

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

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4. Schremmer, B. et al. (2007) *Subcell Biochem* 44, 317-44.
5. Lee, S.B. et al. (2009) *Mol Cells* 28, 583-8.
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8. Pak, J.H. et al. (2011) *Cancer Invest* 29, 21-8.
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10. Chatterjee, S. et al. (2011) *J Biol Chem* 286, 11696-706.
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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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