

Cluster One (2997)		Cluster Three (631)	
p-Value	Ontology Term	p-Value	Ontology Term
0.0002	plasma protein	0.0001	actin filament-based process
0.0002	complement activity	0.0002	response to biotic stimulus
0.0005	humoral defense mechanism (sensu Vertebrata)	0.0004	actin cytoskeleton organization and biogenesis
0.0008	complement activation	0.0009	phorbol ester receptor activity
0.0008	intracellular	0.0009	protein kinase C activity
0.001	RNA polymerase II transcription factor activity	0.0011	defense response
0.0012	complement activation, alternative pathway	0.0015	immune response
0.0012	interleukin-1, Type I, activating receptor activity	0.0023	protein tyrosine kinase activity
0.0012	interleukin-1 receptor activity	0.0029	GDP-dissociation inhibitor activity
0.0012	interleukin-1, Type I, activating binding activity	0.0038	cell communication
0.0012	interleukin-1 binding activity	0.0041	response to pest/pathogen/parasite
0.0013	defense response	0.0041	protein serine/threonine kinase activity
0.0018	humoral immune response	0.0053	defense/immunity protein activity
0.002	immune response	0.0055	enzyme activator activity
0.0046	oogenesis	0.0058	protein kinase activity
0.0049	response to external stimulus	0.0067	actin cytoskeleton reorganization
0.0066	glycine hydroxymethyltransferase activity	0.0067	RAN protein binding activity
0.0091	specific RNA polymerase II transcription factor activity	0.0069	cAMP-dependent protein kinase activity
0.0102	response to biotic stimulus	0.0069	cyclic-nucleotide dependent protein kinase activity
0.0113	cell growth and/or maintenance	0.0074	protein amino acid phosphorylation
0.0117	neurogenesis	0.0076	cellular process
0.0119	cell adhesion molecule activity	0.0082	actin binding activity
0.0133	coenzymes and prosthetic group metabolism	0.0085	galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase activity
0.0136	ligand-dependent nuclear receptor activity	0.0085	actin modulating activity
0.0136	steroid hormone receptor activity	0.0085	actin monomer binding activity
0.0145	ligand-regulated transcription factor activity	0.0085	regulation of actin polymerization and/or depolymerization
0.0178	defense/immunity protein activity	0.0086	response to wounding
0.0179	nucleus	0.0096	protein binding activity
0.0201	morphogenesis	0.0103	small GTPase mediated signal transduction
0.0225	molecular_function	0.0109	intracellular signaling cascade
0.0232	cellular process	0.011	cytoskeletal protein binding activity
0.0254	secretory vesicle	0.0125	protein C-terminus binding activity
0.0254	antimicrobial peptide activity	0.0138	protein kinase CK2 activity
0.0257	response to pest/pathogen/parasite	0.0143	phosphotransferase activity, alcohol group as acceptor
0.0265	chemotaxis	0.0146	response to external stimulus
0.0265	taxis	0.0163	signal transduction
0.0274	cell	0.0171	phosphorylation
0.0301	cell migration	0.0182	G-protein coupled receptor activity
0.031	transmembrane receptor protein kinase activity		
0.0342	coenzymes and prosthetic group biosynthesis		
Cluster Four (1550)		Cluster Six (2117)	
p-Value	Ontology Term	p-Value	Ontology Term
0.0002	plasma protein	<0.0001	immune response
0.0002	complement activity	<0.0001	nucleobase, nucleoside, nucleotide and nucleic acid metabolism
0.0005	humoral defense mechanism (sensu Vertebrata)	<0.0001	intracellular
0.0008	complement activation	<0.0001	metabolism
0.0008	intracellular	0.0001	defense response
0.001	RNA polymerase II transcription factor activity	0.0001	G-protein coupled receptor protein signaling pathway
0.0012	complement activation, alternative pathway	0.0001	response to pest/pathogen/parasite
0.0012	interleukin-1, Type I, activating receptor activity	0.0002	transcription from Pol II promoter
0.0012	interleukin-1 receptor activity	0.0003	nucleus
0.0012	interleukin-1, Type I, activating binding activity	0.0003	extracellular
0.0012	interleukin-1 binding activity	0.0004	humoral immune response
0.0013	defense response	0.0008	rhodopsin-like receptor activity
0.0018	humoral immune response	0.0009	response to external stimulus
0.002	immune response	0.0013	G-protein coupled receptor activity
0.0046	oogenesis	0.002	cell surface receptor linked signal transduction
0.0049	response to external stimulus	0.0021	acid-D-amino acid ligase activity
0.0066	glycine hydroxymethyltransferase activity	0.003	nucleoplasm
0.0091	specific RNA polymerase II transcription factor activity	0.0038	perception of external stimulus
0.0102	response to biotic stimulus	0.0039	transferase activity, transferring phosphorus-containing groups
0.0113	cell growth and/or maintenance	0.0041	phospholipase activity
0.0117	neurogenesis	0.0041	chromatin remodeling complex
0.0119	cell adhesion molecule activity	0.0048	26S proteasome
0.0133	coenzymes and prosthetic group metabolism	0.005	extracellular space
0.0136	ligand-dependent nuclear receptor activity	0.0056	ubiquitin-protein ligase activity
0.0136	steroid hormone receptor activity	0.006	response to wounding
0.0145	ligand-regulated transcription factor activity	0.0061	receptor activity
0.0178	defense/immunity protein activity	0.0064	purine nucleotide metabolism
0.0179	nucleus	0.0069	regulation of transcription from Pol II promoter
0.0201	morphogenesis	0.0075	DNA repair
0.0225	molecular_function	0.0076	integral to membrane
0.0232	cellular process	0.0077	sensory perception
0.0254	secretory vesicle	0.0078	kinase activity
0.0254	antimicrobial peptide activity	0.008	xenobiotic metabolism
0.0257	response to pest/pathogen/parasite	0.008	response to xenobiotic stimulus
0.0265	chemotaxis	0.0083	humoral defense mechanism (sensu Vertebrata)
0.0265	taxis	0.0085	non-membrane spanning protein tyrosine phosphatase activity
0.0274	cell	0.0093	DNA metabolism
0.0301	cell migration	0.0096	serine-type endopeptidase activity
0.031	transmembrane receptor protein kinase activity	0.0103	nucleobase, nucleoside, nucleotide kinase activity
0.0342	coenzymes and prosthetic group biosynthesis	0.0108	small GTPase mediated signal transduction

Table Two (supplemental)