

Cat. No. CD3-HM405B-UL

Description	
Source	Recombinant Biotinylated Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein is expressed from HEK293 with His tag and Avi tag at the C-terminus of CD3D. It contains Asp23-Asp126 (CD3E) and Phe22-Ala105 (CD3D).
Accession	P07766(CD3E)&P04234(CD3D)
Molecular Weight	The protein has a predicted MW of 17.9 kDa (CD3E) and 18.52 kDa (CD3D). Due to glycosylation, the protein migrates to 23-27 kDa and 32-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

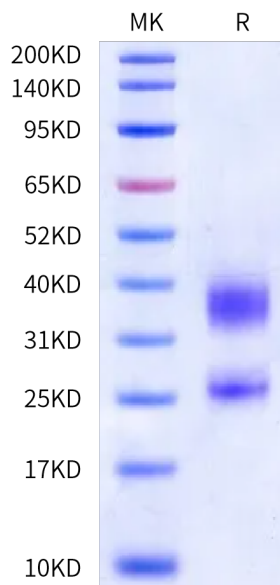
Formulation and Storage	
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
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**

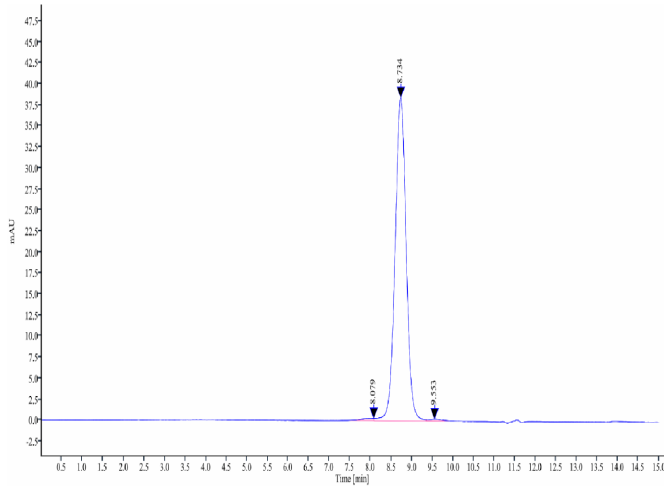
**Bis-Tris PAGE**



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

**SEC-HPLC**

Assay Data

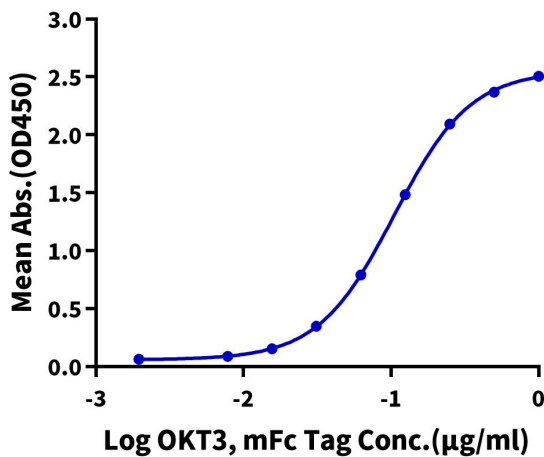


The purity of Biotinylated Human CD3E&CD3D is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Biotinylated Human CD3E&CD3D, His Avi Tag ELISA**

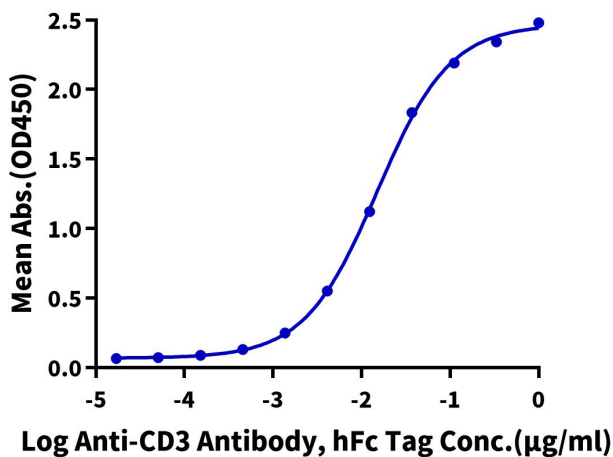
0.05µg Biotinylated Human CD3E&CD3D, His Avi Tag Per Well



Immobilized Biotinylated Human CD3E&CD3D, His Avi Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for OKT3, mFc Tag with the EC50 of 0.11µg/ml determined by ELISA.

**Biotinylated Human CD3E&CD3D, His Avi Tag ELISA**

0.05µg Biotinylated Human CD3E&CD3D, His Avi Tag Per Well



Immobilized Biotinylated Human CD3E&CD3D, His Avi Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-CD3 Antibody, hFc Tag with the EC50 of 15.1ng/ml determined by ELISA.