

Product datasheet for **RC231229**

DCAMKL1 (DCLK1) (NM_001195416) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCAMKL1 (DCLK1) (NM_001195416) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DCAMKL1
Synonyms:	CL1; CLICK1; DCAMKL1; DCDC3A; DCLK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC231229 representing NM_001195416
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTAGAAGTTCATAGAAGTAAATGGAACCCCTGGTAGTCAGCTCTCTACTCCGCGCTCAGCAAGTCGC
 CAAGCCCATCACCCACCAGCCCAGGAAGCCTGCGAAGCAGAGGAGCTCTCAGCATGGCGGCTCCTCTAC
 GTCACTTGCCTCCACCAAGTCTGCAGCTCGATGGATGAGAACGATGGCCCTGGAGAAGAAGTGTGGAG
 GAAGGCTTCCAGATTCCAGCTACAATAACAGAACGATATAAAGTCGGAAGAACAATAGGAGATGAAATT
 TTGCTGTTGTCAAGGAATGTGTAGAAAGATCGACTGCTAGAGAGTATGCTCTGAAAATTATCAAGAAAAG
 CAAATGTCGAGGCAAAGAGCACATGATCCAGAATGAAGTGTCTATTTAAGAAGAGTGAAGCATCCCAAT
 ATCGTTCTTCTGATTGAGGAGATGGATGTGCCAAGTGAAGTGTCTTGTGTCATGGAATTAGTAAAGGGG
 GAGACCTTTTGGATGCCATTACTCCACTAACAAATACACCGAGAGAGACGCCAGTGGGATGCTGTACAA
 CCTAGCCAGCGCCATCAAATACCTGCATAGCCTGAACATCGTCCACCGTATATCAAGCCAGAGAACCTG
 CTGGTGTATGAGACCAAGATGGCAGCAAATCACTGAAGCTGGGTGACTTTGGACTGGCCACCATTGTAG
 ACGGCCCCCTGTACACAGTCTGTGGCACCCCAACATACGTGGCTCCAGAAATCATTGCAGAGACTGGATA
 CGGCCTCAAGGTGGACATCTGGCAGCAGGTGTAATCACTTATATCCTGCTGTGTGGTTTCCCTCCATTC
 CGTGGAAGTGGTATGACCAGGAGGTGCTTTTGTATCAGATTTTGTATGGGCGAGTGGACTTTCTTCTC
 CATACTGGGATAATGTTCCGATTCTGCAAAGGAGCTCATTACCATGATGCTGTTGGTTCGATGTAGATCA
 GCGATTTTCTGCTGTTCAAGTACTTGAGCATCCCTGGGTTAATGATGATGGCCTCCAGAAAATGAACAT
 CAGCTGTCAGTAGCTGGAAGATAAAGAAGCATTCAACACAGGCCCAAGCCGAATAGCACAGCAGCTG
 GAGTTTCTGTATAGCAACCACCGCTCTTGATAAGGAGAGGCAGGTTTTCCGACGAAGACGCAACCAGGA
 TGTGAGGAGCCGGTACAAGGCGCAGCCAGCTCCTCCCGAAGTCAACTCGGAATCGGAAGACTACTCCCA
 AGCTCCTCCGAGACTGTTGCTCCCTAACTCGCCCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC231229 representing NM_001195416
 Red=Cloning site Green=Tags(s)

MLELIEVNGTPGSQLSTPRSGKSPSPSPTSPGSLRKQRSSQHGGSSLSLSTKVCSSMDENDGPGEVSE
 EGFQIPATITERYKVGRTIGDGNFAVVKECVERSTAREYALKI IKKSKCRGKEHMIQNEVSILRRVKHPN
 IVLLIEEMDVPTL YLVMELVGGDLFDAITSTNKYTERDASGMLYNLASAIKYLHSLNI VHRDIKPENL
 LVYEHQDGSKSLKLGDFGLATIVDGPLYTVCGTPTYVAPEIIAETGYGLKVDIWAAGVITYILLCGFPPF
 RSGDDQEVLFQILMGQVDFPSPYWDNVSDSAKELITMMLLVDVDQRFSAVQVLEHPWVNDGLPENEH
 QLSVAGIKKHFNTGPKPNSTAAGVSVIATTALDKERQVFRRRRNQDVR SRYKAQPAPPELNSESEDYSP
 SSSETVRSNPSPF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8059_e12.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001195416

ORF Size: 1299 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

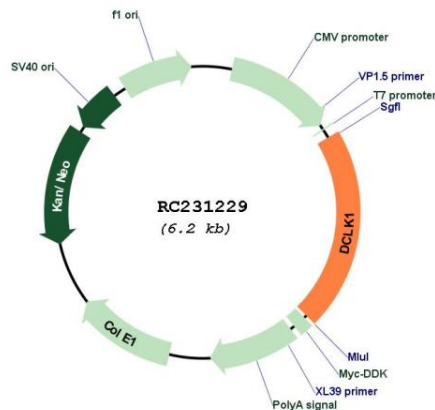
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001195416.2](#)

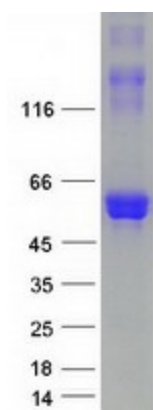
RefSeq ORF:	1302 bp
Locus ID:	9201
UniProt ID:	<u>O15075</u>
Cytogenetics:	13q13.3
Protein Families:	Druggable Genome, Protein Kinase
MW:	48.1 kDa

Gene Summary: 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 Ca²⁺/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.[provided by RefSeq, Sep 2010]

Product images:



Circular map for RC231229



Coomassie blue staining of purified DCLK1 protein (Cat# [TP331229]). The protein was produced from HEK293T cells transfected with DCLK1 cDNA clone (Cat# RC231229) using MegaTran 2.0 (Cat# [TT210002]).