

Datasheet for ABIN3043903

anti-Peroxiredoxin 1 antibody (Middle Region)**6** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Peroxiredoxin 1 (PRDX1)
Binding Specificity:	AA 100-128, Middle Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Peroxiredoxin-1 (PRDX1) detection. Tested with WB, IHC-P, ICC in Human, Mouse, Rat.
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.
Sequence:	MNIPLVSDPK RTIAQDYGVLE KADEGISFR
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Peroxiredoxin-1 (PRDX1) detection. Tested with WB, IHC-P, ICC in Human, Mouse, Rat. Gene Name: peroxiredoxin 1

Product Details

Protein Name: Peroxiredoxin-1

Purification: Immunogen affinity purified.

Target Details

Target: Peroxiredoxin 1 (PRDX1)

Alternative Name: PRDX1 ([PRDX1 Products](#))

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.

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

Gene ID: 5052

Target Details

UniProt: [Q06830](#)

Pathways: [p53 Signaling](#), [EGFR Signaling Pathway](#), [CXCR4-mediated Signaling Events](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat, The detection limit for Peroxiredoxin 1 is approximately 0.1 ng/lane under reducing conditions.
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.
ICC: Concentration: 0.5-1 µg/mL, Tested Species: Human
Notes: Tested Species: Species with positive results. Other applications have not been tested.
Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and ICC.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

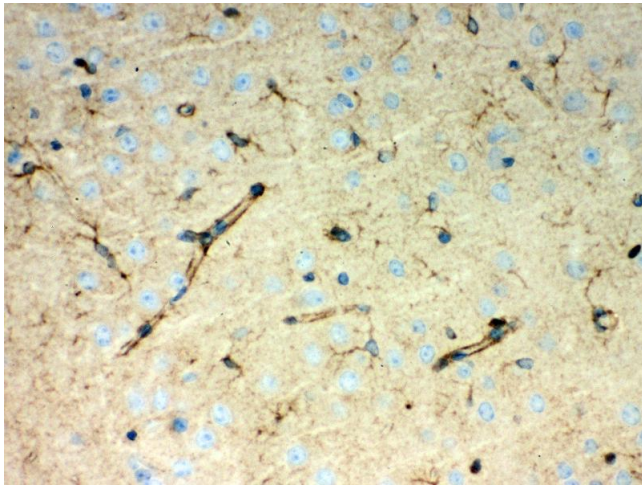
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

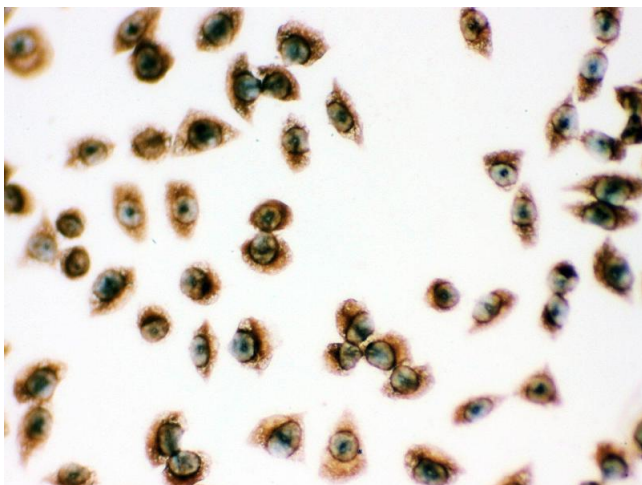
Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.



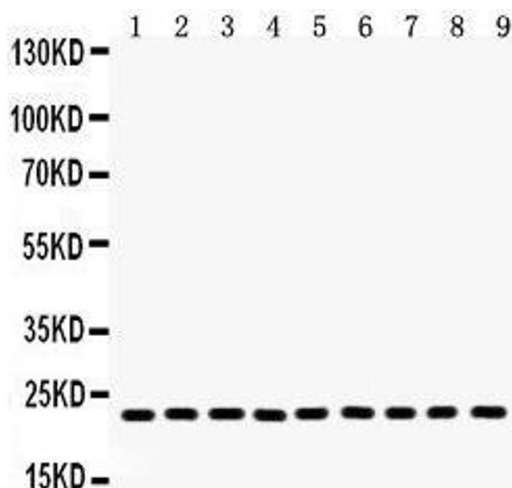
Immunohistochemistry

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



Immunohistochemistry

Image 2. Anti- Peroxiredoxin 1 Picoband antibody, ICC
SMMC-7721 Cell



Western Blotting

Image 3. Anti- Peroxiredoxin 1 Picoband antibody, Western blotting
All lanes: Anti Peroxiredoxin 1 at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Lane 3: U87 Whole Cell Lysate at 40ug Lane 4: NEURO Whole Cell Lysate at 40ug Lane 5: A375 Whole Cell Lysate at 40ug Lane 6: 293T Whole Cell Lysate at 40ug Lane 7: SMMC Whole Cell Lysate at 40ug Lane 8: A549 Whole Cell Lysate at 40ug Lane 9: RH35 Whole Cell Lysate at 40ug Predicted bind size: 22KD Observed bind size: 22KD

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN3043903.