

HUMAN CD3D PROTEIN**Cat.#:** 12253**Product Name:** Human CD3D Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** CD3-DELTA;IMD19;T3D and IMD18;T3E;TCRE**Target:** CD3E**UNIPROT ID:** P04234;P07766**Description:** Recombinant Human CD3D Protein with C-terminal 6xHis tag and Human CD3E Protein with C-terminal human Fc tag**Background:** T-cell surface glycoprotein CD3 delta and CD3 epsilon chain, also known as CD3D and CD3E or CD3DandCD3E 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.**Species/Host:** HEK293**Molecular Weight:** The protein has a predicted molecular mass of 10.4 and 37.9 kDa after removal of the signal peptide. The apparent molecular mass of CD3D-His and CD3E-hFc is approximately 35-55 kDa due to glycosylation.**Molecular Characterization:** CD3D(Phe22-Ala105) 6×His tag and CD3E(Asp23-Asp126) hFc(Glu99-Ala330)**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human CD3D&CD3E Heterodimer Protein, His Tag & hFc Tag on SDS-PAGE under reducing condition.