

## Immortalized RFP-Expressing Human Primary Thyroid Endothelial Cells

Catalog No. H-6058IM.RFP

### Suggested Medium

H1168 Complete Endothelial Cell Medium w/ Kit – 500 ml

### Product Description

Immortalized RFP-Expressing Human Primary Thyroid Endothelial Cells from Cell Biologics are isolated from human thyroid tissue and grown in gelatin pre-coated tissue culture flasks with Cell Biologics' Complete Growth Medium. Cells at passage 3 are harvested from flasks and cryo-preserved in vials. Each vial contains  $0.5 \times 10^6$  cells per ml and is delivered frozen. Immortalized RFP-Expressing Human Primary Thyroid Endothelial Cells are characterized by immunofluorescence staining with antibodies of CD31 (Catalog No. 550389, BD), CD31/PECAM-1 (Catalog No. FAB3567P, R&D), or VE-Cadherin (FITC-VE-cadherin, Catalog No. 560411, BD), or use of fluorescence-labeled acetylated low-density lipoprotein (DiI-Ac-LDL) uptake (Catalog No. L-35353, Invitrogen), a functional marker for endothelial cells. These cells are negative for bacteria, yeast, fungi, and mycoplasma and can be expanded for 10 passages at a split ratio of 1:2 under the cell culture conditions specified by Cell Biologics. Repeated freezing and thawing of cells are not recommended.

Immortalized cells from Cell Biologics are derived from primary cells with extended life span. The primary cells are immortalized by over-expression of the large T-antigen of the simian virus (SV40) or human telomerase reverse transcriptase (hTERT).

Red Fluorescent Protein (RFP), a mutant form of green fluorescent protein, gives rise to very bright red fluorescence when exposed to yellow-green light. Cell Biologics generates various RFP-expressing stable cells, including endothelial cells, epithelial cells and so forth. RFP-expressing cells are developed through transducing RFP-lentiviral particles.

### Storage

Cryopreserved cells are shipped with dry ice overnight. Upon arrival, transfer frozen cells to liquid nitrogen ( $-180^{\circ}\text{C}$ ) immediately until ready for use. Live cell shipment is also available on request. Primary cells can never be kept at  $-20^{\circ}\text{C}$  or  $-80^{\circ}\text{C}$  freezer.

### Authorized Uses of Cell Biologics' Products

Immortalized RFP-Expressing Human Primary Thyroid Endothelial Cells from Cell Biologics are distributed for research purposes only. Our products are not authorized for human use, for in vitro diagnostic or therapeutic procedures. Transfer or resale of any Cell Biologics' cells or products from the purchaser to other markets, organizations or individuals is prohibited by Cell Biologics without the company's written consent. Cell Biologics' Terms and Conditions must be accepted before submitting an order.

### Disclaimer

Investigators should handle the cells with caution and treat all primary cells as potential pathogens, since no test procedure can completely guarantee the absence of infectious agents. The entire text of discussing Biosafety in Microbiological and Biomedical Laboratories, 5th ed. is available online at <http://www.cdc.gov/biosafety/publications/bmbl5/index.htm>.

### Warranty and Liability

Cell Biologics' guarantee applies only to your purchase of Cell Biologics' Cells with Cell Biologics' Media and Coating Solution for appropriate cell culture and cell testing following Cell Biologics' online protocols within 35 days from the date of product delivery.

