

Resource Summary Report

Generated by [Kravitz](#) on Sep 19, 2026

B6.129S6(SJL)-Fgf21^{tm1.2Djm/J}

RRID:IMSR_JAX:022361

Type: Organism

Proper Citation

RRID:IMSR_JAX:022361

Organism Information

URL: <https://www.jax.org/strain/022361>

Proper Citation: RRID:IMSR_JAX:022361

Description: Mus musculus with name B6.129S6(SJL)-Fgf21^{tm1.2Djm/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: fibroblast growth factor 21; mutant strain|congenic strain: Fgf21

Affected Gene: fibroblast growth factor 21

Genomic Alteration: targeted mutation 1.2; David J Mangelsdorf

Catalog Number: JAX:022361

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: sperm

Organism Name: B6.129S6(SJL)-Fgf21^{tm1.2Djm/J}

Record Creation Time: 20250513T053745+0000

Record Last Update: 20260919T054931+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S6(SJL)-Fgf21^{tm1.2Djm/J}.

No alerts have been found for B6.129S6(SJL)-Fgf21^{tm1.2Djm/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Jaschke NP, et al. (2025) Gut-to-brain signaling restricts dietary protein intake during recovery from catabolic states. *Cell*, 188(26), 7481.

Cui X, et al. (2023) Pancreatic alpha cell glucagon-liver FGF21 axis regulates beta cell regeneration in a mouse model of type 2 diabetes. *Diabetologia*, 66(3), 535.

Pena-Leon V, et al. (2022) Prolonged breastfeeding protects from obesity by hypothalamic action of hepatic FGF21. *Nature metabolism*, 4(7), 901.

Croon M, et al. (2022) FGF21 modulates mitochondrial stress response in cardiomyocytes only under mild mitochondrial dysfunction. *Science advances*, 8(14), eabn7105.

Katsumura S, et al. (2022) Deadenylase-dependent mRNA decay of GDF15 and FGF21 orchestrates food intake and energy expenditure. *Cell metabolism*, 34(4), 564.

Green CL, et al. (2022) Sex and genetic background define the metabolic, physiologic, and molecular response to protein restriction. *Cell metabolism*, 34(2), 209.

Zhou B, et al. (2022) Central FGF21 production regulates memory but not peripheral metabolism. *Cell reports*, 40(8), 111239.

Zhang Y, et al. (2022) Pegylated arginine deiminase drives arginine turnover and systemic autophagy to dictate energy metabolism. *Cell reports. Medicine*, 3(1), 100498.

Ma Y, et al. (2021) Exercise Training Alleviates Cardiac Fibrosis through Increasing Fibroblast Growth Factor 21 and Regulating TGF- β 1-Smad2/3-MMP2/9 Signaling in Mice with Myocardial Infarction. *International journal of molecular sciences*, 22(22).

Girer NG, et al. (2021) Liver-Specific Nonviral Gene Delivery of Fibroblast Growth Factor 21 Protein Expression in Mice Regulates Body Mass and White/Brown Fat Respiration. *The Journal of pharmacology and experimental therapeutics*, 378(2), 157.

Yu D, et al. (2021) The adverse metabolic effects of branched-chain amino acids are mediated by isoleucine and valine. *Cell metabolism*, 33(5), 905.

Girer NG, et al. (2019) Inducible Loss of the Aryl Hydrocarbon Receptor Activates Perigonadal White Fat Respiration and Brown Fat Thermogenesis via Fibroblast Growth Factor 21. *International journal of molecular sciences*, 20(4).

Geller S, et al. (2019) Tanycytes Regulate Lipid Homeostasis by Sensing Free Fatty Acids and Signaling to Key Hypothalamic Neuronal Populations via FGF21 Secretion. *Cell metabolism*, 30(4), 833.

Ruan CC, et al. (2018) A2A Receptor Activation Attenuates Hypertensive Cardiac Remodeling via Promoting Brown Adipose Tissue-Derived FGF21. *Cell metabolism*, 28(3), 476.