ATCC

Product Sheet

NCI-H345 [H345] (ATCC® HTB-180™)

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

HITES medium (serum free) is formulated at the ATCC as follows:

- DMEM: F-12 Medium (ATCC 30-2006)
- Insulin 0.005mg/ml (Gibco 12585-014)
- Transferrin 0.01 mg/ml (Sigma T5391 or equivalent)
- Sodium selenite 30 nM (Sigma S9133 or equivalent)
- Hydrocortisone 10 nM (Sigma H0135 or equivalent)
- beta-estradiol 10 nM (Sigma E2257 or equivalent)
- L-Glutamine Solution (ATCC 30-2214) 2 mM (in addition to that in the base medium)

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: NCI-H345 [H345] (ATCC® HTB-180™)

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: lung; derived from metastatic site: bone marrow
Disease: carcinoma; small cell lung cancer
Age: 64 years
Gender: male
Morphology: epithelial
Growth Properties: suspension, multicell aggregates and some adherent cells
Isoenzymes:
AK-1, 1
ES-D, 1
G6PD, B
GLO-I, 1
Me-2, 0
PGM1, 1-2
PGM3, 1
DNA Profile:
Amelogenin: X
CSF1PO: 11,12
D13S317: 9,11
D16S539: 8
D5S818: 11,12
D7S820: 9,13
THO1: 9,9.3
TPOX: 8,9
vWA: 15,16
Cytogenetic Analysis: hypotriploid; modal number = 63; range = 60 to 66.
Sixteen or more marker chromosomes were common to most cells. Nearly half of the markers had lengths close to the D group or smaller chromosomes. Among the identifiable markers were der(1)t(1;17)(q21;q11), der(?9)t(1;?9)()q12;?q21, t(8q?12q), t(12q?17q), der(9)t(9,?)(q22;?). Normal N13 was absent; the N8, N9, N12 and N19 were found as single copies; N20 generally had 4 copies; there were 2 normal X chromosomes and no Y chromosome was detected.

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. It is recommended that the cryoprotective agent be removed immediately. Centrifuge the cell suspension at approximately 125 xg for 5 to 10 minutes. Discard the supernatant and resuspend the

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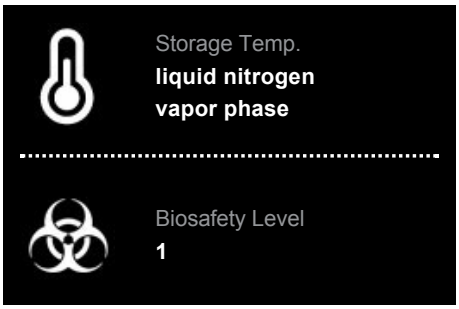

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cell pellet in an appropriate amount of fresh growth medium. to an appropriate size vessel. Incubate the culture at 37°C in a suitable incubator. A 5% CO_2 in air atmosphere is recommended if using the medium described on this product sheet.

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 become suspended in the culture medium (but are still viable).
2. **If the cells are still attached,** aseptically remove all but 5 to 10 mL of the shipping medium. The shipping medium can be saved for reuse. Incubate the cells at 37°C in a 5% CO_2 in air atmosphere until they are ready to be subcultured.
3. **If the cells are not attached,** aseptically remove the entire contents of the flask and centrifuge at 125 x g for 5 to 10 minutes. Remove shipping medium and save. Resuspend the pelleted cells in 10 mL of this medium and add to 25 cm^2 flask. Incubate at 37°C in a 5% CO_2 in air atmosphere until cells are ready to be subcultured.

Subculturing Procedure

Culture can be maintained by addition of medium or by replacement of medium. Alternatively, the cells may be collected by centrifugation and dispersed into fresh medium. Aggregates may be dispersed by trituration. The use of trypsin is not recommended.
Medium Renewal: Add fresh medium every 3 to 4 days (depending on cell density)

Cryopreservation Medium

Complete growth medium described above supplemented with 7. 5% (v/v) DMSO.
Cell culture tested DMSO is available as ATCC Catalog No. 4-X.

Comments

The cells produce easily detectable p53 mRNA at levels comparable to those in normal lung tissue.
The line does not exhibit any gross structural DNA abnormalities.
The cells express elevated levels of four biochemical markers of SCLC: neuron specific enolase, the brain isoenzyme of creatine kinase, L-DOPA decarboxylase and bombesin-like immunoreactivity.
This cell line grows as gland-like clusters in suspension with a few attached cells. The viability of the cells in clusters is better than the viability of the single cells in the cultures.

The cells form transplantable tumors with typical small cell carcinoma histology.

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

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in

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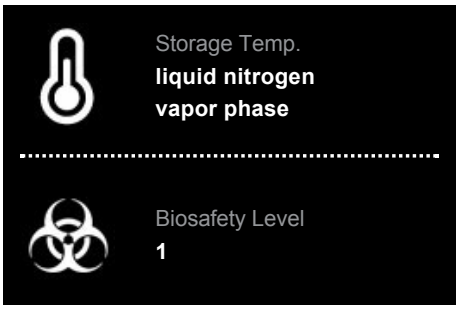

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media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

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.
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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.