

## DESCRIPTION

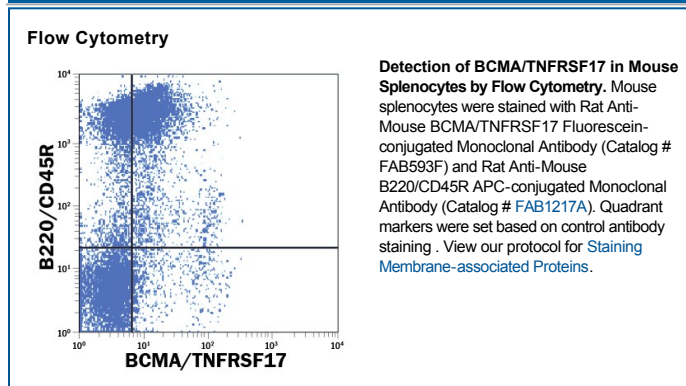
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse BCMA in direct ELISAs. In direct ELISAs, this antibody does not cross-react with recombinant human (rh) BCMA or rhTACI.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 161616
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse BCMA Met1-Thr49 Accession # O88472
<b>Conjugate</b>	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

BCMA (B Cell Maturation Antigen), also known as TNFRSF17, is a 22-26 kDa member of the TNFR superfamily. It is a type III transmembrane (TM) protein one that is synthesized as a type I TM protein that has a restricted expression pattern. Among the cells recognized to express BCMA are bone marrow plasma cells (PCs), adipocytes and stratum basale keratinocytes. At least some human BCMA is now known to be N-glycosylated, a modification that affects both its affinity for ligand, and its half-life on the cell surface. Mouse, by contrast, has no potential N-linked site, and any glycosylation would have to be either O-linked, or N-linked through the generation of an alternative splice form. In any case, and although the predicted MW of mouse BCMA is 20 kDa, it appears to run anomalously at 22-26 kDa in SDS-PAGE. Mouse BCMA is 185 amino acids (aa) in length. It contains a long, 115 aa cytoplasmic region and a short 49 aa extracellular domain characterized by two cysteine-rich segments. Ligands for BCMA are trimers, and include APRIL and BAFF homotrimers, plus APRIL:BAFF heterotrimers. In human, BCMA is known to be proteolytically cleaved and released, acting as an antagonist to APRIL AND BAFF signaling; in mouse, it is unclear if cleavage occurs. BCMA activation on PCs promotes PC survival, while on adipocytes, BCMA signaling downregulates adiponectin and leptin production, and on keratinocytes, BCMA ligation induces IL-6 and GM-CSF secretion. Over aa 1-49, mouse BCMA shares 65% and 90% aa sequence identity with human and rat BCMA, respectively.