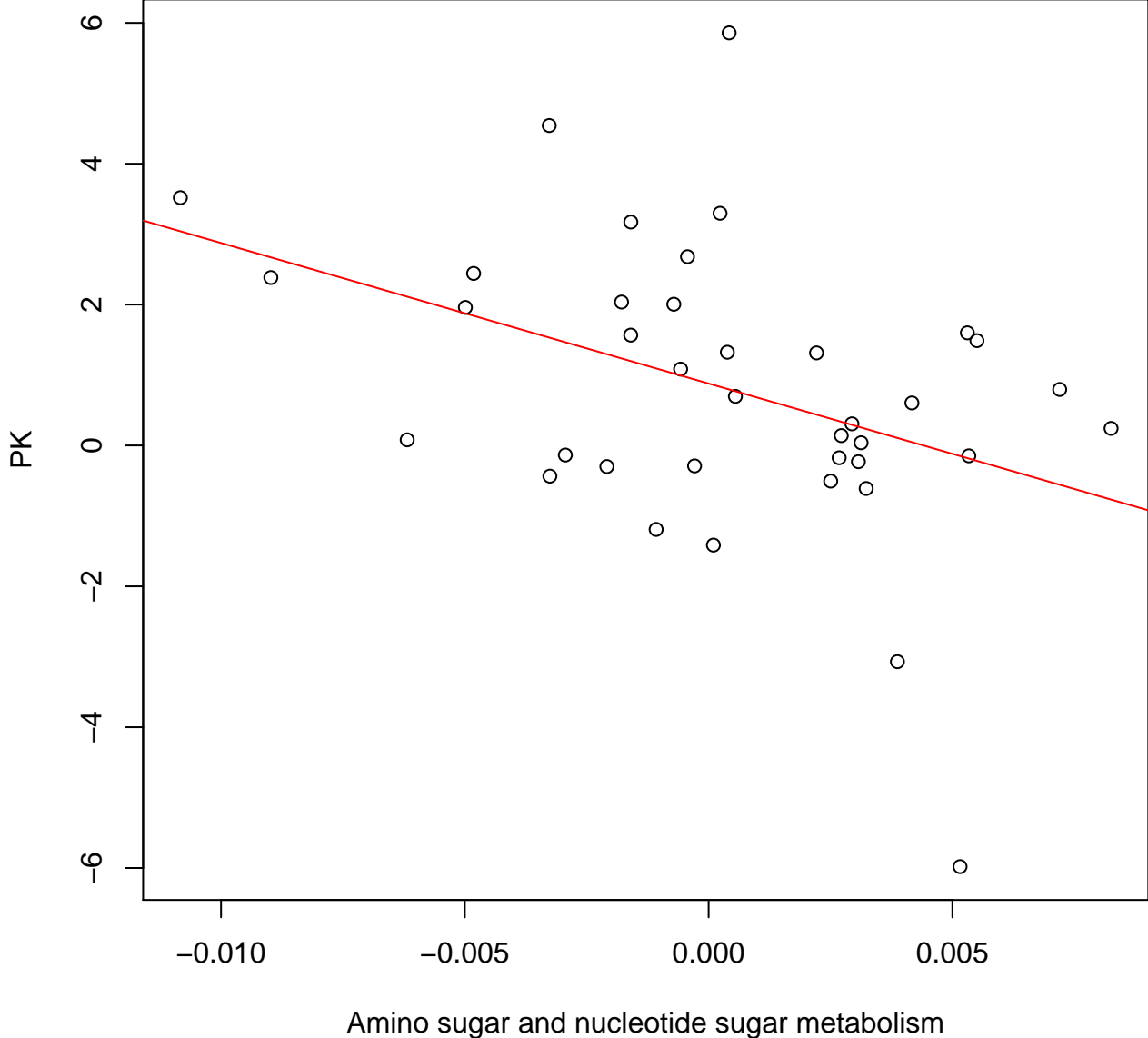


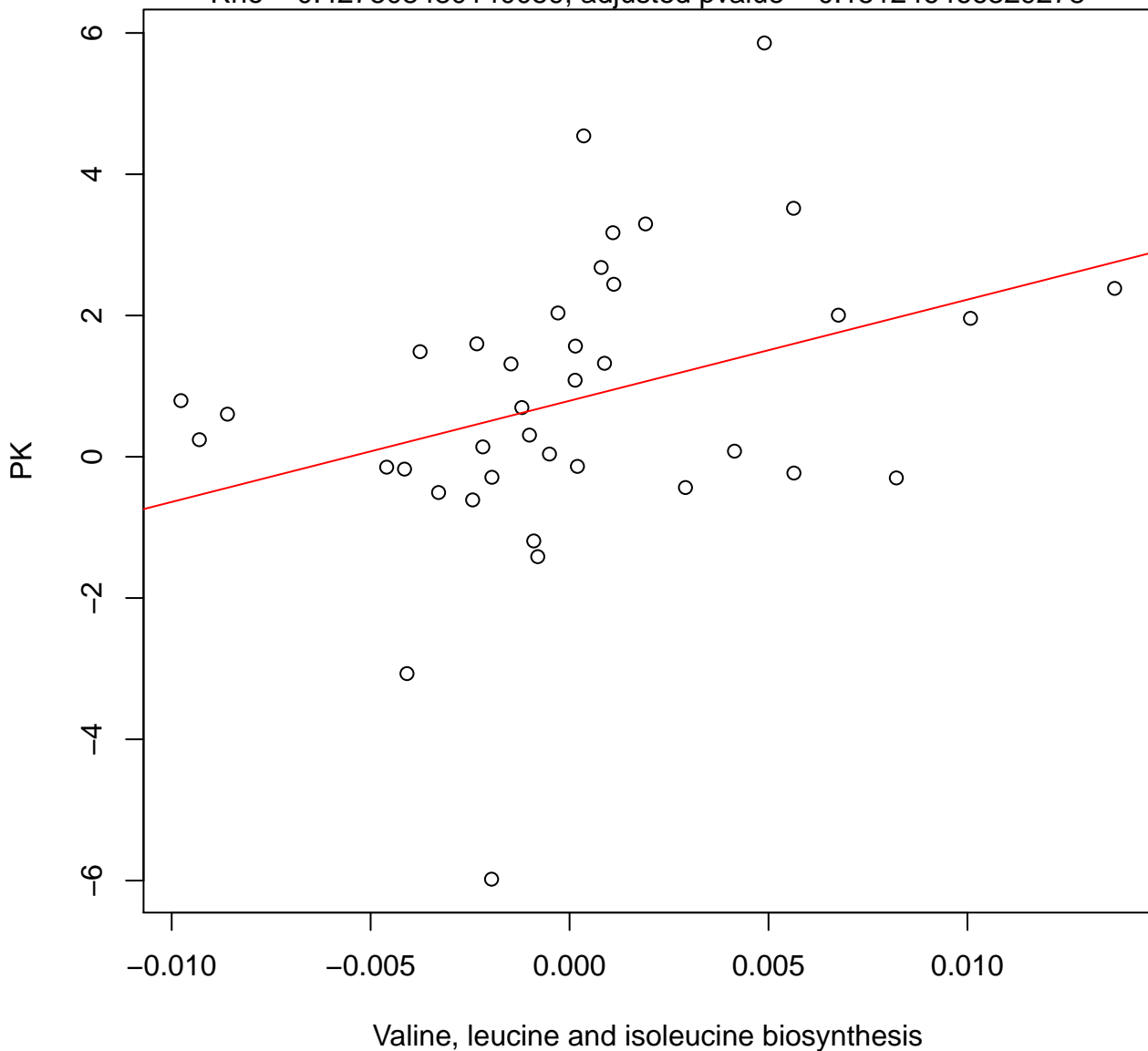
**Group B, Delta PK ~ Delta Amino sugar and nucleotide sugar metabolism**

Rho = -0.358354305722727, adjusted pvalue = 0.218515956872292



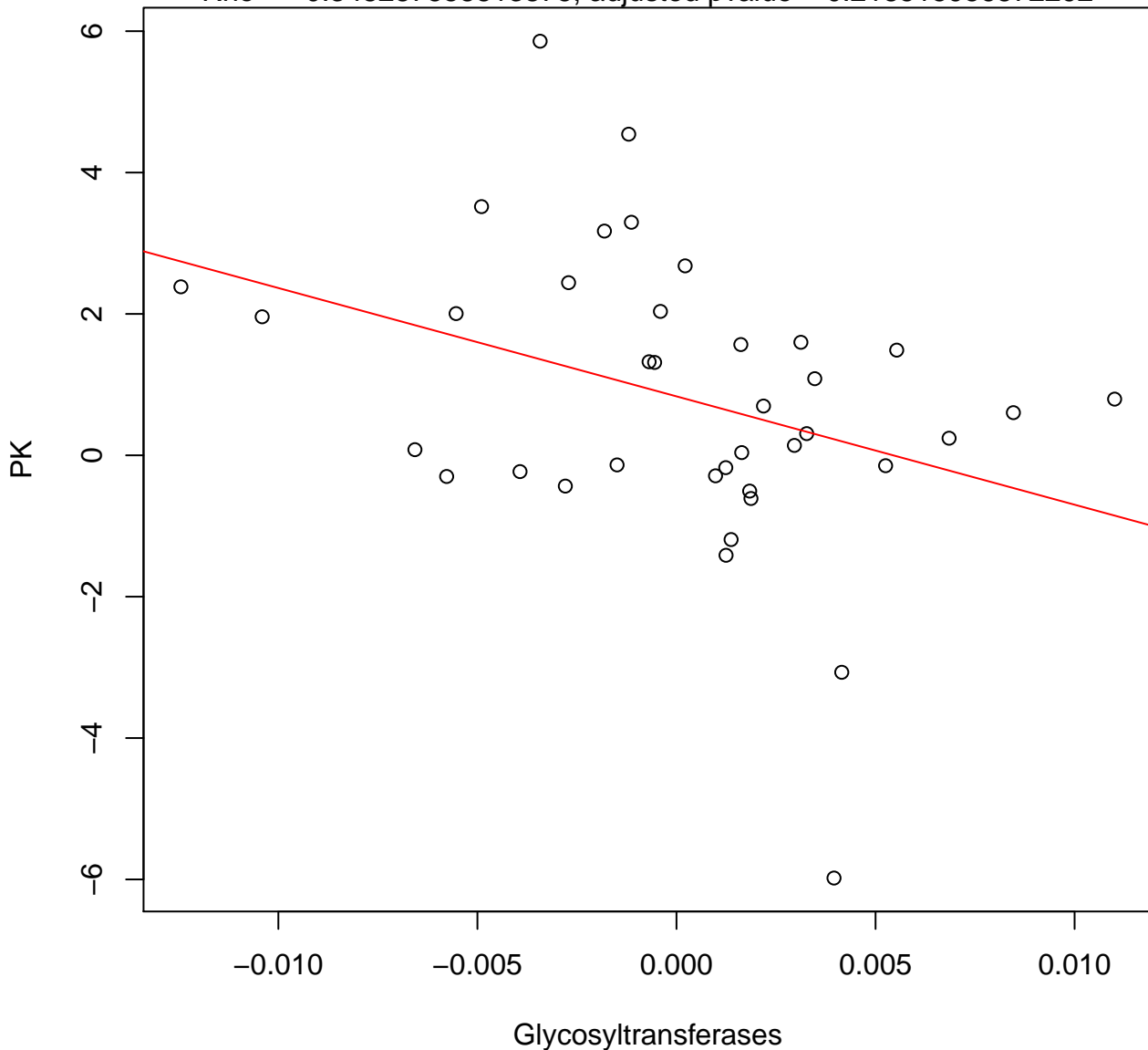
## Group B, Delta PK ~ Delta Valine, leucine and isoleucine biosynthesis

Rho = 0.427508480140059, adjusted pvalue = 0.151246466329278



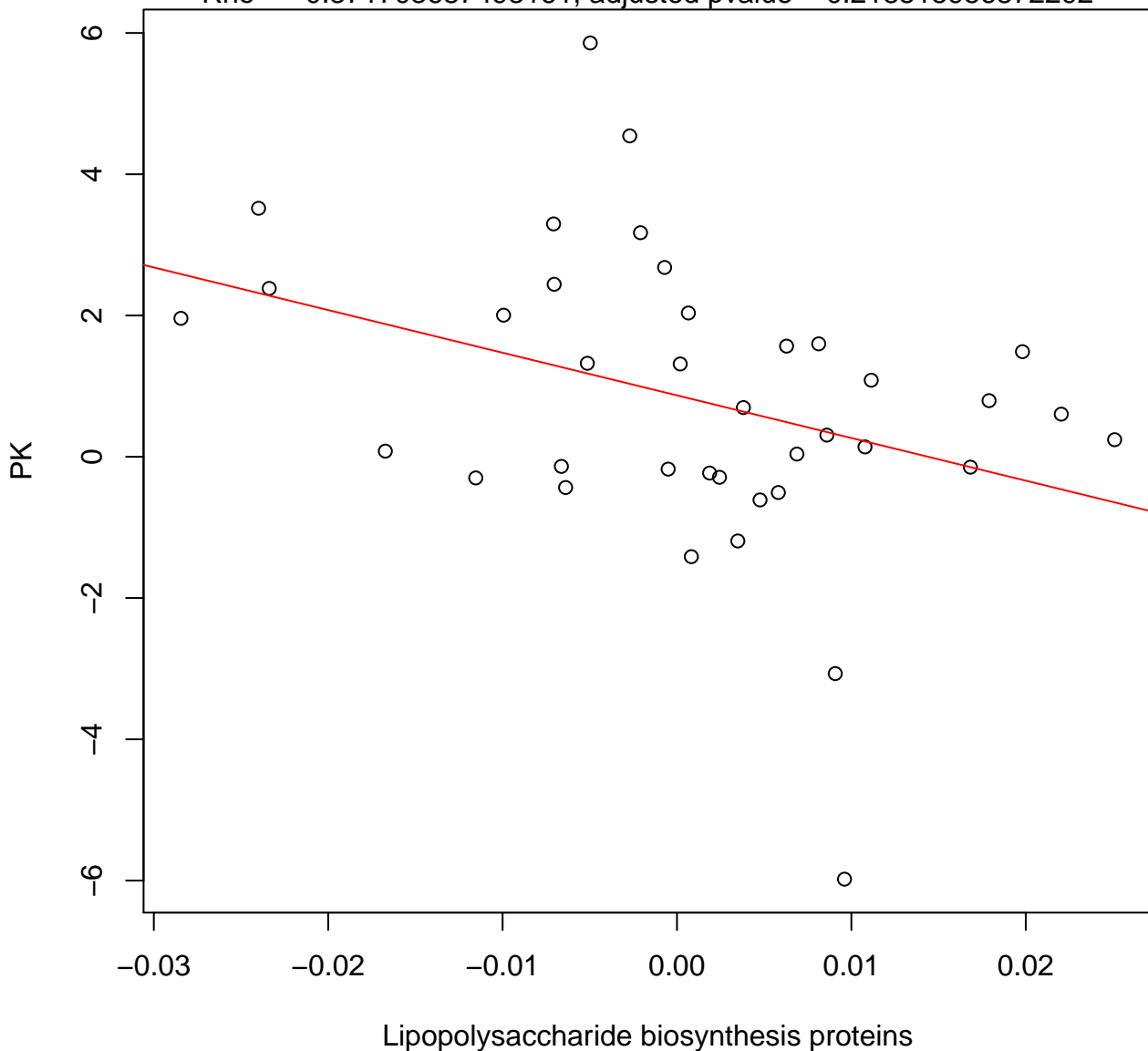
## Group B, Delta PK ~ Delta Glycosyltransferases

Rho =  $-0.348287558813875$ , adjusted pvalue =  $0.218515956872292$



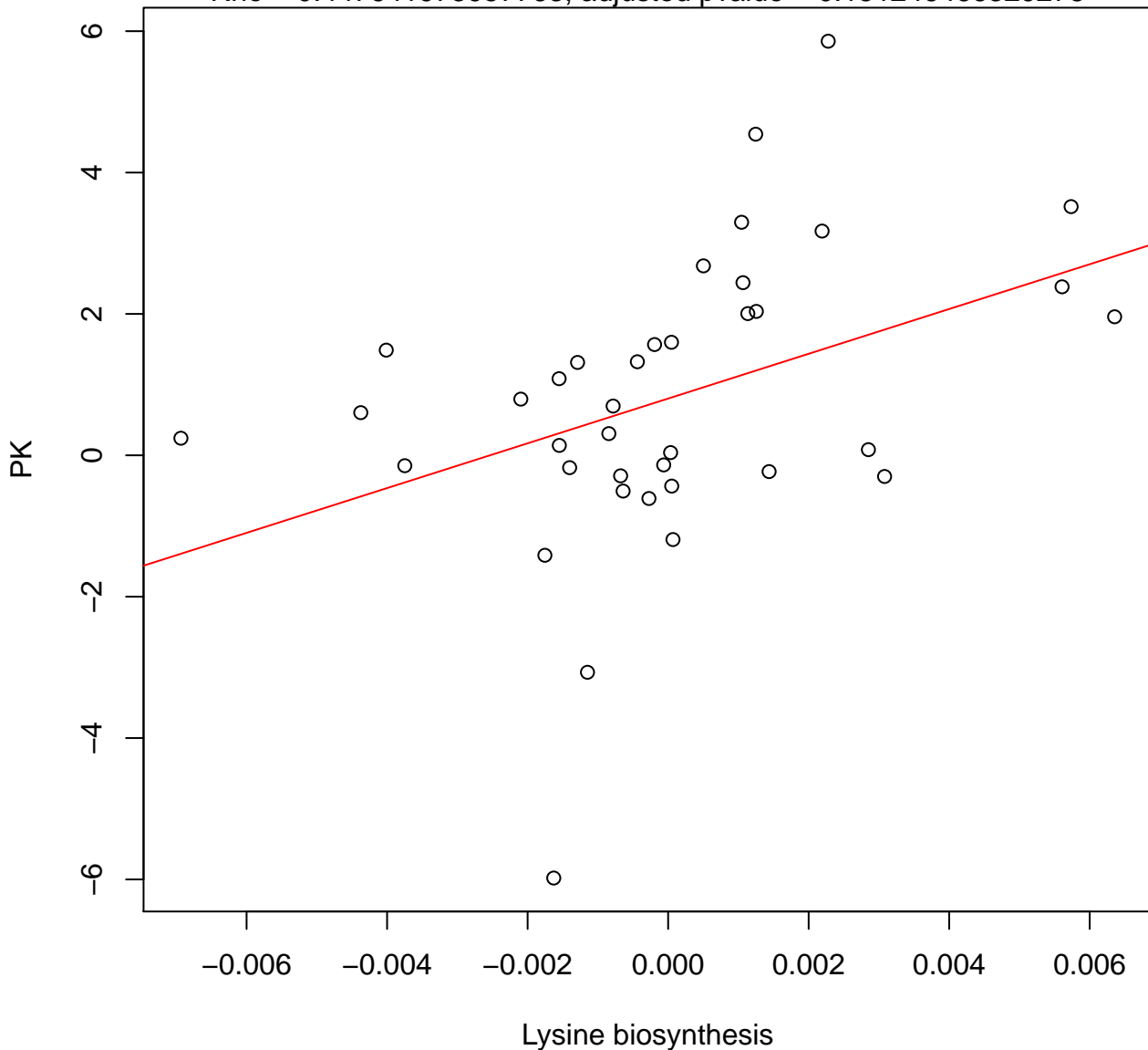
# Group B, Delta PK ~ Delta Lipopolysaccharide biosynthesis proteins

Rho =  $-0.371703687493161$ , adjusted pvalue =  $0.218515956872292$



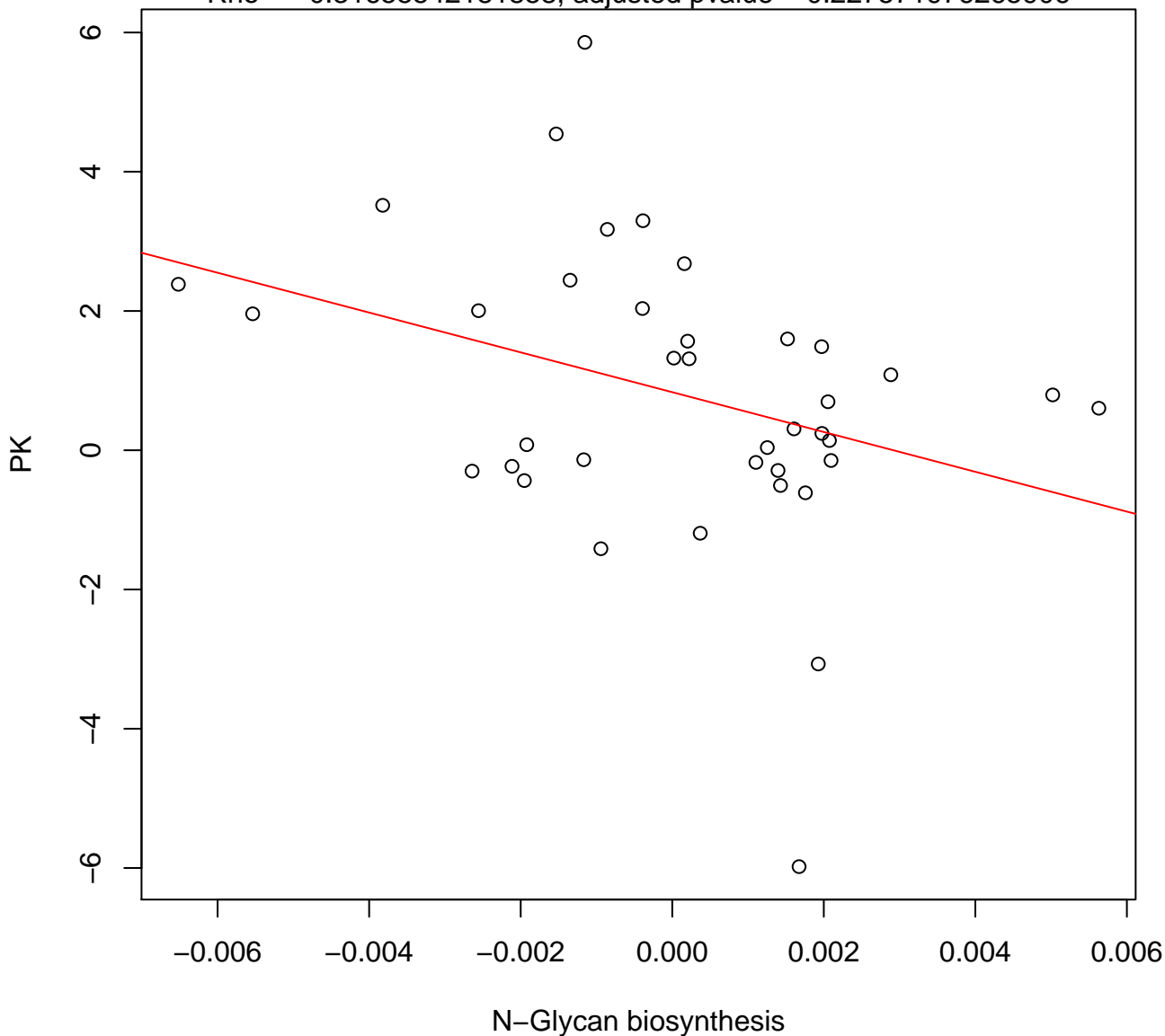
# Group B, Delta PK ~ Delta Lysine biosynthesis

Rho = 0.447641973957763, adjusted pvalue = 0.151246466329278



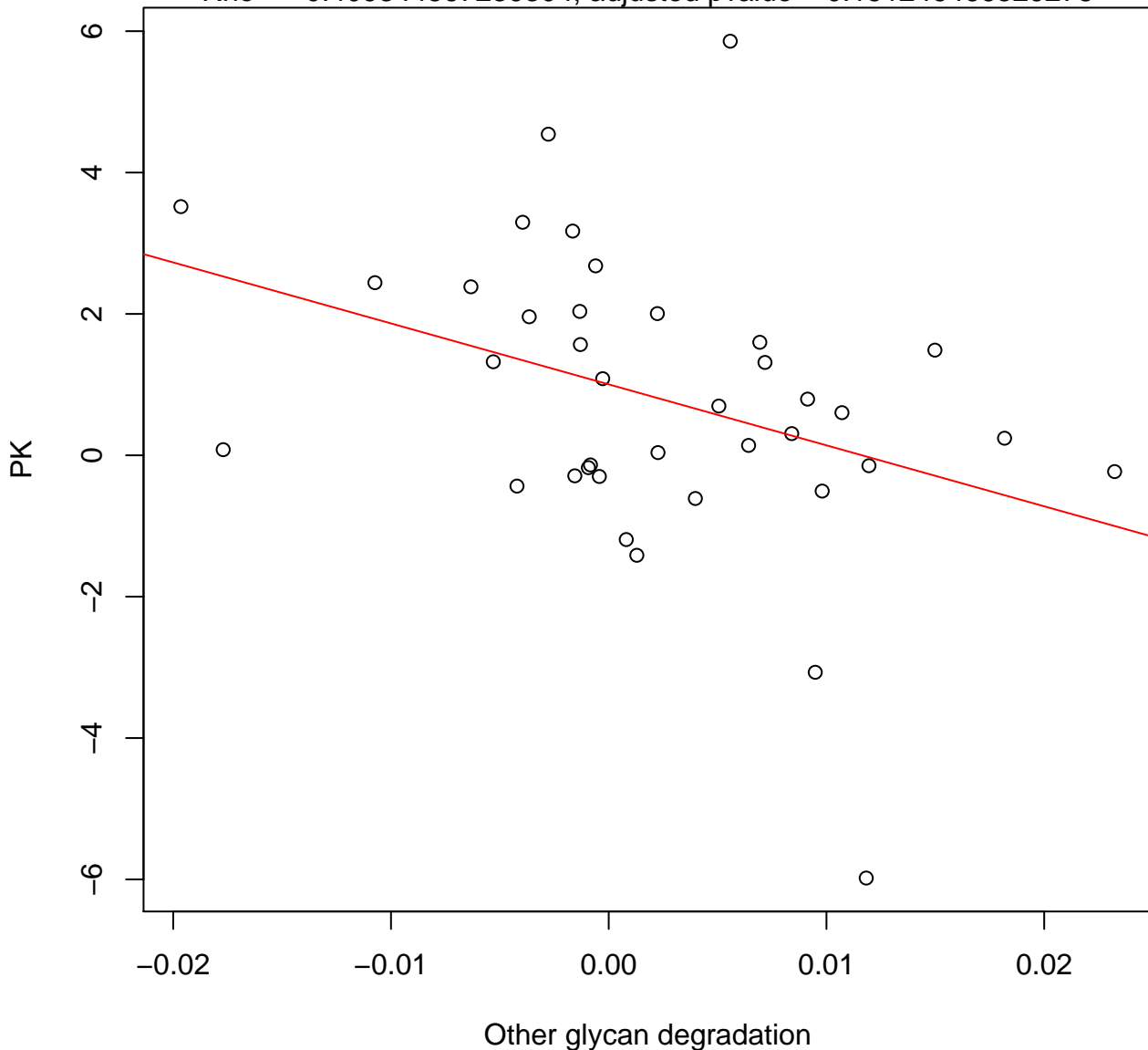
# Group B, Delta PK ~ Delta N-Glycan biosynthesis

Rho =  $-0.31655542181858$ , adjusted pvalue =  $0.227571976265906$



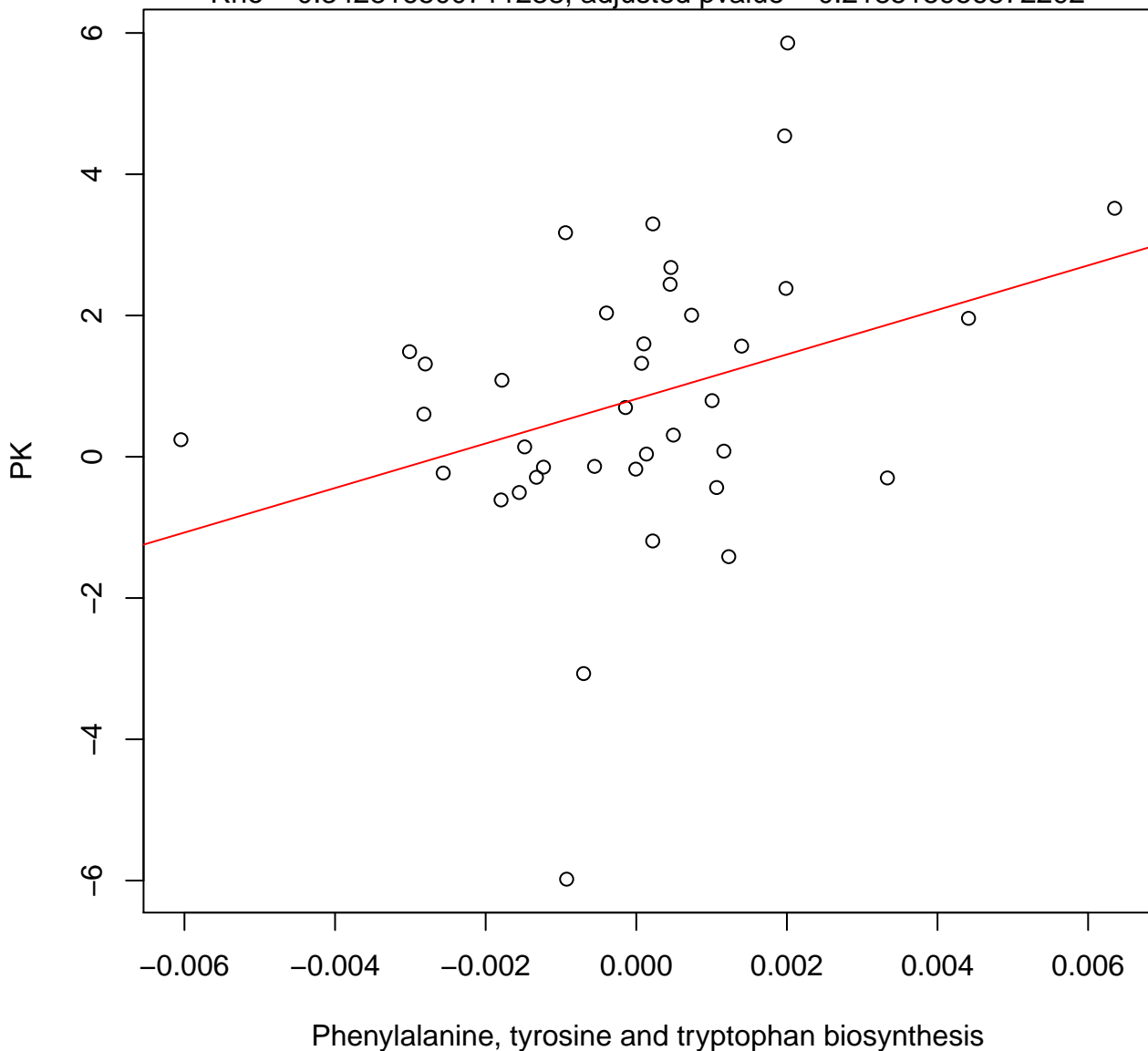
# Group B, Delta PK ~ Delta Other glycan degradation

Rho =  $-0.409344567239304$ , adjusted pvalue =  $0.151246466329278$



**Group B, Delta PK ~ Delta Phenylalanine, tyrosine and tryptophan biosynthesis**

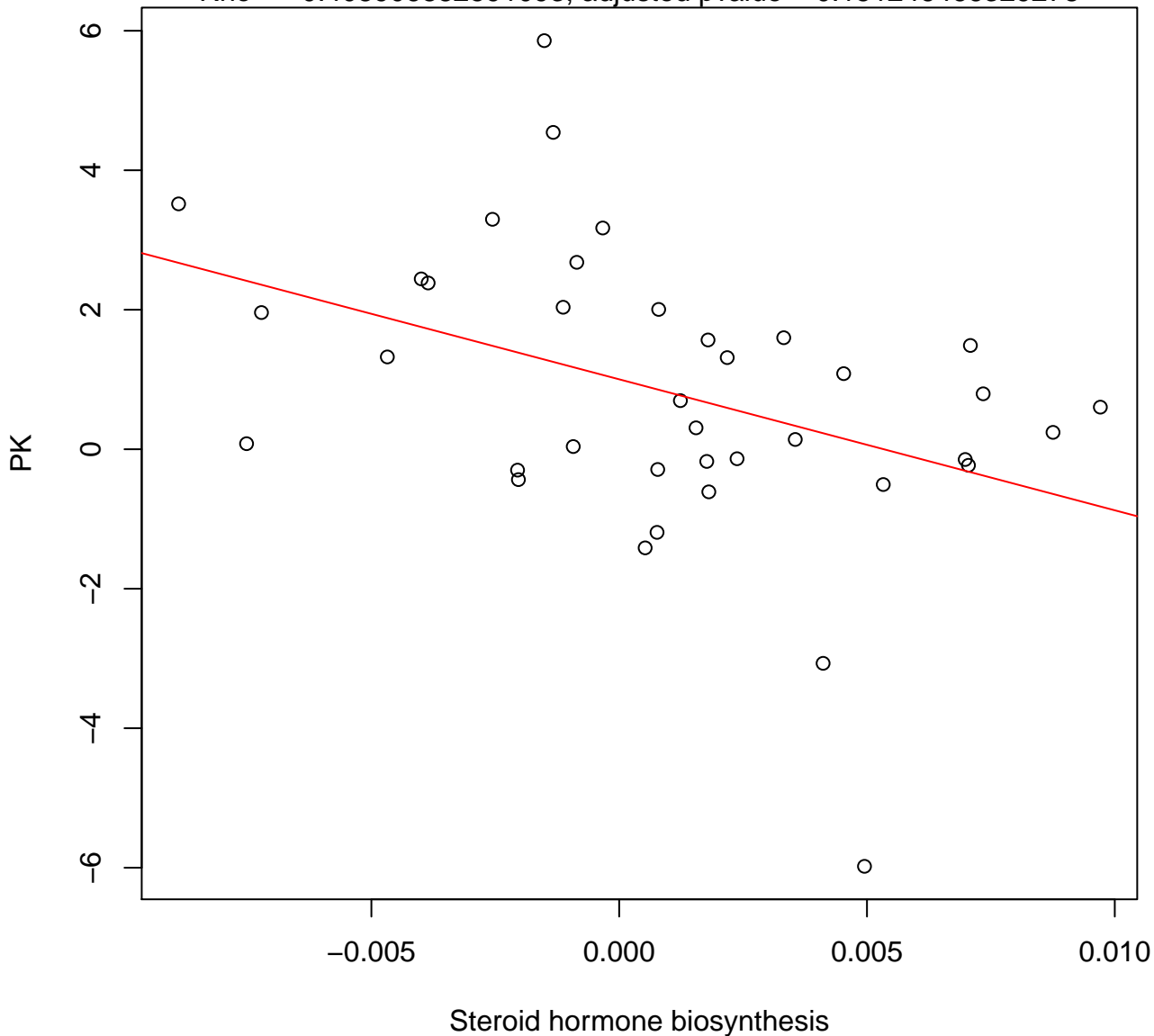
Rho = 0.342816500711238, adjusted pvalue = 0.218515956872292





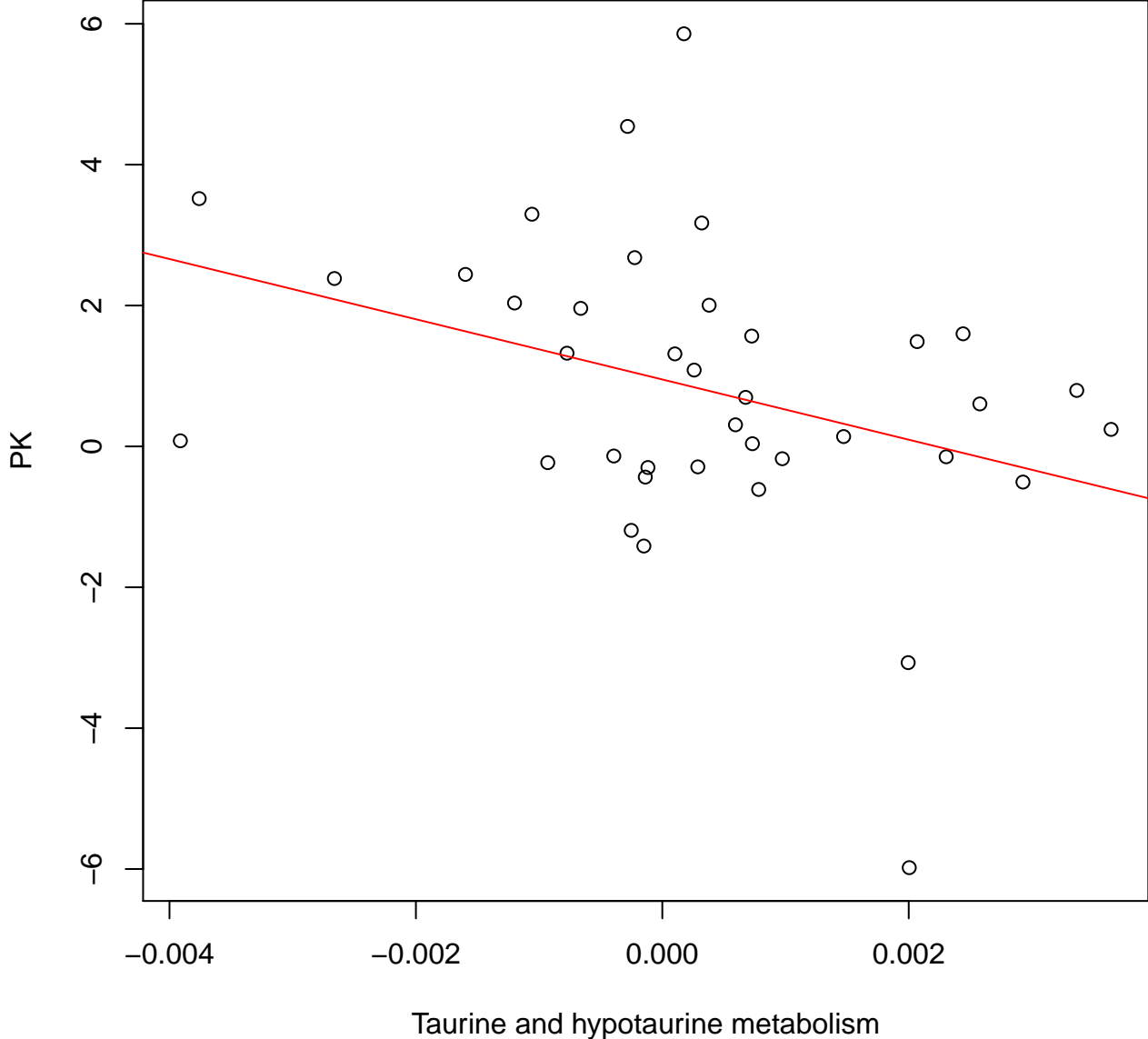
# Group B, Delta PK ~ Delta Steroid hormone biosynthesis

Rho =  $-0.408906882591093$ , adjusted pvalue =  $0.151246466329278$



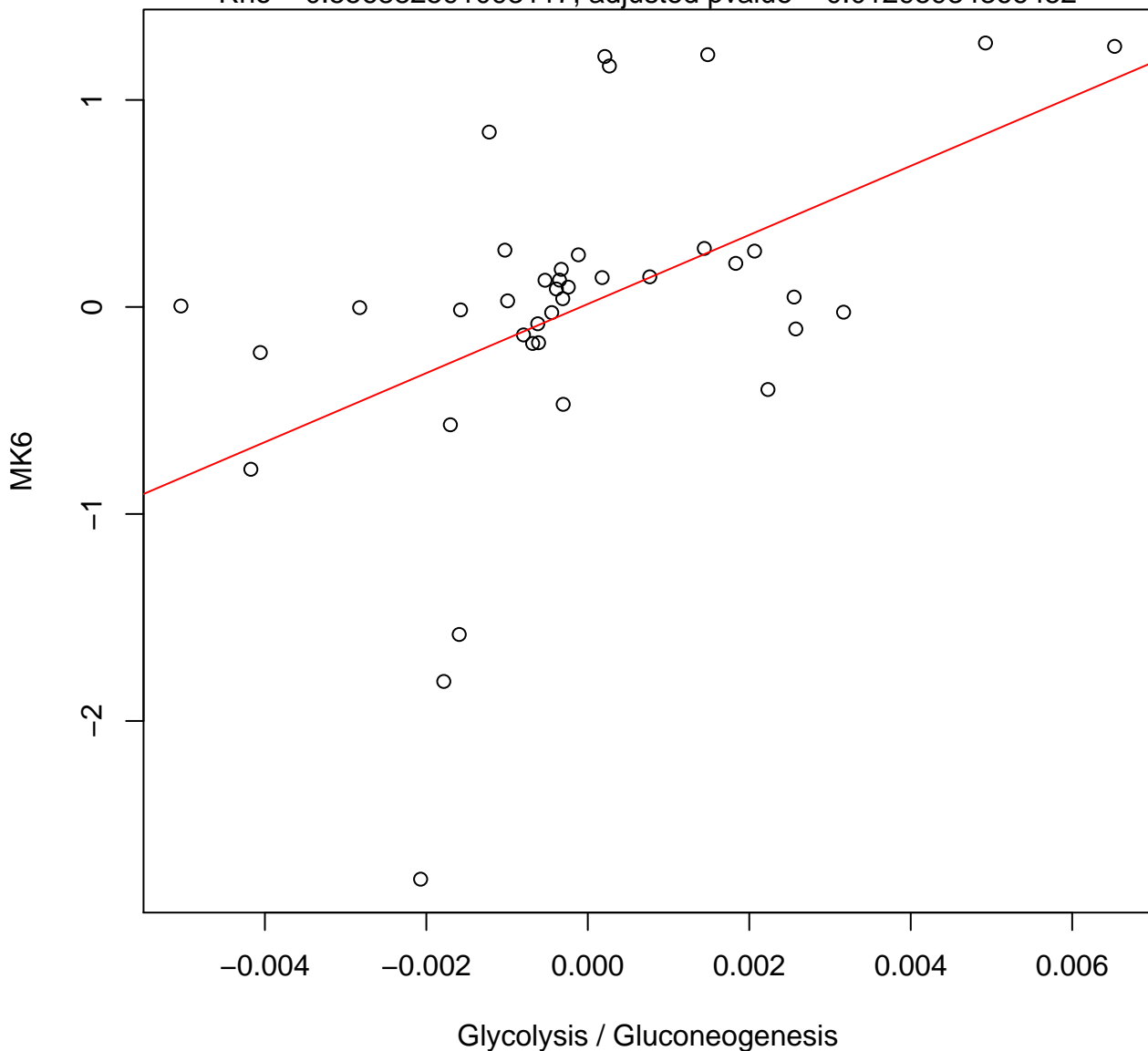
**Group B, Delta PK ~ Delta Taurine and hypotaurine metabolism**

Rho = -0.356603567129883, adjusted pvalue = 0.218515956872292



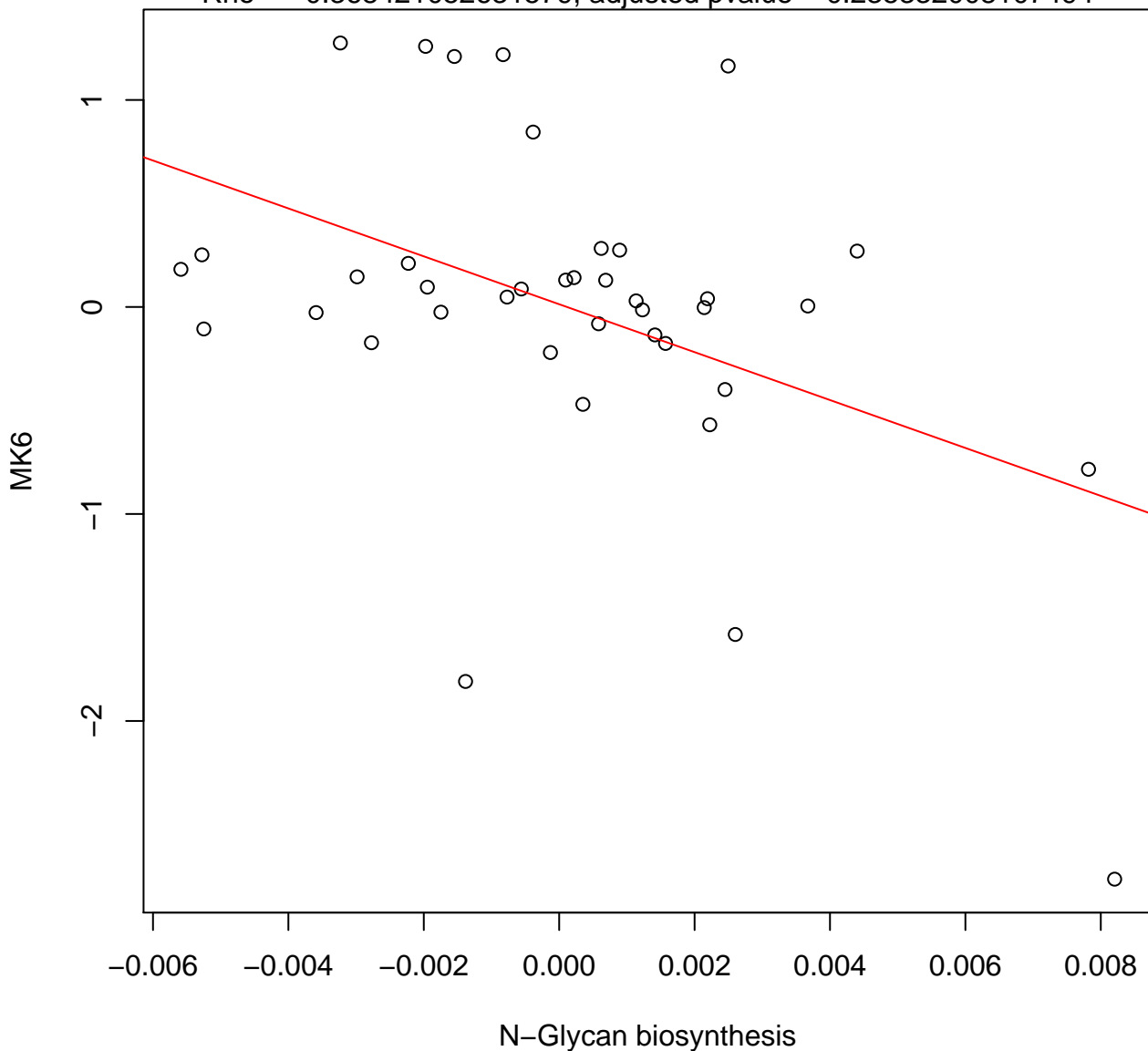
# Group A, Delta MK6 ~ Delta Glycolysis / Gluconeogenesis

Rho = 0.556882591093117, adjusted pvalue = 0.01295934366452



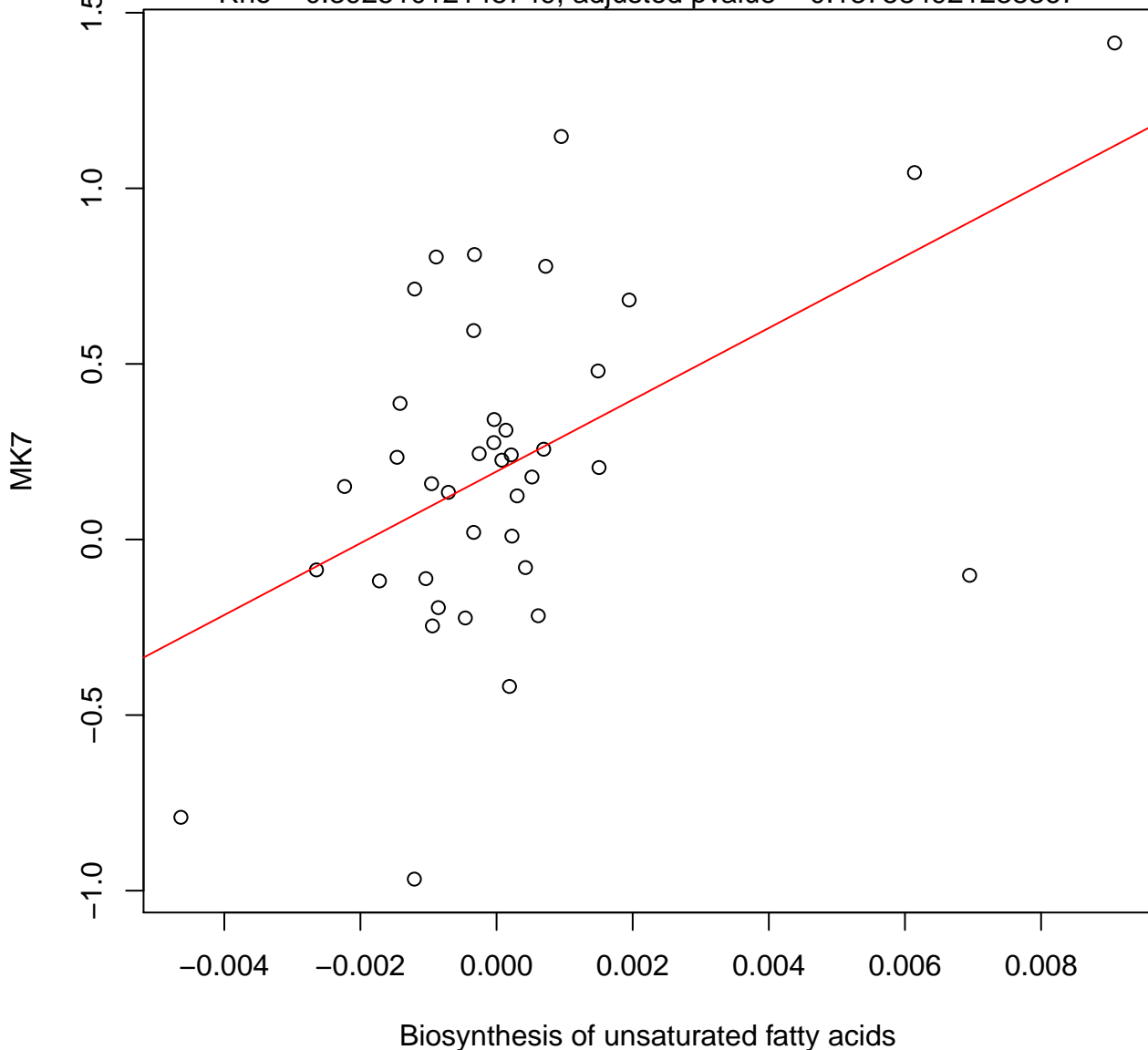
# Group A, Delta MK6 ~ Delta N-Glycan biosynthesis

Rho =  $-0.368421052631579$ , adjusted pvalue =  $0.235332008107494$



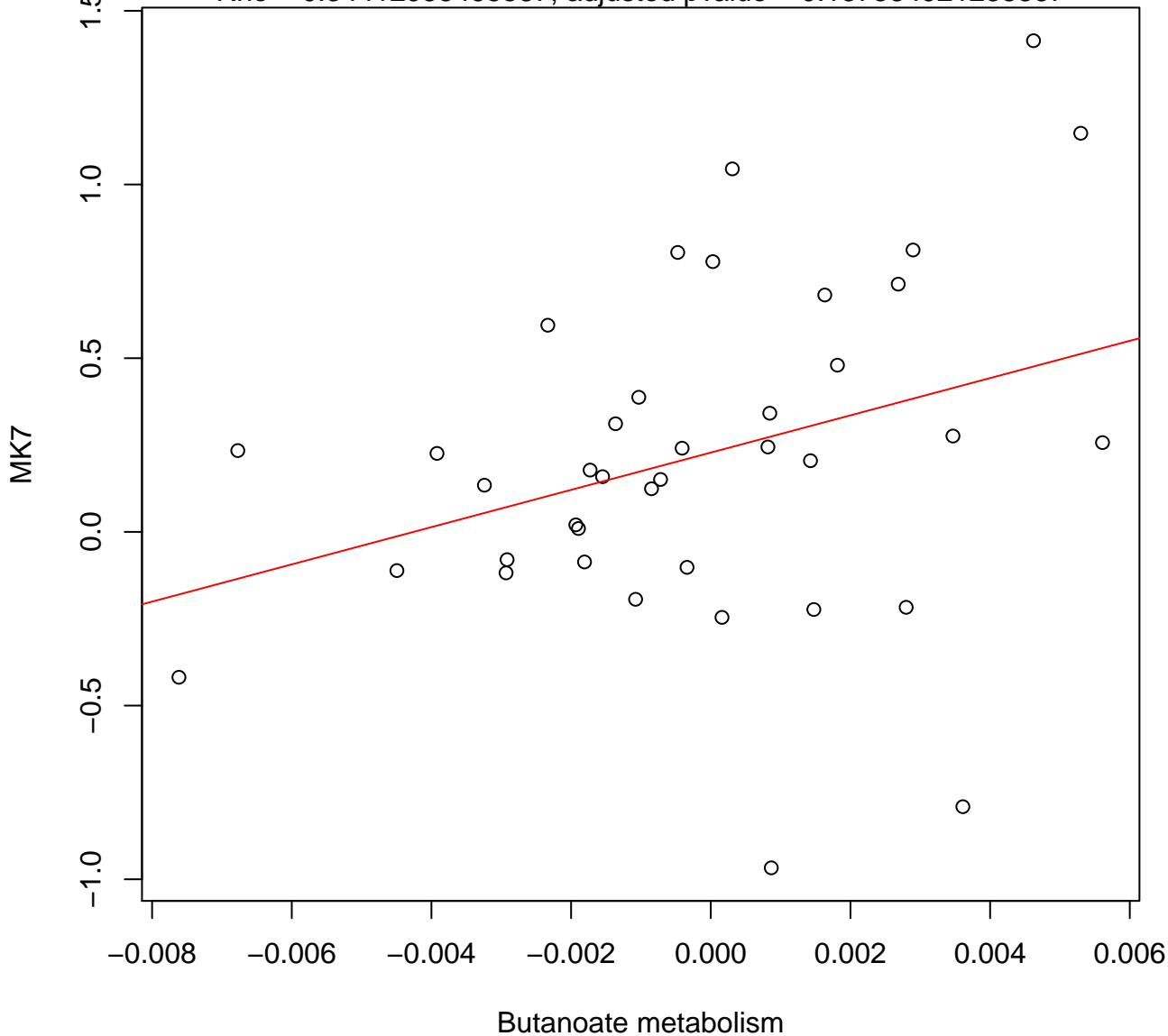
# Group A, Delta MK7 ~ Delta Biosynthesis of unsaturated fatty acids

Rho = 0.39251012145749, adjusted pvalue = 0.137584921238367



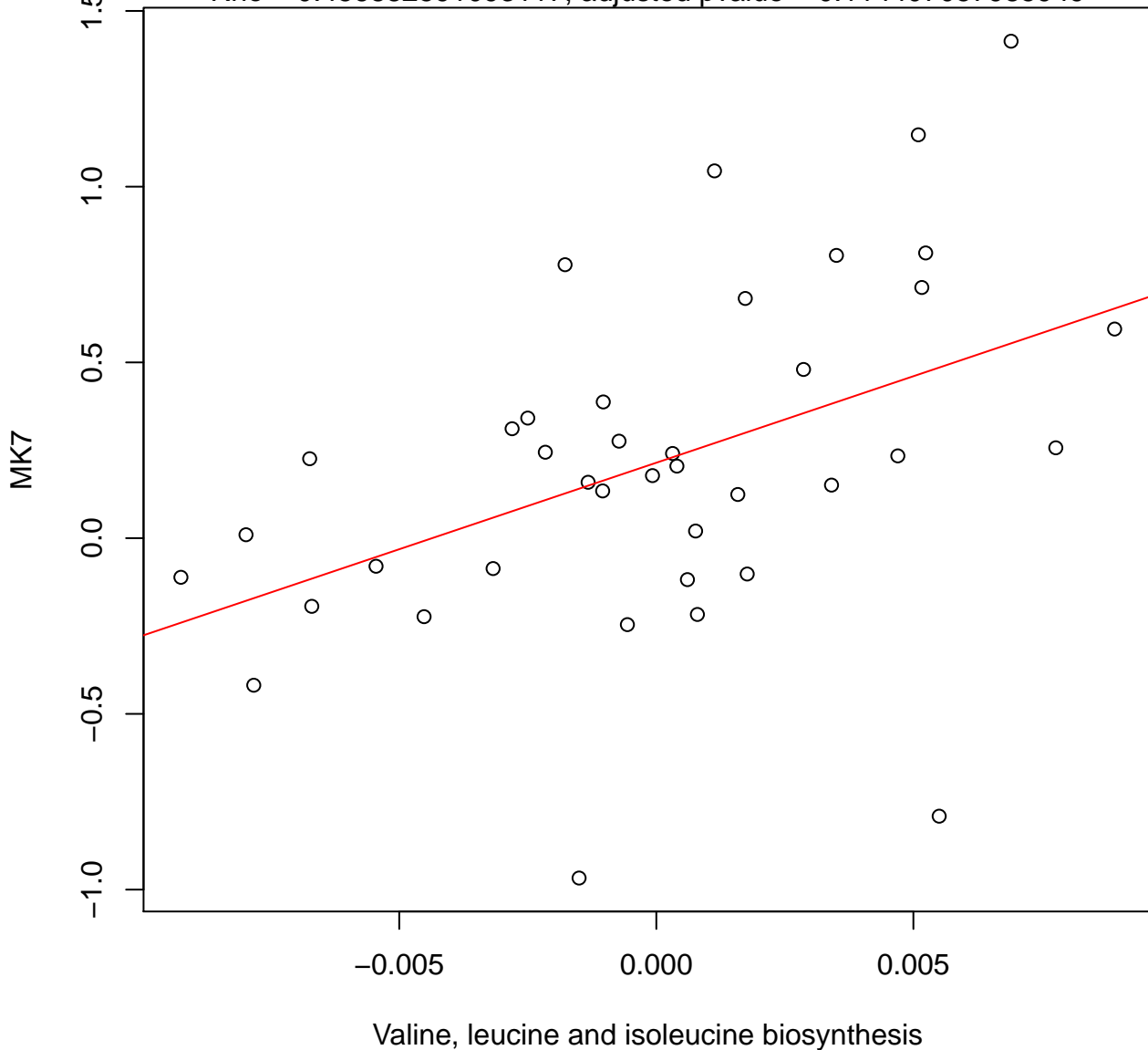
# Group A, Delta MK7 ~ Delta Butanoate metabolism

Rho = 0.34412955465587, adjusted pvalue = 0.137584921238367



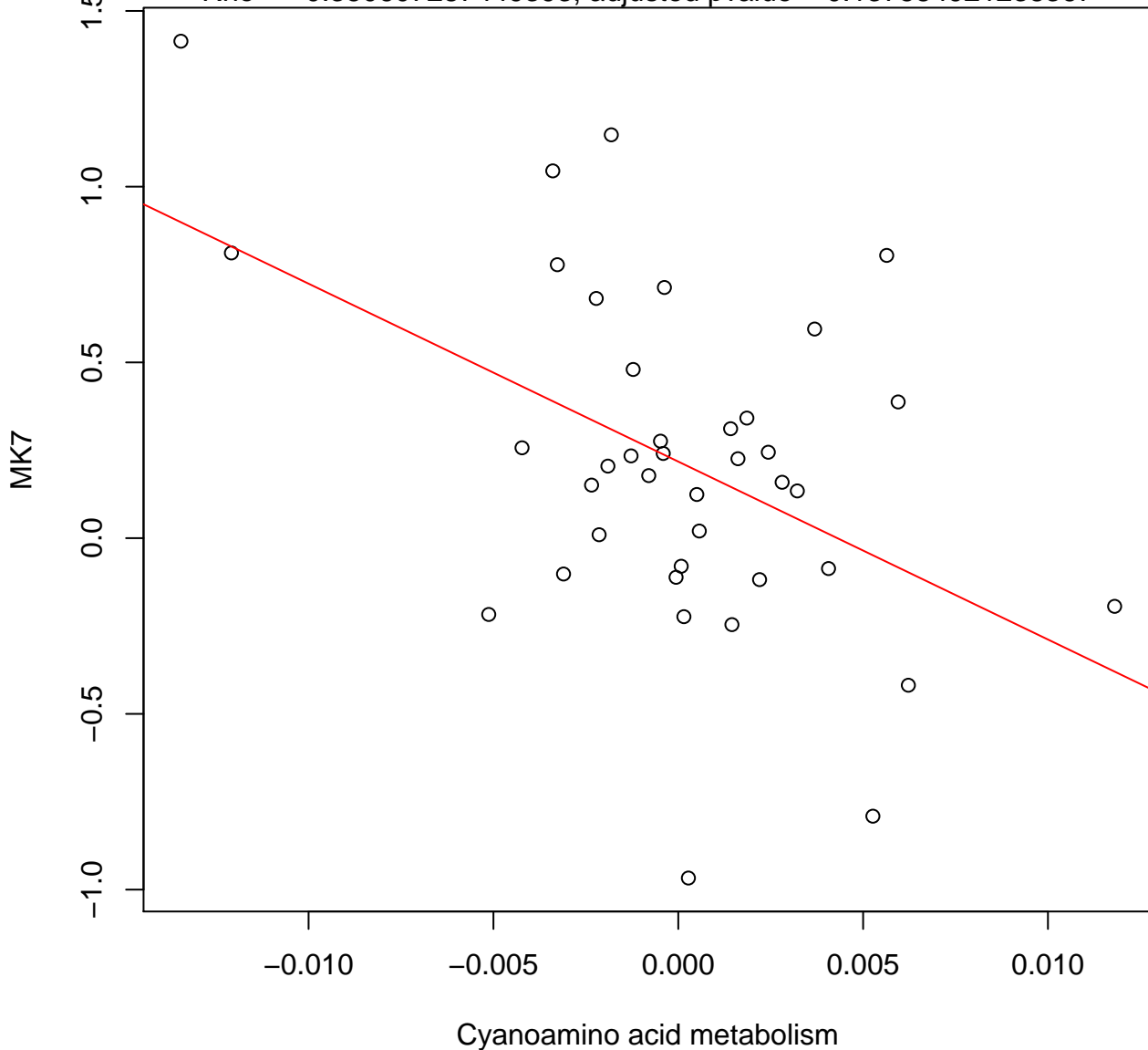
# Group A, Delta MK7 ~ Delta Valine, leucine and isoleucine biosynthesis

Rho = 0.456882591093117, adjusted pvalue = 0.114407057985949



# Group A, Delta MK7 ~ Delta Cyanoamino acid metabolism

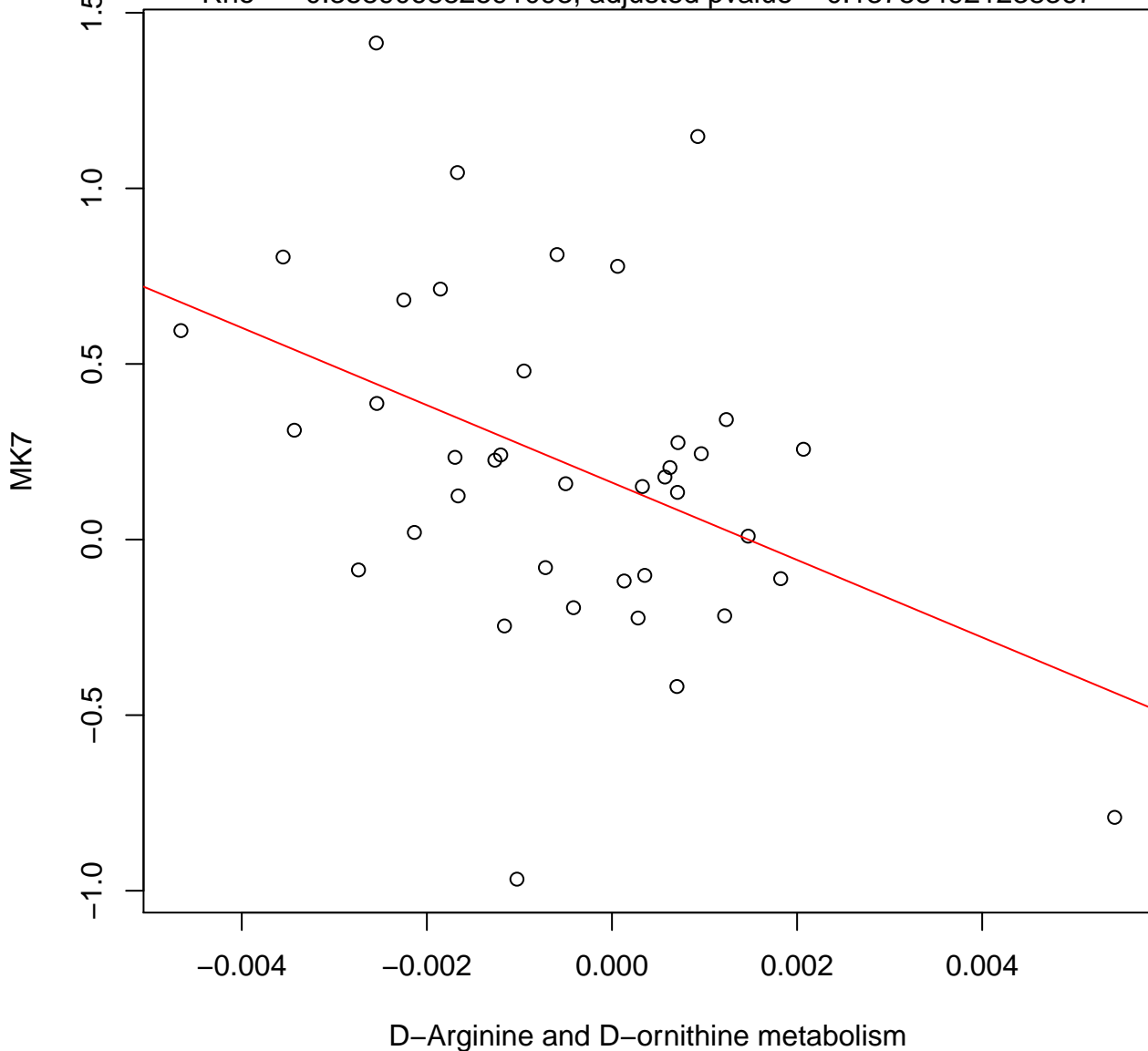
Rho =  $-0.350607287449393$ , adjusted pvalue =  $0.137584921238367$





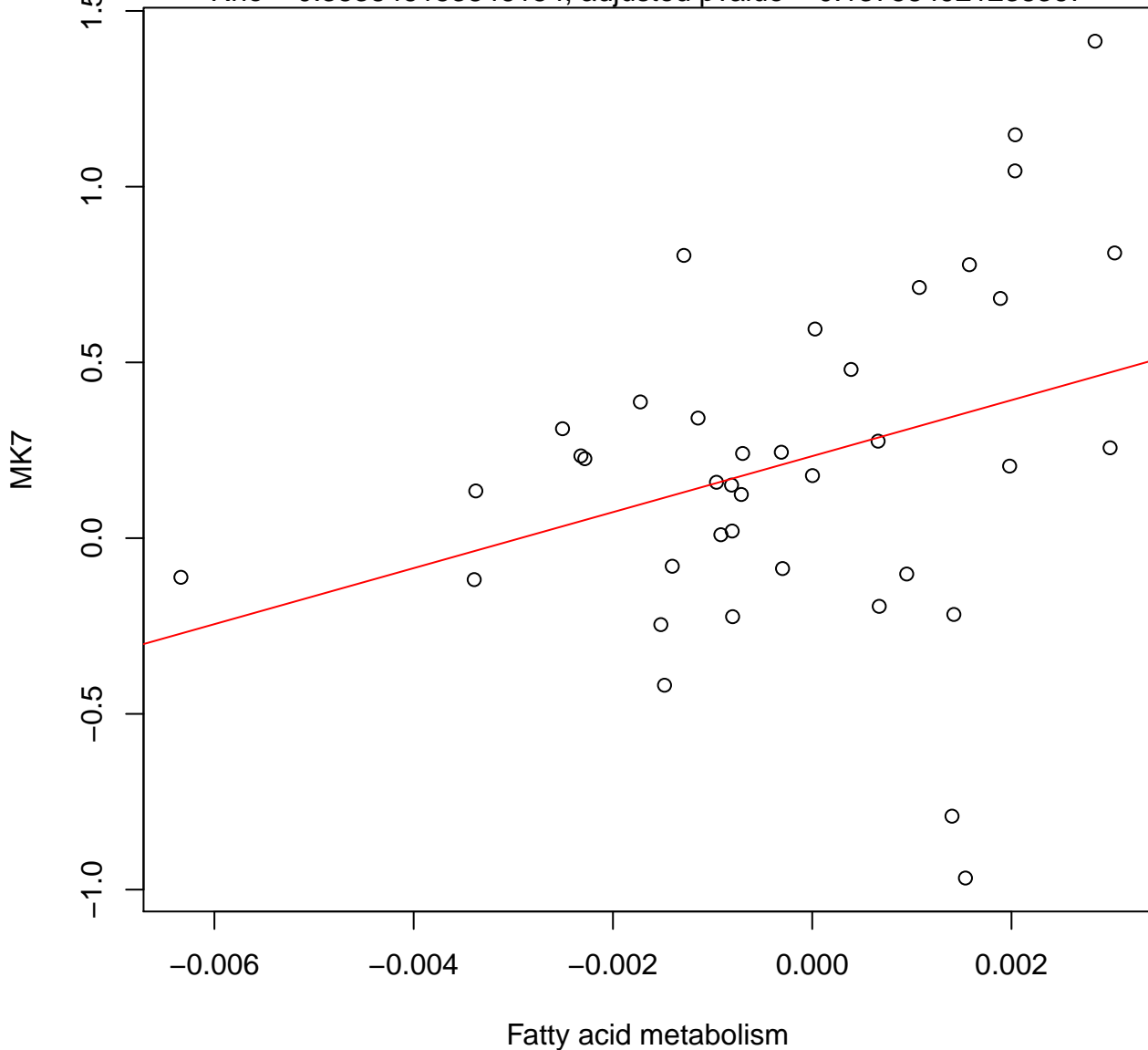
# Group A, Delta MK7 ~ Delta D-Arginine and D-ornithine metabolism

Rho =  $-0.358906882591093$ , adjusted pvalue =  $0.137584921238367$



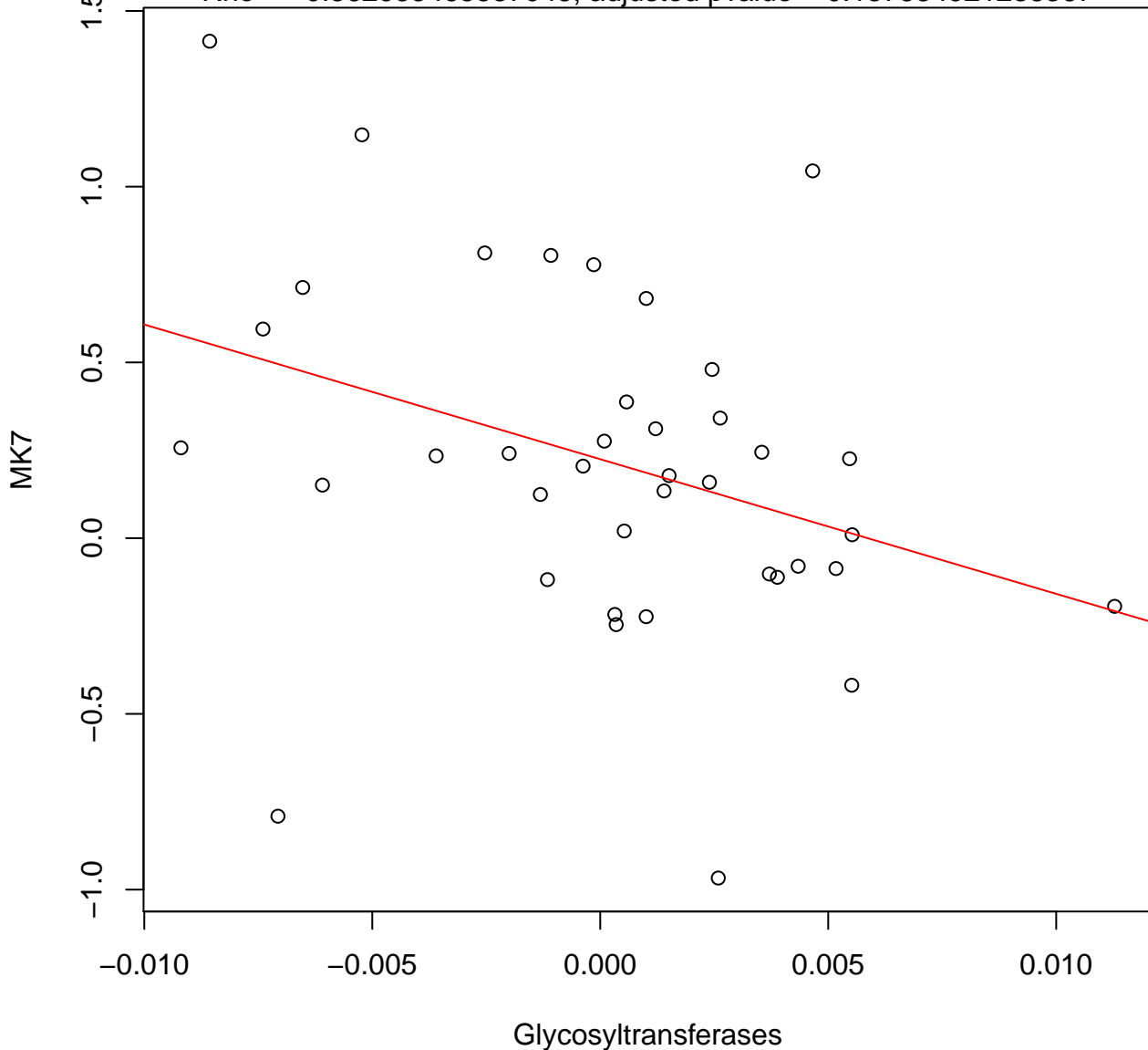
# Group A, Delta MK7 ~ Delta Fatty acid metabolism

Rho = 0.353846153846154, adjusted pvalue = 0.137584921238367



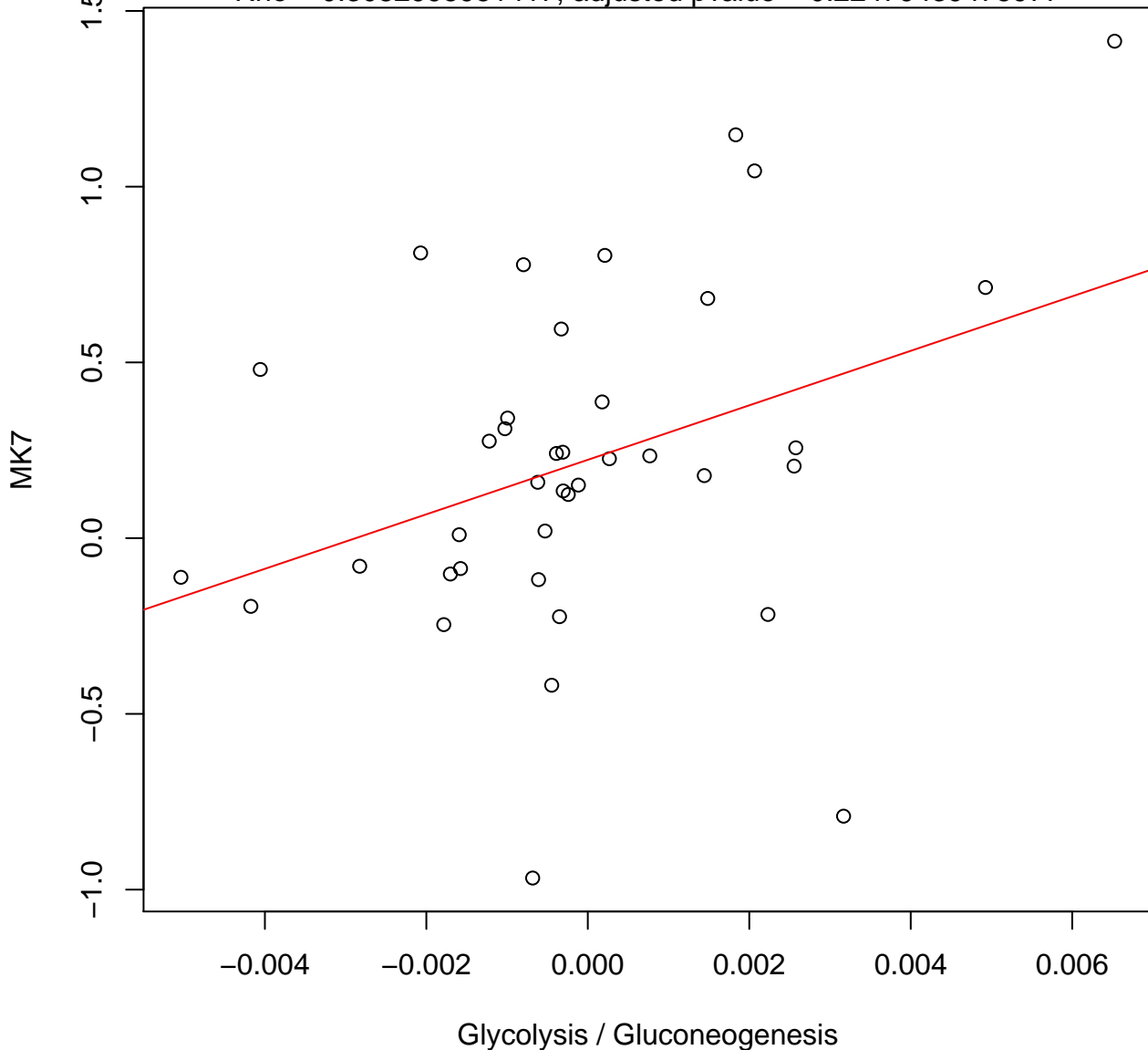
## Group A, Delta MK7 ~ Delta Glycosyltransferases

Rho = -0.362955465587045, adjusted pvalue = 0.137584921238367



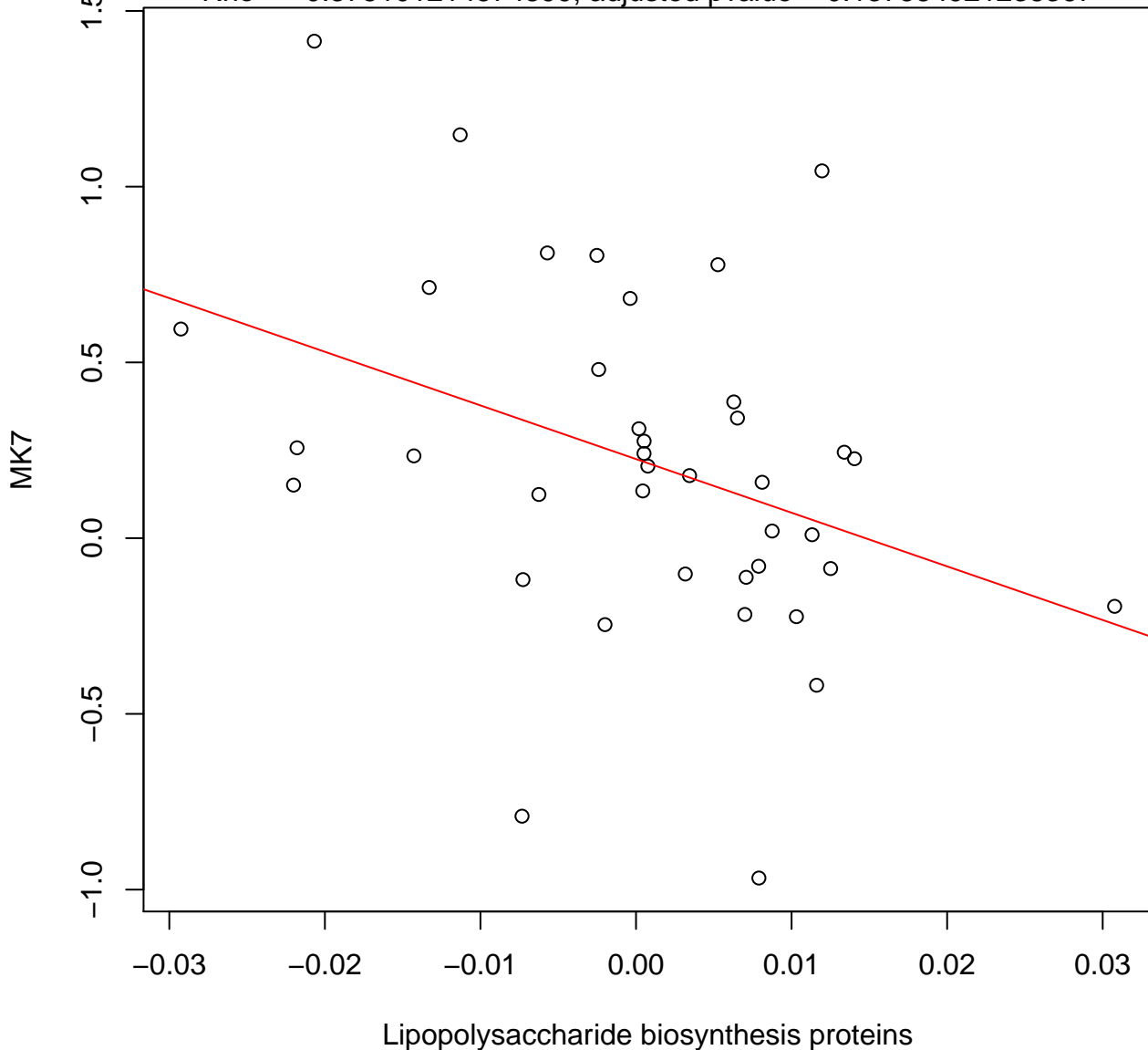
# Group A, Delta MK7 ~ Delta Glycolysis / Gluconeogenesis

Rho = 0.3082995951417, adjusted pvalue = 0.22479439475977



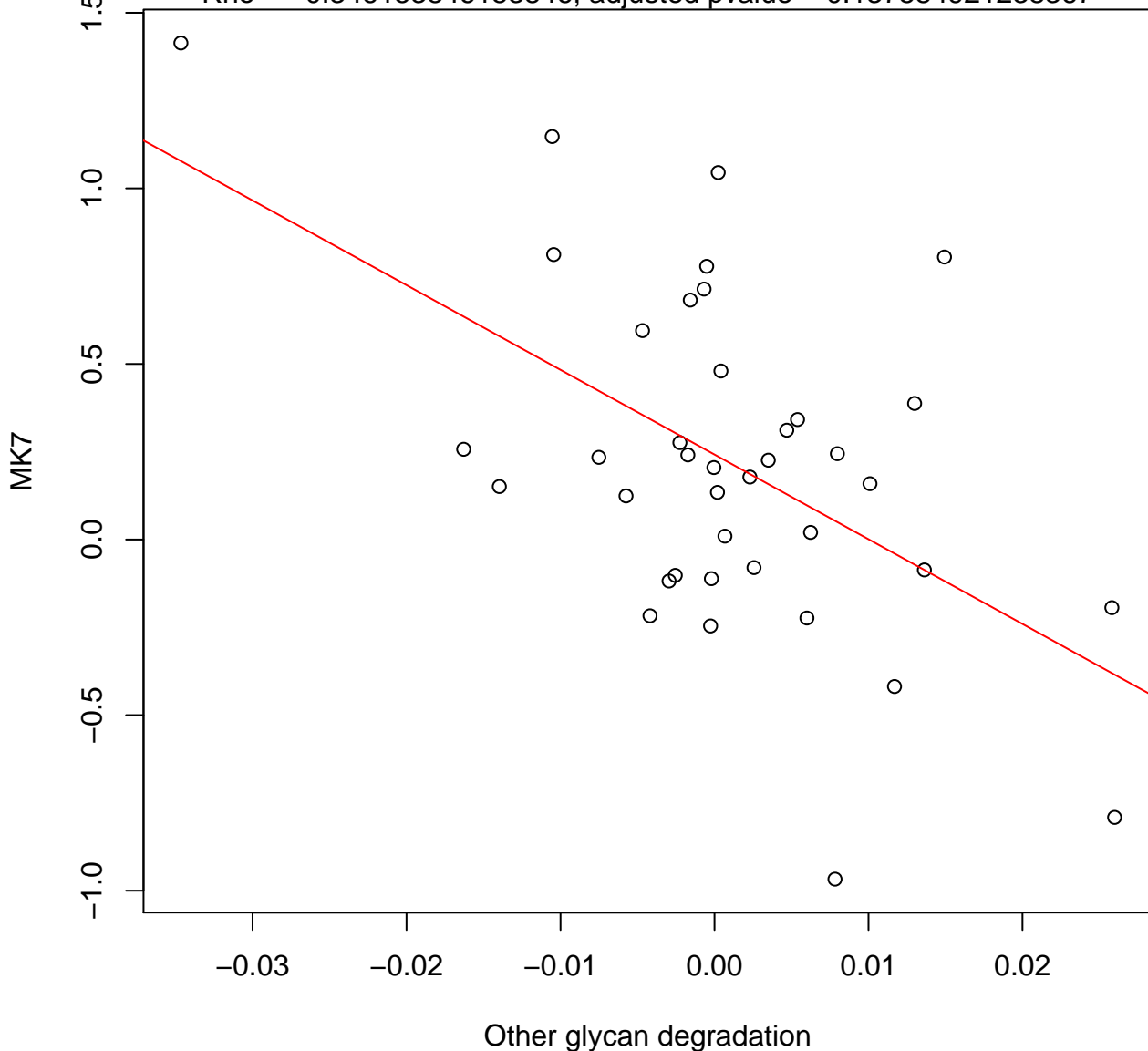
# Group A, Delta MK7 ~ Delta Lipopolysaccharide biosynthesis proteins

Rho =  $-0.375101214574899$ , adjusted pvalue =  $0.137584921238367$



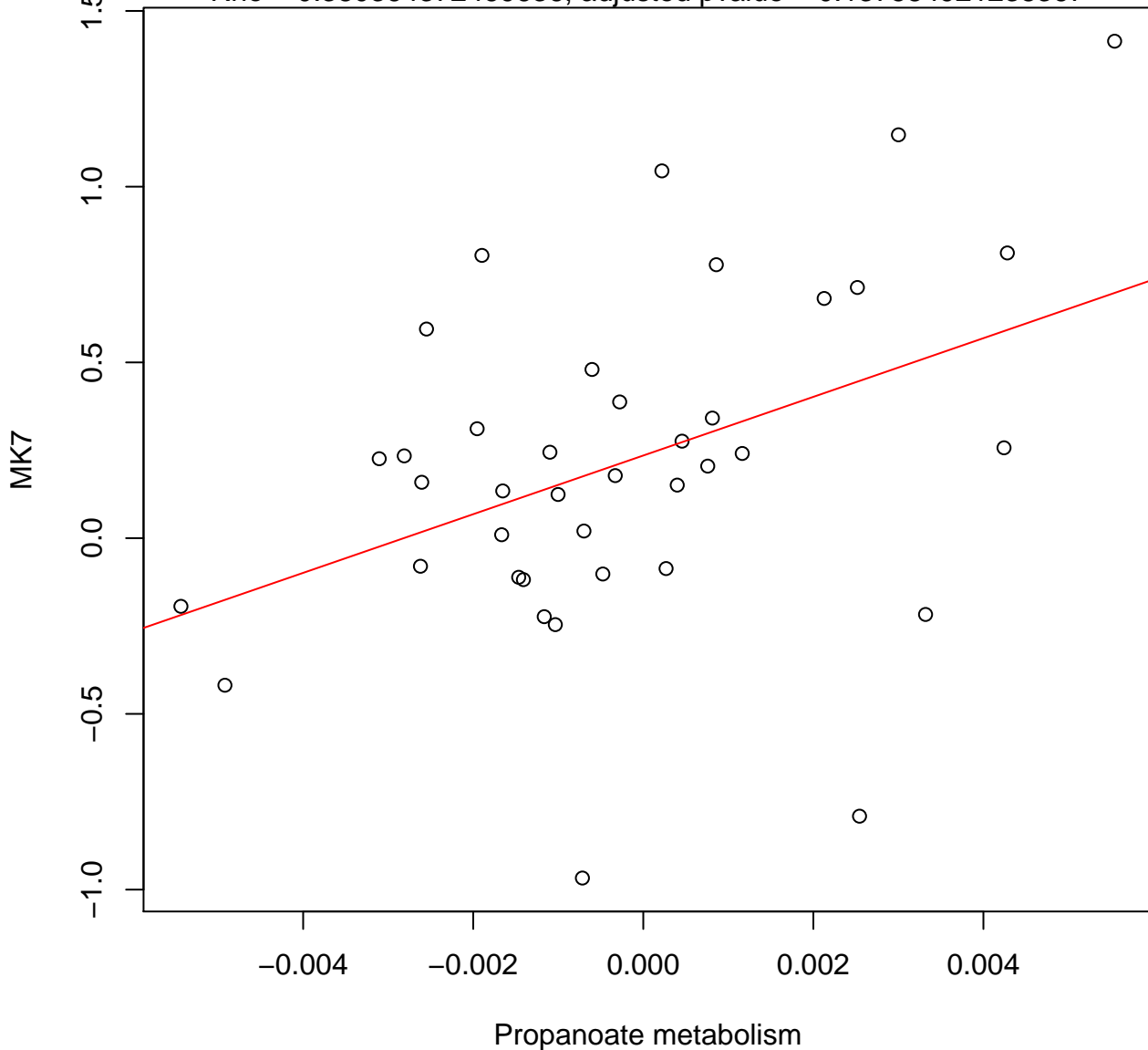
# Group A, Delta MK7 ~ Delta Other glycan degradation

Rho =  $-0.346153846153846$ , adjusted pvalue =  $0.137584921238367$



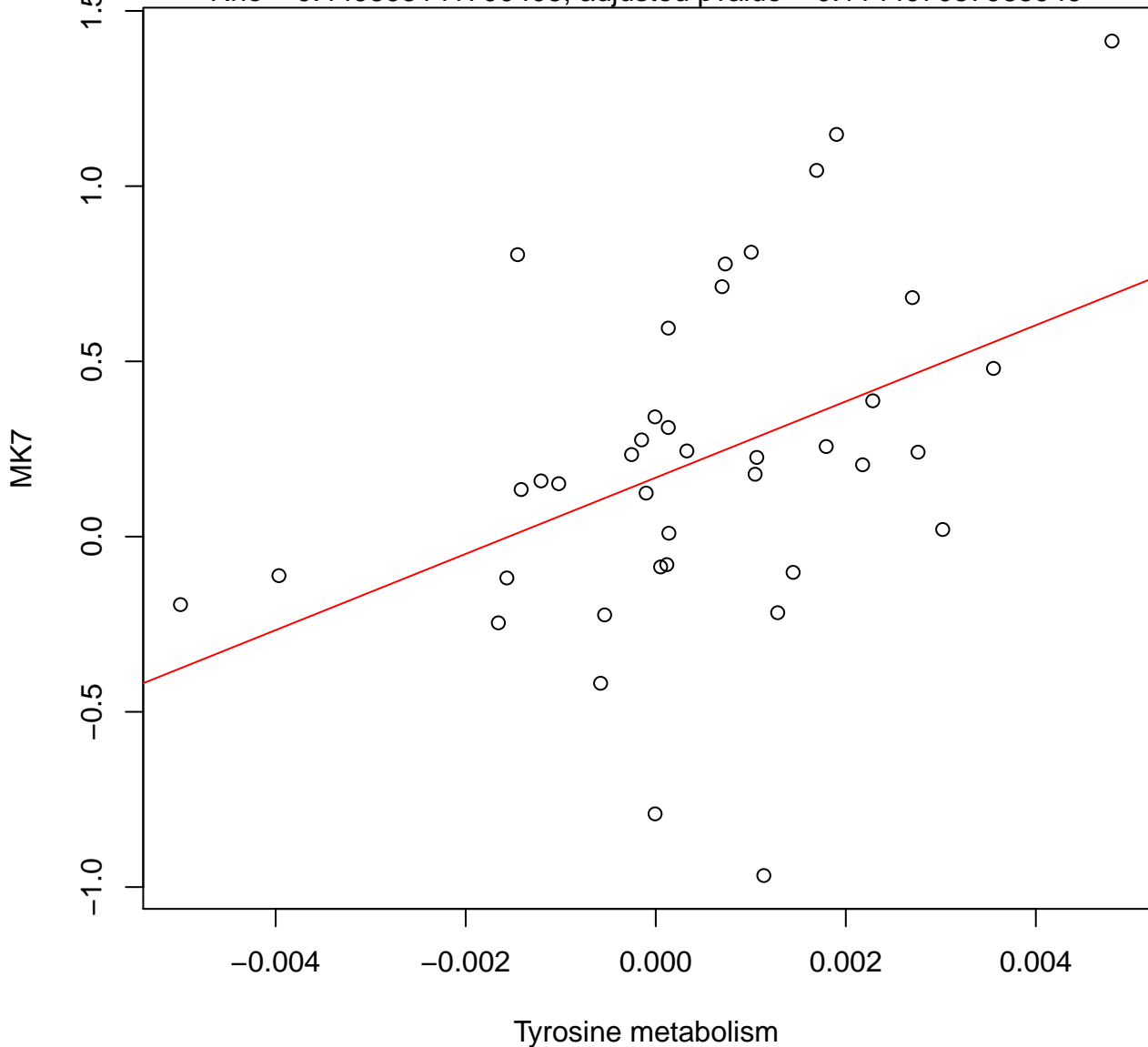
# Group A, Delta MK7 ~ Delta Propanoate metabolism

Rho = 0.380364372469636, adjusted pvalue = 0.137584921238367



# Group A, Delta MK7 ~ Delta Tyrosine metabolism

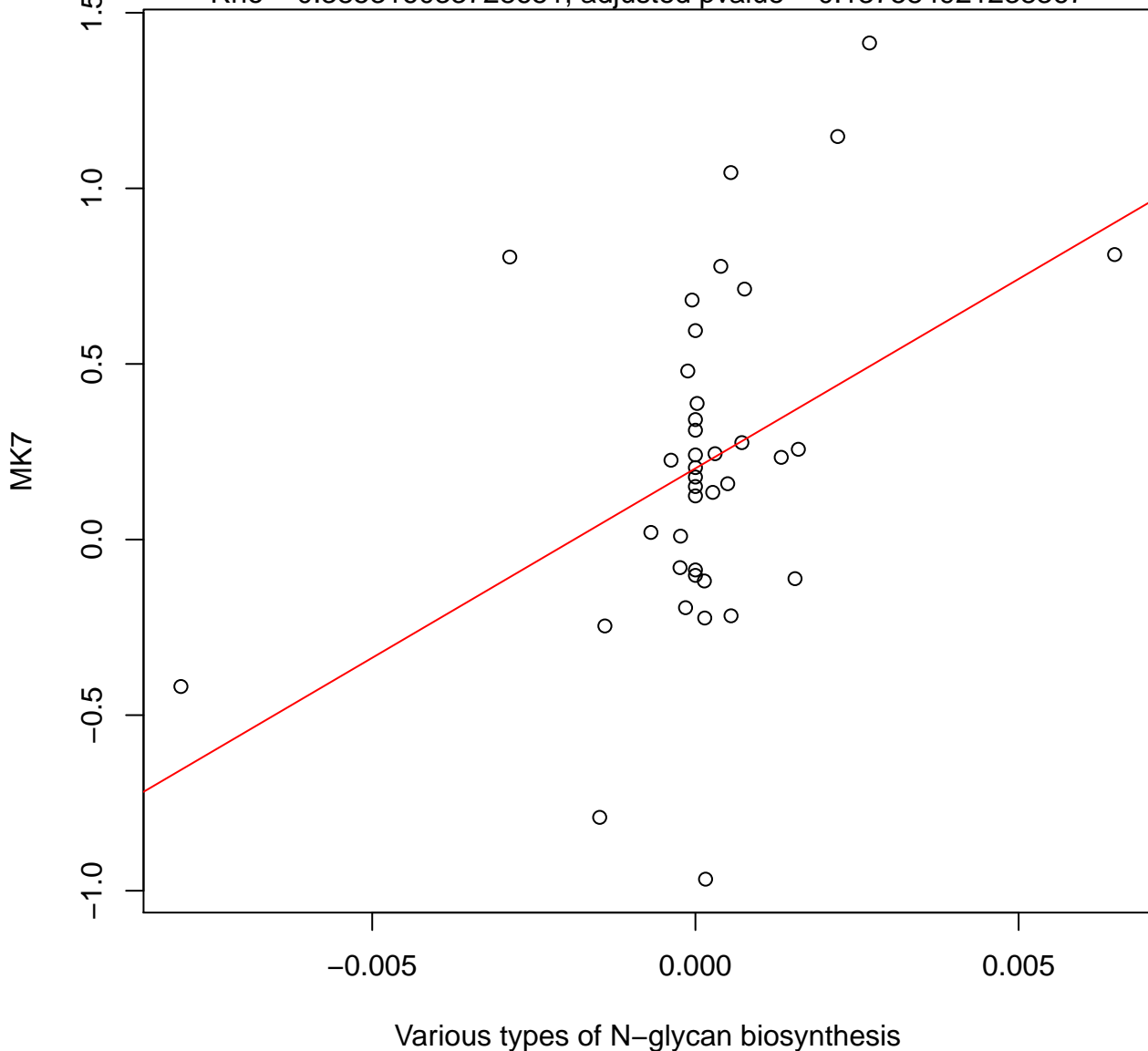
Rho = 0.449595141700405, adjusted pvalue = 0.114407057985949





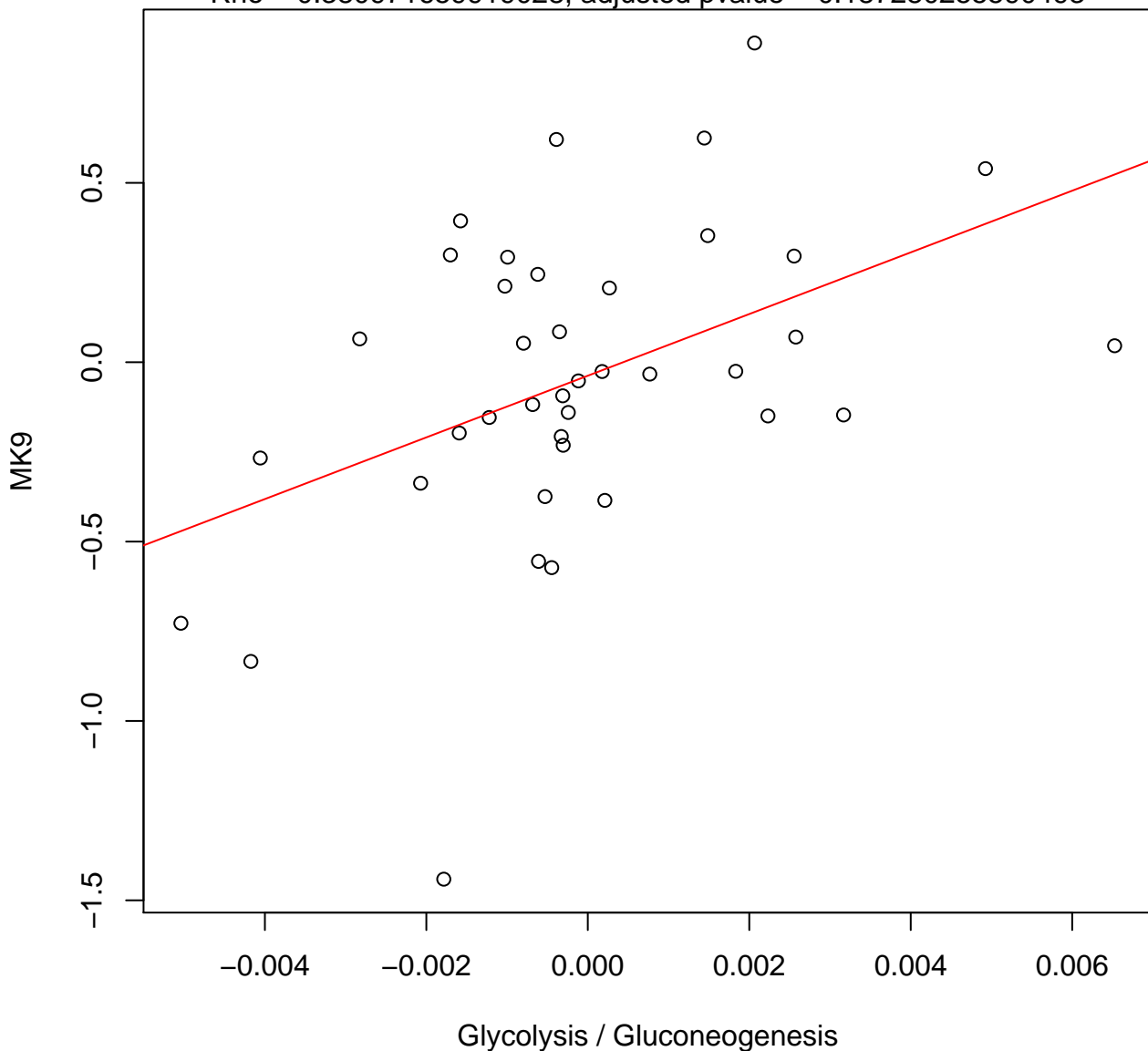
# Group A, Delta MK7 ~ Delta Various types of N-glycan biosynthesis

Rho = 0.385316033728651, adjusted pvalue = 0.137584921238367



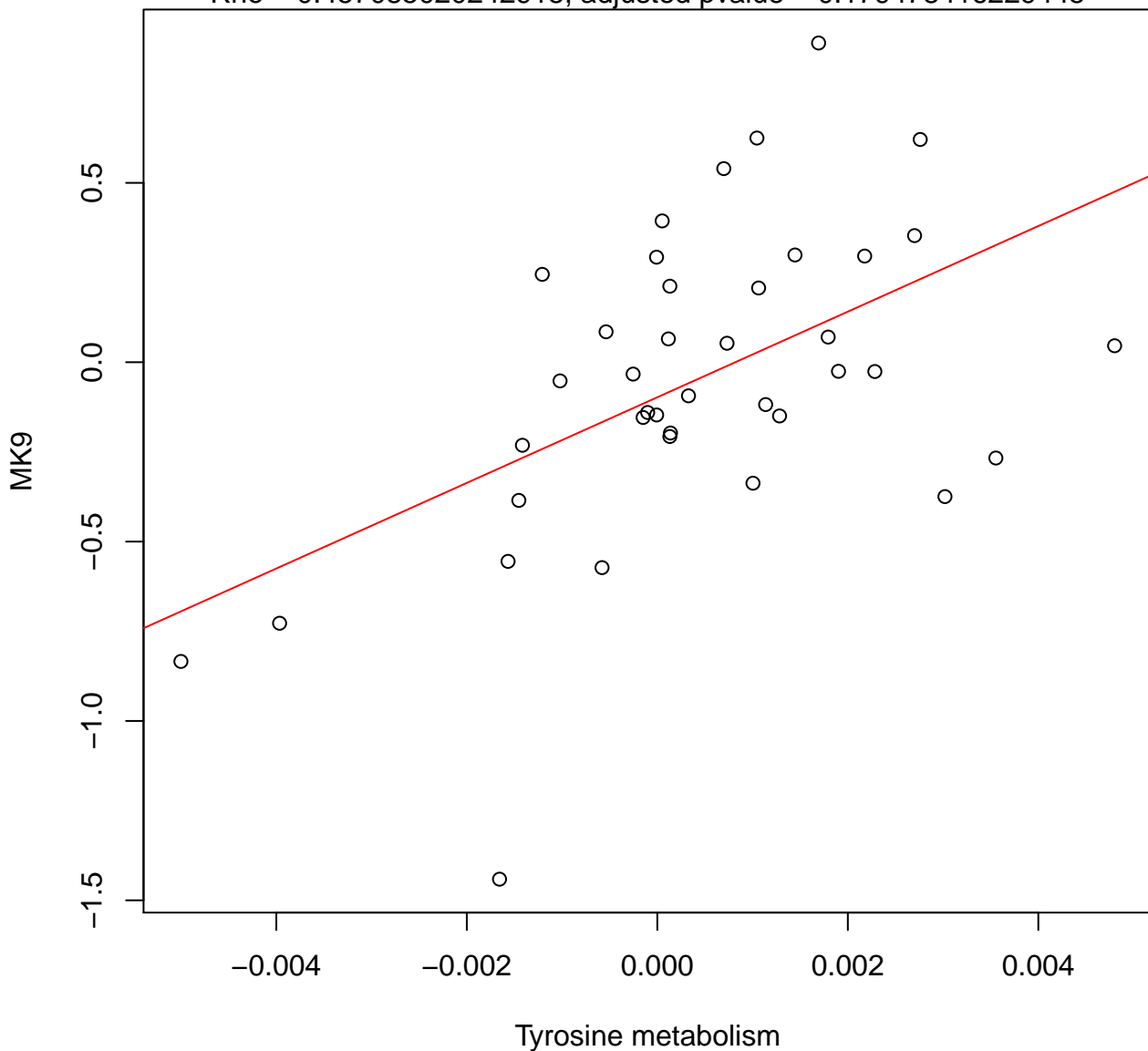
# Group A, Delta MK9 ~ Delta Glycolysis / Gluconeogenesis

Rho = 0.380971659919028, adjusted pvalue = 0.187280255590493



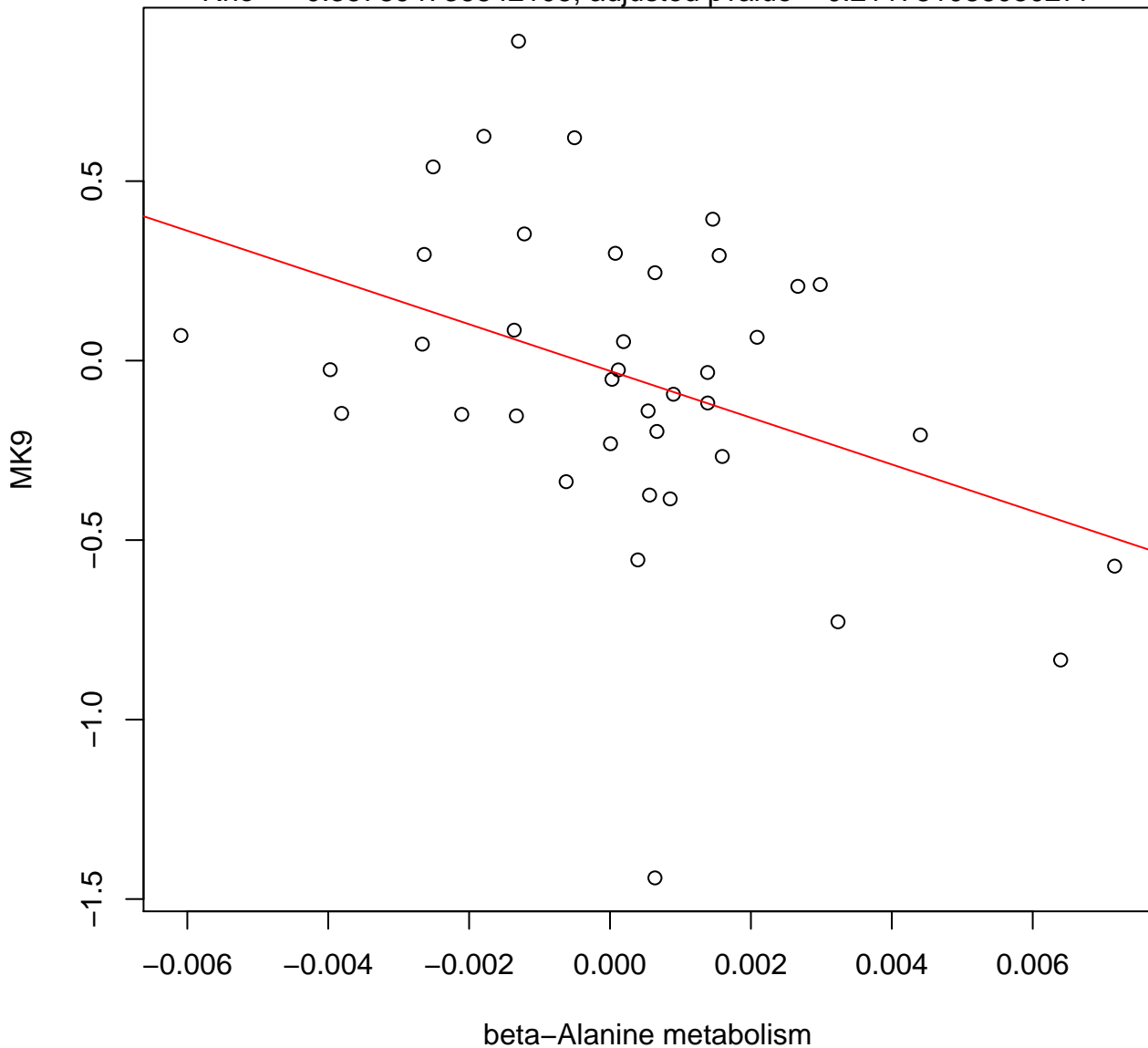
# Group A, Delta MK9 ~ Delta Tyrosine metabolism

Rho = 0.457085020242915, adjusted pvalue = 0.179478416229445



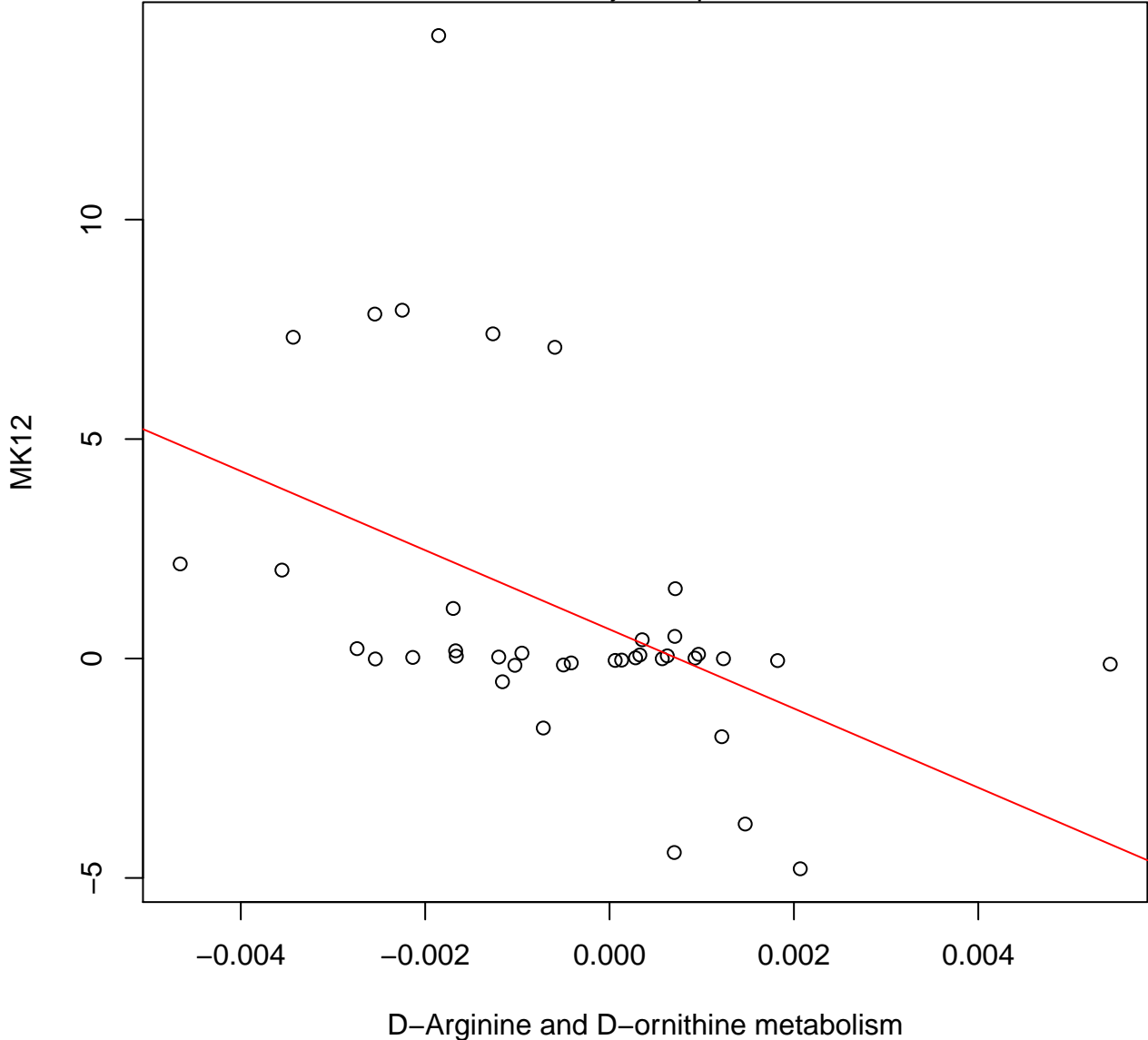
# Group A, Delta MK9 ~ Delta beta-Alanine metabolism

Rho =  $-0.357894736842105$ , adjusted pvalue =  $0.211781086050277$



**Group A, Delta MK12 ~ Delta D-Arginine and D-ornithine metabolism**

Rho = -0.564574898785425, adjusted pvalue = 0.0101462938766033



**Group A, Delta MK13 ~ Delta D-Arginine and D-ornithine metabolism**

Rho = -0.559643707382041, adjusted pvalue = 0.0118777729704735

