

Product datasheet for **RG209806**

CHCHD2 (NM_016139) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CHCHD2 (NM_016139) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CHCHD2
Synonyms: C7orf17; MIX17B; MNRR1; NS2TP; PARK22
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG209806 representing NM_016139
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCGCGTGGAAAGCCGAAGCCGCACCTCCCGCATGGCCCTCCGGCCAGCCGGGCCCTCAGATGAGAG
 CTGCACCCAGGCCAGCACCAGTCGCTCAGCCACCAGCAGCGCCACCCCATCTGCAGTTGGCTCTTCTGC
 TGCTGCGCCCCGGCAGCCAGGTCTGATGGCCAGATGGCAACCACTGCAGCTGGCGTGGCTGTGGGCTCT
 GCTGTGGGGCACACATTGGGTACGCCATTACTGGGGCTTCAGTGGAGGAAGTAATGCTGAGCCTGCCA
 GGCTGACATCACTTACCAGGAGCCTCAGGAACCCAGCCAGCACAGCAGCAGCAGCCTTGCCTCTATGA
 GATCAAACAGTTTCTGGAGTGTGCCAGAACCAGGGTGACATCAAGCTCTGTGAGGGTTTCAATGAGGTG
 CTGAAACAGTGCCGACTTGCAAACGGATTGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG209806 representing NM_016139
 Red=Cloning site Green=Tags(s)

MPRGSRSRTRMAPPASRAPQMRAAPRPAPVAQPPAAAPPSSAVGSSAAAPRQPGLMAQMATTAAAGVAVGS
 AVGHTLGHAIITGGFSGGSNAEPARPDIYQEPQGTQPAQQQQPCLYEIKQFLECAQNQGDIKLCEGFNEV
 LKQCRLANGLA

TRTRPLE - GFP Tag - V

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 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.

RefSeq: [NM_016139.4](#)

RefSeq Size: 831 bp

RefSeq ORF: 456 bp

Locus ID: 51142

UniProt ID: [Q9Y6H1](#)

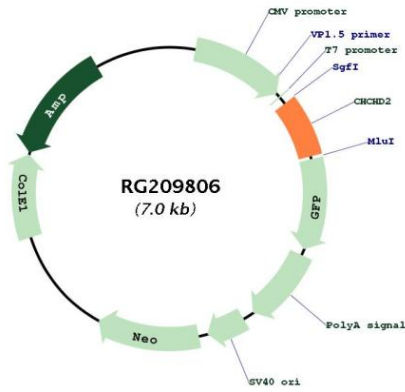
Cytogenetics: 7p11.2

Domains: DUF657

MW: 15.5 kDa

Gene Summary: 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 RG209806