

Resource Summary Report

Generated by T1D on Sep 20, 2026

STOCK Slc32a1^{tm1Lowl/J}

RRID:IMSR_JAX:012897

Type: Organism

Proper Citation

RRID:IMSR_JAX:012897

Organism Information

URL: <https://www.jax.org/strain/012897>

Proper Citation: RRID:IMSR_JAX:012897

Description: Mus musculus with name STOCK Slc32a1^{tm1Lowl/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: solute carrier family 32 (GABA vesicular transporter); member 1; mutant stock: Slc32a1

Affected Gene: solute carrier family 32 (GABA vesicular transporter); member 1

Genomic Alteration: targeted mutation 1; Bradford B Lowell

Catalog Number: JAX:012897

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: STOCK Slc32a1^{tm1Lowl/J}

Record Creation Time: 20250513T053723+0000

Record Last Update: 20260919T054910+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Slc32a1^{tm1Lowl/J}.

No alerts have been found for STOCK Slc32a1^{tm1Lowl/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

Elmendorf AJ, et al. (2026) GCGR agonism requires GABAergic signaling in the medial basal hypothalamus to promote weight loss in obese mice. *Molecular metabolism*, 105, 102328.

Peng Y, et al. (2026) A GABAergic network from AVP- to VIP-neurons in the suprachiasmatic nucleus sets the timing of circadian behavior rhythms. *PLoS biology*, 24(3), e3003706.

de Sousa LMM, et al. (2026) Loss of GABAergic transmission from somatostatin neurons leads to starvation, which is attenuated by a palatable diet. *Life sciences*, 398, 124455.

van der Heijden ME, et al. (2024) Cerebellar nuclei cells produce distinct pathogenic spike signatures in mouse models of ataxia, dystonia, and tremor. *eLife*, 12.

Lyons-Warren AM, et al. (2023) Co-transmitting interneurons in the mouse olfactory bulb regulate olfactory detection and discrimination. *Cell reports*, 42(12), 113471.

Xu Y, et al. (2023) Lateral septum as a melanocortin downstream site in obesity development. *Cell reports*, 42(5), 112502.

Summers MT, et al. (2022) Distinct inhibitory pathways control velocity and directional tuning in the mouse retina. *Current biology : CB*, 32(10), 2130.

Jain V, et al. (2022) Gain control by sparse, ultra-slow glycinergic synapses. *Cell reports*, 38(8), 110410.

Goral RO, et al. (2022) Loss of GABA co-transmission from cholinergic neurons impairs behaviors related to hippocampal, striatal, and medial prefrontal cortex functions. *Frontiers in behavioral neuroscience*, 16, 1067409.

van der Heijden ME, et al. (2022) Influence of data sampling methods on the representation of neural spiking activity in vivo. *iScience*, 25(11), 105429.

Duan ZRS, et al. (2020) GABAergic Restriction of Network Dynamics Regulates Interneuron Survival in the Developing Cortex. *Neuron*, 105(1), 75.

Jain V, et al. (2020) The functional organization of excitation and inhibition in the dendrites of mouse direction-selective ganglion cells. *eLife*, 9.

Chen Q, et al. (2020) Preserving inhibition with a disinhibitory microcircuit in the retina. *eLife*, 9.

Gouwens NW, et al. (2020) Integrated Morphoelectric and Transcriptomic Classification of Cortical GABAergic Cells. *Cell*, 183(4), 935.

Sinha R, et al. (2020) LRRTM4: A Novel Regulator of Presynaptic Inhibition and Ribbon Synapse Arrangements of Retinal Bipolar Cells. *Neuron*, 105(6), 1007.

Peixoto RT, et al. (2019) Abnormal Striatal Development Underlies the Early Onset of Behavioral Deficits in *Shank3B*^{-/-} Mice. *Cell reports*, 29(7), 2016.

Chen Y, et al. (2019) Sustained NPY signaling enables AgRP neurons to drive feeding. *eLife*, 8.

Holly EN, et al. (2019) Striatal Low-Threshold Spiking Interneurons Regulate Goal-Directed Learning. *Neuron*, 103(1), 92.

van der Heijden ME, et al. (2018) Loss of *Atoh1* from neurons regulating hypoxic and hypercapnic chemoresponses causes neonatal respiratory failure in mice. *eLife*, 7.

Kim T, et al. (2017) Inhibitory Control of Feature Selectivity in an Object Motion Sensitive Circuit of the Retina. *Cell reports*, 19(7), 1343.