

**PRDX1 / Peroxiredoxin 1 Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14448****Specification**

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**PRDX1 / Peroxiredoxin 1 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q06830</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	22kDa KDa

**PRDX1 / Peroxiredoxin 1 Antibody - Additional Information****Gene ID** 5052**Other Names**

Peroxiredoxin-1, 1.11.1.15, Natural killer cell-enhancing factor A, NKEF-A, Proliferation-associated gene protein, PAG, Thioredoxin peroxidase 2, Thioredoxin-dependent peroxide reductase 2, PRDX1, PAGA, PAGB, TDPX2

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

**Precautions**

PRDX1 / Peroxiredoxin 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PRDX1 / Peroxiredoxin 1 Antibody - 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<sub>2</sub>O<sub>2</sub> (PubMed:<a href="http://www.uniprot.org/citations/9497357" target="\_blank">9497357</a>). 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

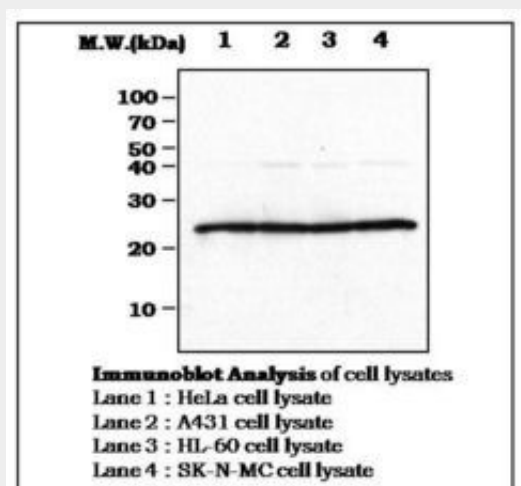
**Volume**  
50 µl

## PRDX1 / Peroxiredoxin 1 Antibody - Protocols

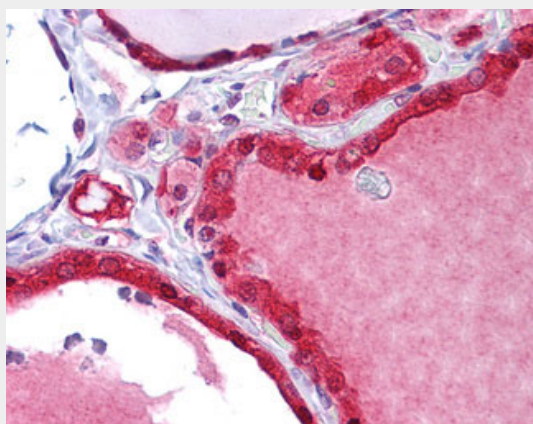
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PRDX1 / Peroxiredoxin 1 Antibody - Images



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Anti-PRDX1 / Peroxiredoxin 1 antibody IHC of human thyroid.

## PRDX1 / Peroxiredoxin 1 Antibody - 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- $\alpha$  by regulating the intracellular concentrations of  $H_2O_2$ . Reduces an intramolecular disulfide bond in GPD5 that gates the ability to GPD5 to drive postmitotic motor neuron differentiation (By similarity).

#### **PRDX1 / Peroxiredoxin 1 Antibody - References**

Prosperi M.T., et al. J. Biol. Chem. 268:11050-11056(1993).  
Shau H., et al. Immunogenetics 40:129-134(1994).  
Kalnina N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Ebert L., et al. Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.  
Goshima N., et al. Nat. Methods 5:1011-1017(2008).