Biological Process cellular response to stimulus response to organic substance ubiquitin–dependent protein catabolic process response to chemical cellular metabolic process response to abiotic stimulus protein homooligomerization immune response circulatory system development biosynthetic process anatomical structure formation involved in morphogenesis telencephalon development T cell activation small GTPase mediated signal transduction positive regulation of transcription of nucleolar large rRNA by RNA polymerase I negative regulation of Wht signaling pathway negative regulation of Notch signaling pathway negative regulation of interleukin–6 production negative regulation of interleukin–1 beta production insulin receptor signaling pathway inorganic cation transmembrane transport glutathione biosynthetic process glucose homeostasis fatty acid biosynthetic process detection of stimulus cholesterol transport behavioral response to nicotine amyloid-beta clearance synaptic transmission involved in micturition sulfide oxidation, using sulfide:quinone oxidoreductase sexual reproduction sensory perception of taste response to food regulation of neurotransmitter levels regulation of dendrite morphogenesis regulation of dendrite development protein homotrimerization protein heterooligomerization positive regulation of synaptic transmission positive regulation of protein-containing complex assembly positive regulation of macrophage derived foam cell differentiation positive regulation of cysteine-type endopeptidase activity involved in apoptotic process positive regulation of cholesterol storage plasma lipoprotein particle clearance phosphatidic acid biosynthetic process phagocytosis, engulfment organic substance biosynthetic process neural crest cell development nephron tubule development negative regulation of synaptic assembly at neuromuscular junction negative regulation of Rho protein signal transduction lipoprotein transport leukotriene biosynthetic process intracellular sulfide ion homeostasis hydrogen sulfide metabolic process hormone transport -hemolysis in another organism glucose transmembrane transport -fructose transmembrane transport floor plate development determination of pancreatic left/right asymmetry determination of liver left/right asymmetry dehydroascorbic acid fransport cytolysis -cellular response to cGMP -cellular detoxification of cadmium ion aromatic amino acid metabolic process-anaphase–promoting complex–dependent catabolic processvitamin B6 metabolic process type I pneumocyte differentiation transmembrane receptor protein tyrosine phosphatase signaling pathway transformation of host cell by virus subpallium development stem vascular tissue pattern formation spinal cord dorsal/ventral patterning specification of proximal tubule identity skin epidermis developmen skeletal muscle satellite cell migration retrograde neuronal dense core vesicle transport response to resveratro regulation of the force of skeletal muscle contraction regulation of slow-twitch skeletal muscle fiber contraction regulation of myosin-light-chain-phosphatase activity regulation of mejotic nuclear division regulation of mast cell activation regulation of hydrogen peroxide metabolic process regulation of female gonad development regulation of DNA endoreduplication regulation of adenylate cyclase–activating G protein–coupled receptor signaling pathway regulation of acetylcholine secretion, neurotransmission proximal/distal pattern formation involved in pronephric nephron development protein transport along microtubule protein repair regulation of mast cell activation proline catabolic process positive regulation of transcription from RNA polymerase II promoter in response to stress positive regulation of TORC2 signaling positive regulation of synaptic plasticity positive regulation of synapse maturation positive regulation of skeletal muscle tissue growth positive regulation of RNA biosynthetic process positive regulation of respiratory burst positive regulation of protein—containing complex disassembly positive regulation of protein oxidation positive regulation of protein localization to nucleolus positive regulation of protein inšertion into mitochondrial outer membrane positive regulation of positive chemotaxis to cAMP positive regulation of meiotic cell cycle process involved in oocyte maturation positive regulation of meiotic cell cycle positive regulation of meiotic cell cycle positive regulation of megakaryocyte differentiation positive regulation of lipase activity positive regulation of glycoprotein biosynthetic process positive regulation of glycogen biosynthetic process positive regulation of chemorepellent activity positive regulation of amacrine cell differentiation pore formation in membrane of another organism polyphosphate—mediated signaling positive regulation of protein insertion into mitochondrial outer meml polyphosphate — mediated signaling — peptidyl—lysine oxidation — peptidyl—lysine oxidation — peptidyl—lysine modification to peptidyl—hypusine — peptidyl—arginine N—methylation — ornithine biosynthetic process — oocyte dorsal/ventral axis specification — notochord cell differentiation notochord cell differentiation
Notch signaling pathway involved in arterial endothelial cell fate commitment negative regulation of transcription from RNA polymerase II promoter involved in smooth muscle cell differentiation negative regulation of regulated secretory pathway negative regulation of post-embryonic development negative regulation of interleukin–10 production negative regulation of hydrogen peroxide–mediated programmed cell death negative regulation of rividiogen peroxide—inediated programmed cell dealing—negative regulation of glucocorticoid secretion—negative regulation of feeding behavior—negative regulation of chaperone—mediated protein folding—negative regulation of cellular response to transforming growth factor beta stimulus—negative regulation of cardiac muscle cell differentiation—negative regulation of cardiac muscle filement differentiation—negative regulation of cardiac muscle cell differentiation of cardiac muscle cell diffe muscle filament sliding
molting cycle, collagen and cuticulin–based cuticle
methionyl–tRNA aminoacylation
methionine catabolic process membrane depolarization during cardiac muscle cell action potentia membrane depolarization leukocyte migration involved in inflammatory response leukocyte chemotaxis intercellular transport indercellular transport induced systemic resistance hemangioblast cell differentiation green leaf volatile biosynthetic process glucosinolate biosynthetic process glucose 6-phosphate metabolic process glomus development GABAergic neuron differentiation in basal ganglia forebrain neuron differentiation forebrain neuron differentiation fatty acid derivative biosynthetic process endothelial tip cell fate specification embryonic liver development cytokinin transport craniofacial suture morphogenesis cotyledon vascular tissue pattern formation complement activation, classical pathway citrulline biosynthetic process chondrocyte intercalation involved in growth plate cartilage morphogenesis chemotaxis to folate cerebral cortex GABAergic interneuron fate commitment cerebellar Purkinje cell layer structural organization cerebellar molecular layer formation cerebellar cortex development cellular response to gonadotropin-releasing hormone cellular response to chemical stress cellular defense response cardiolipin acyl-chain remodeling carbohydrate transmembrane transport blastoderm segmentation asexual reproduction antigen transcytosis by M cells in mucosal–associated lymphoid tissue anterograde neuronal dense core vesicle transport activation of transmembrane receptor protein tyrosine kinase activity activation of phospholipase D activity abscisic acid-activated signaling pathway abscisic acid transport 4-hydroxyproline catabolic process

0 5 10 15 20 25

Molecular Function

identical protein binding

oxidoreductase activity

transmembrane transporter activity

monoatomic ion channel activity

enzyme binding

iron ion binding

Wnt-protein binding -

scavenger receptor activity -

monooxygenase activity -

potassium channel activity -

PDZ domain binding

cargo receptor activity -

amyloid-beta binding -

peroxidase activity -

hydro-lyase activity -

Hsp70 protein binding -

carbonate dehydratase activity -

acetylcholine receptor activity -

TORC2 complex binding -

PTB domain binding

ubiquitin-protein transferase activator activity -

sulfide:quinone oxidoreductase activity -

low-density lipoprotein particle binding -

sugar transmembrane transporter activity

hydrolase activity, hydrolyzing N-glycosyl compounds -

dehydroascorbic acid transmembrane transporter activity -

1-acylglycerol-3-phosphate O-acyltransferase activity -

fructose transmembrane transporter activity -

trehalose transmembrane transporter activity -

soluble NSF attachment protein activity -

RNA-3'-phosphate cyclase activity -

protein-lysine 6-oxidase activity protein adenylyltransferase activity

phosphatidic acid transfer activity -

maleylacetoacetate isomerase activity -

isovaleryl–CoA dehydrogenase activity -

peptide–methionine (R)–S–oxide reductase activity

intracellular cAMP-activated cation channel activity -

hydroxymethylglutaryl-CoA reductase (NADPH) activity

glutamate-5-semialdehyde dehydrogenase activity

gamma-glutamylcyclotransferase activity -

ethanolaminephosphotransferase activity -

D-glucose transmembrane transporter activity -

8-methylthiopropyl glucosinolate S-oxygenase activity

4-methylthiopropyl glucosinolate S-oxygenase activity 3-phosphoinositide-dependent protein kinase binding -

3-oxo-5-alpha-steroid 4-dehydrogenase activity

proline dehydrogenase activity

methionine-tRNA ligase activity

leukotriene-A4 hydrolase activity -

insulin-like growth factor II binding

insulin-like growth factor I binding

guanylate cyclase activator activity -

glutamate 5-kinase activity -

insulin receptor activity -

hexokinase activity -

glucokinase activity -

fructokinase activity -

epoxide hydrolase activity

deoxyhypusine synthase activity -

C-4 methylsterol oxidase activity -

butyryl-CoA dehydrogenase activity

adenylate cyclase activator activity

5'-nucleotidase activity -

D5 dopamine receptor binding

lipoic acid binding -

Notch binding glucose binding -

extracellular ligand-gated monoatomic ion channel activity -

acetylcholine-gated monoatomic cation-selective channel activity -

gated channel activity

oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen

FAD binding