

Resource Summary Report

Generated by [NIF](#) on Sep 7, 2026

C3H/HeSnJ

RRID:IMSR_JAX:000661

Type: Organism

Proper Citation

RRID:IMSR_JAX:000661

Organism Information

URL: <https://www.jax.org/strain/000661>

Proper Citation: RRID:IMSR_JAX:000661

Description: Mus musculus with name C3H/HeSnJ from IMSR.

Species: Mus musculus

Synonyms: C3Sn. C3H Snell. C3H/HeDiSnJ

Notes: gene symbol note: chloride channel CLIC-like 1|phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide; inbred strain: Clcc1|Pde6b

Affected Gene: chloride channel CLIC-like 1|phosphodiesterase 6B; cGMP; rod receptor; beta polypeptide

Genomic Alteration: mutation 1; Jackson|retinal degeneration 1

Catalog Number: JAX:000661

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: C3H/HeSnJ

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260905T044357+0000

Ratings and Alerts

No rating or validation information has been found for C3H/HeSnJ.

No alerts have been found for C3H/HeSnJ.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 41 mentions in open access literature.

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

Li X, et al. (2025) In situ architecture of the intercellular organelle reservoir between epididymal epithelial cells by volume electron microscopy. Nature communications, 16(1), 1664.

Allred MJ, et al. (2025) Benefits of Maternal Choline Supplementation on Aged Basal Forebrain Cholinergic Neurons (BFCNs) in a Mouse Model of Down Syndrome and Alzheimer's Disease. Biomolecules, 15(8).

Kanaan MN, et al. (2025) Impaired xCT-mediated cystine uptake drives serine and proline metabolic reprogramming and mitochondrial fission in skeletal muscle cells. Redox biology, 86, 103839.

Iqbal MA, et al. (2024) The integrated stress response promotes neural stem cell survival under conditions of mitochondrial dysfunction in neurodegeneration. Aging cell, 23(7), e14165.

Kanaan MN, et al. (2024) Cystine/glutamate antiporter xCT controls skeletal muscle glutathione redox, bioenergetics and differentiation. Redox biology, 73, 103213.

Frare C, et al. (2023) Sex- and age-dependent contribution of System xc- to cognitive, sensory, and social behaviors revealed by comprehensive behavioral analyses of System xc- null mice. Frontiers in behavioral neuroscience, 17, 1238349.

Wang X, et al. (2023) Plasminogen Activator Inhibitor-1 Potentiates Neutrophil Infiltration and Tissue Injury in Colitis. International journal of biological sciences, 19(7), 2132.

Chen GY, et al. (2023) Cooperation between physiological defenses and immune resistance produces asymptomatic carriage of a lethal bacterial pathogen. bioRxiv : the preprint server for biology.

Chen GY, et al. (2023) Cooperation between physiological defenses and immune resistance produces asymptomatic carriage of a lethal bacterial pathogen. Science advances, 9(25), eadg8719.

He Y, et al. (2022) The Cystine/Glutamate Antiporter, System xc⁻, Contributes to Cortical Infarction After Moderate but Not Severe Focal Cerebral Ischemia in Mice. *Frontiers in cellular neuroscience*, 16, 821036.

De Toma I, et al. (2021) Meta-analysis of transcriptomic data reveals clusters of consistently deregulated gene and disease ontologies in Down syndrome. *PLoS computational biology*, 17(9), e1009317.

Bartolucci ML, et al. (2021) Obstructive sleep apneas naturally occur in mice during REM sleep and are highly prevalent in a mouse model of Down syndrome. *Neurobiology of disease*, 159, 105508.

Stagni F, et al. (2021) The flavonoid 7,8-DHF fosters prenatal brain proliferation potency in a mouse model of Down syndrome. *Scientific reports*, 11(1), 6300.

Valenti D, et al. (2021) Impaired Brain Mitochondrial Bioenergetics in the Ts65Dn Mouse Model of Down Syndrome Is Restored by Neonatal Treatment with the Polyphenol 7,8-Dihydroxyflavone. *Antioxidants (Basel, Switzerland)*, 11(1).

Sears SMS, et al. (2021) Hyperexcitability and brain morphological differences in mice lacking the cystine/glutamate antiporter, system xc⁻. *Journal of neuroscience research*, 99(12), 3339.

Emili M, et al. (2020) Neonatal therapy with clenbuterol and salmeterol restores spinogenesis and dendritic complexity in the dentate gyrus of the Ts65Dn model of Down syndrome. *Neurobiology of disease*, 140, 104874.

Tsuji M, et al. (2020) Cilostazol, a Phosphodiesterase 3 Inhibitor, Moderately Attenuates Behaviors Depending on Sex in the Ts65Dn Mouse Model of Down Syndrome. *Frontiers in aging neuroscience*, 12, 106.

Victorino DB, et al. (2020) Quantitative Analysis of Retinal Structure and Function in Two Chromosomally Altered Mouse Models of Down Syndrome. *Investigative ophthalmology & visual science*, 61(5), 25.

Nagarkatti R, et al. (2020) A novel *Trypanosoma cruzi* secreted antigen as a potential biomarker of Chagas disease. *Scientific reports*, 10(1), 19591.

Sears SMS, et al. (2019) Decreased epileptogenesis in mice lacking the System xc⁻ transporter occurs in association with a reduction in AMPA receptor subunit GluA1. *Epilepsia open*, 4(1), 133.