

Rabbit anti-Human Peroxiredoxin 2 Polyclonal Antibody | anti-PRDX2 antibody

Anti-Peroxiredoxin 2 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255373	Rabbit	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

Peroxiredoxin 2; Polyclonal Antibody; Anti-Peroxiredoxin 2 Antibody; Rabbit Polyclonal; Peroxiredoxin 2/PRDX2 Antibody; Rabbit PAb; Antigen Affinity Purified; peroxiredoxin 2; Anti-HEL-S-2a Antibody; Anti-NKEF-B Antibody; Anti-NKEFB Antibody; Anti-PRP Antibody; Anti-PRX2 Antibody; Anti-PRXII Antibody; Anti-PTX1 Antibody; Anti-TDPX1 Antibody; Anti-TPX1 Antibody; Anti-TSA Antibody; anti-PRDX2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Peroxiredoxin 2/PRDX2
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-PRDX2 antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human Peroxiredoxin 2/PRDX2 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human Peroxiredoxin 2/PRDX2 (rh Peroxiredoxin 2/PRDX2). Peroxiredoxin 2/PRDX2 specific IgG was purified by Human Peroxiredoxin 2/PRDX2 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

PRDX2 was immunoprecipitated using: Lane A: 0.5 mg Jurkat Whole Cell Lysate; Lane B: 0.5 mg HepG2 Whole Cell Lysate; 4 uL anti-PRDX2 rabbit polyclonal antibody and 15 uL of 50 % Protein G agarose. Primary antibody: Anti-PRDX2 rabbit polyclonal antibody, at 1:100 dilution. Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 22 kDa. Observed band size: 22 kDa.



IF (Immunofluorescence)

Immunofluorescence staining of PRDX2 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human PRDX2 polyclonal antibody (1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.



WB (Western Blot)

Anti-PRDX2 rabbit polyclonal antibody at 1:500 dilution
Lane A: SH-SY5Y Whole Cell Lysate
Lane B: HepG2 Whole Cell Lysate
Lane C: Jurkat Whole Cell Lysate
Lane D: MCF7 Whole Cell Lysate
Lysates/proteins at 30 ug per lane.
Secondary Goat Anti-Rabbit IgG H&L (Dylight 800) at 1/10000 dilution.
Developed using the Odyssey technique.
Performed under reducing conditions.
Predicted band size: 22 kDa
Observed band size: 22 kDa
(We are unsure as to the identity of these extra bands.)

ADDITIONAL INFORMATION

Related Product Information for anti-PRDX2 antibody	Peroxiredoxin-2, also known as Natural killer cell-enhancing factor B, NKEF-B, Thiol-specific antioxidant protein, Thioredoxin peroxidase 1, Thioredoxin-dependent peroxide reductase 1, PRDX2 and NKEFB, is a cytoplasm protein that belongs to the ahpC/TSA family. Peroxiredoxin-2/PRDX2 contains one thioredoxin domain. Peroxiredoxin-2/PRDX2 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system. Peroxiredoxin-2/PRDX2 is not able to receive electrons from glutaredoxin. It may play an important role in eliminating peroxides generated during metabolism. Peroxiredoxin-2/PRDX2 might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H2O2. The Peroxiredoxins/Prx are a family of peroxidases that can reduce H2O2 using an electron from thioredoxin (Trx) or other substances. The mammalian Peroxiredoxins/Prx family is divided into six groups (PRDX1, PRDX2, PRDX3, PRDX4, PRDX5, PRDX6) on the basis of homology of amino acid sequences. They are located in the cytosol and play a role in the cell signaling system. All six mammalian peroxiredoxins are expressed in the lung. Peroxiredoxins/Prx is overexpressed in breast cancer tissues to a great extent suggesting that Peroxiredoxins/Prx has a proliferative effect and may be related to cancer development or progression.
References	Cha M.-K., et al., 1995, Biochem. Biophys. Res. Commun. 217:900-7. Noh, D.Y. et al., 2001, Anticancer Res. 21 (3B): 2085-90. Chevallet M., et al., 2003, J. Biol. Chem. 278:37146-53. Schremmer, B. et al., 2007, Subcell Biochem. 44 :317-44. Gauci S., et al., 2009, Anal. Chem. 81:4493-501.

NCBI AND UNIPROT INFORMATION

NCBI GI #	49456535
NCBI GeneID	7001
UniProt Accession #	P32119; P31945; P32118; P35701; Q6FHG4; Q92763; Q9UC23; A8K0C0
Molecular Weight	21,892 Da
NCBI Official Full Name	PRDX2
NCBI Official Synonym Full Names	peroxiredoxin 2
NCBI Official Symbol	PRDX2
NCBI Official Synonym Symbols	PRP; TSA; PRX2; PTX1; TPX1; NKEFB; PRXII; TDPX1; NKEF-B
NCBI Protein Information	peroxiredoxin-2; torin; thioredoxin peroxidase 1; thiol-specific antioxidant 1; natural killer cell-enhancing factor B; thioredoxin-dependent peroxide reductase 1
UniProt Protein Name	Peroxiredoxin-2
UniProt Gene Name	PRDX2
UniProt Synonym Gene Names	NKEFB; TDPX1; NKEF-B; TSA
UniProt Entry Name	PRDX2_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.