

Product datasheet for **MG226411**

Dclk1 (NM_001111052) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dclk1 (NM_001111052) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dclk1
Synonyms:	1700113D08Rik; 2810480F11Rik; AI836758; Clic; Click-I; CPG1; Cpg16; Dc; Dcamk; Dcamk11; Dcl; Dclk; mKIAA0369
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226411 representing NM_001111052
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTAGAGCTCATAGAAGTTAATGGAACCCCTGGTAGTCAGCTCTCTACTCCACGCTCGGGCAAGTCAC
 CAAGTCCATCACCCACCAGCCCAGGAAGCCTGCGGAAGCAGAGGATCTCTCAGCATGGCGGCTCCTCGAC
 TTCACCTTTCATCCACTAAAGTTTGCAGCTCAATGGATGAGAATGATGGCCCTGGGGAAGAAGAGTCTGAG
 GAAGGCTTCCAGATTCTGCCACAATAACAGAGAGATACAAAGTCGGGAGAACAATAGGAGACGGAATTT
 TTGCTGTTGTCAAGGAATGTATAGAGAGGTCGACTGCTCGGGAGTATGCCCTGAAAATCATCAAGAAAAG
 CAAATGCCGAGGCAAAGAGCACATGATCCAGAACGAGGCTCCATCCTACGGAGGGTGAAGCACCCCAAC
 ATTGCTCCTCTGATTGAAGAGATGGATGTGCCACTGAAGTGTATCTTGAATGGAATTAGTGAAGGGTG
 GAGACCTTTTCGATGCCATCACCTCCACTAGCAAATACACAGAGAGAGATGCCAGCGGGATGCTGTACAA
 CCTGGCCAGCGCCATCAAATACCTGCACAGCCTGAACATCGTCCACCGTGACATCAAGCCAGAGAATCTG
 CTGGTGTATGAGCACCAGGATGGCAGTAAAGTCAAGTTGGGTGACTTTGGCCTGGCCACAATTGTGCG
 ACGGCCCCCTGTACACAGTCTGTGGCACCCCAACATATGTGGCTCCAGAAATCATTGCAGAGACTGGATA
 TGGCCTCAAGGTGGACATCTGGCAGCTGGCGTGATCACTTATATCCTGCTGTGTGGCTTCCCTCCGTTT
 CGTGGAAGTGGGATGACCAGGAGGTGCTTTTGGACAGATCTTGATGGGCCAAGTGGACTTTCATCTC
 CGTATTGGGACAAATGTGTGAGATTCTGTAAGGAGCTCATCAACATGATGCTGTTGGTTAACGTGGACCA
 GAGATTTTCAGCCGTGCAGGTCCTTGAGCATCCCTGGGTTAATGATGATGGTCTCCAGAAAATGAGCAT
 CAGCTGTCAGTAGCTGGCAAAATCAAGAAGCATTCAACACAGGCCCAAGCCGAGCAGCACTGCAGCAG
 GAGTTTCTGTAATAGCACTGGACCACGGGTTTACCATCAAGAGATCAGGGTCTTTGGACTACTACCAACA
 ACCAGGAATGTATTGGATAAGACCACCGCTCTTGATAAGGAGAGGCAGGTTTTCCGACGAAGACGCAACC
 AGGATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG226411 representing NM_001111052
 Red=Cloning site Green=Tags(s)

MLELIEVNGTPGSQLSTPRSGKSPSPSPTSPGSLRKQRISQHGGSSTLSSTKVCSSMDENDGPGESE
 EGFQIPATITERYKVGRTIGDGNFAVVKECIERSTAREYALKI IKKSKCRGKEHMIQNEVSILRRVKHPN
 IVLLIEEMDVPTELYLMELVKGGDLFDAITSTSKYTERDASGMLYNLASAIKYLHSLNIVHRDIKPENL
 LVYEHQDGSKSLKLGDFLATIVDGPLYVCGTPTYVAPEIIAETGYGLKVDIWAAGVITYILLCGFPPF
 RSGDDQEVLFQILMGQVDFSPYWDNVSDSAKELINMMLLVNVDQRFSAVQVLEHPWVNDGLPENEH
 QLSVAGKIKKHFNTGPKPSSTAAGVSVIALDHGFTIKRSGSLDYYQPGMYWIRPPLLIRGRFSDEDAT
 RM

TRTRPLE – GFP Tag – V

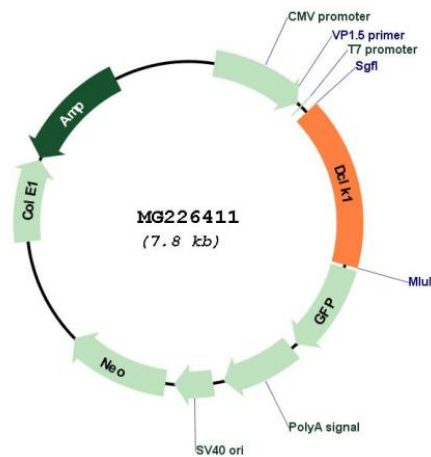
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001111052

ORF Size: 1266 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:	<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.
RefSeq:	<u>NM_001111052.2</u>
RefSeq Size:	7030 bp
RefSeq ORF:	1269 bp
Locus ID:	13175
Cytogenetics:	3 C
Gene Summary:	<p>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]</p>