

Resource Summary Report

Generated by [RRID](#) on Jul 30, 2026

B6.129(Cg)-Slc6a4^{tm1(cre)}Xz/J

RRID:IMSR_JAX:014554

Type: Organism

Proper Citation

RRID:IMSR_JAX:014554

Organism Information

URL: <https://www.jax.org/strain/014554>

Proper Citation: RRID:IMSR_JAX:014554

Description: Mus musculus with name B6.129(Cg)-Slc6a4^{tm1(cre)}Xz/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: [solute carrier family 6 (neurotransmitter transporter; serotonin); member 4; mutant strain]congenic strain: [Slc6a4

Affected Gene: [solute carrier family 6 (neurotransmitter transporter; serotonin); member 4

Genomic Alteration: targeted mutation 1; Xiaoxi Zhuang

Catalog Number: JAX:014554

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129(Cg)-Slc6a4^{tm1(cre)}Xz/J

Record Creation Time: 20250513T053727+0000

Record Last Update: 20260725T044436+0000

Ratings and Alerts

No rating or validation information has been found for B6.129(Cg)-Slc6a4^{tm1(cre)}Xz/J.

No alerts have been found for B6.129(Cg)-Slc6a4^{tm1(cre)}Xz/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Yang L, et al. (2026) IL-1R1-positive dorsal raphe neurons drive self-imposed social withdrawal in sickness. *Cell*, 189(1), 272.

Lee SS, et al. (2025) Sleep need-dependent plasticity of a thalamic circuit promotes homeostatic recovery sleep. *Science (New York, N.Y.)*, 388(6753), eadm8203.

Turi GF, et al. (2025) Serotonin modulates infraslow oscillation in the dentate gyrus during non-REM sleep. *eLife*, 13.

Batten SR, et al. (2025) Emotional words evoke region- and valence-specific patterns of concurrent neuromodulator release in human thalamus and cortex. *Cell reports*, 44(1), 115162.

Hyun JH, et al. (2023) Serotonin in the orbitofrontal cortex enhances cognitive flexibility. *bioRxiv : the preprint server for biology*.

Aklan I, et al. (2023) Dorsal raphe serotonergic neurons suppress feeding through redundant forebrain circuits. *Molecular metabolism*, 69, 101676.

Young TR, et al. (2023) Thalamocortical control of cell-type specificity drives circuits for processing whisker-related information in mouse barrel cortex. *Nature communications*, 14(1), 6077.

Troconis EL, et al. (2023) Serotonin neurons in mating female mice are activated by male ejaculation. *Current biology : CB*, 33(22), 4926.

Fries M, et al. (2023) Pou3f1 orchestrates a gene regulatory network controlling contralateral retinogeniculate projections. *Cell reports*, 42(8), 112985.

Natsubori A, et al. (2023) Serotonergic neurons control cortical neuronal intracellular energy dynamics by modulating astrocyte-neuron lactate shuttle. *iScience*, 26(1), 105830.

Troconis EL, et al. (2023) Serotonin neurons in mating female mice are activated by male ejaculation. *bioRxiv : the preprint server for biology*.

Wang J, et al. (2023) Taok1 haploinsufficiency leads to autistic-like behaviors in mice via the dorsal raphe nucleus. *Cell reports*, 42(9), 113078.

Paquelet GE, et al. (2023) Protocol for in vivo imaging and analysis of brainstem neuronal activity in the dorsal raphe nucleus of freely behaving mice. STAR protocols, 4(1), 102074.

Liu Y, et al. (2023) Molecular and cellular mechanisms of the first social relationship: A conserved role of 5-HT from mice to monkeys, upstream of oxytocin. Neuron, 111(9), 1468.

Hong SZ, et al. (2022) Norepinephrine potentiates and serotonin depresses visual cortical responses by transforming eligibility traces. Nature communications, 13(1), 3202.

Genescu I, et al. (2022) Dynamic interplay between thalamic activity and Cajal-Retzius cells regulates the wiring of cortical layer 1. Cell reports, 39(2), 110667.

Paquelet GE, et al. (2022) Single-cell activity and network properties of dorsal raphe nucleus serotonin neurons during emotionally salient behaviors. Neuron, 110(16), 2664.

Grossman CD, et al. (2022) Serotonin neurons modulate learning rate through uncertainty. Current biology : CB, 32(3), 586.

Schiller M, et al. (2021) Optogenetic activation of local colonic sympathetic innervations attenuates colitis by limiting immune cell extravasation. Immunity, 54(5), 1022.

Clark EA, et al. (2020) Cortical ROR γ is required for layer 4 transcriptional identity and barrel integrity. eLife, 9.