

Resource Summary Report

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Insulin-CreER (Tg(RIP-Cre/ESR1)Ydor)

RRID:BCBC_206

Type: Organism

Proper Citation

RRID:BCBC_206

Organism Information

URL:

Proper Citation: RRID:BCBC_206

Description: A transgenic mouse expression tamoxifen-inducible Cre recombinase under rat insulin promoter. Upon the injection of tamoxifen, loxP-flanked DNA sequences in beta cells will be deleted.

Species: Mus musculus

Notes: A transgenic mouse expression tamoxifen-inducible Cre recombinase under rat insulin promoter. Upon the injection of tamoxifen, loxP-flanked DNA sequences in beta cells will be deleted.

Phenotype: Diabetes mellitus

Catalog Number: 206

Background: TG

Database: BCBC, Beta Cell Biology Consortium

Database Abbreviation: BCBC

Organism Name: Insulin-CreER (Tg(RIP-Cre/ESR1)Ydor)

Record Creation Time: 20230226T042341+0000

Record Last Update: 20260815T181824+0000

Ratings and Alerts

No rating or validation information has been found for Insulin-CreER (Tg(RIP-Cre/ESR1)Ydor).

No alerts have been found for Insulin-CreER (Tg(RIP-Cre/ESR1)Ydor).

Data and Source Information

Source: [Integrated Animals](#)

Source Database: BCBC, Beta Cell Biology Consortium

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Kubota S, et al. (2026) ChREBP drives β -cell proliferation under metabolic stress but not in pregnancy-induced β -cell expansion. Journal of diabetes investigation, 17(6), 938.

King BC, et al. (2026) Beta-cell-specific C3 deficiency exacerbates metabolic dysregulation and insulin resistance in obesity. Molecular metabolism, 103, 102302.

Ding L, et al. (2024) Beta-Cell Tipe1 Orchestrates Insulin Secretion and Cell Proliferation by Promoting G β s/cAMP Signaling via USP5. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(16), e2304940.

Haemmerle MW, et al. (2024) RNA-binding protein PCBP2 regulates pancreatic β cell function and adaptation to glucose. The Journal of clinical investigation, 134(12).

Hill TG, et al. (2024) Loss of electrical β -cell to β -cell coupling underlies impaired hypoglycaemia-induced glucagon secretion in type-1 diabetes. Nature metabolism, 6(11), 2070.

Yang Y, et al. (2024) The mitochondrial enzyme pyruvate carboxylase restricts pancreatic β -cell senescence by blocking p53 activation. Proceedings of the National Academy of Sciences of the United States of America, 121(44), e2401218121.

Akai R, et al. (2024) Partial limitation of cellular functions and compensatory modulation of unfolded protein response pathways caused by double-knockout of ATF6 β and ATF6 γ . Cell stress & chaperones, 29(1), 34.

Shi S, et al. (2024) PGC-1 β -Coordinated Hypothalamic Antioxidant Defense Is Linked to SP1-LanCL1 Axis during High-Fat-Diet-Induced Obesity in Male Mice. Antioxidants (Basel, Switzerland), 13(2).

Iwamoto T, et al. (2023) Inhibition of Insulin Secretion Induces Golgi Morphological Changes. Juntendo Iji zasshi = Juntendo medical journal, 69(1), 42.

Han M, et al. (2023) Luteolin Protects Pancreatic β Cells against Apoptosis through Regulation of Autophagy and ROS Clearance. *Pharmaceuticals* (Basel, Switzerland), 16(7).

Ishii T, et al. (2023) Membrane protease prostasin promotes insulin secretion by regulating the epidermal growth factor receptor pathway. *Scientific reports*, 13(1), 9086.

Chen Y, et al. (2023) Metabolic intervention by low carbohydrate diet suppresses the onset and progression of neuroendocrine tumors. *Cell death & disease*, 14(9), 597.

Zammit NW, et al. (2023) RELA governs a network of islet-specific metabolic genes necessary for beta cell function. *Diabetologia*, 66(8), 1516.

Kohata M, et al. (2022) Roles of FoxM1-driven basal β -cell proliferation in maintenance of β -cell mass and glucose tolerance during adulthood. *Journal of diabetes investigation*, 13(10), 1666.

Coppola I, et al. (2021) Differential Effects of Furin Deficiency on Insulin Receptor Processing and Glucose Control in Liver and Pancreatic β Cells of Mice. *International journal of molecular sciences*, 22(12).

Zhu K, et al. (2020) Kindlin-2 modulates MafA and β -catenin expression to regulate β -cell function and mass in mice. *Nature communications*, 11(1), 484.

Zhang F, et al. (2020) Obesity-induced overexpression of miR-802 impairs insulin transcription and secretion. *Nature communications*, 11(1), 1822.

Lu TT, et al. (2018) The Polycomb-Dependent Epigenome Controls β Cell Dysfunction, Dedifferentiation, and Diabetes. *Cell metabolism*, 27(6), 1294.

Lanuza-Masdeu J, et al. (2013) In vivo JNK activation in pancreatic β -cells leads to glucose intolerance caused by insulin resistance in pancreas. *Diabetes*, 62(7), 2308.

Kalis M, et al. (2011) Beta-cell specific deletion of Dicer1 leads to defective insulin secretion and diabetes mellitus. *PloS one*, 6(12), e29166.