

# Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 1, 2026

## B6;129X1-Snca<sup>tm1Rosl</sup>/J

RRID:IMSR\_JAX:003692

Type: Organism

### Proper Citation

RRID:IMSR\_JAX:003692

### Organism Information

**URL:** <https://www.jax.org/strain/003692>

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**Description:** Mus musculus with name B6;129X1-Snca<sup>tm1Rosl</sup>/J from IMSR.

**Species:** Mus musculus

**Notes:** gene symbol note: synuclein; alpha; mutant stock: Snca

**Affected Gene:** synuclein; alpha

**Genomic Alteration:** targeted mutation 1; Arnon Rosenthal

**Catalog Number:** JAX:003692

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** embryo

**Organism Name:** B6;129X1-Snca<sup>tm1Rosl</sup>/J

**Record Creation Time:** 20250513T053640+0000

**Record Last Update:** 20260801T050344+0000

### Ratings and Alerts

No rating or validation information has been found for B6;129X1-Snca<sup>tm1Rosl</sup>/J.

No alerts have been found for B6;129X1-Snca<sup>tm1Rosl</sup>/J.

## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

## Usage and Citation Metrics

We found 10 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [PRECISE-TBI](#) .

Brimblecombe KR, et al. (2024) Inhibition of striatal dopamine release by the L-type calcium channel inhibitor isradipine co-varies with risk factors for Parkinson's. The European journal of neuroscience, 59(6), 1242.

Nanclares C, et al. (2023) Dysregulation of astrocytic Ca<sup>2+</sup> signaling and gliotransmitter release in mouse models of  $\alpha$ -synucleinopathies. Acta neuropathologica, 145(5), 597.

Dening Y, et al. (2022) Toxicity of extracellular alpha-synuclein is independent of intracellular alpha-synuclein. Scientific reports, 12(1), 21951.

Chen L, et al. (2022) Synaptic location is a determinant of the detrimental effects of  $\alpha$ -synuclein pathology to glutamatergic transmission in the basolateral amygdala. eLife, 11.

Sauerbeck AD, et al. (2021) Alpha-synuclein increases in rodent and human spinal cord injury and promotes inflammation and tissue loss. Scientific reports, 11(1), 11720.

Li N, et al. (2020) Immunoregulation of microglial polarization: an unrecognized physiological function of  $\alpha$ -synuclein. Journal of neuroinflammation, 17(1), 272.

Somayaji M, et al. (2020) A dual role for  $\alpha$ -synuclein in facilitation and depression of dopamine release from substantia nigra neurons in vivo. Proceedings of the National Academy of Sciences of the United States of America, 117(51), 32701.

Yun SP, et al. (2018)  $\alpha$ -Synuclein accumulation and GBA deficiency due to L444P GBA mutation contributes to MPTP-induced parkinsonism. Molecular neurodegeneration, 13(1), 1.

Spencer B, et al. (2017) Anti- $\alpha$ -synuclein immunotherapy reduces  $\alpha$ -synuclein propagation in the axon and degeneration in a combined viral vector and transgenic model of synucleinopathy. Acta neuropathologica communications, 5(1), 7.

Chermenina M, et al. (2015) Single injection of small-molecule amyloid accelerator results in cell death of nigral dopamine neurons in mice. NPJ Parkinson's disease, 1, 15024.