



# PRX II Polyclonal Antibody

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| <b>Catalog No</b>                  | YP-Ab-04102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB;IHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Gene Name</b>                   | PRDX2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Immunogen</b>                   | Synthesized peptide derived from the C-terminal region of human PRX II.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specificity</b>                 | PRX II Polyclonal Antibody detects endogenous levels of PRX II protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Dilution</b>                    | WB 1:500-2000;IHC-p 1:50-300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>                    | PRDX2;EC:1.11.1.24;Natural killer cell-enhancing factor B;NKEFB;NKEF-B;PRX II;Peroxiredoxin-2;TDPX1;PRP;Thiol-specific antioxidant protein;TSA;Thioredoxin peroxidase 1;Thioredoxin-dependent peroxide reductase 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Observed Band</b>               | 21kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Calculated Molecular Weight</b> | 21kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cell Pathway</b>                | Cytoplasm .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Tissue Specificity</b>          | Brain,Cajal-Retzius cell,Cerebellum,Colon carcinoma,Erythrocyte,Fetal brain cortex,Hypothal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Function</b>                    | catalytic activity:2 R'-SH + ROOH = R'-S-S-R' + H(2)O + ROH.,function:Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system. It is not able to receive electrons from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2).,miscellaneous:Inactivated upon oxidative stress by overoxidation of Cys-51 to Cys-SO(2)H and Cys-SO(3)H. Cys-SO(2)H is retroreduced to Cys-SOH after removal of H(2)O(2), while Cys-SO(3)H may be irreversibly oxidized., miscellaneous:The active site is the redox-active Cys-51 oxidized to Cys-SOH. |



Cys-SOH rapidly reacts with Cys-172-SH of the other subunit to form an intermolecular disulfide with a concomitant hom

### Background

This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein plays an antioxidant protective role in cells, and it may contribute to the antiviral activity of CD8(+) T-cells. The crystal structure of this protein has been resolved to 2.7 angstroms. This protein prevents hemolytic anemia from oxidative stress by stabilizing hemoglobin, thus making this gene a therapeutic target for patients with hemolytic anemia. This protein may have a proliferative effect and play a role in cancer development or progression. Related pseudogenes have been identified on chromosomes 5, 6, 10 and 13. [provided by RefSeq, Mar 2013],

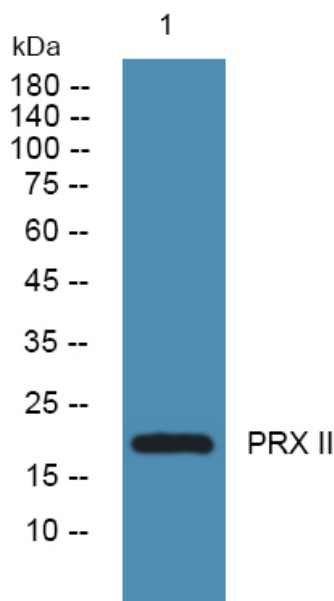
### matters needing attention

Avoid repeated freezing and thawing!

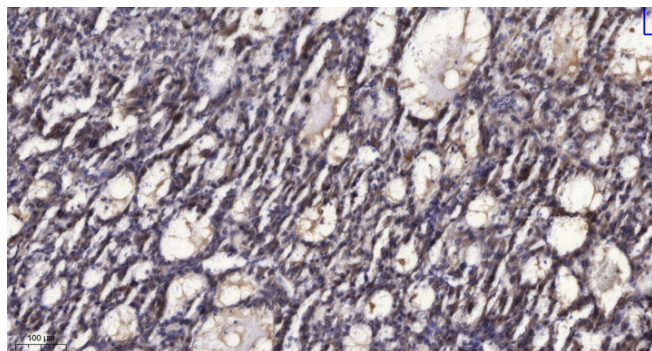
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot analysis of lysates from Jarkat cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).