

**Synonym**

FLJ18683,T3E,TCRE,CD3E,CD3-epsilon

**Source**

Cynomolgus CD3 epsilon, Fc,His Tag(CDE-C5254) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Asp 117 (Accession # [Q95LI5](#) ).

Predicted N-terminus: Gln 22

**Molecular Characterization**

CD3E(Gln 22 - Asp 117) Q95LI5	Fc(Pro 100 - Lys 330) P01857	Poly-his
----------------------------------	---------------------------------	----------

This protein carries a human IgG1 Fc tag at the C-terminus, followed by a polyhistidine tag

The protein has a calculated MW of 38.3 kDa. The protein migrates as 43-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.*

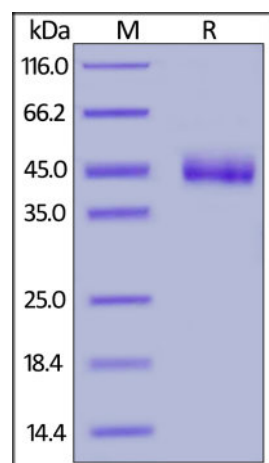
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

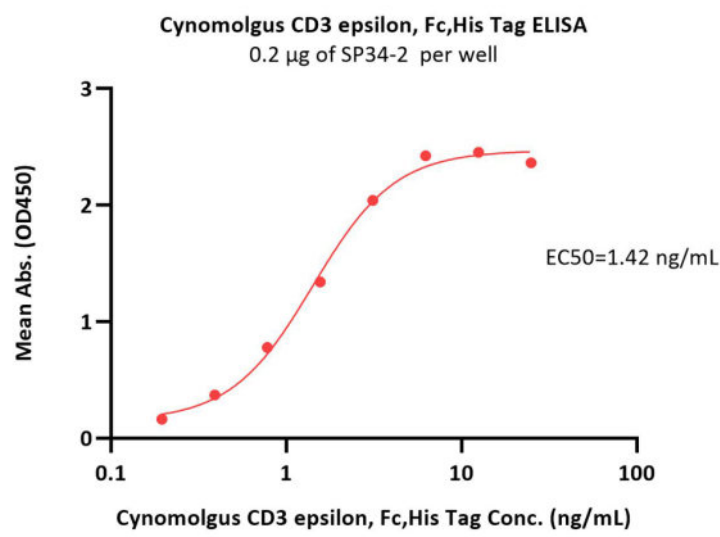
This product is stable after storage at:

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

**SDS-PAGE**

Cynomolgus CD3 epsilon, Fc,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized SP34-2 at 2 µg/mL (100 µL/well) can bind Cynomolgus CD3 epsilon, Fc,His Tag (Cat. No. CDE-C5254) with a linear range of 0.2-3 ng/mL (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.