

# Human BTLA Protein, Ultra Low Endotoxin

Cat. No. BTL-HM201-UL

## Description

<b>Source</b>	Recombinant Human BTLA Protein is expressed from HEK293 with hFc (IgG1) 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 40.5 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

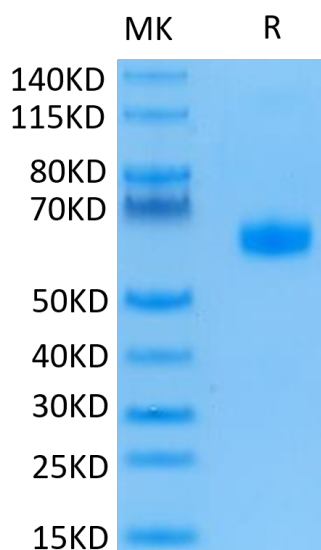
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-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

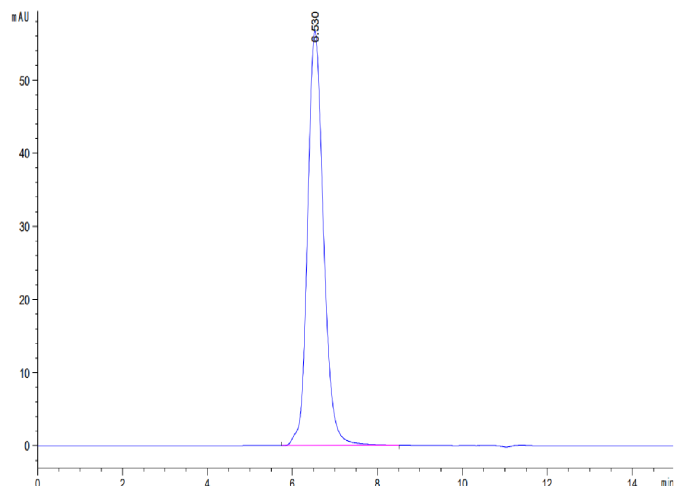
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

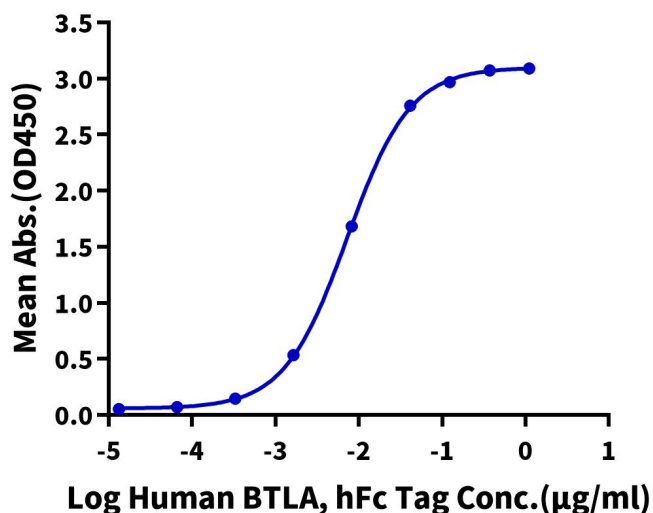


The purity of Human BTLA is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human BTLA, hFc Tag ELISA**

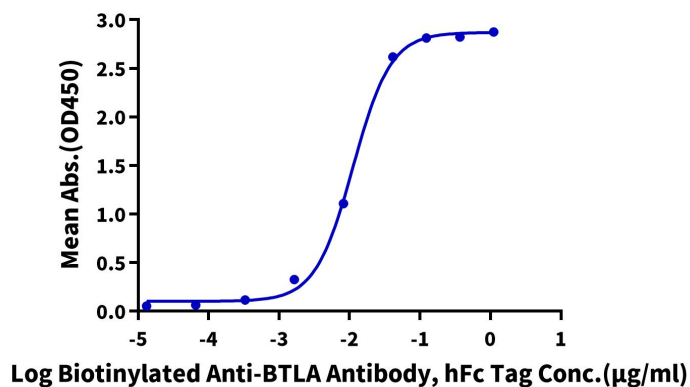
0.2µg Human HVEM, His Tag Per Well



Immobilized Human HVEM, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human BTLA, hFc Tag with the EC50 of 7.2ng/ml determined by ELISA (QC Test).

**Human BTLA, hFc Tag ELISA**

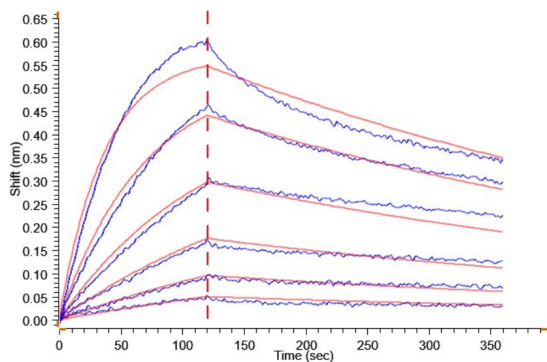
0.02µg Human BTLA, hFc Tag Per Well



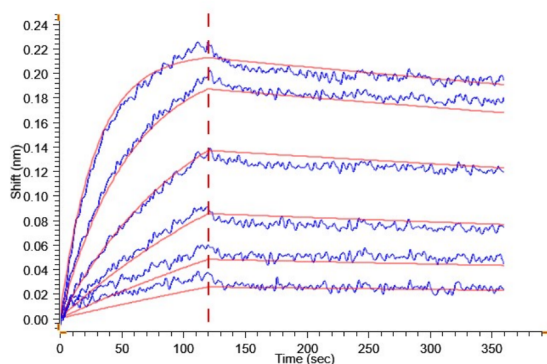
Immobilized Human BTLA, hFc Tag at 0.2µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-BTLA Antibody, hFc Tag with the EC50 of 11.4ng/ml determined by ELISA.

BLI Data

Assay Data



Loaded Human HVEM, His Tag (Cat. HVE-HM111) on Anti-His-Biosensor can bind Human BTLA, hFc Tag with an affinity constant of 3.67 nM as determined in BLI assay .



Loaded Biotinylated Anti-BTLA Antibody, hFc Tag on Streptavidin-Biosensor can bind Human BTLA, hFc Tag with an affinity constant of 0.67 nM as determined in BLI assay .