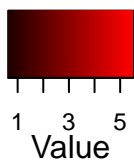
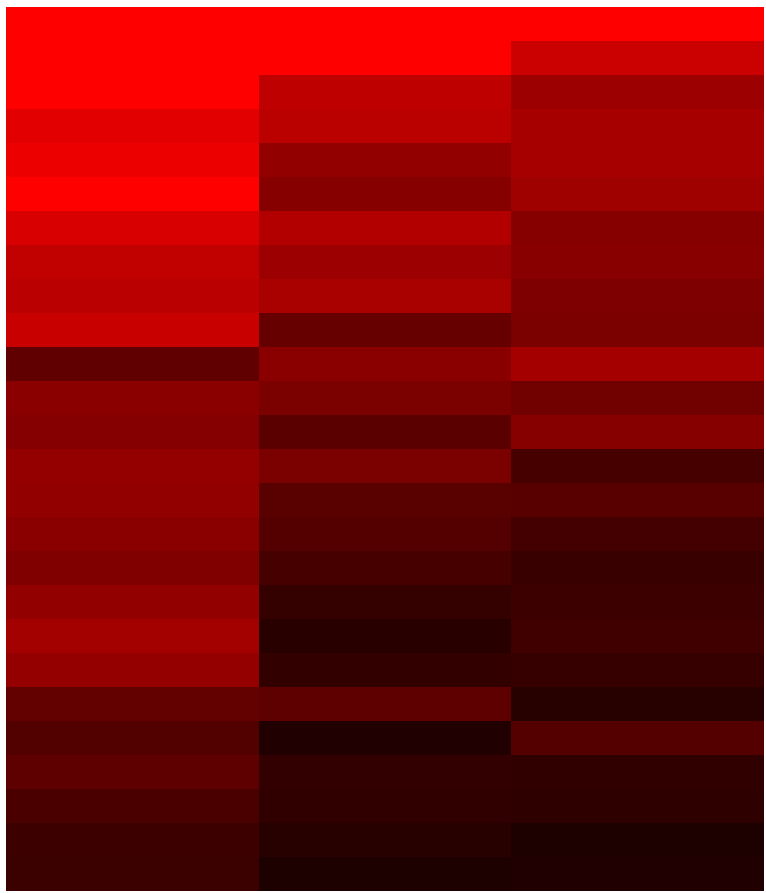


Color Key



GAGE Up-test: $-\log_{10}(\text{p-value})$



Pyruvate metabolism
Fatty acid biosynthesis
Propanoate metabolism
Other carbon fixation pathways
Glycolysis / Gluconeogenesis
Glyoxylate and dicarboxylate metabolism
Starch and sucrose metabolism
Galactose metabolism
Fructose and mannose metabolism
One carbon pool by folate
Thiamine metabolism
Methane metabolism
Glycerolipid metabolism
Inositol phosphate metabolism
Porphyrin metabolism
Fatty acid degradation
Lipoic acid metabolism
Amino sugar and nucleotide metabolism
Biosynthesis of unsaturated fatty acids
Glycine, serine and threonine metabolism
Sphingolipid metabolism
Pentose and glucuronate interconversions
Valine, leucine and isoleucine metabolism
beta-Alanine metabolism
Selenocompound metabolism
Carotenoid biosynthesis

ML_1

ML_2

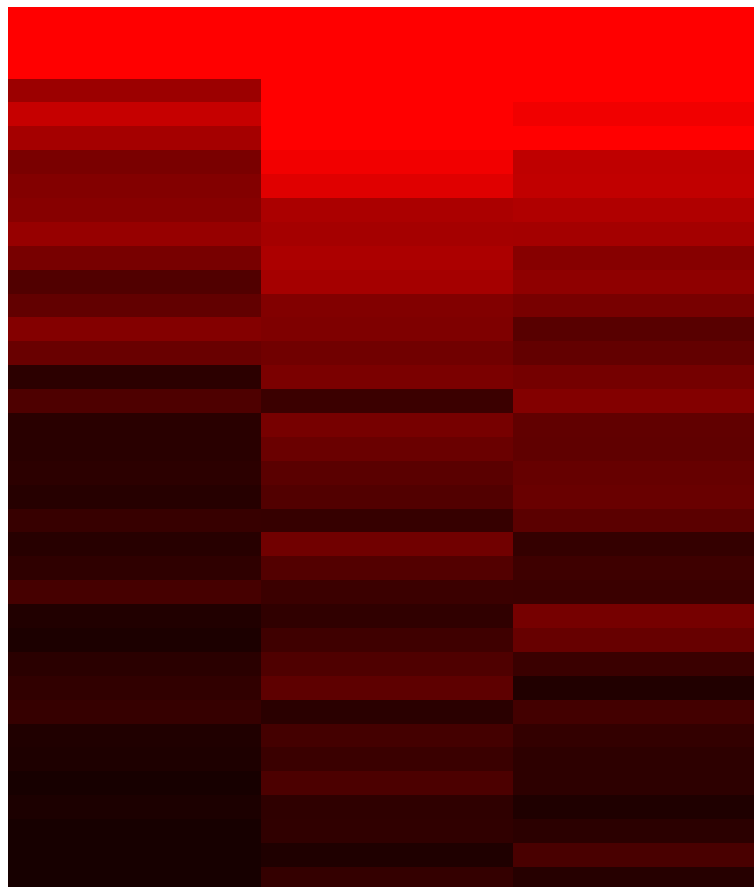
ML_3

Color Key



1 3 5
Value

GAGE Down-test: $-\log_{10}(\text{p-value})$



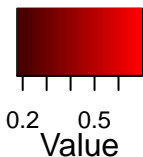
Photosynthesis
Oxidative phosphorylation
Purine metabolism
Photosynthesis – antenna protein
Carbon fixation by Calvin cycle
Citrate cycle (TCA cycle)
Sulfur metabolism
Cysteine and methionine metabolism
Arginine biosynthesis
Phenylalanine, tyrosine and tryptophan metabolism
Pyrimidine metabolism
Alanine, aspartate and glutamate metabolism
Pentose phosphate pathway
Arginine and proline metabolism
Nitrogen metabolism
Glutathione metabolism
Nicotinate and nicotinamide metabolism
Folate biosynthesis
Drug metabolism – other enzymes
N-Glycan biosynthesis
Valine, leucine and isoleucine biosynthesis
Tyrosine metabolism
Riboflavin metabolism
Terpenoid backbone biosynthesis
Glycosylphosphatidylinositol (GPI) anchor biosynthesis
Various types of N-glycan biosynthesis
Other types of O-glycan biosynthesis
Pantothenate and CoA biosynthesis
Glycerophospholipid metabolism
Phenylalanine metabolism
Ubiquinone and other terpenoid biosynthesis
Ascorbate and aldarate metabolism
Metabolism of xenobiotics by cytochrome P450
Tryptophan metabolism
Biotin metabolism
Lysine degradation
Drug metabolism – cytochrome P450

ML_1

ML_2

ML_3

Color Key



GAGE test statistics

