

# RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Recombinant Human BAFF (BLyS) Receptor

Catalog No. Source: 228-10092 Escherichia coli.

# Synonyms:

TNFRSF13C, CD268, BAFF-R, MGC138235, B cell-activating factor receptor.

#### Introduction:

B cell-activating factor (BAFF) enhances B-cell survival *in vitro* and is a regulator of the peripheral B-cell population. Overexpression of Baff in mice results in mature B-cell hyperplasia and symptoms of systemic lupus erythematosus (SLE). Also, some SLE patients have increased levels of BAFF in serum. Therefore, it has been proposed that abnormally high levels of BAFF may contribute to the pathogenesis of autoimmune diseases by enhancing the survival of autoreactive B cells. The protein encoded by this gene is a receptor for BAFF and is a type III transmembrane protein containing a single extracellular cysteine-rich domain. It is thought that this receptor is the principal receptor required for BAFF-mediated mature B-cell survival.

# Description:

B Lymphocyte Stimulator Receptor Human Recombinant extracellular produced in *E.coli* is a single, non-glycosylated polypeptide chain containing 76 amino acids and having a molecular mass of 7.7 kDa. The BAFF-R is purified by proprietary chromatographic techniques.

#### Source:

Escherichia coli.

# Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Formulation:

Lyophilized from a  $0.2~\mu m$  filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 8.0, 500mM NaCl.



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# Solubility:

It is recommended to reconstitute the lyophilized B Lymphocyte Stimulator Receptor Recombinant in sterile  $18M\Omega$ -cm  $H_2O$  not less than  $100~\mu g/ml$ , which can then be further diluted to other aqueous solutions.

# Stability:

Lyophilized BAFF-R although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution B Lymphocyte Stimulator Receptor should be stored at 4°C between 2-7 days and for future use below -18°C.

Please prevent freeze-thaw cycles.

# Amino Acid Sequence:

MRRGPRSLRGRDAPAPTPCVPAECFDLLVRHCVACGLLRTPRPKPAGASSPAPRTALQP QESVGAGAGEAALPLPG

# **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

# Biological Activity:

Determined by its ability to block BAFF induced mouse splenocyte survival. The expected ED<sub>50</sub> for this effect is  $1.0-5.0 \mu g/ml$  in the presence of  $1.0 \mu g/ml$  of human soluble BAFF.