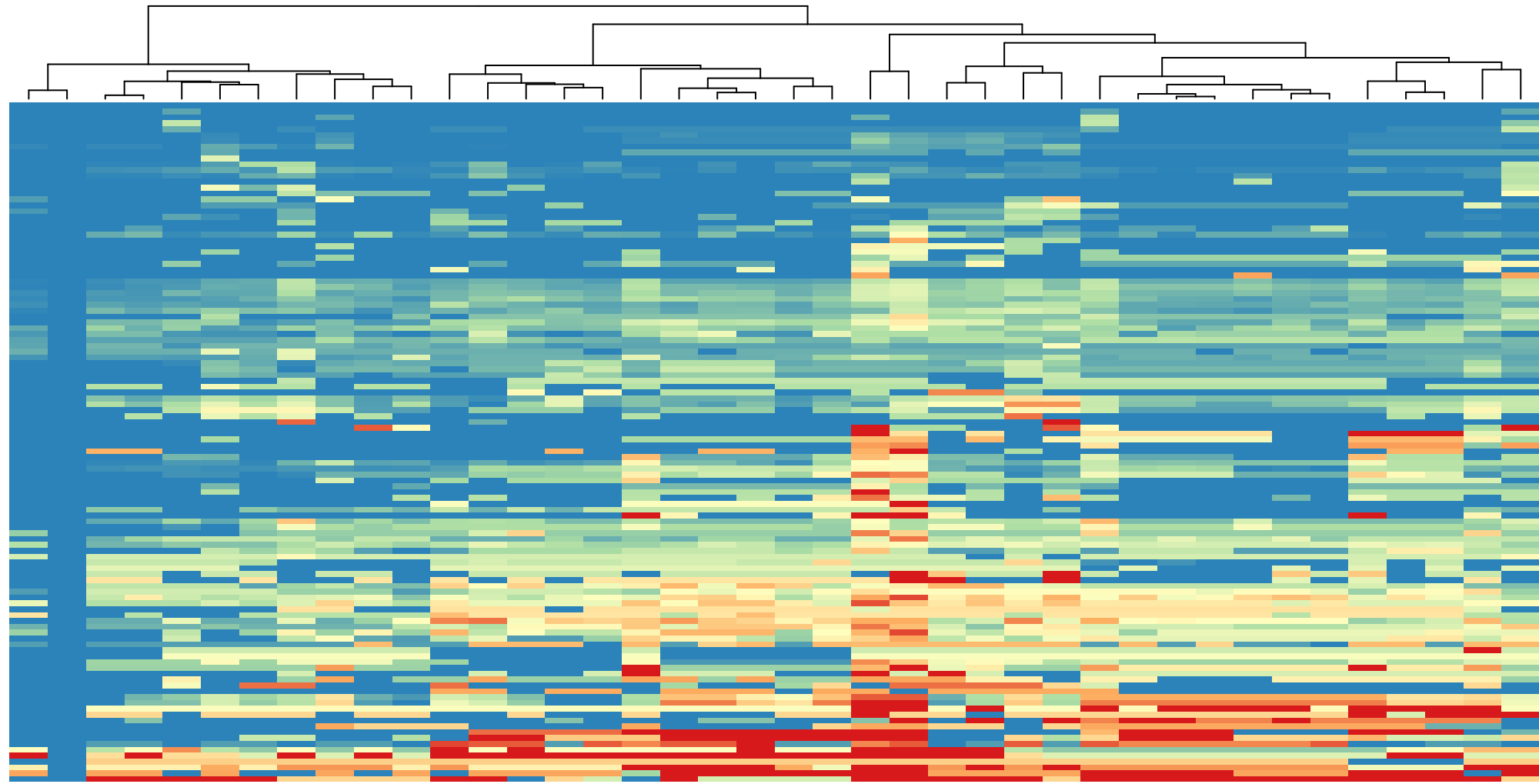
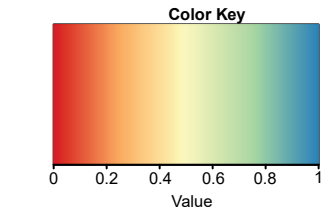


Extended Data Figure 21



Dr. melanogaster
Mu. musculus
Acy. subglobosum
Di. discoideum
Th. trahens
Aca. castellani
mantamnad_sp
Re. filosa
Cym. tetramitiformis
Bi. natans
Prymnesium_parvum_TRX
F. alba
Con. coronatus
Ba. dendrobatidis
N. californiae
Rh. irregularis
Phaeodactylum_tricornutum
Pu. sorghi
Sa. cerevisiae
Sc. pombe
Al. macrogynus
R. allomyces
Cya. merolae
Plasmodium_faiciparum
Pa. tetraurelia
Te. thermophila
Entamoeba_histolytica
Trichomonas_vaginalis
Pi. abies
Br. distachyon
Ar. thaliana
Mi. guttatus
Se. moellendorffii
O. sativa
Ph. patens
Chlorella_sp.
Chl. reinhardtii
V. carteri
Bo. saltans
Chr. tobin

GO:0006610 ribosomal protein import into nucleus_3
GO:000184 nuclear transcribed mRNA catabolic process_nonsense mediated decay_7
GO:000184 vesicle docking_9
GO:0001997 viral transcription_5
GO:0001998 hydroxycoupled proton transport_11
GO:0001999 membrane fusion_20
GO:0002000 protein folding_21
GO:0002001 vacuolar organization_3
GO:0002002 amyloid organization_2
GO:0002003 mature ribosome assembly_17
GO:0002004 transition_74
GO:0002005 mRNA splicing via spliceosome_20
GO:0002006 polysomal small subunit assembly_5
GO:0002007 ribosomal small subunit assembly_6
GO:0002008 transitional elongation_8
GO:0002009 protein folding in endoplasmic reticulum_4
GO:0002010 tricarboxylic acid cycle_8
GO:0002011 cell redox homeostasis_8
GO:0002012 response to cadmium ion_11
GO:0002013 NLS bearing protein import into nucleus_4
GO:0002014 response to calcium ion
GO:0002015 regulation of transcription_19
GO:0002016 regulation of SRE
GO:0002017 telomere determination_4
GO:0002018 telomere determination_4 complex assembly_3
GO:0002019 cortical actin cytoskeleton organization_6
GO:0002020 actin packing behavior
GO:0002021 mRNA 5' splice site recognition_2
GO:0002022 intracellular protein transport_86
GO:0002023 cellular protein localization_87
GO:0002024 protein transport_112
GO:0002025 vesicle mediated transport_87
GO:0002026 protein transport_112
GO:0002027 protein targeting to vacuole_9
GO:0002028 endocytosis_28
GO:0002029 positive regulation of gene expression_27
GO:0002030 cellular calcium ion homeostasis
GO:0002031 regulation of protein catabolic process_8
GO:0002032 regulation of RNA splicing
GO:0002033 removal of superoxide radicals_4
GO:0002034 lipid transport_16
GO:0002035 glucose release
GO:0002036 glycolysis_11
GO:0002037 negative chemotaxis_3
GO:0002038 embryonic axis specification_3
GO:0002039 osmotic salinity response_3
GO:0002040 ATP metabolic process_36
GO:0002041 ATP synthase coupled proton transport_11
GO:0002042 Golgi organization_6
GO:0002043 protein import into mitochondrial matrix_5
GO:0002044 chaperone mediated protein transport_2
GO:0002045 attachment of GTP anchor to protein_4
GO:0002046 positive regulation of synaptic growth at neuromuscular junction_2
GO:0002047 terminal button organization_3
GO:0002048 barbed end actin filament capping_3
GO:0002049 progesterone biosynthetic process_3
GO:0002050 Arp2/3 complex mediated actin nucleation_6
GO:0002051 cell growth_27
GO:0002052 actin filament polymerization_16
GO:0002053 root epidermal cell differentiation_4
GO:0002054 endosome to lysosome transport_4
GO:0002055 late endosome to lysosome transport_2
GO:0002056 stem cell division_5
GO:0002057 positive regulation of cardiac muscle hypertrophy_2
GO:0002058 neutrophil degranulation_5
GO:0002059 actin crosslink formation_2
GO:0002060 protein targeting to ER_17
GO:0002061 SRE development transcriptional protein targeting to membrane_8
GO:0002062 retrograde transport endosome to plasma membrane_4
GO:0002063 positive regulation of protein secretion_5
GO:0002064 apoptotic signaling pathway_16
GO:0002065 endosome organization_6
GO:0002066 ribosomal large subunit assembly_5
GO:0002067 cellular response to interferon_4_4
GO:0002068 collagen catabolic process
GO:0002069 positive regulation of calcium import into nucleus_2
GO:0002070 positive regulation of epithelial to mesenchymal transition_2
GO:0002071 receptor mediated signaling_9
GO:0002072 receptor mediated signaling_9
GO:0002073 regulation of protein kinase activity_16
GO:0002074 lysosome organization
GO:0002075 cellular response to low density lipoprotein particle stimulus_2
GO:0002076 neuromuscular process controlling balance_4
GO:0002077 myeloid cell differentiation_7
GO:0002078 lysosomal transport_9
GO:0002079 glucose homeostasis_6
GO:0002080 positive regulation of MAPK cascade_8
GO:0002081 hydrogen peroxide catabolic process_3
GO:0002082 protein retention in Golgi apparatus_2
GO:0002083 Golgi vesicle budding_2
GO:0002084 late endosome to vacuole transport_7
GO:0002085 regulation of Rho protein signal transduction_5
GO:0002086 cytoskeletal anchoring at plasma membrane
GO:0002087 adenylate cyclase inhibiting G protein coupled receptor signaling pathway_3
GO:0002088 cell growth_27
GO:0002089 collagen fibril organization
GO:0002090 positive regulation of IGF1 signaling_7
GO:0002091 positive regulation of amino acid stimulus_5
GO:0002092 positive regulation of tumor necrosis factor production_2
GO:0002093 regulation of lamellipodium assembly_2
GO:0002094 muscle filament sliding_2
GO:0002095 chemotaxis to cAMP_8
GO:0002096 phagosome reformation_3
GO:0002097 protein localization to lysosome_3
GO:0002098 chylomicron receptor cell differentiation_3
GO:0002099 oligosaccharide catabolic process_3
GO:0002100 galactoside catabolic process
GO:0002101 cellular copper ion homeostasis_2
GO:0002102 lysosome localization_3
GO:1904925 positive regulation of mitophagy in response to mitochondrial depolarization_2