

# Recombinant mouse BTLA protein

Catalog Number: ATGP4003

## PRODUCT INFORMATION

---

### Expression system

HEK293

### Domain

30-176aa

### UniProt No.

Q32MV9

### NCBI Accession No.

AAI08964.1

### Alternative Names

Btla, B- and T-lymphocyte attenuator isoform 1, BTLA, BTLA1, CD272

## PRODUCT SPECIFICATION

---

### Molecular Weight

44.1 kDa (390aa)

### Concentration

0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

hIgG-His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

BTLA, also known as B- and T-lymphocyte attenuator isoform 1, is an inhibitory molecule which belongs to the Ig superfamily. It is a type 1 transmembrane glycoprotein in the CD28 family of T cell costimulatory molecules. This protein is a third inhibitory receptor on T lymphocytes with similarities to cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) and programmed death 1 (PD-1). Unlike other CD28 family members, the BTLA Ig domain in

# Recombinant mouse BTLA protein

Catalog Number: ATGP4003

the ECD is of the I-type rather than V-type, and BTLA does not form homodimers. It is also unusual in its interaction with the TNF superfamily member HVEM rather than with B7 family ligands. And, it is a ligand for tumor necrosis factor (receptor) superfamily, member 14 (TNFRSF14), also known as herpes virus entry mediator (HVEM). BTLA-HVEM complexes negatively regulate T-cell immune responses. Recombinant mouse BTLA, fused to IgG-His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

<DGSM>EKATKR NDEECEVQLN IKRNSKHS AW TGELFKIECP VKYCVHRPNV TWCKHNGTIW VPLEVGPQLY  
TSWEENRSVP VFVLHFKPIH LSDNGSYSCS TNFNSQVINS HSVTIHVRRER TQNSSEHPLI ISDIPDATNA SGPSTMEKRP  
G<LEPKSCDKT HTCPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHNAKTKPRE  
EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV SNKALPAPIE KTISKAKGQP REPQVYTLPP SRDELTKNQV SLTCLVKGFY  
PSDIAVEWES NGQPENNYKT TPPVLDS DGS FFLYSKLTVD KSRWQQGNVF SCSVMHEALH NHYTQKSLSL  
SPGKHHHHHH>

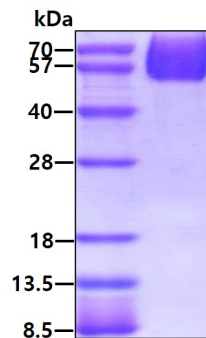
## General References

Watanabe N., et al, (2003) Nat. Immunol. 4:670-679.

Gavrieli M., et al, (2003) Biochem. Biophys. Res. Commun. 312:1236-1243.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain