

Recombinant Human CD3D & CD3E, Flag-Fc & His-Fc tag

Cat. No. CD3E&D-310H Lot. No. (See product label)

SPECIFICATION

Product Overview

A DNA sequence encoding the extracellular domain (Met 1- Ala 105) of human CD3D (P04234) was fused with the C-terminal flag-tagged Fc region of human IgG1 at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the extracellular domain (Met 1- Asp 126) of human CD3E (P07766) was fused with the C-terminal His-tagged Fc region of human IgG1 at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the human CD3D/CD3E heterodimer was purified.

Source Human Cells


ProteinLength 1-105;1-126 a.a.

Description

T-cell surface glycoprotein CD3 delta/epsilon chain, also known as CD3D and CD3E respectively, are single-pass type I membrane proteins. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. 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. This complex is critical for T-cell development and function, and represents one of the most complex transmembrane receptors. The T cell receptor-CD3 complex is unique in having ten cytoplasmic immunoreceptor tyrosine-based activation motifs (ITAMs). The immunofluorescence defined that CD3 epsilon(CD3E0) was strongly stained bound to either CD 3 gamma or CD 3 delta. The recognition by this panel of anti-CD3

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antibodies of CD3-gamma/ epsilon and CD3-delta/ epsilon complexes and not of CD3-epsilon alone was assessed by immunoprecipitation.

Molecular Mass

The recombinant heterodimer of human CD3D/CD3E comprises 670 (333+354) amino acids and has a calculated molecular mass of 77.5 (37.5+40) KDa. As a result of glycosylation, the apparent molecular mass of human CD3D/CD3E heterodimer is approximately 45-50 KDa in SDS-PAGE under reducing conditions.

Predicted N terminal

Phe 22 & Asp 23

Purity

> 90 % as determined by SDS-PAGE.

Endotoxin

< 1.0 EU per µg of the protein as determined by the LAL method

Formulation

Lyophilized from sterile PBS, pH 7.4.

Storage

Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products.

GENE INFORMATION

Synonyms

CD3e molecule, epsilon (CD3-TCR complex); T3E; TCRE; FLJ18683; CD3E; T-cell surface glycoprotein CD3 epsilon chain; CD3-epsilon; T-cell surface antigen T3/Leu-4 epsilon chain; CD3e antigen, epsilon polypeptide (TiT3 complex); T-cell antigen receptor complex, epsilon subunit of T3; CD3E antigen, epsilon polypeptide; CD3e antigen; CD3d molecule, delta (CD3-TCR complex); T3D; CD3-DELTA; CD3D; T-cell surface glycoprotein CD3 delta chain; OKT3, delta chain; CD3 antigen, delta subunit; T-cell receptor T3 delta chain; CD3d antigen, delta polypeptide (TiT3 complex); CD3d antigen

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