

NQO1 Rabbit mAb

Catalog # AP78997

Specification

NQO1 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB P15559 Human, Mouse, Rat Rabbit Monoclonal Antibody 30868

NQO1 Rabbit mAb - Additional Information

Gene ID 1728

Other Names NQO1

Dilution WB~~1/500-1/1000

Format Liquid

NQ01 Rabbit mAb - Protein Information

Name NQO1 {ECO:0000303|PubMed:1657151, ECO:0000312|HGNC:HGNC:2874}

Function

Flavin-containing quinone reductase that catalyzes two- electron reduction of quinones to hydroguinones using either NADH or NADPH as electron donors. In a ping-pong kinetic mechanism, the electrons are sequentially transferred from NAD(P)H to flavin cofactor and then from reduced flavin to the quinone, bypassing the formation of semiquinone and reactive oxygen species (By similarity) (PubMed: 8999809, PubMed:9271353). Regulates cellular redox state primarily through quinone detoxification. Reduces components of plasma membrane redox system such as coenzyme Q and vitamin quinones, producing antioxidant hydroquinone forms. In the process may function as superoxide scavenger to prevent hydroquinone oxidation and facilitate excretion (PubMed: 15102952, PubMed:8999809, PubMed:9271353). Alternatively, can activate quinones and their derivatives by generating redox reactive hydroquinones with DNA cross-linking antitumor potential (PubMed:8999809). Acts as a gatekeeper of the core 20S proteasome known to degrade proteins with unstructured regions. Upon oxidative stress, interacts with tumor suppressors TP53 and TP73 in a NADH-dependent way and inhibits their ubiquitin-independent



degradation by the 20S proteasome (PubMed:15687255, PubMed:28291250).

Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:P05982}

NQO1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NQO1 Rabbit mAb - Images

