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Human CellExpCD4, human recombinant protein

CD4, CD-4, CD4mut, CD-4mut
Catalog # PBV11393r

Specification

Human CellExpCD4, human recombinant protein - Product info

Primary Accession	P01730
Calculated MW	**This protein rhCD4 is fused with Fc fragment of human IgG1 at the C-terminus, has a calculated MW of 68 kDa expressed. The predicted N-terminus is Lys26. Protein migrates as 80 kDa in reduced SDS-PAGE due to glycosylation. KDa**

Human CellExpCD4, human recombinant protein - Additional Info

Gene ID	**920**
Gene Symbol	**CD4**

Other Names
CD4, CD-4, CD4mut, CD-4mut

Gene Source	**Human**
Source	**HEK 293 cells**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**Measured by its ability to bind with HIV-1 gp120 in a functional ELISA.**

Target/Specificity
CD4

Application Notes
Centrifuge the vial prior to opening. Reconstitute in PBS, pH 7.4. Do not vortex.

Format
Lyophilized

Storage
-20°C; Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM glycine, pH 7.5. Normally Mannitol or Trehalose are added as protectants before lyophilization.

Human CellExpCD4, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human CellExpCD4, human recombinant protein - Images

Human CellExpCD4, human recombinant protein - Background

Cluster of Differentiation 4 (CD4), 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.

Human CellExpCD4, human recombinant protein - References

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