

Basic Information

Product Name	Anti-GPX4 Antibody
Gene Name	GPX4
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat, monkey
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human Glutathione Peroxidase 4/GPX4 recombinant protein (Position: A30-F197).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	19 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Enzyme linked immunosorbent assay (ELISA):1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

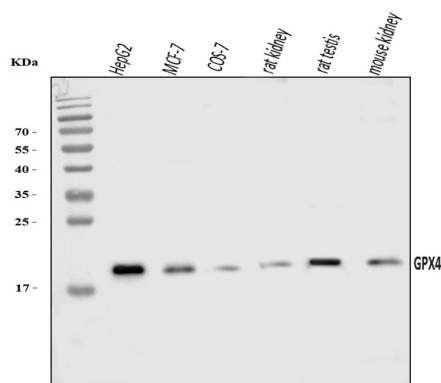
Background Information

Glutathione peroxidase 4, also known as GPX4, is an enzyme that in humans is encoded by the GPX4 gene. This gene encodes a member of the glutathione peroxidase protein family. Glutathione peroxidase catalyzes the reduction of hydrogen peroxide, organic hydroperoxide, and lipid peroxides by reduced glutathione and functions in the protection of cells against oxidative damage. Human plasma glutathione peroxidase has been shown to be a selenium-containing enzyme and the UGA codon is translated into a selenocysteine. The encoded protein has been identified as a moonlighting protein based on its ability to serve dual functions as a peroxidase as well as a structural protein in mature spermatozoa. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, alternative transcription initiation and the cleavage sites of the mitochondrial and nuclear transit peptides need to be experimentally verified. Alternative splicing results in multiple transcript variants.

Reference

Anti-GPX4 Antibody被引用在16文献中。

Selected Validation Data



Western blot analysis of GPX4 using anti-GPX4 antibody

(A02059-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HepG2 whole cell lysates,

Lane 2: MCF-7 whole cell lysates,

Lane 3: COS-7 whole cell lysates,

Lane 4: rat kidney tissue lysates,

Lane 5: rat testis tissue lysates,

Lane 6: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GPX4 antigen

affinity purified polyclonal antibody (A02059-1) 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 GPX4 at approximately 19 kDa. The

expected band size for GPX4 is at 22 kDa.