




Product datasheet

Anti-Peroxiredoxin 2 antibody ab59539

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Overview

Product name	Anti-Peroxiredoxin 2 antibody
Description	Rabbit polyclonal to Peroxiredoxin 2
Host species	Rabbit
Specificity	ab59539 reacts with Peroxiredoxin 2.
Tested applications	Suitable for: ICC/IF, WB, ELISA, IHC-Fr, IHC-P
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, Cow, Cynomolgus monkey, Chinese hamster, Orangutan 
Immunogen	Synthetic peptide: VVDGAFKEVKLS , corresponding to amino acids 20-31 of Human Peroxiredoxin 2 conjugated to diphtheria toxin. <div style="text-align: right;">  Run BLAST with  Run BLAST with </div>
Positive control	Rat lung and kidney tissue.

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	Preservative: 0.02% Thimerosal (merthiolate) Constituents: Whole serum
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab59539** in the following tested applications.

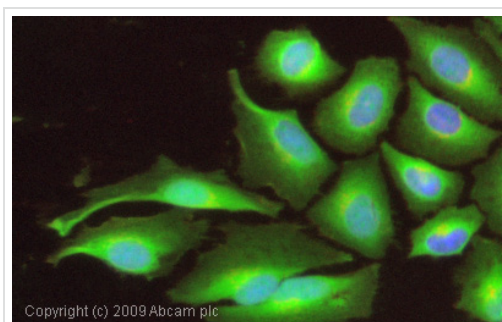
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/50 - 1/100.
WB	★★★★☆	1/1000 - 1/4000. Predicted molecular weight: 22 kDa.
ELISA	★★★★☆	1/1000 - 1/4000.
IHC-Fr		1/500 - 1/1000.
IHC-P		Use at an assay dependent concentration.

Target

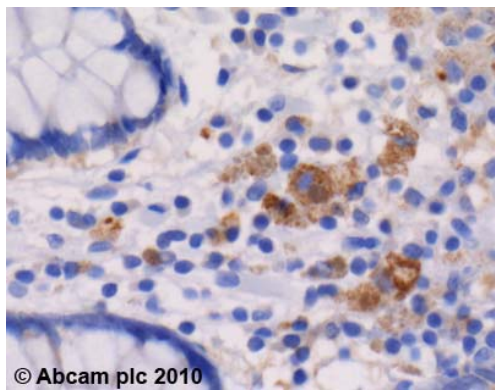
Function	Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system. It is not able to receive electrons from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H ₂ O ₂ .
Sequence similarities	Belongs to the ahpC/TSA family. Contains 1 thioredoxin domain.
Cellular localization	Cytoplasm.

Images



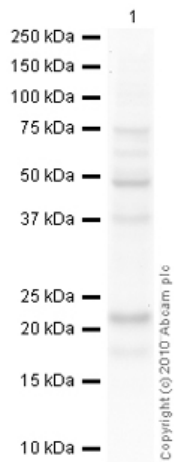
Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 2 antibody (ab59539)

ICC/IF image of ab59539 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ([ab39539](#), 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 2 antibody (ab59539)

ab59539 (1/2000) staining peroxiredoxin 2 in human colon using an automated system (DAKO Autostainer Plus). Using this protocol there is strong cytoplasmic staining of submucosal infiltrating leukocytes. Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer EDTA pH 9.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Western blot - Anti-Peroxiredoxin 2 antibody (ab59539)

Anti-Peroxiredoxin 2 antibody (ab59539) at 1/500 dilution + HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 10 µg

Secondary

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

Developed using the ECL technique.

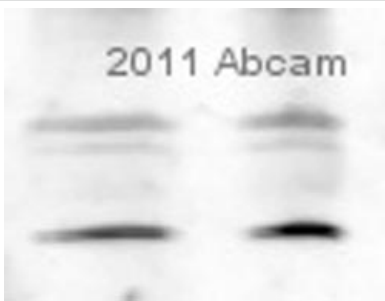
Performed under reducing conditions.

Predicted band size: 22 kDa

Observed band size: 22 kDa

Additional bands at: 37 kDa, 49 kDa, 75 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds



Western blot - Anti-Peroxiredoxin 2 antibody (ab59539)

Image courtesy of an anonymous Abreview.

All lanes : Anti-Peroxiredoxin 2 antibody (ab59539) at 1/5000 dilution

All lanes : Whole tissue lysate prepared from murine liver

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : IRDye 680 conjugated goat anti-rabbit polyclonal at 1/5000 dilution

Predicted band size: 22 kDa

Observed band size: 22,45 kDa

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