

# Resource Summary Report

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## 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](https://web.expasy.org/cellosaurus/CVCL_7226)

**Proper Citation:** (RRID:CVCL\_7226)

**Sex:** Male

**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

**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, TOKU-E:4125, PubChem\_Cell\_line:CVCL\_7226, Wikidata:Q54897743

**ID:** CVCL\_7226

**Record Creation Time:** 20250131T201036+0000

**Record Last Update:** 20250131T202525+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.

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## Data and Source Information

**Source:** [Cellosaurus](#)

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## Usage and Citation Metrics

We found 142 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Lee CC, et al. (2024) Sodium butyrate prevents cytokine-induced  $\beta$ -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  $\beta$ -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  $\beta$  cells. *Cell reports*, 42(5), 112529.

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.

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

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  $\beta$ -Cell Function. *International journal of molecular sciences*, 24(5).

Lee CC, et al. (2023) Histone Deacetylase Inhibitors Prevent Cytokine-Induced  $\beta$  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  $\beta$ -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 $\kappa$ B (RelA) in Pancreatic Beta Cells. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 56(4), 367.

Verma G, et al. (2022) Ribosomal biogenesis regulator DIMT1 controls  $\beta$ -cell protein synthesis, mitochondrial function, and insulin secretion. *The Journal of biological chemistry*, 298(3), 101692.

Ye Y, et al. (2022) A critical role of the mechanosensor PIEZO1 in glucose-induced insulin secretion in pancreatic  $\beta$ -cells. *Nature communications*, 13(1), 4237.

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

Gamage S, et al. (2022) CARD9 Mediates Pancreatic Islet Beta-Cell Dysfunction Under the Duress of Hyperglycemic Stress. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 56(2), 120.