

# Human CTLA-4/CD152 Protein

Cat. No. CTL-HM141

## Description

<b>Source</b>	Recombinant Human CTLA-4/CD152 Protein is expressed from Expi293 with His tag at the C-terminal. It contains Lys36-Asp161.
<b>Accession</b>	P16410-1
<b>Molecular Weight</b>	The protein has a predicted MW of 14.3 kDa. Due to glycosylation, the protein migrates to 28-35 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg 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 0.22µm 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 µg/ml is recommended (usually we use 1mg/ml solution for lyophilization). 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

CTLA-4 (cytotoxic T-lymphocyte-associated protein 4), also known as CD152, is a protein receptor that, functioning as an immune checkpoint, downregulates immune responses. CTLA4 is constitutively expressed in regulatory T cells but only upregulated in conventional T cells after activation – a phenomenon which is particularly notable in cancers. It acts as an "off" switch when bound to CD80 or CD86 on the surface of antigen-presenting cells.

## Assay Data

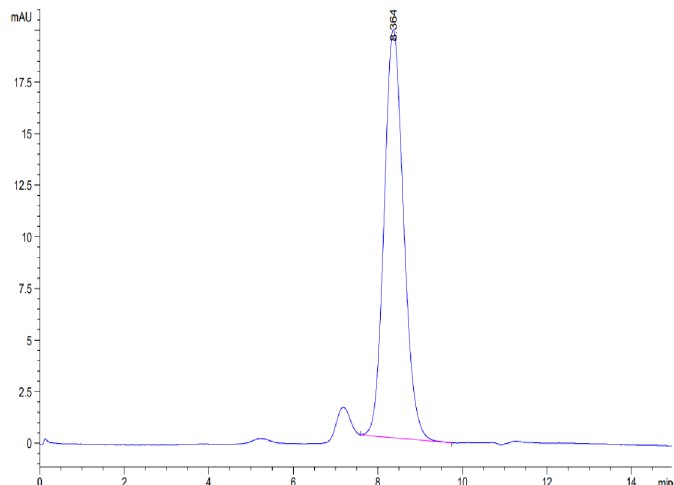
### Tris-Bis PAGE



Human CTLA-4 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%..

### SEC-HPLC

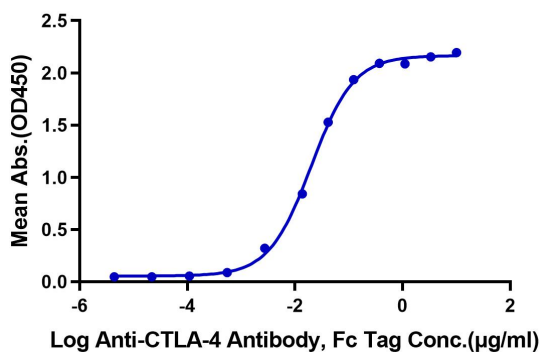
Assay Data



The purity of Human CTLA-4 is greater than 95% as determined by SEC-HPLC.

ELISA Data

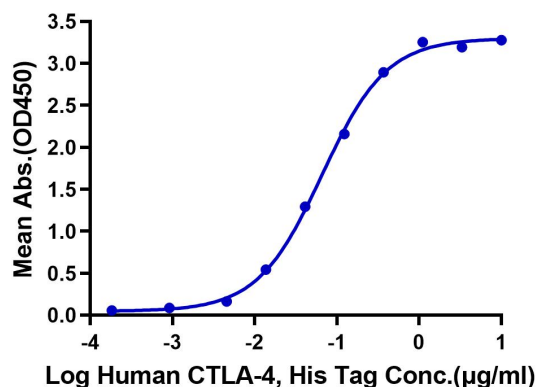
**Human CTLA-4, His Tag ELISA**  
0.05µg Human CTLA-4, His Tag Per Well



Immobilized Human CTLA-4, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CTLA-4 Antibody, hFc Tag with the EC50 of 20.1ng/ml determined by ELISA.

ELISA Data

**Human CTLA-4, His Tag ELISA**  
0.05µg Human B7-1, hFc Tag Per Well



Immobilized Human B7-1, hFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human CTLA-4, His Tag with the EC50 of 66ng/ml determined by ELISA.