**Cell Characteristics**

**Tissue:** blood

**Morphology:** lymphoid

**Growth Properties:** suspension

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.

**Preparation of Complete Growth Medium**

Natural Killer Cells have a limited lifespan in culture and should be thawed immediately and only prior to their intended use in application specific media. ATCC recommends thawing them in RPMI-1640 (ATCC 30-2001). ATCC does not recommend maintaining Natural Killer Cells in culture in the absence of application-specific growth factors.

**Handling Procedure for Frozen Cells and Initiation of Culture**

Refer to the batch specific information for the total number of viable cells recovered from this lot of ATCC® PCS-800-019™.

1. Rapidly thaw the vial in a 37°C water bath.
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by spraying with 70% ethanol. All operations from this point onward should be carried out under strict aseptic conditions.
3. Carefully transfer the contents of the vial to a conical tube containing 5mL HBSS (without Ca2+ or Mg2+) containing 10% Human AB serum or 10% Human Serum Albumin.
4. Rinse the vial with additional HBSS and transfer to the conical tube.
5. Bring the volume in the cryovial up to 10 mL with HBSS containing 10% HSA.
6. Take an aliquot for counting.
7. Centrifuge the cell suspension at 300 x g for 5 minutes at room temperature.
8. Carefully aspirate the supernatant without disturbing the pellet.
9. Gently re-suspend the pellet in an appropriate buffer/medium such as RPMI-1640 containing 10% HSA.

**Viral Testing**

- **Hepatitis B:** Negative
- **Hepatitis C:** Negative
- **HIV:** Negative
- **HTLV-I/II:** Negative

**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.

**Human Material Precaution**

All tissues used for isolation are obtained under informed consent and conform to HIPAA standards to protect the privacy of the donor’s personal health information. It is best to use caution when handling any human cells. We recommend that all human cells be accorded the same level of biosafety consideration as cells known to carry HIV. With infectious virus assays or viral antigen assays, even a negative test result may leave open the possible existence of a latent viral genome.

**ATCC Warranty**

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. 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.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

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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