For Research Use Only

DCLK1 Monoclonal antibody

Catalog Number:68234-1-Ig

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
68234-1-Ig

Size:
1000 μg/ml

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG17110

GenBank Accession Number:
BC152456

GeneID (NCBI):
9201

UNIPROT ID:
O15075

Full Name:
doublecortin-like kinase 1

Calculated MW:
729 aa, 81 kDa

Observed MW:
46 kDa, 82 kDa

Purification Method:
Protein G purification

CloneNo.:
3C12C1

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:500-1:2000
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, ELISA, FC (Intra)

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-P : mouse brain tissue,

Background Information

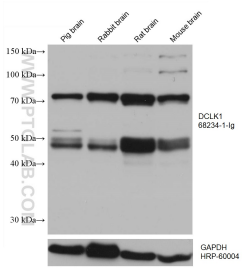
DCLK1 (Serine/threonine-protein kinase DCLK1) is also named as DCAMKL1, DCDC3A, KIAA0369 and belongs to the CAMK Ser/Thr protein kinase family. It is a microtubule-associated kinase that can undergo autophosphorylation and it also has microtubule-polymerizing activity that is independent of its protein 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.

Storage

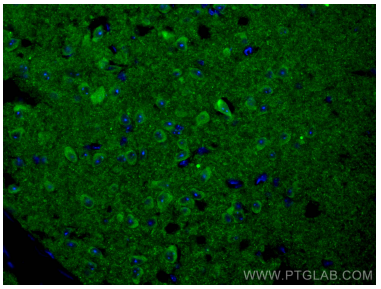
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

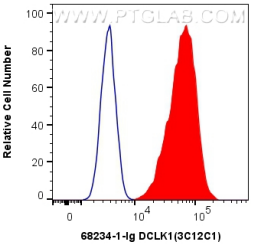
Selected Validation Data



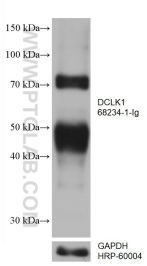
Various lysates were subjected to SDS PAGE followed by western blot with 68234-1-Ig (DCLK1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



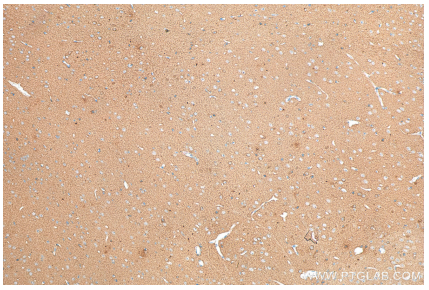
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DCLK1 antibody (68234-1-Ig, Clone: 3C12C1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



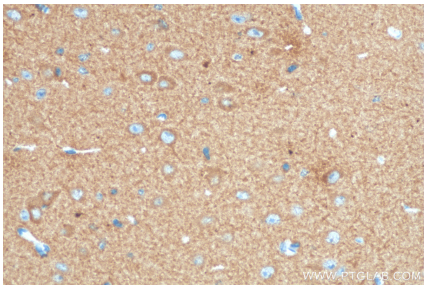
1X10^6 Neuro-2a cells were intracellularly stained with 0.4 ug Anti-Human DCLK1 (68234-1-Ig, Clone:3C12C1) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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).