

Resource Summary Report

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STOCK Tg(Pomc1-cre)16Lowl/J

RRID:IMSR_JAX:005965

Type: Organism

Proper Citation

RRID:IMSR_JAX:005965

Organism Information

URL: <https://www.jax.org/strain/005965>

Proper Citation: RRID:IMSR_JAX:005965

Description: Mus musculus with name STOCK Tg(Pomc1-cre)16Lowl/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: |transgene insertion 16; Bradford B Lowell|pro-opiomelanocortin-alpha; mutant stock: |Tg(Pomc1-cre)16Lowl|Pomc

Affected Gene: |transgene insertion 16; Bradford B Lowell|pro-opiomelanocortin-alpha

Genomic Alteration: transgene insertion 16; Bradford B Lowell

Catalog Number: JAX:005965

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: STOCK Tg(Pomc1-cre)16Lowl/J

Record Creation Time: 20250513T053653+0000

Record Last Update: 20260801T050356+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Tg(Pomc1-cre)16Lowl/J.

No alerts have been found for STOCK Tg(Pomc1-cre)16Lowl/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 36 mentions in open access literature.

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

Leon-Mercado L, et al. (2025) Fatty Acid Synthase regulates glucose and energy homeostasis via POMC neurons and adrenergic signals. *Molecular metabolism*, 98, 102177.

Kohno D, et al. (2025) FTO promotes weight gain via altering Kif1a splicing and axonal vesicle trafficking in AgRP neurons. *The EMBO journal*, 44(18), 4919.

Wang T, et al. (2025) Identification of a neural basis for energy expenditure in the mouse arcuate hypothalamus. *Neuron*.

Talbi R, et al. (2025) POMC neurons control fertility through differential signaling of MC4R in kisspeptin neurons. *eLife*, 13.

Tan B, et al. (2025) A cellular and molecular basis of leptin resistance. *Cell metabolism*, 37(3), 723.

Sk??ld 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.

Talbi R, et al. (2024) POMC neurons control fertility through differential signaling of MC4R in Kisspeptin neurons. *bioRxiv : the preprint server for biology*.

Liu MY, et al. (2023) Prenatal stress modulates HPA axis homeostasis of offspring through dentate TERT independently of glucocorticoids receptor. *Molecular psychiatry*, 28(3), 1383.

Li L, et al. (2023) Sample enrichment for single-nucleus sequencing using concanavalin A-conjugated magnetic beads. *STAR protocols*, 4(4), 102595.

Qi Y, et al. (2023) Agrp-negative arcuate NPY neurons drive feeding under positive energy balance via altering leptin responsiveness in POMC neurons. *Cell metabolism*, 35(6), 979.

Wang Q, et al. (2023) Regional and cell-type-specific afferent and efferent projections of the mouse claustrum. *Cell reports*, 42(2), 112118.

Zanesco AM, et al. (2022) Hypothalamic CREB Regulates the Expression of Pomc-Processing Enzyme Pcsk2. *Cells*, 11(13).

Qiu J, et al. (2022) CRISPR/SaCas9 mutagenesis of stromal interaction molecule 1 in proopiomelanocortin neurons increases glutamatergic excitability and protects against diet-induced obesity. *Molecular metabolism*, 66, 101645.

Ju SH, et al. (2022) Melanocortin-4 receptors activate sympathetic preganglionic neurons and elevate blood pressure via TRPV1. *Cell reports*, 41(5), 111579.

Ma Y, et al. (2022) Neuronal miR-29a protects from obesity in adult mice. *Molecular metabolism*, 61, 101507.

Fricker LD, et al. (2021) Neuropeptidomic Analysis of a Genetically Defined Cell Type in Mouse Brain and Pituitary. *Cell chemical biology*, 28(1), 105.

Perino A, et al. (2021) Central anorexigenic actions of bile acids are mediated by TGR5. *Nature metabolism*, 3(5), 595.

Chang CC, et al. (2021) Laser Capture Microdissection of Single Neurons with Morphological Visualization Using Fluorescent Proteins Fused to Transmembrane Proteins. *eNeuro*, 8(5).

Barbier M, et al. (2021) Projections from the dorsomedial division of the bed nucleus of the stria terminalis to hypothalamic nuclei in the mouse. *The Journal of comparative neurology*, 529(5), 929.

Saucisse N, et al. (2021) Functional heterogeneity of POMC neurons relies on mTORC1 signaling. *Cell reports*, 37(2), 109800.