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CARMA1 / CARD11 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS13622

Specification

CARMA1 / CARD11 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9BXL7
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**133kDa KDa**

CARMA1 / CARD11 Antibody - Additional Information

Gene ID 84433

Other Names
Caspase recruitment domain-containing protein 11, CARD-containing MAGUK protein 1, Carma 1, CARD11, CARMA1

Target/Specificity
Human CARD11. Predicted cross-reactivity based on amino acid sequence homology: mouse (96%), bovine (98%).

Reconstitution & Storage
Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions
CARMA1 / CARD11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CARMA1 / CARD11 Antibody - Protein Information

Name CARD11 {ECO:0000303|PubMed:11278692, ECO:0000312|HGNC:HGNC:16393}

Function
Adapter protein that plays a key role in adaptive immune response by transducing the activation of NF-kappa-B downstream of T- cell receptor (TCR) and B-cell receptor (BCR) engagement (PubMed:11278692, PubMed:11356195, PubMed:12356734). Transduces signals downstream TCR or BCR activation via the formation of a multiprotein complex together with BCL10 and MALT1 that induces NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways (PubMed:11356195). Upon activation in response to TCR or BCR triggering, CARD11 homooligomerizes to form a nucleating helical template that recruits BCL10 via CARD-CARD interaction, thereby promoting polymerization of BCL10 and subsequent recruitment of MALT1:

this leads to I-kappa-B kinase (IKK) phosphorylation and degradation, and release of NF-kappa-B proteins for nuclear translocation (PubMed:24074955). Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed:17287217). Promotes linear ubiquitination of BCL10 by promoting the targeting of BCL10 to RNF31/HOIP (PubMed:27777308). Stimulates the phosphorylation of BCL10 (PubMed:11356195). Also activates the TORC1 signaling pathway (PubMed:28628108).

Cellular Location
Cytoplasm. Membrane raft. Note=Colocalized with DPP4 in membrane rafts.

Tissue Location
Detected in adult peripheral blood leukocytes, thymus, spleen and liver. Also found in promyelocytic leukemia HL-60 cells, chronic myelogenous leukemia K-562 cells, Burkitt's lymphoma Raji cells and colorectal adenocarcinoma SW480 cells. Not detected in HeLaS3, MOLT-4, A-549 and G431 cells.

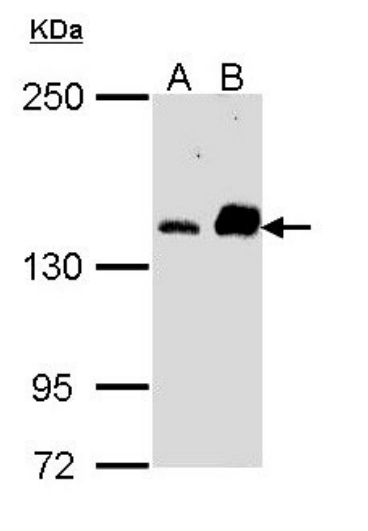
Volume
50 µl

CARMA1 / CARD11 Antibody - Protocols

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

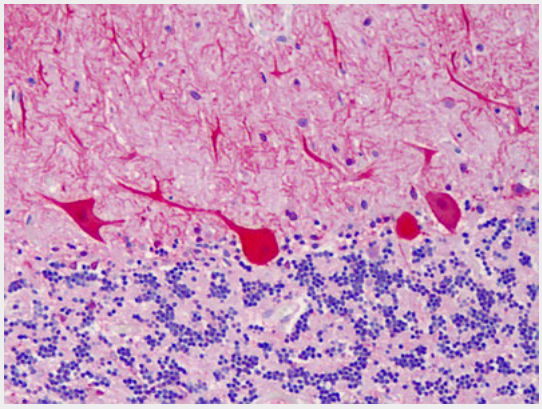
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CARMA1 / CARD11 Antibody - Images



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Sample (30 ug of whole cell lysate).



Anti-CARD11 antibody IHC of human cerebellum.

CARMA1 / CARD11 Antibody - Background

Involved in the costimulatory signal essential for T- cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Activates NF-kappa-B via BCL10 and IKK. Stimulates the phosphorylation of BCL10.

CARMA1 / CARD11 Antibody - References

Bertin J.,et al.J. Biol. Chem. 276:11877-11882(2001).
Hillier L.W.,et al.Nature 424:157-164(2003).
Scherer S.W.,et al.Science 300:767-772(2003).
Gaide O.,et al.FEBS Lett. 496:121-127(2001).
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