

Datasheet for ABIN7505781

**CD4 Protein (CD4) (AA 1-394) (His tag)**[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	CD4
Protein Characteristics:	AA 1-394
Origin:	Rat
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD4 protein is labelled with His tag.

## Product Details

Sequence:	Met1-Thr394
Characteristics:	A DNA sequence encoding the Rat CD4 protein (P05540) (Met1-Thr394) was expressed with a C-His.
Purity:	> 95 % as determined by reducing SDS-PAGE.

## Target Details

Target:	CD4
Alternative Name:	CD4 ( <a href="#">CD4 Products</a> )
Background:	Abbreviation: CD4 Target Synonym: T-cell surface glycoprotein CD4,T-cell surface antigen T4/Leu-3,W3/25 antigen,CD antigen CD4,CD4_RAT Background: Integral membrane glycoprotein that plays an essential role in the immune

## Target Details

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 T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages.

Molecular Weight: Calculated MW: 43.23 kDa  
Observed MW: 45 kDa

UniProt: [P05540](#)

Pathways: [TCR Signaling](#), [Maintenance of Protein Location](#), [CXCR4-mediated Signaling Events](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Lyophilized from sterile PBS, pH 7.4.  
Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.  
Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date: 12 months