

Recombinant Human CD3E&CD3D Protein

Catalog No.: RP00624 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	916&915	P07766(CD3E)&P04234(CD3D)

Tags

C-hFc

Synonyms

CD3; CD3e; CD3E; CD3d; T3D; CD3D; CD3E&CD3D; CD3 delta&CD3 epsilon

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
37.8 kDa (CD3E) , 35.4 kDa (CD3D)	48-58 kDa (CD3E) , 42-48 kDa (CD3D)

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

 | 400-999-6126

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.

Basic Information

Description

Recombinant Human CD3E&CD3D/CD3 epsilon&CD3 delta Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp23-Asp126(CD3E) & Phe22-Ala105(CD3D)) of Human CD3E&CD3D/CD3 epsilon&CD3 delta (Accession #P07766(CD3E)&P04234(CD3D)) fused with a C-hFc tag at the C-terminus.

Bio-Activity

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

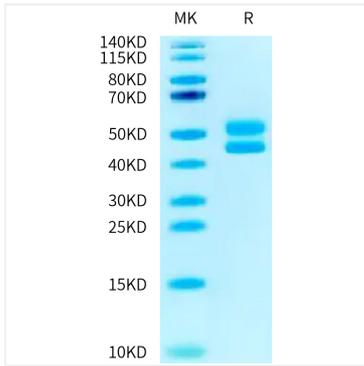
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

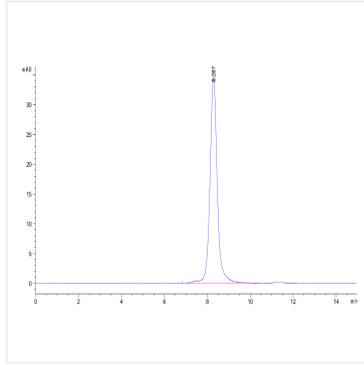
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

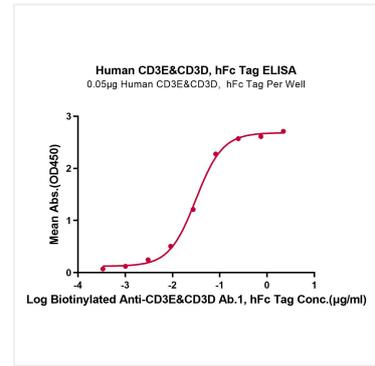
Validation Data



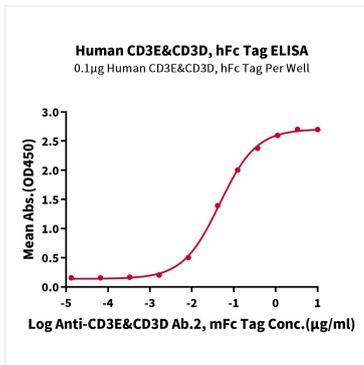
Recombinant Human CD3E&CD3D Protein was determined by Tris-Bis PAGE under reducing conditions.



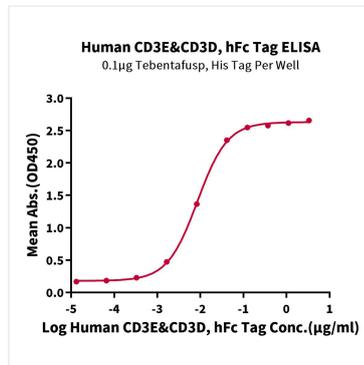
The purity of Human CD3E&CD3D was greater than 95% as determined by SEC-HPLC.



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



Immobilized Human CD3E&CD3D, hFc Tag at 1 µg/mL (100ul/Well). Dose response curve for Anti-CD3E&CD3D Ab.2, mFc Tag with the EC₅₀ of 45.9ng/mL determined by ELISA (QC Test).



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