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Datasheet for 600-401-Z51

# BCMA Antibody

## Overview

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| **Description:** | Anti-BCMA (RABBIT) Antibody - 600-401-Z51 |
| **Item No.:** | 600-401-Z51 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, IHC, WB |
| **Reactivity:** | Human |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Members in the TNF superfamily regulate immune responses and induce apoptosis. Two novel members in the TNF family were recently identified and designated BAFF/BLyS/TALL-1/THANK/zTNF4 and April/TALL-2, respectively. BAFF was characterized as a B cell activator since it induced B cell proliferation and immunoglobulin secretion. April regulates immunological and non-immunological cell growth. Three receptors, BCMA (for B cell maturation protein), TACI, and BAFF-R, for BAFF were recently identified. BCMA, like TACI, binds BAFF and April. BAFF and its receptors induce B cell development and survival, activate NF-kB and c-jun N-terminal kinase, and are involved in B cell associated autoimmune diseases. |
| **Synonyms:** | BCMA Antibody, BCM, BCMA, CD269, TNFRSF13A, BCM, Tumor necrosis factor receptor superfamily member 17, B-cell maturation protein |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | TNFRSF17 |
| **Reactivity:** | Human |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-BCMA antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide mapping at the C-terminus of human BCMA. The immunogen is located within the last 50 amino acids of BCMA. |
| **Purity/Specificity:** | Anti-BCMA Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with BCMA from other sources has not been determined. |
| **Relevant Links:** | • UniProtKB - Q02223<br>• GeneID - 608<br>• NCBI - NP_001183 |

## Application Details

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| **Tested Applications:** | ELISA, IF, IHC, WB |
| **Application Note:** | Anti-BCMA Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 20 kDa in Western Blots of specific cell lysates and tissues. Positive controls: human spleen tissue lysate, human colon tissue lysate. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:50,000 |
| **IF:** | 10-20 µg/mL |
| **IHC:** | 1-5 µg/mL |
| **WB:** | 1-4 µg/mL |

## Formulation

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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

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| **Shipping Condition:** | Wet Ice |

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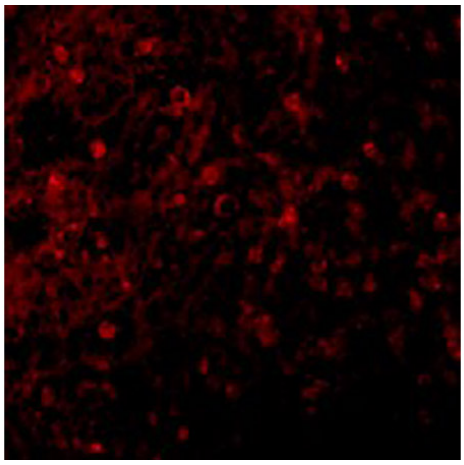
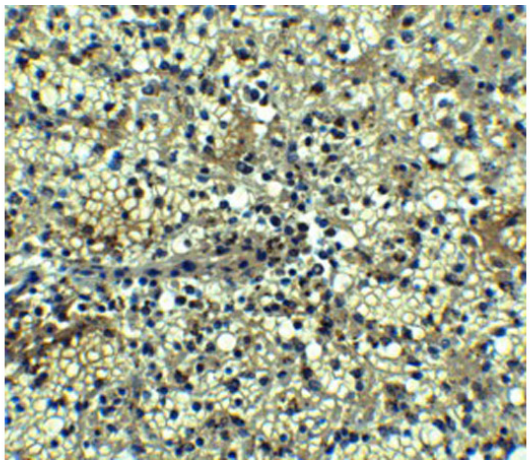
| **Storage Condition:** | Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images

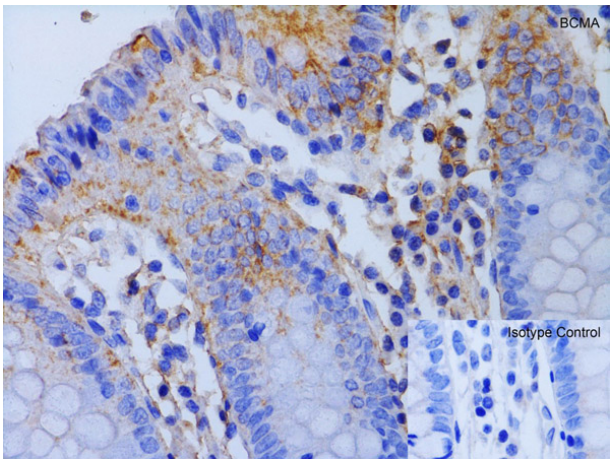


**Immunofluorescence Microscopy**
Immunofluorescence Validation of BCMA.
Tissue: Human Spleen.
Fixation: 4% paraformaldehyde-fixed.
Primary: BCMA at 10 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1:500 dilution (red).



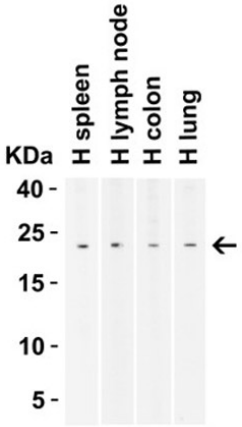
**Immunohistochemistry**
Immunohistochemistry Validation of BCMA.
Tissue: Human Spleen.
Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.
Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-BCMA antibody at 5 µg/ml overnight at 4°C.
Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.

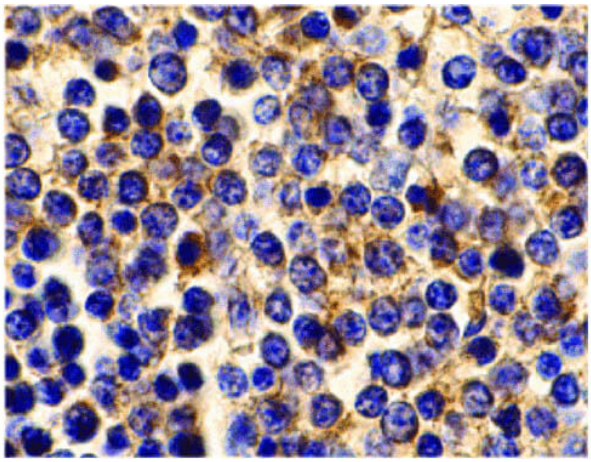



**Immunohistochemistry**
Immunohistochemistry Validation of BCMA.
Tissue: Human Colon.
Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.
Antigen retrieval: heat mediation with a citrate buffer (pH6).

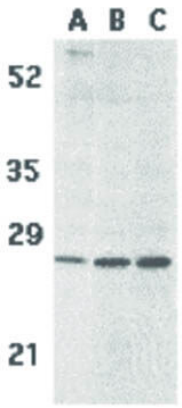
Primary Antibody: anti-BCMA antibody at 1 µg/ml overnight at 4°C.
Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.




**Western Blot**
Western Blot Validation of BCMA.
Load: 10 µg of human lysates. Lane 1: human spleen, Lane 2: human lymph node, Lane 3: human colon, Lane 4: human lung.
Primary Antibody: BCMA 2 µg/mL for 1 h incubation at RT in 5% NFDM/TBST.
Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



**Immunohistochemistry**
Immunohistochemistry of BCMA antibody. Tissue: Human spleen cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: BCMA antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: BCMA is localized in the cell membrane and in the endomembrane system. Staining: BCMA as precipitated brown signal with hematoxylin blue nuclear counterstain.




**Western Blot**

Western Blot of BCMA antibody. Lane 1: Human spleen tissue lysate. Lane 2: K562 cell lysate. Lane 3: U937 cell lysate. Load: 35 µg per lane. Primary antibody: BCMA antibody at 5 µg/mL for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 20.2 kDa, 28 kDa for BCMA. Other band(s): BCMA splice variants and isoforms.

## Disclaimer