

**PRDX1 / Peroxiredoxin 1 Antibody (Internal)**  
**Goat Polyclonal Antibody**  
**Catalog # ALS13105****Specification**

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**PRDX1 / Peroxiredoxin 1 Antibody (Internal) - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">Q06830</a>
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Horse, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	22kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

**PRDX1 / Peroxiredoxin 1 Antibody (Internal) - 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

**Target/Specificity**

Human PRDX1 / Peroxiredoxin 1. Reported variants represent identical protein (NP\_002565.1, NP\_859047.1, NP\_859048.1).

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

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

**PRDX1 / Peroxiredoxin 1 Antibody (Internal) - 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 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

#### PRDX1 / Peroxiredoxin 1 Antibody (Internal) - Protocols

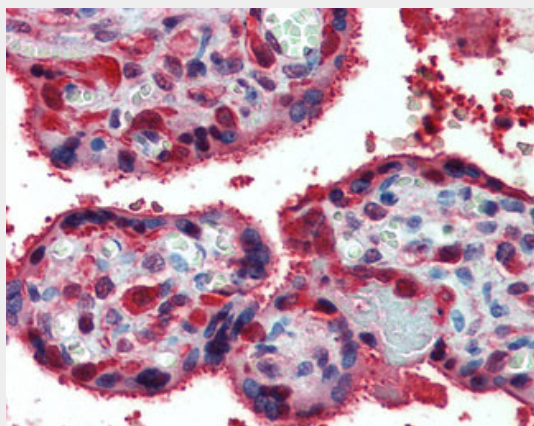
Provided below are standard protocols that you may find useful for product applications.

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

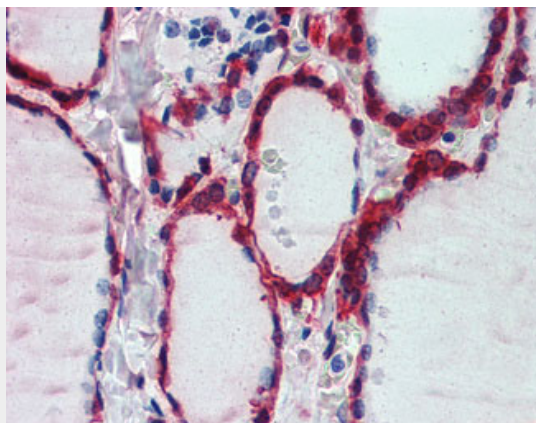
#### PRDX1 / Peroxiredoxin 1 Antibody (Internal) - Images



Antibody (0.01 ug/ml) staining of HepG2 lysate (35 ug protein in RIPA buffer).



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



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

#### **PRDX1 / Peroxiredoxin 1 Antibody (Internal) - 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 (Internal) - 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).