

**Bcl-10 Antibody**  
**Catalog # ASC10077****Specification****Bcl-10 Antibody - Product Information**

Application	WB, IF, ICC, E
Primary Accession	<a href="#">O95999</a>
Other Accession	<a href="#">AF134395</a> , <a href="#">5070371</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	31 kDa KDa
Application Notes	Bcl-10 antibody can be used for detection of BCL10 by Western blot at 0.5 µg/mL dilution. An approximately 31 kDa band can be detected. Antibody can also be used for immunocytochemistry starting at 1 µg/mL. For immunofluorescence start at 10 µg/mL.

**Bcl-10 Antibody - Additional Information**Gene ID **8915****Other Names**

Bcl-10 Antibody: CLAP, mE10, CIPER, c-E10, CARMEN, CLAP, CARD-containing molecule enhancing NF-kappa-B, Bcl-10, B-cell CLL/lymphoma 10

**Target/Specificity**

BCL10;

**Reconstitution & Storage**

Bcl-10 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**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:&lt;a href="http://www.uniprot.org/citations/10187770" target="\_blank"&gt;10187770&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/10364242" target="\_blank"&gt;10364242&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/10364242" target="\_blank"&gt;10364242&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/10364242" target="\_blank"&gt;10364242&lt;/a&gt;)

href="http://www.uniprot.org/citations/10400625" target="\_blank">10400625</a>, PubMed:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>, PubMed:<a href="http://www.uniprot.org/citations/25365219" target="\_blank">25365219</a>). 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:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>). 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:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>). 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:<a href="http://www.uniprot.org/citations/18287044" target="\_blank">18287044</a>, PubMed:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>, PubMed:<a href="http://www.uniprot.org/citations/27777308" target="\_blank">27777308</a>). Activated by CARD9 downstream of C-type lectin receptors; CARD9-mediated signals are essential for antifungal immunity (PubMed:<a href="http://www.uniprot.org/citations/26488816" target="\_blank">26488816</a>). Activated by CARD11 downstream of T-cell receptor (TCR) and B-cell receptor (BCR) (PubMed:<a href="http://www.uniprot.org/citations/18264101" target="\_blank">18264101</a>, PubMed:<a href="http://www.uniprot.org/citations/18287044" target="\_blank">18287044</a>, PubMed:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>, PubMed:<a href="http://www.uniprot.org/citations/27777308" target="\_blank">27777308</a>). Promotes apoptosis, pro-caspase-9 maturation and activation of NF-kappa-B via NIK and IKK (PubMed:<a href="http://www.uniprot.org/citations/10187815" target="\_blank">10187815</a>).

#### 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..

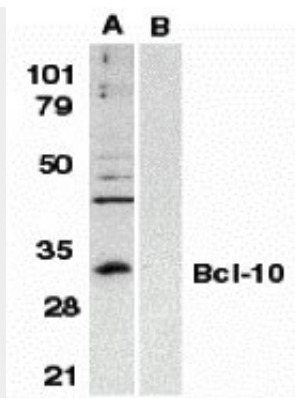
#### Bcl-10 Antibody - Protocols

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

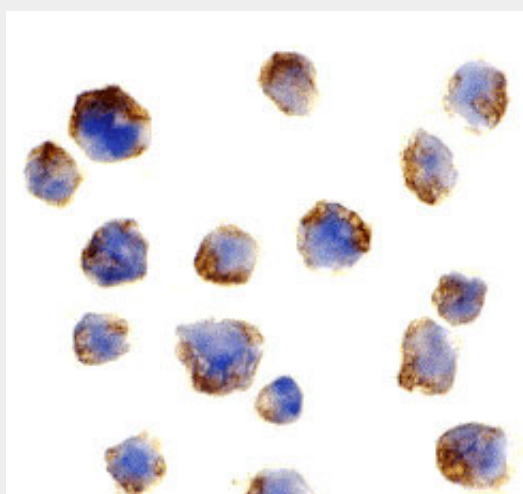
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Bcl-10 Antibody - Images

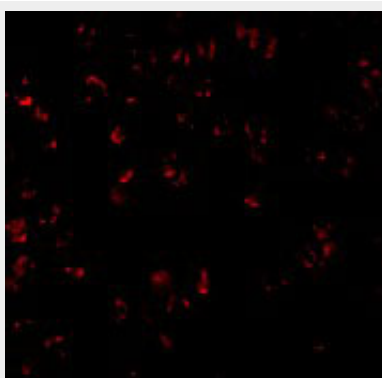




Western blot analysis of Bcl-10 in Raji whole cell lysate in the absence (A) or presence (B) of peptide (2161P) with Bcl-10 antibody at 1:500 dilution.



Immunocytochemistry of Bcl10 in Raji cells with Bcl10 antibody at 1 µg/mL.



Immunofluorescence of Bcl-10 in Raji cells with Bcl-10 antibody at 10 µg/mL.

### **Bcl-10 Antibody - Background**

**Bcl-10 Antibody:** Apoptosis is related to many diseases including cancer. Cell death signals are transduced by death domain (DD) and caspase recruitment domain (CARD) containing molecules and a caspase family of proteases. CARD containing cell death regulators include ARC, RAIDD, Apaf-1, caspase-9, and caspase-2. A novel CARD containing protein was recently identified by several groups and designated Bcl10, CIPER, mE10, CARMEN, CLAP. Bcl10 is a cellular homolog of the equine herpesvirus-2 E-10 gene. Overexpression of Bcl10 induces JNK, p38, and NF-κB activation. Bcl10 interacts with caspase-9 and enhances pro-caspase-9 processing and induces

apoptosis through caspase-9 activation. Bcl10 exhibits a variety of mutations in MALT lymphomas and in B and T cell lineage lymphomas indicating that it may be commonly involved in the pathogenesis of human malignancy. Bcl10 is expressed in many human and murine tissues and cell lines.

#### **Bcl-10 Antibody - References**

Willis TG, Jadayel DM, Du MQ, et al. Bcl10 is involved in t(1;14)(p22;q32) of MALT B cell lymphoma and mutated in multiple tumor types. *Cell* 1999;96(1):35-45

Koseki T, Inohara N, Chen S, et al. CIPER, a novel NF  $\kappa$ B-activating protein containing a caspase recruitment domain with homology to Herpesvirus-2 protein E10. *J Biol Chem* 1999;274(15):9955-61

Yan M, Lee J, Schilbach S, Goddard A, Dixit V. mE10, a novel caspase recruitment domain-containing proapoptotic molecule. *J Biol Chem* 1999;274(15):10287-92

Thome M, Martinon F, Hofmann K, et al. Equine herpesvirus-2 E10 gene product, but not its cellular homologue, activates NF- $\kappa$ B transcription factor and c-Jun N-terminal kinase. *J Biol Chem* 1999;274(15):9962-8