TNFSF13B
Recombinant Human BLyS / TNFSF13B / BAFF (Fc Tag)

Catalog No.	CRH386A-Fc CRH386B-Fc	**Quantity:**	20 µg 100 µg

Alternate Names: Tumor necrosis factor ligand superfamily member 13B, B lymphocyte stimulator, BLyS, B-cell-activating factor, BAFF, Dendritic cell-derived TNF-like molecule, TNF- and APOL-related leukocyte expressed ligand 1, TALL-1, CD257

Description: B lymphocyte stimulator (BLyS), also known as TNFSF13B, CD257 and BAFF, is single-pass type II membrane protein, which belongs to the tumor necrosis factor family. BAFF is abundantly expressed in peripheral blood Leukocytes and is specifically expressed in monocytes and macrophages. BAFF is a cytokine and serves as a ligand for receptors TNFRSF13B (TACI), TNFRSF17 (BCMA), and TNFRSF13C (BAFFR). These receptors is a prominent factor in B cell differentiation, homeostasis, and selection. BLyS levels affect survival signals and selective apoptosis of autoantibody-producing B cells. Thus, it acts as a potent B cell activator and has been shown to play an important role in the proliferation and differentiation of B cells. Overexpression of BLyS in mice can lead to clinical and serological features of systemic lupus erythematosus (SLE) and Sjögren's syndrome (SS). BLyS as an attractive therapeutic target in human rheumatic diseases. The ability of BLyS to regulate both the size and repertoire of the peripheral B cell compartment raises the possibility that BLyS and antagonists thereof may form the basis of a therapeutic trichotomy. As an agonist, BLyS protein may enhance humoral immunity in congenital or acquired immunodeficiencies such as those resulting from viral infection or cancer therapy.

UniProt ID: Q9Y275

Accession Number: Q9Y275-1

Protein Construction: A DNA sequence encoding the soluble form of human BAFF (Q9Y275-1) (Ala 134-Leu 285) was fused with the Fc region of human IgG1 at the N-terminus.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The recombinant human BAFF/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 389 amino acids and has a predicted molecular mass of 43.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhBAFF/Fc monomer is approximately 48-55 kDa due to glycosylation.

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per µg protein as determined by the LAL method.

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Biological Activity: 1. Measured by its binding ability in a functional ELISA. Immobilized recombinant human BAFF at 1 µg/mL (100 µl/well) can bind human TNFRSF17, EC50 is 0.07 µg/mL.
2. Measured in a cell proliferation assay in mouse splenocytes. The ED50 for this effect is typically 0.6-3.2 ng/ml.

Predicted N-terminal: Glu 20

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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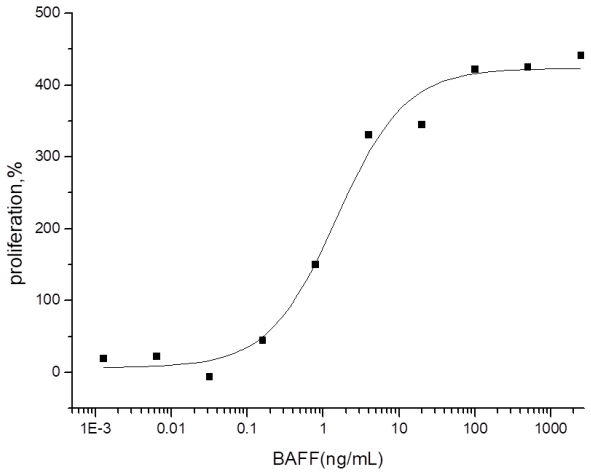
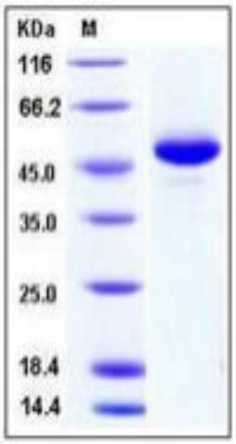


SDS-PAGE



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