Please read this FIRST

Storage Temp.
liquid nitrogen vapor phase

Biosafety Level
2

Intended Use
This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Complete Growth Medium
iPSC-derived CD34+ hematopoietic progenitor cells should be thawed prior to their intended use in application specific media. ATCC recommends thawing them in RPMI-1640 (ATCC 30-2001). ATCC does not recommend maintaining iPSC-derived CD34+ hematopoietic progenitor cells in culture in the absence of application-specific growth factors.

Citation of Strain
If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: iPSC-derived CD34+ Cells, BXSO117 (ATCC® ACS-7020™).

Description
Organism: Homo sapiens, human
Tissue: iPSC-derived CD34+ cells
Age: 27
Gender: female
Morphology: rounded
Growth Properties: suspension
DNA Profile:
Amelogenin: X
CSF1PO: 10, 12
D13S17: 9, 12
D16S539: 11
DSS818: 12
D7S820: 9, 13
TH01: 7, 9
TPOX: 8, 11
vWA: 19

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 submerged 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
Refer to the batch specific information for the total number of viable cells recovered from this lot of ATCC® ACS-7020 Lot 70020687 is ~ 2.8 x 10⁶.

1. Using the total number of viable cells, customers have to decide seeding for their experiments and applications.
2. Prepare the desired combinations of culture dishes with required media and allow the media to pre-equilibrate to temperature and pH for 30 minutes prior to adding cells.
3. While the culture dishes equilibrate, remove one vial of ATCC® ACS-7020 from storage and thaw the cells 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 1 to 2 minutes).
4. 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 onward should be carried out under strict aseptic conditions.
5. Add 4ml of base medium or complete growth media – into a sterile conical tube. Using a sterile pipette, transfer cells from the cryovial to the conical tube. Centrifuge at 200-300xg for 5min, remove supernatant and re suspend the pellet in complete growth medium.
6. Transfer cell suspension to each of the pre-equilibrated culture dishes in the required seeding density, gently rock each dishes to evenly distribute the cells.
7. Place the seeded culture flasks in the incubator at 37°C with a 5% CO₂ atmosphere. Incubate for at least 24 hours before processing the cells further.

Handling Procedure for Flask Cultures
1. Pre-warm complete growth media in a 37°C water bath. This will take between 10 to 30 minutes, depending on the volume. If using a small volume of medium (50 mL or less), warm only the volume...
Human iPSC-derived CD34+ can be used for drug development, toxicity screening, and cancer immunology experiments. There is reduced lot-to-lot variability in this cell line as they are all derived from the parental iPSC line (ATCC ACS-1031).

**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.

**ATCC Warranty**

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. 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 product. 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 materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

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](http://www.atcc.org).

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