

**Synonym**

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

**Source**

Sus scrofa CD3E&CD3D Heterodimer Protein, His Tag&Tag Free (CDD-S52W3) is expressed from human 293 cells (HEK293). It contains AA Glu 23 - Leu 116 (CD3E) & Tyr 22 - Leu 104 (CD3D) (Accession # [NP\\_999392.1](#) (CD3E) & [NP\\_998940.1](#) (CD3D)).

Predicted N-terminus: Glu 23 (CD3E) & Tyr 22 (CD3D)

**Molecular Characterization**

CD3E (Glu 23 - Leu 116) NP_999392.1	Poly-his
CD3D (Tyr 22 - Leu 104) NP_998940.1	

Sus scrofa CD3E&CD3D Heterodimer Protein, His Tag&Tag Free is produced by co-expression of CD3E and CD3D, has a calculated MW of 16.2 kDa (CD3E) and 13.5 kDa (CD3D). Subunit CD3E is fused with a polyhistidine tag at the C-terminus, followed by an Avi tag and subunit CD3G contains no tag at the C-terminus. As a result of glycosylation, the protein migrates as 19-22 kDa under reducing (R) condition, and 35-38 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE).

**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.*

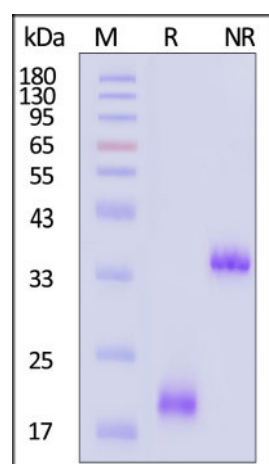
**Storage**

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

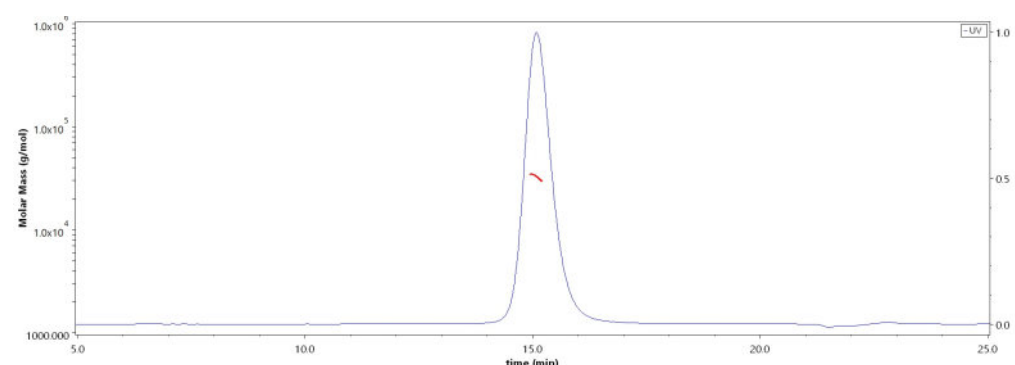
*Please avoid repeated freeze-thaw cycles.*

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**

Sus scrofa CD3E&CD3D Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

**SEC-MALS**

The purity of Sus scrofa CD3E&CD3D Heterodimer Protein, His Tag&Tag Free (Cat. No. CDD-S52W3) is more than 90% and the molecular weight of this protein is around 27-37 kDa verified by SEC-MALS.

[Report](#)

**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.