

**KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1065****Specification****KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">Q06830</a>
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 22 kDa , observed, 22 kDa kDa
Gene Name	PRDX1
Aliases	PRDX1; Peroxiredoxin 1; NKEFA; PAGA; Thioredoxin-Dependent Peroxide Reductase; Natural Killer Cell-Enhancing Factor A; Proliferation-Associated Gene Protein; Thioredoxin-Dependent Peroxiredoxin 1; Thioredoxin Peroxidase; Peroxiredoxin-1; NKEF-A; TDPX2; PAGB; PAG; Epididymis Secretory Sperm Binding Protein; Natural Killer-Enhancing Factor A; Proliferation-Associated Gene A; EC 1.11.1.24; EC 1.11.1.15; EC 1.11.1; MSP23; PRX1; PRXI
Immunogen	A synthesized peptide derived from human PRDX1

**KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody - Additional Information**

Gene ID	5052
<b>Other Names</b>	
Peroxiredoxin-1, 1.11.1.24, Natural killer cell-enhancing factor A, NKEF-A, Proliferation-associated gene protein, PAG, Thioredoxin peroxidase 2, Thioredoxin-dependent peroxide reductase 2, Thioredoxin-dependent peroxiredoxin 1, PRDX1, PAGA, PAGB, TDPX2	

**KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody - Protein Information****Name** PRDX1**Synonyms** PAGA, PAGB, TDPX2**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 and as sensor of hydrogen peroxide-mediated signaling events. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H<sub>2</sub>O<sub>2</sub> (PubMed:<a

href="http://www.uniprot.org/citations/9497357" target="\_blank">9497357</a>). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation (By similarity).

#### Cellular Location

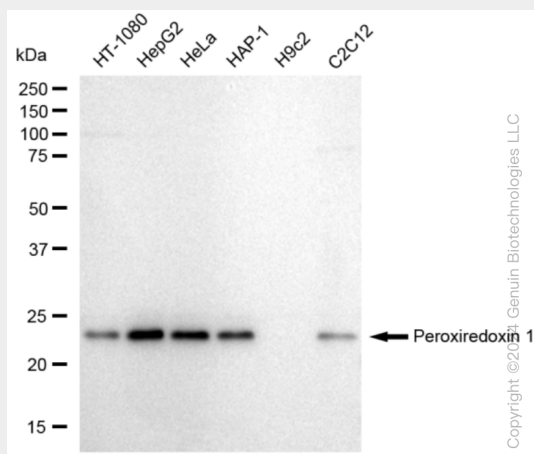
Cytoplasm. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

### KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody - Protocols

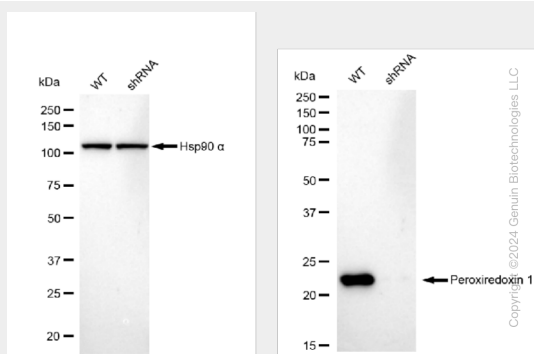
Provided below are standard protocols that you may find useful for product applications.

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

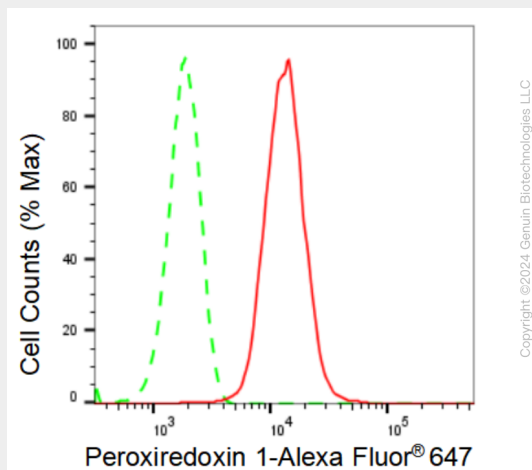
### KD-Validated Anti-Peroxiredoxin 1 Rabbit Monoclonal Antibody - Images



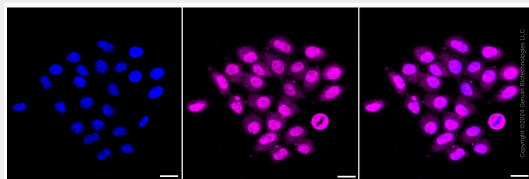
Western blotting analysis using anti-Peroxiredoxin 1 antibody (Cat#AGI1065). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Peroxiredoxin 1 antibody (Cat#AGI1065, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Peroxiredoxin 1 antibody (Cat#AGI1065). Peroxiredoxin 1 expression in wild type (WT) and peroxiredoxin 1 shRNA knockdown (KD) Hela cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Peroxiredoxin 1 antibody (Cat#AGI1065, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Peroxiredoxin 1 expression in HepG2 cells using Peroxiredoxin 1 antibody (Cat#AGI1065, 1:2,000). Green, isotype control; red, Peroxiredoxin 1.



Immunocytochemical staining of HepG2 cells with Peroxiredoxin 1 antibody (Cat#AGI1065, 1:1,000). Nuclei were stained blue with DAPI; Peroxiredoxin 1 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.