

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant BAFF, Human

Catalog Number: BK0183-50µg

Source: CHO

Quantity: 50µg

### Description:

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+ T cells, thymus and peripheral blood leukocytes.

### Molecular Weight:

17kDa, observed by non-reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

### Biological Activity:

ED50 < 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.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

AVQGPEETVTQDCLQLIAD-  
SETPTIQKGSYTFVPWLLSFKRGSALEEK-  
ENKILVKETGYFFIYGQVLYTDK-  
TYAMGHLIQRKKVHVFGDELSLVTLFRCIQNM-  
PETLPNNSCYSAGIAKLEEGDELQLAIPRENA-  
QISLDGDVTFFGALKLL

### Endotoxin:

<0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant human B-Cell Activating Factor (BAFF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rh-BAFF should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

### Usage:

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