

KEGG Pathways with Significant Changes in number of unique KEGG Orthologs across Anthozoan Tree

Major KEGG Category	Minor KEGG Category	KEGG Pathway	p-value
Cellular Processes	Cell motility	Bacterial chemotaxis (map02030)	<0.001
Environmental Information Processing	Membrane transport	ABC transporters (map02010)	0.001
Environmental Information Processing	Membrane transport	Bacterial secretion system (map03070)	<0.001
Environmental Information Processing	Signal transduction	Two-component system (map02020)	0.001
Environmental Information Processing	Signaling molecules and interaction	Neuroactive ligand-receptor interaction (map04080)	0.004
Genetic Information Processing	Folding, sorting and degradation	Protein export (map03060)	0.005
Genetic Information Processing	Information processing in viruses	Virion - Herpesvirus (map03266)	0.036
Genetic Information Processing	Information processing in viruses	Virion - Lyssavirus (map03265)	<0.001
Genetic Information Processing	Replication and repair	DNA replication (map03030)	0.017
Genetic Information Processing	Replication and repair	Nucleotide excision repair (map03420)	<0.001
Genetic Information Processing	Transcription	RNA polymerase (map03020)	<0.001
Genetic Information Processing	Transcription	Spliceosome (map03040)	0.001
Genetic Information Processing	Translation	Ribosome (map03010)	<0.001
Metabolism	Amino acid metabolism	Arginine biosynthesis (map00220)	0.018
Metabolism	Amino acid metabolism	Lysine biosynthesis (map00300)	<0.001

KEGG Pathways with Significant Changes in number of unique KEGG Orthologs across Anthozoan Tree

Metabolism	Amino acid metabolism	Phenylalanine, tyrosine and tryptophan biosynthesis (map00400)	0.016
Metabolism	Biosynthesis of other secondary metabolites	Glucosinolate biosynthesis (map00966)	<0.001
Metabolism	Biosynthesis of other secondary metabolites	Isoquinoline alkaloid biosynthesis (map00950)	0.037
Metabolism	Biosynthesis of other secondary metabolites	Tropane, piperidine and pyridine alkaloid biosynthesis (map00960)	0.012
Metabolism	Carbohydrate metabolism	Amino sugar and nucleotide sugar metabolism (map00520)	0.043
Metabolism	Carbohydrate metabolism	Glyoxylate and dicarboxylate metabolism (map00630)	0.040
Metabolism	Carbohydrate metabolism	Propanoate metabolism (map00640)	0.005
Metabolism	Energy metabolism	Carbon fixation in photosynthetic organisms (map00710)	0.049
Metabolism	Energy metabolism	Carbon fixation pathways in prokaryotes (map00720)	0.040
Metabolism	Energy metabolism	Oxidative phosphorylation (map00190)	0.019
Metabolism	Glycan biosynthesis and metabolism	Lipopolysaccharide biosynthesis (map00540)	0.005
Metabolism	Glycan biosynthesis and metabolism	Mannose type O-glycan biosynthesis (map00515)	0.011
Metabolism	Lipid metabolism	Primary bile acid biosynthesis (map00120)	<0.001
Metabolism	Lipid metabolism	Steroid biosynthesis (map00100)	0.006
Metabolism	Metabolism of cofactors and vitamins	Ubiquinone and other terpenoid-quinone biosynthesis (map00130)	0.031
Metabolism	Metabolism of other	Taurine and hypotaurine metabolism	0.005

KEGG Pathways with Significant Changes in number of unique KEGG Orthologs across Anthozoan Tree

	amino acids	(map00430)	
Metabolism	Xenobiotics biodegradation and metabolism	Aminobenzoate degradation (map00627)	0.029
Metabolism	Xenobiotics biodegradation and metabolism	Drug metabolism - other enzymes (map00983)	0.006
Metabolism	Xenobiotics biodegradation and metabolism	Fluorobenzoate degradation (map00364)	0.028
Metabolism	Xenobiotics biodegradation and metabolism	Toluene degradation (map00623)	0.028
Organismal Systems	Circulatory system	Cardiac muscle contraction (map04260)	0.003
Organismal Systems	Digestive system	Pancreatic secretion (map04972)	0.014
Organismal Systems	Endocrine system	Thyroid hormone synthesis (map04918)	0.004
Organismal Systems	Environmental adaptation	Thermogenesis (map04714)	0.007
Organismal Systems	Excretory system	Aldosterone-regulated sodium reabsorption (map04960)	0.004
Organismal Systems	Immune system	Complement and coagulation cascades (map04610)	0.013
Organismal Systems	Immune system	Hematopoietic cell lineage (map04640)	0.035
Organismal Systems	Nervous system	Dopaminergic synapse (map04728)	0.020
Organismal Systems	Nervous system	Retrograde endocannabinoid signaling (map04723)	<0.001
Organismal Systems	Sensory system	Phototransduction - fly (map04745)	0.035