

**Anti-Peroxiredoxin 2 Antibody**  
Catalog # ABO11142**Specification****Anti-Peroxiredoxin 2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P32119</a>
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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg Na<sub>3</sub>N.

**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

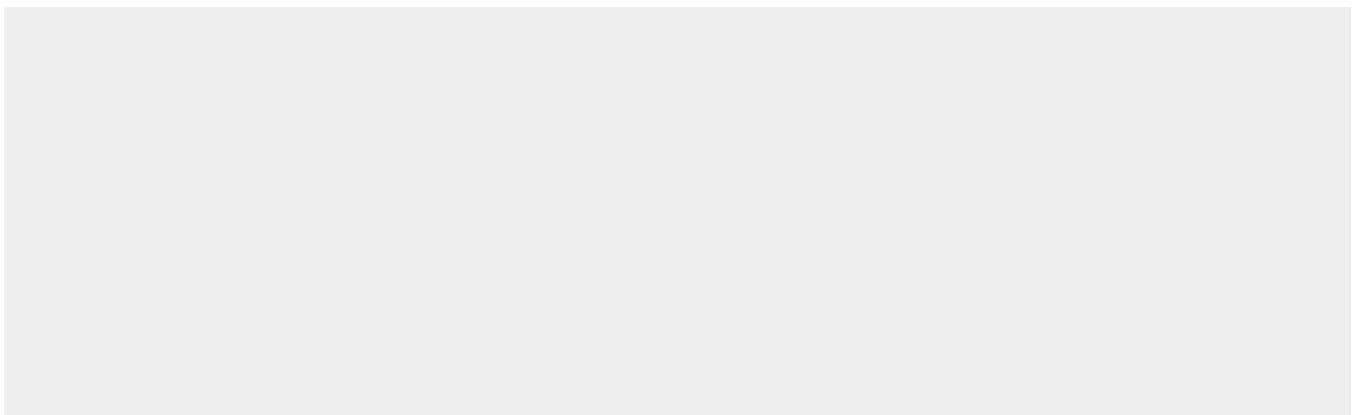
Cytoplasm.

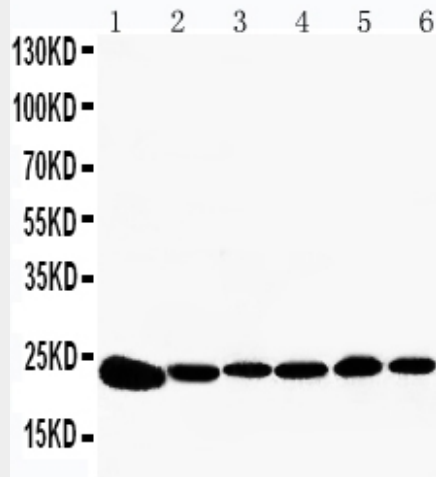
## Anti-Peroxiredoxin 2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Peroxiredoxin 2 Antibody - Images





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

#### **Anti-Peroxiredoxin 2 Antibody - Background**

PRDX2(peroxiredoxin 2) also known as NKEFB, PRP, PRX2, PRXII or TPX1, is a protein that in humans is encoded by the PRDX2 gene. This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. 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. The Prdx2<sup>-/-</sup> mice were healthy in appearance and fertile. Choi et al.(2005) demonstrated that PRDX2 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.