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Product datasheet for RC208721

DCDC2 (NM_016356) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCDC2 (NM_016356) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DCDC2
Synonyms:	DCDC2A; DFNB66; NPHP19; NSC; RU2; RU2S
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC208721 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCGGCAGCAGCGCCAGGTCCAGCCACCTGTCTCAGCCCGTCGTGAAGAGCGTGCTTGTGTACCGCA
ACGGGGACCCCTTCTACGCGGGGCGCCGCGTCGTCATCCATGAGAAGAAGGTGTCCAGCTTCGAAGTCTT
CCTGAAGGAGGTGACCGGCGGCGTTCAGGCACCCTTTGGGGCCGTCAGGAACATCTACACCCCGCGGACT
GACCACCGAATCCGGAAGCTAGACCAGATCCAGAGCGGGGGCAATTACGTGGCTGGAGGCCAGGAAGCCT
TCAAGAAACTCAATTACTTGGACATAGGAGAAATCAAGAAAAGACCAATGGAAGTTGTTAATACAGAGGT
AAAACCAGTAATCCATAGCAGGATCAACGTGTCAGCTCGCTTTAGAAAACCGCTTCAGGAGCCGTGCACT
ATCTTCTTGATTGCAAATGGAGACCTCATAAACCCAGCTTCTCGCCTCCTTATCCCCCGAAAAACCTTGA
ATCAGTGGGATCATGTACTACAAATGGTCACAGAAAAAATCACTCTGAGGAGCGGGGCTGTTCACAGGCT
TTATACTTTAGAAGGAAAACTTGTTGAGAGTGGAGCAGAGTTGGAGAATGGGCAGTTTTATGTGGCTGTT
GGCAGAGATAAGTTTAAGAAACTGCCTTACGGTGAGTTACTTTTTGACAAGTCAACGATGAGAAGGCCTT
TTGGTCAGAAAGCTTCTTCACTACCTCCTATTGTAGGATCCAGAAAGTCTAAAGGGAGTGGAAATGATCG
CCACTCTAAGTCAACAGTTGGATCCAGTGACAACTCATCTCCTCAGCCCCTGAAGAGGAAAGGGAAAAAA
GAAGACGTGAATTCAGAAAAACTGACGAAATTGAAACAAAATGTAAAATTAAAGAATTCACAAGAAACCA
TTCCAAATAGTGATGAAGGCATTTTCAAAGCTGGAGCAGAGAGGTCTGAAACACGGGGGGCAGCAGAAGT
CCAAGAAGATGAAGATACTCAGGTTGAGGTTCCAGTCGATCAGAGGCCAGCAGAAATAGTAGACGAGGAA
GAAGATGGAGAGAAGGCAAACAAGGATGCAGAACAGAAAGAAGACTTTTCAGGAATGAATGGTGACCTTG
AAGAGGAAGGAGGTAGGGAGGCTACAGATGCCCCTGAGCAAGTCGAGGAGATTCTGGATCACAGTGAGCA
GCAGGCACGCCCTGCTCGTGTAAATGGAGGCACCGATGAGGAGAATGGTGAGGAGCTGCAGCAGGTTAAT
AATGAGCTTCAACTGGTCCTAGACAAGGAAAGAAAGTCTCAAGGAGCTGGCAGTGGACAAGATGAGGCTG
ATGTAGACCCTCAAAGACCACCAAGGCCAGAAGTAAAAATTACCAGTCCAGAAGAAAATGAAAACAACCA
ACAAAACAAGGACTATGCTGCCGTGGCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208721 protein sequence
Red=Cloning site Green=Tags(s)

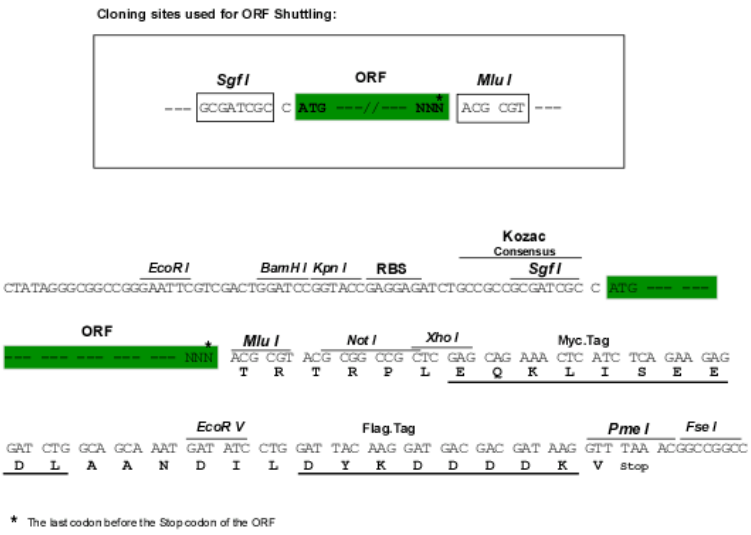
MSGSSARSSHLSQPVVKSVLVYRNGDPFYAGRRVVIHEKKVSSFEVFLKEVTGGVQAPFGAVRNIYTPRT
DHRIRKLDQIQSGGNYVAGGQEAFKKLNYLDIGEIKKRPMEVVNTEVKPVIHSRINVSARFRKPLQEPCT
IFLIANGDLINPASRLLIPRKTLNQWDHVLQMVTEKITLRSGAVHRLYTLEGKLVESGAELENGQFYVAV
GRDKFKKLPYGELLFDKSTMRRPFGQKASSLPPIVGSRKSKGSGNDRHSKSTVGSSDNSSPQPLKRKGKK
EDVNSEKLTKLKQNVKLKNSQETIPNSDEGIFKAGAERSETRGAAEVQEDEDTQVEVPVDQRPAEIVDEE
EDGEKANKDAEQKEDFSGMNGDLEEEGGREATDAPEQVEEILDHSEQQARPARVNGGTDEENGEELQQVN
NELQLVLDKERKSQGAGSGQDEADVDPQRPPRPEVKITSPEENENNQQNKDYAAVA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6361_a02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016356

ORF Size: 1428 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_016356.5

RefSeq Size: 4716 bp

RefSeq ORF: 1431 bp

Locus ID: 51473

UniProt ID: Q9UHG0

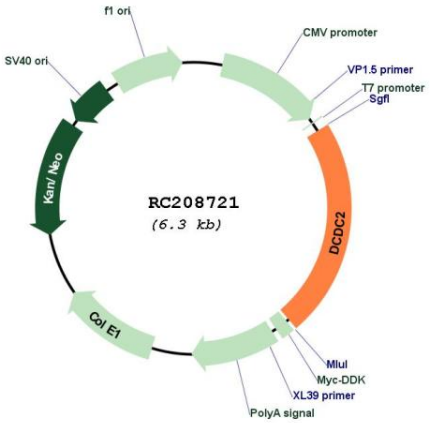
Cytogenetics: 6p22.3

Domains: DCX

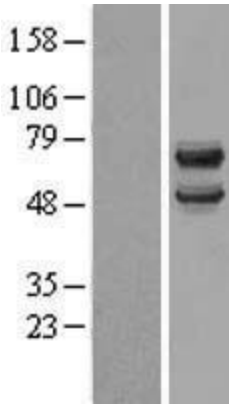
MW: 52.9 kDa

Gene Summary: This gene encodes a doublecortin domain-containing family member. The doublecortin domain has been demonstrated to bind tubulin and enhance microtubule polymerization. This family member is thought to function in neuronal migration where it may affect the signaling of primary cilia. Mutations in this gene have been associated with reading disability (RD) type 2, also referred to as developmental dyslexia. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2013]

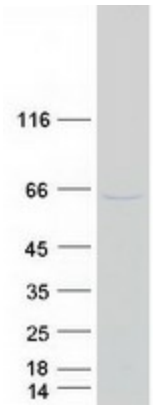
Product images:



Circular map for RC208721



Western blot validation of overexpression lysate (Cat# [LY414031]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208721 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCDC2 protein (Cat# [TP308721]). The protein was produced from HEK293T cells transfected with DCDC2 cDNA clone (Cat# RC208721) using MegaTran 2.0 (Cat# [TT210002]).