

PRDX6 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2927b**Specification**

PRDX6 Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P30041
Other Accession	O35244 , O9TSX9 , O08709 , O2PFL9 , O5ZJF4 , O77834
Reactivity	Human
Predicted	Bovine, Chicken, Monkey, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25035
Antigen Region	197-224

PRDX6 Antibody (C-term) - Additional Information**Gene ID** 9588**Other Names**

Peroxiredoxin-6, 1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, aiPLA2, 311-, Antioxidant protein 2, Liver 2D page spot 40, Non-selenium glutathione peroxidase, NSGPx, Red blood cells page spot 12, PRDX6, AOP2, KIAA0106

Target/Specificity

This PRDX6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 197-224 amino acids from the C-terminal region of human PRDX6.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

PRDX6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PRDX6 Antibody (C-term) - Protein Information

Name PRDX6**Synonyms** AOP2, KIAA0106

Function Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively (PubMed:[9497358](#), PubMed:[10893423](#)). Can reduce H₂O₂ and short chain organic, fatty acid, and phospholipid hydroperoxides (PubMed:[10893423](#)). 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:[10893423](#), PubMed:[26830860](#)). These activities are dependent on binding to phospholipids at acidic pH and to oxidized phospholipids at cytosolic pH (PubMed:[10893423](#)). Plays a role in cell protection against oxidative stress by detoxifying peroxides and in phospholipid homeostasis (PubMed:[10893423](#)). Exhibits acyl-CoA-dependent lysophospholipid acyltransferase which mediates the conversion of lysophosphatidylcholine (1-acyl-sn-glycero-3-phosphocholine or LPC) into phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine or PC) (PubMed:[26830860](#)). Shows a clear preference for LPC as the lysophospholipid and for palmitoyl CoA as the fatty acyl substrate (PubMed:[26830860](#)).

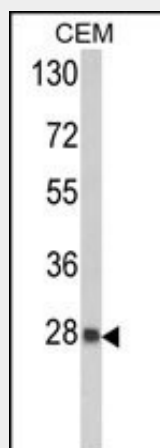
Cellular Location

Cytoplasm. Lysosome {ECO:0000250|UniProtKB:O35244}. Note=Also found in lung secretory organelles (lamellar bodies). {ECO:0000250|UniProtKB:O35244}

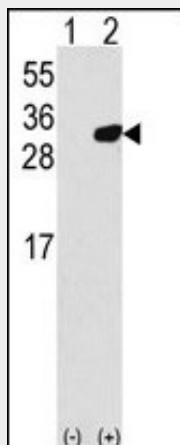
PRDX6 Antibody (C-term) - Protocols

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

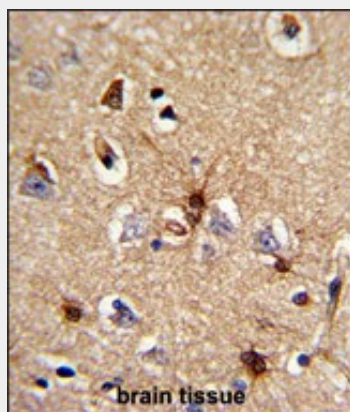
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRDX6 Antibody (C-term) - Images

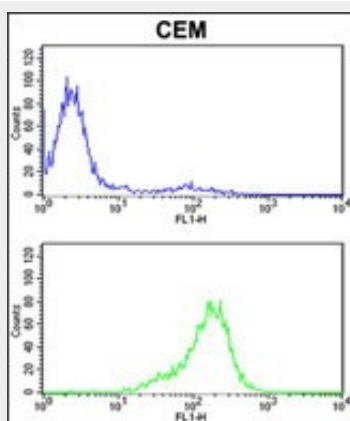
Western blot analysis of PRDX6 Antibody (C-term) (Cat. #AP2927b) in CEM cell line lysates (35ug/lane). PRDX6 (arrow) was detected using the purified Pab.



Western blot analysis of PRDX6 (arrow) using rabbit polyclonal PRDX6 Antibody (C-term) (RB20894). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRDX6 gene (Lane 2) .



Formalin-fixed and paraffin-embedded human brain tissue reacted with PRDX6 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



PRDX6 Antibody (C-term) (Cat. #AP2927b) flow cytometric analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PRDX6 Antibody (C-term) - Background

PRDX6 is a member of the thiol-specific antioxidant protein family. This protein is a bifunctional

enzyme with two distinct active sites. It is involved in redox regulation of the cell; it can reduce H_2O_2 and short chain organic, fatty acid, and phospholipid hydroperoxides. It may play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury.

PRDX6 Antibody (C-term) - References

Sorokina, E.M., et.al., Am. J. Physiol. Lung Cell Mol. Physiol. 297 (5), L871-L880 (2009)
Manevich, Y., et.al., Arch. Biochem. Biophys. 485 (2), 139-149 (2009)