Human Breast Ductal Carcinoma Cells, T47D

Catalog Number: iCell-h209

Product description

The T47D line was isolated by I. Keydar from a pleural effusion obtained from a 54 year old female patient with an infiltrating ductal carcinoma of the breast. This differentiated epithelial substrain (T47D) was found to contain cytoplasmic junctions and receptors to 17 beta estradiol, other steroids and calcitonin. The cells express the WNT7B oncogene.

Product characteristics

1. Tissue: Female breast ductal cancer
2. Cell growth pattern: Epithelioid, adherent growth
3. Size/Quantity: Each vial contains >1 × 10^6 cells in 1ml volume
4. Contamination: Mycoplasma, bacteria, yeast and fungi tests are negative
5. Packaging: 1ml frozen cell suspension in cryovial / living cells in T-25 flask

Shipping & Storage

Dry ice shipment (cryopreserved vial) and delivery of recovered cells (T-25 flask) can be selected:

1. For dry ice shipment, the vial of the cryopreserved cell suspension should be immediately transferred to liquid nitrogen cryopreservation. Or initiate the culturing right after receiving.
2. Living cells(T-25) should continue to be subcultured after receiving and then be cryopreserved when the cells grow well. The specific procedures can be found as follows (Cell culture instructions).

Note: Please take photos after receiving the cells. If contamination is found within the first 3 days after receiving the cells, please take photos and contact us instantly.

Product use

This product is for research use only. It is not approved for human or animal use. It is not approved for in vitro diagnostic application.

The treatment after cell receiving

1. After receiving the cells, please check the condition of the delivery culture flask. If you find that the culture flask is damaged, there is liquid overflow and the cells are contaminated, please contact us immediately after taking photos.
2. When confirming the cell growth condition under a microscope, it is better to perform it under the low power lens (4 or 5× objective lens), which can accurately judge the cell densityof subculture. To see the morphology ofthe cells, please take photos of the newly received cells under 10× and 20× objective lenses, (10× 20×) 2-3 photos each and one photo of the culture flask appearance, as the evidence for the cell quality.
3. After observing the cell growth condition, wipe the flask down with 75% ethanol,

and transfer it to the incubator at 37℃ for about 2-3 hours.

4. Adherent cells: Adherent cells will fall off during shipment. If it is found that adherent cells have fallen off or grown in clumps after falling off, the T-25 flask can be placed in a 37℃ incubator for about 2-3 hours. Then the culture medium and the non-adherent cells in the flask can be centrifuged at 1000rpm for 5 minutes. After removing the supernatant, the cells can be subcultured in the old culture flask (or new culture flask) with a newly prepared complete cell culture medium according to the following instructions (Cell culture instructions).
5. Suspension cells: T-25 flasks are placed in a 37℃ incubator for about 2-3 hours, then the medium and cells in the flask can be centrifuged for 5 minutesat 1000rpm. After removing the supernatant, the cells can be subcultured in a new culture flask with a newly prepared complete cell culture medium according to the following instructions (Cell culture instructions).
6. Note: The medium in the shipment (Infusion medium) can no longer be used to culture cells. Please use the newly prepared complete medium according to the following instructions to subculture the cells. Suggest 1:2 in the first passage.

Cell culture instructions

Preparation

1. Prepare
   DMEM culture medium(iCell-0001), 89%;
   High quality fetal bovine serum, 10%;
   P/S penicillin-streptomycin, 1%.
   Note: The cells exist in round and shiny adherent growth within 48hrs during early passage, don't move the flask if there is no need to change medium, cells will attach firmly after 48hrs, and grow faster.
2. Culture conditions: gas phase: air, 95%, CO_2, 5%. Temperature: 37℃, incubator humidity: 70% - 80%.
3. Cryopreservation solution: 90% FBS, 10% DMSO, prepare it when it needs to be used.

Cell culture procedure

1. **Cell initiating:** Shake and thaw the cryopreserved vial containing 1 ml cell suspension rapidly in a 37°C water bath. Add 4 ml culture medium and resuspend. Centrifuge them for 4 minutes at 1000 rpm, discard supernatant, add 1-2 ml culture medium and suspend. Transfer all cell suspensions to the flask for overnight culture. On the following day, change the culture medium and monitor the cell density.
2. **Cell subculturing:** Once the culture reaches 80%-90% cell confluent, it can be subcultured.
   1) Discard the culture supernatant and wash the cells 1-2 times with PBS without calcium and magnesium ions.
   2) Add 2 ml digestive solution (0.25% Trypsin-0.53mM EDTA) to the culture

flask and digest in a 37°C incubator for 1-2 minutes. Then observe the culture under the microscope. If most of the cells become round and detach, quickly take it back to the biosafety cabinet, tap the culture flask a few times and add a small amount of medium to stop digestion.

3) Add culture medium(6-8ml/flask), gently suspend and transfer to the tube to centrifuge for 4 minutes at 1000rpm. Discard the supernatant, add 1-2mL culture medium and suspend the cells.

4) After receiving the cells for the first time, it is recommended to divide the cell suspension into a new dish or bottle containing 6ml of medium at a ratio of 1: 2, and you can freeze one for future use. Subsequent passages can be performed at a ratio of 1: 2 to 1: 5 according to the actual situation.

3. **Cell cryopreservation:** Cell cryopreservation can be carried out when cell growth is in good condition.

Take the T25 flask for example:

1) When cryopreserve the cell, discard the culture medium and wash the bottom of the flask for 1-2 times with PBS, then added 1 ml trypsin. After the cells become round and fall off,add 2ml complete culture medium to terminate the digestion, and use a blood count plate to count the number of cells.

2) Centrifuge for 5 minutes at 1000 rpm,then discard the supernatant. Add FBS to suspend the cells. Add DMSO to the final concentration of 10%. After adding DMSO, mix it up quickly and distribute it tocryopreserved vials, each vial contains 1ml cell suspension. Make sure that the cryopreserved vials are marked well.Our cell quantity is more than 1 × 10^6 cells per cryopreservation vial.

3) Place the cryopreservation vial in a -80℃ refrigerator. Transfer it to liquid nitrogen container for storage at least 2 hours later. Record the location of the cryopreserved vial so that it can beeasily taken next time.

Note

1. After receiving the cells, if it is found that the dry ice has evaporated clean, the cap of the freezing tube has fallen off, the package damaged or the cells polluted, please contact us immediately.
2. All human and animal cells are considered to have potential biological hazards. The protocols must be performed according to the biosafety level 2 standards. Please pay attention to wear suitable protective clothing, gloves and eye/face protection when working with the products. All wastes and containers that come into contact with the cells need to be sterilized before disposal.

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