

### **Synonym**

BTLA,CD272

#### Source

Biotinylated Human BTLA (31-134), Fc,Avitag(BTA-H82F8) is expressed from human 293 cells (HEK293). It contains AA Lys 31 - Thr 134 (Accession # Q7Z6A9).

Predicted N-terminus: Lys 31

### **Molecular Characterization**

BTLA(Lys 31 - Thr 134) Fc(Pro 100 - Lys 330) Avi P01857

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 40.5 kDa. The protein migrates as 48-60 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

# Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>95% as determined by SDS-PAGE.

### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

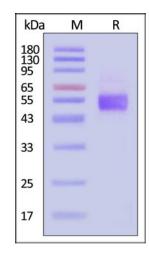
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**



Biotinylated Human BTLA (31-134), Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

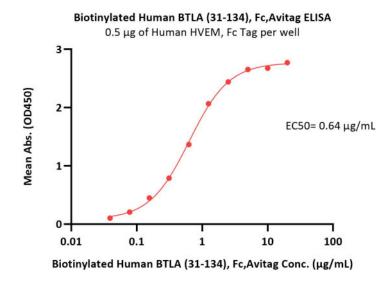
**Bioactivity-ELISA** 



# Biotinylated Human BTLA (31-134) Protein, Fc,Avitag™







Immobilized Human HVEM, Fc Tag (Cat. No. HVM-H5258) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human BTLA (31-134), Fc,Avitag (Cat. No. BTA-H82F8) with a linear range of 0.039-1.25  $\mu$ g/mL (QC 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**

