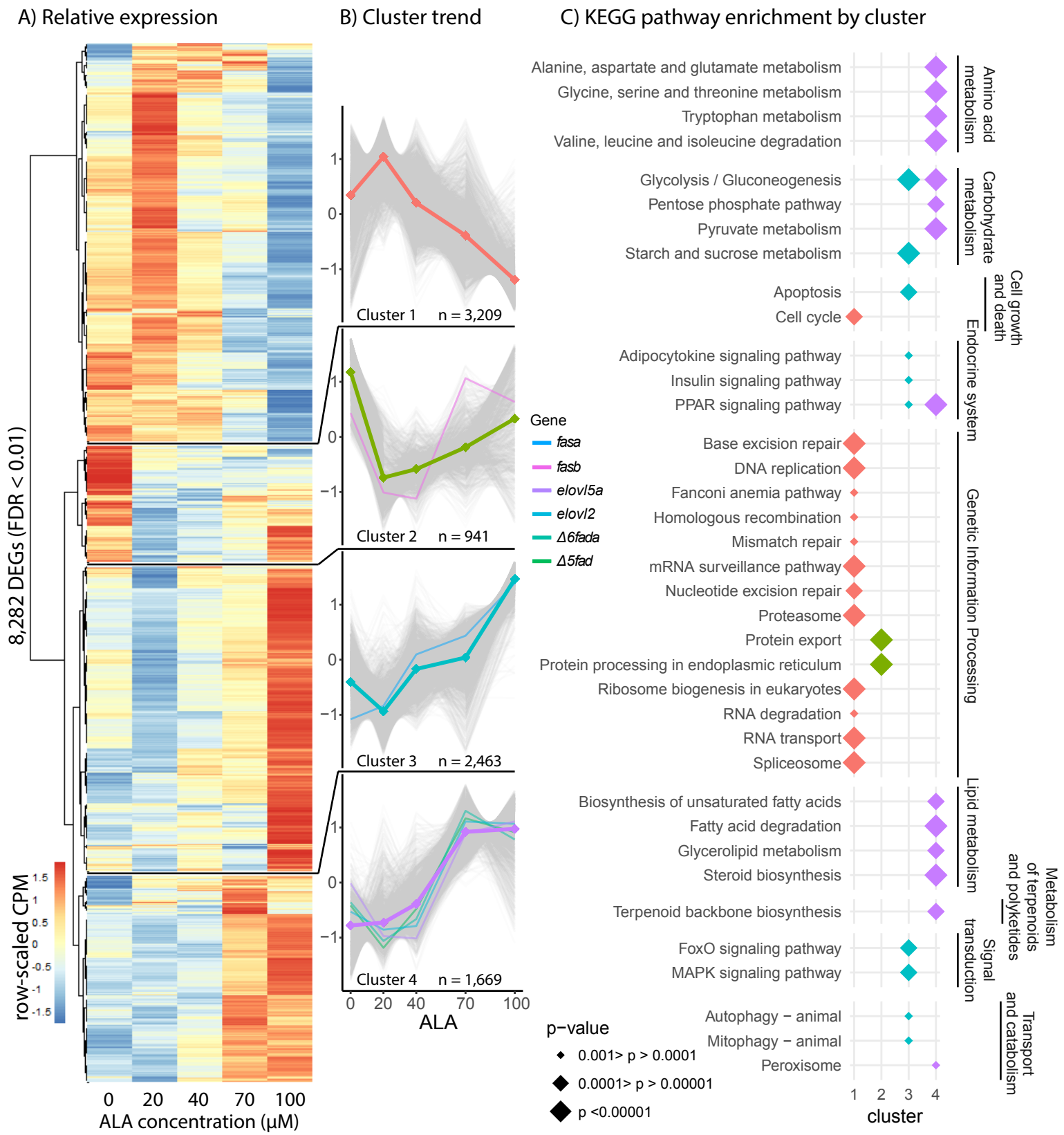
A) Relative expression
B) Cluster trend
C) KEGG pathway enrichment by cluster
8,282 DEGs (FDR < 0.01)
row-scaled CPM
1.5
1
0.5
0
-0.5
-1
-1.5
0
20
40
70
100
ALA concentration (μM)
Cluster 1 n = 3,209
Cluster 2 n = 941
Cluster 3 n = 2,463
Cluster 4 n = 1,669
ALA
Gene
fasa
fasb
elovl5a
elovl2
Δ6fada
Δ5fad
Alanine, aspartate and glutamate metabolism
Glycine, serine and threonine metabolism
Tryptophan metabolism
Valine, leucine and isoleucine degradation
Amino acid metabolism
Glycolysis / Gluconeogenesis
Pentose phosphate pathway
Pyruvate metabolism
Starch and sucrose metabolism
Carbohydrate metabolism
Apoptosis
Cell cycle
Cell growth and death
Adipocytokine signaling pathway
Insulin signaling pathway
PPAR signaling pathway
Endocrine system
Base excision repair
DNA replication
Fanconi anemia pathway
Homologous recombination
Mismatch repair
mRNA surveillance pathway
Nucleotide excision repair
Proteasome
Protein export
Protein processing in endoplasmic reticulum
Ribosome biogenesis in eukaryotes
RNA degradation
RNA transport
Spliceosome
Genetic Information Processing
Biosynthesis of unsaturated fatty acids
Fatty acid degradation
Glycerolipid metabolism
Steroid biosynthesis
Lipid metabolism
Terpenoid backbone biosynthesis
Metabolism of terpenoids and polyketides
FoxO signaling pathway
MAPK signaling pathway
Signal transduction
Autophagy − animal
Mitophagy − animal
Peroxisome
Transport and catabolism
p−value
0.001> p > 0.0001
0.0001> p > 0.00001
p <0.00001
1
2
3
4
cluster