

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived human BCMA/TNFRSF17 protein		
	Human BCMA/TNFRSF17 (Met1-Ala54) Accession # Q6PE46	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Met 1		
Structure / Form	Disulfide-linked homodimer, biotinylated via amines		
Predicted Molecular Mass	32 kDa		

SPECIFICATIONS

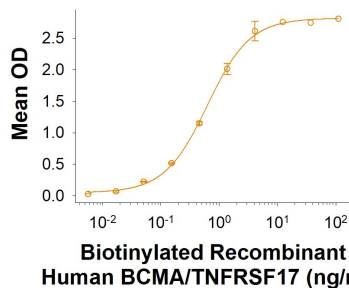
SDS-PAGE	31-48 kDa, under reducing conditions.
Activity	Measured by its binding ability in a functional ELISA. Biotinylated Recombinant Human BCMA/TNFRSF17 Fc Chimera (Catalog # BT193) binds Recombinant Human APRIL/TNFSF13 (Catalog # 5860-AP/CF) with an ED ₅₀ of 0.500-6.00 ng/mL.
Endotoxin Level	<0.10 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	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 250 µg/mL in water.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

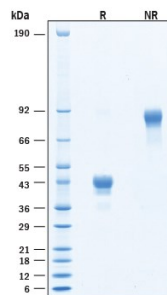
DATA

Binding Activity



Biotinylated Recombinant Human BCMA/TNFRSF17 Fc Chimera Protein Binding Activity. Biotinylated Recombinant Human BCMA/TNFRSF17 Fc Chimera Protein (Catalog # BT193) binds Recombinant Human APRIL/TNFSF13 (Catalog # 5860-AP/CF) with an ED₅₀ of 0.500-6.00 ng/mL.

SDS-PAGE



Biotinylated Recombinant Human BCMA/TNFRSF17 Fc Chimera Protein SDS-PAGE. 2 µg/lane of Biotinylated Recombinant Human BCMA/TNFRSF17 Fc Chimera Protein (Catalog # BT193) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 31-48 kDa and 60-100 kDa, respectively.

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.