

Resource Summary Report

Generated by [RRID](#) on Sep 1, 2026

NIT-1

RRID:CVCL_3561

Type: Cell Line

Proper Citation

RRID:CVCL_3561

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_3561

Proper Citation: RRID:CVCL_3561

Description: Cell line NIT-1 is a Transformed cell line with a species of origin Mus musculus (Mouse)

Sex: Female

Defining Citation: [PMID:1647994](#), [PMID:8697299](#)

Comments: Characteristics: Secretes insulin.

Category: Transformed cell line

Organism: Mus musculus (Mouse)

Name: NIT-1

Synonyms: NIT1

Cross References: CLO:CLO_0008175, ATCC:CRL-2055, BCRC:60452, IZSLER:BS TCL 192, Wikidata:Q54930633

ID: CVCL_3561

Record Creation Time: 20220427T221343+0000

Record Last Update: 20260829T235433+0000

Ratings and Alerts

No rating or validation information has been found for NIT-1.

No alerts have been found for NIT-1.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 13 mentions in open access literature.

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

Gonzalez GC, et al. (2025) High-Yield Generation of Glucose-Responsive Pseudoislets From Murine Insulinoma Cells for In Vitro Studies and Longitudinal Monitoring of Graft Survival In Vivo. *Cell transplantation*, 34, 9636897251315123.

Rao C, et al. (2025) Beta cell extracellular vesicle PD-L1 as a novel regulator of CD8+ T cell activity and biomarker during the evolution of type 1 diabetes. *Diabetologia*, 68(2), 382.

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.

Li GJ, et al. (2025) Downregulation of NAD Kinase Expression in β -Cells Contributes to the Aging-Associated Decline in Glucose-Stimulated Insulin Secretion. *Aging cell*, 24(4), e70037.

Rao C, et al. (2024) Beta cell extracellular vesicle PD-L1 as a novel regulator of CD8+ T cell activity and biomarker during the evolution of Type 1 Diabetes. *bioRxiv : the preprint server for biology*.

Shang B, et al. (2024) Combination therapy enhances efficacy and overcomes toxicity of metal-based anti-diabetic agent. *British journal of pharmacology*, 181(21), 4214.

Brown ME, et al. (2024) Inhibition of CD226 Co-Stimulation Suppresses Diabetes Development in the NOD Mouse by Augmenting Tregs and Diminishing Effector T Cell Function. *bioRxiv : the preprint server for biology*.

Chen X, et al. (2023) BCAS2 Participates in Insulin Synthesis and Secretion via mRNA Alternative Splicing in Mice. *Endocrinology*, 165(1).

Li S, et al. (2022) Regenerating islet-derived protein 3 gamma (Reg3g) ameliorates tacrolimus-induced pancreatic β -cell dysfunction in mice by restoring mitochondrial function. *British journal of pharmacology*, 179(12), 3078.

Wu Y, et al. (2022) Glycerate from intestinal fructose metabolism induces islet cell damage and glucose intolerance. *Cell metabolism*, 34(7), 1042.

Brawerman G, et al. (2022) DNA damage to β cells in culture recapitulates features of senescent β cells that accumulate in type 1 diabetes. *Molecular metabolism*, 62, 101524.

Wee J, et al. (2021) Tentonin 3/TMEM150C regulates glucose-stimulated insulin secretion in pancreatic β -cells. Cell reports, 37(9), 110067.

Kim HI, et al. (2019) Metformin Ameliorates Lipotoxic β -Cell Dysfunction through a Concentration-Dependent Dual Mechanism of Action. Diabetes & metabolism journal, 43(6), 854.