

Resource Summary Report

Generated by [RRID](#) on Sep 2, 2026

RIN-m5F

RRID:CVCL_0501

Type: Cell Line

Proper Citation

RRID:CVCL_0501

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0501

Proper Citation: RRID:CVCL_0501

Description: Cell line RIN-m5F is a Cancer cell line with a species of origin Rattus norvegicus (Rat)

Sex: Male

Disease: Rat insulinoma

Defining Citation: [PMID:2090331](#), [PMID:2156672](#), [PMID:2550270](#), [PMID:2569024](#), [PMID:2997172](#), [PMID:3902821](#), [PMID:6129963](#), [PMID:6141566](#), [PMID:6295859](#), [PMID:8697299](#), [PMID:10417352](#), [PMID:22538498](#)

Comments: Characteristics: Secretes mainly insulin and little somatostatin (PubMed=6141566; PubMed=6295859).

Category: Cancer cell line

Organism: Rattus norvegicus (Rat)

Name: RIN-m5F

Synonyms: RIN m5F, Rin-M-5F, Rin-m-5F, RIN-m 5F, RINm-5F, RINm5F, RIN-m clone 5F, RIN CI-5F, RIN-5F, Rin-5F, RIN 5F, RIN5F, m5F, 5F

Cross References: BTO:BTO_0001185, CLO:CLO_0008817, CLO:CLO_0008819, MCCL:MCC:0000398, CLDB:cl4150, ATCC:CRL-2058, ATCC:CRL-11605, BCRC:60410, CCRID:1101RAT-PUMC000386, CCRID:4201RAT-CCTCC00223, CCTCC:GDC0223, ECACC:95090402, IBRC:C10101, Lonza:1056, NCBI_Iran:C526, Wikidata:Q54950473

ID: CVCL_0501

Hierarchy: cvcl_3584

Record Creation Time: 20220427T221500+0000

Record Last Update: 20260829T235738+0000

Ratings and Alerts

No rating or validation information has been found for RIN-m5F.

No alerts have been found for RIN-m5F.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Yang X, et al. (2025) Berberine Protects Pancreatic β -Cells From IL-1 β Damage Through Hormetic Mechanisms Via P53-Mediated Apoptosis Pathways. *Endocrinology*, 166(9).

Zhang S, et al. (2022) EZH2 suppresses insulinoma development by epigenetically reducing KIF4A expression via H3K27me3 modification. *Gene*, 822, 146317.

Krüger C, et al. (2021) The importance of aquaporin-8 for cytokine-mediated toxicity in rat insulin-producing cells. *Free radical biology & medicine*, 174, 135.

Krüger C, et al. (2021) AQP8 is a crucial H₂O₂ transporter in insulin-producing RINm5F cells. *Redox biology*, 43, 101962.

Laporte A, et al. (2020) Hydrogen peroxide permeability of cellular membranes in insulin-producing cells. *Biochimica et biophysica acta. Biomembranes*, 1862(2), 183096.

Melo EP, et al. (2017) TriPer, an optical probe tuned to the endoplasmic reticulum tracks changes in luminal H₂O₂. *BMC biology*, 15(1), 24.