Mouse Models MSA/OPCA Publication

TgM83+/? Snca0/0

IDENTIFICATION

Causal gene(s)	Sporadic
Repeat size or mutation	human A53T ?-synuclein (heterozygous) and mouse ?-synuclein (homozygous KO)
Animal model	Mouse

MODEL DETAILS

Mouse strain / background	129/SvEvTac x C57Bl/C3H
Type of model	Transgenic

TRANSGENIC CONSTRUCT

Transgenic construct: sequence type	cDNA for human ?-synuclein expression
Promoter: gene	PrP
Promoter: species	Mouse

PHENOTYPE

Hallmark features	No development of spontaneous illness, neurodegeneration only occurred after addition of MSA brain extracts

SOURCE & PUBLICATIONS

Originating lab / institution	University of California
Links to publications or public resources	Evidence for u03b1-synuclein prions causing multiple system atrophy in humans with parkinsonism - PubMed https://pubmed.ncbi.nlm.nih.gov/26324905/