

NQO1 Polyclonal Antibody

Catalog number: 11451-1-AP

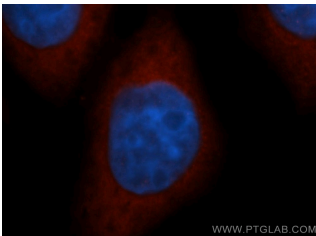
Size: 20 µg/150 µl

Source: Rabbit

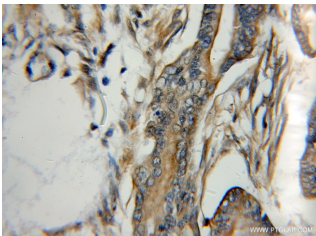
Isotype: IgG

Synonyms:

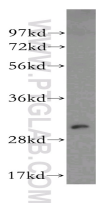
NQO1; Azoreductase, DHQU, DIA4, DT diaphorase, DTD, Menadione reductase, NQO1, Phylloquinone reductase, QR1, Quinone reductase 1



Immunofluorescent analysis of MCF-7 cells, using NQO1 antibody 11451-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical of paraffin-embedded human pancreas cancer using 11451-1-AP (NQO1 antibody) at dilution of 1:50 (under 10x lens)



K-562 cells were subjected to SDS PAGE followed by western blot with 11451-1-AP (NQO1 antibody) at dilution of 1:500

Background

NQO1, also named as DIA4, NMOR1, DTD and QR1, belongs to the NAD(P)H dehydrogenase (quinone) family. This 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. It is known to be involved in benzene metabolism. In human studies of ozone exposure, polymorphisms in oxidative stress genes (NQO1, GSTM1, GSTP1) modify respiratory symptoms, lung function, biomarkers and risk of asthma. (PMID:18511640; 18848868) This antibody recognizes all the three isoforms (26-27 kDa and 31 kDa) of NQO1 and the homo-dimer form (66-70 kDa) of NQO1.

Applications

Tested applications:	ELISA, WB, IHC, IF, FC
Cited applications:	IF, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human, mouse, rat
Calculated NQO1 MW:	274aa, 31 kDa
Observed NQO1 MW:	31 kDa
Positive WB detected in	K-562 cells, HepG2 cells, MDA-MB-453s cells
Positive IHC detected in	Human pancreas cancer tissue
Positive IF detected in	MCF-7 cells
Positive FC detected in	MCF-7 cells
Recommended dilution:	WB: 1:500-1:5000
	IHC: 1:20-1:200
	IF: 1:20-1:200
	FC: N/A

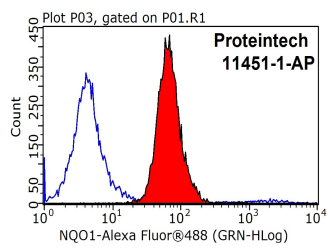
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag2009
GenBank accession number:	BC007659
Gene ID (NCBI):	1728
Full name:	NAD(P)H dehydrogenase, quinone 1

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



1X10⁶ MCF-7 cells were stained with 0.2ug NQO1 antibody (11451-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.