Resource Summary Report

Generated by NIF on Sep 15, 2026

B6;129X1-Snca^{tm1Rosl}/J

RRID:IMSR_JAX:003692
Type: Organism

Proper Citation

RRID:IMSR_JAX:003692

Organism Information

URL: https://www.jax.org/strain/003692

Proper Citation: RRID:IMSR_JAX:003692

Description: Mus musculus with name B6;129X1-Snca^{tm1Rosl}/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^{tm1Rosl}/J

Record Creation Time: 20250513T053640+0000

Record Last Update: 20260912T060425+0000

Ratings and Alerts

No rating or validation information has been found for B6;129X1-Snca^{tm1Rosl}/J.

No alerts have been found for B6;129X1-Snca^{tm1Rosl}/J.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 12 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Choi SJ, et al. (2026) ?-Synuclein expression is required for somatodendritic dopamine release and immediate early gene induction. Science advances, 12(5), eady6978.

Moschonas EH, et al. (2025) Assessment of Neurobehavioral Performance and Markers of Synaptic Vesicle Trafficking in an Alpha-Synuclein Knockout Mouse Model after Controlled Cortical Impact Injury. Neurotrauma reports, 6(1), 854.

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 Ca2+ signaling and gliotransmitter release in mouse models of ?-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 ?-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 ?-synuclein. Journal of neuroinflammation, 17(1), 272.

Somayaji M, et al. (2020) A dual role for ?-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) ?-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-?-synuclein immunotherapy reduces ?-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.