CMONT HEAD

Immunoglobulin domain extracellular ligand-gated ion channel activity 6 copies)

Receptor family ligand binding region SspA type Leucine rich repeat region (6 copies) transporter complex response to light stimulus Neurotransmitter-gated ion-channel ligand binding domain CUB domain

CUB domain

chemical synaptic transmission

Fibronectin type III domain channel activity anterograde trans-synaptic signaling PAS fold Homeodomain synapse presynapse synaptic signaling PAS fold cell-cell signaling trans-synaptic signaling ion channel activity

ion channel complex cation channel activity Amino acid permease passive transmembrane transporter activity PBP/GOBP family 7 transmembrane receptor (rhodopsin family) Immunoglobulin V-set domain

ion transmembrane transporter activity Immunoglobulin domain Serpentine type 7TM GPCR chemoreceptor Srsx CD80-like C2-set immunoglobulin domain Immunoglobulin domain

CSEPT HEAD

extracellular ligand—gated ion channel activity

Serpentine type 7TM GPCR chemoreceptor Srsx

Immunoglobulin I—set domain lon transport protein passive transmembrane transporter activity Immunoglobulin V-set domain cation channel activity chemical synaptic transmission Carboxylesterase family 7 transmembrane receptor (rhodopsin family) ion channel activity channel activity Ion channel intrinsic component of plasma membrane CUB domain presynapse integral component of plasma membrane Homeodomain C2 domain G protein-coupled receptor signaling pathway synapse
Neurotransmitter-gated ion-channel transmembrane region anterograde trans-synaptic signaling synaptic signaling RhoGEF domain neurotransmitter receptor activity Immunoglobulin domain trans-synaptic signaling Receptor family ligand binding region cell-cell signaling

transmembrane signaling receptor activity Immunoglobulin domain

CMONT THORAX

purine ribonucleoside monophosphate metabolic process Fransmembrane amino acid transporter protein ucleoside triphosphate metabolic process purine ribonucleoside triphosphate metabolic process

antibiotic metabolic process tricarboxylic acid metabolic process

Fibronectin type III domain

oxidoreductase activity, acting on CH-OH group of donors

energy derivation by oxidation of organic compounds

generation of precursor metabolites and energy

citrate metabolic process cellular respiration drug metabolic process ATP metabolic process tricarboxylic acid cycle

carbohydrate metabolic process

purine nucleoside triphosphate metabolic process

purine nucleoside monophosphate metabolic process

CSEPT THORAX

mitochondrial inner membrane mitochondrial membrane purine nucleoside monophosphate metabolic process mitochondrial respirasome respiratory electron transport chain purine ribonucleoside triphosphate metabolic process AspA type Leucine rich repeat region (6 copies) nucleoside triphosphate metabolic process organelle inner membrane oxidative phosphorylation mitochondrial ATP synthesis coupled electron transport inner mitochondrial membrane protein complex oxidoreductase complex ATP metabolic process ATP synthesis coupled electron transport cellular respiration purine nucleoside triphosphate metabolic process PBP/GOBP family ribonucleoside triphosphate metabolic process

Amiloride-sensitive sodium channel purine ribonucleoside monophosphate metabolic process generation of precursor metabolites and energy

ein heavy chain region D6 P-loop domain

CMONT ABDOMEN P-loop containing dynein motor region D4

Dynein heavy chain region D6 P-loop domain Tubulin C-terminal domain microtubule-based movement
Dynein heavy chain AAA lid domain

ONS1/SUR4 fami Cysteine-rich secretory protein family meiotic cell cycle process Kinesin motor domain Hsp20/alpha crystallin family meiotic nuclear division mitotic cell cycle microtubule cytoskeleton cell cycle process Microtubule binding cytoskeleton nuclear division sperm motility meiotic cell cycle microtubule-based process cilium assembly AAA+ lid domain Microtubule-binding stalk of dynein motor flagellated sperm motility microtubule cytoskeleton organization cilium organization spindle assembly Dynein heavy chain AAA lid domain microtubule motor activity Cyclic nucleotide-binding domain eucine Rich repeat spindle assembly involved in meiosis Tubulin/FtsZ family, GTPase domain Dynein heavy chain C-terminal domain

ATP-binding dynein motor region

P-loop containing dynein motor region

CSEPT ABDOMEN Kinesin motor domain linker histone H1 and H5 family Tubulin/FtsZ family, GTPase domain chromosome segregation Microtubule binding meiotic cell cycle process

DNA-dependent DNA replication

Dynein heavy chain, N-terminal region 2

Male sterility protein nc-binding dehydrogenase mitotic cell cycle process replication fork replication fork

AAA+ lid domain organelle fission mitotic cell cycle.

DNA replication spindle assembly cycle, N-terminal domain spindle organization mitotic cell cycle cell cycle process

DNA replication spindle organization process

DNA metabolic process meiotic cell cycle cell cycle DNA replication initiation
Histone-like transcription factor (CBF/NF-Y) and archaeal histone

Trypsin microtubule—based process regulation of cell cycle
Zinc finger, C3HC4 type (RING finger)
Male sterility protein
microtubule cytoskeleton organization
Zinc carboxypeptidase Tubulin C-terminal domain nuclear chromosome segregation Cysteine-rich secretory protein family

Cyclic nucleotide-binding domain

CMONT ANTENNA

Ligated ion channel L-glutamate- and glycine-binding site Dynein heavy chain region D6 P-loop domain detection of stimulus lon transport protein sensory perception of mechanical stimulus

PBP/GOBP family detection of stimulus involved in sensory perception

plasma membrane bounded cell projection channel activity cell projection EGF-like domain

Trypsin cilium organization cilium sensory perception

cilium assembly intraciliary transport

plasma membrane bounded cell projection assembly cell projection assembly Ligand-gated ion channel ion channel activity detection of chemical stimulus involved in sensory perception

passive transmembrane transporter activity

Calcium-binding EGF domain

Amiloride-sensitive sodium channel

CSEPT ANTENNA

detection of chemical stimulus involved in sensory perception Immunoglobulin I-set domain Sugar (and other) transporter detection of chemical stimulus integral component of plasma membrane 7tm Chemosensory receptor

nunoglobulin domain plasma membrane bounded cell projection assembly CRAL/TRIO domain plasma membrane bounded cell projection Cadherin doma EGF-like domain cell projection cilium assembly Major Facilitator Superfamily cilium intraciliary transport particle cell projection assembly cilium organization dendrite lon transport protein

CD80-like C2-set immunoglobulin domain sensory perception sensory perception of smell intrinsic component of plasma membrane Ligand-gated ion channel nsect cuticle protein sensory perception of chemical stimulus Immunoglobulin domain

Peptidase family M13 nervous system process Immunoglobulin V-set domain Haemolymph juvenile hormone binding protein (JHBP) Dynein heavy chain region D6 P-loop domain

CMONT GUT

endoplasmic reticulum structural molecule activity ribosomal subunit peptide metabolic process

Major Facilitator Superitaria Major Facilitator Superrarminy amide biosynthetic process Major Facilitator Superfamily cytoplasmic translation

Ras family Carbohydrate derivative metabolic process small ribosomal subunit Acyl-CoA dehydrogenase, middle domain DM4/DM12 family structural constituent of ribosome UDP-glucoronosyl and UDP-glucosyl transferase Proteasome subunit ribosome cytosolic ribosome translation Ecdysteroid kinase proton transmembrane transport

Sulfotransferase domain

Serine carboxypeptidase

peptide biosynthetic process large ribosomal subunit ABC transporter transmembrane region cellular amide metabolic process mitochondrial protein complex

Papain family cysteine protease

cytosolic large ribosomal subunit c. domain of DAPkinase short chain dehydrogenase

CSEPT GUT

DP-ribosylation factor family carbohydrate derivative metabolic process active transmembrane transporter activity
Sugar (and other) transporter
Ribosomal protein L7Ae/L30e/S12 peptide biosynthetic process peptide metabolic process hydrolase activity, hydrolyzing O-glycosyl compounds ribosomal subunit ribosome Basic region leucine zipper translation structural constituent of ribosome EF-hand domain orter cytosol cytosolic ribosome ABC transporter **Cytosol Cytosolic ribosome**UDP-glucoronosyl and UDP-glucosyl transferase

bZIP transcription factor Ras family cytoplasmic translation Cathepsin propeptide inhibitor domain (I29) Ras family cytosolic large ribosomal subunit large ribosomal subunit lysteroid kinase-like family cytosolic small ribosomal subunit Glycosyl hydrolases family 18

hydrolase activity, acting on glycosyl bonds amide biosynthetic process Major Facilitator Superfamily

Nose resistant-to-fluoxetine protein, N-terminal domain carbohydrate metabolic process cellular amide metabolic process

CIMPU GUT

monovalent inorganic cation transport electron transport chain Major Facilitator Superfamily Cathepsin propeptide inhibitor domain (I29)

Ecdysteroid kinase-like family proton-transporting two-sector ATPase complex

Sulfotransferase domain Glutathione S-transferase, N-terminal domain Choline/ethanolamine kinase inner mitochondrial membrane protein complex mitochondrial protein complex ABC transporter transmembrane region nucleobase—containing small molecule metabolic process

Nose resistant—to-fluoxetine protein. N—terminal domain Carbovylesterase family Carbohydrate derivative metabolic process teine protease organelle inner mombrane ion transport proton transmembrane transport ABC transport ABC transporter Sulfate permease family proton transmembrane transporter activity UDP-glucoronosyl and UDP-glucosyl transferase transferase activity, transferring hexosyl groups Lipocalin-like domain
Sugar (and other) transporter Lipocalin / cytosolic fatty-acid binding protein family
drug metabolic process mitochondrial envelope

Chitin binding Peritrophin-A domain

active transmembrane transporter activity organelle membrane cellular response to xenobiotic stimulus Glutathion athione S-transferase, N-terminal domain mitochondrial inner membrane

Haemolymph juvenile hormone binding protein (JHBP)

CMONT LEG

Lipocalin / cytosolic fatty-acid binding protein family

Bacterial extracellular solute-binding proteins, family 3

Receptor family ligand binding region Glycosyl hydrolases family 18 striated muscle cell differentiation Chitin binding Peritrophin-A domain chitin metabolic process chitin binding striated muscle cell development PDZ domain muscle cell development contractile fiber muscle system process myofibril supramolecular fiber LIM domain EF-hand domain I band myofibril assembly Z disc actin binding supramolecular complex Trypsin muscle cell differentiation actomyosin structure organization Calponin homology (CH) domain cellular component assembly involved in morphogenesis

Ligated ion channel L-glutamate- and glycine-binding site

CSEPT LEG

haloacid dehalogenase-like hydrolase Immunoglobulin domain Immunoglobulin I-set domain Calponin homology (CH) domain Leucine Rich Repeat MYND finger apposition of dorsal and ventral imaginal disc-derived wing surfaces supramolecular complex muscle structure development sarcomere organization striated muscle cell differentiation Hsp70 protein EF hand muscle system process muscle cell development actin binding LIM domai contractile fiber striated muscle cell development sarcomere supramolecular fiber muscle cell differentiation myofibril EF-hand domain EF hand MreB/Mbl protein Lipase myofibril assembly supramolecular polymer actomyosin structure organization cellular component assembly involved in morphogenesis supramolecular fiber organization Chitin binding Peritrophin-A domai Immunoglobulin domain EF-hand domain pair Insect cuticle protein

Annotation a GO

ABC transporter transmembrane region

a Pfam

Count

a 80 **a** 120

a 160

p.adjust a 0.00

a 0.01 a 0.02 a 0.03

a 0.04 a 0.05