

PRDX3 Polyclonal Antibody | anti-PRDX3 antibody

PRDX3 Antibody

CATALOG # AAA267943	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunofluorescence, Immunoprecipitation, Immunohistochemistry, Western Blot
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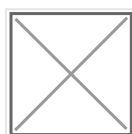
PRODUCT SYNONYMS

PRDX3; Polyclonal Antibody; PRDX3 Antibody; PRDX3;AOP1;Thioredoxin-dependent peroxide reductase; mitochondrial;Antioxidant protein 1;AOP-1;HBC189;Peroxiredoxin III;Prx-III;Peroxiredoxin-3;Protein MER5 homolo; anti-PRDX3 antibody

PRODUCT SPECIFICATIONS

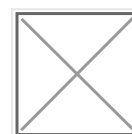
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PRX III Polyclonal Antibody detects endogenous levels of PRX III protein.
Purity/Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Form/Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide
Concentration	1 mg/ml (varies by lot)
Sequence Length	198
Applicable Applications for anti-PRDX3 antibody	ELISA, IF (Immunofluorescence), IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	The antiserum was produced against synthesized peptide derived from human PRX III. AA range:44-93
Function	catalytic activity:2 R'-SH + ROOH = R'-S-S-R' + H(2)O + ROH.,function:Involved in redox regulation of the cell. Protects radical-sensitive enzymes from oxidative damage by a radical-generating system. Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.,miscellaneous:Irreversibly inactivated by overoxidation of Cys-108 (to Cys-SO(3)H) upon oxidative stress.,miscellaneous:The active site is the redox-active Cys-108 oxidized to Cys-SOH. Cys-SOH rapidly reacts with Cys-229-SH of the other subunit to form an intermolecular disulfide with a concomitant homodimer formation. The enzyme may be subsequently regenerated by reduction of the disulfide by thioredoxin.,similarity:Belongs to the ahpC/TSA family.,similarity:Contains 1 thioredoxin domain.,subunit:Homodimer; disulfide-linked, upon oxidation (By similarity). Binds MAP3K13. Subcellular Location:Mitochondrion . Cytoplasm . Early endosome . Localizes to early endosomes in a RPS6KC1-dependent manner.
Expression	Blood,Bone marrow,Brain,Cajal-Retzius cell,Cerebellum,Fetal brain cortex,Liver, Lung, Skeleta
Preparation and Storage	Store at -15°C to -25°C/1 year (Do not lower than -25°C)

IMAGES



IHC (Immunohistochemistry)

Immunohistochemistry analysis of PRX III antibody in paraffin-embedded human lung carcinoma tissue.



WB (Western Blot)

Western Blot analysis of various cells using PRX III Polyclonal Antibody diluted at 1:1000.

ADDITIONAL INFORMATION

Related Product Information for anti-PRDX3 antibody	This gene encodes a mitochondrial protein with antioxidant function. The protein is similar to the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase, and it can rescue bacterial resistance to alkylhydroperoxide in E. coli that lack the C22 subunit. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologs suggest that these genes consist of a family that is responsible for the regulation of cellular proliferation, differentiation and antioxidant functions. This family member can protect cells from oxidative stress, and it can promote cell survival in prostate cancer. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 1, 3, 13 and 22. [provided by RefSeq, Oct 2014]
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NCBI AND UNIPROT INFORMATION

NCBI GI #	695917253
NCBI GeneID	10935
NCBI Accession #	NP_001289201.1
NCBI GenBank Nucleotide #	NM_001302272.1
UniProt Accession #	P30048; P35690; Q0D2H1; Q13776; Q5T5V2; Q96HK4; B2R7Z0; D3DRC9; E9PH29
Molecular Weight	26kD
NCBI Official Full Name	thioredoxin-dependent peroxide reductase, mitochondrial isoform c
NCBI Official Synonym Full Names	peroxiredoxin 3
NCBI Official Symbol	PRDX3
NCBI Official Synonym Symbols	AOP1; MER5; AOP-1; SP-22; HBC189; PRO1748; prx-III
NCBI Protein Information	thioredoxin-dependent peroxide reductase, mitochondrial
UniProt Protein Name	Thioredoxin-dependent peroxide reductase, mitochondrial
UniProt Gene Name	PRDX3
UniProt Synonym Gene Names	AOP1; AOP-1; Prx-III

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.