Please read this FIRST

Storage Temp. liquid nitrogen vapor phase

Biohazard Level 1

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

The base medium for this cell line is ATCC-formulated RPMI-1640 Medium, ATCC 30-2001. To make the complete growth medium, add the following components to the base medium: fetal bovine serum (ATCC 30-2020) to a final concentration of 10%.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: HCC1187 (ATCC® CRL-2322™)

Description

Organism: Homo sapiens, human
Tissue: mammary gland; breast
Disease: TNM stage IIA, grade 3, primary ductal carcinoma
Cell Type: Epithelial
Age: 41 years adult
Gender: female
Morphology: epithelial
Growth Properties: mixed, adherent and suspension

DNA Profile:
Amelogenin: X
CSF1PO: 13
D13S317: 11
D16S539: 10
D5S818: 12
D7S820: 8,11
TH01: 6
TPOX: 8
vWA: 19

Cytogenetic Analysis: multiploid; cell population has several ploidy indices

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 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 75 cm² tissue culture flask and dilute with the recommended complete culture medium (see the specific batch information for the recommended dilution ratio). 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).
4. 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.

Note: If it is desired that the cryoprotective agent be removed immediately, or that a more concentrated cell suspension be obtained, centrifuge the cell suspension at approximately 125 x g for 5 to 10 minutes. Discard the supernatant and resuspend the cells with fresh growth medium at the dilution ratio recommended in the specific batch information.

Handling Procedure for Flask Cultures
Upon receipt visually examine the culture for macroscopic evidence of any microbial contamination.

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, aspirate and 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.
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 grow as floating aggregates of round cell clusters and as attached epithelial-like cells. Cultures can be maintained by the addition of fresh medium to the flask, or centrifuging and removing the spent medium, resuspending the cell pellet in fresh medium and returning the resuspended cells to the flask.

To subculture the attached cells, remove and reserve the suspended cells (recover the suspended cells by centrifugation if desired). Rinse the monolayer with fresh 0.25% trypsin-0.53 mM EDTA, neutralize with an equal volume complete medium and centrifuge. Remove supernatant and resuspend cell pellet with complete medium and pool into reserved suspended cells. Add appropriate aliquots of the pooled cell suspension to new culture vessels.

Subcultivation Ratio: A subcultivation ratio of 1:2 is recommended

Medium Renewal: Every 2 to 3 days

Cryopreservation Medium

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

Comments

The tumor was classified as TNM stage IIA, grade 3, invasive ductal carcinoma. Information regarding lymph node metastasis is not available.

The cells are poorly differentiated. An EBV transformed lymphoblastoid cell line (HCC1187 BL) from the same patient is available as ATCC CRL-2323.

HCC1187 is positive for the epithelial cell specific marker Epithelial Glycoprotein 2 (EGP2) and for cytokeratin 19. The cells are negative for expression of Her2-neu; they overexpress p53. The cells are negative for expression of progesterone receptor (PR).

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.

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

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