

	Enriched gained GO terms	P-value	Enriched lost GO terms	P-value
<b>Unikonta</b>	<ul style="list-style-type: none"> <li>protein import into peroxisome matrix, docking</li> <li>cAMP catabolic process</li> </ul>	9.5E-3 1.9E-2		
<b>Opisthokonta</b>	<ul style="list-style-type: none"> <li>regulation of primary metabolic process</li> </ul>	1.3E-2	<ul style="list-style-type: none"> <li>protein-heme linkage</li> <li>asparagine biosynthetic process</li> </ul>	5.2E-3 1.0E-2
<b>Metazoa &amp; Choanoflagellata</b>	<ul style="list-style-type: none"> <li>cell-cell signaling</li> <li>cell surface receptor linked signal transduction</li> </ul>	2.2E-3 9.2E-3	<ul style="list-style-type: none"> <li>xylan catabolic process</li> <li>carbohydrate metabolic process</li> </ul>	1.6E-5 3.1E-4
<b>Metazoa</b>	<ul style="list-style-type: none"> <li>regulation of transcription, DNA-dependent</li> <li>cell-matrix adhesion</li> </ul>	1.2E-7 4.0E-4	<ul style="list-style-type: none"> <li>aromatic amino acid family biosynthetic process, prephenate pathway</li> <li>histidine biosynthetic process</li> </ul>	1.1E-4 2.3E-3
<b>Bilaterian &amp; Cnidaria</b>	<ul style="list-style-type: none"> <li>apoptosis</li> <li>peptide cross-linking</li> </ul>	3.1E-4 4.7E-4	<ul style="list-style-type: none"> <li>protein folding</li> <li>transcription initiation</li> </ul>	1.7E-3 3.8E-3
<b>Bilateria</b>	<ul style="list-style-type: none"> <li>multicellular organismal development</li> <li>cell surface receptor linked signal transduction</li> </ul>	1.2E-2 1.7E-2	<ul style="list-style-type: none"> <li>branched chain family amino acid biosynthetic process</li> <li>histidine biosynthetic process</li> </ul>	3.3E-4 2.3E-3
<b>Deuterostomia &amp; Protostomia &amp; Aschelminthes</b>	<ul style="list-style-type: none"> <li>mitochondrial ATP synthesis coupled electron transport</li> <li>developmental process</li> </ul>	8.8E-4 5.3E-3	<ul style="list-style-type: none"> <li>DNA replication</li> </ul>	1.3E-3
<b>Deuterostomia &amp; Protostomia</b>	<ul style="list-style-type: none"> <li>mitochondrial electron transport, NADH to ubiquinone</li> <li>Wnt receptor signaling pathway</li> </ul>	4.8E-4 3.2E-3	<ul style="list-style-type: none"> <li>DNA integration</li> <li>metal ion transport</li> </ul>	9.2E-3 1.2E-2
<b>Deuterostomia</b>	<ul style="list-style-type: none"> <li>protein transport</li> </ul>	8.2E-2	<ul style="list-style-type: none"> <li>cellular amino acid biosynthetic process</li> <li>phosphoenolpyruvate-dependent sugar phosphotransferase system</li> </ul>	4.7E-4 2.7E-3
<b>Chordata</b>	<ul style="list-style-type: none"> <li>lipid catabolic process</li> <li>activation of MAPKK activity</li> </ul>	3.2E-3 6.7E-3	<ul style="list-style-type: none"> <li>proteolysis</li> </ul>	2.1E-2
<b>Urochordata &amp; Vertebrata</b>	<ul style="list-style-type: none"> <li>antigen processing and presentation</li> <li>protein amino acid phosphorylation</li> </ul>	5.5E-3 1.8E-2	<ul style="list-style-type: none"> <li>folic acid and derivative metabolic process</li> <li>oligosaccharide biosynthetic process</li> </ul>	2.3E-3 3.0E-3
<b>Vertebrata</b>	<ul style="list-style-type: none"> <li>immune response</li> <li>G-protein coupled receptor protein signaling pathway</li> </ul>	4.4E-11 1.6E-5	<ul style="list-style-type: none"> <li>DNA topological change</li> <li>carbohydrate metabolic process</li> </ul>	2.0E-3 3.1E-3
<b>Tetrapoda</b>	<ul style="list-style-type: none"> <li>regulation of growth</li> <li>synaptic transmission</li> </ul>	1.3E-2 2.0E-2	<ul style="list-style-type: none"> <li>valyl-tRNA aminoacylation</li> <li>response to water</li> </ul>	4.3E-3 8.6E-3
<b>Amniota</b>	<ul style="list-style-type: none"> <li>immune response</li> <li>defense response</li> </ul>	1.8E-3 2.0E-3	<ul style="list-style-type: none"> <li>regulation of transcription, DNA-dependent</li> <li>riboflavin biosynthetic process</li> </ul>	9.2E-8 1.0E-3
<b>Mammalia</b>	<ul style="list-style-type: none"> <li>hemopoiesis</li> <li>reciprocal meiotic recombination</li> </ul>	2.8E-3 8.3E-3	<ul style="list-style-type: none"> <li>aromatic amino acid family biosynthetic process</li> </ul>	1.1E-2