

Biotinylated Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein



Cat. No. CD3-HM505B

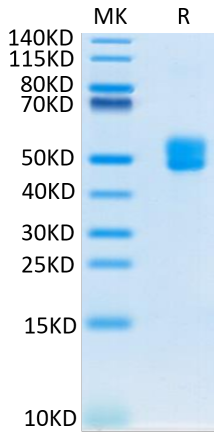
Description	
Source	Recombinant Biotinylated Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein is expressed from HEK293 with hFc tag and Avi tag at the C-Terminus. It contains Asp23-Asp126(CD3E) & Phe22-Ala105(CD3D).
Accession	P07766(CD3E)&P04234(CD3D)
Molecular Weight	The protein has a predicted MW of 40 kDa (CD3E) and 35.4 kDa (CD3D). Due to glycosylation,the protein migrates to 48-60 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background	
T-cell surface glycoprotein CD3 epsilon&CD3 delta chain, also known as CD3E&CD3D , are single-pass type I membrane proteins.When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain.	

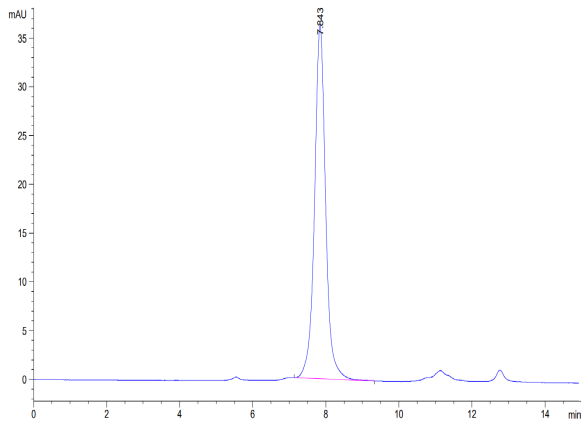
Assay Data

Bis-Tris PAGE



Biotinylated Human CD3E&CD3D on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



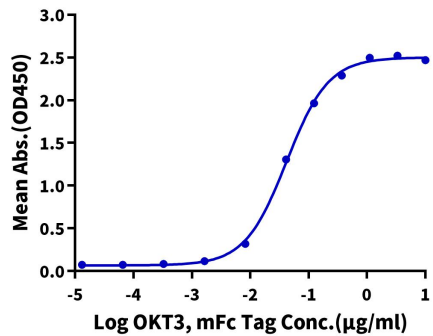
The purity of Biotinylated Human CD3E&CD3D was greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Biotinylated Human CD3E&CD3D, hFc Tag ELISA

0.1µg Biotinylated Human CD3E&CD3D, hFc Tag Per Well

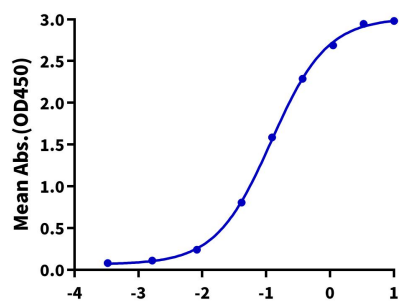


Immobilized Biotinylated Human CD3E&CD3D, hFc Tag at 1µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for OKT3, mFc Tag with the EC50 of 42.1ng/ml determined by ELISA (QC Test).

ELISA Data

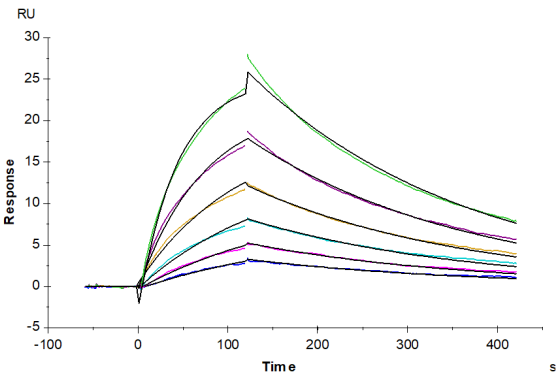
Biotinylated Human CD3E&CD3D, hFc-Avi Tag ELISA

0.5µg Anti-CD3 Anitibody, hFc Tag Per Well



Immobilized Anti-CD3 Anitibody, hFc Tag at 5µg/ml(100µl/well) on the plate. Dose response curve for Biotinylated Human CD3E&CD3D, hFc-Avi Tag with the EC50 of 0.12µg/ml determined by ELISA.

SPR Data



Anti-CD3 Antibody, hFc Tag immobilized on CM5 Chip can bind Biotinylated Human CD3E&CD3D, hFc-Avi Tag with an affinity constant of 0.17 µM as determined in SPR assay (Biacore T200).