

# BCL10 (MALT-Lymphoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM520] Catalog # AH10829

# **Product Information**

Application Primary Accession	WB, IF, FC, IHC-P 095999
Other Accession	<u>8915, 193516</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM520
Calculated MW	26252

## **Additional Information**

Gene ID	8915
Other Names	B-cell lymphoma/leukemia 10, B-cell CLL/lymphoma 10, Bcl-10, CARD-containing molecule enhancing NF-kappa-B, CARD-like apoptotic protein, hCLAP, CED-3/ICH-1 prodomain homologous E10-like regulator, CIPER, Cellular homolog of vCARMEN, cCARMEN, Cellular-E10, c-E10, Mammalian CARD-containing adapter molecule E10, mE10, BCL10, CIPER, CLAP
Application Note	WB~~1:1000 IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	BCL10 (MALT-Lymphoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	BCL10 {ECO:0000303 PubMed:9989495, ECO:0000312 HGNC:HGNC:989}
Function	Plays a key role in both adaptive and innate immune signaling by bridging CARD domain-containing proteins to immune activation (PubMed: <u>10187770</u> , PubMed: <u>10364242</u> , PubMed: <u>10400625</u> , PubMed: <u>24074955</u> , PubMed: <u>25365219</u> ). Acts by channeling adaptive and innate immune signaling

	downstream of CARD domain-containing proteins CARD9, CARD11 and CARD14 to activate NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (PubMed: <u>24074955</u> ). Recruited by activated CARD domain-containing proteins: homooligomerized CARD domain-containing proteins form a nucleating helical template that recruits BCL10 via CARD-CARD interaction, thereby promoting polymerization of BCL10, subsequent recruitment of MALT1 and formation of a CBM complex (PubMed: <u>24074955</u> ). This leads to activation of NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (PubMed: <u>18287044</u> , PubMed: <u>24074955</u> , PubMed: <u>27777308</u> ). Activated by CARD9 downstream of C-type lectin receptors; CARD9-mediated signals are essential for antifungal immunity (PubMed: <u>26488816</u> ). Activated by CARD11 downstream of T-cell receptor (TCR) and B-cell receptor (BCR) (PubMed: <u>18264101</u> , PubMed: <u>18287044</u> , PubMed: <u>24074955</u> , PubMed: <u>27777308</u> ). Promotes apoptosis, pro-caspase-9 maturation and activation of NF-kappa-B via NIK and IKK (PubMed: <u>10187815</u> ).
Cellular Location	Cytoplasm, perinuclear region. Membrane raft. Note=Appears to have a perinuclear, compact and filamentous pattern of expression. Also found in the nucleus of several types of tumor cells. Colocalized with DPP4 in membrane rafts.
Tissue Location	Ubiquitous

# Background

BCL10, with an N-terminal caspase recruitment domain (CARD), is found in a number of apoptotic regulatory molecules. It was identified through its direct involvement in t(1;14) of mucosa-associated lymphoid tissue (MALT) lymphoma. Expression of BCL10 was shown to induce NF IIB activation in a NIK-dependent pathway. This MAb labels subpopulations of normal B and T cells and is a useful tool for the sub-classification of lymphomas. In MALT lymphomas with the t(1;14) translocation, while 55% of MALT lymphomas lacking this translocation exhibited the same labeling pattern, although at a much lower level.

## References

Ye H et. al. Am J Pathol 2000;157:1147-54

### Images



Formalin-fixed, paraffin-embedded human Tonsil stained with BCL10 Monoclonal Antibody (SPM520).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.