

DCLK2 Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP19971A

Specification

DCLK2 Blocking Peptide (N-term) - Product Information

Primary Accession

[O8N568](#)

Other Accession

[NP_001035351.3](#)**DCLK2 Blocking Peptide (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

The synthetic peptide sequence is selected from aa 182-196 of HUMAN DCLK2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DCLK2 Blocking Peptide (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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

DCLK2 Blocking Peptide (N-term) - Images

DCLK2 Blocking Peptide (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 Blocking Peptide (N-term) - References

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Tuy, F.P., et al. Dev. Neurosci. 30 (1-3), 171-186 (2008) :
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