00	4.80E-01
PANTHER_MOLECULAR_	Other_enzyme_regulator	9.11E-01	4.83E-01
KEGG	KEGG_ECM_RECEPTOR_INTERACTION	1.00E+00	4.88E-01

GOTERM	positive regulation of insulin secretion	1.29E-01	8.24E-01
GOTERM	calcium-dependent cysteine-type endopeptidase activity	2.39E-01	8.04E-01
Panther	Adrenaline_and_noradrenaline_biosynthesis	2.79E-01	5.68E-01
PANTHER_MOLECULAR_	Cysteine_protease	3.74E-01	4.94E-01
PANTHER_MOLECULAR_	Adenylate_cyclase	4.53E-01	5.10E-01
BIOCARTA	TCYTOTOXIC_PATHWAY	5.63E-01	1.00E+00
PANTHER_MOLECULAR_	Interferon	5.96E-01	2.21E-01
KEGG	KEGG_ADHERENS_JUNCTION	6.68E-01	5.51E-01
KEGG	KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	7.33E-01	5.23E-01
Panther	Muscarinic_acetylcholine_receptor_1_and_3_signaling_pathway	7.37E-01	3.99E-01
BIOCARTA	IL17_PATHWAY	7.99E-01	9.74E-01
GOTERM	positive regulation of interleukin-8 production	8.00E-01	9.61E-01
GOTERM	cell recognition	8.02E-01	6.38E-01
GOTERM	positive regulation of epithelial to mesenchymal transition	8.04E-01	8.32E-01
GOTERM	actin filament capping	8.07E-01	8.51E-01
GOTERM	cellular protein metabolic process	8.13E-01	9.57E-01
PANTHER_MOLECULAR_	Non-motor_actin_binding_protein	8.14E-01	3.13E-01
Panther	GABA-B_receptor_II_signaling	8.17E-01	9.38E-01
GOTERM	glutathione transferase activity	8.18E-01	8.65E-01
GOTERM	activation of protein kinase A activity	8.19E-01	8.10E-01
BIOCARTA	SET_PATHWAY	8.28E-01	1.00E+00
GOTERM	neural crest cell migration	8.28E-01	7.30E-01
GOTERM	nucleic acid binding	8.28E-01	8.63E-01
GOTERM	double-strand break repair via nonhomologous end joining	8.32E-01	8.68E-01
GOTERM	tumor necrosis factor receptor binding	8.35E-01	7.79E-01

PC2 adjusted for covariates

Database	Gene Set	FDR_95Pct	FDR_75Pct
Panther	JAK/STAT_signaling_pathway	4.41E-01	5.00E-03
REACTOME	COLLAGEN_MEDIATED_ACTIVATION_CASCADE	1	0.0246
Panther	Axon_guidance_mediated_by_semaphorins	0.8718444	0.0486
REACTOME	PLATELET_ACTIVATION_TRIGGERS	1.00E+00	1.02E-01
REACTOME	CD28_CO_STIMULATION	9.14E-01	1.29E-01
KEGG	KEGG_RENAL_CELL_CARCINOMA	8.95E-01	1.47E-01
Panther	Huntington_disease	8.88E-01	1.55E-01
KEGG	KEGG_CHRONIC_MYELOID_LEUKEMIA	8.93E-01	1.97E-01
REACTOME	FORMATION_OF_PLATELET_PLUG	1.00E+00	2.09E-01
REACTOME	PLATELET_ACTIVATION	1.00E+00	2.18E-01
REACTOME	CD28_DEPENDENT_VAV1_PATHWAY	8.82E-01	2.26E-01
KEGG	KEGG_PANCREATIC_CANCER	8.61E-01	2.45E-01
KEGG	KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	8.84E-01	2.52E-01
REACTOME	EFFECTS_OF_PIP2_HYDROLYSIS	8.97E-01	2.58E-01
KEGG	KEGG_TYPE_II_DIABETES_MELLITUS	8.42E-01	2.65E-01
Ingenuity	Cell.Cycle.G1.S.Checkpoint.Regulation	7.41E-01	2.68E-01
KEGG	KEGG_PROGESTERONE_MEDIATED_OOCYTE_MATURATION	8.42E-01	2.69E-01
REACTOME	NEF_MEDIATED_DOWNREGULATION_OF_MHC_CLASS_I_COMPLEX_CEL	8.94E-01	2.70E-01
REACTOME	G_PROTEIN_BETA_GAMMA_SIGNALLING	8.62E-01	2.71E-01

REACTOME	CRMPS_IN_SEMA3A_SIGNALING	9.66E-01	2.71E-01
REACTOME	G_BETA_GAMMA_SIGNALLING_THROUGH_PI3KGAMMA	9.20E-01	2.72E-01
KEGG	KEGG_CELL_CYCLE	1.00E+00	2.74E-01
REACTOME	INORGANIC_CATION_ANION_SLC_TRANSPORTERS	8.90E-01	2.76E-01
REACTOME	TRANSFORMATION_OF_LANOSTEROL_TO_CHOLESTEROL	3.94E-01	2.77E-01
REACTOME	AXON_GUIDANCE	9.66E-01	2.79E-01
Panther	Purine_metabolism	2.29E-01	7.73E-01
Panther	Alzheimer_disease-presenilin_pathway	3.14E-01	8.04E-01
REACTOME	TRANSFORMATION_OF_LANOSTEROL_TO_CHOLESTEROL	3.94E-01	2.77E-01
Panther	JAK/STAT_signaling_pathway	4.41E-01	5.00E-03
Panther	Circadian_clock_system	4.79E-01	8.32E-01
BIOCARTA	ARENRF2_PATHWAY	5.55E-01	6.79E-01
Ingenuity	Tight.Junction.Signaling	5.66E-01	8.13E-01
PANTHER_BIOLOGICAL	Meiosis	5.69E-01	7.83E-01
Ingenuity	NFKB.Signaling	5.72E-01	7.87E-01
PANTHER_BIOLOGICAL	DNA_recombination	5.73E-01	7.75E-01
PANTHER_BIOLOGICAL	DNA_repair	5.77E-01	7.11E-01
PANTHER_BIOLOGICAL	Non-vertebrate_process	5.78E-01	7.88E-01
Ingenuity	Mitochondrial.Dysfunction	5.78E-01	7.57E-01
Ingenuity	ERK.MAPK.Signaling	5.83E-01	7.88E-01
Ingenuity	Apoptosis.Signaling	5.83E-01	7.67E-01
Ingenuity	LPS.IL-1.Mediated.Inhibition.of.RXR.Function	5.88E-01	7.57E-01
Ingenuity	cAMP-mediated.Signaling	5.91E-01	7.68E-01
PANTHER_BIOLOGICAL	MAPKKK_cascade	5.92E-01	7.34E-01
Ingenuity	IL-10.Signaling	5.93E-01	7.47E-01
Ingenuity	PTEN.Signaling	5.94E-01	7.26E-01
PANTHER_BIOLOGICAL	Nucleoside,_nucleotide_and_nucleic_acid_metabolism	5.97E-01	7.17E-01
PANTHER_BIOLOGICAL	Intracellular_protein_traffic	6.00E-01	9.34E-01
Ingenuity	Integrin.Signaling	6.06E-01	8.54E-01
BIOCARTA	RANKL_PATHWAY	6.07E-01	7.92E-01
Ingenuity	Toll-like.Receptor.Signaling	6.08E-01	7.52E-01

PC3 adjusted for covariates

Database	Gene Set	FDR_95Pct	FDR_75Pct
Panther	Heme_biosynthesis	8.49E-01	6.20E-02
Panther	Notch_signaling_pathway	8.98E-01	8.91E-02
REACTOME	REGULATION_OF_INSULIN_SECRETION_BY_GLUCAGON_LIKE_PEPTIDE_:	9.84E-01	1.19E-01
Panther	Opioid_proopiomelanocortin_pathway	9.66E-01	1.65E-01
REACTOME	INHIBITION_OF_INSULIN_SECRETION_BY_ADRENALINE_NORADRENALIN	9.54E-01	1.76E-01
BIOCARTA	ARF_PATHWAY	8.57E-01	2.79E-01
Panther	p38_MAPK_pathway	7.62E-01	2.87E-01
BIOCARTA	TEL_PATHWAY	7.24E-01	3.02E-01
Panther	Metabotropic_glutamate_receptor_group_III_pathway	8.64E-01	3.41E-01
Panther	P53_pathway_feedback_loops_1	1.00E+00	3.86E-01
REACTOME	PP2A_MEDIATED_DEPHOSPHORYLATION_OF_KEY_METABOLIC_FACTOR	7.02E-01	3.93E-01
REACTOME	G_PROTEIN_ACTIVATION	9.49E-01	4.23E-01

REACTOME	TELOMERE_MAINTENANCE	1.00E+00	4.72E-01
REACTOME	P75NTR_SIGNALS_VIA_NFKB	1.00E+00	4.82E-01
PANTHER_BIOLOGICAL	Monosaccharide_metabolism	5.72E-01	4.98E-01
REACTOME	NF_KB_IS_ACTIVATED_AND_SIGNALS_SURVIVAL	6.69E-01	5.15E-01
PANTHER_BIOLOGICAL	Other_amino_acid_metabolism	8.22E-01	5.38E-01
PANTHER_BIOLOGICAL	Other_steroid_metabolism	8.35E-01	5.43E-01
PANTHER_BIOLOGICAL	Hematopoiesis	9.68E-01	5.44E-01
PANTHER_BIOLOGICAL	Gluconeogenesis	6.58E-01	5.48E-01
PANTHER_BIOLOGICAL	Phagocytosis	5.09E-01	5.52E-01
Panther	Metabotropic_glutamate_receptor_group_I_pathway	9.24E-01	5.62E-01
PANTHER_BIOLOGICAL	Other_developmental_process	8.66E-01	5.68E-01
PANTHER_BIOLOGICAL	Sex_determination	7.56E-01	5.71E-01
Panther	Ionotropic_glutamate_receptor_pathway	8.53E-01	5.73E-01
Ingenuity	14-3-3-mediated.Signaling	1.45E-01	1.00E+00
GOTERM	Rac GTPase binding	1.74E-01	9.60E-01
BIOCARTA	GSK3_PATHWAY	4.05E-01	9.79E-01
PANTHER_BIOLOGICAL	Lipid_fatty_acid_and_steroid_metabolism	4.26E-01	9.68E-01
PANTHER_BIOLOGICAL	Asymmetric_protein_localization	4.28E-01	6.18E-01
BIOCARTA	AKT_PATHWAY	4.40E-01	1.00E+00
PANTHER_BIOLOGICAL	Tumor_suppressor	4.60E-01	7.83E-01
BIOCARTA	LEPTIN_PATHWAY	4.80E-01	1.00E+00
PANTHER_MOLECULAR_	Phosphodiesterase	4.93E-01	9.63E-01
PANTHER_BIOLOGICAL	Protein_targeting	4.99E-01	9.41E-01
PANTHER_BIOLOGICAL	Phagocytosis	5.09E-01	5.52E-01
PANTHER_BIOLOGICAL	Other_receptor_mediated_signaling_pathway	5.35E-01	8.53E-01
PANTHER_BIOLOGICAL	Cell_cycle	5.36E-01	8.04E-01
PANTHER_BIOLOGICAL	Cell_structure_and_motility	5.49E-01	9.39E-01
PANTHER_BIOLOGICAL	Heart_development	5.50E-01	9.30E-01
BIOCARTA	CDMAC_PATHWAY	5.59E-01	1.00E+00
BIOCARTA	NKT_PATHWAY	5.61E-01	9.48E-01
PANTHER_BIOLOGICAL	Transport	5.61E-01	6.28E-01
BIOCARTA	CELL2CELL_PATHWAY	5.61E-01	1.00E+00
PANTHER_BIOLOGICAL	Monosaccharide_metabolism	5.72E-01	4.98E-01
BIOCARTA	PS1_PATHWAY	5.73E-01	9.96E-01
PANTHER_BIOLOGICAL	Embryogenesis	5.75E-01	9.31E-01
PANTHER_BIOLOGICAL	Sensory_perception	5.76E-01	8.80E-01
BIOCARTA	CD40_PATHWAY	5.81E-01	1.00E+00
BIOCARTA	COMP_PATHWAY	5.82E-01	9.69E-01