

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

Cat. No. CD3-MM105

## Description

<b>Source</b>	Recombinant Mouse CD3E&CD3D/CD3 epsilon&CD3 delta Protein is expressed as a heterodimer of CD3E and CD3D by co-expression in HEK293. Subunit CD3E is fused with a Flag tag at the C-terminus and subunit CD3D is fused with a His tag at the C-terminus. It contains Asp22-Asp108 (CD3E) and Phe22-Ala105 (CD3D).
<b>Accession</b>	P22646(CD3E)&P04235(CD3D)
<b>Molecular Weight</b>	The protein has a predicted MW of 15.34 kDa (CD3E) and 14.81 kDa (CD3D). Due to glycosylation, the protein migrates to 18-22 kDa and 35-45 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

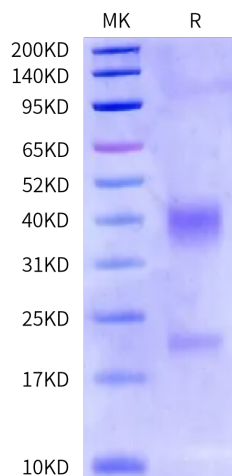
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage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

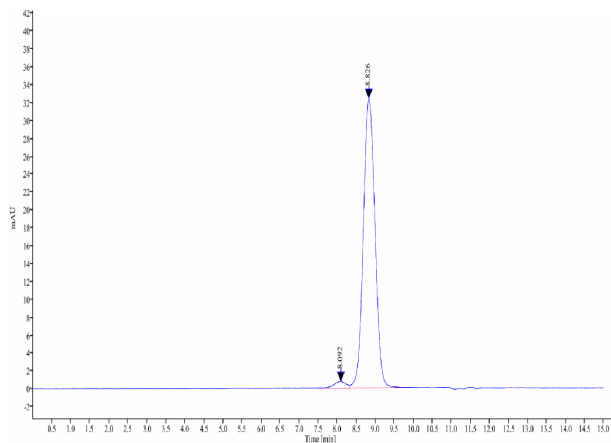
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data



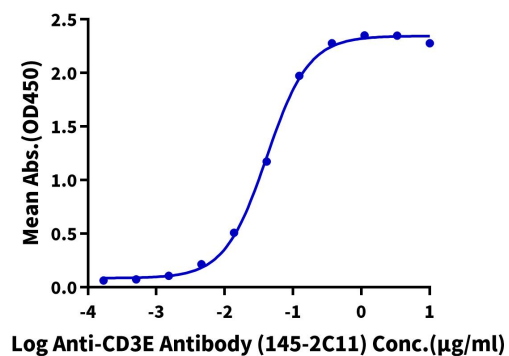
The purity of Mouse CD3E&CD3D is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Mouse CD3E&CD3D, His Tag ELISA

0.2µg Mouse CD3E&CD3D, His Tag Per Well



Immobilized Mouse CD3E&CD3D, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD3E Antibody (145-2C11) with the EC50 of 41.2ng/ml determined by ELISA.