

Product datasheet for **MG215988**

Coq6 (NM_172582) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Coq6 (NM_172582) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Coq6
Synonyms:	5930427M12Rik; AW742344
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215988 representing NM_172582
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCCCGCATTGGCTCCATGGCAGGCTTGTCTGCGTTGCTGGTGGAGTTCGCGCAGCTCGCAC
 CCAGAGGAGGCCCTAGTTGCCAGCCAGCGATGGGCGGCTCCTCGGCAGACACCGTGTACGACGTGGT
 GGTGTCAGGAGGAGCCTAGTGGCTCTGCCATGGCTTGTGCCTTAGGACATGATATCACTTTTCATGAC
 AAGAAAATCCTGTTGCTGGAGGCGGGTCCAAGAAAGCCCTGGAGAACTGTGAGAGACTTACAGCAACA
 GAGTCAGCTCCATATCCCCTGGCTCCACAACCCTGCTCAGCAGTTTTGGTGCATGGGACCACATCTGCAA
 TATGCGCTGCAAAGCCTCCGGAGGATGCAGGTGTGGGACTCCTGCTCAGAGGCCTTGATAATGTTGAC
 AGGGACAACCTGGATGACATGGCTATATAGTGGAAAATGACGTCATCATGTATGCCCTCACAAACAGC
 TGGAGGCTGTGGCAGATCGAGTGAAGTTCTCTATGAGAGCAAAGCTGTTGGCTATTCTGGCCTGGTGC
 ATTTTCCATGGCAGACTCCAGCCCTTGGGTCCATATTACCCTAGGTGATGGCAGTACCCTCCAGACCAAA
 CTGTTGATTGGTCTGATGGGCACAAGTCAAGAGTGAAGCAAGCTGCTGGGATCCAGAATGTCAGCTGGA
 AGTACGACCAGTCTGCTGTGGTGGCCACTCTCCAATTATCAGAGGCCACAGAAAACAATGTAGCCTGGCA
 GAGATTTCTTCCCTCTGGGCTATTGCTCTGCTCCCGCTCTCGGATACCTTGAGCTCCTTGGTCTGGTCC
 ACATCACACGAGCATGCAGCAGAGCTGGTCAGCATGGATGAGGAAGAATTCGTGGATGCCATCAACTCTG
 CCTTTGGAGTGATGTTACCACACAGACTTCGTCGACTCTGCCAGCGCCATGGTGCGCCATGCTGTGCG
 CCTTCTGAAGCCCACTAAGGTCTCAGCCCGTCACTGCCCAAGTATAGCCAAGGTGGATGCTAAAAGC
 AGAGCCCTCTTCTCTGGGCTGGGACATGCTGCTGAGTACGTCGGCCTCGGGTGGCCCTCATTGGTG
 ATGCAGCCACAGAATCCACTCCGCGGACAAGGTGTCAACATGGGCTTCGGGGATATTTCCAGTT
 GGTTTCATCATCTCAGTACAGCAGCCTCAATGGGAAGGACTTAGGCTCCATGAGCCACCTCACAGGTTAT
 GAGACAGACAGACAGCGTCATAACTGCTCTCCTGGCTGCTACTGACCTGTTGAAAAGGCTCTACTCTA
 CCAGTGCCACTCCCCTCGTCTGCTCAGGACCTGGGGCTTGACAGGCCACGAACGCAGTGTCTCTCTCAA
 AGAACAGATTATGGCCTTTGCGAGCAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG215988 representing NM_172582
 Red=Cloning site Green=Tags(s)

MAARIGSMAGLLCVRWWSSAQLAARGGPLVASQRWAGSSADTVYDVVVSGGGLVGSAMACALGHDHIFHD
 KKILLLEAGPKKALEKLSETYSNRVSSISPGSTLLSSFAGWDHICNMCKAFRRMQVWDCSEALIMFD
 RDNLDDMGYIVENDVIMYALTKQLEAVADRVKVLYESKAVGYSWPGAFSMADSSPWWHITLGDGSLQTK
 LLIGADGHKSGVRQAAGIQNVSWKYDQSAVVATLHLSEATENNAVQRFLPSGPIALLPLSDTLSSLVWS
 TSHEHAAELVSMDEEFVDAINSFAFWSVDVHHTDFVDSASAMVRHAVALLKPTKVSARQLPPSIKVDKAS
 RALFPLGLGHAAEYVRPRVALIGDAAHRIHPLAQGVNMGFGDISSLVHHLSTAAFNGKDLGSMHSLTGY
 ETDRQRHNTALLAATDLLKRLYSTSATPLVLLRTWGLQATNAVSPLEQIMAFASK

TRTRPLE – GFP Tag – V

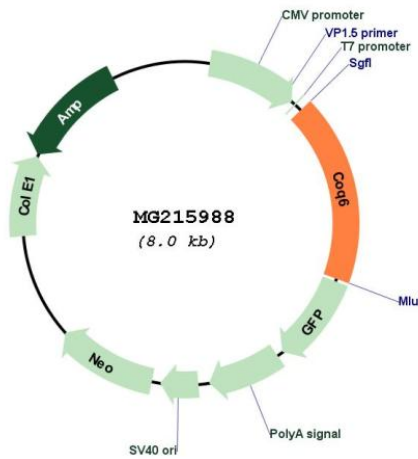
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_172582

ORF Size: 1428 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_172582.3](#), [NP_766170.2](#)

RefSeq Size: 1602 bp

RefSeq ORF: 1431 bp

Locus ID: 217707

UniProt ID: [Q8R1S0](#)

Cytogenetics: 12 D1

Gene Summary: FAD-dependent monooxygenase required for the C5-ring hydroxylation during ubiquinone biosynthesis. Catalyzes the hydroxylation of 3-polyprenyl-4-hydroxybenzoic acid to 3-polyprenyl-4,5-dihydroxybenzoic acid. The electrons required for the hydroxylation reaction may be funneled indirectly from NADPH via a ferredoxin/ferredoxin reductase system to COQ6.[UniProtKB/Swiss-Prot Function]