

# Human CD4/LEU3 Protein

Cat. No. CD4-HM401

## Description

<b>Source</b>	Recombinant Human CD4/LEU3 Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal. It contains Lys26-Trp390.
<b>Accession</b>	P01730
<b>Molecular Weight</b>	The protein has a predicted MW of 43.6 kDa. Due to glycosylation, the protein migrates to 50-60 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

## Background

CD4, also known as L3T4, T4, and W3/25, is an approximately 55 kDa type I transmembrane glycoprotein that is expressed predominantly on thymocytes and a subset of mature T lymphocytes. It is a standard phenotype marker for the identification of T cell populations. 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.

## Assay Data

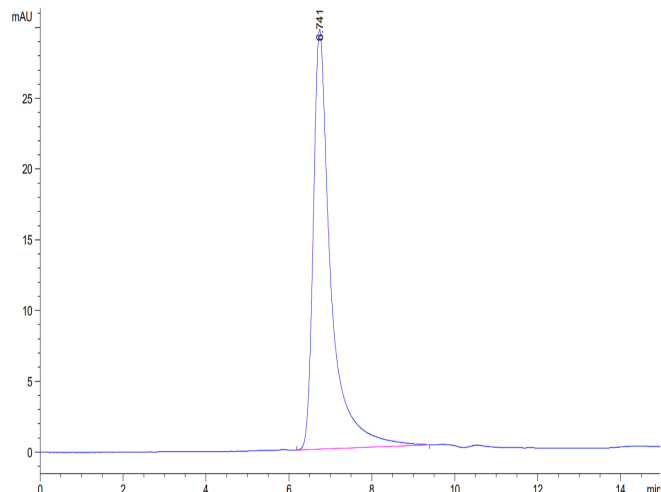
### Tris-Bis PAGE



Human CD4 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

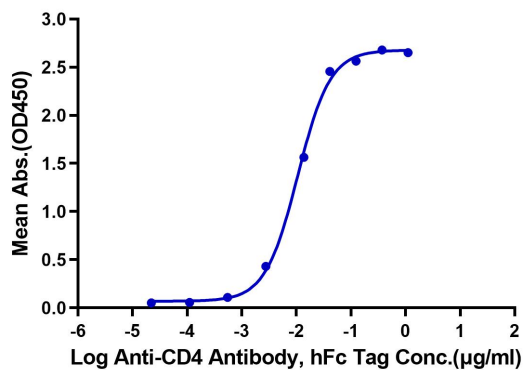


The purity of Human CD4 is greater than 95% as determined by SEC-HPLC

ELISA Data

Human CD4, His Tag ELISA

0.05µg Human CD4, His Tag Per Well

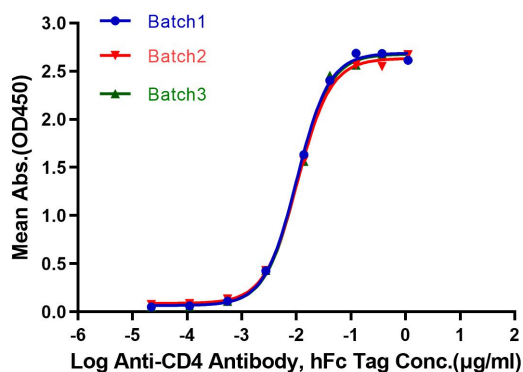


Immobilized Human CD4 at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CD4 Antibody, hFc Tag with the EC50 10.6ng/ml determined by ELISA.

Batch to Batch Consistency

Human CD4, His Tag ELISA

0.05µg Human CD4, His Tag Per Well



Immobilized Human CD4 at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD4 Antibody, hFc Tag with the EC50 of 10.2ng/ml / 10.6ng/ml / 10.6ng/ml determined by ELISA.