

Resource Summary Report

Generated by [nidm-terms](#) on Jul 30, 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: 20260725T044328+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 +/- Lepr/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 98 mentions in open access literature.

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

Basu P, et al. (2025) Long-lasting and fast methylglyoxal-scavenging peptide CycK(Myrr)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.

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).

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.

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.

Ho QWC, et al. (2025) I-BET151 modulates glucokinase gene expression and beta cell function in part through changes in FOXO1 expression. Diabetologia.

Wang S, et al. (2024) Accelerating diabetic wound healing by ROS-scavenging lipid nanoparticle-mRNA formulation. Proceedings of the National Academy of Sciences of the United States of America, 121(22), e2322935121.

Llorián-Salvador M, et al. (2024) Regulatory T cell expansion prevents retinal degeneration in type 2 diabetes. *Journal of neuroinflammation*, 21(1), 328.

Yu H, et al. (2024) Effects of *Abelmoschus manihot* (L.) and its combination with irbesartan in the treatment of diabetic nephropathy via the gut-kidney axis. *Frontiers in pharmacology*, 15, 1424968.

Liang Q, et al. (2024) Comprehensive bioinformatics analysis identifies metabolic and immune-related diagnostic biomarkers shared between diabetes and COPD using multi-omics and machine learning. *Frontiers in endocrinology*, 15, 1475958.

Tan CAZ, et al. (2024) Purine and carbohydrate availability drive *Enterococcus faecalis* fitness during wound and urinary tract infections. *mBio*, 15(1), e0238423.

Hui Y, et al. (2024) High glucose impairs cognitive function through inducing mitochondrial calcium overload in Treg cells. *iScience*, 27(1), 108689.

Yang S, et al. (2024) Advanced glycation end products promote meniscal calcification by activating the mTOR-ATF4 positive feedback loop. *Experimental & molecular medicine*, 56(3), 630.

Yu V, et al. (2024) Differential CpG methylation at *Nnat* in the early establishment of beta cell heterogeneity. *Diabetologia*, 67(6), 1079.

Sciarretta F, et al. (2024) Lipid-associated macrophages reshape BAT cell identity in obesity. *Cell reports*, 43(7), 114447.

Schaub JA, et al. (2023) SGLT2 inhibitors mitigate kidney tubular metabolic and mTORC1 perturbations in youth-onset type 2 diabetes. *The Journal of clinical investigation*, 133(5).