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KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1636

Product Information

Application	WB, FC, ICC
Primary Accession	P30041
Reactivity	Rat, Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB910
Calculated MW	25035
Gene Name	PRDX6
Aliases	Peroxiredoxin 6; AiPLA2; NSGPx; AOP2; KIAA0106; 1-Cys; PRX; P29; Acidic Calcium-Independent Phospholipase A2; Lysophosphatidylcholine Acyltransferase 5; Glutathione-Dependent Peroxiredoxin; Non-Selenium Glutathione Peroxidase; Red Blood Cells Page Spot 12; Lyso-PC Acyltransferase 5; LPC Acyltransferase 5; Antioxidant Protein 2; Liver 2D Page Spot 40; 1-Cys Peroxiredoxin; Peroxiredoxin-6; 24 KDa Protein; 1-Cys PRX; MGC46173; LPCAT-5; Epididymis Secretory Sperm Binding Protein Li 128m; EC 1.11.1.27; EC 1.11.1.15; EC 2.3.1.23; HEL-S-128m; EC 3.1.1.4
Immunogen	A synthesized peptide derived from human PRDX6

Additional Information

Gene ID	9588
Other Names	Peroxiredoxin-6, 1.11.1.27, 1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, aiPLA2, 3.1.1.4, Antioxidant protein 2, Glutathione-dependent peroxiredoxin, Liver 2D page spot 40, Lysophosphatidylcholine acyltransferase 5, LPC acyltransferase 5, LPCAT-5, Lyso-PC acyltransferase 5, 2.3.1.23, Non-selenium glutathione peroxidase, NSGPx, Red blood cells page spot 12, PRDX6, AOP2, KIAA0106

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}

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