

# Summary

Production Name	PRDX6 (10R16) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human, Mouse, Rat

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

### Immunogen

Gene Name	PRDX6
Alternative Names	Peroxiredoxin-6; Antioxidant protein 2; Liver 2D page spot 40; NSGPx; PRDX6; AOP2;
	KIAA;
Gene ID	9588.0
SwissProt ID	P30041.A synthetic peptide of human Peroxiredoxin 6

# Application

Dilution Ratio	WB: 1:1000
Molecular Weight	25kDa



### Background

Involved in redox regulation of the cell. Can reduce H(2)O(2) and short chain organic, fatty acid, and phospholipid hydroperoxides. May play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury. Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively (PubMed: <a href="http://www.uniprot.org/citations/9497358" target=" blank">9497358</a>, PubMed:<a href="http://www.uniprot.org/citations/10893423" target=" blank">10893423</a>). Can reduce H(2)O(2) and short chain organic, fatty acid, and phospholipid hydroperoxides (PubMed:<a href="http://www.uniprot.org/citations/10893423" target=" blank">10893423</a>). Also has phospholipase activity, can therefore either reduce the oxidized sn-2 fatty acyl group of phospholipids (peroxidase activity) or hydrolyze the sn-2 ester bond of phospholipids (phospholipase activity) (PubMed: <a href="http://www.uniprot.org/citations/10893423" target=" blank">10893423</a>, PubMed:<a href="http://www.uniprot.org/citations/26830860" target=" blank">26830860</a>). These activities are dependent on binding to phospholipids at acidic pH and to oxidized phospholipds at cytosolic pH (PubMed: <a href="http://www.uniprot.org/citations/10893423" target=" blank">10893423</a>). Plays a role in cell protection against oxidative stress by detoxifying peroxides and in phospholipid homeostasis (PubMed:<a href="http://www.uniprot.org/citations/10893423" target=" blank">10893423</a>). Exhibits acyl-CoA-dependent lysophospholipid acyltransferase which mediates the conversion of lysophosphatidylcholine (1-acyl-sn-glycero-3- phosphocholine or LPC) into phosphatidylcholine (1,2-diacylsn-glycero- 3-phosphocholine or PC) (PubMed:<a href="http://www.uniprot.org/citations/26830860" target=" blank">26830860</a>). Shows a clear preference for LPC as the lysophospholipid and for palmitoyl CoA as the fatty acyl substrate (PubMed:<a href="http://www.uniprot.org/citations/26830860" target=" blank">26830860</a>).

## **Research Area**

## Image Data



Western blot detection of Peroxiredoxin 6 in A549, HL-60, U2OS cell lysates using Peroxiredoxin 6 antibody (1:1000 diluted).



**Note** For research use only.