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PRDX6 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2927b

Specification

PRDX6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	P30041

PRDX6 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP2927b was selected from the C-term region of human PRDX6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PRDX6 Antibody (C-term) Blocking Peptide - 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 H(2)O(2) 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 phospholipds 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) Blocking Peptide - Protocols

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

- Blocking Peptides

PRDX6 Antibody (C-term) Blocking Peptide - Images

PRDX6 Antibody (C-term) Blocking Peptide - Background

PRDX6is 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(2)O(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) Blocking Peptide - 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)