



# Recombinant Protein Technical Manual

## Recombinant Human BLyS/TNFSF13B/BAFF Protein (Fc Tag)(Active) RPES2617

### Product Data:

**Product SKU:** RPES2617

**Size:** 5µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** Q9Y275

### Protein Information:

**Molecular Mass:** 43.7 kDa

**AP Molecular Mass:** 48-55 kDa

**Tag:** N-Fc

**Bio-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. The EC50 of human TNFRSF17 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.

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

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

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Cell Culture, Functional ELISA

**Synonyms:** BAFF;BLYS;CD257;DTL;TALL;TALL1;THANK;TNFSF20;ZTNF4

## Immunogen Information:

**Sequence:** Ala 134-Leu 285

## Background:

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.