

Resource Summary Report

Generated by SPARC SAWG on Aug 9, 2026

B6.129S4-Bdnf^{tm1Jae/J}

RRID:IMSR_JAX:002266

Type: Organism

Proper Citation

RRID:IMSR_JAX:002266

Organism Information

URL: <https://www.jax.org/strain/002266>

Proper Citation: RRID:IMSR_JAX:002266

Description: Mus musculus with name B6.129S4-Bdnf^{tm1Jae/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: brain derived neurotrophic factor; mutant strain|congenic strain: Bdnf

Affected Gene: brain derived neurotrophic factor

Genomic Alteration: targeted mutation 1; Rudolf Jaenisch

Catalog Number: JAX:002266

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: embryo

Organism Name: B6.129S4-Bdnf^{tm1Jae/J}

Record Creation Time: 20250513T053630+0000

Record Last Update: 20260808T050832+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4-Bdnf^{tm1Jae/J}.

No alerts have been found for B6.129S4-Bdnf^{tm1Jae/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 12 mentions in open access literature.

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

Xu Y, et al. (2026) BDNF insufficiency exacerbates ALS progression. Cell reports. Medicine, 7(5), 102758.

Schäfer K, et al. (2023) Decreased plasma levels of the brain-derived neurotrophic factor correlate with right heart congestion in pulmonary arterial hypertension. ERJ open research, 9(2).

Wollet M, et al. (2022) Brain-Derived Neurotrophic Factor Is Involved in Activity-Dependent Tonotopic Refinement of MNTB Neurons. Frontiers in neural circuits, 16, 784396.

Navarro-Lobato I, et al. (2021) 14-3-3 γ is crucial for the conversion of labile short-term object recognition memory into stable long-term memory. Journal of neuroscience research, 99(9), 2305.

Demir IE, et al. (2019) Targeting nNOS ameliorates the severe neuropathic pain due to chronic pancreatitis. EBioMedicine, 46, 431.

Moy JK, et al. (2018) eIF4E Phosphorylation Influences Bdnf mRNA Translation in Mouse Dorsal Root Ganglion Neurons. Frontiers in cellular neuroscience, 12, 29.

Sun C, et al. (2018) Maintenance of Mouse Gustatory Terminal Field Organization Is Dependent on BDNF at Adulthood. The Journal of neuroscience : the official journal of the Society for Neuroscience, 38(31), 6873.

Giza JI, et al. (2018) The BDNF Val66Met Prodomain Disassembles Dendritic Spines Altering Fear Extinction Circuitry and Behavior. Neuron, 99(1), 163.

Garofalo S, et al. (2017) Environmental stimuli shape microglial plasticity in glioma. eLife, 6.

Garofalo S, et al. (2017) The Glycoside Oleandrin Reduces Glioma Growth with Direct and Indirect Effects on Tumor Cells. The Journal of neuroscience : the official journal of the Society for Neuroscience, 37(14), 3926.

Tang T, et al. (2017) Taste bud-derived BDNF maintains innervation of a subset of TrkB-expressing gustatory nerve fibers. Molecular and cellular neurosciences, 82, 195.

Dugan AM, et al. (2015) Low-Level Stress Induces Production of Neuroprotective Factors in Wild-Type but Not BDNF $^{+/-}$ Mice: Interleukin-10 and Kynurenic Acid. The international

