

Peroxioredoxin 1/PAG Rabbit mAb

Catalog # AP76650

Product Information

Application	WB, FC, IP
Primary Accession	Q06830
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	22110

Additional Information

Gene ID	5052
Other Names	PRDX1
Dilution	WB~~1:1000 FC~~1:10~50 IP~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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 GPD5 that gates the ability to GPD5 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

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_2O_2 .

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