

**PRDX4 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12100c**

**Specification**

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**PRDX4 Antibody (Center) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">Q13162</a>
Other Accession	<a href="#">Q9Z0V5</a> , <a href="#">O08807</a> , <a href="#">Q9BGI2</a> , <a href="#">NP_006397.1</a>
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30540
Antigen Region	82-110

**PRDX4 Antibody (Center) - Additional Information**

**Gene ID** 10549

**Other Names**

Peroxiredoxin-4, Antioxidant enzyme AOE372, AOE37-2, Peroxiredoxin IV, Prx-IV, Thioredoxin peroxidase A0372, Thioredoxin-dependent peroxide reductase A0372, PRDX4

**Target/Specificity**

This PRDX4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 82-110 amino acids from the Central region of human PRDX4.

**Dilution**

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PRDX4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PRDX4 Antibody (Center) - Protein Information**

**Name** PRDX4

**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. Regulates the activation of NF-kappa-B in the cytosol by a modulation of I-kappa-B-alpha phosphorylation.

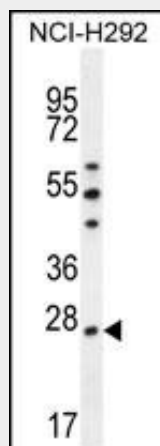
**Cellular Location**

Cytoplasm. Endoplasmic reticulum. Note=Cotranslationally translocated to and retained within the endoplasmic reticulum. A small fraction of the protein is cytoplasmic.

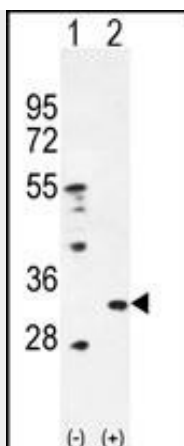
**PRDX4 Antibody (Center) - Protocols**

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

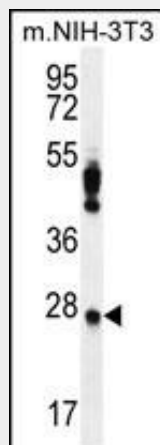
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PRDX4 Antibody (Center) - Images**

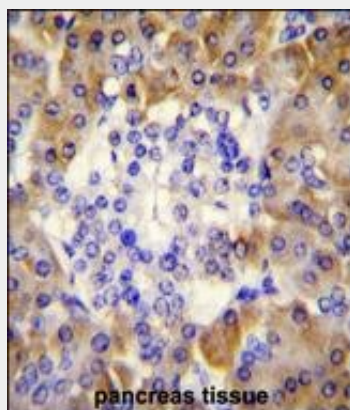
PRDX4 Antibody (Center) (Cat. #AP12100c) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the PRDX4 antibody detected the PRDX4 protein (arrow).



Western blot analysis of PRDX4 (arrow) using rabbit polyclonal PRDX4 Antibody (Center) (Cat. #AP12100c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PRDX4 gene.



PRDX4 Antibody (Center) (Cat. #AP12100c) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the PRDX4 antibody detected the PRDX4 protein (arrow).



PRDX4 Antibody (Center) (Cat. #AP12100c) immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PRDX4 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **PRDX4 Antibody (Center) - Background**

The protein encoded by this gene is an antioxidant enzyme

and belongs to the peroxiredoxin family. The protein is localized to the cytoplasm. Peroxidases of the peroxiredoxin family reduce hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. This protein has been found to play a regulatory role in the activation of the transcription factor NF-kappaB.

#### **PRDX4 Antibody (Center) - References**

Jamaluddin, M., et al. J. Virol. 84(18):9533-9545(2010)  
Davila, S., et al. Genes Immun. 11(3):232-238(2010)  
Edvardsen, H., et al. Pharmacogenomics J. (2010) In press :  
Wang, H.Q., et al. FEBS Lett. 583(9):1511-1515(2009)  
Starr, J.M., et al. Mech. Ageing Dev. 129(12):745-751(2008)