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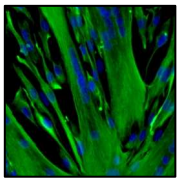

Clonetics™ Skeletal Muscle Myoblast Cell Systems

HSMM – Technical Sheet

Introduction

Clonetics™ Skeletal Muscle Myoblast Cell Systems contain Normal Human Skeletal Muscle Myoblasts (HSMM) or Human Skeletal Muscle Myoblasts from Diabetic Donors from post gestational tissue, usually from the quadriceps or psoas tissue, and optimized media for their growth. Each system can quickly generate HSMM cultures for experimental applications in cellular development and differentiation, insulin uptake or resistance, or tissue repair. Clonetics™ Skeletal Muscle Myoblast Cell Systems are convenient and easy to use, allowing the researcher to focus on results. There are two types of Human Skeletal Muscle Myoblasts from Diabetic Donors available – cells isolated from donors with Type I diabetes and cells isolated from donors with Type II diabetes. Cryopreserved HSMM are shipped in second passage. Proliferating HSMM are shipped in third passage.

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

Cell System Components (Sold Separately)

- One skeletal muscle myoblast cell product – normal or diseased (cryopreserved or proliferating)
- One Skeletal Muscle Myoblast Cell Media BulletKit™ Medium - 500 ml

  Clonetics™ SkGM™-2 BulletKit™ (CC-3245) contains 500 ml of Skeletal Muscle Basal Medium-2 (SkBM™-2 Medium) and the following growth supplements: human Epidermal Growth Factor (hEGF), 0.5 ml; Dexamethasone, 0.5 ml; L-glutamine, 10.0 ml; Fetal Bovine Serum (FBS), 50.0 ml; Gentamicin/Amphotericin-B (GA), 0.5 ml.
- Subculturing Reagents (each sold separately):

Trypsin/EDTA Solution (CC-5012)	100 ml
Trypsin Neutralizing Solution (CC-5002)	100 ml
Dulbecco's Phosphate Buffered Saline Solution (17-512F)	100 ml

Characterization of Cells

Routine characterization of HSMM includes positive immunofluorescence staining for Desmin (≥60% positive) following differentiation in fusion medium in first passage out of cryopreservation.

Performance	
Recommended seeding density for plating/subculture	3,500 cells/cm^2
Typical time from subculture to confluent monolayer	5 - 9 days
Normal HSMM additional population doublings guaranteed using Clonetics™ Media System	10
HSMM from Diabetic Donor additional population doublings guaranteed using Clonetics™ Media System	Tested through two passages for information only

Quality Control

All cells are performance assayed and test negative for HIV-1, mycoplasma, Hepatitis-B, Hepatitis-C, bacteria, yeast and fungi. Cell viability, cell number, and proliferative capacity are 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. COAs for all other products are available upon request.

Ordering Information

Cryopreserved Skeletal Muscle Myoblast Cells (Single Donor):

Cat. No.	Product	Description
CC-2580	Normal HSMM	≥500,000 cells
CC-2900	HSMM (Diabetes Type I)	≥500,000 cells
CC-2901	HSMM (Diabetes Type II)	≥500,000 cells

Proliferating Skeletal Muscle Myoblast Cells (Single Donor):

Cat. No.	Product	Description
CC-2580T25	Normal HSMM (T-25)	Proliferating, Normal HSMM in a T-25 flask
CC-2580T75	Normal HSMM (T-75)	Proliferating, Normal HSMM in a T-75 flask
CC-2580W96	Normal HSMM (96-well plate)	Proliferating, Normal HSMM in a 96-well plate

Other proliferating formats are available. Refer to the Lonza website or contact Scientific Support for details.

Skeletal Muscle Myoblast Growth Media (Sold Separately):

Cat. No.	Product	Description
CC-3245	SkGM™-2 BulletKit™ Medium	500 ml SkBM™-2 Basal Medium plus CC-3244 SingleQuots™ Kit to formulate SkGM™-2 Medium (growth medium)
CC-3246	SkBM™-2 Basal Medium	Skeletal muscle myoblast basal medium-2 (500 ml)
CC-3244	SkGM™-2 SingleQuots™ Kit	Formulates 500 ml of SkBM™-2 Basal Medium to SkGM™-2 Growth Medium; contains hEGF, 0.5 ml; Dexamethasone, 0.5 ml; L-glutamine, 10.0 ml; FBS, 50.0 ml; GA, 0.5 ml.

Subculturing Reagents (Sold Separately):

Cat. No.	Product	Description
CC-5012	Trypsin/EDTA Solution	100 ml
CC-5002	TNS	Trypsin Neutralizing Solution (100 ml)
17-512F	DPBS (1X)	Dulbecco's Phosphate Buffered Saline (1X) (500 ml)

Product Warranty

Cultures have a finite lifespan *in vitro.*

Lonza guarantees the performance of its cells in the following manner 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.

1. Clonetics™ HSMM Cryopreserved Cultures are assured for experimental use for 10 population doublings. Clonetics™ HSMM from Diabetic Donors Cryopreserved Cultures are tested for two passages for population doublings FIO (For Information Only).
2. Clonetics™ HSMM Proliferating Cultures and HSMM from Diabetic Donors Proliferating Cultures are assured for experimental use for one passage upon receipt.
3. Additional population doublings and subcultures are possible, but growth rate, biological responsiveness and function deteriorate with subsequent passage.
4. To avoid the loss of your cells and forfeiture of your warranty, subculture cells before they reach 50-70% 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.