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Product datasheet for RC204051

UQCRFS1 (NM_006003) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UQCRFS1 (NM_006003) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UQCRFS1
Synonyms:	MC3DN10; RIP1; RIS1; RISP; UQCR5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204051 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGTCGGTAGCAGCCCGCTCGGGCCCGTTCGCGCCCGTCCTGTCGGCCACGTCCCGCGGGGTGGCGG
GCGCGCTGCGGCCCTTGGTGCAGGCCACGGTGCCCGCCACCCCGGAGCAGCCTGTGTTGGACCTGAAGCG
GCCCTTCCTCAGCCGGGAGTCGCTGAGCGGCCAGGCCGTGCGCCGGCCTTTGGTCGCCTCCGTGGGCCTC
AATGTCCCTGCTTCTGTTTGTTATTCCCACACAGACATCAAGGTGCCTGACTTCTCTGAATACCGCCGCC
TTGAAGTTTTAGATAGTACGAAGTCTTCAAGAGAAAGCAGCGAGGCTAGGAAAGGTTTCTCCTATTTGGT
AACTGGAGTAACTACTGTGGGTGTCGCATATGCTGCCAAGAATGCCGTCACCCAGTTCGTTTCCAGCATG
AGTGCTTCTGCTGATGTGTTGGCCCTGGCGAAAATCGAAATCAAGTTATCCGATATTCCAGAAGGCAAGA
ACATGGCTTTCAAATGGAGAGGCAAACCCCTGTTTGTGCGTCATAGAACCCAGAAGGAAATTGAGCAGGA
AGCTGCAGTTGAATTATCACAGTTGAGGGACCCACAGCATGATCTAGATCGAGTAAAGAAACCTGAATGG
GTTATCCTGATAGGTGTTTGCACTCATCTTGGCTGTGTACCCATTGCAAATGCAGGAGATTTTGGTGGTT
ATTACTGCCCTTGCCATGGGTCACACTATGATGCATCTGGCAGGATCAGATTGGGTCCTGCTCCTCTCAA
CCTTGAAGTCCCCACGTATGAGTTCACCAGTGACGATATGGTGATTGTTGGT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

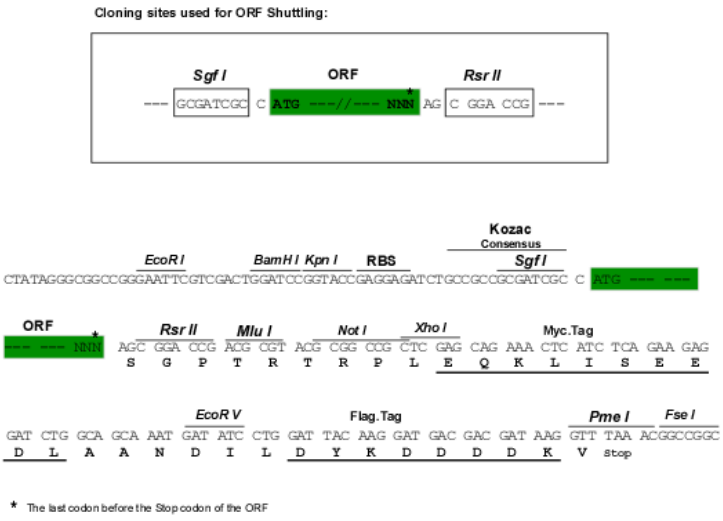
>RC204051 protein sequence
Red=Cloning site Green=Tags(s)

MLSVAARSGPFAPVLSATSRGVAGALRPLVQATVPATPEQPVLDLKRPFLSRESLSGQAVRRPLVASVGL
NVPASVCYSHTDIKVPDFSEYRRLEVLDSTKSSRESSEARKGFSYLVTGVTTVGVAYAAKNAVTQFVSSM
SASADVLALAKIEIKLSDIPEGKNMAFKWRGKPLFVRHRTQKEIEQEAAVELSQLRDPQHDLDRVKKPEW
VILIGVCTHLGCVPIANAGDFGGYYCPCHGSHYDASGRIRLGPAPLNLEVPTYEFTSDDMVIVG

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_006003

ORF Size: 822 bp

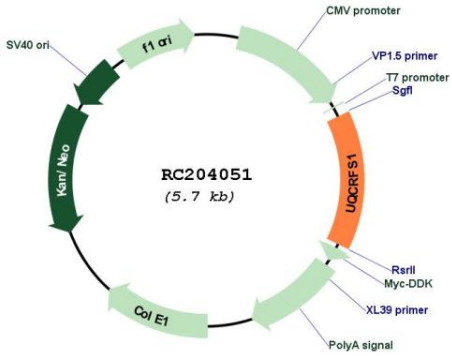
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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

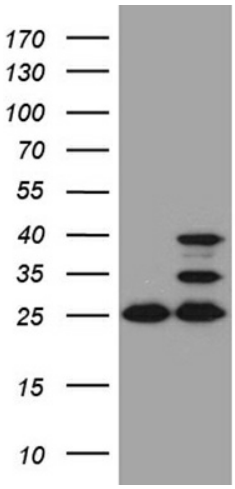
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_006003.1, NP_005994.1
RefSeq Size:	1224 bp
RefSeq ORF:	825 bp
Locus ID:	7386
UniProt ID:	P47985
Cytogenetics:	19q12
Domains:	UCR_TM, Rieske
Protein Pathways:	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	29.7 kDa
Gene Summary:	Cytochrome b-c1 complex subunit Rieske, mitochondrial: Component of the mitochondrial ubiquinol-cytochrome c reductase complex dimer (complex III dimer), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis (PubMed:28673544). Incorporation of UQCRFS1 is the penultimate step in complex III assembly (PubMed:28673544).[UniProtKB/Swiss-Prot Function]

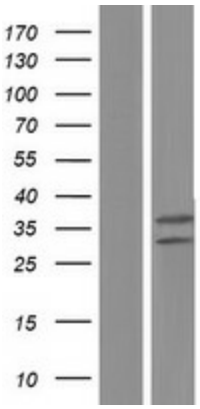
Product images:



Circular map for RC204051



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UQCRFS1 (Cat# RC204051, 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-UQCRFS1 (1:2000) (Cat# [TA811461]). Positive lysates [LY416927] (100ug) and [LC416927] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416927]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204051 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).