Human Colorectal Cancer-Associated Fibroblasts (CAFs)

Product Information

Product Name	**Human Colorectal Cancer-Associated Fibroblasts (CAFs)**
Catalog Number	NEOCAF78
Cell Type	Primary Human Cancer-Associated Fibroblasts
Tissue Source	Human Colorectal Tumor Tissue
Species	Human
Cell Number	1×10^6 cells/vial
Passage Number	P1
Growth Properties	Adherent
Morphology	Spindle-shaped fibroblast morphology
Biosafety Level	BSL-2
Storage Condition	Liquid Nitrogen, Vapor Phase
Intended Use	For Research Use Only (RUO). Not for human or clinical applications.

Product Description

Human Colorectal Cancer-Associated Fibroblasts (CAFs) are isolated from human colorectal carcinoma tissue and expanded under optimized culture conditions. CAFs are a critical component of the tumor microenvironment and play essential roles in tumor progression, extracellular matrix remodeling, angiogenesis, immune modulation, metastasis, and therapeutic resistance.

These primary fibroblasts exhibit characteristic activated fibroblast morphology and express multiple CAF-associated biomarkers relevant for cancer biology, immuno-oncology, drug discovery, fibrosis studies, and tumor-stroma interaction research.

Expression Markers

Positive Expression Markers

Marker	**Expression**
α-SMA (ACTA2)	Positive
FAP (Fibroblast Activation Protein)	Positive

Marker	Expression
Vimentin	Positive
FSP-1 / S100A4	Positive
PDGFR-β	Positive
Fibronectin	Positive
Collagen I	Positive
Tenascin-C	Positive
CXCL12	Positive
TGF-β1	Positive
VEGF	Positive
IL-6	Positive
α1 Collagen	Positive
Periostin	Positive

Negative Expression Markers

Marker	Expression
CD31	Negative
CD45	Negative
Cytokeratin (Pan-CK)	Negative
EpCAM	Negative
VE-Cadherin	Negative

Quality Control

Test	Result
Sterility Testing	Negative
Mycoplasma Testing	Negative
Viability	≥ 85% post-thaw
Endotoxin	Pass
Morphology Verification	Pass

Recommended Culture Conditions

Parameter	Recommendation
Culture Medium	Fibroblast Growth Medium
Culture Surface	Tissue Culture-Treated Flask
Incubation Conditions	37°C, 5% CO_2
Medium Change	Every 2–3 days
Subculture Ratio	1:2 to 1:4

Applications

- Tumor Microenvironment Studies
- Cancer Stromal Biology
- Drug Screening & Discovery
- Immuno-Oncology Research
- Fibrosis & ECM Remodeling Studies
- Cell Signaling Research
- Angiogenesis Research
- Co-culture Systems
- Metastasis Research

Cryopreservation

Cells are cryopreserved in optimized freezing medium and shipped on dry ice or in liquid nitrogen dry shippers.

Upon thawing, cells should be transferred immediately into pre-warmed complete growth medium.

Safety Statement

This product is intended for laboratory research use only and is not intended for diagnostic, therapeutic, or clinical applications.
