Resource Summary Report

Generated by kravitz2 on Jul 28, 2026

LE-*Slc32a1*$^{tm1(cre)Sage}$

RRID:RGD_12905033
Type: Organism

Proper Citation

RRID:RGD_12905033

Organism Information

URL: https://rgd.mcw.edu/rgdweb/report/strain/main.html?id=12905033

Proper Citation: RRID:RGD_12905033

Description: Rattus norvegicus with name LE-*Slc32a1*$^{tm1(cre)Sage}$ from RGD.

Species: Rattus norvegicus

Notes: This model expresses cre-recombinase under the control of the endogenous solute carrier family 32 member 1 (Vgat) promoter enabling specific expression in Vgat positive GABAergic neurons. This model possesses a targeted insertion of (IRES)-cre immediately after the translational stop in the open reading frame of the Vgat gene. The Vgat-Cre rat is useful for applications requiring tissue specific expression, including optogenetics and breeding with transgenic floxed lines. Horizon Discovery

Catalog Number: 12905033

Background: mutant

Database: Rat Genome Database (RGD)

Database Abbreviation: RGD

Availability: Live Animals (as of 2017-05-31)

Alternate IDs: 12905033

Organism Name: LE-*Slc32a1*$^{tm1(cre)Sage}$

Record Creation Time: 20230509T191948+0000

Record Last Update: 20260725T194304+0000

Ratings and Alerts

No rating or validation information has been found for LE-*Slc32a1*$^{tm1(cre)Sage}$.

No alerts have been found for LE-*Slc32a1*$^{tm1(cre)Sage}$.

Data and Source Information

Source: Integrated Animals

Source Database: Rat Genome Database (RGD)

Usage and Citation Metrics

We found 78 mentions in open access literature.

Listed below are recent publications. The full list is available at kravitz2 .

Alton H, et al. (2026) Cannabinoid CB1 receptor and mu-opioid receptor interaction: new insights from conditional knockout mice. Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology, 51(2), 506.

Luo L, et al. (2026) ?-Aminobutyric Acid-mediated Parafacial Zone: Integrating Consciousness and Respiratory Control in Sevoflurane Anesthesia. Anesthesiology, 144(1), 116.

Strassmann P, et al. (2026) A behavioral integration mechanism underlies action timing. Science advances, 12(1), eaea5558.

Prévost ED, et al. (2025) Untangling dopamine and glutamate in the ventral tegmental area. bioRxiv : the preprint server for biology.

Harvey BJ, et al. (2025) Automated Classification of Sleep-Wake States and Seizures in Mice. eNeuro, 12(10).

Bakhurin K, et al. (2025) Dopamine dynamics during stimulus-reward learning in mice can be explained by performance rather than learning. Nature communications, 16(1), 9081.

Cui J, et al. (2025) Activation of the zona incerta GABAergic circuit for the treatment of pain hypersensitivity in Parkinson's disease mice model. The journal of headache and pain, 26(1), 244.

Wang ZQ, et al. (2025) Decoding auditory cognition: Unraveling the corticostriatal-SNr circuit's role in frequency discrimination accuracy. iScience, 28(12), 114184.

Li H, et al. (2025) An alternative neural basis underlying leptin resistance. Cell reports, 44(7), 115863.

Zhang JS, et al. (2025) GABAergic Neurons in the Central Amygdala Promote Emergence from Isoflurane Anesthesia in Mice. Anesthesiology, 142(2), 278.

Ishii KK, et al. (2025) Post-ejaculatory inhibition of female sexual drive via heterogeneous neuronal ensembles in the medial preoptic area. eLife, 12.

Ahmadlou M, et al. (2025) A subcortical switchboard for perseverative, exploratory and disengaged states. Nature, 641(8061), 151.

Ding X, et al. (2025) The role of inhibitory neurons in novelty sound detection in regular and random statistical contexts. bioRxiv : the preprint server for biology.

You H, et al. (2025) Development of Cre-dependent retrograde trans-multisynaptic tracer based on pseudorabies virus bartha strain. Molecular brain, 18(1), 33.

Fallah M, et al. (2025) Inhibitory basal ganglia nuclei differentially innervate pedunculopontine nucleus subpopulations and evoke differential motor and valence behaviors. eLife, 13.

Chen J, et al. (2025) The anterior paraventricular thalamus counteracts fear expression during retrieval through both amygdala and subiculum circuits. Communications biology, 8(1), 1635.

Inada K, et al. (2025) A transgenic mouse line for rabies virus-mediated trans-synaptic tracing in the postnatal developing brain. PloS one, 20(5), e0323629.

Nelson AC, et al. (2025) Molecular and neural control of social hierarchy by a forebrain-thalamocortical circuit. Cell.

Han M, et al. (2025) Glycosaminoglycan sugar side chains on perineuronal nets in the fastigial nucleus regulate motor skills. iScience, 28(8), 112952.

Grove JCR, et al. (2025) A lateralized pathway for associating nutrients with flavors. bioRxiv : the preprint server for biology.