

Resource Summary Report

Generated by [kravitz2](#) on Sep 19, 2026

B6J.129S6-Chat^{tm2(cre)}Lowl/MwarJ

RRID:IMSR_JAX:028861

Type: Organism

Proper Citation

RRID:IMSR_JAX:028861

Organism Information

URL: <https://www.jax.org/strain/028861>

Proper Citation: RRID:IMSR_JAX:028861

Description: Mus musculus with name B6J.129S6-Chat^{tm2(cre)}Lowl/MwarJ from IMSR.

Species: Mus musculus

Notes: gene symbol note: choline O-acetyltransferase|; mutant strain|congenic strain: Chat|

Affected Gene: choline O-acetyltransferase|

Genomic Alteration: targeted mutation 2; Bradford B Lowell

Catalog Number: JAX:028861

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6J.129S6-Chat^{tm2(cre)}Lowl/MwarJ

Record Creation Time: 20250513T053806+0000

Record Last Update: 20260919T054951+0000

Ratings and Alerts

No rating or validation information has been found for B6J.129S6-Chat^{tm2(cre)}Lowl/MwarJ.

No alerts have been found for B6J.129S6-Chat^{tm2(cre)}Lowl/MwarJ.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 24 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Yogesh B, et al. (2025) Activity in serotonergic axons in visuomotor areas of cortex is modulated by the recent history of visuomotor coupling. Peer community journal, 5.

Tu G, et al. (2025) Acetylcholine modulates prefrontal outcome coding during threat learning under uncertainty. eLife, 13.

Matsumoto A, et al. (2025) Functionally distinct GABAergic amacrine cell types regulate spatiotemporal encoding in the mouse retina. Nature neuroscience, 28(6), 1256.

Yogesh B, et al. (2025) Quantification of the effect of hemodynamic occlusion in two-photon imaging of mouse cortex. eLife, 14.

Chen Y, et al. (2025) Graded remapping of prefrontal representations preserves a cumulative record of distinct events within an environment. iScience, 28(8), 113009.

Strain MM, et al. (2024) Dorsal motor vagal neurons can elicit bradycardia and reduce anxiety-like behavior. iScience, 27(3), 109137.

Fischl M, et al. (2024) Fast Inhibition Slows and Desynchronizes Mouse Auditory Efferent Neuron Activity. The Journal of neuroscience : the official journal of the Society for Neuroscience, 44(33).

Sharma R, et al. (2024) Dopamine D2 receptors in the accumbal core region mediates the effects of fentanyl on sleep-wakefulness. Neuroscience, 560, 11.

Sharma R, et al. (2024) Cholinergic interneurons in the shell region of the nucleus accumbens regulate binge alcohol consumption: A chemogenetic and genetic lesion study. Alcohol, clinical & experimental research, 48(5), 827.

Chang M, et al. (2024) Distinct distribution of subplate neuron subtypes between the sensory cortices during the early postnatal period. The Journal of comparative neurology, 532(2), e25594.

Griffiths JA, et al. (2024) Peripheral neuronal activation shapes the microbiome and alters gut physiology. Cell reports, 43(4), 113953.

Yogesh B, et al. (2024) Cholinergic input to mouse visual cortex signals a movement state and acutely enhances layer 5 responsiveness. eLife, 12.

Sharma R, et al. (2024) Cholinergic Interneurons in the Accumbal Shell Region Regulate Binge Alcohol Self-Administration in Mice: An In Vivo Calcium Imaging Study. *Brain sciences*, 14(5).

Liu Y, et al. (2023) Mapping visual functions onto molecular cell types in the mouse superior colliculus. *Neuron*, 111(12), 1876.

Tang Y, et al. (2022) TIGAR deficiency enhances skeletal muscle thermogenesis by increasing neuromuscular junction cholinergic signaling. *eLife*, 11.

Tu G, et al. (2022) Outcome-Locked Cholinergic Signaling Suppresses Prefrontal Encoding of Stimulus Associations. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(20), 4202.

Matsumoto A, et al. (2021) Direction selectivity in retinal bipolar cell axon terminals. *Neuron*, 109(18), 2928.

Severino AL, et al. (2020) μ -Opioid Receptors on Distinct Neuronal Populations Mediate Different Aspects of Opioid Reward-Related Behaviors. *eNeuro*, 7(5).

Quaresma PGF, et al. (2020) Cholinergic neurons in the hypothalamus and dorsal motor nucleus of the vagus are directly responsive to growth hormone. *Life sciences*, 259, 118229.

Wu JS, et al. (2020) Sound exposure dynamically induces dopamine synthesis in cholinergic LOC efferents for feedback to auditory nerve fibers. *eLife*, 9.