Human DCLK1 Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF7138T
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DCLK1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-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 DCKL1 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

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