

## **Synonym**

BTLA,CD272

#### Source

Human BTLA (31-150), His Tag(BTA-H52H3) is expressed from human 293 cells (HEK293). It contains AA Lys 31 - Ser 150 (Accession # <u>AAP44003.1</u>).

### **Molecular Characterization**

BTLA(Lys 31 - Ser 150) AAP44003.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 15.7 kDa. The protein migrates as 27-34 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 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

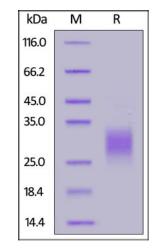
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

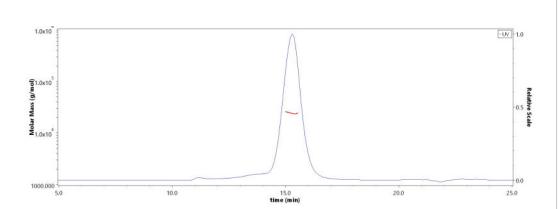
## **SDS-PAGE**



Human BTLA (31-150), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

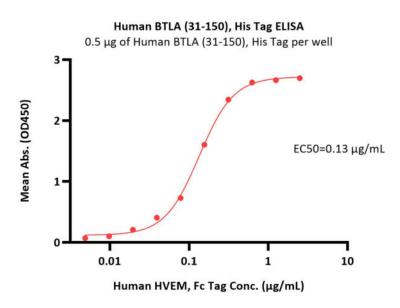
## **SEC-MALS**



The purity of Human BTLA (31-150), His Tag (Cat. No. BTA-H52H3) is more than 85% and the molecular weight of this protein is around 19-29 kDa verified by SEC-MALS.

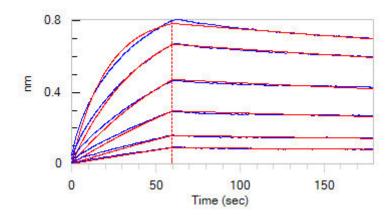
Report





Immobilized Human BTLA (31-150), His Tag (Cat. No. BTA-H52H3) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human HVEM, Fc Tag (Cat. No. HVM-H5258) with a linear range of 0.005-0.313  $\mu$ g/mL (QC tested).

# **Bioactivity-BLI**



Loaded Human BTLA (31-150), His Tag (Cat. No. BTA-H52H3) on NTA Biosensor, can Human HVEM, Mouse IgG2a Fc Tag, low endotoxin with an affinity constant of 20.8 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

# Background

B- and T-lymphocyte attenuator (BTLA) is also known as B- and T-lymphocyte-associated protein, CD antigen CD272. BTLA contains one Ig-like V-type (immunoglobulin-like) domain. As a lymphocyte inhibitory receptor, BTLA / CD272 inhibits lymphocytes during immune response. BTLA / CD272 can interact with tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2, and interact with TNFRSF14/HVEM.

## **Clinical and Translational Updates**

