10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PRDX3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2926a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P30048
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20889
Calculated MW	27693
Antigen Region	66-94

Additional Information

Gene ID	10935
Other Names	Thioredoxin-dependent peroxide reductase, mitochondrial, Antioxidant protein 1, AOP-1, HBC189, Peroxiredoxin III, Prx-III, Peroxiredoxin-3, Protein MER5 homolog, PRDX3, AOP1
Target/Specificity	This PRDX3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-94 amino acids from the N-terminal region of human PRDX3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~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	PRDX3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PRDX3
Synonyms	AOP1

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 (PubMed:17707404, PubMed:29438714, PubMed:33889951, PubMed:7733872). Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol (PubMed:12492477). Required for the maintenance of physical strength (By similarity).
Cellular Location	Mitochondrion. Cytoplasm. Early endosome. Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

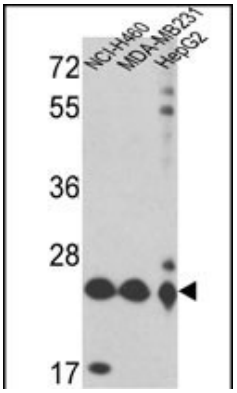
Background

PRDX3 is a protein with antioxidant function and is localized in the mitochondrion. This protein is involved in redox regulation of the cell and Protects radical-sensitive enzymes from oxidative damage by a radical-generating system.It Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.

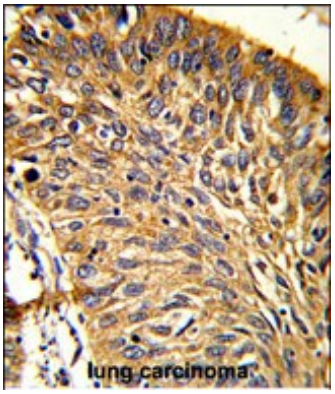
References

Cox,A.G., et.al., Biochemistry 48 (27), 6495-6501 (2009)

Images

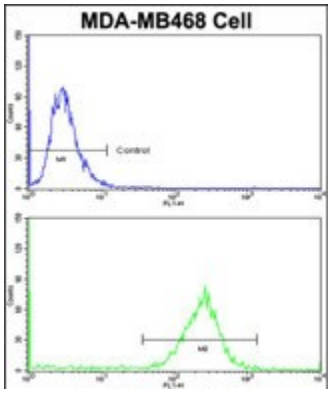


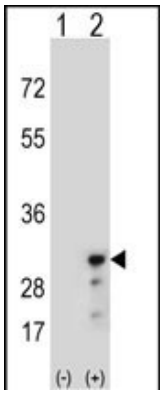
Western blot analysis of PRDX3 Antibody (N-term) (Cat. #AP2926a) in NCI-H460,MDA-MB231,HepG2 cell line lysates (35ug/lane). PRDX3 (arrow) was detected using the purified Pab.(2ug/ml)



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with PRDX3 Antibody (N-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.

Flow cytometric analysis of MDA-MB468 cells using PRDX3 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Western blot analysis of PRDX3 (arrow) using rabbit polyclonal PRDX3 Antibody (N-term) (Cat. #AP2926a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PRDX3 gene.

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