

CD4

Recombinant Human CD4 (ECD, Fc Tag)

Catalog No.	CRH473A-Fc CRH473B-Fc	Quantity:	50 µg 100 µg
Alternate Names:	T-cell surface glycoprotein CD4, T-cell surface antigen T4/Leu-3, CD4		
Description:	T-cell surface glycoprotein CD4, is a single-pass type I membrane protein with three Ig-like C2-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. CD4 is a glycoprotein expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages, and dendritic cells. The CD4 surface determinant, previously associated as a phenotypic marker for helper/inducer subsets of T lymphocytes, has now been critically identified as the binding/entry protein for human immunodeficiency viruses (HIV). The human CD4 molecule is readily detectable on monocytes, T lymphocytes, and brain tissues. All human tissue sources of CD4 bind radiolabeled gp12 to the same relative degree; however, the murine homologous protein, L3T4, does not bind the HIV envelope protein. CD4 is a co-receptor that assists the T cell receptor (TCR) to activate its T cell following an interaction with an antigen presenting cell. Using its portion that resides inside the T cell, CD4 amplifies the signal generated by the TCR. CD4 interacts directly with MHC class II molecules on the surface of the antigen presenting cell via its extracellular domain.		
UniProt ID:	P01730		
Accession Number:	NP_000607.1		
Protein Construction:	A DNA sequence encoding the human CD4 extracellular domain (Met1-Trp390) was expressed with the Fc region of human IgG1 at the C-terminus.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human CD4 consists of 603 amino acids and predicts a molecular mass of 67.4 kDa.		
Purity:	> 95 % as determined by SDS-PAGE		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.		
Biological Activity:	Measured by the ability of the immobilized protein to support the adhesion of NIH-3T3 mouse embryonic fibroblast cells. When 5×10^4 cells/well are added to CD4-Fc-coated plates (1.25µg/mL, 100 µL/well), approximately 20%-50% cells will adhere after 30 minutes at 37°C.		
Predicted N-terminal:	Lys 26		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution.		

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.