

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

Cat. No. CD3-HM105

## Description

|                         |  |
|-------------------------|--|
| <b>Source</b>           | Recombinant Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein is expressed from HEK293 with His tag at the C-Terminus.<br>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 17.9 kDa (CD3E) and 16.7 kDa (CD3D). Due to glycosylation, the protein migrates to 28-38 kDa and 25 kDa 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<br>> 95% as determined by HPLC  |

## Formulation and Storage

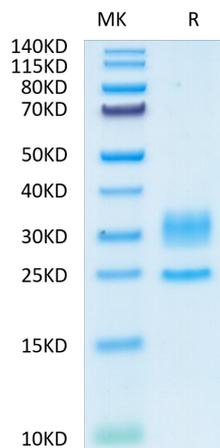
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.  |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting to a concentration 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.

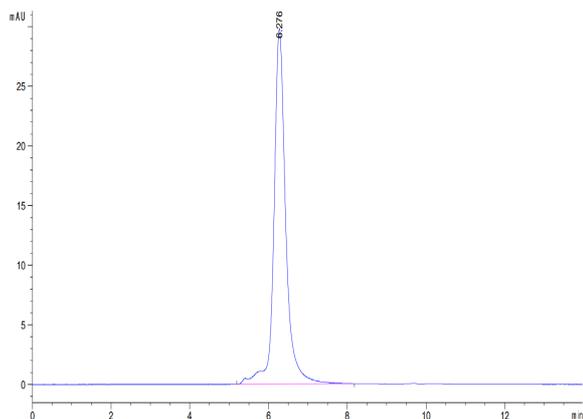
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



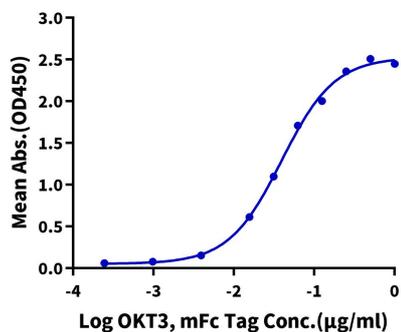
The purity of Human CD3E&CD3D was greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

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

0.2µg Human CD3E&CD3D, His Tag Per Well

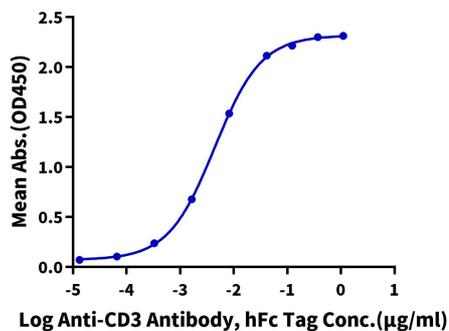


Immobilized Human CD3E&CD3D, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for OKT3, mFc Tag with the EC50 of 39.3ng/ml determined by ELISA (QC Test).

ELISA Data

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

0.2µg Human CD3E&CD3D, His Tag Per Well



Immobilized Human CD3E&CD3D, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD3 Antibody, hFc Tag with the EC50 of 4.4ng/ml determined by ELISA.