

Resource Summary Report

Generated by [NIF](#) on Sep 11, 2026

STOCK Mc4r^{tm3.1(cre)}Lowl/J

RRID:IMSR_JAX:030759

Type: Organism

Proper Citation

RRID:IMSR_JAX:030759

Organism Information

URL: <https://www.jax.org/strain/030759>

Proper Citation: RRID:IMSR_JAX:030759

Description: Mus musculus with name STOCK Mc4r^{tm3.1(cre)}Lowl/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: |melanocortin 4 receptor; mutant stock: |Mc4r

Affected Gene: |melanocortin 4 receptor

Genomic Alteration: targeted mutation 3.1; Bradford B Lowell

Catalog Number: JAX:030759

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: STOCK Mc4r^{tm3.1(cre)}Lowl/J

Record Creation Time: 20250513T053817+0000

Record Last Update: 20260905T044553+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Mc4r^{tm3.1(cre)}Lowl/J.

No alerts have been found for STOCK Mc4r^{tm3.1(cre)}Lowl/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 10 mentions in open access literature.

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

Li Y, et al. (2026) A spatial and projection-based transcriptomic atlas of paraventricular hypothalamic cell types. Cell reports, 45(2), 116904.

Matsumura S, et al. (2026) OPA1 in MC4R Neurons Regulates Dietary Fat Intake and Body Weight in Mice. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 40(10), e71941.

Sköld J, et al. (2025) Melanocortin 4 receptor-expressing neurons in the lateral stripe of the striatum regulate affect and motor control. iScience, 28(5), 112456.

Xun Y, et al. (2025) GPR45 modulates G?s at primary cilia of the paraventricular hypothalamus to control food intake. Science (New York, N.Y.), 388(6751), eadp3989.

Schappe MS, et al. (2024) A vagal reflex evoked by airway closure. Nature, 627(8005), 830.

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

Gonzalez IE, et al. (2021) Paraventricular Calcitonin Receptor-Expressing Neurons Modulate Energy Homeostasis in Male Mice. Endocrinology, 162(6).

Reinoß P, et al. (2020) Hypothalamic Pomc Neurons Innervate the Spinal Cord and Modulate the Excitability of Premotor Circuits. Current biology : CB, 30(23), 4579.

Li MM, et al. (2019) The Paraventricular Hypothalamus Regulates Satiety and Prevents Obesity via Two Genetically Distinct Circuits. Neuron, 102(3), 653.

Li C, et al. (2019) Defined Paraventricular Hypothalamic Populations Exhibit Differential Responses to Food Contingent on Caloric State. Cell metabolism, 29(3), 681.