

**Prdx6 Antibody**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	25	Rabbit	#P30041	9588

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

Prdx6 Antibody recognizes endogenous levels of total Prdx6 protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human Prdx6 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

Peroxiredoxin 6 (Prdx6) belongs to an antioxidant enzyme family of non-seleno peroxidases (prdx). It is a unique member of the Prdx family exhibiting both glutathione peroxidase and phospholipase A2 activities (1,2). Prdx6 regulates phospholipid turnover as well as protects cells against oxidative injury. Prdx6 is expressed in all major organs with a particularly high level in lung where it regulates lung surfactant phospholipid synthesis and turnover (3-5). Studies show Prdx6 is aberrantly expressed in various cancers and promotes cancer cell metastasis and invasion (6,7). Elevated expression of Prdx6 and other prdx family members contributes to drug resistance in cancer cells (8,9). Prdx6 is also expressed in neutrophils, where it regulates the function of these cells and activates NADPH oxidase (Nox2) (10-12).

**Background References**

1. Kang, S.W. et al. (1998) *J Biol Chem* 273, 6303-11.
2. Chen, J.W. et al. (2000) *J Biol Chem* 275, 28421-7.
3. Manevich, Y. and Fisher, A.B. (2005) *Free Radic Biol Med* 38, 1422-32.
4. Schremmer, B. et al. (2007) *Subcell Biochem* 44, 317-44.
5. Lee, S.B. et al. (2009) *Mol Cells* 28, 583-8.
6. Ho, J.N. et al. (2010) *Mol Cancer Ther* 9, 825-32.
7. Yun, H.M. et al. (2014) *Free Radic Biol Med* 69, 367-76.
8. Pak, J.H. et al. (2011) *Cancer Invest* 29, 21-8.
9. Kalinina, E.V. et al. (2012) *Bull Exp Biol Med* 153, 878-81.
10. Chatterjee, S. et al. (2011) *J Biol Chem* 286, 11696-706.
11. Ambruso, D.R. et al. (2012) *Biochim Biophys Acta* 1823, 306-15.
12. Ambruso, D.R. (2013) *Methods Enzymol* 527, 145-67.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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