Bladder Epithelial Growth Kit

PCS-420-042™

Description

The kit contains components that when added to Bladder Epithelial Cell Basal Medium (ATCC PCS-420-032) create a complete ATCC® Primary Cell Solutions™ culture environment for epithelial cells derived from normal human bladder tissue. The serum-free medium formulation is designed to support normal bladder epithelial cell morphology as well as promote rapid growth and proliferation. No feeder layers, extracellular matrix proteins or other substrates are required.
The final concentration for each component in complete bladder epithelial cell growth medium is as follows:

- L-Glutamine: 6 mM
- Extract P: 0.4%
- Epinephrine: 1.0 µM
- rh EGF: 5 ng/mL
- Hydrocortisone: 100 ng/mL
- Insulin: 5 µg/mL
- Apo-transferrin: 5 µg/mL
- rh TGF-α: 0.5 ng/mL
- rh KGF: 5 ng/mL

Storage Conditions

Product format: Frozen
Storage conditions: -20°C or colder, -70°C for long-term storage

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.

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

Unpacking and Storage Instructions

1. Check all containers for leakage or breakage.
2. Store the growth kit(s) at either 20°C in a freezer that is not self-defrosting or at 70°C for long term storage. If thawed upon arrival, the Growth Kit can be stored at 2°C to 8°C and added to the basal medium within 72 hours of receipt.

Preparation of Complete Growth Media

1. Obtain one growth kit from the freezer; make sure that the caps of all components are tight.
2. Thaw the components of the growth kit just prior to adding to the basal medium. Warm the L-glutamine component in a 37°C water bath and shake to

dissolve any precipitates prior to adding to the basal medium.

3. Obtain one bottle of Bladder Epithelial Cell Basal Medium (485 mL) from cold storage.
4. Decontaminate the external surfaces of all growth kit component vials and the basal medium bottle by spraying them with 70% ethanol.
5. Using aseptic technique and working in a laminar flow hood or biosafety cabinet, transfer the indicated volume of each growth kit component to the bottle of basal medium using a separate sterile pipette for each.

Table 1. Bladder Epithelial Cell Growth Kit Components

Component	Volume	Final Concentration
L-Glutamine	15 mL	6 mM
Extract P	2 mL	0.4%
Epinephrine	0.5 mL	1 M
rh EGF	0.5 mL	5 ng/mL
Hydrocortisone	0.5 mL	100 ng/mL
rh Insulin	0.5 mL	5 g/mL
Apo-transferrin	0.5 mL	5 g/mL
rh TGF-alpha	0.5 mL	0.5 ng/mL
rh KGF	1 mL	5 ng/mL

Antimicrobials and phenol red are not required for proliferation, but may be added if

desired. The recommended volume of each *optional* component to be added to the complete growth media is summarized in Table 2.

Table 2. Addition of Antimicrobials/Antimycotics and Phenol Red (Optional)

Component	Volume	Final Concentration
Penicillin-Streptomycin-Amphotericin B Solution (PCS-999-002)	**0.5 mL**	**Penicillin: 10 Units/mL** **Streptomycin: 10 g/mL** **Amphotericin B: 25 ng/mL**
Phenol Red (PCS-999-001)	**0.5 mL**	**33 M**

- Tightly cap the bottle of complete growth medium and swirl the contents gently to assure a homogeneous solution. Do not shake forcefully to avoid foaming. Label and date the bottle.
- Complete media should be stored in the dark at 2°C to 8°C (do not freeze). When stored under these conditions, complete media is stable for 30 days.

Quality Control Specifications

Bacterial and fungal testing: Not detected
Functional tests: Rate of proliferation and morphology

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Bladder Epithelial Growth Kit (ATCC PCS-420-042)

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

© 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

Bladder Epithelial Growth Kit

PCS-420-042

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