

**Synonym**

CD3 epsilon & CD3 gamma,CD3E & CD3G

**Source**

Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag(CDG-M52W2) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Asp 108 (CD3E) & Gln 23 - Ser 116 (CD3G) (Accession # [P22646-1](#) (CD3E) & [P11942-1](#) (CD3G)).

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

**Molecular Characterization**

CD3E (Asp 23 - Asp 108) P22646-1	Fc(Pro 100 - Lys 330) P01857	Poly-his
CD3G (Gln 23 - Ser 116) P11942-1	Fc(Pro 100 - Lys 330) P01857	Flag

Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag is produced by co-expression of CD3E and CD3G, has a calculated MW of 41.5 kDa (CD3E) and 41.6 kDa (CD3G). Subunit CD3E is fused with a human IgG1 Fc tag at the C-terminus, followed by a polyhistidine tag and subunit CD3G is fused with a human IgG1 Fc tag at the C-terminus, followed by a Flag tag. As a result of glycosylation, the protein migrates as 48-55 kDa under reducing (R) condition, and 100 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 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**

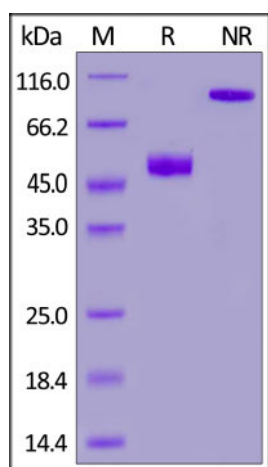
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

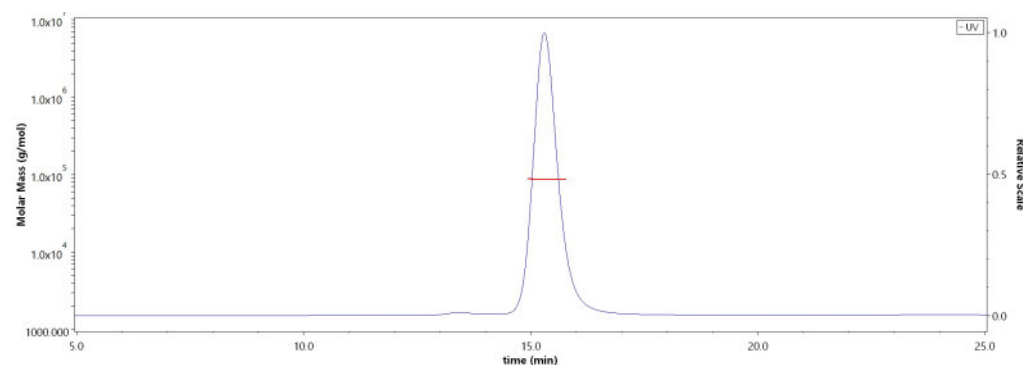
**SDS-PAGE**



Mouse CD3E&CD3G 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**

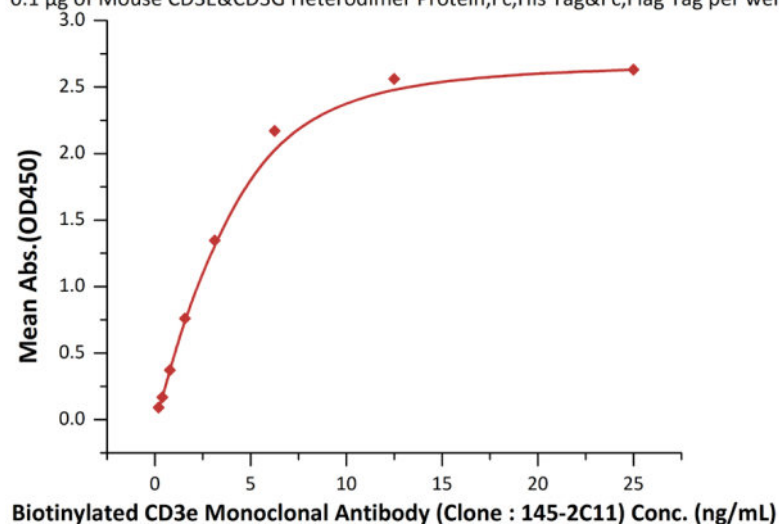


The purity of Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag (Cat. No. CDG-M52W2) is more than 90% and the molecular weight of this protein is around 80-95 kDa verified by SEC-MALS.

[Report](#)

Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag ELISA

0.1 µg of Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag per well

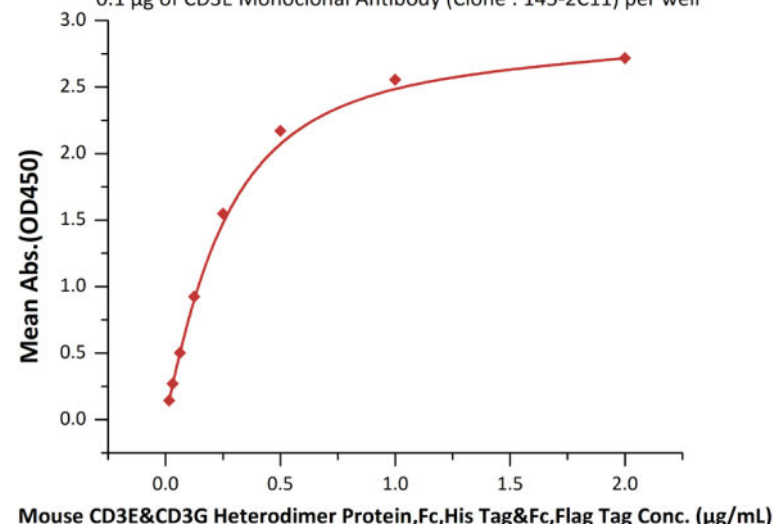


Biotinylated CD3e Monoclonal Antibody (Clone : 145-2C11) Conc. (ng/mL)

Immobilized Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag (Cat. No. CDG-M52W2) at 1 µg/mL (100 µL/well) can bind Biotinylated CD3e Monoclonal Antibody (Clone : 145-2C11) with a linear range of 0.2-6 ng/mL (QC tested).

Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag ELISA

0.1 µg of CD3E Monoclonal Antibody (Clone : 145-2C11) per well



Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag Conc. (µg/mL)

Immobilized CD3E Monoclonal Antibody (Clone : 145-2C11) at 1 µg/mL (100 µL/well) can bind Mouse CD3E&CD3G Heterodimer Protein,Fc,His Tag&Fc,Flag Tag (Cat. No. CDG-M52W2) with a linear range of 0.01-0.25 µg/mL (Routinely tested).

## 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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.