Human Primary Liver Tumor-Associated Fibroblasts
Catalog No. HC-6019

Suggested Medium
M2267 Complete Fibroblast Medium w/ Kit – 500 ml

Product Description
Human Primary Liver Tumor-Associated Fibroblasts from Cell Biologics are isolated from human liver tumor tissue and grown in gelatin pre-coated tissue culture flasks with Cell Biologics' Complete Growth Medium. Cells at passage 2-3 are harvested from flasks and cryo-preserved in vials. Each vial contains $0.5x10^6$ cells per ml and is delivered frozen. Cells are characterized by their spindle morphology and immunofluorescent staining with anti-fibroblast-specific protein 1 or anti-Vimentin antibody. These cells are negative for mycoplasma, bacteria, yeast, fungi, HIV-1, hepatitis B and hepatitis C and can be expanded for 3-5 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.

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

Authorized Uses of Cell Biologics' Products
Human Primary Liver Tumor-Associated Fibroblasts 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 received from Cell Biologics 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.

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