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PRDX2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2925b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P32119
Other Accession	P35704, Q61171, Q2PFZ3, Q8K3U7, Q9BGI3
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Hamster, Monkey, Rat, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20888
Calculated MW	21892
Antigen Region	169-198

Additional Information

Gene ID	7001
Other Names	Peroxiredoxin-2, Natural killer cell-enhancing factor B, NKEF-B, PRP, Thiol-specific antioxidant protein, TSA, Thioredoxin peroxidase 1, Thioredoxin-dependent peroxide reductase 1, PRDX2, NKEFB, TDPX1
Target/Specificity	This PRDX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 169-198 amino acids from the C-terminal region of human PRDX2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PRDX2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PRDX2

Synonyms	NKEFB, TDPX1
Function	Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2).
Cellular Location	Cytoplasm.

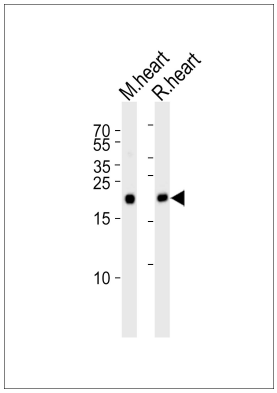
Background

PRDX2 is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. This protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. The crystal structure of this protein has been resolved to 2.7 angstroms.

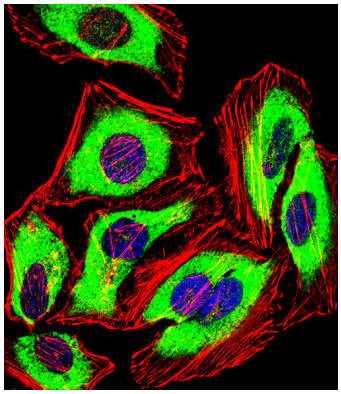
References

Engstrom,K.S., et.al., Mutat. Res. (2009)

Images

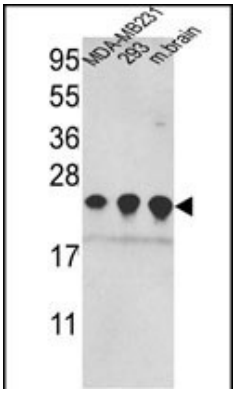


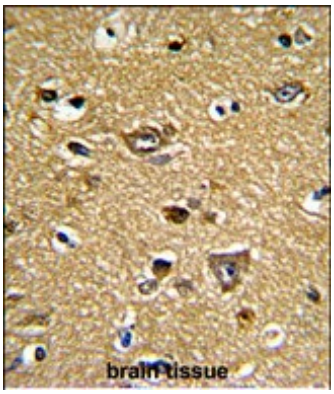
Western blot analysis of lysates from mouse heart and rat heart tissue lysate (from left to right), using PRDX2 Antibody (C-term) (Cat. #AP2925b). AP2925b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Fluorescent confocal image of Hela cell stained with PRDX2 Antibody (C-term)(Cat#AP2925b).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with PRDX2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min).PRDX2 immunoreactivity is localized to Cytoplasm significantly.

Western blot analysis of PRDX2 Antibody (C-term) (Cat. #AP2925b) in MDA-MB231,293 cell line and mouse brain tissue lysates (35ug/lane).PRDX2 (arrow) was detected using the purified Pab.(2ug/ml)





Formalin-fixed and paraffin-embedded human brain tissue reacted with PRDX2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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