

## Product datasheet for RC209806

### CHCHD2 (NM\_016139) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CHCHD2 (NM_016139) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHCHD2
Synonyms:	C7orf17; MIX17B; MNRR1; NS2TP; PARK22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209806 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCGCGTGGAAGCCGAAGCCGACCTCCCGCATGGCCCCTCCGGCCAGCCGGGCCCCCTCAGATGAGAG  
 CTGCAACCCAGGCCAGCACCAGTCGCTCAGCCACCAGCAGCGGCACCCCATCTGCAGTTGGCTCTTCTGC  
 TGCTGCGCCCCGGCAGCCAGTTCTGATGGCCAGATGGCAACCACTGCAGCTGGCGTGGCTGTGGGCTCT  
 GCTGTGGGGCACACATTGGGTACGCCATTACTGGGGCTTCAGTGGAGGAAGTAATGCTGAGCCTGCGA  
 GGCCTGACATCACTTACCAGGAGCCTCAGGGAACCCAGCCAGCACAGCAGCAGCAGCCTTGCCTCTATGA  
 GATCAAACAGTTTCTGGAGTGTGCCAGAACCCAGGGTGACATCAAGCTCTGTGAGGGTTTCAATGAGGTG  
 CTGAAACAGTGCCGACTTGCAAACGGATTGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC209806 protein sequence Red=Cloning site Green=Tags(s)
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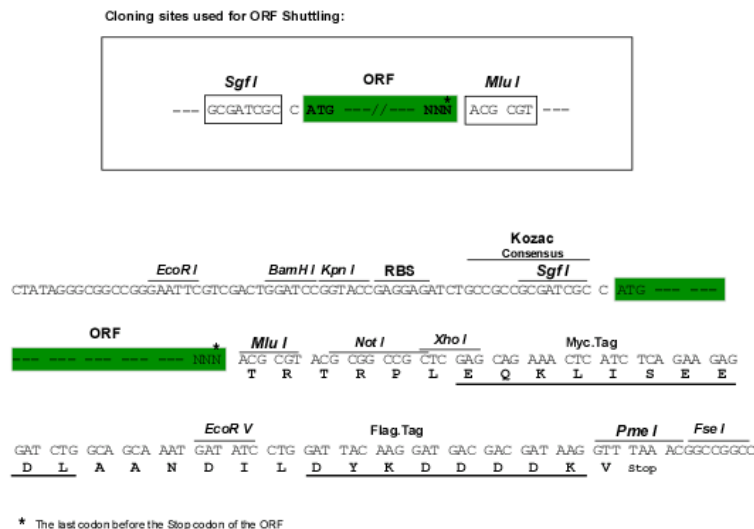
MPRGSRSRSTRMAPPASRAPQMRAAPRPAPVAQPPAAAPPSAVGSSAAAPRQPVLMQMATTAAAGVAVGS  
 AVGHTLGHAIITGGFSGGSNAEPARPDIITYQEPQGTQPAQQQQPCLYEIKQFLECAQNQGDIKLCEGFNEV  
 LKQCRLANGLA

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:	SgfI-MluI
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## Cloning Scheme:



ACCN: NM\_016139

ORF Size: 453 bp

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](mailto: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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

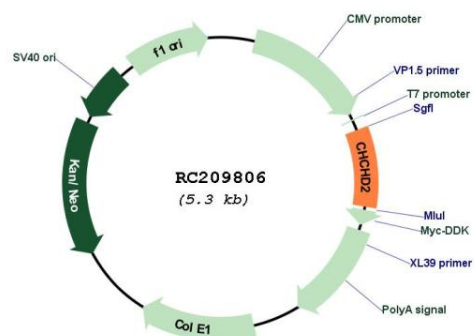
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_016139.4</a>
<b>RefSeq Size:</b>	831 bp
<b>RefSeq ORF:</b>	456 bp
<b>Locus ID:</b>	51142
<b>UniProt ID:</b>	<a href="#">Q9Y6H1</a>
<b>Cytogenetics:</b>	7p11.2
<b>Domains:</b>	DUF657
<b>MW:</b>	15.6 kDa
<b>Gene Summary:</b>	The protein encoded by this gene belongs to a class of eukaryotic CX(9)C proteins characterized by four cysteine residues spaced ten amino acids apart from one another. These residues form disulfide linkages that define a CHCH fold. In response to stress, the protein translocates from the mitochondrial intermembrane space to the nucleus where it binds to a highly conserved 13 nucleotide oxygen responsive element in the promoter of cytochrome oxidase 4I2, a subunit of the terminal enzyme of the electron transport chain. In concert with recombination signal sequence-binding protein J, binding of this protein activates the oxygen responsive element at four percent oxygen. In addition, it has been shown that this protein is a negative regulator of mitochondria-mediated apoptosis. In response to apoptotic stimuli, mitochondrial levels of this protein decrease, allowing BCL2-associated X protein to oligomerize and activate the caspase cascade. Pseudogenes of this gene are found on multiple chromosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]

## Product images:



Circular map for RC209806