

Product Name: KD-Validated NAD(P)H Quinone Dehydrogenase 1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00998

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 30.9kDa

Antigen Information

Gene Name	NQO1 NAD(P)H Quinone Dehydrogenase 1; QR1; DTD; DT-Diaphorase; NMOR1; DHQU; DIA4; Diaphorase (NADH/NADPH) (Cytochrome B-5 Reductase); NAD(P)H Dehydrogenase [Quinone] 1; NAD(P)H Dehydrogenase, Quinone 1; NAD(P)H:Quinone Oxidoreductase 1;
Alternative Names	NAD(P)H-Quinone Oxidoreductase; Phylloquinone Reductase; Menadione Reductase; Quinone Reductase 1; Azoreductase; EC 1.6.5.2; NAD(P)H:Quinone Acceptor Oxidoreductase Type 1; NAD(P)H:Menadione Oxidoreductase 1; NAD(P)H:Quinone Oxidoreductase; Dioxin-Inducible 1; Quinone Reductase; Diaphorase-4; NMORI
Gene ID	1728.0
SwissProt ID	P15559

Immunogen

A synthesized peptide derived from human NQO1

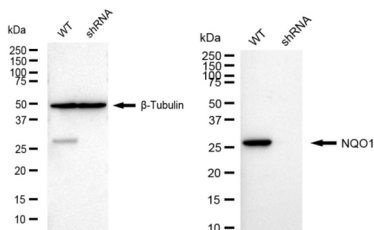
Background

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]

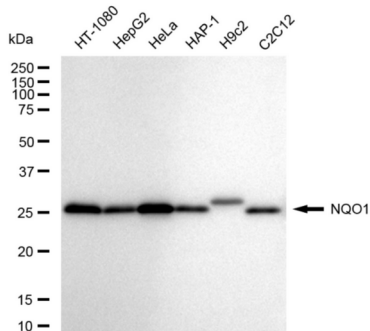
Research Area

Signal Transduction, Metabolism

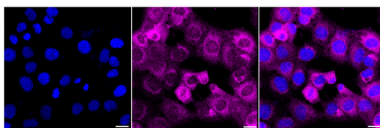
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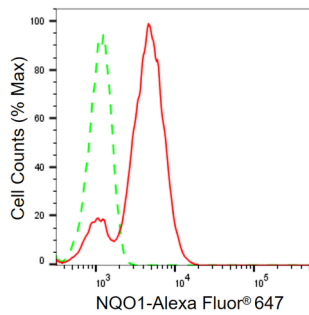
Western blotting analysis using NQO1 antibody (KVA00998). NQO1 expression in wild type (WT) and NQO1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with NQO1 antibody (KVA00998, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using NQO1 antibody (KVA00998). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with NQO1 antibody (KVA00998, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with NQO1 antibody (KVA00998, 1:1,000). Nuclei were stained blue with DAPI; NQO1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of NQO1 expression in HT-1080 cells using NQO1 antibody (KVA00998, 1:2,000). Green, isotype control; red, NQO1.