Human BLyS / TNFSF13B / BAFF Protein (Fc Tag)

Catalog Number: **10056-H01H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

BAFF; BLYS; CD257; DTL; TALL-1; TALL1; THANK; TNFSF20; ZTNF4; BAFF; BLyS; D8Ertd387e; 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 fused with the Fc region of human IgG1 at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

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 EC_{50} of human TNFRSF17 is 0.07 μg/mL. 2. Measured in a cell proliferation assay using anti-IgM stimulated mouse splenic cells. The ED_{50} for this effect is typically 50-150 ng/mL.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu 20

Molecular Mass:

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.

Formulation:

Lyophilized from sterile PBS, 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

Storage:

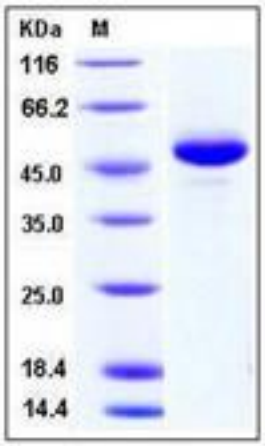
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.