

CARD 9 (T-17): sc-49408

BACKGROUND

Membrane-associated guanylate kinase (MAGUK) family members localize to the plasma membrane and function as molecular scaffolds for the assembly of multi-protein complexes. The MAGUK family includes several mammalian proteins related to the *Drosophila* tumor suppressor discs-large (dlg) gene product such as postsynaptic proteins, GKAPs, the tight junction associated proteins (ZO-1-3), and the caspase-associated recruitment domain (CARD) proteins: CARD 6, CARD 8-12 and CARD 14. CARD 9 is the main transducer of Dectin-1 signals that consist of mediated myeloid cell activation, cytokine production, and innate anti-fungal immunity. Dectin-1 is the main mammalian receptor that recognizes the fungal component zymosan. CARD 9 self-associates and has coiled-coil motifs that may function as oligomerization domains. Bcl10 interacts with CARD 9 and regulates the zymosan induced NF κ B activation. Overexpression of CARD 9 correlates with the development of gastric B-cell lymphoma.

REFERENCES

1. Bertin, J., et al. 2000. CARD 9 is a novel caspase recruitment domain-containing protein that interacts with Bcl10/CLAP and activates NF κ B. *J. Biol. Chem.* 275: 41082-41086.
2. Wang, L., et al. 2001. CARD 10 is a novel caspase recruitment domain/membrane-associated guanylate kinase family member that interacts with Bcl10 and activates NF κ B. *J. Biol. Chem.* 276: 21405-21409.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607212. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Kono, T., et al. 2003. Molecular cloning and expression analysis of a novel caspase recruitment domain protein (CARD) in common carp *Cyprinus carpio* L. *Gene* 309: 57-64.

CHROMOSOMAL LOCATION

Genetic locus: CARD9 (human) mapping to 9q34.3; Card9 (mouse) mapping to 2 A3.

SOURCE

CARD 9 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CARD 9 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49408 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

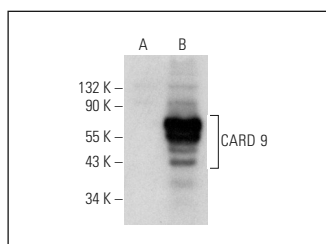
CARD 9 (T-17) is recommended for detection of CARD 9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CARD 9 siRNA (h): sc-60333, CARD 9 siRNA (m): sc-60334, CARD 9 shRNA Plasmid (h): sc-60333-SH, CARD 9 shRNA Plasmid (m): sc-60334-SH, CARD 9 shRNA (h) Lentiviral Particles: sc-60333-V and CARD 9 shRNA (m) Lentiviral Particles: sc-60334-V.

Molecular Weight of CARD 9: 62 kDa.

Positive Controls: CARD 9 (h): 293 Lysate: sc-174094.

DATA



CARD 9 (T-17): sc-49408. Western blot analysis of CARD 9 expression in non-transfected: sc-110760 (A) and human CARD 9 transfected: sc-174094 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Pedroza, L.A., et al. 2012. Autoimmune regulator (AIRE) contributes to Dectin-1-induced TNF- α production and complexes with caspase recruitment domain-containing protein 9 (CARD9), spleen tyrosine kinase (Syk), and Dectin-1. *J. Allergy Clin. Immunol.* 129: 464-472.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CARD 9 (A-8): sc-374569** or **CARD 9 (C-2): sc-374007**, our highly recommended monoclonal alternatives to CARD 9 (T-17).