

#### CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone B-B8]
Catalog # AH12615

#### **Specification**

# CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Product Information

Application IF, FC
Primary Accession P06127
Other Accession 921, 58685
Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Calculated MW 67kDa KDa

# CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 921

#### **Other Names**

T-cell surface glycoprotein CD5, Lymphocyte antigen T1/Leu-1, CD5, CD5, LEU1

#### **Application Note**

<span class ="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200/span><br/>br \><span class ="dilution FC">FC $\sim$ 1:10 $\sim$ 50/span>

#### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

# CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Protein Information

Name CD5

Synonyms LEU1

#### **Function**

Lymphoid-specific receptor expressed by all T-cells and in a subset of B-cells known as B1a cells. Plays a role in the regulation of TCR and BCR signaling, thymocyte selection, T-cell effector differentiation and immune tolerance. Acts by interacting with several ligands expressed on B-cells such as CD5L or CD72 and thereby plays an important role in contact-mediated, T-dependent B-cell activation and in the maintenance of regulatory T and B-cell homeostasis. Functions as a



negative regulator of TCR signaling during thymocyte development by associating with several signaling proteins including LCK, CD3Z chain, PI3K or CBL (PubMed:<a

href="http://www.uniprot.org/citations/1384049" target="\_blank">1384049</a>, PubMed:<a href="http://www.uniprot.org/citations/1385158" target="\_blank">1385158</a>).

Mechanistically, co- engagement of CD3 with CD5 enhances phosphorylated CBL recruitment leading to increased VAV1 phosphorylation and degradation (PubMed:<a

href="http://www.uniprot.org/citations/23376399" target="\_blank">23376399</a>). Modulates B-cell biology through ERK1/2 activation in a Ca(2+)-dependent pathway via the non-selective Ca(2+) channel TRPC1, leading to IL-10 production (PubMed:<a

href="http://www.uniprot.org/citations/27499044" target="\_blank">27499044</a>).

#### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P13379}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P13379}

### CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Images

## CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - Background

Recognizes a 67kDa transmembrane protein which is identified as CD5. The CD5 antigen is found on 95% of thymocytes and 72% of peripheral blood lymphocytes. In lymph nodes, the main reactivity is observed in T cell areas. Anti-CD5 is a pan T-cell marker that also reacts with a range of neoplastic B-cells, e.g. chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), mantle cell lymphoma, and a subset ( $\sim 10\%$ ) of diffuse large B-cell lymphoma. CD5 aberrant expression is useful in making a diagnosis of mature T-cell neoplasms. Note that this MAb is not suitable for frozen tissues.

### CD5 (Mantle Cell Lymphoma Marker) Antibody - With BSA and Azide - References

Berezowski K; et al. American Journal of Clinical Pathology, 1996 Oct, 106(4):483-6. | Ferry JA; et al. American Journal of Clinical Pathology, 1996 Jan, 105(1):31-7