Rcombinant Human CD3D, flag-tagged

Cat. No. CD3D-163H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the extracellular domain (Met1-Ala105) of human CD3D (P04234) was fused with a flag tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the extracellular domain (Met1-Asp126) of human CD3E (P07766) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the human CD3D/CD3E heterodimer was purified.
Species	Human
Source	Human Cells
ProteinLength	1-105 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

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	bound to either CD 3 gamma or CD 3 delta. The recognition by this panel of anti-CD3 antibodies of CD3-gamma/ epsilon and CD3-delta/ epsilon complexes and not of CD3-epsilon alone was assessed by immunoprecipitation.
Predicted N Terminal	Phe 22 & Asp 23
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.
Molecular Mass	The recombinant heterodimer of human CD3D&CD3E comprises 272 (126+146) amino acids and has a calculated molecular mass of 31.2 (14.4+16.8)KDa. As a result of glycosylation, the apparent molecular mass of human CD3D&CD3E heterodimer is approximately 20, 22 and 26 KDa in SDS-PAGE under reducing conditions.
Endotoxin	< 1.0 eu per ug of the protein as determined by the lal
Purity	(43.8+13.1+41.9) % as determined by SDS-PAGE
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Storage	Store it under sterile conditions at -70℃. 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. Please refer to it for detailed information.

GENE INFORMATION

Gene Name	CD3D CD3d molecule, delta (CD3-TCR complex) [Homo sapiens]

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Official Symbol	CD3D
Synonyms	CD3D; CD3d molecule, delta (CD3-TCR complex); CD3d antigen, delta polypeptide (TiT3 complex) , T3D; T-cell surface glycoprotein CD3 delta chain; CD3 delta; OKT3, delta chain; CD3 antigen, delta subunit; T-cell receptor T3 delta chain; CD3d antigen, delta polypeptide (TiT3 complex); T3D; CD3-DELTA;
Gene ID	915
mRNA Refseq	NM_000732
Protein Refseq	NP_000723
MIM	186790
UniProt ID	P04234
Chromosome Location	11q23
Pathway	Adaptive Immune System, organism-specific biosystem; CXCR4-mediated signaling events, organism-specific biosystem; Chagas disease (American trypanosomiasis), organism-specific biosystem; Chagas disease (American trypanosomiasis), conserved biosystem; Costimulation by the CD28 family, organism-specific biosystem; Downstream TCR signaling, organism-specific biosystem; Downstream signaling in naive CD8+ T cells, organism-specific biosystem;
Function	protein heterodimerization activity; receptor activity; transcription coactivator activity; transmembrane signaling receptor activity;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA