Resource Summary Report

Generated by NIF on Aug 1, 2026

B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng/J

RRID:IMSR_JAX:014546
Type: Organism

Proper Citation

RRID:IMSR_JAX:014546

Organism Information

URL: https://www.jax.org/strain/014546

Proper Citation: RRID:IMSR_JAX:014546

Description: Mus musculus with name B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng/J from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng. B6.Cg-Tg(Chat-COP4*H134R/EYFP)6Gfng/J

Notes: gene symbol note: solute carrier family 18 (vesicular monoamine); member 3|transgene insertion 6; Guoping Feng||Channelrhodopsin|choline O-acetyltransferase; mutant strain|congenic strain: Slc18a3|Tg(Chat-COP4*H134R/EYFP;Slc18a3)6Gfng||COP4|Chat

Affected Gene: solute carrier family 18 (vesicular monoamine); member 3|transgene insertion 6; Guoping Feng||Channelrhodopsin|choline O-acetyltransferase

Genomic Alteration: transgene insertion 6; Guoping Feng

Catalog Number: JAX:014546

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng/J

Record Creation Time: 20250513T053727+0000

Record Last Update: 20260801T050432+0000

Ratings and Alerts

No rating or validation information has been found for B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng/J.

No alerts have been found for B6.Cg-Tg(Chat-COP4*H134R/EYFP.Slc18a3)6Gfng/J.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Power SK, et al. (2024) Enhanced prefrontal nicotinic signaling as evidence of active compensation in Alzheimer's disease models. Translational neurodegeneration, 13(1), 58.

Chang H, et al. (2024) Stress-sensitive neural circuits change the gut microbiome via duodenal glands. Cell, 187(19), 5393.

Power SK, et al. (2023) Xanomeline restores endogenous nicotinic acetylcholine receptor signaling in mouse prefrontal cortex. Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology, 48(4), 671.

Venkatesan S, et al. (2023) Chrna5 and lynx prototoxins identify acetylcholine super-responder subplate neurons. iScience, 26(2), 105992.

He L, et al. (2022) A weakened recurrent circuit in the hippocampus of Rett syndrome mice disrupts long-term memory representations. Neuron, 110(10), 1689.

Kocaturk S, et al. (2022) Cholinergic control of striatal GABAergic microcircuits. Cell reports, 41(4), 111531.

Bowles S, et al. (2022) Vagus nerve stimulation drives selective circuit modulation through cholinergic reinforcement. Neuron, 110(17), 2867.

Arulkandarajah KH, et al. (2021) Neuroepithelial progenitors generate and propagate non-neuronal action potentials across the spinal cord. Current biology : CB, 31(20), 4584.

Perniss A, et al. (2020) Chemosensory Cell-Derived Acetylcholine Drives Tracheal Mucociliary Clearance in Response to Virulence-Associated Formyl Peptides. Immunity, 52(4), 683.

Patel JM, et al. (2019) Sensory perception drives food avoidance through excitatory basal forebrain circuits. eLife, 8.

Ables JL, et al. (2017) Retrograde inhibition by a specific subset of interpeduncular ??5 nicotinic neurons regulates nicotine preference. Proceedings of the National Academy of Sciences of the United States of America, 114(49), 13012.

Papouin T, et al. (2017) Septal Cholinergic Neuromodulation Tunes the Astrocyte-Dependent Gating of Hippocampal NMDA Receptors to Wakefulness. Neuron, 94(4), 840.

Xu M, et al. (2015) Basal forebrain circuit for sleep-wake control. Nature neuroscience, 18(11), 1641.