

Product sheet

MIN-6 | 302148

MIN-6

Description MIN-6 is a rat insulinoma cell line derived from a spontaneously occurring insulinoma in a rat. It is a clonal cell line that grows in suspension and is characterized by its ability to produce and secrete insulin. MIN-6 cells are used in research to study the regulation of insulin secretion and the pathogenesis of diabetes mellitus.

Organism Rat

Tissue Pancreas, Islet of Langerhans

Disease Insulinoma

Synonyms Min6, MIN6, RIN-6, RIN-6A

MIN-6

Breed/Subspecies C57BL/6 IT6

Age 13 weeks

Gender Male

Cell type Endocrine

Growth properties Suspension

MIN-6

Citation MIN-6 (Rat Insulinoma) Cytion 302148

Biosafety level 1

NCBI_TaxID 10090

CellosaurusAccession CVCL_0431

GMO Status GMO-S1: Rat β -casein promoter (MIN-6) SV40 T-Antigen

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Cell Line

Protein expression **CD133, CD133, CD133, CD133**

Viruses **SV40 (SV40)**

Media

Culture Medium **DMEM, w: 4.5 g/L D-glucose, w: 4 mM L-glutamine, w: 3.7 g/L NaHCO₃, w: 1.0 mM sodium pyruvate (Cytion 82030a)**

Supplements **15% FBS, 50 μM β-mercaptoethanol**

Dissociation Reagent **Trypsin**

Subculturing **Trypsin 0.025%/EDTA 0.02% (Cytion 82030a), 37 °C**

Seeding density **5 x 10⁴ cells/cm²**

Freeze medium **DMEM (10% FBS) + 10% DMSO**

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Thawing and Culturing Cells

1. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. Transfer the cells to a pre-warmed medium.
2. Seed the cells into a pre-warmed flask containing 10 mL of medium. Incubate at 37°C with 5% CO₂ until the cells reach 70% confluency.
3. Harvest the cells by trypsinization. Seed the cells into a new flask containing 10 mL of medium. Incubate at 37°C with 5% CO₂ until the cells reach 70% confluency.
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Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating None

Freezing Procedure Harvest cells by trypsinization. Resuspend cells in freezing medium. Aliquot into 1 mL cryovials. Store at -80°C.

Shipping Conditions Store at -80°C. Ship on dry ice.

Storage Conditions Store at -150°C for 196 weeks.

HLA

Sterility The cells are free of mycoplasmas and PCR detectable agents.