Biotinylated Mouse CTLA-4 / CD152 Protein, Fc,Avitag™ (MALS verified)

Catalog # CT4-M82F3

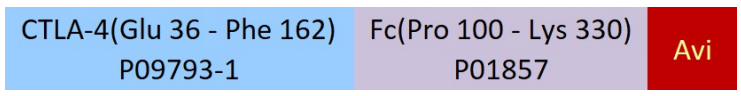
Synonym

CTLA4,CD152

Source

Biotinylated Mouse CTLA-4 Protein, Fc,Avitag(CT4-M82F3) is expressed from human 293 cells (HEK293). It contains AA Glu 36 - Phe 162 (Accession # P09793-1).
Predicted N-terminus: Glu 36

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 42.1 kDa. The protein migrates as 55-65 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

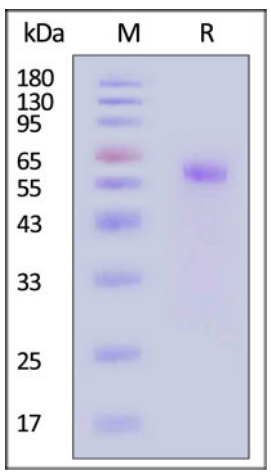
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

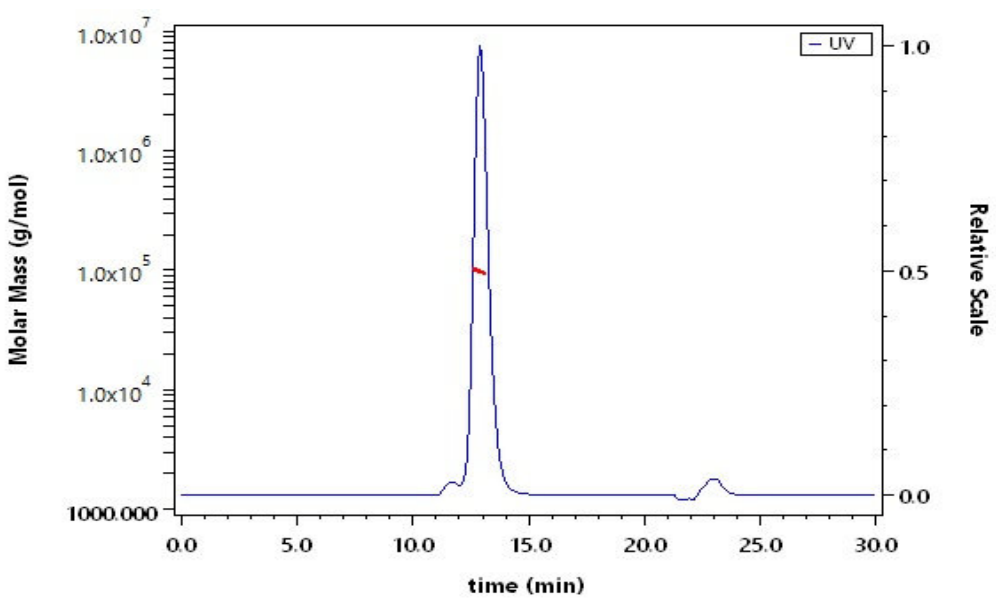
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



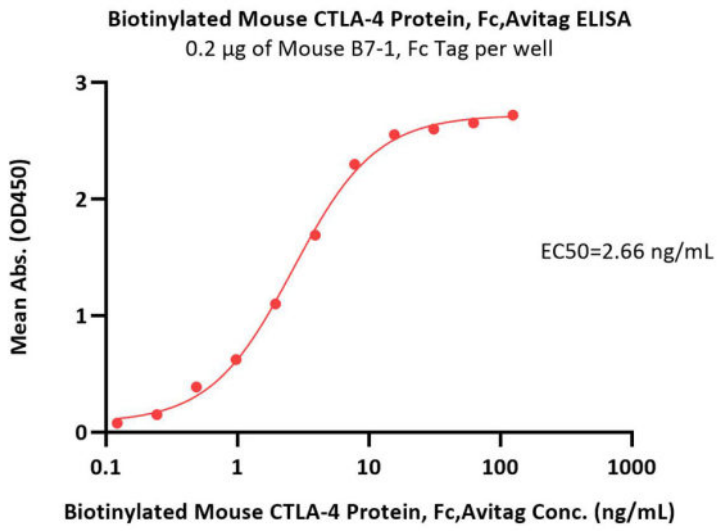
Biotinylated Mouse CTLA-4 Protein, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

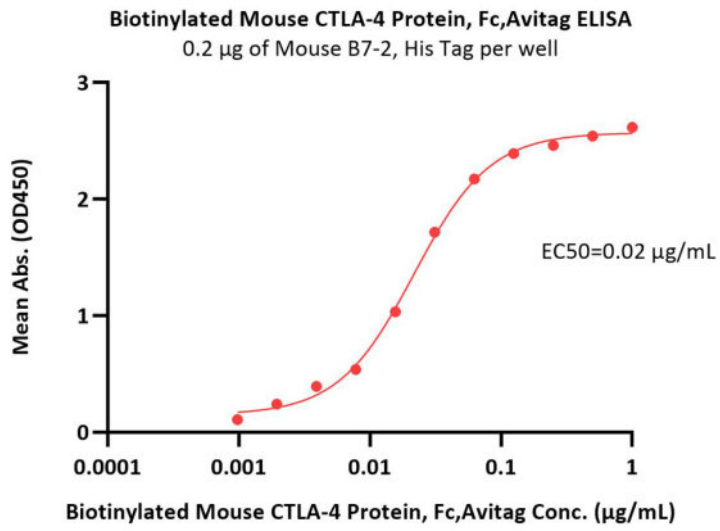


The purity of Biotinylated Mouse CTLA-4 Protein, Fc,Avitag (Cat. No. CT4-M82F3) is more than 95% and the molecular weight of this protein is around 90-110 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Mouse B7-1, Fc Tag (Cat. No. CD0-M5259) at 2 μg/mL (100 μL/well) can bind Biotinylated Mouse CTLA-4 Protein, Fc,Avitag (Cat. No. CT4-M82F3) with a linear range of 0.1-8 ng/mL (QC tested).



Immobilized Mouse B7-2, His Tag (Cat. No. CD6-M52H0) at 2 μg/mL (100 μL/well) can bind Biotinylated Mouse CTLA-4 Protein, Fc,Avitag (Cat. No. CT4-M82F3) with a linear range of 0.001-0.031 μg/mL (Routinely tested).

Background

CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4) is also known as CD152 (Cluster of differentiation 152), is a protein receptor that downregulates the immune system. CTLA4 is a member of the immunoglobulin superfamily, which is expressed on the surface of Helper T cells and transmits an inhibitory signal to T cells. The protein contains an extracellular V domain, a transmembrane domain, and a cytoplasmic tail. Alternate splice variants, encoding different isoforms. CTLA4 is similar to the T-cell co-stimulatory protein, CD28, and both molecules bind to CD80 and CD86, also called B7-1 and B7-2 respectively, on antigen-presenting cells. CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. Intracellular CTLA4 is also found in regulatory T cells and may be important to their function. Fusion proteins of CTLA4 and antibodies (CTLA4-Ig) have been used in clinical trials for rheumatoid arthritis.