

Product datasheet for RC217898

COQ6 (NM_182480) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COQ6 (NM_182480) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COQ6
Synonyms:	CGI-10; CGI10; COQ10D6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC217898 representing NM_182480 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGGGCCAGGGTCCACCCCTTTCTAGCTTTGGCGTCTGGTTGGCTTCCAGGGCAGCCTCCGATCCAT
CCCGCCGAGGAGCAAGGATATGATATCACTTTCATGACAAGAAAATCCTGTTGCTCGAAGCAGGTCC
AAAGAAAGTACTGGAGAAATTGTCAGAACTTACAGCAACAGGGTCAGCTCCATTTCCCCTGGCTCTGCA
ACGCTTCTCAGTAGTTTTGGTGCCTGGGACCATATCTGCAACATGAGATACAGAGCCTTTTCGGCGAATGC
AGGTGTGGGACGCCTGCTCAGAGGCCCTGATAATGTTTGATAAGGATAATTTAGATGACATGGGCTATAT
CGTGGAGAATGATGTCATCATGCATGCTCTCACTAAGCAGTTGGAGGCTGTGTCTGACCGAGTGACGGTT
CTCTACAGGAGCAAAGCCATTGCTATACCTGGCCTTGTCCATTTCTATGGCCGACTCCAGCCCTTGGG
TTCATATTACCCTAGGTGATGGCAGCACCTTCCAGACCAATTGTTGATAGGTGCAGATGGTCACAACCTC
CGGAGTACGGCAGGCTGTTGGAATCCAGAATGTGAGCTGGAACATGACCAGTCTGCTGTTGTGGCTACT
CTGCATTTATCAGAGGCCACAGAAAACAACGTAGCCTGGCAGAGATTTCTCCCTGGGCTATTGCTC
TGCTCCCGCTCTCAGACACCTTGAGTTCCTTGGTTTGGTCCACGTCCCATGAACATGCAGCAGAGTAGT
TAGCATGGATGAGGAAAAATTTGGATGCCGTTAACTCTGCCTTTTGGAGTGATGCTGACCACACGGAC
TTCATCGACACAGCTGGTGCCATGCTGCAGTATGCTGTCAGCCTTCTGAAGCCCACTAAGGTCTCGGCTC
GCCAGCTGCCCAAGCGTAGCCAGGGTGGATGCCAAAAGCCGAGTTCTGTTTCTCTTGGGTTGGGACA
TGCTGCTGAGTACGTCAGGCCTCGGGTGGCGCTCATTGGGGATGCAGCCACAGAGTCCATCCGCTTGCA
GGACAGGGTGTCAACATGGGCTTTGGGATATCTCCAGCTTGGCCATCACCTCAGTACGGCAGCCTTCA
ATGGGAAGGACTTAGGTTCCGTGAGCCACCTCACAGGTTATGAAACAGAAAGACAGCGTCACAACACTGC
TCTTCTGGCTGTACAGACTTACTAAAAAGGCTCTATTCTACCAGTGCCTCCCGCTTGTGTTGCTCAGG
ACGTGGGCTTGCAGGCCACAAATGCAGTGTCTCACTCAAAGAACAGATTATGGCCTTTCGAAGCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC217898 representing NM_182480
 Red=Cloning site Green=Tags(s)

MRGQGPPLSSFGVWLASRAADSPSRPRRQGYDIHFHDKILLLEAGPKKVLKLEKSETYSNRVSSISPGSA
 TLLSSFGAWDHICNMRYRAFRRMQVWDACSEALIMFDKDNLDDMGYIVENDVIMHALTKQLEAVSDRVTV
 LYRSKAIRYTWPCFPFPMADSSPWVHITLGDGSTFQTKLLIGADGHNSGVRQAVGIQNVSWNYDQSAVVAT
 LHLSEATENNVAWQRFLPSGPIALLPLSDTLSSLVWSTSHEHAAELVSMDEEKFVDAVNSAFWSDADHTD
 FIDTAGAMLQYAVSLLKPTKVSARQLPPSVARVDAKSRVLFPLGLGHAAEYVRPRVALIGDAAHRVHPLA
 GQGVNMGFGDISSLAHLSTAAFNGKDLGSVSHLTGYETERQRHNTALLAATDLLKRLYSTASPLVLLR
 TWGLQATNAVSPLEQIMAFASK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

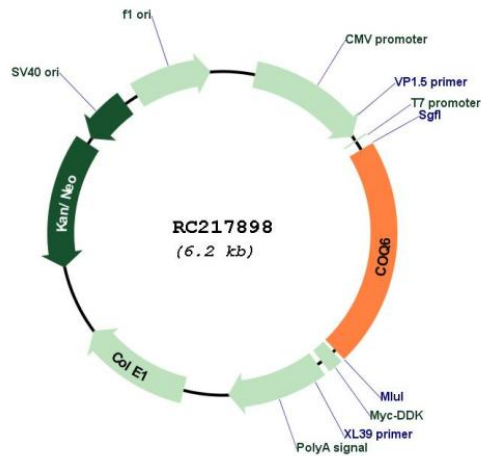
Chromatograms: https://cdn.origene.com/chromatograms/mk8056_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

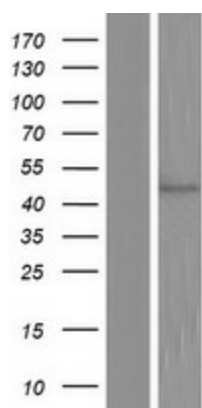


Plasmid Map:



ACCN:	NM_182480
ORF Size:	1329 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.
RefSeq:	NM_182480.2 , NP_872286.2
RefSeq Size:	1553 bp
RefSeq ORF:	1332 bp
Locus ID:	51004
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Ubiquinone and other terpenoid-quinone biosynthesis
MW:	43 kDa
Gene Summary:	The protein encoded by this gene belongs to the ubiH/COQ6 family. It is an evolutionarily conserved monooxygenase required for the biosynthesis of coenzyme Q10 (or ubiquinone), which is an essential component of the mitochondrial electron transport chain, and one of the most potent lipophilic antioxidants implicated in the protection of cell damage by reactive oxygen species. Knockdown of this gene in mouse and zebrafish results in decreased growth due to increased apoptosis. Mutations in this gene are associated with autosomal recessive coenzyme Q10 deficiency-6 (COQ10D6), which manifests as nephrotic syndrome with sensorineural deafness. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jun 2012]

Product images:



Western blot validation of overexpression lysate (Cat# [LY405541]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217898 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).