




Product Sheet


# Primary Bone Marrow CD34+ Cells, Normal, Human (ATCC® PCS-800-012™)

Please read this FIRST



Storage Temp.  
**liquid nitrogen  
vapor phase**

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Biosafety Level  
**1**

## Intended Use

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

## Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: Primary Bone Marrow CD34+ Cells, Normal, Human (ATCC® PCS-800-012™)

American Type Culture Collection  
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Or contact your local distributor

## Description

### Components:

One vial of Primary Bone Marrow CD34+ cells, Normal, Human (ATCC® PCS-800-012™) containing a minimum of  $5 \times 10^5$  viable cells (provided).

**Also Required:** Application specific medium, cytokines and other factors.

## Cell Characteristics

**Tissue:** Bone

**Morphology:** spherical; variable after culturing

**Growth Properties:** suspension; variable after culturing

## 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  $-130^{\circ}\text{C}$ , preferably in liquid nitrogen vapor, until ready for use.

## Preparation of Complete Growth Medium

CD34+ cells have a limited lifespan in culture and should only be thawed immediately prior to their intended use. ATCC does not recommend maintaining CD34+ cells in culture in the absence of application-specific growth factors.

## Handling Procedure for Frozen Cells and Initiation of Culture

1. Rapidly thaw cryovial in a  $37^{\circ}\text{C}$  water bath. Remove the vial before all the ice is thawed.
2. Decontaminate the cryovial with ethanol and move it to a biosafety cabinet.
3. While on ice, transfer contents of the vial to a 15 mL conical tube.
4. Rinse the cryovial with 1 mL of ice-cold thawing media (Hank's Balanced Salt Solution without  $\text{Ca}^{2+}$  or  $\text{Mg}^{2+}$  (ATCC 30-2213), supplemented with 10% Fetal Bovine Serum (ATCC 30-2020) and slowly transfer to the cells in the conical tube.
5. Slowly pipet 10X the vial volume of thawing media into the conical tube
6. Take a sample for counting and viability assessment.
7. Centrifuge the remaining contents of the vial at  $4^{\circ}\text{C}$  at  $300 \times g$  for 5 minutes to pellet cells.
8. Aspirate the wash leaving a few mL behind.
9. Re-suspend cells in the media of choice.

## Quality Control Specifications

### Viral Testing

**Hepatitis B:** Negative

**Hepatitis C:** Negative

**HIV(I/II):** Negative

**HTLV(I/II):** Negative

**WNV:** Negative


**Trypanasome:** Negative



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## Specific Staining

CD34+: Positive

CD45+: Positive



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

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

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