

DESCRIPTION

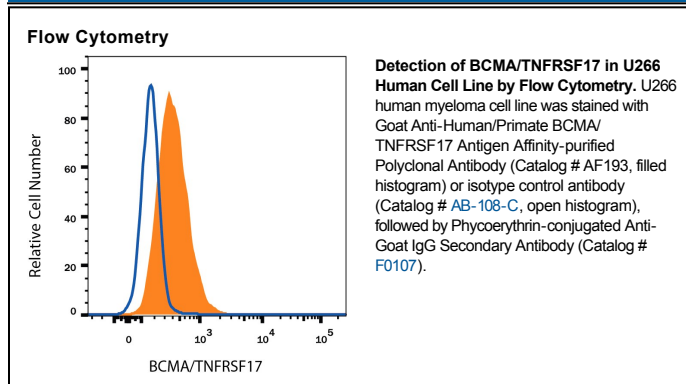
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|---------------------------|--|
| Species Reactivity | Human/Primate |
| Specificity | Detects human BCMA in ELISAs and Western blots. In sandwich ELISAs, less than 0.1% cross-reactivity with recombinant human (rh) APRIL, rhBAFF, rhTACI, and recombinant mouse BCMA is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human BCMA/TNFRSF17 Met1-Ala54 Accession # Q6PE46 |
| Endotoxin Level | <0.10 EU per 1 µg of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

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 |
|---|---|--|
| Western Blot | 0.1 µg/mL | Recombinant Human BCMA/TNFRSF17 Fc Chimera (Catalog # 193-BC) |
| Flow Cytometry | 0.25 µg/10 ⁶ cells | See Below |
| Human/Primate BCMA/TNFRSF17 Sandwich Immunoassay | | Reagent |
| ELISA Capture | 0.2-0.8 µg/mL | Human/Primate BCMA/TNFRSF17 Antibody (Catalog # AF193) |
| ELISA Detection | 0.1-0.4 µg/mL | Human/Primate BCMA/TNFRSF17 Biotinylated Antibody (Catalog # BAF193) |
| Standard | | Recombinant Human BCMA/TNFRSF17 Fc Chimera (Catalog # 193-BC) |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |
| Blockade of Receptor-ligand Interaction | In a functional ELISA, 0.3-1.2 µg/mL of this antibody will block 50% of the binding of 500 ng/mL of Recombinant Human APRIL/TNFSF13 (Catalog # 884-AP) to immobilized Recombinant Human BCMA/TNFRSF17 Fc Chimera (Catalog # 193-BC) coated at 1 µg/mL (100 µL/well). At 15 µg/mL, this antibody will block >90% of the binding. | |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| 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. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

BCMA, B cell maturation, 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.