

Product Information

Human Peripheral Blood CD3+ T Cells (Pan T Cells)

Catalog Number	10HU-009	Cell Number	20 million cells/vial 40 million cells/vial
Species	<i>Homo sapiens</i>	Storage Temperature	Liquid Nitrogen

Product Description

CD3 is a multimeric protein complex, which is composed of four distinct chains (CD3 γ , CD3 δ and two CD3 ϵ). CD3 complex serves as a T-cell co-receptor that associates non-covalently with the T cell receptor (TCR) [1]. CD3 is expressed in almost all T cell lineages, which make it useful marker for T cells. T cells exhibit multiple functions including cell-mediated cytotoxicity, promotion of antibody production by B cells, and immune regulation. CD3+ T cells can be divided into several subsets. CD4+ helper T cell, CD8+ cytotoxic T cell and NK cells are the three major subsets. T cells have been widely used in research fields including immunology, infectious diseases, cancer therapy, etc. [2]

iXCells Biotechnologies offers CD3+ Pan T Cells from the human peripheral blood of individual healthy donors using negative immunomagnetic selection. These cells are untouched by the separation process and ready for downstream usage. > 86% of the cells are CD3+ as shown by flow cytometric analysis.

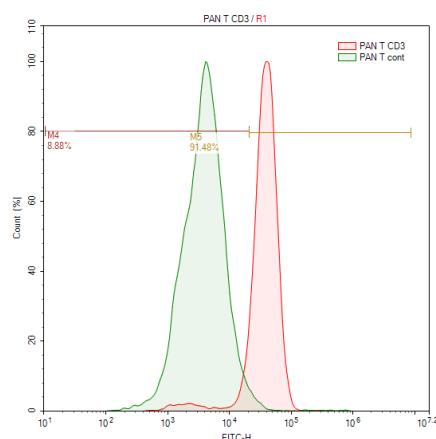


Figure 1. Flow cytometric analysis showed that >86% of the cells are CD3+.

Product Details

Tissue	Normal human peripheral blood
Package Size	20.0 x 10 ⁶ cells/vial, 40.0 x 10 ⁶ cells/vial
Passage Number	P0
Shipped	Cryopreserved
Storage	Liquid nitrogen
Growth Properties	Suspension
Media	Blood Cell Culture Medium (Cat# MD-0007)

Protocols

Thawing of Frozen Cells

1. Upon receipt of the frozen CD3+ Pan T Cells, it is recommended to thaw the cells and initiate the culture immediately in order to retain the highest cell viability.
2. To thaw the cells, put the vial in 37°C water bath with gentle agitation for 1-2 minutes. Keep the cap out of water to minimize the risk of contamination.
3. Pipette the cells into a 15 mL conical tube with 5 mL fresh **Blood Cell Culture Medium** (Cat# MD-0007).
4. Centrifuge at 400-450 g for 5 minutes under room temperature.
5. Remove the supernatant and the cells are ready for downstream applications.

Safety Precaution: *it is highly recommended that protective gloves and clothing should be used when handling frozen vials.*

References

- [1] Smith-Garvin JE, Koretzky GA and Jordan MS. (2009) "T cell activation. Annual Review of Immunology" 27: 591-619.
- [2] Vigneron N. (2015) "Human Tumor Antigens and Cancer Immunotherapy". Biomed Res Int.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While iXCells Biotechnologies uses reasonable efforts to include accurate and up-to-date information on this product sheet, we make no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. iXCells Biotechnologies 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. iXCells Biotechnologies 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, iXCells Biotechnologies is not liable for damages arising from the misidentification or misrepresentation of cultures.
© iXCells Biotechnologies 2015. All rights reserved.