Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # CDG-C5257

Synonym

CD3 epsilon & CD3 gamma,CD3E & CD3G

Source

Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag(CDG-C5257) 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

CD3E(Gln 22 - Asp 117) Q95LI5-1	Fc(Pro 100 - Lys 330) P01857
CD3G(Gln 23 - Thr 113) Q95LI7-1	Fc(Pro 100 - Lys 330) P01857

Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag is produced by co-expression of CD3E and CD3G, has a calculated MW of 40.6 kDa (CD3E) and 40.4 kDa (CD3G). Subunit CD3E is fused with a human IgG1 Fc tag at the C-terminus and subunit CD3G is fused with a human IgG1 Fc tag at the C-terminus. The reducing (R) heterodimer protein migrates as 45-52 kDa due to glycosylation.

Endotoxin

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

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in
Tris with Glycine, Arginine and NaCl, pH7.5 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

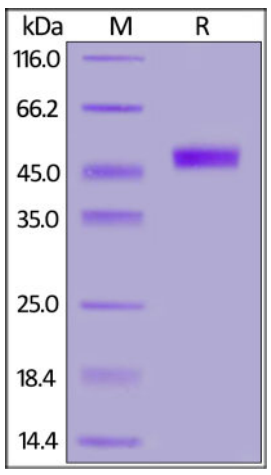
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

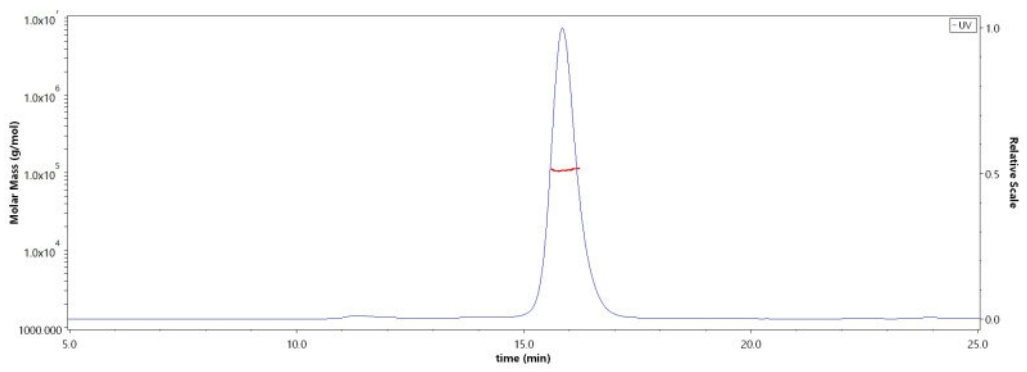
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



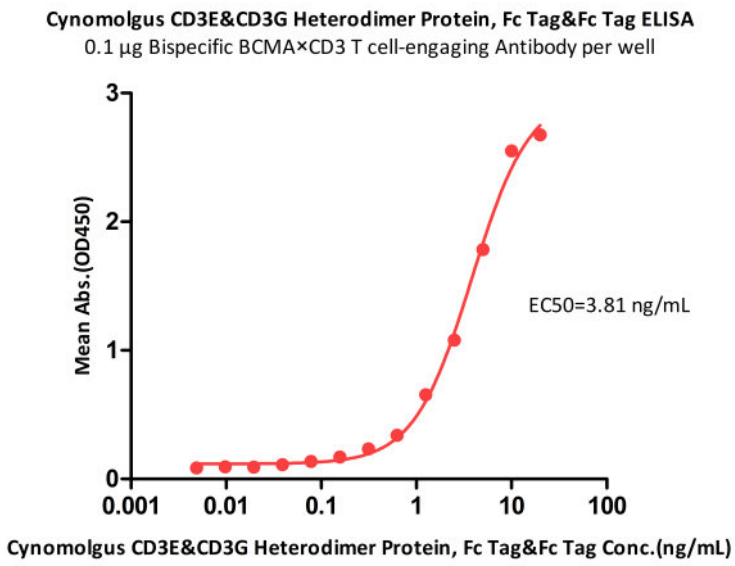
Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



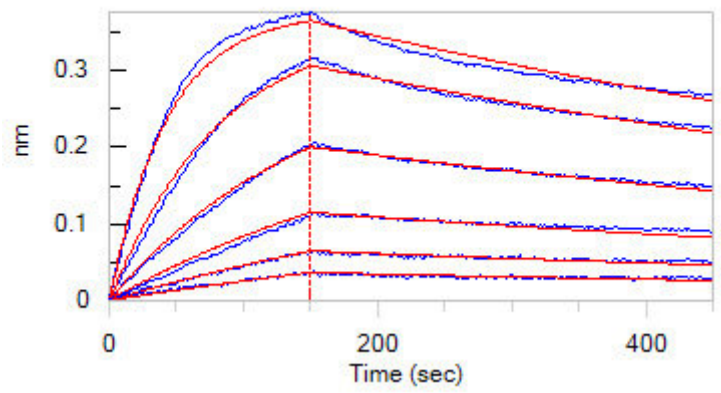
The purity of Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. CDG-C5257) is more than 90% and the molecular weight of this protein is around 100-120 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Bispecific BCMA×CD3 T cell-engaging Antibody (Cat. No.CDA-H52Hb) at 1 μg/mL (100 μL/well) can bind Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag (Cat. No.CDG-C5257) with a linear range of 0.3-5 ng/mL (QC tested).

Bioactivity-BLI



Loaded Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. CDG-C5257) on AHC Biosensor, can bind Human CD3×BCMA scFV with an affinity constant of 1.02 nM as determined in BLI assay (ForteBio Octet Red96e) (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.