

| Names | total | elements |
|---------------------------------------|-------|--|
| Acute F Acute M Protract F Protract M | 51 | regulation of locomotion |
| | | ribonucleoside triphosphate metabolic process |
| | | regulation of synapse structure or activity |
| | | negative regulation of cellular component organization |
| | | cell junction organization |
| | | neuron projection organization |
| | | regulation of transport |
| | | vesicle-mediated transport in synapse |
| | | cytoskeleton organization |
| | | small molecule metabolic process |
| | | organophosphate metabolic process |
| | | positive regulation of protein metabolic process |
| | | macromolecule catabolic process |
| | | plasma membrane bounded cell projection organization |
| | | locomotion |
| | | import into cell |
| | | anterograde trans-synaptic signaling |
| | | cell projection organization |
| | | postsynapse organization |
| | | cytoplasmic translation |
| | | regulation of postsynapse organization |
| | | regulation of anatomical structure morphogenesis |
| | | organonitrogen compound biosynthetic process |
| | | synaptic signaling |
| | | receptor internalization |
| | | nucleotide metabolic process |
| | | cell motility |
| | | vesicle-mediated transport |
| | | peptide metabolic process |
| | | purine-containing compound metabolic process |
| | | purine ribonucleoside triphosphate metabolic process |
| | | regulation of cellular component size |
| | | chemical synaptic transmission |
| | | regulation of cell migration |
| | | regulation of protein localization |
| | | regulation of cellular localization |
| | | positive regulation of molecular function |
| | | intracellular transport |
| | | negative regulation of organelle organization |
| | | cell migration |
| | | regulation of organelle organization |
| | | microtubule-based process |
| | | regulation of synapse organization |
| | | purine nucleoside triphosphate metabolic process |
| | | cellular component disassembly |
| | | microtubule cytoskeleton organization |
| | | synapse organization |
| | | synaptic vesicle cycle |

purine nucleotide metabolic process
 oxidative phosphorylation
 trans-synaptic signaling
 Acute M Protract F Protract M 25 actin filament polymerization
 cytosolic transport
 supramolecular fiber organization
 actin filament organization
 regulation of supramolecular fiber organization
 regulation of cytoskeleton organization
 regulation of cellular component biogenesis
 regulation of protein-containing complex assembly
 actin filament bundle organization
 positive regulation of protein modification process
 regulation of actin filament length
 actin polymerization or depolymerization
 regulation of intracellular transport
 exocytic process
 protein polymerization
 regulation of actin polymerization or depolymerization
 negative regulation of cytoskeleton organization
 dendritic spine organization
 regulation of protein polymerization
 positive regulation of developmental process
 regulation of protein modification process
 protein-containing complex disassembly
 protein depolymerization
 actin filament bundle assembly
 negative regulation of supramolecular fiber
 organization
 Acute F Protract F Protract M 15 actin filament-based process
 proton motive force-driven mitochondrial ATP synthesis
 neurotransmitter secretion
 synaptic vesicle priming
 nucleoside triphosphate biosynthetic process
 purine nucleoside triphosphate biosynthetic process
 ATP metabolic process
 ATP biosynthetic process
 organonitrogen compound catabolic process
 synaptic vesicle exocytosis
 neurotransmitter transport
 ribonucleoside triphosphate biosynthetic process
 purine ribonucleoside triphosphate biosynthetic
 process
 signal release from synapse
 protein catabolic process
 Acute F Acute M Protract F 160 regulation of biological
 quality
 energy derivation by oxidation of organic compounds
 peptide biosynthetic process
 presynapse organization

positive regulation of secretion by cell
amino acid metabolic process
positive regulation of metabolic process
cell morphogenesis
dendrite development
maintenance of postsynaptic specialization structure
establishment of localization in cell
dendritic spine development
synaptic vesicle recycling via endosome
regulation of cell motility
receptor-mediated endocytosis
membrane organization
neuron differentiation
regulation of biological process
protein localization to membrane
establishment of vesicle localization
amide biosynthetic process
neuron development
cellular component organization or biogenesis
nucleoside phosphate metabolic process
regulation of protein metabolic process
developmental process
positive regulation of macromolecule metabolic process
cell population proliferation
system development
macromolecule localization
establishment of protein localization
negative regulation of protein metabolic process
localization
multicellular organism development
organelle localization
regulation of transmembrane transport
positive regulation of transport
cellular macromolecule localization
synaptic vesicle localization
organelle organization
negative regulation of cellular process
cell junction assembly
regulation of protein transport
tRNA aminoacylation
endosomal transport
nervous system development
cell part morphogenesis
maintenance of synapse structure
generation of precursor metabolites and energy
cell development
cellular component biogenesis
regulation of vesicle-mediated transport
cellular metabolic process
establishment of localization

ribonucleotide metabolic process
 regulation of localization
 tRNA aminoacylation for protein translation
 cellular process
 postsynaptic density organization
 regulation of establishment of protein localization
 plasma membrane bounded cell projection morphogenesis
 transport
 presynaptic endocytosis
 generation of neurons
 organonitrogen compound metabolic process
 regulation of response to stimulus
 cellular catabolic process
 regulation of plasma membrane bounded cell projection
 organization
 phosphate-containing compound metabolic process
 protein localization to cell junction
 organic substance transport
 cellular nitrogen compound biosynthetic process
 secretion
 primary metabolic process
 modulation of chemical synaptic transmission
 regulation of trans-synaptic signaling
 purine ribonucleotide metabolic process
 neuron projection development
 Ras protein signal transduction
 regulation of mitochondrion organization
 negative regulation of catabolic process
 regulation of cell communication
 vesicle localization
 positive regulation of cellular process
 synaptic vesicle endocytosis
 positive regulation of cellular component organization
 cell-cell signaling
 nucleobase-containing small molecule metabolic process
 regulation of molecular function
 protein transport
 translation
 mitochondrion organization
 catabolic process
 synaptic vesicle transport
 protein localization to synapse
 negative regulation of biological process
 cell projection morphogenesis
 regulation of cell morphogenesis
 synapse assembly
 protein localization
 regulation of cell projection organization
 cellular response to oxygen levels
 carbohydrate catabolic process

regulation of protein-containing complex disassembly
protein metabolic process
secretion by cell
exocytosis
endocytosis
dendrite morphogenesis
regulation of cellular component organization
nitrogen compound transport
regulation of signaling
endomembrane system organization
regulation of endocytosis
metabolic process
intracellular protein transport
programmed cell death
protein localization to organelle
postsynaptic specialization organization
organic substance catabolic process
neuron projection morphogenesis
synaptic vesicle recycling
vesicle organization
regulation of neuron projection development
cellular component maintenance
regulation of cell population proliferation
mitochondrial transport
positive regulation of cellular metabolic process
cell junction maintenance
positive regulation of biological process
phosphorus metabolic process
cellular component organization
small GTPase mediated signal transduction
carbohydrate metabolic process
translation at postsynapse
aerobic respiration
positive regulation of endocytosis
cell morphogenesis involved in neuron differentiation
cellular response to stress
carbohydrate derivative metabolic process
establishment of organelle localization
translation at presynapse
amide metabolic process
biological regulation
vesicle budding from membrane
cellular component assembly
neurogenesis
regulation of cellular process
regulation of catabolic process
ribose phosphate metabolic process
amino acid activation
organic substance metabolic process
export from cell

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| | | | | positive regulation of nitrogen compound metabolic |
| process | | | | translation at synapse |
| | | | | cellular component morphogenesis |
| | | | | positive regulation of protein localization |
| | | | | cellular localization |
| | | | | localization within membrane |
| | | | | cellular respiration |
| Protract F | Protract M | 30 | | positive regulation of transferase activity |
| | | | | filopodium assembly |
| | | | | endothelium development |
| | | | | cell adhesion |
| membrane | | | | positive regulation of protein localization to |
| | | | | cellular response to endogenous stimulus |
| | | | | regulation of kinase activity |
| | | | | proton motive force-driven ATP synthesis |
| | | | | actin cytoskeleton organization |
| | | | | regulation of protein tyrosine kinase activity |
| | | | | regulation of catalytic activity |
| | | | | regulation of intracellular signal transduction |
| | | | | cellular response to nitrogen compound |
| | | | | regulation of protein localization to membrane |
| | | | | response to endogenous stimulus |
| | | | | response to organonitrogen compound |
| | | | | regulation of transferase activity |
| | | | | regulation of actin cytoskeleton organization |
| | | | | regulation of actin filament organization |
| compartments | | | | vesicle-mediated transport between endosomal |
| | | | | regulation of actin filament polymerization |
| | | | | positive regulation of neuron apoptotic process |
| | | | | developmental growth involved in morphogenesis |
| | | | | regulation of protein localization to cell periphery |
| | | | | regulation of actin filament-based process |
| | | | | growth |
| | | | | response to nitrogen compound |
| | | | | cellular response to organonitrogen compound |
| | | | | regulation of anatomical structure size |
| | | | | developmental growth |
| Acute M | Protract M | 5 | | negative regulation of actin filament polymerization |
| | | | | negative regulation of protein polymerization |
| | | | | viral translational termination-reinitiation |
| | | | | negative regulation of protein-containing complex |
| assembly | | | | negative regulation of dendritic spine maintenance |
| Acute F | Protract M | 3 | | regulation of synaptic vesicle priming |
| | | | | negative regulation of response to stimulus |

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| | alcohol metabolic process |
| Acute M Protract F | 93 glucan metabolic process |
| | response to oxidative stress |
| | regulation of postsynaptic membrane neurotransmitter |
| receptor levels | |
| | regulation of system process |
| | rRNA processing |
| | positive regulation of protein transport |
| | positive regulation of phosphate metabolic process |
| | cell differentiation |
| | NADH dehydrogenase complex assembly |
| | ribosome biogenesis |
| | regulation of synaptic plasticity |
| | negative regulation of transmembrane transport |
| | modulation of excitatory postsynaptic potential |
| | regulation of potassium ion transmembrane transport |
| | Golgi organization |
| | glycogen metabolic process |
| | regulation of microtubule cytoskeleton organization |
| | negative regulation of protein-containing complex |
| disassembly | |
| | positive regulation of cell population proliferation |
| | polysaccharide metabolic process |
| | glycogen catabolic process |
| | regulation of neuron apoptotic process |
| | regulation of developmental process |
| | negative regulation of protein depolymerization |
| | negative regulation of monoatomic ion transmembrane |
| transport | |
| | organelle assembly |
| | regulation of cell shape |
| | regulation of intracellular protein transport |
| | cellular developmental process |
| | negative regulation of cell projection organization |
| | regulation of neurotransmitter receptor activity |
| | vacuole organization |
| | axo-dendritic transport |
| | glucan catabolic process |
| | energy reserve metabolic process |
| | polysaccharide catabolic process |
| | regulation of phosphorylation |
| | establishment of protein localization to mitochondrion |
| | cellular nitrogen compound catabolic process |
| | protein targeting to mitochondrion |
| | positive regulation of cellular component biogenesis |
| | positive regulation of cell projection organization |
| | heterocycle catabolic process |
| | regulation of microtubule-based process |
| | positive regulation of phosphorylation |
| | negative regulation of potassium ion transmembrane |

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|------------------------|---|
| transporter activity | mitochondrial membrane organization regulation of phosphate metabolic process anterograde axonal transport actin filament depolymerization ribosomal large subunit biogenesis regulation of postsynaptic neurotransmitter receptor |
| activity | regulation of signaling receptor activity regulation of protein modification by small protein |
| conjugation or removal | Golgi vesicle transport protein localization to mitochondrion phosphorylation regulation of synapse assembly negative regulation of potassium ion transport neuron apoptotic process organelle disassembly negative regulation of cation transmembrane transport organic cyclic compound catabolic process axonal transport mitochondrial respiratory chain complex assembly protein-containing complex organization positive regulation of phosphorus metabolic process positive regulation of nervous system development protein-containing complex assembly inner mitochondrial membrane organization negative regulation of potassium ion transmembrane |
| transport | positive regulation of organelle organization positive regulation of intracellular transport negative regulation of actin filament depolymerization regulation of protein depolymerization regulation of cell junction assembly mitochondrial respiratory chain complex I assembly presynapse assembly regulation of binding endoplasmic reticulum to Golgi vesicle-mediated |
| transport | protein targeting regulation of actin filament depolymerization regulation of phosphorus metabolic process nucleobase-containing compound catabolic process regulation of small molecule metabolic process positive regulation of establishment of protein |
| localization | aromatic compound catabolic process regulation of potassium ion transport positive regulation of intracellular protein transport neurotransmitter receptor internalization |

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|--------------------|--|
| | circulatory system process |
| | protein-containing complex localization |
| | regulation of nervous system process |
| Acute F Protract F | 133 regulation of metal ion transport |
| | regulation of proteolysis involved in protein |
| catabolic process | |
| | regulation of neuronal synaptic plasticity |
| | regulation of transporter activity |
| | alpha-amino acid metabolic process |
| | peptide secretion |
| | establishment of protein localization to extracellular |
| region | |
| | purine ribonucleotide biosynthetic process |
| | presynaptic dense core vesicle exocytosis |
| | protein localization to cell periphery |
| | positive regulation of insulin secretion |
| | behavior |
| | response to stimulus |
| | protein localization to extracellular region |
| | regulation of signal transduction |
| | protein secretion |
| | negative regulation of molecular function |
| | regulation of secretion |
| | inorganic cation transmembrane transport |
| | regulation of ubiquitin-dependent protein catabolic |
| process | |
| | nucleoside monophosphate metabolic process |
| | regulation of peptide hormone secretion |
| | proteolysis involved in protein catabolic process |
| | monosaccharide catabolic process |
| | regulation of amyloid precursor protein catabolic |
| process | |
| | amide transport |
| | locomotory behavior |
| | negative regulation of proteolysis involved in protein |
| catabolic process | |
| | regulation of monoatomic ion transmembrane transporter |
| activity | |
| | regulation of regulated secretory pathway |
| | response to endoplasmic reticulum stress |
| | nucleoside phosphate biosynthetic process |
| | receptor localization to synapse |
| | positive regulation of peptide secretion |
| | modification-dependent protein catabolic process |
| | epithelial cell development |
| | regulation of proteasomal ubiquitin-dependent protein |
| catabolic process | |
| | positive regulation of protein secretion |
| | positive regulation of programmed cell death |
| | insulin secretion |

negative regulation of proteasomal protein catabolic process

process

ATP synthesis coupled electron transport

axon development

hormone secretion

neuron cellular homeostasis

amino acid transport

cell death

regulation of peptide transport

ribonucleotide biosynthetic process

proteasome-mediated ubiquitin-dependent protein

catabolic process

cellular homeostasis

aerobic electron transport chain

regulation of neurotransmitter secretion

positive regulation of apoptotic process

organic acid metabolic process

ubiquitin-dependent protein catabolic process

regulation of hormone secretion

cellular response to hypoxia

positive regulation of peptide hormone secretion

regulation of transmembrane transporter activity

nucleotide biosynthetic process

positive regulation of hormone secretion

ribose phosphate biosynthetic process

brain development

signal release

anterograde axonal protein transport

monoatomic cation transmembrane transport

respiratory electron transport chain

protein localization to presynapse

cytoskeleton-dependent intracellular transport

regulation of secretion by cell

regulation of synaptic vesicle exocytosis

monoatomic ion transport

regulation of protein secretion

positive regulation of secretion

positive regulation of aspartic-type endopeptidase

activity involved in amyloid precursor protein catabolic process

nucleoside triphosphate metabolic process

intrinsic apoptotic signaling pathway

regulation of proteolysis

process utilizing autophagic mechanism

hormone transport

protein localization to plasma membrane

purine nucleotide biosynthetic process

intracellular signal transduction

regulation of peptide secretion

endothelial cell development

carboxylic acid catabolic process

apoptotic process
 monoatomic cation transport
 purine nucleoside monophosphate metabolic process
 positive regulation of aspartic-type peptidase
 activity
 anatomical structure development
 regulation of programmed cell death
 negative regulation of protein localization
 autophagy
 monoatomic ion transmembrane transport
 organic acid catabolic process
 regulated exocytosis
 mitochondrial electron transport, NADH to ubiquinone
 peptide hormone secretion
 regulation of monoatomic ion transport
 peptide transport
 regulation of protein catabolic process
 oxoacid metabolic process
 negative regulation of ubiquitin-dependent protein
 catabolic process
 regulation of neurotransmitter levels
 pallium development
 signaling
 purine-containing compound biosynthetic process
 inorganic ion transmembrane transport
 regulation of insulin secretion
 cellular response to decreased oxygen levels
 proteasomal protein catabolic process
 regulation of neurotransmitter transport
 regulation of monoatomic ion transmembrane transport
 mitochondrial ATP synthesis coupled electron transport
 transport along microtubule
 establishment of endothelial barrier
 carboxylic acid metabolic process
 cell communication
 axonogenesis
 organophosphate biosynthetic process
 small molecule biosynthetic process
 regulation of proteasomal protein catabolic process
 apoptotic signaling pathway
 modification-dependent macromolecule catabolic process
 microtubule-based transport
 proteolysis
 electron transport chain
 regulation of membrane potential
 regulation of apoptotic process
 small molecule catabolic process
 regulation of monoatomic cation transmembrane
 transport
 Acute F Acute M 27 synaptic vesicle budding from presynaptic

endocytic zone membrane

regulation of synaptic vesicle recycling
synaptic vesicle clustering
citrate metabolic process
viral translation
protein folding
response to abiotic stimulus
regulation of dendritic spine morphogenesis
release of cytochrome c from mitochondria
positive regulation of amide metabolic process
positive regulation of synaptic vesicle clustering
positive regulation of neuron projection development
protein modification process
positive regulation of synaptic vesicle recycling
regulation of amide metabolic process
apoptotic mitochondrial changes
nitrogen compound metabolic process
macromolecule modification
peptidyl-amino acid modification
regulation of synaptic vesicle endocytosis
dendritic spine morphogenesis
response to stress
regulation of dendrite development
regulation of dendritic spine development
positive regulation of dendritic spine development
mitochondrial electron transport, cytochrome c to

oxygen

Protract M
positive regulation of synaptic vesicle endocytosis
207 branching morphogenesis of an epithelial tube
central nervous system vasculogenesis
coronary vasculature development
regulation of anion channel activity
synaptic transmission, glutamatergic
regulation of steroid biosynthetic process
regulation of determination of dorsal identity
nephron epithelium development
morphogenesis of an endothelium
regulation of guanyl-nucleotide exchange factor

activity

positive regulation of sulfur metabolic process
glycerol-3-phosphate metabolic process
vasculogenesis
limb joint morphogenesis
neural plate development
developmental induction
organic hydroxy compound biosynthetic process
actin-myosin filament sliding
renal vesicle formation
cellular response to fibroblast growth factor stimulus
renal tubule morphogenesis

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|---------------------------------------|--|
| | specification of animal organ identity |
| | nephron tubule development |
| | regulation of endothelial cell chemotaxis to |
| fibroblast growth factor | anagen |
| | maintenance of protein location |
| | ureteric bud elongation |
| | regulation of epithelial cell proliferation involved |
| in prostate gland development | alditol catabolic process |
| | biological phase |
| | regulation of mesenchymal to epithelial transition |
| involved in metanephros morphogenesis | oviduct development |
| | regulation of locomotion involved in locomotory |
| behavior | |
| | negative regulation of p38MAPK cascade |
| | neuron projection maintenance |
| | regulation of steroid metabolic process |
| | nephron epithelium morphogenesis |
| | negative regulation of protein sumoylation |
| | negative regulation of interleukin-2 production |
| | mesonephric epithelium development |
| | mesenchymal stem cell differentiation |
| | protein maturation by [4Fe-4S] cluster transfer |
| | negative regulation of cholesterol metabolic process |
| | protein localization to early endosome |
| | antigen receptor-mediated signaling pathway |
| | regulation of branching involved in lung morphogenesis |
| | embryonic foregut morphogenesis |
| | negative regulation of cholesterol biosynthetic |
| process | |
| | lung-associated mesenchyme development |
| | cholesterol metabolic process |
| | mesonephric tubule development |
| | foregut morphogenesis |
| | adherens junction assembly |
| | endothelial cell chemotaxis to fibroblast growth |
| factor | |
| | establishment of centrosome localization |
| | IRES-dependent viral translational initiation |
| | cellular response to indole-3-methanol |
| | cholesterol biosynthetic process |
| | membrane to membrane docking |
| | polyol catabolic process |
| | positive regulation of endothelial cell |
| differentiation | |
| | endothelial cell differentiation |
| | determination of dorsal identity |
| | mesenchymal cell proliferation involved in lung |

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|---------------------------|---|
| development | regulation of cell chemotaxis to fibroblast growth |
| factor | negative regulation of signal transduction sterol metabolic process dorsal/ventral axis specification renal tubule development regulation of hair follicle maturation mesenchymal to epithelial transition involved in |
| metanephros morphogenesis | positive regulation of sterol biosynthetic process regulation of endothelial tube morphogenesis regulation of animal organ formation regulation of cholesterol biosynthetic process centromeric sister chromatid cohesion regulation of T cell receptor signaling pathway coronary vasculature morphogenesis postsynaptic cytoskeleton organization positive regulation of core promoter binding fibroblast growth factor receptor signaling pathway sequestering of actin monomers striated muscle cell proliferation postsynaptic actin cytoskeleton organization astral microtubule organization alcohol biosynthetic process response to fibroblast growth factor cardioblast proliferation cell-cell adhesion secondary alcohol biosynthetic process regulation of cell projection size postsynaptic density protein 95 clustering fungiform papilla morphogenesis positive regulation of cholesterol biosynthetic |
| process | regulation of nephron tubule epithelial cell |
| differentiation | negative regulation of sterol biosynthetic process dorsal root ganglion development muscle filament sliding primary amino compound biosynthetic process negative regulation of guanyl-nucleotide exchange |
| factor activity | secondary alcohol metabolic process regulation of antigen receptor-mediated signaling |
| pathway | positive regulation of protein localization to plasma |
| membrane | ureteric bud morphogenesis mesonephros development regulation of glutamate receptor signaling pathway |

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|-------------------|--|
| | trachea morphogenesis |
| | regulation of lipid metabolic process |
| | regulation of cardioblast proliferation |
| process | positive regulation of proteoglycan biosynthetic |
| | regulation of cytoplasmic transport |
| | ventricular compact myocardium morphogenesis |
| | heart growth |
| | endothelial tube morphogenesis |
| | negative regulation of long-term synaptic potentiation |
| endosome | positive regulation of protein localization to early |
| | cell chemotaxis to fibroblast growth factor |
| | serotonin biosynthetic process |
| | regulation of microvillus length |
| | mesonephric tubule morphogenesis |
| | protein localization to cell cortex |
| | hepatocyte growth factor receptor signaling pathway |
| | ureteric bud development |
| | regulation of sterol biosynthetic process |
| | regulation of timing of anagen |
| | modulation of inhibitory postsynaptic potential |
| | neuron fate determination |
| | Schwann cell proliferation |
| | hair follicle placode formation |
| | interleukin-2 production |
| pathway | negative regulation of intrinsic apoptotic signaling |
| stimulus | cellular response to insulin-like growth factor |
| | organic hydroxy compound metabolic process |
| | negative regulation of antigen receptor-mediated |
| signaling pathway | epithelial cell differentiation involved in prostate |
| gland development | |
| | transmembrane receptor protein tyrosine kinase |
| signaling pathway | positive regulation of protein localization to cell |
| periphery | |
| | Wnt signaling pathway involved in heart development |
| | glycerol catabolic process |
| | branching involved in ureteric bud morphogenesis |
| | steroid biosynthetic process |
| | [2Fe-2S] cluster assembly |
| | regulation of morphogenesis of an epithelium |
| | epithelial cell proliferation involved in prostate |
| gland development | |
| | regulation of alcohol biosynthetic process |
| | negative regulation of signaling |
| | determination of dorsal/ventral asymmetry |

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| | regulation of secondary heart field cardioblast |
| proliferation | coronary artery morphogenesis |
| | fungiform papilla development |
| | canonical Wnt signaling pathway involved in regulation |
| of cell proliferation | acinar cell differentiation |
| | enzyme-linked receptor protein signaling pathway |
| | regulation of interleukin-2 production |
| | cellular response to peptide |
| | kidney morphogenesis |
| | cranial ganglion development |
| | positive regulation of early endosome to late endosome |
| transport | |
| transport | regulation of early endosome to late endosome |
| | primary lung bud formation |
| | hair cycle phase |
| | neurotransmitter loading into synaptic vesicle |
| | thrombin-activated receptor signaling pathway |
| | indole-containing compound biosynthetic process |
| | activation of protein kinase activity |
| | regulation of ATP-dependent activity |
| | response to indole-3-methanol |
| | negative regulation of T cell receptor signaling |
| pathway | |
| | negative regulation of oxidative stress-induced neuron |
| intrinsic apoptotic signaling pathway | |
| | maintenance of protein location in cell |
| | kidney epithelium development |
| | nephron tubule morphogenesis |
| | sympathetic ganglion development |
| | T cell receptor signaling pathway |
| | skin epidermis development |
| | positive regulation of animal organ morphogenesis |
| | regulation of actin filament bundle assembly |
| | nephron tubule epithelial cell differentiation |
| | negative regulation of lipid kinase activity |
| | regulation of core promoter binding |
| | negative regulation of actin filament bundle assembly |
| | tongue morphogenesis |
| | sterol biosynthetic process |
| | regulation of animal organ morphogenesis |
| | establishment of blood-retinal barrier |
| | early endosome to late endosome transport |
| | embryonic skeletal joint morphogenesis |
| | positive regulation of fibroblast growth factor |
| receptor signaling pathway | |
| | regulation of protein localization to plasma membrane |
| | ectodermal placode formation |

organ induction
 smooth muscle cell differentiation
 regulation of protein localization to early endosome
 Wnt signaling pathway involved in midbrain
 dopaminergic neuron differentiation
 cardiac muscle tissue growth
 regulation of cholesterol metabolic process
 ectodermal placode morphogenesis
 ectoderm development
 cardiac muscle cell proliferation
 trachea formation
 negative regulation of cell communication
 nephron development
 negative regulation of intracellular signal
 transduction
 canonical Wnt signaling pathway involved in osteoblast
 differentiation
 negative regulation of lipid metabolic process
 nephron morphogenesis
 animal organ formation
 Protract F 489 head development
 autophagosome assembly
 purine deoxyribonucleoside metabolic process
 establishment of protein localization to membrane
 regulation of glucose import
 regulation of long-term neuronal synaptic plasticity
 protein localization to endosome
 aspartate family amino acid metabolic process
 positive regulation of secretory granule organization
 deoxyribose phosphate metabolic process
 purine nucleoside monophosphate catabolic process
 regulation of microtubule polymerization
 regulation of membrane depolarization
 amino acid biosynthetic process
 neuromuscular junction development
 intracellular monoatomic cation homeostasis
 myelination in peripheral nervous system
 glutathione catabolic process
 regulation of cell-substrate junction organization
 cell cycle
 extracellular vesicle biogenesis
 response to nerve growth factor
 deoxyribonucleotide metabolic process
 dense core granule exocytosis
 alpha-amino acid biosynthetic process
 nerve growth factor signaling pathway
 cell cycle process
 negative regulation of fatty acid transport
 fatty acid oxidation
 multicellular organismal process

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| | negative regulation of glucose transmembrane transport |
| | establishment of apical/basal cell polarity |
| | insulin secretion involved in cellular response to |
| glucose stimulus | |
| | neuromuscular process |
| | purine nucleotide salvage |
| | establishment or maintenance of microtubule |
| cytoskeleton polarity | |
| | cellular response to chemical stimulus |
| | regulation of nervous system development |
| | intracellular chemical homeostasis |
| | nucleoside bisphosphate biosynthetic process |
| | regulation of protein localization to synapse |
| | regulation of exocytosis |
| | regulation of presynapse assembly |
| | protein localization to postsynaptic specialization |
| membrane | |
| | ribosomal large subunit assembly |
| | positive regulation of motor neuron apoptotic process |
| | regulation of heart contraction |
| | axon guidance |
| | regulation of protein localization to cell surface |
| | regulation of action potential |
| | lipid catabolic process |
| | phospholipid biosynthetic process |
| | regulation of non-canonical NF-kappaB signal |
| transduction | |
| | aspartate family amino acid biosynthetic process |
| | cytokinesis |
| | regulation of aspartic-type peptidase activity |
| | pyruvate metabolic process |
| | calcium ion transmembrane transport |
| | activation of GTPase activity |
| | fructose 1,6-bisphosphate metabolic process |
| | nucleotide salvage |
| | endothelial cell migration |
| | adherens junction maintenance |
| | regulation of hydrolase activity |
| | membrane depolarization during cardiac muscle cell |
| action potential | |
| | regulation of modification of synaptic structure |
| | cell division |
| | regulation of oxidoreductase activity |
| | regulation of potassium ion transmembrane transporter |
| activity | |
| | regulation of SA node cell action potential |
| | regulation of generation of precursor metabolites and |
| energy | |
| | organelle fusion |
| | membrane depolarization |

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| | regulation of GTPase activity regulation of apoptotic signaling pathway positive regulation of response to stimulus hexose transmembrane transport myelin assembly fatty acid catabolic process negative regulation of multicellular organismal |
| process | glutamine metabolic process polarized epithelial cell differentiation fatty acid metabolic process positive regulation of lipid kinase activity neurotransmitter receptor transport to postsynaptic |
| membrane | positive regulation of signal transduction protein localization to postsynapse developmental cell growth regulation of epithelial cell migration establishment or maintenance of cell polarity positive regulation of membrane potential cellular response to stimulus positive regulation of intrinsic apoptotic signaling |
| pathway by p53 class mediator | sterol transport glial cell differentiation Rac protein signal transduction regulation of organic acid transport positive regulation of actin filament bundle assembly glucose metabolic process intracellular glucose homeostasis negative regulation of phosphorus metabolic process actin filament-based movement oligodendrocyte differentiation cellular response to cGMP positive regulation of supramolecular fiber |
| organization | establishment of epithelial cell polarity myelination establishment of cell polarity cellular response to growth factor stimulus carbohydrate derivative catabolic process regulation of cell-matrix adhesion modification of synaptic structure heart process protein localization to cell surface regulation of endothelial cell migration axon ensheathment Schwann cell development purine-containing compound salvage negative regulation of nervous system development |

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| | cell-cell junction maintenance |
| | calcium ion-regulated exocytosis of neurotransmitter |
| | forebrain neuron differentiation |
| | tissue migration |
| | actomyosin structure organization |
| | positive regulation of oxidoreductase activity |
| | deoxyribonucleoside metabolic process |
| | maintenance of presynaptic active zone structure |
| | cell-cell junction assembly |
| | negative regulation of protein modification process |
| | regulation of presynaptic cytosolic calcium ion |
| concentration | |
| | positive regulation of dendrite extension |
| | glucose transmembrane transport |
| | regulation of microtubule depolymerization |
| | nerve development |
| | negative regulation of cardiac muscle contraction |
| | positive regulation of cAMP-dependent protein kinase |
| activity | |
| | regulation of monooxygenase activity |
| | cell growth |
| | nucleoside metabolic process |
| | glucose import |
| | GMP catabolic process |
| | GTP metabolic process |
| | animal organ development |
| | phenylalanyl-tRNA aminoacylation |
| | autophagy of mitochondrion |
| | plasma membrane organization |
| | visual behavior |
| | protein insertion into mitochondrial membrane |
| | pentose-phosphate shunt |
| | dGMP catabolic process |
| | microtubule polymerization |
| | protein transport along microtubule |
| | cell projection assembly |
| | cellular response to interleukin-7 |
| | regulation of plasma membrane bounded cell projection |
| assembly | |
| | neurotransmitter receptor localization to postsynaptic |
| specialization | membrane |
| | mitochondrion disassembly |
| | positive regulation of pinocytosis |
| | Schwann cell differentiation |
| | negative regulation of glial cell differentiation |
| | regulation of amine transport |
| | negative regulation of transferase activity |
| | positive regulation of microtubule polymerization or |
| depolymerization | |
| | regulation of gliogenesis |

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| | regulation of presynapse organization anterograde neuronal dense core vesicle transport long-chain fatty acid import into cell regulation of protein serine/threonine kinase activity membrane fusion carboxylic acid biosynthetic process regulation of protein kinase activity ribonucleoside biphosphate biosynthetic process monosaccharide transmembrane transport organic anion transport uropod organization regulation of blood circulation positive regulation of kinase activity positive regulation of epithelial cell migration cellular lipid catabolic process cellular response to nitrogen levels positive regulation of intracellular signal |
| transduction | negative regulation of locomotion glycerolipid metabolic process blood circulation ruffle assembly glucose homeostasis negative regulation of bicellular tight junction |
| assembly | neuron maturation negative regulation of striated muscle contraction monoatomic cation homeostasis regulation of synaptic transmission, GABAergic cortical actin cytoskeleton organization positive regulation of stress fiber assembly cellular metabolic compound salvage synaptic vesicle fusion to presynaptic active zone |
| membrane | homeostatic process protein localization to basolateral plasma membrane sodium ion transport positive regulation of purine nucleotide metabolic |
| process | carbohydrate derivative biosynthetic process blood vessel morphogenesis lipid metabolic process 2'-deoxyribonucleotide metabolic process COPII-coated vesicle budding negative regulation of transport intracellular calcium ion homeostasis cardiac muscle cell action potential positive regulation of cell-matrix adhesion response to acetylcholine icosanoid biosynthetic process |

purine ribonucleotide catabolic process
 epithelial cell migration
 regulation of post-translational protein modification
 organophosphate catabolic process
 postsynaptic membrane organization
 regulation of purine nucleotide metabolic process
 regulation of calcium ion-dependent exocytosis
 positive regulation of cytoskeleton organization
 negative regulation of regulated secretory pathway
 response to growth factor
 organic acid transport
 regulation of amyloid fibril formation
 glial cell development
 positive regulation of filopodium assembly
 cell-substrate junction organization
 action potential
 paranodal junction assembly
 regulation of nitric oxide metabolic process
 negative regulation of microtubule polymerization or
 depolymerization
 hippocampus development
 exosomal secretion
 neuron projection extension
 glycophyagy
 negative regulation of catalytic activity
 limbic system development
 monocarboxylic acid metabolic process
 vesicle-mediated cholesterol transport
 carbohydrate transmembrane transport
 fatty acid beta-oxidation
 gliogenesis
 regulation of ubiquitin protein ligase activity
 extracellular exosome biogenesis
 hexose metabolic process
 selective autophagy
 nucleoside phosphate catabolic process
 regulation of cytosolic calcium ion concentration
 negative regulation of developmental process
 regulation of anterograde dense core granule transport
 regulation of microtubule polymerization or
 depolymerization
 gamma-aminobutyric acid secretion
 forebrain neuron development
 regulation of hormone levels
 adult behavior
 lipid biosynthetic process
 GMP metabolic process
 deoxyribonucleoside monophosphate metabolic process
 visual learning
 positive regulation of hydrolase activity

endocytic recycling
 leucine catabolic process
 regulation of cardiac muscle cell membrane potential
 vesicle fusion
 purine-containing compound catabolic process
 carbohydrate homeostasis
 focal adhesion assembly
 developmental maturation
 synaptic transmission, GABAergic
 clustering of voltage-gated sodium channels
 regulation of sodium ion transmembrane transport
 regulation of heart rate by cardiac conduction
 negative regulation of secretion
 autophagosome organization
 regulation of sodium ion transport
 T-tubule organization
 cell communication involved in cardiac conduction
 cellular response to nerve growth factor stimulus
 negative regulation of cell motility
 positive regulation of apoptotic signaling pathway
 glyceraldehyde-3-phosphate metabolic process
 synaptic vesicle endosomal processing
 cellular lipid metabolic process
 inorganic ion homeostasis
 regulation of superoxide anion generation
 protein deneddylation
 cold-induced thermogenesis
 regulation of Rac protein signal transduction
 retrograde axonal transport
 purine nucleotide catabolic process
 deoxyribonucleoside monophosphate catabolic process
 response to salt
 positive regulation of signaling
 monosaccharide metabolic process
 pentose-phosphate shunt, non-oxidative branch
 ruffle organization
 regulation of vesicle transport along microtubule
 calcium-ion regulated exocytosis
 negative regulation of microtubule depolymerization
 regulation of nitric oxide biosynthetic process
 establishment or maintenance of bipolar cell polarity
 positive regulation of protein-containing complex

assembly

mitochondrial calcium ion transmembrane transport
 regulation of cAMP-dependent protein kinase activity
 negative regulation of neuron projection development
 cellular response to salt
 macroautophagy
 positive regulation of developmental growth
 positive regulation of nitric-oxide synthase activity

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| | lipid modification |
| | NADPH regeneration |
| | regulation of heart rate |
| | ameboidal-type cell migration |
| | response to interleukin-7 |
| | cell-substrate adhesion |
| | second-messenger-mediated signaling |
| | receptor clustering |
| | regulation of nitric-oxide synthase activity |
| | regulation of protein phosphorylation |
| | deoxyribonucleotide catabolic process |
| | negative regulation of actin nucleation |
| | positive regulation of nucleotide metabolic process |
| | regulation of lipid kinase activity |
| | purine deoxyribonucleoside monophosphate metabolic |
| process | |
| | neurotrophin signaling pathway |
| | lipid transport across blood-brain barrier |
| | lipid oxidation |
| pathway | G protein-coupled acetylcholine receptor signaling |
| | cellular response to nitrogen starvation |
| | regulation of multicellular organismal process |
| | microtubule-based protein transport |
| | positive regulation of cell communication |
| | epinephrine secretion |
| | establishment of epithelial cell apical/basal polarity |
| | regulation of receptor localization to synapse |
| | central nervous system neuron development |
| | cell-cell junction organization |
| | glycolytic process |
| | leucine metabolic process |
| | cardiac conduction |
| | negative regulation of kinase activity |
| | exocytic insertion of neurotransmitter receptor to |
| postsynaptic membrane | |
| | establishment or maintenance of apical/basal cell |
| polarity | |
| | regulation of filopodium assembly |
| | positive regulation of post-translational protein |
| modification | |
| | metal ion transport |
| | negative regulation of neurogenesis |
| | sulfur compound metabolic process |
| | negative regulation of programmed cell death |
| | regulation of secretory granule organization |
| | peptidyl-threonine phosphorylation |
| | regulation of cation channel activity |
| | response to oxygen-containing compound |
| | positive regulation of extrinsic apoptotic signaling |

pathway

homeostasis of number of cells within a tissue
response to organic cyclic compound
positive regulation of microtubule nucleation
synaptic vesicle to endosome fusion
positive regulation of locomotion
adherens junction organization
cell surface receptor signaling pathway
cell-matrix adhesion
purine deoxyribonucleotide metabolic process
positive regulation of protein kinase activity
heart contraction
cell-substrate junction assembly
regulation of multicellular organism growth
transmission of nerve impulse
gamma-aminobutyric acid transport
regulation of reactive oxygen species metabolic

process

organelle membrane fusion
forebrain development
positive regulation of reactive oxygen species

metabolic process

neurotransmitter receptor transport to plasma membrane
positive regulation of extrinsic apoptotic signaling

pathway in absence of ligand

calcium ion homeostasis
glycosyl compound metabolic process
sulfur compound biosynthetic process
regulation of dense core granule transport
dendrite extension
regulation of long-chain fatty acid import into cell
vesicle-mediated transport to the plasma membrane
negative regulation of cell migration
purine nucleoside monophosphate biosynthetic process
long-chain fatty acid transport
positive regulation of protein polymerization
regulation of glucose transmembrane transport
positive regulation of catalytic activity
neuron projection guidance
positive regulation of growth
cellular response to organic substance
purine nucleoside metabolic process
podocyte cell migration
adenylate cyclase-activating adrenergic receptor

signaling pathway

cortical cytoskeleton organization
positive regulation of endothelial cell migration
monoatomic ion homeostasis
regulation of long-chain fatty acid import across

plasma membrane

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| | actin nucleation |
| | positive regulation of amyloid fibril formation |
| | regulation of cold-induced thermogenesis |
| | adult locomotory behavior |
| | regulation of membrane depolarization during cardiac |
| muscle cell action potential | |
| | regulation of neurogenesis |
| | positive regulation of cell motility |
| | positive regulation of insulin secretion involved in |
| cellular response to glucose stimulus | |
| | neuromuscular process controlling balance |
| | negative regulation of proteasomal ubiquitin-dependent |
| protein catabolic process | |
| | cristae formation |
| | regulation of growth |
| | deoxyribose phosphate catabolic process |
| | epithelium migration |
| | regulation of cell projection assembly |
| | monocarboxylic acid catabolic process |
| | Rap protein signal transduction |
| | neuron cell-cell adhesion |
| | lipid transport |
| | anatomical structure morphogenesis |
| | mitochondrial respirasome assembly |
| | calcium import into the mitochondrion |
| | purine nucleoside bisphosphate biosynthetic process |
| | negative regulation of cell population proliferation |
| | regulation of membrane depolarization during action |
| potential | |
| | anatomical structure formation involved in |
| morphogenesis | |
| | early endosome to recycling endosome transport |
| | cellular response to organic cyclic compound |
| | negative regulation of synaptic vesicle exocytosis |
| | positive regulation of microtubule polymerization |
| | central nervous system development |
| | negative regulation of oligodendrocyte differentiation |
| | membrane depolarization during action potential |
| | phospholipid metabolic process |
| | positive regulation of cell-substrate junction |
| organization | |
| | lipid import into cell |
| | regulation of dendrite extension |
| | sensory perception of pain |
| | neuronal ion channel clustering |
| | negative regulation of phosphate metabolic process |
| | regulation of establishment or maintenance of cell |
| polarity | |
| | endosome to lysosome transport |
| | peripheral nervous system axon ensheathment |

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| | regulation of epinephrine secretion |
| | establishment or maintenance of monopolar cell |
| polarity | ensheathment of neurons positive regulation of sodium ion transport regulation of glial cell differentiation muscle contraction positive regulation of GTPase activity non-canonical NF-kappaB signal transduction central nervous system neuron differentiation negative regulation of blood circulation response to organic substance establishment or maintenance of cytoskeleton polarity negative regulation of protein catabolic process establishment or maintenance of epithelial cell |
| apical/basal polarity | protein localization to postsynaptic membrane positive regulation of small molecule metabolic |
| process | regulation of epidermal growth factor-activated |
| receptor activity | positive regulation of cell migration positive regulation of protein serine/threonine kinase |
| activity | microtubule polymerization or depolymerization positive regulation of dense core granule transport regulation of protein binding establishment of monopolar cell polarity positive regulation of vesicle transport along |
| microtubule | carboxylic acid transport regulation of developmental growth chemical homeostasis response to cGMP organic acid biosynthetic process adaptive thermogenesis nucleotide catabolic process positive regulation of anterograde dense core granule |
| transport | regulation of aspartic-type endopeptidase activity |
| involved in amyloid precursor protein catabolic process | regulation of cell size intracellular monoatomic ion homeostasis regulation of protein localization to nucleus transmembrane transport epithelium development cellular response to acetylcholine glutamine family amino acid metabolic process nucleoside monophosphate biosynthetic process regulation of cell growth |

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| | plasma membrane bounded cell projection assembly |
| | establishment of protein localization to postsynaptic |
| membrane | |
| | epithelial cell differentiation |
| | nucleoside monophosphate catabolic process |
| | positive regulation of receptor binding |
| | positive regulation of excitatory postsynaptic |
| potential | |
| | carbohydrate transport |
| | cellular response to oxygen-containing compound |
| Acute M 162 | mRNA export from nucleus |
| | positive regulation of Schwann cell migration |
| | physiological cardiac muscle hypertrophy |
| | cytoplasmic translational initiation |
| | aminoacyl-tRNA metabolism involved in translational |
| fidelity | |
| | regulation of translation |
| | positive regulation of translation |
| | nuclear-transcribed mRNA catabolic process, nonsense- |
| mediated decay | |
| | fatty acid biosynthetic process |
| | nuclear-transcribed mRNA catabolic process |
| | regulation of NMDA receptor activity |
| | positive regulation of mitochondrion organization |
| | actin filament capping |
| | positive regulation of lymphocyte chemotaxis |
| | microtubule severing |
| | regulation of unsaturated fatty acid biosynthetic |
| process | |
| | ribosomal small subunit biogenesis |
| | R-loop processing |
| | microtubule anchoring |
| | positive regulation of mRNA binding |
| | positive regulation of hexokinase activity |
| | mRNA destabilization |
| | negative regulation of translation |
| | regulation of vesicle size |
| | regulation of intrinsic apoptotic signaling pathway in |
| response to osmotic stress | |
| | positive regulation of inhibitory postsynaptic |
| potential | |
| | protein dephosphorylation |
| | clathrin-dependent endocytosis |
| | postsynaptic neurotransmitter receptor internalization |
| | RNA transport |
| | lipid tube assembly |
| | regulation of mRNA catabolic process |
| | vesicle docking involved in exocytosis |
| | regulation of synaptic assembly at neuromuscular |
| junction | |

pentose-phosphate shunt, oxidative branch
 regulation of DNA metabolic process
 positive regulation of cytoplasmic translation
 vesicle docking
 positive regulation of protein depolymerization
 mitochondrial fragmentation involved in apoptotic

process

ribosome assembly
 response to heat
 tRNA transport
 ncRNA metabolic process
 RNA export from nucleus
 glutamine family amino acid biosynthetic process
 lysosomal transport
 regulation of cytoplasmic translation
 positive regulation of glucokinase activity
 dephosphorylation
 regulation of nuclear-transcribed mRNA catabolic

process, deadenylation-dependent decay

protein maturation by protein folding
 regulation of nitrogen compound metabolic process
 viral genome replication
 clathrin coat disassembly
 protein phosphorylation
 establishment of RNA localization
 viral gene expression
 positive regulation of catabolic process
 peptidyl-tyrosine dephosphorylation
 chemokine (C-X-C motif) ligand 12 signaling pathway
 prostanoid biosynthetic process
 positive regulation of fibroblast growth factor

production

regulation of smooth muscle cell migration
 negative regulation of DNA damage checkpoint
 maintenance of postsynaptic density structure
 unidimensional cell growth
 positive regulation of multicellular organismal

process

biological process involved in symbiotic interaction
 proline metabolic process
 negative regulation of calcium ion transmembrane

transport via high voltage-gated calcium channel

negative regulation of sodium ion transport
 respiratory system process
 regulation of autophagy of mitochondrion
 macromolecule metabolic process
 membrane docking
 nuclear-transcribed mRNA catabolic process,

deadenylation-dependent decay

regulation of primary metabolic process

post-transcriptional regulation of gene expression
 L-proline biosynthetic process
 regulation of establishment or maintenance of cell

polarity regulating cell shape
 positive regulation of clathrin-dependent endocytosis
 regulation of clathrin-dependent endocytosis
 regulation of prostaglandin biosynthetic process
 positive regulation of protein modification by small

protein conjugation or removal
 regulation of respiratory system process
 retrograde trans-synaptic signaling
 nucleic acid transport
 presynaptic membrane assembly
 positive regulation of mRNA catabolic process
 cell growth involved in cardiac muscle cell

development
 positive regulation of RNA binding
 RNA destabilization
 telomere maintenance
 positive regulation of microtubule depolymerization
 dicarboxylic acid metabolic process
 organelle localization by membrane tethering
 regulation of RNA binding
 formation of cytoplasmic translation initiation

complex
 retrograde trans-synaptic signaling by trans-synaptic

protein complex
 regulation of mRNA metabolic process
 positive regulation of establishment or maintenance of

cell polarity regulating cell shape
 vesicle uncoating
 negative regulation of amide metabolic process
 establishment of protein localization to organelle
 regulation of caveolin-mediated endocytosis
 regulation of neuromuscular junction development
 regulation of dephosphorylation
 prostaglandin biosynthetic process
 positive regulation of cell junction assembly
 regulation of cellular catabolic process
 smooth muscle cell migration
 RNA localization
 regulation of peroxisome organization
 clathrin coat assembly
 proline biosynthetic process
 regulation of translational fidelity
 positive regulation of mRNA metabolic process
 cellular response to chemical stress
 regulation of mRNA stability
 viral mRNA export from host cell nucleus
 positive regulation of binding

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| | mRNA catabolic process |
| | physiological muscle hypertrophy |
| | viral process |
| | translational initiation |
| | mitochondrial fusion |
| | negative regulation of smooth muscle cell migration |
| | telomere organization |
| | regulation of dendrite morphogenesis |
| | regulation of long-term synaptic potentiation |
| | positive regulation of neuromuscular junction |
| development | |
| | synaptic vesicle budding |
| | rRNA metabolic process |
| | establishment or maintenance of cell polarity |
| regulating cell shape | |
| | nuclear transport |
| | synaptic vesicle uncoating |
| | negative regulation of sodium ion transmembrane |
| transporter activity | |
| | positive regulation of platelet-derived growth factor |
| receptor signaling pathway | |
| | regulation of muscle adaptation |
| | postsynaptic endocytosis |
| | positive regulation of lamellipodium organization |
| | positive regulation of lymphocyte migration |
| | positive regulation of platelet-derived growth factor |
| receptor-beta signaling pathway | |
| | positive regulation of cellular catabolic process |
| | vacuolar transport |
| | RNA catabolic process |
| | positive regulation of protein localization to synapse |
| | vesicle targeting |
| | regulation of platelet-derived growth factor receptor- |
| beta signaling pathway | |
| | translocation of molecules into host |
| | nucleocytoplasmic transport |
| | mitochondrial translation |
| | cellular response to heat |
| | regulation of RNA stability |
| | cytochrome complex assembly |
| | respiratory gaseous exchange by respiratory system |
| | cellular response to external stimulus |
| | muscle cell migration |
| | negative regulation of sodium ion transmembrane |
| transport | |
| | negative regulation of monoatomic ion transport |
| | cellular response to oxidative stress |
| Acute F 150 mitochondria | positive regulation of release of cytochrome c from |
| | amyloid-beta metabolic process |

- regulation of response to osmotic stress
- amyloid-beta formation
- response to virus
- positive regulation of cation transmembrane transport
- alpha-amino acid catabolic process
- tetrahydrobiopterin biosynthetic process
- anterograde dendritic transport of neurotransmitter
- receptor complex
 - synaptic vesicle maturation
 - vesicle targeting, to, from or within Golgi
 - negative regulation of viral-induced cytoplasmic
- pattern recognition receptor signaling pathway
 - regulation of neutrophil migration
 - negative regulation of mitochondrion organization
 - positive regulation of monoatomic ion transport
 - ribonucleoside diphosphate biosynthetic process
 - mitochondrial transmembrane transport
 - UV protection
 - amino sugar biosynthetic process
 - regulation of oxidative phosphorylation uncoupler
- activity
 - negative regulation of extrinsic apoptotic signaling
- pathway via death domain receptors
 - peptidyl-serine modification
 - establishment of Golgi localization
 - substrate localization to autophagosome
 - modulation by symbiont of host cellular process
 - regulation of response to salt stress
 - modulation by virus of host apoptotic process
 - positive regulation of amyloid-beta formation
 - intracellular cholesterol transport
 - nucleoside diphosphate metabolic process
 - purine ribonucleoside monophosphate metabolic process
 - modulation by symbiont of host apoptotic process
 - suppression by symbiont of host apoptotic process
 - learning or memory
 - regulation of postsynaptic density organization
 - modulation by virus of host process
 - glutathione metabolic process
 - positive regulation of receptor internalization
 - positive regulation of dendritic spine morphogenesis
 - negative regulation of RIG-I signaling pathway
 - modulation by symbiont of host process
 - hyperosmotic response
 - amyloid precursor protein catabolic process
 - S-adenosylmethionine metabolic process
 - trans-synaptic signaling by trans-synaptic complex
 - positive regulation of transmembrane transport
 - regulation of cellular respiration
 - nuclear pore complex assembly

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| | peptidyl-serine phosphorylation regulation of amyloid-beta formation amyloid precursor protein metabolic process cerebral cortex development negative regulation of release of cytochrome c from |
| mitochondria | S-adenosylmethionine cycle regulation of mitochondrial membrane potential regulation of ARF protein signal transduction synaptic membrane adhesion positive regulation of ER-associated ubiquitin- |
| dependent protein catabolic process | negative regulation of proteolysis autophagosome-lysosome fusion regulation of synaptic vesicle clustering methylglyoxal metabolic process protein insertion into ER membrane negative regulation of nucleocytoplasmic transport response to osmotic stress UDP-N-acetylglucosamine biosynthetic process chaperone cofactor-dependent protein refolding intrinsic apoptotic signaling pathway in response to |
| osmotic stress | |
| | AMP metabolic process regulation of Ras protein signal transduction positive regulation of amyloid precursor protein |
| catabolic process | |
| | regulation of response to stress regulation of cellular response to osmotic stress regulation of ubiquitin-protein transferase activity plasma membrane repair ribonucleoside monophosphate metabolic process regulation of membrane permeability negative regulation of myosin-light-chain-phosphatase |
| activity | |
| | dicarboxylic acid transport regulation of store-operated calcium channel activity purine ribonucleoside diphosphate metabolic process purine nucleoside diphosphate biosynthetic process regulation of release of cytochrome c from |
| mitochondria | |
| | amino acid catabolic process nucleotide-sugar biosynthetic process regulation of short-term neuronal synaptic plasticity negative regulation of defense response ribonucleoside diphosphate metabolic process cell redox homeostasis regulation of ER-associated ubiquitin-dependent |
| protein catabolic process | |
| | cell recognition |

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| | telencephalon development |
| | modulation of process of another organism |
| | negative regulation of defense response to virus |
| | maintenance of location |
| | regulation of aerobic respiration |
| | negative regulation of ubiquitin-protein transferase |
| activity | ARF protein signal transduction |
| | negative regulation of protein export from nucleus |
| | pore complex assembly |
| | positive regulation of synaptic vesicle exocytosis |
| | regulation of translational termination |
| | regulation of oxidative phosphorylation |
| | intrinsic apoptotic signaling pathway in response to |
| oxidative stress | |
| | organic hydroxy compound transport |
| | positive regulation of monoatomic ion transmembrane |
| transport | |
| | regulation of small GTPase mediated signal |
| transduction | |
| | anterograde dendritic transport |
| | regulation of response to endoplasmic reticulum stress |
| | telencephalon glial cell migration |
| | regulation of G protein-coupled receptor signaling |
| pathway | |
| | regulation of myosin-light-chain-phosphatase activity |
| | cell motility involved in cerebral cortex radial glia |
| guided migration | |
| | regulation of large conductance calcium-activated |
| potassium channel activity | |
| | regulation of cellular hyperosmotic salinity response |
| | purine ribonucleoside metabolic process |
| | acidic amino acid transport |
| | suppression by symbiont of host programmed cell death |
| | suppression by virus of host apoptotic process |
| | tail-anchored membrane protein insertion into ER |
| membrane | |
| | 'de novo' protein folding |
| | response to external stimulus |
| | positive regulation of intrinsic apoptotic signaling |
| pathway | |
| | excitatory synapse assembly |
| | chaperone-mediated protein folding |
| | purine nucleoside diphosphate metabolic process |
| | regulation of intrinsic apoptotic signaling pathway |
| | ADP biosynthetic process |
| | postsynaptic signal transduction |
| | modulation of microtubule cytoskeleton involved in |
| cerebral cortex | radial glia guided migration |
| | proton transmembrane transport |

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| | postsynapse assembly |
| | neuroligin clustering involved in postsynaptic |
| membrane assembly | amide catabolic process |
| | postsynaptic membrane assembly |
| | presynaptic modulation of chemical synaptic |
| transmission | |
| | regulation of mitochondrial membrane permeability |
| | cerebral cortex radial glia-guided migration |
| | modulation by symbiont of host programmed cell death |
| | detoxification of hydrogen peroxide |
| | tetrahydrobiopterin metabolic process |
| | regulation of killing of cells of another organism |
| | regulation of viral-induced cytoplasmic pattern |
| recognition receptor signaling pathway | |
| | modulation by virus of host cellular process |
| | ADP metabolic process |
| | maintenance of location in cell |
| | arginine catabolic process |
| | type B pancreatic cell development |
| | purine ribonucleoside diphosphate biosynthetic process |
| | negative regulation of transporter activity |