

Datasheet for ABIN3043905

anti-Peroxiredoxin 4 antibody (C-Term)**6** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Peroxiredoxin 4 (PRDX4)
Binding Specificity:	AA 178-2081, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Peroxiredoxin 4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Peroxiredoxin-4(PRDX4) detection. Tested with WB, IHC-P, ICC in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human Peroxiredoxin 4 (178-2081aa SDLTHQISKDYGVYLEDSGHTLRGLFIIDDK), different from the related mouse and rat sequences by one amino acid.
Sequence:	SDLTHQISKD YGVYLEDSGH TLRGLFIIDD K
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Peroxiredoxin-4(PRDX4) detection. Tested with WB, IHC-P, ICC in Human,Mouse,Rat.

Product Details

Gene Name: peroxiredoxin 4
Protein Name: Peroxiredoxin-4

Purification: Immunogen affinity purified.

Target Details

Target: Peroxiredoxin 4 (PRDX4)

Alternative Name: PRDX4 ([PRDX4 Products](#))

Background: PRDX4 (peroxiredoxin 4) is also known as AOE37-2. The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. Functional analysis showed that PRDX4 protects glutamine synthetase from inactivation. Yeast 2-hybrid, immunoprecipitation, and immunoblot analyses indicated that PRDX4 and PRDX1 are capable of homodimerization and heterodimerization with each other but not with the mitochondrial PRDX3. Gel mobility shift and immunoblot analysis found that PRDX4 depletes NFkB binding activity together with a reduction in the amounts of p50, p65, and phosphorylated IKBA, as well as a reduction in the expression of HIV-1 viral proteins. Expression of PRDX4, alone or with PRDX1, increased the resistance of yeast cells to oxidant-induced toxicity. Jin et al. suggested PRDX4 modulates IKBA phosphorylation in the cytoplasm and thus affects a peroxiredoxin-dependent redox step.

Synonyms: Antioxidant enzyme 372 antibody|Antioxidant enzyme AOE372 antibody|AOE37 2 antibody|AOE37-2 antibody|AOE372 antibody|EC 1.11.1.15 antibody|Peroxiredoxin IV antibody|Peroxiredoxin-4 antibody|Peroxiredoxin4 antibody|PRDX 4 antibody|PRDX4 antibody|PRDX4_HUMAN antibody|PRX 4 antibody|Prx IV antibody|Prx-IV antibody|PRX4 antibody|PrxIV antibody|Thioredoxin dependent peroxide reductase A0372 antibody|Thioredoxin Peroxidase (Antioxidant Enzyme) antibody|Thioredoxin peroxidase antibody|Thioredoxin peroxidase A0372 antibody|Thioredoxin-dependent peroxide reductase A0372 antibody|TRANK antibody

Gene ID: 10549

UniProt: [Q13162](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat, The detection limit for Peroxiredoxin 4 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

Application Details

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.

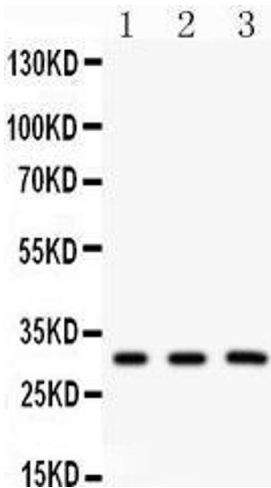
Preservative: Sodium azide

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.

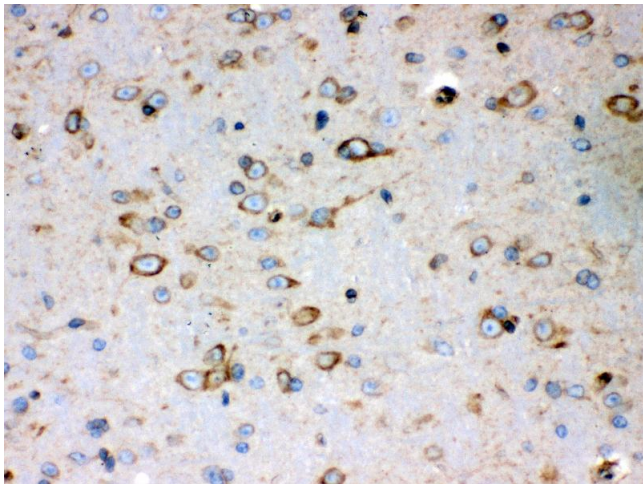
Storage: 4 °C/-20 °C

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.



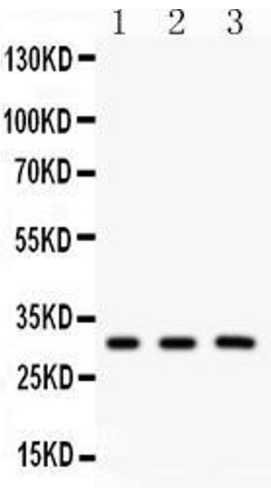
Western Blotting

Image 1.



Immunohistochemistry

Image 2. Anti- Peroxiredoxin 4 Picoband antibody, IHC(P)
IHC(P): Mouse Brain Tissue



Western Blotting

Image 3. Anti- Peroxiredoxin 4 Picoband antibody, Western blotting
All lanes: Anti Peroxiredoxin 4 at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Mouse Brain Tissue Lysate at 50ug
Lane 3: HELA Whole Cell Lysate at 40ug
Predicted bind size: 31KD
Observed bind size: 31KD

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN3043905.