

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human BCMA/TNFRSF17 in direct ELISAs. |
| Source | Monoclonal Mouse IgG ₁ Clone # 1039701 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human BCMA /TNFRSF17 Met1-Ala54 Accession # Q02223 |
| Conjugate | Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm |
| Formulation | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *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 |
|-----------------------|----------------------------------|----------------------------------|
| Flow Cytometry | 0.25-1 µg/10 ⁶ cells | RPMI8226 human myeloma cell line |

PREPARATION AND STORAGE

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

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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