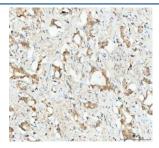


# Glutathione Peroxidase 1 Antibody / GPX1 (RQ8025)

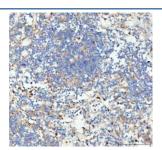
Catalog No.	Formulation	Size
RQ8025	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

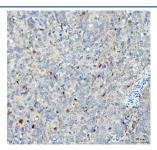
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P07203
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This Glutathione Peroxidase 1 antibody is available for research use only.



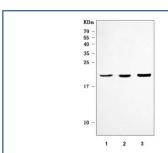
IHC staining of FFPE human prostatic acinar adenocarcinoma tissue with Glutathione Peroxidase 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human spleen tissue with Glutathione Peroxidase 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human cervical squamous carcinoma tissue with Glutathione Peroxidase 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



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

#### **Description**

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.

### **Application Notes**

Optimal dilution of the Glutathione Peroxidase 1 antibody should be determined by the researcher.

#### **Immunogen**

E. coli-derived recombinant human protein (amino acids A13-A203) was used as the immunogen for the Glutathione Peroxidase 1 antibody.

#### **Storage**

After reconstitution, the Glutathione Peroxidase 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.