10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1636

Specification

KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P30041
Reactivity	**Rat, Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 25 kDa , observed , 25 kDa KDa**
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**

KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody - 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

KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody - Protein Information

Name PRDX6

Synonyms AOP2, KIAA0106

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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

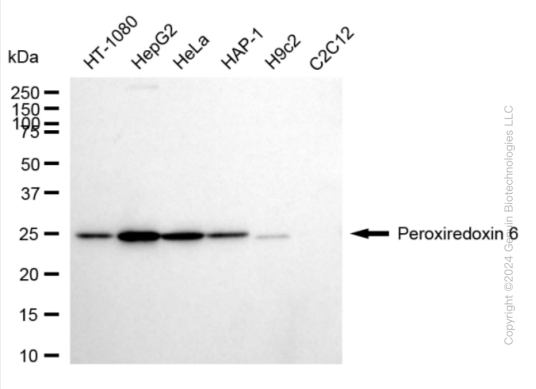
Cytoplasm. Lysosome {ECO:0000250|UniProtKB:O35244}. Note=Also found in lung secretory organelles (lamellar bodies). {ECO:0000250|UniProtKB:O35244}

KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Peroxiredoxin 6 Rabbit Monoclonal Antibody - Images



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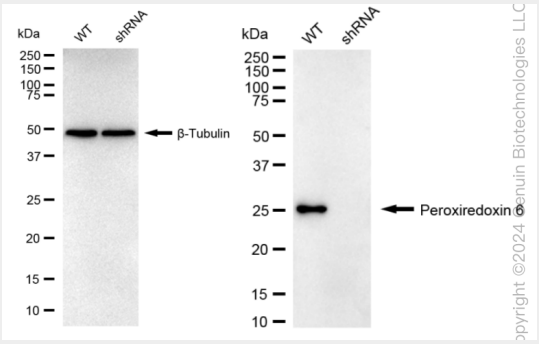
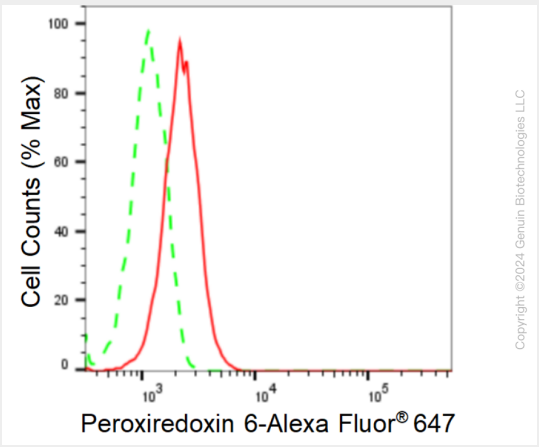
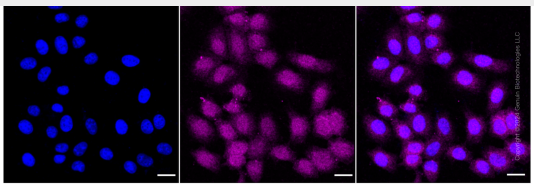
Western blotting analysis using anti-Peroxiredoxin 6 antibody (Cat#AGI1636). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peroxiredoxin 6 antibody (Cat#AGI1636, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Peroxiredoxin 6 antibody (Cat#AGI1636). Peroxiredoxin 6 expression in wild type (WT) and Peroxiredoxin 6 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Peroxiredoxin 6 antibody (Cat#AGI1636, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Peroxiredoxin 6 expression in HepG2 cells using anti-Peroxiredoxin 6 antibody (Cat#AGI1636, 1:2,000). Green, isotype control; red, Peroxiredoxin 6.



Immunocytochemical staining of HepG2 cells with anti-Peroxiredoxin 6 antibody (Cat#AGI1636, 1:1,000). Nuclei were stained blue with DAPI; Peroxiredoxin 6 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.