

RP02963

Leader in Biomolecular Solutions for Life Science



Recombinant Human CD3E&CD3D Protein

Catalog No.: RP02963 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	916&915	P07766(CD3E)&P04234(CD3D)

Tags

C-His

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.

Endotoxin

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

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the tube 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



www.abclonal.com

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 Heterodimer Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp23-Glu120 (CD3E)&Phe22-Ala105 (CD3D)) of human CD3E&CD3D Heterodimer (Accession #P07766(CD3E)&P04234(CD3D)) fused with a 6×His tag at the C-terminus.

Bio-Activity

1. Immobilized Human CD3E&CD3D at 2μg/ml (100μl/Well) on the plate. Dose response curve for OKT3, mFc Tag with the EC₅₀ of 38ng/ml determined by ELISA. | 2. Immobilized Human CD3E&CD3D at 2μg/ml (100μl/Well). Dose response curve for Foralumab, hFc Tag with the EC₅₀ of 18.5ng/ml determined by ELISA.

Shipping

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

Operational Notes

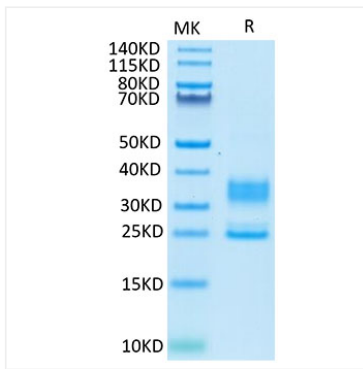
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

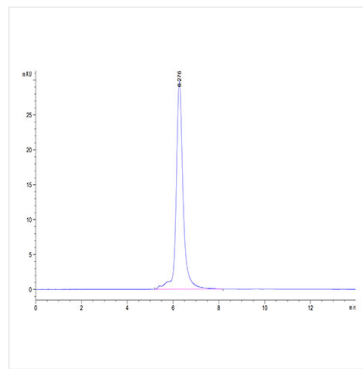
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

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

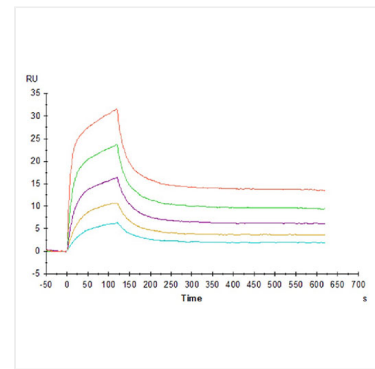
Validation Data



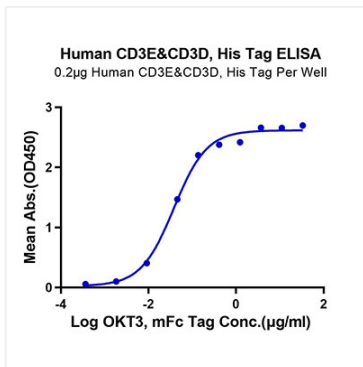
Recombinant Human CD3E&CD3D Protein was determined by Tris-Bis PAGE under reducing conditions.



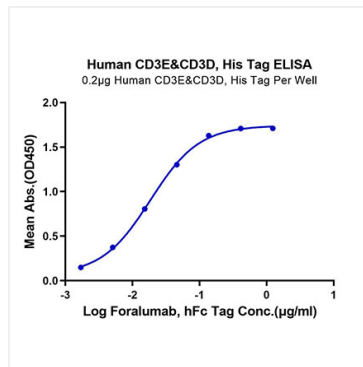
The purity of Human CD3E&CD3D was greater than 95% as determined by SEC-HPLC.



Human CD3E&CD3D, His Tag captured on CM5 Chip via Anti-His Antibody can bind OKT3, mFc Tag with an affinity constant of 0.36nM as determined in SPR assay (Biacore T200).



Immobilized Human CD3E&CD3D at 2µg/ml (100µl/Well) on the plate. Dose response curve for OKT3, mFc Tag with the EC₅₀ of 38ng/ml determined by ELISA.



Immobilized Human CD3E&CD3D at 2µg/mL (100µl/Well). Dose response curve for Foralumab, hFc Tag with the EC₅₀ of 18.5ng/ml determined by ELISA.