

## Lonza Skeletal Muscle Cell System SkMC – Technical Sheet

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### Introduction

Lonza's Skeletal Muscle Cell System contains Normal Human Skeletal Muscle Cells (SkMC), usually from upper arm or upper leg muscle tissue, and optimized media for their growth. Each system can quickly generate SkMC cultures for experimental applications in gene expression, differentiation, ion transport and receptor mediated function. Lonza's Skeletal Muscle Cell System is convenient and easy to use, allowing the researcher to focus on results. Cryopreserved SkMC are shipped in second passage. Proliferating SkMC are shipped in third passage.

Lonza 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 cell product – (cryopreserved or proliferating)
- One Skeletal Muscle Cell Media BulletKit™ Medium - 500 mL  
Lonza's SkGM™-2 BulletKit™ (CC-3245) contains 500 mL of Skeletal Muscle Basal Medium (SkBM™-2 Medium) and the following growth supplements: human Epidermal Growth Factor (hEGF), 0.5 mL; Fetal Bovine Serum (FBS), 50.0 mL; Dexamethasone, 0.5 mL; Gentamicin/Amphotericin-B (GA-1000), 0.5 mL; and L-Glutamine, 10.0 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 SkMC includes positive immunofluorescence staining for Desmin ( $\geq 30\%$  positive) following differentiation in fusion medium in first passage out of cryopreservation.

### Performance

Recommended seeding density for plating/subculture	3,500 cells/cm <sup>2</sup>
Typical time from subculture to confluent monolayer	6 - 10 days
Additional population doublings guaranteed using Lonza's Media System	15

### 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, cell number, and proliferative capacity are measured after recovery from cryopreservation. Lonza's 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 cells (single donor):

Cat. no.	Product	Description
CC-2561	SkMC	≥500,000 cells

### Proliferating skeletal muscle cells (single donor):

Cat. no.	Product	Description
CC-2661	SkMC (T-25)	Proliferating SkMC in a T-25 flask
CC-0231	SkMC (T-75)	Proliferating SkMC in a T-75 flask
CC-0144	SkMC (96-well plate)	Proliferating SkMC 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 (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; FBS, 50.0 mL; Dexamethasone, 0.5 mL; GA-1000, 0.5 mL; L-Glutamine, 10.0 mL.

### Subculturing reagents (sold separately):

Cat. no.	Product	Description
CC-5034	ReagentPack™	Provides necessary components for subculture of SkMC; contains Trypsin/EDTA Solution, 100 mL; Trypsin Neutralizing Solution (TNS), 100 mL; HEPES Buffered Saline Solution, 100 mL

## Product warranty

Cultures have a finite lifespan *in vitro*.

Lonza guarantees the performance of its cells in the following manner only if Lonza Media and Reagents are used exclusively and the recommended protocols are followed. The performance of cells is not guaranteed if any modifications are made to the complete cell system.

1. Lonza SkMC Cryopreserved Cultures are assured for experimental use for 15 population doublings.
2. Lonza SkMC Proliferating Cultures are assured for experimental use for 10 population doublings.
3. Additional population doublings and subcultures are possible, but growth rate, biological responsiveness and function deteriorate with subsequent passage.
4. SkMC 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 Lonza 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: LONZA 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 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](#), 5<sup>th</sup>ed. If you require further information, please contact your site safety officer or Scientific Support.

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