

Synonym

CD3 epsilon & CD3 gamma, CD3E & CD3G

Source

Sus scrofa CD3E&CD3G Heterodimer Protein, His Tag&Tag Free (CDG-S52W3) is expressed from human 293 cells (HEK293). It contains AA Glu 23 - Leu 116 (CD3E) & Gln 23 - Ser 116 (CD3G) (Accession # [NP_999392.1](#) (CD3E) & [NP_001008686.1](#) (CD3G)).

Predicted N-terminus: Glu 23 (CD3E) & Gln 23 (CD3G)

Molecular Characterization

CD3E (Glu 23 - Leu 116) NP_999392.1	Poly-his
CD3G (Gln 23 - Ser 116) NP_001008686.1	

Sus scrofa CD3E&CD3G Heterodimer Protein, His Tag&Tag Free is produced by co-expression of CD3E and CD3G, has a calculated MW of 16.2 kDa (CD3E) and 13.5 kDa (CD3G). 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.

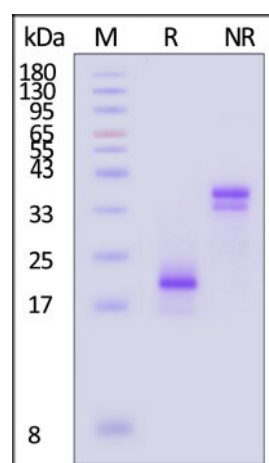
Storage

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

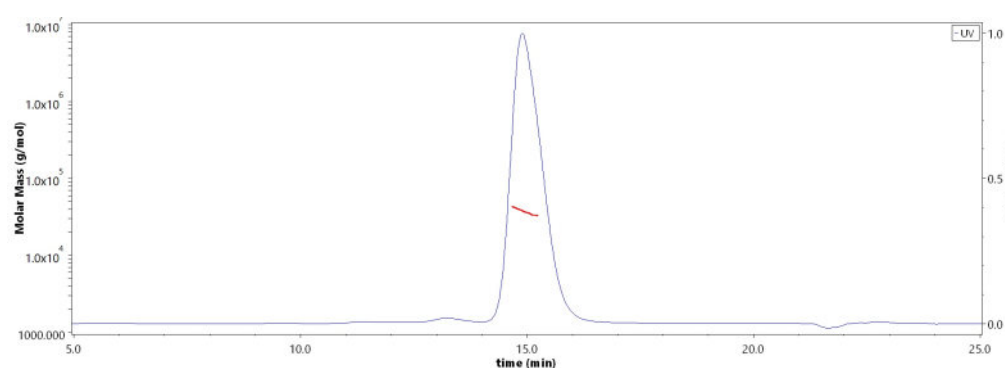
Please avoid repeated freeze-thaw cycles.

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&CD3G 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&CD3G Heterodimer Protein, His Tag&Tag Free (Cat. No. CDG-S52W3) is more than 90% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.

[Report](#)

Background

T-cell surface glycoprotein CD3 delta & CD3 gamma chain, also known as CD3D & CD3G or CD3D&CD3G 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 if you have any question on this product.