

Datasheet: VPA00163KT

Description:	NQO1 ANTIBODY WITH CONTROL LYSATE
Specificity:	NQO1
Format:	Purified
Product Type:	PrecisionAb Polyclonal
Isotype:	Polyclonal IgG
Quantity:	2 Westerns

#### **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting				1/1000

PrecisionAb antibodies have been extensively <u>validated for the western blot</u> <u>application</u>. The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species	Human
Species Cross Reactivity	Reacts with: Rat  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG - liquid
Preparation	20μl Goat polyclonal antibody purified by affinity chromatography
Buffer Solution	TRIS buffered saline
Preservative Stabilisers	0.02% Sodium Azide (NaN <sub>3</sub> ) 0.5% BSA
Immunogen	Synthetic peptide sequence C-SIPTDNQIKARK from the C terminus of NQO1

External Database Links	UniProt: P15559 Related reagents
	Entrez Gene:  1728 NQO1 Related reagents
Synonyms	DIA4, NMOR1
Specificity	Goat anti Human NQO1 antibody recognizes NAD(P)H dehydrogenase [quinone] 1 (NQO1), also known as azoreductase, DT-diaphorase (DTD), menadione reductase, phylloquinone reductase and quinone reductase 1 (QR1).
	The NQO1 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 NQO1 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).
	Goat anti Human NQO1 antibody detects a band of 29 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.
Western Blotting	Anti NQO1 detects a band of approximately 29 kDa in A549 cell lysates.
Instructions For Use	Please refer to the <u>PrecisionAb western blotting protocol.</u> For additional information on secondary antibody dilution and exposure time see product web page.
Lysate Composition	400μg A549 lysate lyophilized in RIPA buffer.
Lysate Reconstitution	<ul> <li>If using DDT reconstitute the lyophilized lysate with 190μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample Buffer and 10μl 2M DTT.</li> <li>If using BME reconstitute the lyophilized lysate with 180μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample Buffer and 20μl BME.</li> <li>Heat at 95°C for 5 minutes. For 10 well mini gels load 25μl. For other gel and comb</li> </ul>
	formats please refer to the PrecisionAb western blotting protocol.

#### Storage

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

# Guarantee

As supplied, 12 months from date of despatch.

# Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Material Safety Datasheet documentation #10058 #10561 available at:

Information Antibody (10058): https://www.bio-rad-antibodies.com/uploads/MSDS/10058.pdf

Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf

**Regulatory** For research purposes only

# **Related Products**

# **Recommended Secondary Antibodies**

Donkey Anti Sheep IgG (STAR88...) HRP

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

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