

Product datasheet for **RC236757**

NQO2 (NM_001290221) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NQO2 (NM_001290221) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NQO2
Synonyms: DHQV; DIA6; NMOR2; QR2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236757 representing NM_001290221
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGGCAGGTAAGAAAGTACTCATTGTCTATGCACACCAGGAACCAAGTCTTTCAACGGATCCTTGAAGA
ATGTGGCTGTAGATGAAGTACTGAGCAGGCAGGGCTGCACCGTCACAGTGTCTGATTTGTATGCCATGAACCT
TGAGCCGAGGGCCACAGACAAAGATATCACTGGTACTCTTTCTAATCCTGAGGTTTTCAATTATGGAGTG
GAAACCCACGAAGCCTACAAGCAAAGGTCTCTGGCTAGCGACATCACTGATGAGCAGAAAAAGGTTCCGGG
AGGCTGACCTAGTGATATTTCAAGTCCCGCTGACTGGTTCAGCGTGCCAGCCATCCTGAAGGGCTGGAT
GGATAGGGTGCTGTGCCAGGGCTTTGCCTTTGACATCCCAGGATTCTACGATTCGGTTTTGCTCCAGGGT
AACTAGCGCTCCTTTCCGTAACCACGGGAGGCACGGCCGAGATGTACACGAAGACAGGAGTCAATGGAG
ATTCTCGATACTTCTGTGGCCACTCCAGCATGGCACATTACACTTCTGTGGATTTAAAGTCTTGCCCC
TCAGATCAGCTTTGCTCCTGAAATTGCATCCGAAGAAGAAAGAAAGGGGATGGTGGCTGCGTGGTCCCAG
AGGCTGCAGACCATCTGGAAGGAAGAGCCATCCCCTGCACAGCCCACTGGCACTTCGGGCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC236757 representing NM_001290221
 Red=Cloning site Green=Tags(s)

MAGKKVLIVYAHQEPKSFNGSLKNVAVDEL SRQGCTVTVSDLYAMNLEPRATDKDITGTLNPEVFN YGV
 ETHEAYKQRSLASDITDEQKKVREADLVIFQFPLYWFSVPAILKGWMDRVL CQGF AFDIPGFYDSGLLQG
 KLALLSVTTGGTAEMYTKGVNGDSRYFLWPLQHGTLHFCGFKVLAPQISFAPEIASEEERKGMVAWSQ
 RLQTIWKEEPICTAHWHFGQ

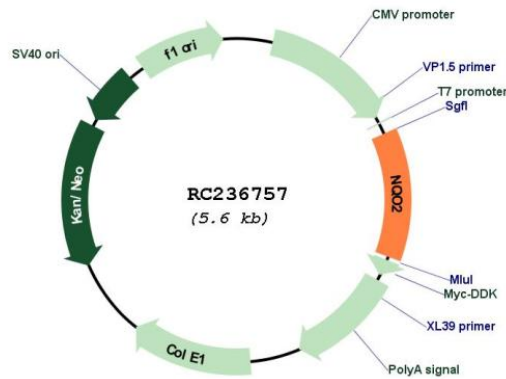
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001290221

ORF Size: 693 bp

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|-------------------------------|---|
| 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: | <ol style="list-style-type: none">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_001290221.1 , NP_001277150.1 |
| RefSeq Size: | 1787 bp |
| RefSeq ORF: | 696 bp |
| Locus ID: | 4835 |
| UniProt ID: | P16083 |
| Cytogenetics: | 6p25.2 |
| MW: | 26.4 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] |