

## Summary

Description Rabbit Monoclonal Antibody
Host Rabbit
Application WB
Reactivity Human, Mouse

### Performance

Conjugation	Unconjugated		
Modification	Unmodified		
lsotype	lgG		
Clonality	Monoclonal		
Form	Liquid		
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.		
	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type		
Buffer	preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.		
	Avoid freeze / thaw cycle.		
Purification	Affinity purification		

#### Immunogen

Gene Name	CARD11
Alternative Names	CARD11; CARMA1; Carma 1; BIMP3;
Gene ID	84433.0
SwissProt ID	Q9BXL7.

# Application

Dilution Ratio	WB 1:1000-1:5000
Molecular Weight	133kDa



#### 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. 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:<a href="http://www.uniprot.org/citations/11278692" target=" blank">11278692</a>, PubMed:<a href="http://www.uniprot.org/citations/11356195" target=" blank">11356195</a>, PubMed:<a href="http://www.uniprot.org/citations/12356734" target=" blank">12356734</a>). 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>).

#### **Research Area**

#### **Image Data**





Western blot analysis of CARD11 expression in K562 cell lysate.

#### Note

For research use only.