

Catalog Number:	NB200-209SS
Background:	NQO1 is a 2-electron reductase that detoxifies quinones derived from the oxidation of phenolic metabolites of benzene. Individuals homozygous for the T/T form of the 609C-T polymorphism have an increased risk of benzene hematotoxicity.
Alternate Names:	anti-DHQU antibody; anti-DIA4 antibody; anti-Diaphorase (NADH/NADPH) (cytochrome b-5 reductase) antibody; anti-Diaphorase (NADH/NADPH) antibody; anti-Diaphorase 4 antibody; anti-DTD antibody; anti-NAD(P)H dehydrogenase quinone 1 antibody; anti-NAD(P)H: menadione oxidoreductase 1 dioxin inducible 1 antibody; anti-NMOR1 antibody; anti-NMOR1 antibody; anti-QR1 antibody; anti-NQO-1 antibody; anti-NADPH quinone oxidoreductase-1 antibody
Research Areas:	348,0
Immunogen:	Full length recombinant NQO1 (from human lung).
Clone:	A180
Isotype:	IgG1
Specificity:	This antibody is specific for NQO1. It does not cross-react with NQO2.
Localization:	Cytoplasmic (primarily), nuclear (faintly)
Species Reactivity:	Cross-reacts with human and rat. Cross-reacts with monkey and dog in immunohistochemistry. Cross-reactivity with mouse is extremely poor. Not yet tested in other species.
Uses:	This antibody works well in Western blot where a single band at ~31 kDa is seen. No other applications have been tested. The investigator should determine the optimal working dilution for a specific application. * Other applications have not been tested.
Dilutions:	Suggested working dilutions * immunohistochemistry , immunofluorescence , immunoprecipitation , Western Blot 1:1,000-1:10,000 * Investigator should determine optimal working dilutions.
Packaging:	0.025 ml IgG purified Mouse ascites.
Concentration:	1 mg/ml
Buffer:	Tris-glycine and 150mM NaCl
Preservative:	0.05% sodium azide
Storage:	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Product Specific References:	1. Siegel, et al. <i>Clinical Can. Res.</i>;4; 2065-2070 (1998)

2. Siegel, et al. *Free Radical Biol. Med.* 29: 246-253 (2000)
3. Slitt, A. L., Cherrington, N. J., Dieter, M. Z., Aleksunes, L. M., Scheffer, G. L., Huang, W., Moore, D. D., and Klaassen, C. D. (2006) trans-Stilbene Oxide Induces Expression of Genes Involved in Metabolism and Transport in Mouse Liver via CAR and Nrf2 Transcription Factors, *69*, 1554-1563.

- Novus Specific References:**
1. Slitt, A.L., et al. trans-Stilbene oxide induces expression of genes involved in metabolism and transport in mouse liver via CAR and Nrf2 transcription factors. *Mol. Pharmacol.* 69:1554-1563, 2006.
 2. Lee, J. C., F. Bhora, et al. (2008). Dietary flaxseed enhances antioxidant defenses and is protective in a mouse model of lung ischemia-reperfusion injury. *Am J Physiol Lung Cell Mol Physiol* 294: L255-265.
 3. Cho H-Y, Imani F, Miller-DeGraff L, et al. Antiviral Activity of Nrf2 in a Murine Model of Respiratory Syncytial Virus Disease. *Am J Respir Crit Care Med* 2009;179(2):138-150.
 4. Salama SA, Kamel MW, Diaz-Arrastia CR, et al. Effect of Tumor Necrosis Factor- α on Estrogen Metabolism and Endometrial Cells: Potential Physiological and Pathological Relevance. *J Clin Endocrinol Metab* 2009;94(1):285-293.

Gene Id: 1728

Reference Sequence: P15559

Image(s)