

Human CellExp™ CD3 epsilon (His-tag) - CD3 delta Heterodimer

CATALOG NO: P1655-10 10 µg
P1655-50 50 µg

ALTERNATE NAMES: CD3E & CD3D, CD3 delta & CD3 epsilon, CD3 delta/epsilon

SOURCE: HEK 293 cells

AMINO ACID SEQUENCE: Human CD3E (Asp 23 - Asp 126) (6x His-tag at C-Terminal) and CD3D (Phe 22 - Ala 105, no His-tag).

PURITY: ≥ 95% by SDS PAGE

MOL. WEIGHT: The calculated MW is 16 kDa (CD3E) and 13 kDa (CD3D).

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4) with 5% trehalose

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS (pH 7.4).

STORAGE CONDITIONS: Store at -20 °C. Once reconstituted, aliquot and store at -20 °C or -70 °C for long term storage. Avoid repeated freeze and thaw cycles.

DESCRIPTION: 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 CD3E, CD3-gamma and CD3-zeta, and the T-cell receptor alpha/beta, and gamma/delta heterodimers, form 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. Since CD3 is required for T-Cell activation, drugs and therapeutics targeting CD3 are being researched for diseases like Type 1 diabetes and other autoimmune diseases. For example, Muromonab-CD3, a monoclonal antibody targeting the CD3 receptor, is an immunosuppressant drug to reduce acute rejection in patients with organ transplants.

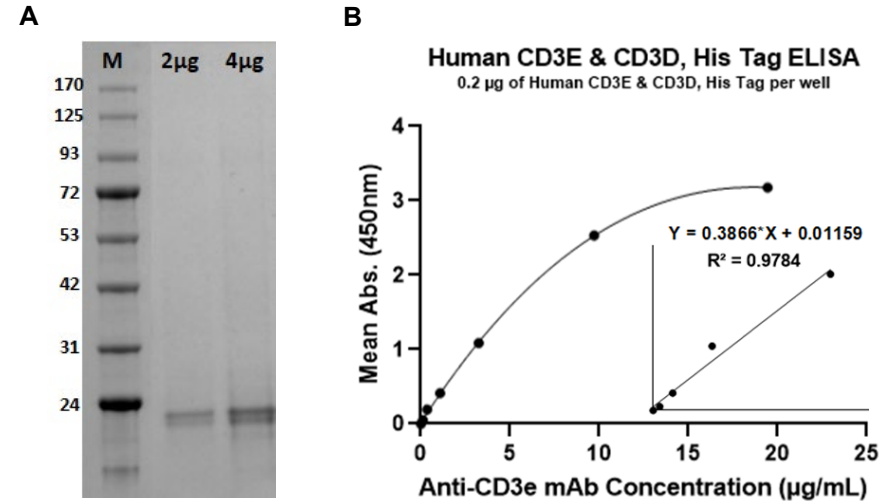


Fig. A. Human CD3E His-tag-CD3D protein was run on SDS PAGE gel under reducing (R) conditions and stained with Coomassie Blue. The protein migrates to around 22 kDa and 20 kDa respectively, due to glycosylation.

Fig. B. Immobilized Human CD3 epsilon & CD3 delta heterodimer protein at 2 µg/ml (100 µl/well) can bind Anti-CD3 epsilon (OKT-3 (muromonab) BioVision Cat# A2008] with a linear range of 0.04 – 1.0 µg/mL

RELATED PRODUCTS:

- Human CellExp™ CD3 epsilon & CD3 delta Heterodimer (# **P1183**)
- QuickDetect™ CD3 (Human) ELISA Kit (# **K4420**)
- CD3 FITC Monoclonal Antibody (Clone OKT3) (# **6952**)
- CD3d Antibody (# **6936**)
- Anti-CD3 epsilon (Muromonab) (# **A2008**)
- Anti-CD3e Antibody (C3e/1308) (**A1523**)
- Anti-CD3E Rabbit Monoclonal Antibody (RM344) (# **A1851**)
- Anti-Human CD3 PE-Cyanine 7 Antibody (OKT3) (# **A1584**)

FOR RESEARCH USE ONLY! Not to be used on humans.