

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1818

Specification

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC
Primary Accession P07203
Reactivity Rat, Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 22 kDa, observed, 20 kDa KDa

Gene Name GPX

Aliases GPX1; Glutathione Peroxidase 1; Cellular Glutathione Peroxidase; Selenoprotein

Glutathione Peroxidase; Selenoprotein GPX1; EC 1.11.1.9; GSHPx-1; EC 1.11.1;

GSHPX1; **GPX-1**; **GPXD**

Immunogen A synthesized peptide derived from human

Glutathione Peroxidase 1

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 2876

Other Names

Glutathione peroxidase 1, GPx-1, GSHPx-1, 1.11.1.9, Cellular glutathione peroxidase, Phospholipid-hydroperoxide glutathione peroxidase GPX1, 1.11.1.12, GPX1 (HGNC:4553)

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody - Protein Information

Name GPX1 (HGNC:4553)

Function

Catalyzes the reduction of hydroperoxides in a glutathione- dependent manner thus regulating cellular redox homeostasis (PubMed:11115402, PubMed:36608588). Can reduce small soluble hydroperoxides such as H2O2, cumene hydroperoxide and tert-butyl hydroperoxide, as well as several fatty acid-derived hydroperoxides (PubMed:11115402, PubMed:36608588). In platelets catalyzes the reduction of 12-hydroperoxyeicosatetraenoic acid, the primary product of the arachidonate 12-lipoxygenase pathway (PubMed:11115402).



Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P11352}. Mitochondrion {ECO:0000250|UniProtKB:P11352}

Tissue Location

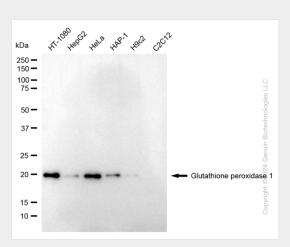
Expressed in platelets (at protein level).

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody - Protocols

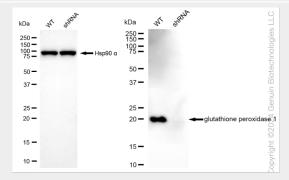
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-Glutathione Peroxidase 1 Rabbit Monoclonal Antibody - Images



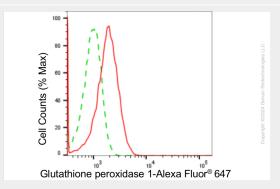
Western blotting analysis using anti-glutathione peroxidase 1 antibody (Cat#AGI1818). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-glutathione peroxidase 1 antibody (Cat#AGI1818, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



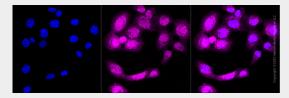
Western blotting analysis using anti-glutathione peroxidase 1 antibody (Cat#AGI1818). Glutathione peroxidase 1 expression in wild type (WT) and glutathione peroxidase 1 (GPX1) shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control.



The blot was incubated with anti-glutathione peroxidase 1 antibody (Cat#AGI1818, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of glutathione peroxidase 1 expression in HT-1080 cells using anti-glutathione peroxidase 1 antibody (Cat#AGI1818, 1:2,000). Green, isotype control; red, glutathione peroxidase 1.



Immunocytochemical staining of HT-1080 cells with anti-Glutathione peroxidase 1 antibody(Cat #AGI1818, 1:1,000). Nuclei were stained blue with DAPI; Glutathione peroxidase 1 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.