



User Manual

B-Cell Maturation Antigen (BCMA) (Human)

Cat. No. HEOPP-02031

Description:

B-Cell Maturation Antigen (BCMA), a member of the TNF receptor superfamily, binds to BAFF and APRIL. BCMA is expressed on mature B-cells and other B-cell lines and plays an important role in B cell development, function and regulation. BCMA also has the capability to activate NF-kappaB and JNK. The human BCMA gene codes for a 184 amino acid type I transmembrane protein, which contains a 54 amino acid extracellular domain, a 23 amino acid transmembrane domain, and a 107 amino acid extracellular domain.

Source:

Escherichia coli

Unit:

5 µg

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 30% acetonitrile, 0.1% TFA.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 5.3 kDa, a single non-glycosylated polypeptide chain containing 50 amino

acids.

Endotoxin:

Less than 1 EU/μg of BCMA as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by its ability to inhibit APRIL-mediated proliferation of anti-IgM stimulated murine B cells is no less than 40 ng/mL, corresponding to a specific activity of $> 2.5 \times 10^4$ IU/mg in the presence of 100 ng/mL human APRIL.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

AGQCSQNEYF DSHLHACIPC QLRCSSNTPP LTCQRYCNAS VTNSVKGTNA

Purity:

> 98% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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