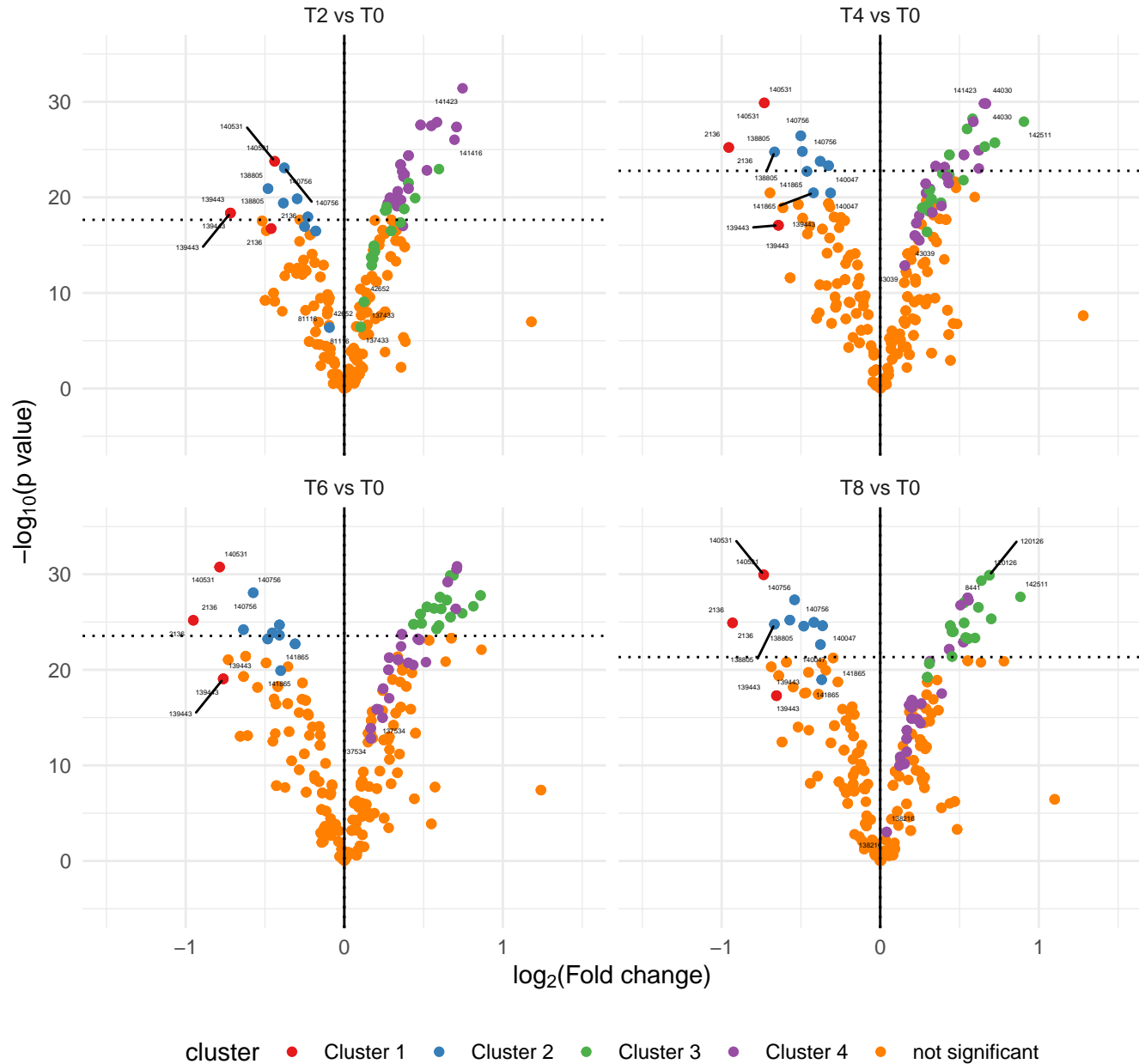
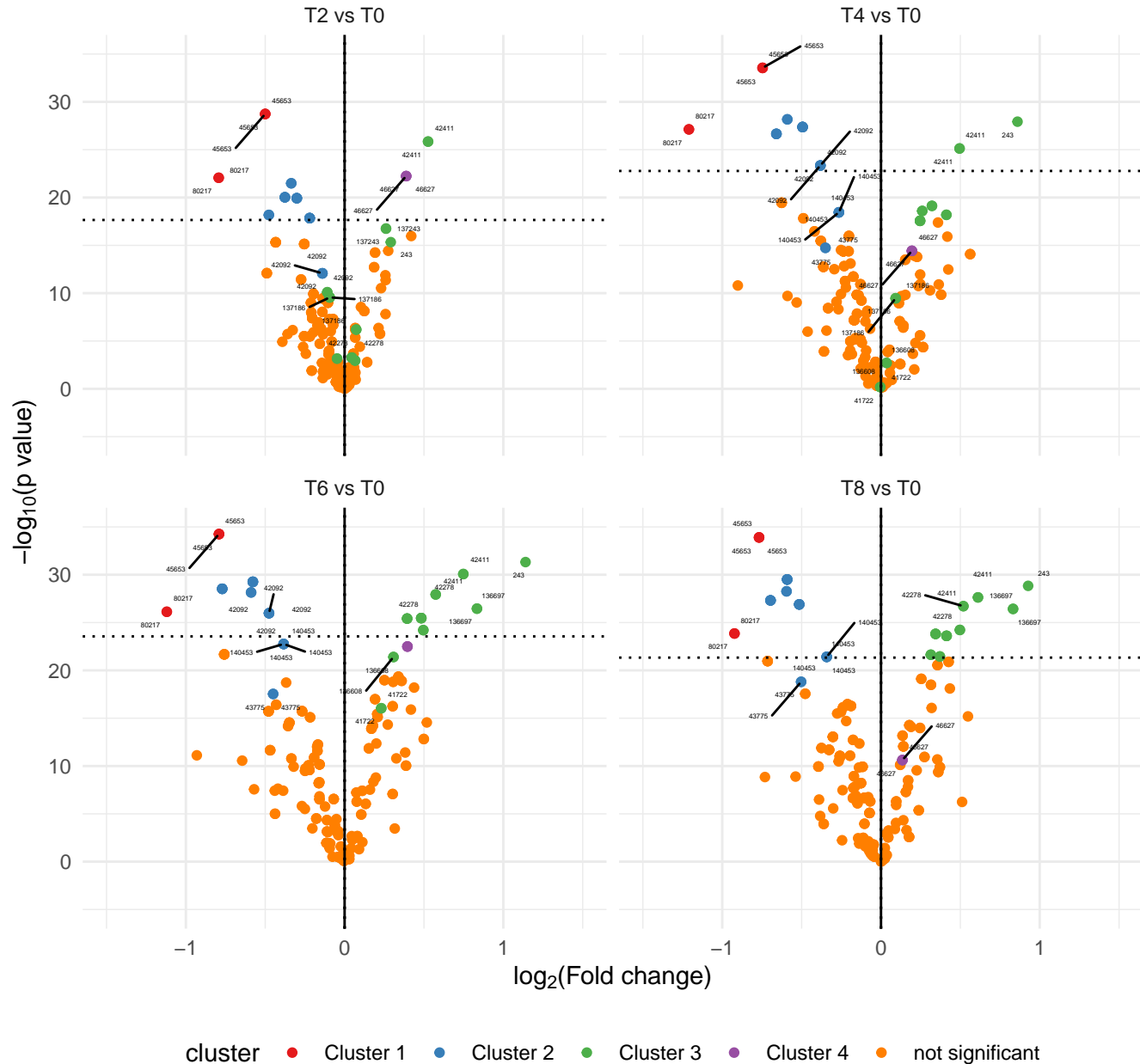


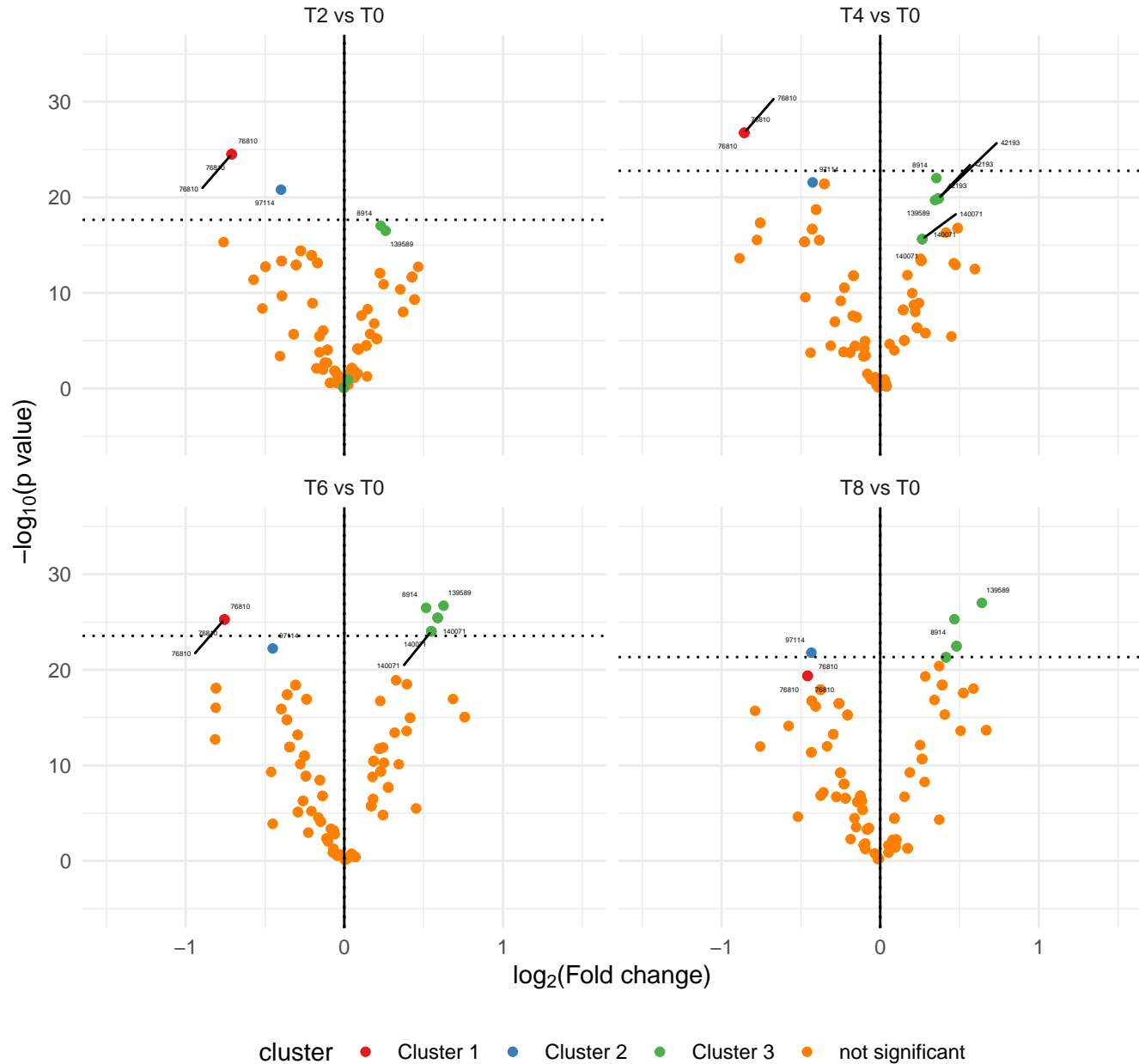
Amino acid transport and metabolism



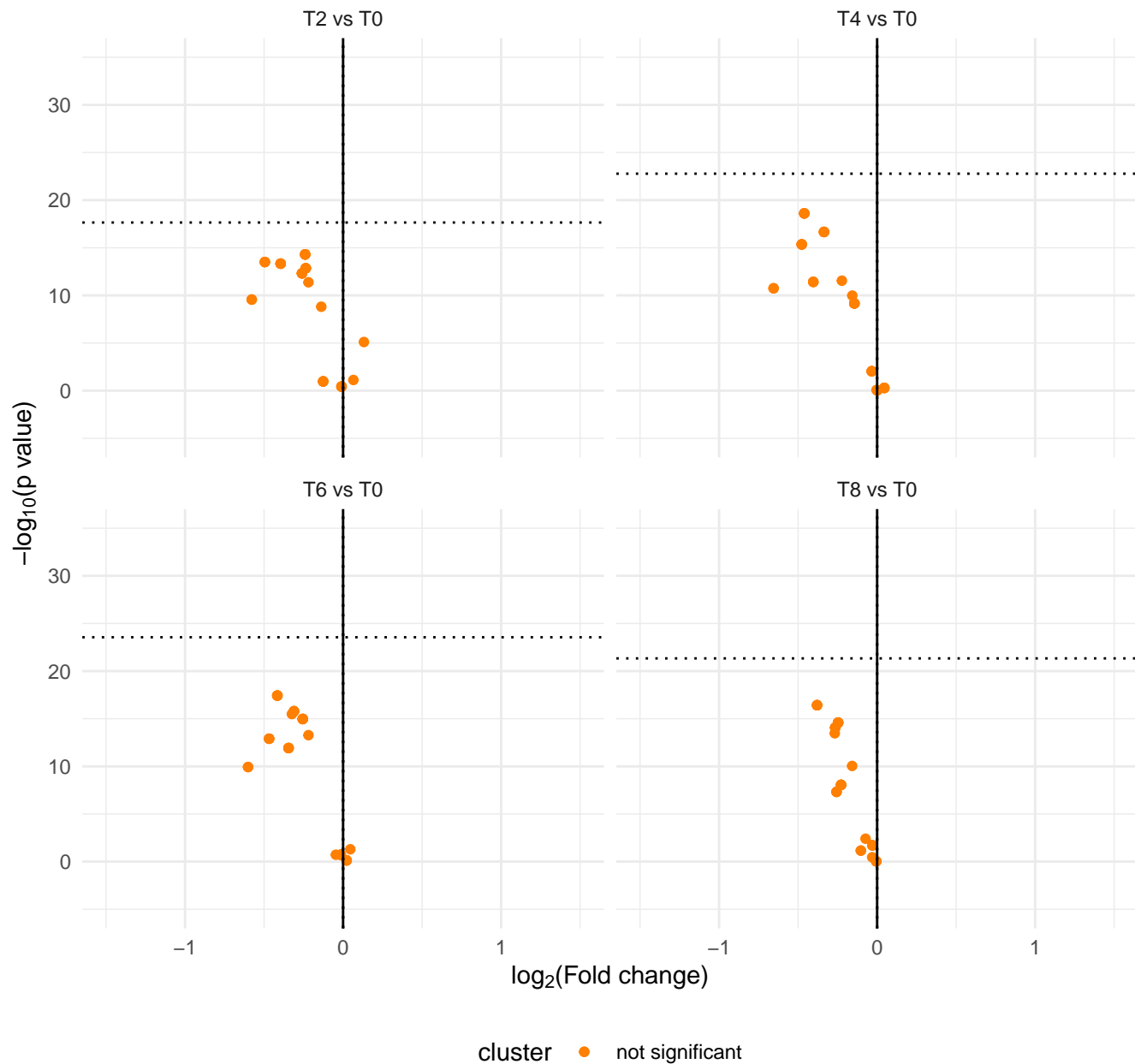
Carbohydrate transport and metabolism



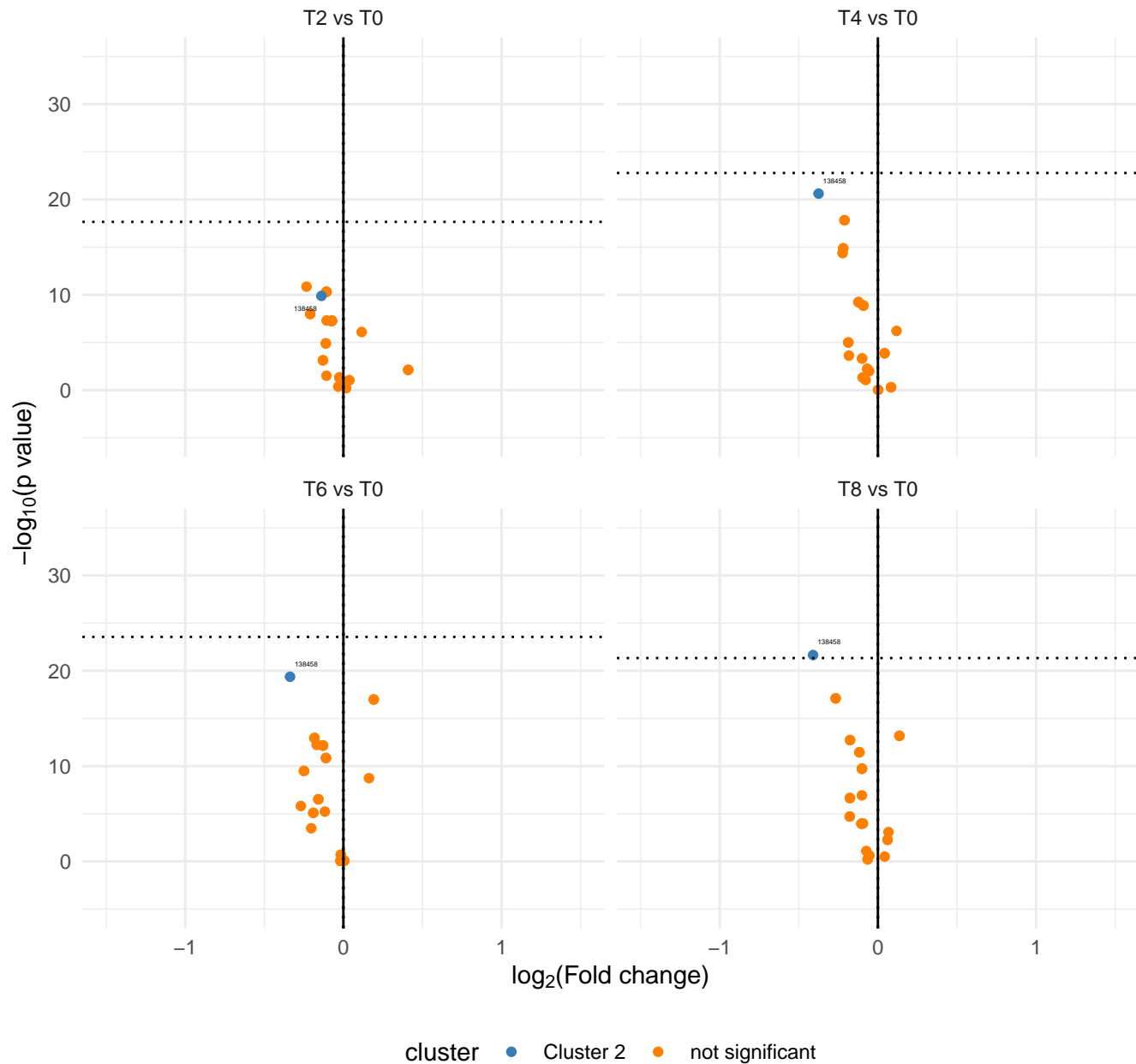
Cell cycle control, cell division, chromosome partitioning



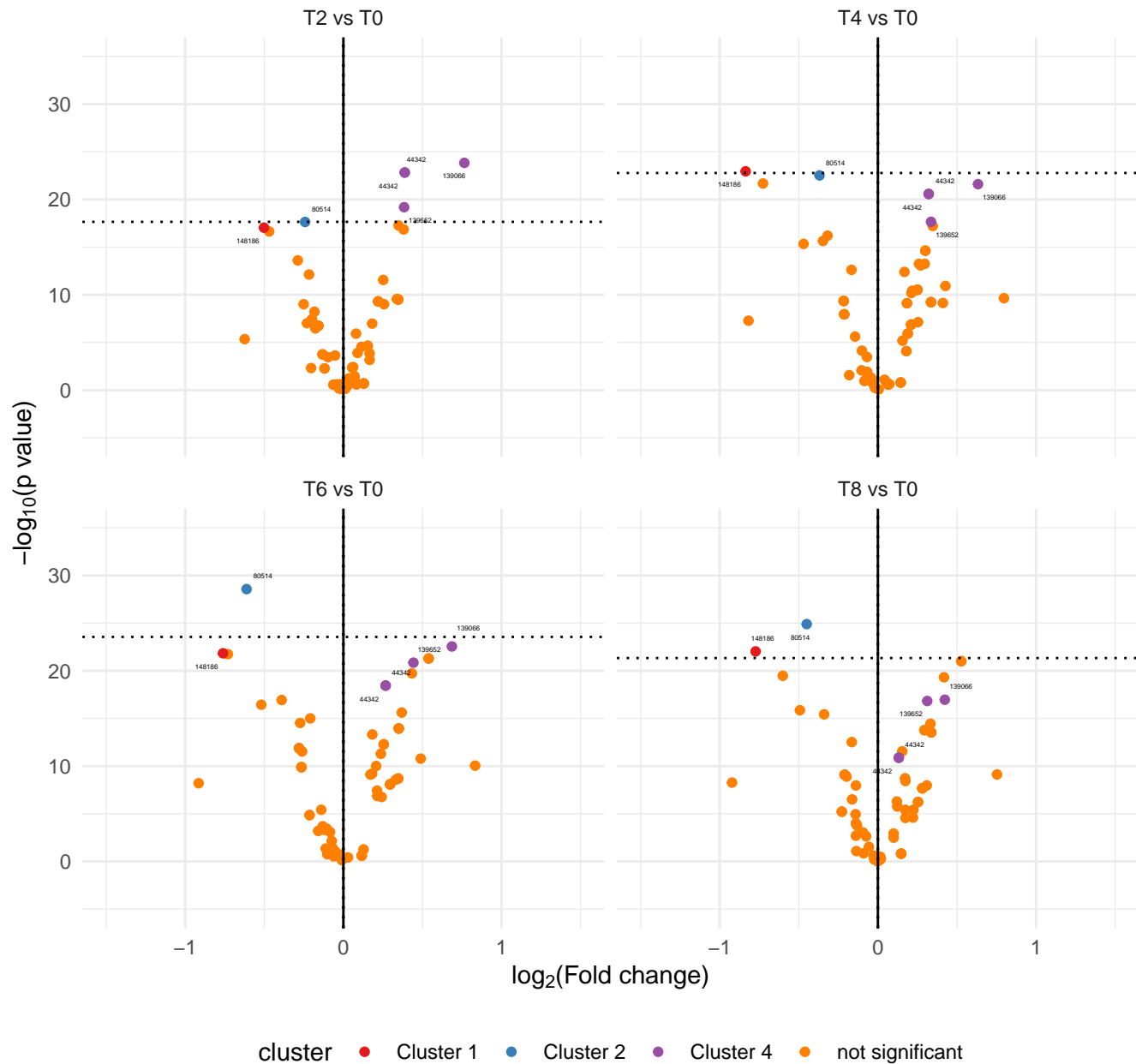
Cell motility



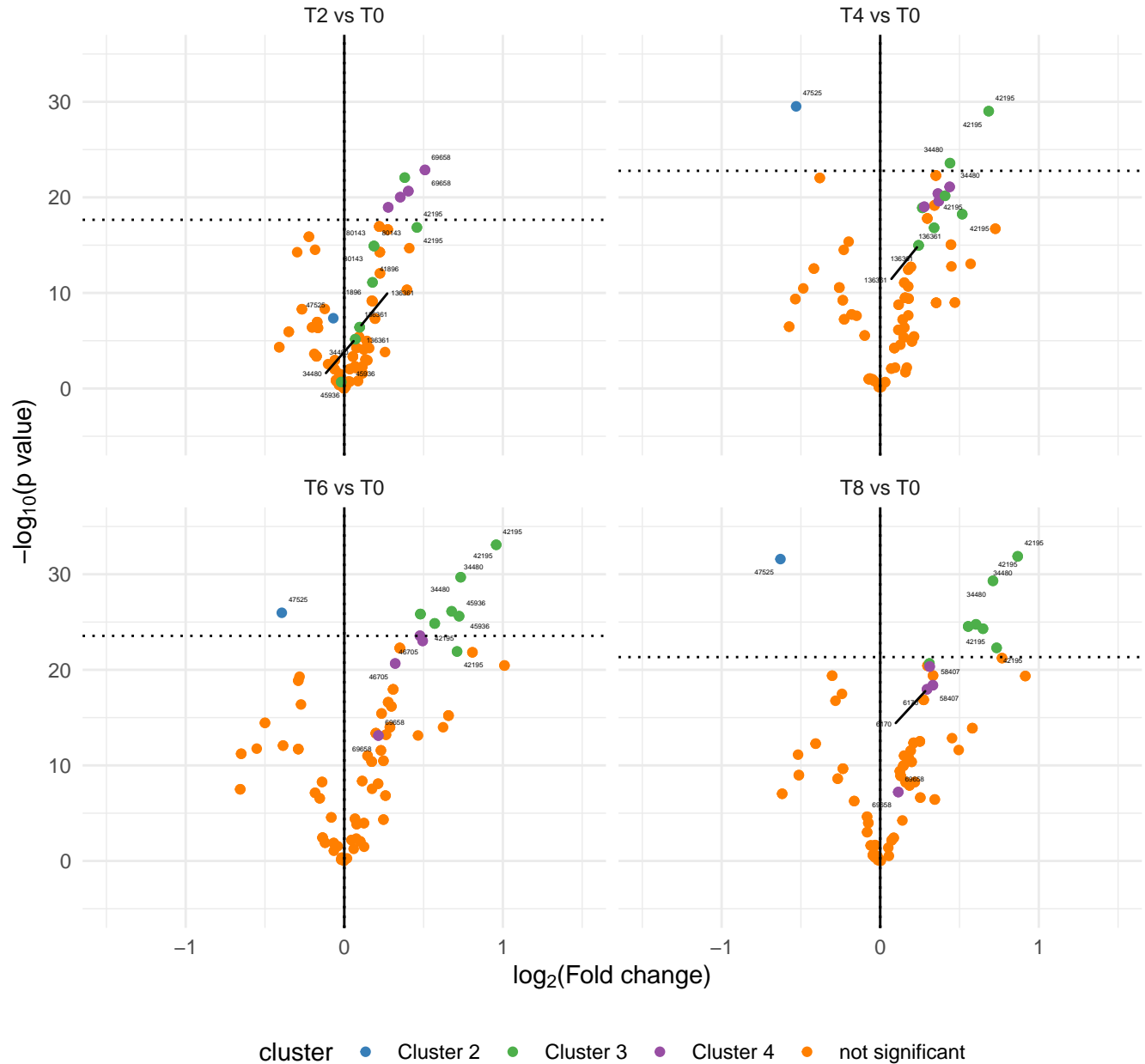
Cell wall/membrane/envelope biogenesis



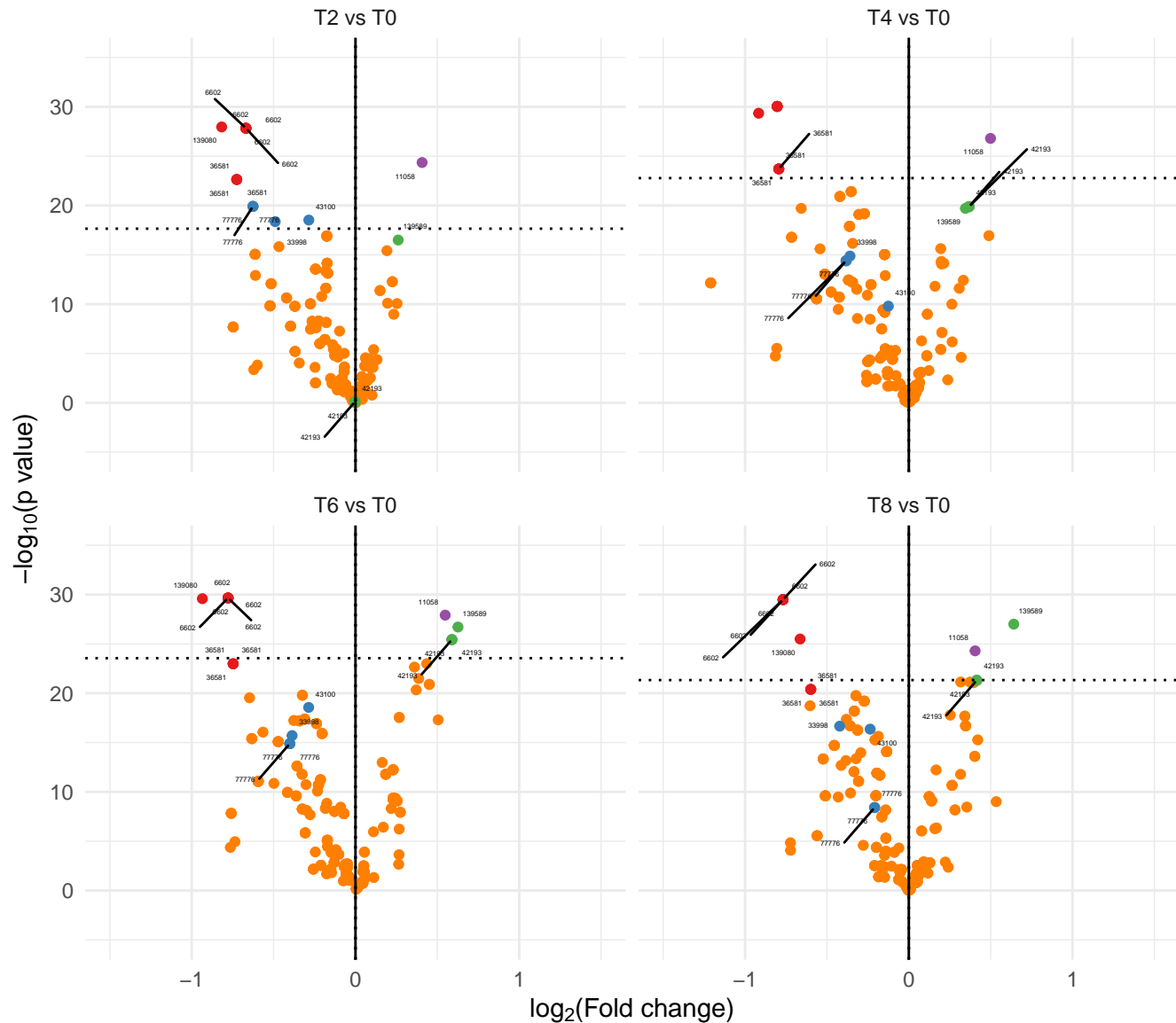
Chromatin structure and dynamics



Coenzyme transport and metabolism

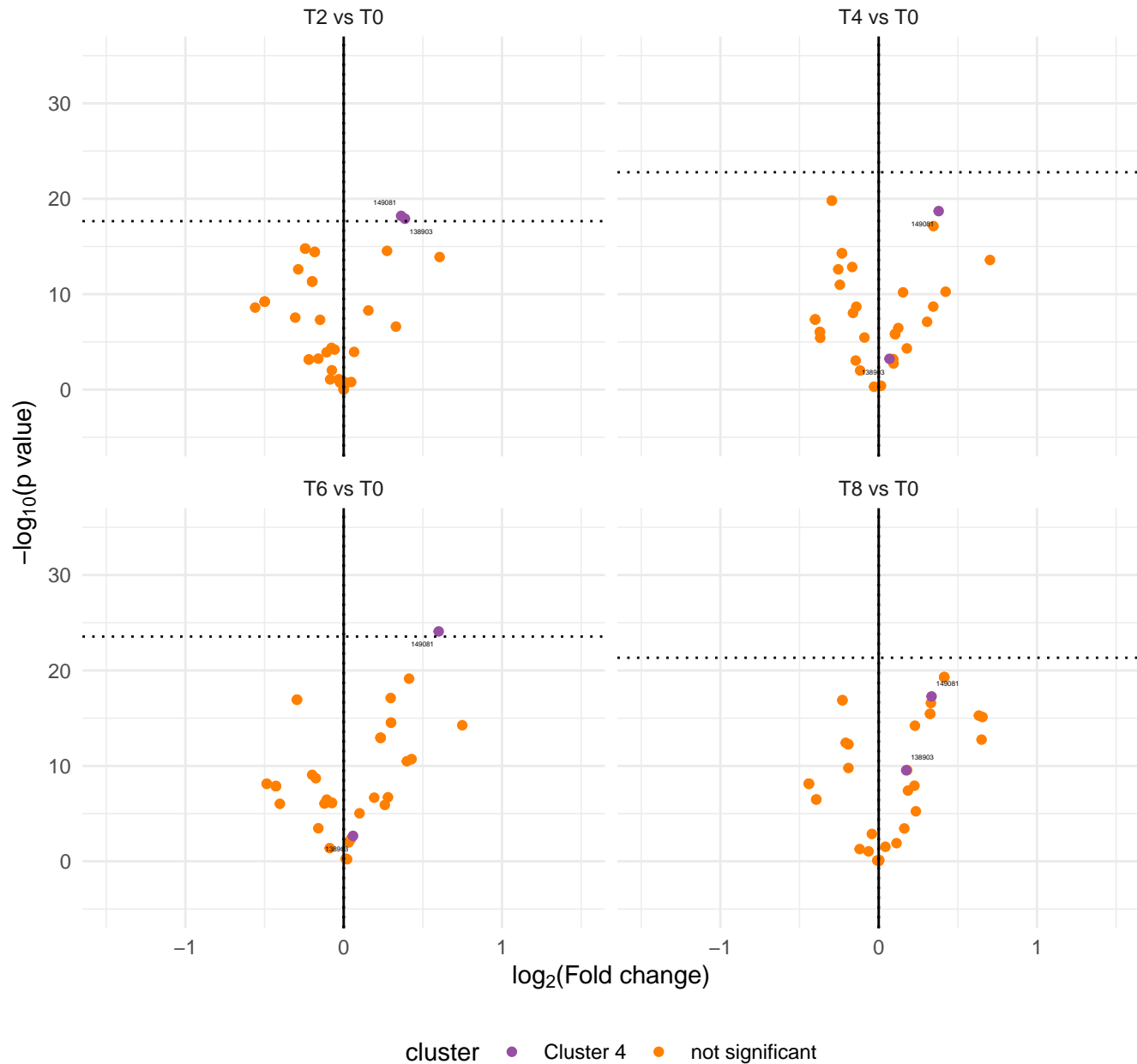


Cytoskeleton

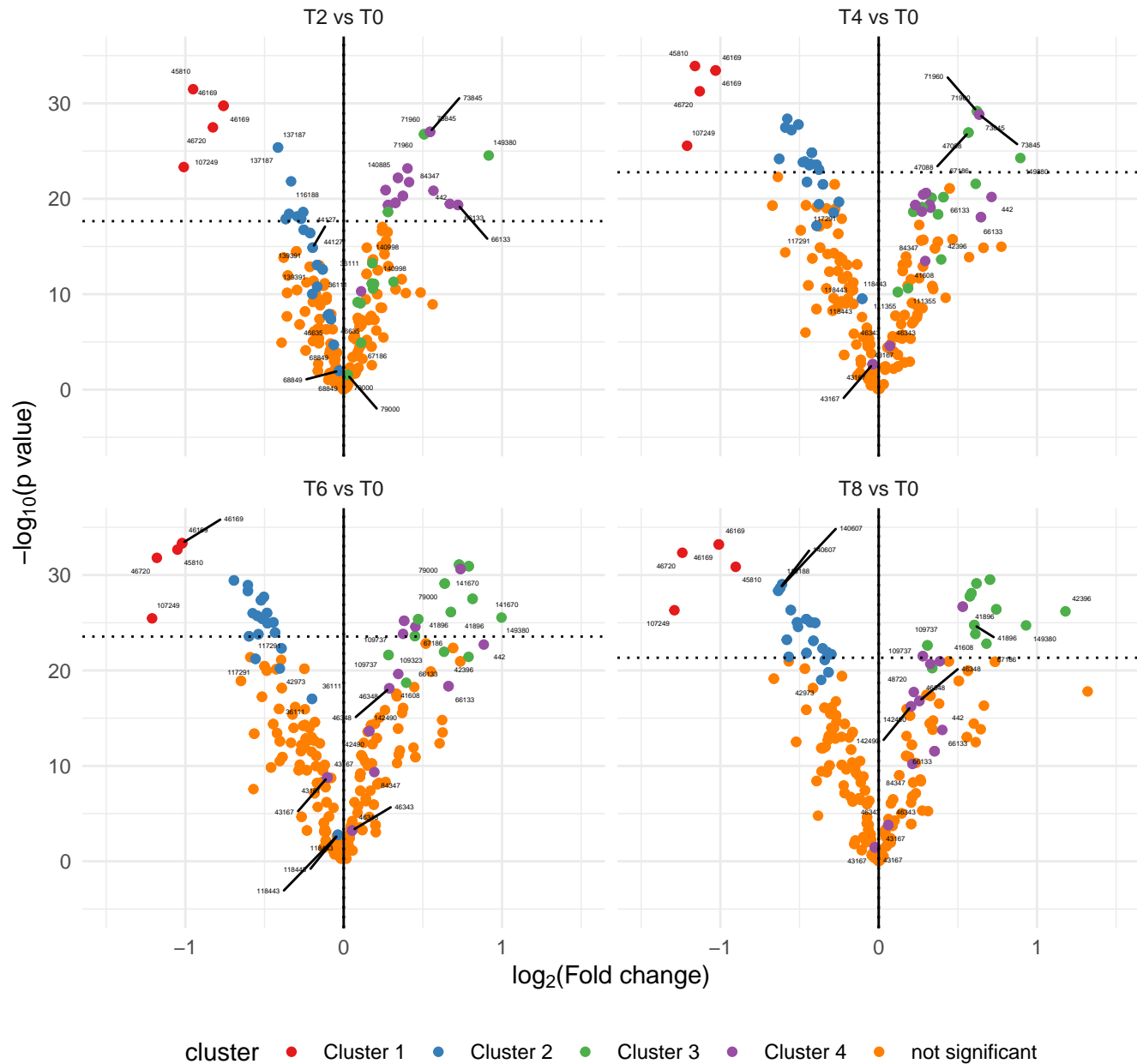


cluster ● Cluster 1 ● Cluster 2 ● Cluster 3 ● Cluster 4 ● not significant

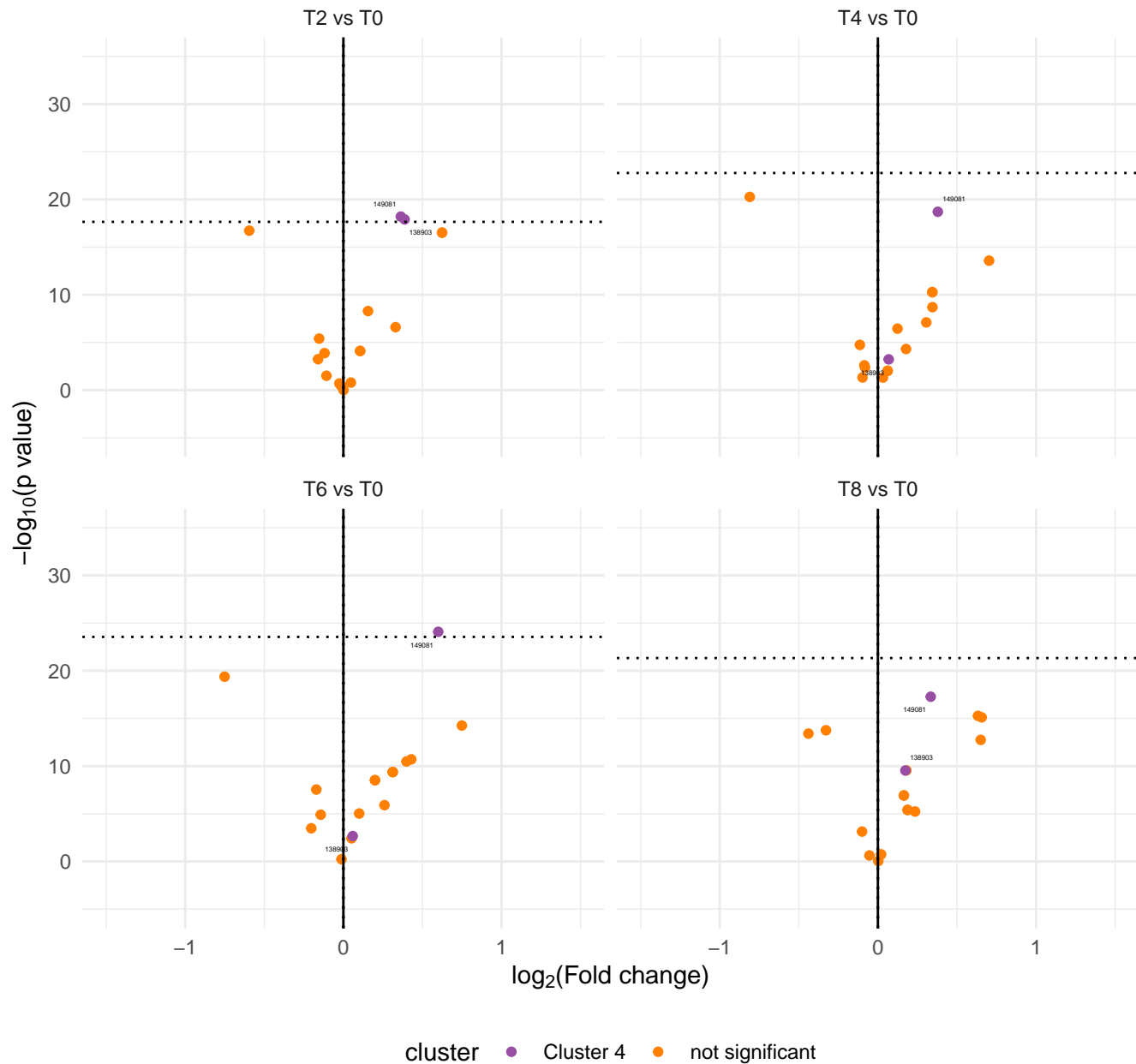
Defense mechanisms



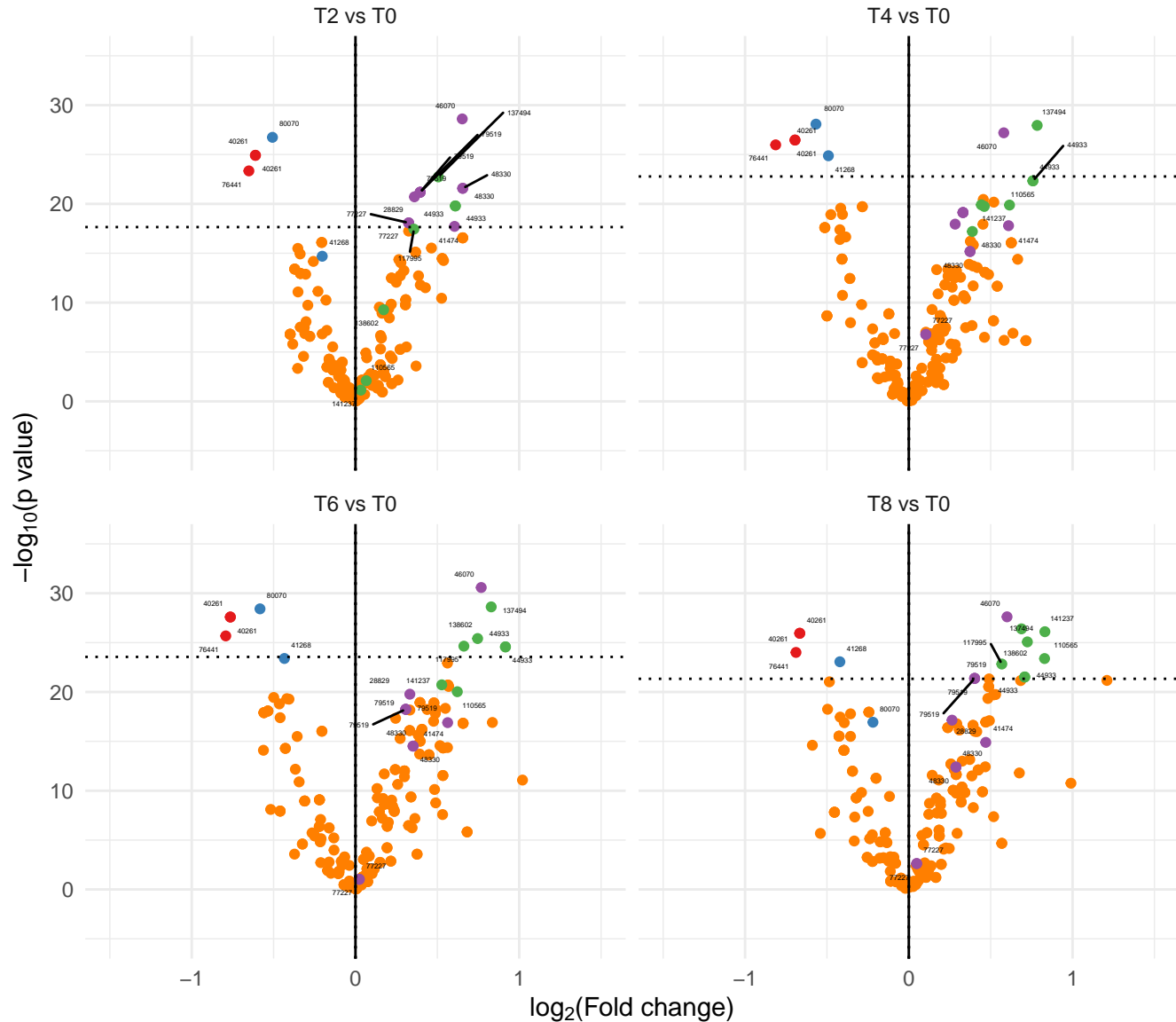
Energy production and conversion



Extracellular structures

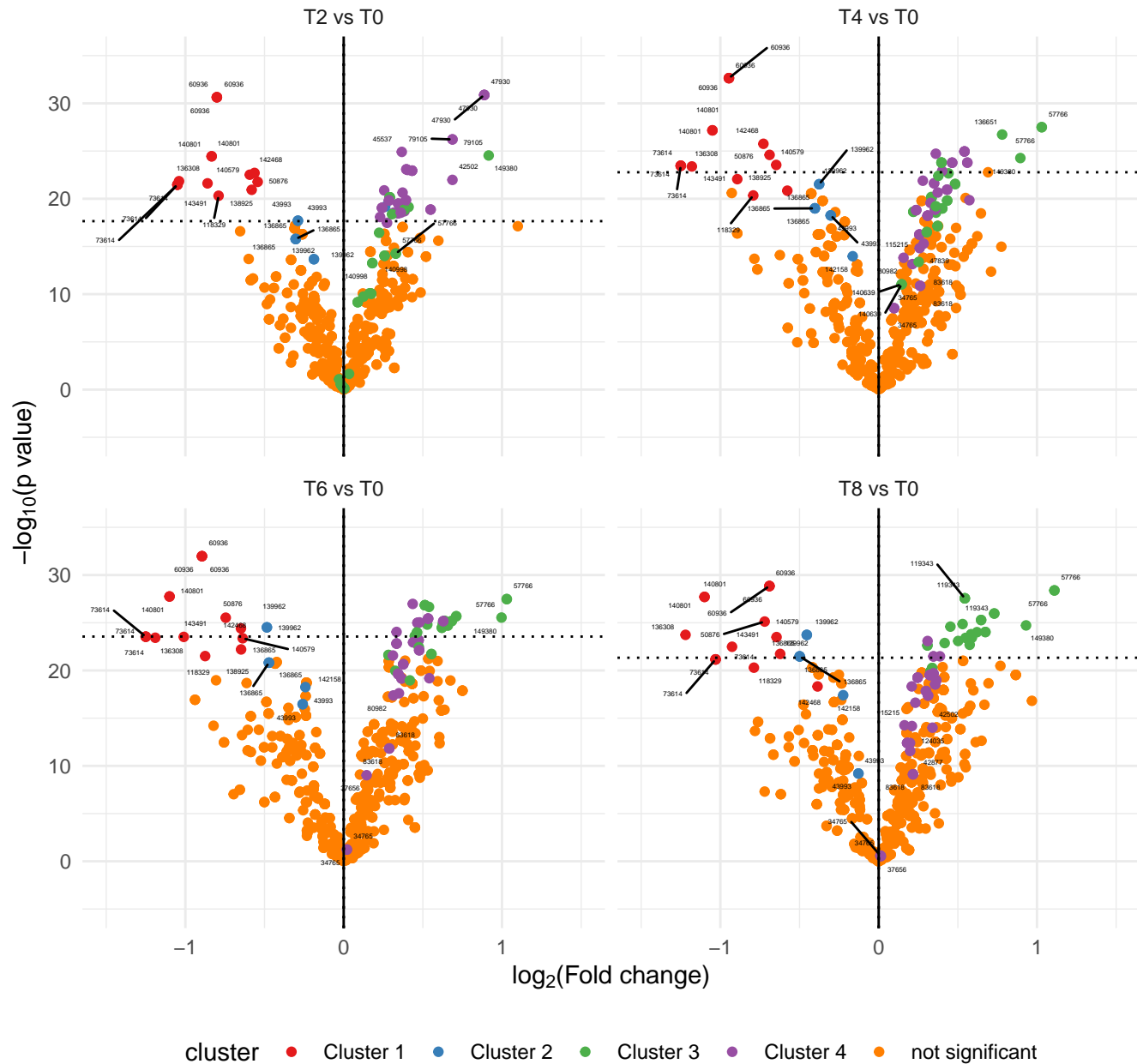


Function unknown

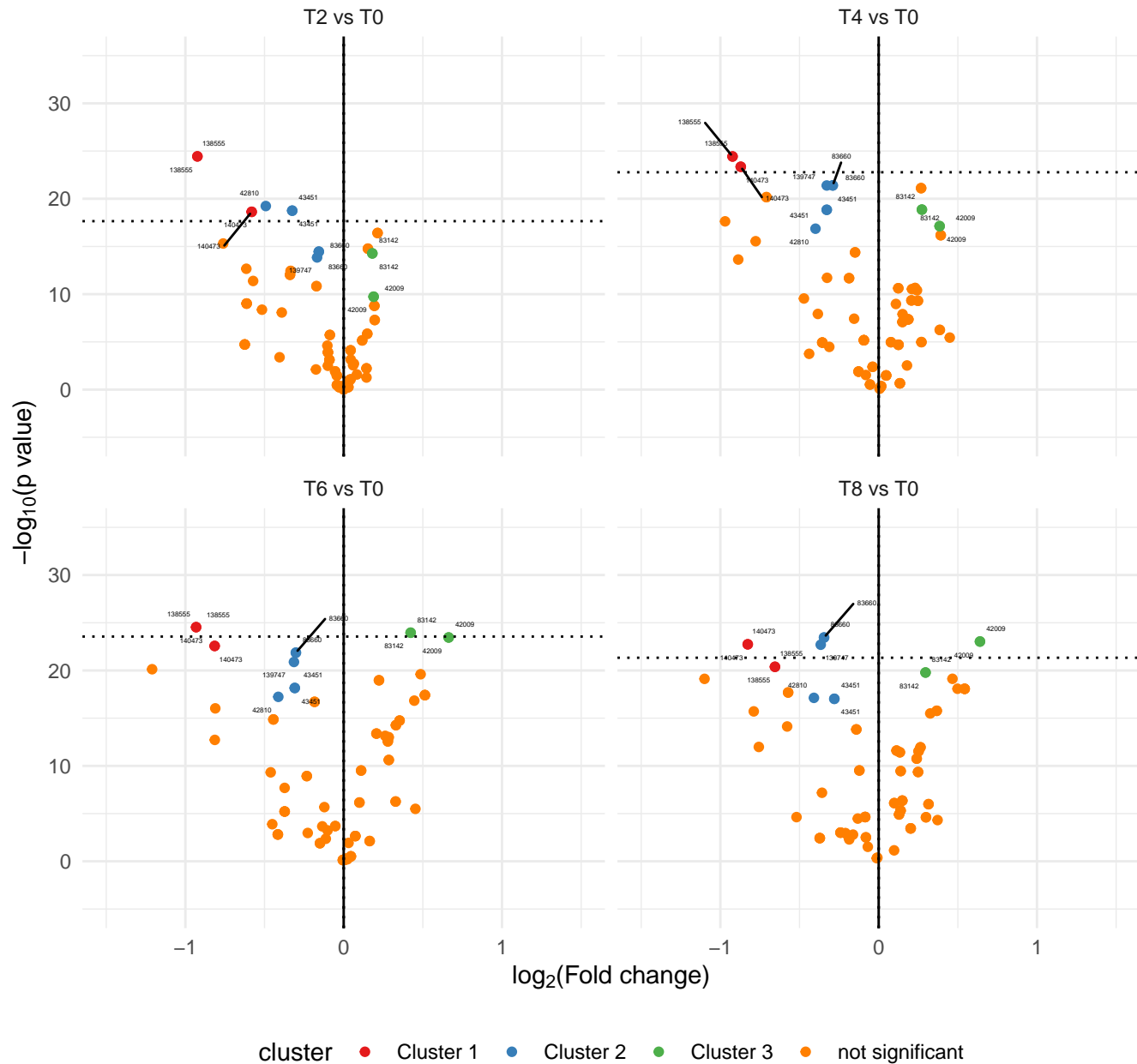


cluster ● Cluster 1 ● Cluster 2 ● Cluster 3 ● Cluster 4 ● not significant

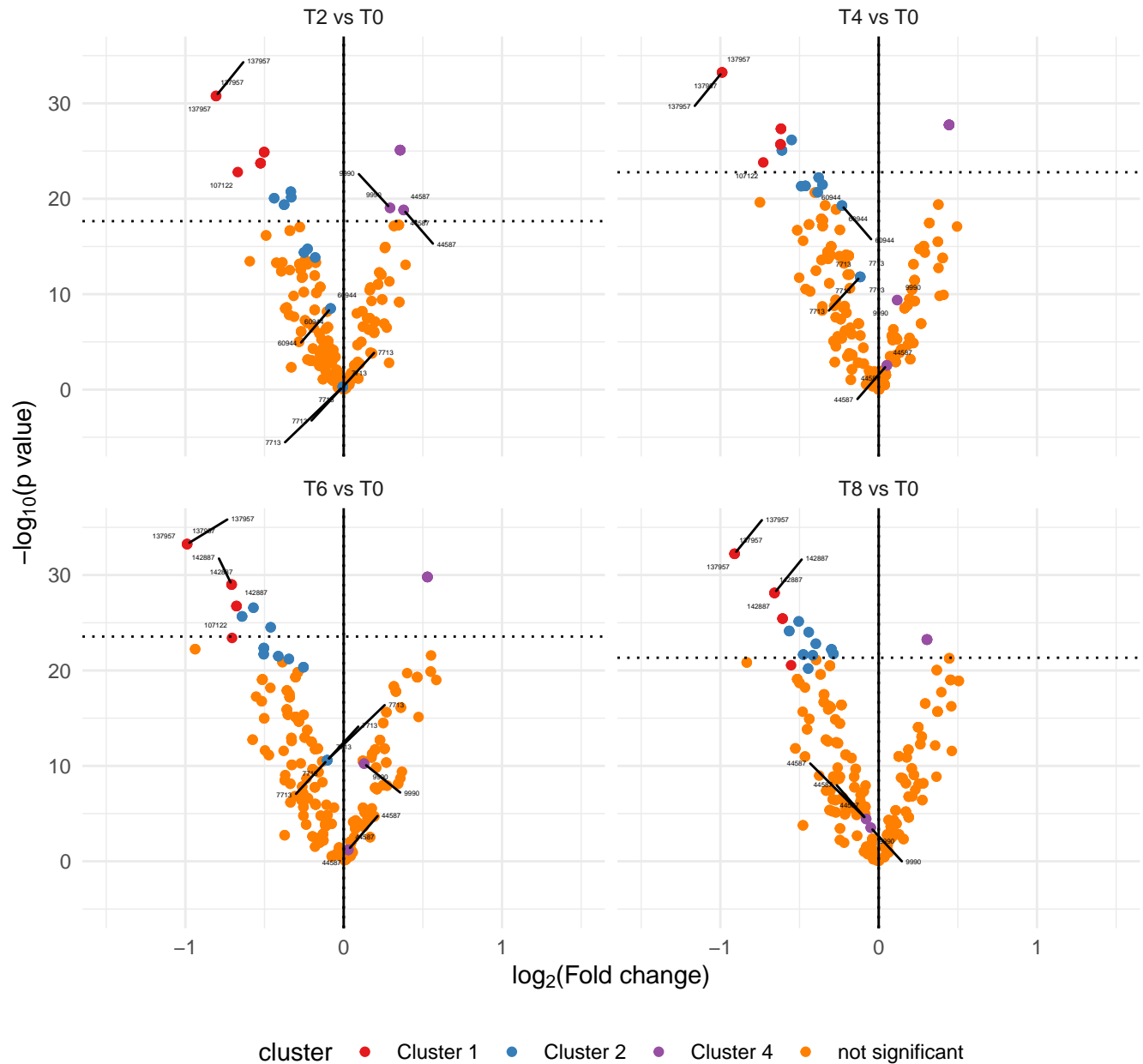
General function prediction only



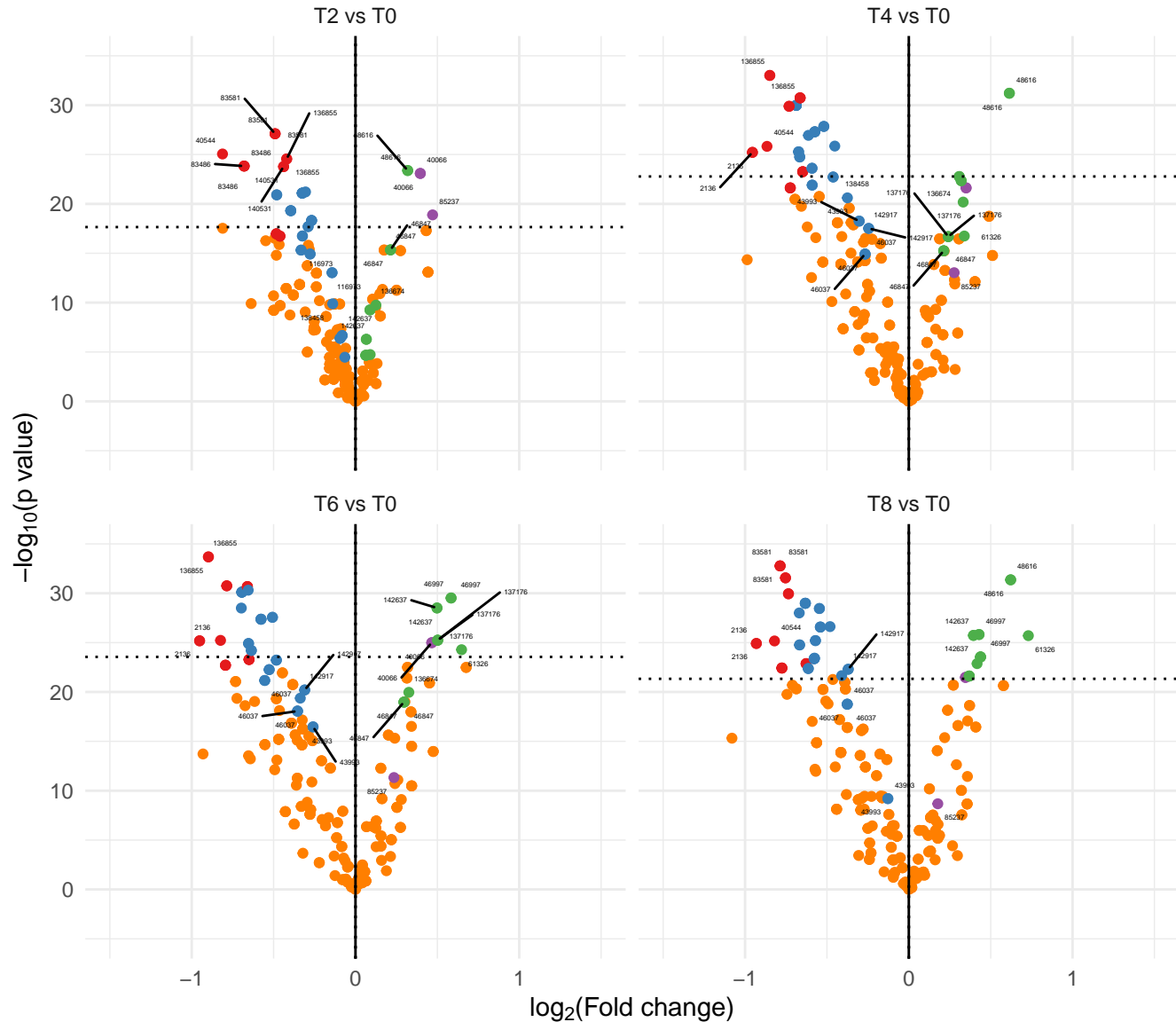
Inorganic ion transport and metabolism



Intracellular trafficking, secretion, and vesicular transport

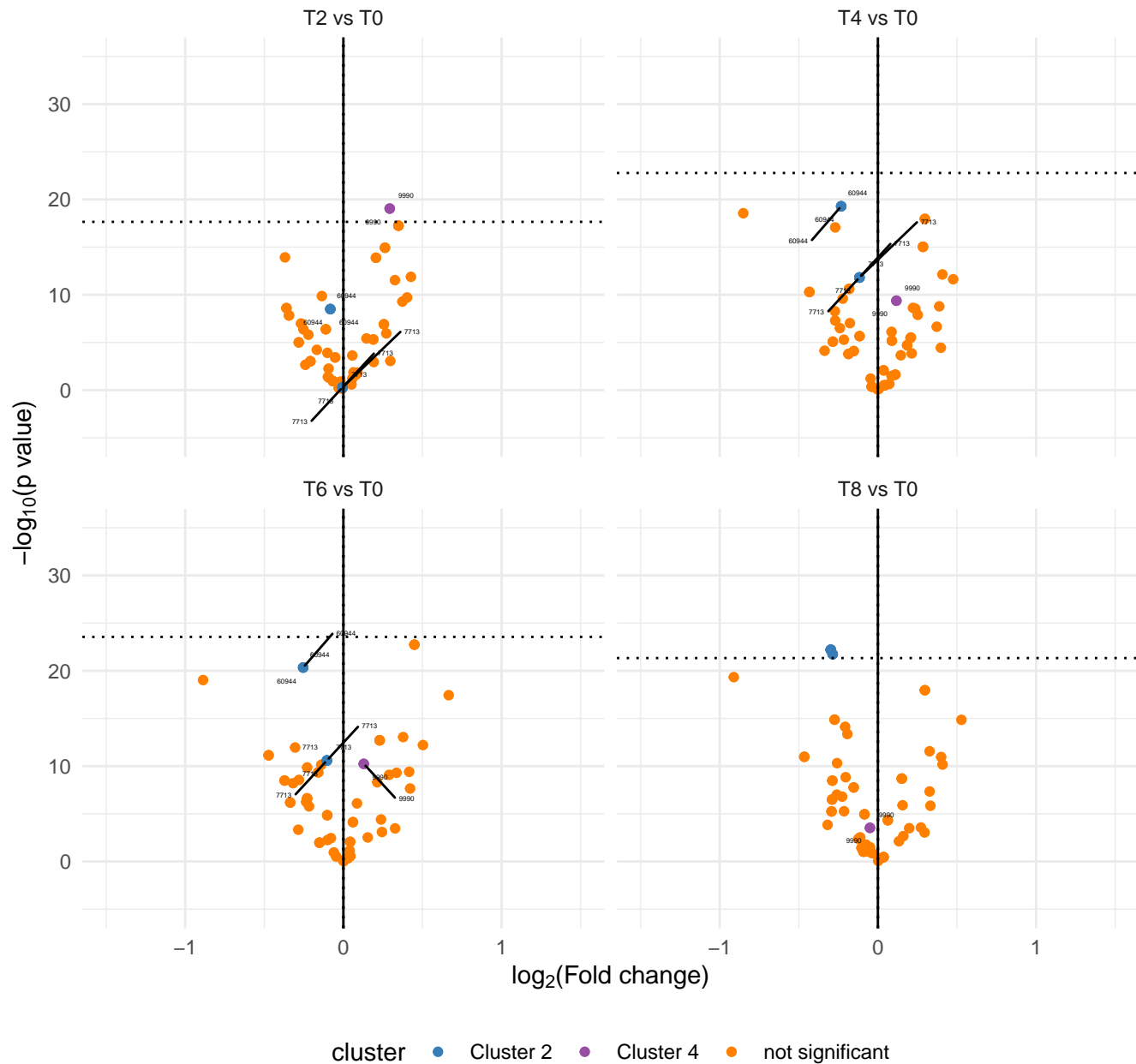


Lipid transport and metabolism

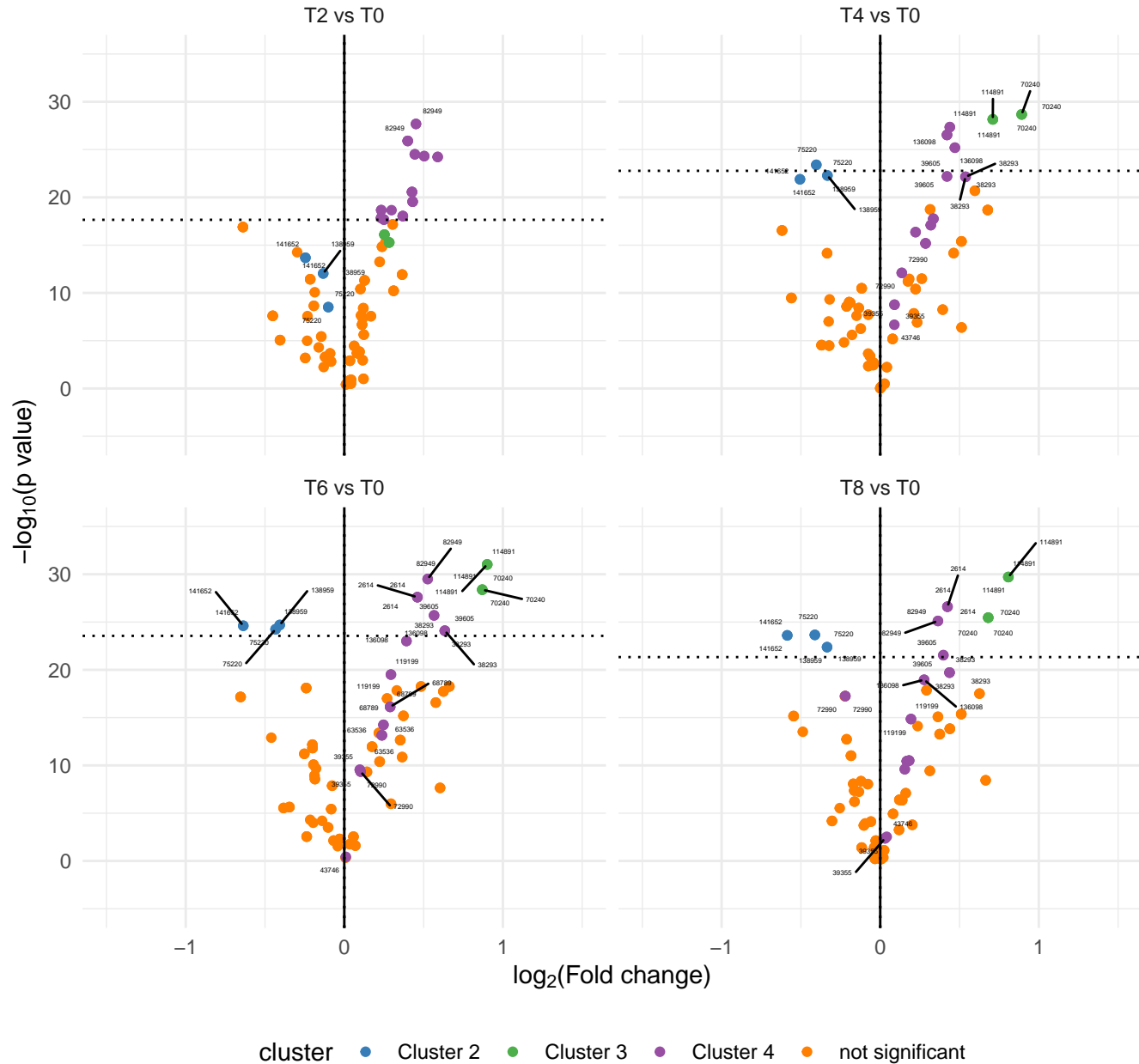


cluster ● Cluster 1 ● Cluster 2 ● Cluster 3 ● Cluster 4 ● not significant

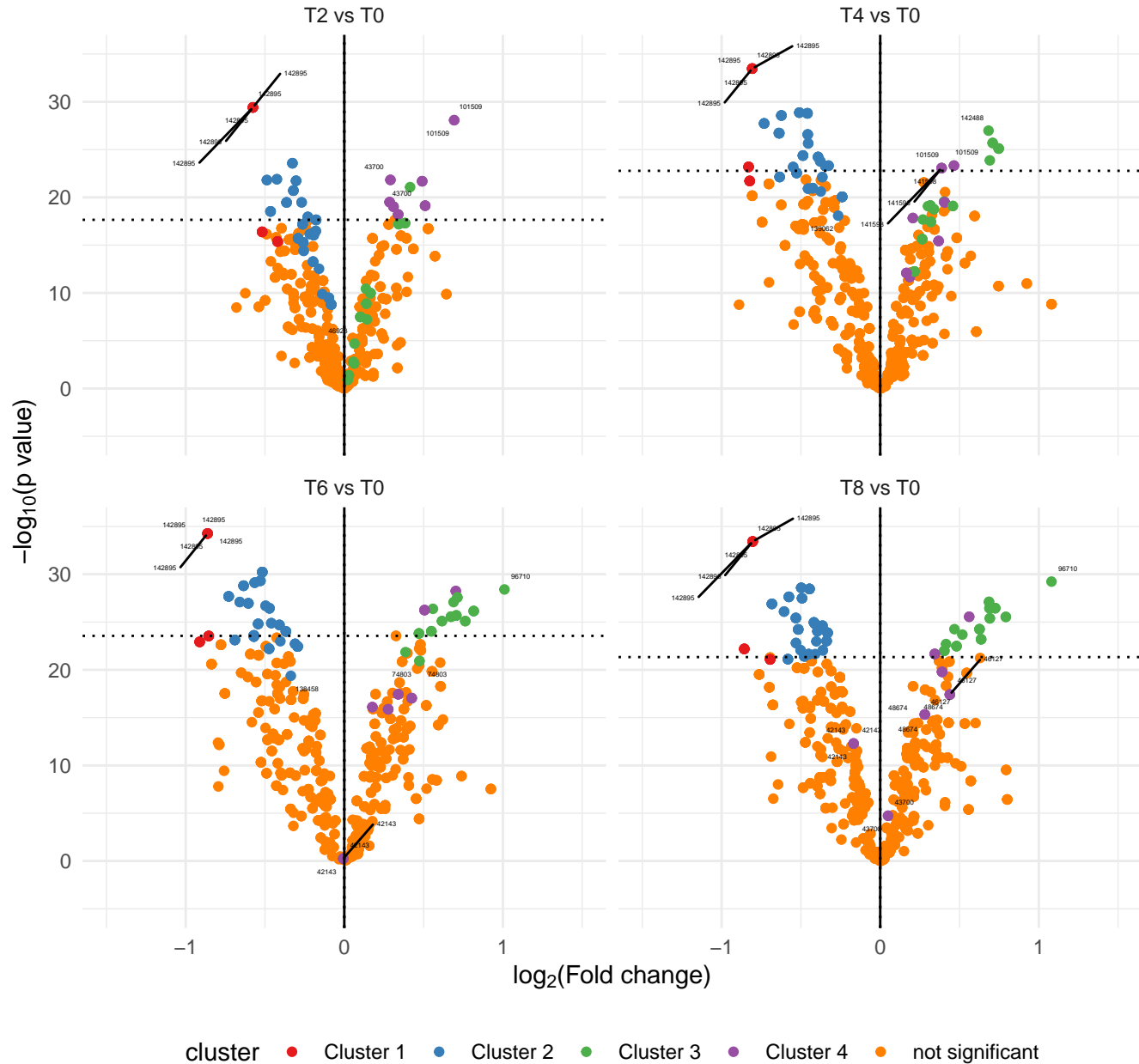
Nuclear structure



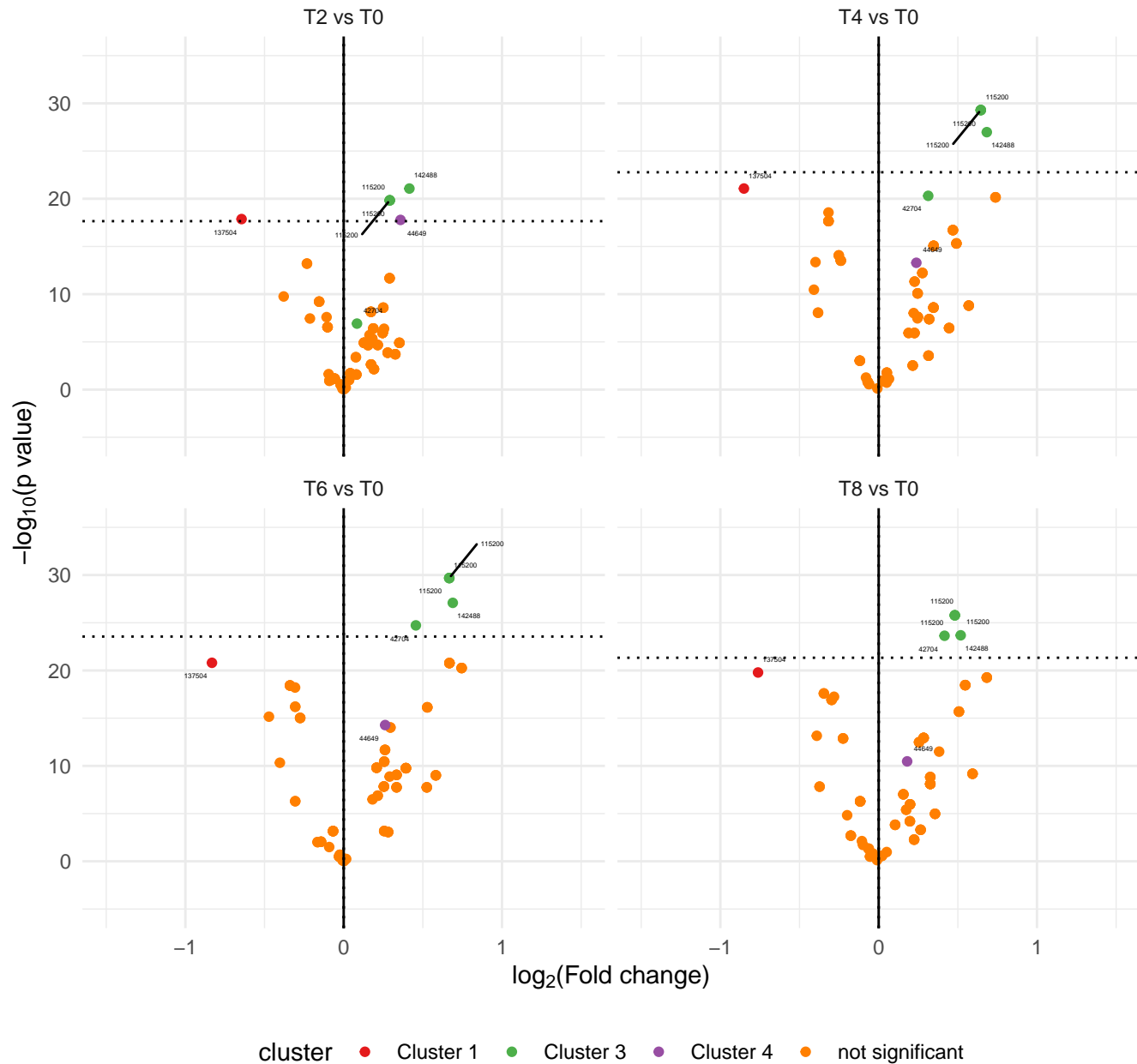
Nucleotide transport and metabolism



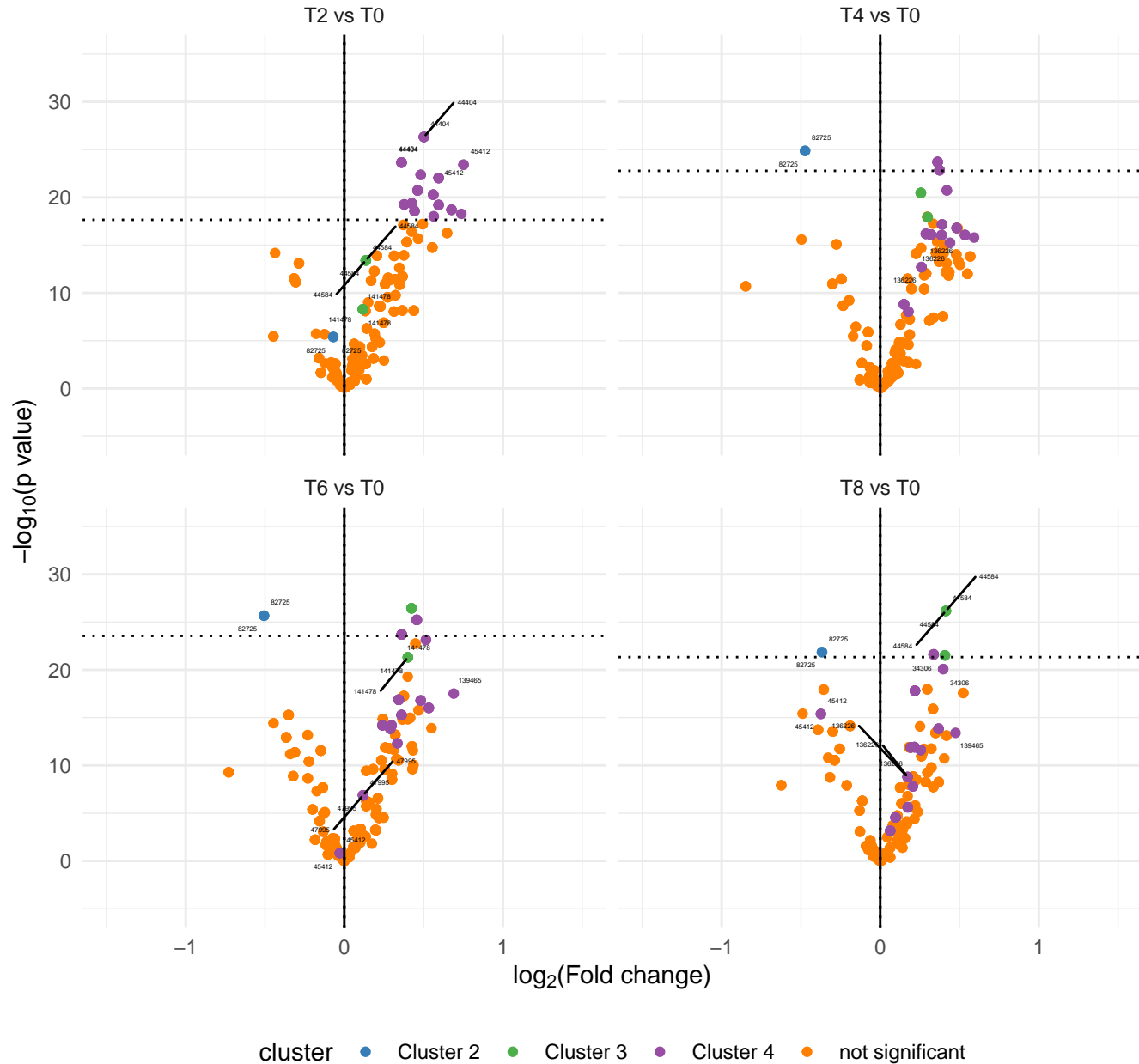
Posttranslational modification, protein turnover, chaperones



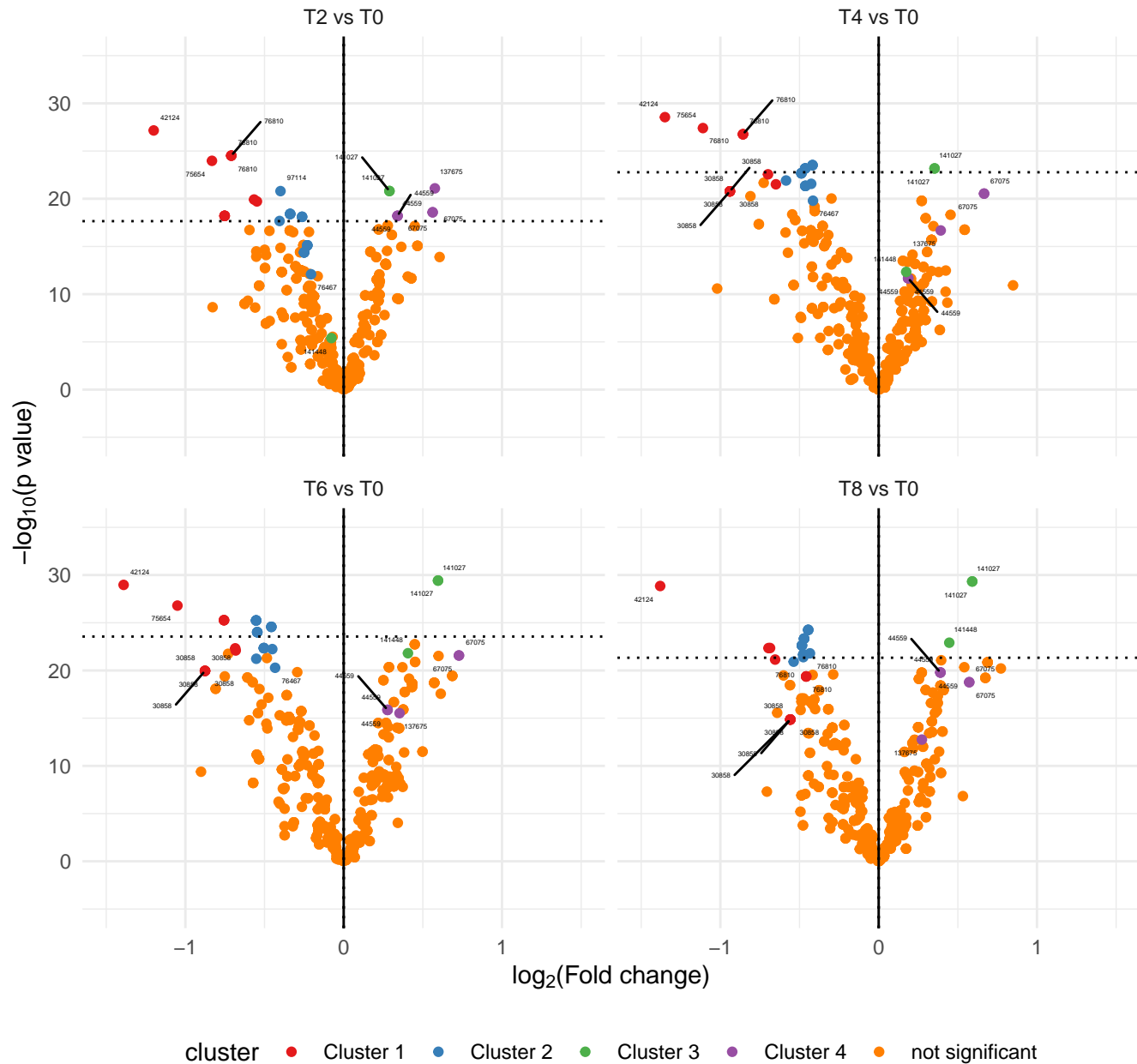
Replication, recombination and repair



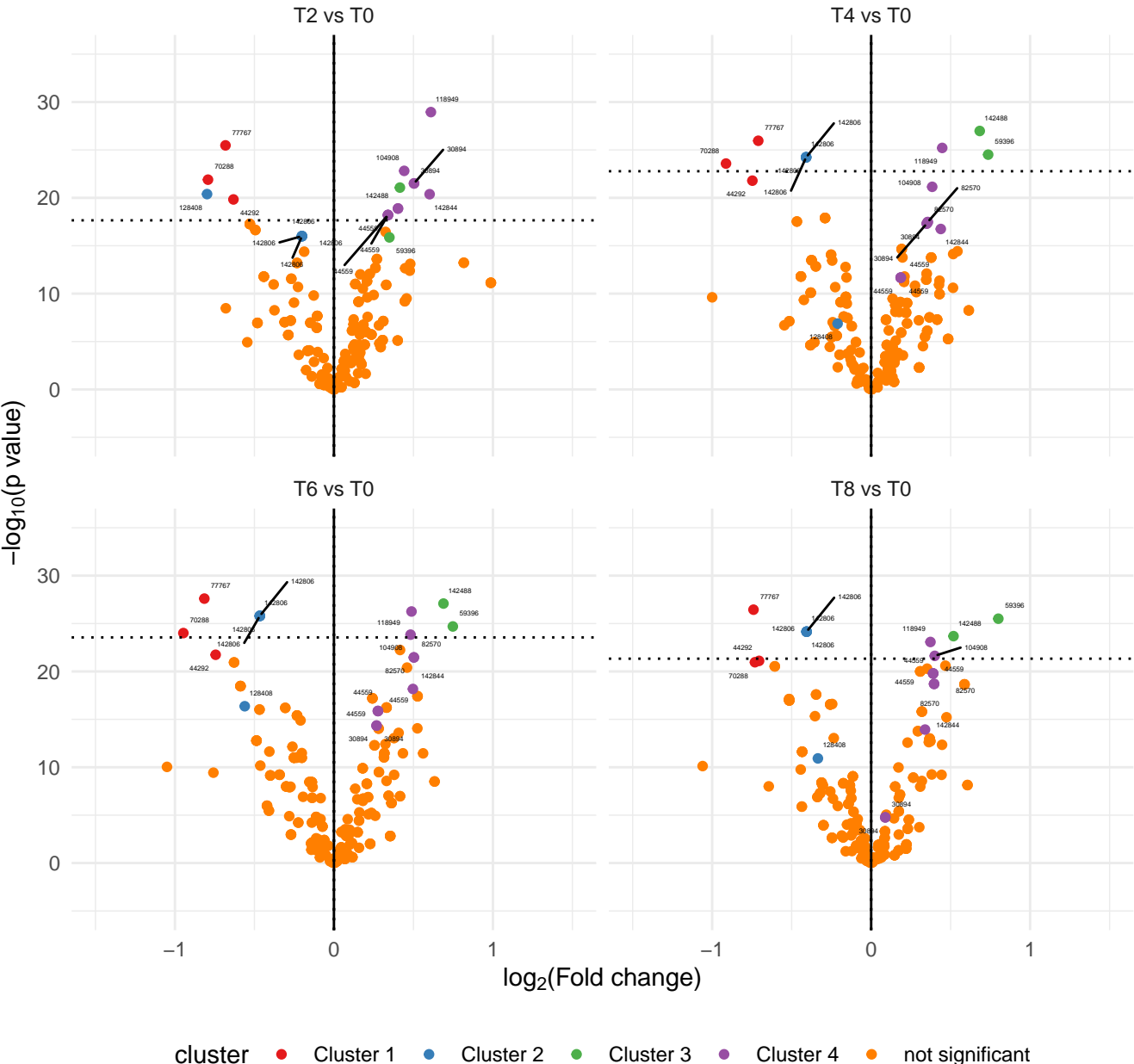
RNA processing and modification



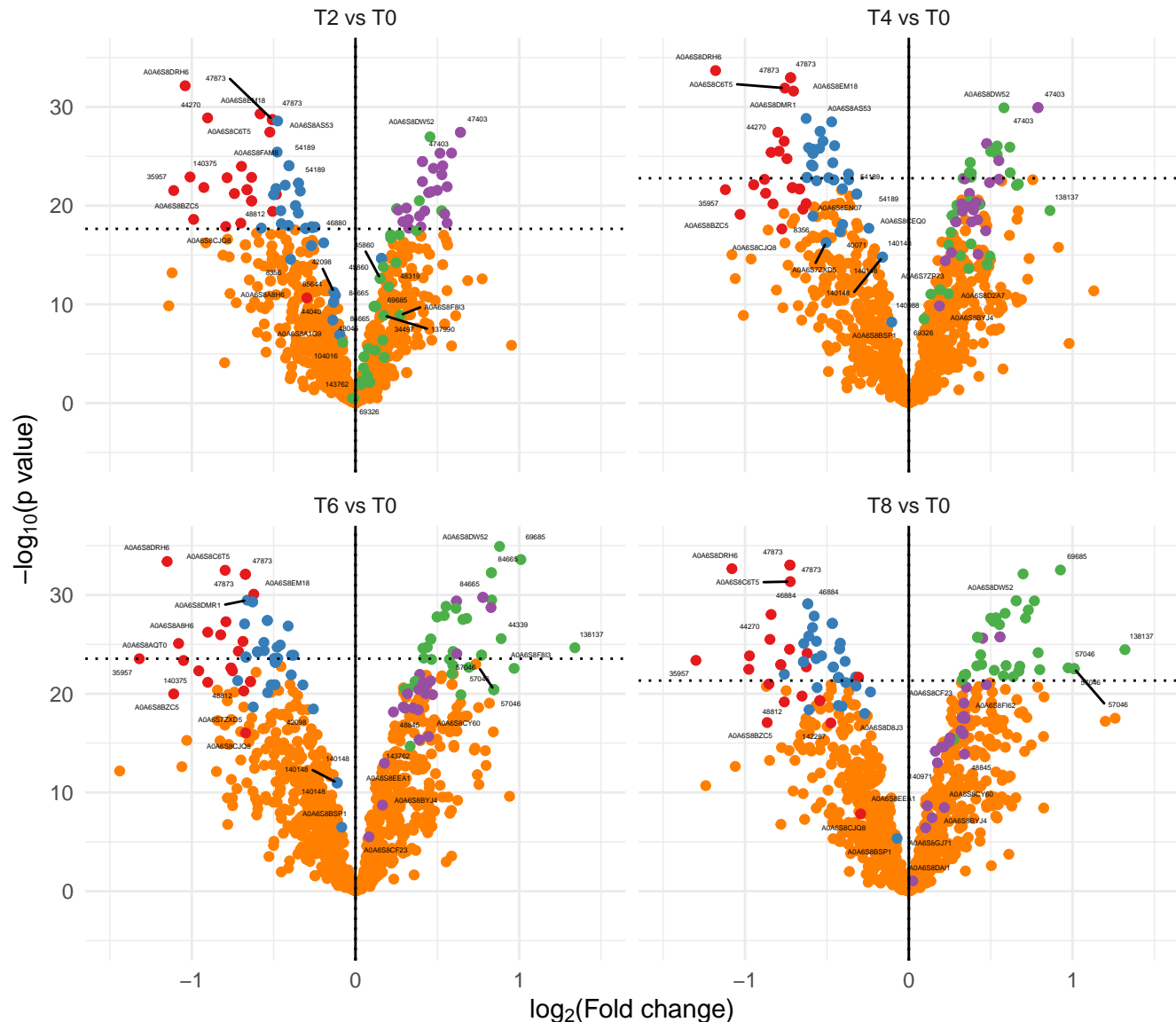
Signal transduction mechanisms



Transcription



Unknown kogClass



cluster ● Cluster 1 ● Cluster 2 ● Cluster 3 ● Cluster 4 ● not significant