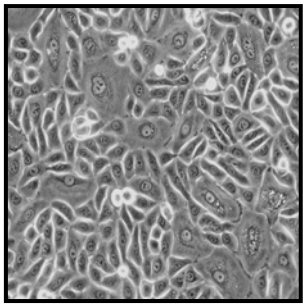
REF: P10491

ENDOCRINE CELL SYSTEM INNOPROFILE™
HUMAN THYMIC EPITHELIAL CELLS



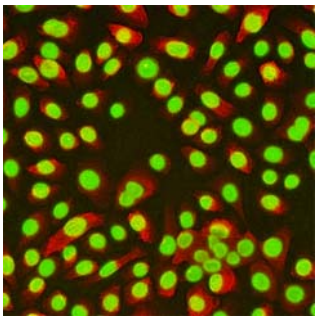
Product Type:	Cryo-preserved Thymic Epithelial Cells
Catalog Number:	P10491
Source:	Human Thymus
Number of Cells:	5 x 10^5 Cells / vial (1ml)
Storage:	Liquid Nitrogen

Human Thymic Epithelial Cells (HTyEpiC) provided by Innoprot are isolated from human normal thymus. HTyEpiC are cryopreserved at passage one cultures and delivered frozen. HTyEpiC are guaranteed to further culture under the conditions provided in this data sheet; however, HTyEpiC are not recommended for expanding or long-term cultures due to limited expansion capacity.

Thymic epithelial cells (TyEpiC) are vital regulators of thymocyte development and T lymphocyte (T-cell) tolerance. The thymus contains two types of TyEpiC, cortical and medullary thymic epithelial cells, which regulate the positive selection of thymocytes and the negative selection of autoreactive T-cells. The inability of TyEpiC to remove autoreactive T-cells in the thymus can affect self-tolerance and contribute to the development of autoimmune diseases such as myasthenia gravis, type 1 diabetes, rheumatoid arthritis, and multiple sclerosis.

Recommended Medium

- Thymic Epithelial Cell Medium (Reference: P60168)



Product Characterization

Immunofluorescent method

- CK-18
- CK-19

The cells test negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast and fungi

Product Use

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in vitro diagnostic or clinical procedures

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INSTRUCTIONS FOR CULTURING CELLS

IMPORTANT: Cryopreserved cells are very delicate. Thaw the vial in a 37 ºC waterbath and return them to culture as quickly as possible with minimal handling!

Set up culture after receiving the order:

1. Prepare a poly-L-lysine-coated culture vessel (2 µg/cm², T-75 flask is recommended). Add 10 ml of sterile water to a T-75 flask and then add 150 µl of poly-L-lysine stock solution (1 mg/ml, Cat. PLL). Leave the vessel in a 37ºC incubator overnight (or for a minimum of one hour).

2. Prepare complete medium. Decontaminate the external surfaces of medium bottle and medium supplement tubes with 70% ethanol and transfer them to a sterile field. Aseptically transfer supplement to the basal medium with a pipette. Rinse the supplement tube with medium to recover the entire volume.

3. Rinse the poly-L-lysine-coated vessel twice with sterile water and then add 15 ml of complete medium. Leave the vessel in the sterile field and proceed to thaw the cryopreserved cells.

4. Place the frozen vial in a 37ºC water bath. Hold and rotate the vial gently until the contents completely thaw. Promptly remove the vial from the water bath, wipe it down with 70% ethanol, and transfer it to the sterile field.

5. Carefully remove the cap without touching the interior threads. Gently resuspend and dispense the contents of the vial into the equilibrated, poly-L-lysine-coated culture vessel. A seeding density of 5,000 cells/cm² is recommended.

Note: Dilution and centrifugation of cells after thawing are not recommended since these actions are more harmful to the cells than the effect of residual DMSO in the culture. It is also important that cells are plated in poly-L-lysine-coated culture vessels to promote cell attachment.

6. Replace the cap or lid of the culture vessel and gently rock the vessel to distribute the cells evenly. Loosen cap, if necessary, to allow gas exchange.

7. Return the culture vessel to the incubator.

8. For best results, do not disturb the culture for at least 16 hours after the culture has been initiated. Refresh culture medium the next day to remove residual DMSO and unattached cells, then every other day thereafter.

Maintenance of Culture:

1. Refresh supplemented culture medium the next morning after establishing a culture from cryopreserved cells.

2. Change the medium every three days thereafter, until the culture is approximately 70% confluent.

3. Once the culture reaches 70% confluency, change medium every other day until the culture is approximately 90% confluent.

Caution: *Handling human derived products is potentially bioharzadous. Although each cell strain testes negative for HIV, HBV and HCV DNA, diagnostic tests are not necessarily 100% accurate, therefore, proper precautions mush be taken to avoid inadvertent exposure. Always wear gloves and safety glasses when working these materials. Never mouth pipette. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination [1].*

[1]. Grizzle, W. E., and Polt, S. S. (1988) Guidelines to avoid personal contamination by infective agents in research laboratories that use human tissues. *J Tissue Culture Methods*. 11(4)

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