

## Active Recombinant Human DCLK2 Protein, GST-tagged

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

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Human DCLK2 (NP_689832.1, 1 a.a. - 695 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>           | Insect Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | <p>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 Ca<sup>2+</sup>/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]</p> |
| <b>Form</b>             | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Bio-activity</b>     | The activity was measured by off-chip mobility shift assay. The enzyme was                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

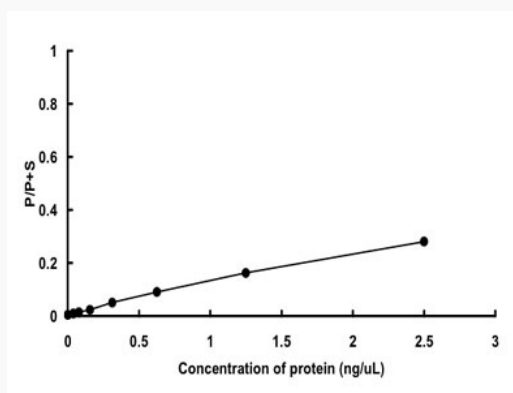
 45-1 Ramsey Road, Shirley, NY 11967, USA

**Protein Refseq** NP\_001035350

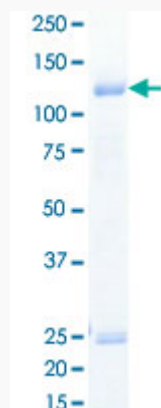
**MIM** 613166

**UniProt ID** Q8N568

**Result of activity analysis**



**Quality Control Testing:**



Loading 1 µg protein in SDS-PAGE

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA