

# Recombinant Human B Lymphocyte Stimulator (rh BAFF / CD257)

**Synonymes** BLYS, THANK, zTNF4, TALL-1, TNFSF13B, B-cell Activating Factor.

**Introduction:** BAFF, a member of the TNF family of ligands, is expressed in T cells, macrophages, monocytes and dendritic cells. BAFF is involved in stimulation of B and T cell function, and is an important survival and maturation factor for peripheral B cells. BAFF signals through three different TNF receptors TACI, BCMA and BAFF-R. The human BAFF gene codes for a 285 amino acid type II transmembrane protein containing a 46 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain, and a 218 amino acid extracellular domain. The protein contains the TNF-like portion of the extracellular domain of BAFF.

Administration of BAFF to mice disrupts splenic B-cell and T-cell zones and results in elevated levels of serum immunoglobulin.

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

**Source:** Escherichia Coli

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.22µm filtered solution in PBS, pH 7.4  
The samples of 1 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh BAFF in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh BAFF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh BAFF should be stored at 4° C between 2-7 days and for future use below -18° C. Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Amino Acid Sequence:** MAVQGPEETV TQDCLQLIAD SETPTIQKGS YTFVPWLLSF KRGSALLEEKE  
NKILVKETGY FFIYQVLYT DKTYAMGHLI QRKKVHVFGD ELSLVTLFRC IQNMPETLPN NSCYSAGIAK  
LEEGDELQLA IPRENAQISL DGDVTFFGAL KLL.

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Biological Activity:** Tested by its ability to stimulate secretion of IL-8 of human PBMCs. The ED50 for this effect is less than 10ng/ml corresponding to a specific activity of 10<sup>5</sup> IU/mg

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11343430
<i>medium</i>	20 µg	Cat.N°	11343434
<i>large</i>	100 µg	Cat.N°	11343436

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