

Human CD3E Protein; hFc Tag

Product Information

Product Name	Human CD3E Protein; hFc Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-87535RP-100 / 100 μg GM-87535RP-1000 / 1 mg

Protein Information

Alternative Names	FLJ18683, T3E, TCRE, CD3-epsilon
Source	Human CD3E Protein; hFc Tag (GM-87535RP) is expressed from human 293 cells (HEK-293). It contains AA Gln 22 - Asp 126 (Accession # P07766). This protein carries a hFc tag at the C-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	37.8 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH 7.2–7.4.
Description	CD3E, located on human chromosome 11, encodes a 207-amino-acid type I transmembrane glycoprotein and constitutes an essential signaling subunit of the T-cell receptor (TCR)–CD3 complex. Its extracellular immunoglobulin-like domain pairs with CD3D and CD3G to form the CD3 $\delta\epsilon$ and CD3 $\gamma\epsilon$ heterodimers engaging the TCR $\alpha\beta$ chains, whereas its cytoplasmic immunoreceptor tyrosine-based activation motif (ITAM) transduces antigen signals through LCK/FYN phosphorylation and ZAP70 recruitment, governing adaptive immunity and T-cell development. The 3.7 Å cryo-EM structure of the human TCR $\alpha\beta$:CD3 $\gamma\epsilon$:CD3 $\delta\epsilon$:CD3 $\zeta\zeta$ complex delineates its octameric assembly, establishing CD3E as a target for anti-CD3 antibodies and T-cell-engaging bispecific immunotherapies.

Figures

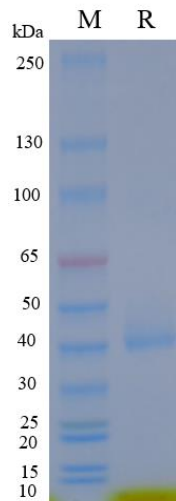


Figure 1 | On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

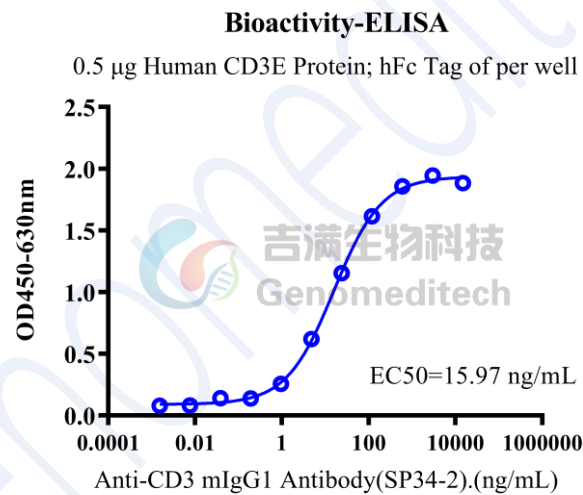


Figure 2 | Human CD3E Protein; hFc Tag (Catalog # GM-87535RP) was immobilized at 5 µg/ml (100 µL/well). Increasing concentrations of Anti-CD3 mIgG1 Antibody(SP34-2) (Catalog # GM-87919AB) were added.

Related Products

CD28	
H_CD28 Reporter Jurkat Cell Line	Cynomolgus_CD28 CHO-K1 Cell Line
H_CD28 CHO-K1 Cell Line	H_CD28 HEK-293 Cell Line
H_CD28 KO Jurkat Cell Line	
Anti-CD28 hIgG4 Antibody(FR104)	Anti-H_CD28 hIgG4 Antibody(Theralizumab)
Anti-mouse CD28 Syrian Hamster IgG2 Antibody(37.51)	
Human CD28 Protein; His Tag	
CD19	
H_CD19 KO Raji Cell Line	Cynomolgus_CD19 CHO-K1 Cell Line
Cynomolgus_CD19 HEK-293 Cell Line	H_CD19 CHO-K1 Cell Line
H_CD19 HEK-293 Cell Line	Mouse_CD19 CHO-K1 Cell Line
Anti-CD19 hIgG1 Reference Antibody (Loncbio)	Anti-CD19×CD3 hIgG1 Antibody[PIT-565(CD58 K34A)]
Anti-H_CD19 hIgG1/hIgG2 Antibody(Tafasitamab)	
CD3	
Cynomolgus_CD3D_CD3E Reporter Jurkat(CD3DE KO) Cell Line	Jurkat CD3-BsAb Reporter Cell Line
Cynomolgus_CD3 HEK-293 Cell Line	Cynomolgus_CD3E(Membrane Bound ECD) CHO-K1 Cell Line
H_CD3 CHO-K1 Cell Line	H_CD3 HEK-293 Cell Line
H_CD3(TCR V2) CHO-K1 Cell Line	H_CD3(TCR V2) HEK-293 Cell Line
H_CD3(TCRαβ delta V) HEK-293 Cell Line	H_CD3D_CD3E KO Jurkat Cell Line
H_CD3E KO Jurkat Cell Line	H_CD3E(Membrane Bound ECD) CHO-K1 Cell Line
Mouse_CD3 HEK-293 Cell Line	
Anti-CD19×CD3 hIgG1 Antibody[PIT-565(CD58 K34A)]	Anti-CD3 epsilon hIgG1 Antibody [OKT-3 (muromonab)]
Anti-CD3 hIgG1 Antibody(CH2527)	Anti-CD3×CD20 hIgG1 Bispecific Antibody (Epcobio)
Anti-CD3×FCRL5 hIgG1 Bispecific Antibody(cevostamab)	Anti-CD3E×BCMA hIgG4 Reference Antibody (Tecbio)
Anti-CD3E×DLL3 hIgG1 Bispecific Antibody(Tarlabio)	Anti-CD3E×MUC17 hIgG1 Bispecific Antibody(Vepsitbio)
Anti-mouse CD3ε mIgG2a Antibody(145-2C11)	
CD2	
H_CD2 KO Jurkat(CD3-) Cell Line	CD3-CD2-tsAb Reporter Jurkat(CD58 KO) Cell Line
Cynomolgus_CD2 CHO-K1 Cell Line	H_CD2 CHO-K1 Cell Line
H_CD2 KO Jurkat(CD3+) Cell Line	
Anti-CD19×CD3 hIgG1 Antibody[PIT-565(CD58 K34A)]	Anti-CD2 hIgG1 Antibody(BTI-322)
Human CD2 Protein; hFc Tag	Human CD2 Protein; His Tag