Primary CD4+ Helper T Cells

PCS-800-016™

Description

Primary CD4+ Helper T Cells is a cell line exhibiting spherical-like morphology that was isolated from the peripheral blood of a donor. This cell has applications in compound screening and immune function assays.

Organism: *Homo sapiens*, human
Tissue: Peripheral blood
Age: lot-specific
Gender: Lot-specific
Morphology: spherical
Growth properties: Suspension
Disease: Normal
Cells per vial: ≥ 2.5 x 10^6
Volume: 1.0 mL

Storage Conditions

Product format: Frozen
Storage conditions: Vapor phase of liquid nitrogen

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

All tissues used for isolation are obtained under informed consent and conform to HIPAA regulations to protect the privacy of the donor's Personally Identifiable 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 Human immunodeficiency virus (HIV) and other bloodborne pathogens. With infectious virus assays or viral antigen assays, even a negative test result may not exclude the possibility of the existence of a latent viral genome or infectious viral particles below the lower limit of detection of that assay.

ATCC recommends that appropriate safety procedures be used when handling all primary cells and cell lines, especially those derived from human or other primate material. Handle as a potentially biohazardous material using universal precautions. Cells derived from primate lymphoid tissue may fall under the regulations of 29 CFR 1910.1030 Bloodborne Pathogens.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may 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 vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Temperature: 37°C
Atmosphere: 95% Air, 5% CO_2

Handling Procedures

Unpacking and 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.

Complete medium: CD4+ Helper T 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 CD4+ Helper T Cells in culture in the absence of application-specific growth factors.

Handling Procedure: Refer to the batch specific information for the total number of viable cells recovered from this lot of ATCC® PCS-800-016™.

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 (HSA).
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 300xg 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.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Primary CD4+ Helper T Cells (ATCC PCS-800-016)

References

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

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