Normal Human Smooth Muscle Cells (HSMC) Specification Sheet

Human Aortic Smooth Muscle Cells (HAoSMC)  Human Lung Smooth Muscle Cells (HLSMC)
Human Bladder Smooth Muscle Cells (HBSMC)  Human Pulmonary Artery Smooth Muscle Cells (HPASMC)
Human Bronchial/Tracheal Smooth Muscle Cells (HBTSMC)  Human Prostate Smooth Muscle Cells (HPPrSMC)
Human Coronary Artery Smooth Muscle Cells (HCASMC)  Human Uterine Smooth Muscle Cells (HUtSMC)

CELL FEATURES:

- HAoSMC
- HB5MC
- HBTSMC
- HCASMC
- HLSMC
- HPASMC
- HPPrSMC
- HUtSMC

ISOLATED FROM:

- Human aorta
- Human (urinary) bladder
- Human bronchi and trachea
- Human coronary arteries
- Human lung
- Human pulmonary artery
- Human prostate
- Human uterus

CRYOPRESERVED AT THE END OF:

- Secondary Culture*
- Secondary Culture*
- Secondary Culture*
- Secondary Culture*
- Secondary Culture*
- Secondary Culture*
- Tertiary Culture*
- Secondary Culture*

HSMC are extensively tested to meet quality standards and exhibit optimal performance.

Lifeline guarantees performance and quality.

NORMAL HUMAN SMOOTH MUSCLE CELLS ARE TESTED FOR:

- Cell Count
- Proliferation and Morphology
- Cell Viability
- Sterility
- Virus
- Specific Staining

- 500,000 cryopreserved cells per vial
- Normal cell appearance for 15 population doublings
- Minimum 70% viability when thawed from cryopreservation
- Negative for mycoplasma, bacterial and fungal growth
- Negative for HIV-1, HIV-2, HBV, and HCV by PCR
- von Willebrand Factor negative
  Smooth muscle α-actin positive after differentiation

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>FC-0015</td>
<td>HAoSMC, Normal Human Aortic Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0031</td>
<td>HCASMC, Human Coronary Artery Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0043</td>
<td>HB5MC, Human Bladder Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0046</td>
<td>HLSMC, Human Lung Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0056</td>
<td>HPASMC, Human Pulmonary Artery Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0059</td>
<td>HBTSMC, Human Bronchial/Tracheal Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0075</td>
<td>HUtSMC, Human Uterine Smooth Muscle Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>FC-0100</td>
<td>HPPrSMC, Human Prostate Smooth Muscle Cells, Tertiary – 500,000 cells per vial</td>
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<tr>
<td>LL-0014</td>
<td>VascuLife® SMC Complete Kit (VascuLife Basal Medium, VascuLife SMC LifeFactors® Kit)</td>
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<tr>
<td>LS-1104</td>
<td>GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of LL-0014</td>
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</tbody>
</table>

To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.
**Lifeline’s Normal Human Smooth Muscle Cells**

Lifeline’s Normal Human Smooth Muscle Cells (HSMC), when grown in Lifeline’s VascuLife® SMC Medium, provide an ideal low serum (5%) culture model for the study of angiogenesis, atherosclerosis, diabetes or vascular, pulmonary, or uterine biology.

Lifeline’s HSMC are cryopreserved at the earliest possible passage to ensure the highest viability, purity, and plating efficiency. Our HSMC are quality tested in VascuLife SMC Medium and demonstrate optimal low serum growth over a period of at least 15 population doublings at rates equal to or greater than other serum-supplemented media.

Lifeline’s HSMC 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 VascuLife SMC Medium Complete Kit (LL-0014) 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.

*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 ‘secondary’ indicates that the cells have been isolated, plated and expanded in culture vessels twice before being harvested for cryopreservation.*