

Peroxiredoxin 1 (ANT0001R) Rabbit mAb

CatalogNo: ANT8127 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human,Mouse,Rat,

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 22kD (Calculated)
- 26kD (Observed)

Isotype

- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000

WB 1:1000-1:5000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200,

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0001R

Target Information

Endogenous

Gene name PRDX1
Protein Name Peroxiredoxin-1

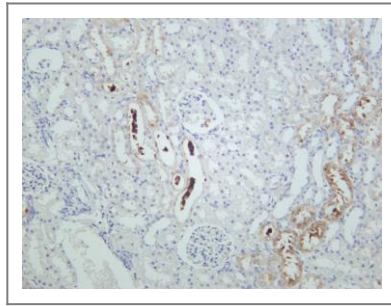
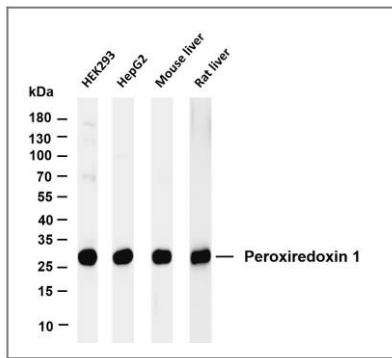
Organism	Gene ID	UniProt ID
Human	5052 ;	Q06830 ;
Mouse	18477 ;	P35700 ;
Rat	117254 ;	Q63716 ;

Cellular Localization Cytoplasm

Tissue specificity Brain,Cajal-Retzius cell,Fetal brain cortex,Urinary bladder,

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 but not 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).,induction:Constitutively expressed in most human cells; is induced to higher levels upon serum stimulation in untransformed and transformed cells.,miscellaneous:Inactivated upon oxidative stress by overoxidation of Cys-52 to CysSO(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 redoxactive Cys-52 oxidized to Cys-SOH. Cys-SOH rapidly reacts with Cys-173-SH of the other subunit to form an intermolecular disulfide with a concomitant homodimer formation. The enzyme may be subsequently regenerated by reduction of the disulfide by thioredoxin.,ANTM:Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity.,similarity:Belongs to the ahpC/TSA family.,similarity:Contains 1 thioredoxin domain.,subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,subunit:Homodimer; disulfide-linked, upon oxidation (By similarity). May form heterodimers with AOP2.,

Validation Data

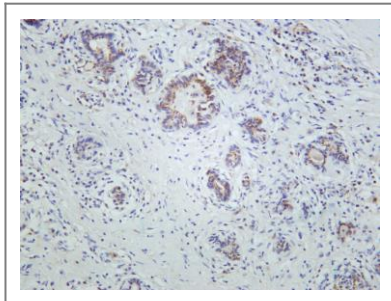
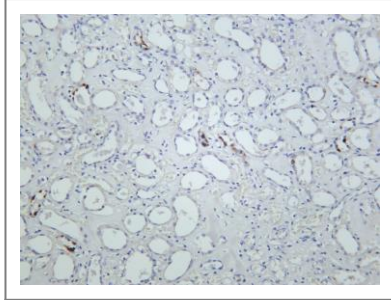


Rat kidney was stained with anti-Peroxiredoxin

1 (ANT0001R) rabbit antibody. Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Peroxiredoxin 1 (ANT0001R) antibody.

The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HepG2 Lane 3: Mouse liver Lane 4: Rat liver

Predicted band size: 22kDa Observed band size: 26kDa



Human kidney was stained with anti-Peroxiredoxin 1 (ANT0001R) rabbit antibody

Human thyroid was stained with anti-Peroxiredoxin 1 (ANT0001R) rabbit antibody

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