10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DCLK2 Blocking Peptide (N-term)

Synthetic peptide
Catalog # BP19971A

Specification

DCLK2 Blocking Peptide (N-term) - Product Information

Primary Accession	Q8N568
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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

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) :