

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

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**Goat Anti-CARD11 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9BXL7</a>
Other Accession	<a href="#">NP_115791</a> , <a href="#">84433</a> , <a href="#">108723 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Dog, Cow
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:&lt;a href="http://www.uniprot.org/citations/11278692" target="\_blank"&gt;11278692&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/11356195" target="\_blank"&gt;11356195&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/12356734" target="\_blank"&gt;12356734&lt;/a&gt;).

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:<a href="http://www.uniprot.org/citations/11356195" target="\_blank">11356195</a>). 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:<a href="http://www.uniprot.org/citations/24074955" target="\_blank">24074955</a>). Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/17287217" target="\_blank">17287217</a>). 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</a>). Stimulates the phosphorylation of BCL10 (PubMed:<a href="http://www.uniprot.org/citations/11356195" target="\_blank">11356195</a>). Also activates the TORC1 signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/28628108" target="\_blank">28628108</a>).

### 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

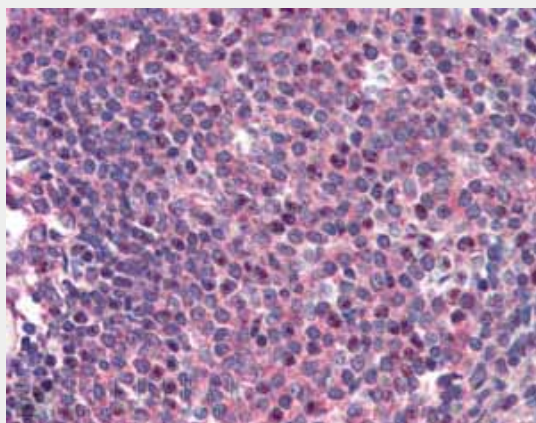
Provided below are standard protocols that you may find useful for product applications.

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

## Goat Anti-CARD11 Antibody - Images



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



AF1190a (2 µg/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.