



#### Product Description

iPSC-Derived Islet Organoids (iIslet) represent advanced 3D pancreatic models generated from human induced pluripotent stem cells. These organoids closely recapitulate the architecture and function of native pancreatic islets, containing insulin-producing  $\beta$  cells, glucagon-secreting  $\alpha$  cells, and somatostatin-producing  $\delta$  cells. Quality is assessed by expression of INSULIN, GLUCAGON, and NKKX6.1, along with functional validation of glucose-stimulated insulin secretion, ensuring physiologically relevant performance.

We are developing a panel of iIslet organoids from iPSCs derived from patients with diabetes and other metabolic disorders, enabling disease-specific modeling and comparative studies.

iIslet organoids provide a powerful tool for investigating islet biology, diabetes mechanisms, drug discovery, transplantation research, and regenerative therapy development, supporting both fundamental research and translational applications in metabolic disease.

#### Stability and Storage

Upon receipt, immediately transfer the cells from dry ice to liquid nitrogen storage, and maintain them in liquid nitrogen until ready for experimental use.

#### Shipping

Cryopreserved cells are shipped on dry ice. Live cells are shipped at ambient temperature.

#### Product Use

The products are for research use only. They are not approved for human or animal use, or for application in in vitro diagnostic procedures.

#### Contact Us

[www.i-linkbio.com](http://www.i-linkbio.com)  
sales@i-linkbio.com

## iPSC-Derived Islet Organoids Kit (iIslet) (Normal, Diseased, Engineered)

#### Quality Control:

Catalog Number	ILC-2023
Organism	<i>Homo sapiens</i>
Donor/Tissue/Medical History	See CoA for the detailed information
Product Format	Cryopreserved, or Live Cell Culture
Culture Properties	Suspension
Total Cell Number	400 organoids /vial
Viability	>90%
Human Pathogen	Negative
Bacterial, Fungi, Mycoplasma	Negative
Biomarker Expression	Positive (>80% of Insulin+)

#### Representative Dataset:

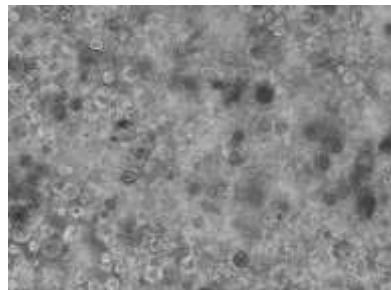


Figure 1. Bright Field Image of Islet Organoids.

#### Cell Thawing and Culture Protocol:

1. Thaw the cells rapidly in a 37 °C water bath.
2. Transfer the thawed cells into a 15 mL conical tube.
3. Gently add 2 mL of iIslet Culture Media (Cat# ILC0023M) to the tube.
4. Centrifuge at 100  $\times$  g for 2 minutes at room temperature.
5. Carefully aspirate the supernatant.
6. Gently resuspend the cell pellet in 2 mL of iIslet Culture Medium.
7. Seed the organoids onto Non-treated TC plates (typically, one vial yields 1 well of a 6-well plate).
8. Gently distribute the organoids evenly across the wells.
9. Incubate overnight at 37 °C in a CO<sub>2</sub> incubator.
10. Half change media daily.

#### Related Products:

iIslet Culture Medium (Catalog Number: ILC0023M) is specifically formulated to support iPSC-derived Islet Organoid (iIslet) recovery and maintenance.