

ARG23279
anti-NQO1 antibody [A180]

Package: 100 µg

Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [A180] recognizes NQO1 Mouse anti human NQO1 antibody, clone A180 specifically recognises human NQO1 (NAD(P)H:quinone oxidoreductase 1), a 31kDa cytosolic flavoenzyme and member of the NAD(P)H dehydrogenase (quinone) family, involved in detoxification, which catalyzes the two-electron reduction of quinones to hydroquinones. NQO1 is expressed in a wide range of tissues and is overexpressed in many human tumours including lung, brain, liver, colon and breast. The ability of NQO1 to bioactivate anti-tumour quinones including mitomycin C and diaziquone, has become a focus area for chemotherapeutic studies. Mutations in the NQO1 gene are associated with an increased risk of certain cancers, and an increased risk of leukaemia has been associated with diminished NQO1 activity and the NQO1 *2 allele (Nerbert, D. W. et al. 2002). Clone A180 recognizes the product of the wild-type allele NQO1*1 but does not recognize the product of the mutant NQO1*2 allele (Sato, M. et al. 2010 and Fegerholm, R. et al. 2008). Mouse anti human NQO1 antibody, clone A180 detects endogenous levels of total NQO1, and does not cross-react with NQO2 (Siegal, D. et al. 1998). Clone A180 is reported as suitable for use in immunofluorescence studies.
Tested Reactivity	Hu, Dog
Predict Reactivity	Ms, Rat, Mk, Rb
Species Does Not React With	Ms
Tested Application	FACS, IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	A180
Isotype	IgG1
Target Name	NQO1
Species	Human
Immunogen	Purified recombinant Human NQO1
Conjugation	Un-conjugated
Alternate Names	DTD; QR1; DHQU; DIA4; NMOR1; NMORI; NAD(P)H dehydrogenase [quinone] 1; EC 1.6.5.2; Azoreductase; DT-diaphorase; DTD; Menadione reductase; NAD(P)H:quinone oxidoreductase 1; Phylloquinone reductase; Quinone reductase 1; QR1

Application Instructions

Application table	Application	Dilution
	FACS	1µg for 10 ⁶ cells
	IHC-P	1:100 - 1:1000
	IP	Assay-dependent
	WB	1:100 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0).	

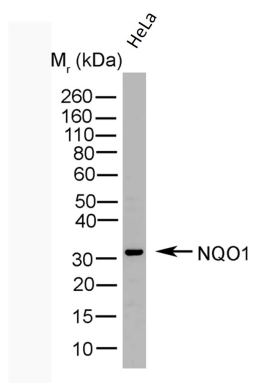
WB: This product detects a band of approximately 31 kDa in HeLa and HepG2 cell lysates.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	NQO1
Gene Full Name	NAD(P)H dehydrogenase, quinone 1
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]
Function	The enzyme 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. [UniProt]
Highlight	Related products: NQO1 antibodies ; NQO1 Duos / Panels ; Anti-Mouse IgG secondary antibodies ; Related news: Keap1-Nrf2-ARE antibody panel is launched
Calculated Mw	31 kDa



ARG23279 anti-NQO1 antibody [A180] WB image

Western blot: HeLa cell lysate stained with ARG23279 anti-NQO1 antibody [A180].