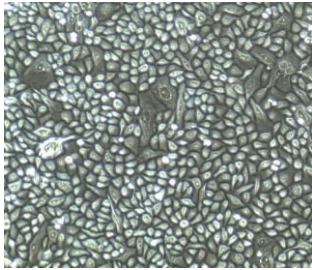
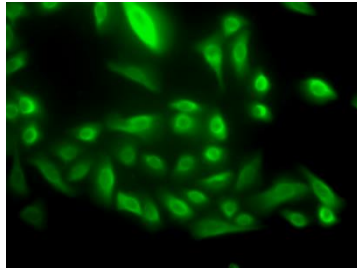


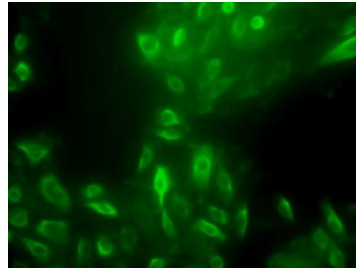
Normal Human Mammary Epithelial Cells (HMEC) Specification Sheet



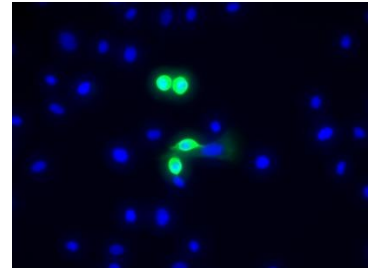
HMEC, passage4,
5 days after inoculation
with 5,000 cells/cm² (100X)



HMEC expressing
Cytokeratin 14 (400X)



HMEC expressing
Cytokeratin 8/18 (400X)



HMEC expressing
Cytokeratin 19, DAPI nuclear
counter stain (400X)

CELL FEATURES:

- HMEC are cryopreserved as tertiary cells*.
- HMEC provide an ideal model for the study of breast cancer development, three dimensional culture, carcinogen screening and other areas of breast research.
- HMEC are extensively tested for quality and optimal performance.
- Lifeline guarantees performance and quality.

HUMAN MAMMARY EPITHELIAL CELLS ARE TESTED FOR:

• Cell Count	500,000 cryopreserved cells per vial
• Proliferation and Morphology	Normal morphology for 15 population doublings
• Cell Viability	Minimum 70% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma Negative for bacterial and fungal growth
• Virus Testing	Negative for HIV-1, HIV-2, HBV, and HCV by PCR

PART NUMBER	DESCRIPTION
FC-0063	Normal Human Mammary Epithelial Cells, Male, Tertiary – 500,000 cells per vial
FC-0065	Normal Human Mammary Epithelial Cells, Female, Tertiary – 500,000 cells per vial
LL-0061	MammaryLife™ Medium Complete Kit (MammaryLife Basal Medium, MammaryLife LifeFactors® Kit)
LS-1104	GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of LL-0061

**Lifeline Technical Note: There are different and often contradictory terminologies used by cell culture companies to define the passage number of cells. Lifeline's designation of 'primary cells' are cells that have been isolated from tissue, plated onto culture vessels, expanded, harvested and cryopreserved. The term 'tertiary' indicates that the cells have been isolated, plated and expanded in culture vessels three times before being harvested for cryopreservation.*

To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

Lifeline's Normal Human Mammary Epithelial Cells

Lifeline's normal Human Mammary Epithelial Cells (HMEC), when grown in Lifeline's MammaryLife™ Medium, provide an ideal serum-free culture model for many areas of research. HMEC may be used for the study of breast cancer development, three dimensional culture, carcinogen screening and other areas of breast research.

Lifeline's HMEC are cryopreserved as tertiary* cells to ensure the highest viability and plating efficiency. Our HMEC are quality tested in MammaryLife Medium to ensure optimal morphology and growth over a period of at least 15 population doublings. Lifeline's HMEC are a mixed culture of epithelial cells bearing positive markers such as Cytokeratin 14 (myoepithelial), Cytokeratin 8/18 (luminal), and Cytokeratin 19 (luminal subpopulation).

Lifeline's HMEC are not exposed to antimicrobials or phenol red when cultured in the respective Lifeline® medium. Lifeline offers antimicrobials and phenol red; however they are not required for eukaryotic cell proliferation. A vial of Gentamicin and Amphotericin B (GA; LS-1104) is provided with the purchase of MammaryLife Medium Complete Kit (LL-0061) for your convenience. The use of GA is recommended to inhibit potential fungal or bacterial contamination of eukaryotic cell cultures. Phenol Red (LS-1009) may be purchased, but is not required.

Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent performance.

The Lifeline Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. Upon request, Lifeline will provide lot specific QC test results, material safety data sheets, and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

All donated tissues have been obtained under proper informed consent and adheres to the Declaration of Helsinki, The Human Tissue Act (UK), CFR Title 21, and HIPAA Regulations relative to obtaining and handling human tissue for Research Use.

Safety Statement

This product is for Research Use Only. This product is not approved for human or veterinary use or for use in *in vitro* diagnostics or clinical procedures.

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any liquid nitrogen from cryopreserved vials by carefully loosening the vial cap in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed.

Call Lifeline Technical Service and Sales at 877.845.7787
or visit lifelinecelltech.com for more information

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