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 RC232677

CCDC51 (NM_001256964) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CCDC51 (NM_001256964) 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:	>RC232677 representing NM_001256964 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGATGGGGCGCAGCCCTGGGTTTGCCATGCAGCACATCGTGGGTGTGCCCCACGTACTGGTTCGGAGGG GCCTCCTTGGAAGGGACCTCTTCATGACCAGGACTCTCTGCAGCCCAGGCCCAAGCCAGCCCGGAGAGAA AAGACCTGAGGAGGTGGCCCTGGGGCTGCACCACCGCCTCCCAGCACTGGGAAGAGCCCTGGGGCACAGC ATTCAGCAACGAGCGACCTCCACAGCCAAGACTTGGTGGGACAGATATGAAGAGTTTGTTGGACTCAACG AGGTTCGAGAGGCCCAGGGAAAGGTGACAGAGGCTGAGAAAGTGTTCATGGTGGCTCGAGGGCTTGTCCG AGAGGCTCGGGAGGACTTGGAAGTTCACCAGGCCAAGCTGAAGGAGGTGAGGGACCGCTTGGACCGTGTC TCCAGGGAGGACAGTCAGTACTTGGAACTGGCTACTCTCGAGCACAGGATGCTGCAGGAGGAGAAGAGGC TTCGCACAGCCTATCTGCGTGCAGAAGACTCTGAGCGAGAGAAGTTCTCCCTCTTCTCTGCAGCTGTGCG GGAAAGTCATGAGAAGGAGCGCACAAGGGCTGAGAGGACCAAGAACTGGTCCCTCATTGGCTCAGTCCTG GGGGCCCTGATTGGTGTGGCTGGCTCCACCTATGTGAACCGTGTGCGACTACAGGAGCTGAAGGCTTTAC TCCTGGAGGCGCAGAAGGGGCCTGTGAGTCTCCAAGAGGCCATTCGAGAACAGGCGTCTAGCTACTCCCG CCAGCAGAGGGACCTCCACAATCTCATGGTGGACTTGAGGGGCCTGGTACATGCTGCTGGGCCAGGGCAG GACTCTGGGTCACAGGCAGGTAGTCCCCCGACCAGAGACAGAGATGTAGATGTCCTTTCAGCTGCCTTGA AAGAGCAGCTTAGTCATTCCAGGCAAGTCCATTCATGTCTAGAAGGCTTACGAGAGCAGCTTGATGGCCT AGAAAAGACTTGTAGCCAAATGGCTGGGGTGGTTCAGCTTGTAAAGTCTGCAGCACACCCAGGCCTGGTG GAACCAGCAGACGGGGCTATGCCCAGCTTCTTGCTGGAGCAGGGGAGCATGATCTTGGCACTGTCAGACA CGGAGCAGAGACTAGAAGCCCAAGTCAACAGGAACACCATCTATAGCACCCTGGTCACCTGTGTGACATT TGTGGCCACACTGCCTGTGCTCTACATGCTATTCAAAGCCAGC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

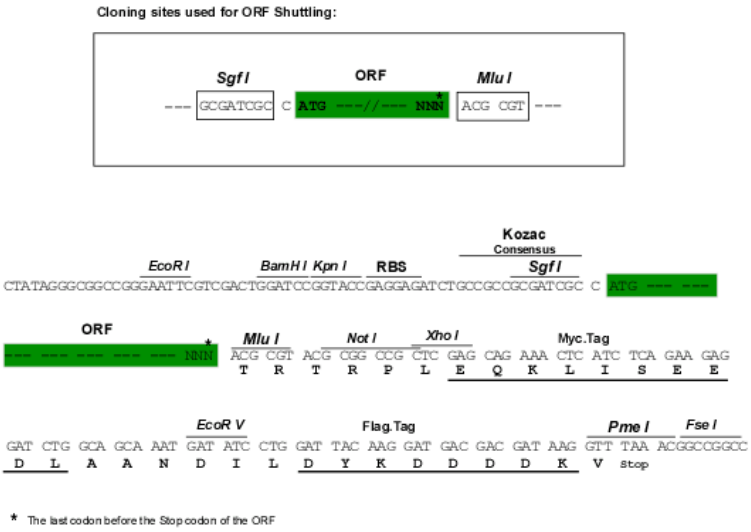
>RC232677 representing NM_001256964
Red=Cloning site Green=Tags(s)

MMGRSPGFAMQHIVGVPHVLVRRGLLGRDLFMTRTLCSPGPSQPGEKRPEEVALGLHHRLPALGRALGHS
IQQRATSTAKTWWDRYEEFVGLNEVREAQGKVTEAEKVFMVARGLVREAREDLEVHQAKLKEVRDRLDRV
SREDSQYLELATLEHRMLQEEKRLRTAYLRAEDSEREKFSLFSAAVRESHEKERTRAERTKNWSLIGSVL
GALIGVAGSTYVNRVRLQELKALLLEAQKGPVSLQEAIREQASSYSRQQRDLHNLMVDLRGLVHAAGPGQ
DSGSQAGSPPTRDRDVDVLSAALKEQLSHSRQVHSCLEGLREQLDGLEKTCSQMAGVVQLVKSAAHPGLV
EPADGAMPSFLLEQGSMILALSDTEQRLEAQVNRNTIYSTLVTCVTFVATLPVLYMLFKAS

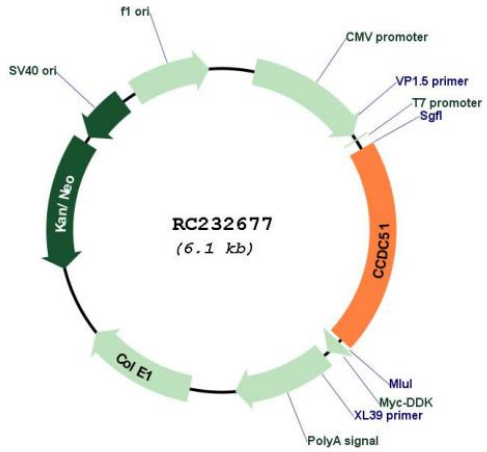
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001256964

ORF Size:	1233 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_001256964.1, NP_001243893.1
RefSeq Size:	1627 bp
RefSeq ORF:	1236 bp
Locus ID:	79714
UniProt ID:	Q96ER9
Cytogenetics:	3p21.31
Protein Families:	Transmembrane
MW:	46.3 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]