

Human BLyS / TNFSF13B / BAFF Protein (ECD)

Catalog Number: 10056-HNCH



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

BAFF; BLyS; CD257; DTL; TALL-1; TALL1; THANK; TNFSF20; ZTNF4

Protein Construction:

A DNA sequence encoding the soluble form of human BAFF (Q9Y275-1) (Ala 134-Leu 285) was expressed and purified.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured in a cell proliferation assay using mouse splenocytes. The ED50 for this effect is typically 0.1-1.5 ng/mL.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Ala 134

Molecular Mass:

The recombinant human BAFF consists of 152 amino acids and has a predicted molecular mass of 17 kDa. In SDS-PAGE under reducing conditions, rhBAFF migrates as an approximately 19 kDa band.

Formulation:

Lyophilized from sterile PBS, 5% Trehalose, 10% Glycerol, 0.1 M Arg, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

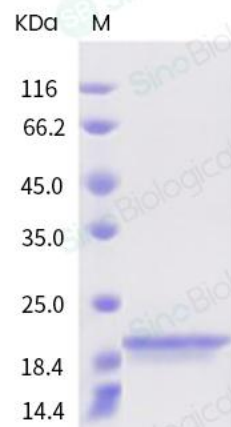
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein 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.

References

- 1.Nardelli B, et al. (2002) B lymphocyte stimulator (BLyS): a therapeutic trichotomy for the treatment of B lymphocyte diseases. Leuk Lymphoma. 43(7): 1367-73.
- 2.Stohl W. (2006) Therapeutic targeting of B lymphocyte stimulator (BLyS) in the rheumatic diseases. Endocr Metab Immune Disord Drug Targets. 6(4): 51-8.
- 3.Cancro MP, et al. (2009) The role of B lymphocyte stimulator (BLyS) in systemic lupus erythematosus. J Clin Invest. 119(5): 1066-73.