**Description**

**Organism:** Homo sapiens, human  
**Tissue:** liver  
**Disease:** hepatoma  
**Cell Type:** Alexander cells  
**Morphology:** epithelial  
**Growth Properties:** adherent  
**DNA Profile:**
- Amelogenin: X  
- CSF1PO: 10  
- D13S317: 11, 12  
- D16S539: 13  
- D5S818: 12  
- D7S820: 9, 11  
- THO1: 8  
- TPOX: 8  
- vWA: 15, 16

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 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 1:2 to 1:4 is recommended  
**Medium Renewal:** Twice per week  
Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37°C) until the cells detach.  
Add fresh culture medium, aspirate and dispense into new culture 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**

The line was originally contaminated with mycoplasma, and was cured by treatment with BM-cycline. The cells secrete HBsAg.

**References**

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

**ATCC Warranty**

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