Datasheet for ABIN3137675

BAFF Protein (AA 134-285) (AVI tag,Fc Tag,Biotin)

3 Images

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Overview

Quantity:	200 µg
Target:	BAFF (TNFSF13B)
Protein Characteristics:	AA 134-285
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This BAFF protein is labelled with AVI tag,Fc Tag,Biotin.

Product Details

Brand:	MABSol®,PrecisionAvi
Sequence:	AA 134-285
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	This protein carries an Avi tag (Avitag™) at the N-terminus, followed by a human IgG1 Fc tag. The protein has a calculated MW of 44.9 kDa. As a result of Glycosylation, the protein migrates as 50 kDa under reducing (R) condition, and 200 kDa under non-reducing (NR) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	BAFF (TNFSF13B)
Alternative Name:	BAFF (TNFSF13B Products)
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.
Molecular Weight:	44.9 kDa
Pathways:	NF-kappaB Signaling, Production of Molecular Mediator of Immune Response

Application Details

Comment:	Ready-to-use AvitagTM biotinylated protein: The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA. This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does

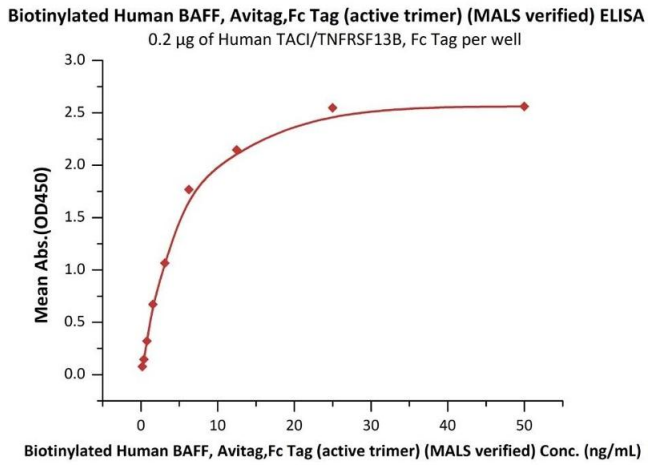
Application Details

	NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images



ELISA

Image 1. Immobilized Human TACI/TNFRSF13B, Fc Tag (ABIN5674644,ABIN6253675) at 2 µg/mL (100 µL/well) can bind Biotinylated Human BAFF, Avitag,Fc Tag (active trimer) (MALS verified) (ABIN3137675,ABIN4369372) with a linear range of 0.2-6 ng/mL (Routinely tested).

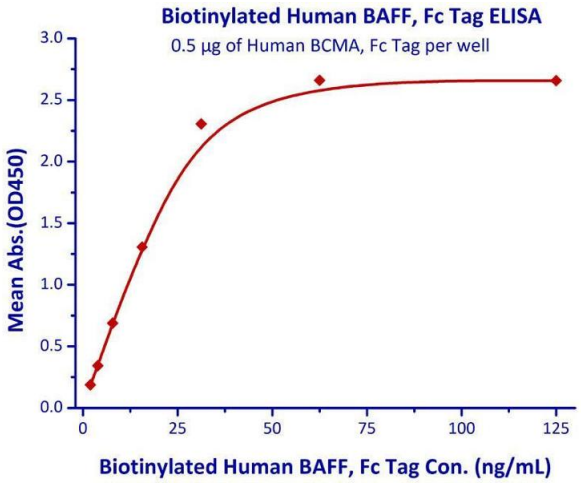
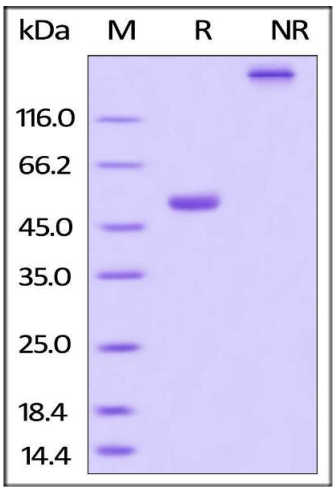


Image 2. Measured by its binding ability in a functional ELISA. Immobilized Human BCMA, Fc Tag with a linear range of 1.95-15.6 ng/mL.



SDS-PAGE

Image 3. Biotinylated Human BAFF, Fc Tag on SDS-PAGE under reducing (R) and no-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

