SANTA CRUZ BIOTECHNOLOGY, INC.

DCAMKL3 (S-16): sc-102474

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The Power to Question

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. DCAMKL3 (Doublecortin-like and CAM kinase-like 3), also known as DCLK3 or DCDC3C, is a 648 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one protein kinase domain. One of several members of the Ser/Thr protein kinase family, DCAMKL3 functions to catalyze the ATP-dependent attachment of a phospho residue to target proteins, an event that may play a role in various cellular processes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DCLK3 (human) mapping to 3p22.2; Dclk3 (mouse) mapping to 9 F3.

SOURCE

DCAMKL3 (S-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DCAMKL3 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DCAMKL3 (S-16) is recommended for detection of DCAMKL3 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); non cross-reactive with family members DCAMKL1 or DCAMKL2.

Suitable for use as control antibody for DCAMKL3 siRNA (h): sc-78120, DCAMKL3 siRNA (m): sc-142890, DCAMKL3 shRNA Plasmid (h): sc-78120-SH, DCAMKL3 shRNA Plasmid (m): sc-142890-SH, DCAMKL3 shRNA (h) Lentiviral Particles: sc-78120-V and DCAMKL3 shRNA (m) Lentiviral Particles: sc-142890-V.

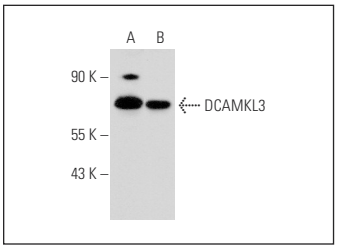
Molecular Weight of DCAMKL3: 74 kDa.

Positive Controls: K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

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



DCAMKL3 (S-16): sc-102474. Western blot analysis of DCAMKL3 expression in K-562 (**A**) and Jurkat (**B**) nuclear extracts.

RESEARCH USE

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