Resource Summary Report

Generated by T1D on Sep 6, 2026

B6(Cg)-Ins1$^{tm1.1(cre)Thor}$/J

RRID:IMSR_JAX:026801
Type: Organism

Proper Citation

RRID:IMSR_JAX:026801

Organism Information

URL: https://www.jax.org/strain/026801

Proper Citation: RRID:IMSR_JAX:026801

Description: Mus musculus with name B6(Cg)-Ins1$^{tm1.1(cre)Thor}$/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: |insulin I; mutant strain: |Ins1

Affected Gene: |insulin I

Genomic Alteration: targeted mutation 1.1; Bernard Thorens

Catalog Number: JAX:026801

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6(Cg)-Ins1$^{tm1.1(cre)Thor}$/J

Record Creation Time: 20250513T053758+0000

Record Last Update: 20260905T044536+0000

Ratings and Alerts

- Used for genotyping by the Human Islet Research Network community. Contact(s): Peter Arvan - Human Islets Research Network https://hirnetwork.org/

No alerts have been found for B6(Cg)-Ins1$^{tm1.1(cre)Thor}$/J.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Yang Z, et al. (2026) BAF60C links nucleolar stress to ? cell dysfunction in type 2 diabetes through controlling Reg3b mRNA decay. Developmental cell, 61(5), 976.

Kumar S, et al. (2026) A distinct vagus-beta cell neural circuit senses glucose and modulates insulin secretion. Molecular metabolism, 108, 102371.

Umapathysivam MM, et al. (2026) Type 2 diabetes risk alleles in peptidyl-glycine alpha-amidating monooxygenase influence GLP-1 levels and response to GLP-1 receptor agonists. Genome medicine, 18(1).

Melnyk O, et al. (2025) Intravital imaging reveals glucose-dependent cilia movement in pancreatic islets in vivo. Metabolism: clinical and experimental, 163, 156105.

Osipovich AB, et al. (2025) Dynamic Ca2+-Dependent Transcription Links Metabolic Stress to Impaired ?-Cell Identity. Diabetes, 74(9), 1547.

Bernardo E, et al. (2025) HNF1A and A1CF coordinate a beta cell transcription-splicing axis that is disrupted in type 2 diabetes. Cell metabolism, 37(9), 1870.

Austin MC, et al. (2025) Dysfunctional ?-cell autophagy induces ?-cell stress and enhances islet immunogenicity. Frontiers in immunology, 16, 1504583.

Bartosiak JT, et al. (2025) Lipopolysaccharide-induced cytokine signaling activates a temporal innate defense program and represses pancreatic ?-cell identity. The Journal of biological chemistry, 301(12), 110811.

Graff SM, et al. (2024) TALK-1-mediated alterations of ?-cell mitochondrial function and insulin secretion impair glucose homeostasis on a diabetogenic diet. Cell reports, 43(1), 113673.

Baumel-Alterzon S, et al. (2024) NRF2 is required for neonatal mouse beta cell growth by maintaining redox balance and promoting mitochondrial biogenesis and function. Diabetologia, 67(3), 547.

Jones Lipinski RA, et al. (2024) Zinc-chelating BET bromodomain inhibitors equally target islet endocrine cell types. American journal of physiology. Regulatory, integrative and comparative physiology, 326(6), R515.

Kitamura RA, et al. (2024) Dual role of neuroplastin in pancreatic ? cells: Regulating insulin secretion and promoting islet inflammation. Proceedings of the National Academy of Sciences of the United States of America, 121(33), e2411234121.

Gong Y, et al. (2023) Loss of RanGAP1 drives chromosome instability and rapid tumorigenesis of osteosarcoma. Developmental cell, 58(3), 192.

Lacombe J, et al. (2023) Vitamin K-dependent carboxylation regulates Ca2+ flux and adaptation to metabolic stress in ? cells. Cell reports, 42(5), 112500.

Pelligra A, et al. (2023) Pancreatic islet protection at the expense of secretory function involves serine-linked mitochondrial one-carbon metabolism. Cell reports, 42(6), 112615.

Osipovich AB, et al. (2023) Deletion of Ascl1 in pancreatic ?-cells improves insulin secretion, promotes parasympathetic innervation, and attenuates dedifferentiation during metabolic stress. Molecular metabolism, 78, 101811.

Tixi W, et al. (2023) Coordination between ECM and cell-cell adhesion regulates the development of islet aggregation, architecture, and functional maturation. eLife, 12.

Zhang X, et al. (2022) IL18 signaling causes islet ? cell development and insulin secretion via different receptors on acinar and ? cells. Developmental cell, 57(12), 1496.

Papazoglou I, et al. (2022) A distinct hypothalamus-to-? cell circuit modulates insulin secretion. Cell metabolism, 34(2), 285.

Nasteska D, et al. (2021) PDX1LOW MAFALOW ?-cells contribute to islet function and insulin release. Nature communications, 12(1), 674.