

Resource Summary Report

Generated by [kravitz2](#) on Aug 23, 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: 20260815T050639+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 [kravitz2](#) .

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.

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

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

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.

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

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

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),

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.

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

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

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.

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.

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.