

## DCAMKL1/DCLK1 Polyclonal Antibody

catalog number: **E-AB-92967**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

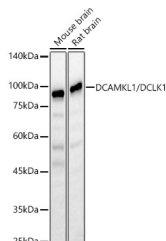
### Description

|                     |                                                                                    |
|---------------------|------------------------------------------------------------------------------------|
| <b>Reactivity</b>   | Human;Mouse;Rat                                                                    |
| <b>Immunogen</b>    | Recombinant fusion protein of human DCAMKL1/DCLK1                                  |
| <b>Host</b>         | Rabbit                                                                             |
| <b>Isotype</b>      | IgG                                                                                |
| <b>Purification</b> | Affinity purification                                                              |
| <b>Buffer</b>       | Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol. |

### Applications

|           |              |
|-----------|--------------|
| <b>WB</b> | 1:500-1:2000 |
| <b>IF</b> | 1:20-1:50    |

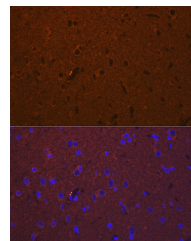
### Data



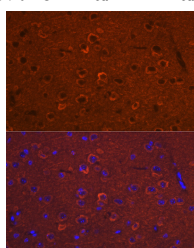
Western blot analysis of various lysates using DCAMKL1/DCLK1 Polyclonal Antibody at 1:500 dilution.

**Observed-MW:82 kDa**

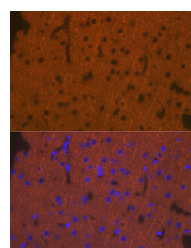
**Calculated-MW:46 kDa/47 kDa/81 kDa/82 kDa**



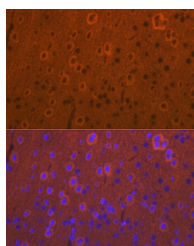
Immunofluorescence analysis of Rat brain using DCAMKL1/DCLK1 Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of Mouse brain using DCAMKL1/DCLK1 Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of rat brain cells using DCAMKL1/DCLK1 Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of mouse brain cells using DCAMKL1/DCLK1 Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.

### For Research Use Only

## Preparation & Storage

**Storage**

Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

**Shipping**

The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

## 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 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. The encoded protein is involved in several different cellular processes, including neuronal migration, retrograde transport, neuronal apoptosis and neurogenesis. This gene is up-regulated by brain-derived neurotrophic factor and associated with memory and general cognitive abilities. Multiple transcript variants generated by two alternative promoter usage and alternative splicing have been reported, but the full-length nature and biological validity of some variants have not been defined. These variants encode different isoforms, which are differentially expressed and have different kinase activities.

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