

Human BTLA Protein

Cat. No. BTL-HM401

Description

Source	Recombinant Human BTLA Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Lys31-Ser150.
Accession	Q7Z6A9-1
Molecular Weight	The protein has a predicted MW of 16.7 kDa. Due to glycosylation, the protein migrates to 35-45 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

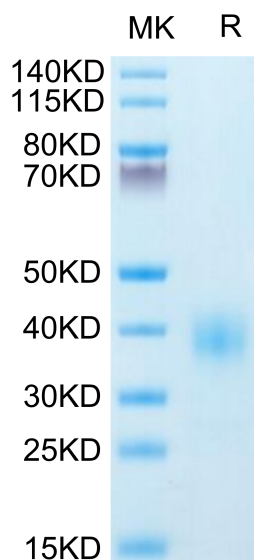
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized 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

B- and T-lymphocyte attenuator (BTLA; CD272) is a 35 kDa type I transmembrane glycoprotein in the CD28 family of T cell costimulatory molecules. BTLA is a inhibitory receptor on lymphocytes that negatively regulates antigen receptor signaling via PTPN6/SHP-1 and PTPN11/SHP-2. BTLA may interact in cis (on the same cell) or in trans (on other cells) with TNFRSF14.

Assay Data

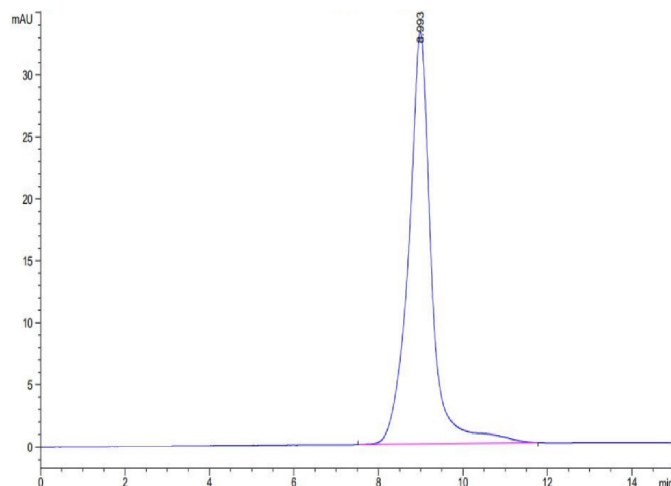
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

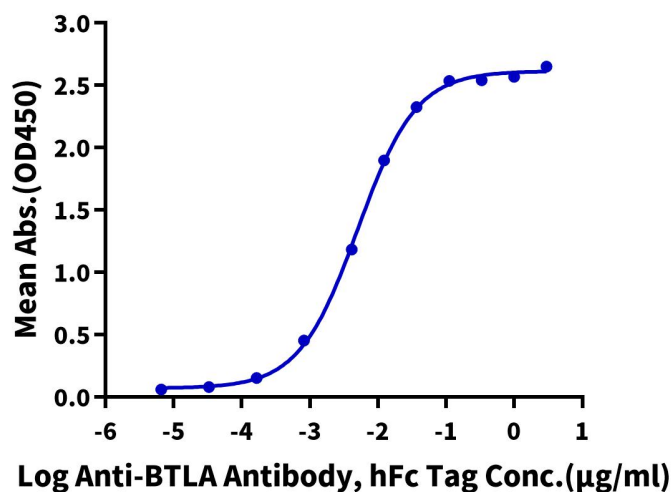


The purity of Human BTLA is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human BTLA, His Tag ELISA

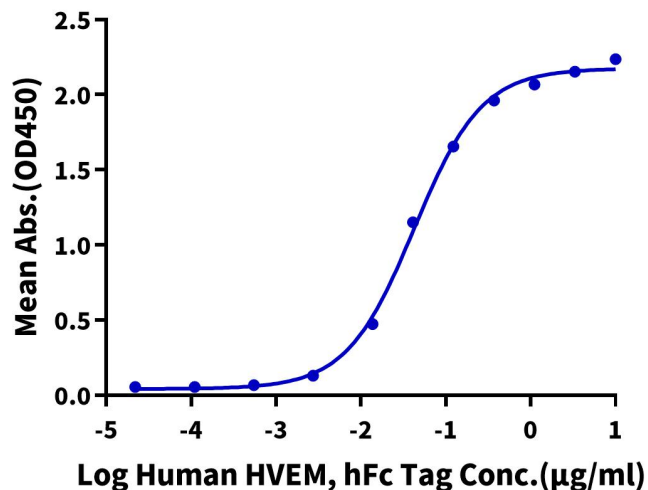
0.05 μ g Human BTLA, His Tag Per Well



Immobilized Human BTLA, His Tag at 0.5 μ g/ml (100 μ l/Well) on the plate. Dose response curve for Anti-BTLA Antibody, hFc Tag with the EC₅₀ of 5.0ng/ml determined by ELISA (QC Test).

Human BTLA, His Tag ELISA

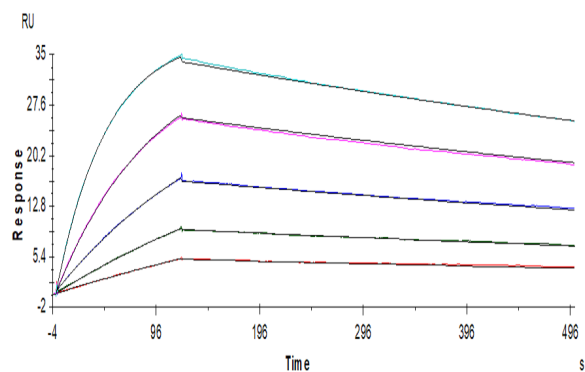
0.1 μ g Human BTLA, His Tag Per Well



Immobilized Human BTLA, His Tag at 1 μ g/ml (100 μ l/Well). Dose response curve for Human HVEM, hFc Tag with the EC₅₀ of 42.5ng/ml determined by ELISA.

Assay Data

SPR Data



Anti-BTLA antibody captured on Protein A chip, can bind Human BTLA, His Tag with an affinity constant of 0.99nM as determined in a SPR assay (Biacore T200).