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Product datasheet for RC200174

CHCHD3 (NM_017812) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHCHD3 (NM_017812) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHCHD3
Synonyms:	Mic19; MICOS19; MINOS3; PPP1R22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC200174 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTGGGACCACCAGCACCCGCCGGGTCACCTTCGAGGCGGACGAGAATGAGAACATCACCGTGGTGA
AGGGCATCCGGCTTTCGGAAAATGTGATTGATCGAATGAAGGAATCCTCTCCATCTGGTTCGAAGTCTCA
GCGGTATTCTGGTGCTTATGGTGCCTCAGTTTCTGATGAAGAATTGAAAAGAAGAGTAGCTGAGGAGCTG
GCATTGGAGCAAGCCAAGAAAGAATCCGAAGATCAGAAACGACTAAAGCAAGCCAAAGAGCTGGACCGAG
AGAGGGCTGCTGCCAATGAGCAGTTAACCAGAGCCATCCTTCGGGAGAGGATATGTAGCGAGGAGGAACG
CGCTAAGGCAAAGCACCTGGCTAGGCAGCTGGAAGAGAAAGACCGAGTGCTAAAGAAGCAGGATGCATTC
TACAAAGAACAGCTGGCTAGACTGGAGGAGAGGAGCTCAGAGTTCTACAGAGTCACCACTGAACAATATC
AGAAAGCTGCTGAAGAGGTGGAAGCAAAGTTCAAGCGATATGAGTCTCATCCAGTCTGTGCTGATCTGCA
GGCCAAAATTCTTCAGTGTTACCGTGAGAACACCCACCAGACCCTCAAATGCTCCGCTCTGGCCACCCAG
TATATGCACTGTGTCAATCATGCCAAACAGAGCATGCTTGAGAAGGGAGGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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Protein Sequence:

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>RC200174 protein sequence
Red=Cloning site Green=Tags(s)

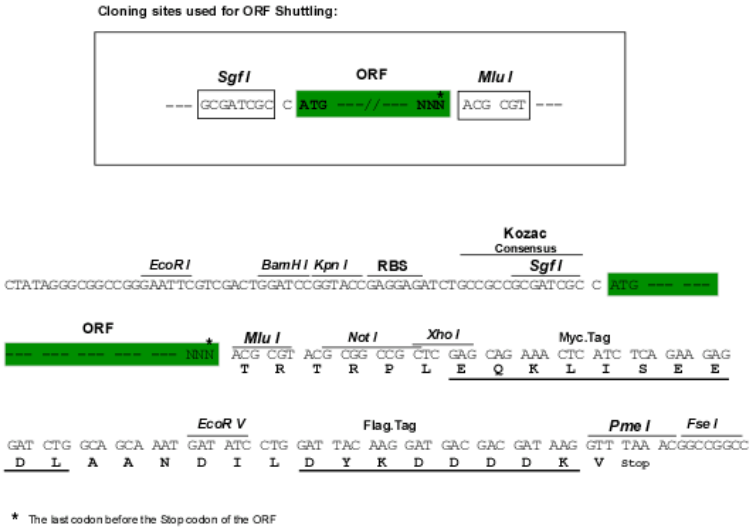
MGGTTSTRRVTFEADENENITVVKGIRLSENVIDRMKESSPSGSKSQRYSGAYGASVSDEELKRRVAEEL
ALEQAKKESEDQKRLKQAKELDRERAAANEQLTRAILRERICSEEERAKAKHLARQLEEKDRVLKKQDAF
YKEQLARLEERSSEFYRVTTEQYQKAAEEVEAKFKRYESHPVCADLQAKILQCYRENTHQTLKCSALATQ
YMHCVNHAKQSMLEKGG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

Chromatograms: https://cdn.origene.com/chromatograms/mk6418_d07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017812

ORF Size: 681 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).

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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_017812.4

RefSeq Size: 1622 bp

RefSeq ORF: 684 bp

Locus ID: 54927

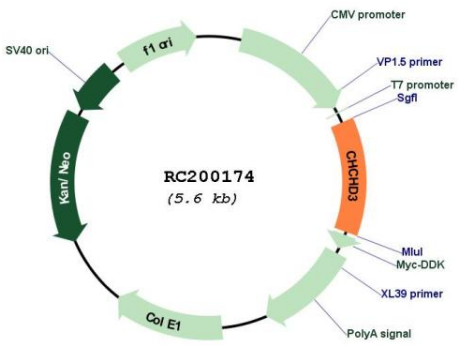
UniProt ID: Q9NX63

Cytogenetics: 7q32.3-q33

MW: 26.2 kDa

Gene Summary: The protein encoded by this gene is an inner mitochondrial membrane scaffold protein. Absence of the encoded protein affects the structural integrity of mitochondrial cristae and leads to reductions in ATP production, cell growth, and oxygen consumption. This protein is part of the mitochondrial contact site and cristae organizing system (MICOS). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RC200174

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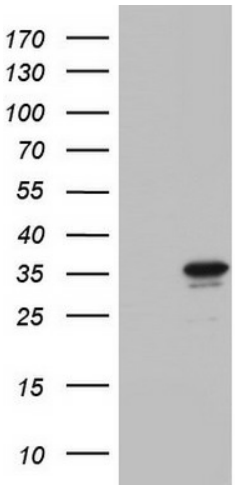
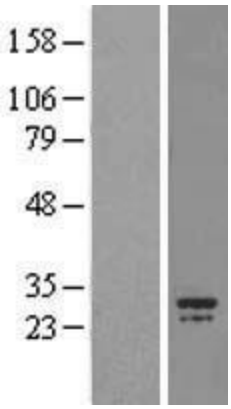
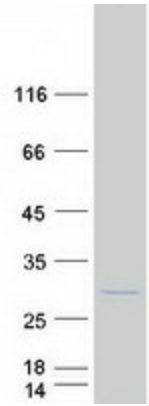


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CHCHD3 (Cat# RC200174, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CHCHD3(Cat# [TA803455]). Positive lysates [LY413521] (100ug) and [LC413521] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200174 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CHCHD3 protein (Cat# [TP300174]). The protein was produced from HEK293T cells transfected with CHCHD3 cDNA clone (Cat# RC200174) using MegaTran 2.0 (Cat# [TT210002]).

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