Description

Organism: Homo sapiens, human
Tissue: liver
Disease: grade III/IV, pleomorphic hepatocellular carcinoma
Age: 40 years
Gender: male
Morphology: epithelial
Growth Properties: adherent
DNA Profile:
- Amelogenin: X,Y
- CSF1PO: 11,12
- D13S317: 10,13
- D16S539: 9
- D5S818: 10
- D7S820: 12
- THO1: 6,9
- TPOX: 8
- vWA: 15

Cytogenetic Analysis: aneuploid; modal number = 79

Batch-Specific Information

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

SAFETY PRECAUTION

Unpacking & Storage Instructions

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 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% CO₂ 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 xg for 5 to 10 minutes. Remove shipping medium and save. Resuspend the pelleted cells in 10 ml of this medium and add to 25 cm² flask. Incubate at 37°C in a 5% CO₂ in air atmosphere until cells are ready to be subcultured.

Subculturing Procedure

Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:5 is recommended
Medium Renewal: Every 2 to 3 days
Remove spent medium, add fresh 0.25% trypsin, 0.03% EDTA solution, rinse and remove trypsin. Add fresh trypsin solution (1 to 2 ml) and let the culture sit at room temperature (or at 37°C) until the cells detach.
SNU-423 was derived in 1990 by J.-G. Park and associates from a primary hepatocellular carcinoma taken from a Korean patient who had been treated by transcatheter arterial embolization with lipoidol plus doxorubicin.

Tumor cells were initially cultured in ACL-4 medium supplemented with 5% heat-inactivated fetal bovine serum.

After establishment, cultures were maintained in RPMI 1640 supplemented with 10% heat-inactivated fetal bovine serum.

Grossly, the original tumor was single nodular with perinodular extensions.

Histologically, it was trabecular type.

The cultured cells are multinucleated.

Hepatitis B virus (HBV) DNA was detected by Southern blot hybridization.

HBV genomic RNA was not expressed.

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

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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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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