Resource Summary Report

Generated by RRID on Jul 30, 2026

NOD.Cg-Tg(TcraBDC2.5.TcrbBDC2.5)1Doi/DoiJ

RRID:IMSR_JAX:004460
Type: Organism

Proper Citation

RRID:IMSR_JAX:004460

Organism Information

URL: https://www.jax.org/strain/004460

Proper Citation: RRID:IMSR_JAX:004460

Description: Mus musculus with name NOD.Cg-Tg(TcraBDC2.5.TcrbBDC2.5)1Doi/DoiJ from IMSR.

Species: Mus musculus

Synonyms: NOD.Cg-Tg(TcraBDC2.5)1Doi Tg(TcrbBDC2.5)2Doi Rag1/DoiJ. BDC2.5/Rag. NOD.Cg-Tg(TcraBDC2.5)1Doi Tg(TcrbBDC2.5)2Doi/DoiJ

Notes: gene symbol note: T cell receptor alpha chain|transgene insertion 1; Christophe Benoist|T cell receptor beta chain; mutant strain|congenic strain: Tcra|Tg(TcraBDC2.5;TcrbBDC2.5)1Doi|Tcrb

Affected Gene: T cell receptor alpha chain|transgene insertion 1; Christophe Benoist|T cell receptor beta chain

Genomic Alteration: transgene insertion 1; Christophe Benoist

Catalog Number: JAX:004460

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: NOD.Cg-Tg(TcraBDC2.5.TcrbBDC2.5)1Doi/DoiJ

Record Creation Time: 20250513T053645+0000

Record Last Update: 20260725T044354+0000

Ratings and Alerts

No rating or validation information has been found for NOD.Cg-Tg(TcraBDC2.5.TcrbBDC2.5)1Doi/DoiJ.

No alerts have been found for NOD.Cg-Tg(TcraBDC2.5.TcrbBDC2.5)1Doi/DoiJ.

Data and Source Information

Source: Integrated Animals

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 11 mentions in open access literature.

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

Loaiza Naranjo JD, et al. (2025) PD-1 expressing islet-specific CD4+ T cells promote bystander tolerance and prevent autoimmunity. Immunology and cell biology, 103(7), 738.

Alvarez F, et al. (2024) The IL-2 SYNTHORIN molecule promotes functionally adapted Tregs in a preclinical model of type 1 diabetes. JCI insight, 9(24).

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.

Funsten MC, et al. (2023) Microbiota-dependent proteolysis of gluten subverts diet-mediated protection against type 1 diabetes. Cell host & microbe, 31(2), 213.

Mandarano AH, et al. (2023) DRAK2 contributes to type 1 diabetes by negatively regulating IL-2 sensitivity to alter regulatory T cell development. Cell reports, 42(2), 112106.

Umeshappa CS, et al. (2021) Liver-specific T regulatory type-1 cells program local neutrophils to suppress hepatic autoimmunity via CRAMP. Cell reports, 34(13), 108919.

Firdessa-Fite R, et al. (2021) Soluble Antigen Arrays Efficiently Deliver Peptides and Arrest Spontaneous Autoimmune Diabetes. Diabetes, 70(6), 1334.

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

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.

Wan X, et al. (2016) Class-switched anti-insulin antibodies originate from unconventional antigen presentation in multiple lymphoid sites. The Journal of experimental medicine,

213(6), 967.

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.