Clonetics™ Bronchial Smooth Muscle Cell Systems
BSMC & DBMSC

Introduction
Clonetics™ Bronchial Smooth Muscle Cell Systems contain Normal Human Bronchial Smooth Muscle Cells (BSMC) or Diseased Human Bronchial Smooth Muscle Cells (DBSMC) and optimized media for their growth. Each System can generate BSMC cultures for experimental applications in respiratory disorders including asthma, cystic fibrosis and respiratory distress syndrome. Clonetics™ Bronchial Smooth Muscle Cell Systems are convenient and easy to use, allowing the researcher to focus on results. There are three types of DBSMC available – cells isolated from donors with cystic fibrosis, asthma, and COPD. Cryopreserved BSMC and DBSMC are shipped in third passage. Proliferating BSMC and DBSMC are shipped in fourth or fifth passage. Clonetics™ Cells, Medium and Reagents are quality tested together and guaranteed to give optimum performance as a complete Cell System.

Cell System Components (Need to be purchased separately)
- One Bronchial Smooth Muscle Cell Product – Normal or Diseased (Cryopreserved or Proliferating)
- One Smooth Muscle Cell Medium BulletKit™ - 500 ml
Clonetics™ SmGM™-2 BulletKit™ (CC-3182) contains one 500 ml bottle of Smooth Muscle Cell Basal Medium and the following growth supplements: hEGF, 0.5 ml; Insulin, 0.5 ml; hFGF-B, 1ml; FBS, 25 ml; GA-1000, 0.5 ml.
- One ReagentPack™ (CC-5034) Containing:
  - Trypsin/EDTA 100 ml
  - Trypsin Neutralizing Solution 100 ml
  - HEPES Buffered Saline Solution 100 ml

Characterization of Cells
Routine characterization of BSMC and DBMSC includes immunofluorescent staining. Cells stain positive for smooth muscle α-actin and negative for von Willebrand (Factor VIII) antigen after differentiation.

Performance
- Recommended seeding density for subculturing 3,500 cells/cm²
- Typical time from subculture to confluent monolayer 6 - 10 days
- BSMC additional population doublings guaranteed using Clonetics™ System 15
- DBSMC additional population doublings guaranteed using Clonetics™ System Tested through 3 passages for information only

Quality Control
HIV-1, Hepatitis B and Hepatitis C are not detected for all donors and/or cell lots. All cells are performance assayed and test negative mycoplasma, bacteria, yeast and fungi. Cell viability, morphology and proliferative capacity are measured after recovery from cryopreservation. Clonetics™ Media are formulated for optimal growth of specific types of normal human cells. A Certificates of Analysis (COA) for each lot of cryopreserved cells is shipped with each order. COAs for all other products are available upon request.

Ordering Information
Cryopreserved Cells
- CC-2576 BSMC ≥ 500,000 cells
- 00196980 DBSMC-CF (cystic fibrosis) ≥ 500,000 cells
- 00194850 DBSMC – AS (asthma) ≥ 500,000 cells
- 00195274 DBSMC-COPD ≥ 500,000 cells

Proliferating formats are available. Refer to the Lonza website or contact Scientific Support for details.
CC-3182  SmGM™-2 BulletKit™, SmBM™ plus SingleQuots™, 500 ml
of Growth Supplements

CC-3181  SmBM™, Smooth Muscle Cell Basal Medium 500 ml

CC-4149  SmGM™-2 SingleQuots™, Formulates SmBM™ to SmGM™-2

CC-5034  ReagentPack™
Trypsin Neutralizing Solution 100 ml
Trypsin/EDTA Solution 100 ml
HEPES Buffered Saline Solution 100 ml

When placing an order or for technical service, please refer to the product numbers and descriptions listed above. For a complete listing of all Clonetics™ Products, refer to the Lonza website or the current Lonza catalog. To obtain a catalog, additional information or technical service you may contact Lonza by web, e-mail, telephone, fax or mail.

Product Warranty

CULTURES HAVE A FINITE LIFESPAN IN VITRO. Lonza guarantees the performance of its cells only if Clonetics™ Media and Reagents are used exclusively, and the recommend protocols are followed. The performance of cells is not guaranteed if any modifications are made to the complete Cell System. Cryopreserved BSMC and DBSMC are assured to be viable and functional when thawed and maintained properly.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or in vitro procedures.

WARNING: CLONETICS™ AND POIETICS™ PRODUCTS CONTAIN HUMAN SOURCE MATERIAL, TREAT AS POTENTIALLY INFECTIOUS. Each donor is tested and found non-reactive by an FDA approved method for the presence of HIV-1, Hepatitis B Virus and Hepatitis C Virus. Where donor testing is not possible, cell products are tested for the presence of viral nucleic acid from HIV, Hepatitis B Virus, and Hepatitis C Virus. Testing can not offer complete assurance that HIV-1, Hepatitis B Virus, and Hepatitis C Virus are absent. All human sourced products should be handled at the Biological Safety Level 2 to minimize exposure of potentially infectious products, as recommended in the CDC-NIH Manual, Biosafety in Microbiological and Biomedical Laboratories, 5th Edition. If you require further information, please contact your site Safety Officer or Scientific Support.