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Anti-Peroxiredoxin 1 Antibody

Mouse monoclonal antibody to Peroxiredoxin 1
Catalog # AP61594

Product Information

Application	WB, IF/IC
Primary Accession	Q06830
Other Accession	P35700
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	22110

Additional Information

Gene ID	5052
Other Names	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
Target/Specificity	Recognizes endogenous levels of Peroxiredoxin 1 protein.
Dilution	WB~~WB (1/1000 - 1/3000), IF/IC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

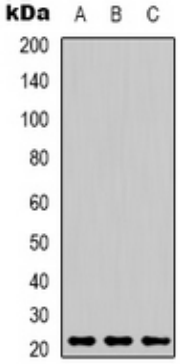
Protein Information

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

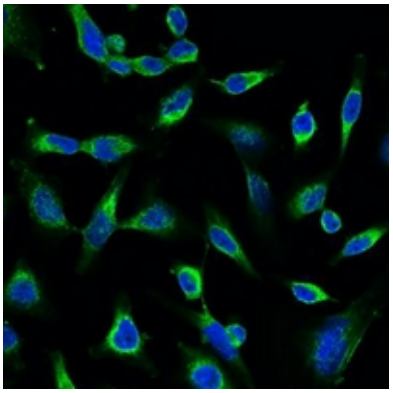
Background

Recombinant protein corresponding to human Peroxiredoxin 1.

Images



Western blot analysis of Peroxiredoxin 1 expression in MCF7 (A), mouse brain (B), rat kidney (C) whole cell lysates.



Immunofluorescent analysis of Peroxiredoxin 1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a FITC-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).