10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DCAMKL1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7219a

Product Information

Application	WB, E
Primary Accession	O15075
Other Accession	Q9JLM8
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	82224
Antigen Region	1-30

Additional Information

Gene ID	9201
Other Names	Serine/threonine-protein kinase DCLK1, Doublecortin domain-containing protein 3A, Doublecortin-like and CAM kinase-like 1, Doublecortin-like kinase 1, DCLK1, DCAMKL1, DCDC3A, KIAA0369
Target/Specificity	This DCAMKL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DCAMKL1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DCAMKL1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DCLK1
Synonyms	DCAMKL1, DCDC3A, KIAA0369

Function	Probable kinase that may be involved in a calcium-signaling pathway controlling neuronal migration in the developing brain. May also participate in functions of the mature nervous system.
Tissue Location	In fetal tissues, highly expressed in brain, detectable in lung and liver, but not in kidney. In adult tissues, expressed ubiquitously in the brain, detectable in the heart, liver, spleen, thymus, prostate, testis, ovary, small intestine and colon. The type A isoforms seem to be expressed predominantly in fetal brain whereas type B isoforms are expressed abundantly in both fetal and adult brain.

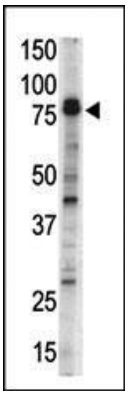
Background

Doublecortin-like kinase (DCAMKL1)(Ser/Thr protein kinase family) is essential for proper neurogenesis, neuronal migration, and axonal wiring. DCAMKL1 is involved in a calcium-signaling pathway controling neuronal migration in the developing brain, and participates in functions of the mature nervous system. DCAMKL1 protein shares high homology with doublecortin (DCX). DCLK, but not DCX, is highly expressed in regions of active neurogenesis in the neocortex and cerebellum. DCAMKL1 controls mitotic division by regulating spindle formation and also determines the fate of neural progenitors during cortical neurogenesis.

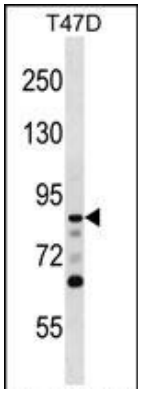
References

Matsumoto, N., et al., Genomics 56(2):179-183 (1999).
Sossey-Alaoui, K., et al., Genomics 56(1):121-126 (1999).
Omori, Y., et al., J. Hum. Genet. 43(3):169-177 (1998).
Nagase, T., et al., DNA Res. 4(2):141-150 (1997).

Images



Western blot analysis of DCAMKL1 Antibody (N-term)(Cat. #AP7219a) in mouse brain tissue lysate. DCAMKL1 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



DCAMKL1 Antibody (D13) (Cat. #AP7219a) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the DCAMKL1 antibody detected the DCAMKL1 protein (arrow).

Citations

- A multicellular approach forms a significant amount of tissue-engineered small intestine in the mouse.
- IFN- inhibits gastric carcinogenesis by inducing epithelial cell autophagy and T-cell apoptosis.
- Conditional deletion of IkappaB-kinase-beta accelerates helicobacter-dependent gastric apoptosis, proliferation, and preneoplasia.
- Inactivating cholecystokinin-2 receptor inhibits progastrin-dependent colonic crypt fission, proliferation, and colorectal cancer in mice.
- Hepatic effects of a methionine-choline-deficient diet in hepatocyte RXRalpha-null mice.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.