ATCC

Product Sheet

AML-193 (ATCC® CRL-9589™)

Please read this FIRST

Storage Temp.
liquid nitrogen vapor phase

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

Iscove's modified Dulbecco's medium with 0.005 mg/ml insulin, 0.005 mg/ml transferrin and 5 ng/ml GM-CSF, 95%; fetal bovine serum, 5%.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: AML-193 (ATCC® CRL-9589™)

American Type Culture Collection
PO Box 1549
Manassas, VA 20108 USA
www.atcc.org

800.638.6597 or 703.365.2700
Fax: 703.365.2750
Email: Tech@atcc.org

Or contact your local distributor

Description

Organism: *Homo sapiens*, human
Tissue: peripheral blood
Disease: acute monocytic leukemia
Cell Type: monocyte
Age: 13 years
Gender: female
Morphology: lymphoblast
Growth Properties: suspension
DNA Profile:
Amelogenin: X
CSF1PO: 11,12
D13S317: 12
D16S539: 12
D5S818: 9,13
D7S820: 9,12
THO1: 7,9
TPOX: 8,9
vWA: 15,17
Cytogenetic Analysis: This is a hyperdiploid human cell line. The modal chromosome number is 49, occurring in 50% of cells. The rate of polyploidy is 2.2%. There is one marker chromosome, der(17)t(17;17)(p13.1;q21.3), that occurred in every cell. These cells are trisomic for N3, N6, N8, and N13, and occasionally also for N2. N17 and X chromosome had a single copy, but occasionally the X had two copies. Thus the modal karyotype of this cell line is 49, X, +3, +6, +8, +der(17)t(17;17)(p13.1;q21.3), -17. The subline with 50, X, +2, +3, +6, +8, +der(17)t(17;17)(p13.1;q21.3), -17 and 50, XX, +3, +6, +8, +der(17)t(17;17)(p13.1;q21.3, -17 also occurred, but at a very low frequency.

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

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. 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.
4. Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). and dispense into a 25 cm^2 or a 75 cm^2 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% CO_2 in air atmosphere is recommended if using the medium described on this product.

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Subculturing Procedure

Cultures can be maintained by addition or replacement of fresh medium. Start cultures at 3 X 10^5 cells/mL and maintain between 3 X 10^5 and 1 X 10^6 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

Interleukin-3 (interleukin 3, IL-3) and granulocyte/macrophage colony stimulating factor (GM-CSF) act synergistically to stimulate growth of the cells. Granulocyte colony stimulating factor (G-CSF) also supports short term and long term growth of AML-193 cells and acts synergistically with GM-CSF in inducing proliferation of the cells.

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

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.
While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.
This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.
Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org

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

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