

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived human BCMA/TNFRSF17 protein		
	Human BCMA (Met1-Ala54) Accession # Q02223.2	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Met1		
Structure / Form	Disulfide-linked homodimer		
	Labeled with Alexa Fluor® 647		
	Excitation Wavelength: 650 nm Emission Wavelength: 668 nm		
Predicted Molecular Mass	32 kDa (monomer)		

SPECIFICATIONS

SDS-PAGE	35-45 kDa, reducing conditions
Activity	Measured by flow cytometry for its ability to bind anti-Human BCMA/TNFRSF17 Monoclonal Antibody conjugated beads. The concentration of Recombinant human BCMA/TNFRSF17 Chimera Alexa Fluor® 647 (Catalog# AFR193) that produces 50% of the binding response is 0.5-5.0 ng/mL.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Supplied as a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Protect from light. Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 6 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after opening. • 3 months, -20 to -70 °C under sterile conditions after opening.

DATA

<p>Flow Cytometry</p>	<p>Flow cytometry analysis for Recombinant Human BCMA/TNFRSF17 Fc Chimera Alexa Fluor® 647 staining on anti-Human BCMA/TNFRSF17 Monoclonal Antibody conjugated beads. Streptavidin coated beads conjugated to biotinylated anti-Human BCMA/TNFRSF17 Monoclonal Antibody were stained with the indicated concentrations of Recombinant Human BCMA/TNFRSF17 Fc Chimera Alexa Fluor® 647 (Catalog # AFR193).</p>	<p>SDS-PAGE</p>	<p>Recombinant Human BCMA/TNFRSF17 Fc Chimera Alexa Fluor® 647 Protein SDS-PAGE. 2 µg/lane of Recombinant Human BCMA/TNFRSF17 Fc Chimera Alexa Fluor® 647 Protein (Catalog # AFR193) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 35-45 kDa and 70-90 kDa, respectively.</p>
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BACKGROUND

BCMA, B cell maturation antigen, is a member of the TNF receptor superfamily. It has been designated TNFRSF17. BCMA is a type III membrane protein containing one extracellular cysteine rich domain. Within the TNFRSF, it shares the highest homology with TACI. BCMA and TACI have both been shown to bind to APRIL and BAFF, members of the TNF ligand superfamily. BCMA expression has been found in immune organs and mature B cell lines. Although some expression has been observed at the cell surface, BCMA appears to be localized to the Golgi compartment. The binding of BCMA to APRIL or BAFF has been shown to stimulate IgM production in peripheral blood B cells and increase the survival of cultured B cells. This data suggests that BCMA may play an important role in B cell development, function and regulation. Human BCMA is a 184 amino acid (aa) protein consisting of a 54 aa extracellular domain, a 23 aa transmembrane domain, and a 107 aa intracellular domain. Mouse and human BCMA share 62% amino acid identity.

References:

1. Madry, C. *et al.* (1998) *Int. Immunol.* **10**:1693.
2. Gras, M. *et al.* (1995) *Int. Immunol.* **7**:1093.
3. Kwon, B. *et al.* (1999) *Curr. Opin. Immunol.* **11**:340.
4. Marsters, S. *et al.* (2000) *Curr. Biol.* **10**:785.
5. Thompson, J. *et al.* (2000) *J. Exp. Med.* **192**:129.

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