

Basic Information

Product Name	Anti-NQO1 Antibody	
Gene Name	NQO1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human NQO1 recombinant protein (Position: M1-K274).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	31 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

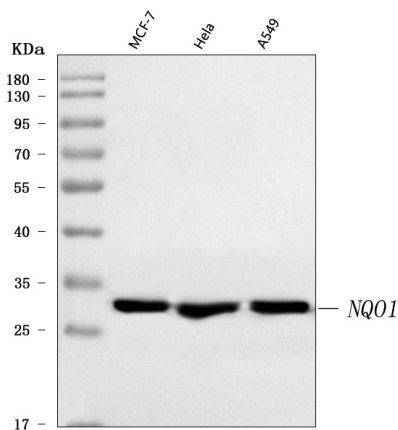
Background Information

NAD(P)H dehydrogenase [quinone] 1 is an enzyme that in humans is encoded by the NQO1 gene. This gene is a member of the NAD(P)H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. And this FAD-binding protein forms homodimers and reduces quinones to hydroquinones. In addition, 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.

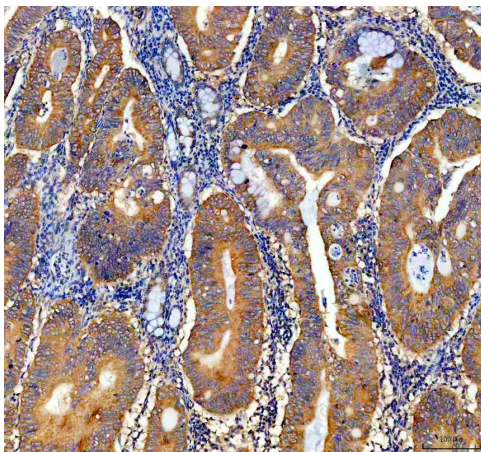
Reference

Anti-NQO1 Antibody被引用在1文献中。

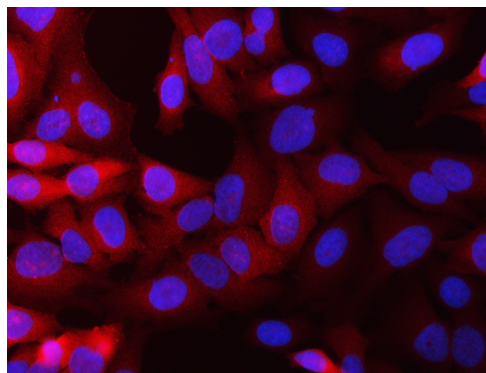
Selected Validation Data



Western blot analysis of anti-NQO1 antibody (A00494-2). The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates, Lane 2: human HeLa whole cell lysates, Lane 3: human A549 whole cell lysates. Use rabbit anti-NQO1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for NQO1 at approximately 31KD. The expected band size for NQO1 is at 31KD.

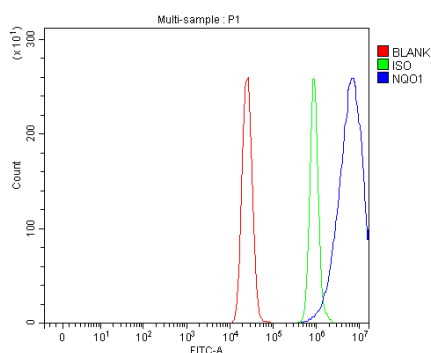


IHC analysis of NQO1 using anti-NQO1 antibody (A00494-2). NQO1 was detected in a paraffin-embedded section of human colon cancer tissue. The tissue section was incubated with rabbit anti-NQO1 Antibody (A00494-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of NQO1 using anti-NQO1 antibody (A00494-2).

NQO1 was detected in an immunocytochemical section of Hela cells. The section was incubated with rabbit anti-NQO1 Antibody (A00494-2) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of MCF-7 cells using anti-NQO1 antibody (A00494-2).

Overlay histogram showing MCF-7 cells stained with A00494-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NQO1 Antibody (A00494-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.