

Product Information

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

Catalog Number	10HU-009	Cell Number	20.0 x 10 ⁶ cells/vial 40.0 x 10 ⁶ 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 [2] etc.

iXCells Biotechnologies offers CD3+ Pan T Cells from the human peripheral blood of individual healthy donors. These T cells are purified from PBMCs using negative immunomagnetic selection. > 86% of the cells are CD3+ as showed by flow cytometric analysis.

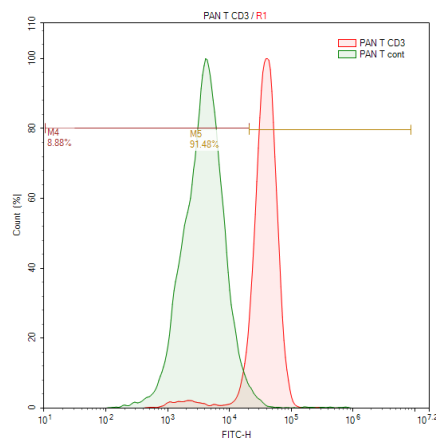


Figure 1. Flow cytometric analysis showed that >86% of the cells are CD3+.

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 cell is 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. T cell activation. Annual Review of Immunology 2009;27: 591-619.
- [2] Vigneron N. Human Tumor Antigens and Cancer Immunotherapy. Biomed Res Int. 2015.

Disclaimers

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