

Product datasheet for MC208366

Dclk1 (NM_001111053) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dclk1 (NM_001111053) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dclk1
Synonyms:	1700113D08Rik; 2810480F11Rik; AI836758; Clic; Click-I; CPG1; Cpg16; Dc; Dcamk; Dcamkl1; Dcl; Dclk; mKIAA0369
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208366 representing NM_001111053 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGTCGTTTCGGCAGAGATATGGAGTTGGAGCATTTTGATGAGCGGGACAAGGCGCAGAGGTACAGCAGGG
 GGTCCCGTGTGAATGGCCTGCCAGCCCCACACACAGCGCCCACTGCAGCTTCTACCGCACCCGACCCCT
 GCAGACACTCAGCTCCGAGAAGAAAGCCAAGAAGGTTTCGATTCTACAGAAATGGTGACCGCTACTTCAAA
 GGAATTGTGTATGCCATCTCCCCAGACCGCTTCAGATCTTTCGAGGCCCTGCTGGCTGATTTGACCCGAA
 CTCTCTCGGATAATGTGAATTTGCCCCAGGGGGTGAGAACCATCTACACCATCGATGGACTCAAGAAGAT
 CTCCAGCCTGGACCAGCTGGTGAAGGTGAAAGCTATGTCTGCGGCTCCATCGAGCCCTTAAGAAGCTG
 GAGTACACCAAGAATGTGAACCCCAACTGGTCAGTGAACGTCAAGACCACCTCAGCCTCCCGCGCAGTGT
 CTTCTTTGGCCACTGCCAAGGGTGGGCCTTCGGAGGTTTCGGGAGAATAAGGATTTTCATTCGACCCAAGCT
 GGTCAACATCATCAGAAGTGGGGTGAAGCCACGGAAGGCTGTGAGAATCCTGCTGAACAAGAAGACGGCT
 CACTCCTTCGAGCAGGTTCTCACTGACATTACCGACGCTATCAAGCTGGACTCCGGTGTGGTGAAGCGCC
 TGTACACTCTGGATGGGAAGCAGGTGATGTGCCTTCAGGACTTTTTTGGTGACGATGACATTTTATTGC
 ATGTGGACCAGAGAAGTCCGTTACCAGGATGATTTCTTGCTAGATGAAAGTGAATGTCGAGTGGTGAAA
 TCAACTTCTTACACAAAATAGCATCAGCGTCCCGCAGAGGCACAACCAAGAGCCAGGACCTTCCCGGA
 GAAGCAAGTCCCCAGCCTCCACCAGCTCAGTTAATGGAACCCCTGGTAGTCAGCTCTCTACTCCACGCTC
 GGGCAAGTCACCAAGTCCATCACCCAGCAGCCAGGAAGCCTGCGGAAGCAGAGGGACCTGTACCGCCCC
 CTCTCGTCGGATGATTTGGACTCAGTAGGAGACTCAGT**GTA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001111053
Insert Size:	1092 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_001111053.1, NP_001104523.1</u>
RefSeq Size:	6026 bp
RefSeq ORF:	1092 bp
Locus ID:	13175
Cytogenetics:	3 C

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 found, but the biological validity of some variants has not been determined. These variants encode different isoforms, which are differentially expressed and have different kinase activities. [provided by RefSeq, Sep 2010]

Transcript Variant: This variant (4, also known as DCL (PMID: 17313568)) is produced from the 5' promoter. It lacks several 3' exons but has an alternate 3' exon, as compared to variant 5. The resulting isoform (4) has a shorter and distinct C-terminus, and lacks a serine/proline-rich domain and a protein kinase domain, as compared to isoform 5. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.