

# DCAMKL1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant DCAMKL1.

Catalog # AT1715a

## Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">O15075</a>
<b>Other Accession</b>	<a href="#">NM_004734</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1 Kappa
<b>Clone Names</b>	6H4
<b>Calculated MW</b>	82224

## Additional Information

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<b>Gene ID</b>	9201
<b>Other Names</b>	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
<b>Target/Specificity</b>	DCAMKL1 (NP_004725, 640 a.a. ~ 729 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	DCAMKL1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

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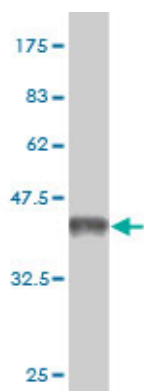
This gene encodes a member of the protein kinase superfamily and the doublecortin family. The protein encoded by this gene contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, a C-terminal serine/threonine protein kinase domain, which shows substantial homology to Ca<sup>2+</sup>/calmodulin-dependent protein kinase, and a serine/proline-rich domain in between the doublecortin and the protein kinase domains, which mediates multiple protein-protein interactions. The microtubule-polymerizing activity of the encoded protein is independent of its protein kinase activity. The encoded protein is involved in several different cellular processes, including neuronal migration, retrograde transport, neuronal apoptosis and neurogenesis. This gene is up-regulated by brain-derived neurotrophic factor and associated with memory and general cognitive abilities. Multiple transcript variants generated by

two alternative promoter usage and alternative splicing have been reported, but the full-length nature and biological validity of some variants have not been defined. These variants encode different isoforms, which are differentially expressed and have different kinase activities.

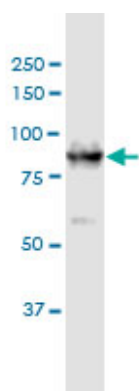
## References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614. The doublecortin gene family and disorders of neuronal structure. Dijkmans TF, et al. *Cent Nerv Syst Agents Med Chem*, 2010 Mar. PMID 20236041. Silencing of the microtubule-associated proteins doublecortin-like and doublecortin-like kinase-long induces apoptosis in neuroblastoma cells. Verissimo CS, et al. *Endocr Relat Cancer*, 2010. PMID 20228126. Variants in doublecortin- and calmodulin kinase like 1, a gene up-regulated by BDNF, are associated with memory and general cognitive abilities. Le Hellard S, et al. *PLoS One*, 2009 Oct 21. PMID 19844571. A potential role for calcium / calmodulin-dependent protein kinase-related peptide in neuronal apoptosis: in vivo and in vitro evidence. Schenk GJ, et al. *Eur J Neurosci*, 2007 Dec. PMID 18052980.

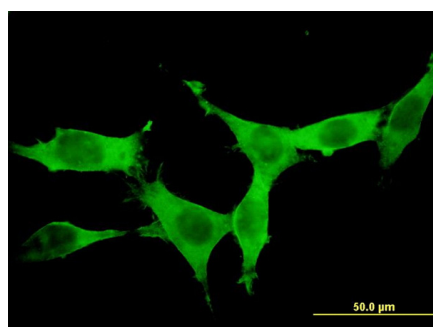
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.53 KDa) .

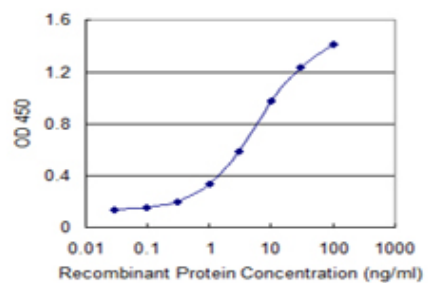


DCAMKL1 monoclonal antibody (M03), clone 6H4 Western Blot analysis of DCAMKL1 expression in NIH/3T3 (Cat # AT1715a )



Immunofluorescence of monoclonal antibody to DCAMKL1 on NIH/3T3 cell. [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged DCLK1 is 0.1 ng/ml as a capture antibody.



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