

## Glutathione Peroxidase 1 Antibody

Catalog No: #48490

Package Size: #48490-1 50ul #48490-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

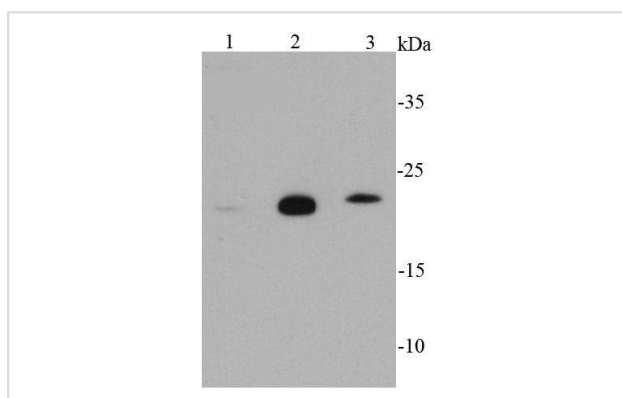
## Description

Product Name	Glutathione Peroxidase 1 Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	C5-F6
Purification	ProA affinity purified
Applications	WB, ICC, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	AL033363 antibody Cellular glutathione peroxidase antibody Glutathione peroxidase 1 antibody Glutathione peroxidase antibody GPx 1 antibody GPx-1 antibody GPX1 antibody GPX1_HUMAN antibody GPXD antibody GSHPx-1 antibody GSHPX1 antibody MGC14399 antibody MGC88245 antibody
Accession No.	Swiss-Prot#:P07203
Uniprot	P07203
GeneID	2876;
Calculated MW	22 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

## Application Details

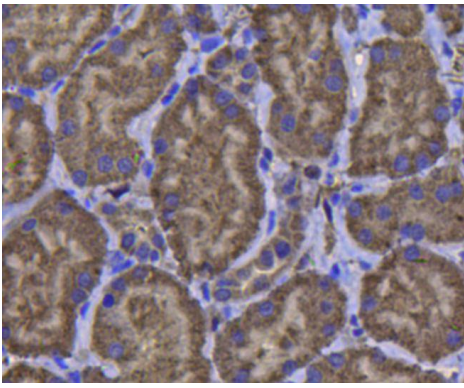
WB: 1:1,000 IHC: 1:200 ICC: 1:200 FC: 1:100-1:200

## Images

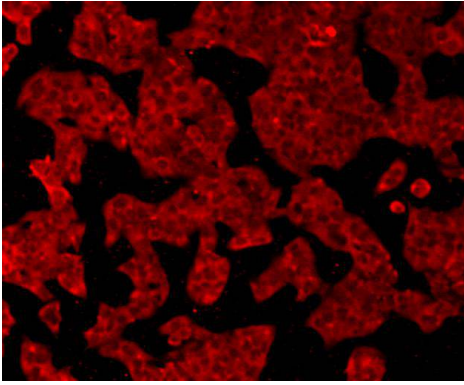


Positive control: Western blot analysis of GPX1 on different cell lysates using anti-GPX1 antibody at 1/1000 dilution.

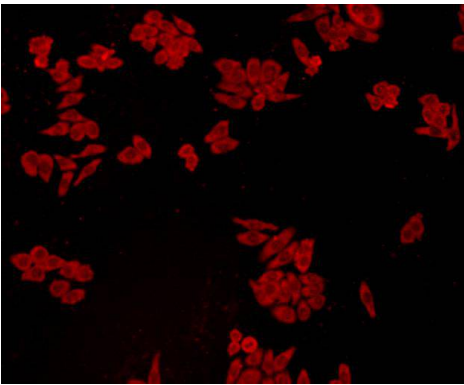
Positive control: Lane 1: THP-1 Lane 2: HepG2  
Lane 3: 293T



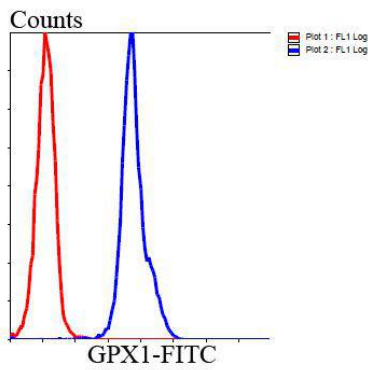
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-GPX1 antibody. Counter stained with hematoxylin.



ICC staining GPX1 in HeLa cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GPX1 in HepG2 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HepG2 cells with GPX1 antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Goat anti mouse IgG (FITC) was used as the secondary antibody.

## Background

GPX1 is ubiquitously expressed in many tissues, where it protects cells from oxidative stress. Within cells, it localizes to the cytoplasm and mitochondria. As a glutathione peroxidase, GPx1 functions in the detoxification of hydrogen peroxide, specifically by catalyzing the reduction of hydrogen peroxide to water. The glutathione peroxidase also catalyzes the reduction of other organic hydroperoxides, such as lipid peroxides, to the corresponding alcohols. GPx1 typically uses glutathione (GSH) as the reductant, but when glutathione synthetase (GSS) is, as in brain mitochondria,  $\gamma$ -glutamylcysteine can serve as the reductant instead. The protein encoded by this gene protects from CD95-induced apoptosis in cultured breast cancer cells and inhibits 5-lipoxygenase in blood cells, and its overexpression delays endothelial cell death and increases resistance to toxic challenges, especially oxidative stress. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs

at the active site of glutathione peroxidase and is coded by the nonsense (stop) codon TGA.

## References

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Note: This product is for in vitro research use only