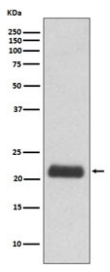
GPX1 Antibody / Glutathione Peroxidase 1 [clone IHO-7] (RQ5171)

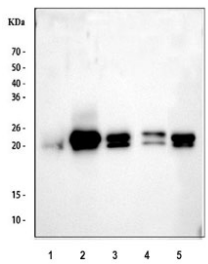
Catalog No.	Formulation	Size
RQ5171	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

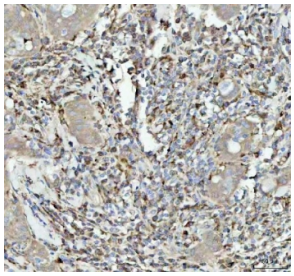
Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	IHO-7
Purity	Affinity purified
UniProt	P07203
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:50-1:200
Limitations	This GPX1 antibody is available for research use only.



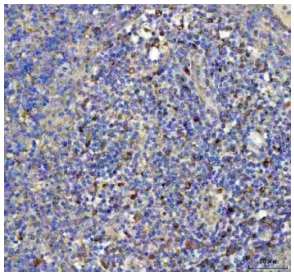
Western blot testing of human 293T cell lysate with GPX1 antibody. Predicted molecular weight ~22 kDa.



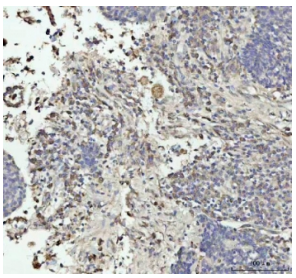
Western blot testing of 1) human 293T, 2) human ThP-1, 3) human HepG2, 4) rat liver and 5) mouse liver tissue lysate with GPX1 antibody. Predicted molecular weight ~22 kDa.



IHC staining of FFPE human breast cancer tissue with GPX1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human spleen tissue with GPX1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human lung squamous cell carcinoma tissue with GPX1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

The protein encoded by the GPX1 gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H2O2) by glutathione, and thereby protect cells against oxidative damage. Other studies indicate that H2O2 is also essential for growth-factor mediated signal transduction, mitochondrial function, and maintenance of thiol redox-balance; therefore, by limiting H2O2 accumulation, glutathione peroxidases are also involved in modulating these processes. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme is the most abundant, is ubiquitously expressed and localized in the cytoplasm, and whose preferred substrate is hydrogen peroxide. It is also a selenoprotein, containing the rare amino acid selenocysteine (Sec) at its active site. [RefSeq]

Application Notes

Optimal dilution of the GPX1 antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Glutathione Peroxidase 1 / GPX1 was used as the immunogen for the GPX1 antibody.

Storage

Store the GPX1 antibody at -20oC.

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