

Active Recombinant Human DCLK2 Protein, GST-tagged

Cat. No. DCLK2-2393H Lot. No. (See product label)

SPECIFICATION

Product Overview	Human DCLK2 (NP_689832.1, 1 a.a. - 695 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Species	Human
Source	Insect Cells
Description	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. [provided by RefSeq, Sep 2010]
Form	Liquid
Bio-activity	The activity was measured by off-chip mobility shift assay. The enzyme was

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incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000. Substrate: GS peptide. ATP: 100 uM.

Molecular Mass 103 kDa

Purity 64 % by SDS-PAGE/CBB staining

Applications
Antibody Production
Functional Study
Compound Screening

Storage Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

Storage Buffer In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)

GENE INFORMATION

Gene Name [DCLK2 doublecortin-like kinase 2 \[Homo sapiens \]](#)

Official Symbol [DCLK2](#)

Synonyms DCLK2; doublecortin-like kinase 2; DCAMKL2, doublecortin and CaM kinase like 2; serine/threonine-protein kinase DCLK2; DCDC3; DCDC3B; DCK2; MGC45428; CaMK-like CREB regulatory kinase 2; doublecortin and CaM kinase-like 2; doublecortin-like and CAM kinase-like 2; doublecortin domain-containing protein 3B; CL2; CLIK2; CLICK2; DCAMKL2; CLICK-II; DKFZp761I032;

Gene ID [166614](#)

mRNA Refseq [NM_001040260](#)

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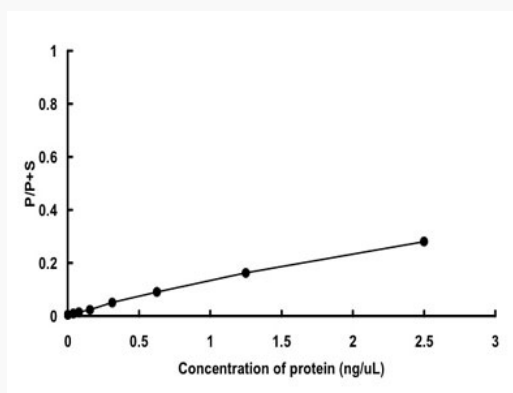
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Protein Refseq NP_001035350

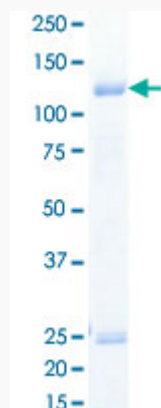
MIM 613166

UniProt ID Q8N568

Result of activity analysis



Quality Control Testing:



Loading 1 µg protein in SDS-PAGE

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