

Human B7-1/CD80 Protein

Cat. No. B71-HM480



Description

Source	Recombinant Human B7-1/CD80 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Val35-Asn242.
Accession	P33681-1
Molecular Weight	The protein has a predicted MW of 26.8 kDa. Due to glycosylation, the protein migrates to 50-70 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis 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 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Cluster of differentiation 80 (also CD80 and B7-1) is a protein found on dendritic cells, activated B cells and monocytes that provides a costimulatory signal necessary for T cell activation and survival. It is the ligand for two different proteins on the T cell surface: CD28 and CTLA-4.

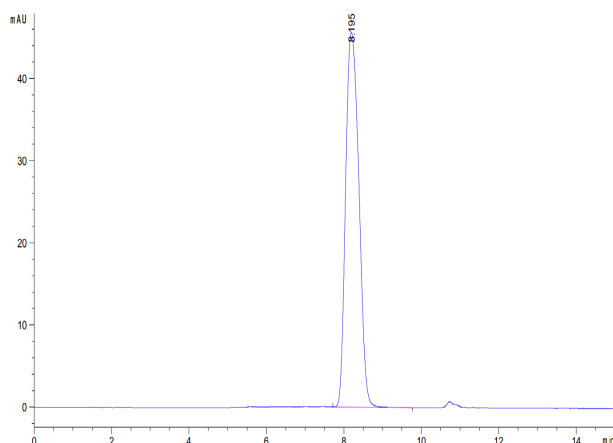
Assay Data

Tris-Bis PAGE



Human B7-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



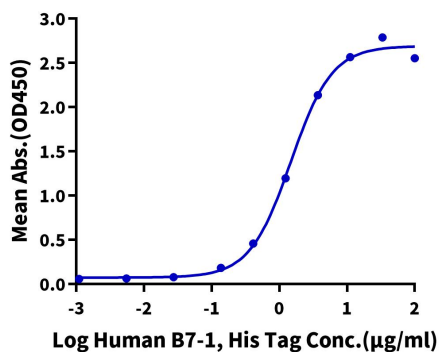
The purity of Human B7-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

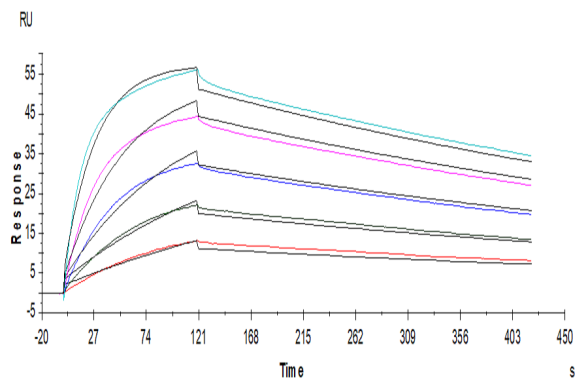
Human B7-1, His Tag ELISA

0.1µg Human CTLA-4, hFc Tag Per Well



Immobilized Human CTLA-4, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human B7-1, His Tag with the EC50 of 1.48µg/ml determined by ELISA.

SPR Data



Human B7-1, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human CTLA4, hFc Tag with an affinity constant of 1.1nM as determined in SPR assay (Biacore T200).