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Product datasheet for RC231222

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

View online »

ORF Nucleotide Sequence:

>RC231222 representing NM_001195415
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTAGAACTCATAGAAGTTAATGGAACCCCTGGTAGTCAGCTCTCTACTCCGCGCTCAGGCAAGTCGC
CAAGCCCATCACCCACCAGCCCAGGAAGCCTGCGGAAGCAGAGGAGCTCTCAGCATGGCGGCTCCTCTAC
GTCACTTGCGTCCACCAAAGTCTGCAGCTCGATGGATGAGAACGATGGCCCTGGAGAAGAAGTGTCGGAG
GAAGGCTTCCAGATTCCAGCTACAATAACAGAACGATATAAAGTCGGAAGAACAATAGGAGATGGAAATT
TTGCTGTTGTCAAGGAATGTGTAGAAAGATCGACTGCTAGAGAGTATGCTCTGAAAATTATCAAGAAAAG
CAAATGTCGAGGCAAAGAGCACATGATCCAGAATGAAGTGTCTATTTTAAGAAGAGTGAAGCATCCCAAT
ATCGTTCTTCTGATTGAGGAGATGGATGTGCCAACTGAACTGTATCTTGTCATGGAATTAGTAAAGGGGG
GAGACCTTTTTGATGCCATTACTTCCACTAACAAATACACCGAGAGAGACGCCAGTGGGATGCTGTACAA
CCTAGCCAGCGCCATCAAATACCTGCATAGCCTGAACATCGTCCACCGTGATATCAAGCCAGAGAACCTG
CTGGTGTATGAGCACCAAGATGGCAGCAAATCACTGAAGCTGGGTGACTTTGGACTGGCCACCATTGTAG
ACGGCCCCCTGTACACAGTCTGTGGCACCCCAACATACGTGGCTCCAGAAATCATTGCAGAGACTGGATA
CGGCCTCAAGGTGGACATCTGGGCAGCAGGTGTAATCACTTATATCCTGCTGTGTGGTTTCCCTCCATTC
CGTGGAAGTGGTGATGACCAGGAGGTGCTTTTTGATCAGATTTTGATGGGGCAGGTGGACTTTCCTTCTC
CATACTGGGATAATGTTTCCGATTCTGCAAAGGAGCTCATTACCATGATGCTGTTGGTCGATGTAGATCA
GCGATTTTCTGCTGTTCAAGTACTTGAGCATCCCTGGGTTAATGATGATGGCCTCCCAGAAAATGAACAT
CAGCTGTCAGTAGCTGGAAAGATAAAGAAGCATTTCAACACAGGCCCCAAGCCGAATAGCACAGCAGCTG
GAGTTTCTGTCATAGCACTGGACCACGGGTTTACCATCAAGAGATCAGGGTCTTTGGACTACTACCAGCA
ACCAGGAATGTATTGGATAAGACCACCGCTCTTGATAAGGAGAGGCAGGTTTTCCGACGAAGACGCAACC
AGGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC231222 representing NM_001195415
Red=Cloning site Green=Tags(s)

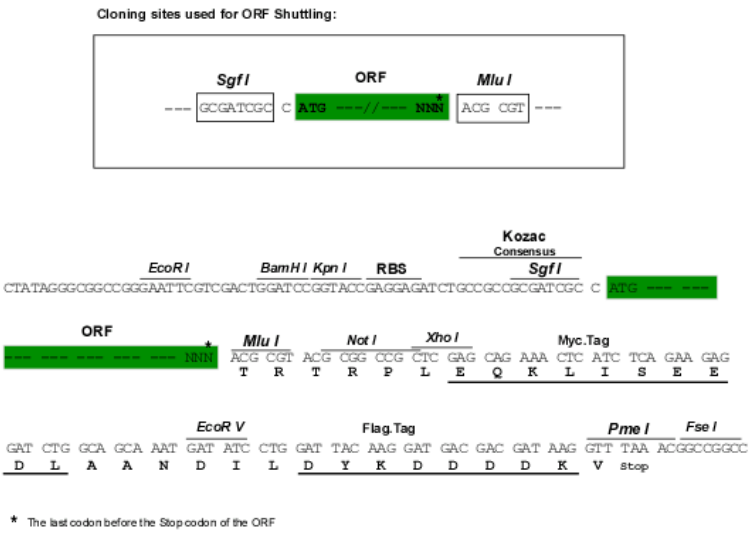
MLELIEVNGTPGSQLSTPRSGKSPSPSPTSPGSLRKQRSSQHGGSSTSLASTKVCSSMDENDGPGEEVSE
EGFQIPATITERYKVGRTIGDGNFAVVKECVERSTAREYALKIIKKSKCRGKEHMIQNEVSILRRVKHPN
IVLLIEEMDVPTELYLVMELVKGGDLFDAITSTNKYTERDASGMLYNLASAIKYLHSLNIVHRDIKPENL
LVYEHQDGSKSLKLGDFGLATIVDGPLYTVCGTPTYVAPEIIAETGYGLKVDIWAAGVITYILLCGFPPF
RGSGDDQEVLFDQILMGQVDFPSPYWDNVSDSAKELITMMLLVDVDQRFSAVQVLEHPWVNDDGLPENEH
QLSVAGKIKKHFNTGPKPNSTAAGVSVIALDHGFTIKRSGSLDYYQQPGMYWIRPPLLIRRGRFSDEDAT
RM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8058_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001195415

ORF Size: 1266 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.

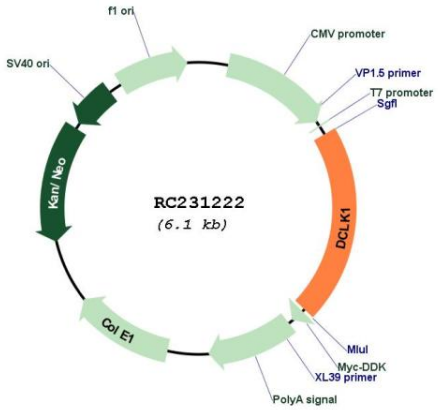
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_001195415.1, NP_001182344.1

RefSeq ORF:	1269 bp
Locus ID:	9201
UniProt ID:	O15075
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