

## Product Information

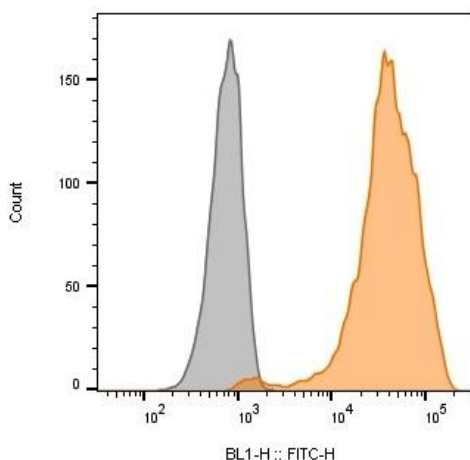
### Human Peripheral Blood CD8+ Cytotoxic T Cells (Untouched)

Catalog Number	10HU-024N	Cell Number	5.0 x 10 <sup>6</sup> cells/vial 1.0 x 10 <sup>7</sup> cells/vial
Species	<i>Homo sapiens</i>	Storage Temperature	Liquid Nitrogen

## Description

The CD8+ T cells, also known as Cytotoxic T cells (T<sub>c</sub> cells), are a type of T cells that kill cancer cells, cells that are infected (particularly with viruses), or cells that are damaged in other ways. Most cytotoxic T cells express T-cell receptors (TCRs) that can recognize a specific antigen, and a glycoprotein called CD8 which binds to the constant portion of the class I MHC molecule. When exposed to infected/dysfunctional somatic cells, CD8+ T cells release the cytotoxins perforin, granzymes, and granulysin, which triggers the caspase cascade and eventually leads to apoptosis. CD8+ T cells have been implicated in the pathogenesis of hepatitis B virus infection <sup>[1]</sup>, arthritis <sup>[2]</sup> etc.

**iXCells Biotechnologies** offers CD8+ T cells isolated from normal human peripheral blood mononuclear cells (PBMCs) using negative immunomagnetic selection. > 90% of the cells are CD8+ as showed by flow cytometric analysis (Figure 1).



**Figure 1.** Flow cytometric analysis showed that >90% of the cells are CD8+.

## Product Details

<b>Tissue</b>	Normal human peripheral blood
<b>Package Size</b>	5.0x10 <sup>6</sup> cells/vial, 1.0x10 <sup>7</sup> cells/vial
<b>Purity</b>	>90%
<b>Passage Number</b>	P0
<b>Shipped</b>	Cryopreserved
<b>Storage</b>	Liquid nitrogen
<b>Growth Properties</b>	Suspension
<b>Media</b>	Blood Cell Culture Medium (Cat# MD-0007)

## Protocols

### Thawing of Frozen Cells

1. Upon receipt of the frozen CD8+ 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] Iannacone, Matteo; Sitia, Giovanni; Guidotti, Luca G (2006). "Pathogenetic and antiviral immune responses against hepatitis B virus". *Future Virology* 1 (2): 189–96.
- [2] Subramanian S and Ramalingam K (2005). "Electron microscopic evidence on the participation Cytotoxic T Lymphocytes and Macrophages in Mtb adjuvant induced connective tissue inflammation and arthritogenesis in Rattus norvegicus". *Asian Journal of Microbiology, Biotechnology and Environmental Sciences* 7 (2): 227–233.

## Disclaimers

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