

### DCLK2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19971A

### Specification

# DCLK2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q8N568</u> <u>NP\_001035351.3</u> Human Rabbit Polyclonal Rabbit IgG 83606 167-196

## DCLK2 Antibody (N-term) - Additional Information

#### Gene ID 166614

**Other Names** 

Serine/threonine-protein kinase DCLK2, CaMK-like CREB regulatory kinase 2, CL2, CLICK-II, CLICK2, Doublecortin domain-containing protein 3B, Doublecortin-like and CAM kinase-like 2, Doublecortin-like kinase 2, DCLK2, DCAMKL2, DCDC3B, DCK2

#### Target/Specificity

This DCLK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 167-196 amino acids from the N-terminal region of human DCLK2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

DCLK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### DCLK2 Antibody (N-term) - Protein Information

Name DCLK2



Synonyms DCAMKL2, DCDC3B, DCK2

**Function** Protein kinase with a significantly reduced C(a2+)/CAM affinity and dependence compared to other members of the CaMK family. May play a role in the down-regulation of CRE-dependent gene activation probably by phosphorylation of the CREB coactivator CRTC2/TORC2 and the resulting retention of TORC2 in the cytoplasm (By similarity).

Cellular Location

Cytoplasm, cytoskeleton. Note=Colocalizes with microtubules.

**Tissue Location** Expressed in the brain, heart and eyes.

## DCLK2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## DCLK2 Antibody (N-term) - Images



DCLK2 Antibody (N-term) (Cat. #AP19971a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the DCLK2 antibody detected the DCLK2 protein (arrow).

# DCLK2 Antibody (N-term) - Background

This gene encodes a member of the protein kinase superfamily and the doublecortin family. The protein encoded by this gene contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, a C-terminal serine/threonine protein kinase domain, which shows substantial homology to Ca2+/calmodulin-dependent protein kinase, and a serine/proline-rich domain in between the doublecortin and the



protein kinase domains, which mediates multiple protein-protein interactions. The microtubule-polymerizing activity of the encoded protein is independent of its protein kinase activity. Mouse studies show that the DCX gene, another family member, and this gene share function in the establishment of hippocampal organization and that their absence results in a severe epileptic phenotype and lethality, as described in human patients with lissencephaly. Multiple alternatively spliced transcript variants have been identified.

# DCLK2 Antibody (N-term) - References

Dijkmans, T.F., et al. Cent Nerv Syst Agents Med Chem 10(1):32-46(2010) Kerjan, G., et al. Proc. Natl. Acad. Sci. U.S.A. 106(16):6766-6771(2009) Gorelik, A., et al. Cell. Mol. Biol. Lett. 13(4):614-620(2008) Tuy, F.P., et al. Dev. Neurosci. 30 (1-3), 171-186 (2008) : Reiner, O., et al. BMC Genomics 7, 188 (2006) :