

Cell Biology

Description: Mouse ES Cell Basal Medium

ATCC® No.: SCRR-2011

Biosafety Level: N/A

Storage Temperature: 2°C to 8°C

Stability: When stored in the dark at 2°C to 8°C, the product is stable until the expiration date on the label.

Size: 500 mL

Quality Control Specifications

pH: 7.1 to 7.5

Osmolality: 260 to 285 mOsm/kg

Appearance: Clear red solution

Sterility testing: Negative for bacteria, fungi, yeast

Cell testing (ES-D3 ES cells): Rate of proliferation and morphology

A Certificate of Analysis (COA) is available upon request for each lot of Mouse ES Cell Basal Medium.

Introduction

General culture conditions to maintain undifferentiated, pluripotent mouse ES cells are now well established, and incremental improvements, such as the development of Mouse ES Cell Basal Medium, are key to the ongoing success of stem cell research.

Mouse ES Cell Basal Medium is a sterile liquid tissue culture medium containing phenol red that has been optimized to support the undifferentiated self-renewal cycle related to mouse embryonic stem cell growth.

The medium contains a stable glutamine dipeptide, providing a long shelf-life when handled and stored properly. The medium may be supplemented by addition of ES-Cell Qualified Fetal Bovine Serum (FBS) or a serum replacement designed for mouse ES cells.

This medium can support the growth of mouse ES cells on either a mitotically inactivated layer of mouse embryonic fibroblast (MEF) feeder cells, or in a feeder-free environment using gelatin-coated plates.

Related ATCC Products

Cell culture medium and reagents:

- SCRR-30-2020 ES-Qualified FBS
- 30-2300 Penicillin - Streptomycin
- PCS-999-027 0.1% Gelatin Solution

Mouse ES cells:

- CRL-1934™ ES-D3 (D3) Stem Cell
- SCRC-1002™ ES-C57BL/6 Mouse ES Cell
- SCRC-1010™ J1 Mouse ES Cell
- SCRC-1011™ R1 Mouse ES Cell
- SCRC-1018™ RW.4 Mouse ES Cell
- SCRC-1019™ B6/BLU Mouse ES Cell

Mouse ES cells (continued):

- SCRC-1020™ SCC#10 Mouse ES Cell
- SCRC-1021™ EDJ#22 Mouse ES Cell
- SCRC-1023™ AB2.2 Mouse ES Cell
- SCRC-1029™ AINV15 Mouse ES Cell
- SCRC-1033™ 7AC5/EYFP Mouse ES Cell
- SCRC-1036™ R1/E Mouse ES Cell
- SCRC-1037™ G-Olig2 Mouse ES Cell
- SCRC-1038™ CE-1 Mouse ES Cell
- SCRC-1039™ CE-3 Mouse ES Cell

MEF feeder cell lines:

- ATCC® SCRC-1007™ AFT024
- ATCC® SCRC-1008™ MEF C56BL/6
- ATCC® SCRC-1040™ MEF CF-1
- ATCC® SCRC-1045™ MEF DR4
- ATCC® SCRC-1049™ MEF SNL 76/7
- ATCC® SCRC-1050™ MEF SNLP 76/7-4

Preparation of Complete Growth Medium for Mouse ES Cells

Grow ES cells in Mouse ES Cell Basal Medium that has been supplemented with the following components:

- 0.1 mM 2-mercaptoethanol (Invitrogen Cat. No. 21985)
- 1,000 U/mL mouse leukemia inhibitory factor (LIF) (Chemicon Cat. No. ESG1107)
- 10% to 15% ES-Cell Qualified FBS (ATCC® SCRR-30-2020) or an ES cell qualified serum replacement

Complete Growth Medium for Mouse ES Cells is stable for 14 days when stored at 2°C to 8°C.

References

No references are available at this time.

Additional Information

Additional product and technical information can be obtained from the ATCC website at www.atcc.org, or by e-mail at tech@atcc.org.

Biosafety Level

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: *Biosafety in Microbiological and Biomedical Laboratories*, 5th ed. HHS Publication No. (CDC) 93-8395. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Washington DC: U.S. Government Printing Office; 2007. The entire text is available online at www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

ATCC Warranty

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