

RP00503

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Recombinant Human CTLA-4/CD152 Protein

Catalog No.: RP00503

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	1493	P16410-1

Tags

C-hFc

Synonyms

CTLA4; CD152; ICOS; CELIAC3; GRD4; GSE; ALPS5; IDDM12

Product Information

Source

<I>E. coli</I>

Purification

> 95% by SDS-PAGE ; > 95% by HPLC

Endotoxin

< 1 EU/μg of the protein by LAL method

Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-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.

Basic Information

Description

Recombinant Human CTLA-4/CD152 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Lys36-Asp161) of Human CTLA-4/CD152 (Accession #P16410-1) fused with a C-hFc tag at the C-terminus.

Bio-Activity

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

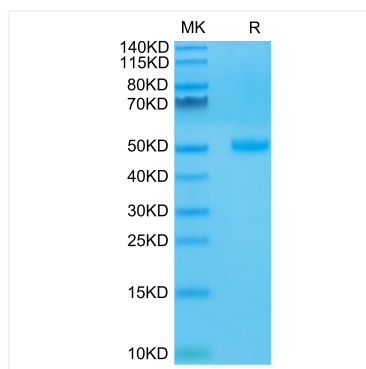
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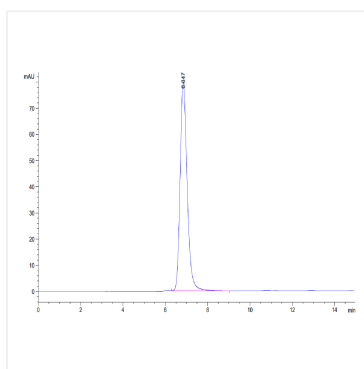
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* For your safety and health, please wear a lab coat and disposable gloves when handling.

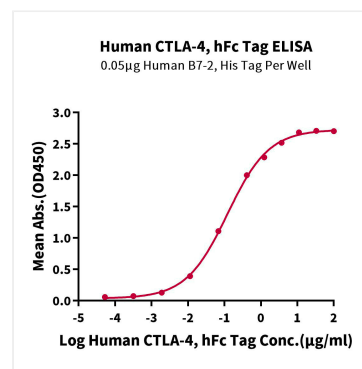
Validation Data



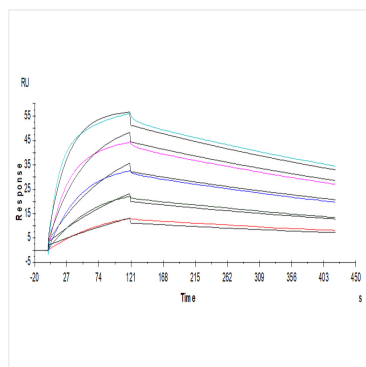
Human CTLA-4 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



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



Immobilized Human B7-2, His Tag at 0.5 $\mu\text{g/mL}$ (100 $\mu\text{L/Well}$) on the plate. Dose response curve for Human CTLA-4, hFc Tag with the EC_{50} of 0.12 $\mu\text{g/mL}$ determined by ELISA (QC Test).



Human B7-1, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human CTLA-4, hFc Tag with an affinity constant of 1.1nM as determined in SPR assay (Biacore T200).