


Product datasheet

Anti-NQO1 antibody ab34173

KO VALIDATED

★★★★☆ 9 Abreviews 151 References 4 Images

Overview

Product name	Anti-NQO1 antibody
Description	Rabbit polyclonal to NQO1
Host species	Rabbit
Tested applications	Suitable for: ICC, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Guinea pig 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type HAP1 whole cell lysate. HepG2 and MCF7 whole cell lysate. Human Kidney Whole Tissue Lysate. Recombinant human NQO1 protein. ICC: HeLa cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab34173 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use a concentration of 1 - 5 µg/ml.
WB	★★★★★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 31 kDa (predicted molecular weight: 31 kDa).

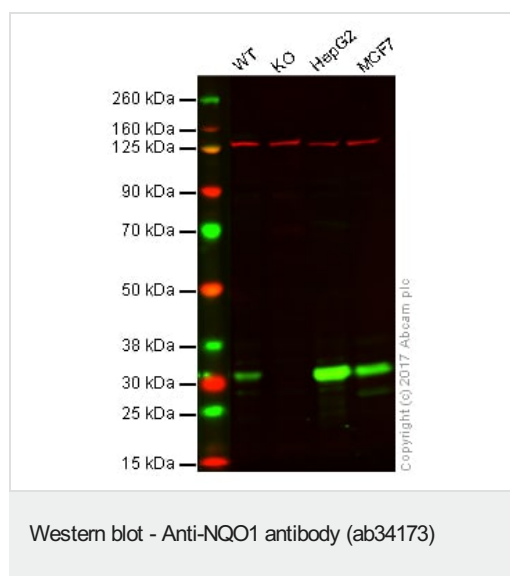
Target

Function The enzyme apparently serves as a quinone reductase in connection with conjugation reactions of hydroquinones involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis.

Sequence similarities Belongs to the NAD(P)H dehydrogenase (quinone) family.

Cellular localization Cytoplasm.

Images



Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

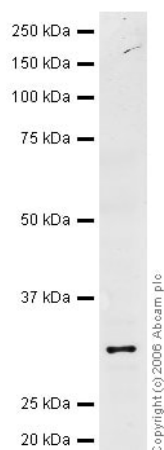
Lane 2: NQO1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HepG2 whole cell lysate (20 µg)

Lane 4: MCF7 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab34173 observed at 31 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab34173 was shown to specifically react with NQO1 in wild-type HAP1 cells as signal was lost in NQO1 knockout cells. Wild-type and NQO1 knockout samples were subjected to SDS-PAGE. ab34173 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-NQO1 antibody (ab34173)

Anti-NQO1 antibody (ab34173) at 1 µg/ml + Human Kidney Whole Tissue Lysate at 20 µg

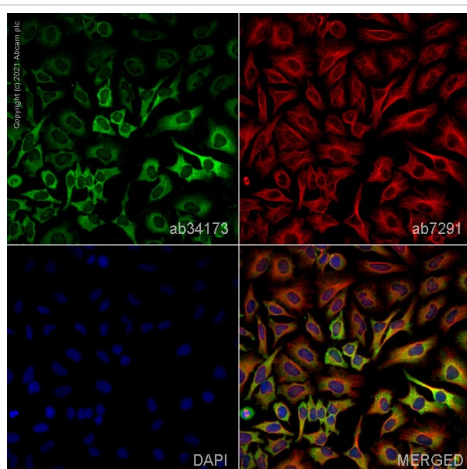
Secondary

IRDye 680 Conjugated Goat Anti Rabbit IgG (H&L) at 1/15000 dilution

Performed under reducing conditions.

Predicted band size: 31 kDa

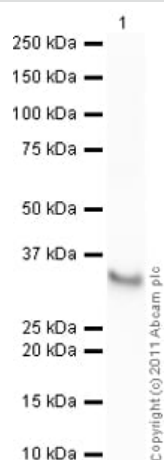
Observed band size: 31 kDa



Immunocytochemistry - Anti-NQO1 antibody (ab34173)

ab34173 staining NQO1 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab34173 at 1 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-NQO1 antibody (ab34173)

Anti-NQO1 antibody (ab34173) at 1 µg/ml + Recombinant human NQO1 protein (**ab59663**) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 31 kDa

Exposure time: 30 seconds

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