

Product datasheet for **RC223043**

C19orf51 (DNAAF3) (NM_178837) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C19orf51 (DNAAF3) (NM_178837) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C19orf51
Synonyms:	C19orf51; CILD2; DAB1; PCD; PF22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223043 representing NM_178837
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTTCCATTGCTTGTATTCCTCGAAAAGGGCGGGACTCTGGCAGCGTTGTGGAGTGCCCGGGTCC
 ACAGTGTGCACTGAGCAGAGAGGAAGGGCGTCCCGGATATTTGGAGATAAAGGTGTGGCAAGGGT
 GATGACCACACCTGCCGGCTCCGGCAGCGGCTTCGGCTCCGTGTCTGGTGGGGCTGTCCCGGCGCTG
 GACCTGCAGGCTGAAAGTCTCTGTGGACCCAGACTCCAGGCCGATACAGTGCACAGCAACCCGAGC
 TAGATGTGCTGCTTCTGGGCTCTGTGGATGGACGGCACCTGTGCGGACCTGTCCCGAGCGAAGTTCTG
 GCCTCGCAGGAGTTCAACTTCTTTGTGCTGGAGAATAATCTGGAAGCTGTGGCCCGACACATGCTGATC
 TTCAGCCTAGCCCTGGAGGAACCGGAGAAGATGGGGCTGCAAGAGCGAAGCGAGACCTTCTGGAAGTGT
 GGGGAACCGCTGTGCGCCCGCAGTGGCCGCTTCGTGCGTCCCAGGCCACTGTGGCGCACCT
 GGTCCCGAGCCGACCGCTGGAGAACAGCTGCCCTGGCTCAGCTCCGCGCCCTCAAGTTCCGCGAG
 CGGGATGCCCTGGAGGCCGATTCGCTTCTGGCTGGCGGCGAGAAAGGGCCCCAGGCGTTCGCCATGA
 GCCGCTCTGGGACTCGCGCTGCGCCACTACCTGGGCTCCCGCTACGACGCCCGCGCGGTGTACGCGA
 CTGGGACTGCGCATGAAGCTGCATGACCGCGGGCTCAAGTCATTACCCCCAGGAGTTCGACGCTGG
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 CCGGTGCGCTCTGAGCTACCGTGGGAGCGCGTGGCAGCGCGCGGGTACTGGGGGACATCGCCACGGG
 GCCCTTCGTGGCCTTCGGCATCGAAGCGGACGACGAGAGCCTCTGCGGACGAGCAACGGCCAGCCAGTC
 AAGACGGCCGGGAGATCACTCAACACAACGTGACGGAGCTGCTCCGCGACGTGGCCGCTGGGGGCGCG
 CGAGAGCCACCGGGGGGACCTGGAGGAGCAGCAGCGGGAGGGAAGCCCGGAGCCAGGACTCCAGC
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 GGGGCCAGGCCTCAGAGACCTTCGCACGTTTCTGCAAGTCCCAGGAATCAGCTCTGGGCAACACTGTCC
 CAGCTGTGGAACCCGGAAGTCCGCCCTTGACATCCTGGCCAGCCTCTGAAGCCAGCAACCCAGCCCT
 TGAGGGCCTGACCCAGCCTCTGCAGGGTGGACCCACACTGTGAGCCCTGCCAGCTGCCCTCTGAGTCT
 CCAGTTCACTCTCAGAGTTCTGGCTCAGCCTCAGGGGCTTGCTCCGCCAACTGTGAGTCAGACT
 CAAAACCTGGAGTC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223043 representing NM_178837
 Red=Cloning site Green=Tags(s)

MLPLLDSSKRAGTLGSGCGVPRVHSAALSREEGASRDIWRIKVVWARVMTTPAGSGSGFGSVSWWGLSPAL
 DLQAESPPVDPDSQADTVHSNPELDVLLLSVDGRHLLRTL SRAKFWPRRRFNFFVLENNLEAVARHMLI
 FSLALEEPEKMGLQERSETFLEVWGNALLRPPVAAFVRAQADLLAHLVPEPDRLEEQLPWL SLRALKFRE
 RDALEAVFRFWAGGEKGPQAFPM SRLWDSRLRHYLGSRYDARRGVSDWDLRMKLDH RGAQVIHPQEFRRW
 RDTGVAFELRDSSAYHVPNRTLASGRLLSYRGERVAARGYWGDIATGPFVAFGIEADDESLLRTSNGQPV
 KTAGEITQHNVTPELLRDVAAWGRARATGGDLEEQQHAEGSPEPGT PAAPTPE SFTVHFLPLNSAQT LHHK
 SCYNRFQLLYVACGMVHLLIPELGACVAPGGNLIVELARYLVDV RQEQLQGFNTRVRELAQAAGFAPQT
 GARPSETFARFCKSQESALGNTVPAVEPGT PPLDILAQPLEASNPAL EGLTQPLQGGTPHCEPCQLPSES
 PGSLSVLAQPQ GALAPPNCESDSKTGV

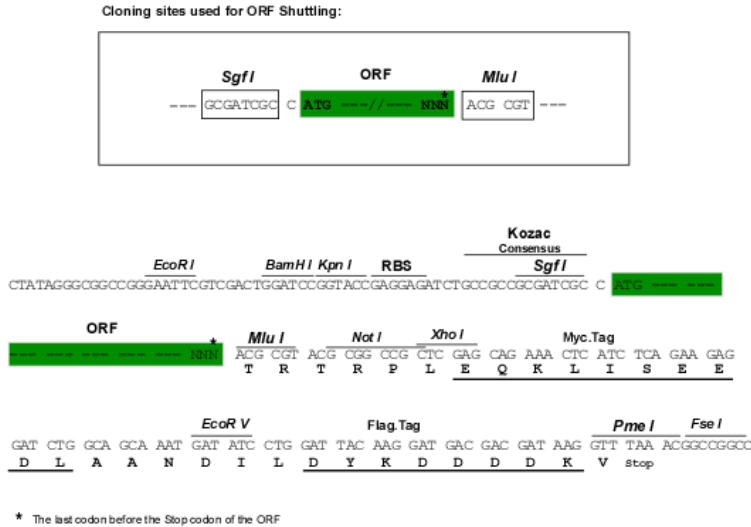
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8046_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178837

ORF Size: 1764 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_178837.4](#), [NP_849159.2](#)

RefSeq Size: 2210 bp

RefSeq ORF: 1767 bp

Locus ID: 352909

UniProt ID: [Q8N9W5](#)

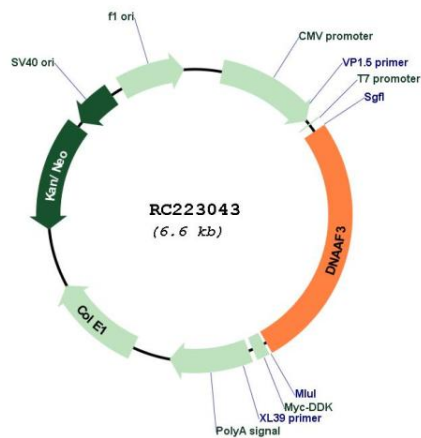
Cytogenetics: 19q13.42

Protein Families: Druggable Genome

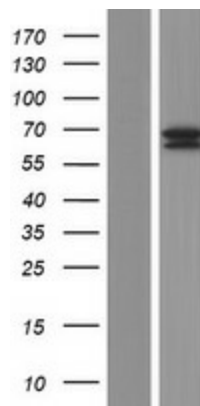
MW: 64.3 kDa

Gene Summary: The protein encoded by this gene is required for the assembly of axonemal inner and outer dynein arms and plays a role in assembling dynein complexes for transport into cilia. Defects in this gene are a cause of primary ciliary dyskinesia type 2 (CILD2). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

Product images:



Circular map for RC223043



Western blot validation of overexpression lysate (Cat# [LY405854]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223043 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).