



Peroxiredoxin 1 Monoclonal Antibody(8E7)

Catalog No	YP-Ab-03489
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF
Gene Name	PRDX1
Immunogen	Recombinant Protein of Peroxiredoxin-1
Specificity	The antibody detects endogenous Peroxiredoxin 1 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:1000-3000 IF: 1:100-200 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PAG;PAGA;PAGB;PRX1;PRXI;MSP23;NKEFA;TDPX2;NKEF-A;Peroxiredoxin 1/ PAG;Prdx1;Peroxiredoxin-1;Natural killer cell-enhancing factor A;Proliferation-associated gene protein;Thioredoxin peroxidase 2;Thioredoxin-dependent peroxide reductase 2
Observed Band	21kD
Calculated Molecular Weight	21kD
Cell Pathway	Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
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- α 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.

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

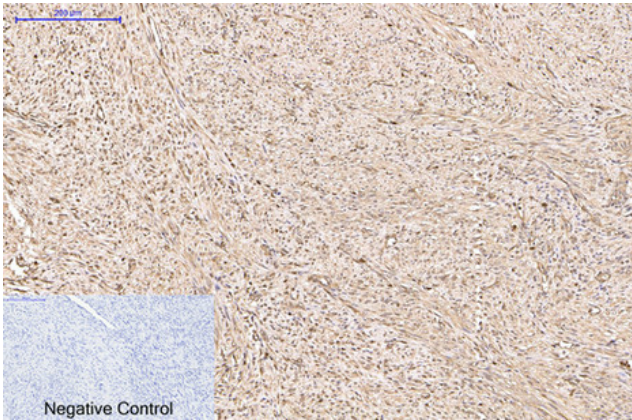
Avoid repeated freezing and thawing!

Usage suggestions

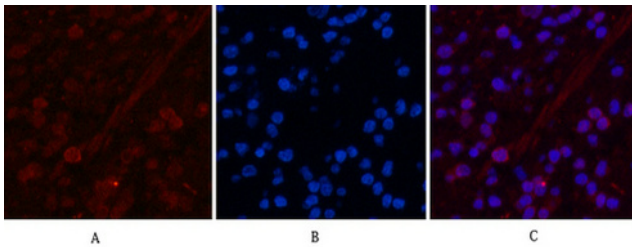
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



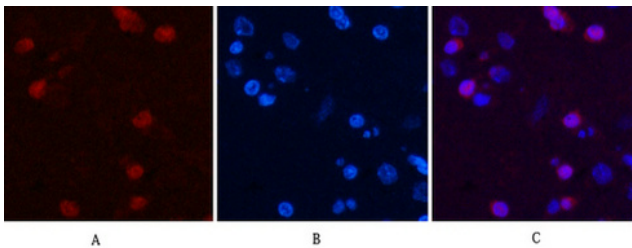
Products Images



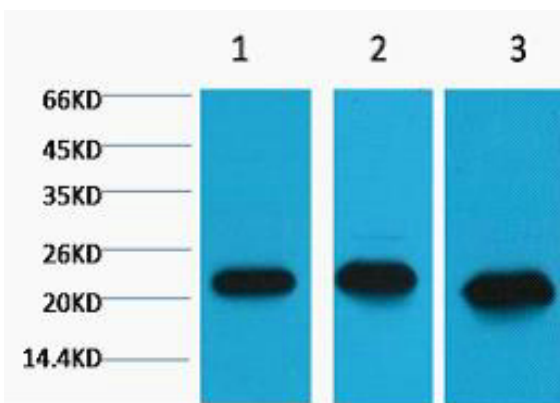
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



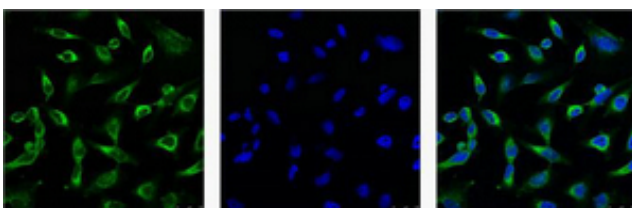
Immunofluorescence analysis of Human-appendix tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Rat-brain tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) MCF7, 2) Rat Kidney Tissue, 3) Mouse Brain Tissue, diluted at 1:2000.



IF analysis of Hela with antibody (Left) and DAPI (Right) diluted at 1:100.