10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Bcl-10 Antibody

Catalog # ASC10077

Product Information

Application	WB, IF, ICC, E
Primary Accession	O95999
Other Accession	AF134395, 5070371
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26252
Conjugate	Unconjugated
Application Notes	Bcl-10 antibody can be used for detection of BCL10 by Western blot at 0.5 g/mL. dilution. An approximately 31 kDa band can be detected. Antibody can also be used for immunocytochemistry starting at 1 g/mL. For immunofluorescence start at 10 g/mL.

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℃ for three months and -20℃, 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.

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..

Background

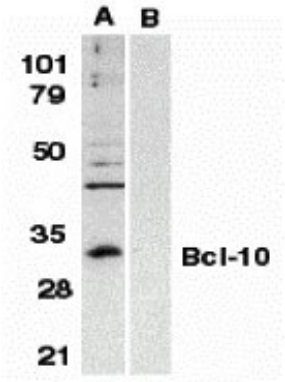
Bcl-10 Antibody: Apoptosis is related to many diseases including cancer. Cell death signals are transduced by death domain (DD) and caspase recruitment domain (CARD) containing molecules and a caspase family of proteases. CARD containing cell death regulators include ARC, RAIDD, Apaf-1, caspase-9, and 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.

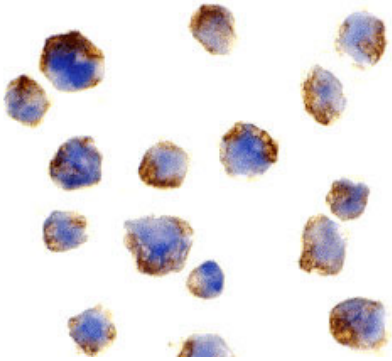
References

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 κB-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-κB transcription factor and c-Jun N-terminal kinase. J Biol Chem 1999;274(15):9962-8

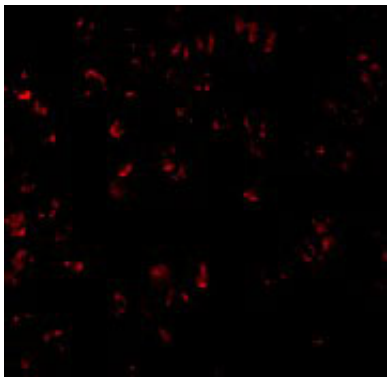
Images

Western blot analysis of Bcl-10 in Raji whole cell lysate in the absence (A) or presence (B) of peptide (APS10077P) 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.

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