Mouse Models SCA11 Publication

conditional Ttbk2 KO (Ttbk2c.mut)

IDENTIFICATION

Causal gene(s)	TTBK2
Repeat size or mutation	Ubiquitous conditional Ttbk2 knockout
Animal model	Mouse

MODEL DETAILS

Type of model	Knockout

TRANSGENIC CONSTRUCT

Transgenic construct: details	a conditional allele of Ttbk2 from the European Mutant Mouse Cell Repository (Ttbk2tm1c(EUCOMM)Hmgu) was crossed with a mouse line expressing tamoxifen-inducible Cre recombinase driven by a ubiquitously expressed promoter, Ubc-Cre-ERT2
Promoter: gene	Ubc
Promoter: species	Mouse

PHENOTYPE

Hallmark features	Locomotor deficiencies, thinning of molecular layer of cerebellum, loss of VGLUT2 synapses in cerebellum, neuronal shrinking, altered bergmann glia morphology, loss of neuronal primary cilia

SOURCE & PUBLICATIONS

Originating lab / institution	Duke University
Links to publications or public resources	TTBK2 and primary cilia are essential for the connectivity and survival of cerebellar Purkinje neurons - PubMed https://pubmed.ncbi.nlm.nih.gov/31934864/