

BAFF, Human CellExp™, human recombinant

CATALOG #:	7222-10	10 µg
ALTERNATE NAMES:	TNFSF13B, BAFF, BLYS, CD257, DTL, TALL-1, TALL1, THANK, TNFSF20, ZTNF4	
SOURCE:	HEK 293 cells (Ala134-Leu285)	
PURITY:	≥ 96% by SDS-PAGE gel	
MOL. WEIGHT:	This protein has a calculated MW of 17.2 kDa. DTT-reduced protein migrates as a 19 kDa polypeptide.	

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in 50 mM tris, 150 mM NaCl, pH 8.0. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

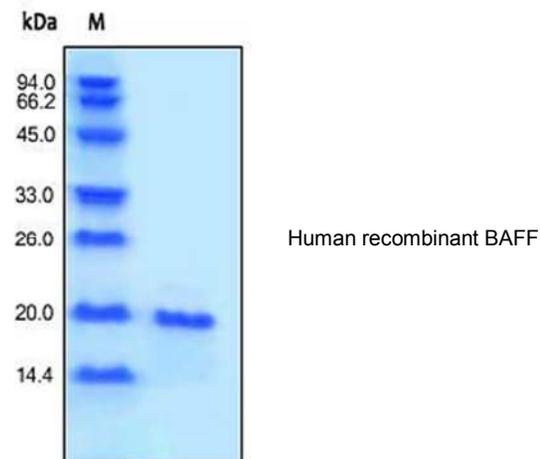
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: B-cell activating factor (BAFF), 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.

BIOLOGICAL ACTIVITY: Measured in a cell proliferation assay using anti-IgM stimulated mouse B cells. The ED₅₀ for this effect is typically 0.3-1.8 ng/ml in the presence of goat anti mouse IgM µ chain.



RELATED PRODUCTS:

- BAFF, human recombinant (Cat # 4451-20, -100, -500, -1000)
- BAFF, rat recombinant (Cat # 4453-20, -100, -1000)
- BAFF Receptor, human recombinant (Cat # 4452-10, -50, -1000)
- BAFF antibody (Cat # 3203-100)
- BAFF antibody (Cat # 5453-100)
- BAFF-R antibody (Cat # 3578-100)
- BAFF-R antibody (Cat # 3578R-100)

FOR RESEARCH USE ONLY! Not to be used in humans.