Mouse Models MSA/OPCA Publication

PLP-?-Syn transgenic mouse

IDENTIFICATION

Research Resource Identifier (RRID)	MGI:3,604,008
Causal gene(s)	Sporadic
Repeat size or mutation	Overexpression of human wild-type ?-syn
Animal model	Mouse

MODEL DETAILS

Mouse strain / background	C57Bl/6
Type of model	Transgenic

TRANSGENIC CONSTRUCT

Transgenic construct: sequence type	cDNA
Transgenic construct: details	Transgene overexpressing human wild-type a-syn
Promoter: gene	PLP

PHENOTYPE

Progression	Progressive
Hallmark features	Motor deficits, loss of striatal dopaminergic terminals and DAPP32-positive medium sized projection neurons, increase in soluble ?-synuclein species, activated microglia

SOURCE & PUBLICATIONS

Originating lab / institution	Ludwig Maximilians University
Links to publications or public resources	Hyperphosphorylation and insolubility of alpha-synuclein in transgenic mouse oligodendrocytes - PubMed https://pubmed.ncbi.nlm.nih.gov/12034752/ Progressive striatonigral degenerationu00a0in a transgenic mouse model of multiple system atrophy: translational implications for interventional therapies - PMC https://pmc.ncbi.nlm.nih.gov/articles/PMC5753576/