

Lonza Walkersville, Inc. www.lonza.com scientific.support@lonza.com Scientific Support: 800-521-0390 Document # TDS-CC-2815-3 11/10 Walkersville, MD 21793-0127 USA © 2010 Lonza Walkersville, Inc.

Clonetics™ Lung Blood Microvascular Endothelial Cell Systems

HMVEC-LBI



Clonetics™ Lung Blood Microvascular Endothelial Cell Systems contain lung-derived Normal Human Microvascular Blood Vessel Endothelial Cells (HMVEC-LBI) and media optimized for their growth. Each System can quickly generate HMVEC-LBI cultures for experimental applications in circulatory physiology, wound healing, angiogenesis, immunology and drug development. Clonetics™ Lung Blood Microvascular Endothelial Cell Systems are convenient and easy to use, allowing the researcher to focus on results. Cryopreserved HMVEC-LBI are shipped in third passage. Proliferating HMVEC-LBI 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 Lung-Derived Blood Microvascular Endothelial Cell Product (Cryopreserved or Proliferating)
- One Endothelial Cell Medium BulletKit[™] 500 ml
 - Clonetics™ EGM™-2 MV BulletKit™ (CC-3202) contains one 500 ml bottle of Endothelial Cell Basal Medium-2 and the following Growth Supplements: hEGF, 0.5 ml; Hydrocortisone, 0.2 ml; GA-1000, 0.5 ml; FBS, 25 ml; VEGF, 0.5 ml; hFGF-B, 2.0 ml; R³-IGF-1, 0.5 ml; Ascorbic Acid, 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 HMVEC-LBI includes immunofluorescent staining. Cells stain positive for acetylated LDL and von Willebrand's (Factor VIII) antigen and stain negative for smooth muscle α -actin. Lung Blood Microvascular Endothelial Cell purity is analyzed by flow cytometry using CD31 (PECAM-1)/Podoplanin double staining. Cells are at least 90% CD31 Pos /Podoplanin Neg the 2 nd or 3 rd passage out of cryopreservation.

Performance

| Recommended seeding density for subculture | 5,000 cells/cm ² |
|--|--------------------------------|
| Typical time from subculture to confluent monolayer | 4 to 7 days |
| Additional population doublings guaranteed using Clonetics™ System | 12 |

Quality Control

All cells are performance assayed and test negative for HIV-1, mycoplasma, Hepatitis-B, Hepatitis-C, bacteria, yeast and fungi. Cell viability, morphology and proliferative capacity is measured after recovery from cryopreservation. Clonetics™ Media are formulated for optimal growth of specific types of normal human cells. Certificates of Analysis (COA) for each cell strain are shipped with each order. COA for all other products are available upon request.



Ordering Information

Cryopreserved Cells

CC-2815 HMVEC-LBI ≥500,000 cells

Proliferating Cells – Flasks and Multiwell Plates HMVEC-LBI

 CC-2815T25
 T-25 Flask

 CC-2815T75
 T-75 Flask

 CC-2815W96
 96-well Plate

Other proliferating formats are available. Contact Scientific Support or refer to the Lonza website for details.

| CC-3202 | EGM [™] -2 MV BulletKit [™] , EBM [™] -2 plus SingleQuots [™] of Growth Supplements | 500 ml |
|---------|---|--------|
| CC-3156 | EBM™-2, Endothelial Cell Basal Medium-2 | 500 ml |
| CC-4147 | EGM [™] -2 MV SingleQuots [™] , Formulates EBM [™] -2 to EGM [™] - 2MV | |
| CC-5034 | ReagentPack™ | |
| | Trypsin Neutralizing Solution | 100 ml |
| | Trypsin/EDTA Solution | 100 ml |
| | HEPES Buffered Saline | 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 HMVEC-LBI 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-I, 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.