

Rabbit Peroxiredoxin 1 Polyclonal Antibody | anti-PRDX1 antibody

Anti-Peroxiredoxin 1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA46546	Rabbit	Human, Mouse, Rat	Immunocytochemistry, Immunohistochemistry, Western Blot

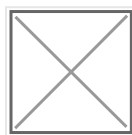
PRODUCT SYNONYMS

Peroxiredoxin 1; Polyclonal Antibody; Anti-Peroxiredoxin 1 Antibody; Peroxiredoxin-1; Hbp23; Heme binding 23 kDa protein; Macrophage 23 Kd stress protein; Macrophage 23kDa stress protein; Macrophase stress protein 22kDa; Macrophase stress protein 23 kd; MSP23; Natural killer cell enhancing factor A; Natural killer cell-enhancing factor A; Natural killer enhancing factor A; NKEF A; NKEF-A; NkefA; OSF3; Osteoblast specific factor 3; PAG; Paga; PAGB; Prdx 1; Prdx1; PRDX1_HUMAN; Proliferation associated gene A; Proliferation associated protein PAG; Proliferation-associated gene protein; Prxl; Tdpx 2; Tdpx2; TDX2; Thioredoxin dependent peroxide reductase 2; Thioredoxin peroxidase 2; Thioredoxin-dependent peroxide reductase 2; TPxA; Trx dependent peroxide reductase 2; peroxiredoxin 1; anti-PRDX1 antibody

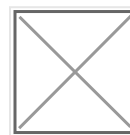
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Sequence Length	199
Applicable Applications for anti-PRDX1 antibody	ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Peroxiredoxin 1 (100-128aa MNIPLVSDPKRTIAQDYGVLEKDEGISFR), different from the related mouse sequence by one amino acid, and identical to the related rat sequence.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES


ICC (Immunocytochemistry)

Anti- Peroxiredoxin 1 Picoband antibody, AAA46546, ICCICC: SMMC-7721 Cell

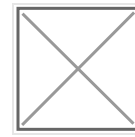

IHC (Immunohistochemistry)

Anti- Peroxiredoxin 1 Picoband antibody, AAA46546, IHC(P)IHC(P): Huma Mammary Cancer Tissue



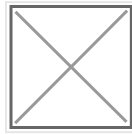
IHC (Immunohistochemistry)

Anti- Peroxiredoxin 1 Picoband antibody, AAA46546, IHC(P)IHC(P): Rat Brain Tissue



IHC (Immunohistochemistry)

Anti- Peroxiredoxin 1 Picoband antibody, AAA46546, IHC(P)IHC(P): Mouse Brain Tissue



WB (Western Blot)

Anti- Peroxiredoxin 1 Picoband antibody, AAA46546, Western blottingAll lanes: Anti Peroxiredoxin 1 (AAA46546) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugLane 4: NEURO Whole Cell Lysate at 40ugLane 5: A375 Whole Cell Lysate at 40ugLane 6: 293T Whole Cell Lysate at 40ugLane 7: SMMC Whole Cell Lysate at 40ugLane 8: A549 Whole Cell Lysate at 40ugLane 9: RH35 Whole Cell Lysate at 40ugPredicted bind size: 22KDObserved bind size: 22KD

ADDITIONAL INFORMATION

Related Product Information for anti-PRDX1 antibody

Description: Rabbit IgG polyclonal antibody for Peroxiredoxin-1(PRDX1) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

Background: PRDX1(Peroxiredoxin 1), also called PRX1, PAGA or NKEFA, is a thiol reductase that plays critical roles in oxidative and thermal stress defense mechanisms through its abilities to metabolize H₂O₂ and act as a molecular chaperone, respectively. This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The PRDX1 gene is mapped on 1p34.1. Prdx1 was expressed in differentiating motor neuron cells in developing embryonic chicken and mouse spinal cords. Immunoprecipitation analysis showed that GDE2 interacted directly with PRDX1 in embryonic chicken spinal cord extracts and in transfected HEK293T cells. This protein may have a proliferative effect and play a role in cancer development or progression. In differentiating spinal cord, Prdx1 was required to activate Gde2 by reducing an intramolecular cystine bridge between the Gde2 N- and C-terminal domains. An intramolecular disulfide bond between the GDE2 N- and C-terminal domains inhibits GDE2 function, and that reduction of this cystine by PRDX1 activates GDE2 for the induction of motor neuron differentiation.

References

1. Neumann, C. A., Krause, D. S., Carman, C. V., Das, S., Dubey, D. P., Abraham, J. L., Bronson, R. T., Fujiwara, Y., Orkin, S. H., Van Etten, R. A. Essential role for the peroxiredoxin Prdx1 in erythrocyte antioxidant defence and tumour suppression. Nature 424: 561-565, 2003. 2. Prosperi, M.-T., Apiou, F., Dutrillaux, B., Goubin, G. Organization and chromosomal assignment of two human PAG gene loci: PAGA encoding a functional gene and PAGB a processed pseudogene. Genomics 19: 236-241, 1994. 3. Yan, Y., Sabharwal, P., Rao, M., Sockanathan, S. The antioxidant enzyme Prdx1 controls neuronal differentiation by thiol-redox-dependent activation of GDE2. Cell 138: 1209-1221, 2009.

NCBI AND UNIPROT INFORMATION

NCBI GI #	320461711
NCBI GeneID	5052
NCBI Accession #	NP_001189360.1
NCBI GenBank Nucleotide #	NM_001202431.1
UniProt Accession #	Q06830; P35703; Q2V576; Q5T154; Q5T155; B5BU26; D3DPZ8
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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/peroxiredoxin-1-antibody-immunocytochemistry-immunohistochemistry-western-blot-elisa/46546>