SANTA CRUZ BIOTECHNOLOGY, INC.

DCAMKL2 (S-13): sc-103449



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. DCAMKL2, also known as DCLK2 (Doublecortin-like kinase 2), DCK2, DCDC3 or DCDC3B, is a 766 amino acid protein that contains one protein kinase domain and two Doublecortin domains. One of several members of the Ser/Thr protein kinase family, DCAMKL2 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. Multiple isoforms of DCAMKL2 exist due to alternative splicing events.

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CHROMOSOMAL LOCATION

Genetic locus: DCLK2 (human) mapping to 4q31.3; Dclk2 (mouse) mapping to 3 F1.

SOURCE

DCAMKL2 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DCAMKL2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-103449 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DCAMKL2 (S-13) is recommended for detection of DCAMKL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 DCAMKL1 or DCAMKL3.

Suitable for use as control antibody for DCAMKL2 siRNA (h): sc-105272, DCAMKL2 siRNA (m): sc-105273, DCAMKL2 shRNA Plasmid (h): sc-105273-SH, DCAMKL2 shRNA (h) Lentiviral Particles: sc-105272-V and DCAMKL2 shRNA (m) Lentiviral Particles: sc-105273-V.

Molecular Weight of DCAMKL2: 84 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.