

Rabbit Prdx1 Polyclonal Antibody | anti-Prdx1 antibody

Phospho-Prdx1 (Ser196) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328490	Rabbit	Human, Mouse, RatPredicted: Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus	ELISA, Immunohistochemistry, Western Blot

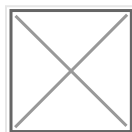
PRODUCT SYNONYMS

Prdx1; Polyclonal Antibody; Phospho-Prdx1 (Ser196) Antibody; Heme binding 23 kDa protein; MSP23; Natural killer cell-enhancing factor A; NKEF A; NKEF-A; NKEFA; OSF3; Osteoblast specific factor 3; PAG; Paga; PAGB; Peroxiredoxin-1; PRDX1; PRDX1_HUMAN; Proliferation associated gene A; Proliferation-associated gene protein; PRX1; Prxl; TDPX2; Thioredoxin peroxidase 2; Thioredoxin-dependent peroxide reductase 2; anti-Prdx1 antibody

PRODUCT SPECIFICATIONS

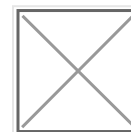
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-Prdx1 (Ser196) Antibody detects endogenous levels of Prdx1 only when phosphorylated at Ser196.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
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	199
Applicable Applications for anti-Prdx1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Prdx1 around the phosphorylation site of Ser196.
Tissue Specificity	Constitutively expressed in most human cells; is induced to higher levels upon serum stimulation in untransformed and transformed cells.
Subcellular Location	Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Phospho-Prdx1 (Ser196) in lysates of A431, using Phospho-Prdx1 (Ser196) Antibody.



IHC (Immunohistochemistry)

At 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



IHC (Immunohistochemistry)

At 1/100 staining mouse heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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-Prdx1 antibody

Description: 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 H₂O₂ (PubMed:9497357). Reduces an intramolecular disulfide bond in GPD5 that gates the ability to GPD5 to drive postmitotic motor neuron differentiation (By similarity).

Post Translational Modifications: Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity. The enzyme can be inactivated by further oxidation of the cysteine sulfinic acid (C(P)-SOH) to sulphinic acid (C(P)-SO₂H) instead of its condensation to a disulfide bond. It can be reactivated by forming a transient disulfide bond with sulfiredoxin SRXN1, which reduces the cysteine sulfinic acid in an ATP- and Mg-dependent manner.

Subunit Structure: Homodimer; disulfide-linked, upon oxidation. 5 homodimers assemble to form a ring-like decamer (PubMed:18172504). Interacts with GPD5; forms a mixed-disulfide with GPD5 (By similarity). Interacts with SESN1 and SESN2 (PubMed:15105503).

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	548453
NCBI GeneID	5052
UniProt Accession #	Q06830
Molecular Weight	Observed: 22 kDa Predicted: 23 kDa
NCBI Official Full Name	Peroxiredoxin-1
NCBI Official Synonym Full Names	peroxiredoxin 1
NCBI Official Symbol	PRDX1
NCBI Official Synonym Symbols	PAG; PAGA; PAGB; PRX1; PRXI; MSP23; NKEFA; TDPX2; NKEF-A
NCBI Protein Information	peroxiredoxin-1
UniProt Protein Name	Peroxiredoxin-1
UniProt Gene Name	PRDX1
UniProt Synonym Gene Names	PAGA; PAGB; TDPX2; NKEF-A; PAG
UniProt Entry Name	PRDX1_HUMAN

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.