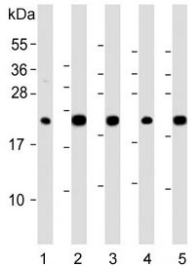
GPX1 Antibody / Glutathione Peroxidase 1 (F54263)

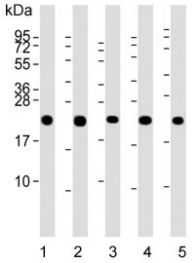
Catalog No.	Formulation	Size
F54263-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54263-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

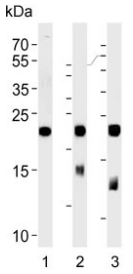
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P07203
Gene ID	2876
Localization	Cytoplasmic
Applications	Western Blot : 1:1000-1:2000 Immunohistochemistry (FFPE) : 1:25 Flow Cytometry : 1:25 (1x10e6 cells) Immunofluorescence : 1:25
Limitations	This GPX1 antibody is available for research use only.



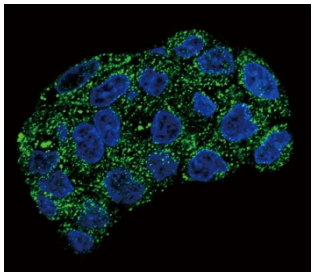
Western blot testing of human 1) liver, 2) HepG2, 3) 293T, 4) kidney and 5) ThP-1 lysate with GPX1 antibody. Predicted molecular weight ~22 kDa.



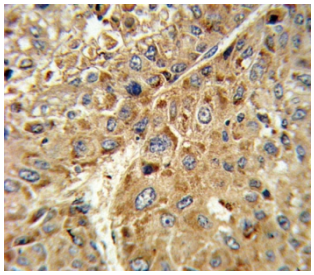
Western blot testing of human 1) ThP-1, 2) 293T, 3) HepG2, 4) SH-SY5Y and 5) human kidney lysate with GPX1 antibody. Predicted molecular weight ~22 kDa.



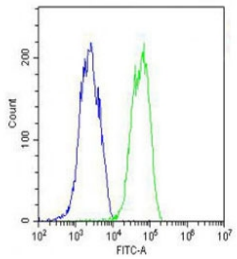
Western blot testing of 1) human ThP-1, 2) mouse liver and 3) rat liver lysate with GPX1 antibody. Predicted molecular weight ~22 kDa.



Immunofluorescent staining of fixed and permeabilized human HepG2 cells with GPX1 antibody (green) and DAPI nuclear stain (blue).



IHC testing of FFPE human hepatocarcinoma tissue with GPX1 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with GPX1 antibody; Blue=isotype control, Green= GPX1 antibody.

Description

GPX1 encodes a member of the glutathione peroxidase family. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. 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 UGA, that normally functions as a translation termination codon. In addition, this protein is characterized in a polyalanine sequence polymorphism in the N-terminal region, which includes three alleles with five, six or seven alanine (ALA) repeats in this sequence.

Application Notes

The stated application concentrations are suggested starting points. Titration of the GPX1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 164-193 from the human protein were used as the immunogen for the GPX1 antibody.

Storage

Aliquot the GPX1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.