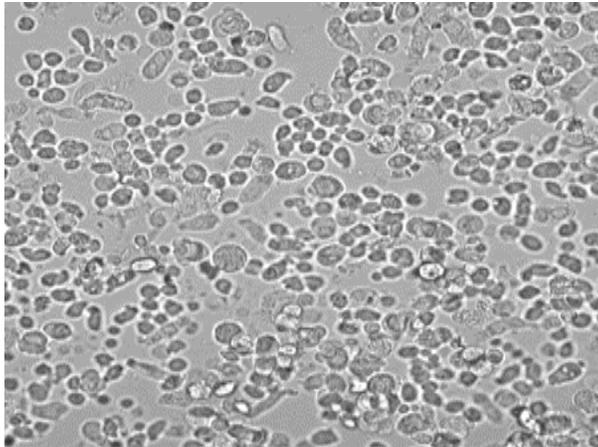


## Novabiosis Proliferating Normal Human Tracheal Epithelial Cells-P0 (NhTE-P0)



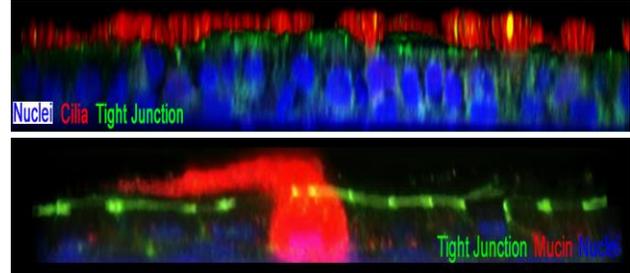
### Novabiosis Proliferating Normal Human Tracheal Epithelial Cells-P0 (NhTE-P0)

are isolated from the trachea of healthy human donors but do not contain epithelial cells from the primary bronchus. Each vial of the Proliferating NhTE-P0 cells contains the complete tracheal cell composition consisting of differentiated cells like ciliated and mucin producing cells as well as basal progenitor cells.

### QC Testing

NhTE-P0 cells have been 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-P0 cells are guaranteed to have minimum of at least 30 population doublings from passage number zero (P0) following the instructions and conditions provided by Novabiosis. Average population doubling time  $40 \pm 10$  hours (P1-P2). Transepithelial resistance at 21 days ALI, typically range from 500 to 2000  $\Omega$  (P0 cells starting material, 12mm Transwell™). Percent ciliated cells at 21 days ALI, typically >30% of P0. Percent ciliated cells at 28 days ALI, typically >40% of P0 cells. Each lot is guaranteed to contain a minimum of 500k cells per vial. All the lot-specific information will be reported on the Certificate of Analysis (CoA).

Immunofluorescence at Day 28:



### Advantages

- **Convenience:** P0 cells can be grown with any method amenable to expansion of primary airway epithelia.
- **High purity and low passage**
- **Access to high quality non-transplantable organs**
- **More extensive donor information**

### Applications

- NhTE-P0 cells can be used as a source for repeated differentiated cell stocks useful for any analysis procedure typically performed with freshly isolated cells derived from ex vivo tissue.
- perfect source for single-cell analysis from individual donors.
- investigating the function and pathology of the respiratory system.
- 3D tissue model
- gene expression
- cell Based Assays
- allow a researcher to perform FACS analysis of the diverse population of epithelial cells found within the tracheal cell composition.
- 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 -P0)

- Cat. # 1002

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.***