

Resource Summary Report

Generated by [ASWG](#) on Sep 23, 2026

BKS.Cg-Dock7^m +/+ Lepr/J

RRID:IMSR_JAX:000642

Type: Organism

Proper Citation

RRID:IMSR_JAX:000642

Organism Information

URL: <https://www.jax.org/strain/000642>

Proper Citation: RRID:IMSR_JAX:000642

Description: Mus musculus with name BKS.Cg-Dock7^m +/+ Lepr/J from IMSR.

Species: Mus musculus

Synonyms: BKS db. C57BLKS-m Lepr. BKS.Cg-m+/+Lepr/J. BKS.Cg-m +/+ Lepr/J

Notes: gene symbol note: dedicator of cytokinesis 7|leptin receptor; mutant strain|congenic strain: Dock7|Lepr

Affected Gene: dedicator of cytokinesis 7|leptin receptor

Genomic Alteration: misty|diabetes

Catalog Number: JAX:000642

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: BKS.Cg-Dock7^m +/+ Lepr/J

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260919T054808+0000

Ratings and Alerts

No rating or validation information has been found for BKS.Cg-Dock7^m +/+ Lepr/J.

No alerts have been found for BKS.Cg-Dock7^m +/- Lep^r/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 109 mentions in open access literature.

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

Figarola J, et al. (2026) Fatty acid-activated proton transporter SR4 prevents hepatic steatosis and metabolic alterations in diabetic mice by improving mitochondria function, energy balance and oxidative stress. *Experimental and therapeutic medicine*, 32(1), 195.

Xu J, et al. (2026) Mitochondrial transfer from glia to neurons protects against peripheral neuropathy. *Nature*, 650(8103), 951.

Xu J, et al. (2026) Hyperglycemia impairs cognitive function by inducing mitochondrial damage through lactylation of LRPPRC at K223. *EMBO molecular medicine*, 18(6), 2038.

Li N, et al. (2026) Total flavonoids of *Abelmoschus manihot* (L.) medic attenuate early renal injury in diabetic kidney disease by modulating the LINC00665/miR-379-5p axis. *Pharmaceutical biology*, 64(1), 351.

Roberts RE, et al. (2026) Local administration of low-intensity vibration improves wound healing in diabetic mice. *Frontiers in bioengineering and biotechnology*, 14, 1731310.

Wu B, et al. (2026) Discovery of AMG 133, a Glucose-Dependent Insulinotropic Polypeptide Receptor Antagonist and Glucagon-Like Peptide 1 Receptor Agonist Antibody-Drug Conjugate for the Treatment of Obesity. *Journal of medicinal chemistry*, 69(8), 9348.

Li S, et al. (2026) Rationally designed light-inducible RNA-releasing protein for translational regulation and optogenetic control of gene therapies. *Trends in biotechnology*.

Song J, et al. (2026) Ets1-dependent Mek-Erk signaling drives adipose tissue macrophage anti-inflammatory polarization to ameliorates insulin resistance. *Cell reports*, 45(4), 117244.

Xu J, et al. (2026) High glucose impairs cognitive function by inducing lipid droplet accumulation through lactylation of HSD17B10 at K105. *Cell reports*, 45(6), 117550.

Basu P, et al. (2025) Long-lasting and fast methylglyoxal-scavenging peptide CycK(My^r)R4E alleviates chronic pain in type 2 diabetic mice. *Pain reports*, 10(5), e1312.

- Pérez-Martínez D, et al. (2025) Sex-specific metabolic effects of Treg expansion in db/db mice. *Frontiers in immunology*, 16, 1599985.
- Lee JJ, et al. (2025) Local arterial administration of acidified malonate as an adjunct therapy to mechanical thrombectomy in ischemic stroke. *Cardiovascular research*, 121(9), 1407.
- Mahameed M, et al. (2025) Nitroglycerin-responsive gene switch for the on-demand production of therapeutic proteins. *Nature biomedical engineering*, 9(7), 1129.
- Yu H, et al. (2025) Total flavonoids from *Abelmoschus manihot* (L.) improve diabetes nephropathy by regulating the gut-kidney axis. *Frontiers in medicine*, 12, 1693643.
- Li Calzi S, et al. (2025) Targeting Diabetic Retinopathy with Human iPSC-Derived Vascular Reparative Cells in a Type 2 Diabetes Model. *Cells*, 14(17).
- Chepurny OG, et al. (2025) GLP-1 receptor agonist properties of a chimeric peptide derived by hybridization of *Latrodectus* ?Latrotoxin and *Heloderma* Exendin-4. *General and comparative endocrinology*, 368, 114745.
- Thieulent CJ, et al. (2025) Diabetes exacerbates SARS-CoV-2 replication through ineffective pulmonary interferon responses, delayed cell-mediated immunity, and disruption of leptin signaling. *Frontiers in cellular and infection microbiology*, 15, 1513687.
- Yan S, et al. (2025) Sodium-glucose cotransporter 2 inhibitors alleviate renal fibrosis in diabetic kidney disease by inhibiting Hmgcs2 and Btg2 in proximal tubular cells. *Journal of translational medicine*, 23(1), 959.
- Miro C, et al. (2025) Leptin enhances the intracellular thyroid hormone activation in skeletal muscle to boost energy balance. *Cell metabolism*, 37(4), 936.
- Sue N, et al. (2025) ER stress disrupts insulin release in murine models of type 2 diabetes by impairing retromer action and constitutive secretion. *Cell reports*, 44(5), 115691.