

Resource Summary Report

Generated by [kravitz2](#) on Aug 9, 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: paired-like homeobox 2b|transgene insertion 3; Joel K Elmquist|; mutant strain: Phox2b|Tg(Phox2b-cre)3Jke|

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

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: 20260808T050934+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 28 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Shao L, et al. (2026) GABAergic Inhibition from the Nucleus Tractus Solitarius to Ventrolateral Medulla Phox2b Neurons Modulates Central Respiratory Chemoreflex and Ventilatory Homeostasis. *Neuroscience bulletin*, 42(6), 1337.

Spann RA, et al. (2026) FGF21 signals through hindbrain neurons to alter food intake and energy expenditure during dietary protein restriction. *Cell reports*, 45(4), 117218.

Tang T, et al. (2026) Ribosomal Profiling of the Geniculate Ganglion Identifies the Receptor ALK as Critical for the Development and Maintenance of Oral Sensory Neurons. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 46(14).

Zhang Y, et al. (2026) Stem cell control in the lung by an autocrine injury-activated Igf complex. *Science (New York, N.Y.)*, 392(6795), eadt1310.

Hayes NW, et al. (2026) IL-1 β engages distinct peripheral sensory circuits to suppress feeding across time. *bioRxiv : the preprint server for biology*.

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

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

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

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

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

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

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-Rodríguez 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.