SV7tert PDGF tumor-1 (ATCC® CRL-4008™)

Please read this FIRST

**Description**

- **Organism:** Homo sapiens, human
- **Immortalization Method:** hTERT and SV40 large T antigen expression
- **Tissue:** Kidney; angiomyolipoma
- **Cell Type:** Epithelial cells immortalized with hTERT and SV40 large T antigen expression
- **Age:** 63 years
- **Gender:** female
- **Morphology:** Epithelial-like
- **Growth Properties:** Adherent

**DNA Profile:**
- Amelogenin: X
- CSF1PO: 10, 12
- D13S317: 8
- D16S539: 9, 11
- D5S818: 11, 13
- D7S820: 11
- TH01: 6, 9, 3
- TPOX: 8, 11
- vWA: 17, 18

**Cytogenetic Analysis:** This is a hypotetraploid cell line with many structural rearrangements, numerical losses and gains. The following eight derivatives were found to be present in low and high passage karyotypes: der(X)(X;3)(q28;p21), der(1)(1;17)(q10;p10), der(3)(3;3)(p10;p10), i(8)(q10), i(12)(q10), der(13)(13;21)(q10;q10), der(16)(4;16)(q21;q24), add(20)(q13.3). Generally, the karyotyped passages contained the same complement of chromosome rearrangements, losses and gains.

**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 ensure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If storage of the frozen culture is necessary upon arrival, store the vial in liquid nitrogen vapor phase and NOT at -70°C. Storage at -70°C will result in loss of viability.

1. Prepare a 25 cm² or a 75 cm² culture flask containing the recommended complete culture medium. Prior to the addition of the vial contents, the vessel containing the growth medium should be placed in the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6) and to avoid excessive alkalinity of the medium during recovery of the cells.
2. 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).
3. 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 operations from this point on should be carried out under strict aseptic conditions.
4. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge the cell suspension at approximately 125 x g for 5 to 7 minutes.
5. Discard the supernatant and resuspend the cells in fresh growth medium (see the batch-specific information for the recommended dilution ratio). Add this suspension to the prepared culture vessel.
6. Incubate the culture at 37°C in a suitable incubator.
7. A 5% CO₂/95% air atmosphere is recommended if using the medium described on this product sheet.
Upon receipt visually examine the culture for macroscopic evidence of any microbial contamination. If the cells are not attached, add appropriate aliquots of the cell suspension to new culture vessels. An inoculum of $1.0 \times 10^4$ cells/mL is recommended.

Incubate cultures at 37°C. Subculture when the cell concentration is between $8.0 \times 10^4$ and $1.0 \times 10^5$ viable cells/mL.

Volumes used in this protocol are for 75-cm$^2$ flasks; proportionally reduce or increase amount of dissociation media for culture vessels of other sizes.

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with Ca$^{++}$/Mg$^{++}$ free Dulbecco's phosphate-buffered saline (D-PBS) or 0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.
3. Add 1.0 to 2.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
   - Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels. An inoculum of 1.0 X $10^4$ to 2.0 X $10^4$ viable cells/cm$^2$ is recommended.
6. Incubate cultures at 37°C. Subculture when the cell concentration is between 8 X $10^4$ to 1 X $10^5$ cells/cm$^2$.

**Subcultivation ratio:** A subcultivation ratio of 1:4 to 1:10 is recommended.

**Medium renewal:** Every 2 to 3 days

**Cryopreservation Medium**

95% growth medium; 5% (v/v) DMSO

Store in liquid nitrogen vapor. Avoid immersing vials into liquid nitrogen.

**References**

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).

**Biosafety Level: 2**

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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