



## PRX II Monoclonal Antibody

Catalog No	YP-mAb-04102
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PRDX2
Protein Name	Peroxiredoxin-2
Immunogen	Synthesized peptide derived from the C-terminal region of human PRX II.
Specificity	PRX II Monoclonal Antibody detects endogenous levels of PRX II protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRDX2; NKEFB; TDPX1; Peroxiredoxin-2; Natural killer cell-enhancing factor B; NKEF-B; PRP; Thiol-specific antioxidant protein; TSA; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1
Observed Band	21kD
Cell Pathway	Cytoplasm .
Tissue Specificity	Brain,Cajal-Retzius cell,Cerebellum,Colon carcinoma,Erythrocyte,Fetal brain cortex,Hypothal
Function	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],

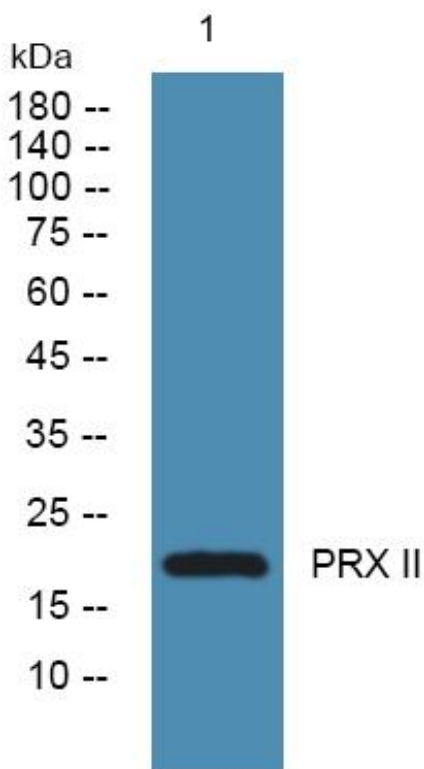
## matters needing attention

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 various cells using PRX II Monoclonal Antibody