

# Human CD3E&CD3G/CD3 epsilon&CD3 gamma Protein

Cat. No. CD3-HM257

## Description

<b>Source</b>	Recombinant Human CD3E&CD3G/CD3 epsilon&CD3 gamma Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Asp23-Asp126 (CD3E)&Gln23-Ser116 (CD3G).
<b>Accession</b>	P07766 (CD3E)&P09693 (CD3G)
<b>Molecular Weight</b>	The protein has a predicted MW of 37.8 kDa (CD3E) and 36.5 kDa (CD3G). Due to glycosylation, the protein migrates to 40-60 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

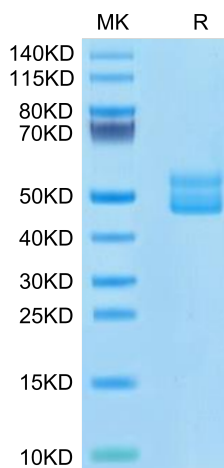
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein 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 gamma chain, also known as CD3E&CD3G, 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.

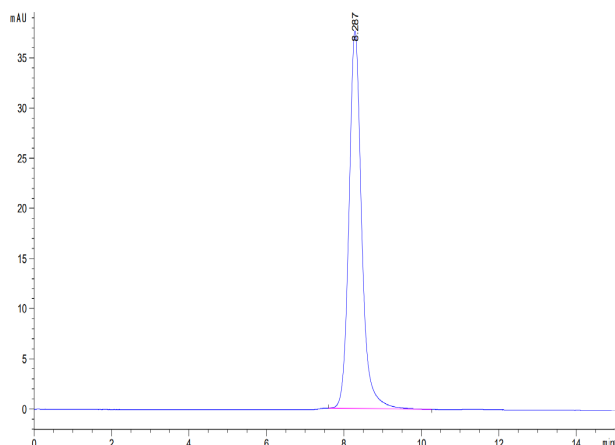
## Assay Data

### Bis-Tris PAGE



Human CD3E&CD3G/CD3 epsilon&CD3 gamma on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



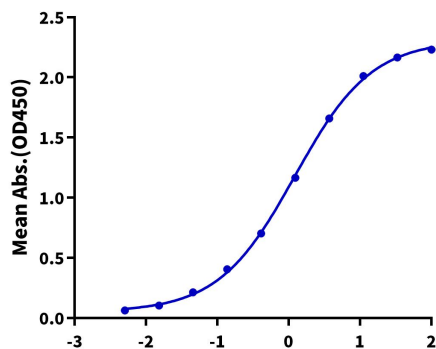
The purity of Human CD3E&CD3G/CD3 epsilon&CD3 gamma was greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human CD3E&CD3G, hFc Tag ELISA**

0.05µg Human CD3E&CD3G, hFc Tag Per Well



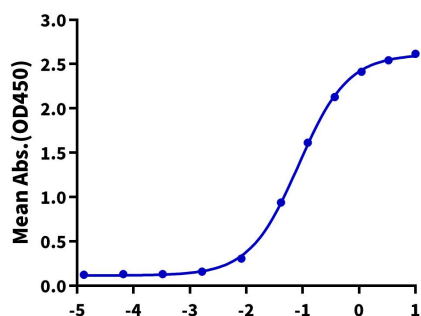
Log Biotinylated Anti-CD3E&CD3G Ab.1, hFc Tag Conc.(µg/ml)

Immobilized Human CD3E&CD3G, hFc Tag at 0.5 µg/ml (100 µl/Well). Dose response curve for Biotinylated Anti-CD3E&CD3G Ab.1, hFc Tag with the EC50 of 1.22 µg/ml determined by ELISA.

ELISA Data

**Human CD3E&CD3G, hFc Tag ELISA**

0.1µg Human CD3E&CD3G, hFc Tag Per Well



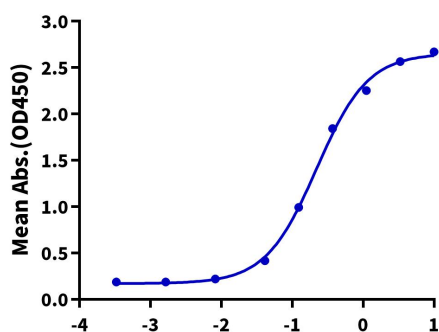
Log Anti-CD3E&CD3G Ab.2, mFc Tag Conc.(µg/ml)

Immobilized Human CD3E&CD3G, hFc Tag at 1 µg/ml (100 µl/Well). Dose response curve for Anti-CD3E&CD3G Ab.2, mFc Tag with the EC50 of 20.7 ng/ml determined by ELISA (QC Test).

ELISA Data

**Human CD3E&CD3G, hFc Tag ELISA**

0.1µg Tebentafusp, His Tag Per Well



Log Human CD3E&CD3G, hFc Tag Conc.(µg/ml)

Immobilized Tebentafusp, His Tag at 1 µg/ml (100 µl/well) on the plate. Dose response curve for Human CD3E&CD3G, hFc Tag with the EC50 of 0.22 µg/ml determined by ELISA.