PRODUCT: Primary human prostate cancer cell culture

CATALOG NUMBER: CL 04001-CLTH

SHIPPED IN: Dry ice

STORAGE: Storage temperature: liquid nitrogen vapor phase

Note: For best results begin culture of cells immediately upon receipt. If this is not possible, store at -80ºC up to one month or for long term store in liquid nitrogen vapor phase.

QUANTITY & CONCENTRATION:

Cells are provided to customers in vials containing ≈1 x 10^6 cells/mL in Freeze Medium (Complete growth medium supplemented with 5% (v/v) DMSO)

PHYSICAL FORM

CLTH/PC cell lines are provided to customers in vials containing >1.0e6 cells/mL

BACKGROUND/DESCRIPTION

The CLTH/PC cell culture is established from human prostate adenocarcinoma immortalized with large antigen SV40. The cells grow adherent. The CLTH/PC have been characterized as epithelial cells via morphological observation throughout serial passages and positive staining for pan-Cytokeratin (see figures 1 and 2).

**Fig. 1.** Immunofluorescence staining using pan-Cytokeratin antibody for detecting epithelial cells. Magnification 10 x 10.microscope. Magnification 10 x 4

**Fig. 2.** Phase-contrast microscopy of primary prostate epithelial cells (magnification 10 x 4)
QUALITY CONTROL

This cryovial contains at least $1.0 \times 10^6$ CLTH/PC cells as determined by viable cell count. The cells are free of microbial contamination.

MEDIUM

As culture medium we recommend Prostate Culture Medium (MED 02006-CLTH) with delivered additives and antibiotics, if desired.

UNPACKING & STORAGE INSTRUCTIONS

1. Check all containers for leakage or breakage.
2. Thaw the frozen cryovial according to subculturing procedure.
3. Optimally: Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below 80°C, preferably in liquid nitrogen vapor, until ready for use.

HANDLING PROCEDURE FOR FROZEN CELLS

Establishing the CLTH/PC cell cultures:

1. The recommended seeding density is 5000 – 10000 cells/mm$^2$.
2. Before thawing cells calculate the number of needed vessels and allow them to equilibrate with desired medium in 37°C, 5% CO$_2$, 5% O$_2$ humidified incubator for at least 30 minutes.
3. Place 10 mL of medium in a 15-mL conical tube.
4. Quickly thaw the frozen cryovial in a 37°C water bath. Decontaminate the cryovial by wiping the surface of the vial with 70% (v/v) ethanol.
5. Transfer the cells to the conical tube containing the medium.
6. Centrifugation at 150 x g for 7 minutes at room temperature and then remove the medium.
7. Resuspend the cells in the small amount of fresh medium and transfer to an equilibrated culture dish with desired growth medium.
8. Place the cells in a 37°C incubator at 5% CO$_2$ and 5% O$_2$. Monitor the cell density every second day.

SUBCULTURING PROCEDURE

1. Discard culture medium.
2. Briefly rinse the cell layer with HBSS and discard it.
3. Add Trypsin-EDTA 0,25% solution to culture dish and place it at 37°C humidified incubator for 2 min. Monitor cell detachment with use of inverted microscope (usually it takes 4 minutes). At this time, it is helpful to hit the dish to facilitate dispersal.
4. Add appropriate volume of medium containing serum to stop reaction and aspirate cells by
5. Centrifuge cells 150 x g for 7 min and resuspend cells in fresh growth medium.
6. Add appropriate aliquots of the cell suspension to new culture vessels.
7. Incubate cultures at 37°C, 5% CO₂, 5% O₂

Subcultivation Ratio: A subcultivation ratio of 1:3 is recommended.

Medium Renewal: Thrice per week.

SAFETY PRECAUTION

AMS Biotechnology Europe recommends using protective gloves and clothing and wearing a full face mask always when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. During thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

The product should be handled by trained personnel observing good laboratory practices. It is important to avoid breathing vapor, avoid skin contact or swallowing.

BIOSAFETY LEVEL: 1
Appropriate safety procedures should always be used with this material. Please check all safety procedures required in your country.

WASTE DISPOSAL
It is highly recommended that waste always be returned to special company responsible for utilizing such type of waste.