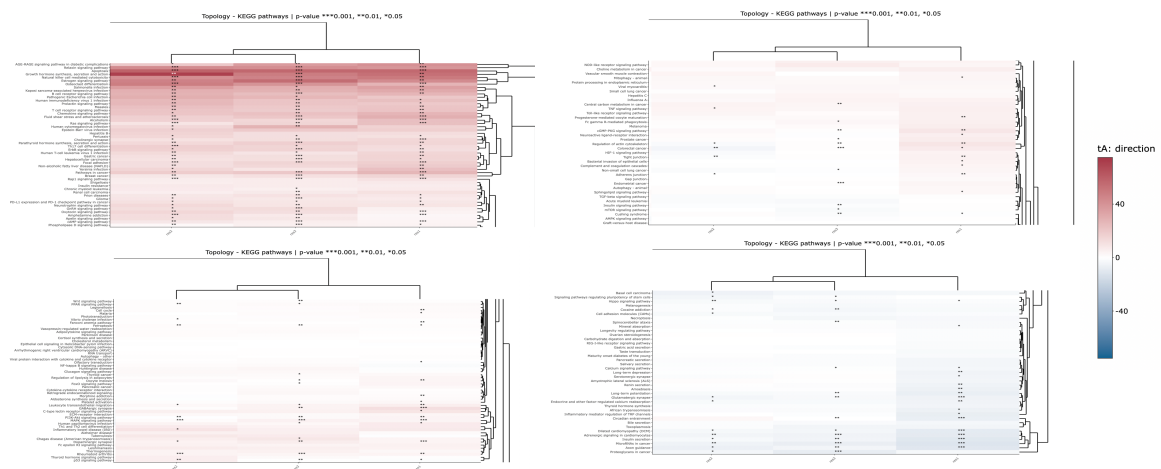


## Supplementary figure 7



**Supplementary figure 7.** Topology analysis of KEGG pathway enrichment was performed to identify pathways activated or suppressed by  $A\beta_{25-35}$  treatment in CTR and exon 2  $-/-$  neurons (res 1, 2 and 3). Several relevant pathways were activated by  $A\beta_{25-35}$  treatment including apoptosis, p53, MAPK signalling, cholinergic synapses in neurons of both genotypes. Fewer relevant pathways were inhibited by  $A\beta_{25-35}$  treatment including glutamatergic synapses and axon guidance in neurons of both genotypes. Three pathways altered by  $A\beta_{25-35}$  treatment only in CTR neurons were identified: cell cycle (activated), long term depression (inhibited) and complement and coagulation regulation (activated). Comparisons: res1: untreated CTR vs  $A\beta_{25-35}$  treated CTR iPSC-neurons, res2: untreated A4 vs  $A\beta_{25-35}$  treated A4 iPSC-neurons and res3: untreated D1 vs  $A\beta_{25-35}$  treated D1 iPSC-neurons. tA: the observed total perturbation accumulation in the pathway, pPERT: probability to observe a total accumulation more extreme than tA only by chance. pPERT\* $<0.05$ , \*\* $<0.01$  and \*\*\* $<0.001$