

For Research Use Only

# NQO1 Polyclonal antibody

Catalog Number: 11451-1-AP

Featured Product

427 Publications



## Basic Information

### Catalog Number:

11451-1-AP

### 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 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.20 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human

### Cited Species:

human, pig, rabbit, canine, chicken, bovine, sheep, goat

**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

IP : HepG2 cells,

IHC : human colon cancer tissue,

IF/ICC : HepG2 cells,

FC (Intra) : MCF-7 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

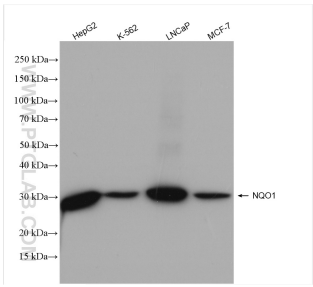
T: 4006900926

E: Proteintech-CN@ptglab.com

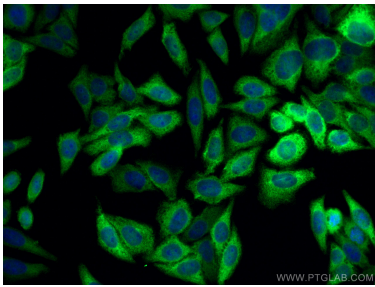
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

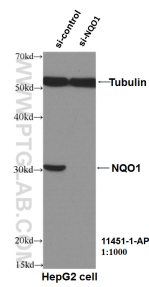
Selected Validation Data



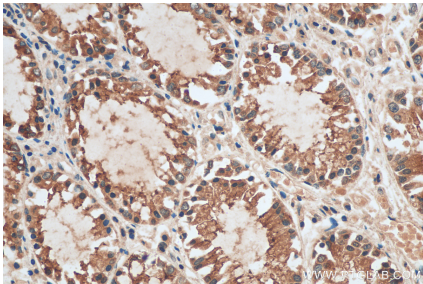
HepG2 cells were subjected to SDS PAGE followed by western blot with 11451-1-AP (NQO1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



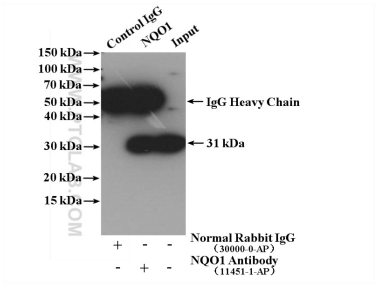
Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using NQO1 antibody (11451-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



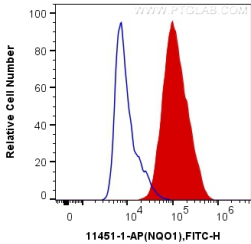
WB result of NQO1 antibody (11451-1-AP, 1:1000) with si-control and si-NQO1 transfected HepG2 cells.



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.



1X10<sup>6</sup> 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.