

Resource Summary Report

Generated by [NIF](#) on Sep 4, 2026

NOD/ShiLtJ

RRID:IMSR_JAX:001976

Type: Organism

Proper Citation

RRID:IMSR_JAX:001976

Organism Information

URL: <https://www.jax.org/strain/001976>

Proper Citation: RRID:IMSR_JAX:001976

Description: Mus musculus with name NOD/ShiLtJ from IMSR.

Species: Mus musculus

Synonyms: Non-obese Diabetic. NOD/LtJ

Notes: gene symbol note: G protein-coupled receptor 84|deletion; Chr 1; Edward H Leiter 2|cadherin related 23 (otocadherin)|histocompatibility-2; MHC|interleukin 2|deletion; Chr 3; Edward H Leiter 3|cytochrome c oxidase subunit 7A2 like|deletion; Chr 3; Edward H Leiter 1|mitochondrially encoded tRNA arginine|hemolytic complement; inbred strain: Gpr84|Del(1)2Lt|Cdh23|H2|II2|Del(3)3Lt|Cox7a2|Del(3)1Lt|mt-Tr|Hc

Affected Gene: G protein-coupled receptor 84|deletion; Chr 1; Edward H Leiter 2|cadherin related 23 (otocadherin)|histocompatibility-2; MHC|interleukin 2|deletion; Chr 3; Edward H Leiter 3|cytochrome c oxidase subunit 7A2 like|deletion; Chr 3; Edward H Leiter 1|mitochondrially encoded tRNA arginine|hemolytic complement

Genomic Alteration: deletion|deletion; Chr 1; Edward H Leiter 2|age related hearing loss 1|g7 variant|mutation 1|deletion; Chr 3; Edward H Leiter 3|long|deletion; Chr 3; Edward H Leiter 1|deficient

Catalog Number: JAX:001976

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: NOD/ShiLtJ

Record Creation Time: 20250513T053628+0000

Record Last Update: 20260829T044917+0000

Ratings and Alerts

- Used for targeted mutation by the Human Islet Research Network community.
Contact(s): [Raghavendra Mirmira](#), [Sarah Tersey](#) - Human Islets Research Network
<https://hirnetwork.org/>

No alerts have been found for NOD/ShiLtJ.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 582 mentions in open access literature.

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

Helmy M, et al. (2026) High-quality mouse reference genomes reveal the structural complexity of the murine protein-coding landscape. *Cell genomics*, 6(2), 101074.

Chen HC, et al. (2026) UTX coordinates TCF1 and STAT3 to control progenitor CD8+ T cell fate in autoimmune diabetes. *The Journal of clinical investigation*, 136(4).

Dewey HB, et al. (2026) Simplifying Systems Genetics with QTLretrievR: An R Package for Molecular QTL Identification. *bioRxiv* : the preprint server for biology.

Lin Y, et al. (2026) JAK inhibitor tofacitinib alleviates secretory dysfunction and Th17/Treg imbalance in a Sjögren's disease murine model. *Annals of medicine*, 58(1), 2625552.

Srivastava N, et al. (2026) A microenvironment-driven HLA-II-associated insulin neoantigen elicits persistent memory T cell activation in diabetes. *Nature immunology*, 27(1), 82.

Blanco-Domínguez R, et al. (2026) Regulatory T cells sabotage anti-tumor ?? T cells by creating IL-2-deficient environments. *The Journal of experimental medicine*, 223(7).

Tamaki CM, et al. (2026) Gain-of-function mutation in SKAP2 leads to type 1 diabetes and broader autoimmunity through hyperactive integrin signaling in myeloid cells. *bioRxiv* : the preprint server for biology.

Xie L, et al. (2026) Galectin-3 exacerbates autoimmune diabetes by limiting regulatory T cell differentiation and function. *Science advances*, 12(1), eadz7916.

Lorenzo K, et al. (2026) Redundant γ c cytokines license IL-1-driven neutrophil inflammation through MEK/ERK convergence. *bioRxiv : the preprint server for biology*.

Ehall B, et al. (2026) Revisiting type 1 diabetes progression in the non-obese diabetic mouse. *Scientific reports*, 16(1), 5768.

Detrez JR, et al. (2026) Immune response to adeno-associated viral vectors in a human iPSC-derived microglia chimeric mouse model. *Cell reports methods*, 6(4), 101362.

Potter G, et al. (2026) OmNI: a modular open-source framework for interactive multi-omics data integration and visualization. *NAR genomics and bioinformatics*, 8(1), lqaf206.

Contreras CJ, et al. (2026) RIPK1 regulates γ -cell fate via actions on gene expression and kinase signaling in a mouse model of γ -cell self-reactivity. *Cell death & disease*, 17(1), 220.

Lai S, et al. (2026) Proinsulin regulators identified with CRISPR screen and in vivo mouse QTL mapping. *Nature communications*, 17(1).

Wu Y, et al. (2026) Anti-CD3 mAb treatment reshapes infiltrating T and γ cells in the islets in autoimmune diabetes. *JCI insight*, 11(2).

Govindarajan M, et al. (2026) Pan-cancer N-glycoproteomic atlas of patient-derived xenografts uncovers FAT2 as an actionable surface target. *Cell reports. Medicine*, 7(2), 102578.

Zhang F, et al. (2026) Engineered ETS1-Nanoconjugate Restores Immune Homeostasis through Dual Immune-Vascular Modulation in Relapsing and Progressive Multiple Sclerosis. *Advanced healthcare materials*, 15(15), e04951.

Poddar S, et al. (2026) Role of small intronic RNAs in the crosstalk between immune cells and γ -cells during type 1 diabetes development. *RNA biology*, 23(1), 1.

Thumbikat P, et al. (2026) Epigenetic Regulation of Immune Dysfunction in Chronic Prostatitis/Chronic Pelvic Pain Syndrome. *The Prostate*, 86(10), 1124.

Cuminetti V, et al. (2026) Succinate receptor 1 restricts hematopoiesis and prevents acute myeloid leukemia progression. *Nature communications*, 17(1).