

Peroxiredoxin 4 Polyclonal Antibody | anti-PRDX4 antibody

Anti-Peroxiredoxin 4 Antibody

CATALOG # AAA46413	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunocytochemistry, Immunohistochemistry, Western Blot
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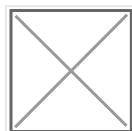
PRODUCT SYNONYMS

Peroxiredoxin 4; Polyclonal Antibody; Anti-Peroxiredoxin 4 Antibody; Peroxiredoxin-4; Antioxidant enzyme 372; Antioxidant enzyme AOE372; AOE37 2; AOE37-2; AOE372; EC 1.11.1.15; Peroxiredoxin IV; Peroxiredoxin4; PRDX 4; PRDX4; PRDX4_HUMAN; PRX 4; Prx IV; Prx-IV; PRX4; PrxIV; Thioredoxin dependent peroxide reductase A0372; Thioredoxin Peroxidase (Antioxidant Enzyme); Thioredoxin peroxidase; Thioredoxin peroxidase A0372; Thioredoxin-dependent peroxide reductase A0372; TRANK antibody; peroxiredoxin 4; anti-PRDX4 antibody

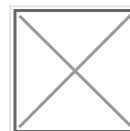
PRODUCT SPECIFICATIONS

Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	271
Applicable Applications for anti-PRDX4 antibody	ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
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.
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.

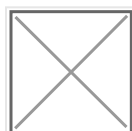
IMAGES


ICC (Immunocytochemistry)

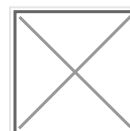
Anti- Peroxiredoxin 4 Picoband antibody, AAA46413, ICCICC: A549 Cell


IHC (Immunohistochemistry)

Anti- Peroxiredoxin 4 Picoband antibody, AAA46413, IHC(P)IHC(P): Human Tonsil Tissue


IHC (Immunohistochemistry)

Anti- Peroxiredoxin 4 Picoband antibody, AAA46413, IHC(P)IHC(P): Rat Brain Tissue


IHC (Immunohistochemistry)

Anti- Peroxiredoxin 4 Picoband antibody, AAA46413, IHC(P)IHC(P): Mouse Brain Tissue



WB (Western Blot)

Anti- Peroxiredoxin 4 Picoband antibody, AAA46413, Western blottingAll lanes: Anti Peroxiredoxin 4 (AAA46413) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 31KDObserved bind size: 31KD

ADDITIONAL INFORMATION

Related Product Information for anti-PRDX4 antibody	Description: Rabbit IgG polyclonal antibody for Peroxiredoxin-4(PRDX4) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat. 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.
References	1. Jin, D.-Y, Chae, H. Z, Rhee, S. G, Jeang, K.-T. Regulatory role for a novel human thioredoxin peroxidase in NF-kappa-B activation. J. Biol. Chem. 272: 30952-30961, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5453549
NCBI GeneID	10549
NCBI Accession #	NP_006397.1
NCBI GenBank Nucleotide #	NM_006406.1
UniProt Accession #	Q13162; Q6FHT3
Molecular Weight	30,540 Da
NCBI Official Full Name	peroxiredoxin-4
NCBI Official Synonym Full Names	peroxiredoxin 4
NCBI Official Symbol	PRDX4
NCBI Official Synonym Symbols	PRX-4; AOE372; AOE37-2; HEL-S-97n
NCBI Protein Information	peroxiredoxin-4
UniProt Protein Name	Peroxiredoxin-4
UniProt Gene Name	PRDX4
UniProt Synonym Gene Names	AOE37-2; Prx-IV
UniProt Entry Name	PRDX4_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.