**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RC232426

## CCDC51 (NM_001256968) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CCDC51 (NM_001256968) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | CCDC51 |
| **Synonyms:** | MITOK |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |
| **Cell Selection:** | Neomycin |
| **ORF Nucleotide Sequence:** | >RC232426 representing NM_001256968<br>Red=Cloning site Blue=ORF Green=Tags(s)<br><br>TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC<br>GCCGCGATCGCC<br><br>ATGGTGGCTCGAGGGCTTGTCCGAGAGGCTCGGGAGGACTTGGAAGTTCACCAGGCCAAGCTGAAGGAGG<br>TGAGGGACCGCTTGGACCGTGTCTCCAGGGAGGACAGTCAGTACTTGGAACTGGCTACTCTCGAGCACAG<br>GATGCTGCAGGAGGAGAAGAGGCTTCGCACAGCCTATCTGCGTGCAGAAGACTCTGAGCGAGAGAAGTTC<br>TCCCTCTTCTCTGCAGCTGTGCGGGAAAGTCATGAGAAGGAGCGCACAAGGGCTGAGAGGACCAAGAACT<br>GGTCCCTCATTGGCTCAGTCCTGGGGGCCCTGATTGGTGTGGCTGGCTCCACCTATGTGAACCGTGTGCG<br>ACTACAGGAGCTGAAGGCTTTACTCCTGGAGGCGCAGAAGGGGCCTGTGAGTCTCCAAGAGGCCATTCGA<br>GAACAGGCGTCTAGCTACTCCCGCCAGCAGAGGGACCTCCACAATCTCATGGTGGACCTGAGGGGCCTGG<br>TACATGCTGCTGGGCCAGGGCAGGACTCTGGGTCACAGGCAGGTAGTCCCCCGACCAGAGACAGAGATGT<br>AGATGTCCTTTCAGCTGCCTTGAAAGAGCAGCTTAGTCATTCCAGGCAAGTCCATTCATGTCTAGAAGGC<br>TTACGAGAGCAGCTTGATGGCCTAGAAAAGACTTGTAGCCAAATGGCTGGGGTGGTTCAGCTTGTAAAGT<br>CTGCAGCACACCCAGGCCTGGTGGAACCAGCAGACGGGGCTATGCCCAGCTTCTTGCTGGAGCAGGGGAG<br>CATGATCTTGGCACTGTCAGACACGGAGCAGAGACTAGAAGCCCAAGTCAACAGGAACACCATCTATAGC<br>ACCCTGGTCACCTGTGTGACATTTGTGGCCACACTGCCTGTGCTCTACATGCTATTCAAAGCCAGC<br><br>ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT<br>ACAAGGATGACGACGATAAGGTTTAA |



View online »

**Protein Sequence:**

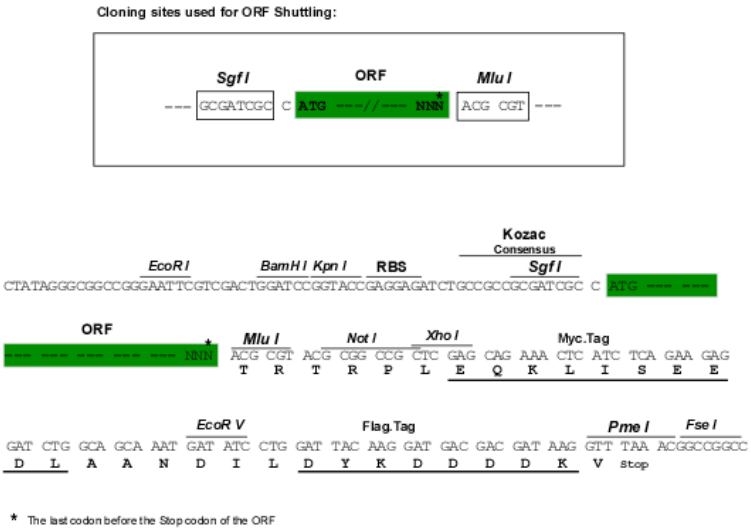
>RC232426 representing NM_001256968
Red=Cloning site Green=Tags(s)

MVARGLVREAREDLEVHQAKLKEVRDRLDRVSREDSQYLELATLEHRMLQEEKRLRTAYLRAEDSEREKF
SLFSAAVRESHEKERTRAERTKNWSLIGSVLGALIGVAGSTYVNRVRLQELKALLLEAQKGPVSLQEAIR
EQASSYSRQQRDLHNLMVDLRGLVHAAGPGQDSGSQAGSPPTRDRDVDVLSAALKEQLSHSRQVHSCLEG
LREQLDGLEKTCSQMAGVVQLVKSAAHPGLVEPADGAMPSFLLEQGSMILALSDTEQRLEAQVNRNTIYS
TLVTCVTFVATLPVLYMLFKAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

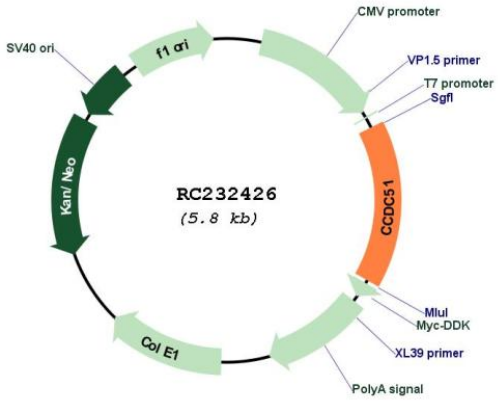
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




* The last codon before the Stop codon of the ORF

**Plasmid Map:**




**ACCN:** NM_001256968

**ORF Size:** 906 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_001256968.3 |
| **RefSeq Size:** | 1398 bp |
| **RefSeq ORF:** | 909 bp |
| **Locus ID:** | 79714 |
| **UniProt ID:** | Q96ER9 |
| **Cytogenetics:** | 3p21.31 |
| **Protein Families:** | Transmembrane |
| **MW:** | 34.1 kDa |
| **Gene Summary:** | Mitochondrial potassium channel located in the mitochondrial inner membrane (PubMed:31435016). Together with ABCB8/MITOSUR, forms a protein complex localized in the mitochondria that mediates ATP-dependent potassium currents across the inner membrane (that is, mitoK(ATP) channel) (PubMed:31435016). May contribute to the homeostatic control of cellular metabolism under stress conditions by regulating the mitochondrial matrix volume (PubMed:31435016).[UniProtKB/Swiss-Prot Function] |