

Resource Summary Report

Generated by [RRID](#) on Jul 29, 2026

B6.129S4(Cg)-Bmal1^{tm1Weit/J}

RRID:IMSR_JAX:007668

Type: Organism

Proper Citation

RRID:IMSR_JAX:007668

Organism Information

URL: <https://www.jax.org/strain/007668>

Proper Citation: RRID:IMSR_JAX:007668

Description: Mus musculus with name B6.129S4(Cg)-Bmal1^{tm1Weit/J} from IMSR.

Species: Mus musculus

Synonyms: B6.129S4-Arntl/J

Notes: gene symbol note: basic helix-loop-helix ARNT like 1; mutant strain|congenic strain: Bmal1

Affected Gene: basic helix-loop-helix ARNT like 1

Genomic Alteration: targeted mutation 1; Charles Weitz

Catalog Number: JAX:007668

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S4(Cg)-Bmal1^{tm1Weit/J}

Record Creation Time: 20250513T053703+0000

Record Last Update: 20260725T044415+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S4(Cg)-Bmal1^{tm1Weit/J}.

No alerts have been found for B6.129S4(Cg)-Bmal1^{tm1Weit}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 47 mentions in open access literature.

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

Leinweber B, et al. (2025) Bmal1 deficiency in neutrophils alleviates symptoms induced by high-fat diet. *iScience*, 28(3), 112038.

Cryan CE, et al. (2025) Bmal1 Modulates Striatal cAMP Signaling and Motor Learning. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(28).

Kaltenecker D, et al. (2025) Functional liver genomics identifies hepatokines promoting wasting in cancer cachexia. *Cell*, 188(17), 4549.

Sun J, et al. (2025) Protocol to evaluate fasting metabolism and its relationship to the core circadian clock in mice. *STAR protocols*, 6(1), 103660.

Yao N, et al. (2025) Maternal circadian rhythms during pregnancy dictate metabolic plasticity in offspring. *Cell metabolism*, 37(2), 395.

Butler TD, et al. (2025) Colonic inflammation modulates the intestinal circadian landscape. *iScience*, 28(8), 113183.

Liu Q, et al. (2024) Circadian-clock-controlled endocrine and cytokine signals regulate multipotential innate lymphoid cell progenitors in the bone marrow. *Cell reports*, 43(5), 114200.

Zhang X, et al. (2024) Cell-type specific circadian transcription factor BMAL1 roles in excitotoxic hippocampal lesions to enhance neurogenesis. *iScience*, 27(2), 108829.

Dandavate V, et al. (2024) Hepatic BMAL1 and HIF1 α regulate a time-dependent hypoxic response and prevent hepatopulmonary-like syndrome. *Cell metabolism*, 36(9), 2038.

Van Drunen R, et al. (2024) Cell-specific regulation of the circadian clock by BMAL1 in the paraventricular nucleus: Implications for regulation of systemic biological rhythms. *Cell reports*, 43(7), 114380.

Ruan W, et al. (2024) The BMAL1/HIF2A heterodimer modulates circadian variations of myocardial injury. *Research square*.

Sarrazin DH, et al. (2024) Prefrontal cortex molecular clock modulates development of depression-like phenotype and rapid antidepressant response in mice. *Nature*

communications, 15(1), 7257.

Rakshit K, et al. (2024) Core circadian transcription factor Bmal1 mediates ? cell response and recovery from pro-inflammatory injury. *iScience*, 27(11), 111179.

Wang C, et al. (2024) Circadian tumor infiltration and function of CD8+ T cells dictate immunotherapy efficacy. *Cell*, 187(11), 2690.

Hoekstra MMB, et al. (2024) Bmal1 integrates circadian function and temperature sensing in the suprachiasmatic nucleus. *Proceedings of the National Academy of Sciences of the United States of America*, 121(17), e2316646121.

Gonzalez JC, et al. (2024) Protocol for electrophysiological measurements of circadian changes in excitability in dentate granule cells from adult mice. *STAR protocols*, 5(3), 103255.

Luengo-Mateos M, et al. (2023) Hypothalamic astrocytic-BMAL1 regulates energy homeostasis in a sex-dependent manner. *Cell reports*, 42(8), 112949.

Xin H, et al. (2023) Daytime-restricted feeding enhances running endurance without prior exercise in mice. *Nature metabolism*, 5(7), 1236.

Sheehan PW, et al. (2023) An astrocyte BMAL1-BAG3 axis protects against alpha-synuclein and tau pathology. *Neuron*, 111(15), 2383.

Dean T, et al. (2022) Endogenous Circadian Clock Machinery in Cortical NG2-Glia Regulates Cellular Proliferation. *eNeuro*, 9(5).