

Resource Summary Report

Generated by [dkNET](#) on Aug 26, 2026

INS-1 832/13

RRID:CVCL_7226

Type: Cell Line

Proper Citation

RRID:CVCL_7226

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_7226

Proper Citation: RRID:CVCL_7226

Description: Cell line INS-1 832/13 is a Cancer cell line with a species of origin Rattus norvegicus (Rat)

Sex: Male

Disease: Rat insulinoma

Defining Citation: [PMID:10868964](#), [PMID:18755687](#), [PMID:23555872](#), [PMID:25803449](#), [PMID:36180704](#)

Comments: Characteristics: Shows robust glucose-stimulated insulin secretion (GSIS) (Millipore=SCC207).

Category: Cancer cell line

Organism: Rattus norvegicus (Rat)

Name: INS-1 832/13

Synonyms: INS1 832/13, INS-1 (832/13), INS 832/13, 832/13, 832/13 INS-1

Cross References: BCGO:BCGO_0000115, BTO:BTO_0003318, AddexBio:C0018024/5026, ChEMBL-Cells:ChEMBL4483142, ChEMBL-Targets:ChEMBL4483248, Lonza:11, MetaboLights:MTBLS951, Millipore:SCC207, PubChem_Cell_line:CVCL_7226, TOKU-E:4125, Wikidata:Q54897743

ID: CVCL_7226

Hierarchy: cvcl_0352

Record Creation Time: 20220427T220636+0000

Record Last Update: 20260815T234323+0000

Ratings and Alerts

No rating or validation information has been found for INS-1 832/13.

No alerts have been found for INS-1 832/13.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 145 mentions in open access literature.

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

Elsheikh A, et al. (2025) AI-based discovery and cryoEM structural elucidation of a KATP channel pharmacochaperone. eLife, 13.

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.

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.

Lee CC, et al. (2024) Sodium butyrate prevents cytokine-induced β -cell dysfunction through restoration of stromal interaction molecule 1 expression and activation of store-operated calcium entry. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 38(15), e23853.

Esser N, et al. (2024) The islet tissue plasminogen activator/plasmin system is upregulated with human islet amyloid polypeptide aggregation and protects beta cells from aggregation-induced toxicity. Diabetologia, 67(9), 1897.

Mohammad Al-Amily I, et al. (2023) Ablation of GPR56 Causes β -Cell Dysfunction by ATP Loss through Mistargeting of Mitochondrial VDAC1 to the Plasma Membrane. Biomolecules, 13(3).

Jeyarajan S, et al. (2023) Simultaneous Measurement of Changes in Mitochondrial and Endoplasmic Reticulum Free Calcium in Pancreatic Beta Cells. Biosensors, 13(3).

Xu W, et al. (2023) Architecture of androgen receptor pathways amplifying glucagon-like peptide-1 insulinotropic action in male pancreatic β cells. Cell reports, 42(5), 112529.

Sohn P, et al. (2023) Stromal Interaction Molecule 1 Maintains β -Cell Identity and Function in Female Mice Through Preservation of G-Protein-Coupled Estrogen Receptor 1 Signaling. *Diabetes*, 72(10), 1433.

Li X, et al. (2023) Deficiency of WTAP in islet beta cells results in beta cell failure and diabetes in mice. *Diabetologia*, 66(6), 1084.

Omar-Hmeadi M, et al. (2023) Local PI(4,5)P₂ signaling inhibits fusion pore expansion during exocytosis. *Cell reports*, 42(2), 112036.

Saeed R, et al. (2023) Dual Role of Mitogen-Activated Protein Kinase 8 Interacting Protein-1 in Inflammasome and Pancreatic β -Cell Function. *International journal of molecular sciences*, 24(5).

Lee CC, et al. (2023) Histone Deacetylase Inhibitors Prevent Cytokine-Induced β Cell Dysfunction Through Restoration of Stromal Interaction Molecule 1 Expression and Activation of Store-Operated Calcium Entry. *bioRxiv : the preprint server for biology*.

Wu R, et al. (2022) The Calcium Channel Subunit Gamma-4 as a Novel Regulator of MafA in Pancreatic Beta-Cell Controls Glucose Homeostasis. *Biomedicines*, 10(4).

Sung BJ, et al. (2022) ROCK1 regulates insulin secretion from β -cells. *Molecular metabolism*, 66, 101625.

Golec E, et al. (2022) Alternative splicing encodes functional intracellular CD59 isoforms that mediate insulin secretion and are down-regulated in diabetic islets. *Proceedings of the National Academy of Sciences of the United States of America*, 119(24), e2120083119.

Todero JE, et al. (2022) Candidate master microRNA regulator of arsenic-induced pancreatic beta cell impairment revealed by multi-omics analysis. *Archives of toxicology*, 96(6), 1685.

Merz KE, et al. (2022) Enrichment of the exocytosis protein STX4 in skeletal muscle remediates peripheral insulin resistance and alters mitochondrial dynamics via Drp1. *Nature communications*, 13(1), 424.

Kowluru A, et al. (2022) Hyperglycemic Conditions Promote Rac1-Mediated Serine536 Phosphorylation of p65 Subunit of NF κ B (RelA) in Pancreatic Beta Cells. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 56(4), 367.

Morikawa S, et al. (2022) Loss of Function of WFS1 Causes ER Stress-Mediated Inflammation in Pancreatic Beta-Cells. *Frontiers in endocrinology*, 13, 849204.