# Recombinant Human B- and T-lymphocyte attenuator (BTLA), partial (Active)

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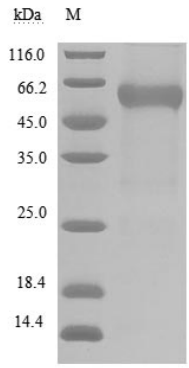
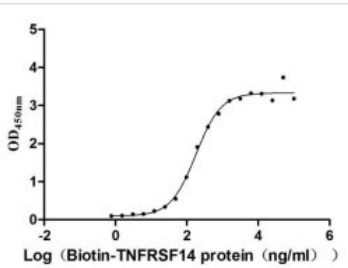
|---|---|
| **Product Code** | CSB-MP773799HU |
| **Storage** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| **Uniprot No.** | Q7Z6A9 |
| **Form** | Lyophilized powder |
| **Storage Buffer** | Lyophilized from a 0.2 μm filtered PBS, 6% Trehalose, pH 7.4 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Biological Activity** | ①Measured by its binding ability in a functional ELISA. Immobilized BTLA at 5 μg/ml can bind biotinylated human TNFRSF14 (CSB-MP842173HU-A), the $EC_{50}$ is 137.8-233.4 ng/ml. |
| **Purity** | Greater than 90% as determined by SDS-PAGE. |
| **Sequence** | KESCDVQLYIKRQSEHSILAGDPFELECPVKYCANRPHVTWCKLNGTTCVKLEDRQTSWKEEKNISFFILHFEPVLPNDNGSYRCSANFQSNLIESHSTTLYVTDVKSASERPSKDEMAS |
| **Lead Time** | 3-7 business days |
| **Research Area** | Cancer |
| **Source** | Mammalian cell |
| **Gene Names** | BTLA |
| **Expression Region** | 31-150aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | C-terminal hFc-Myc-tagged |
| **Mol. Weight** | 43.9 kDa |
| **Protein Description** | Partial |
| **Image** | |




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.




Activity
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## Description

The recombinant human B- and T-lymphocyte attenuator (BTLA) was produced in mammalian cells. The DNA fragment used to prepare the recombinant BTLA protein corresponds to amino acid 31-150 of the human BTLA protein containing a C-terminal hFc-Myc-tag. This BTLA protein is an active protein, whose bio-activity has been validated in a functional ELISA (bind to biotinylated human TNFRSF14 with the $EC_{50}$ of 137.8-233.4 ng/ml). Its purity reaches up to 90%, determined by SDS-PAGE. Due to the glycosylation, this BTLA protein has an apparent molecular mass of 55 kDa on the gel while its predicted mass is 43.9 kDa. Its endotoxin is less than 1.0 EU/ug measured by the LAL method. It is available now.

BTLA is an immunomodulatory molecule widely expressed on the surface of immune cells. Upon binding to its ligand HVEM, BTLA can influence various signaling pathways and negatively regulate the activation and proliferation of immune cells. It is implicated in the pathogenesis of many respiratory diseases, including airway inflammation, asthma, infection, and pneumonia.

## Endotoxin

Less than 1.0 EU/ug as determined by LAL method.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.