

## PRDX2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5227

### Specification

# PRDX2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Calculated MW Isotype Antigen Source IF, IHC-P, WB,E <u>P32119</u> <u>P35704</u>, <u>061171</u>, <u>02PFZ3</u>, <u>08K3U7</u>, <u>09BGI3</u> Human, Mouse, Rat Bovine, Hamster, Monkey Rabbit Polyclonal H=22;M=22;Rat=22 KDa Rabbit IgG HUMAN

## PRDX2 Antibody (C-term) - Additional Information

Gene ID 7001

Antigen Region 169-198

### **Other Names**

PRDX2; NKEFB; TDPX1; Peroxiredoxin-2; Natural killer cell-enhancing factor B; PRP; Thiol-specific antioxidant protein; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1

**Dilution** IF~~1:10~50 IHC-P~~1:50~100 WB~~1:1000

### **Target/Specificity**

This PRDX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 169-198 amino acids from the C-terminal region of human PRDX2.

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

PRDX2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.



# PRDX2 Antibody (C-term) - 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).

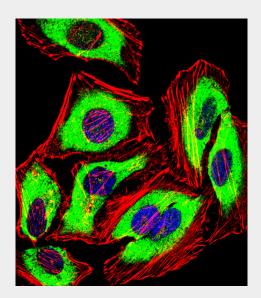
Cellular Location Cytoplasm.

## PRDX2 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

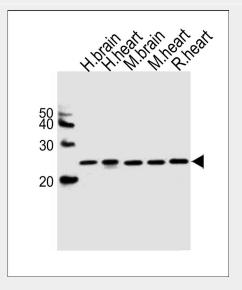
### PRDX2 Antibody (C-term) - Images



Fluorescent confocal image of Hela cell stained with PRDX2 Antibody (C-term)(Cat#AW5227).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with PRDX2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin



(7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min).PRDX2 immunoreactivity is localized to Cytoplasm significantly.



Western blot analysis of lysates from human brain,human heart,mouse brain,mouse heart,rat heart tissue lysate (from left to right), using PRDX2 Antibody (C-term)(Cat. #AW5227). AW5227 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



Formalin-fixed and paraffin-embedded human brain tissue reacted with PRDX2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# PRDX2 Antibody (C-term) - Background

PRDX2 is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. This 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 crystal structure of this protein has been resolved to 2.7 angstroms.

# PRDX2 Antibody (C-term) - References

Engstrom, K.S., et.al., Mutat. Res. (2009)