

# Product datasheet

info@arigobio.com

# ARG54436 anti-CARD9 antibody

Package: 50 μg Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes CARD9

Tested Reactivity Hu

Tested Application ICC/IF, WB

Specificity This antibody recognizes human CARD9, a novel CARD (Caspase Recruitment Domain)-containing

protein that interacts with the CARD activation domain of Bcl-10. CARD9 associates with Bcl-10 to form

a complex within cells. CARD9 induces apoptosis and activates NF- B.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CARD9

Species Human

Immunogen Peptide corresponding to aa 521-536 of human CARD9 (accession no. AF31187). This sequence differs

from that of rat CARD9 by two amino acids.

Conjugation Un-conjugated

Alternate Names CANDF2; hCARD9; Caspase recruitment domain-containing protein 9

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	MB-361, PC-3 and K562	

#### **Properties**

Form Liquid

Purification Immunoaffinity chroma-tography

Buffer PBS (pH 7.4) and 0.02% Sodium azide

Preservative 0.02% Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Database links <u>GeneID: 64170 Human</u>

Swiss-port # Q9H257 Human

Gene Symbol CARD9

Gene Full Name caspase recruitment domain family, member 9

Background The protein encoded by this gene is a member of the CARD protein family, which is defined by the

presence of a characteristic caspase-associated recruitment domain (CARD). CARD is a protein interaction domain known to participate in activation or suppression of CARD containing members of the caspase family, and thus plays an important regulatory role in cell apoptosis. This protein was identified by its selective association with the CARD domain of BCL10, a postive regulator of apoptosis and NF-kappaB activation, and is thought to function as a molecular scaffold for the assembly of a BCL10 signaling complex that activates NF-kappaB. Several alternatively spliced transcript variants have

been observed, but their full-length nature is not clearly defined. [provided by RefSeq, Jul 2008]

**Function** Adapter protein that plays a key role in innate immune response to a number of intracellular

pathogens, such as C.albicans and L.monocytogenes. Is at the crossroads of ITAM-tyrosine kinase and the Toll-like receptors (TLR) and NOD2 signaling pathways. Probably controls various innate immune response pathways depending on the intracellular pathogen. In response to L.monocytogenes infection, acts by connecting NOD2 recognition of peptidoglycan to downstream activation of MAP kinases (MAPK) without activating NF-kappa-B. Also involved in activation of myeloid cells via classical ITAM-associated receptors and TLR: required for TLR-mediated activation of MAPK, while it is not required for TLR-induced activation of NF-kappa-B (By similarity). Controls CLEC7A (dectin-1)-mediated myeloid cell activation induced by the yeast cell wall component zymosan, leading to cytokine production and innate anti-fungal immunity: acts by regulating BCL10-MALT1-mediated NF-kappa-B activation pathway. Activates NF-kappa-B via BCL10. In response to the hyphal form of C.albicans, mediates CLEC6A (dectin-2)-induced I-kappa-B kinase ubiquitination, leading to NF-kappa-B activation via interaction with BCL10. In response to fungal infection, may be required for the development and subsequent differentiation of interleukin 17-producing T helper (TH-17) cells. [UniProt]

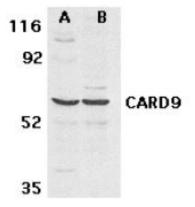
Research Area Cell Biology and Cellular Response antibody; Cell Death antibody

Calculated Mw 62 kDa

PTM Phosphorylated at Thr-531 and Thr-533 by CK2 following interaction with VHL, leading to inhibit the

ability to activate NF-kappa-B.

### **Images**



#### ARG54436 anti-CARD9 antibody WB image

Western Blot: A:MDA-MB-361; B:PC-3 stained with ARG54436 anti-CARD9 antibody at 2.5  $\mu$ g/ml dilution.



## ARG54436 anti-CARD9 antibody ICC/IF image

Immunofluorescence: K562 stained with ARG54436 anti-CARD9 antibody at 10  $\mu g/ml$  dilution.