

## 3DCultr Pancreatic cancer Organoid Growth Medium (Human)

### Product description

3DCultr Pancreatic cancer Organoid Growth Medium (Human) is a serum-free medium designed for the establishment and long-term culture of pancreatic cancer organoids derived from cells or tissues. Under conditions where extracellular matrix is present, the medium contains unique components and abundant cytokines that promote the rapid growth and formation of pancreatic cancer cells into pancreatic cancer organoids. The process of organoid formation is smooth and rapid while maintaining high characteristics and vitality of pancreatic cancer cells. This medium supports subsequent studies and precision medicine based on the physiological functions and disease research of pancreatic cancer organoids.

### Specifications

Product Name	Cat#	Size
3DCultr Pancreatic cancer Organoid Growth Medium (Human)	C231113E	50 mL
	C231113S	100 mL
	C231113M	500 mL

### Components

Contents No.	Contents Name	Catalog No./Specification		
		C231113E	C231113S	C231113M
C231113-A	Pancreatic Cancer Organoid Growth Medium(Human)	45 mL	90 mL	450 mL
C231113-B	Nutritional components 1(10×)	5 mL	10 mL	50 mL

### Storage

Stored at -20°C, the product has a shelf life of 1 year. When stored at 2~8°C, its shelf life is 1 month.

### Notes

1. For your safety and health, please wear lab coat and disposable gloves while handling.
2. Packaging, usage, and other operations of the product should be conducted in a sterile environment.
3. For research use only.

## Instructions

Complete Pancreatic Cancer organoid culture medium was prepared under sterile operating conditions. The following is the procedure for preparing 100 mL of complete culture medium. If the required amount is different, the amount can be adjusted accordingly.

1. Thaw nutritional component 1 at room temperature or slowly thaw at 2~8°C overnight. Avoid repeated freezing and thawing, prepare and thaw immediately.
2. Take 90 mL of basal medium out of the refrigerator and return it to room temperature.
3. Add 10 mL of nutritional component 1 to the basic culture medium and mix evenly; if not used temporarily, store at 2~8°C for a short period of time.
4. You can add 1% double antibody when using.

## Primary culture of human Ovarian Cancer

1. Material collection: After the specimen is removed from the body, collect the material as soon as possible. Use sterile instruments to ensure a sterile environment, place the tumor tissue into a 15 mL centrifuge tube containing 5 mL of primary tissue preservation solution, and transport it at 4°C.
2. Washing: In a biological safety cabinet, remove the sample tube, discard the tissue preservation fluid, and add an appropriate amount of cold PBS containing antibiotics. Wash the tissue repeatedly, then discard the PBS.
3. Repeat Washing: Repeat step 2 three times.
4. Tissue Processing: After removing the PBS buffer, transfer the tissue block to a sterile culture dish containing 10 mL of cold primary tissue preservation fluid. Use sterile ophthalmic microscissors to mince the tissue into fragments (approximately 0.5 mm-1 mm in diameter).
5. Repeat washing: Use room temperature PBS and repeat washing 3 times.
6. Collect tissue fragments, add tissue digestion solution for digestion for 20-30 minutes, pipe repeatedly and pass through a 70 um mesh to collect Pancreatic Cancer cells. If there are few cells, repeat once.
7. Red Blood Cell Lysis: Add 10 mL of red blood cell lysis buffer and shake at room temperature on a rocker for 10 minutes.
8. Repeat cleaning: After lysis is completed, use DMEM/F12 at room temperature and repeat step 2 three times.
9. Organoid seeding plate: Adjust the cell density to  $2\sim 3 \times 10^6$ , mix evenly with Matrigel 1:1, seed the cell suspension in a 24-well plate at 40-60µL per well, and place it at 37°C for 15-30 min, add preheated organoid culture medium, 750 µL to each well.
10. Organoid culture: Place the culture plate in a 37°C CO<sub>2</sub> incubator. Change the culture medium every 2 days. When adding culture medium, keep the tip facing the side wall and add slowly.
11. Organoid observation: Observe the organoids and take pictures every day to understand the

initial number of organoids, proliferation rate, morphology, microbial contamination, etc.