

Basic Information

Product Name	Anti-GPX1 Antibody	
Gene Name	GPX1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human GPX1 recombinant protein (Position: A13-A203).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	22 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

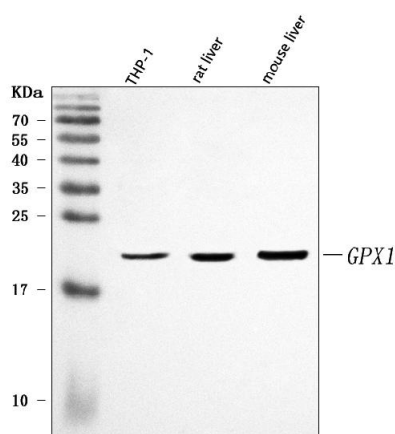
12 months from date of receipt, -20°C as supplied.

Background Information

Glutathione peroxidase 1, also known as, GPX-1 is an enzyme that in humans is encoded by the GPX1 gene. It is mapped to 3p21.31. This gene encodes a member of the glutathione peroxidase family, consisting of eight known glutathione peroxidases (Gpx1-8) in humans. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. It has been reported that 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 growth and increases resistance to toxic challenges. GPX1 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.

Selected Validation Data



Western blot analysis of anti-GPX1 antibody (A01019-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human THP-1 whole cell lysates,

Lane 2: rat liver tissue lysates,

Lane 3: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GPX1 antigen

affinity purified polyclonal antibody (A01019-2) and probed with a

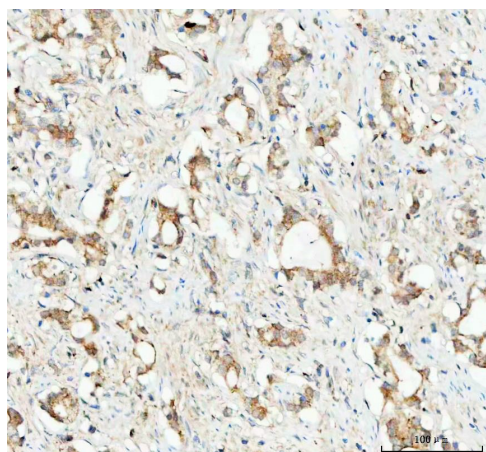
goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054).

The signal is developed using ECL Plus Western Blotting Substrate

(Catalog # AR1197). A specific band was detected for GPX1 at

approximately 22 kDa. The expected band size for GPX1 is at 22

kDa.



IHC analysis of GPX1 using anti-GPX1 antibody (A01019-2).

GPX1 was detected in a paraffin-embedded section of human

prostatic acinar adenocarcinoma tissue. The tissue section was

developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit

(Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.