

Product datasheet for **MR226383**

Dclk2 (NM_001195498) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dclk2 (NM_001195498) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dclk2
Synonyms:	6330415M09Rik; AU044875; CL2; Clic; Click-II; CLICK2; Dcamk; Dcamk12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR226383 representing NM_001195498
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCACAAAGGAGCATTGAGCTGGAACATTTTGAAGAACGGGACAAAAGGCCGCGCCAGGGTCAC
 GGAGAGGGGCTCCAGCTCCTCCGGGGCAGCAGCATCTCTGGCCCAAGGGCAACGGGCTCATCCCAG
 CCCGGCGCACAGTGCTCACTGCAGCTTCTACCGCACGCGGACCTTGCAGGCCCTCAGCTCGGAGAAGAAG
 GCCAAGAAGGCGCGTTCACCGAATGGGGACCCTATTTCAAAGGCCTGGTCTTTGCCATCTCCAACG
 ACCGTTCCGTTCTTCGATGCGCTCCTCATAGAGCTCACCCGCTCACTGTCTGACAATGTGAACCTGCC
 CCAGGGCGTCCGACCCTACACCATAGACGGCAGCCGGAAGGTCACCAGCCTGGACGAGCTGTGGAA
 GGTGAAAGTTACGTGTGCCTCCAACGAACATTTTCGTAAGTTGATTACACAAAAACGTTAATCCGA
 ACTGGTCTGTGAACATCAAGGGCGGAACACCCGACCCCTGGCCGTGGCCTCTCGAAGAGTGAGGTGAA
 AGAAAGCAAAGACTTCATTAACCCAAGTTAGTACTGTGATTGGAAGCGGAGTGAAGCCTAGAAAGGCC
 GTGCGGATCCTTCTGAATAAAAAGACTGCCATTCCTTTGAGCAGGTCTTAACAGATATACCGAAGCCA
 TTAAACTAGACTCAGGCGTGGTCAAGAGGCTGTGCACCCTGGATGGAAAGCAGGTTACTTGTCTGCAAGA
 CTTTTTGGAGACGATGATGTTTTATTGCATGTGGACCTGAAAAATATCGTTATGCCAAAGATGACTTT
 GTCCTGGATCATAGCGAATGCCGTGTCTGAAATCGTCTACTCTCGAGCCTCAGCTGCGAAGTATTCTG
 GATCCAGAAGCCAGGGTTCTCCCGCCGACGAAGTCACCAGCTTCAGTAAAGAGGGCTGGCCACTCCAG
 TGCTATTCTACAGCCAAATCCCAGTGAATGGAACCTCCAGTAGCCAGCTTTCCACTCCGAAGTCCACC
 AAGTCTCCAGCTCCTCTCCAACCAGCCGGAAGTTTCAGAGGATTGAAGCAGATTTCTGCTCAGGGCA
 GATCTTTCCAACGTAAACGGTGGCCCTGAACCTTGACCGTTGCCTGAGCCCTGAAGGTGGAATGGAAA
 CCGGTGCTCCGAGTCGTTCCCCCTTCTGGAGAAAATACAGAATAGGGAAGGTCATCGGGGACGGCAACTTC
 GCGGTAGTTAAGGAGTGCCTGGACAGGTACACTGGAAAAGAGTTTGCATTAAGATTATAGACAAAAGCCA
 AATGCTGTGAAAAGGAGCATCTGATTGAGAACGAAGTGTCAATCCTGCGCCGAGTGAAGCACCCCAACAT
 CATCATGTTGGTTGAAGAGATGAAAACAGCAACTGACCTCTTCTAGTGATGGAAGTGGTCAAAGGTGGA
 GATCTTTGATGCGATTACCTTTCAACCAAGTACACTGAGAGAGATGGAAGCGCCATGGTGTACAACC
 TAGCCAATGCCCTCCGTACCTGCACAGCCTCAGCATCGTCCACAGGGACATCAAGCCTGAGAATCTGCT
 GGTGTGCGAATACCCAGATGGAACCAAGTCTTTGAAGCTGGGAGACTTTGGGCTGGCGACGGTGGTTGAA
 GGCCCGTTGTACACGGTCTGTGGCAGCCAACTTATGTGGCACCAGAGATCATAGCTGAAACAGGTTATG
 GCCTGAAGGTGGATGTTGGGCAGCTGGTGTGATTACATACATACTTCTCTGTGGATTCCCACCATTCCG
 GAGTGAGAAATCTCCAGGAAGATCTCTTTGACCAGATCTTGGCTGGAAAGCTGGAATCCCAGCCCCC
 TACTGGGACAACATTACAGACTCTGCCAAGGAGTTAATCAGTCAAATGCTTCAGGTAAACGTTGAAGCTC
 GCTGTACTGCGGGAGAAATCTGAGTACCCCTGGGTGTGAGATGATGCATCCCAGGAGAACAATATGCA
 AGCCGAGGTTACAGGTAACATAAACAGCACTTAATAATGCGCTCCCAACAGAACAGCACCACCACC
 GGGTCTCCGTTATCATGGTCCAAGGCCATGAACACGGCTCTAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226383 representing NM_001195498
 Red=Cloning site Green=Tags(s)

MASTRSIELEHFEERDKRPRPGSRRGAPSSSSGGSSISGPKGNGLIPSPAHSACSFYRTRTLQALSSEKK
 AKKARFYRNGDRYFKGLVFAISNDRFRSFDALLIELTRSLSDNVNLPQGVRTIYITDGSRKVTSLDELLE
 GESYVVCASNEPFRKVVDYTKNVPNWSVNIKGGTTRTLAVASAKSEVKESKDFIKPKLVTVIRSGVKPRKA
 VRILLNKKTAHSFEQVLTDITEAIKLD SGVVKRLCTLDGKQVTC LQDFFGDDDFIACGPEKYRYAQDDF
 VLDHSECRVLKSSYSRASAAKYSGSRSPGFSRRSKSPASVKRAGHSSAYSTAKSPVNGTPSSQLSTPKST
 KSSSSSPTSPGSRGLKQISAQGRSSSNVNGGPELDRCLSPEGVNGNRCSESFPLLEKYRIGKVIIGDGNF
 AVYKECVDRYTGKEFALKIIDKAKCCGKEHLIENEVSILRRVKHPNIIMLVEEMETATDLFLVMELVKGG
 DLFDAITSSTKYTERDGSAMVYNLANALRYLHLSIVHRDIKPENLLVCEYDPGKSLKLGDFLATVVE
 GPLYTVCGTPTYVAPEIIAETGYGLKVDVWAAGVITYILLCGFPPFRSENNLQEDLFDQILAGKLEFPAP
 YWDNITDSAKELISQMLQVNVEARCTAGEILSHPWVSDDASQENMQAEVTGKLGKQHFNNALPKQNSTTT
 GSVVIMVQGHEHGSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001195498

ORF Size: 2145 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.

RefSeq: [NM_001195498.1](#), [NP_001182427.1](#)

RefSeq Size: 4108 bp

RefSeq ORF: 2148 bp

Locus ID: 70762

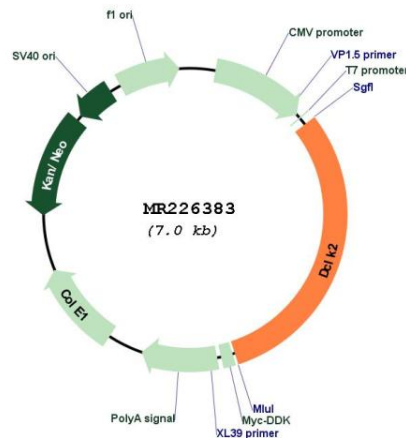
UniProt ID: [Q6PGN3](#)

Cytogenetics: 3 F1

MW: 79 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⁺/calmoduline-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. This gene and the DCX gene, another family member, share function in the establishment of hippocampal organization and their absence results in a severe epileptic phenotype and lethality, as described in human patients with lissencephaly. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Sep 2010]

Product images:



Circular map for MR226383