

### NQO1 (PT0071R) PT® Rabbit mAb

Catalog No: YM8039

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;ELISA

**Gene Name:** >>Ubiquinone and other terpenoid-quinone biosynthesis;>>Metabolic

pathways;>>Biosynthesis of cofactors;>>Pathways in cancer;>>Chemical carcinogenesis - reactive oxygen species;>>Hepatocellular carcinoma;>>Fluid

shear stress and atherosclerosis

Protein Name: NQO1

**Sequence:** NAD(P)H dehydrogenase [quinone] 1

Human Gene Id: 1728

**Human Swiss Prot** P15559

No:

**Mouse Swiss Prot** 

No:

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

Q64669

Dilution: IHC 1:200-1:1000,WB 1:1000-1:5000,IF 1:200-1:1000,ELISA

1:5000-1:20000,IP 1:50-1:200,

**Purification:** Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 31kD

**Observed Band:** 31kD

1/3



#### **Background:**

This gene is a member of the NAD(P)H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. This FAD-binding protein forms homodimers and reduces quinones to hydroquinones. 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. [provided by RefSeq, Jul 2008],

#### **Function:**

catalytic activity:NAD(P)H + a quinone = NAD(P)(+) + a hydroquinone.,cofactor:FAD.,enzyme regulation:Inhibited by

dicoumarol.,function:The 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.,induction:By dioxin.,mass spectrometry:

PubMed:11735396,miscellaneous:Quinone reductase accepts electrons from both NADH and NADPH with equal efficiency.,polymorphism:The Ser-187

polymorphism may be linked to susceptibility to forms of

cancers., similarity: Belongs to the NAD(P)H dehydrogenase (quinone)

family., subunit: Homodimer.,

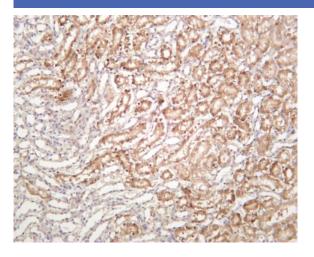
# Subcellular Location :

Cytoplasm

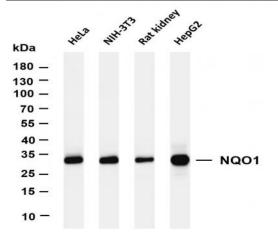
**Expression:** 

Colon, Liver, Pooled,

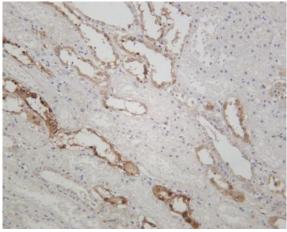
## **Products Images**



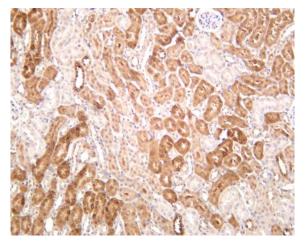
Rat kidney was stained with anti-NQO1 (PT0071R) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-NQO1 (PT0071R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: NIH-3T3 Lane 3: Rat kidney Lane 4: HepG2 Predicted band size: 31kDa Observed band size: 31kDa



Human kidney was stained with anti-NQO1 (PT0071R) rabbit antibody



Mouse kidney was stained with anti-NQO1 (PT0071R) rabbit antibody