

For Research Use Only

# PRDX1 Polyclonal antibody

Catalog Number: 20568-1-AP

Featured Product

1 Publications



## Basic Information

### Catalog Number:

20568-1-AP

### Size:

150ul, Concentration: 800 µg/ml by Nanodrop and 480 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_002574

### GeneID (NCBI):

5052

### Full Name:

peroxiredoxin 1

### Calculated MW:

22 kDa

### Observed MW:

23 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:8000

IF 1:10-1:100

## Applications

### Tested Applications:

IF, WB, ELISA

### Species Specificity:

human, mouse, rat

### Positive Controls:

WB : HEK-293 cells, HeLa cells, Jurkat cells, MCF-7 cells

IF : HepG2 cells, Hela cells

## Background Information

PRDX1(Peroxiredoxin-1), also named as PAGA, PAGB, TDPX2, PAG or NKEF-A, belongs to the ahpC/TSA family. PRDX1 is a thiol reductase that plays critical roles in oxidative and thermal stress defense mechanisms through its abilities to metabolize H<sub>2</sub>O<sub>2</sub> and act as a molecular chaperone, respectively. PRDX1 might participate in the signaling cascades of growth factors and tumor necrosis factor- $\alpha$  by regulating the intracellular concentrations of H<sub>2</sub>O<sub>2</sub> (PMID: 9497357). It reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation. PRDX1 can form a dimer, and also can be phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity (PMID: 22583657, 11986303). The antibody is specific to PRDX1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Huifang Zhu	31130519	Cell Chem Biol	

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

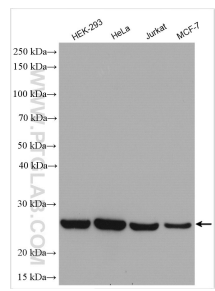
For technical support and original validation data for this product please contact:

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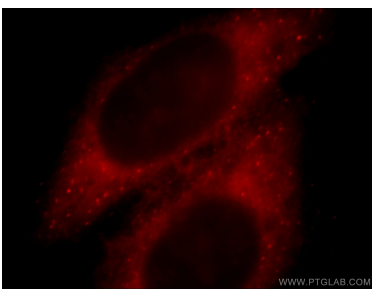
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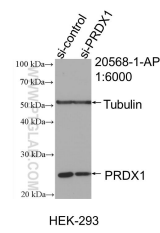
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 20568-1-AP (PRDX1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HepG2 cells, using PRDX1 antibody 20568-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



WB result of PRDX1 antibody (20568-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRDX1 transfected HEK-293 cells.