Recombinant human NQO1 protein

Catalog Number: ATGP0392

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-274aa

UniProt No.
P15559

NCBI Accession No.
NP_000894.1

Alternative Names
NAD(P)H quinone dehydrogenase 1, NMOR1, DIA4, Diaphorase, NADH/NADPH, Cytochrome b-5 reductase, NAD(P)H dehydrogenase, Quinone 1, DHQU, QR1, Azoreductase, DT-diaphorase, DTD, Menadione reductase, NAD(P)H:quinone oxidoreductase 1, Phylloquinone reductase, Quinone reductase 1

PRODUCT SPECIFICATION

Molecular Weight
33.0 kDa (294aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 1mM DTT

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
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

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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 NQO1 protein was expressed in E. coli and purified by using conventional chromatography techniques

Amino acid Sequence

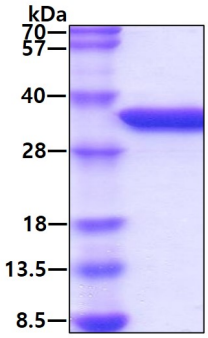
<MGSSHHHHHH SSGLVPRGSH> MVGRRALIVL AHSERTSFNY AMKEAAAAAL KKKGWEVVES DLYAMNFNPI ISRKDITGKL KDPANFQYPA ESVLAYKEGH LSPDIVAEQK KLEAADLVIF QFPLQWFGVP AILKGWFERV FIGEFAYTYA AMYDKGPFRS KKAVLSITTG GSGSMYSLQG IHGDMNVILW PIQSGILHFC GFQVLEPQLT YSIGHTPADA RIQILEGWKK RLENIWDETP LYFAPSSLFD LNFQAGFLMK KEVQDEEKNK KFGLSVGHHL GKSIPTDNQI KARK

General References

Jaiswal AK., et al. (1988) J Biol Chem. 263(27):13572-8.
Traver RD., et al. (1992) Cancer Res. 52(4):797-802.

DATA

SDS-PAGE



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