

**Synonym**

CD3E &amp; CD3D, CD3 delta &amp; CD3 epsilon

**Source**

Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag(CDD-C52W9) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Asp 117 (CD3E) & Phe 22 - Ala 105 (CD3D) (Accession # [Q95LI5-1](#) (CD3E) & [Q95LI8-1](#) (CD3D)).

Predicted N-terminus: Gln 22 (CD3E) & Phe 22 (CD3D)

**Molecular Characterization**

CD3E (Gln 22 - Asp 117) Q95LI5-1	Fc(Pro 100 - Lys 330) P01857	Poly-his
CD3D (Phe 22 - Ala 105) Q95LI8-1	Fc(Pro 100 - Lys 330) P01857	Flag

Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag is produced by co-expression of CD3E and CD3D, has a calculated MW of 42.5 kDa (CD3E) and 40.9 kDa (CD3D). Subunit CD3E is fused with a human IgG1 Fc tag and a polyhistidine tag at the C-terminus and subunit CD3D is fused with a human IgG1 Fc tag and a flag tag at the C-terminus. The predicted N-terminus is Gln 22 (CD3E) & Phe 22 (CD3D). The reducing (R) protein migrates as 46-50 kDa and 55-65 kDa due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**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.*

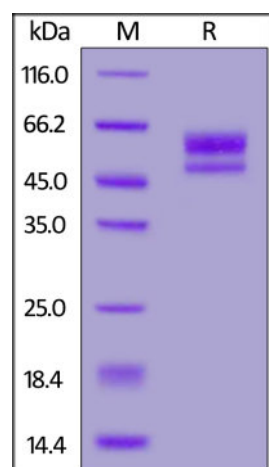
**Storage**

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

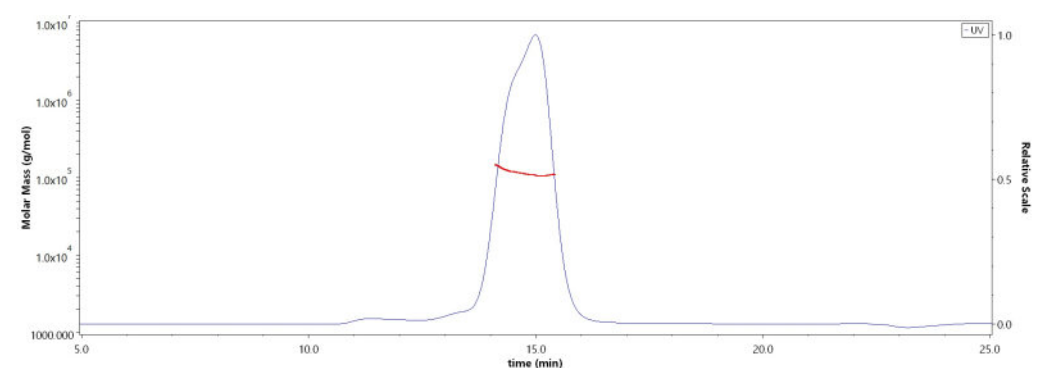
*Please avoid repeated freeze-thaw cycles.*

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.

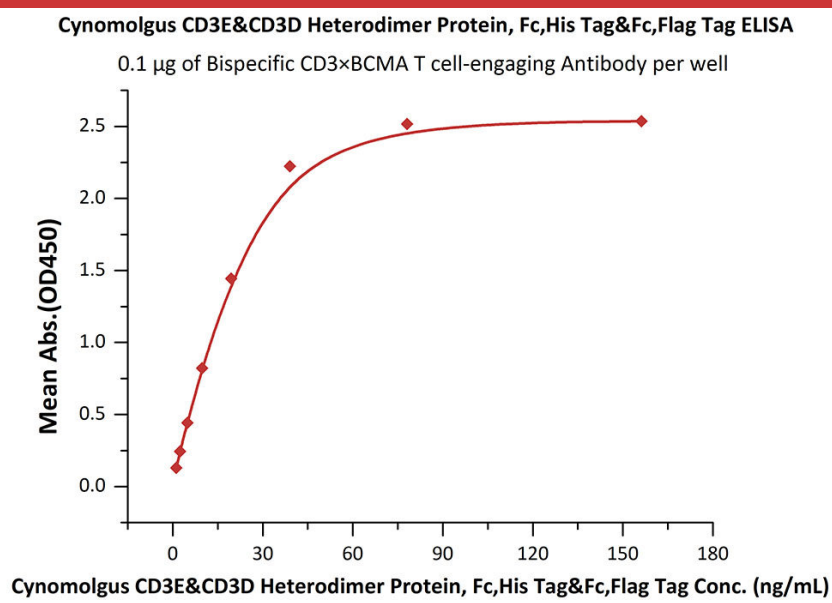
**SDS-PAGE**

Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA****SEC-MALS**

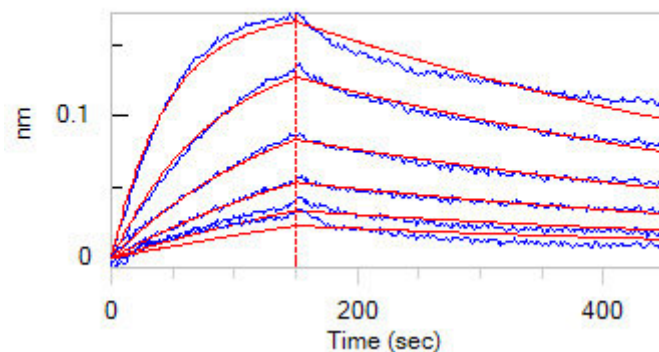
The purity of Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag (Cat. No. CDD-C52W9) is more than 90% and the molecular weight of this protein is around 90-120 kDa verified by SEC-MALS.

[Report](#)



Immobilized Bispecific CD3 $\times$ BCMA T cell-engaging Antibody at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag (Cat. No. CDD-C52W9) with a linear range of 1-20 ng/mL (QC tested).

### Bioactivity-BLI



Loaded Cynomolgus CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag (Cat. No. CDD-C52W9) on AHC Biosensor, can bind Bispecific CD3 $\times$ BCMA T cell-engaging Antibody with an affinity constant of 1.77 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Background

T-cell surface glycoprotein CD3 delta & CD3 epsilon chain, also known as CD3D & CD3E or CD3D&CD3E respectively, are single-pass type I membrane proteins. CD3D, together with CD3-epsilon(CD3E), CD3-gamma and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. T cell receptor-CD3 complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways.

### Clinical and Translational Updates

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