

Rev03  
Update: Dec,14,2021

**DATASHEET**

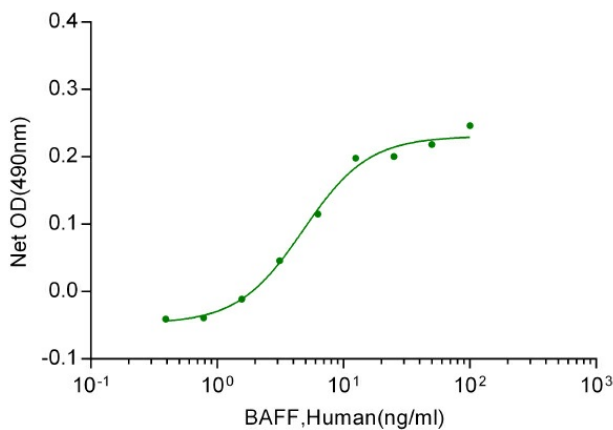
# BAFF, Human

Cat. No.: Z02976

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>BAFF (Ala134-Leu285) Accession # Q9Y275</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 20.0 ng/ml, determined by dose-dependent mitogenic activity on human RPMI 8226 cells, corresponding to a specific activity of > 5.0 x 10 <sup>4</sup> units/mg.
<b>Expression System</b>	CHO
<b>Apparent Molecular Weight</b>	~17 kDa, on SDS-PAGE under non-reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Examples



ED<sub>50</sub> < 20 ng/ml, determined by dose-dependent mitogenic activity on human RPMI 8226 cells, corresponding to a specific activity of >5.0 x 10<sup>4</sup> units/mg.

## Background

**Target Background :** B-cell activating factor, also known as BAFF, TALL-1, TNAK, and zTNF4, is a member of the TNF ligand superfamily designated TNFSF13B. Produced by macrophages, dendritic cells, and T lymphocytes, BAFF promotes the survival of B cells and is essential for B cell maturation. BAFF binds to three TNF receptor superfamily members: B-cell maturation antigen (BCMA/TNFRSF17), transmembrane activator and calcium-modulator and cyclophilin ligand interactor (TACI/TNFRSF13B) and BAFF receptor (BAFF R/BR3/TNFRSF 13C). These receptors are type III transmembrane proteins lacking a signal peptide. Whereas TACI and BCMA bind BAFF and another TNF superfamily ligand, APRIL (a proliferation-inducing ligand), BAFF R selectively binds BAFF. The BAFF R extracellular domain lacks the TNF receptor canonical cysteine-rich domain (CRD) and contains only a partial CRD with four cysteine residues. Human and mouse BAFF R share 56% aa sequence identity. BAFF R is highly expressed in spleen, lymph node and resting B cells. It is also expressed at lower levels in activated B cell, resting CD4<sup>+</sup> T cells, thymus and peripheral blood leukocytes.

**Synonyms :** BLYS; CD257; TALL1; THANK; ZTNF4; TALL-1; TNFSF20; TNFSF13B; B-cell Activating Factor

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**