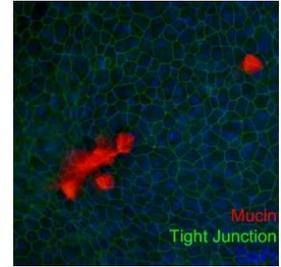
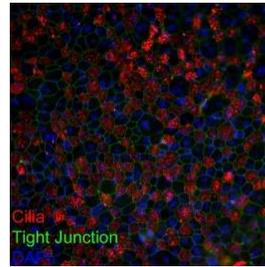
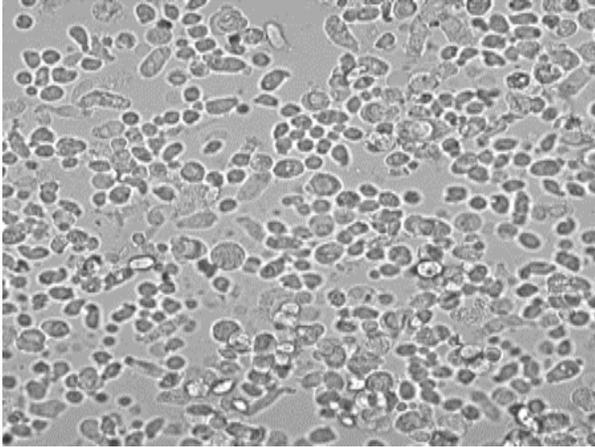


Novabiosis Proliferating Normal Human Tracheal Epithelial Cells-P1 (NhTE-P1)



P1 cells seeded at 350,000 cells/12mm Transwell™ and grown in ALI differentiation medium

Proliferating Normal Human Tracheal Epithelial Cells- P1 (NhTE-P1)

are isolated as NhTE-P0 cells from the trachea of healthy human donors but do not contain epithelial cells from the primary bronchus. Each vial of the Proliferating NhTE-P1 cells were expanded on plastic using BEGM, CRC or Dual Smad expansion media to isolate out an homogenous basal cell population.

QC Testing

NhTE-P1 cells have been characterized by morphological assessment by light microscopy. The NhTE-P1 homogenous basal cell population was then further QC tested after differentiating the NhTE-P1 cells (using Novabiosis ALI-DM media, Cat# 2001) into ciliated, non-ciliated and goblet cells. These differentiated cells were characterized and Air/Liquid Interface culture (ALI) validated by immunofluorescence using protein markers for Cilia (acetylated tubulin), mucin (MUC5AC), tight junctions (Zonula Occludens-1), and basal cells (cytokeratin-5). The NhTE-P1 cells are guaranteed to have a minimum of at least 20 population doublings from P1 to P3 following the instructions and conditions provided by Novabiosis. Attachment from P1 thaw, typically 75% of initial count. Average population doubling time, 40 ± 5 hours (P1 to P2 cells). Transepithelial resistance at 21 days ALI, ranges from 500 to 2000 Ω . Percent ciliated cells at 21 days ALI, >50% at P1. All the lot-specific information will be reported on the Certificate of Analysis (CoA).

Advantages

- **Convenience:** P1 cells can be grown with any method amenable to expansion of primary airway epithelia including BEGM, CRC or Dual Smad conditions.
- **High purity and low passage**
- **Access to high quality non-transplantable organs**
- **More extensive donor information**

Applications

- cell signaling
- cell permeability
- epithelial function
- tissue repair
- cytokine and growth factor production
- apoptosis
- pro-inflammatory signaling
- mucin secretion
- gene expression
- cell Based Assays
- among many others

Donor information including: cause of death, age, gender, race, BMI, diabetic status, smoking history, alcohol use, substance use, HLA typing, serology and culture results, and co-morbidities, if any, is also included on the CoA.

Serology results include (positive or negative):

CMV, EBV, Toxo, HBV, HCV, HIV-1, HIV-2. Additional serology results may be provided upon request.

Culture results include (positive or negative):

Gram +, Gram -, Mycoplasma, Fungi.



Catalog Information and Related Products

Normal Human Tracheal Epithelial Cells-P0 (NhTE -P1)

- Cat. # 1012

Novabiosis Air Liquid Interface Differentiation Media

(ALI-DM), 250mL

- Cat. # 2001

Product Storage and Warranty

CULTURES HAVE A LIMITED LIFESPAN *IN VITRO*.

Upon receipt, immediately store cryovial(s) in vapor phase liquid nitrogen.

Cryopreserved human lung cells are viable for at least 2 years when stored under these conditions.

Novabiosis guarantees the performance of its cells only if following Novabiosis-specific instructions exclusively and the recommended products and protocols are used and followed.

The performance of the cells is not guaranteed if any modifications are made.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY.