Organism: *Mus musculus*, mouse  
Strain: C3H/HeJ  
Cell Type: microglia  
Age: 10 days juvenile  
Gender: female  
Morphology: macrophage  
Growth Properties: adherent

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.

Unpacking & Storage Instructions

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 Frozen Cells

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 9.0 ml complete culture medium and spin at approximately 125 x g for 5 to 7 minutes. Discard supernatant.
4. Resuspend the cell pellet with the recommended complete medium and dispense into a 25 cm² culture flask. It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the complete growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).
5. Incubate the culture at 37°C in a suitable incubator. A 5% CO₂ in air atmosphere is recommended if using the medium described on this product sheet.

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. Also check to determine if the majority of cells are still attached to the bottom of the flask; during shipping the cultures are sometimes handled roughly and many of the cells often detach and

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: EOC 20 (ATCC® CRL-2469™)
Please read this FIRST

Subculturing Procedure

Subcultivation Ratio: A subcultivation ratio of 1:3 is recommended

Medium Renewal: Every 2 to 3 days

Remove 75% of the media. Scrape off the attached cells and transfer into new flasks.

Cryopreservation Medium

Cryoprotectant 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

This is an immortalized cell line derived from the brain of an apparently normal 10 day old mouse [PubMed: 8550814]. Cells were cloned in soft agar in the presence of CSF-1 and expanded on microcarrier beads. Beads were transferred to culture dishes and were subsequently passaged by scraping. The cell line is dependent on growth factor colony stimulating factor 1 (CSF-1). Conditioned medium is made from LADMAC cells (ATCC CRL-2420) as a source of CSF-1. The cells exhibit phagocytic activity. These cells constitutively expressed high levels of major histocompatibility complex (MHC) class II antigens and expression was upregulated by recombinant murine interferon-gamma. The cells may be used to characterize the role of brain macrophages. C3H/HeJ strain is defective in TLR4 (toll-like receptor 4).

References

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

Biosafety Level: 1

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.

ATCC Warranty

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Biosafety Level

1

Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Complete Growth Medium

Dulbecco’s modified Eagle’s medium with 4 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate and 4.5 g/L glucose, 70%; fetal bovine serum, 10%; LADMAC Conditioned Media (produced from the LADMAC cell line (CRL-2420), 20%

Citation of Strain

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