

Resource Summary Report

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C57BL/6J

RRID:IMSR_JAX:000664

Type: Organism

Proper Citation

RRID:IMSR_JAX:000664

Organism Information

URL: <https://www.jax.org/strain/000664>

Proper Citation: RRID:IMSR_JAX:000664

Description: Mus musculus with name C57BL/6J from IMSR.

Species: Mus musculus

Synonyms: B6. B6J. Black 6. C57 Black. C57BL/6JAnu

Notes: gene symbol note: gamma-aminobutyric acid type A receptor subunit alpha 2|annexin A6|cadherin related 23 (otocadherin)|MX dynamin-like GTPase 1|forebrain weight 1|glucose homeostasis QTL 3|nicotinamide nucleotide transhydrogenase|nuclear encoded tRNA arginine 5 (anticodon TCT)|latent transforming growth factor beta binding protein 4|beta-2 microglobulin|microwave induced increase in complement receptor B cells|NLR family; pyrin domain containing 12|cytochrome c oxidase subunit 7A2 like|apolipoprotein B mRNA editing enzyme; catalytic polypeptide 3|CD5 antigen|purinergic receptor P2X; ligand-gated ion channel; 7|glucose homeostasis QTL 2|forebrain weight 2|arylalkylamine N-acetyltransferase|aryl-hydrocarbon receptor|hemoglobin beta chain complex|glucose homeostasis QTL 1; inbred strain: Gabra2|Anxa6|Cdh23|Mx1|Fbrwt1|Gluchos3|Nnt|n-TRtct5|Ltp4|B2m|Micr|Nlrp12|Cox7a2|Apobec3|Cd5|P2rx7|Gluchos2|Fbrwt2|Aanat|Ahr|Hbb|Gluch

Affected Gene: gamma-aminobutyric acid type A receptor subunit alpha 2|annexin A6|cadherin related 23 (otocadherin)|MX dynamin-like GTPase 1|forebrain weight 1|glucose homeostasis QTL 3|nicotinamide nucleotide transhydrogenase|nuclear encoded tRNA arginine 5 (anticodon TCT)|latent transforming growth factor beta binding protein 4|beta-2 microglobulin|microwave induced increase in complement receptor B cells|NLR family; pyrin domain containing 12|cytochrome c oxidase subunit 7A2 like|apolipoprotein B mRNA editing enzyme; catalytic polypeptide 3|CD5 antigen|purinergic receptor P2X; ligand-gated ion channel; 7|glucose homeostasis QTL 2|forebrain weight 2|arylalkylamine N-acetyltransferase|aryl-hydrocarbon receptor|hemoglobin beta chain complex|glucose homeostasis QTL 1

Genomic Alteration: C57BL/6J variant|rs26961431 SNP allele with the G variant|age related hearing loss 1|myxovirus susceptibility 1|C57BL/6J|mutation 1; Jackson|Duchenne modifier 1 resistant|b variant|non-responder|short|recovery from Friend virus 3; resistant|rs48804829 SNP allele with the T variant|rs216509331 SNP allele with the A variant|b-1 variant|single

Catalog Number: JAX:000664

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: C57BL/6J

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260829T044909+0000

Ratings and Alerts

- Used for genotyping by the Human Islet Research Network community. Contact(s): Pedro Herrera, Simona Chera, Seung Kim, Charles Chang - Human Islets Research Network <https://hirnetwork.org/>

Warning: Warning this mouse may be epileptogenic. The cause seems to be that the GABAA receptor is expressed at very low levels compared to other mouse strains including the C57BL/6N, according to Hawkins (2016) and Mulligan (2019).

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 209963 mentions in open access literature.

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

Ware K, et al. (2026) Cell type-dependent role of transforming growth factor- β signaling on postnatal neural stem cell proliferation and migration. *Neural regeneration research*, 21(3), 1151.

Hoyt-Miggelbrink AM, et al. (2026) Upregulation of TNFR2 Precedes TOX Expression by Exhausted T cells and Restricts Antitumor and Antiviral Immunity. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 32(4), 782.

- D'Alessio A, et al. (2026) Neurometabolic adaptations to intestinal inflammation in a mouse model of colitis. *American journal of physiology. Gastrointestinal and liver physiology*, 330(2), G98.
- Liao A, et al. (2026) Transcript-guided targeted cell enrichment for scalable single-nucleus RNA sequencing. *Cell genomics*, 6(3), 101101.
- Qiao S, et al. (2026) Microbiota utilization of intestinal amino acids modulates cancer progression and anticancer immunity. *Cell host & microbe*, 34(1), 18.
- Pan J, et al. (2026) Cannabidiol suppresses emergency MDSCs generation by disturbing EEF1B2-mediated C/EBP β protein synthesis in colorectal adenomas. *Journal for immunotherapy of cancer*, 14(1).
- Ruta A, et al. (2026) Tissue Injury and Biomaterial Treatment Modulate Tumor Growth and Response to Immunotherapy. *bioRxiv : the preprint server for biology*.
- Tripathi A, et al. (2026) Protocol for intranuclear Nrf2 detection in activated mouse, human, and Jurkat T cells by spectral flow cytometry. *STAR protocols*, 7(1), 104360.
- Decouty-Pérez C, et al. (2026) Uncovering the Role of Thrombospondin-1 and Occludin as Potential Prognostic and Diagnostic Biomarkers in Traumatic Brain Injury. *International journal of molecular sciences*, 27(2).
- Yadav S, et al. (2026) A triple-node heart-brain neuroimmune loop underlying myocardial infarction. *Cell*, 189(3), 800.
- Brandquist ND, et al. (2026) Differential sensitivity of leukocyte populations to *Staphylococcus aureus* biofilm. *Infection and immunity*, 94(3), e0065425.
- McIlvried LA, et al. (2026) CGRP signaling links tumor-associated pain to immune evasion in oral squamous cell carcinoma. *Cell reports*, 45(2), 116994.
- Tickman BI, et al. (2026) The response to kidney injury is epigenetically regulated through the activation of bivalent genes. *American journal of physiology. Renal physiology*, 330(2), F238.
- Guo C, et al. (2026) NFAT mediates pro-tumorigenic inflammation in cancer-associated fibroblasts in pancreatic ductal adenocarcinoma. *Cell reports*, 45(1), 116849.
- Lyubetskaya A, et al. (2026) In situ multi-modal characterization of pancreatic cancer reveals tumor cell identity as a defining factor of the surrounding microenvironment. *Cell reports*, 45(1), 116827.
- Ravi VR, et al. (2026) Second-order regulation: IFN- γ suppresses IL-17A-mediated neutrophilic inflammation. *bioRxiv : the preprint server for biology*.
- Abdulla ZI, et al. (2026) mPFC Synaptosome Proteomics Reveals Novel Pathways and Muscarinic Receptor Changes in a Learned Helplessness Mouse Model. *bioRxiv : the preprint server for biology*.
- Finneran MC, et al. (2026) AxoMetric platform facilitates rapid and unbiased automated quantification of axon regeneration in tissue sections. *Cell reports methods*, 6(2), 101296.

Aldrich JC, et al. (2026) DLK inhibition has sex-specific effects on neuroprotection and locomotor recovery after spinal cord injury. *Experimental neurology*, 399, 115681.

Burroughs RW, et al. (2026) Reduced Dietary Protein Induces Changes in the Dental Proteome. *Journal of experimental zoology. Part B, Molecular and developmental evolution*, 346(2), 107.