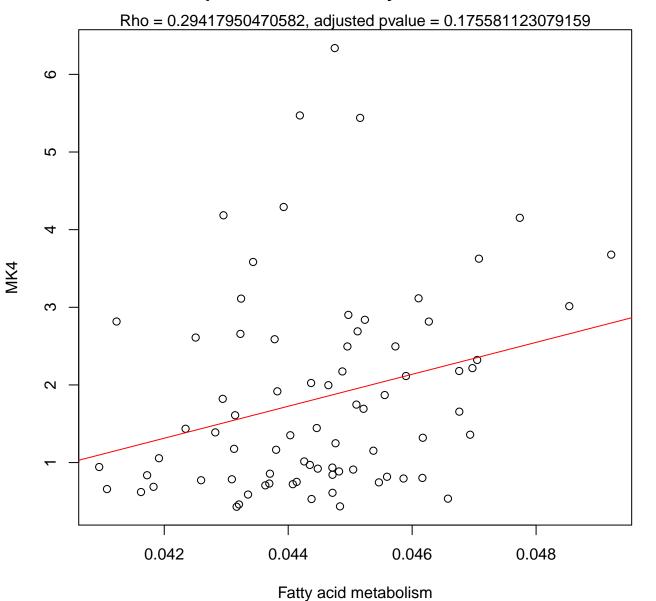
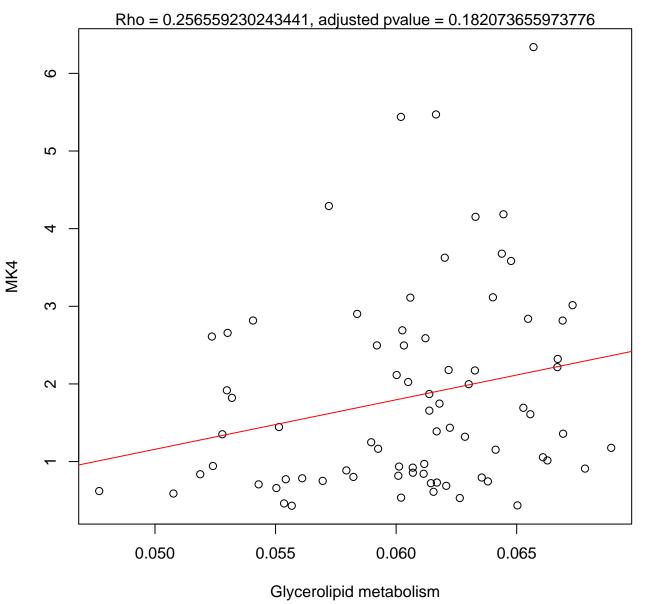
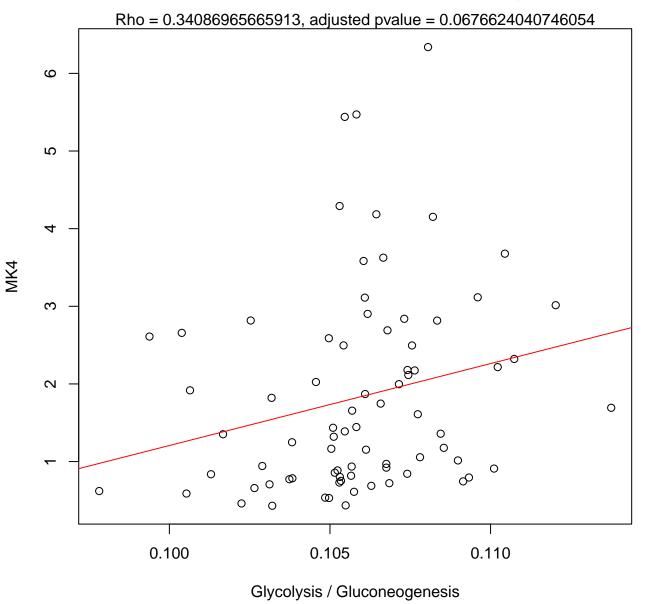
Timepoint 1, MK4 ~ Fatty acid metabolism



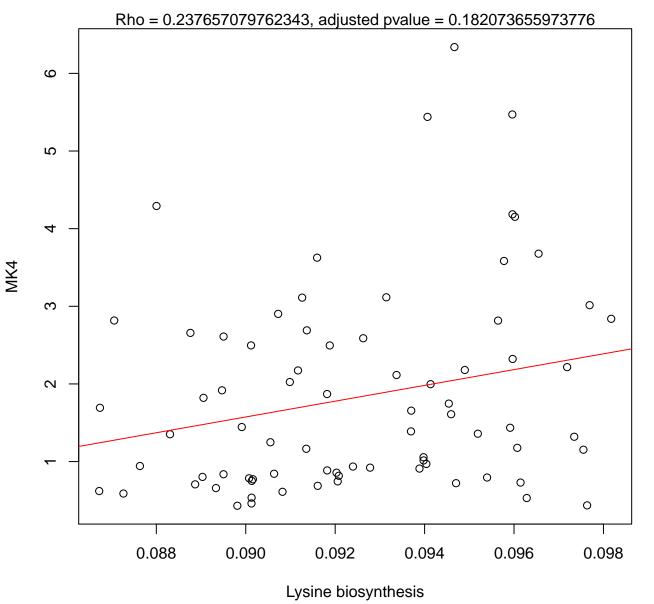
### Timepoint 1, MK4 ~ Glycerolipid metabolism



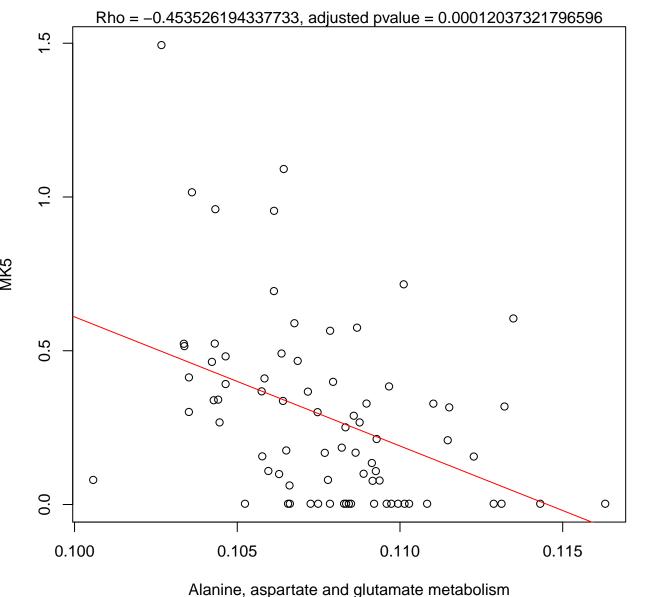
## Timepoint 1, MK4 ~ Glycolysis / Gluconeogenesis



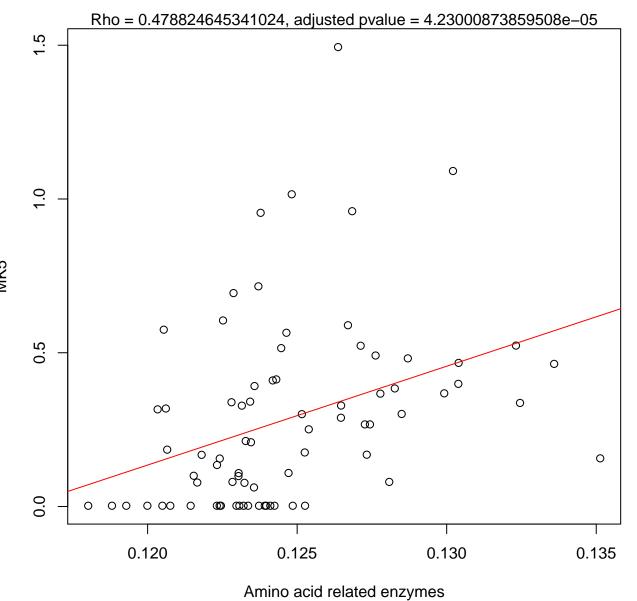
Timepoint 1, MK4 ~ Lysine biosynthesis



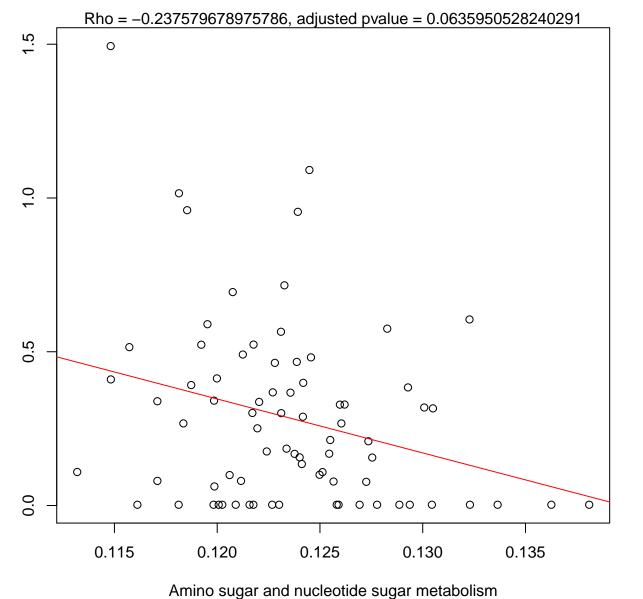
Timepoint 1, MK5 ~ Alanine, aspartate and glutamate metabolism



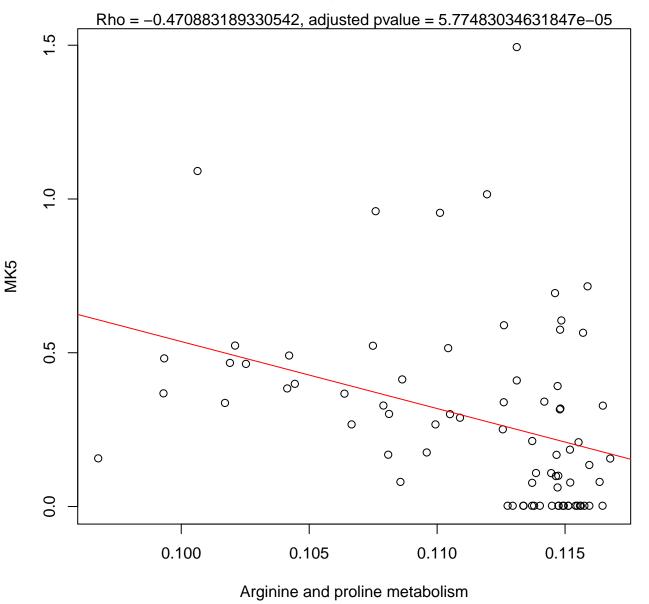
Timepoint 1, MK5 ~ Amino acid related enzymes



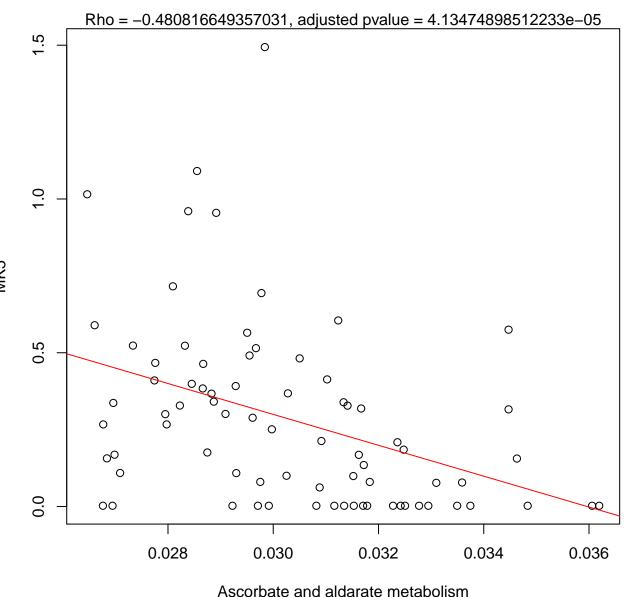
# Timepoint 1, MK5 ~ Amino sugar and nucleotide sugar metabolism



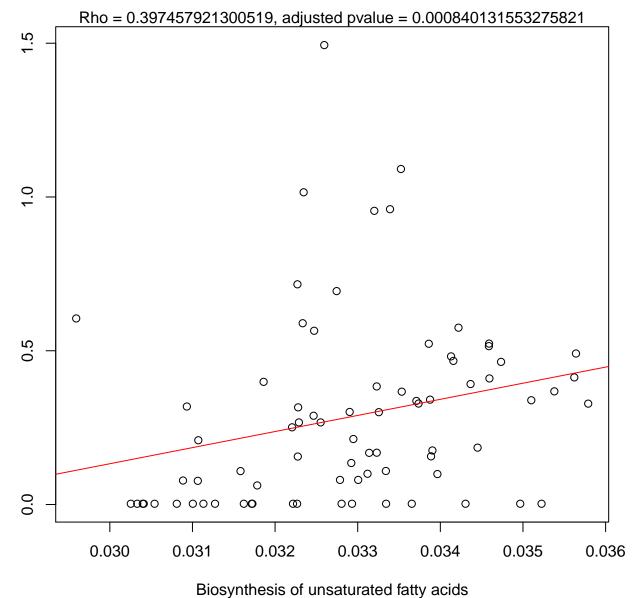
## Timepoint 1, MK5 ~ Arginine and proline metabolism



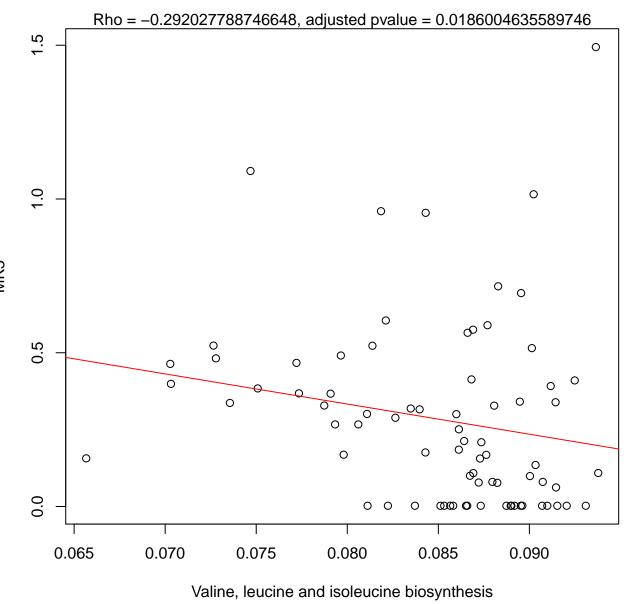
Timepoint 1, MK5 ~ Ascorbate and aldarate metabolism



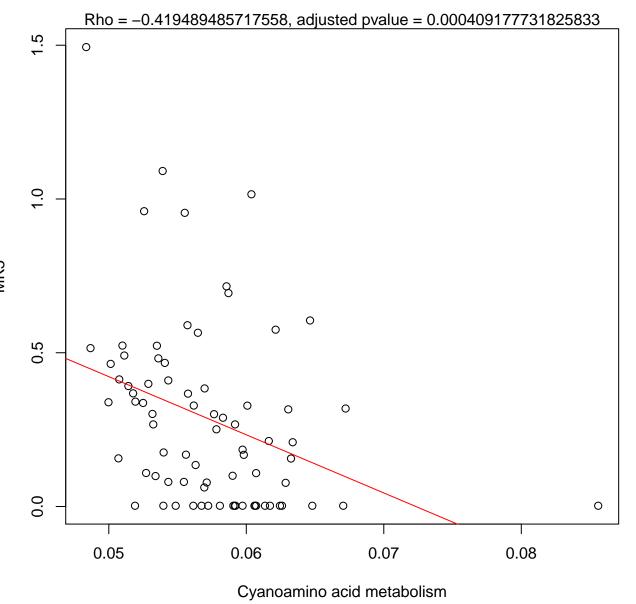
Timepoint 1, MK5 ~ Biosynthesis of unsaturated fatty acids



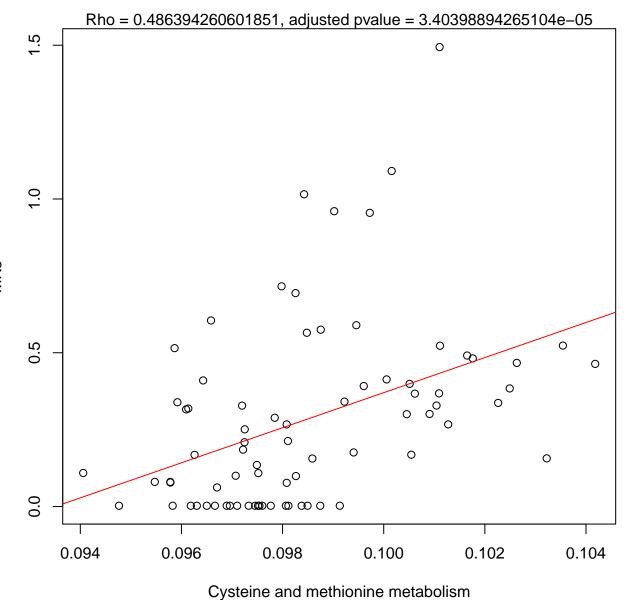
## Timepoint 1, MK5 ~ Valine, leucine and isoleucine biosynthesis



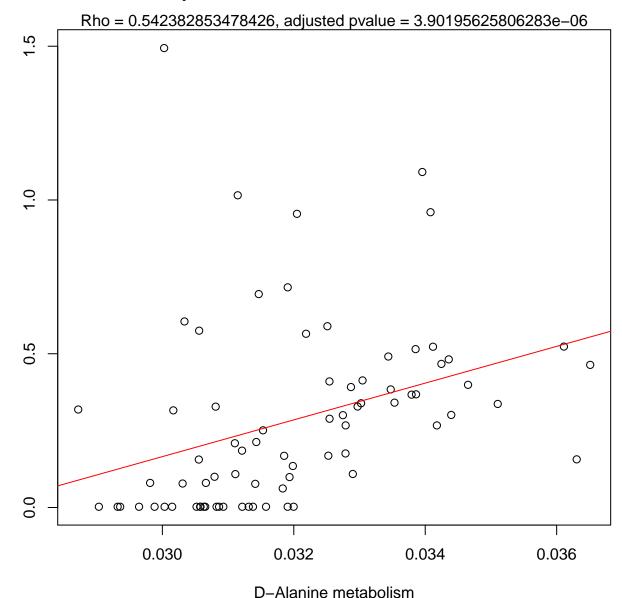
### Timepoint 1, MK5 ~ Cyanoamino acid metabolism



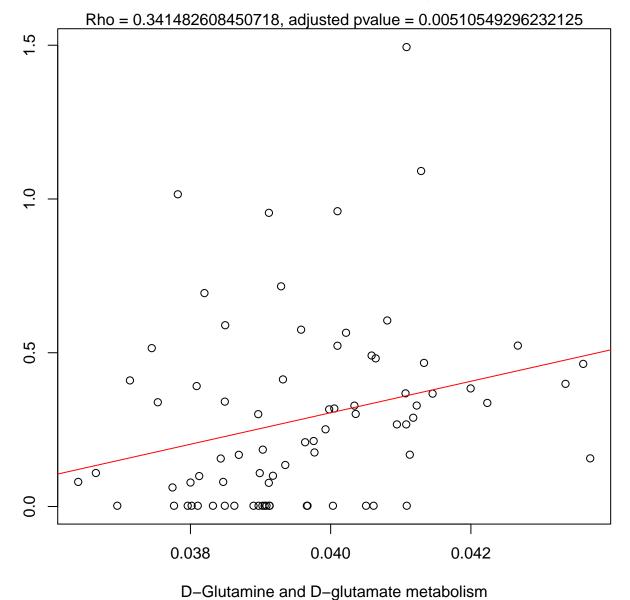
Timepoint 1, MK5 ~ Cysteine and methionine metabolism



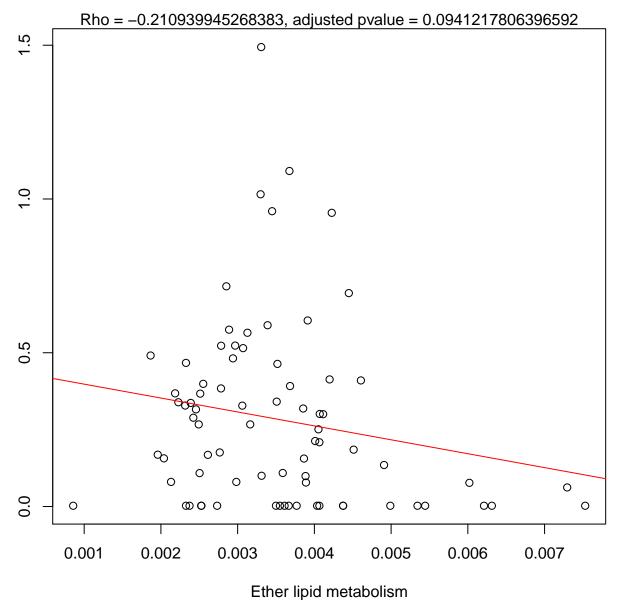
Timepoint 1, MK5 ~ D-Alanine metabolism



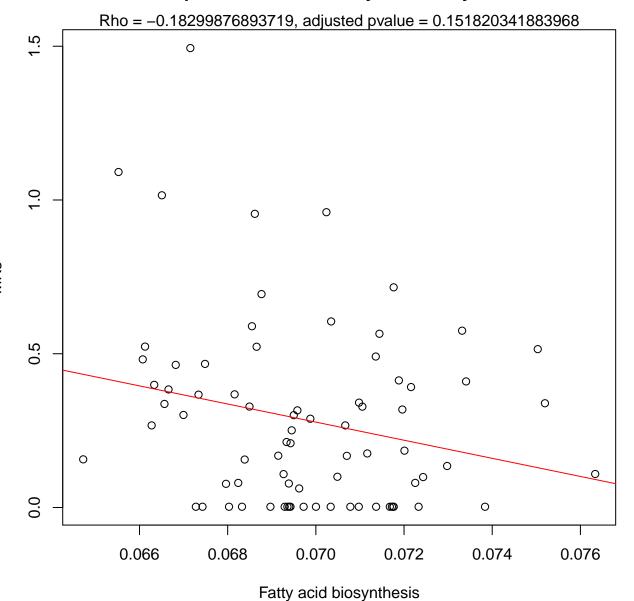
Timepoint 1, MK5 ~ D-Glutamine and D-glutamate metabolism



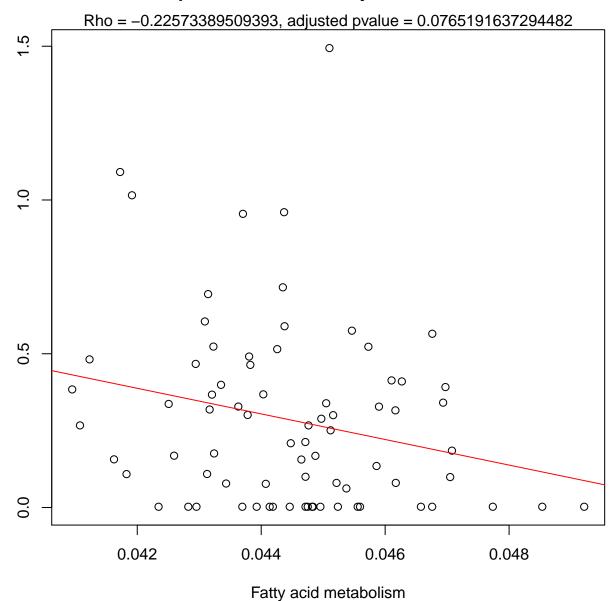
### Timepoint 1, MK5 ~ Ether lipid metabolism



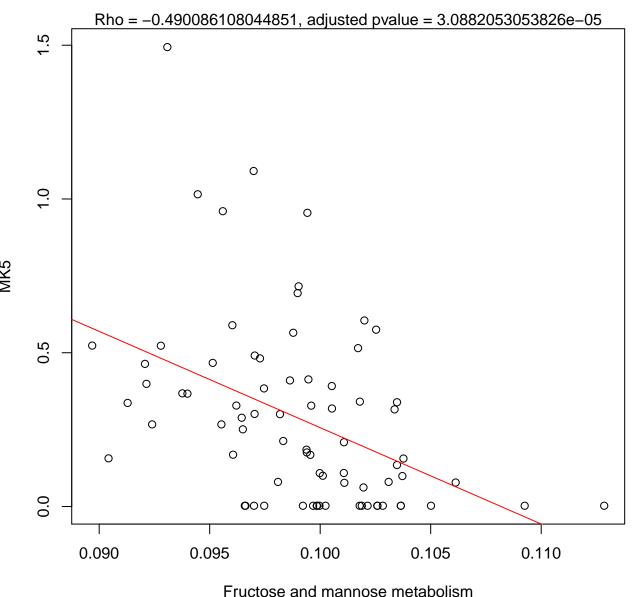
## Timepoint 1, MK5 ~ Fatty acid biosynthesis



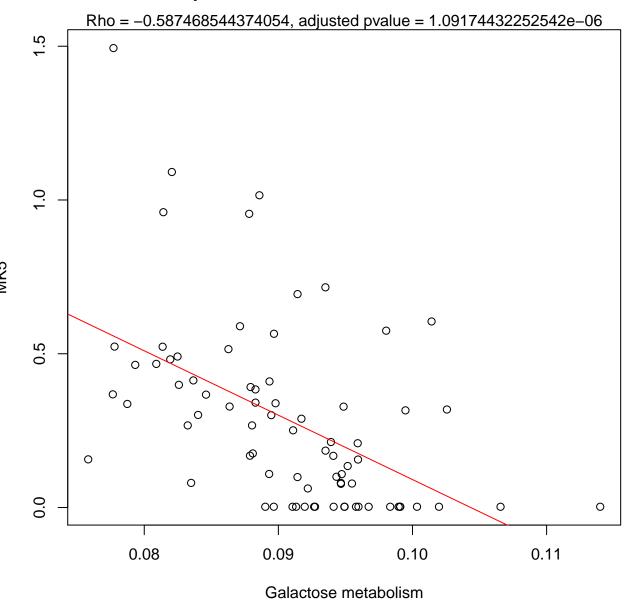
### Timepoint 1, MK5 ~ Fatty acid metabolism



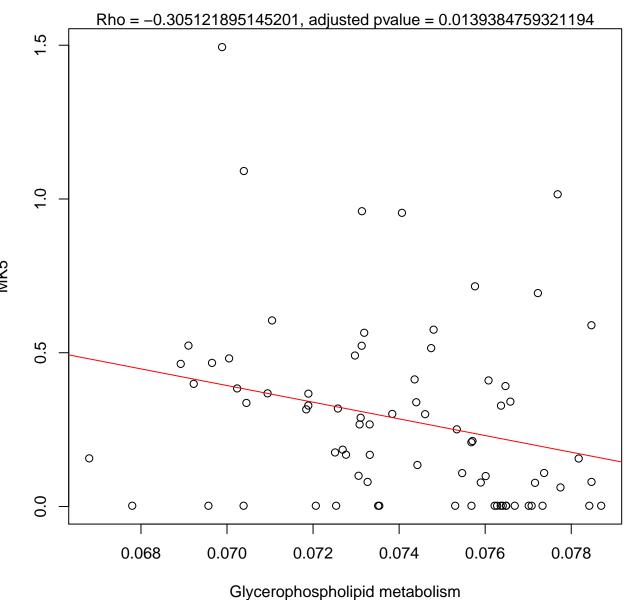
Timepoint 1, MK5 ~ Fructose and mannose metabolism



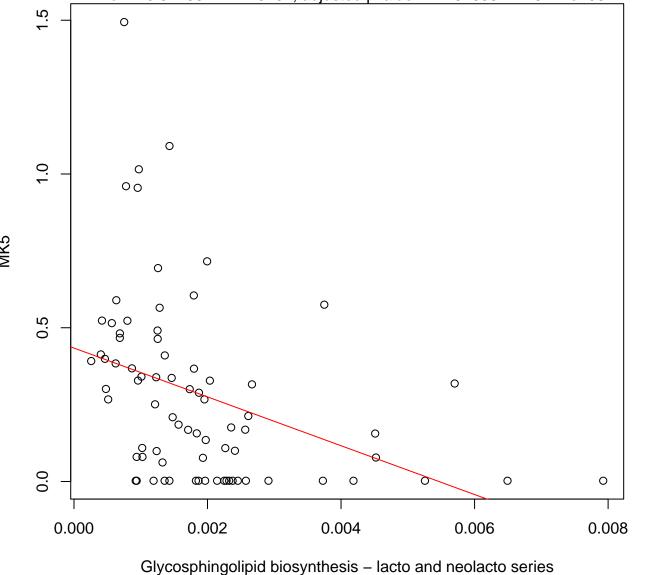
Timepoint 1, MK5 ~ Galactose metabolism



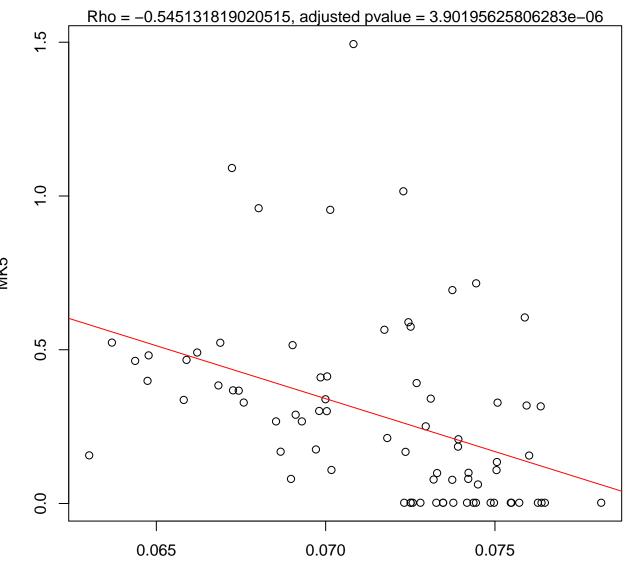
## Timepoint 1, MK5 ~ Glycerophospholipid metabolism



Fimepoint 1, MK5 ~ Glycosphingolipid biosynthesis – lacto and neolacto services Rho = -0.522887774175102, adjusted pvalue = 7.48285824778741e-06

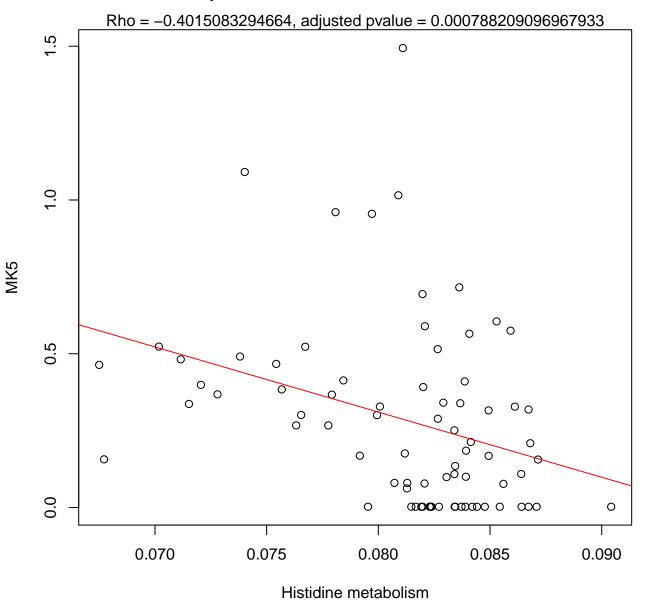


Timepoint 1, MK5 ~ Glyoxylate and dicarboxylate metabolism

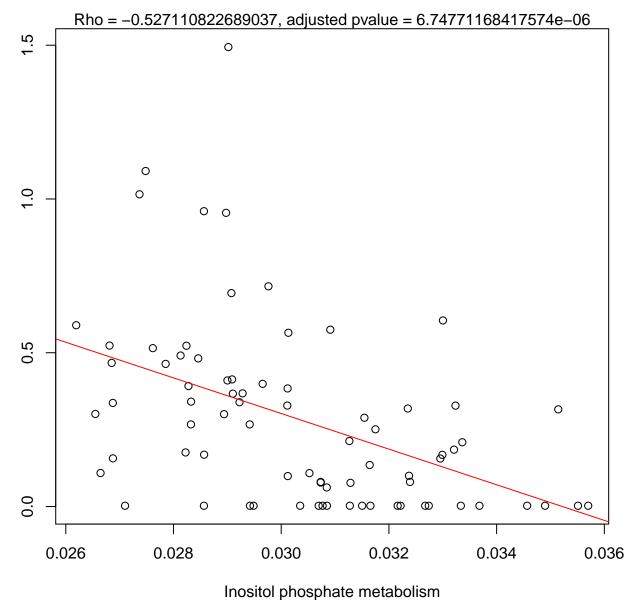


Glyoxylate and dicarboxylate metabolism

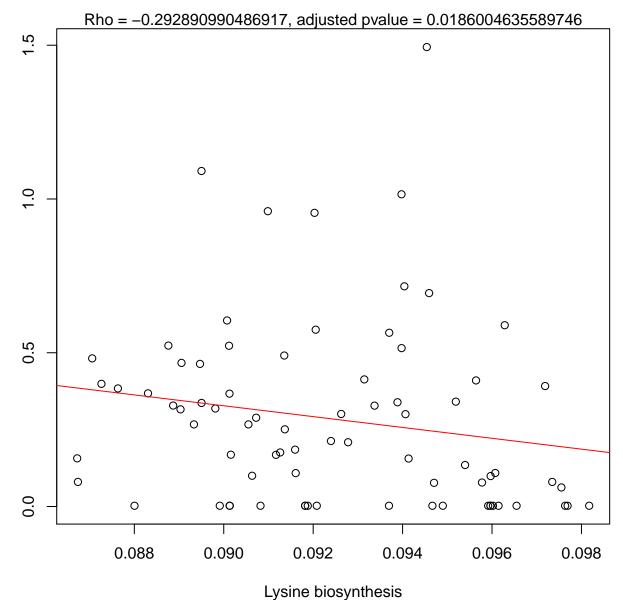
Timepoint 1, MK5 ~ Histidine metabolism



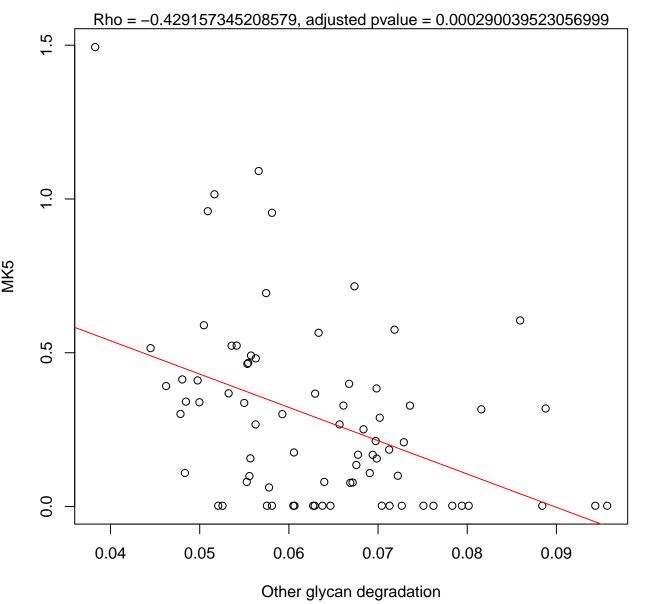
Timepoint 1, MK5 ~ Inositol phosphate metabolism



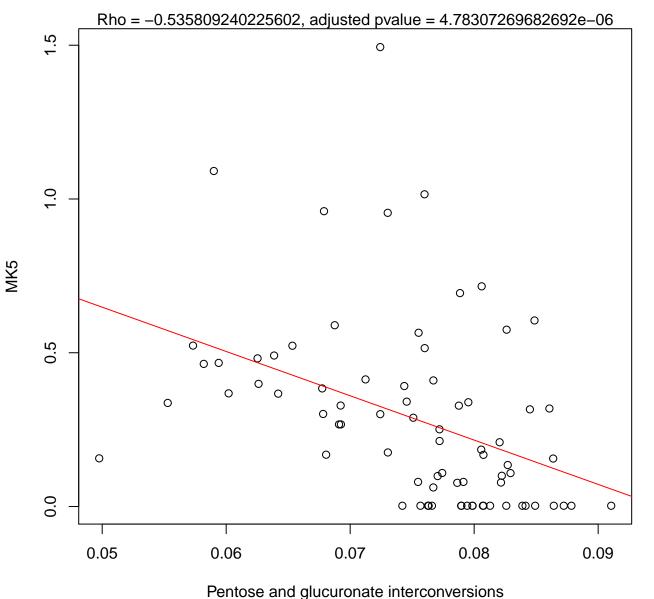
### Timepoint 1, MK5 ~ Lysine biosynthesis



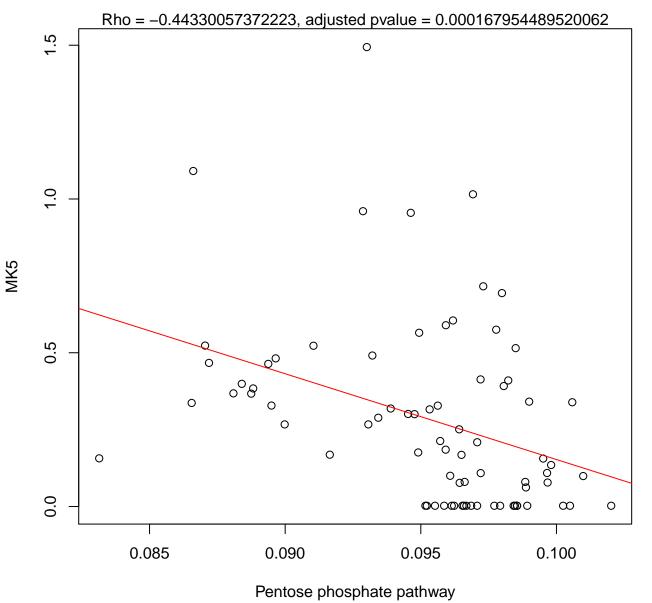
Timepoint 1, MK5 ~ Other glycan degradation



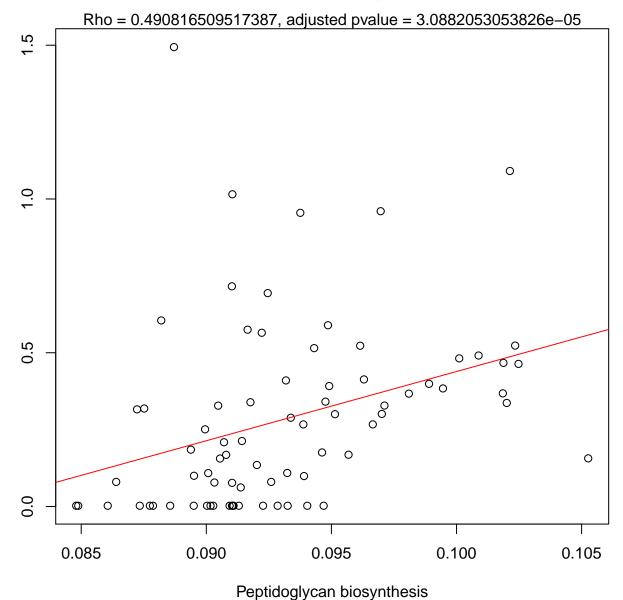
Timepoint 1, MK5 ~ Pentose and glucuronate interconversions



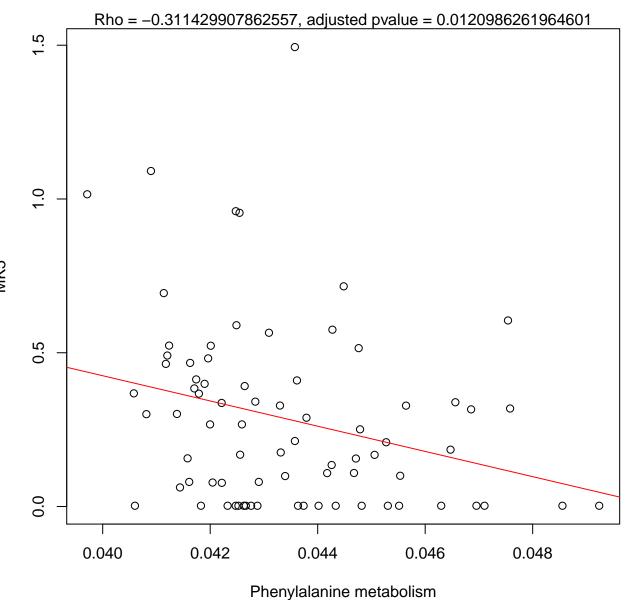
Timepoint 1, MK5 ~ Pentose phosphate pathway



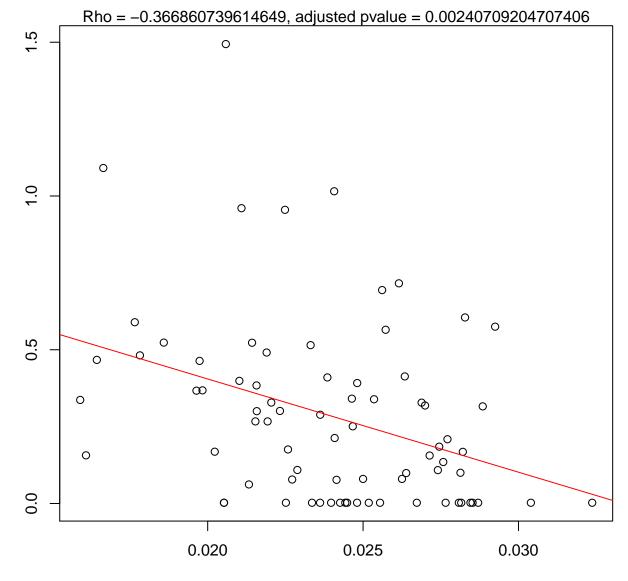
### Timepoint 1, MK5 ~ Peptidoglycan biosynthesis



## Timepoint 1, MK5 ~ Phenylalanine metabolism

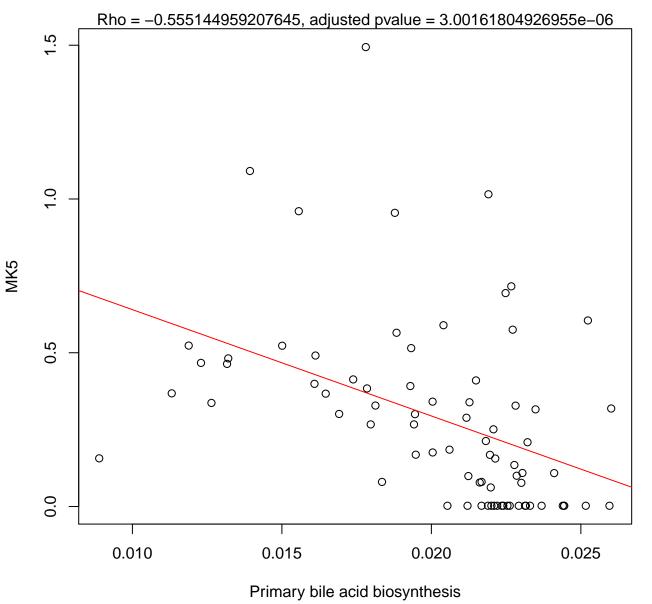


Timepoint 1, MK5 ~ Phosphonate and phosphinate metabolism

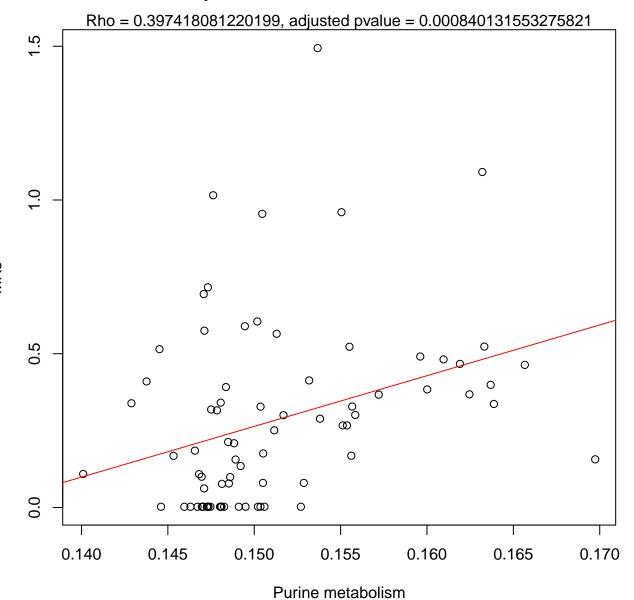


Phosphonate and phosphinate metabolism

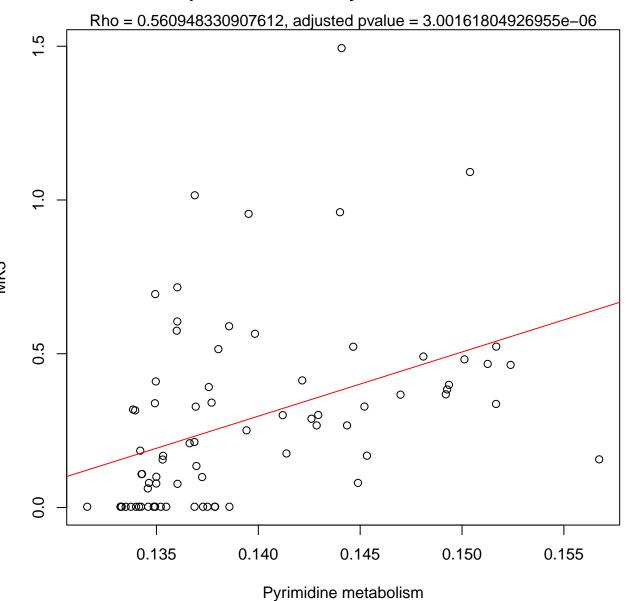
## Timepoint 1, MK5 ~ Primary bile acid biosynthesis



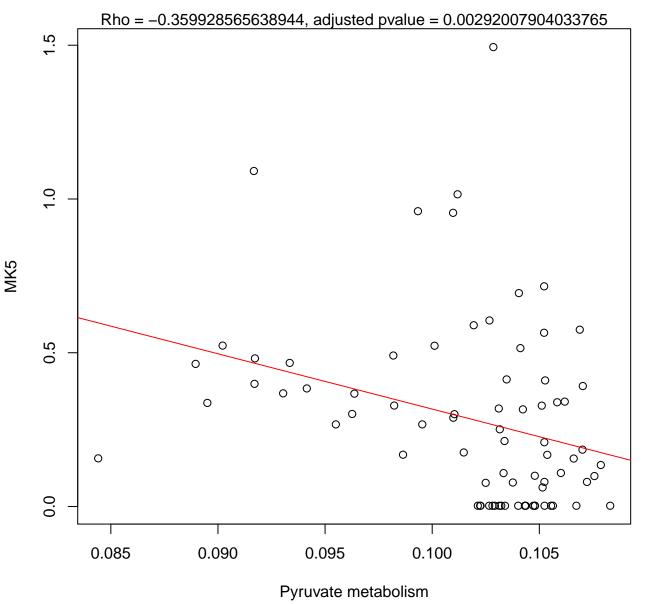
#### Timepoint 1, MK5 ~ Purine metabolism



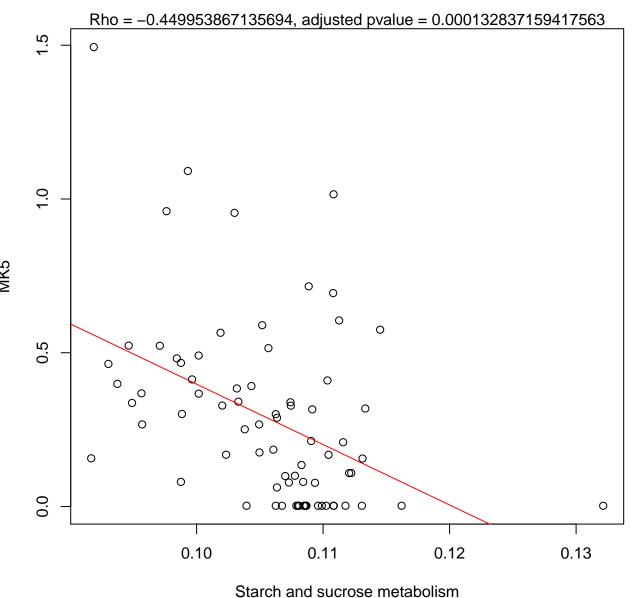
### Timepoint 1, MK5 ~ Pyrimidine metabolism



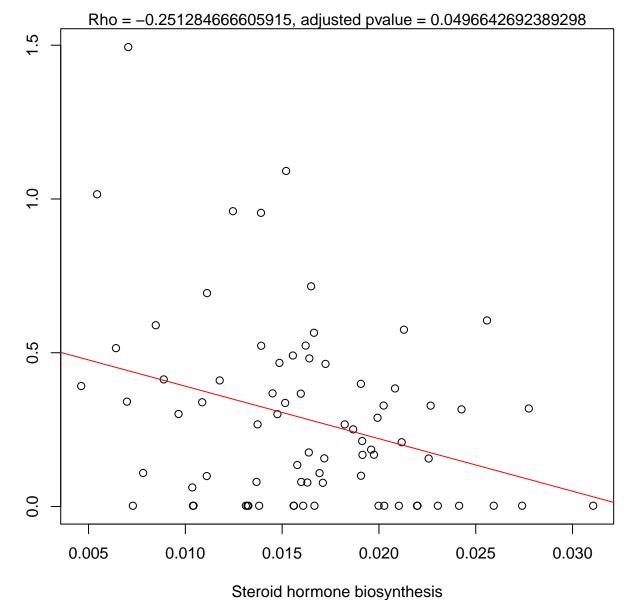
### Timepoint 1, MK5 ~ Pyruvate metabolism



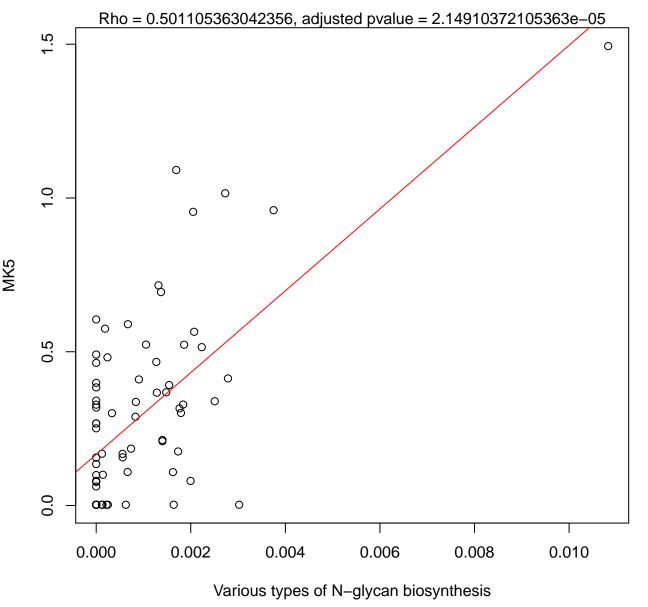
### Timepoint 1, MK5 ~ Starch and sucrose metabolism



## Timepoint 1, MK5 ~ Steroid hormone biosynthesis

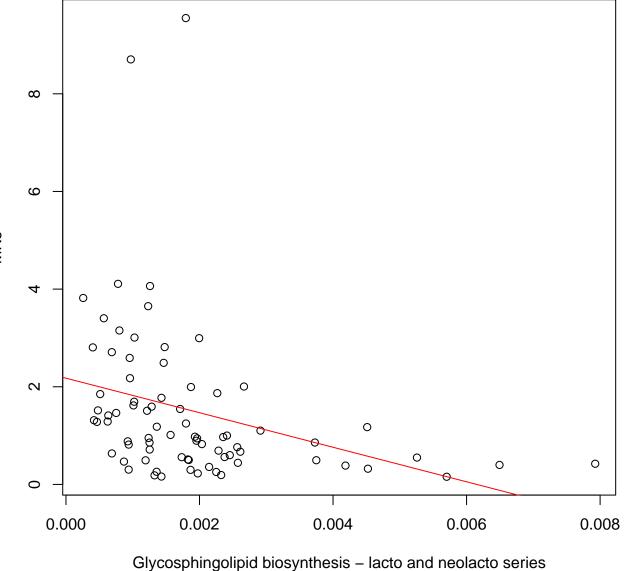


# Timepoint 1, MK5 ~ Various types of N-glycan biosynthesis

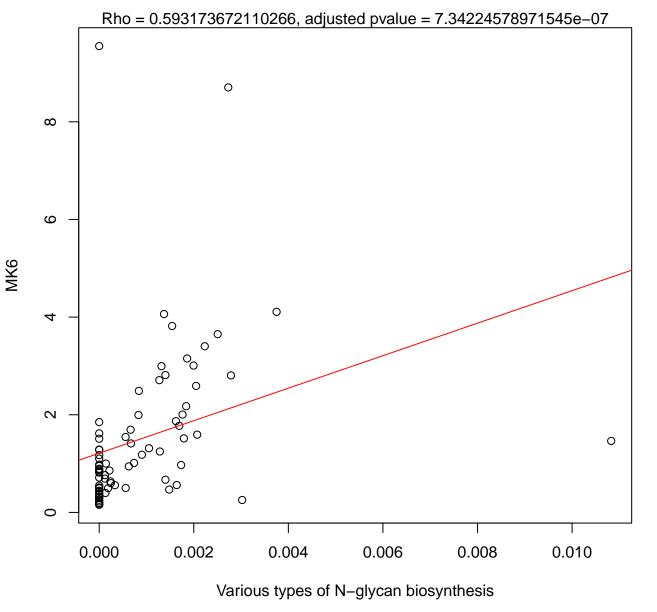


Fimepoint 1, MK6 ~ Glycosphingolipid biosynthesis – lacto and neolacto s

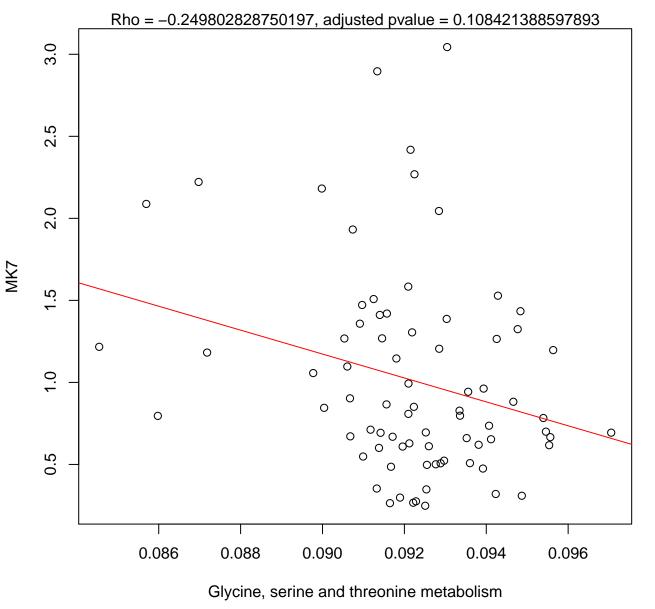
Rho = -0.49000999000999, adjusted pvalue = 0.000170501865907874



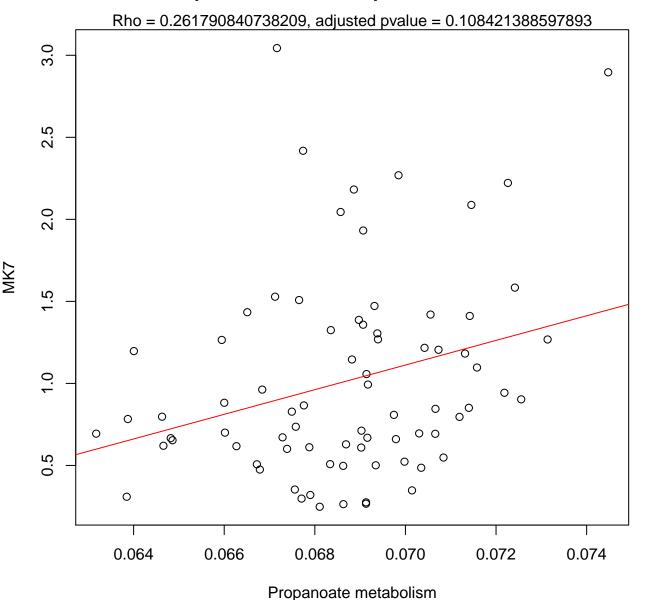
Timepoint 1, MK6 ~ Various types of N-glycan biosynthesis



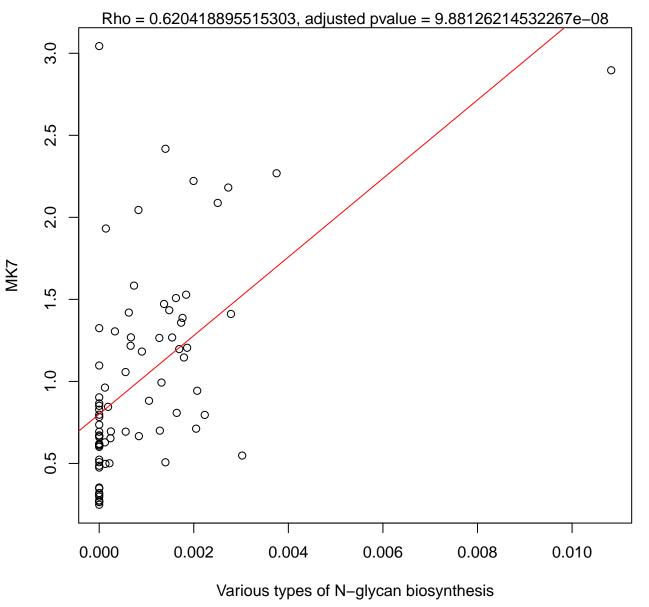
Timepoint 1, MK7 ~ Glycine, serine and threonine metabolism



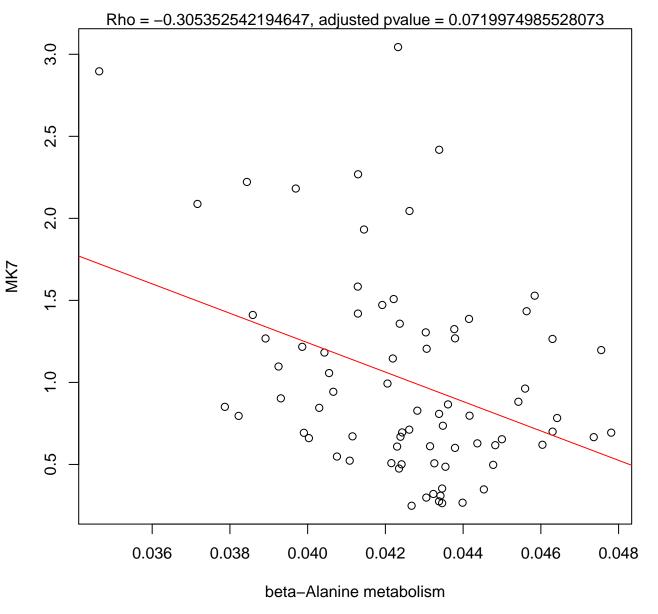
Timepoint 1, MK7 ~ Propanoate metabolism



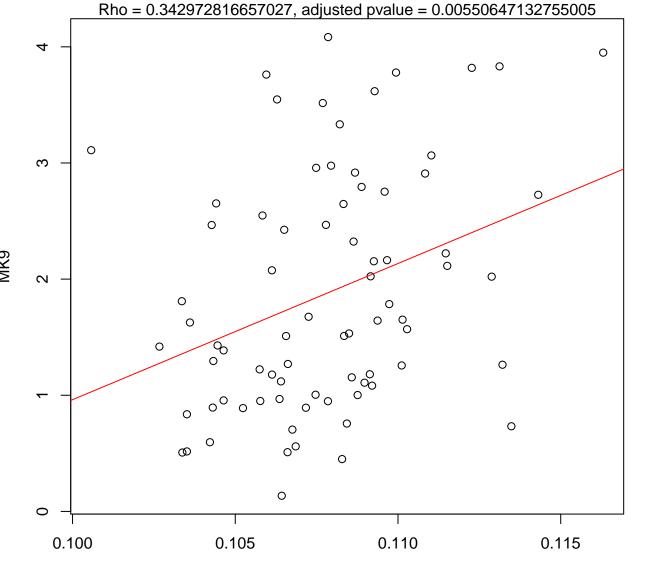
Timepoint 1, MK7 ~ Various types of N-glycan biosynthesis



### Timepoint 1, MK7 ~ beta-Alanine metabolism

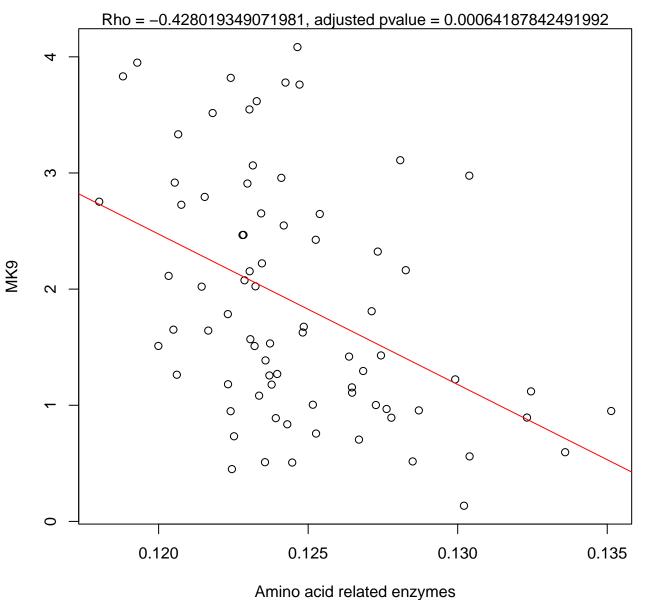


Timepoint 1, MK9 ~ Alanine, aspartate and glutamate metabolism

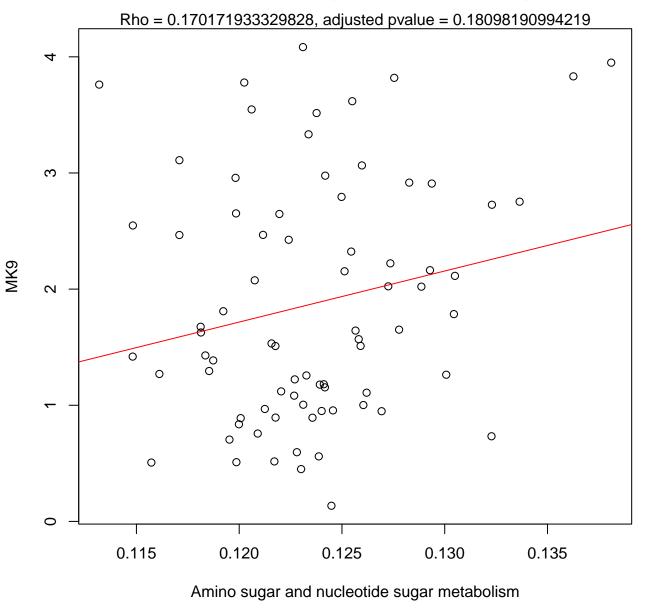


Alanine, aspartate and glutamate metabolism

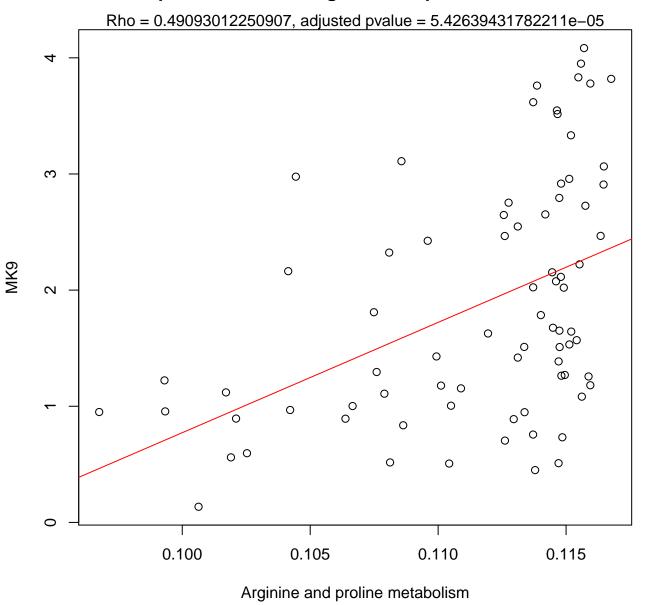
Timepoint 1, MK9 ~ Amino acid related enzymes



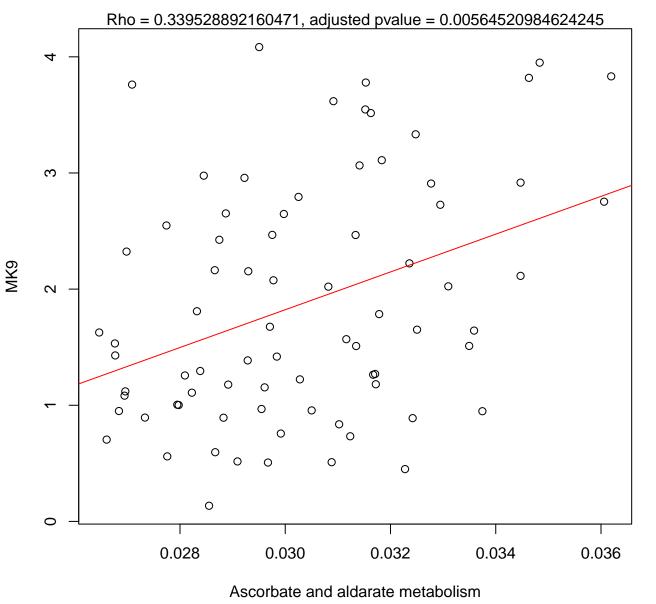
## Timepoint 1, MK9 ~ Amino sugar and nucleotide sugar metabolism



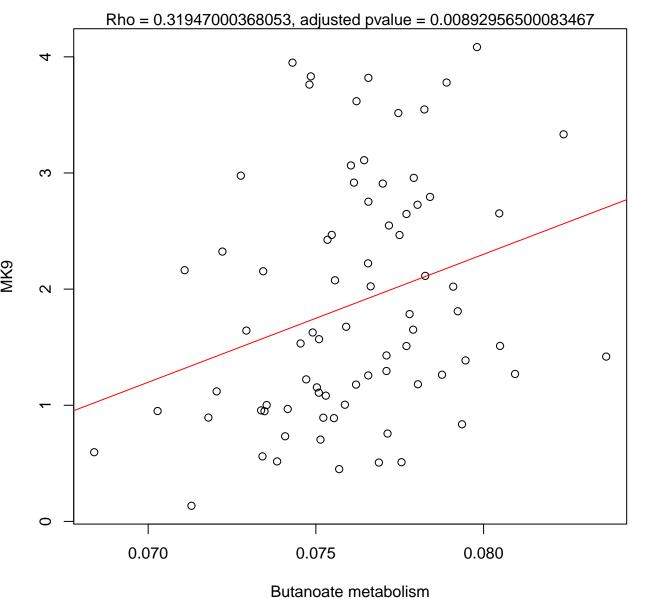
## Timepoint 1, MK9 ~ Arginine and proline metabolism



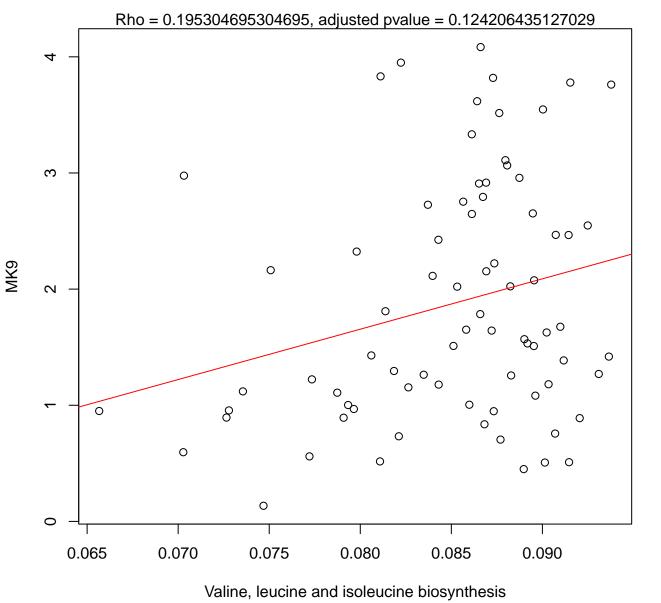
Timepoint 1, MK9 ~ Ascorbate and aldarate metabolism



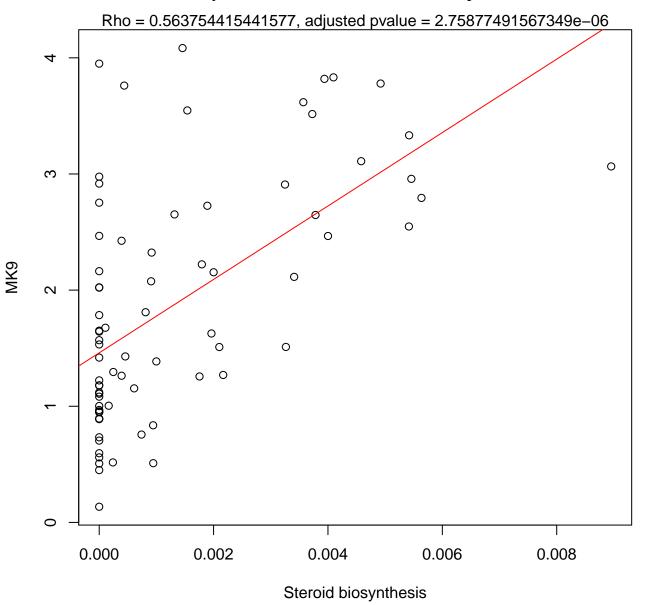
Timepoint 1, MK9 ~ Butanoate metabolism



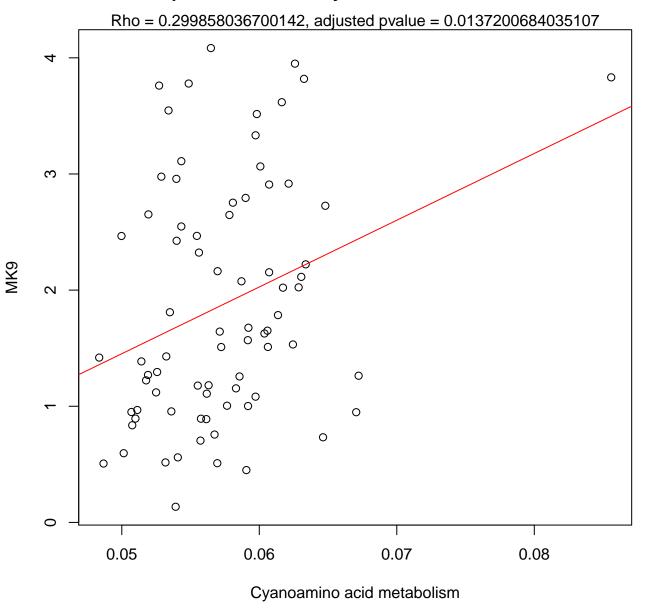
Timepoint 1, MK9 ~ Valine, leucine and isoleucine biosynthesis



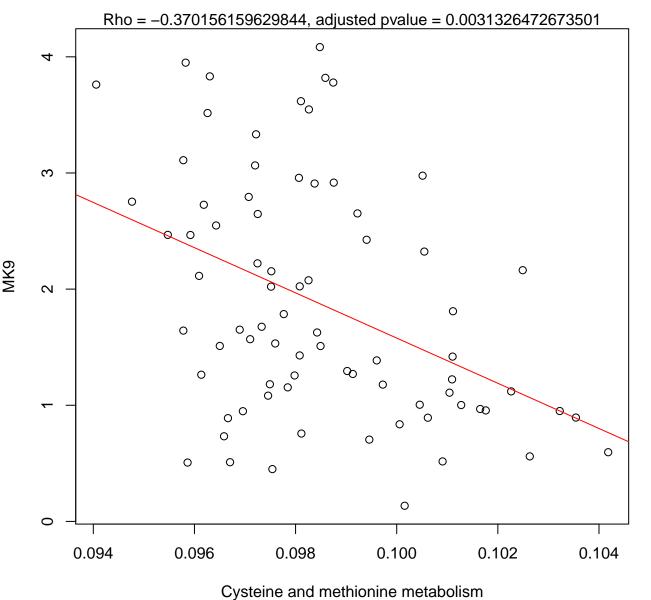
Timepoint 1, MK9 ~ Steroid biosynthesis



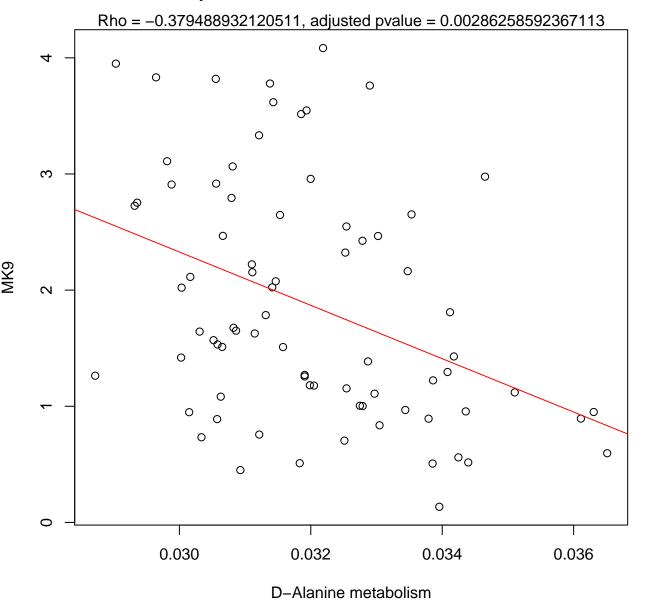
## Timepoint 1, MK9 ~ Cyanoamino acid metabolism



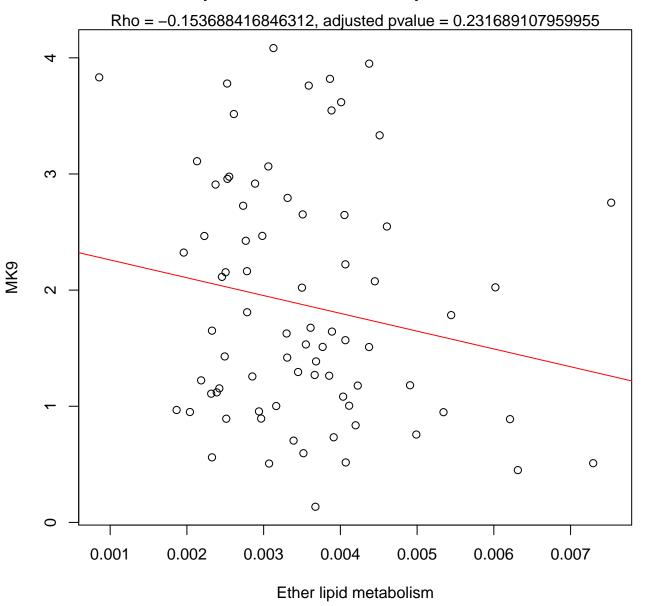
## Timepoint 1, MK9 ~ Cysteine and methionine metabolism



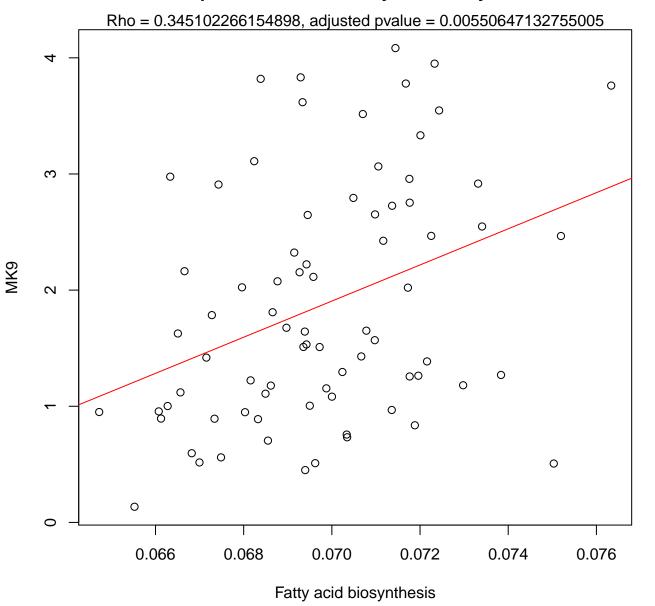
Timepoint 1, MK9 ~ D-Alanine metabolism



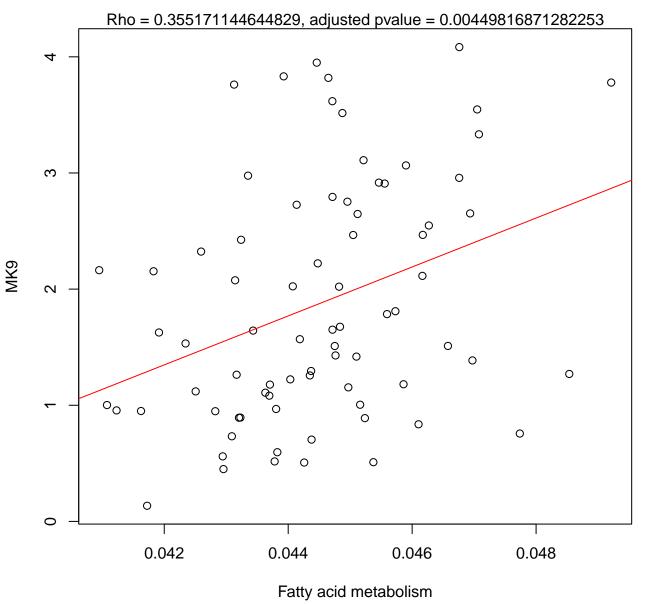
Timepoint 1, MK9 ~ Ether lipid metabolism



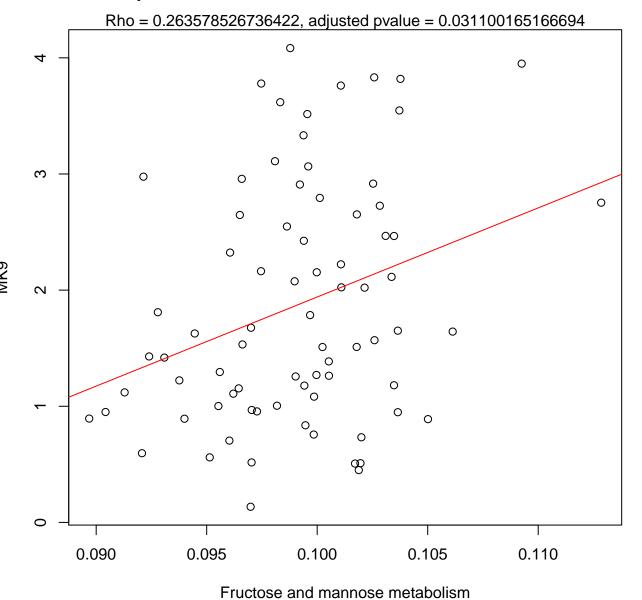
### Timepoint 1, MK9 ~ Fatty acid biosynthesis



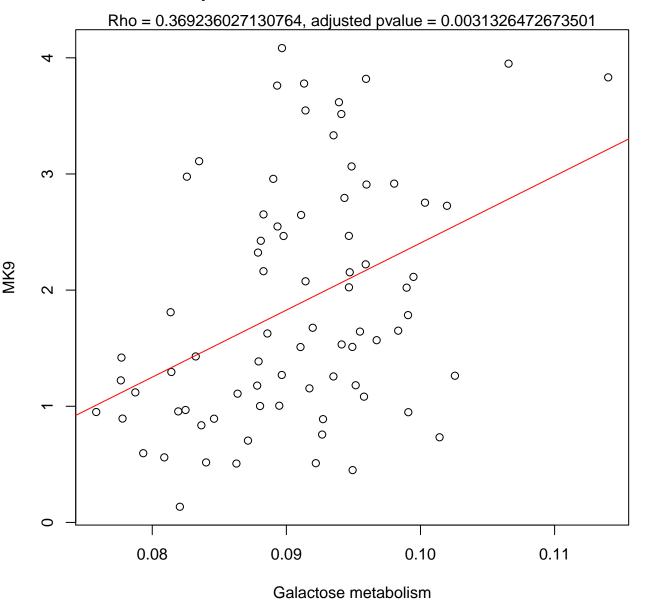
Timepoint 1, MK9 ~ Fatty acid metabolism



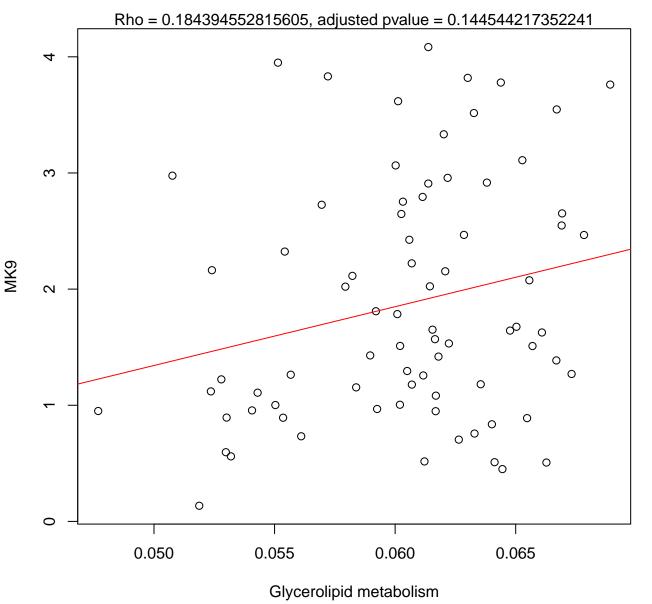
Timepoint 1, MK9 ~ Fructose and mannose metabolism



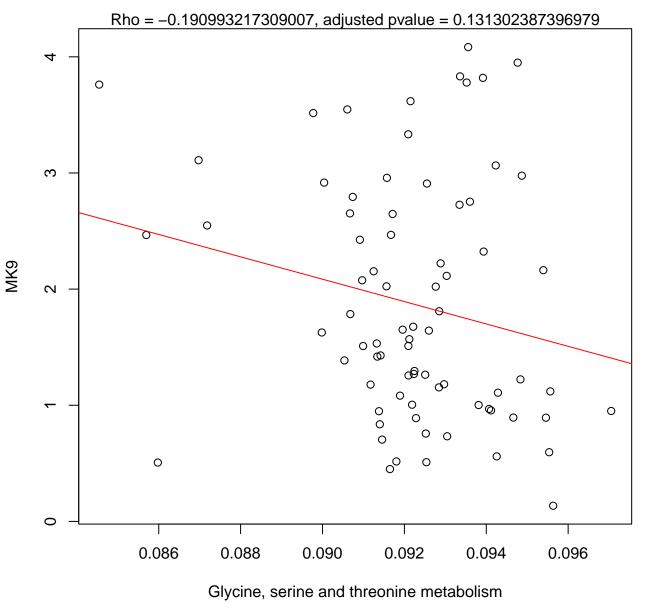
Timepoint 1, MK9 ~ Galactose metabolism



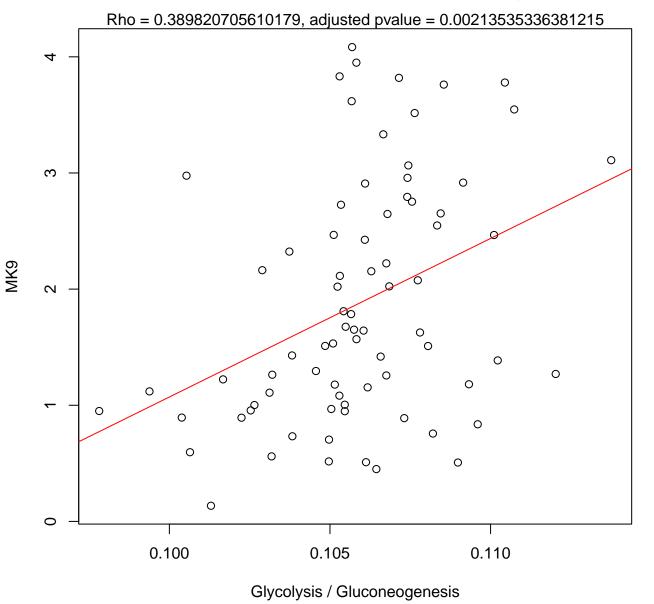
### Timepoint 1, MK9 ~ Glycerolipid metabolism



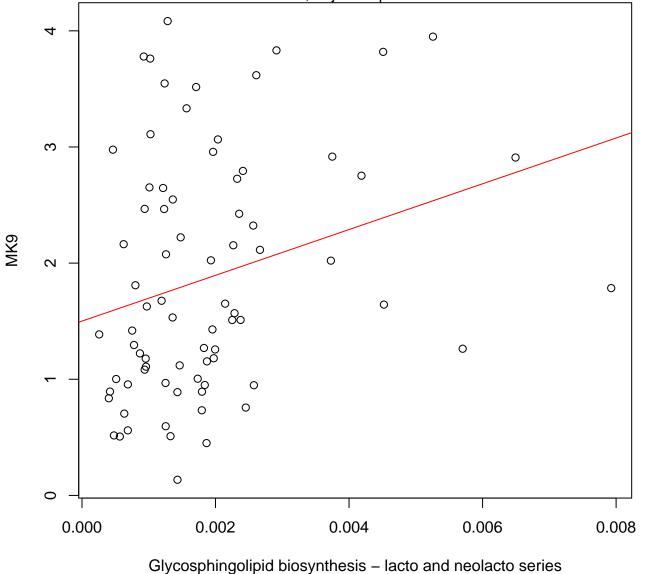
Timepoint 1, MK9 ~ Glycine, serine and threonine metabolism



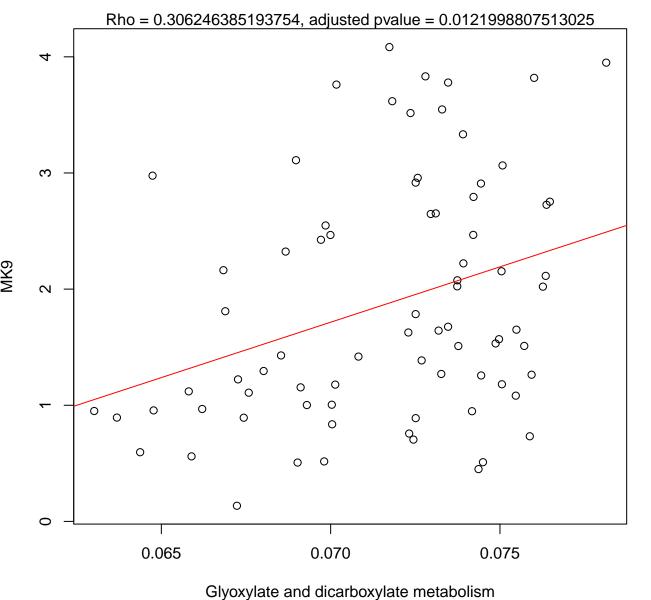
## Timepoint 1, MK9 ~ Glycolysis / Gluconeogenesis



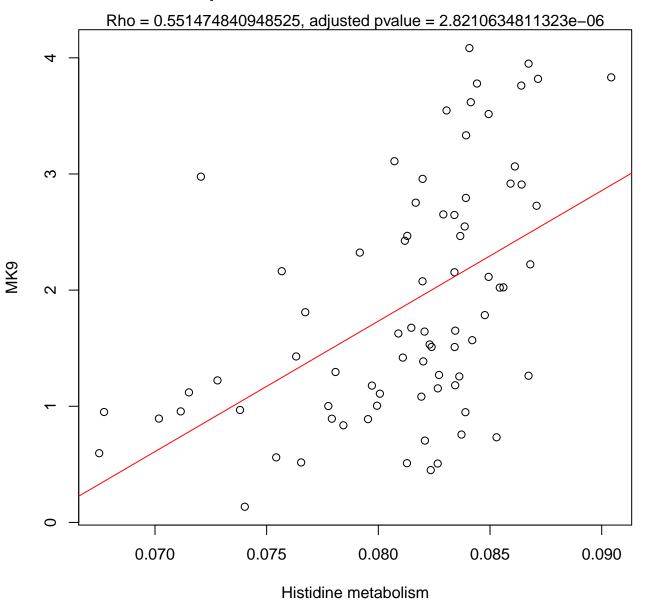
Fimepoint 1, MK9 ~ Glycosphingolipid biosynthesis – lacto and neolacto service Rho = 0.313922919186077, adjusted pvalue = 0.0101388418430323



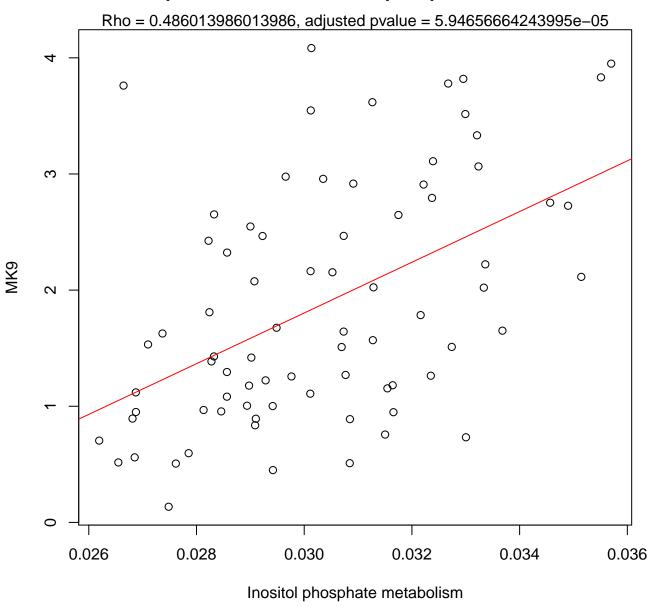
Timepoint 1, MK9 ~ Glyoxylate and dicarboxylate metabolism



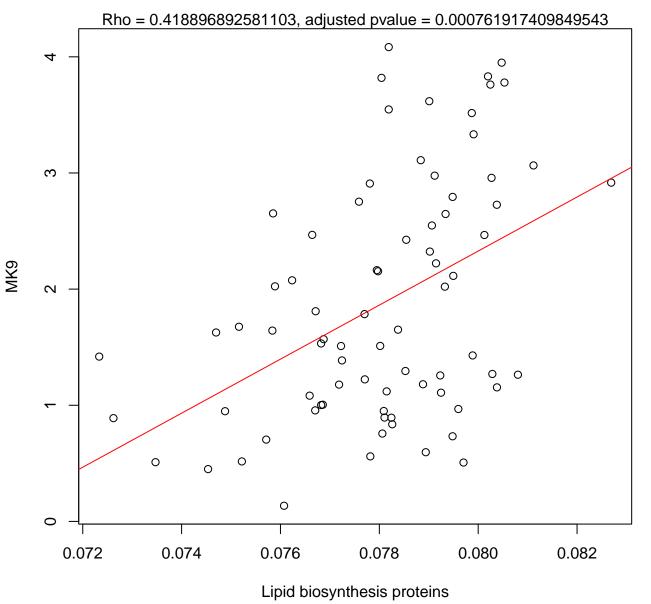
Timepoint 1, MK9 ~ Histidine metabolism



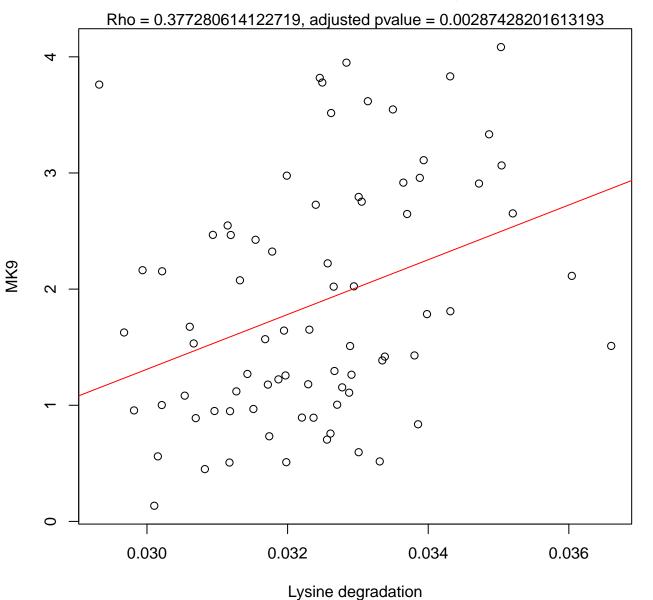
Timepoint 1, MK9 ~ Inositol phosphate metabolism



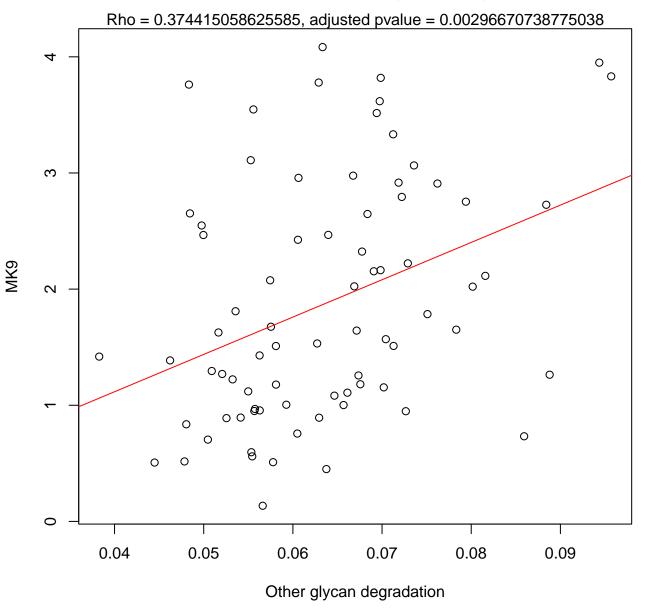
Timepoint 1, MK9 ~ Lipid biosynthesis proteins



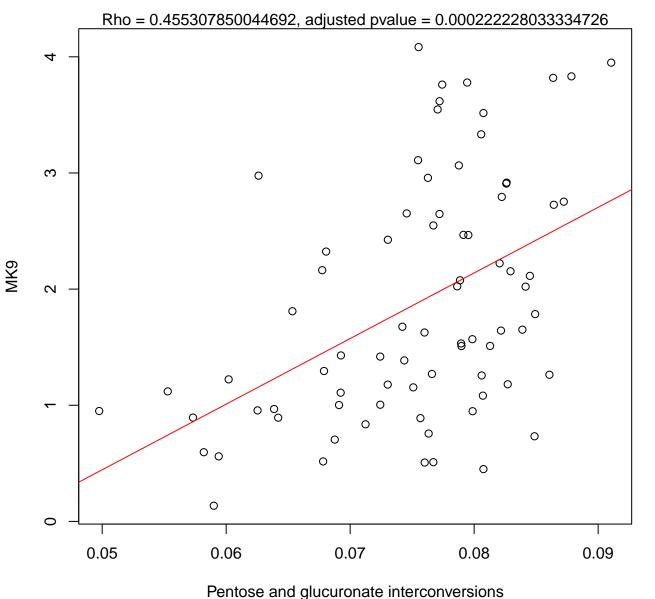
### Timepoint 1, MK9 ~ Lysine degradation



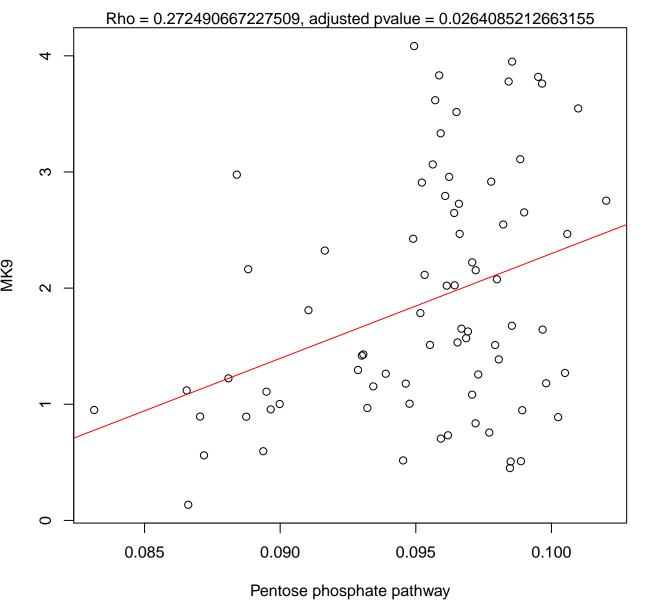
Timepoint 1, MK9 ~ Other glycan degradation



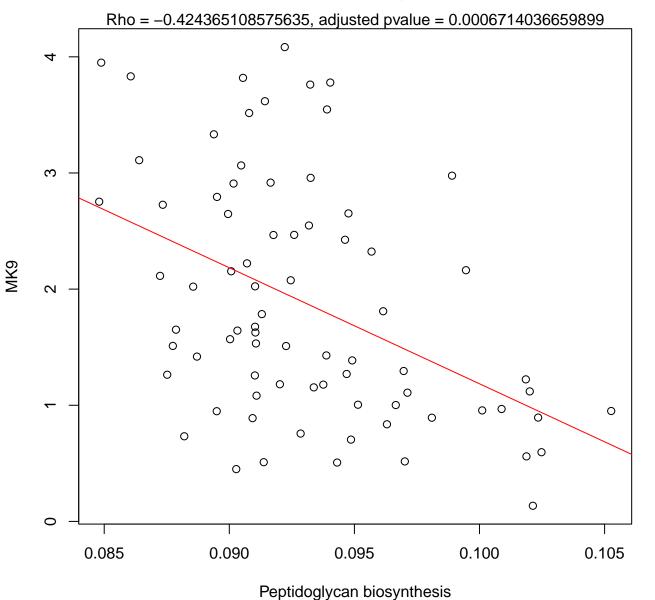
Timepoint 1, MK9 ~ Pentose and glucuronate interconversions



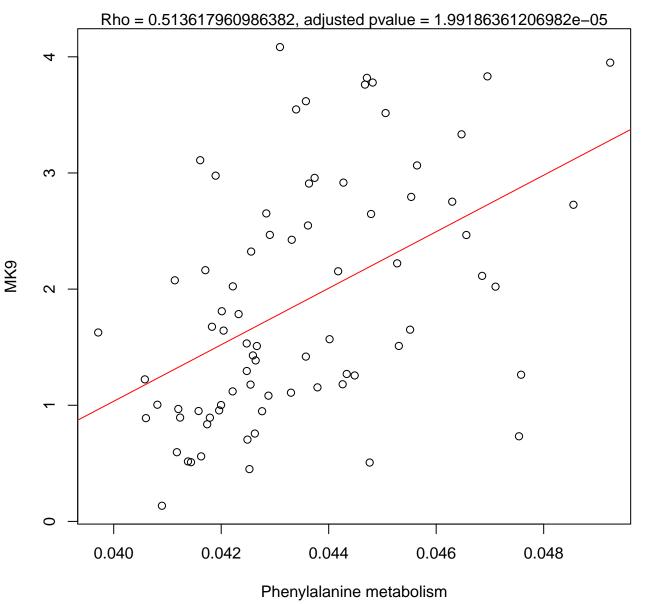
Timepoint 1, MK9 ~ Pentose phosphate pathway



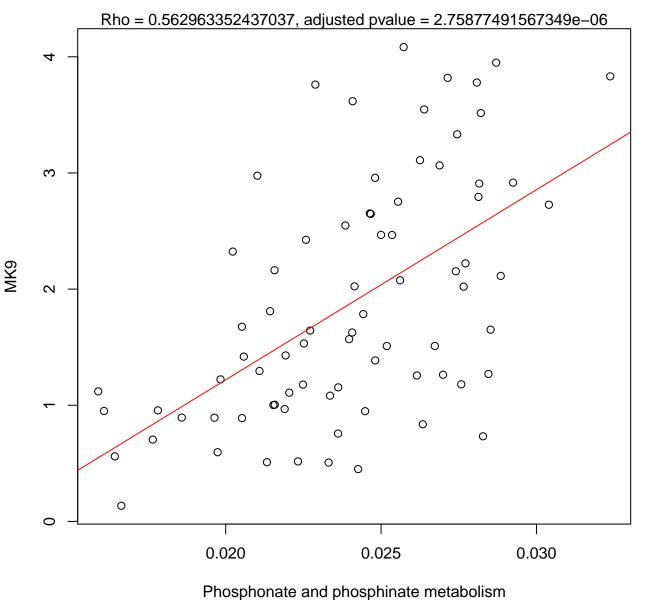
## Timepoint 1, MK9 ~ Peptidoglycan biosynthesis



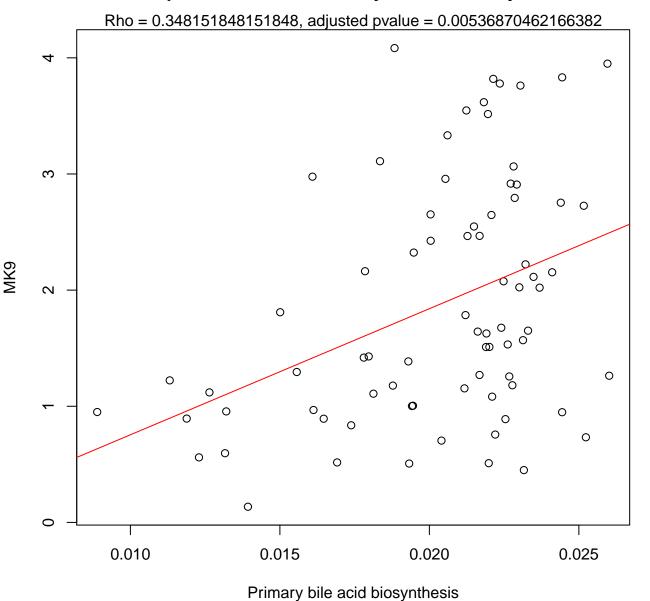
## Timepoint 1, MK9 ~ Phenylalanine metabolism



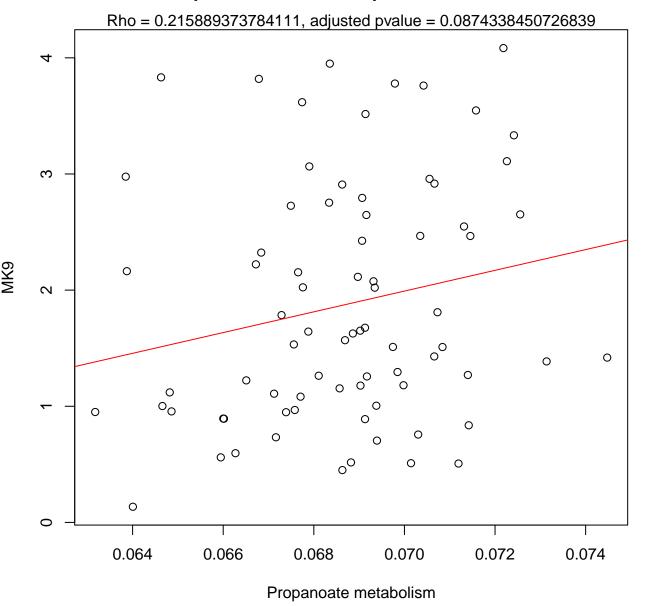
Timepoint 1, MK9 ~ Phosphonate and phosphinate metabolism



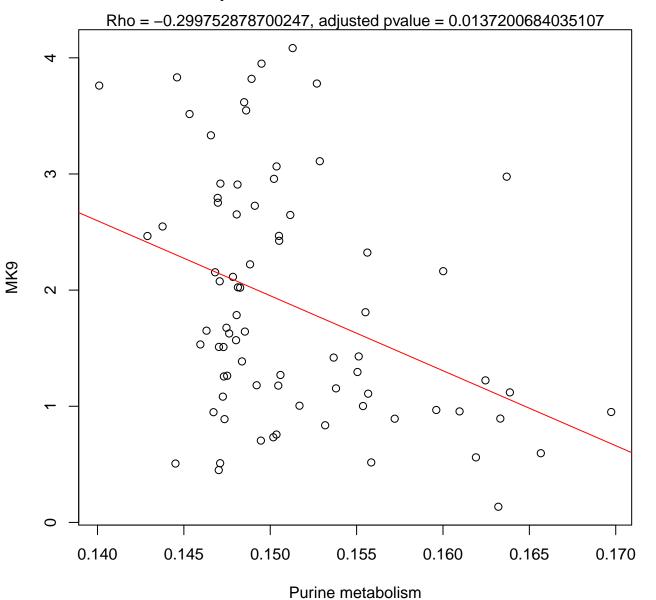
# Timepoint 1, MK9 ~ Primary bile acid biosynthesis



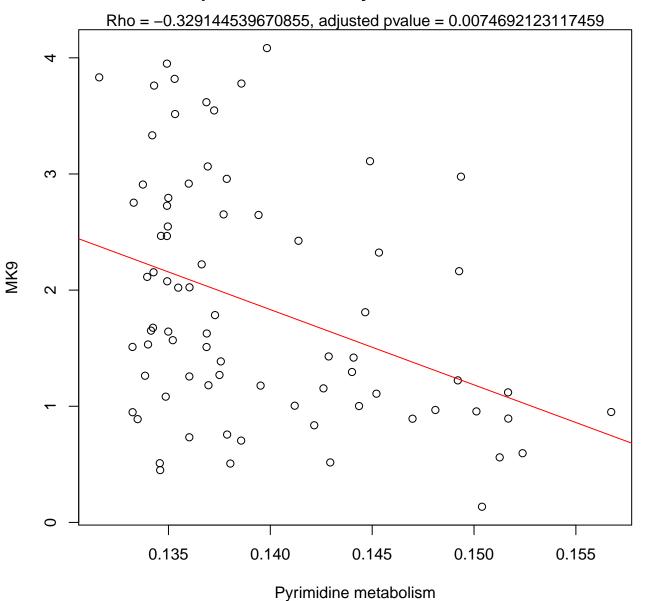
# Timepoint 1, MK9 ~ Propanoate metabolism



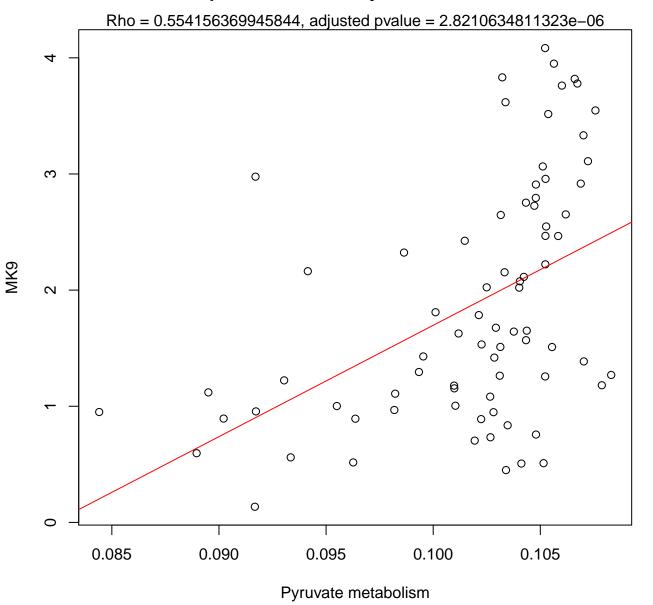
#### Timepoint 1, MK9 ~ Purine metabolism



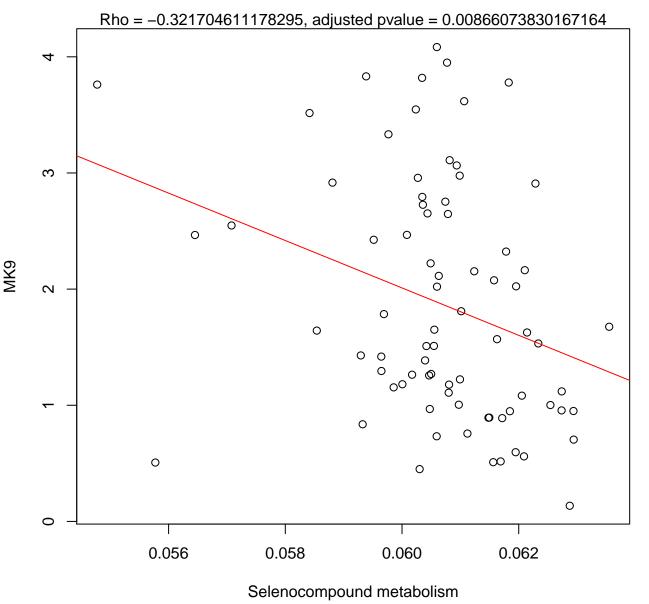
## Timepoint 1, MK9 ~ Pyrimidine metabolism



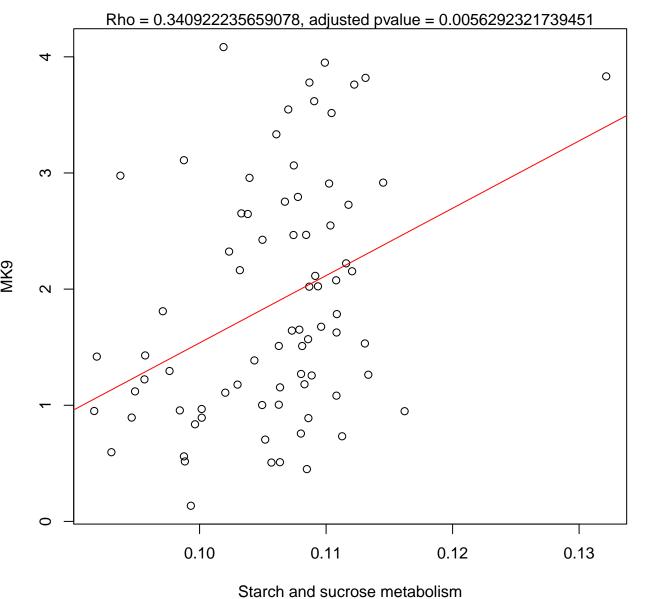
#### Timepoint 1, MK9 ~ Pyruvate metabolism



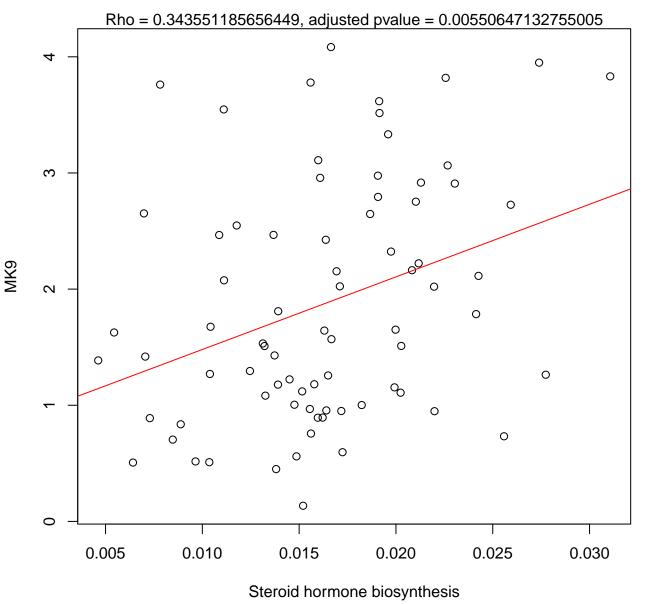
## Timepoint 1, MK9 ~ Selenocompound metabolism



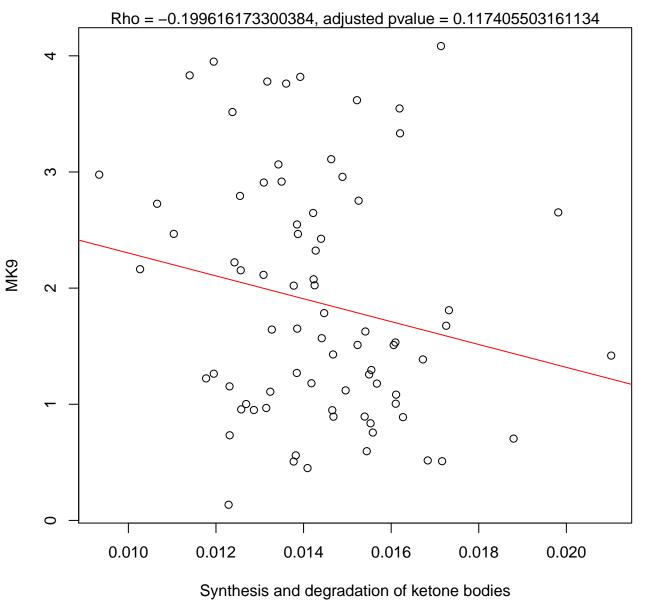
# Timepoint 1, MK9 ~ Starch and sucrose metabolism



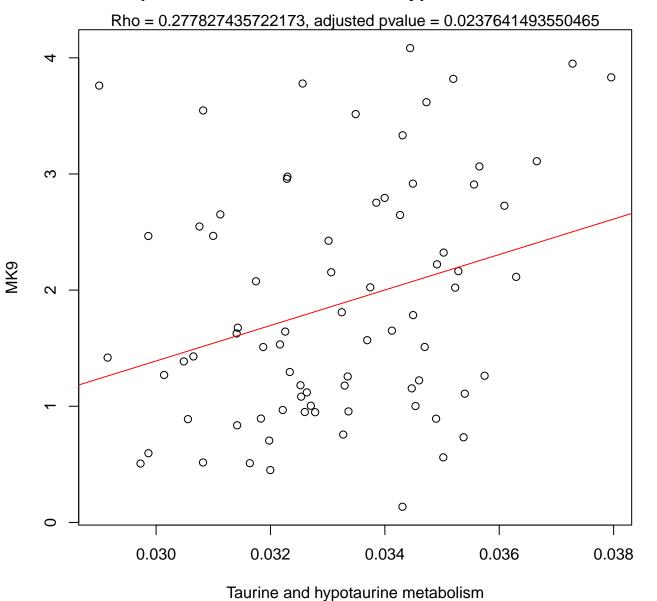
## Timepoint 1, MK9 ~ Steroid hormone biosynthesis



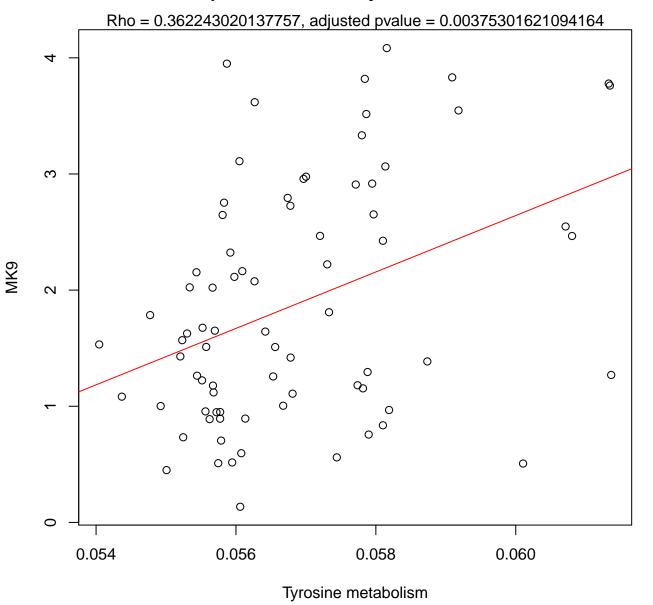
Timepoint 1, MK9 ~ Synthesis and degradation of ketone bodies



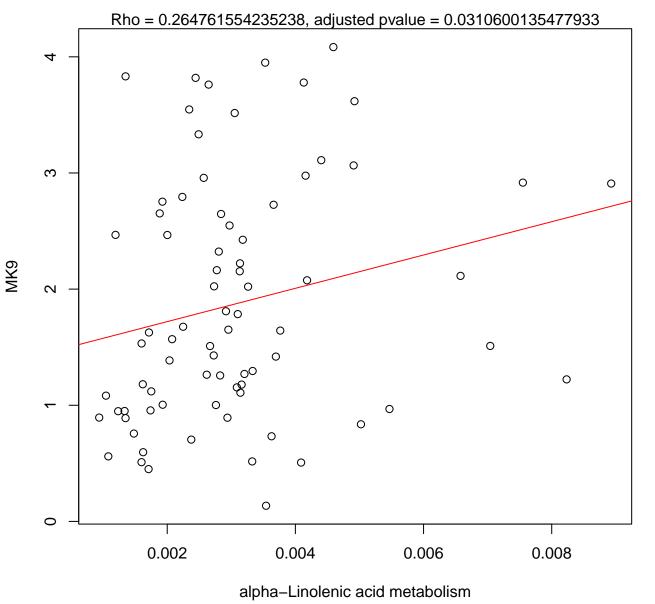
Timepoint 1, MK9 ~ Taurine and hypotaurine metabolism



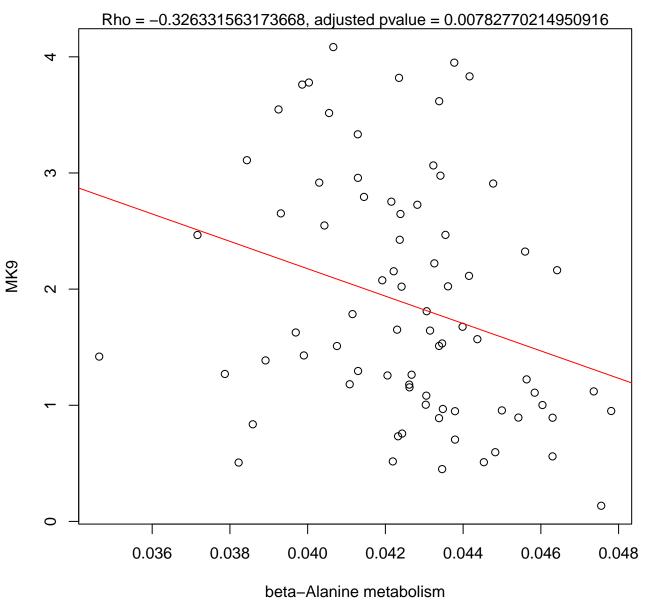
Timepoint 1, MK9 ~ Tyrosine metabolism



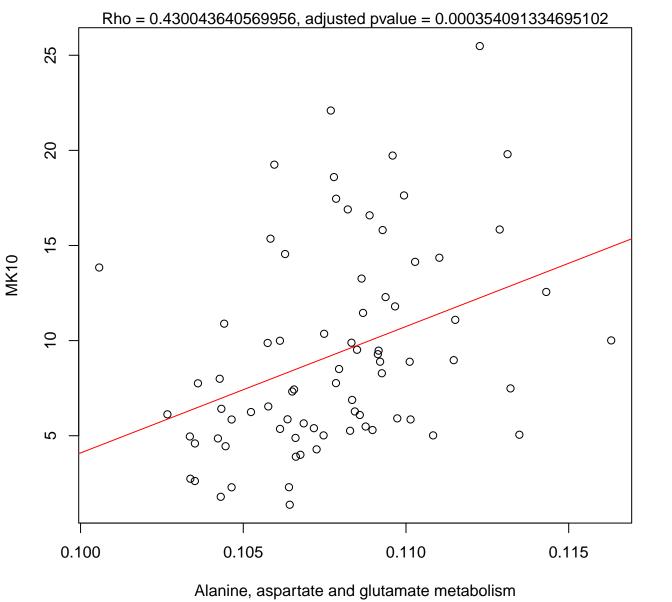
## Timepoint 1, MK9 ~ alpha-Linolenic acid metabolism



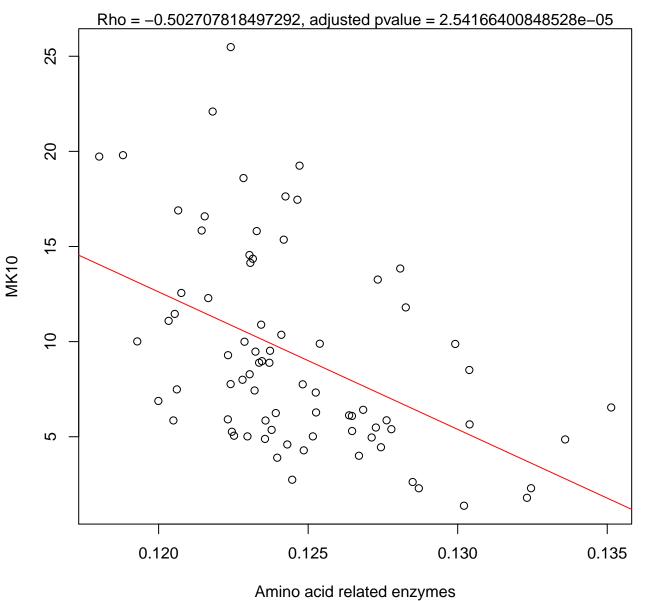
## Timepoint 1, MK9 ~ beta-Alanine metabolism



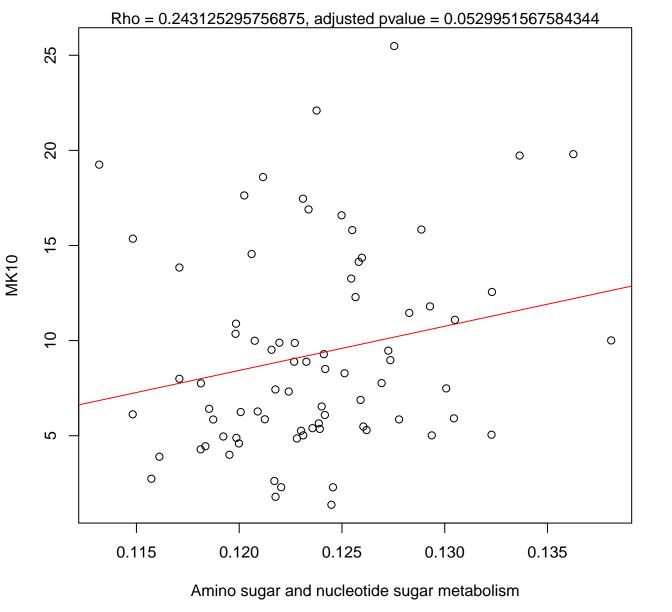
Timepoint 1, MK10 ~ Alanine, aspartate and glutamate metabolism



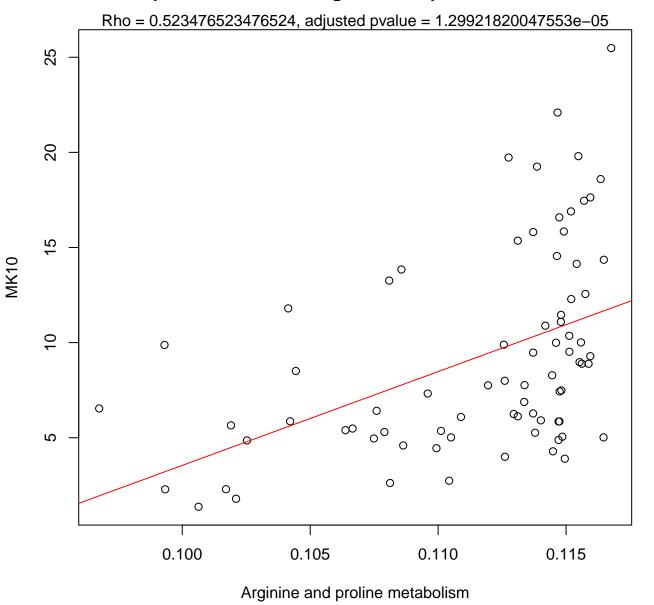
# Timepoint 1, MK10 ~ Amino acid related enzymes



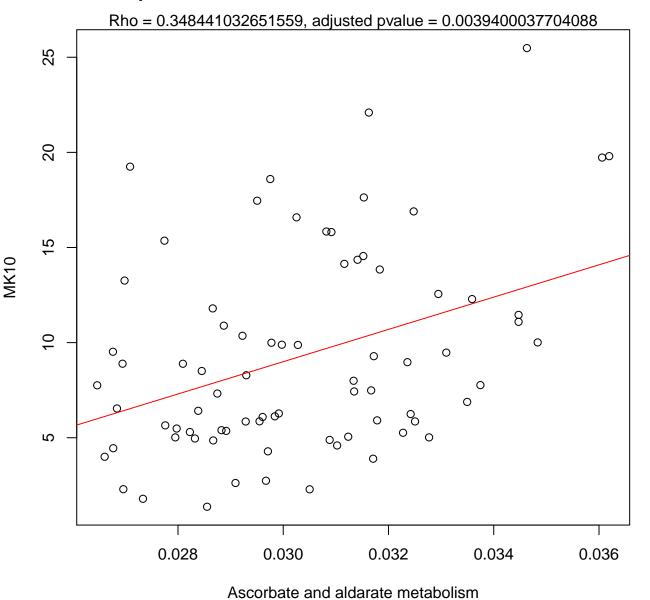
# Timepoint 1, MK10 ~ Amino sugar and nucleotide sugar metabolism



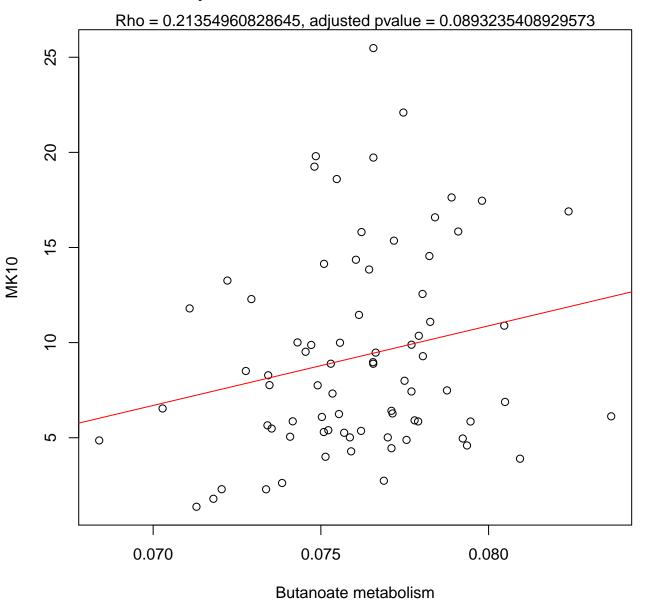
# Timepoint 1, MK10 ~ Arginine and proline metabolism



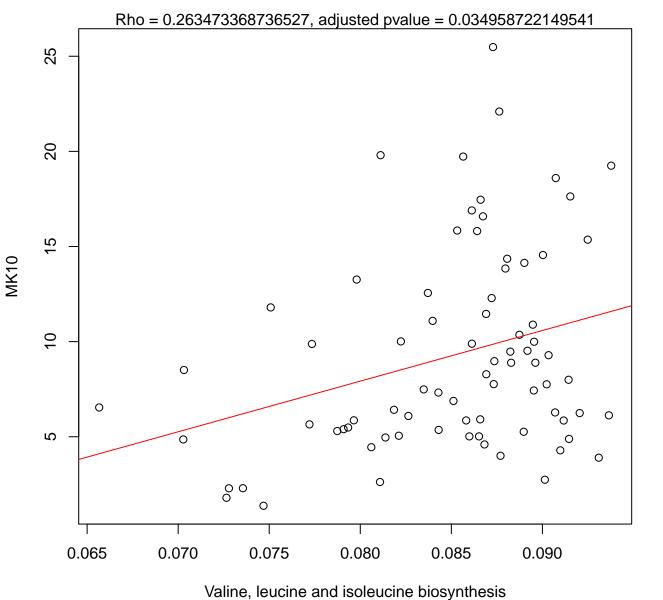
Timepoint 1, MK10 ~ Ascorbate and aldarate metabolism



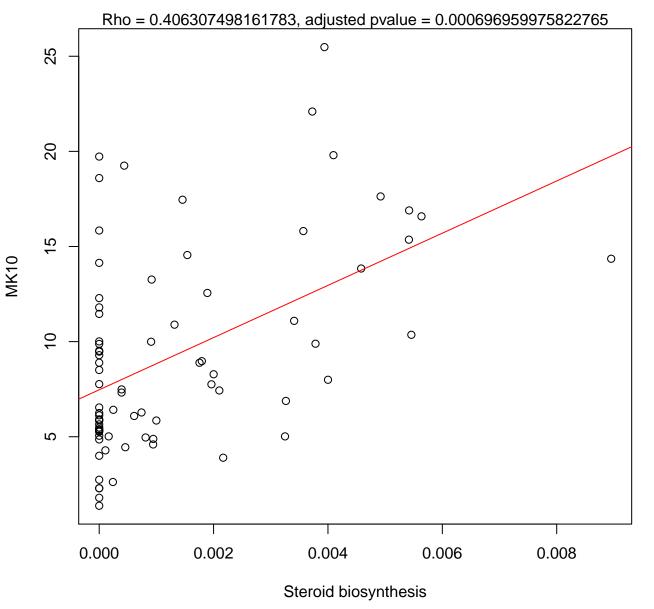
## Timepoint 1, MK10 ~ Butanoate metabolism



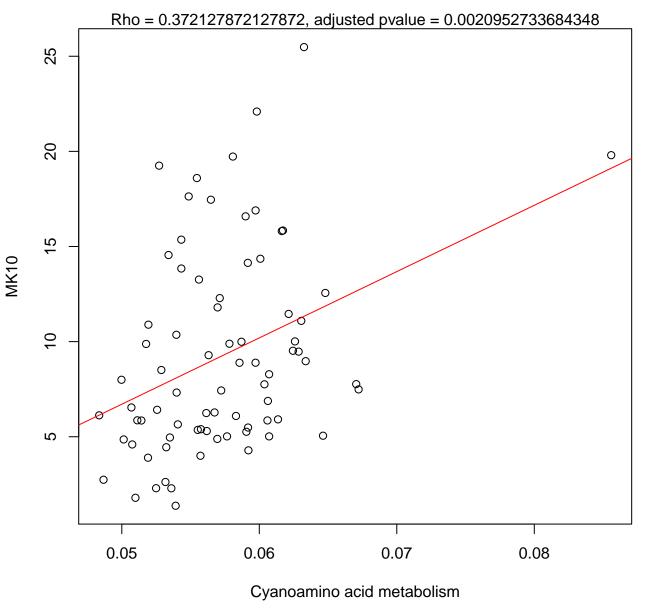
Timepoint 1, MK10 ~ Valine, leucine and isoleucine biosynthesis



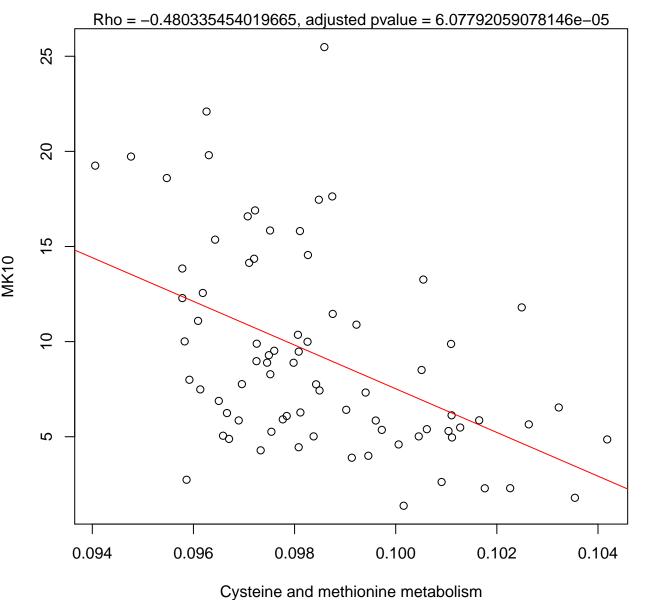
Timepoint 1, MK10 ~ Steroid biosynthesis



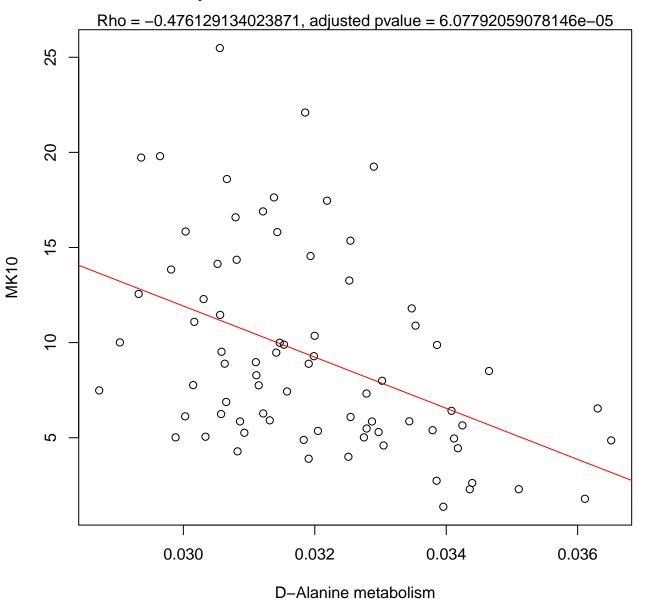
Timepoint 1, MK10 ~ Cyanoamino acid metabolism



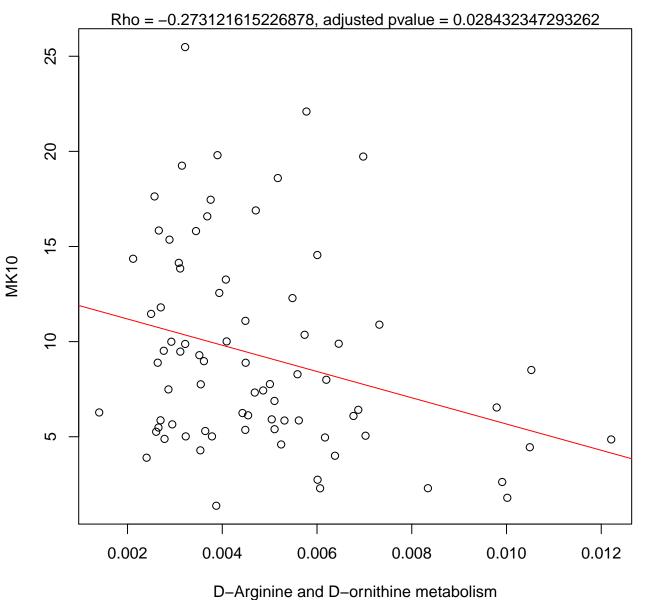
Timepoint 1, MK10 ~ Cysteine and methionine metabolism



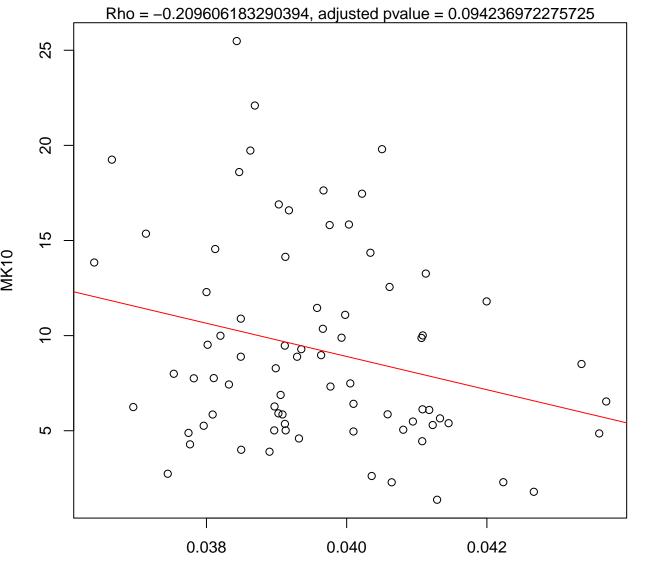
#### Timepoint 1, MK10 ~ D-Alanine metabolism



Timepoint 1, MK10 ~ D-Arginine and D-ornithine metabolism

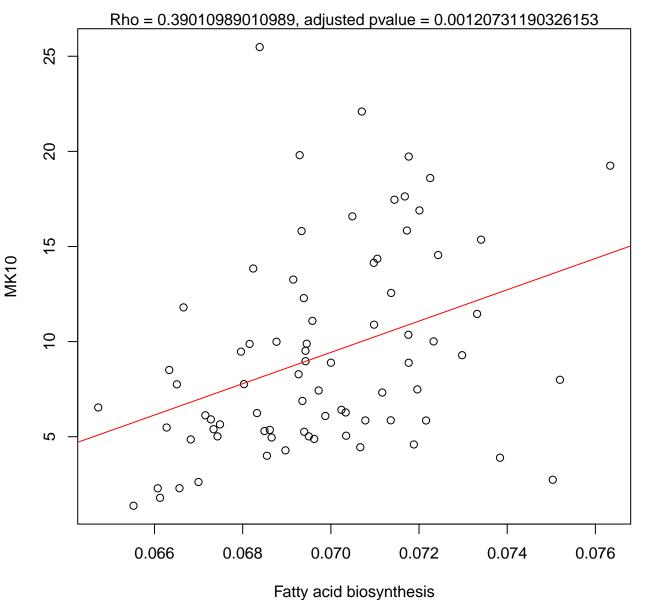


Timepoint 1, MK10 ~ D-Glutamine and D-glutamate metabolism

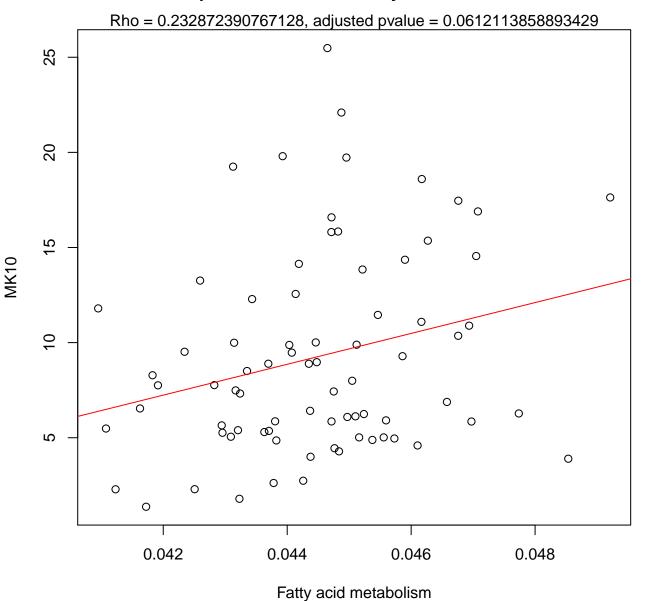


D-Glutamine and D-glutamate metabolism

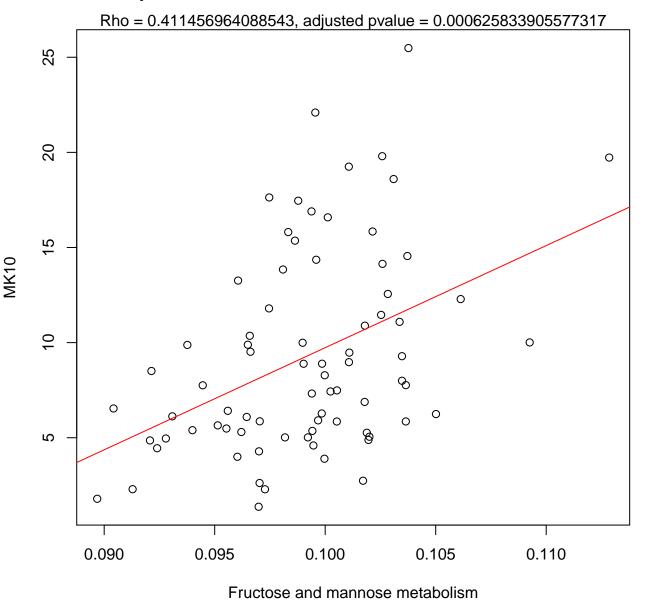
Timepoint 1, MK10 ~ Fatty acid biosynthesis



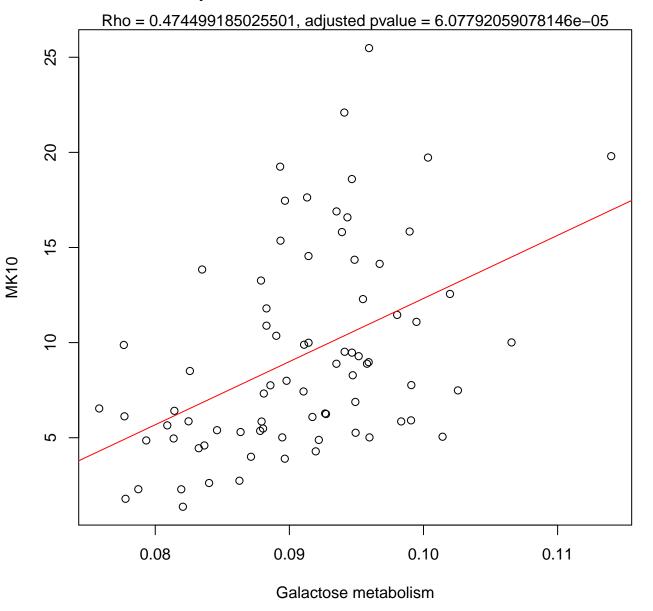
# Timepoint 1, MK10 ~ Fatty acid metabolism



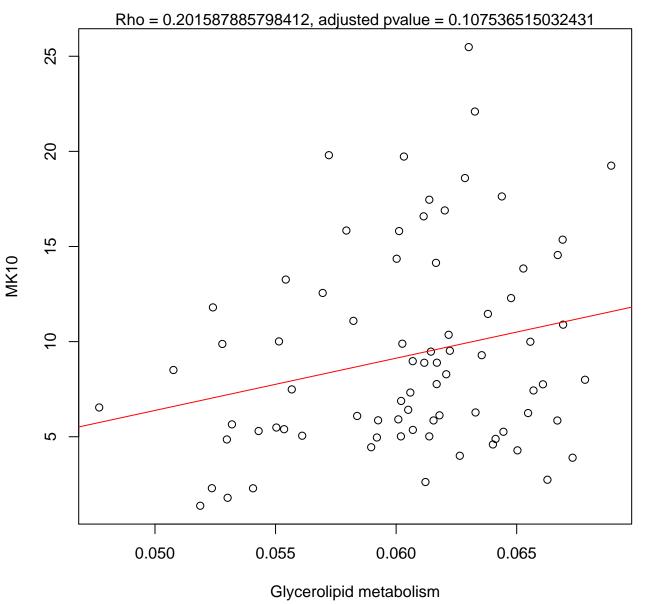
Timepoint 1, MK10 ~ Fructose and mannose metabolism



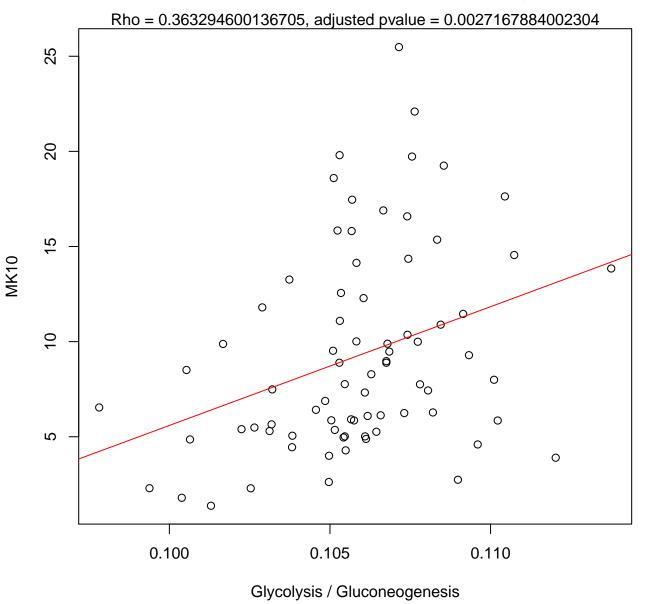
#### Timepoint 1, MK10 ~ Galactose metabolism



## Timepoint 1, MK10 ~ Glycerolipid metabolism

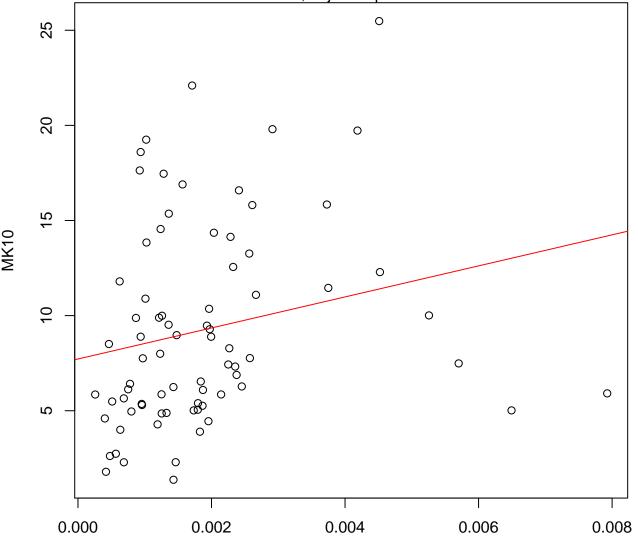


# Timepoint 1, MK10 ~ Glycolysis / Gluconeogenesis



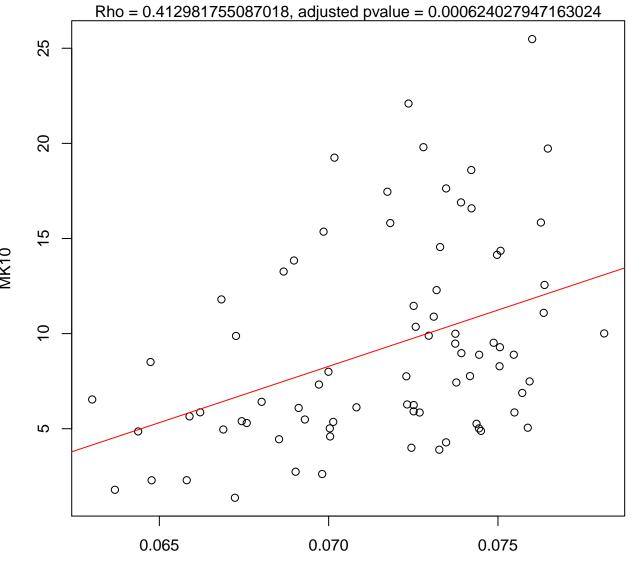
Timepoint 1, MK10 ~ Glycosphingolipid biosynthesis – lacto and neolacto s

Rho = 0.354093275145907, adjusted pvalue = 0.0035417202350559



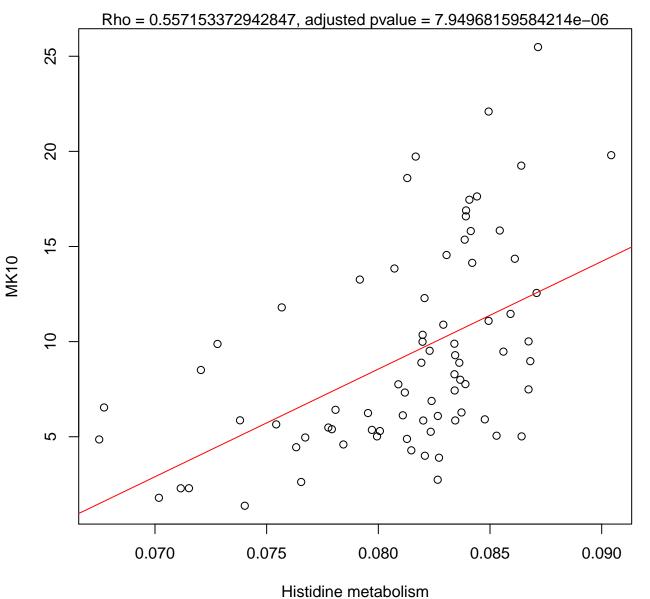
Glycosphingolipid biosynthesis – lacto and neolacto series

Timepoint 1, MK10 ~ Glyoxylate and dicarboxylate metabolism

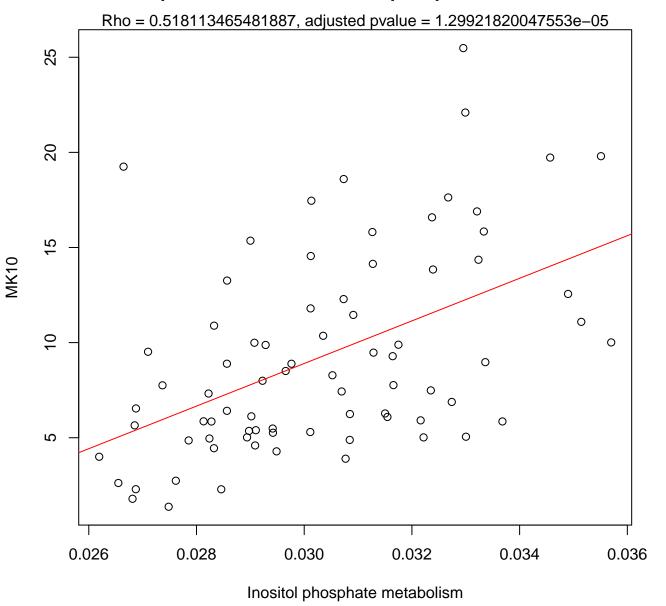


Glyoxylate and dicarboxylate metabolism

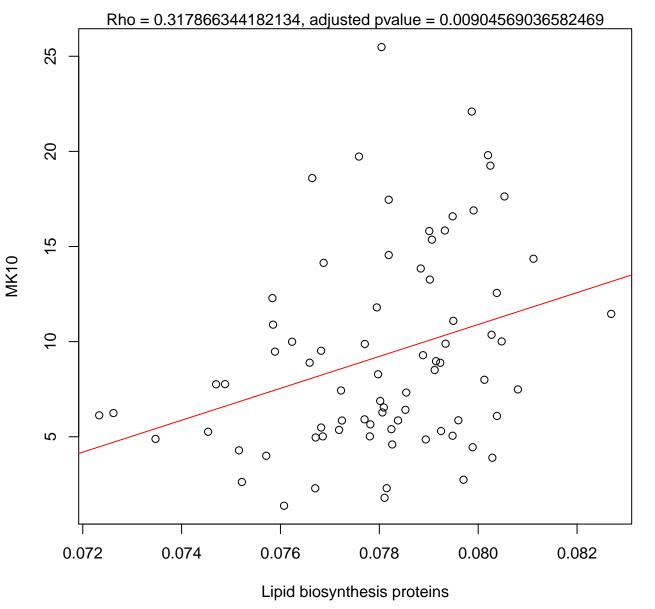
Timepoint 1, MK10 ~ Histidine metabolism



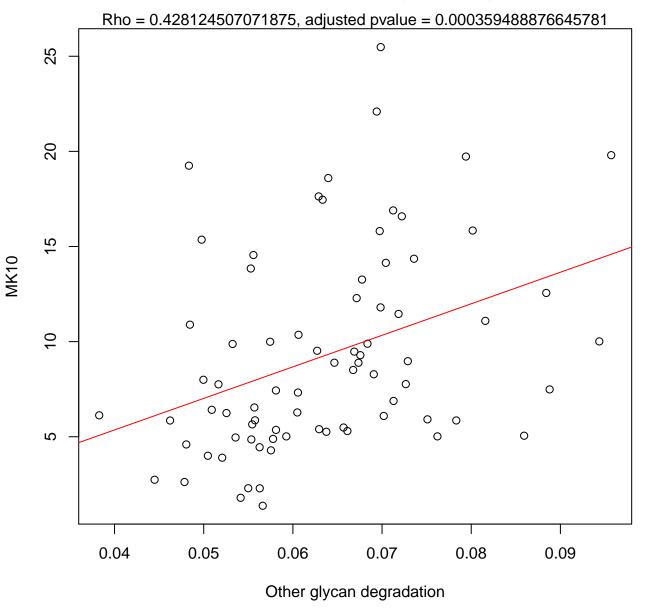
Timepoint 1, MK10 ~ Inositol phosphate metabolism



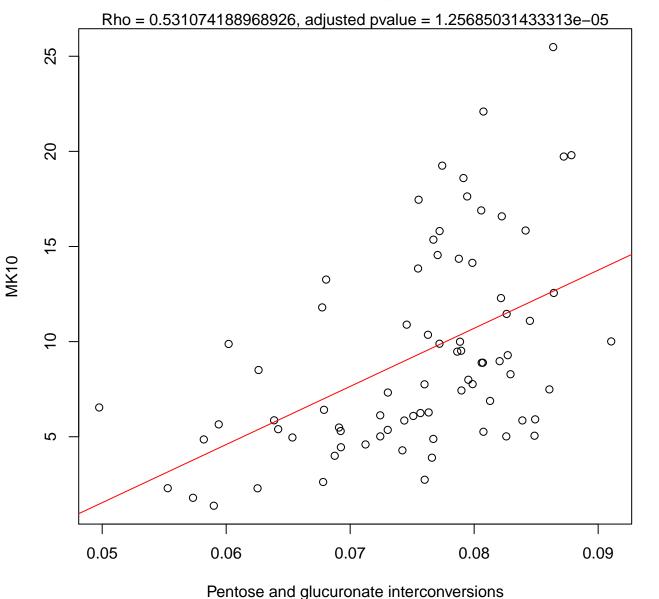
Timepoint 1, MK10 ~ Lipid biosynthesis proteins



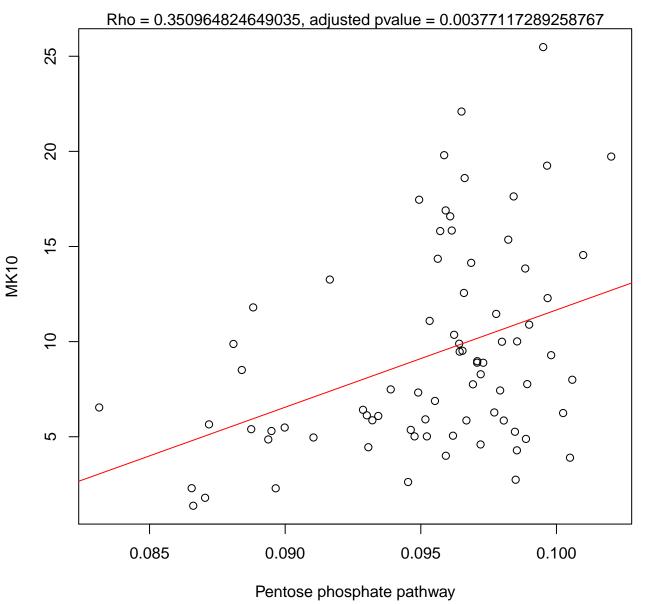
### Timepoint 1, MK10 ~ Other glycan degradation



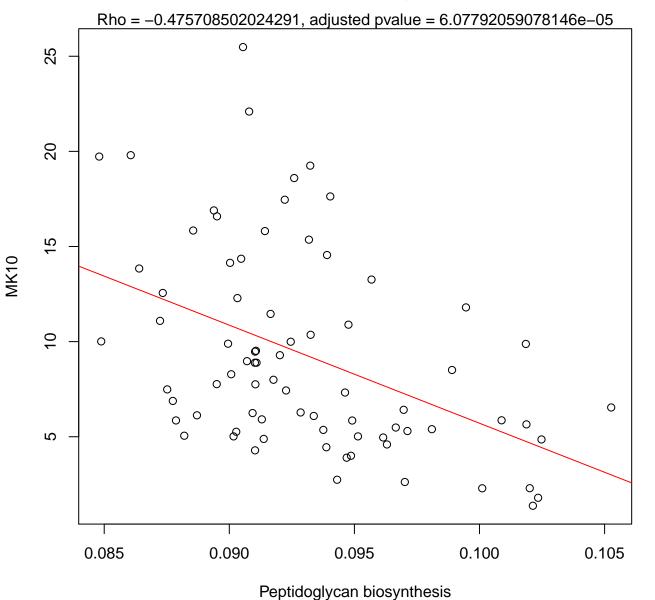
Timepoint 1, MK10 ~ Pentose and glucuronate interconversions



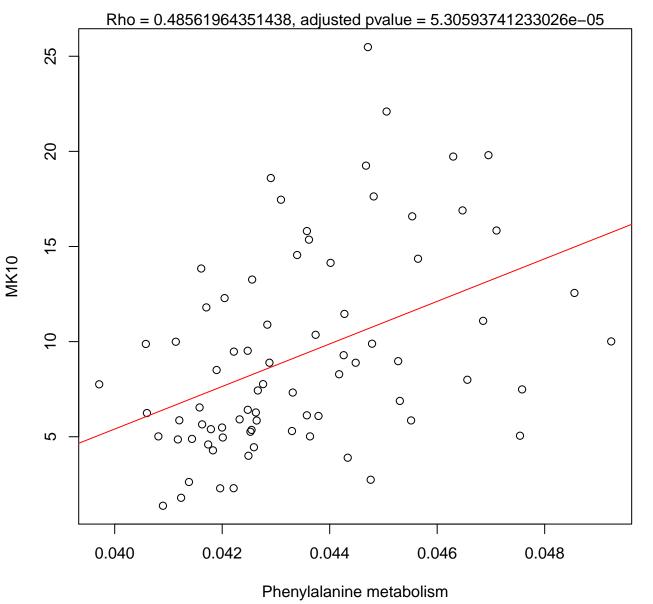
Timepoint 1, MK10 ~ Pentose phosphate pathway



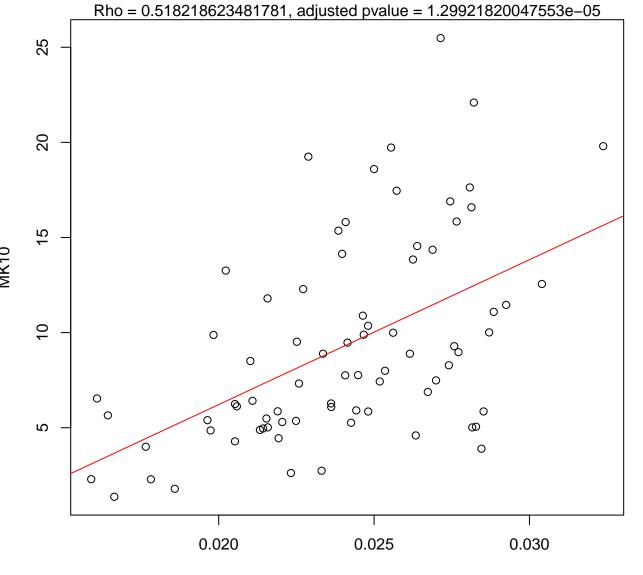
Timepoint 1, MK10 ~ Peptidoglycan biosynthesis



Timepoint 1, MK10 ~ Phenylalanine metabolism

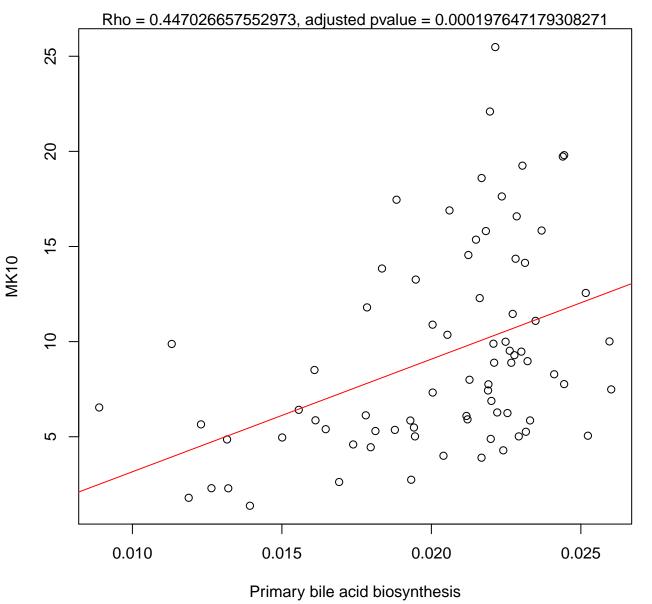


Timepoint 1, MK10 ~ Phosphonate and phosphinate metabolism

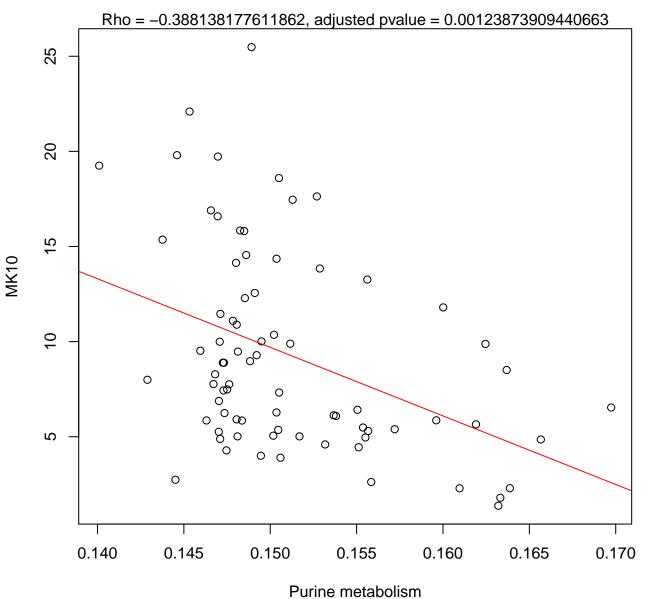


Phosphonate and phosphinate metabolism

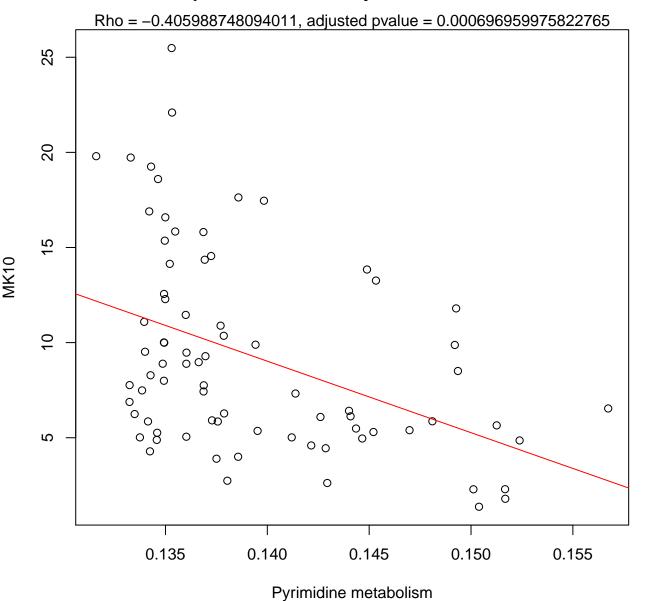
Timepoint 1, MK10 ~ Primary bile acid biosynthesis



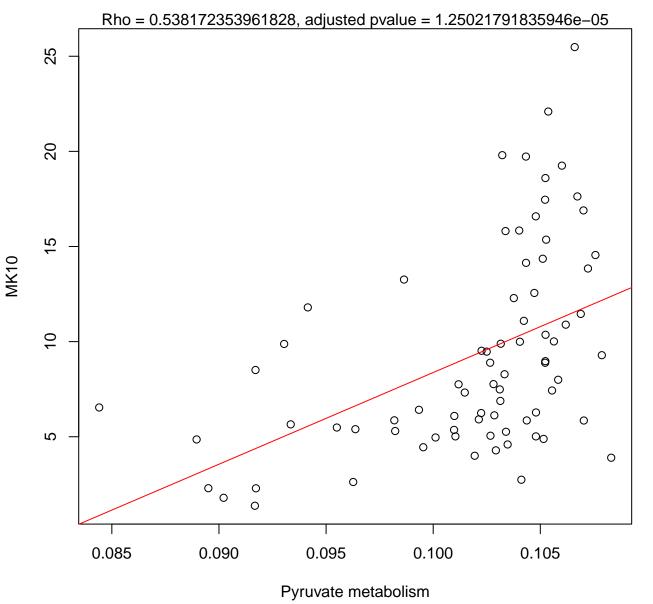
#### Timepoint 1, MK10 ~ Purine metabolism



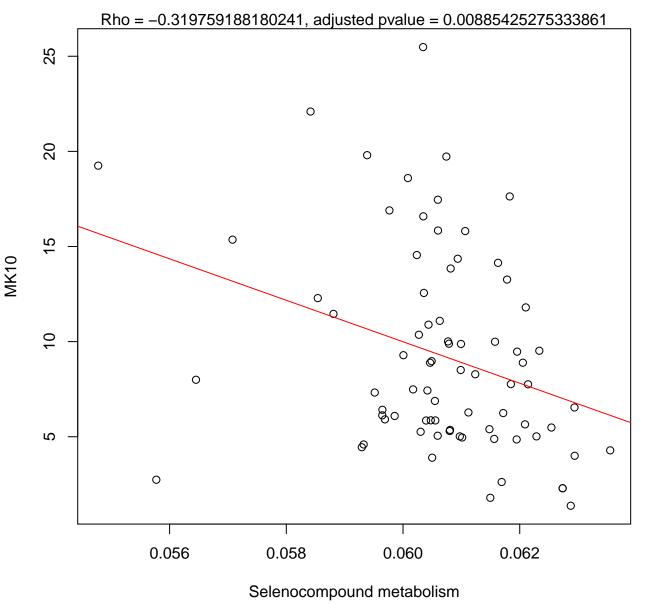
# Timepoint 1, MK10 ~ Pyrimidine metabolism



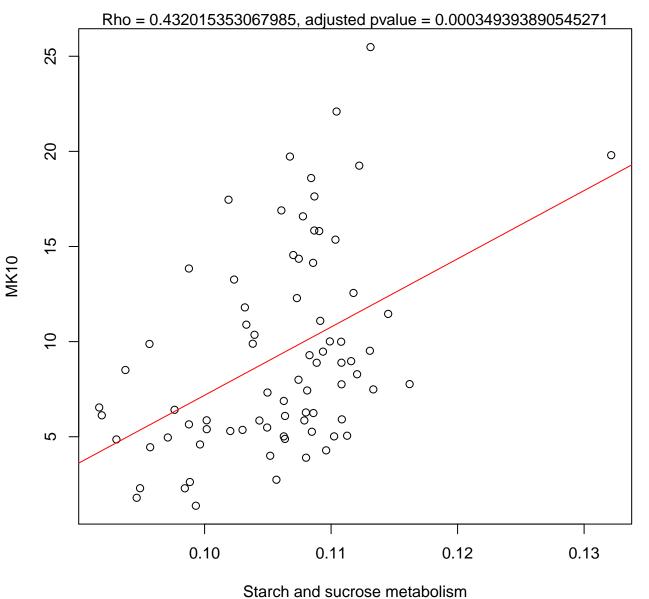
Timepoint 1, MK10 ~ Pyruvate metabolism



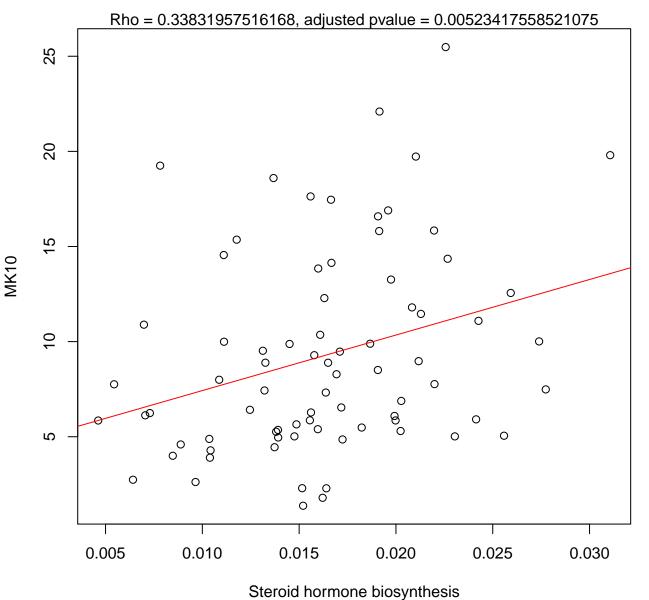
Timepoint 1, MK10 ~ Selenocompound metabolism



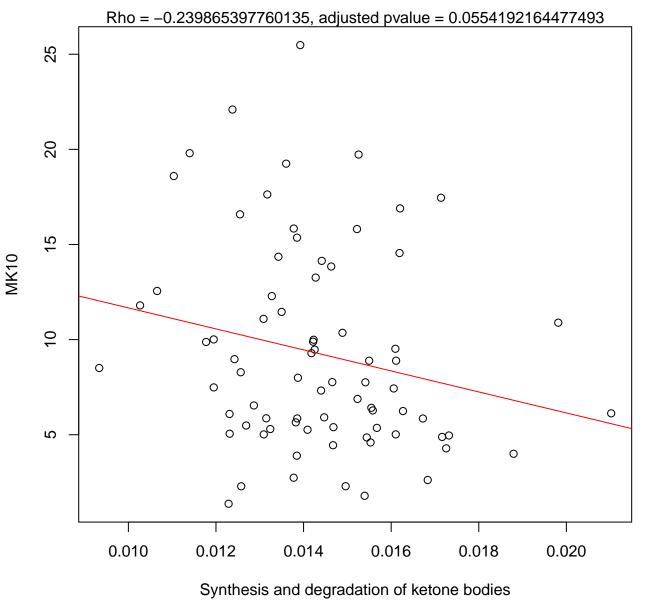
### Timepoint 1, MK10 ~ Starch and sucrose metabolism



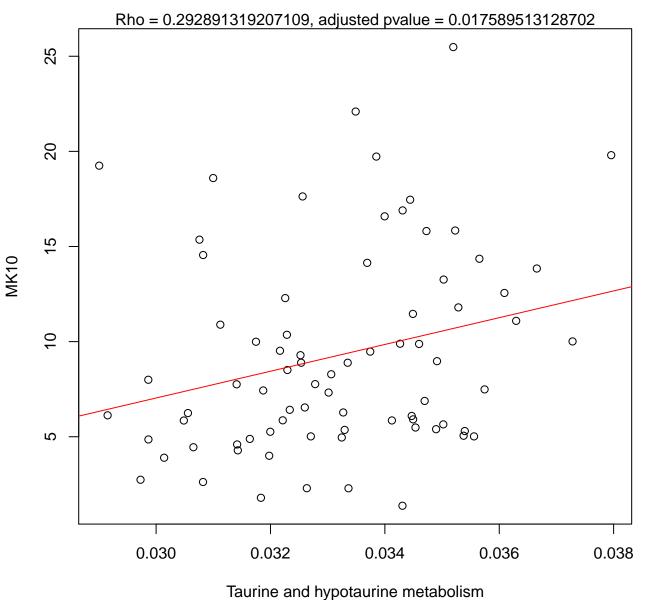
Timepoint 1, MK10 ~ Steroid hormone biosynthesis



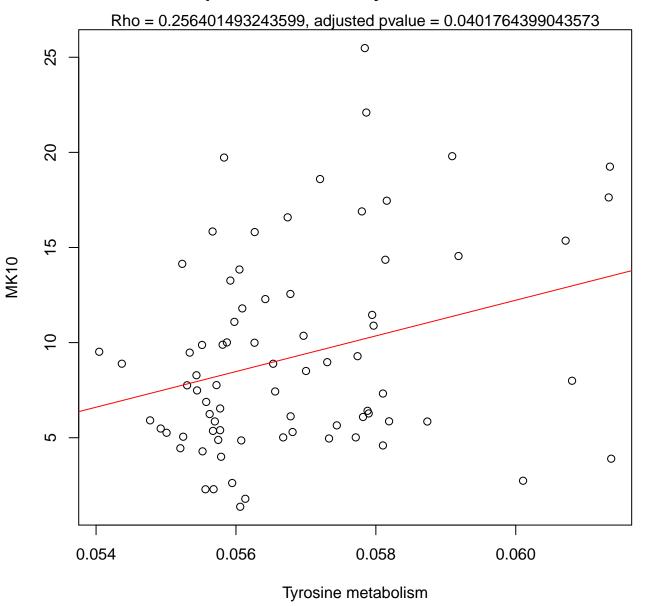
Timepoint 1, MK10 ~ Synthesis and degradation of ketone bodies



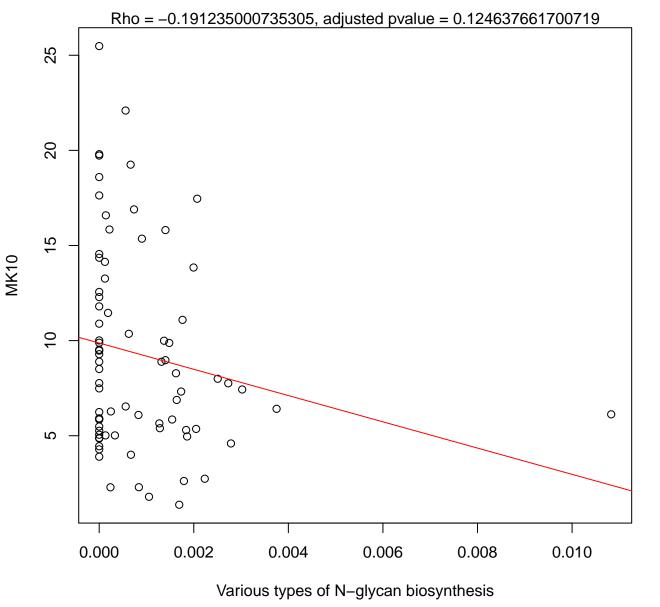
Timepoint 1, MK10 ~ Taurine and hypotaurine metabolism



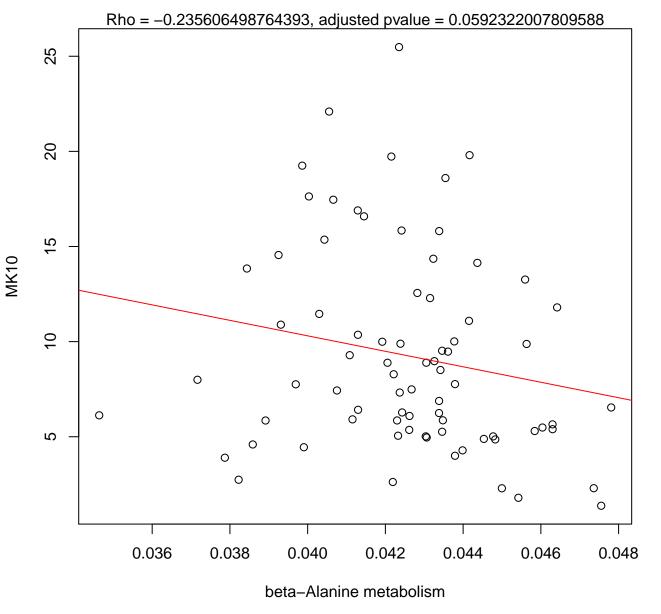
Timepoint 1, MK10 ~ Tyrosine metabolism



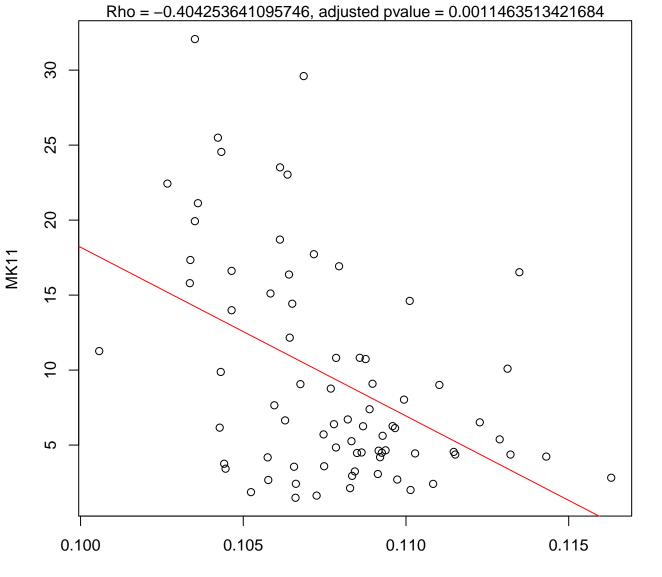
Timepoint 1, MK10 ~ Various types of N-glycan biosynthesis



#### Timepoint 1, MK10 ~ beta-Alanine metabolism

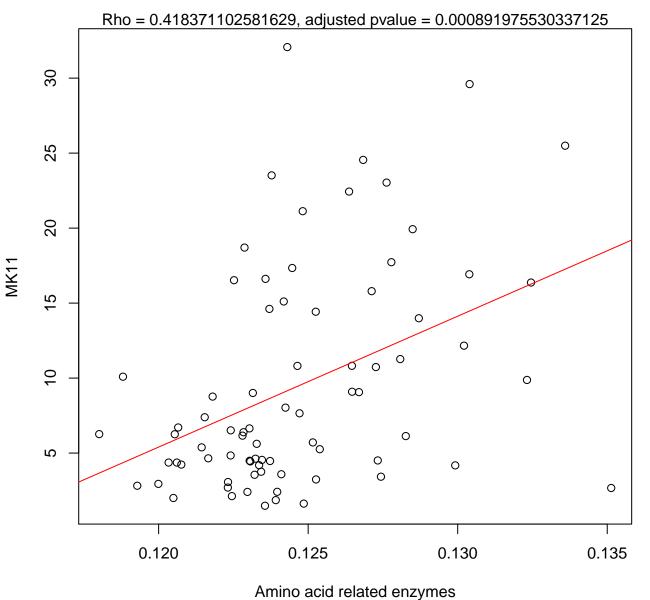


Timepoint 1, MK11 ~ Alanine, aspartate and glutamate metabolism

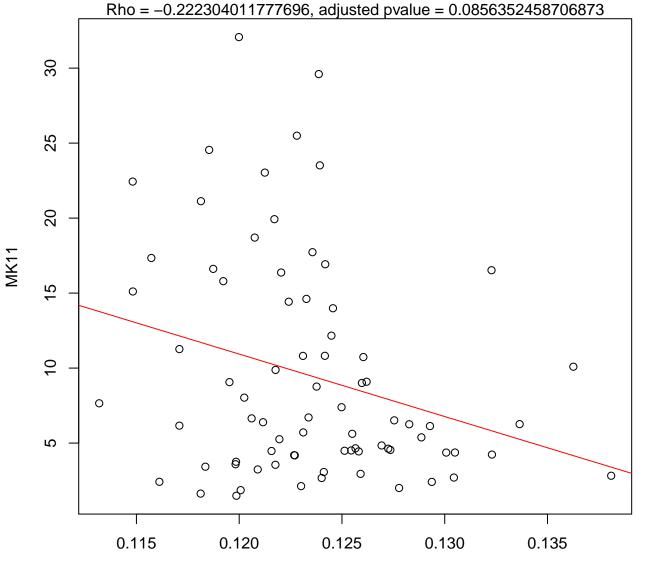


Alanine, aspartate and glutamate metabolism

Timepoint 1, MK11 ~ Amino acid related enzymes

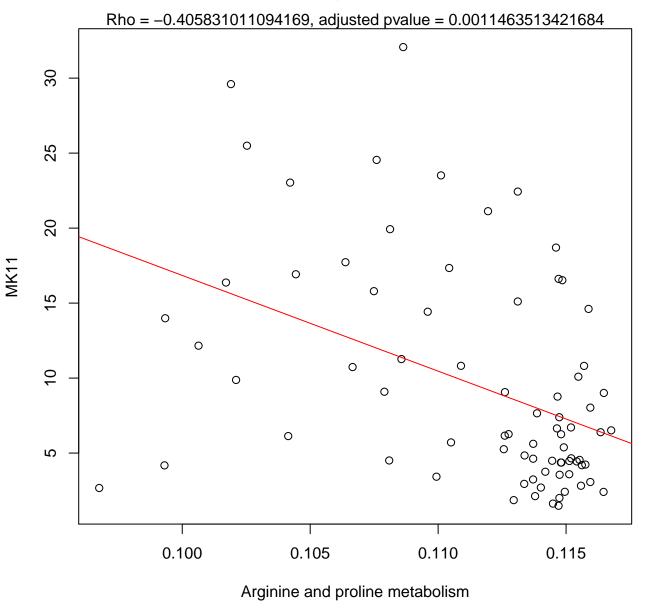


## Timepoint 1, MK11 ~ Amino sugar and nucleotide sugar metabolism

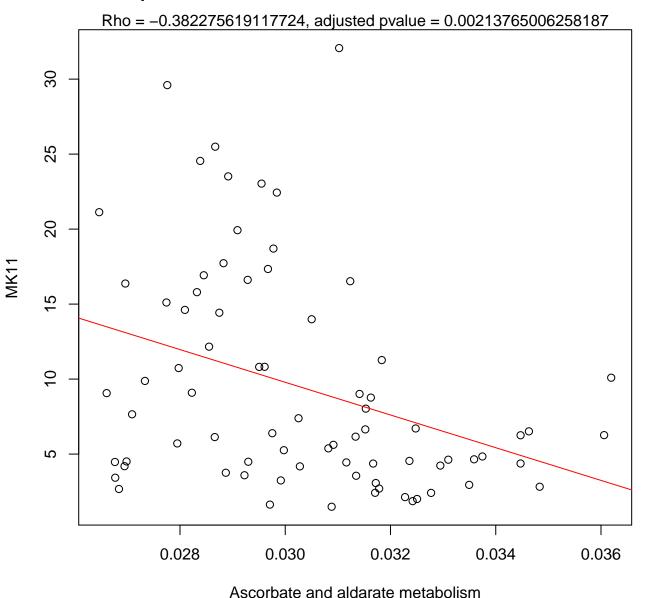


Amino sugar and nucleotide sugar metabolism

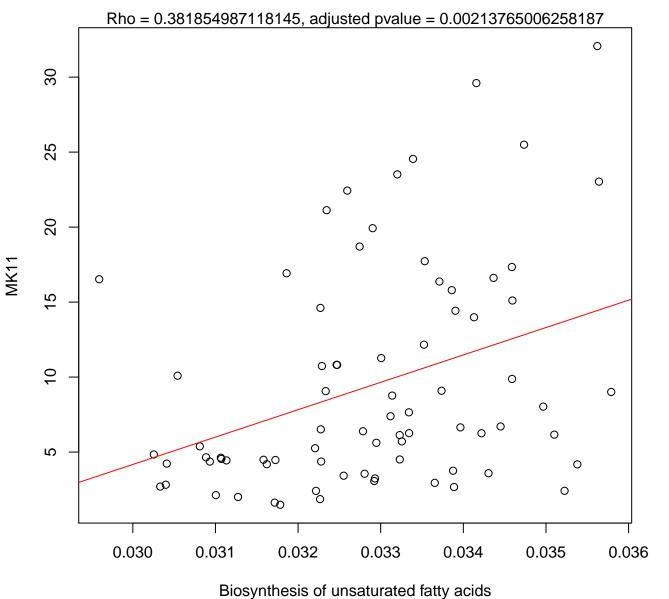
#### Timepoint 1, MK11 ~ Arginine and proline metabolism



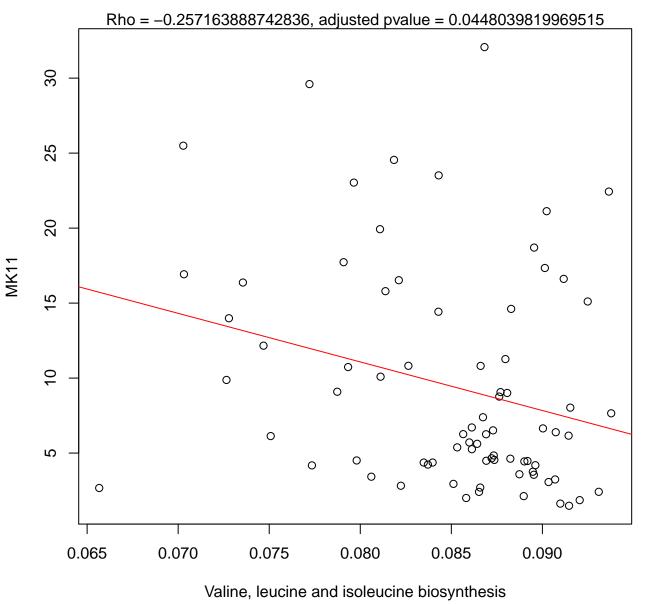
#### Timepoint 1, MK11 ~ Ascorbate and aldarate metabolism



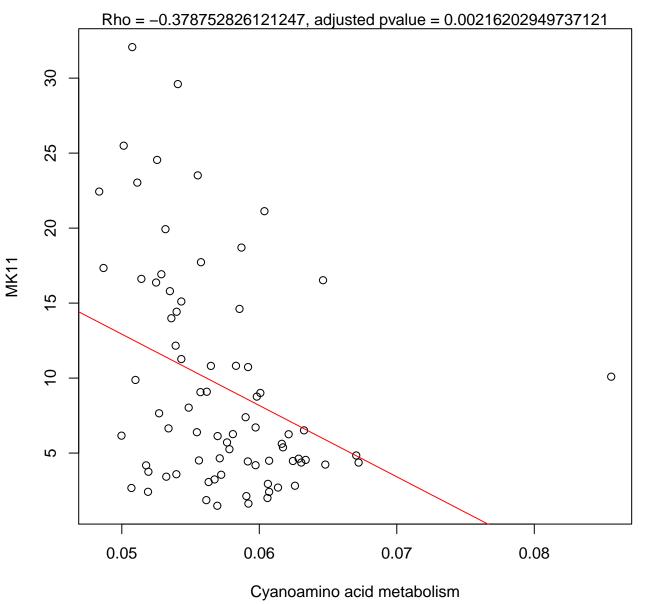
Timepoint 1, MK11 ~ Biosynthesis of unsaturated fatty acids



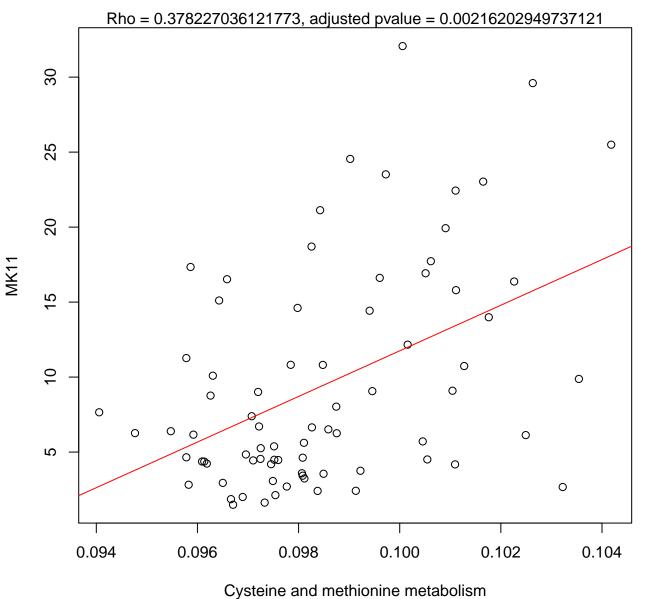
Timepoint 1, MK11 ~ Valine, leucine and isoleucine biosynthesis



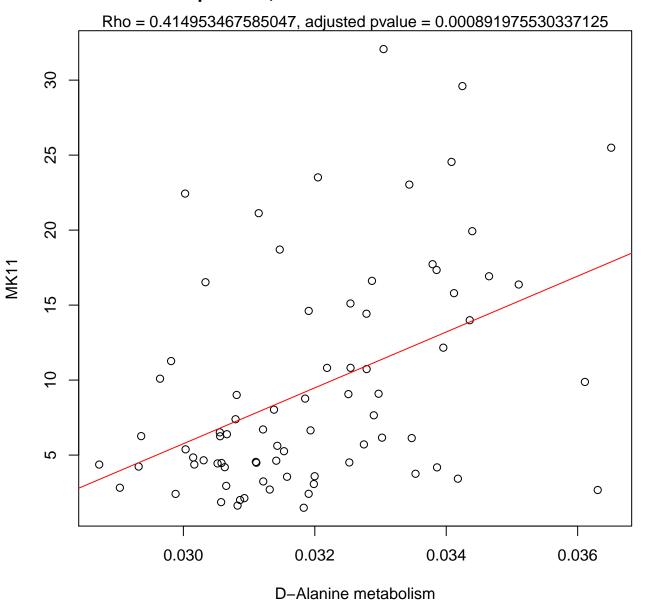
Timepoint 1, MK11 ~ Cyanoamino acid metabolism



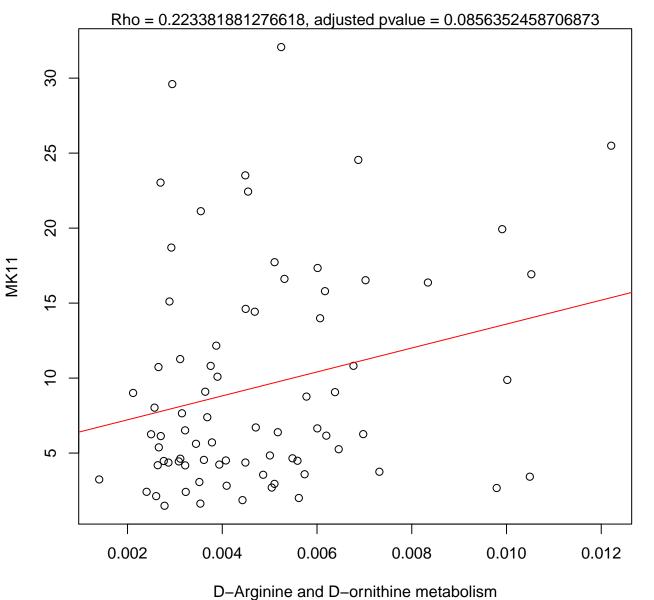
Timepoint 1, MK11 ~ Cysteine and methionine metabolism



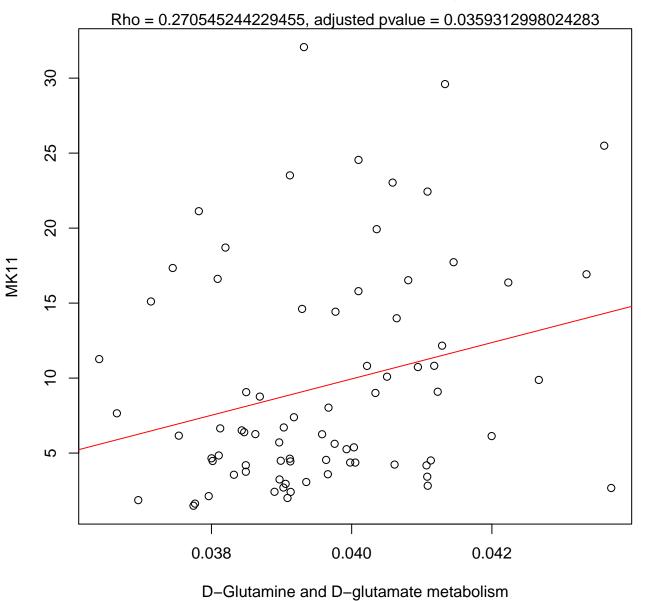
Timepoint 1, MK11 ~ D-Alanine metabolism



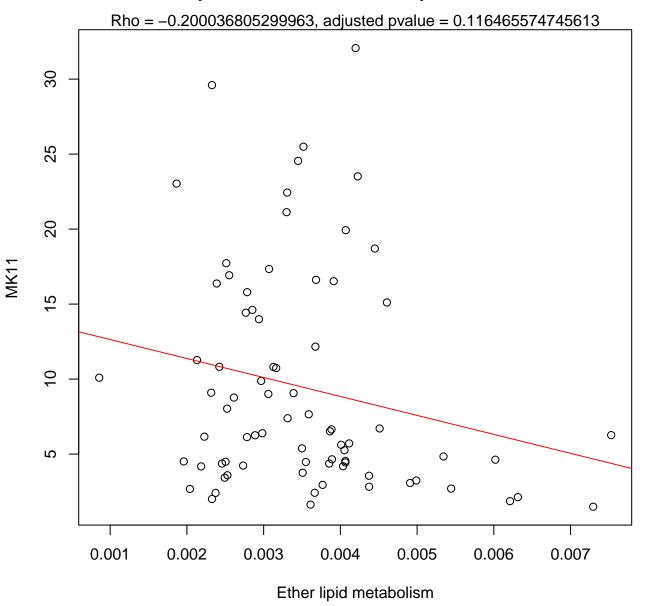
Timepoint 1, MK11 ~ D-Arginine and D-ornithine metabolism



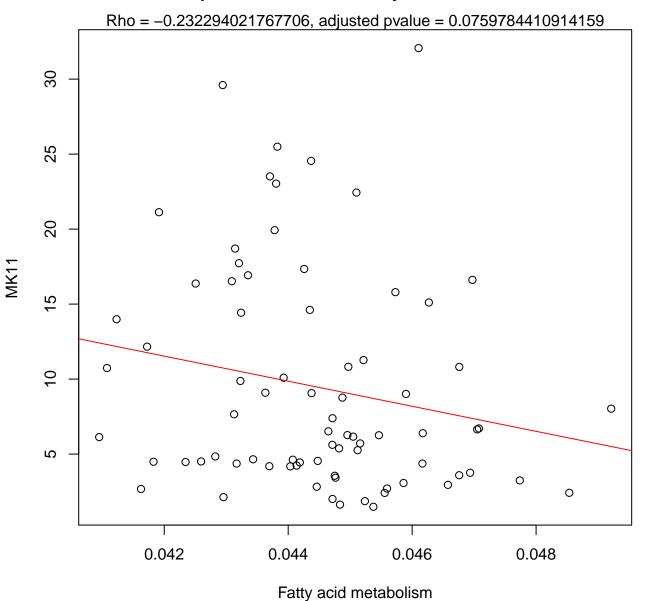
Timepoint 1, MK11 ~ D-Glutamine and D-glutamate metabolism



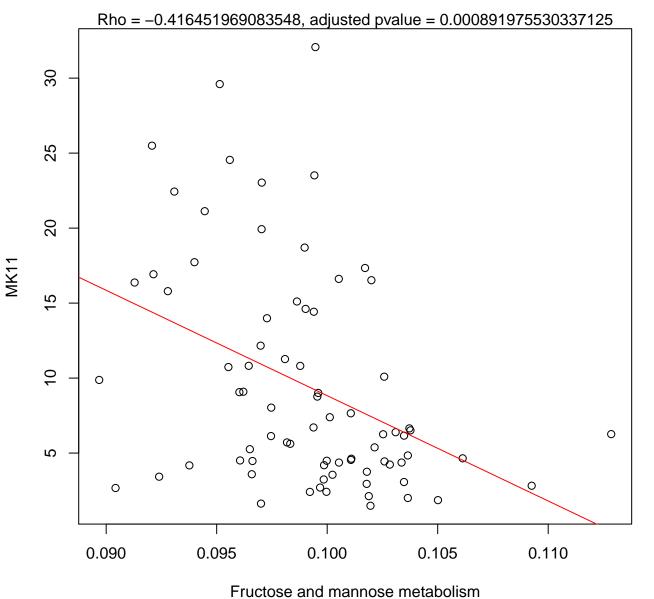
#### Timepoint 1, MK11 ~ Ether lipid metabolism



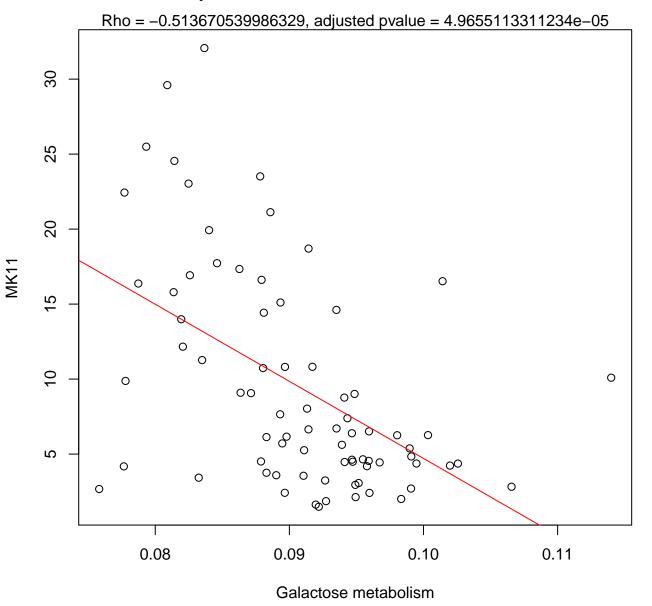
### Timepoint 1, MK11 ~ Fatty acid metabolism



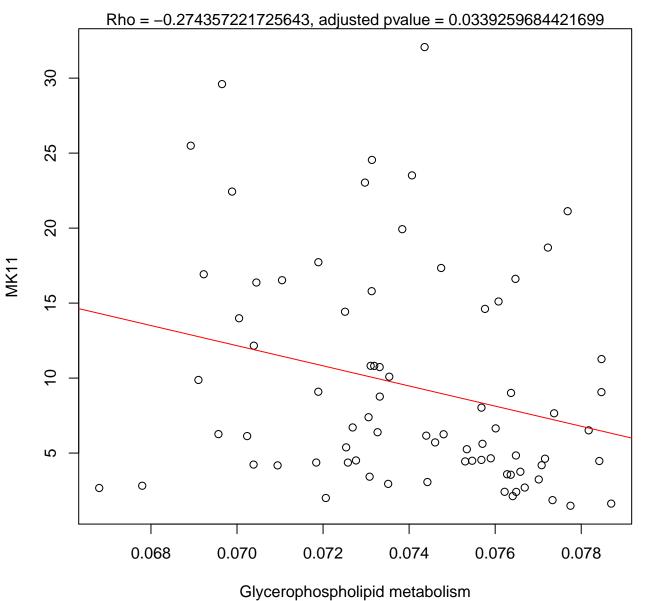
Timepoint 1, MK11 ~ Fructose and mannose metabolism



Timepoint 1, MK11 ~ Galactose metabolism

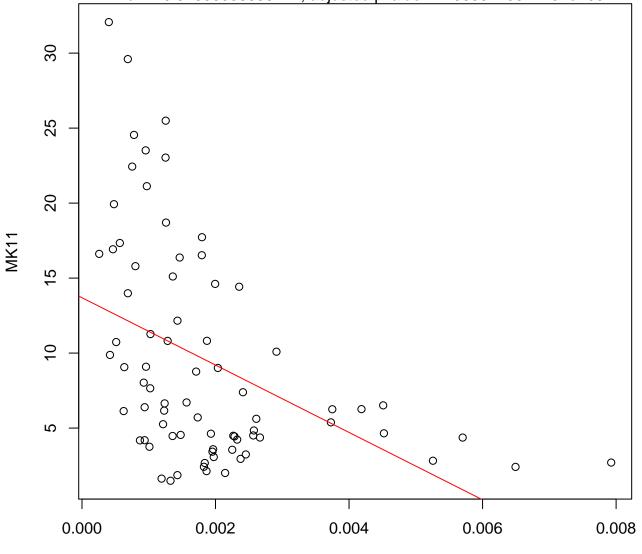


### Timepoint 1, MK11 ~ Glycerophospholipid metabolism



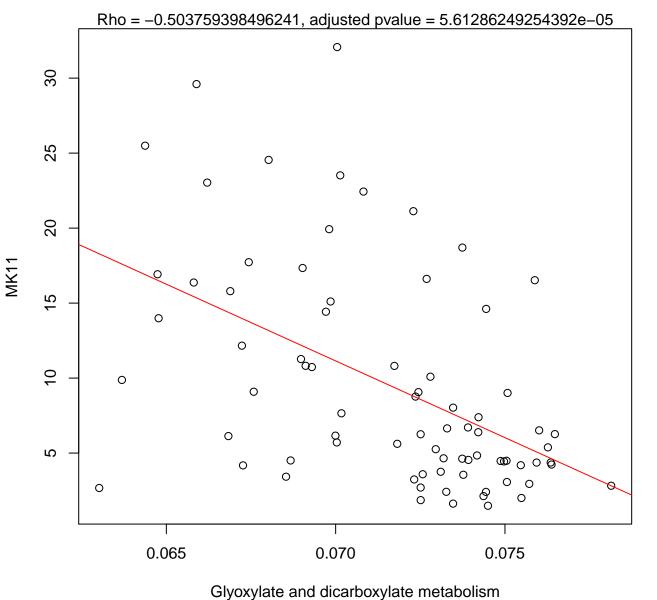
Timepoint 1, MK11 ~ Glycosphingolipid biosynthesis – lacto and neolacto s

Rho = -0.51856038698144, adjusted pvalue = 4.9655113311234e-05

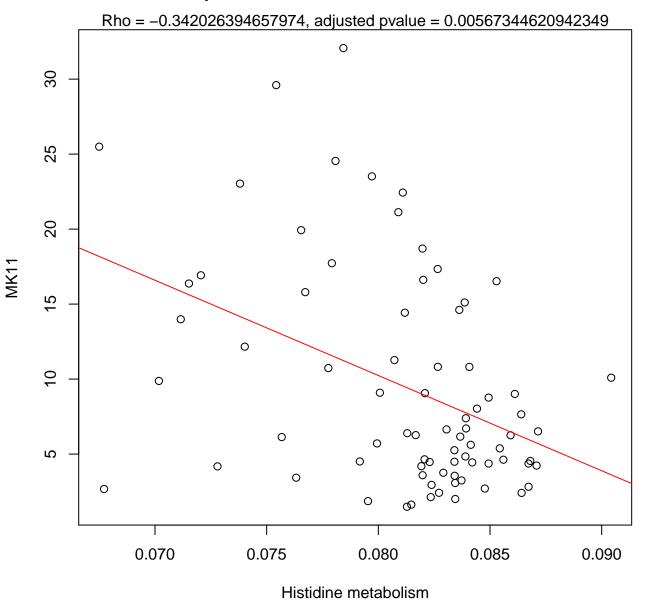


Glycosphingolipid biosynthesis – lacto and neolacto series

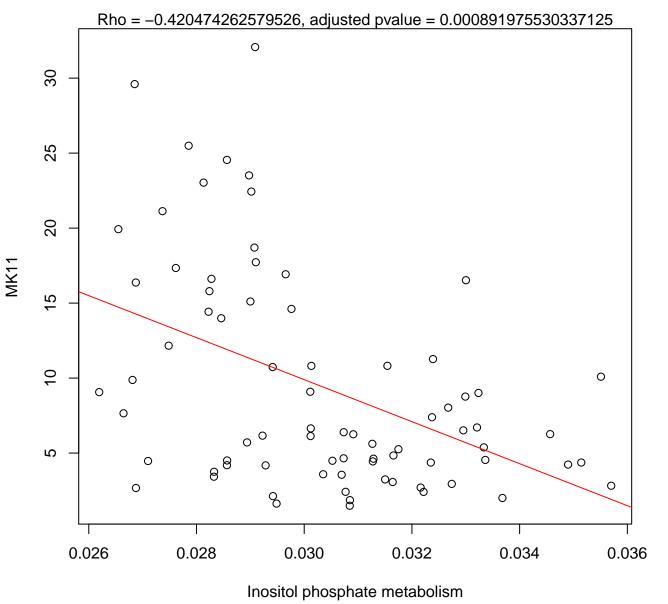
Timepoint 1, MK11 ~ Glyoxylate and dicarboxylate metabolism



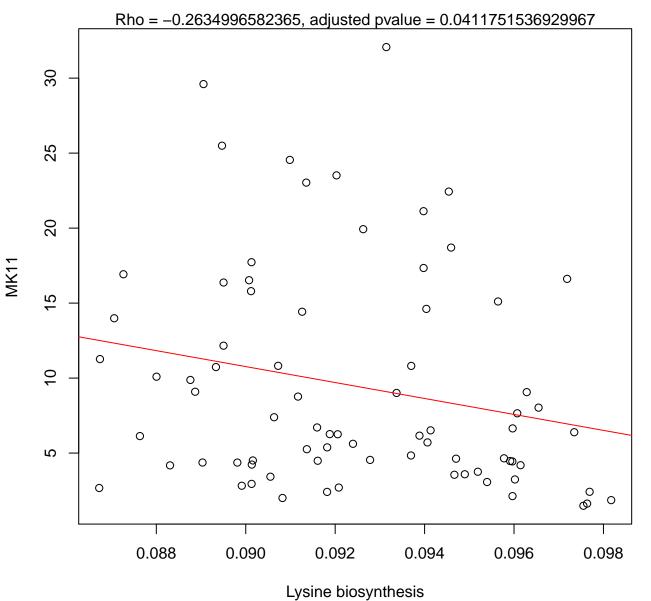
Timepoint 1, MK11 ~ Histidine metabolism



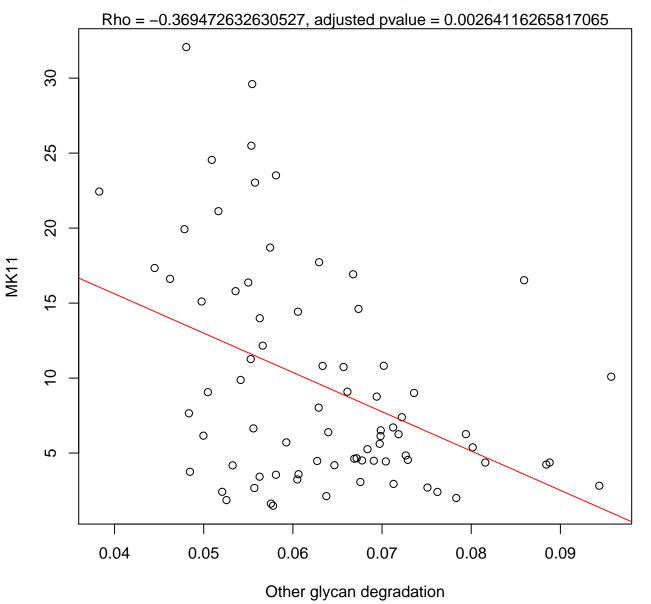
Timepoint 1, MK11 ~ Inositol phosphate metabolism



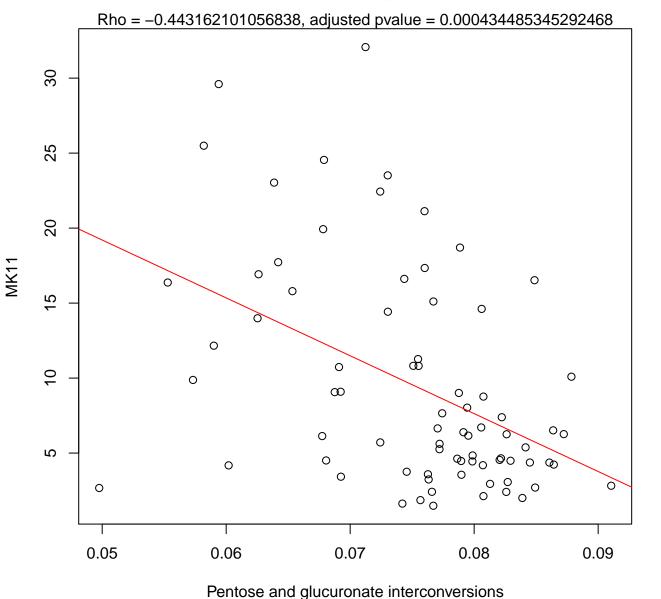
### Timepoint 1, MK11 ~ Lysine biosynthesis



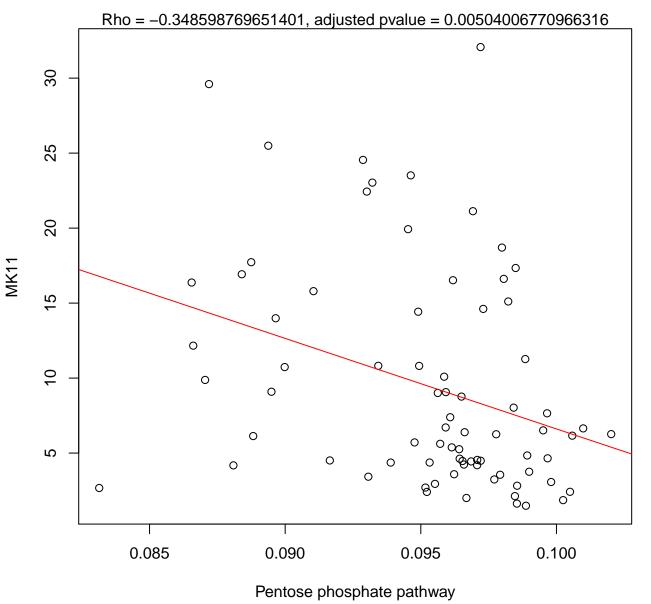
### Timepoint 1, MK11 ~ Other glycan degradation



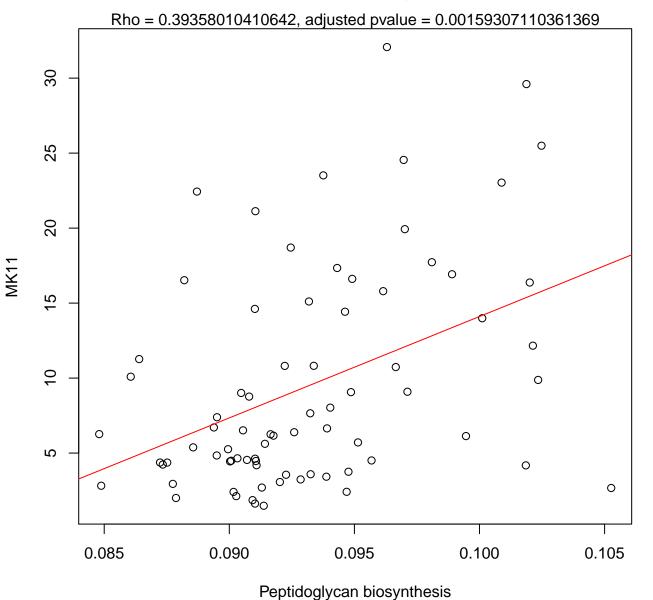
Timepoint 1, MK11 ~ Pentose and glucuronate interconversions



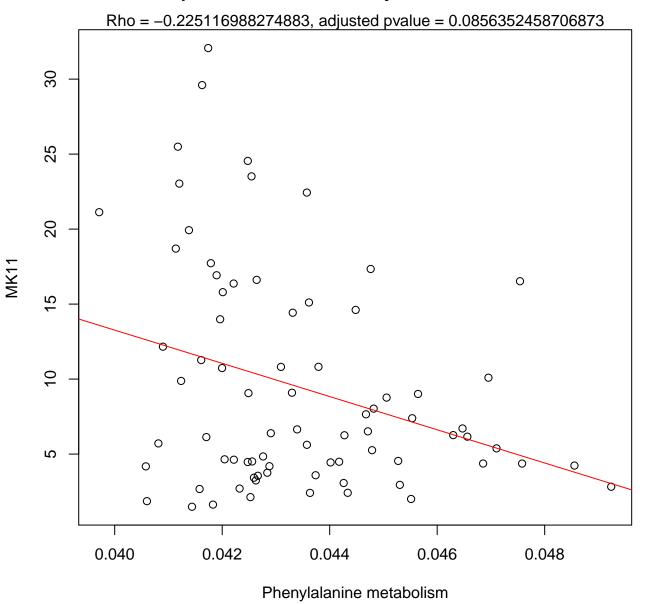
Timepoint 1, MK11 ~ Pentose phosphate pathway



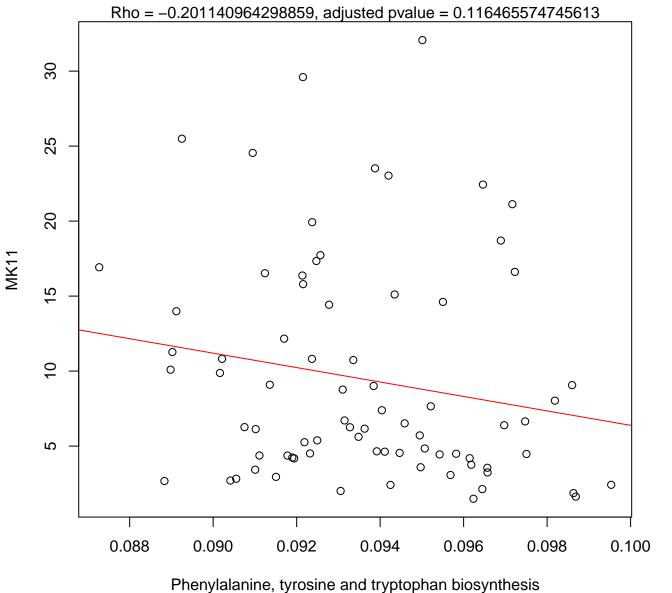
Timepoint 1, MK11 ~ Peptidoglycan biosynthesis



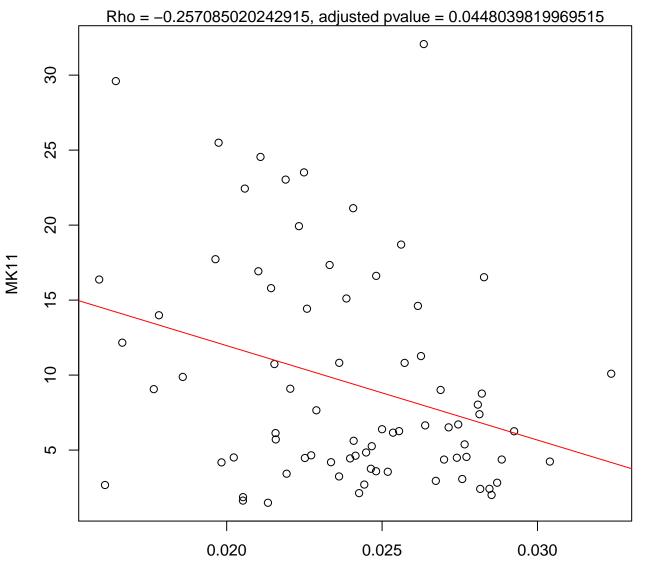
Timepoint 1, MK11 ~ Phenylalanine metabolism



Timepoint 1, MK11 ~ Phenylalanine, tyrosine and tryptophan biosynthes

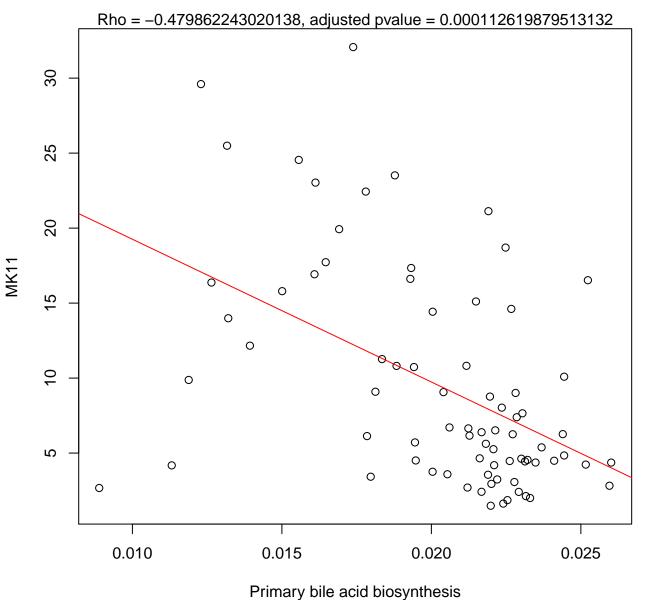


Timepoint 1, MK11 ~ Phosphonate and phosphinate metabolism

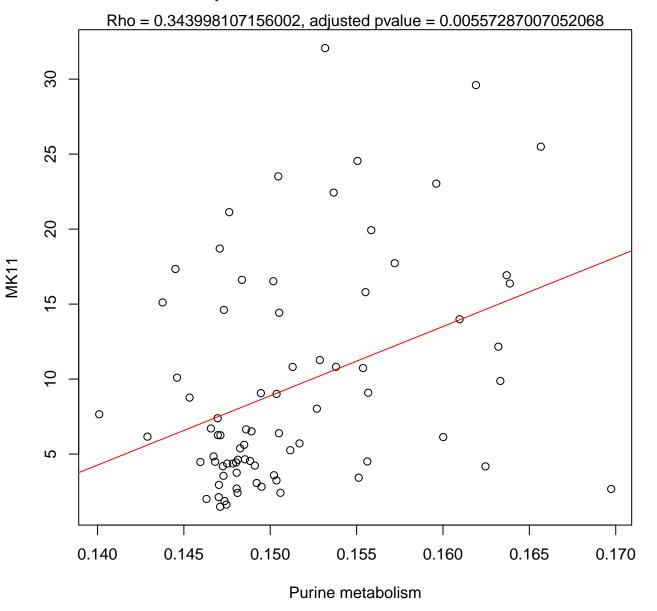


Phosphonate and phosphinate metabolism

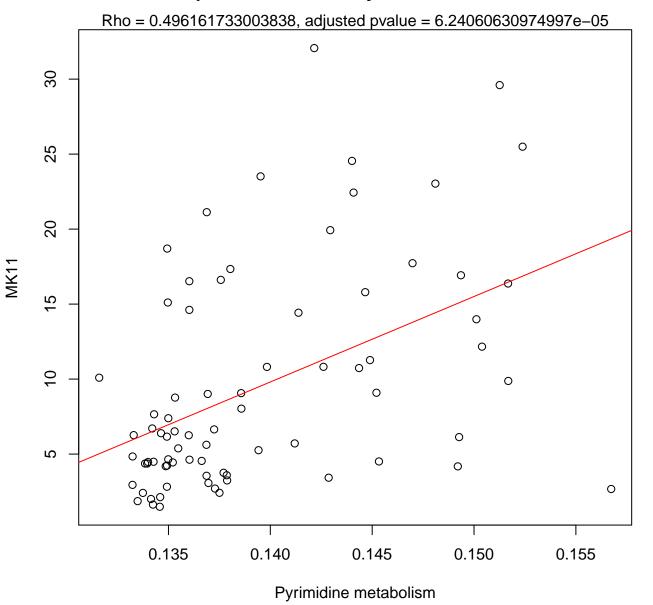
Timepoint 1, MK11 ~ Primary bile acid biosynthesis



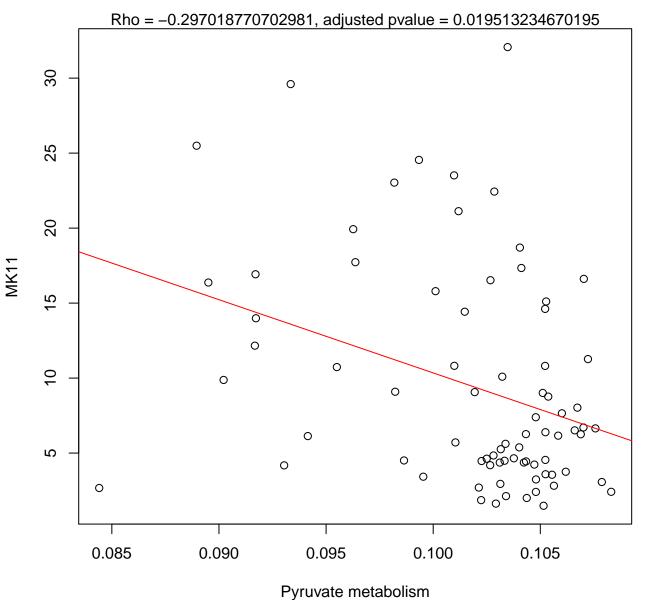
Timepoint 1, MK11 ~ Purine metabolism



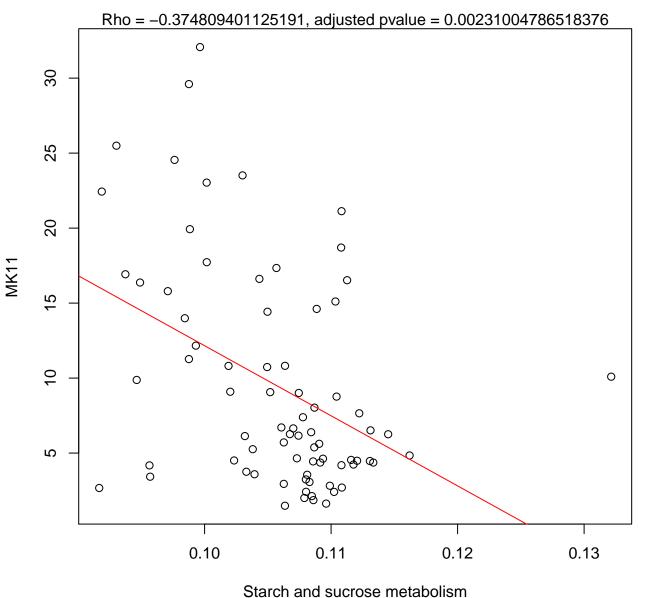
Timepoint 1, MK11 ~ Pyrimidine metabolism



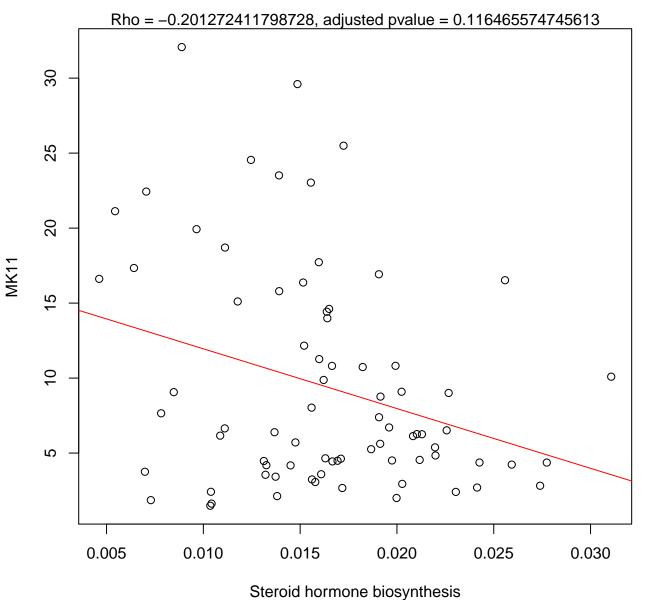
Timepoint 1, MK11 ~ Pyruvate metabolism



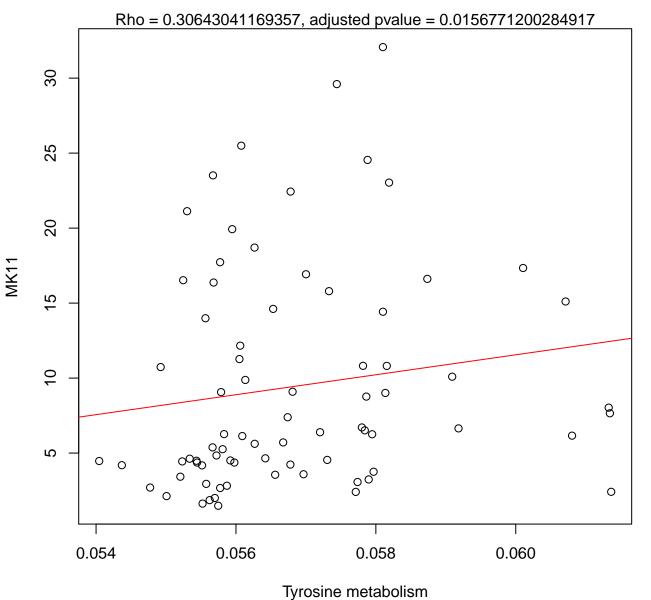
# Timepoint 1, MK11 ~ Starch and sucrose metabolism



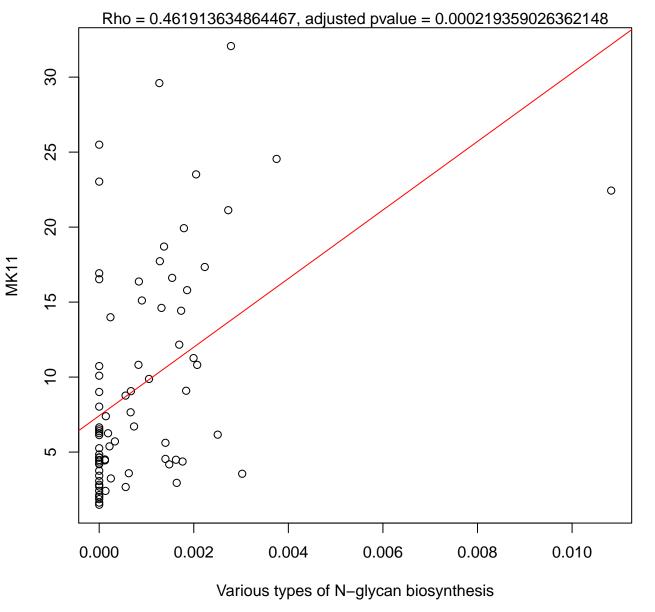
Timepoint 1, MK11 ~ Steroid hormone biosynthesis



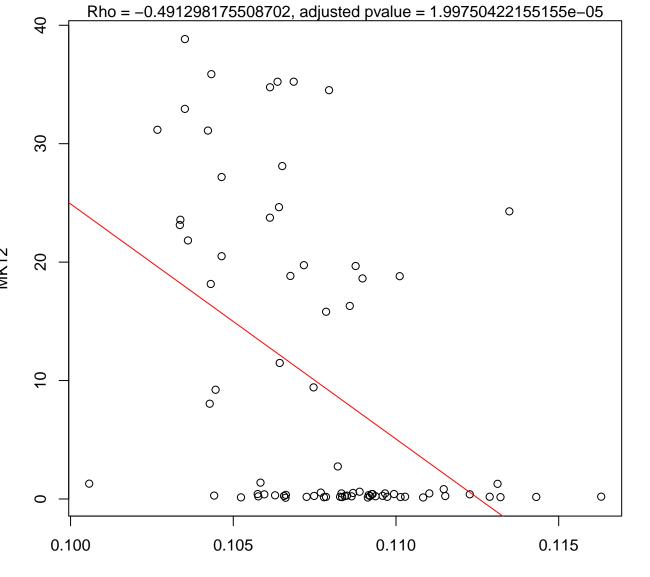
Timepoint 1, MK11 ~ Tyrosine metabolism



Timepoint 1, MK11 ~ Various types of N-glycan biosynthesis

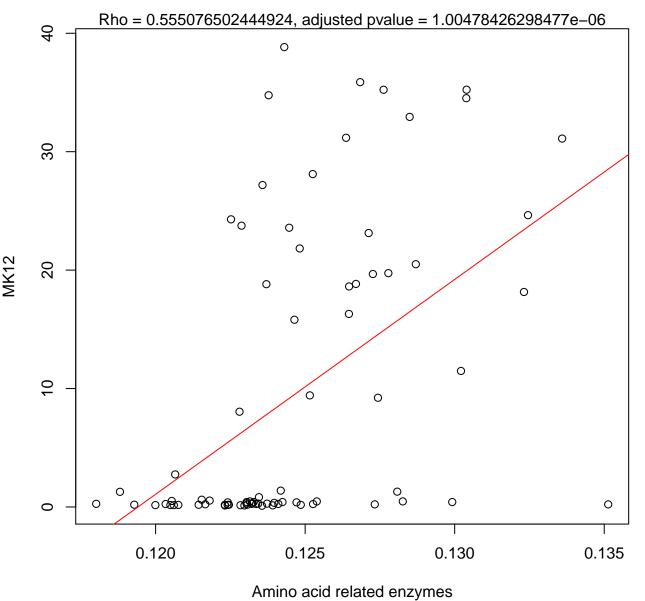


Timepoint 1, MK12 ~ Alanine, aspartate and glutamate metabolism

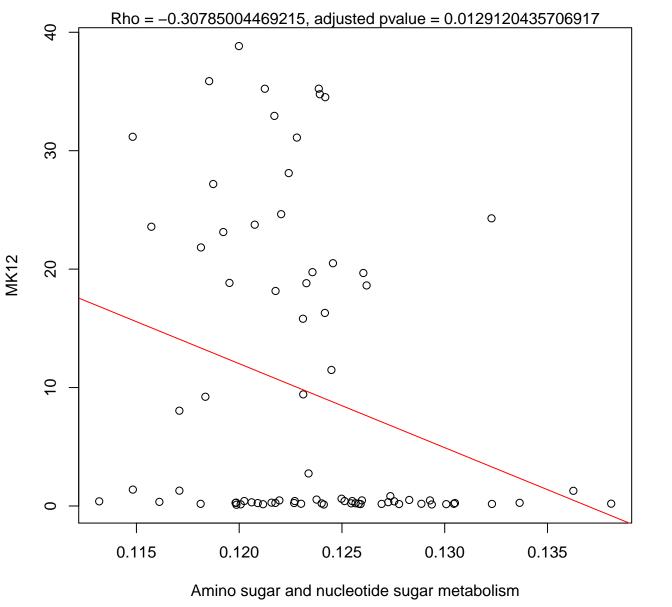


Alanine, aspartate and glutamate metabolism

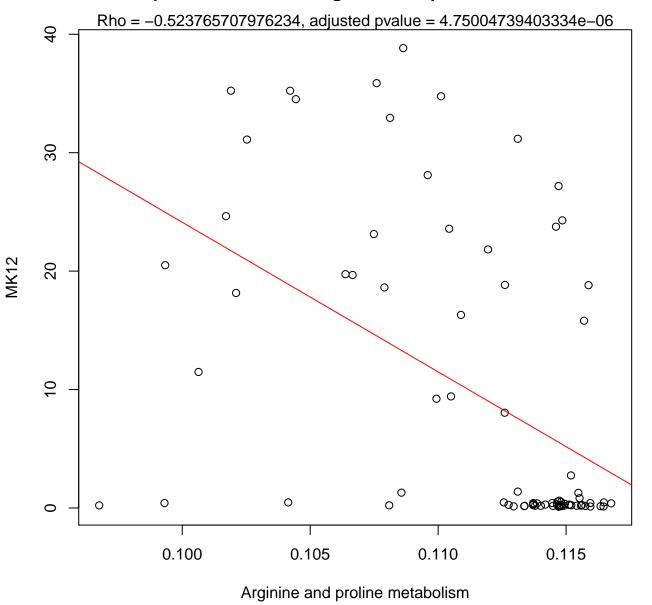
Timepoint 1, MK12 ~ Amino acid related enzymes



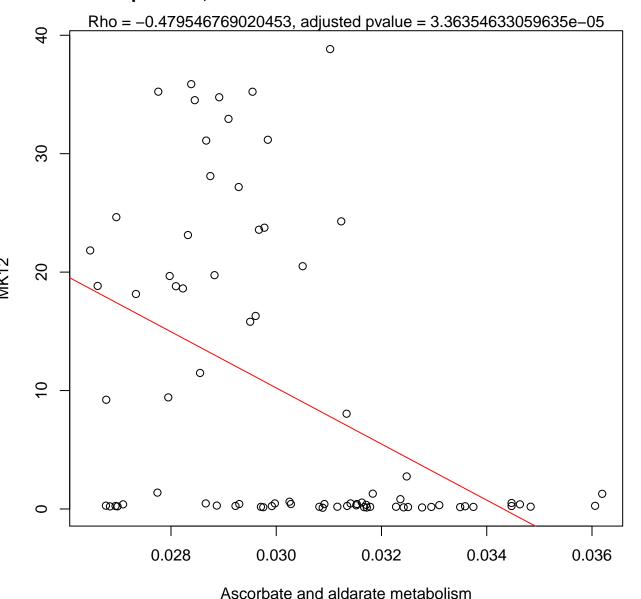
## Timepoint 1, MK12 ~ Amino sugar and nucleotide sugar metabolism



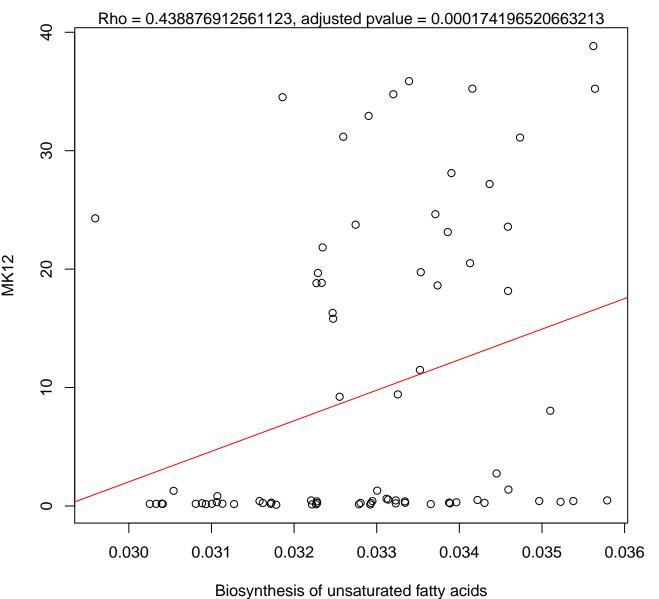
Timepoint 1, MK12 ~ Arginine and proline metabolism



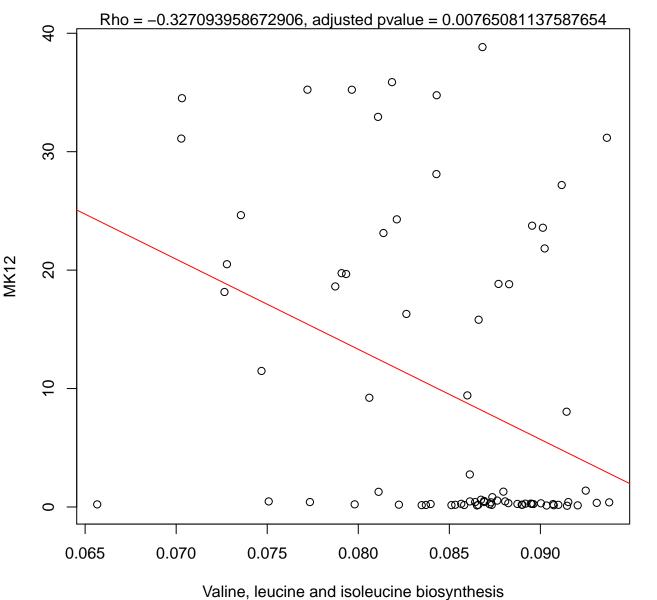
Timepoint 1, MK12 ~ Ascorbate and aldarate metabolism



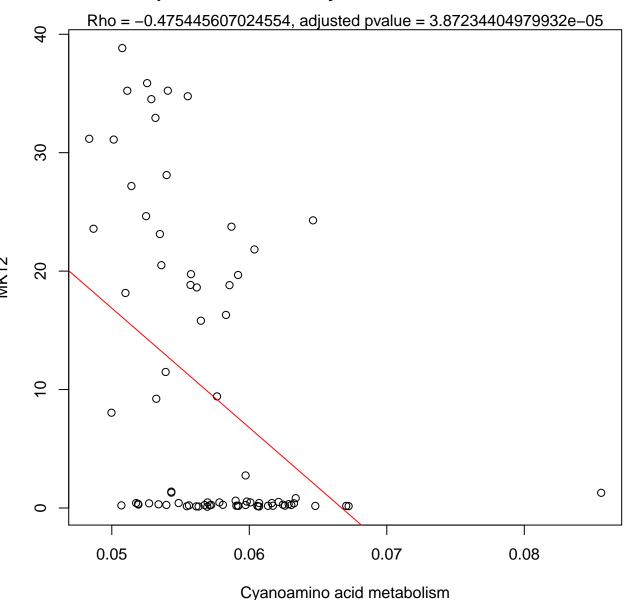
Timepoint 1, MK12 ~ Biosynthesis of unsaturated fatty acids



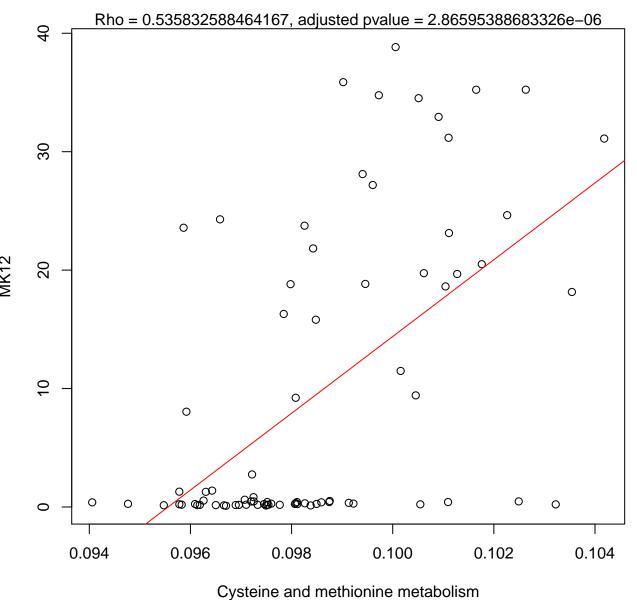
Timepoint 1, MK12 ~ Valine, leucine and isoleucine biosynthesis



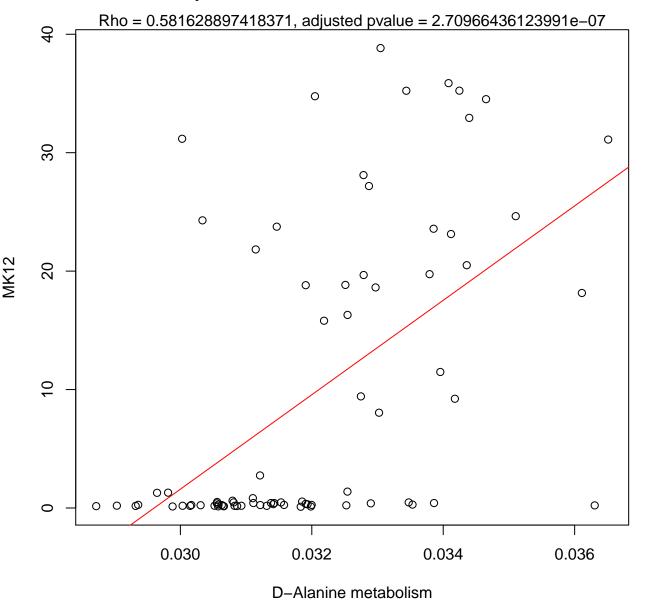
Timepoint 1, MK12 ~ Cyanoamino acid metabolism



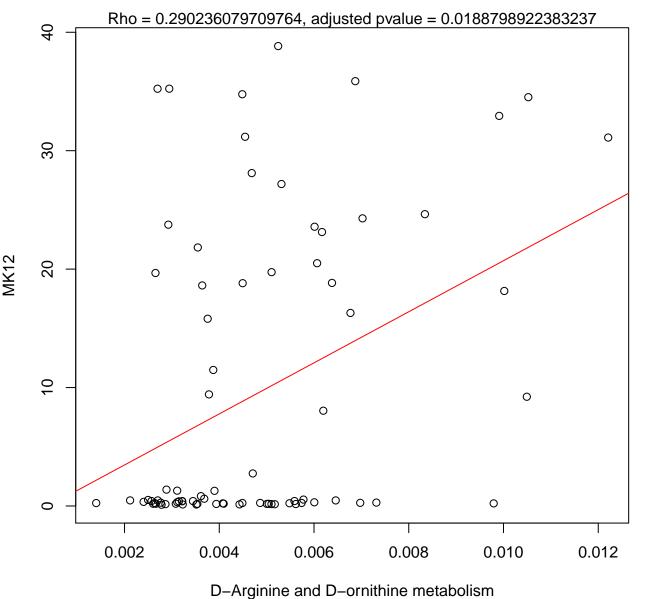
Timepoint 1, MK12 ~ Cysteine and methionine metabolism



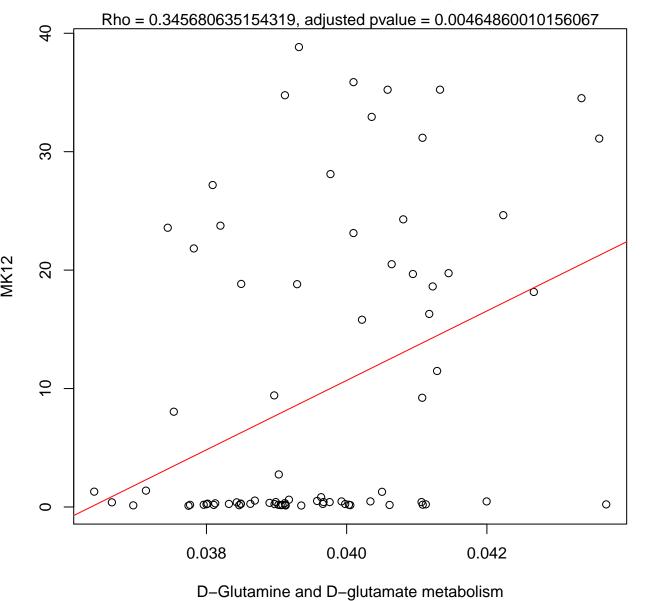
#### Timepoint 1, MK12 ~ D-Alanine metabolism



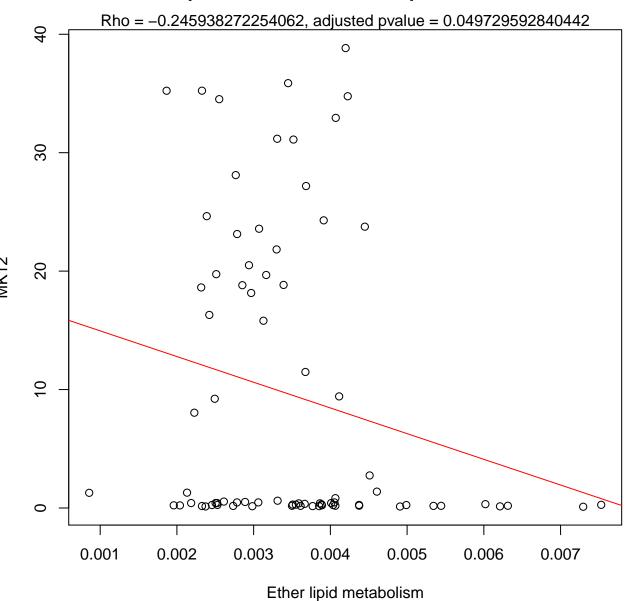
Timepoint 1, MK12 ~ D-Arginine and D-ornithine metabolism



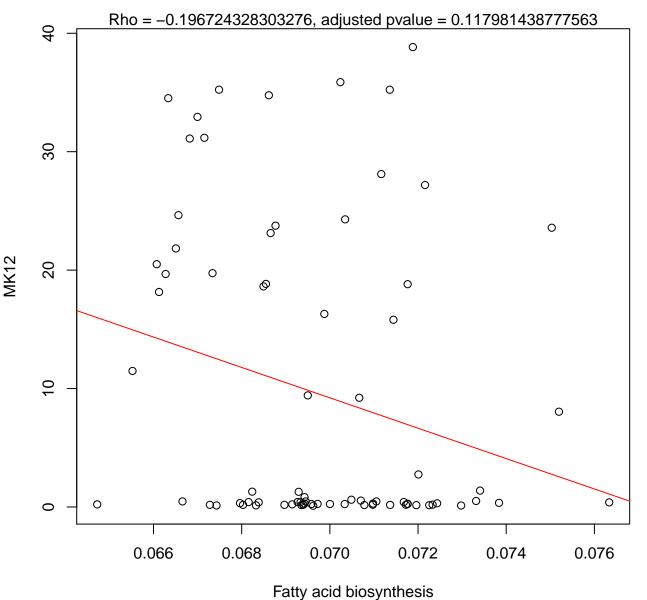
Timepoint 1, MK12 ~ D-Glutamine and D-glutamate metabolism



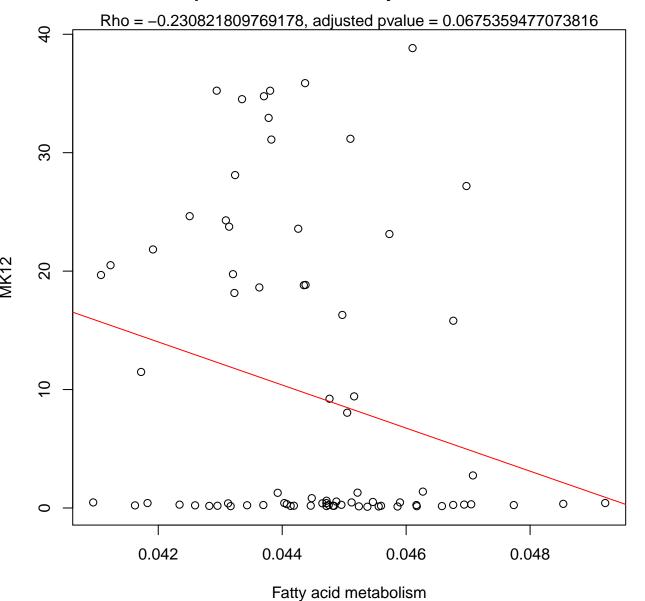
#### Timepoint 1, MK12 ~ Ether lipid metabolism



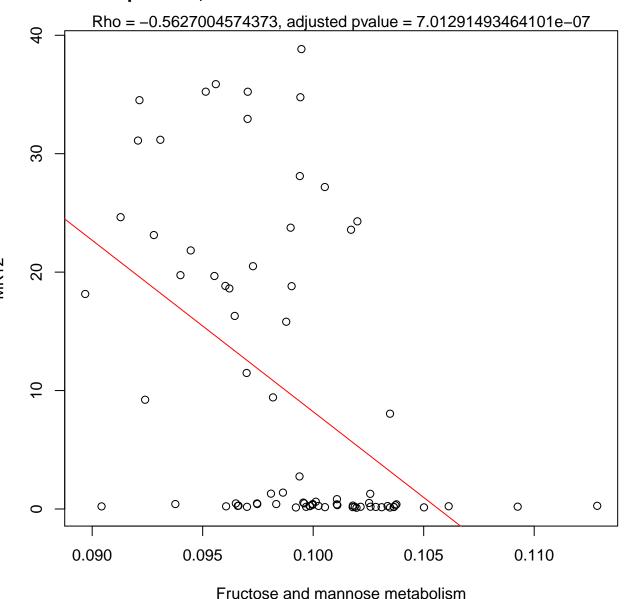
#### Timepoint 1, MK12 ~ Fatty acid biosynthesis



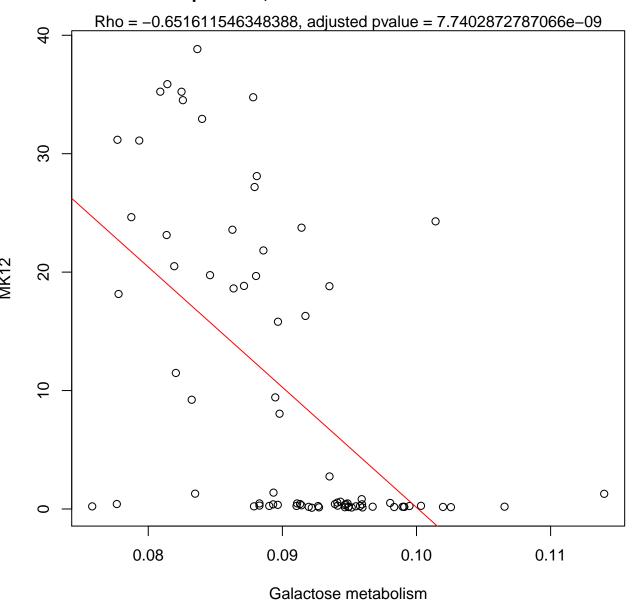
#### Timepoint 1, MK12 ~ Fatty acid metabolism



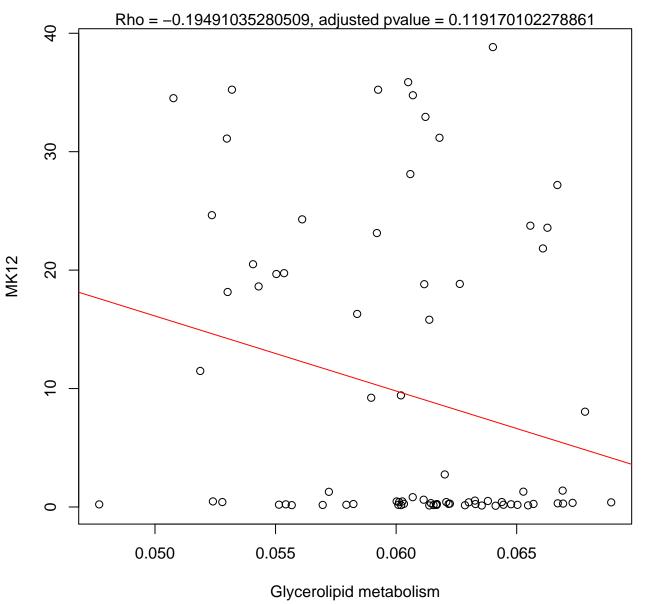
#### Timepoint 1, MK12 ~ Fructose and mannose metabolism



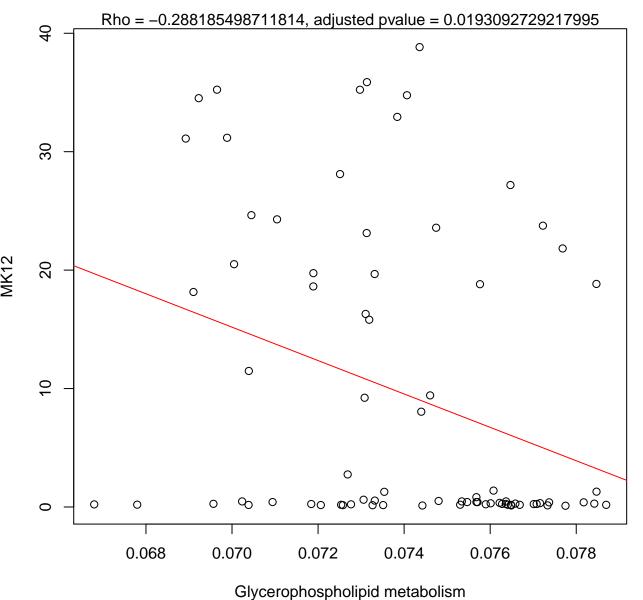
### Timepoint 1, MK12 ~ Galactose metabolism



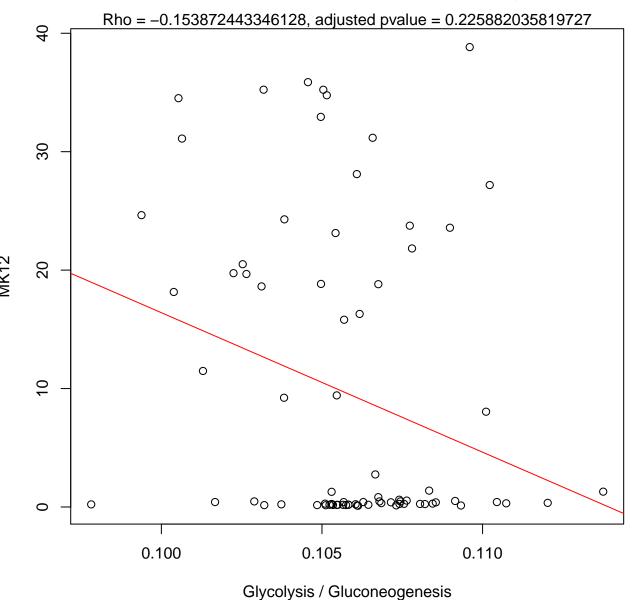
#### Timepoint 1, MK12 ~ Glycerolipid metabolism



## Timepoint 1, MK12 ~ Glycerophospholipid metabolism

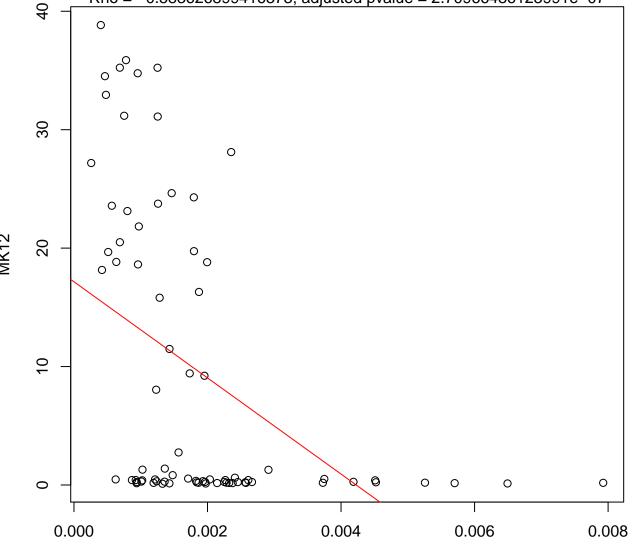


# Timepoint 1, MK12 ~ Glycolysis / Gluconeogenesis



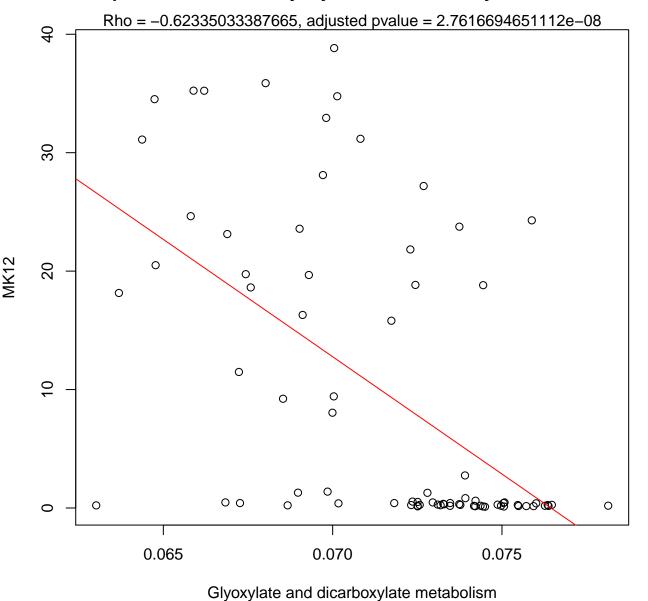
Timepoint 1, MK12 ~ Glycosphingolipid biosynthesis – lacto and neolacto s

Rho = -0.583626899416373, adjusted pvalue = 2.70966436123991e-07

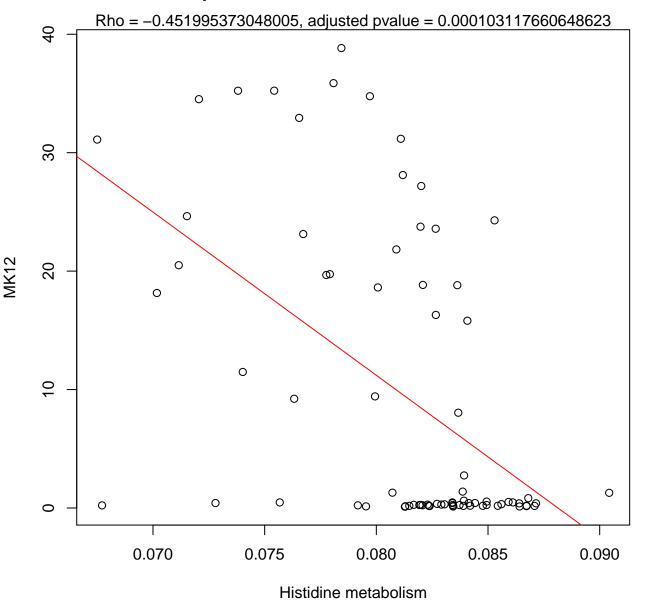


Glycosphingolipid biosynthesis – lacto and neolacto series

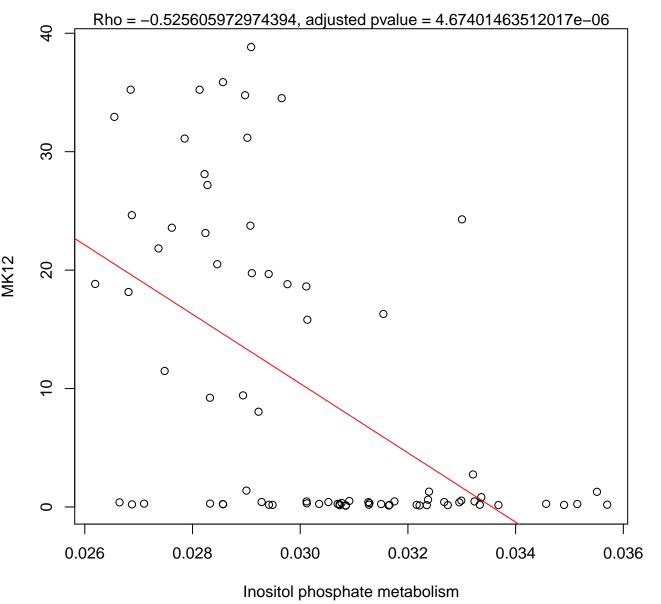
#### Timepoint 1, MK12 ~ Glyoxylate and dicarboxylate metabolism



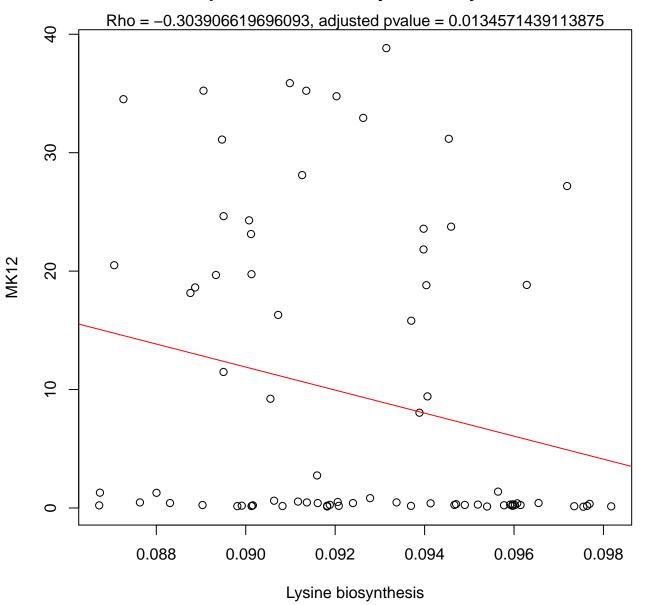
Timepoint 1, MK12 ~ Histidine metabolism



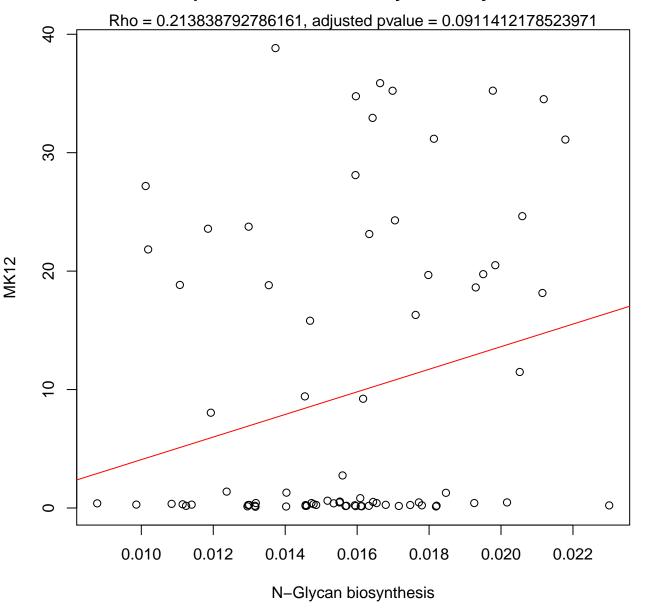
Timepoint 1, MK12 ~ Inositol phosphate metabolism



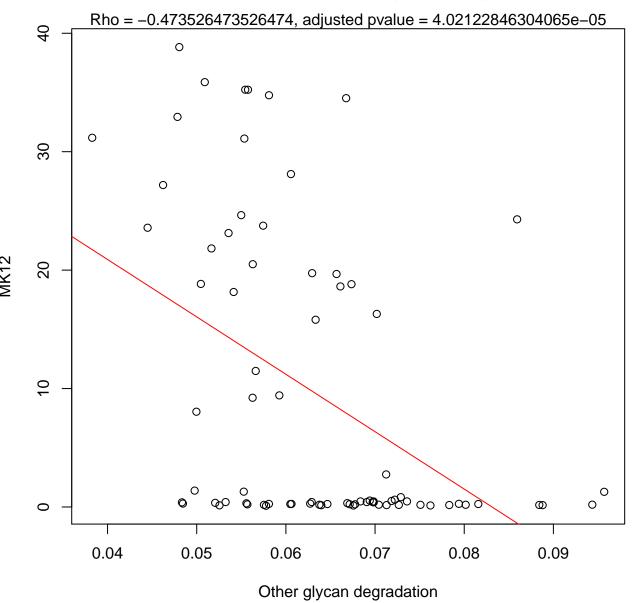
Timepoint 1, MK12 ~ Lysine biosynthesis



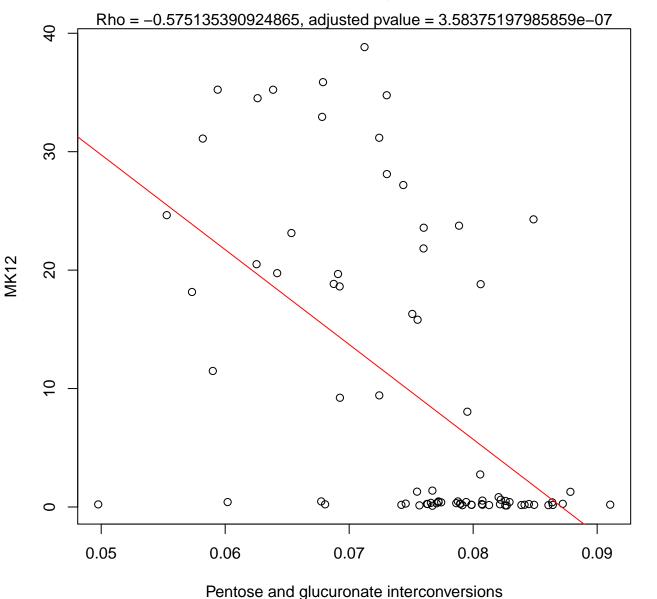
#### Timepoint 1, MK12 ~ N-Glycan biosynthesis



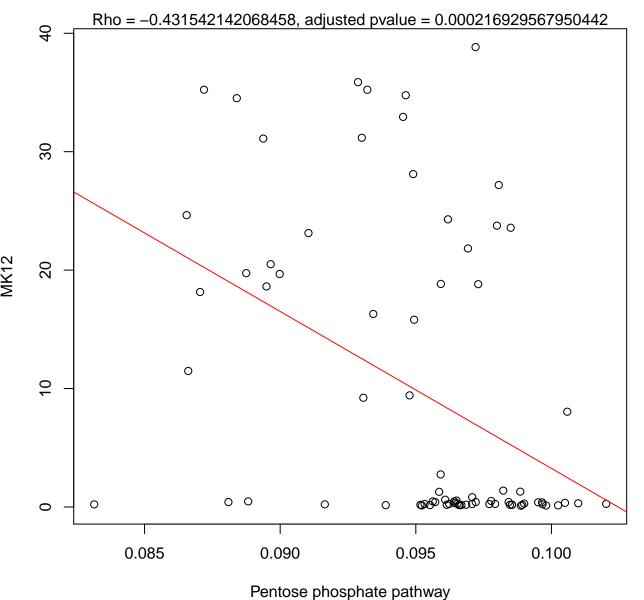
# Timepoint 1, MK12 ~ Other glycan degradation



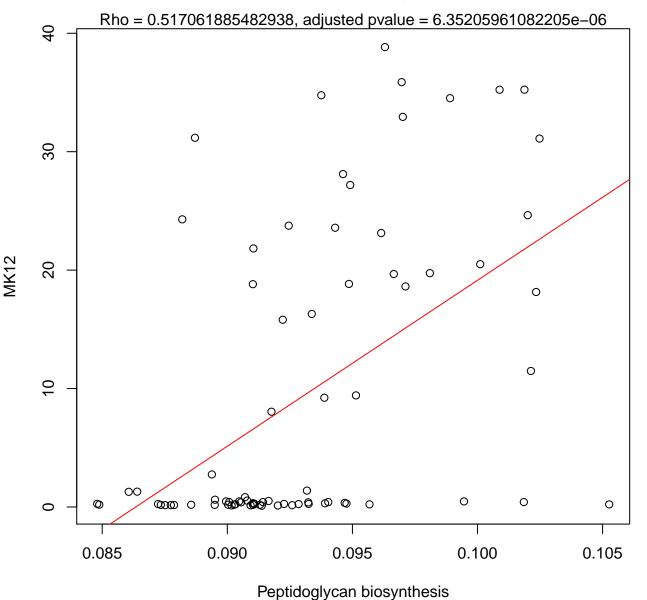
Timepoint 1, MK12 ~ Pentose and glucuronate interconversions



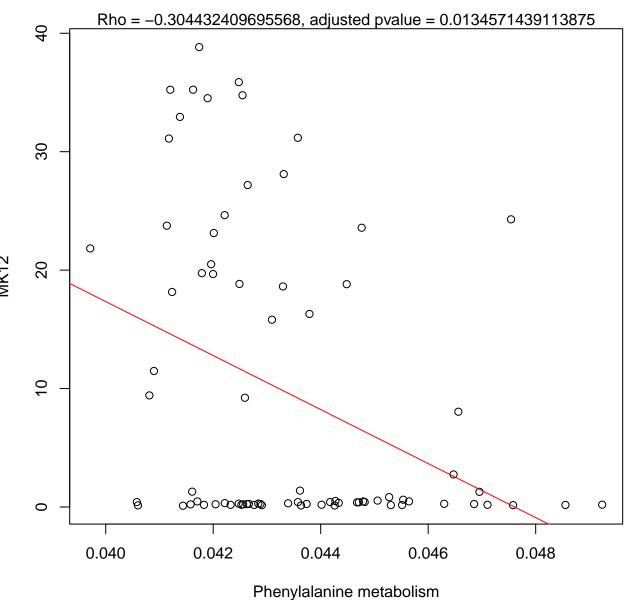
Timepoint 1, MK12 ~ Pentose phosphate pathway



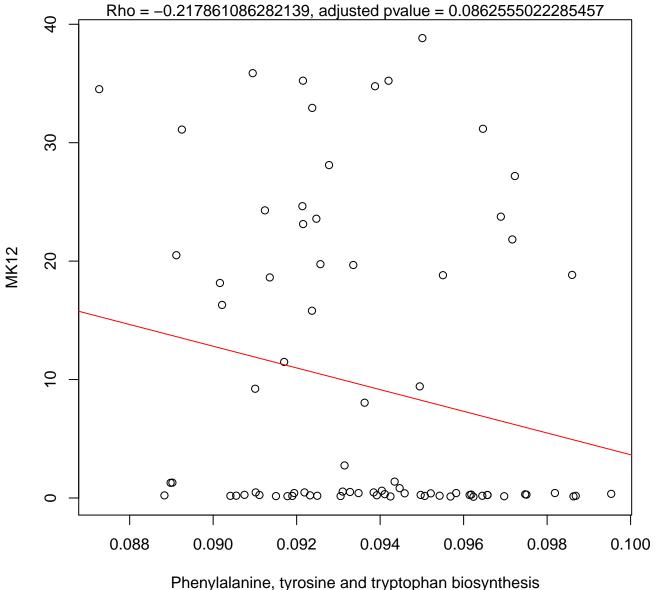
Timepoint 1, MK12 ~ Peptidoglycan biosynthesis



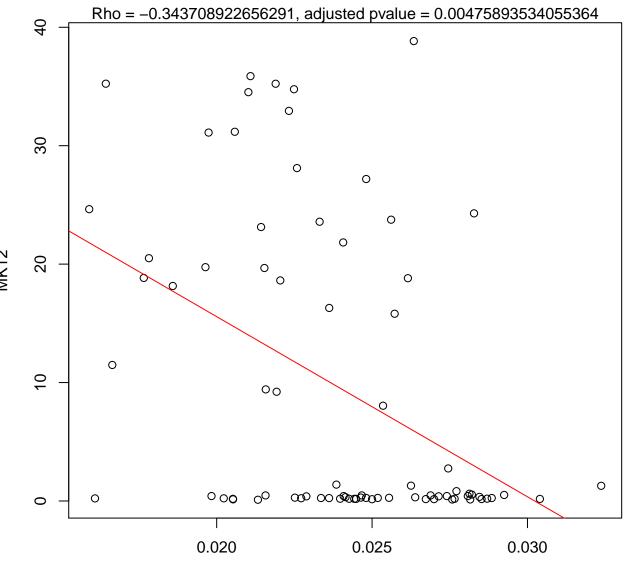
#### Timepoint 1, MK12 ~ Phenylalanine metabolism



Timepoint 1, MK12 ~ Phenylalanine, tyrosine and tryptophan biosynthes

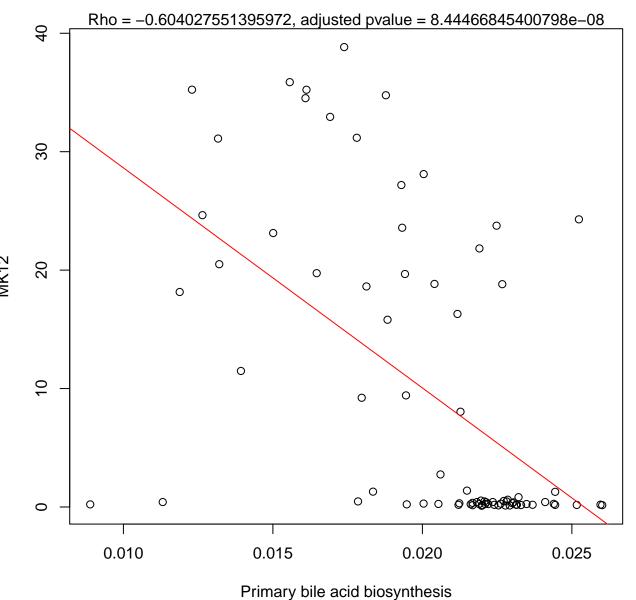


Timepoint 1, MK12 ~ Phosphonate and phosphinate metabolism

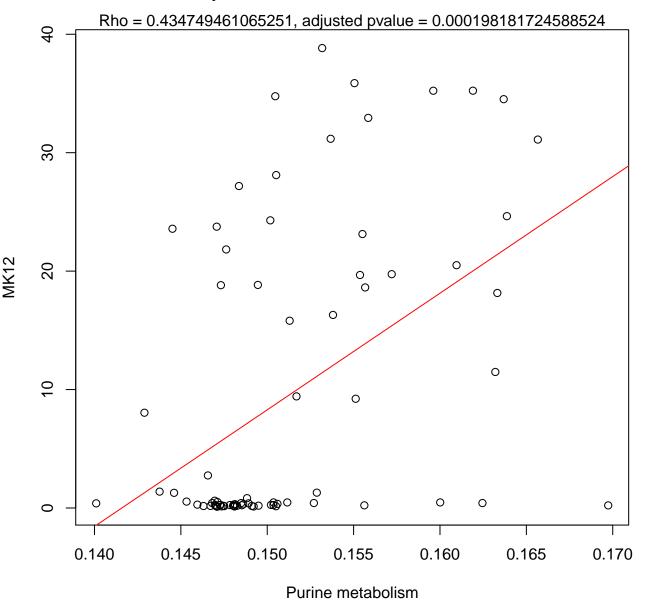


Phosphonate and phosphinate metabolism

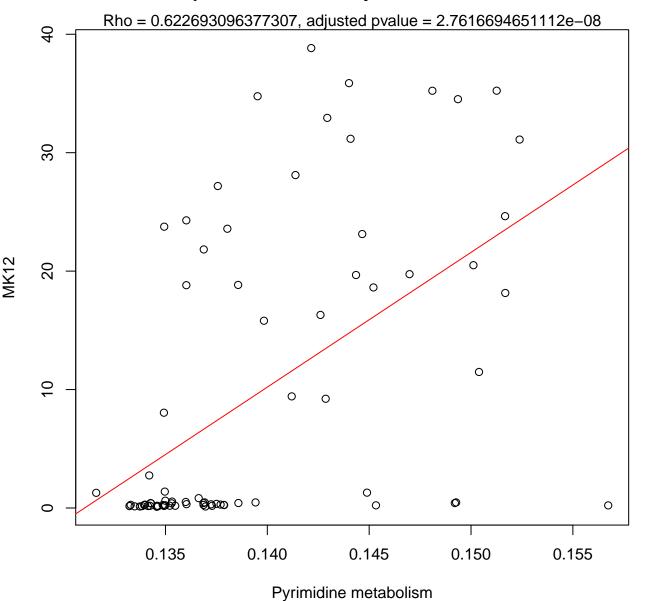
Timepoint 1, MK12 ~ Primary bile acid biosynthesis



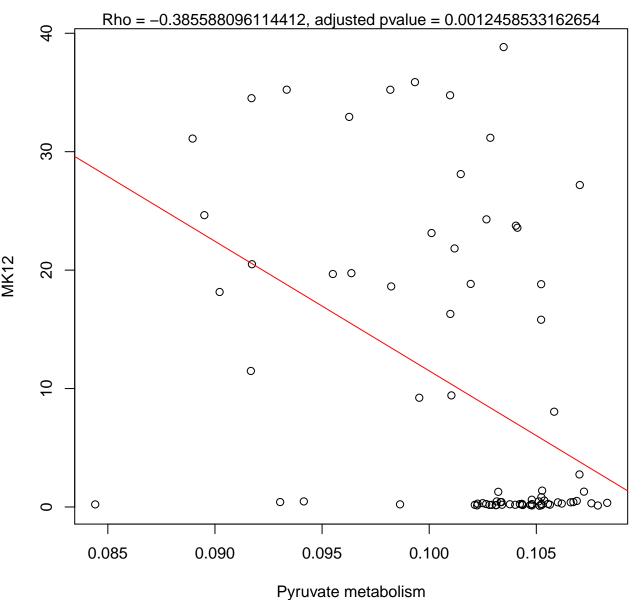
Timepoint 1, MK12 ~ Purine metabolism



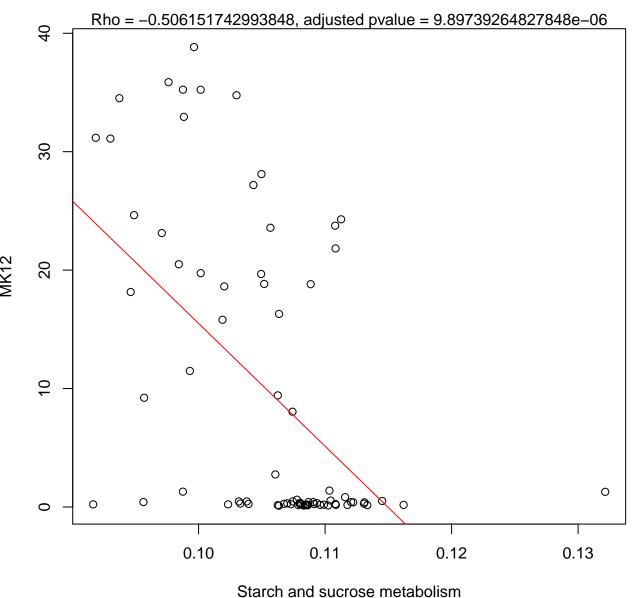
#### Timepoint 1, MK12 ~ Pyrimidine metabolism



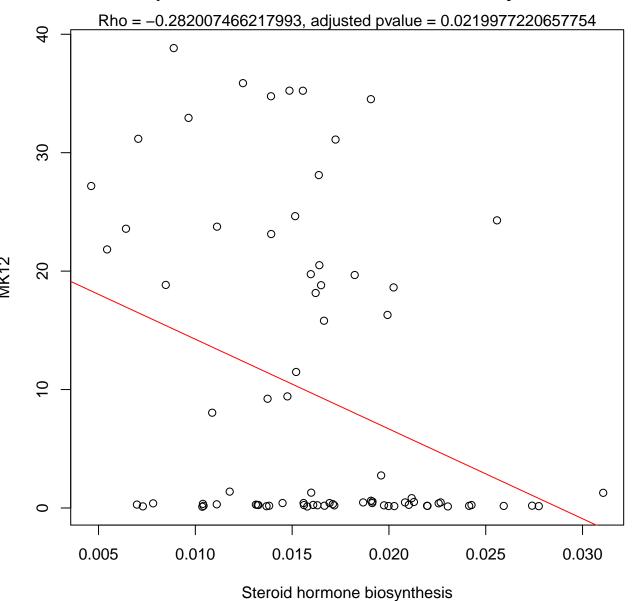
Timepoint 1, MK12 ~ Pyruvate metabolism



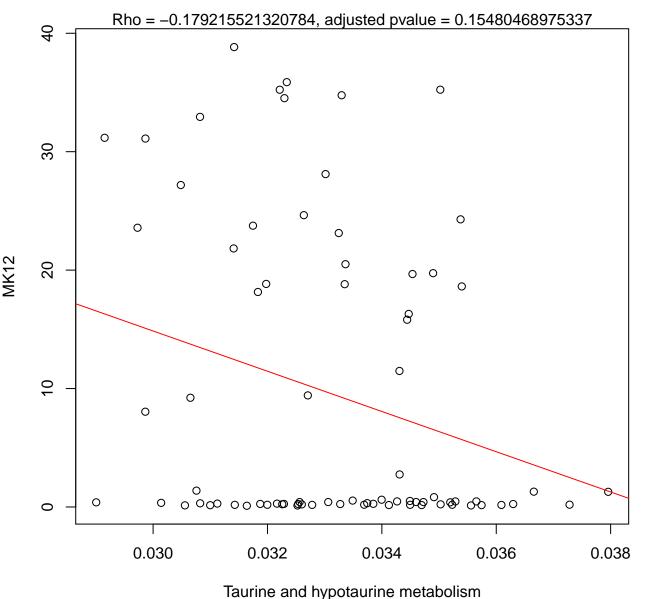
Timepoint 1, MK12 ~ Starch and sucrose metabolism



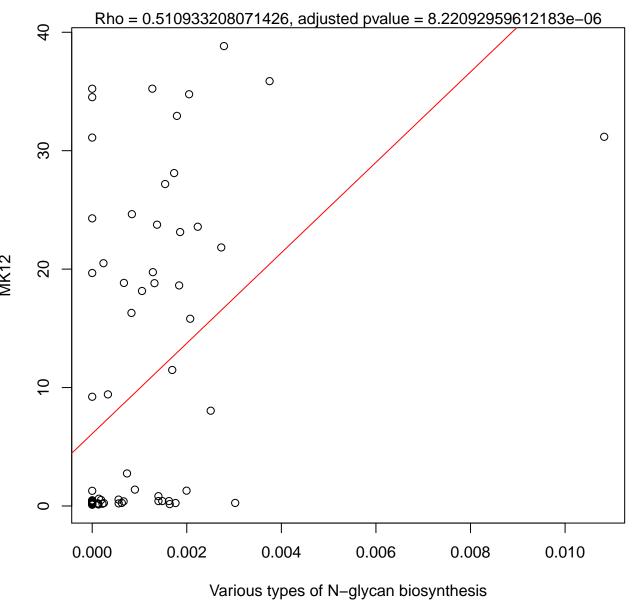
#### Timepoint 1, MK12 ~ Steroid hormone biosynthesis



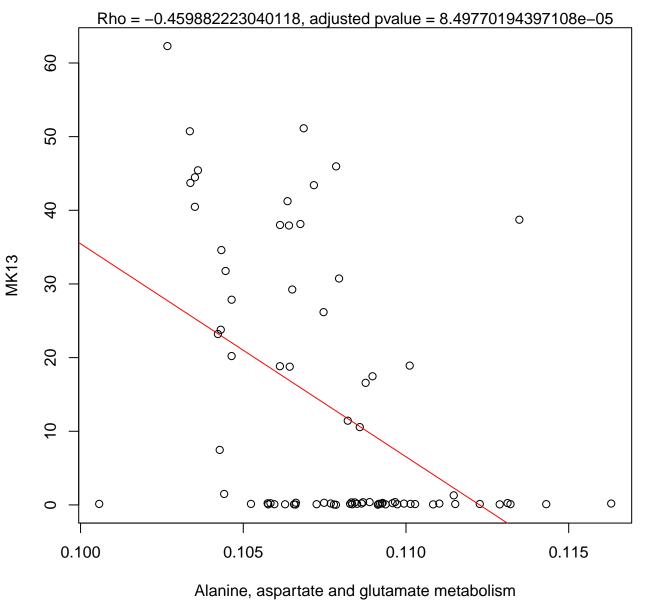
Timepoint 1, MK12 ~ Taurine and hypotaurine metabolism



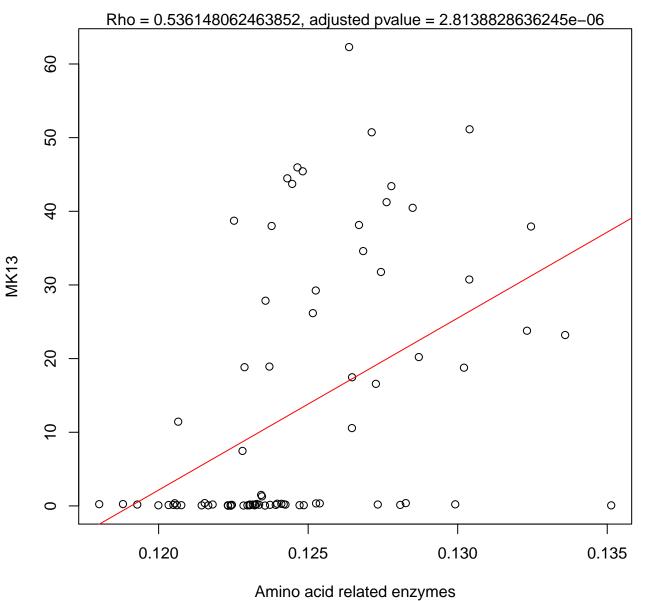
Timepoint 1, MK12 ~ Various types of N-glycan biosynthesis



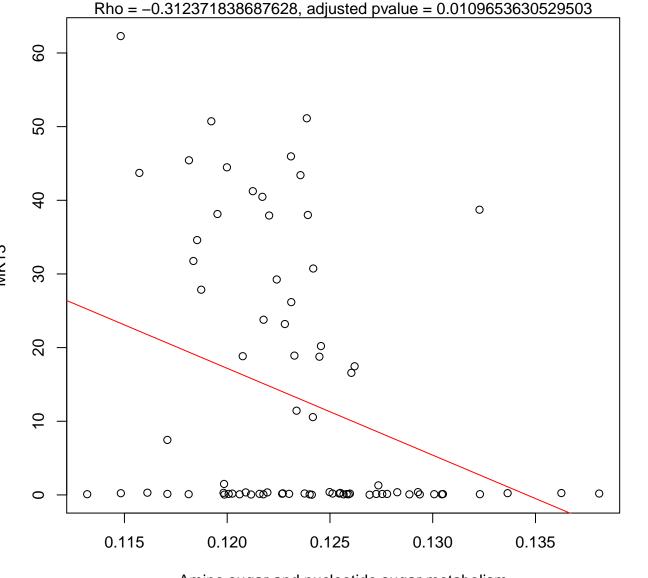
Timepoint 1, MK13 ~ Alanine, aspartate and glutamate metabolism



## Timepoint 1, MK13 ~ Amino acid related enzymes

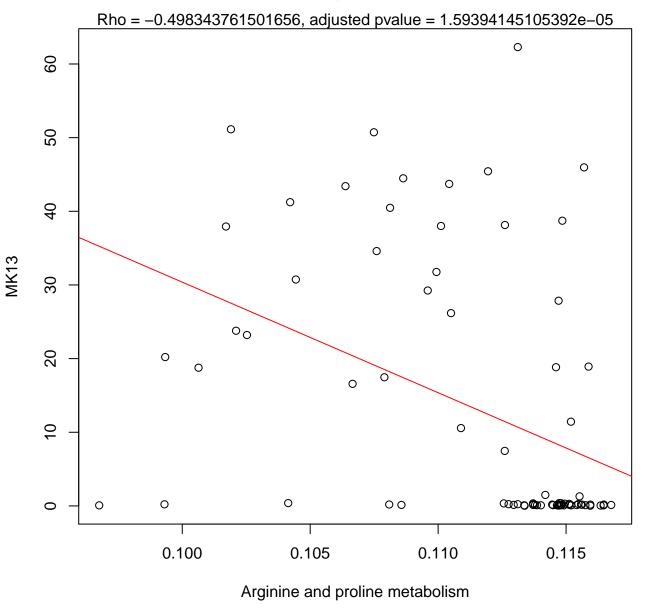


# Timepoint 1, MK13 ~ Amino sugar and nucleotide sugar metabolism

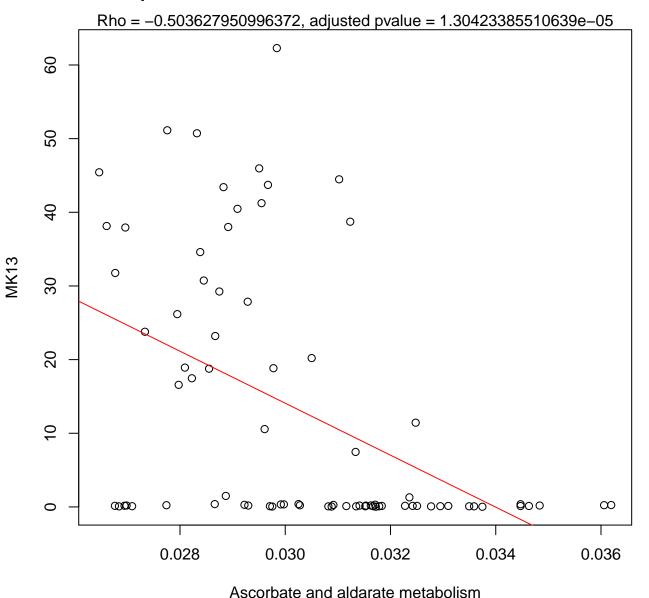


Amino sugar and nucleotide sugar metabolism

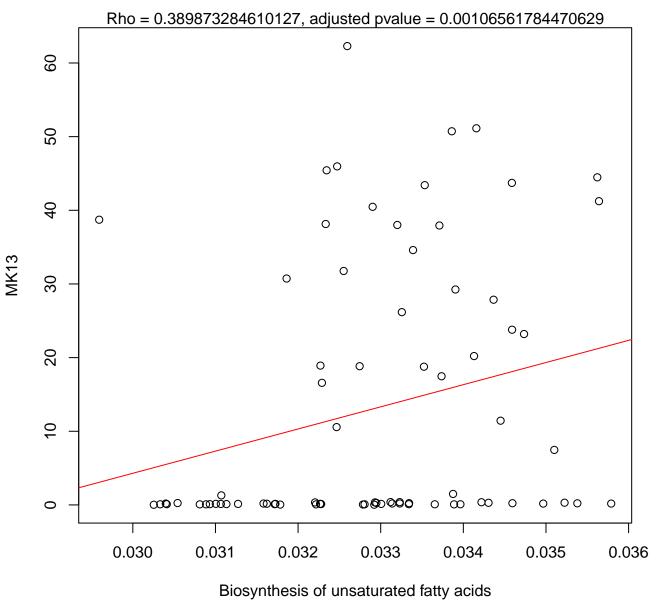
Timepoint 1, MK13 ~ Arginine and proline metabolism



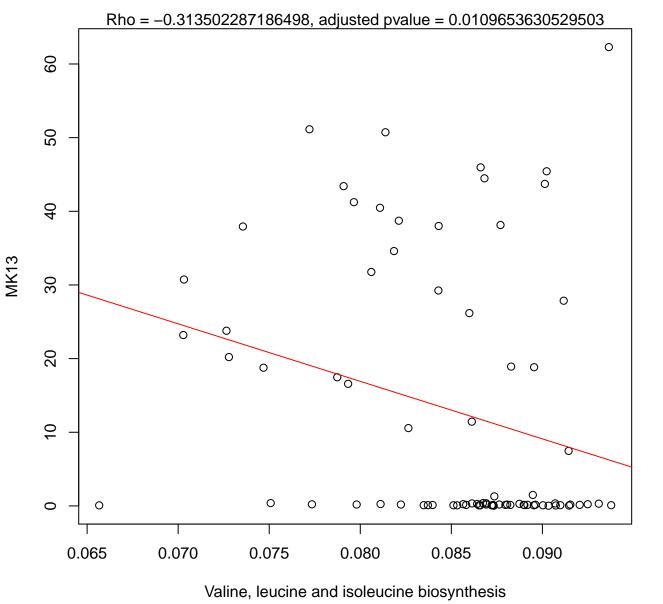
Timepoint 1, MK13 ~ Ascorbate and aldarate metabolism



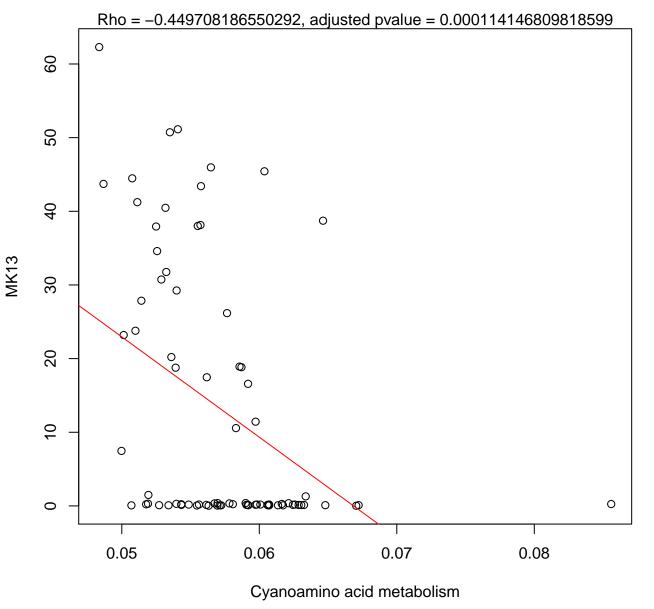
Timepoint 1, MK13 ~ Biosynthesis of unsaturated fatty acids



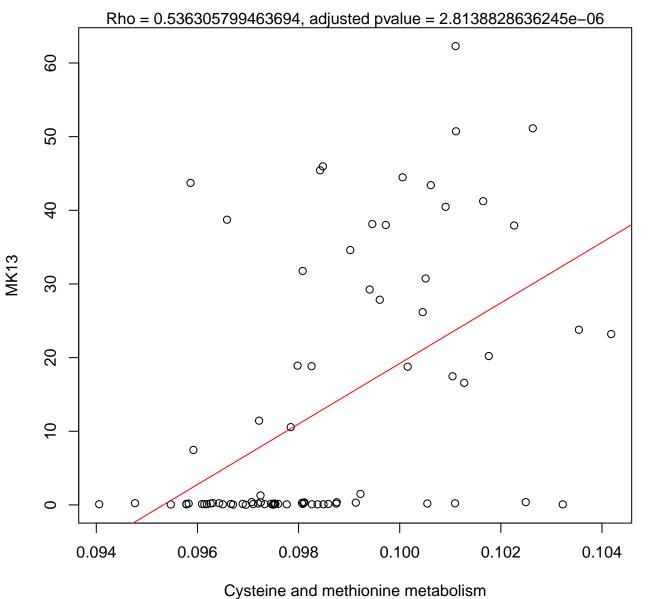
Timepoint 1, MK13 ~ Valine, leucine and isoleucine biosynthesis



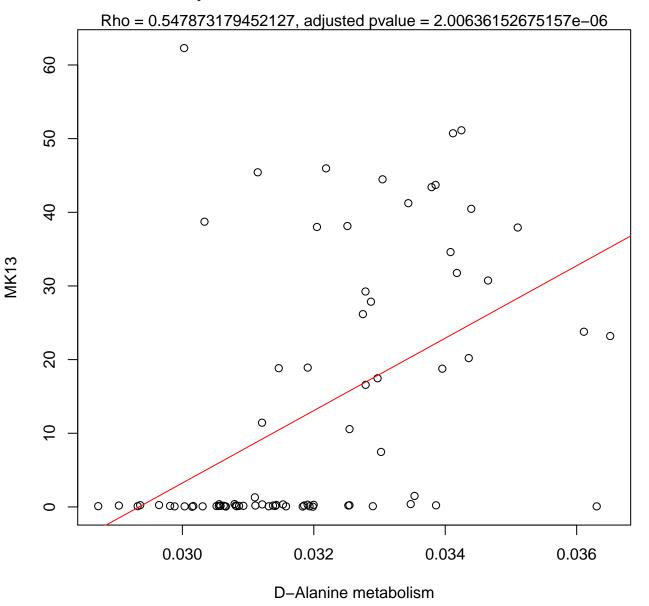
Timepoint 1, MK13 ~ Cyanoamino acid metabolism



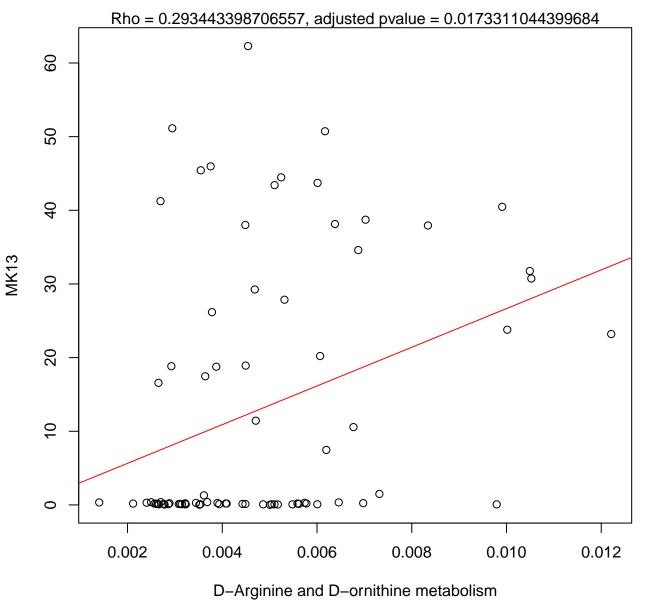
Timepoint 1, MK13 ~ Cysteine and methionine metabolism



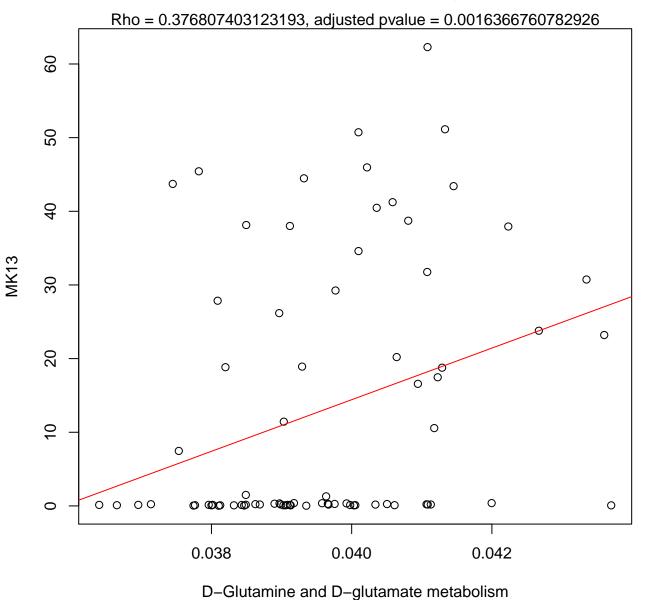
#### Timepoint 1, MK13 ~ D-Alanine metabolism



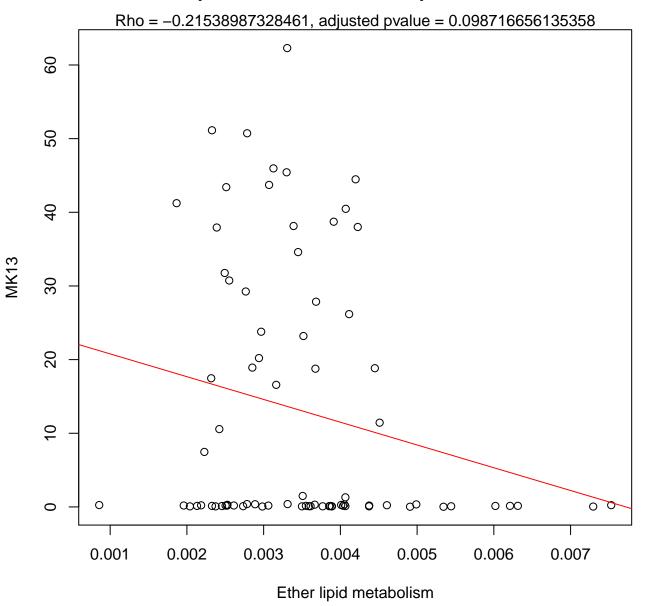
Timepoint 1, MK13 ~ D-Arginine and D-ornithine metabolism



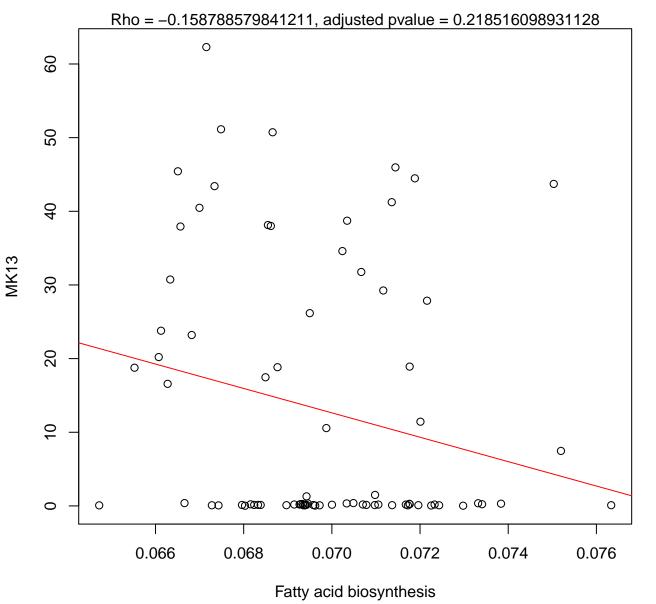
Timepoint 1, MK13 ~ D-Glutamine and D-glutamate metabolism



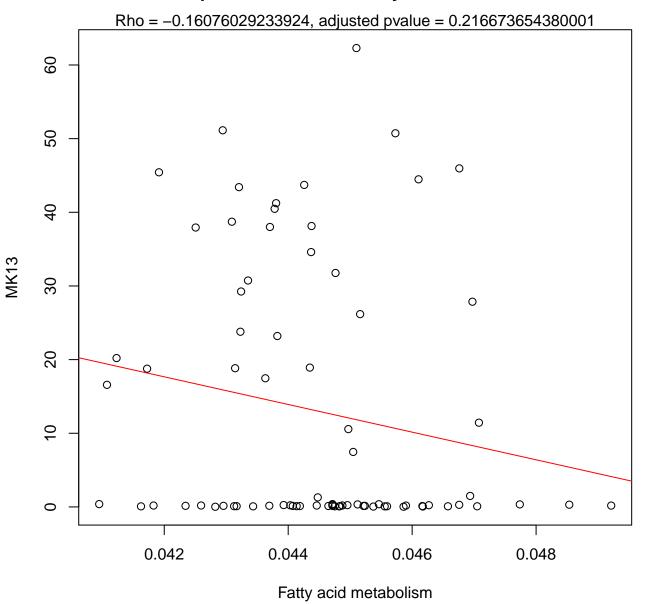
### Timepoint 1, MK13 ~ Ether lipid metabolism



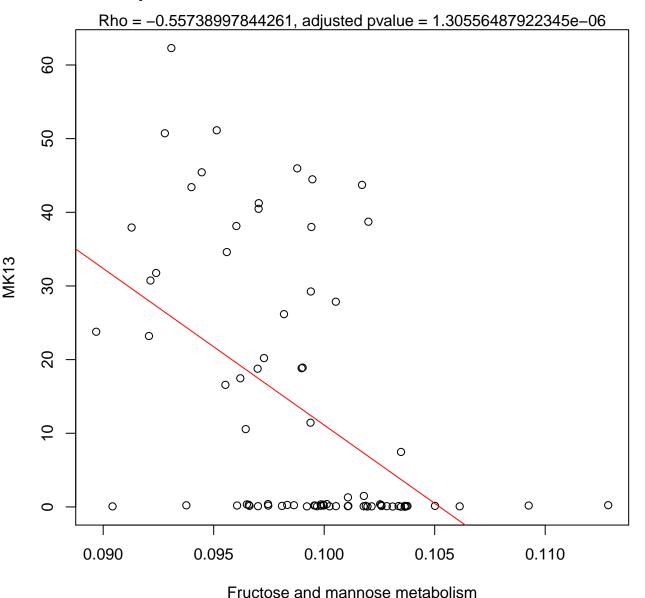
## Timepoint 1, MK13 ~ Fatty acid biosynthesis



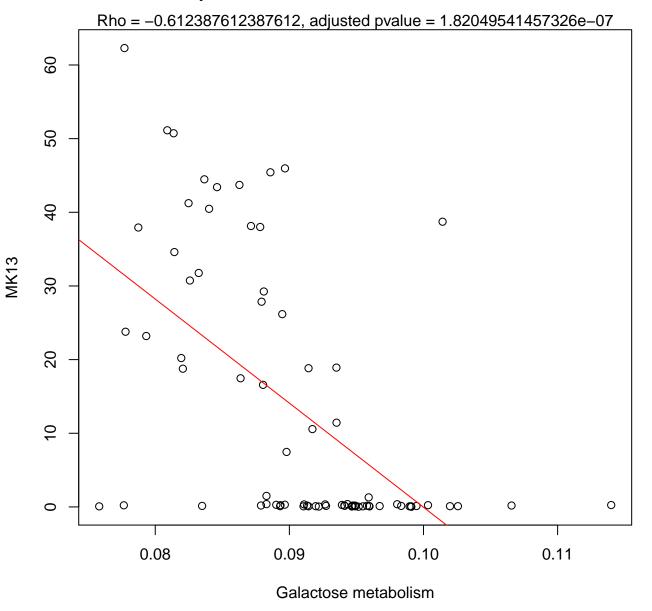
## Timepoint 1, MK13 ~ Fatty acid metabolism



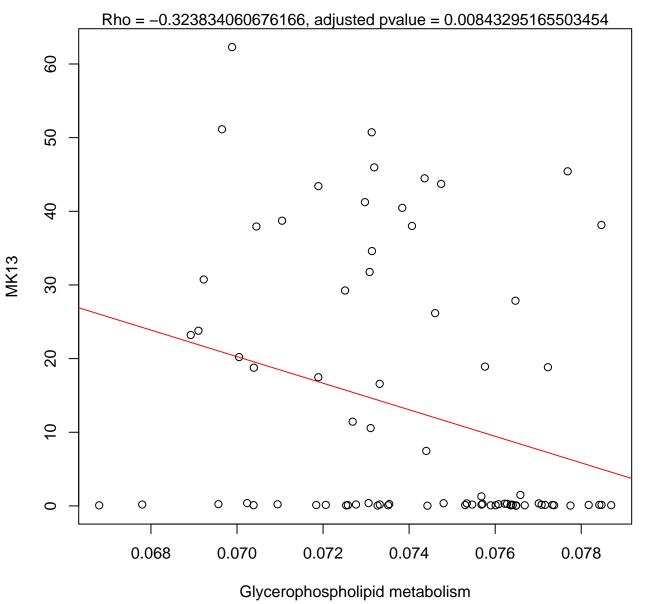
Timepoint 1, MK13 ~ Fructose and mannose metabolism



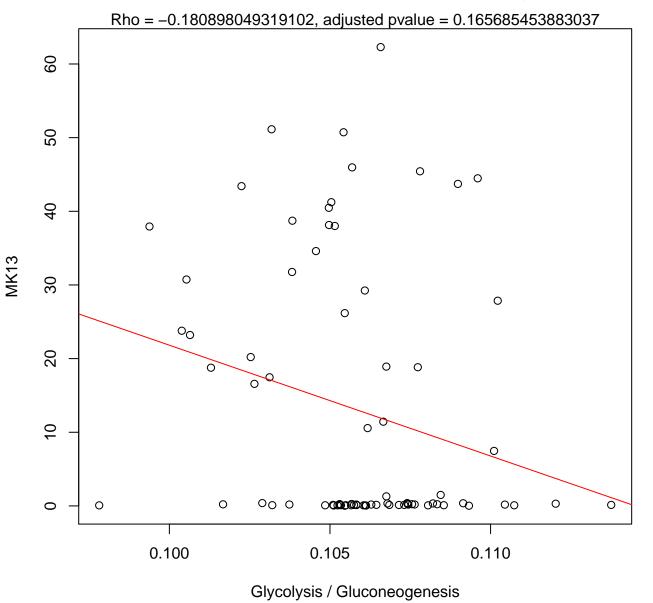
Timepoint 1, MK13 ~ Galactose metabolism



## Timepoint 1, MK13 ~ Glycerophospholipid metabolism

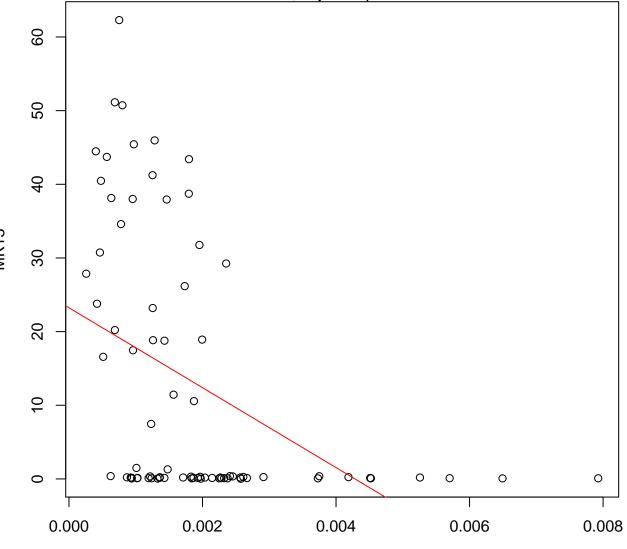


# Timepoint 1, MK13 ~ Glycolysis / Gluconeogenesis



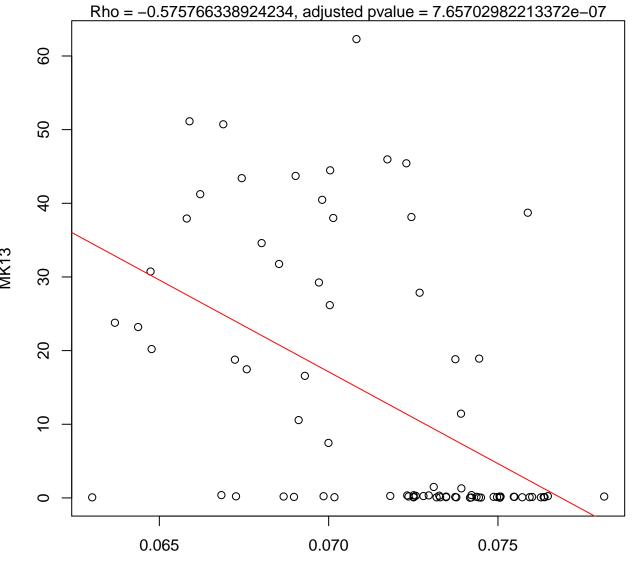
Timepoint 1, MK13 ~ Glycosphingolipid biosynthesis – lacto and neolacto s

Rho = -0.539854881960145, adjusted pvalue = 2.8138828636245e-06



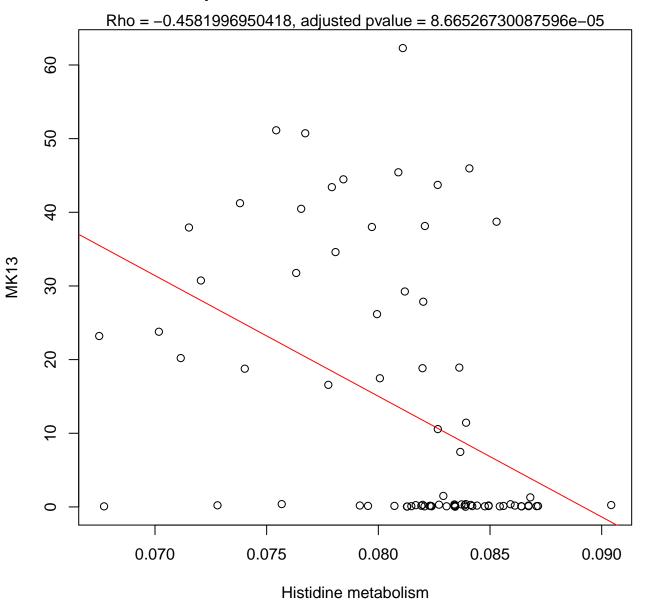
Glycosphingolipid biosynthesis – lacto and neolacto series

Timepoint 1, MK13 ~ Glyoxylate and dicarboxylate metabolism

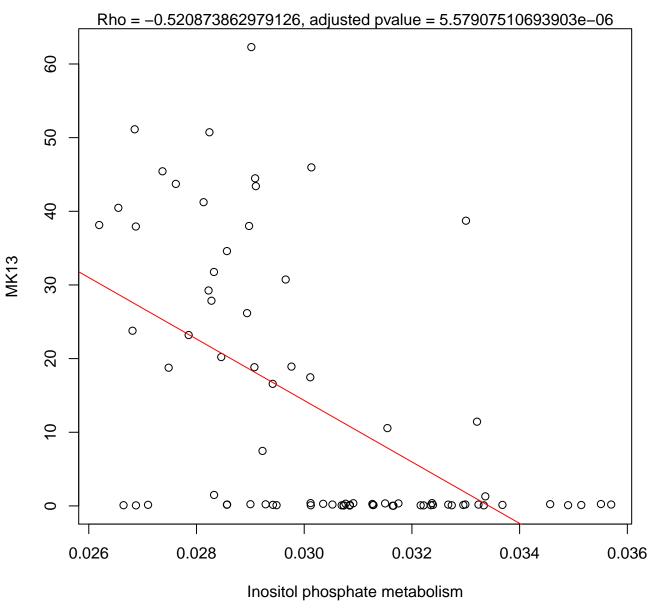


Glyoxylate and dicarboxylate metabolism

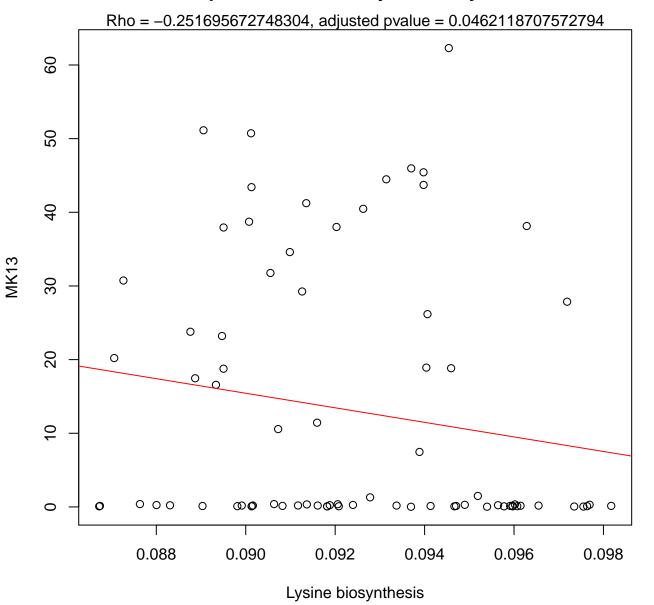
Timepoint 1, MK13 ~ Histidine metabolism



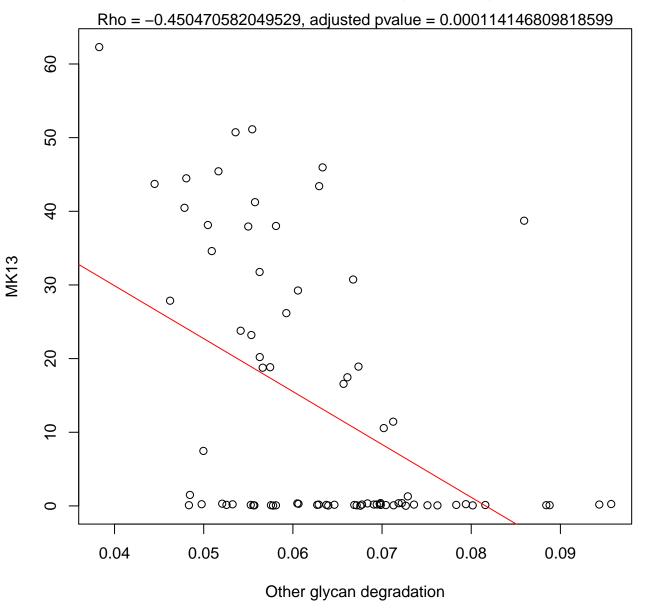
Timepoint 1, MK13 ~ Inositol phosphate metabolism



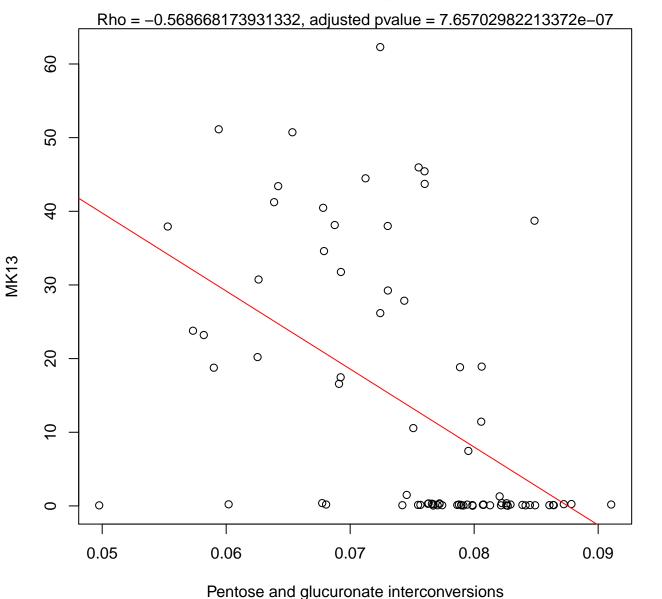
## Timepoint 1, MK13 ~ Lysine biosynthesis



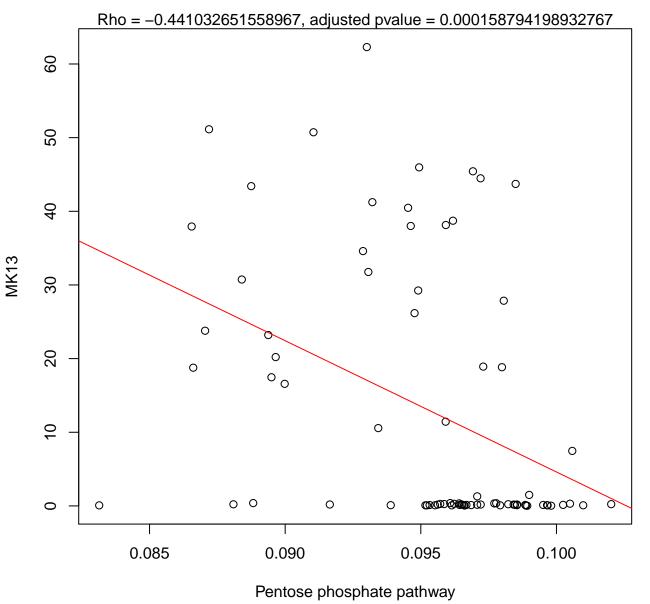
## Timepoint 1, MK13 ~ Other glycan degradation



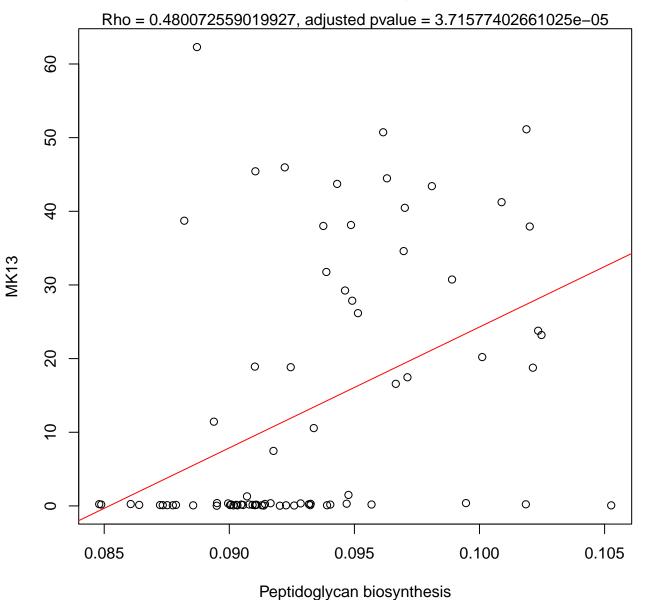
Timepoint 1, MK13 ~ Pentose and glucuronate interconversions



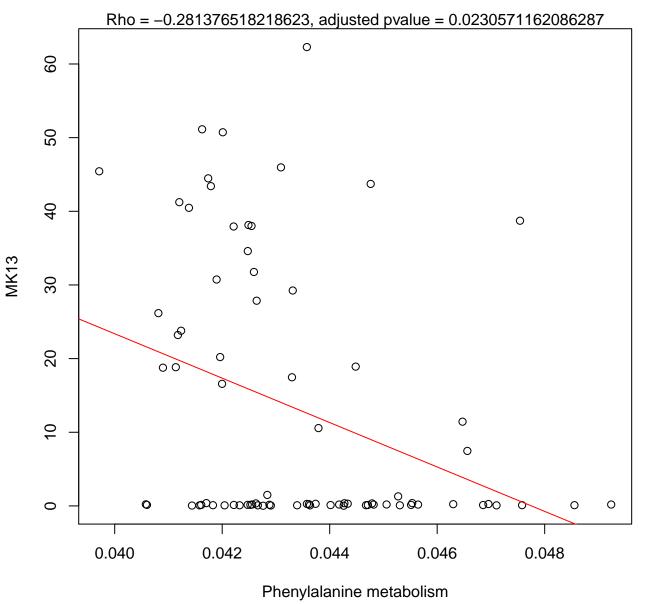
Timepoint 1, MK13 ~ Pentose phosphate pathway



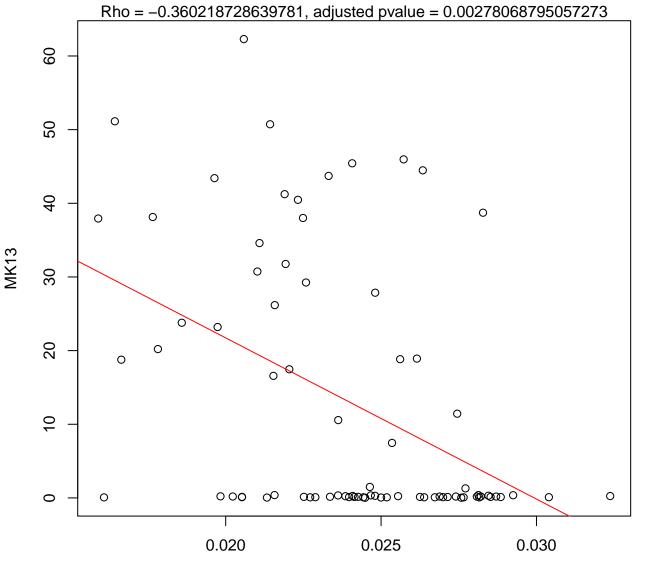
Timepoint 1, MK13 ~ Peptidoglycan biosynthesis



### Timepoint 1, MK13 ~ Phenylalanine metabolism

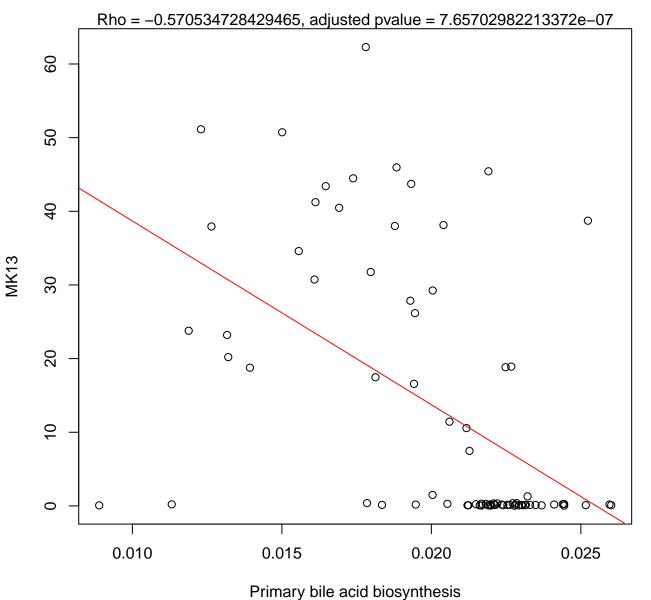


Timepoint 1, MK13 ~ Phosphonate and phosphinate metabolism

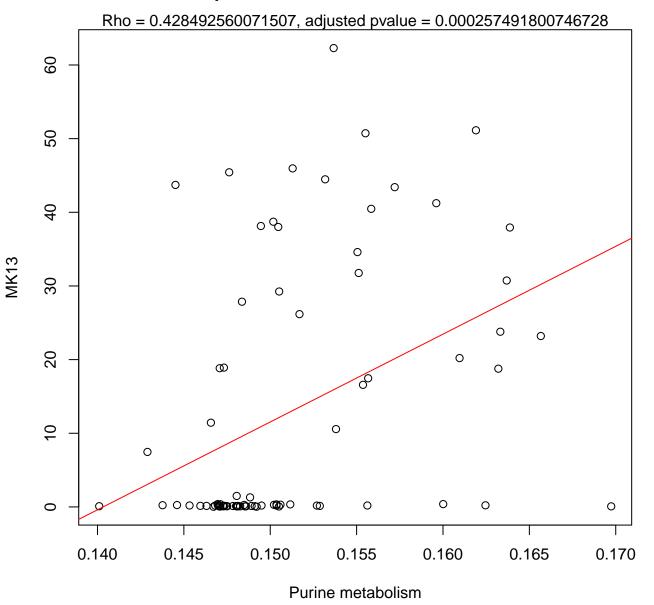


Phosphonate and phosphinate metabolism

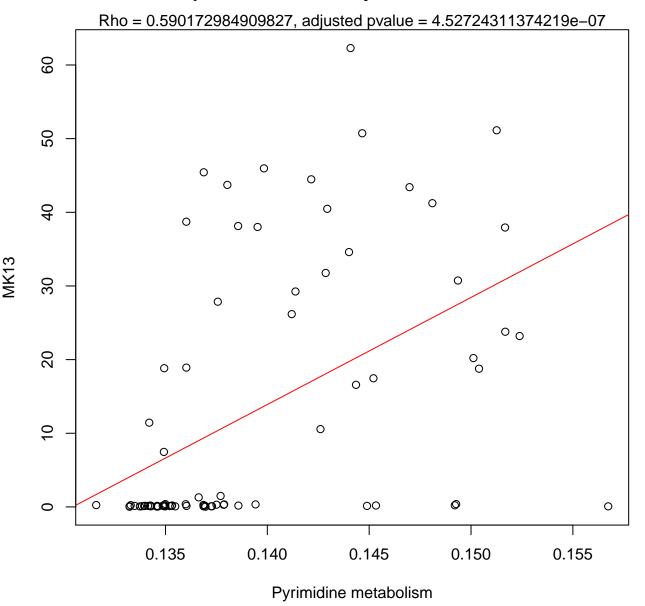
Timepoint 1, MK13 ~ Primary bile acid biosynthesis



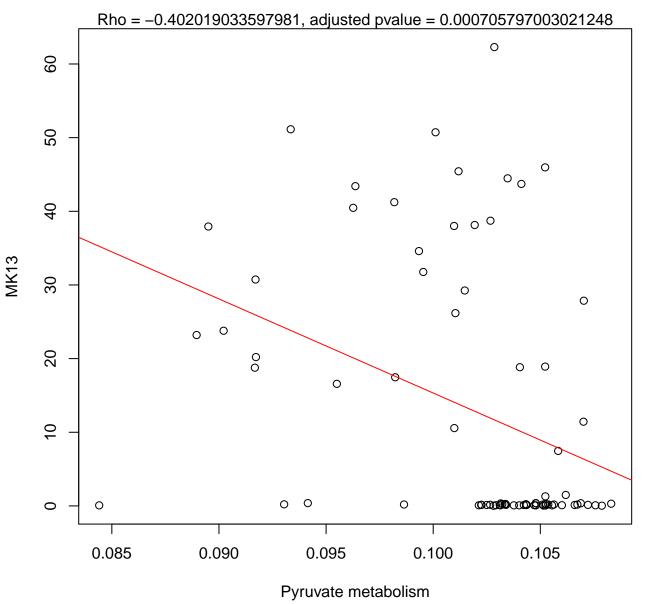
Timepoint 1, MK13 ~ Purine metabolism



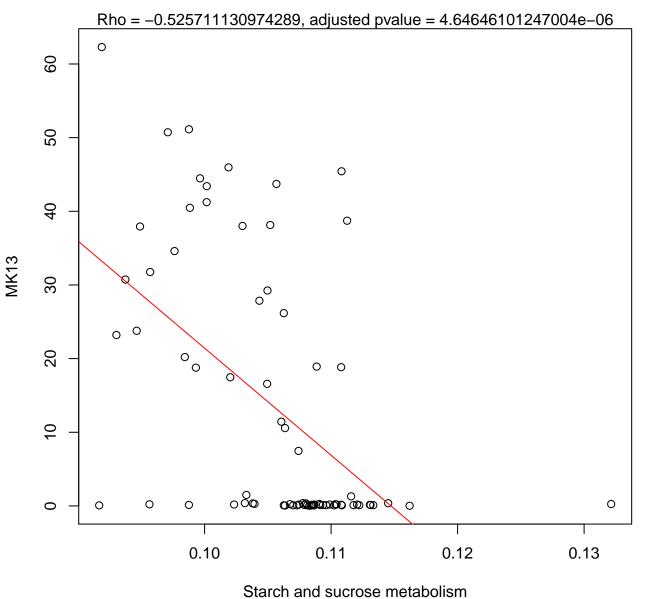
Timepoint 1, MK13 ~ Pyrimidine metabolism



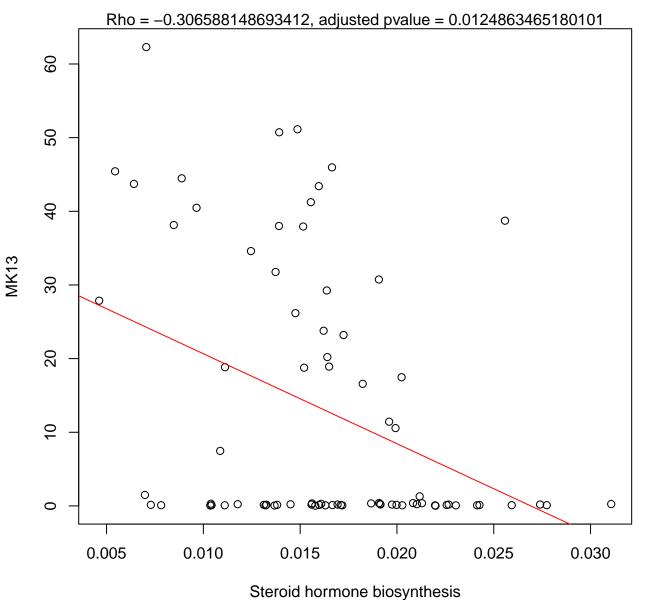
Timepoint 1, MK13 ~ Pyruvate metabolism



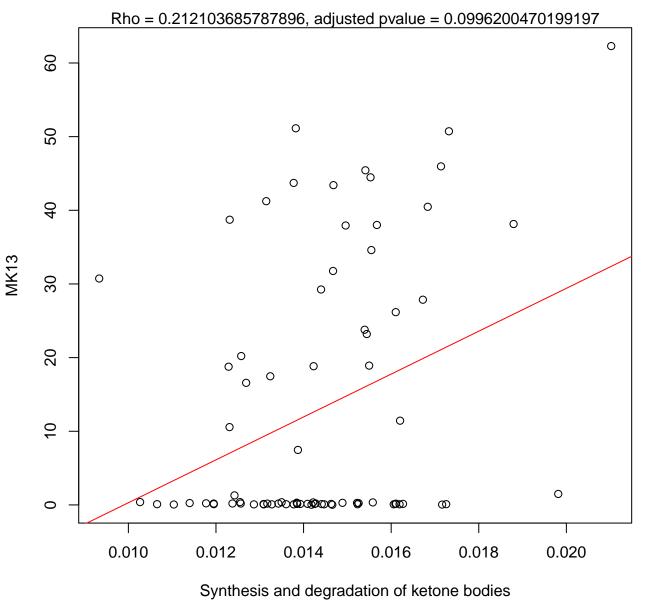
Timepoint 1, MK13 ~ Starch and sucrose metabolism



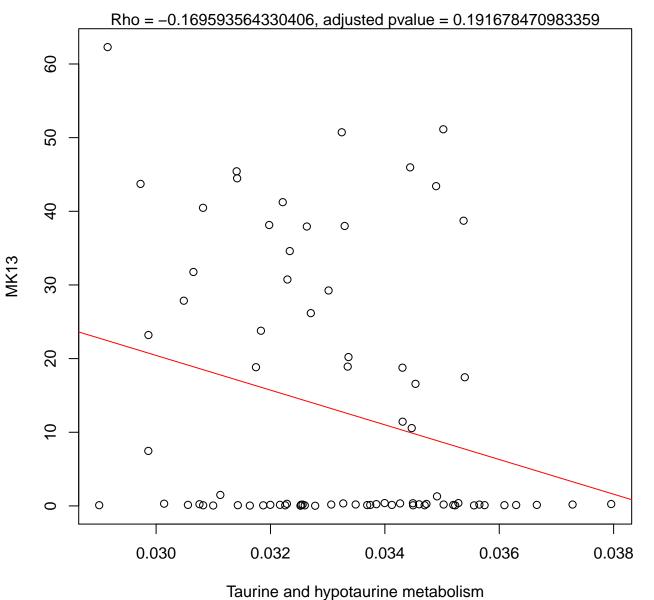
### Timepoint 1, MK13 ~ Steroid hormone biosynthesis



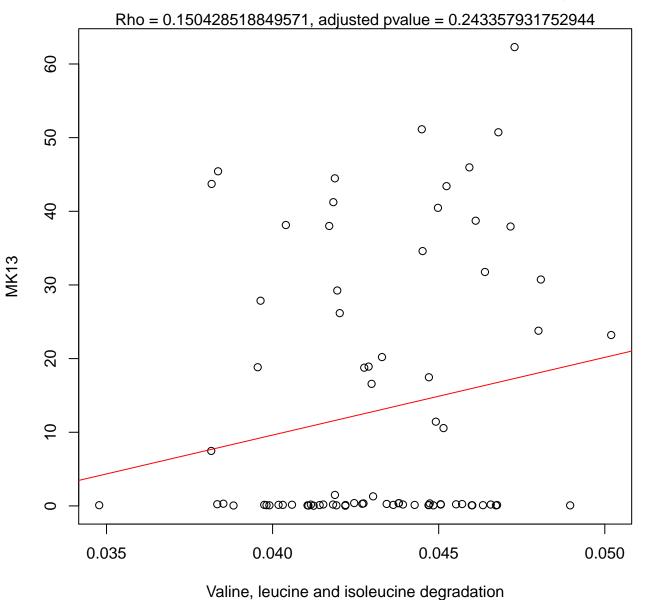
Timepoint 1, MK13 ~ Synthesis and degradation of ketone bodies



Timepoint 1, MK13 ~ Taurine and hypotaurine metabolism



Timepoint 1, MK13 ~ Valine, leucine and isoleucine degradation



Timepoint 1, MK13 ~ Various types of N-glycan biosynthesis

