

Peroxiredoxin 1 Monoclonal Antibody(8E7)

Catalog # AP63366

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q06830
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	22110

Additional Information

Gene ID	5052
Other Names	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
Dilution	WB~~WB: 1:1000-3000 IF: 1:100-200 IHC 1:50-300 IHC-P~~N/A IF~~1:50~200
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20°C

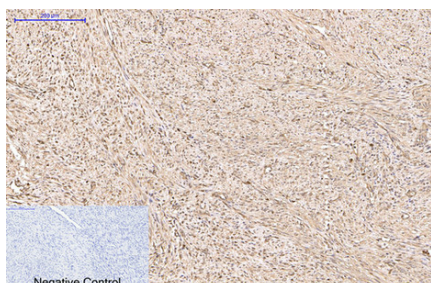
Protein Information

Name	PRDX1
Synonyms	PAGA, PAGB, TDPX2
Function	Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2) (PubMed: 9497357). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation (By similarity).
Cellular Location	Cytoplasm. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

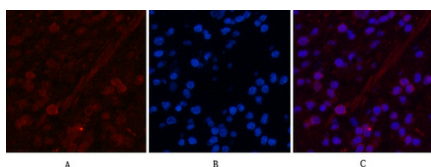
Background

Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H₂O₂ (PubMed:[9497357](https://pubmed.ncbi.nlm.nih.gov/9497357/)). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation (By similarity).

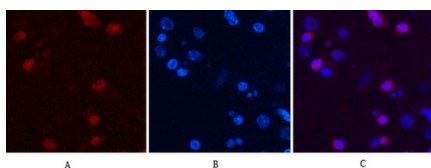
Images



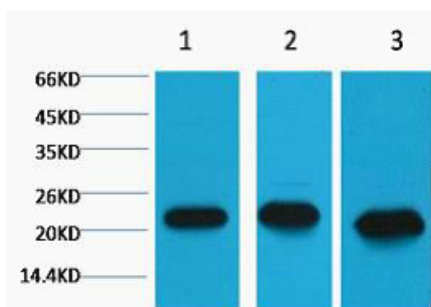
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min).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



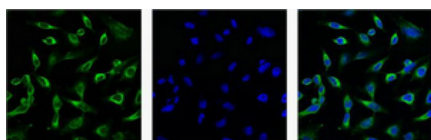
Immunofluorescence analysis of Human-appendix tissue. 1, Peroxiredoxin 1 Monoclonal Antibody(8E7)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: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

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