

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: 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..

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

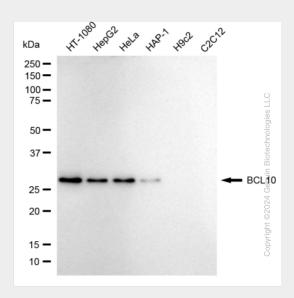
Provided below are standard protocols that you may find useful for product applications.

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

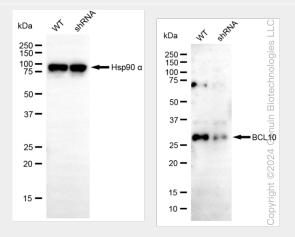


- Flow Cytomety
- Cell Culture

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

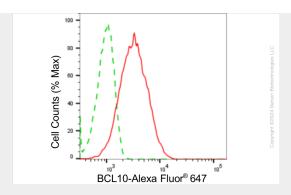


Western blotting analysis using anti-BCL10 antibody (Cat#63220). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BCL10 antibody (Cat#63220, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ $^{\text{TM}}$ ECL Substrate Kit (Cat#716).

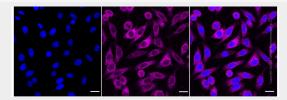


Western blotting analysis using anti-BCL10 antibody (Cat#63220). BCL10 expression in wild type (WT) and BCL10 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-BCL10 antibody (Cat#63220, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).





Flow cytometric analysis of BCL10 expression in HepG2 cells using anti-BCL10 antibody (Cat#63220, 1:2,000). Green, isotype control; red, BCL10.



Immunocytochemical staining of HepG2 cells with anti-BCL10 antibody (Cat#63220, 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: $20~\mu m$.