



Synonym

TNFSF13B,BAFF,BLYS,CD257,DTL,TALL1,THANK,TNFSF20,ZTNF4,TAL L-1

Source

Biotinylated Mouse BAFF Protein, Avitag,His Tag(BAF-M82Q3) is expressed from human 293 cells (HEK293). It contains AA Ala 127 - Leu 309 (Accession # [Q9WU72-1](#)).

Molecular Characterization

This protein carries an Avi tag (Avitag™) at the N-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 65.8 kDa. The protein migrates as 60-65 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Labeling

Biotinylation of this product is performed using Avitag™ 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.

Purity

>90% as determined by SDS-PAGE.
>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

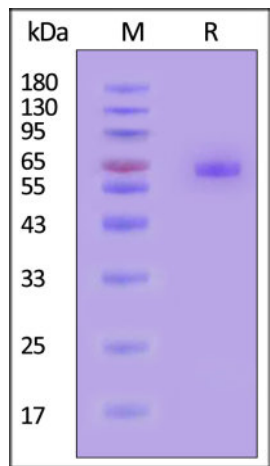
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

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:

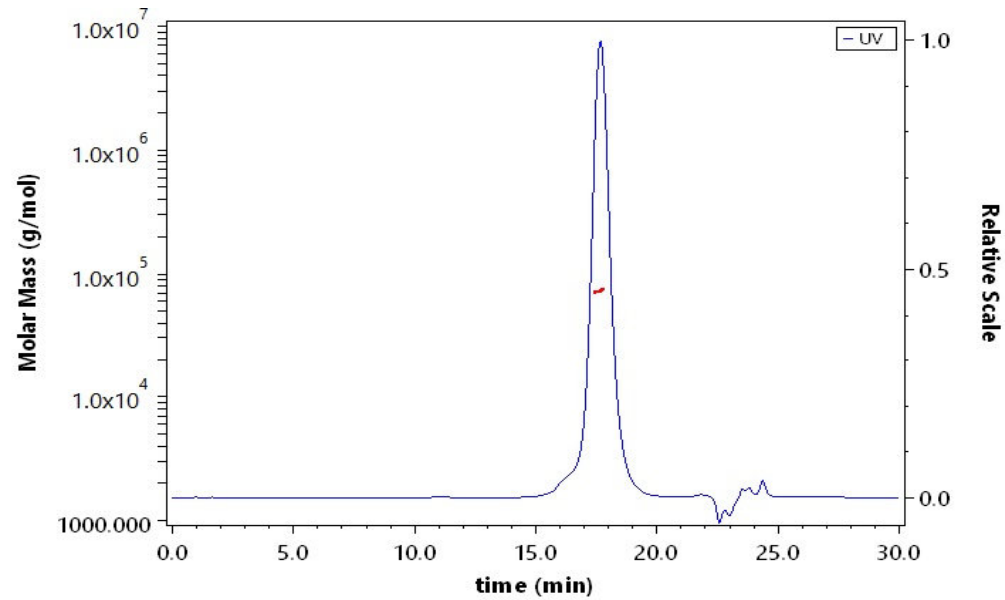
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Mouse BAFF Protein, Avitag,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% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



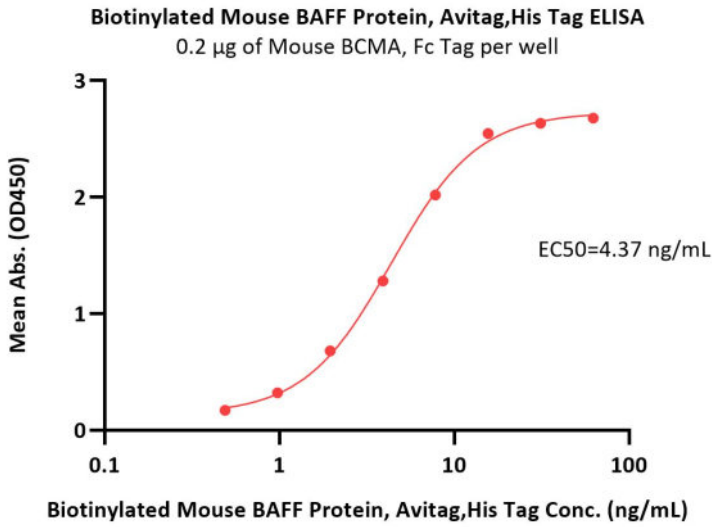
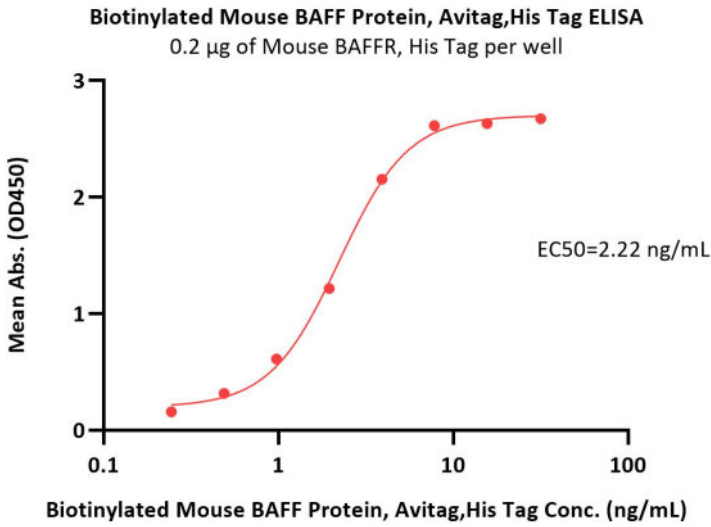
The purity of Biotinylated Mouse BAFF Protein, Avitag,His Tag (Cat. No. BAF-M82Q3) is more than 95% and the molecular weight of this protein is around 60-80 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA



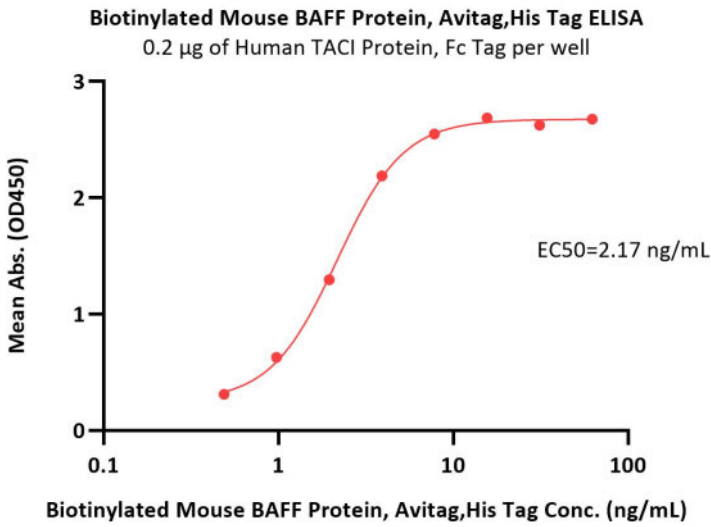
Biotinylated Mouse BAFF / TNFSF13B / CD257 Protein, Avitag™,His Tag, active trimer (MALS verified)

Catalog # BAF-M82Q3



Immobilized Mouse BAFFR, His Tag (Cat. No. BAR-M52H8) at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse BAFF Protein, Avitag,His Tag (Cat. No. BAF-M82Q3) with a linear range of 0.2-4 ng/mL (QC tested).

Immobilized Mouse BCMA, Fc Tag (Cat. No. BCA-M5258) at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse BAFF Protein, Avitag,His Tag (Cat. No. BAF-M82Q3) with a linear range of 0.4-8 ng/mL (Routinely tested).



Immobilized Human TACI Protein, Fc Tag at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse BAFF Protein, Avitag,His Tag (Cat. No. BAF-M82Q3) with a linear range of 0.4-4 ng/mL (Routinely tested).

Background

B-cell activating factor (BAFF) is also known as tumor necrosis factor ligand superfamily member 13B , TNFSF13B, BAFF, B Lymphocyte Stimulator (BLyS) , cluster of differentiation 257 (CD257), DTL, TNF- and APOL-related leukocyte expressed ligand (TALL-1), THANK, TNFSF20, ZTNF4, and is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This cytokine is a ligand for receptors TNFRSF13B/TACI, TNFRSF17/BCMA, and TNFRSF13C/BAFFR. This cytokine is expressed in B cell lineage cells, and acts as a potent B cell activator. It has been also shown to play an important role in the proliferation and differentiation of B cells. It is expressed as transmembrane protein on various cell types including monocytes, dendritic cells and bone marrow stromal cells. BAFF is the natural ligand of three unusual tumor necrosis factor receptors named BAFF-R, TACI, and BCMA, all of which have differing binding affinities for it. These receptors are expressed mainly on mature B lymphocytes (TACI is also found on a subset of T-cells and BCMA on plasma cells). TACI binds worst since its affinity is higher for a protein similar to BAFF, called a proliferation-inducing ligand (APRIL). BCMA displays an intermediate binding phenotype and will work with either BAFF or APRIL to varying degrees. Signaling through BAFF-R and BCMA stimulates B lymphocytes to undergo proliferation and to counter apoptosis. All these ligands act as heterotrimers (i.e. three of the same molecule) interacting with heterotrimeric receptors, although BAFF has been known to be active as either a hetero- or homotrimer. BAFF acts as a potent B cell activator and has been shown to play an important role in the proliferation and differentiation of B cells.

