

Resource Summary Report

Generated by PRECISE-TBI on Aug 1, 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: 20260801T050324+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 114 mentions in open access literature.

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

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

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.

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

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.

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.

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.

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.

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

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.

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.

Chen J, et al. (2022) Tetra-Primer Amplification-Refractory Mutation System (ARMS)-PCR for Genotyping Mouse Leptin Gene Mutation. *Animals : an open access journal from MDPI*, 12(19).

Tian F, et al. (2022) Compound K attenuates hyperglycemia by enhancing glucagon-like peptide-1 secretion through activating TGR5 via the remodeling of gut microbiota and bile acid metabolism. *Journal of ginseng research*, 46(6), 780.