For Research Use Only

DCLK1 Monoclonal antibody, PBS Only



Purification Method:

Protein G purification

CloneNo.:

3C12C1

Catalog Number: 68234-1-PBS

Basic Information

Catalog Number: GenBank Accession Number:

68234-1-PBS BC152456
Size: GeneID (NCBI):

 1mg/ml
 9201

 Source:
 UNIPROT ID:

 Mouse
 015075

 Isotype:
 Full Name:

IgG1 doublecortin-like kinase 1

Immunogen Catalog Number:Calculated MW:AG17110729 aa, 81 kDa

Observed MW: 46 kDa, 82 kDa

Applications

Tested Applications:

WB, IHC, IF-P, Indirect ELISA

Species Specificity:

Human, mouse, rat, rabbit, pig

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

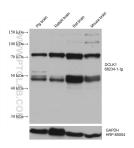
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C $\,$

Storage Buffer: PBS Only

Selected Validation Data

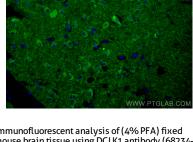


Various lysates were subjected to SDS PAGE followed by western blot with 68234-1-lg (DCLK1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 68234-1-PBS in a different storage buffer formulation.

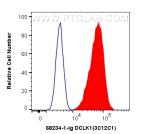
DCLK1 68234-1-1

150 kDa-100 kDa-70 kDa-

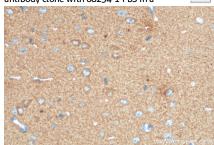
50 kDa



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DCLK1 antibody (68234-1-lg, Clone: 3C12C1) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 68234-1-PBS in a different storage buffer formulation.



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



fetal human brain tissue were subjected to SDS PAGE followed by western blot with 68234-1-1g (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. This data was developed using the same antibody clone with 68234-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 68234-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 68234-1-PBS in a different storage buffer formulation.