

# PRDX1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2924c

## Product Information

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<b>Application</b>	WB, FC, IHC-P, E
<b>Primary Accession</b>	<a href="#">Q06830</a>
<b>Other Accession</b>	<a href="#">Q63716</a> , <a href="#">Q9JKY1</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Hamster, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB20885
<b>Calculated MW</b>	22110
<b>Antigen Region</b>	88-116

## Additional Information

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<b>Gene ID</b>	5052
<b>Other Names</b>	Peroxiredoxin-1, Natural killer cell-enhancing factor A, NKEF-A, Proliferation-associated gene protein, PAG, Thioredoxin peroxidase 2, Thioredoxin-dependent peroxide reductase 2, PRDX1, PAGA, PAGB, TDPX2
<b>Target/Specificity</b>	This PRDX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 88-116 amino acids from the Central region of human PRDX1.
<b>Dilution</b>	WB~~1:1000 FC~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	PRDX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	PRDX1
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## Synonyms

PAGA, PAGB, TDPX2

## 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  $H_2O_2$  (PubMed:[9497357](#)). Reduces an intramolecular disulfide bond in GPD5 that gates the ability to GPD5 to drive postmitotic motor neuron differentiation (By similarity).

## Cellular Location

Cytoplasm. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

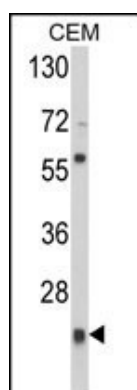
## Background

PRDX1 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.

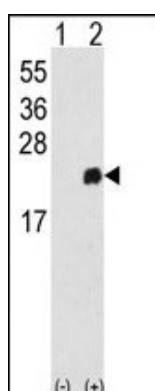
## References

Song,I.S., et.al., Carcinogenesis 30 (7), 1106-1114 (2009)

## Images

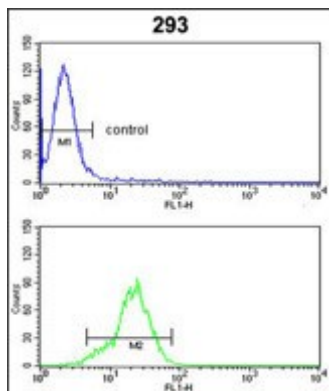


Western blot analysis of PRDX1 Antibody (Center) (Cat. #AP2924c) in CEM cell line lysates (35ug/lane). PRDX1 (arrow) was detected using the purified Pab.

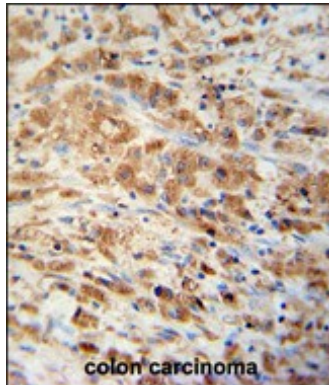


Western blot analysis of PRDX1 (arrow) using rabbit polyclonal PRDX1 Antibody (Center) (Cat. #AP2924c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRDX1 gene (Lane 2) .

PRDX1 Antibody (Center) (Cat. #AP2924c) flow cytometric analysis of 293 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the



analysis.



PRDX1 Antibody (Center) (Cat. #AP2924c)  
immunohistochemistry analysis in formalin fixed and  
paraffin embedded human colon carcinoma followed by  
peroxidase conjugation of the secondary antibody and  
DAB staining. This data demonstrates the use of the  
PRDX1 Antibody (Center) for immunohistochemistry.  
Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.