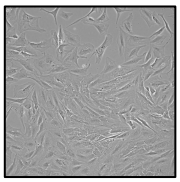
Lonza Walkersville, Inc.
Walkersville, MD 21793-0127 USA
U.S. Scientific Support: 800 521 0390
scientific.support@lonza.com
EU/ROW Scientific Support: +32 87 321 611
scientific.support.eu@lonza.com
Document # TS-MM-HSE-2305-4 10/12
www.lonza.com



Clonetics™ Sertoli Cell System

HSEC - Technical Sheet

Introduction

Human male testes contain a population of "nurse" cells, known as Sertoli cells, capable of replication as undifferentiated cells. Clonetics™ Sertoli Cell System contains normal human Sertoli Cells (HSEC) and optimized medium for their growth. Each system can generate HSEC cultures for experimental studies in male infertility, *in vitro* germ cell proliferation models, drug screening, male reproductive toxicology, xeno- and allograft co-transplantation, immune suppression applications and apoptotic control mechanisms. They are excellent tools for gene delivery research, functional genomics, drug screening, high throughput screening and toxicology. Cryopreserved HSEC are shipped third passage.

Clonetics™ Sertoli Cells and Medium are quality tested together and guaranteed to give optimum performance as a complete Cell System.

Cell System Components (Sold Separately)

- One sertoli cell product – normal (cryopreserved)
- One Sertoli Cell Basal Medium - 500 ml
- Fetal Bovine Serum
- Penicillin/streptomycin (optional)
- Versene® [EDTA] 0.02%
- Trypsin/EDTA
- Phosphate Buffered Saline Solution (PBS)
- Trypsin Neutralizing Solution (TNS)

Characterization of Cells

Routine characterization of HSEC includes testing for cellular proteins, for seeding efficiency, doubling time and morphology and ≥ 70% confluence by day 12 in culture. Cells test positive for GATA-4 and Sox-9 at ≥ 70% by flow cytometry.

Performance

Recommended seeding density for plating/subculture	450-500 cells/cm^2
Recommended feeding interval	3-4 days
Typical time from subculture to confluent monolayer	7-10 days

Quality Control

All cells are performance assayed and test negative for HIV-1, Hepatitis B & C, mycoplasma, bacteria, yeast and fungi. Cell viability and morphology are measured after recovery from cryopreservation. Certificates of Analysis (COA) for each cell strain are shipped with each order. COAs for all other products are available upon request.

Ordering Information

Cryopreserved Sertoli Cells (Single Donor):

Cat. No.	Product	Description
MM-HSE-2305	HSEC – Human Sertoli Cells	≥500,000 cells

Sertoli Cell Growth Media (Sold Separately):

Cat. No.	Product	Description
00191051	SeBM™ Basal Medium	Sertoli cell basal medium (500 ml)
17-602E	Penicillin-Streptomycin Mixture	Contains 10,000 units potassium penicillin and 10,000 µg streptomycin sulfate per ml in 0.85% saline (100 ml)

Fetal Bovine Serum (FBS) is also necessary to create complete Sertoli cell growth media and must be purchased separately.

Subculturing Reagents (Sold Separately):

Cat. No.	Product	Description
17-711E	Versene® [EDTA] 0.02%	0.2 g/L Ethylenediaminetetraacetic acid (0.53 mM) in DPBS, without calcium or magnesium (100 ml)
CC-5012	Trypsin/EDTA Solution	Trypsin/EDTA Solution (100 ml)
CC-5002	TNS	Trypsin Neutralizing Solution (TNS) (100 ml)
17-516F	PBS	Phosphate Buffered Saline (1 x); 6.7 mM (PO_4) without calcium or magnesium (500 ml)

Limited Use License

All Sertoli cells are produced for Lonza by MandalMed Inc. and are subject to the following limited use license:

The included biological material, including progeny and derivatives, (collectively referred to as "Material") is licensed to you under specific terms. You are responsible for ensuring that the terms of the license agreement are met.

1. **GRANTS OF LICENSE:** Lonza grants you a nontransferable, nonexclusive license to use the Material for research.
2. **NOT FOR HUMAN USE:** The Material may not be used: a) in humans; b) in conjunction with human clinical trials; c) in association with human diagnostics.
3. **MATERIAL NOT TRANSFERABLE:** You may not transfer the Material to any other person or organization
4. **PATENT NOTICE:** Material is under license from MandalMed Inc. Material is covered by US Patent 2009/0028833 A1.

Product Warranty

Cultures have a finite lifespan *in vitro.*

Lonza guarantees the performance of its cells in the following manner only if the recommended 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.

1. Clonetics™ HSEC Cryopreserved Cultures are assured to be viable and functional when thawed and maintained properly.
2. HSEC can become irreversibly contact-inhibited if allowed to reach confluence. To avoid the loss of your cells and forfeiture of your warranty, subculture cells before they reach 80% confluence.

When placing an order or for Scientific Support, 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 want to speak with Scientific Support, you may contact Lonza by web, e-mail, telephone, fax or mail
(See page 1 for details).

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 cannot 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 ed. If you require further information, please contact your site safety officer or Scientific Support.