

## **CD4-FC recombinant protein**

YD3061 Catalog No:

Reactivity: Human;

>90% as determined by SDS-PAGE **Purity:** 

Gene Name: CD4

**Protein Name:** T-cell surface glycoprotein CD4 (T-cell surface antigen T4/Leu-3) (CD antigen

Amino acid:26-396, with FC tag. Sequence:

P01730

Human Gene Id: 920

**Human Swiss Prot** 

Formulation:

No:

Phosphate-buffered solution

Source: Mammalian cells

-15°C to -25°C/1 year(Avoid freeze / thaw cycles) **Storage Stability:** 

**Function:** 

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of Thelper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cyto

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts (PubMed:12517957, PubMed:9168119). Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation. Cell surface expression is also down-



modulated by HIV-1 Envelope polyprotein gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum.

## **Expression:**

Highly expressed in T-helper cells. The presence of CD4 is a hallmark of T-helper cells which are specialized in the activation and growth of cytotoxic T-cells, regulation of B cells, or activation of phagocytes. CD4 is also present in other immune cells such as macrophages, dendritic cells or NK cells.

## **Products Images**