Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag™&Flag Tag (MALS verified)

Catalog # CDG-C8219

Synonym

CD3 epsilon & CD3 gamma,CD3E & CD3G

Source

Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag(CDG-C8219) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Asp 117 (CD3E) & Gln 23 - Thr 113 (CD3G) (Accession # Q95LI5-1 (CD3E) & Q95LI7-1 (CD3G)).
Predicted N-terminus: Gln 22 (CD3E) & Gln 23 (CD3G)

Molecular Characterization

Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag is produced by co-expression of CD3E and CD3G, has a calculated MW of 17.7 kDa (CD3E) and 15.4 kDa (CD3G). Subunit CD3E carries a polyhistidine tag at the C-terminus, followed by an Avi tag and subunit CD3G is fused with a flag tag at the C-terminus. As a result of glycosylation, the protein migrates as 19-20 kDa and 22-24 kDa under reducing (R) condition, and 35-40 kDa under non-reducing (NR) condition (SDS-PAGE).

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL 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

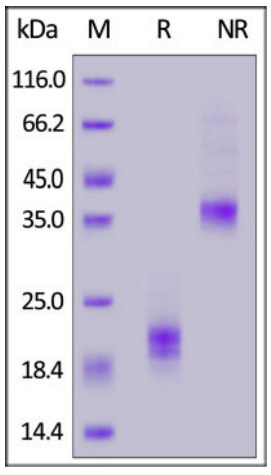
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

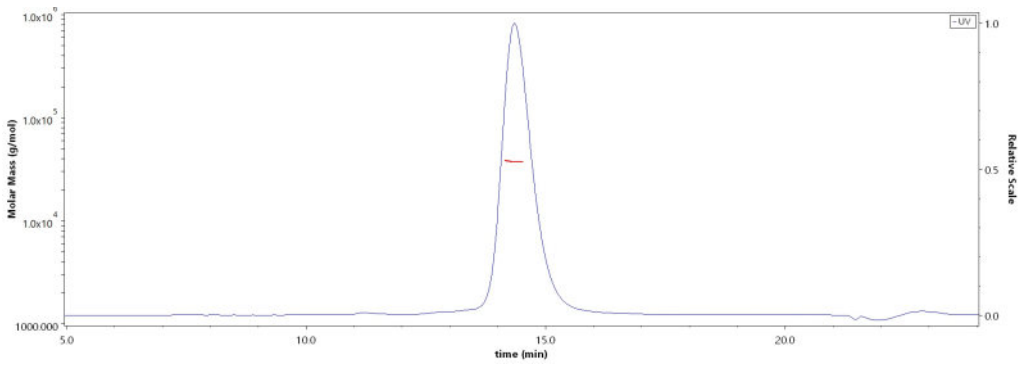
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag on SDS-PAGE under reducing (R) and non-reducing

SEC-MALS

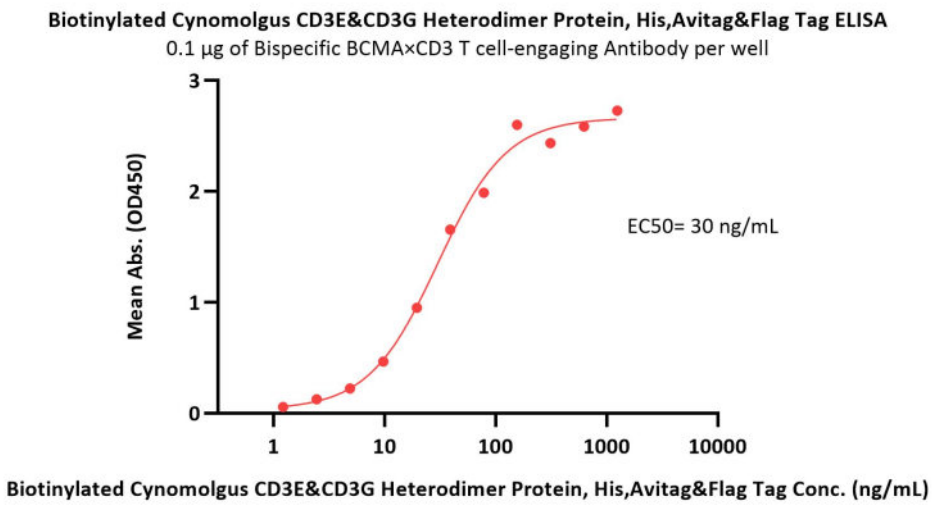


The purity of Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag (Cat. No. CDG-C8219) is more than 90% and the

(NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

molecular weight of this protein is around 33-48kDa verified by SEC-MALS. Report

Bioactivity-ELISA



Immobilized Bispecific BCMA×CD3 T cell-engaging Antibody at 1 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag (Cat. No. CDG-C8219) with a linear range of 2.4-78 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.

Clinical and Translational Updates