HCM-CSHL-0459-C17

PDM-272™

Description

A patient-derived next-generation cancer model generated by the Human Cancer Models Initiative (HCMI). HCM-CSHL-0459-C17 (ATCC No. PDM-272) was isolated from primary neoplasm of small intestine tissue. This tumor-derived model can be used in basic research and pharmacological screening applications. Data for the parental tumor and the tumor-derived organoid models are available at the GDC. Additional molecular characterizations may be available at the GDC. Additional controlled data may be available via dbGaP.

Organism: *Homo sapiens*, human
Tissue: Small intestine
Morphology: organoid
Growth properties: Embedded 3D culture
Disease: Neoplasm; Primary
Cells per vial: ≥ 1.0 x 10^6
Volume: 1.0 mL

Storage Conditions

Product format: Frozen
Storage conditions: Vapor phase of liquid nitrogen

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.

BSL 1

ATCC determines the biosafety level of a 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 understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

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

Growth Conditions

Temperature: 37°C
Atmosphere: 95% Air, 5% CO_2

Handling Procedures

Unpacking and storage instructions:

1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until ready for use.

Complete medium:

To prepare the complete medium for this organoid model, please refer to the Organoid Media Formulation #1.

ATCC offers the recombinant proteins, small molecules, and other supplements to make this complete medium; Organoid Growth Kit 1A (ATCC ACS-7100) provides these supplements in a convenient, pre-portioned, ready-to-reconstitute format that does not require aliquoting or storage once prepared.

Handling Procedure:

Seeding density: We recommend seeding this model at 0.25 - 1 x 10^6/ viable cells in 100 µL of ECM per well of a 6-well plate.

ECM: We recommend culturing this model in ATCC Cell Basement Membrane (ATCC ACS-3035) or Corning Matrigel. Include 10 µM ROCK Inhibitor Y-27632 (ATCC ACS-3030) in medium for the first 2-3 days following subculture.

For a brief overview of the thawing procedure see our quickstart guide Thawing Cryopreserved Human Organoids.

Subculturing procedure:

Initiating culture from frozen vials: For a brief overview of the thawing procedure see our quickstart guide Thawing Cryopreserved Human Organoids.

Seeding density: 0.25 - 1 x 10^6/ viable cells in 100 µL of ECM per well of a 6-well plate. Alternatively, split at 1:2-1:4 every 7-10 days. For example, collect organoids from 100 µL of extracellular matrix (ECM) from a single well of a 6-well plate and re-seed into 2-4 wells of a 6-well plate in 100 µL ECM per well.

Media renewal: Perform a complete medium change every 2-3 days. Include 10 µM ROCK Inhibitor Y-27632 (ATCC ACS-3030) in medium for the first 2-3 days following subculture.

For a brief overview of the subculture and expansion of organoids see our quickstart guide Subculture and Expansion of Human Organoids Protocol.

For more details on the handling and culture of organoids see our methods paper in *Current Protocols in Cell Biology*.

Reagents for cryopreservation: We recommend cryopreserving this model in ATCC Stem Cell Freezing Media (ATCC ACS-3020).
Cryopreservation:

For a brief overview of the cryopreservation procedure for organoids see our quickstart guide Organoid Cryopreservation Protocol.

For more details on the handling and culture of organoids see our methods paper in *Current Protocols in Cell Biology*.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: HCM-CSHL-0459-C17 (ATCC PDM-272)

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 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

Revision

This information on this document was last updated on 2025-12-05

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