Mouse Models MSA/OPCA Publication

Cre-loxP inducible ?-synuclein

IDENTIFICATION

Causal gene(s)	Sporadic
Repeat size or mutation	Expression of inducible ?-synuclein regulated by Cre-loxP
Animal model	Mouse

MODEL DETAILS

Mouse strain / background	129/B6 F1 x C57BL/6J
Type of model	Chimeric

TRANSGENIC CONSTRUCT

Transgenic construct: sequence type	cDNA for human ?-synuclein expression
Transgenic construct: details	Syn cDNA into a Rosa26 chicken ?-actin (CAG) promoter-targeting vector for Cre/ER-mediated expression
Promoter: gene	CAG
Promoter: species	Chicken

PHENOTYPE

Hallmark features	?-synuclein accumulation in oligodendrocytes, decreased motor activity

SOURCE & PUBLICATIONS

Originating lab / institution	Hirosaki University Graduate School of Medicine
Links to publications or public resources	A mouse model of adult-onset multiple system atrophy - PubMed https://pubmed.ncbi.nlm.nih.gov/30910745/