

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DCLK1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DCLK1 Isoform 1 Lys621-Met729 Accession # NP_004725
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DCLK1 (Doublecortin-like and CAM Kinase-like 1; also DCAMKL1) is an 80-88 kDa member of the CaMK subfamily, Ser/Thr protein kinase family of molecules. It is found in both fetal and adult tissues, and individual cells expressing DCLK1 include pancreatic stem cells, intestinal Tuft cells, migrating neurons and select tumor types. DCLK1 is anchored to microtubules, and appears to induce tubulin polymerization. It also possesses a microtubule-independent Ser/Thr kinase phosphorylation activity. Human DCLK1 is 740 amino acids (aa) in length. It contains two doublecortin domains (aa 57-143 and 186-269) plus a protein kinase domain (aa 390-647). There are at least five utilized Ser/Thr phosphorylation sites. Multiple splice variants exist. One is termed DCL, and is a 42 kDa isoform that possesses an 18 aa substitution for aa 346-740. A second is called CPG-16 and represents a 50 kDa isoform that contains a six aa substitution for aa 1-313. A third isoform is called CARP, and is a combination of the C- and N-terminal substitutions described above. A fourth isoform resembles CPG-16 with a 43 aa substitution for aa 687-740, while a fifth isoform is simply DCLK1 with the same 43 aa substitution. DCLK1 undergoes proteolysis to generate a 35 kDa N-terminus and a 50 kDa C-terminus. Over aa 61-729, human DCLK1 shares 98% aa identity with mouse DCLK1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.