

Product datasheet for **RG236463**

NQO2 (NM_001290222) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NQO2 (NM_001290222) 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: >RG236463 representing NM_001290222.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCAGGTAAGAAAGTACTCATTGTCTATGCACACCAGGAACCCAAGTCTTTCAACGGATCCTTGAAG
AATGTGGCTGTAGATGAACTGAGCAGGCAGGGCTGCACCGTCACAGTGTCTGATTTGTATGCCATGAAC
CTTGAGCCGAGGGCCACAGACAAAGATATCACTGGTACTCTTTCTAATCCTGAGGTTTTCAATTATGGA
GTGAAACCCACGAAGCCTACAAGCAAAGGTCTCTGGCTAGCGACATCACTGATGAGCAGAAAAAGTT
CGGGAGGCTGACCTAGTGATATTCAGGGTAACTAGCGCTCCTTCCGTAACCACGGGAGGCACGGCC
GAGATGTACACGAAGACAGGAGTCAATGGAGATTCTCGATACTTCTGTGGCCACTCCAGCATGGCACA
TTACACTTCTGTGGATTTAAAGTCTTGCCCTCAGATCAGCTTTGCTCCTGAAATTGCATCCGAAGAA
GAAAGAAAGGGGATGGTGGCTGCGTGGTCCCAGAGGCTGCAGACCATCTGGAAGGAAGAGCCCATCCCC
TGCACAGCCCACTGGCACTTCGGGCAA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236463
Blue=ORF Red=Cloning site Green=Tag(s)

```
MAGKKVLIVYAHQEPKSFNGSLKNVAVDEL SRQGCTVTVSDLYAMNLEPRATDKDITGLSNPEVFNYG
VETHEAYKQRSLASDITDEQKKVREADLVIFQGLALLSVTTGGTAEMYTKTVNGDSRYFLWPLQHGT
LHFCGFKVLAPQISFAPEIASSEERKGMVAAWSQRLQTIWKEEPIPCTAHWHFGQ
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSPGYENPFLHAINNGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

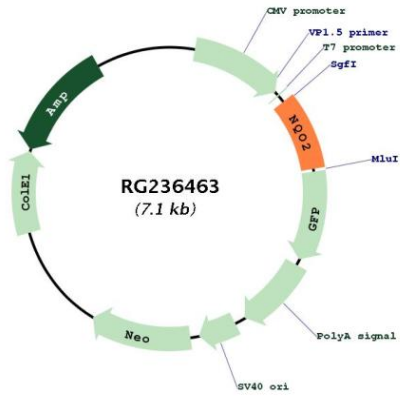
Restriction Sites: SgfI-MluI



Cloning Scheme:


- ACCN:** NM_001290222
- ORF Size:** 579 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).
- RefSeq:** [NM_001290222.1](#), [NP_001277151.1](#)
- RefSeq Size:** 1158 bp
- RefSeq ORF:** 582 bp
- Locus ID:** 4835
- Cytogenetics:** 6p25.2
- MW:** 22 kDa
- 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 RG236463