

**Synonym**

FLJ18683,T3E,TCRE,CD3E,CD3-epsilon

**Source**

HRP-Human CD3 epsilon, His Tag(CDE-HR2H4) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Asp 126 (Accession # [P07766-1](#)).

Predicted N-terminus: Asp 23

**Molecular Characterization**

CD3E(Asp 23 - Asp 126) P07766-1	Poly-his
------------------------------------	----------

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 12.6 kDa.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

**Storage**

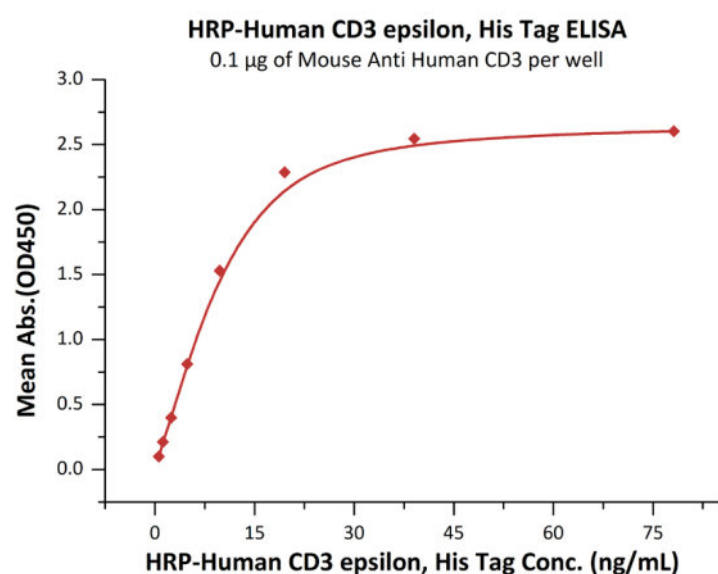
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please protect from light and avoid repeated freeze-thaw cycles.*

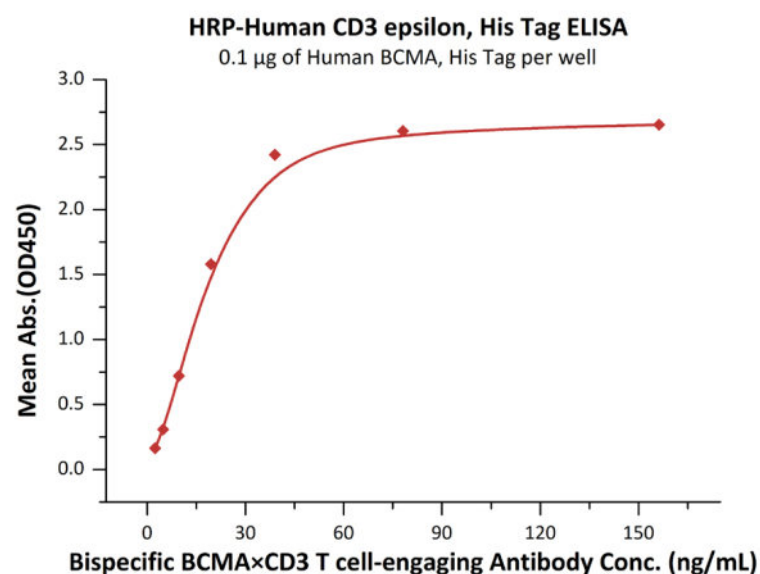
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**Bioactivity-ELISA**



Immobilized Mouse Anti Human CD3(SP-34) at 1 µg/mL (100 µL/well) can bind HRP-Human CD3 epsilon, His Tag (Cat. No. CDE-HR2H4) with a linear range of 1-20 ng/mL (QC tested).



Immobilized Human BCMA, His Tag (Cat. No. BCA-H522y) at 1 µg/mL (100 µL/well) can bind Bispecific BCMAxCD3 T cell-engaging Antibody with a linear range of 5-39 ng/mL when detected by HRP-Human CD3 epsilon, His Tag (Cat. No. CDE-HR2H4) (Routinely tested).

**Background**

CD3e molecule, epsilon is also known as CD3E, is a T-cell surface single-pass type I membrane glycoprotein. CD3E contains 1 Ig-like (immunoglobulin-like) domain and 1 ITAM domain. CD3E, together with CD3-gamma, CD3-delta and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. CD3E plays an essential role in T-cell development, and defects in CD3E gene cause severe immunodeficiency. CD3E gene has also been linked to a susceptibility to type I diabetes in women. CD3E has been shown to interact with TOP2B, CD3EAP and NCK2.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.