

Product datasheet for **RG202889**

NQO2 (NM_000904) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NQO2 (NM_000904) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NQO2
Synonyms: DHQV; DIA6; NMOR2; QR2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG202889 representing NM_000904
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGGTAAGAAAGTACTCATTGTCTATGCACACCAGGAACCAAGTCTTCAACGGATCCTTGAAGA
ATGTGGCTGTAGATGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
TGAGCCGAGGGCCACAGACAAAGATATCACTGGTACTCTTCTAATCCTGAGGTTTTCAATTATGGAGTG
GAAACCCACGAAGCCTACAAGCAAAGGTCTCTGGCTAGCGACATCACTGATGAGCAGAAAAAGTTCCGG
AGGCTGACCTAGTGATATTTCAAGTCCCGCTGTACTGGTTCAGCGTGCCCGCCATCCTGAAGGGCTGGAT
GGATAGGGTGTGTGCCAGGGCTTTGCCTTTGACATCCCAGGATTCTACGATTCCGGTTTGTCCAGGGT
AAACTAGCGCTCCTTTCCGTAACACCGGGAGGCACGGCCGAGATGTACACGAAGACAGGAGTCAATGGAG
ATTCTCGATACTTCTGTGGCACTCCAGCATGGCACATTACACTTCTGTGGATTTAAAGTCTTGCCTCC
TCAGATCAGCTTTGCTCCTGAAATTGCATCCGAAGAAGAAAGAAAGGGGATGGTGGCTGCGTGGTCCAG
AGGCTGCAGACCATCTGGAAGGAAGAGCCATCCCCTGCACAGCCCACTGGCACTTCGGGCAA

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG202889 representing NM_000904
 Red=Cloning site Green=Tags(s)

MAGKKVLIVYAHQEPKSFNGSLKNVAVDEL SRQGCTVTVSDLYAMNFEPRA¹TDKIDITGTL SNPEVFNYGV
 ETHEAYKQRSLASDITDEQKKVREADLVIFQFPLYWFSVPAILKGWMDRVL CQGF²AFDIPGFYDSGLLQG
 KLALLSVTTGGTAEMYTKGVNGDSRYFLWPLQHGTLHFCGFKVLAPQISFAPEIASEEERKGMVAAWSQ
 RLQTIWKEEIPCTAHWHFGQ

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000904

ORF Size: 693 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_000904.2](#)

RefSeq Size: 976 bp

RefSeq ORF: 696 bp

Locus ID: 4835

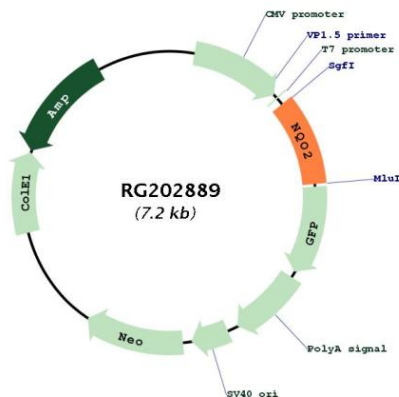
UniProt ID: [P16083](#)

Cytogenetics: 6p25.2

Domains: Flavodoxin_2

Gene Summary: This gene encodes a member of the thioredoxin family of enzymes. It is a cytosolic and ubiquitously expressed flavoprotein that catalyzes the two-electron reduction of quinone substrates and uses dihydronicotinamide riboside as a reducing coenzyme. Mutations in this gene have been associated with neurodegenerative diseases and several cancers. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RG202889