

## KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1832

### **Specification**

# KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Clonality
Isotype

Calculated MW Gene Name Aliases WB, FC, ICC

095999 Human Monoclonal Rabbit IgG

Predicted, 26 kDa, observed, 26 kDa KDa

BCL10

BCL10; BCL10 Immune Signaling Adaptor; CIPER; C-E10; ME10; CLAP; CARMEN; CED-3/ICH-1 Prodomain Homologous E10-Like Regulator; Mammalian

CARD-Containing Adapter Molecule E10; CARD-Containing Molecule Enhancing NF-Kappa-B; Caspase-Recruiting Domain-Containing Protein;

CARD-Containing Apoptotic Signaling Protein; CARD Containing Molecule Enhancing NF-KB; CARD-Containing

Proapoptotic Protein; CARD-Like Apoptotic Protein; B-Cell Lymphoma/Leukemia 10; Cellular Homolog Of VCARMEN; B Cell CLL/Lymphoma 10; Cellular-E10; CCARMEN; HCLAP; BCL10, Immune Signaling Adaptor;

B-Cell; CLL/Lymphoma 10; Bcl-10; IMD37 A synthesized peptide derived from human

Bcl10

# KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal Antibody - Additional Information

Gene ID **8915** 

**Other Names** 

**Immunogen** 

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 {ECO:0000303|PubMed:9989495, ECO:0000312|HGNC:HGNC:989}

# KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal 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: <a href="http://www.uniprot.org/citations/10187770" target=" blank">10187770</a>, PubMed:<a href="http://www.uniprot.org/citations/10364242" target=" blank">10364242</a>, PubMed:<a 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..

# KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal Antibody - Protocols

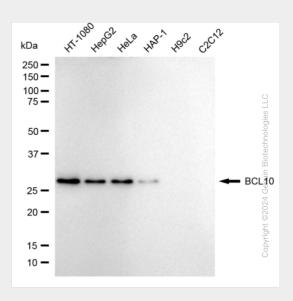
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation

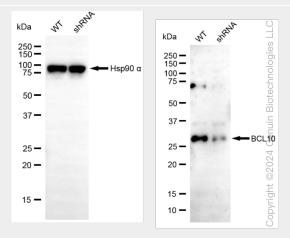


- Flow Cytomety
- Cell Culture

### KD-Validated Anti-BCL10 Immune Signaling Adaptor Rabbit Monoclonal Antibody - Images

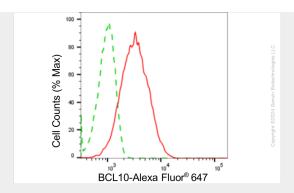


Western blotting analysis using anti-BCL10 antibody (Cat#AGI1832). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BCL10 antibody (Cat#AGI1832, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

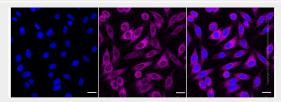


Western blotting analysis using anti-BCL10 antibody (Cat#AGI1832). BCL10 expression in wild type (WT) and BCL10 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-BCL10 antibody (Cat#AGI1832, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Flow cytometric analysis of BCL10 expression in HepG2 cells using anti-BCL10 antibody (Cat#AGI1832, 1:2,000). Green, isotype control; red, BCL10.



Immunocytochemical staining of HepG2 cells with anti-BCL10 antibody (Cat#AGI1832, 1:1,000). Nuclei were stained blue with DAPI; BCL10 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar:  $20~\mu m$ .