



Renal Epithelial Cell Growth Kit

PCS-400-040™

Product Sheet

Description

Renal Epithelial Cell Growth Kit contains components that when added to Renal Epithelial Cell Basal Medium (ATCC PCS-400-030) create a complete ATCC Primary Cell Solutions culture environment for renal epithelial cells derived from a normal human kidney (eg, Primary Renal Proximal Tubule Epithelial Cells, Normal, Human, ATCC PCS-400-010; Primary Renal Cortical Epithelial Cells, Normal, Human, ATCC PCS-400-011; Primary Renal Mixed Epithelial Cells, Normal, Human, ATCC PCS-400-012). The low serum (0.5% FBS) medium formulation is designed to support normal renal cell morphology as well as promote rapid growth and proliferation. No feeder layers, extracellular matrix proteins, or other substrates are required.

Shipping information: 1 kit

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.

All tissues used for isolation are obtained under informed consent and conform to HIPAA regulations to protect the privacy of the donor's Personally Identifiable Information. It is best to use caution when handling any human cells. We recommend that all human cells be accorded the same level of biosafety consideration as cells known to carry Human immunodeficiency virus (HIV) and other bloodborne pathogens. With infectious virus assays or viral antigen assays, even a negative test result may not exclude the possibility of the existence of a latent viral genome or infectious viral particles below the lower limit of detection of that assay.

ATCC recommends that appropriate safety procedures be used when handling all primary cells and cell lines, especially those derived from human or other primate material. Handle as a potentially biohazardous material using universal precautions. Cells derived from primate lymphoid tissue may fall under the regulations of 29 CFR 1910.1030 Bloodborne Pathogens.

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. 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.

3. Obtain one bottle of Renal 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 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. Renal Epithelial Cell Growth Kit Components

| Component | Volume | Final Concentration |
|------------------------------|--------|---------------------|
| Fetal Bovine Serum (FBS) | 2.5 mL | 0.5% |
| Triiodothyronine | 0.5 mL | 10 nM |
| rh EGF | 1.0 mL | 10 ng/mL |
| Hydrocortisone Hemisuccinate | 0.5 mL | 100 ng/mL |
| rh Insulin | 0.5 mL | 5 µg/mL |
| Epinephrine | 0.5 mL | 1 µM |
| Transferrin | 0.5 mL | 5 µg/mL |
| L-Alanyl-L-Glutamine | 6.0 mL | 2.4 mM |

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 |
|--|--------|--|
| Gentamicin- Amphotericin B Solution | 0.5 mL | Gentamicin: 10 µg/mL Amphotericin B: 0.25 µg/mL |
| Penicillin- Streptomycin- Amphotericin B Solution | 0.5 mL | Penicillin: 10 Units/mL Streptomycin: 10 µg/mL Amphotericin B: 25 ng/mL |
| Phenol Red | 0.5 mL | 33 µM |

6. 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.
7. 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

Mycoplasma contamination: Not detected

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Renal Epithelial Cell Growth Kit (ATCC PCS-400-040)

References

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

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Revision

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