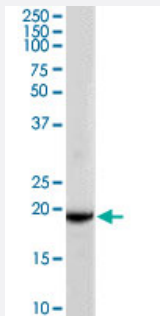


GPX4 polyclonal antibody

Catalog # PAB7065

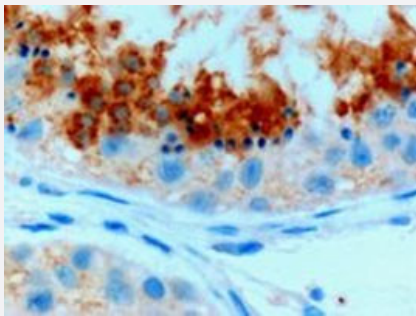
Size 100 ug

Applications



Western Blot (Tissue lysate)

GPX4 polyclonal antibody (Cat # PAB7065) (0.1 ug/mL) staining of human testis lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

GPX4 polyclonal antibody (Cat # PAB7065, 0.3 ug/mL) staining of paraffin embedded human testis. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of GPX4.
Immunogen	A synthetic peptide corresponding to C-terminus of human GPX4.
Sequence	C-EEPLVIEKDLPHY
Host	Goat
Theoretical MW (kDa)	22.1
Reactivity	Human

Specificity	This antibody is expected to recognize isoform A (NP_002076.2) and isoform C (NP_0010.34937.1).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Recommend Usage	ELISA (1:16000) Western blot (0.1-0.3 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.3 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — GPX4

Entrez GeneID	2879
Protein Accession#	NP_002076.2;NP_0010.34937.1
Gene Name	GPX4
Gene Alias	MCSP, PHGPx, snGPx, snPHGPx
Gene Description	glutathione peroxidase 4 (phospholipid hydroperoxidase)

Omim ID [138322](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, experimental evidence for alternative splicing exists; alternative transcription initiation and the cleavage sites of the mitochondrial and nuclear transit peptides need to be experimentally verified. [provided by RefSeq]

Other Designations

glutathione peroxidase 4|phospholipid hydroperoxidase|phospholipid hydroperoxide glutathione peroxidase, mitochondrial|sperm nucleus glutathione peroxidase

Publication Reference

- [Mammalian selenoprotein thioredoxin-glutathione reductase. Roles in disulfide bond formation and sperm maturation.](#)

Su D, Novoselov SV, Sun QA, Moustafa ME, Zhou Y, Oko R, Hatfield DL, Gladyshev VN.

The Journal of Biological Chemistry 2005 Jul; 280(28):26491.

Application: WB-Ti, Mouse, Testes, Sperm

Pathway

- [Arachidonic acid metabolism](#)
- [Glutathione metabolism](#)

Disease

- [Acute Disease](#)
- [Adenoma](#)
- [Alzheimer disease](#)
- [Asthma](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
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- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)