IM-BRE-547-PDX-INV

Breast cancer cell line - Product sheet, catalog n° CTICC1.30

Conservation: T ≤ -150 °C

Biosafety level 1

General Information

- Organism: Human (*Homo sapiens*)
- Product: Breast tumor cancer cell line
- Tissue: Breast Tumor
- Origin: Invasive breast carcinoma of no special type (NST) 8500/3
- Location: Breast
- Derivation: Established from a PDX model at P3
- Gender: Female
- Age: 51
- Ethnicity: Caucasian

Cell Characteristics

- Cell properties: Adherent - Epithelial Only - Sorted
- Morphology: Adherent epitheloid cells growing as monolayer or multilayer when confluent
- Cell passage: P4
- Doubling time: Approximately 26 days
- Cell harvest: about: $2{,}40 \times 10^5$ cells/cm²
- Cell conditioning: supplied as vials of 10^6 cells
- Seeding density: 30 000 to 40 000 cells per cm²
- Cryopreservation medium: Frozen with 90% serum-free cryopreservation medium + 10% DMSO
- Storage condition: Liquid nitrogen vapour phase
- Batch specific information: included in the Certificate of Analysis

Scientific Data

- Flow cytometry characterisation: Available - CD44 / CD326 / CD105 / CD184 / CD90.2
- IHC data: On patient sample ER+ (100%) PR - (0%) Her2 - (2+NA)
- ICC data: NA
- Fingerprint: Cytoscan analysis revealed a unique DNA profile.
- Specie: Confirmed as Human cells - 99,68% ; <0,1% of mouse cells by flow cytometry
- Cytogenetics: Cytoscan analysis available
- Oncogene: NA
- Tumorigenicity: NA
- Specific characterisation: NA
- Comments: Hu/Ms cells ratio maintained for 6 months and 4 passages without further selection

Safety and Quality Control

- Biosafety level: 1
- Contamination: use mandatory laboratory protections and handle with care tissues and cells derived from human samples to avoid any contamination of the operator
- Viral testing: negative for HIV, HBV, HCV
- Sterility testing: Negative for mycoplasma, bacteria and yeasts

Handling upon delivery and storage

- Check that the containers are intact and free of damage
- If cells are not used immediately, place the vials at -150°C or below upon delivery

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Growth medium

- Recommended medium may be purchased under the reference: CTICC.1.1.M: DMEM/F12- FBS EO

Thawing and culturing procedure for frozen cells

1 - Add 0,15 to 0,25 ml per cm² of medium to the culture vessel.
2 - Add 14 ml of PBS solution to a 15 ml conical tube, and warm in a water bath to 37 ˚C.
3 - Thaw cryovial by swirling in a water bath at 37 ˚C. Stop when half of the content is thawed. Bring the cryovial and the tube containing warmed PBS under the Biological Safety Cabinet in sterile condition.
4 - Open the cryovial and without touching the remaining ice, dilute the content of the cryovial with 500 µL of warm PBS, transfer the thawed solution into a new 15 ml conical tube.
5 - Repeat Step 4 until all the content of the cryovial is thawed and wash the cryovial several times with warm PBS. Fill the tube containing the cell suspension up to 14 mL using the remaining warm PBS.
6 - Spin the tube at 250 g for 7 minutes to pellet the cells.
7 - Resuspend the cells in the appropriate volume of recommended medium.
8 - Seed the cells in collagen coated culture vessel at the recommended seeding density.
9 - Incubate at 37 ˚C, 5% CO_2 atmosphere, 95% humidity.
10 - After thawing recovery may be slow and adherence may be reduced.
10 - After 24 h incubation, if most of the cells are attached to the culture vessel the medium can be changed to remove cell debris, if adherence is low wait additional 24 h.
11 - Continue to incubate and perform medium renewal two to three times/week.

Subculturing

1- Cells will not stop growing when confluent, wait until culture is overconfluent to passage.
2 - Preheat TrypLE (non-toxic for cell - trypsin substitute).
3 - Remove the medium from the flask and wash the cells quickly with PBS.
4 - Add 0,1 to 0,2 mL per cm² of TrypLE and incubate for 8 to 20 min at 37 °C in the incubator.
5 - Finish detaching the cells by flushing the flask several times with a serological pipette, remove the cells from the flask and wash the flask with PBS several times to harvest all remaining cells.
6 - Collect all flask content in a 15 mL conical tube and centrifuge at 250 g, 5 minutes to pellet the cells.
7 - Remove the supernatant and resuspend the pellet in recommended medium.
8 - Seed the cells in collagen coated culture vessel at the recommended seeding density.
9 - Incubate at 37 ˚C, 5% CO_2 atmosphere, 95% humidity.
10 - After 24 hours of incubation, if the cells have attached, change the medium to remove any debris.
11 - Incubate and perform medium renewal two to three times/week.
12 - Perform immunomagnetic depletion of murine cells if necessary.

Associated products

- CTICC.1.1.M: Human Cancer Cell Growth Medium EO, 500 mL

Provisions

- Cells and tissues are intended for research use only and shall not be used for human trials, animal trials, or diagnostics.
- Consent: the original tissues have been obtained after informed consent of the patient under the provisions required by French Law.