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CARD11 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9705b

Specification

CARD11 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9BXL7

CARD11 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 84433

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CARD11 Antibody (C-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/27777308" target="_blank">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.

CARD11 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CARD11 Antibody (C-term) Blocking Peptide - Images

CARD11 Antibody (C-term) Blocking Peptide - Background

CARD11 belongs to the membrane-associated guanylate kinase (MAGUK) family, a class of proteins that functions as molecular scaffolds for the assembly of multiprotein complexes at specialized regions of the plasma membrane. This protein is also a member of the CARD protein family, which is defined by carrying a characteristic caspase-associated recruitment domain (CARD). This protein has a domain structure similar to that of CARD14 protein. The CARD domains of both proteins have been shown to specifically interact with BCL10, a protein known to function as a positive regulator of cell apoptosis and NF-kappaB activation. When expressed in cells, this protein activated NF-kappaB and induced the phosphorylation of BCL10.

CARD11 Antibody (C-term) Blocking Peptide - References

Davila, S., et al. Genes Immun. (2010) Brenner, D., et al. Proc. Natl. Acad. Sci. U.S.A. 106(34):14508-14513(2009)Welteke, V., et al. EMBO Rep. 10(6):642-648(2009)