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Product datasheet for MR210491

Dclk2 (NM_001195497) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dclk2 (NM_001195497) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dclk2
Synonyms:	6330415M09Rik; AU044875; CL2; Clic; Click-II; CLICK2; Dcamk; Dcamkl2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR210491 representing NM_001195497
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAGCACAAGGAGCATTGAGCTGGAACATTTTGAAGAACGGGACAAAAGGCCGCGGCCAGGGTCAC
GGAGAGGGGCTCCCAGCTCCTCCGGGGGCAGCAGCATCTCTGGCCCCAAGGGCAACGGGCTCATCCCCAG
CCCGGCGCACAGTGCTCACTGCAGCTTCTACCGCACGCGGACCTTGCAGGCCCTCAGCTCGGAGAAGAAG
GCCAAGAAGGCGCGGTTCTACCGGAATGGGGACCGCTATTTCAAAGGCCTGGTCTTTGCCATCTCCAACG
ACCGTTTCCGTTCCTTCGATGCGCTCCTCATAGAGCTCACCCGCTCACTGTCTGACAATGTGAACCTGCC
CCAGGGCGTCCGCACCATCTACACCATAGACGGCAGCCGGAAGGTCACCAGCCTGGACGAGCTGCTGGAA
GGTGAAAGTTACGTGTGTGCCTCCAACGAACCATTTCGTAAAGTTGATTACACCAAAAACGTTAATCCGA
ACTGGTCTGTGAACATCAAGGGCGGAACCACCCGCACCCTGGCCGTGGCCTCTGCGAAGAGTGAGGTGAA
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TTAAACTAGACTCAGGCGTGGTCAAGAGGCTGTGCACCCTGGATGGAAAGCAGGTTACTTGTCTGCAAGA
CTTTTTTGGAGACGATGATGTTTTTATTGCATGTGGACCTGAAAAATATCGTTATGCCCAAGATGACTTT
GTCCTGGATCATAGCGAATGCCGTGTCCTGAAATCGTCCTACTCTCGAGCCTCAGCTGCGAAGTATTCTG
GATCCAGAAGCCCAGGGTTCTCCCGCCGCAGCAAGTCACCAGCTTCAGTGAATGGAACTCCCAGTAGCCA
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GCCCTGAAGGTGTGAATGGAAACCGGTGCTCCGAGTCGTTCCCCCTTCTGGAGAAATACAGAATAGGGAA
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GGAAGCGCCATGGTGTACAACCTAGCCAATGCCCTCCGGTACCTGCACAGCCTCAGCATCGTCCACAGGG
ACATCAAGCCTGAGAATCTGCTGGTGTGCGAATACCCAGATGGAACCAAGTCTTTGAAGCTGGGAGACTT
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CTTCAGGTAAACGTTGAAGCTCGCTGTACTGCGGGAGAAATTCTGAGTCACCCCTGGGTGTCAGATGATG
CATCCCAGGAGAACAATATGCAAGCCGAGGTTACAGGTAAACTAAAACAGCACTTTAATAATGCGCTCCC
CAAACAGAACAGCACCACCACCGGGGTCTCCGTTATCATGAACACGGCTCTAGATAAAGAGGGGCAGATT
TTCTGCAGCAAGCTCTGTCAAGACAGCAGCAGACCATCCAGGGAGCAGACCTCGCCAGTCCCTCCCTCAG
CCCAGGAGGCCCCTCCCCCACTGGAGTCTCCCAGGCCCCCTGGTCCTCCAGCCACCTCTGGCTGTGATCT
GGCAGGGACCTGGCGCCGCCACCGAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

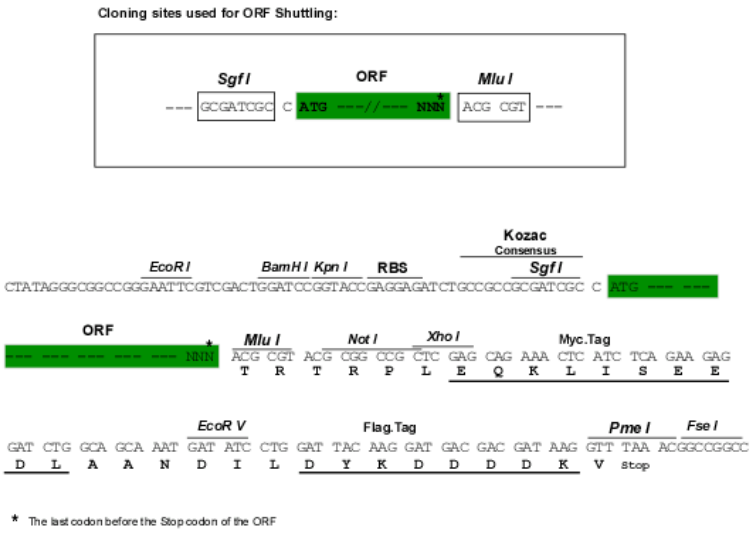
>MR210491 representing NM_001195497
Red=Cloning site Green=Tags(s)

MASTRSIELEHFEERDKRPRPGSRRGAPSSSGGSSISGPKGNGLIPSPAHSAHCSFYRTRTLQALSSEKK
AKKARFYRNGDRYFKGLVFAISNDRFRSFDALLIELTRSLSDNVNLPQGVRTIYTIDGSRKVTSLDELLE
GESYVCASNEPFRKVDYTKNVNPNWSVNIKGGTTRTLAVASAKSEVKESKDFIKPKLVTVIRSGVKPRKA
VRILLNKKTAHSFEQVLTDITEAIKLDSGVVKRLCTLDGKQVTCLQDFFGDDDVFIACGPEKYRYAQDDF
VLDHSECRVLKSSYSRASAAKYSGSRSPGFSRRSKSPASVNGTPSSQLSTPKSTKSSSSSPTSPGSFRGL
KQISAQGRSSSNVNGGPELDRCLSPEGVNGNRCSESFPLLEKYRIGKVIGDGNFAVVKECVDRYTGKEFA
LKIIDKAKCCGKEHLIENEVSILRRVKHPNIIMLVEEMETATDLFLVMELVKGGDLFDAITSSTKYTERD
GSAMVYNLANALRYLHSLSIVHRDIKPENLLVCEYPDGTKSLKLGDFGLATVVEGPLYTVCGTPTYVAPE
IIAETGYGLKVDVWAAGVITYILLCGFPPFRSENNLQEDLFDQILAGKLEFPAPYWDNITDSAKELISQM
LQVNVEARCTAGEILSHPWVSDDASQENNMQAEVTGKLKQHFNNALPKQNSTTTGVSVIMNTALDKEGQI
FCSKLCQDSSRPSREQTSPVPPSAQEAPPPLESPRPPGPPATSGCDLAGTWRRHRD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001195497

ORF Size: 2265 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_001195497.1, NP_001182426.1

RefSeq Size: 4044 bp

RefSeq ORF: 2268 bp

Locus ID: 70762

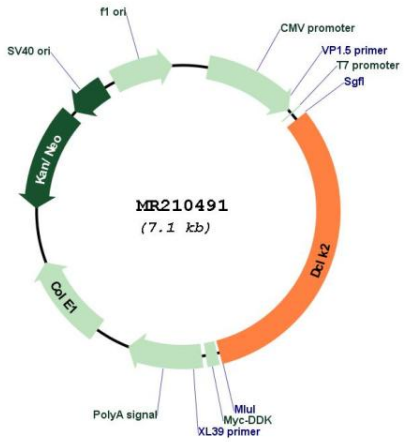
UniProt ID: Q6PGN3

Cytogenetics: 3 F1

MW: 83.3 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 MR210491