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Recombinant Human CD3E&CD3G Protein

Catalog No.: RP00582 Recombinant

Sequence Information

 Species
 Gene ID
 Swiss Prot

 Human
 916&917
 P07766(CD3 E)&P09693(CD3G)

Tags C-hFc

Synonyms

CD3; CD3G; CD3g; T3G; CD3e; CD3E; CD3 epsilon&CD3 gamma; CD3E&CD3G

Product Information

Source Purification
HEK293 cells > 95% by SDS-

PAGE□> 95% by

HPLC

Calculated MW Observed MW

37.8 kDa (CD3E) , 45-60 kDa 36.5 kDa (CD3G)

Endotoxin

< 1 EU/ μ g 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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

Basic Information

Description

Recombinant Human CD3E&CD3G/CD3 epsilon&CD3 gamma Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp23-Asp126(CD3E) & Gln23-Ser116(CD3G)) of Human CD3E&CD3G/CD3 epsilon&CD3 gamma (Accession #P07766(CD3E)&P09693(CD3G)) fused with a C-hFc tag at the C-terminus.

Bio-Activity

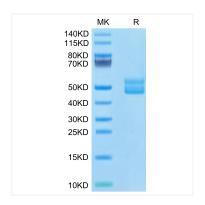
Storage

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

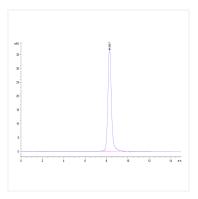
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

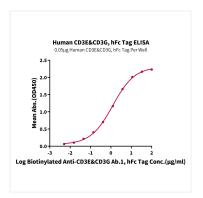
Validation Data



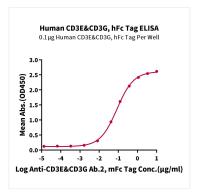
Human CD3E&CD3G/CD3 epsilon&CD3 gamma on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



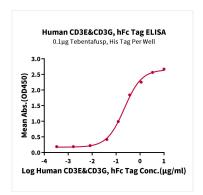
The purity of Human CD3E&CD3G/CD3 Epsilon&CD3 Gamma was greater than 95% as determined by SEC-HPLC.



Immobilized Human CD3E&CD3G, hFc Tag at 0.5 μ g/mL (100 μ L/Well). Dose response curve for Biotinylated Anti-CD3E&CD3G Ab.1, hFc Tag with the EC $_{50}$ of 1.22 μ L determined by ELISA.



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



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