

#### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 2 of 41 telomere organization regulation of organelle organization regulation of DNA metabolic\_ regulation of cell cycle proteolysis involved in cellular protein catabolicprocess protein modification by small protein conjugation or removal protein complex biogenesis **Biological Process** organelle fission mitotic cell cycle meiotic cell cycle -DNA replication -DNA repair -DNA recombination cytoskeleton organization chromosome segregation chromatin organization -

0.05

0.10

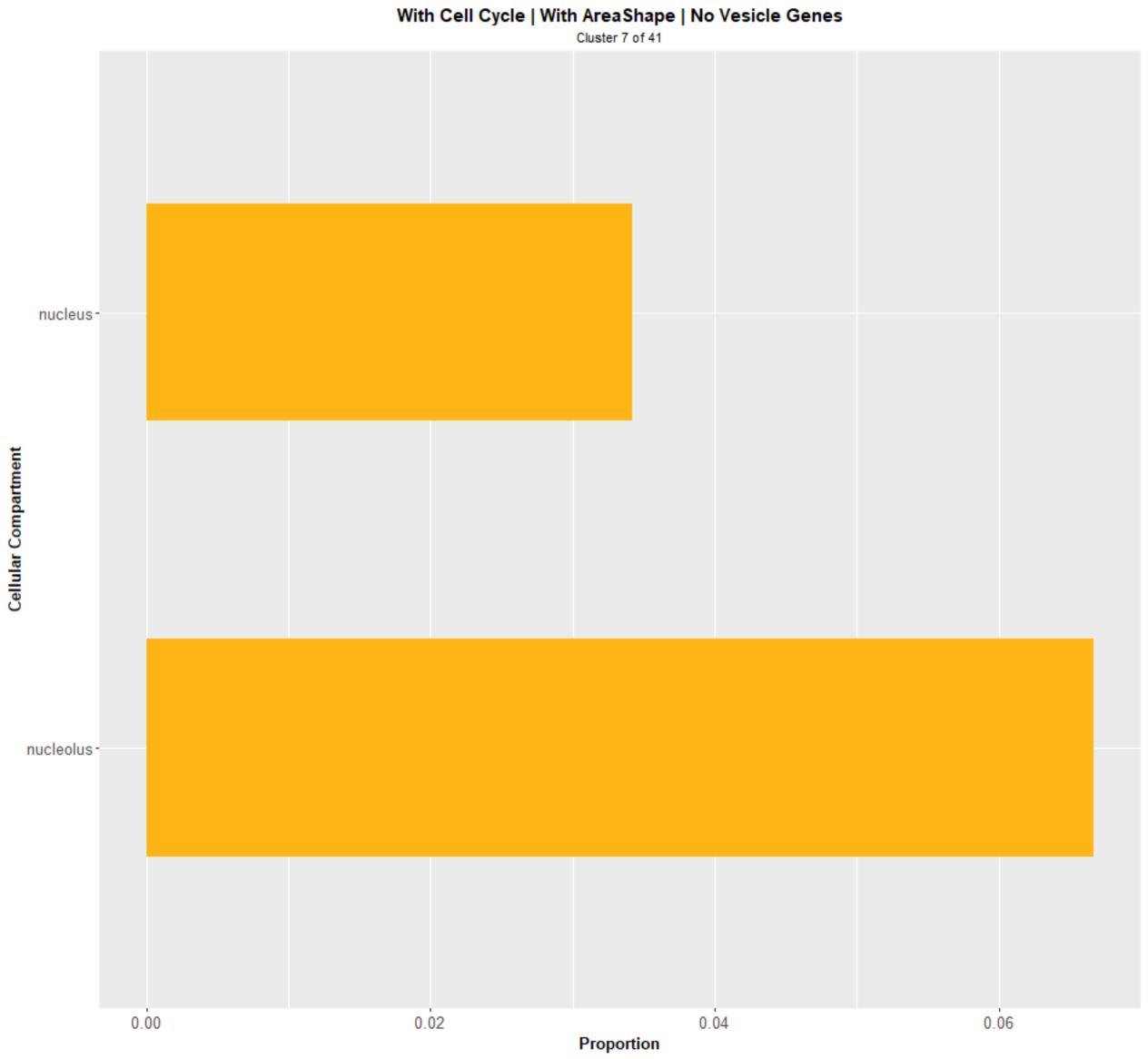
Proportion

0.15

0.20

cellular response to DNA \_ damage stimulus

0.00



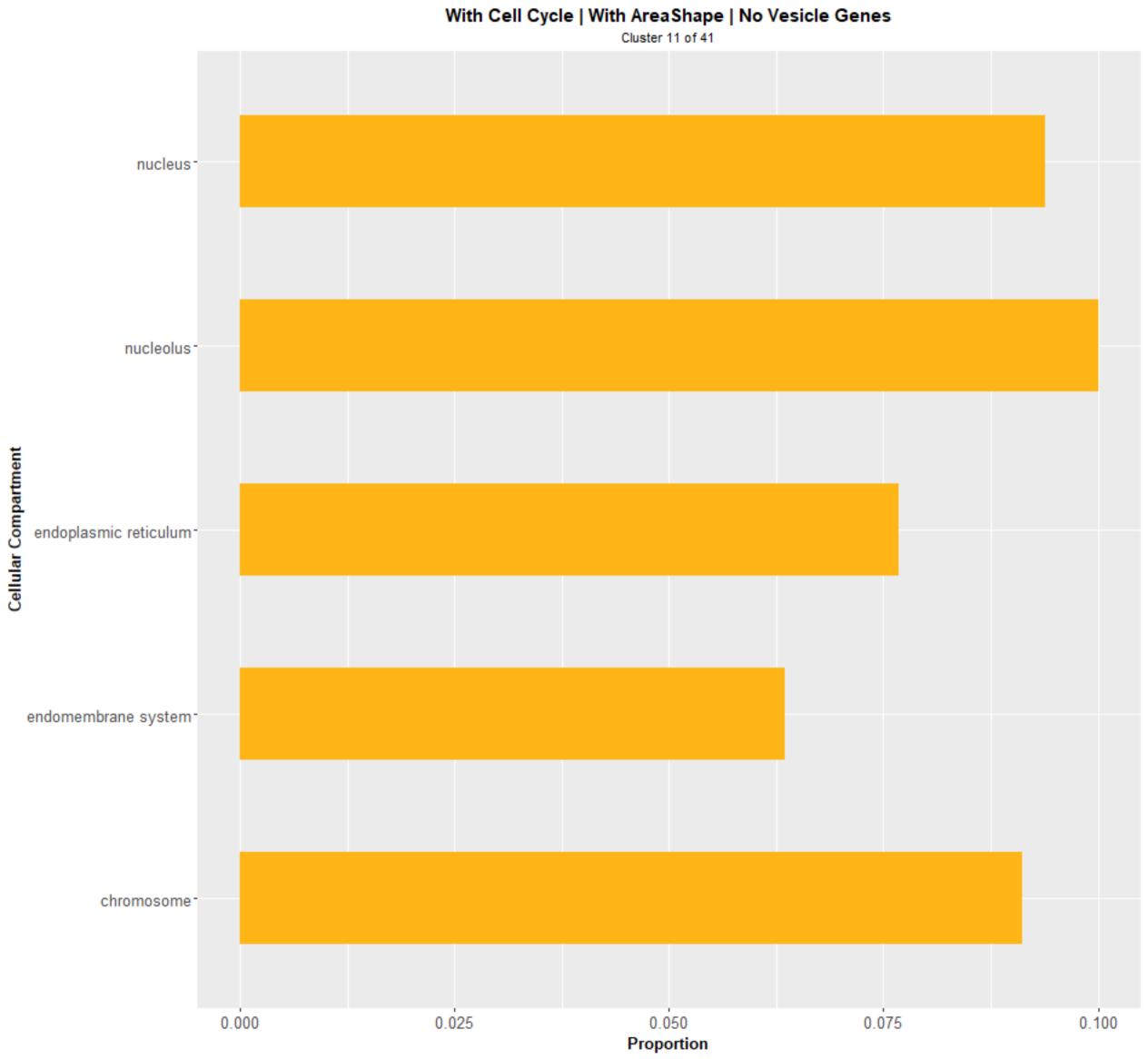
With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 7 of 41 tRNA aminoacylation for \_ protein translation transcription from RNA polymerase III promoter rRNA processing -RNA splicing ribosomal subunit export from nucleus Biological Process ribosomal small subunit biogenesis ribosomal large subunit biogenesis nuclear transport mRNA processing -DNA repair DNA-templated transcription, termination cytoskeleton organization -0.00 0.05 0.10 0.15 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 9 of 41 nucleus -Cellular Compartment nucleolus chromosome-0.01 0.00 0.02 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 9 of 41 snoRNA processing -Biological Process rRNA processing -0.04 0.02 0.00 0.08 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 10 of 41 site of polarized growth microtubule organizing center-Cellular Compartment cytoskeletoncellular budcell cortex-0.02 0.01 0.04 0.03 0.00 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 10 of 41 ribosomal subunit export from nucleus organelle fission organelle assembly **Biological Process** mitotic cell cycle meiotic cell cycle cytoskeleton organization cytokinesis -0.04 0.02 0.00 0.06 0.08 Proportion



With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 11 of 41 translational initiation transcription from RNA polymerase II promoter snoRNA processing rRNA processing -RNA splicing ribosomal subunit export from nucleus protein targeting protein lipidation -**Biological Process** protein complex biogenesis peptidyl-amino acid\_ modification nucleobase-containing compound transport nuclear transport mRNA processing lipid metabolic process DNA-templated transcription, termination DNA-templated transcription, initiation DNA-templated transcription, elongation cytoskeleton organization chromatin organization -0.0 0.2 0.3 0.1 0.4 Proportion

## With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 13 of 41 nucleus-Cellular Compartment nucleolus-0.01 0.02 0.00 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 13 of 41 transcription from RNA\_ polymerase III promoter Biological Process transcription from RNA\_ polymerase I promoter snoRNA processing 0.04 0.00 0.02 0.06 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 16 of 41 transcription from RNA polymerase II promoter Biological Process DNA-templated transcription, initiation 0.00 0.02 0.04 0.06 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 19 of 41 Biological Process

Les and Le 0.02 0.06 0.00 0.04 Proportion

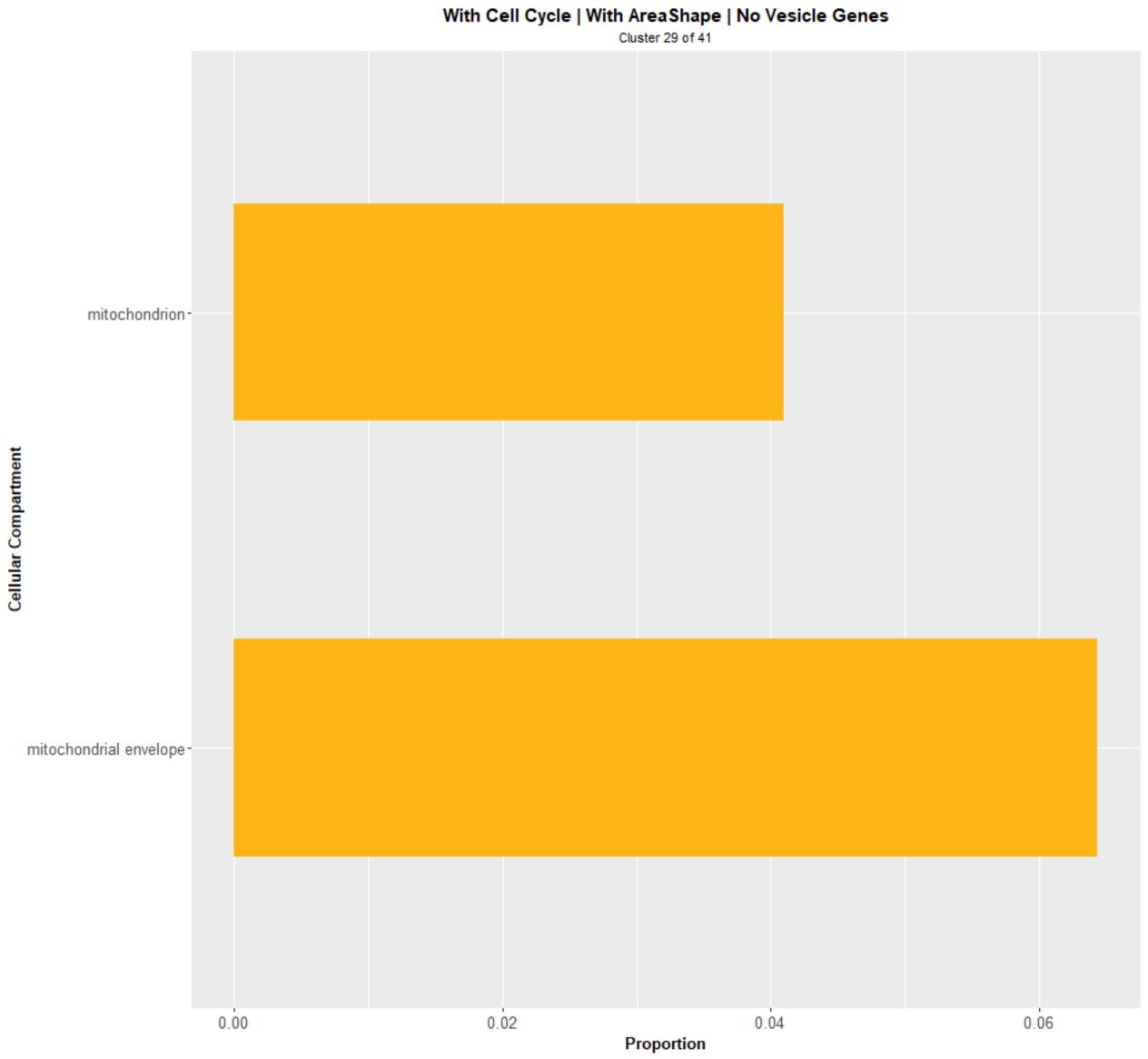
# With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 20 of 41 Cellular Compartment 0.000 0.005 0.010 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 22 of 41 nuclear transport Biological Process cytoplasmic translation -0.00 0.02 0.04 0.06 Proportion

# With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 26 of 41 Cellular Compartment 0.000 0.025 0.050 0.075 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 26 of 41 regulation of transport protein alkylation Biological Process histone modification chromatin organization -0.10 0.00 0.05 0.15 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 27 of 41 Biological Process
Lesponse to starvation 0.02 0.05 0.03 0.00 0.01 0.04 Proportion



#### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 29 of 41 transcription from RNA polymerase I promoter response to heatnucleobase-containing small\_ molecule metabolic process mitochondrion organization -Biological Process mitochondrial translation ion transport invasive growth in response to glucose limitation cofactor metabolic process carbohydrate metabolic process 0.00 0.04 0.08 0.12 Proportion

#### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 30 of 41 translational elongation transcription from RNA polymerase II promoter Protein acylation protein acylation endosomal transport cytoplasmic translation -0.10 0.00 0.05 0.15 0.20 Proportion

With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 31 of 41 protein modification by small\_protein conjugation or removal 0.01 0.02 0.00 Proportion

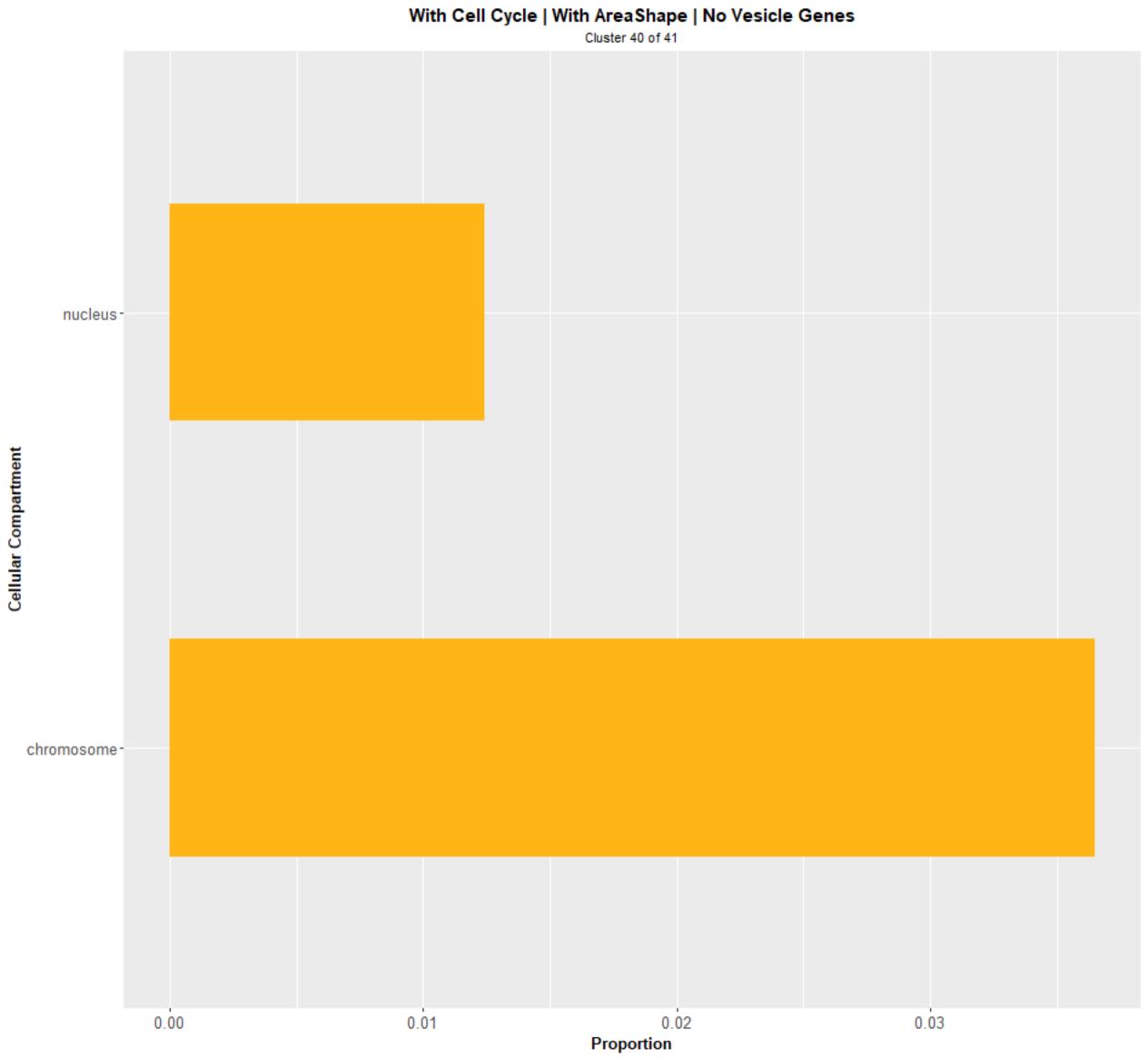
# With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 35 of 41 Cellular Compartment 0.00 0.02 0.04 0.06 Proportion

# With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 35 of 41 0.04 0.02 0.00 0.06 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 36 of 41 cellular response to DNA damage stimulus Biological Process cellular amino acid metabolic process 0.02 0.04 0.06 0.00 Proportion

# With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 37 of 41 Cellular Compartment 0.00 0.01 0.02 0.03 Proportion

### With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 37 of 41 oligosaccharide metabolic process Biological Process cytokinesis -0.050 0.000 0.025 0.075 Proportion



With Cell Cycle | With AreaShape | No Vesicle Genes Cluster 40 of 41 transposition telomere organization -RNA catabolic process regulation of cell cycle protein modification by small\_ protein conjugation or removal peptidyl-amino acid\_ modification **Biological Process** organelle fission mitotic cell cycle meiotic cell cycle -DNA replication -DNA repair DNA recombination chromosome segregation cellular response to DNA damage stimulus 0.05 0.10 0.15 0.00 Proportion

