Biotinylated Mouse BAFF / TNFSF13B / CD257 Protein, Tag Free, ultra sensitivity (primary amine labeling)

Catalog # BAF-M8219

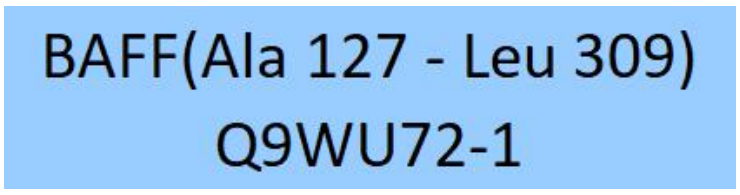
Synonym

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

Source

Biotinylated Mouse BAFF, Tag Free, primary amine labeling (BAF-M8219) is expressed from human 293 cells (HEK293). It contains AA Ala 127 - Leu 309 (Accession # Q9WU72-1). It is the biotinylated form of Mouse BAFF / TNFSF13B / CD257 Protein, Tag Free (Cat. No. BAF-M521y).

Molecular Characterization



This protein carries no "tag".

The protein has a calculated MW of 20.9 kDa. The protein migrates as 20-25 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% as determined by SDS-PAGE.

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

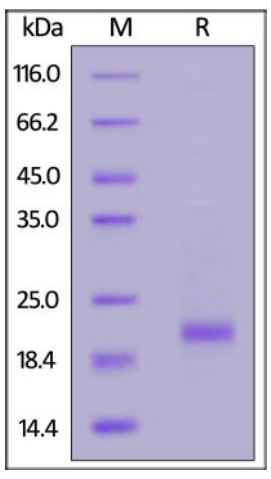
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

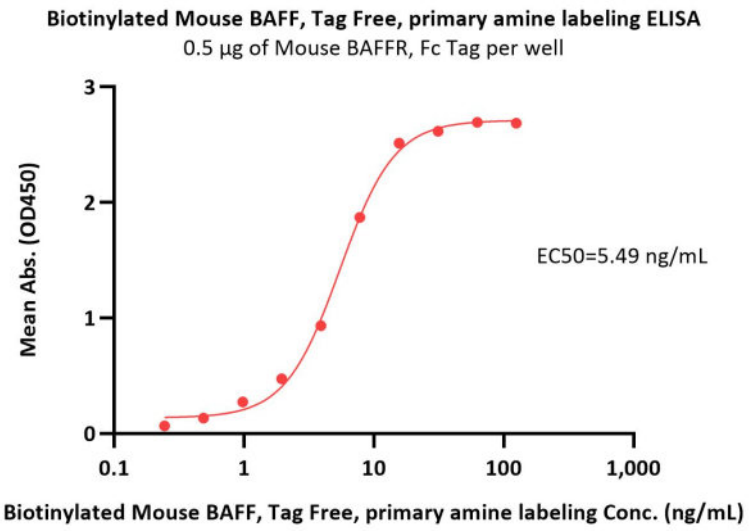
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Mouse BAFF, Tag Free, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Mouse BAFFR, Fc Tag (Cat. No. BAR-M5259) at 5 μg/mL (100 μL/well) can bind Biotinylated Mouse BAFF, Tag Free, primary amine labeling (Cat. No. BAF-M8219) with a linear range of 0.2-16 ng/mL (QC 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.