

Synonym

CD3E & CD3D,CD3 delta & CD3 epsilon

Source

Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag(CDD-M5219) 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	Poly-his
CD3D (Phe 22 - Ala 105) P04235-1	Flag

Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag is produced by co-expression of CD3E and CD3D, has a calculated MW of 15.1 kDa (CD3E) and 14.3 kDa (CD3D). Subunit CD3E is fused with a polyhistidine tag at the C-terminus and subunit CD3D is fused with a flag tag at the C-terminus. As a result of glycosylation, the heterodimer protein migrates as 18-19 kDa and 25-32 kDa under reducing (R) condition, and 38-47 kDa under non-reducing (NR) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC 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

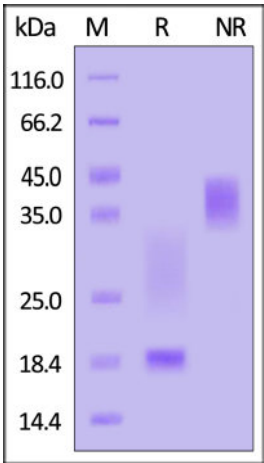
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

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:

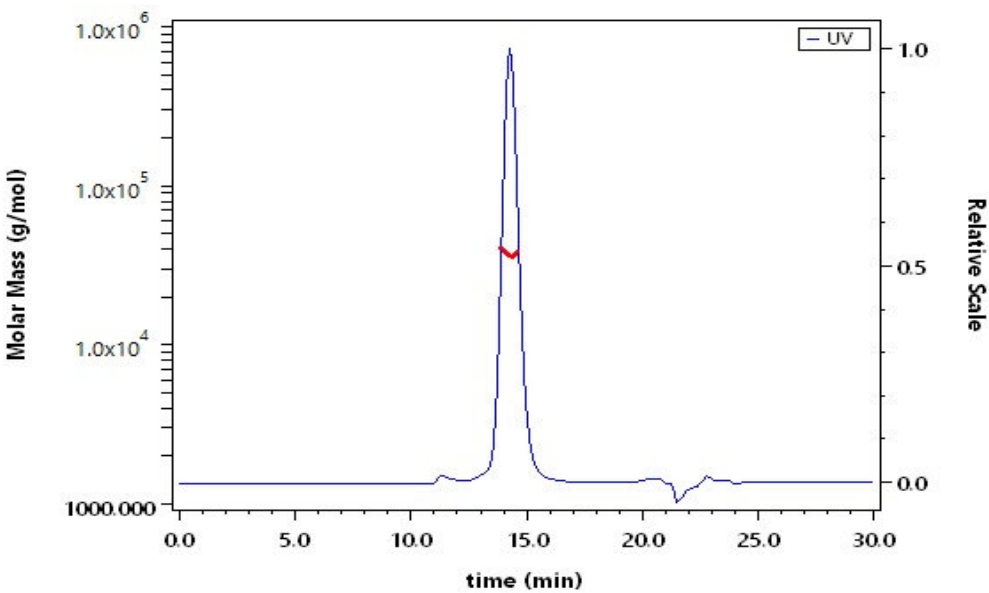
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag 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%.

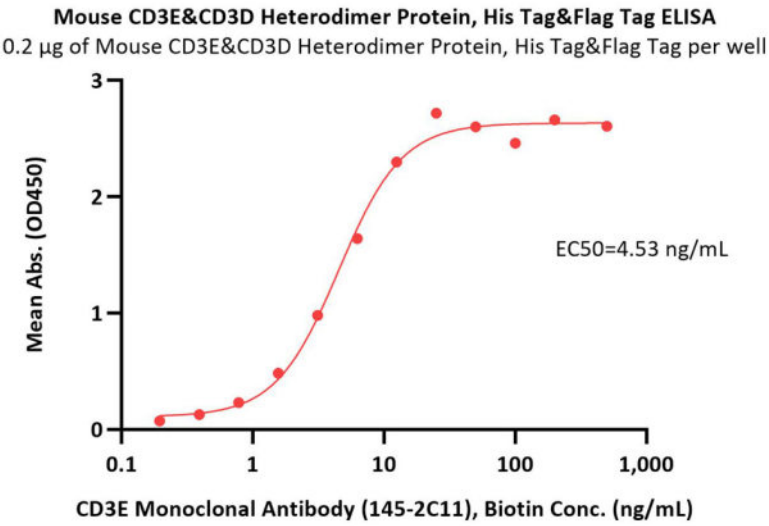
SEC-MALS



The purity of Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag (Cat. No. CDD-M5219) is more than 90% and the molecular weight of this protein is around 32-45 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA





Immobilized Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag (Cat. No. CDD-M5219) at 2 µg/mL (100 µL/well) can bind CD3E Monoclonal Antibody (145-2C11), Biotin with a linear range of 0.2-13 ng/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.

