

**Catalog #: 61599** 

#### **Aliases**

GPX4; Glutathione Peroxidase 4; PHGPx; MCSP; Phospholipid Hydroperoxide Glutathione Peroxidase GPX4; Phospholipid Hydroperoxidase; Selenoprotein GPX4; EC 1.11.1.12; GSHPx-4; GPx-4; Phospholipid Hydroperoxide Glutathione Peroxidase, Mitochondrial; Glutathione Peroxidase 4 (Phospholipid Hydroperoxidase); Epididymis Secretory Sperm Binding Protein; Sperm Nucleus Glutathione Peroxidase; EC 1.11.1.9; EC 1.11.1; SnPHGPx; SnGPx; SMDS

## **Background**

Gene Name: GPX4 NCBI Gene Entry: 2879 UniProt Entry: P36969

# **Application Information**

Molecular Weight: Predicted, 22 kDa; observed, 17 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 25GB2980

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC),

immunohistochemistry (IHC)

#### Immunogen

A synthesized peptide derived from human GPX4

## **Isotype**

Rabbit IgG

### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

## **Storage**

Store at -20 °C for one year.

#### **Recommended Dilutions**

Western Blotting (WB): 1:1,000-1:5,000

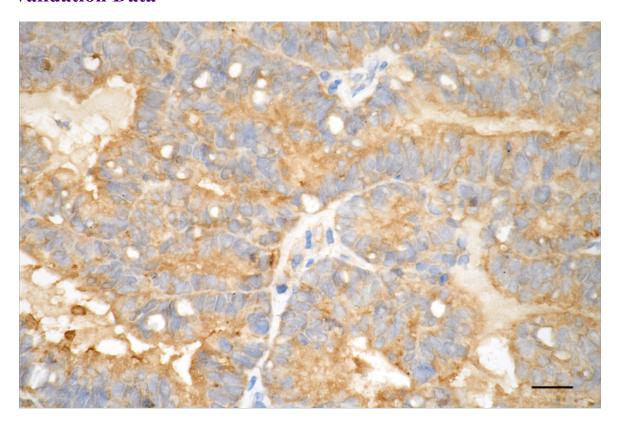
Flow Cytometry (FCM): 1:2,000

Immunocytochemistry (IC): 1:100-1:1,000

Immunohistochemistry (IHC): 1:100-1:200

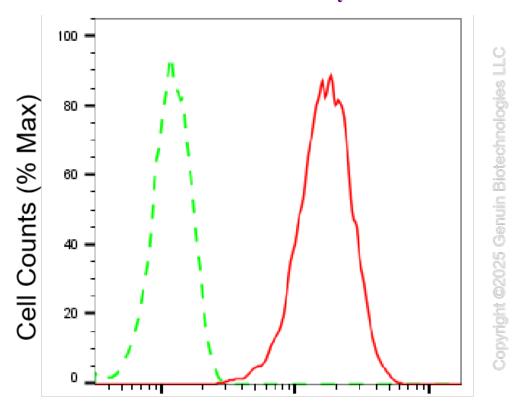
**Note:** This product is for research use only.

#### Validation Data



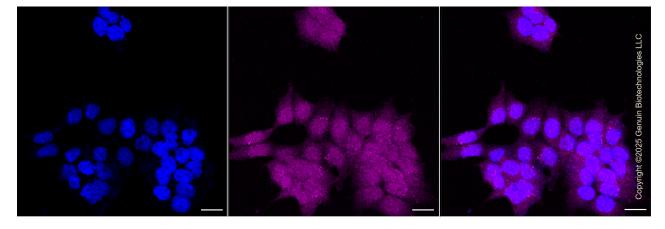
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Immunohistochemistry was performed on paraffin-embedded human endometrial carcinoma using anti-glutathione peroxidase 4 antibody (Cat#61599, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.

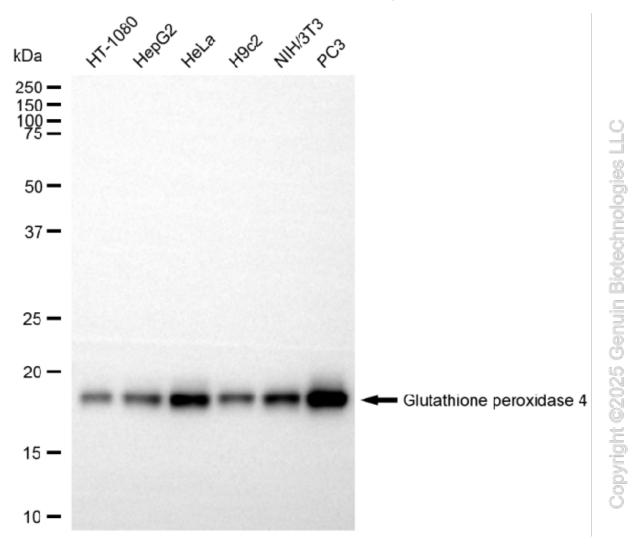


# Glutathione peroxidase 4-Alexa Fluor® 647

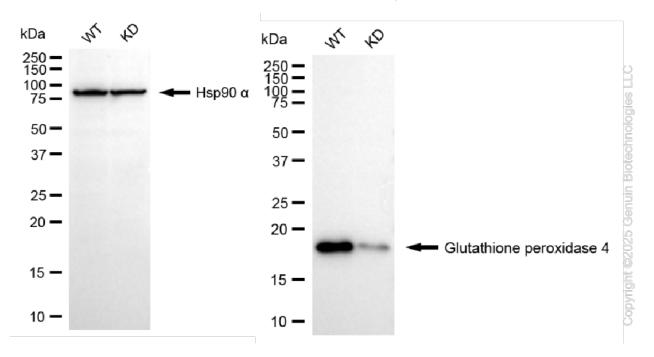
Flow cytometric analysis of Glutathione peroxidase 4 expression in HAP-1 cells using anti-Glutathione peroxidase 4 antibody (Cat#61599, 1:2,000). Green, isotype control; red, Glutathione peroxidase 4.



Immunocytochemical staining of HAP-1 cells with anti-Glutathione peroxidase 4 antibody (Cat#61599, 1:1,000). Nuclei were stained blue with DAPI; Glutathione peroxidase 4 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.



Western blotting analysis using anti-glutathione peroxidase 4 antibody (Cat#61599). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-glutathione peroxidase 4 antibody (Cat#61599, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).



Western blotting analysis using anti-glutathione peroxidase 4 antibody (Cat#61599). Glutathione peroxidase 4 expression in wild type (WT) and glutathione peroxidase 4 (GPX4) knockdown (KD) HSHC cells with 20 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-glutathione peroxidase 4 antibody (Cat#61599, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).