SANTA CRUZ BIOTECHNOLOGY, INC.

CARD 14 (H-167): sc-99052

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 14 is a 1,004 amino acid protein consisting of an N-terminal CARD domain, a central coiled-coil domain and a C-terminal tripartite domain comprised of a PDZ domain, an Src homology 3 domain and a GUK domain with homology to guanylate kinase. CARD 14 is expressed in the placenta where it positively regulates apoptosis. CARD 14 also controls NFκB activation by phosphorylating Bcl10, a signaling protein that activates NFκB through the IκB kinase complex. Epigallocatechin-3-gallate (EGCG) is a polyphenol that induces the expression of CARD 14.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CARD14 (human) mapping to 17q25.3; Card14 (mouse) mapping to 11 E2.

SOURCE

CARD 14 (H-167) is a rabbit polyclonal antibody raised against amino acids 104-270 mapping near the N-terminus of CARD 14 of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

CARD 14 (H-167) is recommended for detection of CARD 14 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 14 siRNA (h): sc-60330, CARD 14 siRNA (m): sc-60331, CARD 14 shRNA Plasmid (h): sc-60330-SH, CARD 14 shRNA Plasmid (m): sc-60331-SH, CARD 14 shRNA (h) Lentiviral Particles: sc-60330-V and CARD 14 shRNA (m) Lentiviral Particles: sc-60331-V.

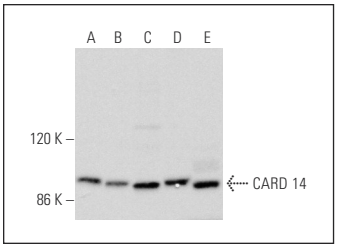
Molecular Weight of CARD 14: 113 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CARD 14 (H-167) : sc-99052. Western blot analysis of CARD 14 expression in K-562 (**A**), Jurkat (**B**), NIH/3T3 (**C**), HeLa (**D**) and A431 (**E**) whole cell lysates.

STORAGE

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

PROTOCOLS

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