Histidine phosphatase superfamily (branch 2) transmembrane transport Major Facilitator Superfamily Innexin serine-type peptidase activity neurotransmitter transport hydrolase activity, hydrolyzing O-glycosyl compounds neurotransmitter:sodium symporter activity transmembrane transport carbohydrate metabolic process proteolysis SPRY domain Fibronectin type III domain Sodium:neurotransmitter symporter family Carboxylesterase family Major Facilitator Superfamily loss in Coccinellinae emergence in Serangiini **DNA** binding CRAL/TRIO domain Major Facilitator Superfamily Sugar (and other) transporter PBP/GOBP family Mitochondrial carrier protein alpha/beta hydrolase fold Tetraspanin family Ras family transmembrane transporter activity GTPase activity odorant binding serine-type endopeptidase activity Homeobox KN domain iron ion binding Cytochrome P450 GTP binding odorant binding PBP/GOBP family oxidoreductase activity, acting on paired donors, Trypsin with incorporation or reduction of molecular oxygen UDP-glucoronosyl and UDP-glucosyl transferase G protein-coupled receptor signaling pathway transmembrane transport BTB/POZ domain BTB/POZ domain transmembrane transport Lipase regulation of transcription, DNA-templated Count Zinc finger, C2H2 type heme binding oxidation-reduction process protein homooligomerization proteolysis a Zinc finger, C2H2 type Hsp20/alpha crystallin family Insect pheromone-binding family, A10/OS-D a а loss in Serangiini emergence in Stethorini а a Chitin binding Peritrophin-A domain Annotation transferase activity, transferring acyl groups a GO Acvltransferase Ankyrin repeats (3 copies) p.adjust emergence in Epilachnini emergence in Coccinellini Serpin (serine protease inhibitor) regulation of transcription, DNA-templated DNA-binding transcription factor activity **DNA** binding Lipocalin / cytosolic fatty-acid binding protein family emergence in mycophagous ladybirds emergence in omnivorous ladybirds Immunoglobulin domain

emergence in Coccinellinae

1.00

1.25 1.50

1.75

Pfam

0.00

0.75

1.00

loss in Coccinellidae