

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.sci-crunch.org) on May 14, 2025

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: cytochrome c oxidase subunit 7A2 like|deletion; Chr 3; Edward H Leiter 1|deletion; Chr 3; Edward H Leiter 3|mitochondrially encoded tRNA arginine|deletion; Chr 1; Edward H Leiter 2|hemolytic complement|interleukin 2|cadherin related 23 (otocadherin)|G protein-coupled receptor 84|histocompatibility-2; MHC; inbred strain: Cox7a2|Del(3)1Lt|Del(3)3Lt|mt-Tr|Del(1)2Lt|Hc|Il2|Cdh23|Gpr84|H2

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

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

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: 20250513T053728+0000

Ratings and Alerts

No rating or validation information has been found for NOD/ShiLtJ.

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 492 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Bode K, et al. (2024) Beta cells deficient for Renalase counteract autoimmunity by shaping natural killer cell activity. *Frontiers in immunology*, 15, 1403752.

Seyedsadr M, et al. (2024) A pathologically expanded, clonal lineage of IL-21-producing CD4+ T cells drives inflammatory neuropathy. *The Journal of clinical investigation*, 134(15).

Simon NM, et al. (2024) Stem cell transcriptional profiles from mouse subspecies reveal cis-regulatory evolution at translation genes. *Heredity*, 133(5), 308.

Cobb J, et al. (2024) Reversal of diabetes by an oral Salmonella-based vaccine in acute and progressive diabetes in NOD mice. *PloS one*, 19(5), e0303863.

Janssen LM, et al. (2024) Differential pulmonary toxicity and autoantibody formation in genetically distinct mouse strains following combined exposure to silica and diesel exhaust particles. *Particle and fibre toxicology*, 21(1), 8.

Nguyen BN, et al. (2024) Dexamethasone-induced muscle atrophy and bone loss in six genetically diverse collaborative cross founder strains demonstrates phenotypic variability by

Rg3 treatment. Journal of ginseng research, 48(3), 310.

Sarkar S, et al. (2024) Regulation of β -cell death by ADP-ribosylhydrolase ARH3 via lipid signaling in insulinitis. Cell communication and signaling : CCS, 22(1), 141.

Bode K, et al. (2024) Beta Cells Deficient for Renalase Counteract Autoimmunity by Shaping Natural Killer Cell Activity. bioRxiv : the preprint server for biology.

Stock AJ, et al. (2024) The IFIH1-A946T risk variant promotes diabetes in a sex-dependent manner. Frontiers in immunology, 15, 1349601.

Guo YJ, et al. (2024) HBB contributes to individualized aconitine-induced cardiotoxicity in mice via interfering with ABHD5/AMPK/HDAC4 axis. Acta pharmacologica Sinica, 45(6), 1224.

Aseer KR, et al. (2024) Beta cell specific cannabinoid 1 receptor deletion counteracts progression to hyperglycemia in non-obese diabetic mice. Molecular metabolism, 82, 101906.

Fernandez Trigo N, et al. (2024) The protective effect of the intestinal microbiota in type-1 diabetes in NOD mice is limited to a time window in early life. Frontiers in endocrinology, 15, 1425235.

Fletcher JD, et al. (2024) Oral gavage delivery of Cornus officinalis extract delays type 1 diabetes onset and hyperglycemia in non-obese diabetic (NOD) mice. FEBS open bio, 14(3), 434.

Wreven E, et al. (2024) Pharmaceutical targeting of the cannabinoid type 1 receptor impacts the crosstalk between immune cells and islets to reduce insulinitis in humans. Diabetologia, 67(9), 1877.

Balasenthilkumaran NV, et al. (2024) Network approach reveals preferential T-cell and macrophage association with β -linked β -cells in early stage of insulinitis in NOD mice. Frontiers in network physiology, 4, 1393397.

Muralidharan C, et al. (2024) Inhibition of the eukaryotic initiation factor-2 γ kinase PERK decreases risk of autoimmune diabetes in mice. The Journal of clinical investigation, 134(16).

Liao CC, et al. (2024) Refined protocol for newly onset identification in non-obese diabetic mice: an animal-friendly, cost-effective, and efficient alternative. Laboratory animal research, 40(1), 16.

Wardell CM, et al. (2024) Short Report: CAR Tregs mediate linked suppression and infectious tolerance in islet transplantation. bioRxiv : the preprint server for biology.

Metz C, et al. (2024) Pharmacokinetic and Environmental Risk Assessment of Prime-2-CoV, a Non-Replicating Orf Virus-Based Vaccine against SARS-CoV-2. Vaccines, 12(5).

Poirion OB, et al. (2024) Enhlink infers distal and context-specific enhancer-promoter

linkages. *Genome biology*, 25(1), 235.