



Peroxiredoxin 1 Rabbit mAb

Catalog No	YP-rAb-17946
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	PRDX1
Protein Name	Peroxiredoxin-1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	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, Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	PRDX1 ; PAGA ; PAGB ; TDPX2 ; Peroxiredoxin-1 ; Natural killer cell-enhancing factor A ; NKEF-A ; Proliferation-associated gene protein ; PAG ; Thioredoxin peroxidase 2 ; Thioredoxin-dependent peroxide reductase 2
Observed Band	26kD
Calculated Molecular Weight	22kD
Cell Pathway	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 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-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.,PTM: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.,

Background

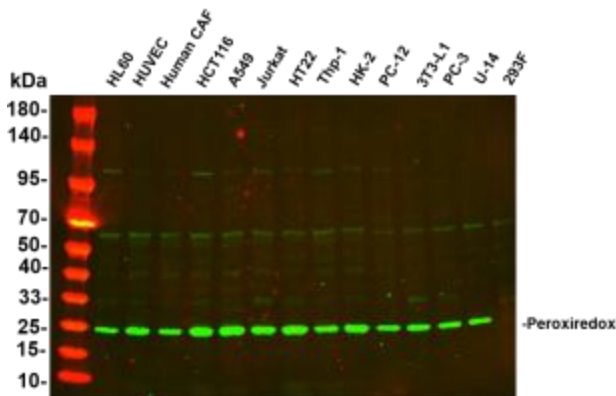
This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. Four transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jan 2011],

matters needing attention

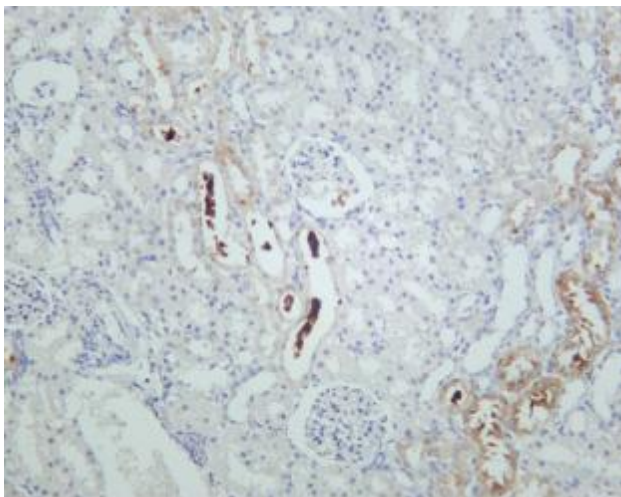
Avoid repeated freezing and thawing!

Usage suggestions

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

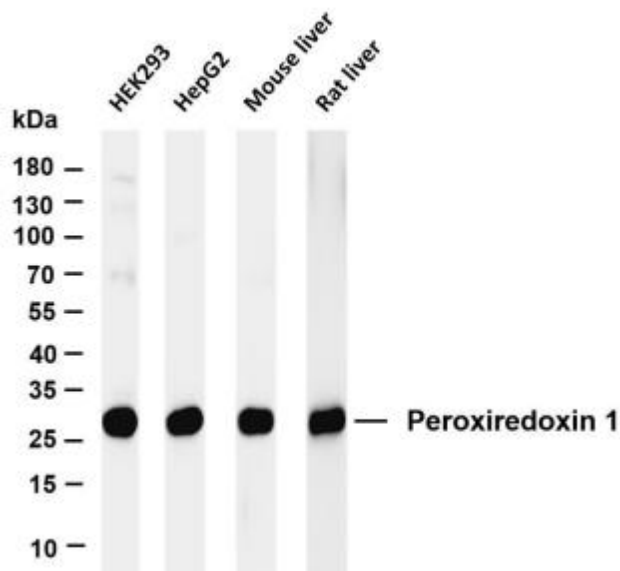


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:2500 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

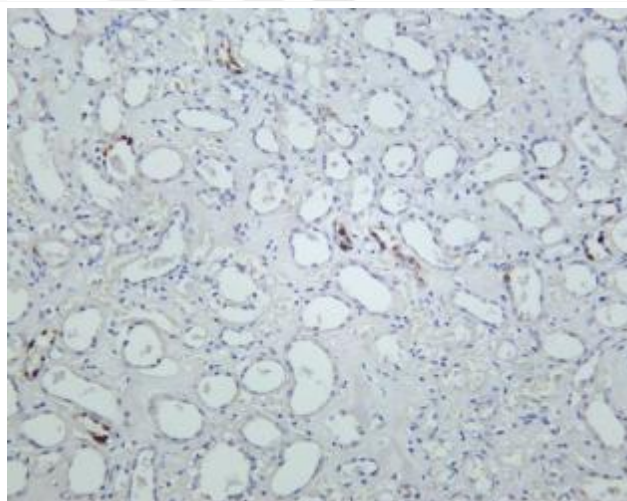


Rat kidney was stained with anti-Peroxiredoxin 1 rabbit antibody

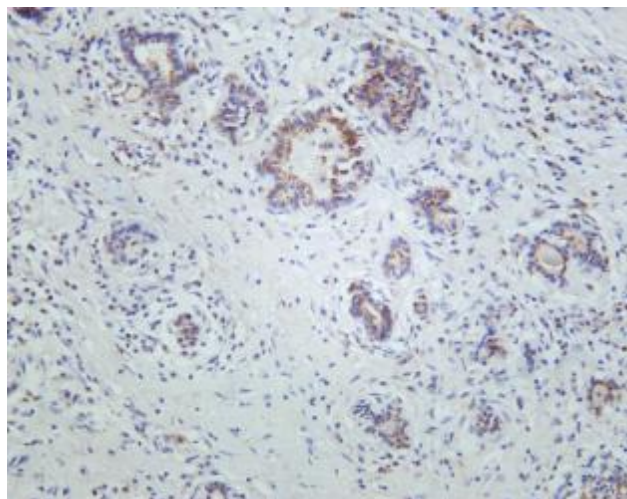




Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Peroxiredoxin 1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: HepG2 Lane 3: Mouse liver Lane 4: Rat liver Predicted band size: 22kDa Observed band size: 26kDa



Human kidney was stained with anti-Peroxiredoxin 1 rabbit antibody



Human thyroid was stained with anti-Peroxiredoxin 1 rabbit antibody

