

Goat Anti-CARD11 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1190a

Specification

Goat Anti-CARD11 Antibody - Product Information

Application	WB, IHC
Primary Accession	O9BXL7
Other Accession	NP_115791 , 84433 , 108723 (mouse)
Reactivity	Human
Predicted	Mouse, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	133284

Goat Anti-CARD11 Antibody - Additional Information

Gene ID 84433

Other Names

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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CARD11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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](http://www.uniprot.org/citations/11278692), PubMed: [11356195](http://www.uniprot.org/citations/11356195), PubMed: [12356734](http://www.uniprot.org/citations/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.

Goat Anti-CARD11 Antibody - Protocols

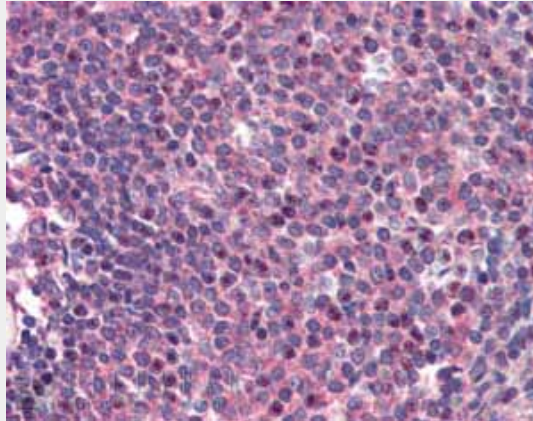
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-CARD11 Antibody - Images



AF1190a staining (1 $\mu\text{g/ml}$) of Human Jurkat cells (RIPA buffer, 35 μg total protein per lane). Primary incubated for 1 hour. Detected by chemiluminescence.



AF1190a (2 $\mu\text{g/ml}$) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-CARD11 Antibody - Background

The protein encoded by this gene 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.

Goat Anti-CARD11 Antibody - References

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. *Genes Immun*, 2010 Apr. PMID 20237496.
NF-kappaB activation in T cells requires discrete control of IkappaB kinase alpha/beta (IKKalpha/beta) phosphorylation and IKKgamm ubiquitination by the ADAP adapter protein. Srivastava R, et al. *J Biol Chem*, 2010 Apr 9. PMID 20164171.
Phosphorylation of CARMA1 by HPK1 is critical for NF-kappaB activation in T cells. Brenner D, et al. *Proc Natl Acad Sci U S A*, 2009 Aug 25. PMID 19706536.
COP9 signalosome controls the Carma1-Bcl10-Malt1 complex upon T-cell stimulation. Welteke V, et al. *EMBO Rep*, 2009 Jun. PMID 19444310.
Compensatory IKKalpha activation of classical NF-kappaB signaling during IKKbeta inhibition identified by an RNA interference sensitization screen. Lam LT, et al. *Proc Natl Acad Sci U S A*, 2008 Dec 30. PMID 19104039.