

Resource Summary Report

Generated by [RRID](#) on Jul 30, 2026

B6.Cg-Tac1^{tm1Bbm}/J

RRID:IMSR_JAX:004103

Type: Organism

Proper Citation

RRID:IMSR_JAX:004103

Organism Information

URL: <https://www.jax.org/strain/004103>

Proper Citation: RRID:IMSR_JAX:004103

Description: Mus musculus with name B6.Cg-Tac1^{tm1Bbm}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: tachykinin 1; mutant strain|congenic strain: Tac1

Affected Gene: tachykinin 1

Genomic Alteration: targeted mutation 1; Allan Basbaum

Catalog Number: JAX:004103

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.Cg-Tac1^{tm1Bbm}/J

Record Creation Time: 20250513T053643+0000

Record Last Update: 20260725T044352+0000

Ratings and Alerts

No rating or validation information has been found for B6.Cg-Tac1^{tm1Bbm}/J.

No alerts have been found for B6.Cg-Tac1^{tm1Bbm}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Florsheim EB, et al. (2023) Immune sensing of food allergens promotes aversive behaviour. bioRxiv : the preprint server for biology.

Tauber M, et al. (2023) Landscape of mast cell populations across organs in mice and humans. The Journal of experimental medicine, 220(10).

Bayless DW, et al. (2023) A neural circuit for male sexual behavior and reward. Cell, 186(18), 3862.

Xu J, et al. (2022) Excess neuropeptides in lung signal through endothelial cells to impair gas exchange. Developmental cell, 57(7), 839.

Zhang W, et al. (2022) Gut-innervating nociceptors regulate the intestinal microbiota to promote tissue protection. Cell, 185(22), 4170.

Wang L, et al. (2021) Mice lacking substance P have normal bone modeling but diminished bone formation, increased resorption, and accelerated osteopenia with aging. Bone, 144, 115806.

Zhang S, et al. (2021) Nonpeptidergic neurons suppress mast cells via glutamate to maintain skin homeostasis. Cell, 184(8), 2151.

Li F, et al. (2021) Sneezing reflex is mediated by a peptidergic pathway from nose to brainstem. Cell, 184(14), 3762.

Talbot S, et al. (2020) Vagal sensory neurons drive mucous cell metaplasia. The Journal of allergy and clinical immunology, 145(6), 1693.

Perner C, et al. (2020) Substance P Release by Sensory Neurons Triggers Dendritic Cell Migration and Initiates the Type-2 Immune Response to Allergens. Immunity, 53(5), 1063.

Gutierrez S, et al. (2019) Tachykinins modulate nociceptive responsiveness and sensitization: In vivo electrical characterization of primary sensory neurons in tachykinin knockout (Tac1 KO) mice. Molecular pain, 15, 1744806919845750.

Li WW, et al. (2018) Neuropeptide regulation of adaptive immunity in the tibia fracture model of complex regional pain syndrome. Journal of neuroinflammation, 15(1), 105.

Mathivanan S, et al. (2016) Bradykinin Induces TRPV1 Exocytotic Recruitment in Peptidergic Nociceptors. *Frontiers in pharmacology*, 7, 178.

Guo TZ, et al. (2012) Neuropeptide deficient mice have attenuated nociceptive, vascular, and inflammatory changes in a tibia fracture model of complex regional pain syndrome. *Molecular pain*, 8, 85.