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DCLK1 Antibody
Catalog # ASC11079

Specification

DCLK1 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	O15075
Other Accession	NP_004725, 9201
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**DCLK1 antibody can be used for detection of DCLK1 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

DCLK1 Antibody - Additional Information

Gene ID **9201**

Target/Specificity
DCLK1 antibody was raised against a 14 amino acid synthetic peptide near the amino terminus of human DCLK1.

The immunogen is located within the last 50 amino acids of DCLK1.

Reconstitution & Storage
DCLK1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
DCLK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DCLK1 Antibody - Protein Information

Name DCLK1

Synonyms DCAMKL1, DCDC3A, KIAA0369

Function
Probable kinase that may be involved in a calcium-signaling pathway controlling neuronal migration in the developing brain. May also participate in functions of the mature nervous system.

Tissue Location
In fetal tissues, highly expressed in brain, detectable in lung and liver, but not in kidney. In adult tissues, expressed ubiquitously in the brain, detectable in the heart, liver, spleen, thymus, prostate, testis, ovary, small intestine and colon. The type A isoforms seem to be expressed

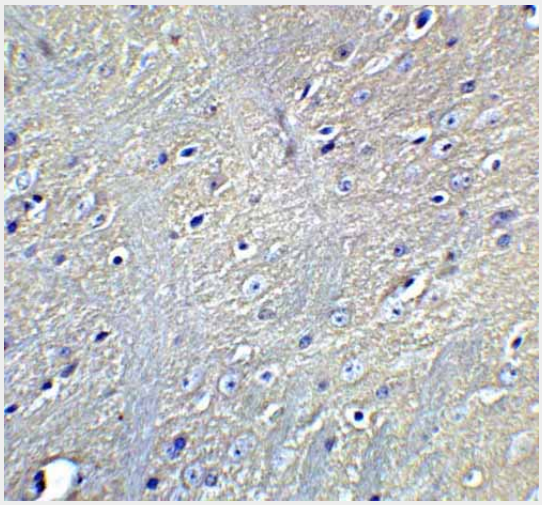
predominantly in fetal brain whereas type B isoforms are expressed abundantly in both fetal and adult brain.

DCLK1 Antibody - Protocols

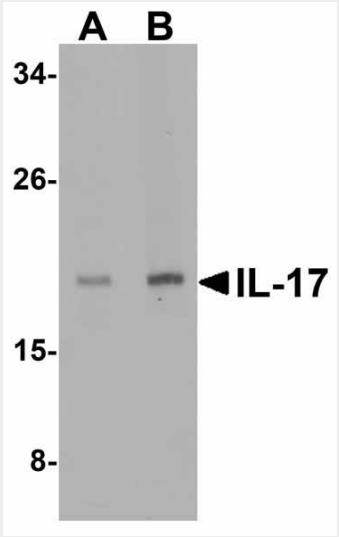
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DCLK1 Antibody - Images



Immunohistochemistry of GABARAPL2 in mouse brain tissue with GABARAPL2 Antibodyat 5 µg/mL.



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Western blot analysis of IL-17 in A-20 cell lysate with IL-17 antibody at (A) 2 and (B) 4 µg/mL.

DCLK1 Antibody - Background

DCLK1 Antibody: DCLK1 is one of three doublecortin-like kinases similar to the Ca2+/calmodulin-dependent protein kinase (CaMK) family. DCLK1 mRNA, like that of the homologous DCLK2 and DCLK3, is highly expressed in adult brain, but only DCLK1 and DCLK2 transcripts are present in human fetal brain and the developing mouse embryo, suggesting that DCLK1 and DCLK2 may play roles in cortical development. The DCLK proteins are homologous to Doublecortin (DCX), a gene that is mutated in X-linked human lissencephaly. In mouse models where the DCX gene has been disrupted, DCLK1 expression increases slightly and appears to compensate for the loss of DCX, as mice mutant for both DCX and DCLK1 show a severe phenotype including perinatal lethality, disorganized neocortical layering, and profound hippocampal cytoarchitectural disorganization. Unlike DCLK1, DCLK2 expression does not change in DCX-null mice.

DCLK1 Antibody - References

Sossey-Alaoui K and Srivastava AK. DCAMKL1, a brain specific transmembrane protein on 13q12.3 that is similar to doublecortin (DCX), Genomics1999; 56:121-6.
Ohmae S, Takemoto-Kimura S, Okamura M, et al. Molecular identification and characterization of a family of kinases with homology to Ca2+/calmodulin-dependent protein kinases I/IV. J. Biol. Chem.2006; 281:20427-39.
Tuy FPD, Saillour Y, Kappeler C, et al. Alternative transcripts of Dlck1 and Dlck2 and their expression in doublecortin knockout mice. Dev. Neurosci.2008; 30:171-86.
Reiner O and Coquelle FM. Missense mutations resulting in type 1 lissencephaly. Cell Mol. Life Sci.2005; 62:425-34.