

Resource Summary Report

Generated by [NIF](#) on Sep 22, 2026

STOCK Pitx3^{ak}/2J

RRID:IMSR_JAX:000942

Type: Organism

Proper Citation

RRID:IMSR_JAX:000942

Organism Information

URL: <https://www.jax.org/strain/000942>

Proper Citation: RRID:IMSR_JAX:000942

Description: Mus musculus with name STOCK Pitx3^{ak}/2J from IMSR.

Species: Mus musculus

Synonyms: B6 x C57BLKS-Pitx3/J

Notes: gene symbol note: paired-like homeodomain transcription factor 3; mutant strain: Pitx3

Affected Gene: paired-like homeodomain transcription factor 3

Genomic Alteration: aphakia

Catalog Number: JAX:000942

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: embryo

Organism Name: STOCK Pitx3^{ak}/2J

Record Creation Time: 20250513T053622+0000

Record Last Update: 20260919T054811+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Pitx3^{ak}/2J.

No alerts have been found for STOCK Pitx3^{ak}/2J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Ayon-Olivas M, et al. (2023) Dopaminergic Input Regulates the Sensitivity of Indirect Pathway Striatal Spiny Neurons to Brain-Derived Neurotrophic Factor. *Biology*, 12(10).

Fernández-Pérez A, et al. (2022) Restricting feeding to dark phase fails to entrain circadian activity and energy expenditure oscillations in Pitx3-mutant Aphakia mice. *Cell reports*, 38(2), 110241.

Zenchak JR, et al. (2020) Bioluminescence-driven optogenetic activation of transplanted neural precursor cells improves motor deficits in a Parkinson's disease mouse model. *Journal of neuroscience research*, 98(3), 458.

Pan J, et al. (2019) ALDH1A1 regulates postsynaptic μ -opioid receptor expression in dorsal striatal projection neurons and mitigates dyskinesia through transsynaptic retinoic acid signaling. *Scientific reports*, 9(1), 3602.

Del Río-Martín A, et al. (2019) Hypomorphic Expression of Pitx3 Disrupts Circadian Clocks and Prevents Metabolic Entrainment of Energy Expenditure. *Cell reports*, 29(11), 3678.

Lieberman OJ, et al. (2018) Dopamine Triggers the Maturation of Striatal Spiny Projection Neuron Excitability during a Critical Period. *Neuron*, 99(3), 540.