



## Synonym

CD3E & CD3D,CD3 delta & CD3 epsilon

## Source

Human CD3E&CD3D Heterodimer Protein(CDD-H52Wa) is expressed from human 293 cells (HEK293). It contains AA Asp 23 - Asp 126 (CD3E) & Phe 22 - Ala 105 (CD3D) (Accession # [P07766-1](#) (CD3E) & [P04234-1](#) (CD3D)).

Predicted N-terminus: Asp 23 (CD3E) & Phe 22 (CD3D)

## Molecular Characterization

CD3E (Asp 23 - Asp 126) P07766-1	Fc(Pro 100 - Lys 330) P01857	Poly-his
CD3D (Phe 22 - Ala 105) P04234-1	Fc(Pro 100 - Lys 330) P01857	Flag

Human CD3E&CD3D Heterodimer Protein is produced by co-expression of CD3E and CD3D, has a calculated MW of 40.2 kDa (CD3E) and 37.3 kDa (CD3D). Subunit CD3E is fused with a human IgG1 Fc tag and a polyhistidine tag at the C-terminus and subunit CD3D is fused with a human IgG1 Fc tag and a flag tag at the C-terminus. As a result of glycosylation, the heterodimer protein migrates as 45-60 kDa under reducing (R) condition, and 100-116 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE).

## Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

## Storage

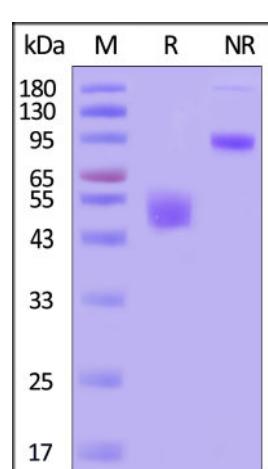
After reconstitution, this product is stable after storage at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

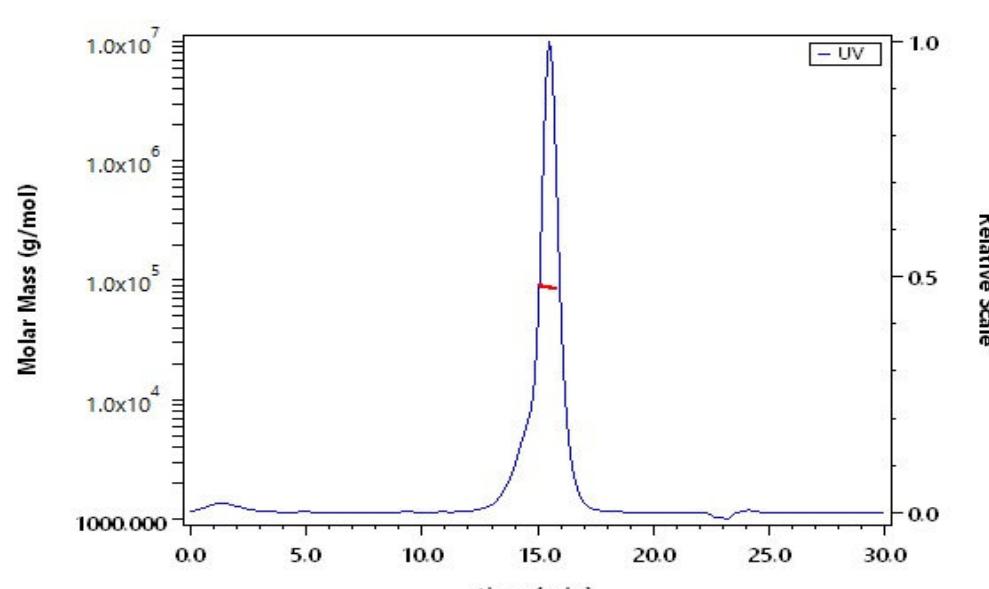
## SDS-PAGE



Human CD3E&CD3D Heterodimer Protein on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue.

The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

## SEC-MALS



The purity of Human CD3E&CD3D Heterodimer Protein (Cat. No. CDD-H52Wa) is more than 85% and the molecular weight of this protein is around 80-90 kDa verified by SEC-MALS.

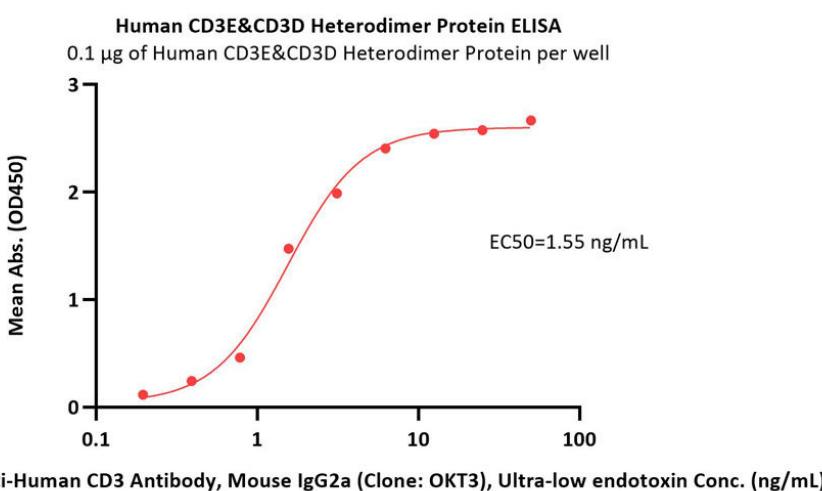
[Report](#)

## Bioactivity-ELISA

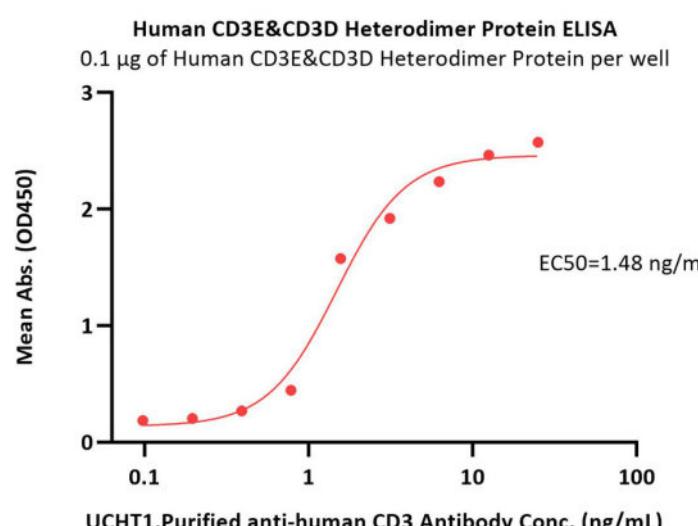
Discounts, Gifts,  
and more!



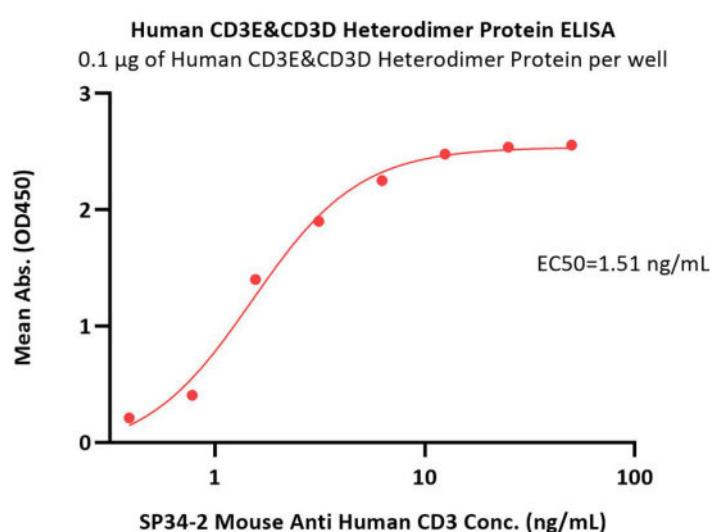
» [www.acrobiosystems.com](http://www.acrobiosystems.com)



Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. CDD-H52Wa) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (Cat. No. CDE-M120a) with a linear range of 0.2-3 ng/mL (QC tested).



Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. CDD-H52Wa) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.1-3 ng/mL (Routinely tested).



Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. CDD-H52Wa) at 1 µg/mL (100 µL/well) can bind SP34-2 with a linear range of 0.4-3 ng/mL (Routinely tested).

## Background

T-cell surface glycoprotein CD3 delta & CD3 epsilon chain, also known as CD3D & CD3E or CD3D&CD3E respectively, are single-pass type I membrane proteins. CD3D, together with CD3- epsilon(CD3E), CD3-gamma and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. T cell receptor-CD3 complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways.

Discounts, Gifts,  
and more!

