

## Product datasheet for **MG222397**

### **Nqo2 (NM\_020282) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nqo2 (NM_020282) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nqo2
Synonyms:	NMO2; Nmor2; Ox2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222397 representing NM_020282 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGTAAGAAAGTGCTCATCGTCTATGCACACCAAGAACCAAGTCCTTCAATGGGTCCTGAAGA  
AAGTGGCTGTTGAAGAACTGAGCAAGCAGGGATGCACAGTCAGTGTGTCTGATTTATATAGCATGAACTT  
TGAGCCAAGGGCCACAAGAAATGATATCACTGGTCCCCCTCTAATCCTGACGTCTTCAGTTATGGGATA  
GAAACCCATGAAGCCTACAAGAAGAAAGCTCTGACCAGTGATATATTTGAAGAACAGAGAAAGGTGCAAG  
AAGCTGATCCTTGTGATATTTTCAGTTCCACTATACTGGTTCAGCGTTCAGCAATCCTAAAAGGTTGGAT  
GGATAGGGTGCTGTGCCGAGGGTTTGCCTTTGATATCCCAGGCTTTTATGACTCTGGTTTTCTCAAGGGT  
AAATTAGCTCTCCTTTTCCCTTAACCACGGGAGGTACAGCGGAGATGTACACAAAAGATGGGGTCAGTGGAG  
ATTTCCGGTACTTCTGTGGCCACTTCAGCATGGTACACTGCACTTCTGTGGATTTAAAGTCCTTGCCCC  
CCAGATCAGTTTTGGTCTTGATGTTTCATCAGAAGAAGAAAGGAAAGTGTGCTGGCATCATGGGCCAG  
CGGCTGAAGAGCATCTGGAAGGAAGAACCCATCCACTGCACACCCCTTGGTACTTCCAAGAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG222397 representing NM\_020282  
 Red=Cloning site Green=Tags(s)

MAGKKVLIVYAHQEPKSFNGSLKKVAVEELSKQGCTVTVSDLYSMNFEPATRNDITGAPSNPDVFSYGI  
 ETHEAYKKKALTSDFEEQRKVQEADLVIFQFPLYWFSVPAILKGWMDRVLCRGF AFDIPGFYDSGFLKG  
 KLALLSLTTGGTAEMYTKDGVSGDFRYFLWPLQHGTLHFCGFKVLAPQISFGLDVSSEERKVMLASWAQ  
 RLKSIWKKEPIHCTPPWYFQE

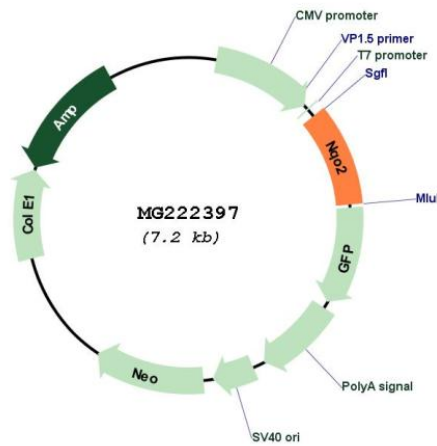
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_020282

**ORF Size:** 693 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](mailto: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\\_020282.3](#), [NP\\_064678.1](#)

**RefSeq Size:** 3974 bp

**RefSeq ORF:** 696 bp

**Locus ID:** 18105

**UniProt ID:** [Q9JL75](#)

**Cytogenetics:** 13 14.01 cM

**Gene Summary:** The enzyme apparently serves as a quinone reductase in connection with conjugation reactions of hydroquinones involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis.[UniProtKB/Swiss-Prot Function]