Catalog # CDG-C8219

# Acro Surprise Inside!

#### Synonym

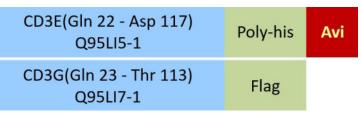
CD3 epsilon & CD3 gamma,CD3E & CD3G

#### 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 # <u>Q95LI5-1</u> (CD3E) & <u>Q95LI7-1</u> (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  $Avitag^{TM}$  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  $\mu g$  by the LAL method.

# Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Lyophilized from 0.22  $\mu$ m 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.

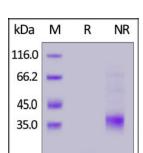
Please avoid repeated freeze-thaw cycles.

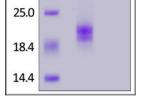
This product is stable after storage at:

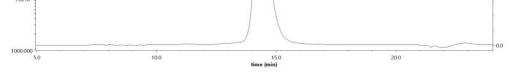
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.



### **SDS-PAGE**







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







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

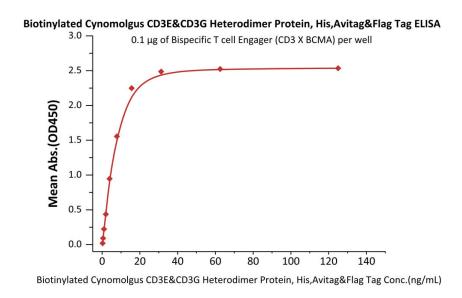


#### Catalog # CDG-C8219

(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. <u>Report</u>

#### **Bioactivity-ELISA**



Immobilized Bispecific T cell Engager (CD3 X BCMA) at  $1 \mu g/mL$  (100  $\mu L/well$ ) can bind Biotinylated Cynomolgus CD3E&CD3G Heterodimer Protein, His,Avitag&Flag Tag (Cat. No.CDG-C8219) with a linear range of 0.98-15.6 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**

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



>>> www.acrobiosystems.com

