

Resource Summary Report

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

B6(Cg)-Tg(Phox2b-cre)3Jke/J

RRID:IMSR_JAX:016223

Type: Organism

Proper Citation

RRID:IMSR_JAX:016223

Organism Information

URL: <https://www.jax.org/strain/016223>

Proper Citation: RRID:IMSR_JAX:016223

Description: Mus musculus with name B6(Cg)-Tg(Phox2b-cre)3Jke/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: transgene insertion 3; Joel K Elmquist||paired-like homeobox 2b; mutant strain: Tg(Phox2b-cre)3Jke||Phox2b

Affected Gene: transgene insertion 3; Joel K Elmquist||paired-like homeobox 2b

Genomic Alteration: transgene insertion 3; Joel K Elmquist

Catalog Number: JAX:016223

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6(Cg)-Tg(Phox2b-cre)3Jke/J

Record Creation Time: 20250513T053729+0000

Record Last Update: 20260725T044438+0000

Ratings and Alerts

No rating or validation information has been found for B6(Cg)-Tg(Phox2b-cre)3Jke/J.

No alerts have been found for B6(Cg)-Tg(Phox2b-cre)3Jke/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 [RRID](#) .

Jameson KG, et al. (2025) Select microbial metabolites in the small intestinal lumen regulates vagal activity via receptor-mediated signaling. *iScience*, 28(2), 111699.

Tan J, et al. (2025) Placode and neural crest origins of congenital deafness in mouse models of Waardenburg-Shah syndrome. *iScience*, 28(1), 111680.

Deng T, et al. (2025) A Molecularly Defined Medullary Network for Control of Respiratory Homeostasis. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(18), e2412822.

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

Moe AAK, et al. (2024) Investigation of vagal sensory neurons in mice using optical vagal stimulation and tracheal neuroanatomy. *iScience*, 27(3), 109182.

Shao L, et al. (2024) Whole-brain inputs and outputs of Phox2b and GABAergic neurons in the nucleus tractus solitarius. *Frontiers in neuroscience*, 18, 1427384.

Leon-Mercado L, et al. (2023) Evidence of extraganglionic vagal mechanoreceptors in the mouse vagus nerve. *Journal of anatomy*, 243(6), 936.

McCoy ME, et al. (2023) Ontogeny and Trophic Factor Sensitivity of Gastrointestinal Projecting Vagal Sensory Cell Types. *eNeuro*, 10(4).

Sandoval-Rodriguez R, et al. (2023) D1 and D2 neurons in the nucleus accumbens enable positive and negative control over sugar intake in mice. *Cell reports*, 42(3), 112190.

Servin-Vences MR, et al. (2023) PIEZO2 in somatosensory neurons controls gastrointestinal transit. *Cell*, 186(16), 3386.

Tolman Z, et al. (2022) Elp1 is required for development of visceral sensory peripheral and central circuitry. *Disease models & mechanisms*, 15(5).

Zheng Q, et al. (2022) Synchronized cluster firing, a distinct form of sensory neuron activation, drives spontaneous pain. *Neuron*, 110(2), 209.

Chen Z, et al. (2021) Interleukin-33 Promotes Serotonin Release from Enterochromaffin Cells for Intestinal Homeostasis. *Immunity*, 54(1), 151.

Borgmann D, et al. (2021) Gut-brain communication by distinct sensory neurons differently controls feeding and glucose metabolism. *Cell metabolism*, 33(7), 1466.

Cleary CM, et al. (2021) Somatostatin-expressing parafacial neurons are CO₂/H⁺ sensitive and regulate baseline breathing. *eLife*, 10.

Kamitakahara AK, et al. (2021) MET Receptor Tyrosine Kinase Regulates Lifespan Ultrasonic Vocalization and Vagal Motor Neuron Development. *Frontiers in neuroscience*, 15, 768577.

Muller PA, et al. (2020) Microbiota modulate sympathetic neurons via a gut-brain circuit. *Nature*, 583(7816), 441.

Matheis F, et al. (2020) Adrenergic Signaling in Muscularis Macrophages Limits Infection-Induced Neuronal Loss. *Cell*, 180(1), 64.

Varin EM, et al. (2019) Distinct Neural Sites of GLP-1R Expression Mediate Physiological versus Pharmacological Control of Incretin Action. *Cell reports*, 27(11), 3371.

Fu C, et al. (2019) Activation of Phox2b-Expressing Neurons in the Nucleus Tractus Solitarius Drives Breathing in Mice. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 39(15), 2837.