

Tau model (rTg4510)

(Chapters 4 - 6)



WT TG

Progressive pathology (months)

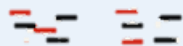
2

4

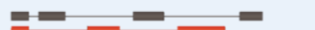
6

8

Short-reads
(Illumina RNA-Seq)



Long-reads
(PacBio Iso-Seq, ONT cDNA)



Whole Transcriptome
(Global Transcriptomic assessment)

(Chapter 4,5)

Targeted Profiling
(Enrichment of 20-AD associated genes)

(Chapter 6)

Comprehensive annotation of mouse transcriptome

(Chapter 4)

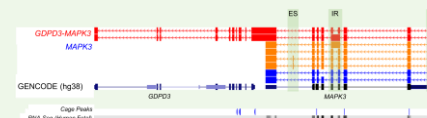
Isoform Diversity



Alternative Splicing
Events

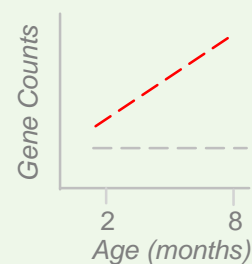


Fusion Genes,
Novel Genes

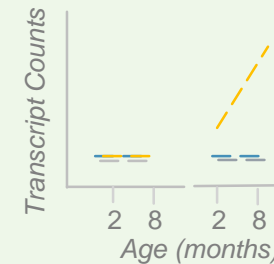


Transcriptomic changes associated AD pathology Global (Chapter 5) & Targeted (Chapter 6)

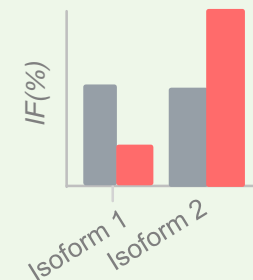
Differential Gene
Expression



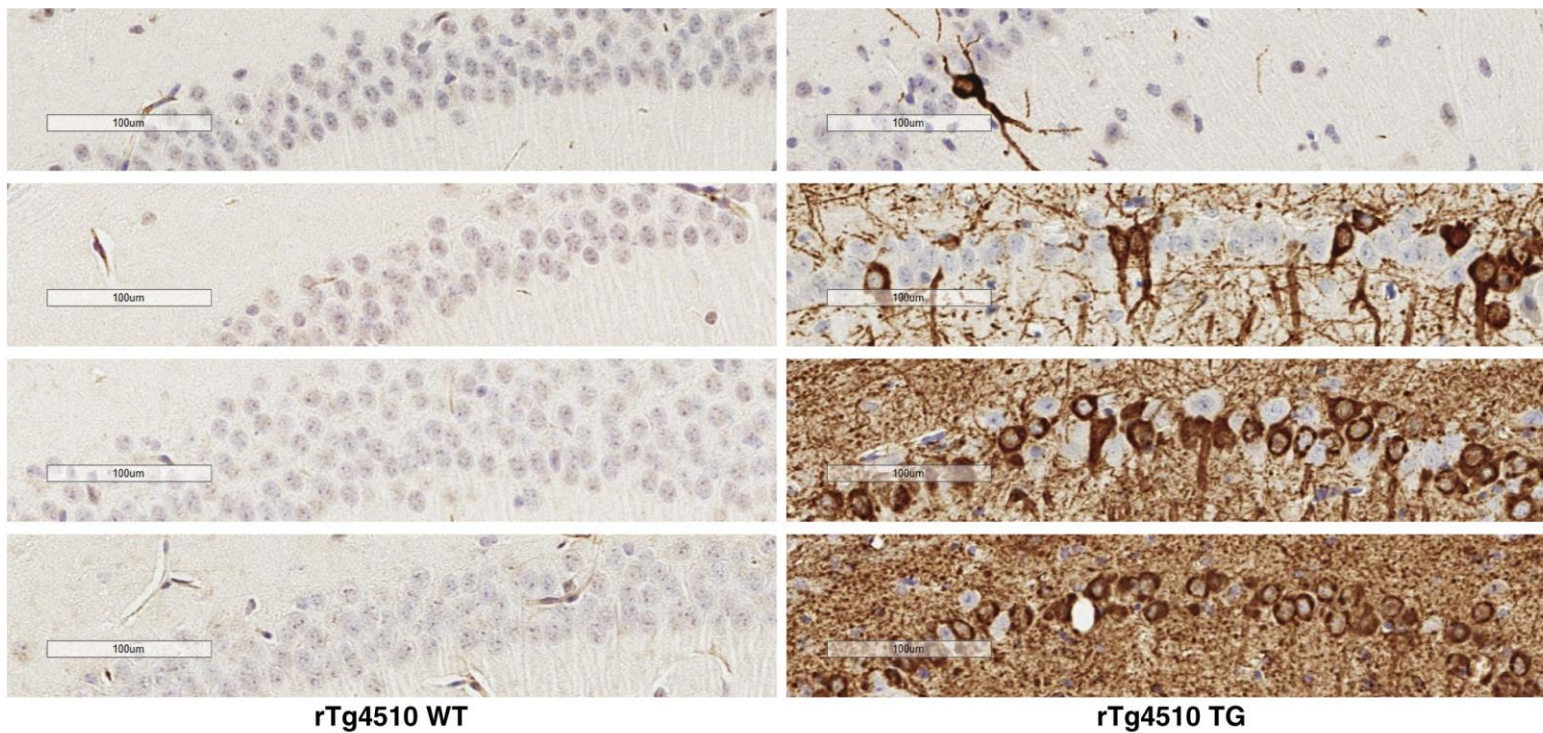
Differential Isoform
Expression



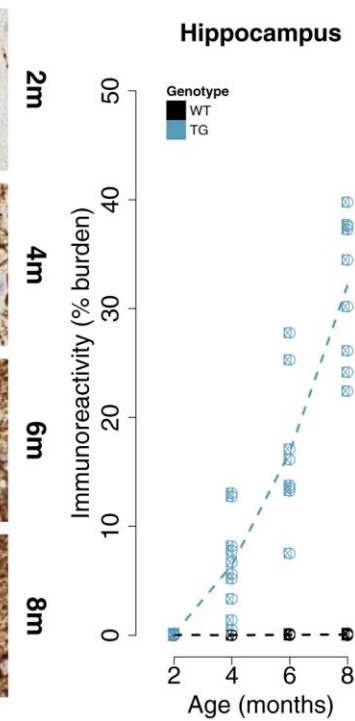
Differential Isoform
Usage



A



B



C

