

# PRDX4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PRDX4.

Catalog # AT3423a

## Product Information

---

<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">Q13162</a>
<b>Other Accession</b>	<a href="#">BC003609</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG3 Kappa
<b>Clone Names</b>	2C12
<b>Calculated MW</b>	30540

## Additional Information

---

<b>Gene ID</b>	10549
<b>Other Names</b>	Peroxiredoxin-4, Antioxidant enzyme AOE372, AOE37-2, Peroxiredoxin IV, Prx-IV, Thioredoxin peroxidase AO372, Thioredoxin-dependent peroxide reductase A0372, PRDX4
<b>Target/Specificity</b>	PRDX4 (AAH03609, 51 a.a. ~ 150 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IHC~~1:100~500
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	PRDX4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

---

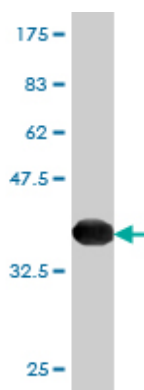
The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. The protein is localized to the cytoplasm. Peroxidases of the peroxiredoxin family reduce hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from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

## References

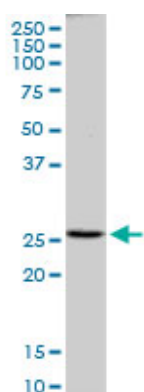
---

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. *Genes Immun*, 2010 Apr. PMID 20237496. SNPs in genes coding for ROS metabolism and signalling in association with docetaxel clearance. Edvardsen H, et al. *Pharmacogenomics J*, 2010 Feb 16. PMID 20157331. TNF-related apoptosis-inducing ligand suppresses PRDX4 expression. Wang HQ, et al. *FEBS Lett*, 2009 May 6. PMID 19364504. Oxidative stress, telomere length and biomarkers of physical aging in a cohort aged 79 years from the 1932 Scottish Mental Survey. Starr JM, et al. *Mech Ageing Dev*, 2008 Dec. PMID 18977241. Involvement of peroxiredoxin IV in the 16 $\alpha$ -hydroxyestrone-induced proliferation of human MCF-7 breast cancer cells. Lee SU, et al. *Cell Biol Int*, 2008 Apr. PMID 18272409.

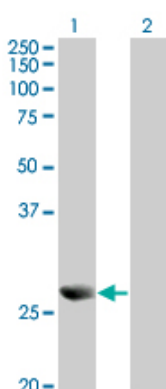
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .

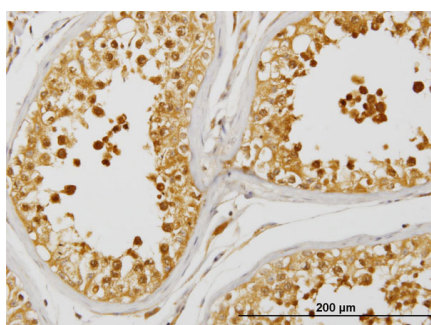


PRDX4 monoclonal antibody (M01), clone 2C12. Western Blot analysis of PRDX4 expression in human liver.



Western Blot analysis of PRDX4 expression in transfected 293T cell line by PRDX4 monoclonal antibody (M01), clone 2C12.

Lane 1: PRDX4 transfected lysate (30.5 KDa).  
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to PRDX4 on formalin-fixed paraffin-embedded human testis. [antibody concentration 3  $\mu$ g/ml]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.