



Rabbit Anti-GPX7 antibody

SL13397R

Product Name:	GPX7
Chinese Name:	谷胱甘肽过氧化酶7抗体
Alias:	CL683; FLJ14777; Glutathione peroxidase 7; GPx-7; GPX6; GPX7; GPX7_HUMAN; GSHPx-7; NPGPx.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Cow,Rabbit,Monkey,
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:	19kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GPX7/Glutathione Peroxidase 7:11-110/187
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-7 (glutathione peroxidase 7), also known as GPX6, CL683 or NPGPx, is a 187 amino acid secreted protein belonging to the glutathione peroxidase family. GPx-7 catalyzes the reaction of glutathione into glutathione disulfide and is encoded by a gene located on human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

Function:

It protects esophageal epithelia from hydrogen peroxide-induced oxidative stress. It suppresses acidic bile acid-induced reactive oxygen species (ROS) and protects against oxidative DNA damage and double-strand breaks.

Subcellular Location:

Secreted.

Tissue Specificity:

Expressed in esophageal epithelial cells; expression is up-regulated after exposure to acidic bile acids.

DISEASE:

Defects in GPX7 are a cause of Barrett esophagus (BE) [MIM:614266]. A condition characterized by a metaplastic change in which normal esophageal squamous epithelium is replaced by a columnar and intestinal-type epithelium. Patients with Barrett esophagus have an increased risk of esophageal adenocarcinoma. The main cause of Barrett esophagus is gastroesophageal reflux. The retrograde movement of acid and bile salts from the stomach into the esophagus causes prolonged injury to the esophageal epithelium and induces chronic esophagitis, which in turn is believed to trigger the pathologic changes. Note=The pathologic mechanisms leading to Barrett esophagus involve GPX7 dysfunction that results in higher levels of hydrogen peroxide and ROS-induced oxidative stress and DNA damage in esophageal cells.

Similarity:

Belongs to the glutathione peroxidase family.

SWISS:

Q96SL4

Gene ID:

2882

Database links:

[Entrez Gene: 2882](#)Human

[Entrez Gene: 67305](#)Mouse

[Entrez Gene: 298376](#)Rat

[SwissProt: A6QLY2](#)Cow

[SwissProt: Q96SL4](#)Human

[SwissProt: Q99LJ6](#)Mouse

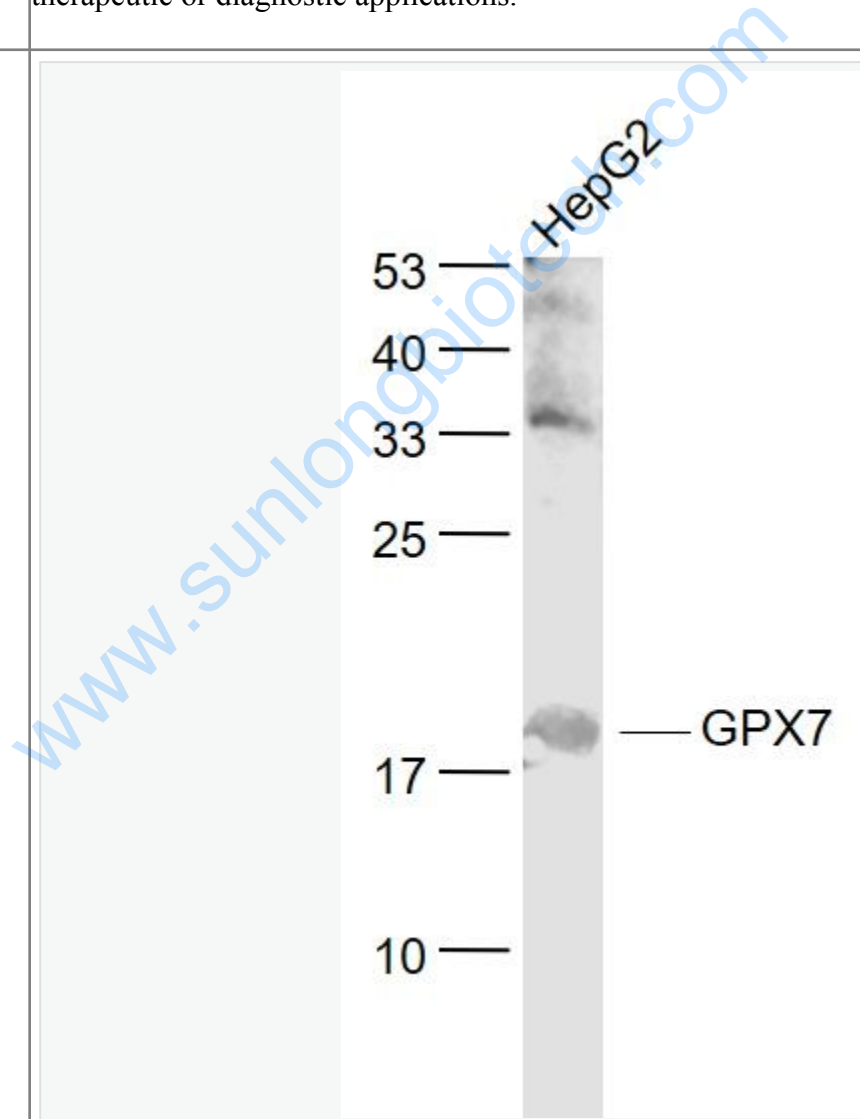
[Unigene: 43728](#)Human

[Unigene: 20164](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

HepG2(Human) Cell Lysate at 30 ug

Primary: Anti- GPX7 (SL13397R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 19 kD

Observed band size: 19 kD

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