

## 32-2612: NQO1 Recombinant Protein

**Alternative Name :** NAD(P)H dehydrogenase (quinone) 1, Quinone reductase 1, QR1, NAD(P)H:quinone oxidoreductase 1, DT-diaphorase, DTD, Azoreductase, Phylloquinone reductase, Menadione reductase, NQO1, DIA4, NMOR1, DHQU, NMORI.

### Description

Source : Escherichia Coli. NQO1 Human Recombinant fused with 20 amino acid His tag at N-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 294 amino acids (1-274 a.a.) and having a molecular mass of 33kDa. The NQO1 is purified by proprietary chromatographic techniques. NQO1 belongs to the NAD(P)H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. NQO1 acts as an imperative part of cellular antioxidant defense by detoxifying quinines therefore preventing the formation of reactive oxygen species. It seems that NQO1 serves as a quinone reductase relating to conjugation reactions of hydroquinones involved in detoxification pathways in addition to biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis. Altered NQO1 expression is seen in many tumors and also linked to Alzheimer's disease. NQO1 gene mutations are linked to tardive dyskinesia which is an increased risk of hematotoxicity after exposure to benzene, and susceptibility to various forms of cancer.

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** The NQO1 solution contains 20mM Tris-HCl buffer (pH 8.0), 10% glycerol and 1mM DTT.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MVGRRALIVL AHSERTSFNY AMKEAAAAAL KKKGWEEVVE  
DLYAMNPNPI ISRKDITGKL KDPANFQYPA ESVLAYKEGH LSPDIVAEQK KLEAADLVIF QFPLQWFGVP  
AILKGWFERV FIGEFAYTYA AMYDKGPFERS KKAVLSITTG GSGSMYSLQG IHGDMNVILW PIQSGILHFC  
GFQVLEPQLT YSIGHTPADA RIQILEGWKK RLENIWDETP LYFAPSSLFD LNFQAGFLMK KEVQDEEKNK  
KFGLSVGHHL GKSIPDNQI KARK.

