



# Peroxiredoxin 1 Monoclonal Antibody(8E7)

<b>Catalog No</b>	BYab-03489
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF
<b>Gene Name</b>	PRDX1
<b>Protein Name</b>	Peroxiredoxin-1
<b>Immunogen</b>	Recombinant Protein of Peroxiredoxin-1
<b>Specificity</b>	The antibody detects endogenous Peroxiredoxin 1 protein.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB: 1:1000-3000 IF: 1:100-200 IHC 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	21kD
<b>Cell Pathway</b>	Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
<b>Tissue Specificity</b>	Brain,Cajal-Retzius cell,Fetal brain cortex,Urinary bladder,
<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 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

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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!

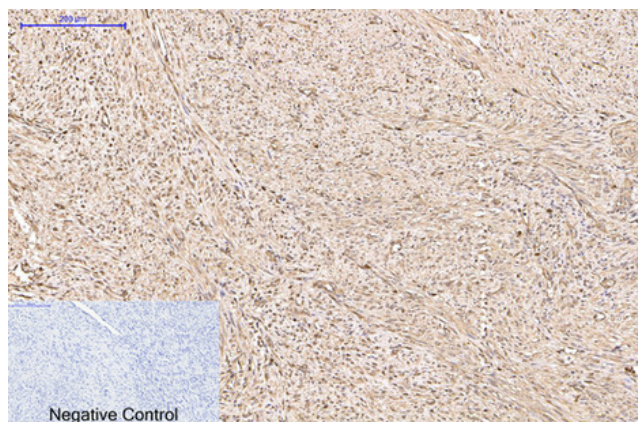
**Usage suggestions**

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

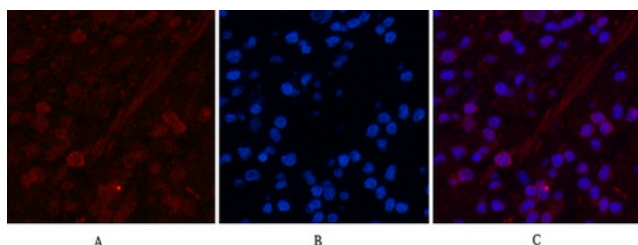
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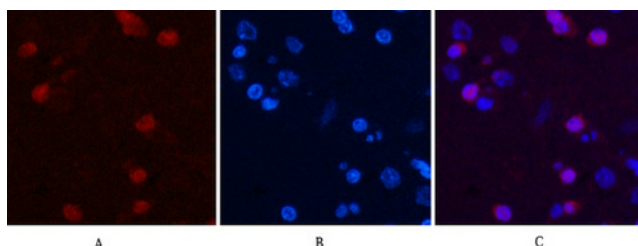
## Products Images



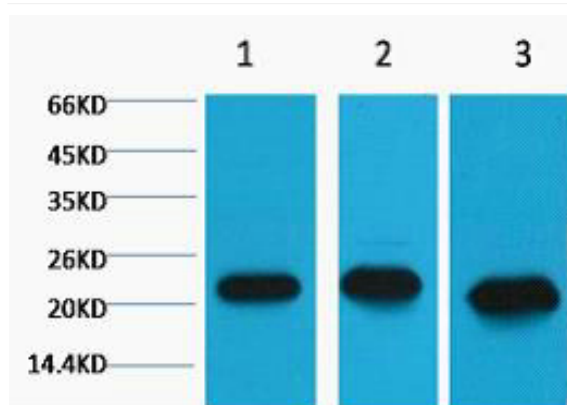
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min).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



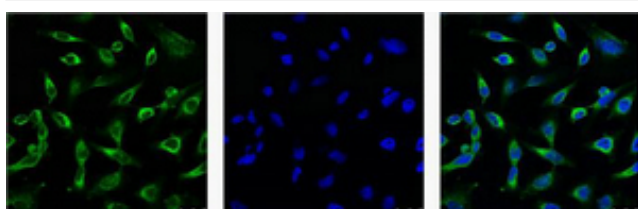
Immunofluorescence analysis of Human-appendix tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: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