

Recombinant Human TNFSF13B protein, His-tagged

Cat. No. TNFSF13B-1818H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TNFSF13B protein (Ala134-Leu285), fused to His tag at N-terminus, was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	152
Description	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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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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.

Form	Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 18.4 kDa. The protein migrates as 18 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name **TNFSF13B**

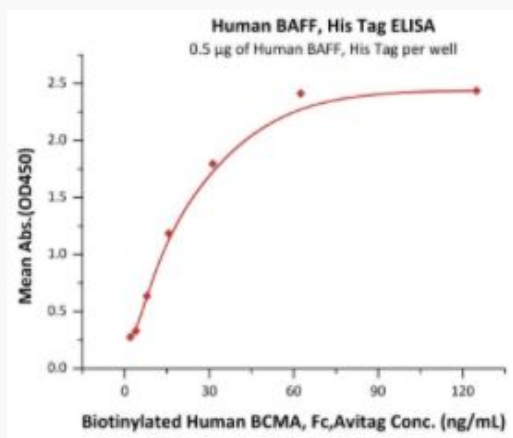
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Official Symbol	TNFSF13B
Synonyms	DTL; BAFF; BLYS; CD257; TALL1; THANK; ZTNF4; TALL-1; TNLG7A; TNFSF20
Gene ID	10673
mRNA Refseq	NM_006573.4
Protein Refseq	NP_006564.1
MIM	603969
UniProt ID	Q9Y275

Bioactivity-ELISA of TNFSF13B-1818H



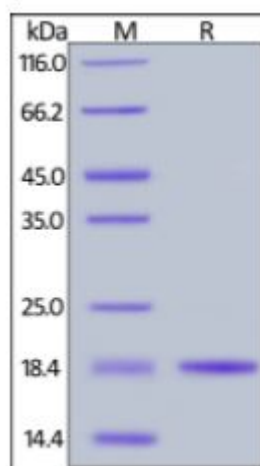
Immobilized Human BAFF, His Tag at 5 µg/mL (100 µL/well) can bind Biotinylated Human BCMA, Fc,Avitag with a linear range of 4-16 ng/mL (QC tested).

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**SDS-PAGE of
TNFSF13B-1818H**



Human BAFF, His 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%.

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