

Human CTLA-4/CD152 Protein

Cat. No. CTL-HM141



Description

Source	Recombinant Human CTLA-4/CD152 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Lys36-Asp161.
Accession	P16410-1
Molecular Weight	The protein has a predicted MW of 14.3 kDa. Due to glycosylation, the protein migrates to 28-35 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

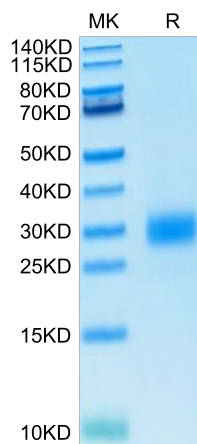
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize 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.

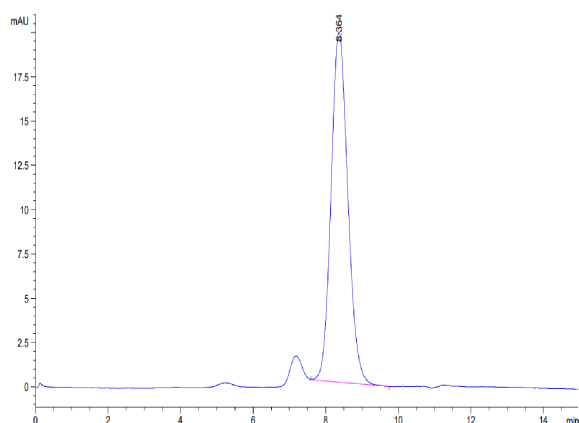
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



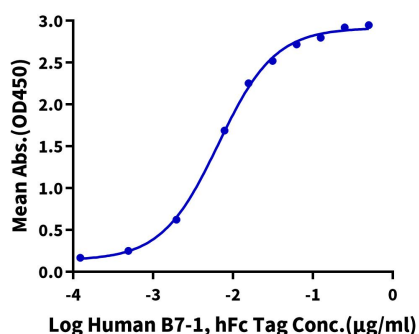
The purity of Human CTLA-4 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human CTLA-4, His Tag ELISA

0.1µg Human CTLA-4, His Tag Per Well

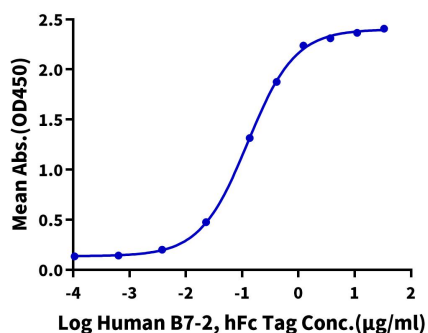


Immobilized Human CTLA-4, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human B7-1, hFc Tag with the EC50 of 6.5ng/ml determined by ELISA (QC Test).

ELISA Data

Human CTLA-4, His Tag ELISA

0.5µg Human CTLA-4, His Tag Per Well

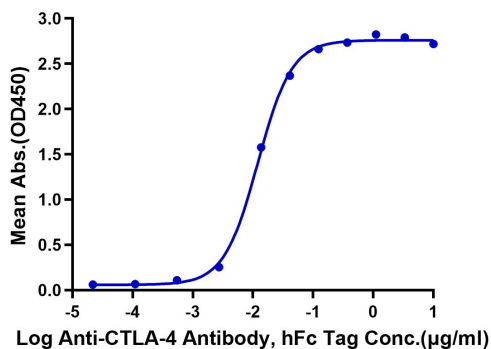


Immobilized Human CTLA-4, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human B7-2, hFc Tag with the EC50 of 125.7ng/ml determined by ELISA.

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 12.1ng/ml determined by ELISA.