

Synonym

CD3E & CD3D,CD3 delta & CD3 epsilon

Source

Rat CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag(CDD-R52D8) is expressed from human 293 cells (HEK293). It contains AA Gln 21 - Asp 103 (CD3E) & Phe 22 - Gly 106 (CD3D) (Accession # [D4A5M2-1](#) (CD3E) & [P19377-1](#) (CD3D)).
Predicted N-terminus: Gln 21 (CD3E) & Phe 22 (CD3D)

Molecular Characterization

CD3E (Gln 21 - Asp 103) D4A5M2-1	Poly-his
CD3D (Phe 22 - Gly 106) P19377-1	Flag

Rat CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag is produced by co-expression of CD3E and CD3D, has a calculated MW of 14.9 kDa (CD3E) and 14.5 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 19-20 kDa and 27-33 kDa under reducing (R) condition, and 37-40 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 / 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

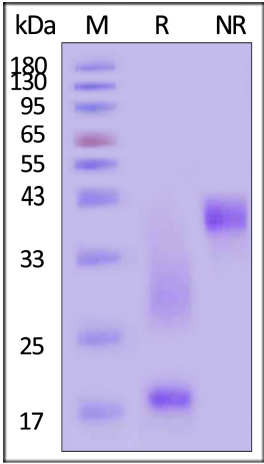
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

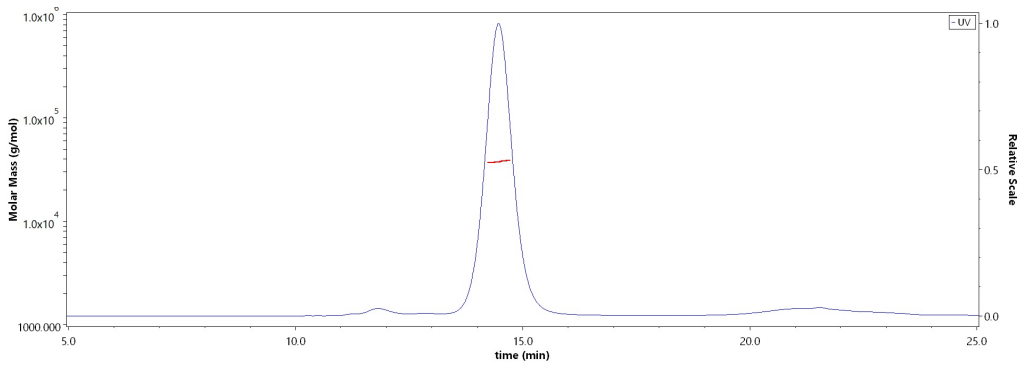
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Rat 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Rat CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag (Cat. No. CDD-R52D8) is more than 90% and the molecular weight of this protein is around 35-45 kDa verified by SEC-MALS. [Report](#)





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.

