

Rabbit PRDX3 Polyclonal Antibody | anti-PRDX3 antibody

PRDX3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326901	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PRDX3; Polyclonal Antibody; PRDX3 Antibody; Antioxidant protein 1; AOP 1; AOP-1; AOP1; HBC189; MER5; MGC104387; MGC24293; mitochondrial; peroxiredoxin 3; Peroxiredoxin III; Peroxiredoxin-3; PRDX3_HUMAN; PRO1748; Protein MER5 homolog; PRX III; Prx-III; PRX3; SP 22; SP-22; SP22; Thioredoxin dependent peroxide reductase mitochondrial; Thioredoxin-dependent peroxide reductase; anti-PRDX3 antibody

PRODUCT SPECIFICATIONS

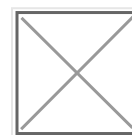
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PRDX3 antibody detects endogenous levels of total PRDX3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	198
Applicable Applications for anti-PRDX3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide of human PRDX3
Subcellular Location	Mitochondrion.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (91%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (91%), Xenopus (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from rat brain, rat spleen, mouse spleen, using PRDX3 Antibody.



WB (Western Blot)

Western blot analysis of Mouse liver tissue lysates, using PRDX3 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326901 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PRDX3 antibody

Description: This gene encodes a protein with antioxidant function and is localized in the mitochondrion. This gene shows significant nucleotide sequence similarity to the gene coding for the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase. Expression of this gene product in E. coli deficient in the C22-subunit gene rescued resistance of the bacteria to alkylhydroperoxide. 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 homologues suggest that these genes consist of a family that is responsible for regulation of cellular proliferation, differentiation, and antioxidant functions. Two transcript variants encoding two different isoforms have been found for this gene.

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:7733872, PubMed:17707404). Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol (PubMed:12492477).

Subunit Structure: Homodimer; disulfide-linked, upon oxidation. 6 homodimers assemble to form a ring-like dodecamer (PubMed:17707404, PubMed:27238969). Interacts with NEK6 (PubMed:20873783). Interacts with LRRK2 (PubMed:21850687). Interacts with MAP3K13 (PubMed:12492477). Interacts with RPS6KC1 (via PX domain) (PubMed:15750338).

Post-translational Modifications: Phosphorylated by LRRK2; phosphorylation reduces peroxidase activity. The enzyme can be inactivated by further oxidation of the cysteine sulfenic acid (C(P)-SOH) to sulphinic acid (C(P)-SO₂H) and sulphonic acid (C(P)-SO₃H) instead of its condensation to a disulfide bond.

Similarity: Belongs to the peroxiredoxin family. AhpC/Prx1 subfamily.

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	Observed: 28 kDa Predicted: 28 kDa
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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/prdx3-antibody-immunohistochemistry-western-blot-elisa/326901>