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PRDX6 Antibody

Rabbit mAb
Catalog # AP91214

Product Information

Application	WB, IF, ICC, IP
Primary Accession	P30041
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Peroxiredoxin-6; Antioxidant protein 2; Liver 2D page spot 40; NSGPx; PRDX6; AOP2; KIAA;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	25035

Additional Information

Dilution	WB 1:500~1:1000 ICC/IF 1:50~1:200 IP 1:20
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PRDX6
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

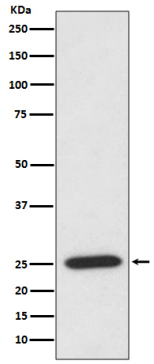
Name	PRDX6
Synonyms	AOP2, KIAA0106
Function	Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively (PubMed:10893423, PubMed:9497358). Can reduce H(2)O(2) and short chain organic, fatty acid, and phospholipid hydroperoxides (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}

Images



Western blot analysis of PRDX6 expression in HeLa cell lysate.

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