

Synonym

CD3E & CD3D,CD3 delta & CD3 epsilon

Source

Mouse CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag(CDD-M52W2) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Asp 108 (CD3E) & Phe 22 - Ala 105 (CD3D) (Accession # [P22646-1](#) (CD3E) & [P04235-1](#) (CD3D)).

Predicted N-terminus: Asp 23 (CD3E) & Phe 22 (CD3D)

Molecular Characterization

CD3E (Asp 23 - Asp 108) P22646-1	Fc(Pro 100 - Lys 330) P01857	Poly-his
CD3D (Phe 22 - Ala 105) P04235-1	Fc(Pro 100 - Lys 330) P01857	Flag

Mouse CD3E&CD3D Heterodimer Protein, Fc, His Tag&Fc, Flag Tag is produced by co-expression of CD3E and CD3D, has a calculated MW of 41.5 kDa (CD3E) and 40.7 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. As a result of glycosylation, the heterodimer protein migrates as 55-65 kDa under reducing (R) condition, and 90-116 kDa under non-reducing (NR) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100mM Glycine, 25mM Arginine, 150mM 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

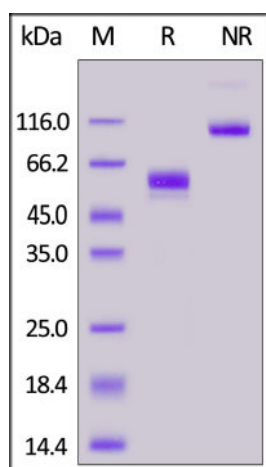
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

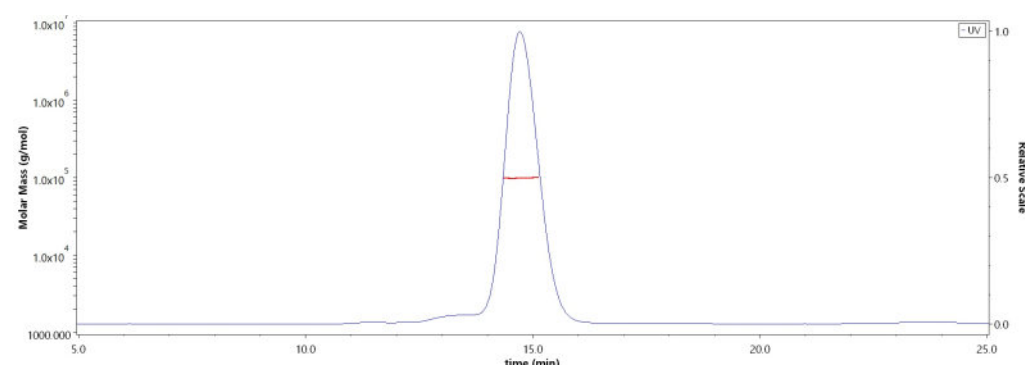
SDS-PAGE



Mouse CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

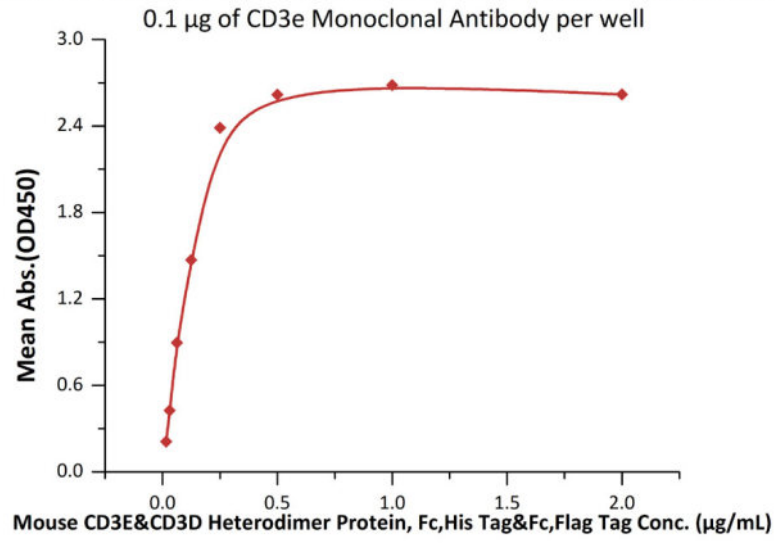
SEC-MALS



The purity of Mouse CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag (Cat. No. CDD-M52W2) is more than 90% and the molecular weight of this protein is around 95-110 kDa verified by SEC-MALS.

[Report](#)

Mouse CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag ELISA



Immobilized Biotinylated CD3e Monoclonal Antibody at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) (0.5 µg/well) plate, can bind Mouse CD3E&CD3D Heterodimer Protein, Fc,His Tag&Fc,Flag Tag (Cat. No. CDD-M52W2) with a linear range of 0.016-0.25 µg/mL (QC 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 if you have any question on this product.