

Product datasheet for SC302402

NQO1 (NM_001025433) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: NQO1 (NM_001025433) Human Untagged Clone

Tag: Tag Free Symbol: NQO1

Synonyms: DHQU; DIA4; DTD; NMOR1; NMORI; QR1

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_001025433 edited

CAAGGTTGCAGCCGGAGCCGCCCAGCTCACCGAGAGCCTAGTTCCGGCCAGGGTCGCCCC GGCAACCACGAGCCCAGCCAATCAGCGCCCCGGACTGCACCAGAGCCATGGTCGGCAGAA GAGCACTGATCGTACTGGCTCACTCAGAGAGGACGTCCTTCAACTATGCCATGAAGGAGG CTGCTGCAGCGGCTTTGAAGAAGAAAGGATGGGAGGTGGTGGAGTCGGACCTCTATGCCA TGAACTTCAATCCCATCATTTCCAGAAAGGACATCACAGGTAAACTGAAGGACCCTGCGA ACTTTCAGTATCCTGCCGAGTCTGTTCTGGCTTATAAAGAAGGCCATCTGAGCCCAGATA TTGTGGCTGAACAAAAGAAGCTGGAAGCCGCAGACCTTGTGATATTCCAGTTCCCCCTGC AGTGGTTTGGAGTCCCTGCCATTCTGAAAGGCTGGTTTGAGCGAGTGTTCATAGGAGAGT TTGCTTACACTTACGCTGCCATGTATGACAAAGGACCCTTCCGGAGTGGCATTCTGCATT TCTGTGGCTTCCAAGTCTTAGAACCTCAACTGACATATAGCATTGGGCACACTCCAGCAG ACGCCCGAATTCAAATCCTGGAAGGATGGAAGAAACGCCTGGAGAATATTTGGGATGAGA TGAAAAAGAGGTACAGGATGAGGAGAAAAACAAGAAATTTGGCCTTTCTGTGGGCCATC ACTTGGGCAAGTCCATCCCAACTGACAACCAGATCAAAGCTAGAAAATGAGATTCCTTAG CCTGGATTTCCTTCTAACATGTTATCAAATCTGGGTATCTTTCCAGGCTTCCCTGACTTG CTTTAGTTTTTAAGATTTGTGTTTTTCTTTTTCCACAAGGAATAAATGAGAGGGAATCGA

CAAAAAAAAAAAAAAA

Restriction Sites: ECoRI-NOT

ACCN: NM_001025433

Insert Size: 1000 bp



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NQO1 (NM_001025433) Human Untagged Clone - SC302402

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: The ORF of this clone has been fully sequenced and found to be a perfect match to

NM_001025433.1.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001025433.1</u>, <u>NP 001020604.1</u>

RefSeq Size: 2499 bp
RefSeq ORF: 723 bp
Locus ID: 1728

 UniProt ID:
 P15559

 Cytogenetics:
 16q22.1

Protein Families: Druggable Genome

Gene Summary: This gene is a member of the NAD(P)H dehydrogenase (quinone) family and encodes a

cytoplasmic 2-electron reductase. This FAD-binding protein forms homodimers and reduces quinones to hydroquinones. This protein's enzymatic activity prevents the one electron reduction of quinones that results in the production of radical species. Mutations in this gene have been associated with tardive dyskinesia (TD), an increased risk of hematotoxicity after exposure to benzene, and susceptibility to various forms of cancer. Altered expression of this protein has been seen in many tumors and is also associated with Alzheimer's disease (AD).

Alternate transcriptional splice variants, encoding different isoforms, have been

characterized. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) lacks an alternate in-frame exon, compared to variant 1.

The resulting protein (isoform b) is shorter than isoform a.