

NQO1 Polyclonal Antibody

Catalog NumberPA5-18022

Product data sheet

Details		Species Reactivity	
Size	100 µg	Species reactivity	Human, Rat
Host/Isotope	Goat / IgG	Tested Applications	Dilution *
Class	Polyclonal		
Type	Antibody		
Immunogen	Synthetic peptide sequence (SIPTDNQIKARK) corresponding to the C-terminus amino acids of NQO1		
Conjugate	Unconjugated	Immunohistochemistry (Paraffin) (IHC (P))	2-4 µg/mL
Form	Liquid	Western Blot (WB)	0.1-0.3 µg/mL
Concentration	0.5 mg/mL	Immunocytochemistry (ICC/IF)	10 µg/mL
Purification	Ammonium sulfate precipitation	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Storage buffer	TBS, pH 7.3, with 0.5% BSA		
Contains	0.02% sodium azide		
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles		

Product specific information

This antibody is predicted to react with porcine and rat based on sequence homology. This antibody is tested in Peptide ELISA: antibody detection limit dilution 64,000.

Background/Target Information

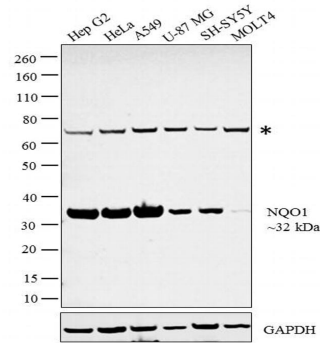
NQO1 is a member of the NAD(P)H dehydrogenase (quinone) family and a cytoplasmic 2-electron reductase. This FAD-binding protein forms homodimers and reduces quinones to hydroquinones. NQO1's enzymatic activity prevents the one electron reduction of quinones that results in the production of radical species. Altered expression of the protein has been seen in many tumors and is also associated with Alzheimer's disease (AD).

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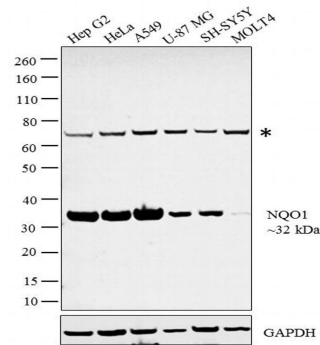
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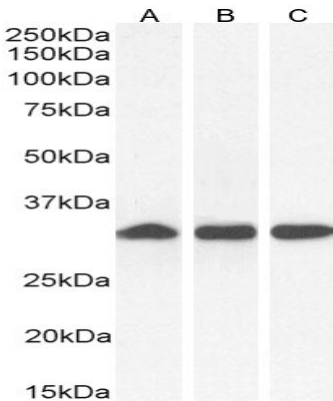
**NQO1 Antibody (PA5-18022)**

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Abundant expression of NQO1 was observed in all the cell lines except SH-SY5Y and MOLT4 which showed little or no expression respectively using NQO1 Polyclonal Antibody (Product # PA5-18022) in Western Blot. {RE}



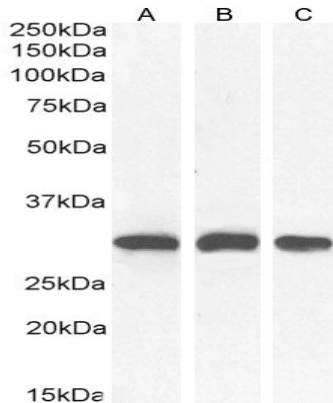
**NQO1 Antibody (PA5-18022) in WB**

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Hep G2 (Lane 1), HeLa (Lane 2), A549 (Lane 3), U-87 MG (Lane 4), SH-SY5Y (Lane 5) and MOLT4 (Lane 6). The blot was probed with Anti-NQO1 Polyclonal Antibody (Product # PA5-18022, 1:1,000 dilution) and detected by chemiluminescence using Rabbit anti-Goat IgG Heavy Chain Superclonal™ Secondary Antibody, HRP conjugate (Product # A27014, 0.25 µg/mL, 1:4,000 dilution). A 32 kDa band corresponding to NQO1 was detected across the cell lines tested except SH-SY5Y and MOLT4 which showed little or no expression respectively as reported in the literature. An additional non-specific band (\*) was observed at ~70 kDa.



**NQO1 Antibody (PA5-18022) in WB**

Western blot analysis of NQO1 using NQO1 Polyclonal Antibody (Product # PA5-18022) (0.3 µg/mL) in staining of Rat Kidney (A), Rat Lung (B) and Rat Duodenum (C) lysate. (35 µg protein in RIPA buffer). Detected by chemiluminescence.



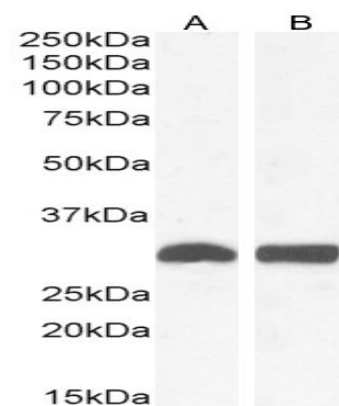
**NQO1 Antibody (PA5-18022) in WB**

Western blot analysis of NQO1 using NQO1 Polyclonal Antibody (Product # PA5-18022) (0.3 µg/mL) in staining of Human Kidney (A), Lung (B) and Duodenum (C) lysate. (35 µg protein in RIPA buffer). Detected by chemiluminescence.

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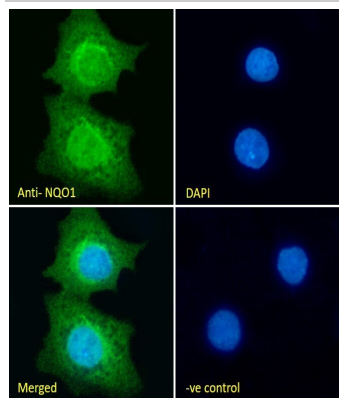
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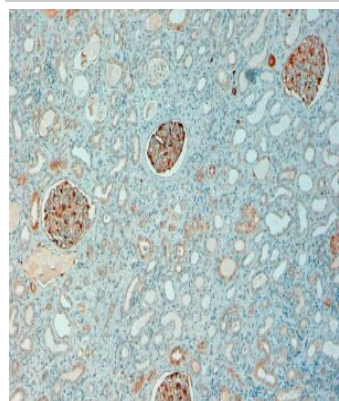
#### NQO1 Antibody (PA5-18022) in WB

Western blot analysis of NQO1 using NQO1 Polyclonal Antibody (Product # PA5-18022) (0.3 µg/mL) in staining of U251 (A) and HepG2 (B) cell lysate. (35 µg protein in RIPA buffer). Detected by chemiluminescence.



#### NQO1 Antibody (PA5-18022) in ICC/IF

Immunocytochemistry analysis of NQO1 using NQO1 Polyclonal Antibody (Product # PA5-18022) in paraformaldehyde fixed HepG2 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/mL), showing cytoplasmic and some nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/mL).



#### NQO1 Antibody (PA5-18022) in IHC (P)

Immunohistochemistry (PFA fixed) analysis of NQO1 using NQO1 Polyclonal Antibody (Product # PA5-18022) (2 µg/mL) in staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

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