

BCMA/TNFRSF17 Protein, Mouse (HEK293, Fc)

Cat. No.:	HY-P7656
Synonyms:	rMuBCMA/TNFRSF17, C-Fc; Tumor necrosis factor receptor superfamily member 17; TNFRSF17; BCMA
Species:	Mouse
Source:	HEK293
Accession:	O88472 (M1-T49)
Gene ID:	21935
Molecular Weight:	35-45 kDa

PROPERTIES

AA Sequence	MAQQCFHSEY FDSL L H A C K P C H L R C S N P P A T C Q P Y C D P S V T S S V K G T Y T
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>BCMA is expressed preferentially by mature B lymphocytes, with minimal expression in hematopoietic stem cells or nonhematopoietic tissue^[1]. BCMA is almost exclusively expressed on plasmablasts and PCs^[2].</p> <p>The amino acid sequence of human BCMA protein has low homology for mouse BCMA protein.</p> <p>BCMA is a 184 amino acid and 20.2-kDa type III transmembrane glycoprotein, with the extracellular N terminus containing a conserved motif of 6 cysteines. BCMA has two agonist ligands: a proliferation-inducing ligand (APRIL) and B cell activating factor (BAFF). Upon binding of the ligands to BCMA, activates B cells (NF-κβ), rat sarcoma/mitogen-activated protein kinase (RAS/MAPK), and phosphoinositide-3-kinase-protein kinase B/Akt (PI3K-PKB/Akt) signaling pathway. These pathways result in proliferation stimulation by modulating cell cycle checkpoints, increasing survival by upregulating anti-apoptotic proteins, and production of cell adhesion molecules, angiogenesis factors, and immunosuppressive molecules^[2].</p> <p>BCMA can be used as a promising antigen to target using a variety of immuno-therapy treatments including CART cells, for</p>
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MM patients^[3]. BCMA markedly reduces plasma IgA, IgG, and IgM levels and splenic Ig heavy chain mRNA levels in mouse^[4]. In BCMA^{-/-} mice, the long-term survival of PCs is impaired, but lack of BCMA has no effect in short-lived PCs, B cell development, or early humoral immune response, and the splenic architecture and germinal centers appear intact in these BCMA-deficient mice^[5]. BCMA overexpression significantly promotes in vivo growth of xenografted MM cells in murine models^[6].

REFERENCES

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Caution: Product has not been fully validated for medical applications. For research use only.

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