Human BAFF / TNFSF13B / CD257 Protein, Fc Tag

Catalog # BAF-H4268

Synonym

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

Source

Human BAFF, Fc Tag (BAF-H4268) is expressed from human 293 cells (HEK293). It contains AA Ala 134 - Leu 285 (Accession # AAH20674.1).

Molecular Characterization

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 44.0 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

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

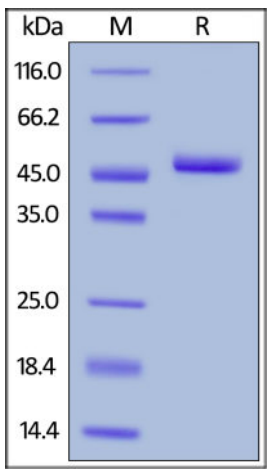
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

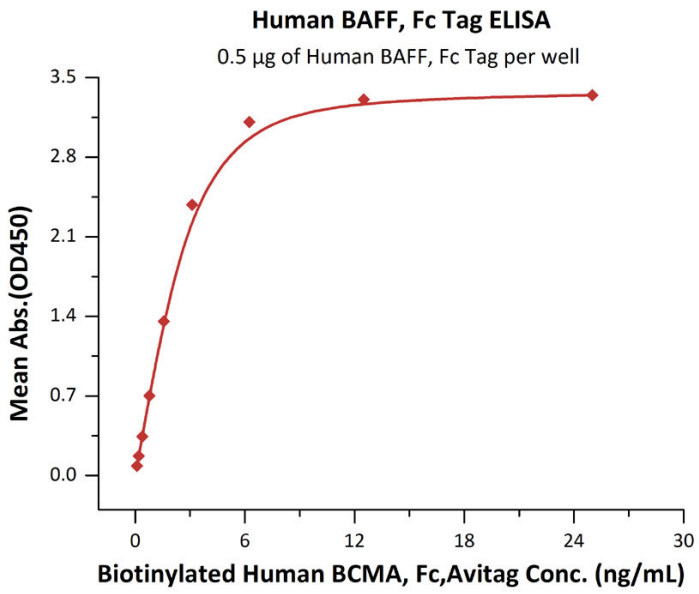
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

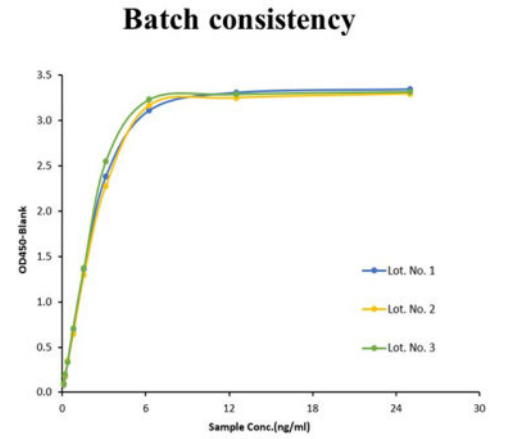
SDS-PAGE



Human BAFF, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

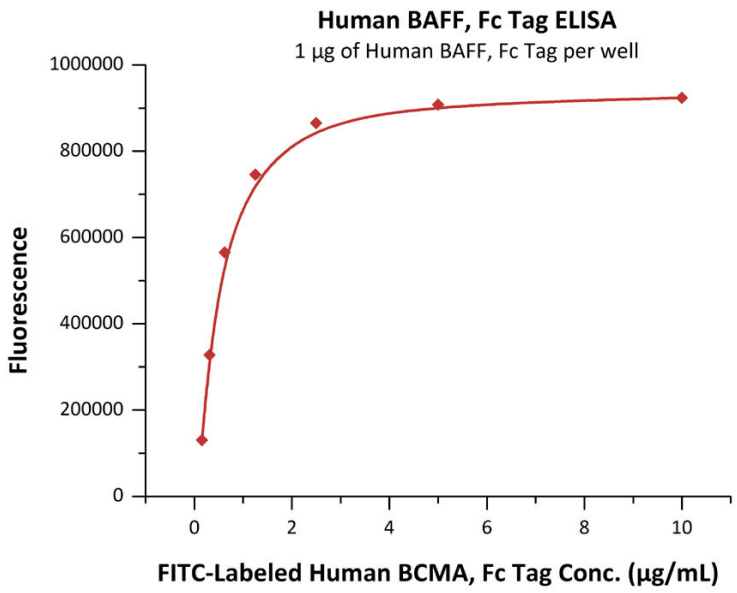




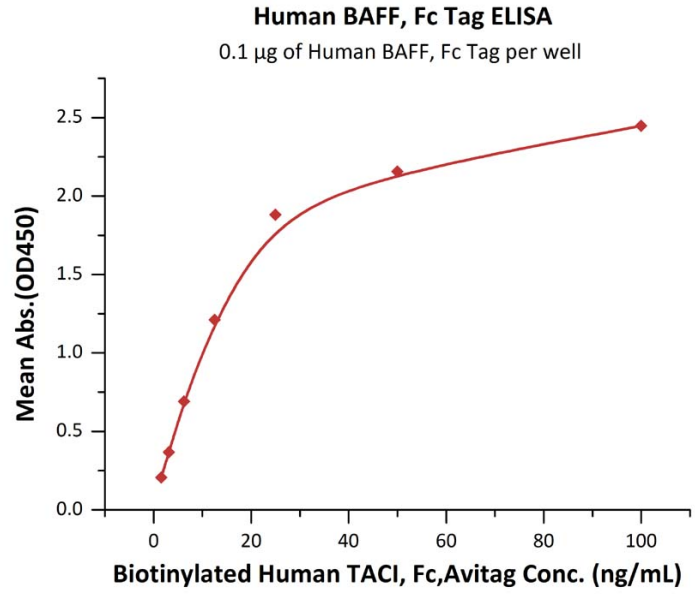
Lot. No.	EC50(μg/mL)
Lot. No. 1	0.0020
Lot. No. 2	0.0021
Lot. No. 3	0.0019

Report

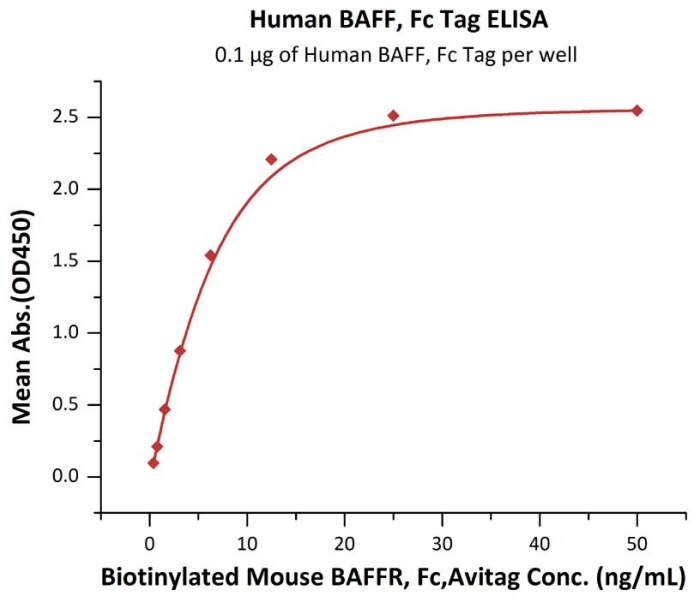
Immobilized Human BAFF, Fc Tag (Cat. No. BAF-H4268) at 5 μg/mL (100 μL/well) can bind Biotinylated Human BCMA, Fc,Avitag (Cat. No. BC7-H82F0) with a linear range of 0.2-3 ng/mL (QC tested).



Immobilized Human BAFF, Fc Tag (Cat. No. BAF-H4268) at 10 μg/mL (100 μL/well) can bind FITC-Labeled Human BCMA, Fc Tag (Cat. No. BCA-HF254) with a linear range of 0.15-0.625 μg/mL (Routinely tested).



Immobilized Human BAFF, Fc Tag (Cat. No. BAF-H4268) at 1 μg/mL (100 μL/well) can bind Biotinylated Human TACI, Fc,Avitag (Cat. No. TAI-H82F6) with a linear range of 2-25 ng/mL (Routinely tested).



Immobilized Human BAFF, Fc Tag (Cat. No. BAF-H4268) at 1 μg/mL (100 μL/well) can bind Biotinylated Mouse BAFFR, Fc,Avitag (Cat. No. BAR-M82F0) with a linear range of 0.4-6 ng/mL (Routinely tested).

Background

Human BAFF / TNFSF13B / CD257 Protein, Fc Tag

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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.

References

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.