

NQO1 Polyclonal antibody

Catalog Number: 11451-1-AP

Featured Product

300 Publications

Basic Information

Catalog Number:

11451-1-AP

Size:

150ul, Concentration: 550 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2009

GenBank Accession Number:

BC007659

GeneID (NCBI):

1728

UNIPROT ID:

P15559

Full Name:

NAD(P)H dehydrogenase, quinone 1

Calculated MW:

274 aa, 31 kDa

Observed MW:

31 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse

Cited Species:

human, goat, chicken, mouse, rabbit, pig, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HepG2 cells, K-562 cells, LNCaP cells, MCF-7 cells, NIH/3T3 cells

IP : HepG2 cells,

IHC : human colon cancer tissue,

IF : HepG2 cells,

Background Information

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 hydroquinones 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Xuan Wang	36167857	Nat Commun	WB
Zengxin Jiang	36238561	Front Pharmacol	WB
Taiwei Wang	36169181	Oncol Rep	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

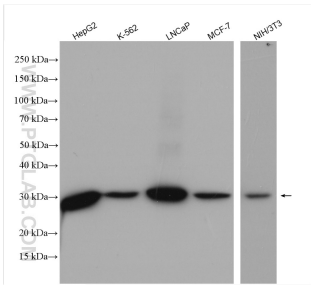
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

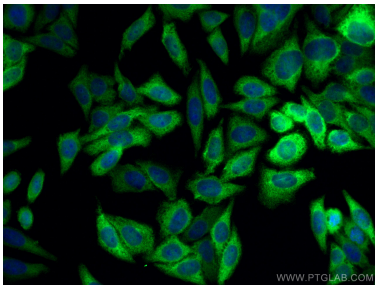
E: proteintech@ptglab.com
W: ptglab.com

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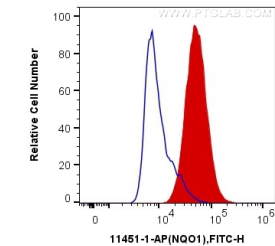
Selected Validation Data



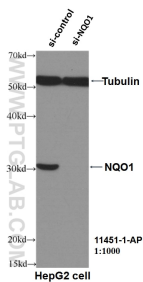
HepG2 cells were subjected to SDS PAGE followed by western blot with 11451-1-AP (NQO1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



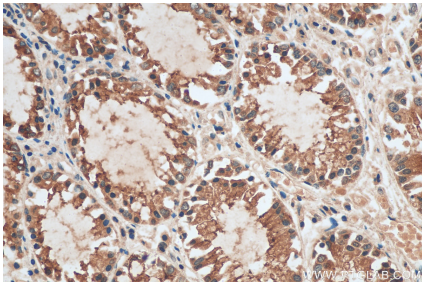
Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using NQO1 antibody (11451-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



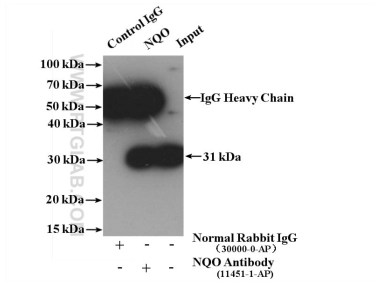
1X10⁶ MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human NQO1 (11451-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of NQO1 antibody (11451-1-AP, 1:1000) with si-control and si-NQO1 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 11451-1-AP (NQO1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-NQO1 (IP:11451-1-AP, 4ug; Detection:11451-1-AP 1:300) with HepG2 cells lysate 3000 ug.