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Product datasheet for SC310975

DCAMKL2 (DCLK2) (NM_001040261) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCAMKL2 (DCLK2) (NM_001040261) Human Untagged Clone
Tag:	Tag Free
Symbol:	DCAMKL2
Synonyms:	CL2; CLICK-II; CLICK2; CLIK2; DCAMKL2; DCDC3; DCDC3B; DCK2
Vector:	pCMV6 series

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001040261, the custom clone sequence may differ by one or more nucleotides

ATGGCCAGCACCAGGAGTATCGAGCTGGAGCACTTTGAGGAACGGGACAAAAGGCCGCGG
CCGGGGTCGCGGAGAGGGGCCCCCAGCTCCTCCGGGGGCAGCAGCAGCTCGGGCCCCAAG
GGGAACGGGCTCATCCCCAGTCCGGCGCACAGTGCCCACTGCAGCTTCTACCGCACGCGG
ACCCTGCAGGCCCTCAGCTCGGAGAAGAAGGCCAAGAAGGCGCGCTTCTACCGGAACGGG
GACCGCTACTTCAAGGGCCTGGTGTTTGCCATCTCCAGCGACCGCTTCCGGTCCTTCGAT
GCGCTCCTCATAGAGCTCACCCGCTCCCTGTCGGACAACGTGAACCTGCCCCAGGGTGTC
CGCACTATCTACACCATCGACGGCAGCCGGAAGGTCACCAGCCTGGACGAGCTGCTGGAA
GGTGAGAGTTACGTGTGTGCATCCAATGAACCATTTCGTAAAGTCGATTACACCAAAAAT
ATTAATCCAAACTGGTCTGTGAACATCAAGGGTGGGACATCCCGAGCGCTGGCTGCTGCC
TCCTCTGTGAAAAGTGAAGTAAAAGAAAGTAAAGATTTCATCAAACCCAAGTTAGTGACT
GTGATTCGAAGTGGAGTGAAGCCTAGAAAAGCCGTGCGGATCCTTCTGAATAAAAAGACT
GCTCATTCCTTTGAACAAGTCTTAACAGATATCACCGAAGCCATTAAACTAGACTCAGGA
GTCGTCAAGAGGCTCTGCACCCTGGATGGAAAGCAGGTTACTTGTCTGCAAGACTTTTTT
GGTGATGACGATGTTTTTATTGCATGTGGACCAGAAAAATTTCGTTATGCCCAAGATGAC
TTTGTCCTGGATCATAGTGAATGTCGTGTCCTGAAGTCATCTTATTCTCGATCCTCAGCT
GTTAAGTATTCTGGATCCAAAAGCCCTGGGCCCTCTCGACGCAGCAAATCACCAGCTTCA
GTTAATGGAACTCCCAGCAGCCAACTTTCTACTCCTAAATCTACGAAATCCTCCAGTTCC
TCTCCAACTAGTCCAGGAAGTTTCAGAGGATTAAAGATTTCTGCTCATGGCAGATCTTCT
TCCAATGTAAACGGTGGACCTGAGCTTGACCGTTGCATAAGTCCTGAAGGTGTGAATGGA
AACAGATGCTCTGAATCATCAACTCTTCTTGAGAAATACAAAATTGGAAAGGTCATTGGT
GATGGCAATTTTGCAGTAGTCAAAGAGTGTATAGACAGGTCCACTGGAAAGGAGTTTGCC
CTAAAGATTATAGACAAAGCCAAATGTTGTGGAAAGGAACACCTGATTGAGAATGAAGTG
TCAATACTGCGCCGAGTGAAACATCCCAATATCATTATGCTGGTCGAGGAGATGGAAACA
GCAACTGAGCTCTTTCTGGTGATGGAATTGGTCAAAGGTGGAGATCTCTTTGATGCAATT
ACTTCGTCGACCAAGTACACTGAGAGAGATGGCAGTGCCATGGTGTACAACTTAGCCAAT
GCCCTCAGGTATCTCCATGGCCTCAGCATCGTGCACAGAGACATCAAACCAGAGAATCTC
TTGGTGTGTGAATATCCTGATGGAACCAAGTCTTTGAAACTGGGAGACTTTGGGCTTGCG
ACTGTGGTAGAAGGCCCTTTATACACAGTCTGTGGCACACCCACTTATGTGGCTCCAGAA
ATCATTGCTGAAACTGGCTATGGCCTGAAGGTGGACATTTGGGCAGCTGGTGTGATCACA
TACATACTTCTCTGTGGATTCCCACCATTCCGAAGTGAGAACAATCTCCAGGAAGATCTC
TTCGACCAGATCTTGGCTGGGAAGCTGGAGTTTCCGGCCCCCTACTGGGATAACATCACG
GACTCTGCCAAGGAATTAATCAGTCAAATGCTTCAGGTAAATGTTGAAGCTCGGTGTACC
GCGGGACAAATCCTGAGTCACCCCTGGGTGTCAGATGATGCCTCCCAGGAGAATAACATG
CAAGCTGAGGTGACAGGTAAACTAAAACAGCACTTTAATAATGCGCTCCCCAAACAGAAC
AGCACTACCACCGGGGTCTCCGTCATCATGAACACGGCTCTAGATAAGGAGGGGCAGATT
TTCTGCAGCAAGCACTGTCAAGACAGCGGCAGGCCTGGGATGGAGCCCATCTCTCCAGTT
CCTCCCTCAGTGGAGGAGATCCCTGTGCCTGGGGAAGCAGTCCCGGCCCCCACCCCTCCG
GAATCTCCCACCCCCCACCCTCCTCCCGCTGCCCCGGGTGGTGAGCGGGCAGGAACCTGG
CGCCGCCACCGAGACTGA

Restriction Sites: Please inquire

ACCN: NM_001040261

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001040261.1, NP_001035351.1
RefSeq Size:	3600 bp
RefSeq ORF:	2298 bp
Locus ID:	166614
UniProt ID:	Q8N568
Cytogenetics:	4q31.23-q31.3
Protein Families:	Druggable Genome, Protein Kinase

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. Mouse studies show that the DCX gene, another family member, and this gene share function in the establishment of hippocampal organization and that their absence results in a severe epileptic phenotype and lethality, as described in human patients with lissencephaly. Multiple alternatively spliced transcript variants have been identified. [provided by RefSeq, Sep 2010] Transcript Variant: This variant (2) is known as exon-5-containing transcript (PMIDs:15611072 and 18075264) and encodes the longer isoform (b). 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.