

# **Rabbit Anti-GPX2 antibody**

## SL13396R

Product Name:	GPX2
Chinese Name:	谷胱甘肽过氧化酶2抗体
Alias:	Gastrointestinal glutathione peroxidase; GI GPx; Glutathione peroxidase 2 (gastrointestinal); Glutathione peroxidase 2; Glutathione peroxidase gastrointestinal; Glutathione peroxidase related protein 2; Glutathione peroxidase-gastrointestinal; Glutathione peroxidase-related protein 2; GPRP; GPRP-2; GPx 2; GPx-2; GPx-GI; GPX2; GPX2 HUMAN; GSHPx 2; GSHPx GI; GSHPx-2; GSHPx-GI.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GPX2/Glutathione Peroxidase 2:41-140/190
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Glutathione peroxidase (GPx) enzymes are generally selenium-containing tetrameric glycoproteins that help prevent lipid peroxidation of cell membranes. GPx enzymes

reduce lipid hydroperoxides to alcohols, and reduce free hydrogen peroxide to water. GPx members are among the 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. There are eight GPx homologs (GPx-1–8). GPx-1 plays an important role in the antioxidant defense of the vascular wall and neural cells in response to oxidative stress. GPx-2 is the major isoform in the lungs and its basal or inducible expression is dependent on Nrf2. GPx-3 is under regulation by hypoxic stress and the expression and deficiency of GPx-3 is associated with cardiovascular disease and stroke. GPx-5 is selenium-independent; it is bound to the acrosome of sperm, where it may protect sperm from premature acrosome reaction in the epididymis.

## Function:

Could play a major role in protecting mammals from the toxicity of ingested organic hydroperoxides. Tert-butyl hydroperoxide, cumene hydroperoxide and linoleic acid hydroperoxide but not phosphatidycholine hydroperoxide, can act as acceptors.

#### Subunit:

Homotetramer.

## **Subcellular Location:**

Cytoplasm. Mainly cytoplasmic.

## **Tissue Specificity:**

Mostly in liver and gastrointestinal tract, not found in heart or kidney.

### Similarity:

Belongs to the glutathione peroxidase family.

## **SWISS:**

P18283

## Gene ID:

2877

#### Database links:

Entrez Gene: 2877Human

Entrez Gene: 14776Mouse

Entrez Gene: 29326Rat

Omim: 138319Human

SwissProt: P18283Human

SwissProt: Q9JHC0Mouse

SwissProt: P83645Rat

	Unigene: 2704Human
	Unigene: 441856Mouse
	Unigene: 3503Rat
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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Picture:	Sample: Liver (Mouse) Lysate at 40 ug  Primary: Anti-GPX2 (SL13396R) at 1/1000 dilution  Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  Predicted band size: 22 kD
	Observed band size: 22 kD