

# **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 # <u>P07766-1</u>). 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  $\mu g$  by the LAL method.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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**

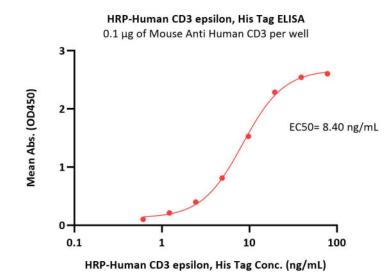
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

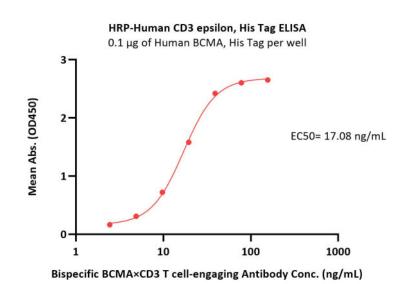
This product is stable after storage at:

- -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  $\mu$ g/mL (100  $\mu$ L/well) can bind HRP-Human CD3 epsilon, His Tag (Cat. No. CDE-HR2H4) with a linear range of 1-20  $\mu$ g/mL (QC tested).



Immobilized Human BCMA, His Tag (Cat. No. BCA-H522y) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Bispecific BCMA×CD3 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



# HRP-Human CD3 epsilon Protein, His Tag

Catalog # CDE-HR2H4



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, 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** 

