

Datasheet for 600-401-AT0**DCLK1 Antibody****Overview**

Description:	Anti-DCLK1 (RABBIT) Antibody - 600-401-AT0
Item No.:	600-401-AT0
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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.
Synonyms:	DCLK1 Antibody, CL1, DCLK, CLICK1, DCDC3A, DCAMKL1, KIAA0369, Doublecortin domain-containing protein 3A
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	DCLK1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-DCLK1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the N-terminus of human DCLK1. The immunogen is located within the last 50 amino acids of DCLK1.
Purity/Specificity:	Anti-DCLK1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with DCLK1 from other sources has not been determined.
Relevant Links:	• UniProtKB - O15075 • GeneID - 9201 • NCBI - NP_004725

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-DCLK1 Antibody has been tested for use in ELISA, Western Blotting, Immunofluorescence, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 82 kDa in Western Blots of specific cell lysates and tissues. Positive controls used Rat and Human brain tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000-1:10000
IF:	20µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

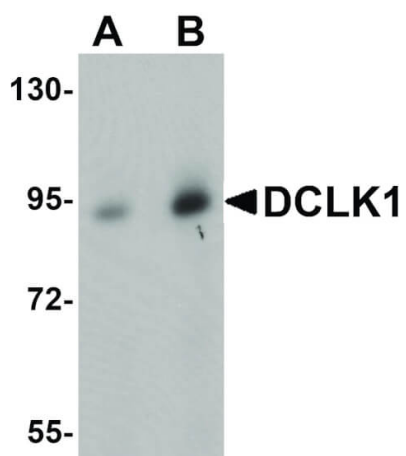
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

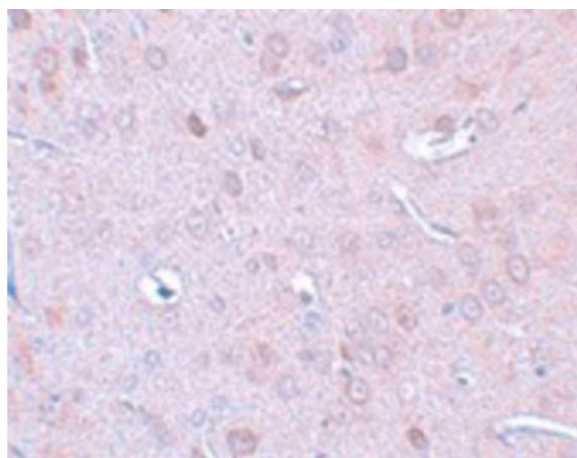
Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of DCLK1 antibody. Lane 1: human brain tissue lysate with DCLK1 antibody at 0.5 µg/mL. Lane 2: human brain tissue lysate with DCLK1 antibody at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 82 kDa, 95 kDa for DCLK1. Other band(s): DCLK1 splice variants and isoforms.



Immunohistochemistry

Immunohistochemistry of DCLK1 antibody. Tissue: rat brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: DCLK1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: DCLK1 is localized in the plasma membrane. Staining: DCLK1 as precipitated purple signal with blue nuclear counterstain.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.