

Datasheet: VMA00039KT

| Description: | NQO1 ANTIBODY WITH CONTROL LYSATE |
|---------------|-----------------------------------|
| Specificity: | NQO1 |
| Other names: | NAD(P)H Dehydrogenase [Quinone] 1 |
| Format: | Purified |
| Product Type: | PrecisionAb Monoclonal |
| Isotype: | lgG1 |
| 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 www.bio-rad-antibodies.com/protocols.

| | 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 | | |
|-----------------------------|---|--|--|
| Product Form | Purified IgG - liquid | | |
| Preparation | 20µl Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) | | |
| Immunogen | Recombinant human NQO1 | | |
| External Database Links | UniProt: P15559 Related reagents | | |

Entrez Gene:

1728 NQO1 Related reagents

| Specificity Mouse anti Human NQO1 antibody recognizes human NAD(P)H dehydrogenase [quinone] 1 also known as NQO1, azoreductase, phylloquinone reductase or QR1. NQO1 is a cytosolic flavoenzyme and member of the NAD(P)H dehydrogenase (quinone) family, involved in detoxification, which catalyzes the two-electron reduction of quinones to hydroquinones. NQO1 is expressed in a wide range of tissues and is overexpressed in many human tumors including lung, brain, fiver, colon and breast. The ability of NQO1 to bioactivate anti-tumor quinones including mitomycin C, diaziquone and deoxynyboquinone has become a focus area for chemotherapeutic studies (Parkinson, E. et al. 2013). Mutations in the NQO1 gene are associated with an increased risk of certain cancers, and an increased risk of leukaemia has been associated with diminished NQO1 activity and the NQO1² allele (Nerbert, D.W. et al. 2002). NQO1 expression is significantly upregulated in hypertrophic astrocytes and myelin-laden macrophages of active and chronic active multiple sclerosis patients (van Horssen et al. 2009). Mouse anti Human NQO1 antibody recognizes human NQO1 as a single band of ~32 kDa in HeLa cell line lysates under reducing conditions and detects endogenous levels of total NQO1 but does not cross-react with NQO2. Western Blotting Anti NQO1 antibody detects a band of approximately 32 kDa in HeLa cell lysates. Instructions For Use Please refer to the PrecisionAb western blotting protocol. For additional information on secondary antibody dilution and exposure time see product web page. Lysate Reconstitution -If using BME reconstitute the lyophilized lysate with 190µl DI H ₂ O, add 200µl 2x Laemmli Sample Buffer and 20µl BME. Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. | Synonyms | DIA4, NMOR1 |
|---|-----------------------|--|
| tumors including lung, brain, liver, colon and breast. The ability of NQO1 to bioactivate anti-tumor quinones including mitomycin C, diaziquone and deoxynyboquinone has become a focus area for chemotherapeutic studies (Parkinson, E, et al. 2013). Mutations in the NQO1 gene are associated with an increased risk of certain cancers, and an increased risk of leukaemia has been associated with diminished NQO1 activity and the NQO1 '2 allele (Nerbert, D.W. et al. 2002). NQO1 expression is significantly upregulated in hypertrophic astrocytes and myelin-laden macrophages of active and chronic active multiple sclerosis patients (van Horssen et al. 2006). Mouse anti Human NQO1 antibody recognizes human NQO1 as a single band of ~32 kDa in HeLa cell line lysates under reducing conditions and detects endogenous levels of total NQO1 but does not cross-react with NQO2. Western Blotting Anti NQO1 antibody detects a band of approximately 32 kDa in HeLa cell lysates. Instructions For Use Please refer to the PrecisionAb western blotting protocol. For additional information on secondary antibody dilution and exposure time see product web page. Lysate Composition 400µg HeLa lysate lyophilized in RIPA buffer. Lysate Reconstitution - If using DDT reconstitute the lyophilized lysate with 190µl DI H ₂ O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT. - If using BME reconstitute the lyophilized lysate with 180µl DI H ₂ O, add 200µl 2x Laemmli Sample Buffer and 20µl BME. Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb 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. | Specificity | [quinone] 1 also known as NQO1, azoreductase, phylloquinone reductase or QR1. NQO1 is a cytosolic flavoenzyme and member of the NAD(P)H dehydrogenase (quinone) family, involved in detoxification, which catalyzes the two-electron reduction of quinones to |
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| | | |
| Acknowledgements PrecisionAb™ is a trademark of Bio-Rad Laboratories. | Guarantee | As supplied, 12 months from date of despatch. |
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Health And Safety Information

Material Safety Datasheet documentation #10040 #10561 available at:

Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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