

CARD 11 (m): 293T Lysate: sc-118999

BACKGROUND

Modular protein interaction domains are an evolutionarily conserved protein contour feature in tertiary and quaternary protein folding that gives rise to a dynamic protein signaling network by mediating the assembly of encoded components into specific signaling complexes. Caspase-associated recruitment domain (CARD) proteins CARD 11 and CARD 14 are members of the membrane-associated guanylate kinase (MAGUK) family, a class of proteins that function as molecular scaffolds for the assembly of multiprotein complexes at the plasma membrane. The human CARD 11 gene maps to chromosome 7p22.2 and encodes a 1,147 amino acid protein. The human CARD 14 gene maps to chromosome 17q25 and encodes a 1,004 amino acid protein. CARD 11 and CARD 14 can function as components of signaling pathways that lead to activation of the transcription factor NFκB. The CARD domains of CARD 11 and CARD 14 can specifically interact with Bcl10, a protein known to function as a positive regulator of cell apoptosis and NFκB activation.

REFERENCES

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2. Pawson T. and Nash P. 2000. Protein-protein interactions define specificity in signal transduction. *Genes Dev.* 14: 1027-1047.
3. Bertin, J., Wang, L., Guo, Y., Jacobson, M.D., Poyet, J.L., Srinivasula, S.M., Merriam, S., DiStefano, P.S. and Alnemri, E.S. 2001. CARD 11 and CARD 14 are novel caspase recruitment domain (CARD)/membrane-associated guanylate kinase (MAGUK) family members that interact with Bcl-10 and activate NFκB. *J. Biol. Chem.* 276: 11877-11882.
4. Gaide, O., Martinon, F., Micheau, O., Bonnet, D., Thome, M. and Tschopp, J. 2001. Carma1, a CARD-containing binding partner of Bcl-10, induces Bcl-10 phosphorylation and NFκB activation. *FEBS Lett.* 496: 121-127.
5. LocusLink Report (LocusID: 84433). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: Card11 (mouse) mapping to 5 G2.

PRODUCT

CARD 11 (m): 293T Lysate represents a lysate of mouse CARD 11 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CARD 11 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CARD 11 antibodies. Recommended use: 10-20 µl per lane.

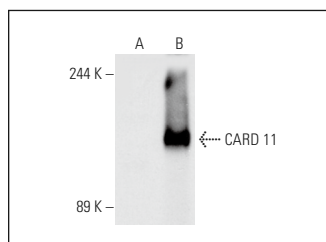
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CARD 11 (A-4): sc-166910 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse CARD 11 expression in CARD 11 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CARD 11 (A-4): sc-166910. Western blot analysis of CARD 11 expression in non-transfected: sc-117752 (A) and mouse CARD 11 transfected: sc-118999 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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