EML Cell Line, Clone 1 (ATCC® CRL-11691™)

**Description**

Organism: Mus musculus, mouse  
Strain: BDF1  
Tissue: bone marrow  
Cell Type: basophil  
Gender: male  
Growth Properties: suspension

**Batch-Specific Information**

Refer to the Certificate of Analysis for batch-specific test results.

**SAFETY PRECAUTION**

ATCC highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials 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 vessel exploding or blowing off its cap with dangerous force creating flying debris.

**Handling Procedure for Frozen Cells**

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

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.

**Handling Procedure for Flask Cultures**

The flask was seeded with cells (see specific batch information), grown, and completely filled with medium at ATCC to prevent loss of cells during shipping.

1. Upon receipt visually examine the culture for macroscopic evidence of any microbial contamination. Using an inverted microscope (preferably equipped with phase-contrast optics), carefully check for any evidence of microbial contamination.
2. Incubate the flask in an upright position for several hours at 37°C. After the temperature has equilibrated, aseptically remove the entire contents of the flask and centrifuge at 125 x g for 5 to 10 minutes. Remove shipping medium and save for reuse. Resuspend the cell pellet in 10 mL of this medium.
3. From this cell suspension remove a sample for a cell count and viability. Adjust the cell density of the suspension to 4-5 x 10^6 viable cells/mL in the shipping medium.
4. Incubate the culture, horizontally, at 37°C in a 5% CO₂ in air atmosphere. Maintain the cell density of the culture as suggested under the subculture procedure.
Subculturing Procedure

Cultures can be maintained by addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension in fresh medium at 2 to 3 x 10⁶ viable cells/mL.

Interval: Maintain cultures at cell concentrations between 4 x 10⁶ and 2 x 10⁶ viable cells/mL.

Medium Renewal: Every 2 to 3 days

Cryopreservation Medium

Complete growth medium described above supplemented with 5% (v/v) DMSO. Cell culture tested DMSO is available as ATCC Catalog No. 4-X.

Comments

EML Clone 1 is a stem cell factor-dependent lympho-hematopoietic progenitor cell line. They can be induced with IL-7 and bone marrow stromal cells to express characteristics of pre-pro-B lymphocytes. EML contains progenitors capable of differentiation along B-lymphocyte, erythrocyte, neutrophil, macrophage, mast cell, and megakaryocyte lineages. They are the only known SCF-dependent cell line with both lympho and myelo-erythroid potential. These cells are available only as a frozen ampule.

RARalpha403 is a truncated cDNA that encodes a peptide of 403 amino acids containing the N-terminus and the DNA-binding domain. RARalphacDNA contains a truncation of the sequences coding for the C-terminal 59 amino acids as well as a portion of the 3' untranslated region.

References

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

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the Biosafety in Microbiological and Biomedical Laboratories from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

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Additional information on this culture is available on the ATCC web site at www.atcc.org.

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