

## **Product datasheet for RC231222**

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### DCAMKL1 (DCLK1) (NM\_001195415) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** DCAMKL1 (DCLK1) (NM\_001195415) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: DCAMKL1

Synonyms: CL1; CLICK1; DCAMKL1; DCDC3A; DCLK

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



ORF Nucleotide Sequence:

>RC231222 representing NM\_001195415
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGTTAGAACTCATAGAAGTTAATGGAACCCCTGGTAGTCAGCTCTCTACTCCGCGCTCAGGCAAGTCGC CAAGCCCATCACCCACCAGCCCAGGAAGCCTGCGGAAGCAGAGGAGCTCTCAGCATGGCGGCTCCTCTAC GTCACTTGCGTCCACCAAAGTCTGCAGCTCGATGGATGAGAACGATGGCCCTGGAGAAGAAGTGTCGGAG GAAGGCTTCCAGATTCCAGCTACAATAACAGAACGATATAAAGTCGGAAGAACAATAGGAGATGGAAATT TTGCTGTTGTCAAGGAATGTGTAGAAAGATCGACTGCTAGAGAGTATGCTCTGAAAATTATCAAGAAAAG CAAATGTCGAGGCAAAGAGCACATGATCCAGAATGAAGTGTCTATTTTAAGAAGAGTGAAGCATCCCAAT ATCGTTCTTCTGATTGAGGAGATGGATGTGCCAACTGAACTGTATCTTGTCATGGAATTAGTAAAGGGGG CCTAGCCAGCGCCATCAAATACCTGCATAGCCTGAACATCGTCCACCGTGATATCAAGCCAGAGAACCTG CTGGTGTATGAGCACCAAGATGGCAGCAAATCACTGAAGCTGGGTGACTTTGGACTGGCCACCATTGTAG ACGGCCCCTGTACACAGTCTGTGGCACCCCAACATACGTGGCTCCAGAAATCATTGCAGAGACTGGATA CGGCCTCAAGGTGGACATCTGGGCAGCAGGTGTAATCACTTATATCCTGCTGTGTGGTTTCCCTCCATTC CGTGGAAGTGGTGATGACCAGGAGGTGCTTTTTGATCAGATTTTGATGGGGCAGGTGGACTTTCCTTCTC CATACTGGGATAATGTTTCCGATTCTGCAAAGGAGCTCATTACCATGATGCTGTTGGTCGATGTAGATCA GCGATTTTCTGCTGTTCAAGTACTTGAGCATCCCTGGGTTAATGATGATGGCCTCCCAGAAAATGAACAT CAGCTGTCAGTAGCTGGAAAGATAAAGAAGCATTTCAACACAGGCCCCAAGCCGAATAGCACAGCAGCTG GAGTTTCTGTCATAGCACTGGACCACGGGTTTACCATCAAGAGATCAGGGTCTTTGGACTACCAGCA ACCAGGAATGTATTGGATAAGACCACCGCTCTTGATAAGGAGGCAGGTTTTCCGACGAAGACGCAACC **AGGATG** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** 

>RC231222 representing NM\_001195415
Red=Cloning site Green=Tags(s)

MLELIEVNGTPGSQLSTPRSGKSPSPSTSPGSLRKQRSSQHGGSSTSLASTKVCSSMDENDGPGEEVSE EGFQIPATITERYKVGRTIGDGNFAVVKECVERSTAREYALKIIKKSKCRGKEHMIQNEVSILRRVKHPN IVLLIEEMDVPTELYLVMELVKGGDLFDAITSTNKYTERDASGMLYNLASAIKYLHSLNIVHRDIKPENL LVYEHQDGSKSLKLGDFGLATIVDGPLYTVCGTPTYVAPEIIAETGYGLKVDIWAAGVITYILLCGFPPF RGSGDDQEVLFDQILMGQVDFPSPYWDNVSDSAKELITMMLLVDVDQRFSAVQVLEHPWVNDDGLPENEH QLSVAGKIKKHFNTGPKPNSTAAGVSVIALDHGFTIKRSGSLDYYQQPGMYWIRPPLLIRRGRFSDEDAT RM

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

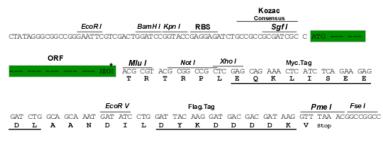
Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk8058">https://cdn.origene.com/chromatograms/mk8058</a> g06.zip

**Restriction Sites:** Sgfl-Mlul



**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001195415

ORF Size: 1266 bp

**OTI Disclaimer:** 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001195415.1</u>, <u>NP 001182344.1</u>

 RefSeq ORF:
 1269 bp

 Locus ID:
 9201

 UniProt ID:
 015075



Cytogenetics: 13q13.3

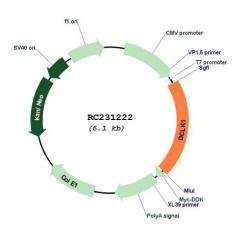
**Protein Families:** Druggable Genome, Protein Kinase

**MW:** 47 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 RC231222