



Skeletal Muscle Differentiation Tool

PCS-950-050TM

Description

The Skeletal Muscle Differentiation Tool is a single-component media for the differentiation of Primary Skeletal Muscle Cells. Muscle Cells can be expanded in vitro with complete media before final differentiation into Skeletal Muscle Cells.

Volume: 100 mL

Storage Conditions

Product format: Frozen

Storage conditions: -20°C or colder

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

Biosafety Information

ATCC determined that a biosafety level is not applicable to this material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to complete your own risk assessment and understand any potential hazards associated with the material per your organization's policies and procedures and any other applicable regulations as enforced by your local or national agencies.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Handling Procedures

1. Seed ATCC PCS-950-010 (in complete growth media) onto a fibronectin coated multi-well plate, 50,000 cells/cm².
2. Incubate @ 37°C for 24hrs.
3. Replace complete growth media with pre-warmed differentiation media after 24hrs.
4. Leave in differentiation media for a minimum of 96 hours or until a sufficient level of differentiation has occurred. The time to achieve differentiation will require optimization and depends on various factors including cell type, age/confluence of the culture, specific lot of smooth muscle cells, and the formulation of the differentiation medium that is used. Differentiation media should be replaced every 48 hours.

Note: Under some conditions, optimal differentiation may require a period of 120 hours or more.

Quality Control Specifications

Bacterial and fungal testing: Not detected

Endotoxin: 5 EU/mL

Osmolality: 255 to 285 mOsm/kg

pH: 7.5 to 8.1



ATCC® Credible leads to Incredible®

www.atcc.org

Skeletal Muscle Differentiation Tool

PCS-950-050

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Skeletal Muscle Differentiation Tool (ATCC PCS-950-050)

References

References and other information relating to this material are available at www.atcc.org.

Warranty

The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product.

While other unspecified media and reagents may also produce satisfactory results, a change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid.

Except as expressly set forth herein, no other warranties of any kind are provided, express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, manufacture according to cGMP standards, typicality, safety, accuracy, and/or noninfringement.

Disclaimers

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use. Any proposed commercial use is prohibited without a [license from](#)

Skeletal Muscle Differentiation Tool

PCS-950-050

ATCC.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the ATCC product including without limitation taking all appropriate safety and handling precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the ATCC product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at www.atcc.org.

Copyright and Trademark Information

© ATCC 2023. All rights reserved.

ATCC is a registered trademark of the American Type Culture Collection.

Revision

This information on this document was last updated on 2025-10-13

Contact Information

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: tech@atcc.org or contact your local distributor
