For Research Use Only

DCLK1 Polyclonal antibody

Catalog Number:21699-1-AP Featured Product 11 Publications

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Basic Information

Catalog Number:
21699-1-AP

Size:
150ul , Concentration: 600 ug/ml by Nanodrop and 333 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16292

GenBank Accession Number:
BC152456

GeneID (NCBI):
9201

UNIPROT ID:
O15075

Full Name:
doublecortin-like kinase 1

Calculated MW:
729 aa, 81 kDa

Observed MW:
48 kDa, 82 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:3000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:200-1:800
IF-P 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : rat brain tissue, human brain tissue, mouse brain tissue

IP : rat brain tissue,

IHC : human pancreas cancer tissue,

IF-P : mouse brain tissue,

Background Information

DCLK1 (Serine/threonine-protein kinase DCLK1) is also named as DCAMKL1, DCDC3A, KIAA0369 and belongs to the CAMK Ser/Thr protein kinase family. It is a microtubule-associated kinase that can undergo autophosphorylation and it also has microtubule-polymerizing activity that is independent of its protein kinase activity (PMID: 11124993). It plays a unique role in mitotic spindle integrity during early neurogenesis in radial glial cell proliferation and their radial process stability. DCLK1 is a unique marker for distinguishing tumor stem cells from intestinal normal stem cells (PMID: 23202126). This protein has 4 isoforms produced by alternative splicing with the molecular weight of 82 kDa, 81 kDa, 47 kDa and 48 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Kai Lu	31562534	J Gastroenterol	WB
Mahan Si	36210463	Cell Biosci	WB
Lanqing Wang	35522902	Clin Transl Med	WB,IHC,IF,IP

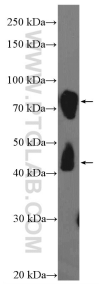
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

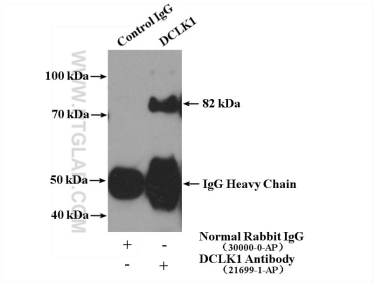
*** 20ul sizes contain 0.1%BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

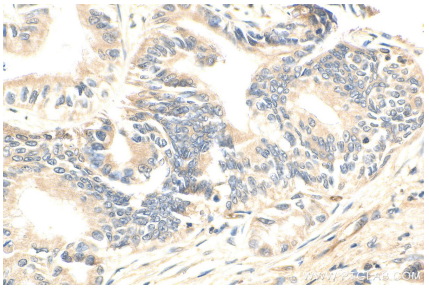
Selected Validation Data



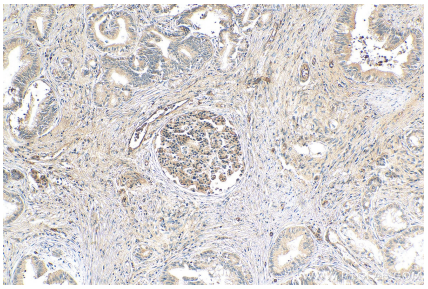
rat brain tissue were subjected to SDS PAGE followed by western blot with 21699-1-AP (DCLK1 Antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



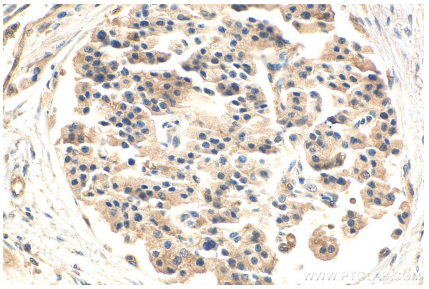
IP result of anti-DCLK1 (IP:21699-1-AP, 4ug; Detection:21699-1-AP 1:1000) with rat brain tissue lysate 4000ug.



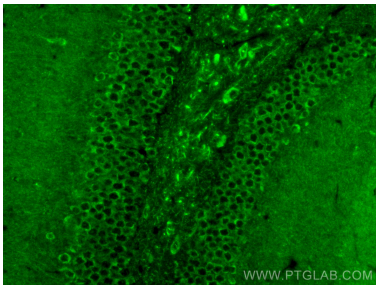
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 21699-1-AP (DCLK1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 21699-1-AP (DCLK1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 21699-1-AP (DCLK1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DCLK1 antibody (21699-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).