Mouse Models SCA37 Publication

Forebrain-specific Dab1 knockout mice

IDENTIFICATION

Causal gene(s)	DAB1
Repeat size or mutation	Dab1 conditional knock-out
Animal model	Mouse

MODEL DETAILS

Mouse strain / background	C57BL/6N
Type of model	Knockout

TRANSGENIC CONSTRUCT

Transgenic construct: sequence type	Part of the mouse Dab1 cDNA
Transgenic construct: details	Targeting plasmid containing exon 3 of the Dab1 mouse cDNA, flanked by 2 LoxP sites and 6.14 kb downstream and 4.5 kb upstream for homologous recombination. Emx1 promoter-Cre recombinase (Emx1-Cre) for specific expression in the dorsal forebrain
Promoter: gene	Emx1

PHENOTYPE

Hallmark features	No cerebellar phenotype or motor dysfunction, hyperactivity, decreased anxiety-like behavior, working memory impairment

SOURCE & PUBLICATIONS

Originating lab / institution	Kobe University
Links to publications or public resources	Dorsal Forebrain-Specific Deficiency of Reelin-Dab1 Signal Causes Behavioral Abnormalities Related to Psychiatric Disorders - PubMed https://pubmed.ncbi.nlm.nih.gov/26762856/