

Product datasheet for **RG204353**

COQ6 (NM_182476) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COQ6 (NM_182476) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	COQ6
Synonyms:	CGI-10; CGI10; COQ10D6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG204353 representing NM_182476
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGCCCGCTTGTGACCCGATGCGGGGCTGTGCGTGCAGCTCCCCACAGCGGCCCGCTGGTGTCTT
 GCGCAGGTGGTCCGGCCCTCAACAGACACCGTGTATGACGTGGTGGTGTGCGGTGGAGCCTGGTGGG
 CGCTGCCATGGCCTGTGCCTTGGGATATGATATCACTTTCATGACAAGAAAATCCTGTTGCTCGAAGCA
 GGTCCAAAGAAAGTACTGGAGAAATGTGAGAACTTACAGCAACAGGGTCACTCCATTTCCCCTGGCT
 CTGCAACGCTTCTCAGTAGTTTTGGTGCCTGGGACCATACTGCAACATGAGATACAGAGCCTTTCCGGC
 AATGCAGGTGTGGGACGCTGCTCAGAGGCCGTGATAATGTTTGATAAGGATAATTTAGATGACATGGGC
 TATATCGTGGAGAATGATGTCATCATGCATGCTCTCACTAAGCAGTTGGAGGCTGTGTCTGACCGAGTGA
 CGGTTCTCTACAGGAGCAAAGCCATTGCTATACTGGCCTTGTCCATTTCTATGGCCGACTCCAGCCC
 TTGGGTTCAATTACCCTAGGTGATGGCAGCACCTTCCAGACAAATTGTTGATAGTGCAGATGGTCAC
 AACTCCGGAGTACGGCAGGCTGTTGGAATCCAGAATGTGAGCTGGAACATGACCACTGCTGTTGTGG
 CTACTCTGCATTTATCAGAGGCCACAGAAAACAACGTAGCCTGGCAGAGATTTCTTCCCTCTGGGCAT
 TGCTCTGCTCCCGCTCTCAGACACCTTGAGTTCCTTGGTTTGGTCCACGTCATGAACATGCAGCAGAG
 CTAGTTAGCATGGATGAGGAAAAATTTGGTATGCCGTTAACTCTGCCTTTTGGAGTGTGCTGACCACA
 CGGACTTCATCGACACAGCTGGTCCATGCTGCAGTATGCTGTGACGCTTCTGAAGCCACTAAGGTCTC
 GGCTCGCCAGTGCCTCAAGCGTAGCCAGGGTGGATGCCAAAAGCCGAGTCTGTTTCTCTTGGGTTG
 GGACATGCTGCTGAGTACGTGAGCCTCGGGTGGCGCTCATTGGGGATGCAGCCACAGAGTCCATCCGC
 TTGCAGGACAGGGTGTCAACATGGGCTTTGGGGATATCTCCAGCTTGGCCATCACCTCAGTACGGCAGC
 CTTCAATGGGAAGGACTTAGGTTCCGTGAGCCACCTCACAGTTATGAAACAGAAAAGACAGCGTCACAAC
 ACTGCTCTTCTGCTGCTACAGACTTACTAAAAAGGCTCTATTCTACCAGTGCCTCCCGCTTGTGTTGC
 TCAGGACGTGGGCTTGCAGGCCACAAATGCAGTGTCTCCACTCAAGAACAGATTATGGCCTTTGCAAG
 CAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG204353 representing NM_182476
 Red=Cloning site Green=Tags(s)

MAARLVSRGAVRAAPHSGPLVSWRRWSGASTDTVYDVVVSGLLVGAAMACALGYDIHFHDKKILLLEA
 GPKKVLEKLSETYSNRVSSISPGSATLLSSFGAWDHICNMRYRAFRRMQVWDACSEALIMFDKDNLDDMG
 YIVENDVIMHALTKQLEAVSDRVTLYRSKAIRYTWPCPFPMADSSPWVHITLGDGSTFQTKLLIGADGH
 NSGVRQAVGIQNVSWNYDQSAVVATLHLSEATENNVAWQRFLPSGPIALLPLSDLSSLVWSTSHEHAAE
 LVSMDEEKFVDVAVNSAFWSDADHTDFIDTAGAMLQYAVSLLKPTKVSARQLPPSVARVDAKSRVLFPLGL
 GHAAEYVRPRVALIGDAAHRVHPLAQGVNMGFGDISSLAHHLSTAAFNGKDLGSVSHLTGYETERQRHN
 TALLAATDLLKRLYSTSASPLVLLRTWGLQATNAVSPLEQIMAFASK

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_182476

ORF Size: 1404 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_182476.3](#)

RefSeq Size: 1609 bp

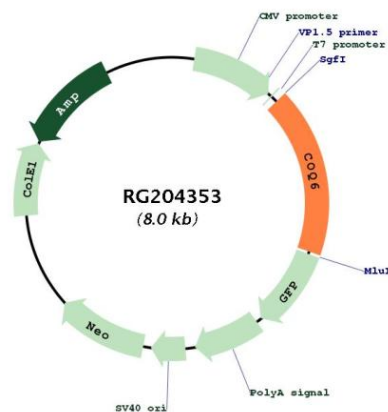
RefSeq ORF: 1407 bp

Locus ID: 51004

UniProt ID: [Q9Y2Z9](#)

Cytogenetics:	14q24.3
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Ubiquinone and other terpenoid-quinone biosynthesis
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:



Circular map for RG204353