

Synonym

CD3 epsilon & CD3 gamma,CD3E & CD3G

Source

Mouse CD3 epsilon&CD3 gamma Heterodimer Protein, His Tag&Flag Tag (CDG-M52D2) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Asp 108 (CD3E) & Gln 23 - Ser 116 (CD3G) (Accession # [Q22646-1](#)(CD3E) & [Q11942-1](#)(CD3G)).

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

Molecular Characterization

CD3E (Asp 23 - Asp 108) P22646-1	Poly-his
CD3G (Gln 23 - Ser 116) P11942-1	Flag

Mouse CD3 epsilon&CD3 gamma Heterodimer Protein, His Tag&Flag Tag is produced by co-expression of CD3E and CD3G, has a calculated MW of 15.1 kDa (CD3E) and 15.2 kDa (CD3D). Subunit CD3E is fused with a polyhistidine tag at the C-terminus and subunit CD3G is fused with a flag tag at the C-terminus. As a result of glycosylation, the protein migrates as 19-22 kDa under reducing (R) condition, and 35 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.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

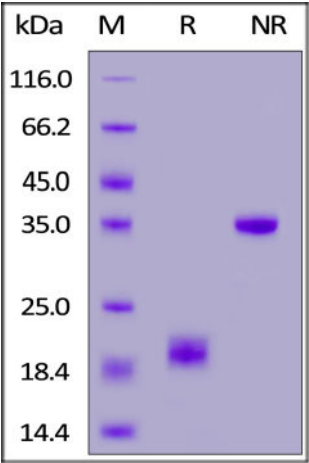
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

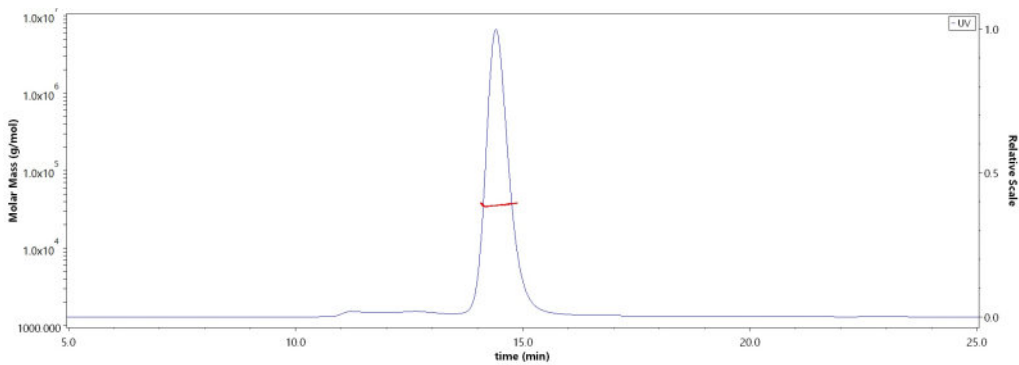
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



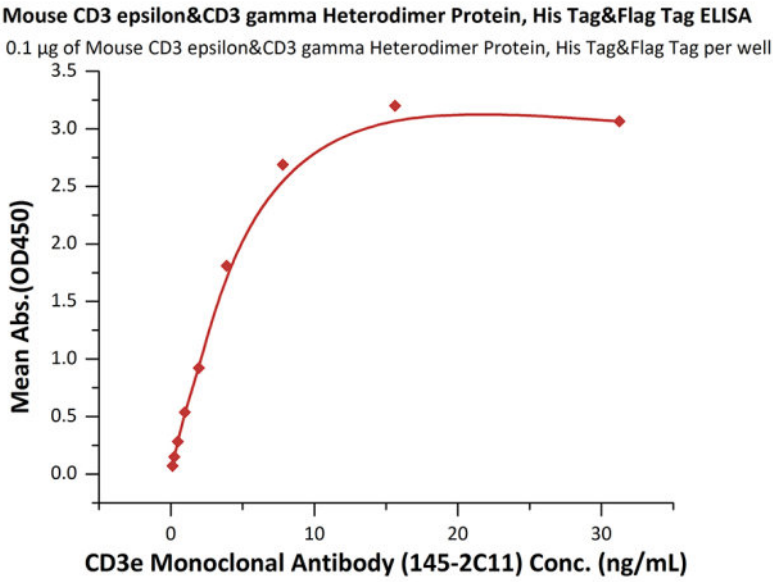
Mouse CD3 epsilon&CD3 gamma Heterodimer Protein, His Tag&Flag Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Mouse CD3 epsilon&CD3 gamma Heterodimer Protein, His Tag&Flag Tag(Cat. No. CDG-M52D2) was more than 85% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS. [Report](#)

Bioactivity-ELISA



Immobilized Mouse CD3 epsilon&CD3 gamma Heterodimer Protein, His Tag&Flag Tag (Cat. No. [CDG-M52D2](#)) at 1 µg/mL (100 µL/well) can bind CD3e Monoclonal Antibody (145-2C11) with a linear range of 0.1-4 ng/mL (QC 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.

References

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.