Resource Summary Report

Generated by ASWG on Jul 30, 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: cytochrome c oxidase subunit 7A2 like|deletion; Chr 3; Edward H Leiter 3|hemolytic complement|mitochondrially encoded tRNA arginine|G protein-coupled receptor 84|deletion; Chr 3; Edward H Leiter 1|interleukin 2|deletion; Chr 1; Edward H Leiter 2|histocompatibility-2; MHC|cadherin related 23 (otocadherin); inbred strain: Cox7a2l|Del(3)3Lt|Hc|mt-Tr|Gpr84|Del(3)1Lt|Il2|Del(1)2Lt|H2|Cdh23

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

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

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: 20260725T044336+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 540 mentions in open access literature.

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

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.

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

Gudi RR, et al. (2026) Human Gut Commensal Bacteroides fragilis Suppresses Mucin Production and Alters Microbiota Composition Resulting in Accelerated Type 1 Diabetes in Mice. Immunology, 177(1), 119.

Fletcher JD, et al. (2026) NMR and proteomic analysis of Cornus officinalis extract reveals abundance of 5-hydroxymethylfurfural and induced expression of Nrf2 and superoxide dismutase-2 in 1.1B4 human pancreatic ?-cells and murine islets. Molecular and cellular endocrinology, 611, 112675.

Brown ME, et al. (2025) Inhibition of CD226 co-stimulation suppresses diabetes development in the NOD mouse by augmenting regulatory T cells and diminishing effector T cell function. Diabetologia, 68(2), 397.

Wang CM, et al. (2025) Supplementation with active vitamin D3 ameliorates experimental autoimmune thyroiditis in mice by modulating the differentiation and functionality of intrathyroidal T-cell subsets. Frontiers in immunology, 16, 1528707.

Islam MZ, et al. (2025) Single-cell RNA-seq reveals disease-specific CD8+ T cell clonal expansion and a high frequency of transcriptionally distinct double-negative T cells in diabetic NOD mice. PloS one, 20(3), e0317987.

Nowak EC, et al. (2025) The role of VISTA engagement in limiting neutrophil-mediated inflammation. Journal of immunology (Baltimore, Md. : 1950), 214(9), 2385.

Garretson A, et al. (2025) Benchmarking Genomic Variant Calling Tools in Inbred Mouse Strains: Recommendations and Considerations. bioRxiv : the preprint server for biology.

Pipella J, et al. (2025) Autoreactive T Cells and Cytokine Stress Drive ?-Cell Senescence Entry and Accumulation in Type 1 Diabetes. Diabetes, 74(9), 1562.

Choe J, et al. (2025) ST8Sia6 overexpression protects pancreatic ? cells from spontaneous autoimmune diabetes in nonobese diabetic mice. The Journal of clinical investigation, 135(15).

Murray KE, et al. (2025) Sex and Genotype Affect Mouse Hippocampal Gene Expression in Response to Blast-Induced Traumatic Brain Injury. Molecular neurobiology, 62(8), 9980.

Gan Y, et al. (2025) Pharmacological Mechanisms of CheReCunJin Formula in Ameliorating Sjögren's Syndrome: Suppression of IL-17 Signal-Mediated Inflammatory Cascade. Journal of inflammation research, 18, 17289.

Li S, et al. (2025) Autoimmune thyroiditis promotes breast cancer progression: exploratory role of thyroid hormone receptor beta signaling disruption. Breast cancer research : BCR, 27(1), 225.

Tao X, et al. (2025) Engineered nanozyme immunomodulator for xerostomia treatment via regulating submandibular salivary gland. Materials today. Bio, 35, 102555.

Elias-Oliveira J, et al. (2025) Lactococcus lactis-HSP65 requires TLR2 to induce tolerogenic dendritic cells and confer protection against type 1 diabetes in a murine model. Cellular and molecular life sciences : CMLS, 82(1), 435.

Oestereicher MA, et al. (2025) Establishing standardized transthoracic echocardiography reference ranges for mouse models: insights into the impact of anesthesia, sex, and age. Frontiers in cardiovascular medicine, 12, 1695034.

Garnica J, et al. (2025) BLIMP-1-dependent differentiation of T follicular helper cells into Foxp3+ T regulatory type 1 cells. Frontiers in immunology, 16, 1519780.

Janssen LMF, et al. (2025) Crystalline silica exposure induces multiple systemic autoimmune phenotypes including inflammatory arthritis and nephritis in Collaborative Cross mice with differing sub-clinical autoimmune profiles. bioRxiv : the preprint server for biology.

Dai YD, et al. (2025) Identification of conserved T cell epitopes and flanking amino acid mutants of endogenous retrovirus Gag antigen in nonobese diabetic mice. ImmunoHorizons, 9(9).