

Datasheet for ABIN2180789

CD4 Protein (CD4) (AA 26-396) (Fc Tag)[Go to Product page](#)**3** Images

Overview

Quantity:	200 µg
Target:	CD4
Protein Characteristics:	AA 26-396
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD4 protein is labelled with Fc Tag.

Product Details

Sequence:	AA 26-396
Characteristics:	This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 67.5 kDa. The protein migrates as 80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD4
Alternative Name:	CD4 (CD4 Products)

Target Details

Background:	Cluster of Differentiation 4 (CD4) is also known as T-cell surface antigen T4/Leu-3 (LEU-3) and CD4mut, is a single-pass type I membrane glycoprotein, and is a member of the immunoglobulin superfamily. CD4 expressed on the surface of T helper cells, monocytes, macrophages, and dendritic cells. It has four immunoglobulin domains (D1 to D4) that are exposed on the extracellular surface of the cell: D1 and D3 resemble immunoglobulin variable (IgV) domains. D2 and D4 resemble immunoglobulin constant (IgC) domains. CD4 is a co-receptor that assists the T cell receptor (TCR) with an antigen-presenting cell. Using its portion that resides inside the T cell, CD4 amplifies the signal generated by the TCR by recruiting an enzyme, known as the tyrosine kinase lck, which is essential for activating many molecules involved in the signaling cascade of an activated T cell. CD4 also interacts directly with MHC class II molecules on the surface of the antigen-presenting cell using its extracellular domain. The extracellular domain adopts an immunoglobulin-like beta-sandwich with seven strands in 2 beta sheets, in a Greek key topology. CD4 has also been shown to interact with SPG21, Lck and Protein unc-119 homolog. CD4 is a primary receptor used by HIV-1 to gain entry into host T cells. HIV infection leads to a progressive reduction of the number of T cells possessing CD4 receptors. Therefore, medical professionals refer to the CD4 count to decide when to begin treatment for HIV-infected patients.
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Molecular Weight:	67.5 kDa
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Pathways:	TCR Signaling , Maintenance of Protein Location , CXCR4-mediated Signaling Events
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Application Details

Restrictions:	For Research Use only
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Handling

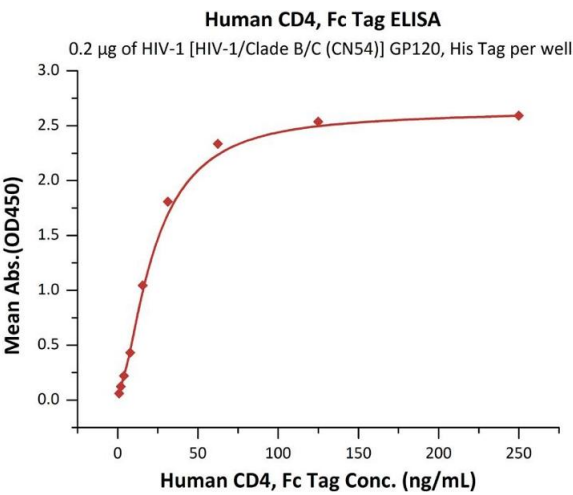
Format:	Lyophilized
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Buffer:	Tris, Glycine and NaCl, pH 7.5
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Handling Advice:	Please avoid repeated freeze-thaw cycles.
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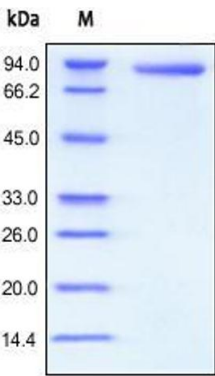
Storage:	-20 °C
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Storage Comment:	Lyophilized Protein should be stored at -20 °C or lower for long term storage. Upon reconstitution, working aliquots should be stored at -20 °C or -70 °C. Avoid repeated freeze-thaw cycles.
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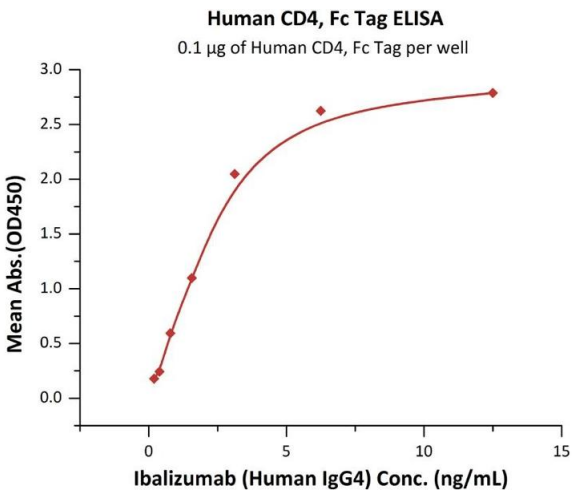
ELISA

Image 1. Immobilized HIV-1 [HIV-1/Clade B/C (CN54)] GP120, His Tag (7) at 2 µg/mL (100 µL/well) can bind Human CD4, Fc Tag (ABIN2180789,ABIN2180788) with a linear range of 1-31 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Human CD4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 98%.



ELISA

Image 3. Immobilized Human CD4, Fc Tag (ABIN2180789,ABIN2180788) at 1 µg/mL (100 µL/well) can bind Ibalizumab (Human IgG4) with a linear range of 0.2-3 ng/mL (QC tested).