

**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	<a href="#">P30048</a>
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: [17707404](http://www.uniprot.org/citations/17707404) target="\_blank">17707404</a>, PubMed: [29438714](http://www.uniprot.org/citations/29438714) target="\_blank">29438714</a>, PubMed: [33889951](http://www.uniprot.org/citations/33889951) target="\_blank">33889951</a>, PubMed: [7733872](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

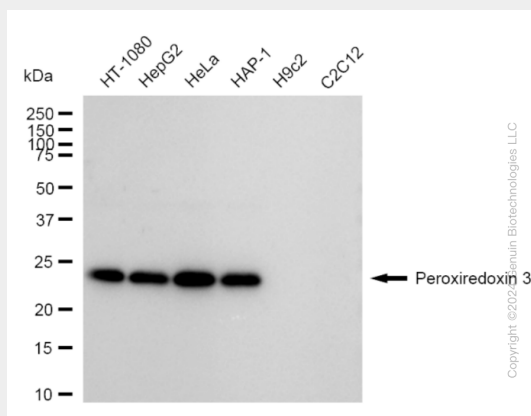
Mitochondrion. Cytoplasm. Early endosome. Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

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

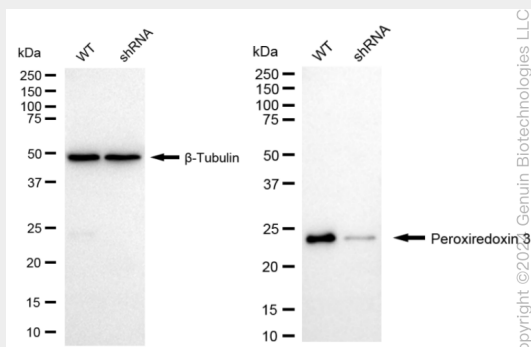
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

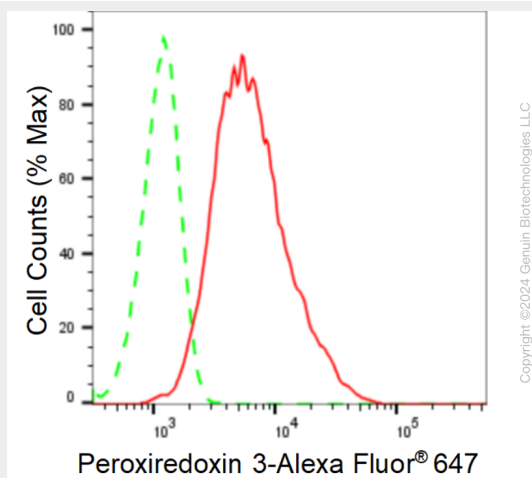


Western blotting analysis using anti-Peroxiredoxin 3 antibody (Cat#AGI1638). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peroxiredoxin 3 antibody (Cat#AGI1638, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody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

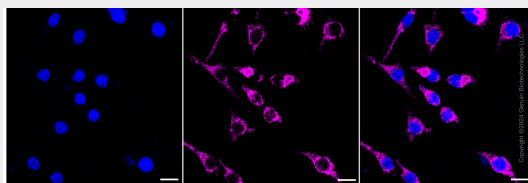


Western blotting analysis using anti-Peroxiredoxin 3 antibody (Cat#AGI1638). Peroxiredoxin 3

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.