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BCL-10 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1003a

Specification

BCL-10 Antibody - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	O95999
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**26kDa KDa**

Description
Bcl-10 (B-cell CLL/lymphoma 10), also known as CLAP, Me10, CIPER, c-E10, CARMEN. Entrez Protein NP_003912. It is a protein containing a caspase recruitment domain (CARD). It plays an important role in apoptosis and activating NF-kappaB. The research suggested that it interacted with other CARD domain containing proteins including CARD9, 10, 11 and 14, which were thought to function as upstream regulators in NF-kappaB signaling. Bcl-10 is found to form a complex with MALT1 which encoded by another gene known to be translocated in MALT lymphoma. MALT1 and Bcl-10 are thought to synergize in the activation of NF-kappaB, and the deregulation of either of them may contribute to the same pathogenetic process that leads to the malignancy.

Immunogen
Purified recombinant fragment of human BCL-10 expressed in E. Coli.

Formulation
Purified antibody in PBS containing 0.03% sodium azide.

BCL-10 Antibody - 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

Dilution
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400
ICC~~N/A
E~~N/A

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
BCL-10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BCL-10 Antibody - 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:10187770, PubMed:10364242, PubMed:10400625, PubMed:24074955, PubMed:25365219). 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:24074955). 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:24074955). 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:18287044, PubMed:24074955, PubMed:27777308). Activated by CARD9 downstream of C-type lectin receptors; CARD9-mediated signals are essential for antifungal immunity (PubMed:26488816). Activated by CARD11 downstream of T-cell receptor (TCR) and B-cell receptor (BCR) (PubMed:18264101, PubMed:18287044, PubMed:24074955, PubMed:27777308). Promotes apoptosis, pro-caspase-9 maturation and activation of NF-kappa-B via NIK and IKK (PubMed:10187815).

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..

BCL-10 Antibody - Protocols

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

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- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BCL-10 Antibody - Images

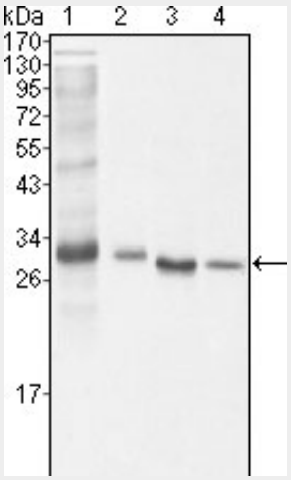

Figure 1: Western blot analysis using BCL10 mouse mAb against NIH/3T3 (1), Hela (2), MCF-7 (3) and Jurkat (4) cell lysate.

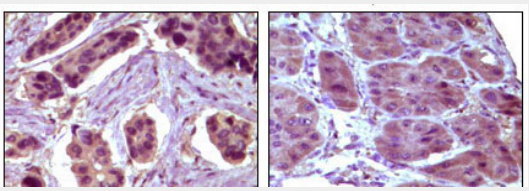

Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma (A) and liver carcinoma (B), showing cytoplasmic localization using BCL10 mouse mAb with DAB staining.

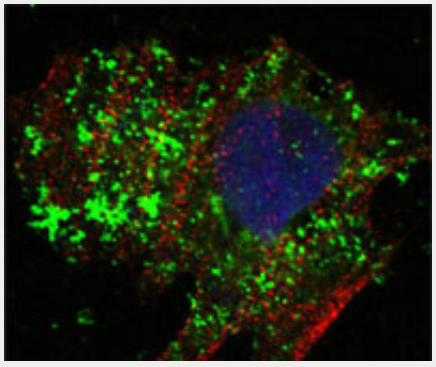

Figure 3: Confocal immunofluorescence analysis of Hela cells using BCL10 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

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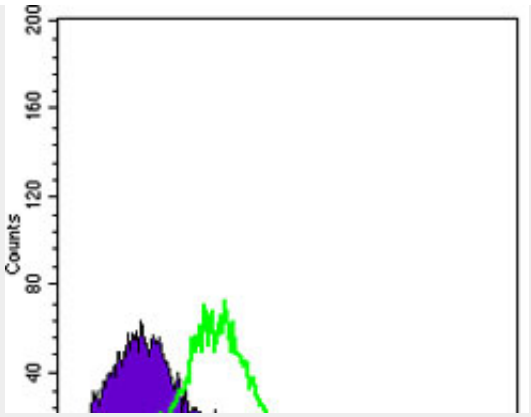

Figure 4: Flow cytometric analysis of Hela cells using BCL10 mouse mAb (green) and negative control (purple).

BCL-10 Antibody - References

1. Willis, T.G., et al. (1999) Cell. 96, 35-45. 2. Lucas, P.C., et al. (2001) J. Biol.Chem. 276, 19012-19019. 3. Wang, L., et al. (2001) J. Biol.Chem. 276, 21405-21409