

# Human BTLA Protein

Cat. No. BTL-HM401



## Description

<b>Source</b>	Recombinant Human BTLA Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Lys31-Ser150.
<b>Accession</b>	Q7Z6A9-1
<b>Molecular Weight</b>	The protein has a predicted MW of 16.7 kDa. Due to glycosylation, the protein migrates to 35-45 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

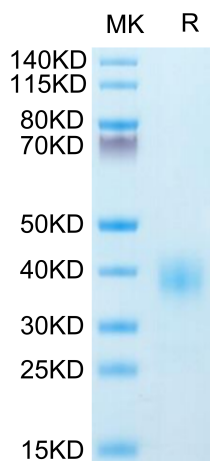
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state 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

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 an 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.

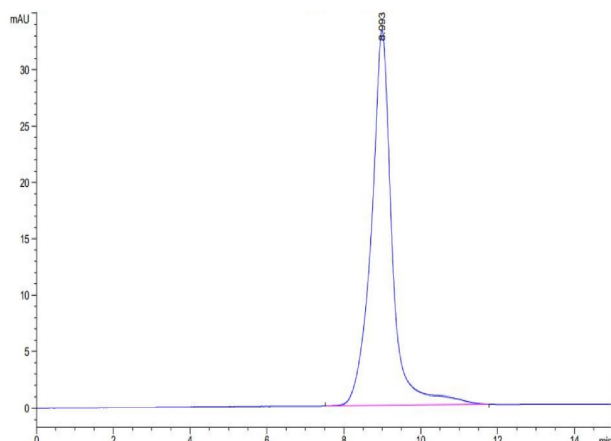
## Assay Data

### Tris-Bis PAGE



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

### SEC-HPLC



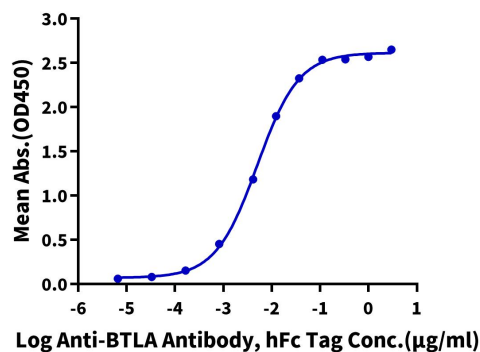
The purity of Human BTLA is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human BTLA, His Tag ELISA**

0.05µg Human BTLA, His Tag Per Well

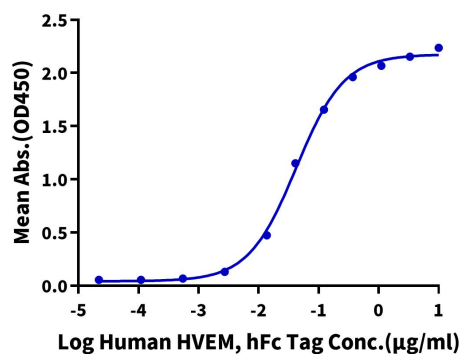


Immobilized Human BTLA, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-BTLA Antibody, hFc Tag with the EC50 of 5.0ng/ml determined by ELISA (QC Test).

ELISA Data

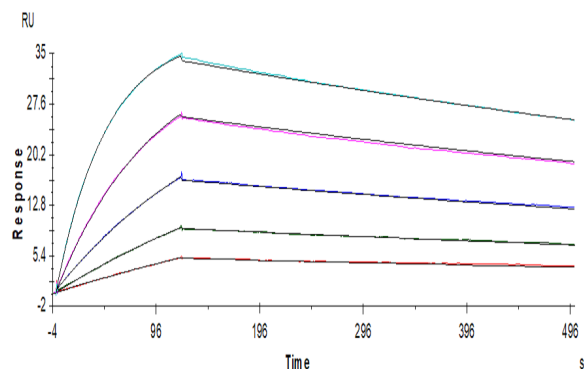
**Human BTLA, His Tag ELISA**

0.1µg Human BTLA, His Tag Per Well



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

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).