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NQO1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant NQO1.
Catalog # AT3089a

Product Information

Application	WB, IF, IP, E
Primary Accession	P15559
Other Accession	BC007659
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1E3-A6
Calculated MW	30868

Additional Information

Gene ID	1728
Other Names	NAD(P)H dehydrogenase [quinone] 1, Azoreductase, DT-diaphorase, DTD, Menadione reductase, NAD(P)H:quinone oxidoreductase 1, Phylloquinone reductase, Quinone reductase 1, QR1, NQO1, DIA4, NMOR1
Target/Specificity	NQO1 (AAH07659, 1 a.a. ~ 274 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	NQO1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

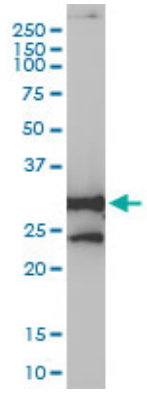
References

Genetic Polymorphisms of CYP2E1, GSTP1, NQO1 and MPO and the Risk of Nasopharyngeal Carcinoma in a Han Chinese Population of Southern China. Guo X, et al. BMC Res Notes, 2010 Jul 27. PMID 20663217.Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.NAD(P)H quinone oxidoreductase protects TAp63gamma from proteasomal degradation and regulates TAp63gamma-dependent growth arrest. Hershkovitz Rokah O, et al. PLoS One, 2010 Jun 30. PMID 20613985.NAD(P)H:quinone oxidoreductase 1 (NQO1) Pro187Ser polymorphism and colorectal cancer predisposition in the ethnic Kashmiri population. Sameer AS, et al. Asian Pac J Cancer Prev, 2010. PMID 20593958.

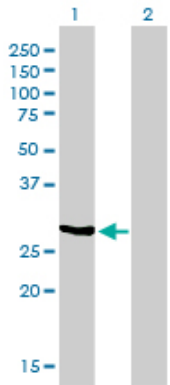
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (55.88 KDa) .



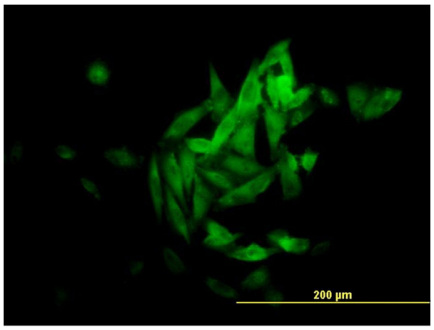
NQO1 monoclonal antibody (M01), clone 1E3-A6 Western Blot analysis of NQO1 expression in HepG2 ((Cat # AT3089a)

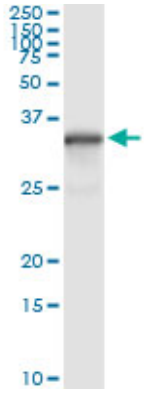


Western Blot analysis of NQO1 expression in transfected 293T cell line by NQO1 monoclonal antibody (M01), clone 1E3-A6.

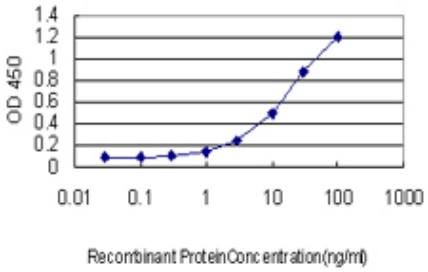
Lane 1: NQO1 transfected lysate(30.9 KDa).
Lane 2: Non-transfected lysate.

Immunofluorescence of monoclonal antibody to NQO1 on HepG2 cell. [antibody concentration 10 ug/ml]

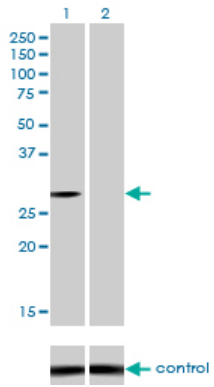




Immunoprecipitation of NQO1 transfected lysate using anti-NQO1 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with NQO1 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged NQO1 is approximately 0.3ng/ml as a capture antibody.



Western blot analysis of NQO1 over-expressed 293 cell line, cotransfected with NQO1 Validated Chimera RNAi ((Cat # AT3089a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.