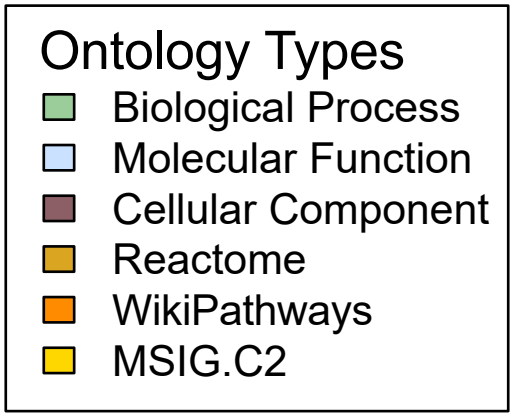
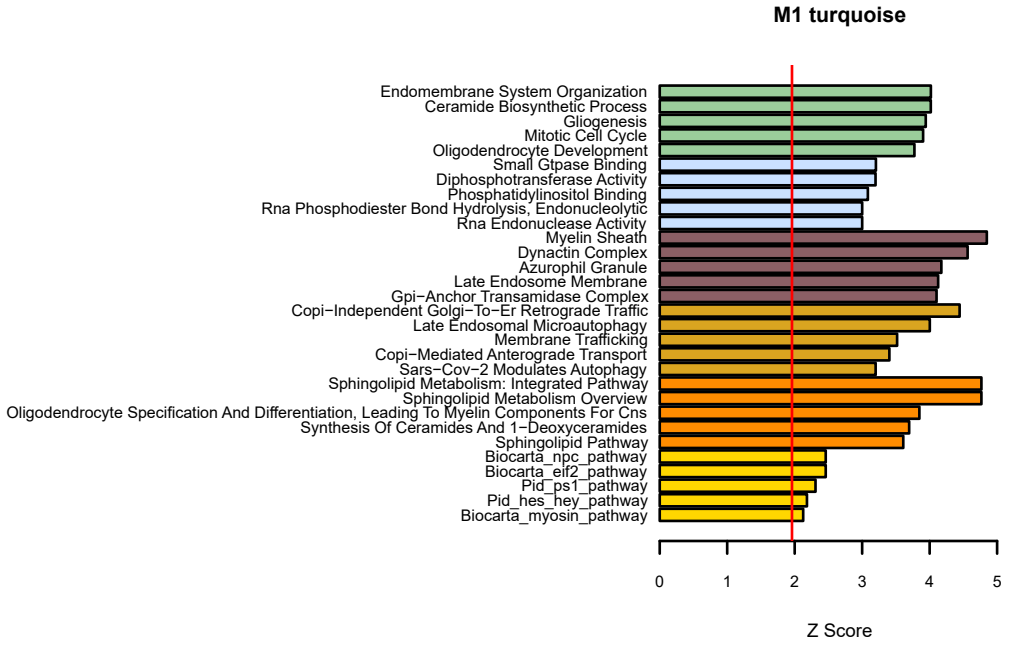
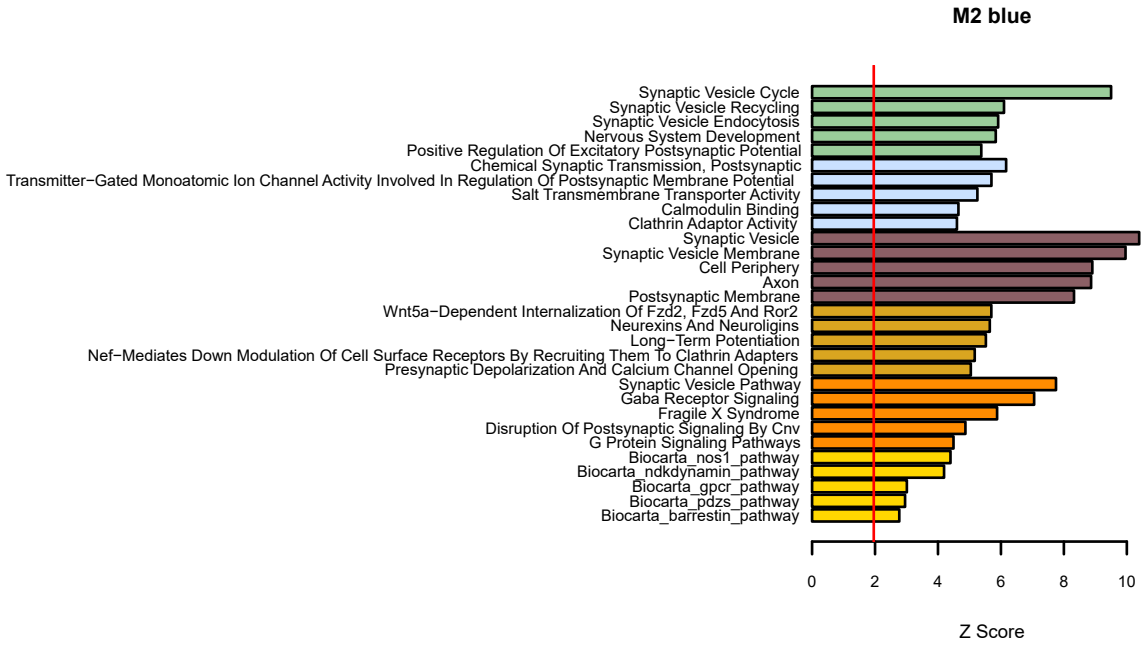
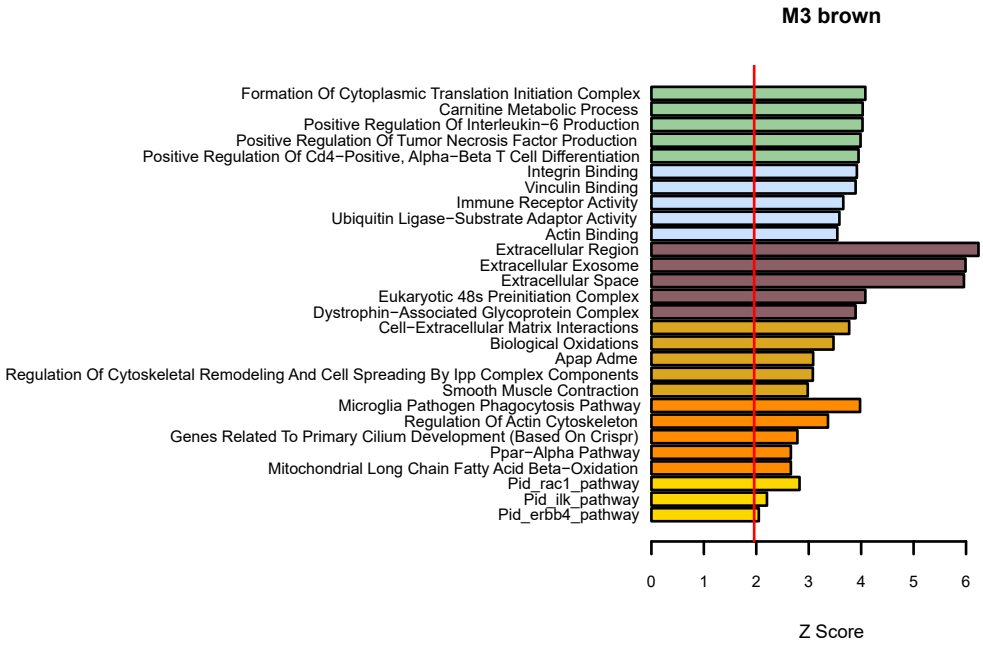
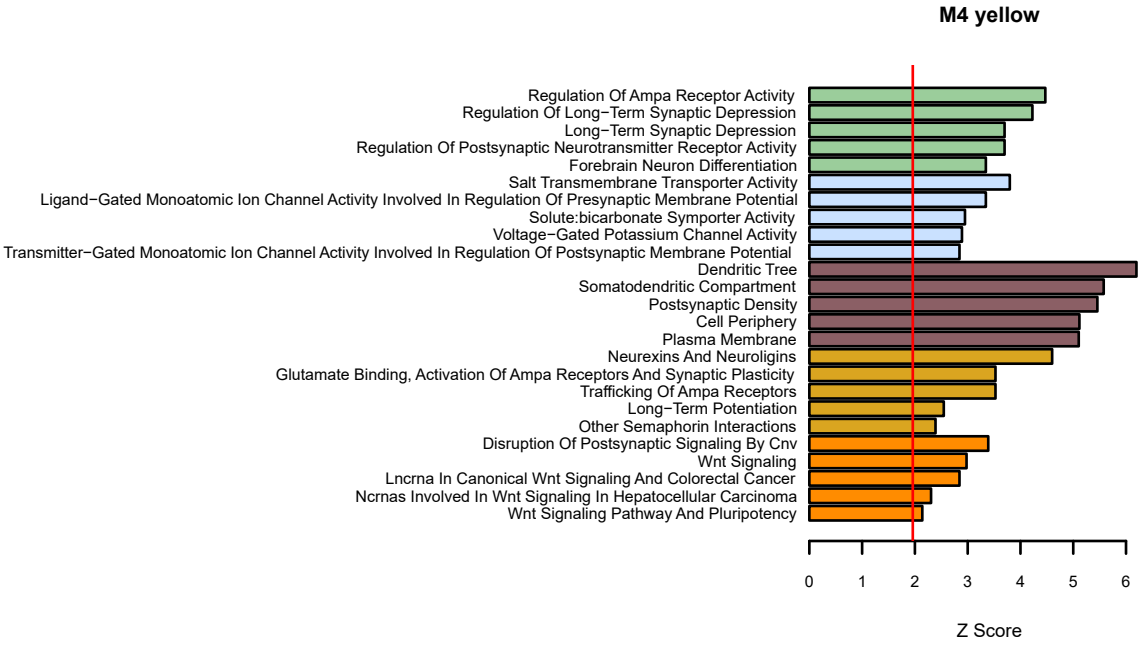
Enriched Gene Ontologies Within Each Ratio Network Module

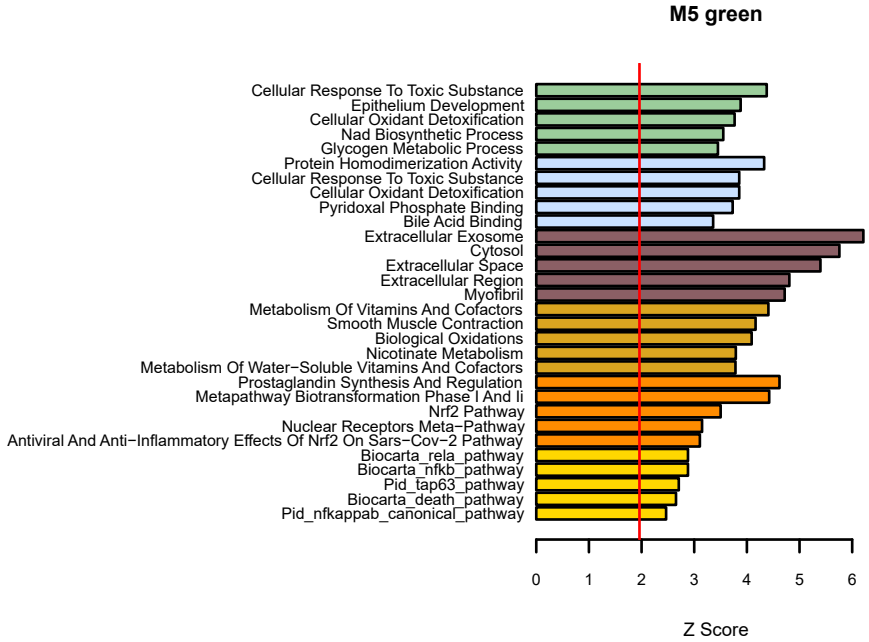


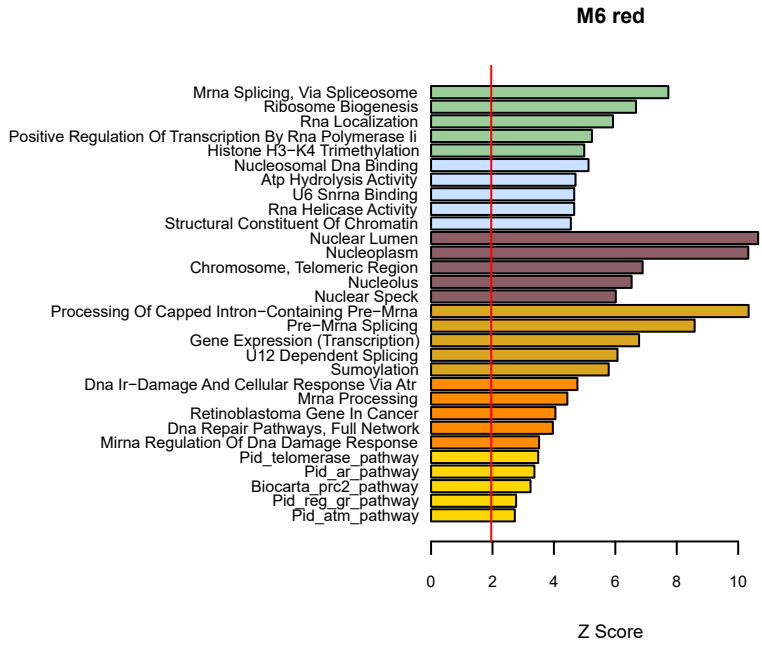


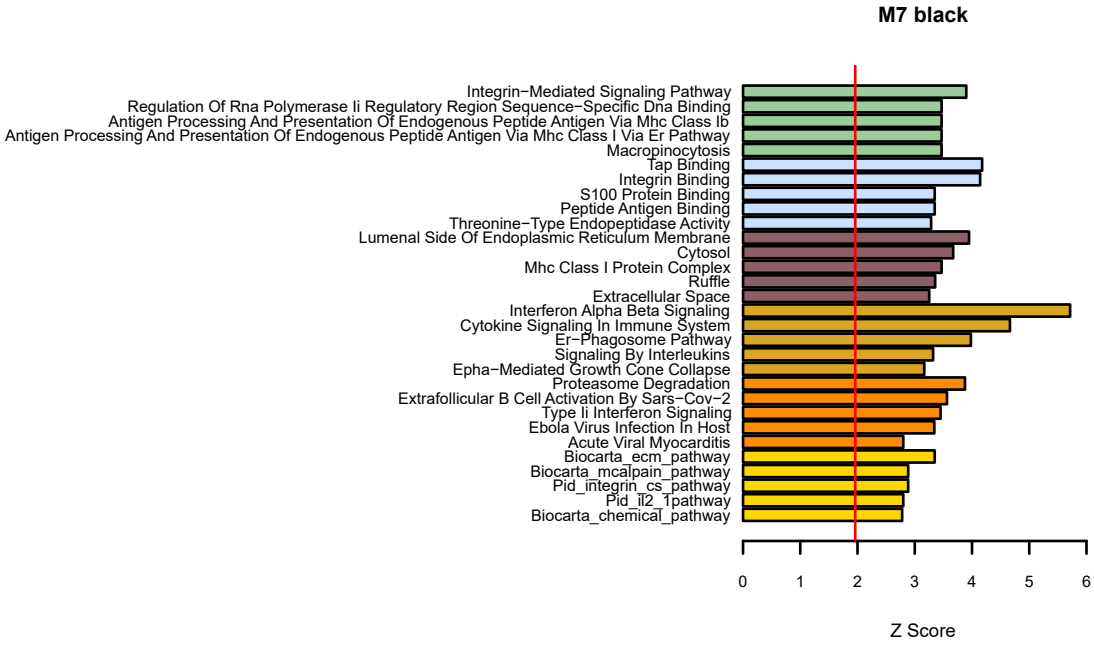


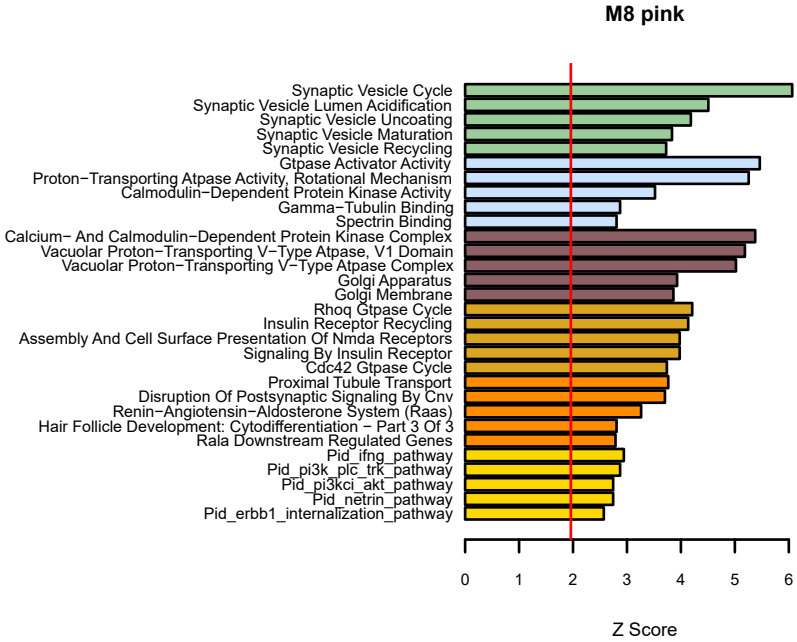

M3 brown
Formation Of Cytoplasmic Translation Initiation Complex
Carnitine Metabolic Process
Positive Regulation Of Interleukin−6 Production
Positive Regulation Of Tumor Necrosis Factor Production
Positive Regulation Of Cd4−Positive, Alpha−Beta T Cell Differentiation
Integrin Binding
Vinculin Binding
Immune Receptor Activity
Ubiquitin Ligase−Substrate Adaptor Activity
Actin Binding
Extracellular Region
Extracellular Exosome
Extracellular Space
Eukaryotic 48s Preinitiation Complex
Dystrophin−Associated Glycoprotein Complex
Cell−Extracellular Matrix Interactions
Biological Oxidations
Apap Adme
Regulation Of Cytoskeletal Remodeling And Cell Spreading By Ipp Complex Components
Smooth Muscle Contraction
Microglia Pathogen Phagocytosis Pathway
Regulation Of Actin Cytoskeleton
Genes Related To Primary Cilium Development (Based On Crispr)
Ppar−Alpha Pathway
Mitochondrial Long Chain Fatty Acid Beta−Oxidation
Pid_rac1_pathway
Pid_ilk_pathway
Pid_erbb4_pathway
0
1
2
3
4
5
6
Z Score

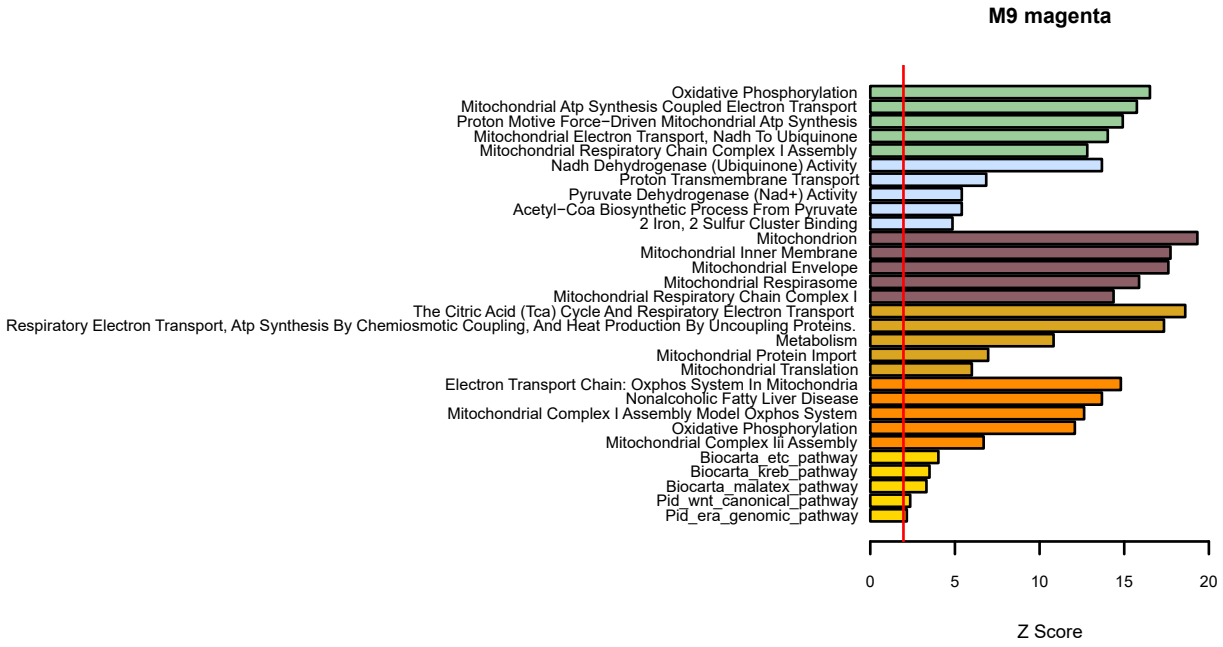

M4 yellow
Regulation Of Ampa Receptor Activity
Regulation Of Long−Term Synaptic Depression
Long−Term Synaptic Depression
Regulation Of Postsynaptic Neurotransmitter Receptor Activity
Forebrain Neuron Differentiation
Salt Transmembrane Transporter Activity
Ligand−Gated Monoatomic Ion Channel Activity Involved In Regulation Of Presynaptic Membrane Potential
Solute:bicarbonate Symporter Activity
Voltage−Gated Potassium Channel Activity
Transmitter−Gated Monoatomic Ion Channel Activity Involved In Regulation Of Postsynaptic Membrane Potential
Dendritic Tree
Somatodendritic Compartment
Postsynaptic Density
Cell Periphery
Plasma Membrane
Neurexins And Neuroligins
Glutamate Binding, Activation Of Ampa Receptors And Synaptic Plasticity
Trafficking Of Ampa Receptors
Long−Term Potentiation
Other Semaphorin Interactions
Disruption Of Postsynaptic Signaling By Cnv
Wnt Signaling
Lncrna In Canonical Wnt Signaling And Colorectal Cancer
Ncrnas Involved In Wnt Signaling In Hepatocellular Carcinoma
Wnt Signaling Pathway And Pluripotency
0
1
2
3
4
5
6
Z Score

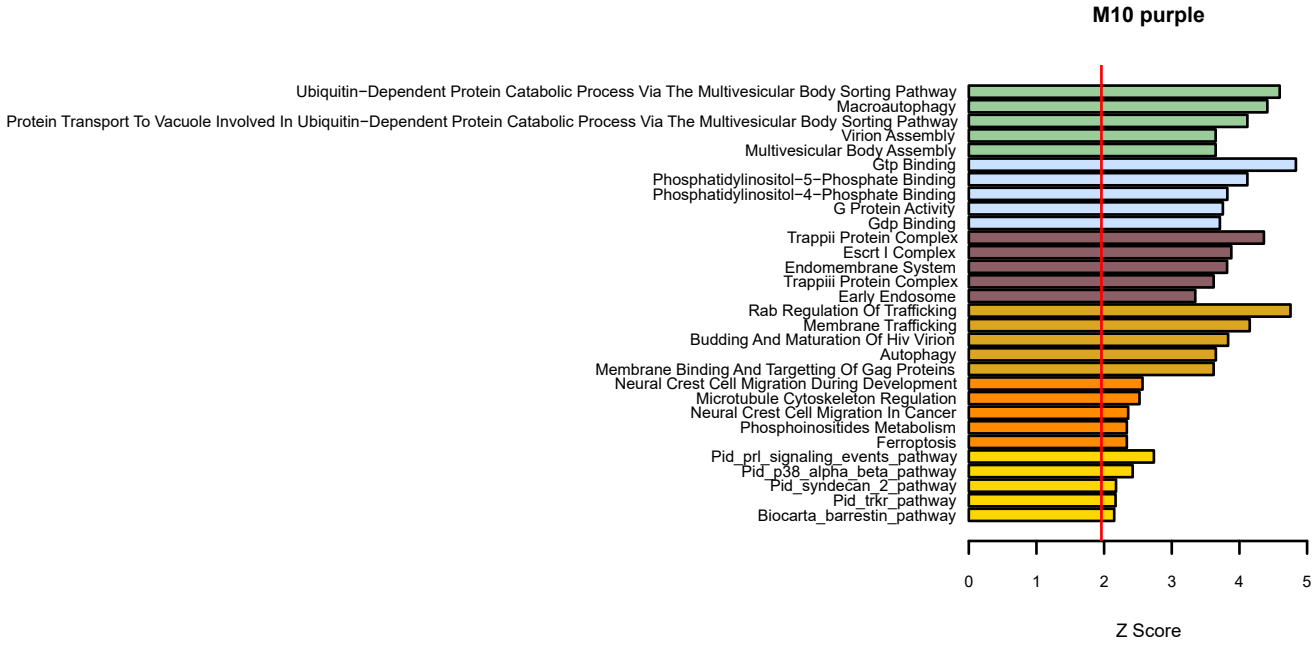

M5 green
Cellular Response To Toxic Substance
Epithelium Development
Cellular Oxidant Detoxification
Nad Biosynthetic Process
Glycogen Metabolic Process
Protein Homodimerization Activity
Cellular Response To Toxic Substance
Cellular Oxidant Detoxification
Pyridoxal Phosphate Binding
Bile Acid Binding
Extracellular Exosome
Cytosol
Extracellular Space
Extracellular Region
Myofibril
Metabolism Of Vitamins And Cofactors
Smooth Muscle Contraction
Biological Oxidations
Nicotinate Metabolism
Metabolism Of Water−Soluble Vitamins And Cofactors
Prostaglandin Synthesis And Regulation
Metapathway Biotransformation Phase I And Ii
Nrf2 Pathway
Nuclear Receptors Meta−Pathway
Antiviral And Anti−Inflammatory Effects Of Nrf2 On Sars−Cov−2 Pathway
Biocarta_rela_pathway
Biocarta_nfkb_pathway
Pid_tap63_pathway
Biocarta_death_pathway
Pid_nfkappab_canonical_pathway
0
1
2
3
4
5
6
Z Score

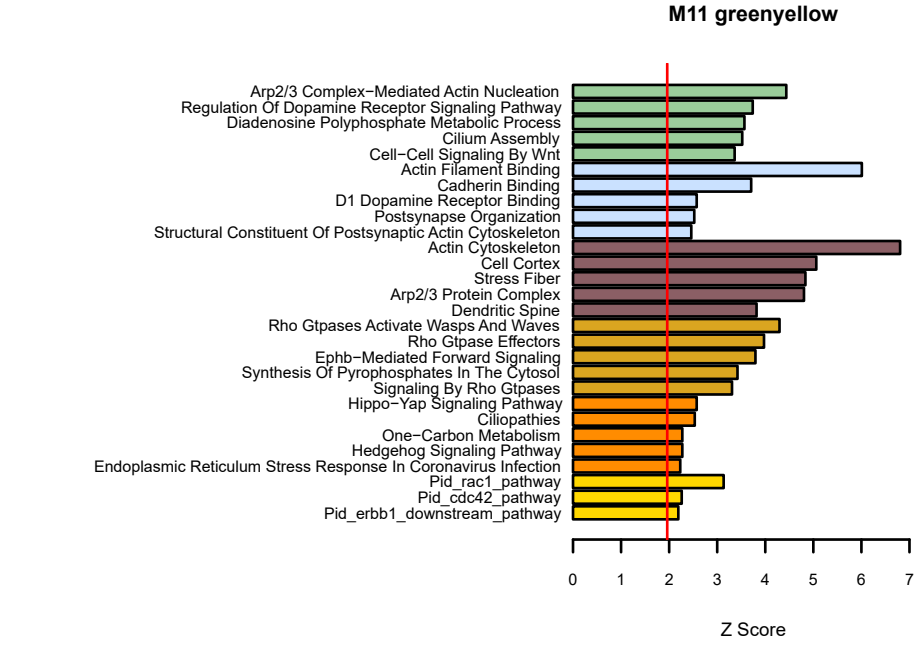

M6 red
Mrna Splicing, Via Spliceosome
Ribosome Biogenesis
Rna Localization
Positive Regulation Of Transcription By Rna Polymerase Ii
Histone H3−K4 Trimethylation
Nucleosomal Dna Binding
Atp Hydrolysis Activity
U6 Snrna Binding
Rna Helicase Activity
Structural Constituent Of Chromatin
Nuclear Lumen
Nucleoplasm
Chromosome, Telomeric Region
Nucleolus
Nuclear Speck
Processing Of Capped Intron−Containing Pre−Mrna
Pre−Mrna Splicing
Gene Expression (Transcription)
U12 Dependent Splicing
Sumoylation
Dna Ir−Damage And Cellular Response Via Atr
Mrna Processing
Retinoblastoma Gene In Cancer
Dna Repair Pathways, Full Network
Mirna Regulation Of Dna Damage Response
Pid_telomerase_pathway
Pid_ar_pathway
Biocarta_prc2_pathway
Pid_reg_gr_pathway
Pid_atm_pathway
0
2
4
6
8
10
Z Score

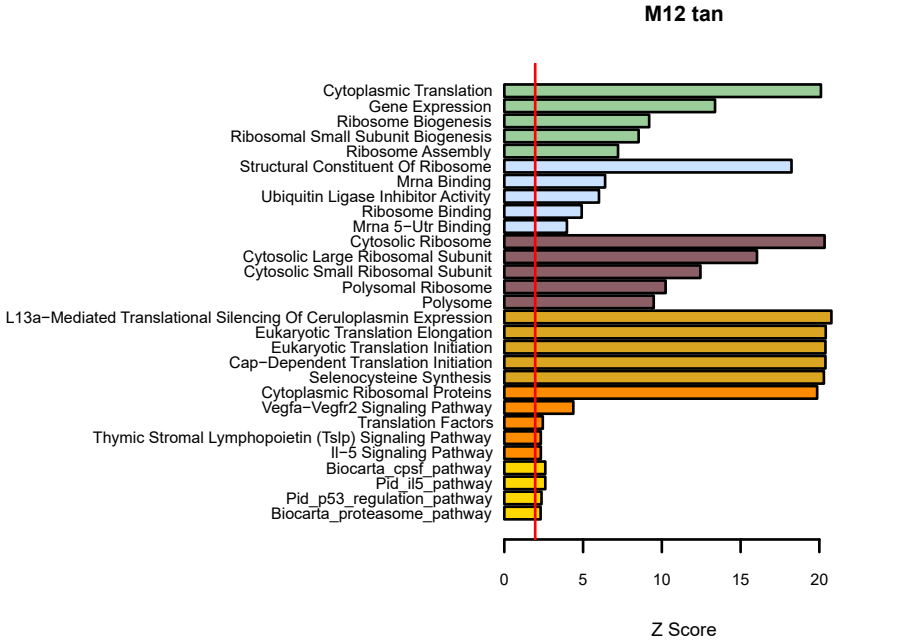

M7 black
Integrin−Mediated Signaling Pathway
Regulation Of Rna Polymerase Ii Regulatory Region Sequence−Specific Dna Binding
Antigen Processing And Presentation Of Endogenous Peptide Antigen Via Mhc Class Ib
Antigen Processing And Presentation Of Endogenous Peptide Antigen Via Mhc Class I Via Er Pathway
Macropinocytosis
Tap Binding
Integrin Binding
S100 Protein Binding
Peptide Antigen Binding
Threonine−Type Endopeptidase Activity
Lumenal Side Of Endoplasmic Reticulum Membrane
Cytosol
Mhc Class I Protein Complex
Ruffle
Extracellular Space
Interferon Alpha Beta Signaling
Cytokine Signaling In Immune System
Er−Phagosome Pathway
Signaling By Interleukins
Epha−Mediated Growth Cone Collapse
Proteasome Degradation
Extrafollicular B Cell Activation By Sars−Cov−2
Type Ii Interferon Signaling
Ebola Virus Infection In Host
Acute Viral Myocarditis
Biocarta_ecm_pathway
Biocarta_mcalpain_pathway
Pid_integrin_cs_pathway
Pid_il2_1pathway
Biocarta_chemical_pathway
0
1
2
3
4
5
6
Z Score

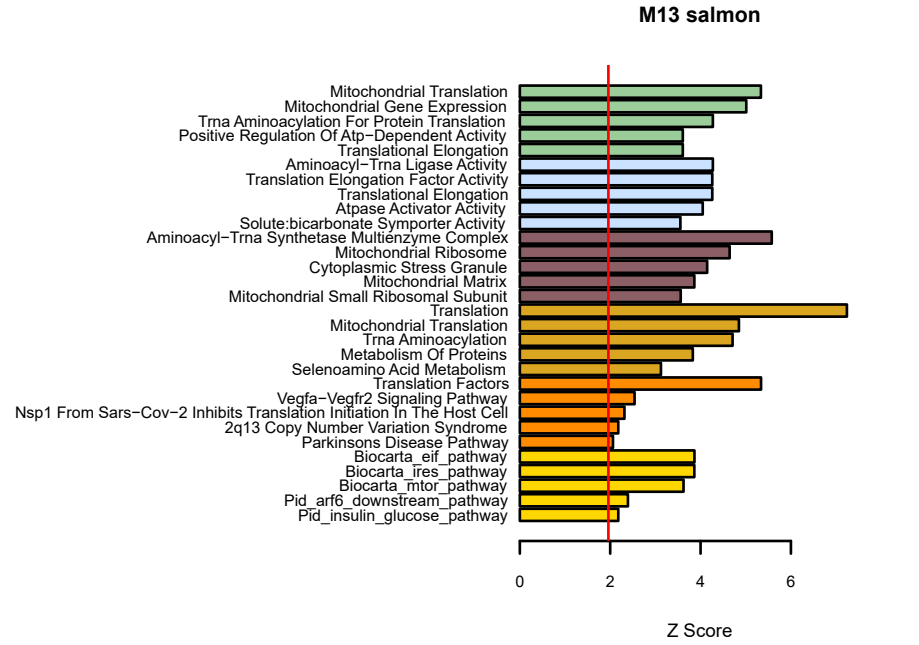

M8 pink
Synaptic Vesicle Cycle
Synaptic Vesicle Lumen Acidification
Synaptic Vesicle Uncoating
Synaptic Vesicle Maturation
Synaptic Vesicle Recycling
Gtpase Activator Activity
Proton−Transporting Atpase Activity, Rotational Mechanism
Calmodulin−Dependent Protein Kinase Activity
Gamma−Tubulin Binding
Spectrin Binding
Calcium− And Calmodulin−Dependent Protein Kinase Complex
Vacuolar Proton−Transporting V−Type Atpase, V1 Domain
Vacuolar Proton−Transporting V−Type Atpase Complex
Golgi Apparatus
Golgi Membrane
Rhoq Gtpase Cycle
Insulin Receptor Recycling
Assembly And Cell Surface Presentation Of Nmda Receptors
Signaling By Insulin Receptor
Cdc42 Gtpase Cycle
Proximal Tubule Transport
Disruption Of Postsynaptic Signaling By Cnv
Renin−Angiotensin−Aldosterone System (Raas)
Hair Follicle Development: Cytodifferentiation − Part 3 Of 3
Rala Downstream Regulated Genes
Pid_ifng_pathway
Pid_pi3k_plc_trk_pathway
Pid_pi3kci_akt_pathway
Pid_netrin_pathway
Pid_erbb1_internalization_pathway
0
1
2
3
4
5
6
Z Score

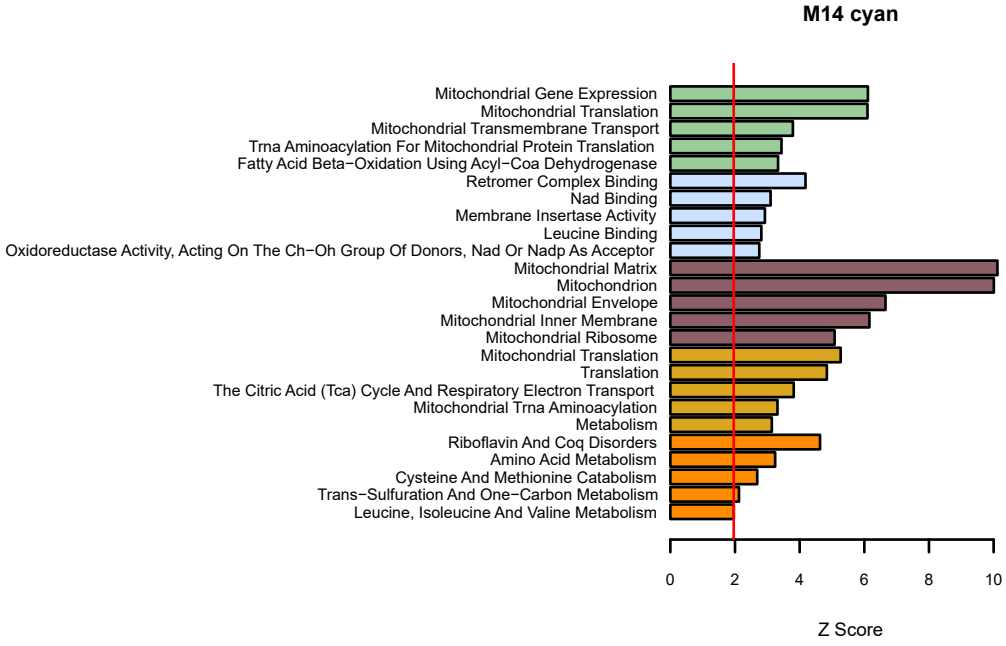

M9 magenta
Oxidative Phosphorylation
Mitochondrial Atp Synthesis Coupled Electron Transport
Proton Motive Force−Driven Mitochondrial Atp Synthesis
Mitochondrial Electron Transport, Nadh To Ubiquinone
Mitochondrial Respiratory Chain Complex I Assembly
Nadh Dehydrogenase (Ubiquinone) Activity
Proton Transmembrane Transport
Pyruvate Dehydrogenase (Nad+) Activity
Acetyl−Coa Biosynthetic Process From Pyruvate
2 Iron, 2 Sulfur Cluster Binding
Mitochondrion
Mitochondrial Inner Membrane
Mitochondrial Envelope
Mitochondrial Respirasome
Mitochondrial Respiratory Chain Complex I
The Citric Acid (Tca) Cycle And Respiratory Electron Transport
Respiratory Electron Transport, Atp Synthesis By Chemiosmotic Coupling, And Heat Production By Uncoupling Proteins.
Metabolism
Mitochondrial Protein Import
Mitochondrial Translation
Electron Transport Chain: Oxphos System In Mitochondria
Nonalcoholic Fatty Liver Disease
Mitochondrial Complex I Assembly Model Oxphos System
Oxidative Phosphorylation
Mitochondrial Complex Iii Assembly
Biocarta_etc_pathway
Biocarta_kreb_pathway
Biocarta_malatex_pathway
Pid_wnt_canonical_pathway
Pid_era_genomic_pathway
0
5
10
15
20
Z Score

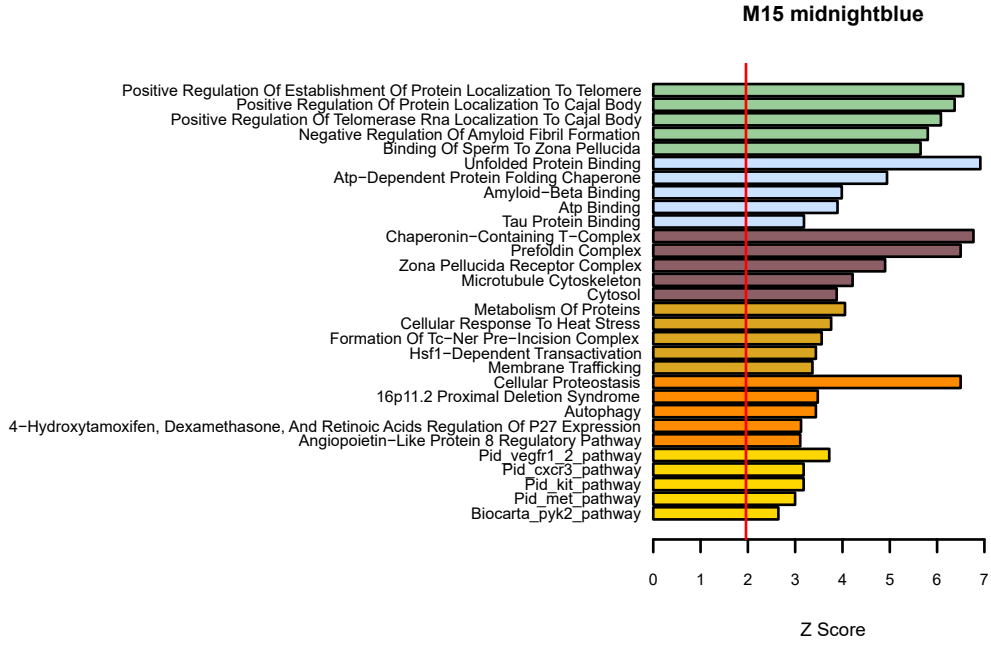

M10 purple
Ubiquitin−Dependent Protein Catabolic Process Via The Multivesicular Body Sorting Pathway
Macroautophagy
Protein Transport To Vacuole Involved In Ubiquitin−Dependent Protein Catabolic Process Via The Multivesicular Body Sorting Pathway
Virion Assembly
Multivesicular Body Assembly
Gtp Binding
Phosphatidylinositol−5−Phosphate Binding
Phosphatidylinositol−4−Phosphate Binding
G Protein Activity
Gdp Binding
Trappii Protein Complex
Escrt I Complex
Endomembrane System
Trappiii Protein Complex
Early Endosome
Rab Regulation Of Trafficking
Membrane Trafficking
Budding And Maturation Of Hiv Virion
Autophagy
Membrane Binding And Targetting Of Gag Proteins
Neural Crest Cell Migration During Development
Microtubule Cytoskeleton Regulation
Neural Crest Cell Migration In Cancer
Phosphoinositides Metabolism
Ferroptosis
Pid_prl_signaling_events_pathway
Pid_p38_alpha_beta_pathway
Pid_syndecan_2_pathway
Pid_trkr_pathway
Biocarta_barrestin_pathway
0
1
2
3
4
5
Z Score

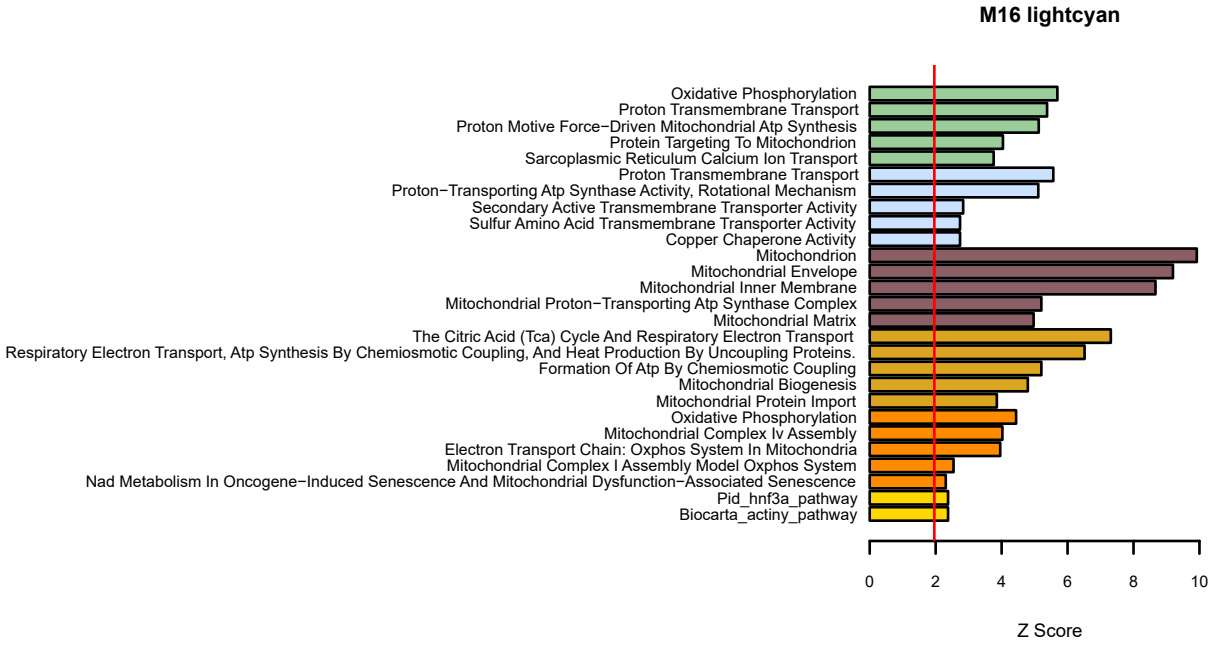

M11 greenyellow
Arp2/3 Complex−Mediated Actin Nucleation
Regulation Of Dopamine Receptor Signaling Pathway
Diadenosine Polyphosphate Metabolic Process
Cilium Assembly
Cell−Cell Signaling By Wnt
Actin Filament Binding
Cadherin Binding
D1 Dopamine Receptor Binding
Postsynapse Organization
Structural Constituent Of Postsynaptic Actin Cytoskeleton
Actin Cytoskeleton
Cell Cortex
Stress Fiber
Arp2/3 Protein Complex
Dendritic Spine
Rho Gtpases Activate Wasps And Waves
Rho Gtpase Effectors
Ephb−Mediated Forward Signaling
Synthesis Of Pyrophosphates In The Cytosol
Signaling By Rho Gtpases
Hippo−Yap Signaling Pathway
Ciliopathies
One−Carbon Metabolism
Hedgehog Signaling Pathway
Endoplasmic Reticulum Stress Response In Coronavirus Infection
Pid_rac1_pathway
Pid_cdc42_pathway
Pid_erbb1_downstream_pathway
0
1
2
3
4
5
6
7
Z Score

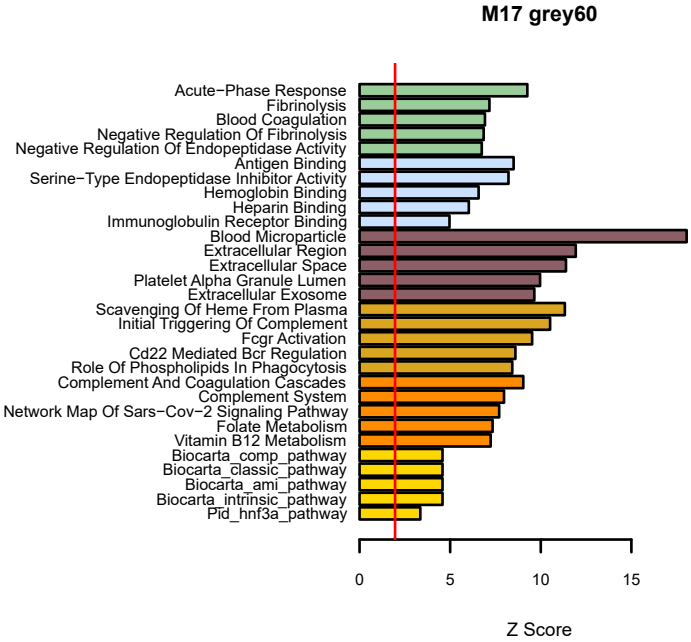

M12 tan
Cytoplasmic Translation
Gene Expression
Ribosome Biogenesis
Ribosomal Small Subunit Biogenesis
Ribosome Assembly
Structural Constituent Of Ribosome
Mrna Binding
Ubiquitin Ligase Inhibitor Activity
Ribosome Binding
Mrna 5−Utr Binding
Cytosolic Ribosome
Cytosolic Large Ribosomal Subunit
Cytosolic Small Ribosomal Subunit
Polysomal Ribosome
Polysome
L13a−Mediated Translational Silencing Of Ceruloplasmin Expression
Eukaryotic Translation Elongation
Eukaryotic Translation Initiation
Cap−Dependent Translation Initiation
Selenocysteine Synthesis
Cytoplasmic Ribosomal Proteins
Vegfa−Vegfr2 Signaling Pathway
Translation Factors
Thymic Stromal Lymphopoietin (Tslp) Signaling Pathway
Il−5 Signaling Pathway
Biocarta_cpsf_pathway
Pid_il5_pathway
Pid_p53_regulation_pathway
Biocarta_proteasome_pathway
0
5
10
15
20
Z Score

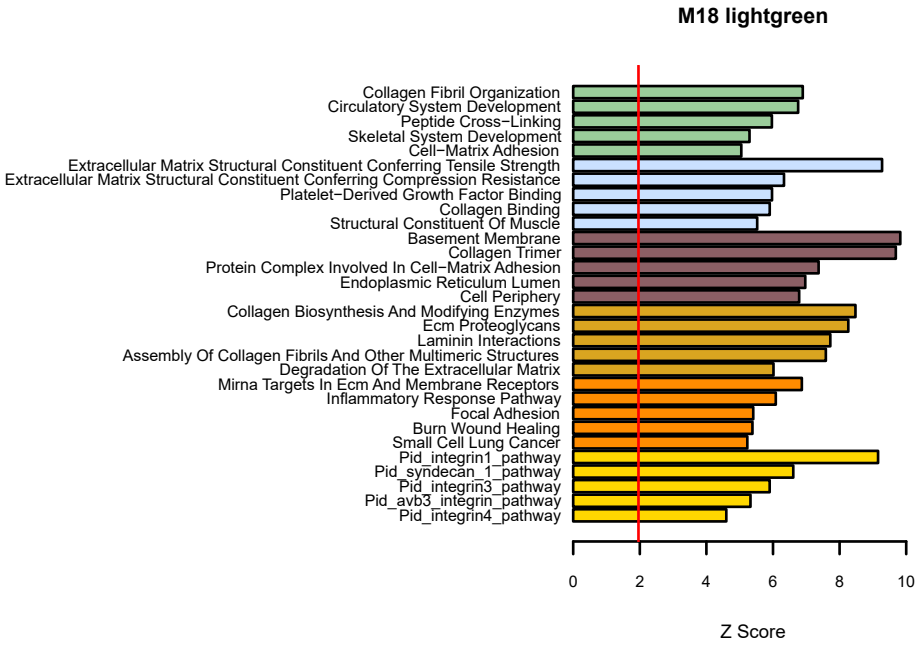

M13 salmon
Mitochondrial Translation
Mitochondrial Gene Expression
Trna Aminoacylation For Protein Translation
Positive Regulation Of Atp−Dependent Activity
Translational Elongation
Aminoacyl−Trna Ligase Activity
Translation Elongation Factor Activity
Translational Elongation
Atpase Activator Activity
Solute:bicarbonate Symporter Activity
Aminoacyl−Trna Synthetase Multienzyme Complex
Mitochondrial Ribosome
Cytoplasmic Stress Granule
Mitochondrial Matrix
Mitochondrial Small Ribosomal Subunit
Translation
Mitochondrial Translation
Trna Aminoacylation
Metabolism Of Proteins
Selenoamino Acid Metabolism
Translation Factors
Vegfa−Vegfr2 Signaling Pathway
Nsp1 From Sars−Cov−2 Inhibits Translation Initiation In The Host Cell
2q13 Copy Number Variation Syndrome
Parkinsons Disease Pathway
Biocarta_eif_pathway
Biocarta_ires_pathway
Biocarta_mtor_pathway
Pid_arf6_downstream_pathway
Pid_insulin_glucose_pathway
0
2
4
6
Z Score

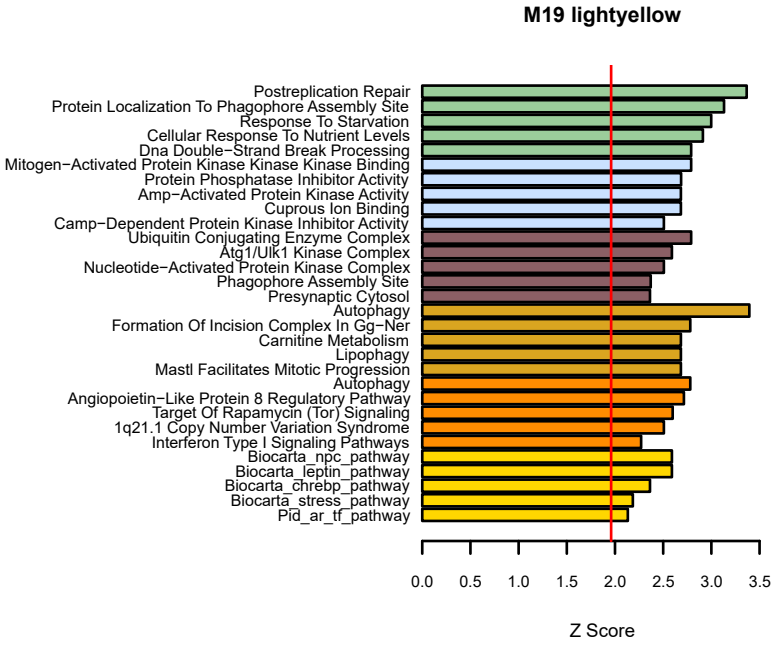

M14 cyan
Mitochondrial Gene Expression
Mitochondrial Translation
Mitochondrial Transmembrane Transport
Trna Aminoacylation For Mitochondrial Protein Translation
Fatty Acid Beta−Oxidation Using Acyl−Coa Dehydrogenase
Retromer Complex Binding
Nad Binding
Membrane Insertase Activity
Leucine Binding
Oxidoreductase Activity, Acting On The Ch−Oh Group Of Donors, Nad Or Nadp As Acceptor
Mitochondrial Matrix
Mitochondrion
Mitochondrial Envelope
Mitochondrial Inner Membrane
Mitochondrial Ribosome
Mitochondrial Translation
Translation
The Citric Acid (Tca) Cycle And Respiratory Electron Transport
Mitochondrial Trna Aminoacylation
Metabolism
Riboflavin And Coq Disorders
Amino Acid Metabolism
Cysteine And Methionine Catabolism
Trans−Sulfuration And One−Carbon Metabolism
Leucine, Isoleucine And Valine Metabolism
0
2
4
6
8
10
Z Score

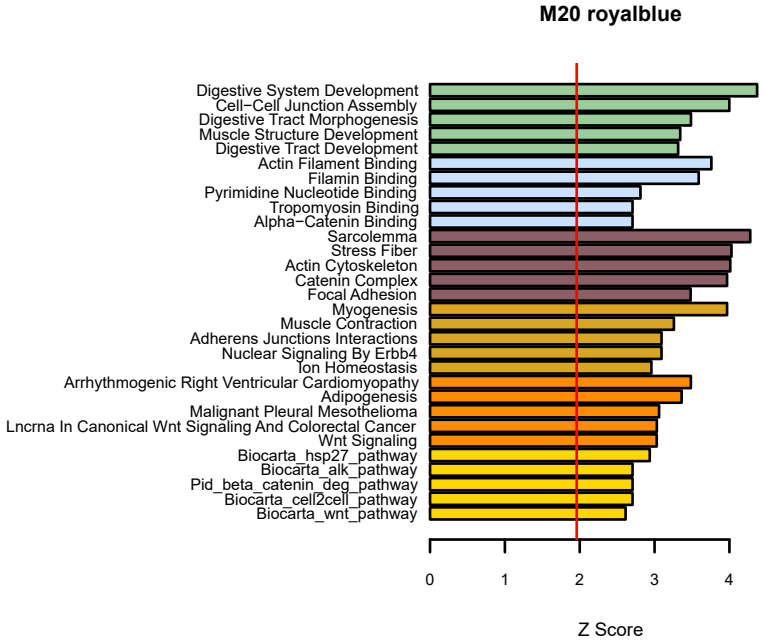

M15 midnightblue
Positive Regulation Of Establishment Of Protein Localization To Telomere
Positive Regulation Of Protein Localization To Cajal Body
Positive Regulation Of Telomerase Rna Localization To Cajal Body
Negative Regulation Of Amyloid Fibril Formation
Binding Of Sperm To Zona Pellucida
Unfolded Protein Binding
Atp−Dependent Protein Folding Chaperone
Amyloid−Beta Binding
Atp Binding
Tau Protein Binding
Chaperonin−Containing T−Complex
Prefoldin Complex
Zona Pellucida Receptor Complex
Microtubule Cytoskeleton
Cytosol
Metabolism Of Proteins
Cellular Response To Heat Stress
Formation Of Tc−Ner Pre−Incision Complex
Hsf1−Dependent Transactivation
Membrane Trafficking
Cellular Proteostasis
16p11.2 Proximal Deletion Syndrome
Autophagy
4−Hydroxytamoxifen, Dexamethasone, And Retinoic Acids Regulation Of P27 Expression
Angiopoietin−Like Protein 8 Regulatory Pathway
Pid_vegfr1_2_pathway
Pid_cxcr3_pathway
Pid_kit_pathway
Pid_met_pathway
Biocarta_pyk2_pathway
0
1
2
3
4
5
6
7
Z Score

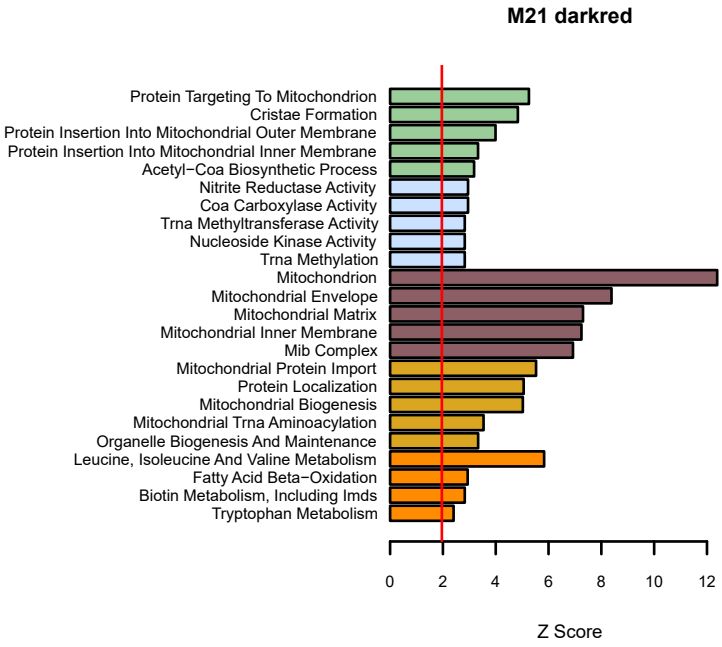

M16 lightcyan
Oxidative Phosphorylation
Proton Transmembrane Transport
Proton Motive Force−Driven Mitochondrial Atp Synthesis
Protein Targeting To Mitochondrion
Sarcoplasmic Reticulum Calcium Ion Transport
Proton Transmembrane Transport
Proton−Transporting Atp Synthase Activity, Rotational Mechanism
Secondary Active Transmembrane Transporter Activity
Sulfur Amino Acid Transmembrane Transporter Activity
Copper Chaperone Activity
Mitochondrion
Mitochondrial Envelope
Mitochondrial Inner Membrane
Mitochondrial Proton−Transporting Atp Synthase Complex
Mitochondrial Matrix
The Citric Acid (Tca) Cycle And Respiratory Electron Transport
Respiratory Electron Transport, Atp Synthesis By Chemiosmotic Coupling, And Heat Production By Uncoupling Proteins.
Formation Of Atp By Chemiosmotic Coupling
Mitochondrial Biogenesis
Mitochondrial Protein Import
Oxidative Phosphorylation
Mitochondrial Complex Iv Assembly
Electron Transport Chain: Oxphos System In Mitochondria
Mitochondrial Complex I Assembly Model Oxphos System
Nad Metabolism In Oncogene−Induced Senescence And Mitochondrial Dysfunction−Associated Senescence
Pid_hnf3a_pathway
Biocarta_actiny_pathway
0
2
4
6
8
10
Z Score

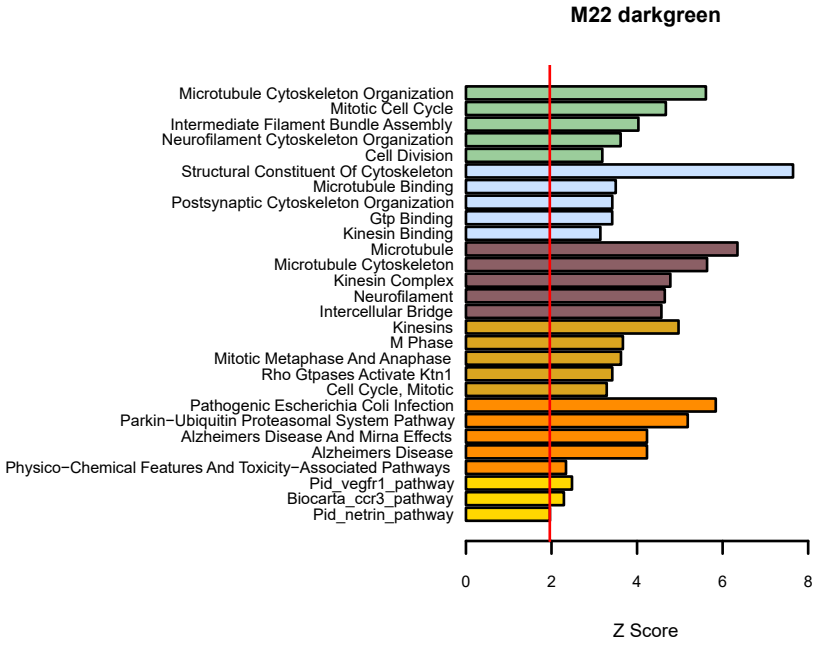

M17 grey60
Acute−Phase Response
Fibrinolysis
Blood Coagulation
Negative Regulation Of Fibrinolysis
Negative Regulation Of Endopeptidase Activity
Antigen Binding
Serine−Type Endopeptidase Inhibitor Activity
Hemoglobin Binding
Heparin Binding
Immunoglobulin Receptor Binding
Blood Microparticle
Extracellular Region
Extracellular Space
Platelet Alpha Granule Lumen
Extracellular Exosome
Scavenging Of Heme From Plasma
Initial Triggering Of Complement
Fcgr Activation
Cd22 Mediated Bcr Regulation
Role Of Phospholipids In Phagocytosis
Complement And Coagulation Cascades
Complement System
Network Map Of Sars−Cov−2 Signaling Pathway
Folate Metabolism
Vitamin B12 Metabolism
Biocarta_comp_pathway
Biocarta_classic_pathway
Biocarta_ami_pathway
Biocarta_intrinsic_pathway
Pid_hnf3a_pathway
0
5
10
15
Z Score

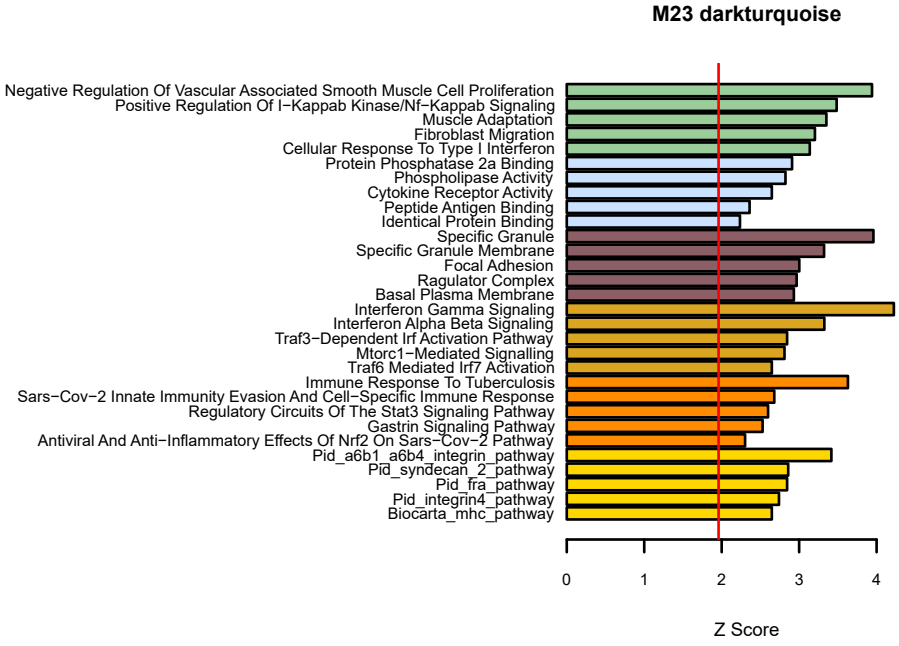

M18 lightgreen
Collagen Fibril Organization
Circulatory System Development
Peptide Cross−Linking
Skeletal System Development
Cell−Matrix Adhesion
Extracellular Matrix Structural Constituent Conferring Tensile Strength
Extracellular Matrix Structural Constituent Conferring Compression Resistance
Platelet−Derived Growth Factor Binding
Collagen Binding
Structural Constituent Of Muscle
Basement Membrane
Collagen Trimer
Protein Complex Involved In Cell−Matrix Adhesion
Endoplasmic Reticulum Lumen
Cell Periphery
Collagen Biosynthesis And Modifying Enzymes
Ecm Proteoglycans
Laminin Interactions
Assembly Of Collagen Fibrils And Other Multimeric Structures
Degradation Of The Extracellular Matrix
Mirna Targets In Ecm And Membrane Receptors
Inflammatory Response Pathway
Focal Adhesion
Burn Wound Healing
Small Cell Lung Cancer
Pid_integrin1_pathway
Pid_syndecan_1_pathway
Pid_integrin3_pathway
Pid_avb3_integrin_pathway
Pid_integrin4_pathway
0
2
4
6
8
10
Z Score

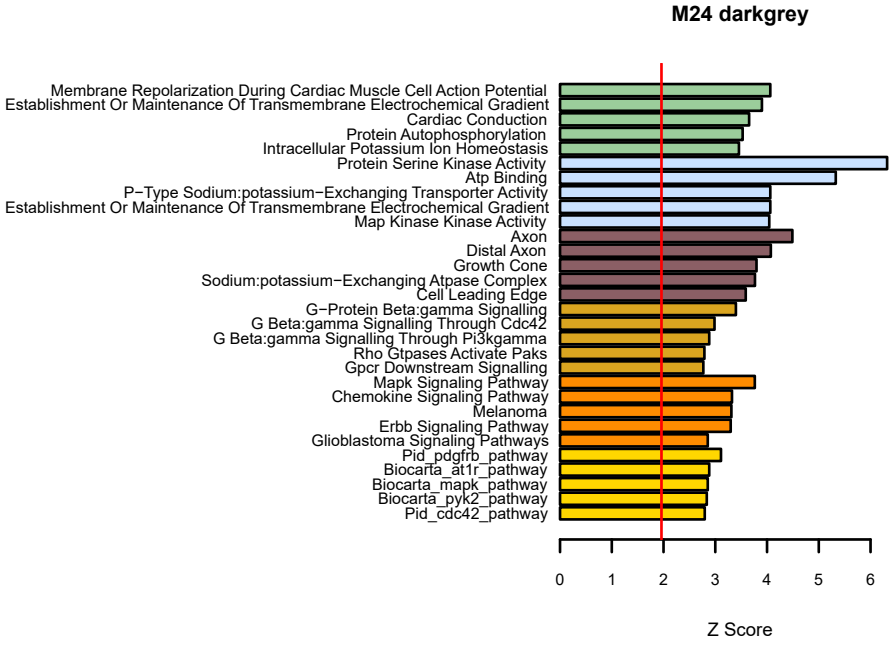

M19 lightyellow
Postreplication Repair
Protein Localization To Phagophore Assembly Site
Response To Starvation
Cellular Response To Nutrient Levels
Dna Double−Strand Break Processing
Mitogen−Activated Protein Kinase Kinase Kinase Binding
Protein Phosphatase Inhibitor Activity
Amp−Activated Protein Kinase Activity
Cuprous Ion Binding
Camp−Dependent Protein Kinase Inhibitor Activity
Ubiquitin Conjugating Enzyme Complex
Atg1/Ulk1 Kinase Complex
Nucleotide−Activated Protein Kinase Complex
Phagophore Assembly Site
Presynaptic Cytosol
Autophagy
Formation Of Incision Complex In Gg−Ner
Carnitine Metabolism
Lipophagy
Mastl Facilitates Mitotic Progression
Autophagy
Angiopoietin−Like Protein 8 Regulatory Pathway
Target Of Rapamycin (Tor) Signaling
1q21.1 Copy Number Variation Syndrome
Interferon Type I Signaling Pathways
Biocarta_npc_pathway
Biocarta_leptin_pathway
Biocarta_chrebp_pathway
Biocarta_stress_pathway
Pid_ar_tf_pathway
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
Z Score

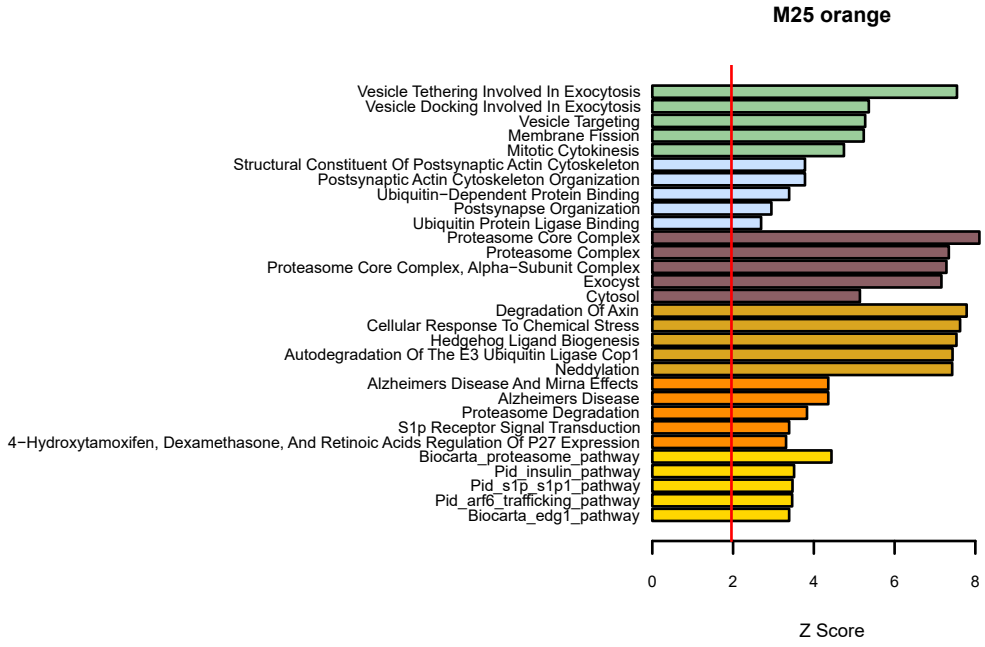

M20 royalblue
Digestive System Development
Cell−Cell Junction Assembly
Digestive Tract Morphogenesis
Muscle Structure Development
Digestive Tract Development
Actin Filament Binding
Filamin Binding
Pyrimidine Nucleotide Binding
Tropomyosin Binding
Alpha−Catenin Binding
Sarcolemma
Stress Fiber
Actin Cytoskeleton
Catenin Complex
Focal Adhesion
Myogenesis
Muscle Contraction
Adherens Junctions Interactions
Nuclear Signaling By Erbb4
Ion Homeostasis
Arrhythmogenic Right Ventricular Cardiomyopathy
Adipogenesis
Malignant Pleural Mesothelioma
Lncrna In Canonical Wnt Signaling And Colorectal Cancer
Wnt Signaling
Biocarta_hsp27_pathway
Biocarta_alk_pathway
Pid_beta_catenin_deg_pathway
Biocarta_cell2cell_pathway
Biocarta_wnt_pathway
0
1
2
3
4
Z Score

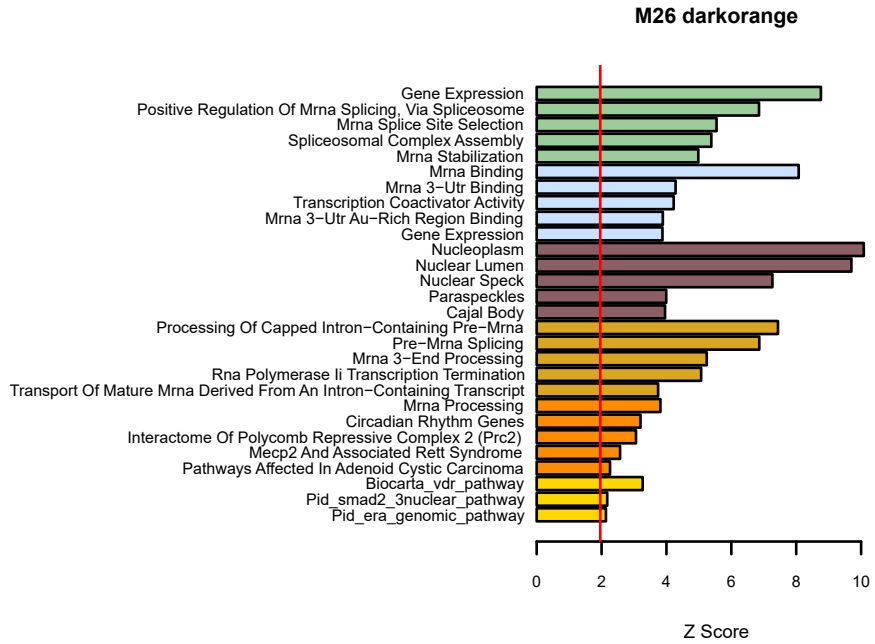

M21 darkred
Protein Targeting To Mitochondrion
Cristae Formation
Protein Insertion Into Mitochondrial Outer Membrane
Protein Insertion Into Mitochondrial Inner Membrane
Acetyl−Coa Biosynthetic Process
Nitrite Reductase Activity
Coa Carboxylase Activity
Trna Methyltransferase Activity
Nucleoside Kinase Activity
Trna Methylation
Mitochondrion
Mitochondrial Envelope
Mitochondrial Matrix
Mitochondrial Inner Membrane
Mib Complex
Mitochondrial Protein Import
Protein Localization
Mitochondrial Biogenesis
Mitochondrial Trna Aminoacylation
Organelle Biogenesis And Maintenance
Leucine, Isoleucine And Valine Metabolism
Fatty Acid Beta−Oxidation
Biotin Metabolism, Including Imds
Tryptophan Metabolism
0
2
4
6
8
10
12
Z Score

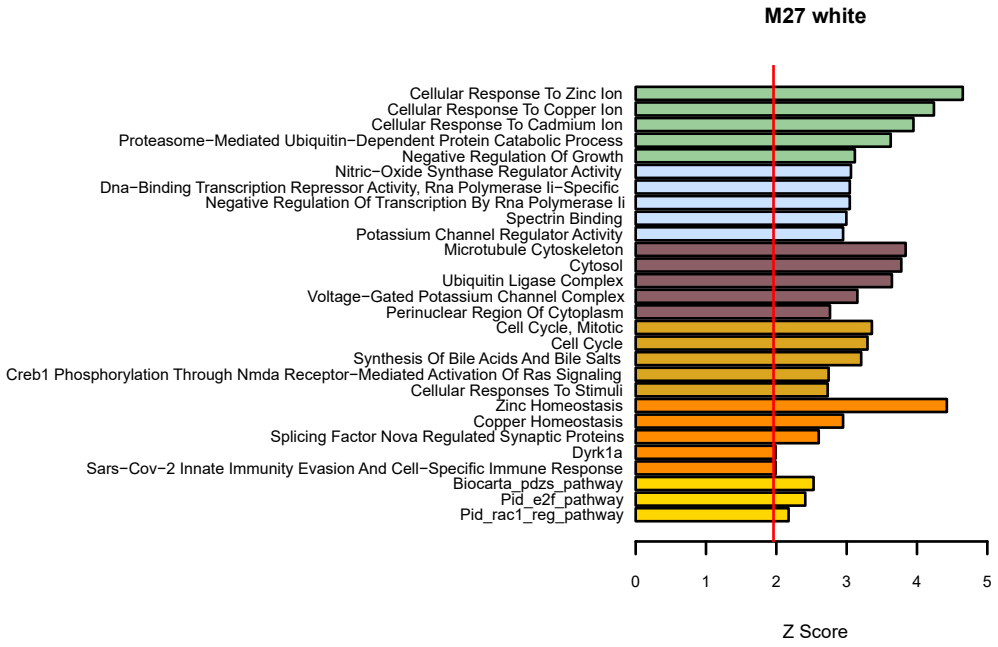

M22 darkgreen
Microtubule Cytoskeleton Organization
Mitotic Cell Cycle
Intermediate Filament Bundle Assembly
Neurofilament Cytoskeleton Organization
Cell Division
Structural Constituent Of Cytoskeleton
Microtubule Binding
Postsynaptic Cytoskeleton Organization
Gtp Binding
Kinesin Binding
Microtubule
Microtubule Cytoskeleton
Kinesin Complex
Neurofilament
Intercellular Bridge
Kinesins
M Phase
Mitotic Metaphase And Anaphase
Rho Gtpases Activate Ktn1
Cell Cycle, Mitotic
Pathogenic Escherichia Coli Infection
Parkin−Ubiquitin Proteasomal System Pathway
Alzheimers Disease And Mirna Effects
Alzheimers Disease
Physico−Chemical Features And Toxicity−Associated Pathways
Pid_vegfr1_pathway
Biocarta_ccr3_pathway
Pid_netrin_pathway
0
2
4
6
8
Z Score

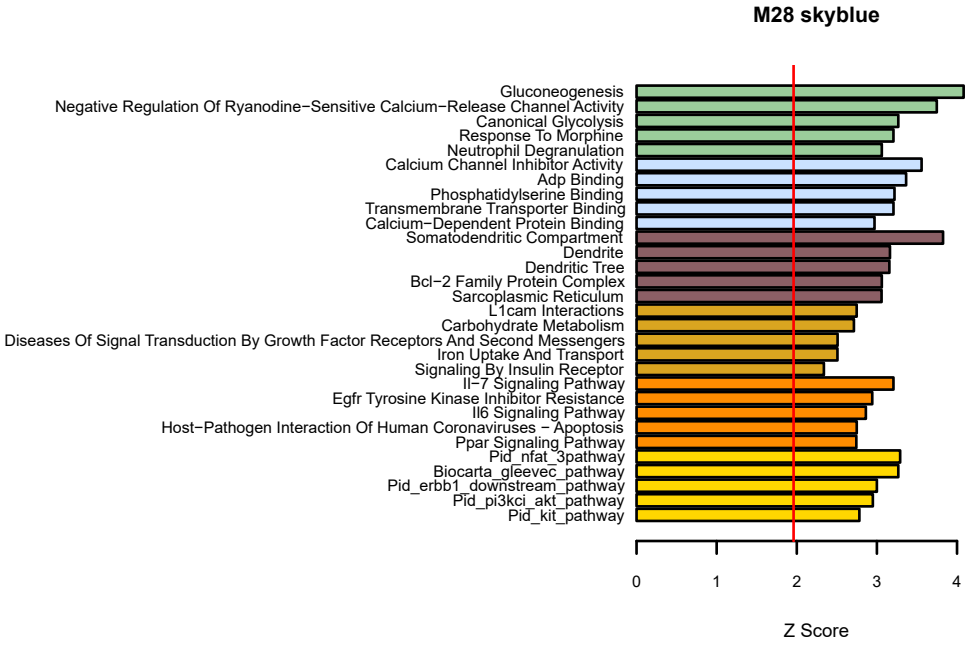

M23 darkturquoise
Negative Regulation Of Vascular Associated Smooth Muscle Cell Proliferation
Positive Regulation Of I−Kappab Kinase/Nf−Kappab Signaling
Muscle Adaptation
Fibroblast Migration
Cellular Response To Type I Interferon
Protein Phosphatase 2a Binding
Phospholipase Activity
Cytokine Receptor Activity
Peptide Antigen Binding
Identical Protein Binding
Specific Granule
Specific Granule Membrane
Focal Adhesion
Ragulator Complex
Basal Plasma Membrane
Interferon Gamma Signaling
Interferon Alpha Beta Signaling
Traf3−Dependent Irf Activation Pathway
Mtorc1−Mediated Signalling
Traf6 Mediated Irf7 Activation
Immune Response To Tuberculosis
Sars−Cov−2 Innate Immunity Evasion And Cell−Specific Immune Response
Regulatory Circuits Of The Stat3 Signaling Pathway
Gastrin Signaling Pathway
Antiviral And Anti−Inflammatory Effects Of Nrf2 On Sars−Cov−2 Pathway
Pid_a6b1_a6b4_integrin_pathway
Pid_syndecan_2_pathway
Pid_fra_pathway
Pid_integrin4_pathway
Biocarta_mhc_pathway
0
1
2
3
4
Z Score

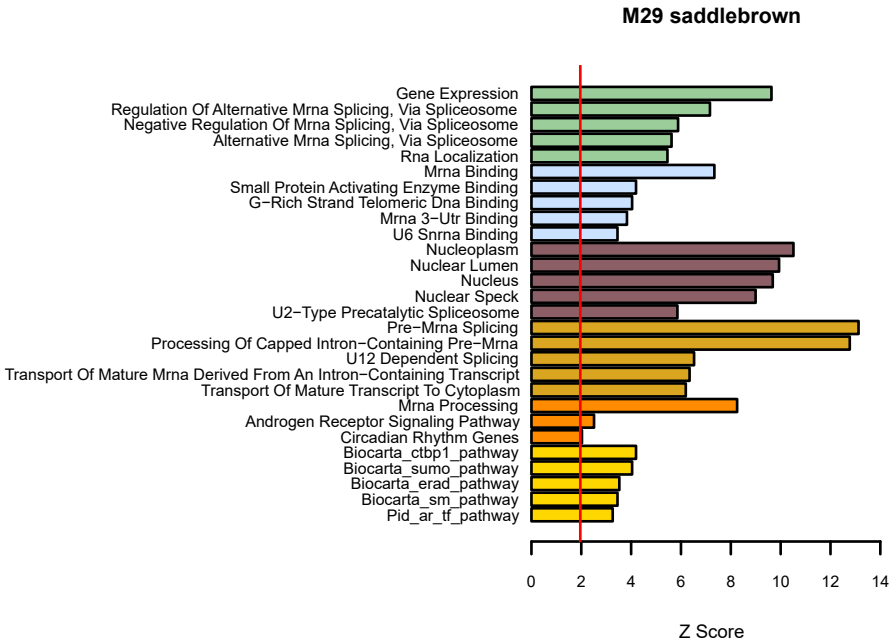

M24 darkgrey
Membrane Repolarization During Cardiac Muscle Cell Action Potential
Establishment Or Maintenance Of Transmembrane Electrochemical Gradient
Cardiac Conduction
Protein Autophosphorylation
Intracellular Potassium Ion Homeostasis
Protein Serine Kinase Activity
Atp Binding
P−Type Sodium:potassium−Exchanging Transporter Activity
Establishment Or Maintenance Of Transmembrane Electrochemical Gradient
Map Kinase Kinase Activity
Axon
Distal Axon
Growth Cone
Sodium:potassium−Exchanging Atpase Complex
Cell Leading Edge
G−Protein Beta:gamma Signalling
G Beta:gamma Signalling Through Cdc42
G Beta:gamma Signalling Through Pi3kgamma
Rho Gtpases Activate Paks
Gpcr Downstream Signalling
Mapk Signaling Pathway
Chemokine Signaling Pathway
Melanoma
Erbb Signaling Pathway
Glioblastoma Signaling Pathways
Pid_pdgfrb_pathway
Biocarta_at1r_pathway
Biocarta_mapk_pathway
Biocarta_pyk2_pathway
Pid_cdc42_pathway
0
1
2
3
4
5
6
Z Score

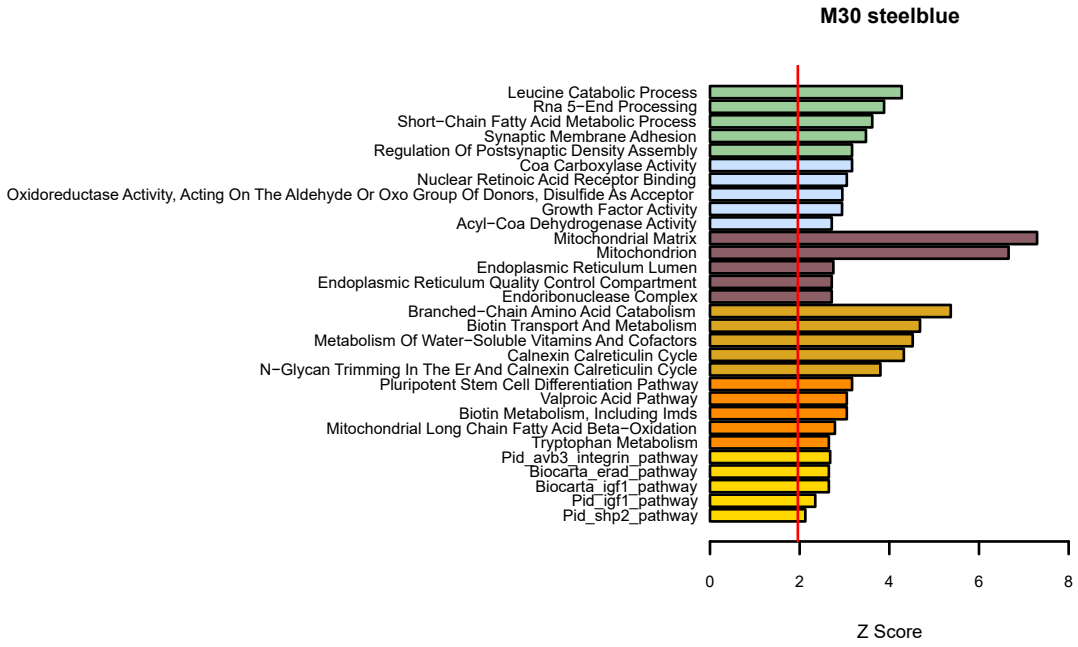

M25 orange
Vesicle Tethering Involved In Exocytosis
Vesicle Docking Involved In Exocytosis
Vesicle Targeting
Membrane Fission
Mitotic Cytokinesis
Structural Constituent Of Postsynaptic Actin Cytoskeleton
Postsynaptic Actin Cytoskeleton Organization
Ubiquitin−Dependent Protein Binding
Postsynapse Organization
Ubiquitin Protein Ligase Binding
Proteasome Core Complex
Proteasome Complex
Proteasome Core Complex, Alpha−Subunit Complex
Exocyst
Cytosol
Degradation Of Axin
Cellular Response To Chemical Stress
Hedgehog Ligand Biogenesis
Autodegradation Of The E3 Ubiquitin Ligase Cop1
Neddylation
Alzheimers Disease And Mirna Effects
Alzheimers Disease
Proteasome Degradation
S1p Receptor Signal Transduction
4−Hydroxytamoxifen, Dexamethasone, And Retinoic Acids Regulation Of P27 Expression
Biocarta_proteasome_pathway
Pid_insulin_pathway
Pid_s1p_s1p1_pathway
Pid_arf6_trafficking_pathway
Biocarta_edg1_pathway
0
2
4
6
8
Z Score

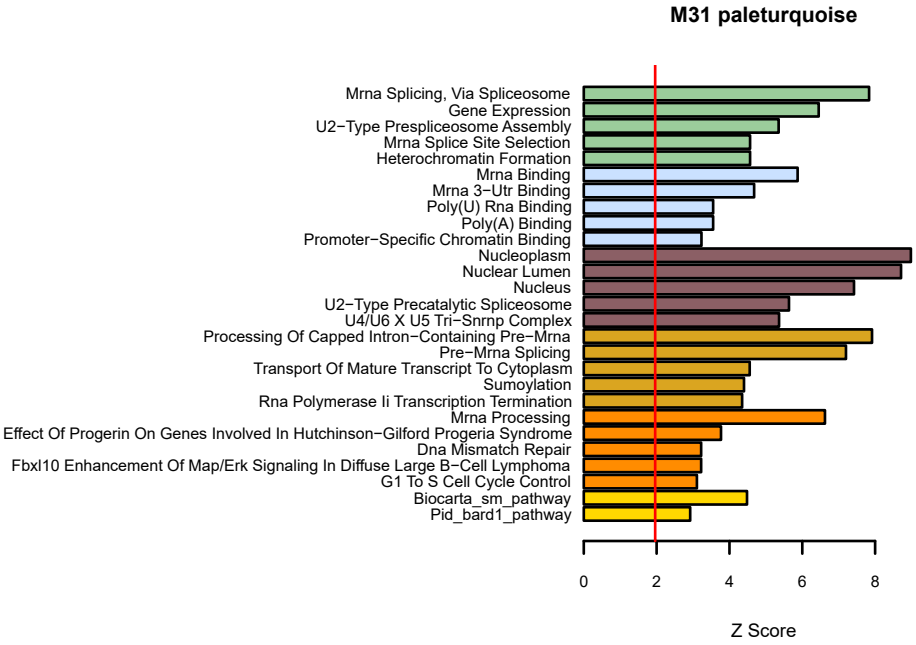

M26 darkorange
Gene Expression
Positive Regulation Of Mrna Splicing, Via Spliceosome
Mrna Splice Site Selection
Spliceosomal Complex Assembly
Mrna Stabilization
Mrna Binding
Mrna 3−Utr Binding
Transcription Coactivator Activity
Mrna 3−Utr Au−Rich Region Binding
Gene Expression
Nucleoplasm
Nuclear Lumen
Nuclear Speck
Paraspeckles
Cajal Body
Processing Of Capped Intron−Containing Pre−Mrna
Pre−Mrna Splicing
Mrna 3−End Processing
Rna Polymerase Ii Transcription Termination
Transport Of Mature Mrna Derived From An Intron−Containing Transcript
Mrna Processing
Circadian Rhythm Genes
Interactome Of Polycomb Repressive Complex 2 (Prc2)
Mecp2 And Associated Rett Syndrome
Pathways Affected In Adenoid Cystic Carcinoma
Biocarta_vdr_pathway
Pid_smad2_3nuclear_pathway
Pid_era_genomic_pathway
0
2
4
6
8
10
Z Score

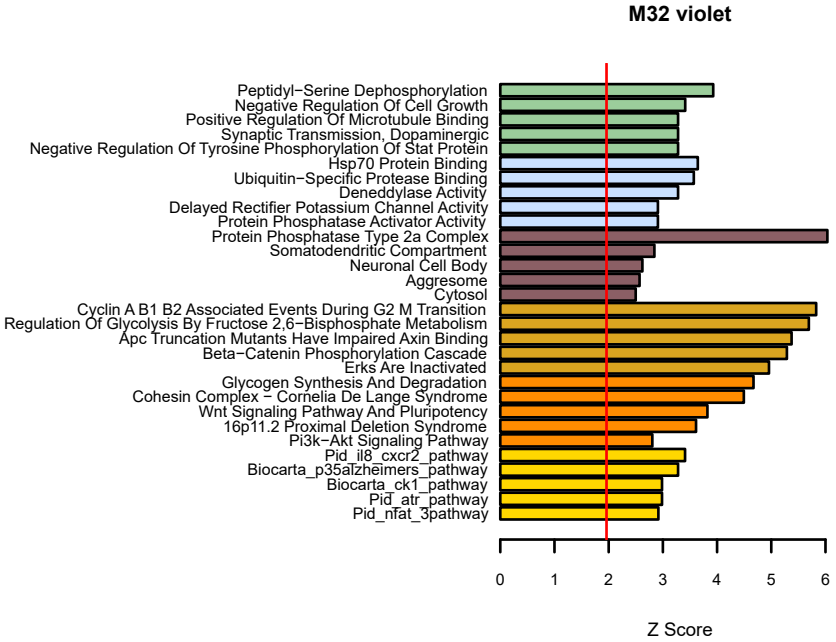

M27 white
Cellular Response To Zinc Ion
Cellular Response To Copper Ion
Cellular Response To Cadmium Ion
Proteasome−Mediated Ubiquitin−Dependent Protein Catabolic Process
Negative Regulation Of Growth
Nitric−Oxide Synthase Regulator Activity
Dna−Binding Transcription Repressor Activity, Rna Polymerase Ii−Specific
Negative Regulation Of Transcription By Rna Polymerase Ii
Spectrin Binding
Potassium Channel Regulator Activity
Microtubule Cytoskeleton
Cytosol
Ubiquitin Ligase Complex
Voltage−Gated Potassium Channel Complex
Perinuclear Region Of Cytoplasm
Cell Cycle, Mitotic
Cell Cycle
Synthesis Of Bile Acids And Bile Salts
Creb1 Phosphorylation Through Nmda Receptor−Mediated Activation Of Ras Signaling
Cellular Responses To Stimuli
Zinc Homeostasis
Copper Homeostasis
Splicing Factor Nova Regulated Synaptic Proteins
Dyrk1a
Sars−Cov−2 Innate Immunity Evasion And Cell−Specific Immune Response
Biocarta_pdzs_pathway
Pid_e2f_pathway
Pid_rac1_reg_pathway
0
1
2
3
4
5
Z Score

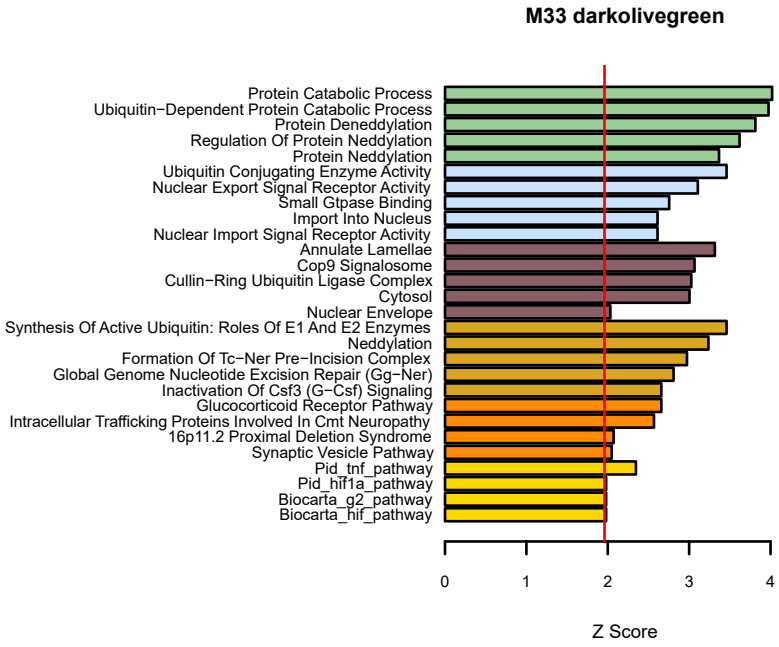

M28 skyblue
Gluconeogenesis
Negative Regulation Of Ryanodine−Sensitive Calcium−Release Channel Activity
Canonical Glycolysis
Response To Morphine
Neutrophil Degranulation
Calcium Channel Inhibitor Activity
Adp Binding
Phosphatidylserine Binding
Transmembrane Transporter Binding
Calcium−Dependent Protein Binding
Somatodendritic Compartment
Dendrite
Dendritic Tree
Bcl−2 Family Protein Complex
Sarcoplasmic Reticulum
L1cam Interactions
Carbohydrate Metabolism
Diseases Of Signal Transduction By Growth Factor Receptors And Second Messengers
Iron Uptake And Transport
Signaling By Insulin Receptor
Il−7 Signaling Pathway
Egfr Tyrosine Kinase Inhibitor Resistance
Il6 Signaling Pathway
Host−Pathogen Interaction Of Human Coronaviruses − Apoptosis
Ppar Signaling Pathway
Pid_nfat_3pathway
Biocarta_gleevec_pathway
Pid_erbb1_downstream_pathway
Pid_pi3kci_akt_pathway
Pid_kit_pathway
0
1
2
3
4
Z Score


M29 saddlebrown
Gene Expression
Regulation Of Alternative Mrna Splicing, Via Spliceosome
Negative Regulation Of Mrna Splicing, Via Spliceosome
Alternative Mrna Splicing, Via Spliceosome
Rna Localization
Mrna Binding
Small Protein Activating Enzyme Binding
G−Rich Strand Telomeric Dna Binding
Mrna 3−Utr Binding
U6 Snrna Binding
Nucleoplasm
Nuclear Lumen
Nucleus
Nuclear Speck
U2−Type Precatalytic Spliceosome
Pre−Mrna Splicing
Processing Of Capped Intron−Containing Pre−Mrna
U12 Dependent Splicing
Transport Of Mature Mrna Derived From An Intron−Containing Transcript
Transport Of Mature Transcript To Cytoplasm
Mrna Processing
Androgen Receptor Signaling Pathway
Circadian Rhythm Genes
Biocarta_ctbp1_pathway
Biocarta_sumo_pathway
Biocarta_erad_pathway
Biocarta_sm_pathway
Pid_ar_tf_pathway
0
2
4
6
8
10
12
14
Z Score


M30 steelblue
Leucine Catabolic Process
Rna 5−End Processing
Short−Chain Fatty Acid Metabolic Process
Synaptic Membrane Adhesion
Regulation Of Postsynaptic Density Assembly
Coa Carboxylase Activity
Nuclear Retinoic Acid Receptor Binding
Oxidoreductase Activity, Acting On The Aldehyde Or Oxo Group Of Donors, Disulfide As Acceptor
Growth Factor Activity
Acyl−Coa Dehydrogenase Activity
Mitochondrial Matrix
Mitochondrion
Endoplasmic Reticulum Lumen
Endoplasmic Reticulum Quality Control Compartment
Endoribonuclease Complex
Branched−Chain Amino Acid Catabolism
Biotin Transport And Metabolism
Metabolism Of Water−Soluble Vitamins And Cofactors
Calnexin Calreticulin Cycle
N−Glycan Trimming In The Er And Calnexin Calreticulin Cycle
Pluripotent Stem Cell Differentiation Pathway
Valproic Acid Pathway
Biotin Metabolism, Including Imds
Mitochondrial Long Chain Fatty Acid Beta−Oxidation
Tryptophan Metabolism
Pid_avb3_integrin_pathway
Biocarta_erad_pathway
Biocarta_igf1_pathway
Pid_igf1_pathway
Pid_shp2_pathway
0
2
4
6
8
Z Score


M31 paleturquoise
Mrna Splicing, Via Spliceosome
Gene Expression
U2−Type Prespliceosome Assembly
Mrna Splice Site Selection
Heterochromatin Formation
Mrna Binding
Mrna 3−Utr Binding
Poly(U) Rna Binding
Poly(A) Binding
Promoter−Specific Chromatin Binding
Nucleoplasm
Nuclear Lumen
Nucleus
U2−Type Precatalytic Spliceosome
U4/U6 X U5 Tri−Snrnp Complex
Processing Of Capped Intron−Containing Pre−Mrna
Pre−Mrna Splicing
Transport Of Mature Transcript To Cytoplasm
Sumoylation
Rna Polymerase Ii Transcription Termination
Mrna Processing
Effect Of Progerin On Genes Involved In Hutchinson−Gilford Progeria Syndrome
Dna Mismatch Repair
Fbxl10 Enhancement Of Map/Erk Signaling In Diffuse Large B−Cell Lymphoma
G1 To S Cell Cycle Control
Biocarta_sm_pathway
Pid_bard1_pathway
0
2
4
6
8
Z Score


M32 violet
Peptidyl−Serine Dephosphorylation
Negative Regulation Of Cell Growth
Positive Regulation Of Microtubule Binding
Synaptic Transmission, Dopaminergic
Negative Regulation Of Tyrosine Phosphorylation Of Stat Protein
Hsp70 Protein Binding
Ubiquitin−Specific Protease Binding
Deneddylase Activity
Delayed Rectifier Potassium Channel Activity
Protein Phosphatase Activator Activity
Protein Phosphatase Type 2a Complex
Somatodendritic Compartment
Neuronal Cell Body
Aggresome
Cytosol
Cyclin A B1 B2 Associated Events During G2 M Transition
Regulation Of Glycolysis By Fructose 2,6−Bisphosphate Metabolism
Apc Truncation Mutants Have Impaired Axin Binding
Beta−Catenin Phosphorylation Cascade
Erks Are Inactivated
Glycogen Synthesis And Degradation
Cohesin Complex − Cornelia De Lange Syndrome
Wnt Signaling Pathway And Pluripotency
16p11.2 Proximal Deletion Syndrome
Pi3k−Akt Signaling Pathway
Pid_il8_cxcr2_pathway
Biocarta_p35alzheimers_pathway
Biocarta_ck1_pathway
Pid_atr_pathway
Pid_nfat_3pathway
0
1
2
3
4
5
6
Z Score


M33 darkolivegreen
Protein Catabolic Process
Ubiquitin−Dependent Protein Catabolic Process
Protein Deneddylation
Regulation Of Protein Neddylation
Protein Neddylation
Ubiquitin Conjugating Enzyme Activity
Nuclear Export Signal Receptor Activity
Small Gtpase Binding
Import Into Nucleus
Nuclear Import Signal Receptor Activity
Annulate Lamellae
Cop9 Signalosome
Cullin−Ring Ubiquitin Ligase Complex
Cytosol
Nuclear Envelope
Synthesis Of Active Ubiquitin: Roles Of E1 And E2 Enzymes
Neddylation
Formation Of Tc−Ner Pre−Incision Complex
Global Genome Nucleotide Excision Repair (Gg−Ner)
Inactivation Of Csf3 (G−Csf) Signaling
Glucocorticoid Receptor Pathway
Intracellular Trafficking Proteins Involved In Cmt Neuropathy
16p11.2 Proximal Deletion Syndrome
Synaptic Vesicle Pathway
Pid_tnf_pathway
Pid_hif1a_pathway
Biocarta_g2_pathway
Biocarta_hif_pathway
0
1
2
3
4
Z Score