

BlyS/BAFF

**B Lymphocyte Stimulator/ B cell-activating factor belonging to the TNF family
human, recombinant, *E. coli***

Cat. No.	Amount
PR-406	20 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Lyophilized.

Solubility

It is recommended to reconstitute the lyophilized BAFF in sterile bidest H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Activity

ED₅₀: < 10 ng/ml, determined by the dose-dependent stimulation of IL-8 production by human Peripheral Blood Mononuclear Cells (PBMCs).

Aminoacid sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Val-Gln-Gly

Molecular Weight

17 kDa

Purity

≥ 95% by SDS-PAGE and RP-HPLC

Description

The TNF-related ligand, B cell-activating factor belonging to the TNF family (BAFF), is necessary for normal B cell development and survival, and specifically binds the receptors transmembrane activator and calcium-modulator and cyclophilin ligand interactor (TACI), B cell maturation Antigen (BCMA), and BAFF-R. Using specific mAbs, BAFF-R was found to be the predominant receptor expressed on peripheral B cells, in both humans and mice. BAFF expression on human monocytes could be upregulated by IFN γ .

BAFF produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 153 amino acids and having a molecular mass of 17 kDa. Recombinant BAFF is purified by proprietary chromatographic techniques.

Selected References:

- Moore *et al.* (1999) BlyS: member of the tumor necrosis factor family and B lymphocyte stimulator. *Science*. **285**:260.
- Yamada *et al.* (2005) B Lymphocyte Stimulator activates p38 MAPK in Human Ig Class Switch Recombination. *Am. J. Respir. Cell Mol. Biol.* Jan 24, [Epub ahead of print].
- Morrison *et al.* (2005) An atypical TRAF-binding motif of BAFF receptor mediates induction of the noncanonical NF- κ B signaling pathway. *J. Biol. Chem.* **280**:10018.
- Krumbholz *et al.* (2005) BAFF is produced by astrocytes and upregulated in multiple sclerosis lesions and primary central nervous system lymphoma. *J. Exp. Med.* **201**:195.
- Laird *et al.* (2005) Optimization of BlyS production and purification from *Escherichia coli*. *Protein Expr. Purif.* **39**:237.
- Gottenberg *et al.* (2005) Serum B lymphocyte stimulator and beta2-microglobulin correlation with autoantibody secretion and systemic involvement in primary Sjogren's syndrome. *Ann. Rheum. Dis.* **64**:114.