

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 21, 2026

B6.129S4-Prkn^{tm1Shn}/J

RRID:IMSR_JAX:006582

Type: Organism

Proper Citation

RRID:IMSR_JAX:006582

Organism Information

URL: <https://www.jax.org/strain/006582>

Proper Citation: RRID:IMSR_JAX:006582

Description: Mus musculus with name B6.129S4-Prkn^{tm1Shn}/J from IMSR.

Species: Mus musculus

Synonyms: B6.129S4-Park2/J

Notes: gene symbol note: parkin RBR E3 ubiquitin protein ligase; mutant strain|congenic strain: Prkn

Affected Gene: parkin RBR E3 ubiquitin protein ligase

Genomic Alteration: targeted mutation 1; Jie Shen

Catalog Number: JAX:006582

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S4-Prkn^{tm1Shn}/J

Record Creation Time: 20250513T053657+0000

Record Last Update: 20260815T050606+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4-Prkn^{tm1Shn}/J.

No alerts have been found for B6.129S4-Prkn^{tm1Shn}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 9 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Basak B, et al. (2025) Mitochondrial damage triggers the concerted degradation of negative regulators of neuronal autophagy. *Nature communications*, 16(1), 7367.

Li J, et al. (2022) Reciprocal Regulation of Mitofusin 2-Mediated Mitophagy and Mitochondrial Fusion by Different PINK1 Phosphorylation Events. *Frontiers in cell and developmental biology*, 10, 868465.

Huo Y, et al. (2022) Prkn knockout mice show autistic-like behaviors and aberrant synapse formation. *iScience*, 25(7), 104573.

Duan K, et al. (2021) Mitophagy in the basolateral amygdala mediates increased anxiety induced by aversive social experience. *Neuron*, 109(23), 3793.

Gunn TM, et al. (2019) Chronic and age-dependent effects of the spongiform neurodegeneration-associated MGRN1 E3 ubiquitin ligase on mitochondrial homeostasis. *Mammalian genome : official journal of the International Mammalian Genome Society*, 30(5-6), 151.

Pinto M, et al. (2018) Lack of Parkin Anticipates the Phenotype and Affects Mitochondrial Morphology and mtDNA Levels in a Mouse Model of Parkinson's Disease. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 38(4), 1042.

Abuaita BH, et al. (2018) Mitochondria-Derived Vesicles Deliver Antimicrobial Reactive Oxygen Species to Control Phagosome-Localized *Staphylococcus aureus*. *Cell host & microbe*, 24(5), 625.

Li C, et al. (2018) PINK1 and PARK2 Suppress Pancreatic Tumorigenesis through Control of Mitochondrial Iron-Mediated Immunometabolism. *Developmental cell*, 46(4), 441.

Lin MY, et al. (2017) Releasing Syntaphilin Removes Stressed Mitochondria from Axons Independent of Mitophagy under Pathophysiological Conditions. *Neuron*, 94(3), 595.