Lrrk1/Lrrk2 Knockout Animal Model (The Jackson Labs)

Animal Model:
Lrrk1 and Lrrk2 Knockout Mouse

Available Through:
JAX Labs

Strain Name:
C57BL/6N-*Lrrk*$^{tm1.1Mjff}$ *Lrrk2*$^{tm1.1Mjff}$/J

Genotype:
Heterozygous for ***Lrrk***$^{tm1.1Mjff}$**,**
Heterozygous for ***Lrrk2***$^{tm1.1Mjff}$

Strain Type:
Knockout

Allele:
n/a

Expression Levels / Over Endogenous:
n/a

Phenotype-Behavior:
TBD

Phenotype-Neurochemistry:
TBD

Phenotype-Pathology:
TBD

References:
http://jaxmice.jax.org/strain/016122.html

Notes:
A targeting vector replaced exons 24-29 of the leucine-rich repeat kinase 1 (Lrrk1) gene with a loxP-flanked neomycin resistance (neo) cassette. Cre-mediated recombination removed the neo cassette.
A targeting vector was designed to replace exons 39-40 of the leucine-rich repeat kinase 2 (Lrrk2) gene with a loxP-flanked neomycin resistance (neo) cassette. Correctly targeted ES cells were transiently transfected with a Cre recombinase expression plasmid to delete the neo cassette. Correctly targeted ES cells were injected into blastocysts and resulting chimeric mice were bred to C57BL/6NTac mice.

The two knockout mice were bred
together to create the double knockout.

Mice that are homozygous for the Lrrk1 are born at less than the expected Mendelian ratio, and most do not survive the first postnatal day.