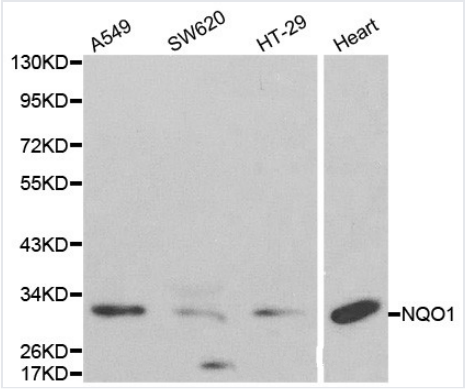
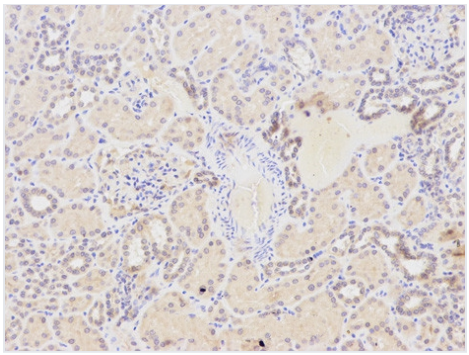
NQO1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

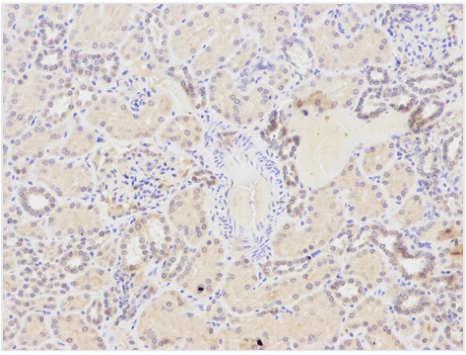
Product Name	NQO1, Polyclonal Antibody
Full Product Name	NQO1 Antibody
Product Gene Name	anti-NQO1 antibody
Product Synonym Names	DHQU; DIA4; DTD; NMOR1; NMORI; QR1
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Purity/Purification	Antigen affinity purification
Concentration	1mg/mL (lot specific)
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.
Molecular Weight	26,365 Da
OMIM	125860
Immunogen	A synthetic peptide of human NQO1
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-16464 / sc-16463 / sc-25591
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-NQO1 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Related Product Information for anti-NQO1 antibody	NAD(P)H:quinone oxidoreductase 1 (NQO1) is a flavoprotein that catalyzes the two-electron reduction of quinones and their derivatives (1, 2). This enzyme protects cells against redox cycling and oxidative stress (1, 3). The expression of NQO1 is increased in liver, colon and breast tumors and non-small cell lung cancer (NSCLC) compared with the normal tissues (1, 2). Moreover, expression levels are also elevated in developing tumors, suggesting a role for NQ01 in the prevention of tumor development (1). Studies on NQO1 knockout mice suggest that the lack of NQO1 enzymatic activity changes intracellular redox states resulting in a reduction in apoptosis, which in turns leads to myeloid hyperplasia of bone marrow (2).
Other Notes	Small volumes of anti-NQO1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for NQO1 purchase	MBS2528040 is an antibody targeting NQO1. Also known as NQO1 Antibody. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-NQO1 antibody
Western blot analysis of extracts of various cell lines, using NQO1 antibody.



Immunohistochemistry (IHC) of anti-NQO1 antibody
Immunohistochemistry of paraffin-embedded human thyroid cancer using NQO1 antibody at dilution of 1:200 (200x lens).



Immunohistochemistry (IHC) of anti-NQO1 antibody
Immunohistochemistry of paraffin-embedded human kidney using NQO1 antibody at dilution of 1:200 (200x lens).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for NQO1. It may not necessarily be applicable to this product.

NCBI GI #	554790420
NCBI GeneID	1728
NCBI Accession #	NP_001273066.1
UniProt Secondary Accession #	Q86UK1; B2R5Y9; B4DNM7; B7ZAD1
UniProt Related Accession #	P15559
GenBank Nucleotide #	NM_001286137.1
NCBI Official Full Name	NAD(P)H dehydrogenase
NCBI Official Synonym Full Names	NAD(P)H dehydrogenase, quinone 1
NCBI Official Symbol	NQO1
NCBI Official Synonym Symbols	DTD; QR1; DHQU; DIA4; NMOR1; NMORI
UniProt Protein Name	NAD(P)H dehydrogenase [quinone] 1
UniProt Synonym Protein Names	Azoreductase; DT-diaphorase; DTD; Menadione reductase; NAD(P)H:quinone oxidoreductase 1; Phylloquinone reductase; Quinone reductase 1; QR1
Protein Family	NAD(P)H dehydrogenase
UniProt Gene Name	NQO1
UniProt Synonym Gene Names	DIA4; NMOR1; DTD; QR1

UniProt Entry Name	NQO1_HUMAN
NCBI Protein Information	NAD(P)H dehydrogenase [quinone] 1; NAD(P)H dehydrogenase [quinone] 1; DT-diaphorase; NAD(P)H:Quinone acceptor oxidoreductase type 1; NAD(P)H:menadione oxidoreductase 1; NAD(P)H:quinone oxidoreductase 1; NAD(P)H:quinone oxireductase; azoreductase; diaphorase (NADH/NADPH) (cytochrome b-5 reductase); diaphorase-4; dioxin-inducible 1; menadione reductase; phylloquinone reductase; quinone reductase 1
NCBI Summary for NQO1	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]
UniProt Comments for NQO1	NQO1: a FAD-binding flavoprotein enzyme that that prevents the one electron reduction of quinones that results in the production of radical species. Involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis. Mutations have been associated with tardive dyskinesia (TD), an increased risk of hematotoxicity after exposure to benzene, and susceptibility to various forms of cancer. The expression of NQO1 is increased in liver, colon and breast tumors and non-small cell lung cancer (NSCLC) compared with the normal tissues. Moreover, expression levels are also elevated in developing tumors, suggesting a role for NQ01 in the prevention of tumor development. A homozygous common missense variant (NQO1(*)2, rs1800566(T)), that disables NQO1 strongly predicts poor survival among two independent series of women with breast cancer. Studies on NQO1 knockout mice suggest that the lack of NQO1 enzymatic activity changes intracellular redox states resulting in a reduction in apoptosis, which in turn leads to myeloid hyperplasia of bone marrow. Altered expression is associated with Alzheimer's disease (AD). Inhibited by dicoumarol. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Oxidoreductase; EC 1.6.5.2 Chromosomal Location of Human Ortholog: 16q22.1 Cellular Component: cell soma; cytoplasm; cytosol Molecular Function: identical protein binding; protein binding; NAD(P)H dehydrogenase (quinone) activity; cytochrome-b5 reductase activity; superoxide dismutase activity Biological Process: response to ethanol; removal of superoxide radicals; response to toxin; positive regulation of neuron apoptosis; xenobiotic metabolic process; negative regulation of catalytic activity; nitric oxide biosynthetic process; regulation of amino acid metabolic process; response to nutrient; response to estradiol stimulus; aging; synaptic transmission, cholinergic
Research Articles on NQO1	**1.** shows that individuals carrying the NQO1 C609T variant allele and genotypes are more susceptible to hepatocellular carcinoma [review]
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/nqo1/2528040