

## DCLK1 Antibody

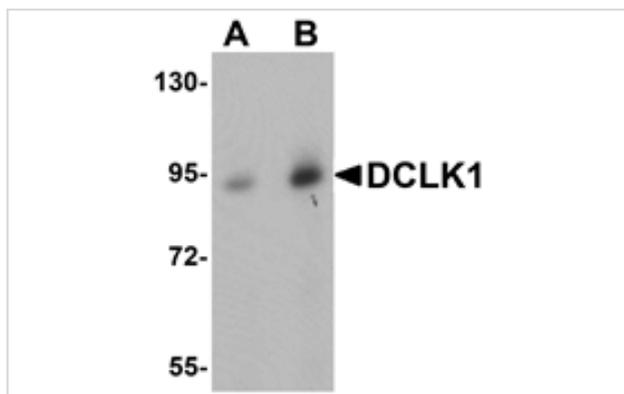
Catalog No: #25067

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

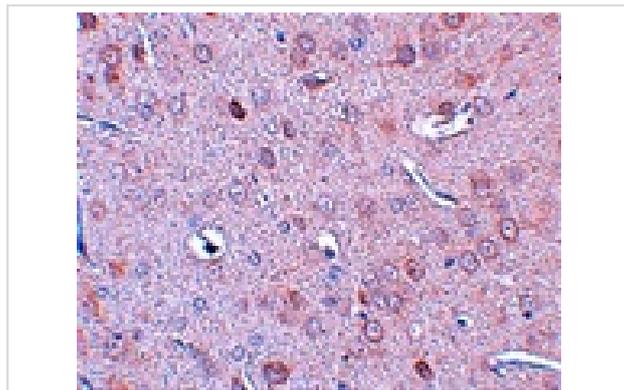
## Description

Product Name	DCLK1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 14 amino acid peptide near the amino terminus of human DCLK1.
Target Name	DCLK1
Other Names	Doublecortin kinase-like 1, CL1, CLICK1, DCAMKL1, DCDC3A
Accession No.	Swiss-Prot:O15075Gene ID:9201
Uniprot	O15075
GeneID	9201;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for 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.

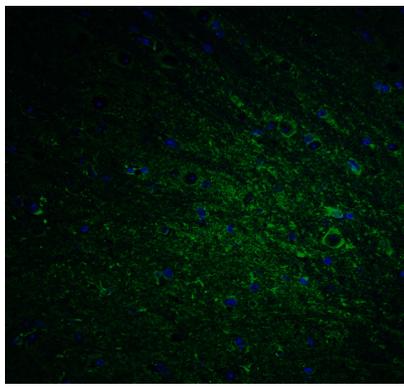
## Images



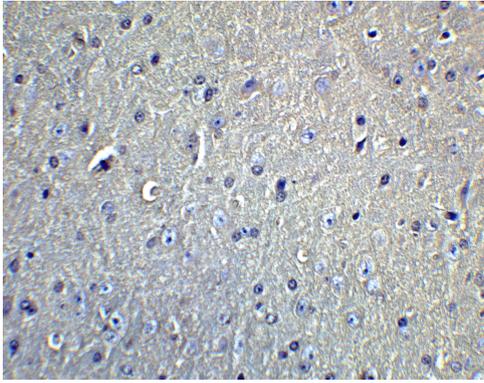
Western blot analysis of DCLK1 in human brain tissue lysate with DCLK1 antibody at (A) 0.5 and (B) 1 ug/mL.



Immunohistochemistry of DLCK1 in rat brain tissue with DLCK1 antibody at 2.5 ug/mL.



Immunofluorescence of DCLK1 in mouse brain tissue with DCLK1 Antibody at 20 µg/mL.



Immunohistochemistry of DCLK1 in mouse brain tissue with DCLK1 Antibody at 5 µg/mL.

## Background

DCLK1 is one of three doublecortin-like kinases similar to the  $Ca^{2+}$ /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.

Note: This product is for in vitro research use only