

# DCAMKL3 (C-14): sc-102472

## 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.

## SOURCE

DCAMKL3 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus 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.

## RESEARCH USE

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

## 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-102472 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DCAMKL3 (C-14) is recommended for detection of DCAMKL3 of 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 shRNA Plasmid (h): sc-78120-SH and DCAMKL3 shRNA (h) Lentiviral Particles: sc-78120-V.

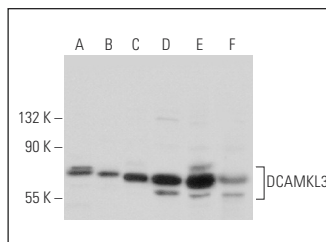
Molecular Weight of DCAMKL3: 74 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or IMR-32 cell lysate: sc-2409.

## 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 (C-14): sc-102472. Western blot analysis of DCAMKL3 expression in PANC-1 (A), IMR-32 (B), U-251-MG (C), K-562 (D) and HeLa (E) whole cell lysates and human tonsil tissue extract (F).

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.