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CARD 11 Polyclonal Antibody

Catalog # AP68818

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q9BXL7
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133284

Additional Information

Gene ID	84433
Other Names	CARD11; CARMA1; Caspase recruitment domain-containing protein 11; CARD-containing MAGUK protein 1; Carma 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

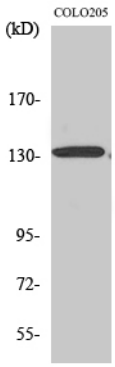
Name	CARD11 {ECO:0000303|PubMed:11278692, ECO:0000312|HGNC:HGNC:16393}
Function	Adapter protein that plays a key role in adaptive immune response by transducing the activation of NF-kappa-B downstream of T- cell receptor (TCR) and B-cell receptor (BCR) engagement (PubMed:11278692, PubMed:11356195, PubMed:12356734). 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.

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. Also activates the TORC1 signaling pathway.

Images



Western Blot analysis of various cells using CARD 11 Polyclonal Antibody