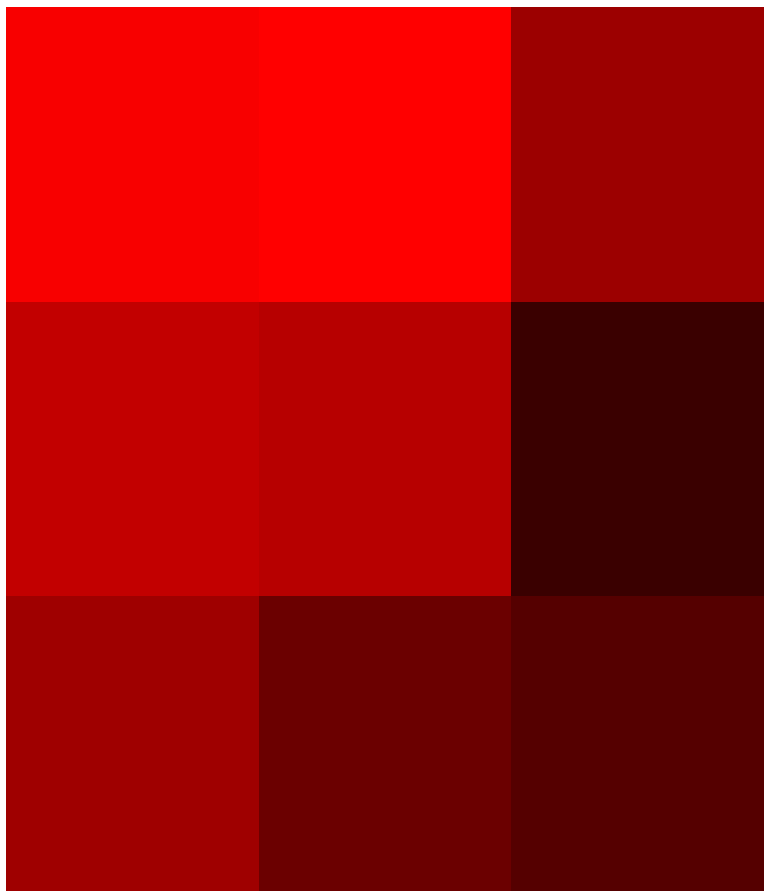


Color Key



0.5 1.5
Value

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



Drug metabolism

beta-Alanine

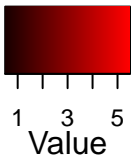
Pantothenate

202_1

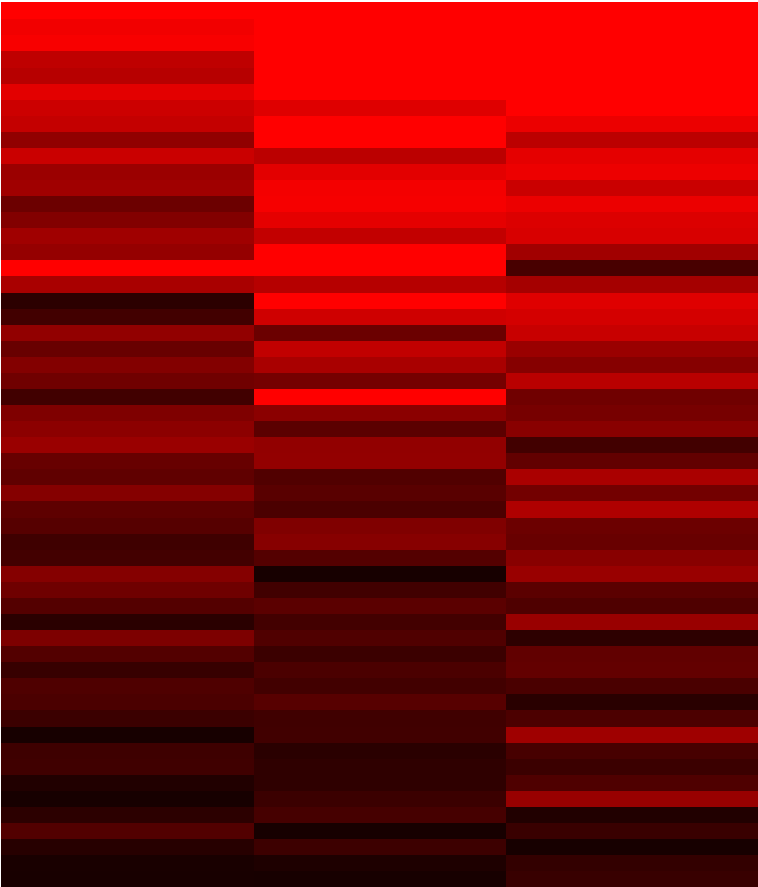
202_2

202_3

Color Key



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



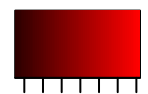
- Photosynthesis – antenna proteins
- Photosynthesis
- Cysteine and methionine metabolism
- Carbon fixation by Calvin cycle
- Glycolysis / Gluconeogenesis
- Alanine, aspartate and glutamate metabolism
- Citrate cycle (TCA cycle)
- Methane metabolism
- Phenylalanine, tyrosine and tryptophan metabolism
- One carbon pool by folate
- Starch and sucrose metabolism
- Arginine biosynthesis
- Valine, leucine and isoleucine biosynthesis
- Glycerophospholipid metabolism
- Terpenoid backbone biosynthesis
- Ascorbate and aldarate metabolism
- Glutathione metabolism
- Other carbon fixation pathways
- Biotin metabolism
- Fatty acid degradation
- Tryptophan metabolism
- Glycerolipid metabolism
- Galactose metabolism
- Glycosylphosphatidylinositol (GPI) anchor metabolism
- Valine, leucine and isoleucine degradation
- Various types of N-glycan biosynthesis
- N-Glycan biosynthesis
- Tyrosine metabolism

202_1

202_2

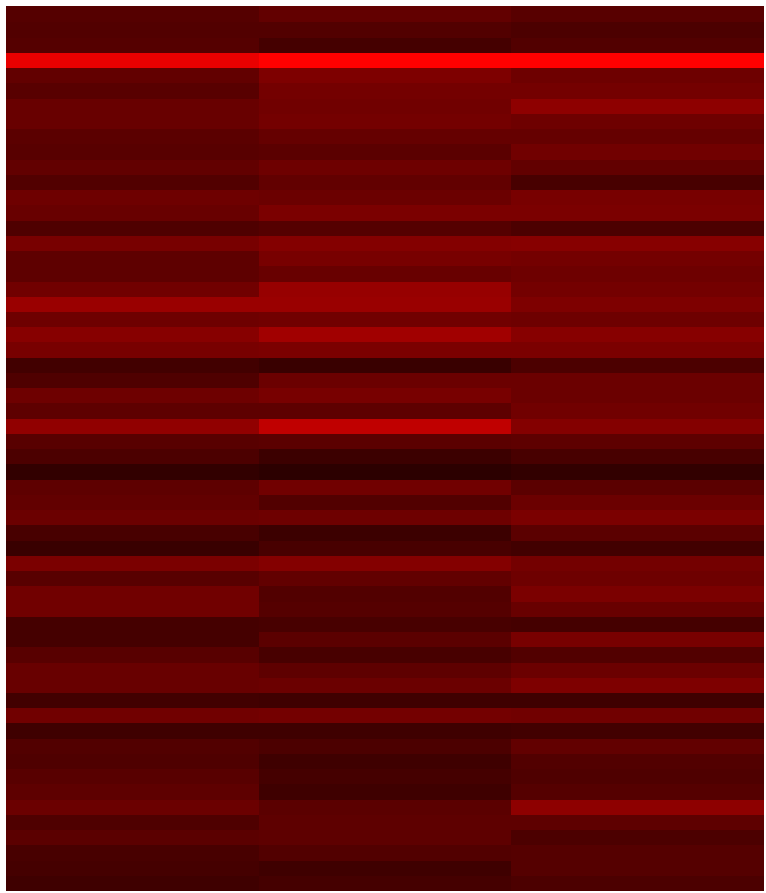
202_3

Color Key



0.2 0.5 0.8
Value

GAGE test statistics



- beta-Alanine metabolism
- Photosynthesis – antenna proteins
- Photosynthesis
- Cysteine and methionine metabolism
- Carbon fixation by Calvin cycle
- Glycolysis / Gluconeogenesis
- Alanine, aspartate and glutamate metabolism
- Citrate cycle (TCA cycle)
- Methane metabolism
- Phenylalanine, tyrosine and tryptophan metabolism
- One carbon pool by folate
- Starch and sucrose metabolism
- Arginine biosynthesis
- Valine, leucine and isoleucine biosynthesis
- Glycerophospholipid metabolism
- Terpenoid backbone biosynthesis
- Ascorbate and aldarate metabolism
- Glutathione metabolism
- Other carbon fixation pathways
- Biotin metabolism
- Fatty acid degradation
- Tryptophan metabolism
- Glycerolipid metabolism
- Galactose metabolism
- Glycosylphosphatidylinositol (GPI) biosynthesis
- Valine, leucine and isoleucine degradation
- Various types of N-glycan biosynthesis
- N-Glycan biosynthesis
- Tyrosine metabolism

202_1

202_2

202_3