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Anti-Peroxiredoxin 2 Antibody

Catalog # ABO11142

Specification

Anti-Peroxiredoxin 2 Antibody - Product Information

Application	**WB**
Primary Accession	P32119
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Peroxiredoxin-2(PRDX2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Peroxiredoxin 2 Antibody - Additional Information

Gene ID 7001

Other Names
Peroxiredoxin-2, 1.11.1.15, Natural killer cell-enhancing factor B, NKEF-B, PRP, Thiol-specific antioxidant protein, TSA, Thioredoxin peroxidase 1, Thioredoxin-dependent peroxide reductase 1, PRDX2, NKEFB, TDPX1

Calculated MW
21892 MW KDa

Application Details
Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization
Cytoplasm.

Protein Name
Peroxiredoxin-2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Peroxiredoxin 2(181-198aa DTIKPNVDDSKEYFSKHN), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, 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.

Sequence Similarities
Belongs to the AhpC/TSA family.

Anti-Peroxiredoxin 2 Antibody - Protein Information

Name PRDX2

Synonyms NKEFB, TDPX1

Function
Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2).

Cellular Location
Cytoplasm.

Anti-Peroxiredoxin 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Peroxiredoxin 2 Antibody - Images

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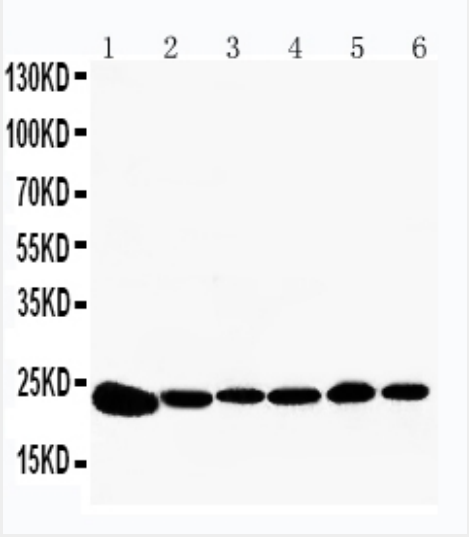

Anti-Peroxiredoxin 2 antibody, ABO11142, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Kidney Tissue LysateLane 3: HELA Cell LysateLane 4: JURKAT Cell LysateLane 5: 293T Cell LysateLane 6: A549 Cell Lysate

Anti-Peroxiredoxin 2 Antibody - Background

PRDX2(peroxiredoxin 2) also known as NKEFB, PRP, PRX2, PRXII or TPX1, is aÂ proteinÂ that in humans is encoded by theÂ PRDX2Â gene. This gene encodes a member of the peroxiredoxin family of antioxidantÂ enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides.Â The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. TheÂ Prdx2Â -/- mice were healthy in appearance and fertile. Choi et al.(2005)Â demonstrated thatÂ PRDX2Â is a negative regulator of PDGF signaling. Prx II deficiency results in increased production of peroxide, enhanced activation of PDGF receptor and phospholipase C-gamma-1, and subsequently increased cell proliferation and migration in response to PDGF. PRX2 accounted for about half of the thioredoxin activity in parasite extracts, and PRX2 expression was increased in the presence of chloroquine, regardless of P. falciparum strain susceptibility to the drug.Â