

Resource Summary Report

Generated by [kravitz2](#) on Aug 3, 2026

NOD.Cg-Tg(TcraTcrbNY8.3)1Pesa/DvsJ

RRID:IMSR_JAX:005868

Type: Organism

Proper Citation

RRID:IMSR_JAX:005868

Organism Information

URL: <https://www.jax.org/strain/005868>

Proper Citation: RRID:IMSR_JAX:005868

Description: Mus musculus with name NOD.Cg-Tg(TcraTcrbNY8.3)1Pesa/DvsJ from IMSR.

Species: Mus musculus

Synonyms: NOD-TCRalpha-beta-TG. 8.3-NOD. 8.3-TCR-alpha/beta transgenic NOD. NOD.8.3. NY8.3-NOD

Notes: gene symbol note: T cell receptor alpha chain|transgene insertion 1; Pere Santamaria|T cell receptor beta chain; mutant strain|congenic strain: Tcra|Tg(TcraTcrbNY8.3)1Pesa|Tcrb

Affected Gene: T cell receptor alpha chain|transgene insertion 1; Pere Santamaria|T cell receptor beta chain

Genomic Alteration: transgene insertion 1; Pere Santamaria

Catalog Number: JAX:005868

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: NOD.Cg-Tg(TcraTcrbNY8.3)1Pesa/DvsJ

Record Creation Time: 20250513T053653+0000

Record Last Update: 20260801T050357+0000

Ratings and Alerts

No rating or validation information has been found for NOD.Cg-Tg(TcraTcrbNY8.3)1Pesa/DvsJ.

No alerts have been found for NOD.Cg-Tg(TcraTcrbNY8.3)1Pesa/DvsJ.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 16 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#).

Ciecko AE, et al. (2025) An interleukin-27-centered cytokine circuit regulates macrophage and T cell interactions in autoimmune diabetes. *iScience*, 28(10), 113537.

Lee J, et al. (2024) Androgens contribute to sex bias of autoimmunity in mice by T cell-intrinsic regulation of Ptpn22 phosphatase expression. *Nature communications*, 15(1), 7688.

Mitchell JS, et al. (2024) CD4+ T cells reactive to a hybrid peptide from insulin-chromogranin A adopt a distinct effector fate and are pathogenic in autoimmune diabetes. *Immunity*, 57(10), 2399.

Srivastava N, et al. (2024) CXCL16-dependent scavenging of oxidized lipids by islet macrophages promotes differentiation of pathogenic CD8+ T cells in diabetic autoimmunity. *Immunity*, 57(7), 1629.

Mine K, et al. (2024) TYK2 signaling promotes the development of autoreactive CD8+ cytotoxic T lymphocytes and type 1 diabetes. *Nature communications*, 15(1), 1337.

Gammon JM, et al. (2023) Engineering the lymph node environment promotes antigen-specific efficacy in type 1 diabetes and islet transplantation. *Nature communications*, 14(1), 681.

Zisi Tegou F, et al. (2022) CCL21 and beta-cell antigen releasing hydrogels as tolerance-inducing therapy in Type I diabetes. *Journal of controlled release : official journal of the Controlled Release Society*, 348, 499.

Pöysti S, et al. (2022) Infection with the enteric pathogen *C. rodentium* promotes islet-specific autoimmunity by activating a lymphatic route from the gut to pancreatic lymph node. *Mucosal immunology*, 15(3), 471.

Anandakumaran PN, et al. (2022) Rapid video-based deep learning of cognate versus non-cognate T cell-dendritic cell interactions. *Scientific reports*, 12(1), 559.

Clark M, et al. (2021) Coreceptor therapy has distinct short- and long-term tolerogenic effects intrinsic to autoreactive effector T cells. *JCI insight*, 6(17).

Ciecko AE, et al. (2019) Interleukin-27 Is Essential for Type 1 Diabetes Development and Sjögren Syndrome-like Inflammation. *Cell reports*, 29(10), 3073.

Wan X, et al. (2018) Pancreatic islets communicate with lymphoid tissues via exocytosis of insulin peptides. *Nature*, 560(7716), 107.

Carrero JA, et al. (2017) Resident macrophages of pancreatic islets have a seminal role in the initiation of autoimmune diabetes of NOD mice. *Proceedings of the National Academy of Sciences of the United States of America*, 114(48), E10418.

Mohan JF, et al. (2013) Pathogenic CD4⁺ T cells recognizing an unstable peptide of insulin are directly recruited into islets bypassing local lymph nodes. *The Journal of experimental medicine*, 210(11), 2403.

Chen XL, et al. (2013) Induction of autoimmune diabetes in non-obese diabetic mice requires interleukin-21-dependent activation of autoreactive CD8⁺ T cells. *Clinical and experimental immunology*, 173(2), 184.

Yi Z, et al. (2012) Long-term remission of diabetes in NOD mice is induced by nondepleting anti-CD4 and anti-CD8 antibodies. *Diabetes*, 61(11), 2871.