

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

Cat. No. CD3-HM205

## Description

<b>Source</b>	Recombinant Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein is expressed from HEK293 with hFc at the C-Terminus. It contains Asp23-Asp126(CD3E)&Phe22-Ala105(CD3D).
<b>Accession</b>	P07766(CD3E)&P04234(CD3D)
<b>Molecular Weight</b>	The protein has a predicted MW of 37.8 kDa (CD3E) and 35.4 kDa (CD3D). Due to glycosylation, the protein migrates to 48-58 kDa (CD3E) and 42-48 kDa (CD3D) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

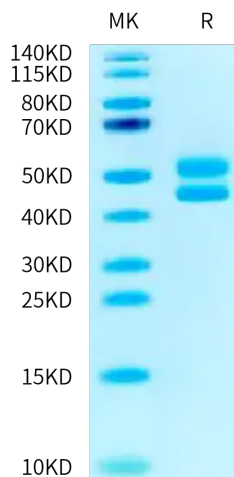
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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.

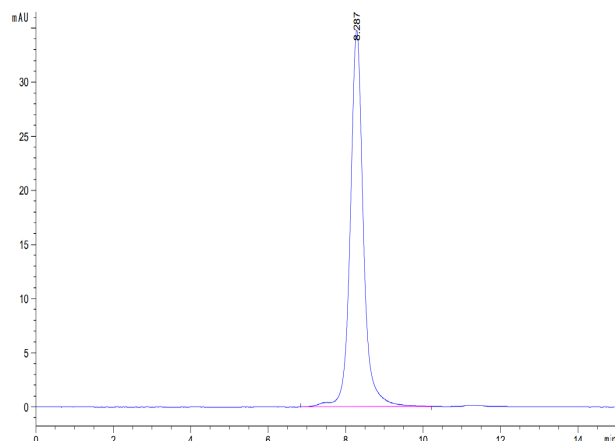
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC

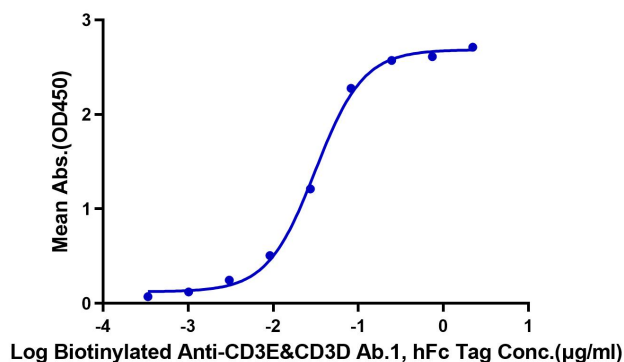


The purity of Human CD3E&CD3D was greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

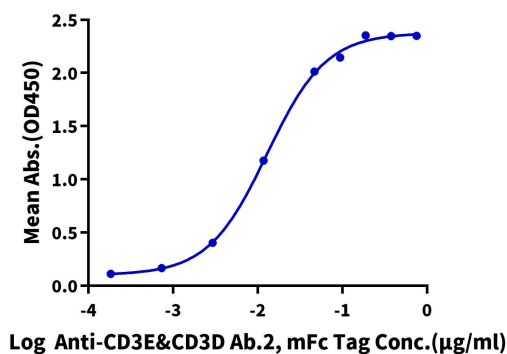
**Human CD3E&CD3D, hFc Tag ELISA**  
0.05µg Human CD3E&CD3D, hFc Tag Per Well



Immobilized Human CD3E&CD3D, hFc Tag at 0.5µg/ml (100µl/Well). Dose response curve for Biotinylated Anti-CD3E&CD3D Ab.1, hFc Tag with the EC50 of 31.68ng/ml determined by ELISA.

ELISA Data

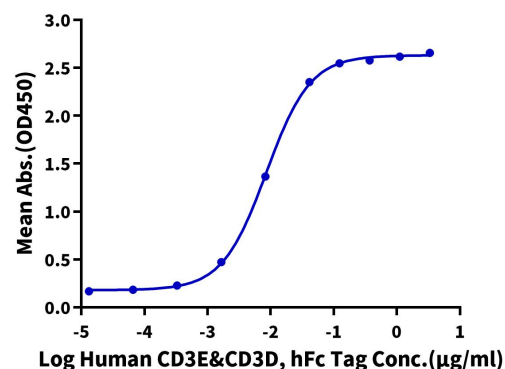
**Human CD3E&CD3D, hFc Tag ELISA**  
0.2µg Human CD3E&CD3D, hFc Tag Per Well



Immobilized Human CD3E&CD3D, hFc Tag at 2µg/ml (100µl/Well). Dose response curve for Anti-CD3E&CD3D Ab.2, mFc Tag with the EC50 of 12.9ng/ml determined by ELISA (QC Test).

ELISA Data

**Human CD3E&CD3D, hFc Tag ELISA**  
0.1µg Tebentafusp, His Tag Per Well



Immobilized Tebentafusp, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human CD3E&CD3D, hFc Tag with the EC50 of 8.7ng/ml determined by ELISA.