

# KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1638

### **Specification**

## KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC
Primary Accession P30048
Reactivity Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 28 kDa , observed , 24 kDa KDa

Gene Name PRDX3

Aliases

Peroxiredoxin 3; AOP-1; Antioxidant
Protein 1; SP-22; MER5; AOP1;

Thioredoxin-Dependent Peroxide

Reductase, Mitochondrial;

Thioredoxin-Dependent Peroxiredoxin 3; Protein MER5 Homolog; Peroxiredoxin III; Prx-III; HBC189; Epididymis Secretory

Sperm Binding Protein; Peroxiredoxin-3; EC 1.11.1.24; EC 1.11.1.15; PRO1748; SCAR32;

**PPPCD** 

Immunogen A synthesized peptide derived from human

Peroxiredoxin 3

### KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody - Additional Information

Gene ID **10935** 

**Other Names** 

Thioredoxin-dependent peroxide reductase, mitochondrial, 1.11.1.24, Antioxidant protein 1, AOP-1, HBC189, Peroxiredoxin III, Prx-III, Peroxiredoxin-3, Protein MER5 homolog, Thioredoxin-dependent peroxiredoxin 3, PRDX3, AOP1

## KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody - Protein Information

Name PRDX3

Synonyms AOP1

#### **Function**

Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides (PubMed:<a href="http://www.uniprot.org/citations/17707404" target="\_blank">17707404</a>, PubMed:<a href="http://www.uniprot.org/citations/29438714" target="\_blank">29438714</a>, PubMed:<a href="http://www.uniprot.org/citations/33889951" target="\_blank">33889951</a>, PubMed:<a href="http://www.uniprot.org/citations/7733872" target="\_blank">7733872</a>). Acts synergistically with MAP3K13 to regulate the activation of



NF-kappa-B in the cytosol (PubMed:<a href="http://www.uniprot.org/citations/12492477" target="\_blank">12492477</a>). Required for the maintenance of physical strength (By similarity).

#### **Cellular Location**

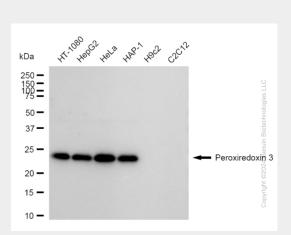
Mitochondrion. Cytoplasm. Early endosome. Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

### KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody - Protocols

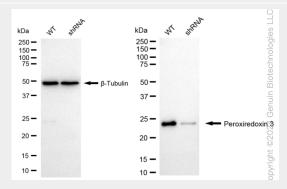
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-Peroxiredoxin 3 Rabbit Monoclonal Antibody - Images



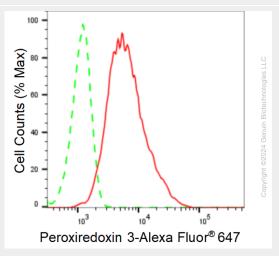
Western blotting analysis using anti-Peroxiredoxin 3 antibody (Cat#AGI1638). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peroxiredoxin 3 antibody (Cat#AGI1638, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



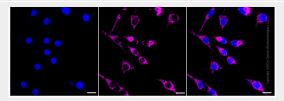
Western blotting analysis using anti-Peroxiredoxin 3 antibody (Cat#AGI1638). Peroxiredoxin 3



expression in wild type (WT) and Peroxiredoxin 3 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Peroxiredoxin 3 antibody (Cat#AGI1638, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Peroxiredoxin 3 expression in HeLa cells using Peroxiredoxin 3 antibody (Cat#AGI1638, 1:2,000). Green, isotype control; red, Peroxiredoxin 3.



Immunocytochemical staining of Hela cells with anti-Peroxiredoxin 3 antibody (Cat#AGI1638, 1:1,000). Nuclei were stained blue with DAPI; Peroxiredoxin 3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20  $\mu$ m.