

## Basic Information

<b>Product Name</b>	Anti-GPX1 Antibody (Clone#IHO-7)
<b>Gene Name</b>	GPX1
<b>Source</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, IHC, IP
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthesized peptide derived from human GPX1
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Affinity-chromatography
<b>Observed MW</b>	22 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200 ImmunoPrecipitation (IP): 1:20

## Storage

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

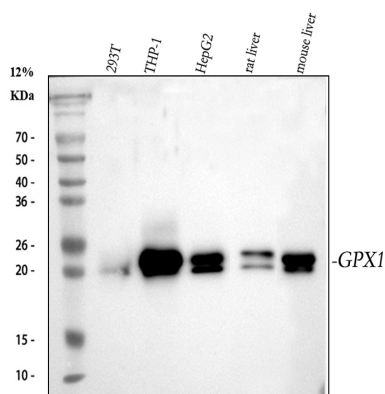
## Background Information

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.

## Reference

Anti-GPX1 Antibody (Clone#IHO-7)被引用在2文献中。

## Selected Validation Data



Western blot analysis of anti-GPX1 antibody (BM4854). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human THP-1 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: rat liver tissue lysates,

Lane 5: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GPX1 antigen

affinity purified monoclonal antibody (BM4854) at a dilution of

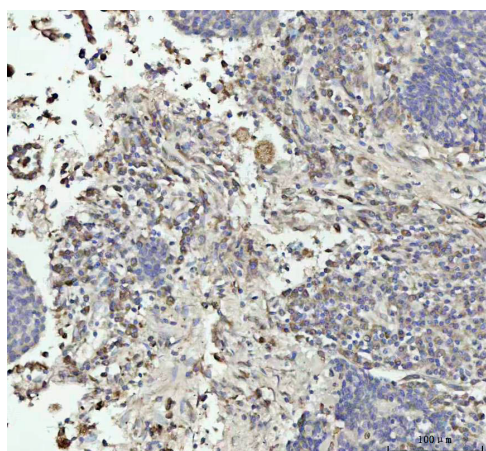
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

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 (BM4854) .

GPX1 was detected in a paraffin-embedded section of human lung

squamous cell carcinoma tissue. The tissue section was incubated

with rabbit anti-GPX1 Antibody (BM4854) at a dilution of 1:200 and

developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit

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