Corneal Epithelial Cell Basal Medium

PCS-700-030™

Description

Corneal Epithelial Cell Basal Medium is a sterile, phenol-red-free, liquid tissue culture medium intended for use as one component in a complete ATCC Primary Cell Solutions system. This serum-free system is designed to support corneal epithelial cells derived from a normal human cornea. Corneal Epithelial Cell Basal Medium contains essential and non-essential amino acids, vitamins, other organic compounds, trace minerals, and inorganic salts. To support the proliferation and plating efficiency of corneal epithelial cells, Corneal Cell Basal Medium must be supplemented with the appropriate cell-specific growth kit. When using this complete media system, the growth of corneal epithelial cells is supported without the use of feeder layers, extracellular matrix proteins, or other substrates.

Volume: 485 mL

Storage Conditions

Storage conditions: 2°C to 8°C

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

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 them to the basal medium. If the growth kit contains L-glutamine, 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 Corneal 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, as indicated in Table 1, to the bottle of basal medium using a separate sterile pipette for each transfer.

Table 1. Corneal Epithelial Cell Growth Kit Components

Component	Volume	Final

		Concentration
Apo-transferrin	0.5 mL	5 mg/mL
Epinephrine	0.5 mL	1.0 mM
Extract P	2 mL	0.4%
Hydrocortisone Hemisuccinate	0.5 mL	100 ng/mL
L-Glutamine	15 mL	6 mM
rh Insulin	0.5 mL	5 mg/mL
CE Growth Factor	1 mL	Proprietary formulation

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 media is summarized in Table 2.

Table 2. Addition of Antimicrobials/Antibiotics 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 growth 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
Endotoxin: < 0.5 EU/mL
Osmolality: 315 ± 10 mOsm/kg
pH: 7.5 ± 0.2
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: Corneal Epithelial Cell Basal Medium (ATCC PCS-700-030)

References

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

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