

3DCultr Esophageal Cancer Organoid Growth Medium (Human)

Product description

3DCultr Esophageal Cancer Organoid Growth Medium (Human) is a serum-free medium that can be used for the establishment and long-term culture of Esophageal Cancer organoids derived from cells or tissues. In the presence of extracellular matrix, The unique components and abundant cytokines contained in the culture medium can promote the rapid growth and formation of Esophageal Cancer organoids from Esophageal Cancer cells. The organoid formation process is smooth and rapid, while maintaining high characteristics and vitality of Esophageal Cancer cells, This provides support for subsequent physiological function studies, disease research, and precision medicine based on esophageal cancer organoids.

Specifications

Product Name	Cat#	Size
3DCultr Esophageal Cancer Organoid Growth Medium (Human)	C231111E	50 mL
	C231111S	100 mL
	C231111M	500 mL

Components

Contents No.	Contents Name	Catalog No./Specification		
		C231111E	C231111S	C231111M
C231111-A	Esophageal Cancer Organoid Growth Medium(Human)	45 mL	90 mL	450 mL
C231111-B	Nutritional components 1(10×)	5 mL	10 mL	50 mL

Storage

stored at -25°C ~-15°C, the validity period is 1 year; when stored at 2~8°C, the validity period is 1 month.

Notes

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

Instructions

Complete Esophageal 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. This product is for research use only.
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. Optional: Add 1% antibiotics when using.

Primary culture of human intestinal 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. **Cleaning:** Take out the sample tube from the biosafety cabinet, remove the tissue preservation solution, add an appropriate amount of cold PBS with double antibodies, and remove the PBS after repeated washing.
3. **Repeat Washing:** Repeat step 2 three times.
4. **Tissue processing:** After removing the PBS buffer, move the tissue block to a 10 cm sterile petri dish containing 10 mL of cold primary tissue preservation solution, and cut the tissue into pieces with sterile ophthalmic microscissors (diameter approximately 0.5 mm-1 mm).
5. **Repeat Washing:** Use room temperature PBS for three repeated washes.
6. **Collecting Tissue Fragments:** Add tissue digestion solution for digestion for 20-30 minutes, pipe repeatedly and pass through a 70 um mesh to collect Esophageal 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 on a rocker shaker at room temperature 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 40-60ul per well, and place it at 37°C for 15-30 min, add preheated organoid culture medium, 750 uL to each well.
10. **Organoid culture:** Place the culture plate in a 37°C CO₂ 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.