

Resource Summary Report

Generated by T1D on Sep 6, 2026

B6.BKS(D)-Lepr^{db}/J

RRID:IMSR_JAX:000697

Type: Organism

Proper Citation

RRID:IMSR_JAX:000697

Organism Information

URL: <https://www.jax.org/strain/000697>

Proper Citation: RRID:IMSR_JAX:000697

Description: Mus musculus with name B6.BKS(D)-Lepr^{db}/J from IMSR.

Species: Mus musculus

Synonyms: B6.BKS-Lepr. B6.Cg-Dock7 +/- Lepr/J

Notes: gene symbol note: leptin receptor; mutant strain|congenic strain: Lepr

Affected Gene: leptin receptor

Genomic Alteration: diabetes

Catalog Number: JAX:000697

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.BKS(D)-Lepr^{db}/J

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260905T044358+0000

Ratings and Alerts

- Used for genotyping by the Human Islet Research Network community. Contact(s): [Galya Orr](#), [Lori Susse](#) - Human Islets Research Network <https://hirnetwork.org/>

No alerts have been found for B6.BKS(D)-Lepr^{db}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 116 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

McKimpson WM, et al. (2026) Activation of a Yap1-mesenchymal-like program in β -cells during diabetes. Cell reports, 45(7), 117596.

Shen Q, et al. (2026) FGF21 synergizes with leptin to counteract obesity-related metabolic comorbidities by reversing hepatic leptin resistance. Cell metabolism.

Taylor D, et al. (2025) Non-orthosteric inhibition of enolase 1 impedes growth of triple-negative breast cancer. Cell reports. Medicine, 6(11), 102451.

Chadwick JS, et al. (2025) Dietary-dependent sensitization of neuronal leptin signaling promotes neural repair after injury via cAMP and gene transcription. Neuron, 113(17), 2839.

Tan B, et al. (2025) A cellular and molecular basis of leptin resistance. Cell metabolism, 37(3), 723.

Miao B, et al. (2025) Glucose transporter 1 is essential to maintain brain endothelial cell homeostasis under hyperglycemia condition. American journal of physiology. Cell physiology, 329(2), C341.

Joyce LR, et al. (2025) Global genome analysis identifies glycolipids and lipoteichoic acid alanylation as contributors to group B streptococcal diabetic wound infection. Cell reports, 44(11), 116510.

Cooper PO, et al. (2024) G-protein-coupled receptor 84 regulates acute inflammation in normal and diabetic skin wounds. Cell reports, 43(6), 114288.

Xie J, et al. (2024) Bone transport induces the release of factors with multi-tissue regenerative potential for diabetic wound healing in rats and patients. Cell reports. Medicine, 5(6), 101588.

Duara J, et al. (2024) Oxysterol-binding protein-like 7 deficiency leads to ER stress-mediated apoptosis in podocytes and proteinuria. American journal of physiology. Renal physiology, 327(3), F340.

Guan D, et al. (2024) Central inhibition of HDAC6 re-sensitizes leptin signaling during obesity to induce profound weight loss. *Cell metabolism*, 36(4), 857.

Cordeiro B, et al. (2024) Obesity intensifies sex-specific interferon signaling to selectively worsen central nervous system autoimmunity in females. *Cell metabolism*, 36(10), 2298.

Huang Y, et al. (2024) The role of KLF2 in regulating hepatic lipogenesis and blood cholesterol homeostasis via the SCAP/SREBP pathway. *Journal of lipid research*, 65(1), 100472.

Pan X, et al. (2024) Krüppel-like factor 10 protects against metabolic dysfunction-associated steatohepatitis by regulating HNF4 α -mediated metabolic pathways. *Metabolism: clinical and experimental*, 155, 155909.

Slieker RC, et al. (2023) Identification of biomarkers for glycaemic deterioration in type 2 diabetes. *Nature communications*, 14(1), 2533.

Panganiban RAM, et al. (2023) Antagonizing cholecystokinin A receptor in the lung attenuates obesity-induced airway hyperresponsiveness. *Nature communications*, 14(1), 47.

Son J, et al. (2023) Genetic and pharmacologic inhibition of ALDH1A3 as a treatment of β -cell failure. *Nature communications*, 14(1), 558.

Machet J, et al. (2023) Type 2 diabetes influences intraepithelial corneal nerve parameters and corneal stromal-epithelial nerve penetration sites. *Journal of diabetes investigation*, 14(4), 591.

Xia W, et al. (2023) Lean adipose tissue macrophage derived exosome confers immunoregulation to improve wound healing in diabetes. *Journal of nanobiotechnology*, 21(1), 128.

Zheng X, et al. (2022) Destabilization of β Cell FIT2 by saturated fatty acids alter lipid droplet numbers and contribute to ER stress and diabetes. *Proceedings of the National Academy of Sciences of the United States of America*, 119(11), e2113074119.