

NQO1 active protein

Recombinant Human NQO1 Protein

CATALOG # AAA11735	HOST E Coli	APPLICATIONS SDS-Page, ELISA
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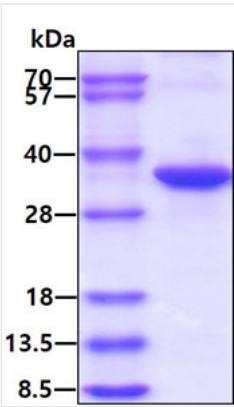
PRODUCT SYNONYMS

NQO1; Recombinant Human NQO1 Protein; NAD(P)H dehydrogenase quinone 1; DHQu; DIA4; DTD; NMOR1; NMORI; QR1; Azoreductase; Quinone reductase 1; DT-diaphorase; NAD(P)H dehydrogenase; quinone 1; Azoreductase.Menadione reductase; NQO 1; QR 1; Phylloquinone reductase; Cytochrome b 5 reductase; DIA 4; Diaphorase (NADH/NADPH); Diaphorase 4 Dioxin inducible 1; DT diaphorase; Diaphorase (NADH/NADPH) (cytochrome b 5 reductase); NAD(P)H dehydrogenase quinone 1 NAD(P)H menadione oxidoreductase 1 dioxin inducible; NAD(P)H: menadione oxidoreductase 1 dioxin inducible 1; NAD(P)H:menadione oxidoreductase 1; NAD(P)H:Quinone acceptor oxidoreductase type 1; NAD(P)H:quinone oxidoreductase 1; NAD(P)H:quinone oxireductase; NMOR 1; NMOR I; NQO1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>95% by SDS-PAGE
Form/Format	Liquid; In 20mM Tris-HCl Buffer (pH 8.0) containing 10% Glycerol 1mM DTT.
Concentration	1mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MGSSHHHHH SSGLVPRGSH MVGRRALIVL AHSERTSFNY AMKEAAAAAL KKKGWEVVES DLYAMNFNPI ISRKDITGKL KDPANFQYPA ESVLAYKEGH LSPDIVAEQK KLEAADLVIF QFPLQWFGVP AILKGWFERV FIGEFAYTYA AMYDKGPFRS KKAVLSITTG GSGSMYSLQG IHGDMNVILW PIQSGILHFC GFQVLEPQLT YSIGHTPADA RIQILEGWKK RLENIWDETP LYFAPSSSLFD LNFQAGFLMK KEVQDEEKNK KFGLSVGHHL GKSIPTDNQI KARK
Sequence Length	274
Applicable Applications for NQO1 active protein	SDS-PAGE, ELISA
Endotoxin	<1 EU per 1ug of protein (determined by LAL method).
Domain	1-274aa
Tag	His-Tag
Biological Activity	Specific activity is > 1,000 pmol/min/ug and is defined as the amount of enzyme that converts 1 pmole of resazurin to resorufin per minute at pH 7.5 at 25C.
Preparation and Storage	Can be stored at +2°C to +8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE
3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

ADDITIONAL INFORMATION

Related Product Information for NQO1 active protein	NQO1 is a member of the NAD (P) H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. This protein apparently serves as a quinone reductase in connection with conjugation reactions of hydroquinons involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis. NQO1 functions as an important part of cellular antioxidant defense by detoxifying quinines thus preventing the formation of reactive oxygen species. Altered expression of NQO1 has been seen in many tumors and is also associated with Alzheimer's disease (AD). Recombinant human NQO1, was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for NQO1 active protein	Redox Proteins
References	Jaiswal AK., et al. (1988) J Biol Chem. 263(27):13572-8. Traver RD., et al. (1992) Cancer Res. 52(4):797-802.

NCBI AND UNIPROT INFORMATION

NCBI GI #	118607
NCBI GeneID	1728
UniProt Accession #	P15559
Molecular Weight	33.0 kDa (294aa), confirmed by MALDI-TOF.
NCBI Official Full Name	NAD(P)H dehydrogenase
NCBI Official Synonym Full Names	NAD(P)H quinone dehydrogenase 1
NCBI Official Symbol	NQO1
NCBI Official Synonym Symbols	DTD; QR1; DHQU; DIA4; NMOR1; NMORI
NCBI Protein Information	NAD(P)H dehydrogenase [quinone] 1
UniProt Protein Name	NAD(P)H dehydrogenase [quinone] 1
UniProt Gene Name	NQO1
UniProt Synonym Gene Names	DIA4; NMOR1; DTD; QR1
UniProt Entry Name	NQO1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

