

Product datasheet for **MR226381**

Dclk2 (NM_027539) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dclk2 (NM_027539) 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:

>MR226381 representing NM_027539
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCACAAAGGAGCATTGAGCTGGAACATTTTGAAGAACGGGACAAAAGGCCGCGCCAGGGTCAC
 GGAGAGGGGCTCCAGCTCCTCCGGGGCAGCAGCATCTCTGGCCCAAGGGCAACGGGCTCATCCCAG
 CCCGGCGCACAGTGCTCACTGCAGCTTCTACCGCACGCGGACCTTGCAGGCCCTCAGCTCGGAGAAGAAG
 GCCAAGAAGGCGCGGTTCTACCGGAATGGGGACCCTATTTCAAAGGCCTGGTCTTTGCCATCTCCAACG
 ACCGTTTCCGTTCTTCGATGCGCTCCTCATAGAGCTCACCCGCTCACTGTCTGACAATGTGAACCTGCC
 CCAGGGCGTCCGACCCTACACCATAGACGGCAGCCGGAAGGTCACCAGCCTGGACGAGCTGTGGAA
 GGTGAAAGTTACGTGTGTGCCTCCAACGAACATTTTCGTAAGTTGATTACACAAAAACGTTAATCCGA
 ACTGGTCTGTGAACATCAAGGGCGGAACACCCGACCCCTGGCCGTGGCCTCTCGAAGAGTGAGGTGAA
 AGAAAGCAAAGACTTCATTAACCCAAGTTAGTACTGTGATTGAAAGCGGAGTGAAGCCTAGAAAGGCC
 GTGCGGATCCTTCTGAATAAAAAGACTGCCATTCTTTGAGCAGGTCTTAACAGATATACCGAAGCCA
 TTAAACTAGACTCAGGCGTGGTCAAGAGGCTGTGCACCCTGGATGGAAAGCAGGTTACTTGTCTGCAAGA
 CTTTTTTGGAGACGATGATGTTTTATTGCATGTGGACCTGAAAAATATCGTTATGCCAAAGATGACTTT
 GTCCTGGATCATAGCGAATGCCGTGTCTGAAATCGTCTACTCTCGAGCCTCAGCTGCGAAGTATTCTG
 GATCCAGAAGCCCAGGGTTCTCCCGCCGACGAAGTACCAGCTTCAAGTGAATGGAACCTCCAGTAGCCA
 GCTTCCACTCCGAAGTCCCAAGTCTCCAGCTCCTTCCAACGACCCGGAAGTTTCAGAGGATTG
 AAGCAGATTTCTGCTCAGGGCAGATCTTCTTCCAACGTAACGGTGGGCCTGAACCTGACCGTTGCCTGA
 GCCCTGAAGGTGTAATGGAACCGGTGCTCCGAGTCTTCCCTTCTGGAGAAATACAGAATAGGGAA
 GGTTCATCGGGGACGGCAACTTCGCGGTAGTTAAGGAGTGCCTGGACAGGTACACTGGAAAAGAGTTTGA
 TTAAGATTATAGACAAAAGCCTAATGCTGTGGAAGGAGCATCTGATTGAGAACGAAGTGTCAATCTGC
 GCCGAGTGAAGCACCCCAACATCATGTTGGTTGAAGAGATGGAAACAGCAACTGACCTCTTTCTAGT
 GATGGAAGTGGTCAAAGGTGGAGATCTCTTTGATGCGATTACCTCTTCAACCAAGTACACTGAGAGAGAT
 GGAAGCGCATGGTGTACAACCTAGCCAATGCCCTCCGGTACCTGCACAGCCTCAGCATCGTCCACAGGG
 ACATCAAGCCTGAGAATCTGCTGGTGTGCGAATACCCAGATGGAACCAAGTCTTTGAAGCTGGGAGACTT
 TGGGCTGGCGACGGTGGTTGAAGGCCCTGTACACGGTCTGTGGCAGCCTCACTTATGTGGCACCAGAG
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 TCTGTGGATTCCACCATTCGGAGTGAGAACAATCTCCAGGAAGATCTTTTGACCAGATCTTGGCTGG
 AAAGCTGGAATCCCAGCCCCCTACTGGGACAACATTACAGACTCTGCCAAGGAGTTAATCAGTCAAATG
 CTTCAGGTAACGTTGAAGCTCGCTGACTGCGGGAGAAATCTGAGTCAACCCCTGGGTGTGAGATGATG
 CATCCCAGGAGACAATATGCAAGCCGAGGTTACAGGTAACCTAAAACAGCACTTAAATAATGCGCTCCC
 CAAACAGAACAGCACCACCACCGGGTCTCCGTTATCATGAACACGGCTCTAGATAAAGAGGGGCAGATT
 TTCTGCAGCAAGCTCTGTCAAGACAGCAGCAGACCATCCAGGGAGCAGACCTCGCCAGTCCCTCCCTCAG
 CCCAGGAGGCCCTCCCCACTGGAGTCTCCAGGCCCTGGTCTCCAGCCACCTCTGGCTGTGATCT
 GGCAGGGACCTGGCGCCGCCACCGAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226381 representing NM_027539
 Red=Cloning site Green=Tags(s)

MASTRSIELEHFEERDKRPRPGSRRGAPSSSSGGSSISGPKGNGLIPSPAHSACSFYRTRTLQALSSEKK
 AKKARFYRNGDRYFKGLVFAISNDRFRSFDALLIELTRSLSDNVNLPQGVRTIYITIDGSRKVTSLDELLE
 GESYVVCASNEPFRKVDYTKNVNPNWSVNIKGGTTRTLAVASAKSEVKESKDFIKPKLVTVIRSGVKPRKA
 VRILLNKKTAHSFEQVLTDITEAIKLD SGVVKRLCTLDGKQVTC LQDFFGDDDFV IACGPEKYRYAQDDF
 VLDHSECRVLKSSYSRASAAKYSGSRSPGF SRRSKSPASVNGTPSSQLSTPKSTKSSSSSPTSPGSFRGL
 KQISAQGRSSSNVNGPELDRCLSPEGVNGNRCSESFPLEKYRIGKVI GDGNFAVVKECVDRYTGKEFA
 LKIIDKAKCCGKEHLIENEVSILRRVKHPNIIMLVEEMETATDLFLVMELVKGDDLFDAITSSKYTERD
 GSAMVYNLANALRYLHLSIVHRDIKPENLLVCEYPDGTSLKLGDFGLATVVEGPLYTVCGTPTYVAPE
 IIAETGYGLKVDVWAAGVITYILLCGFPFRSENNLQEDLFDQILAGKLEFPAPYWDNITDSAKELISQM
 LQVNVEARCTAGEILSHPWVSDDASQENNMQA EVTGK LKQHFNNALPKQNSTTTGVSVMNTALDKEGQI
 FCSKLCQDSSRPSREQTSPVPPSAQEAPPPLESPPRPPGPPATSGCDLAGTWRRHRD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_027539

ORF Size: 2268 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_027539.5](#), [NP_081815.3](#)

RefSeq Size: 4047 bp

RefSeq ORF: 2271 bp

Locus ID: 70762

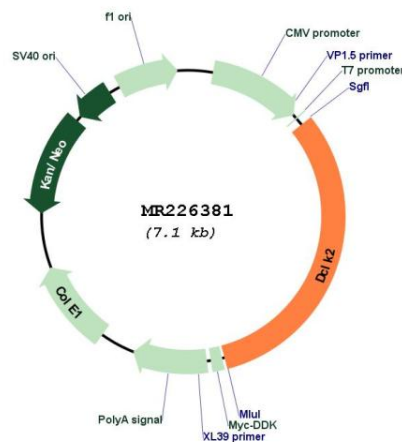
UniProt ID: [Q6PGN3](#)

Cytogenetics: 3 F1

MW: 83.4 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 MR226381