10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NQO1 Rabbit mAb

Catalog # AP75819

Product Information

Application	WB, IP
Primary Accession	P15559
Reactivity	Human, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	30868

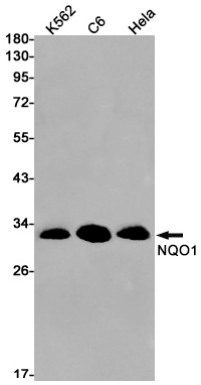
Additional Information

Gene ID	1728
Other Names	NQO1
Dilution	WB~~1/500-1/1000 IP~~N/A
Format	Liquid

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 hydroquinones 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}

Images



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