

For Research Use Only

DCLK1 Monoclonal antibody

Catalog Number: 68234-1-Ig



Basic Information

Catalog Number: 68234-1-Ig	GenBank Accession Number: BC152456	Purification Method: Protein G purification
Size: 150ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 9201	CloneNo.: 3C12C1
Source: Mouse	Full Name: doublecortin-like kinase 1	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:200-1:800
Isotype: IgG1	Calculated MW: 729 aa, 81 kDa	
Immunogen Catalog Number: AG17110	Observed MW: 46 kDa, 82 kDa	

Applications

Tested Applications:
FC, IF, IHC, WB, ELISA

Species Specificity:
Human, mouse, rat, rabbit, pig

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 : pig brain tissue, fetal human brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue

IHC : mouse brain tissue,

IF : 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.

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

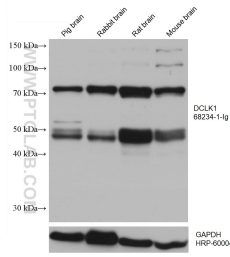
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

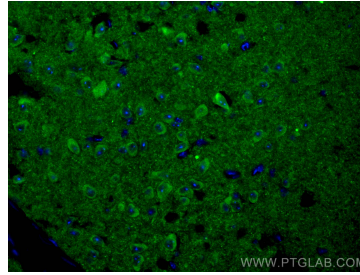
E: proteintech@ptglab.com
W: ptglab.com

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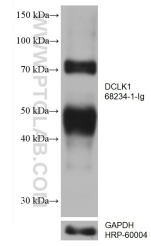
Selected Validation Data



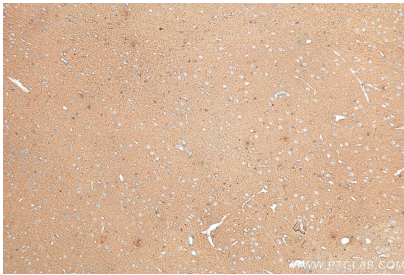
Various lysates were subjected to SDS PAGE followed by western blot with 68234-1-Ig (DCLK1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



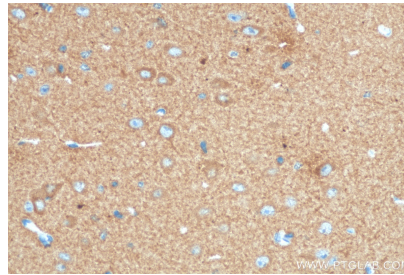
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DCLK1 antibody (68234-1-Ig, Clone: 3C12C1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



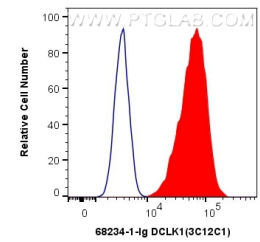
fetal human brain tissue were subjected to SDS PAGE followed by western blot with 68234-1-Ig (DCLK1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68234-1-Ig (DCLK1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68234-1-Ig (DCLK1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 Neuro-2a cells were intracellularly stained with 0.4 ug Anti-Human DCLK1 (68234-1-Ig, Clone:3C12C1) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).