



Rabbit Anti-Human GPX4 Polyclonal Antibody (CABT-L2248)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Glutathione Peroxidase 4 (Knockout Validated)
Specificity	The antibody is a rabbit polyclonal antibody raised against GPX4. It has been selected for its ability to recognize GPX4 in immunohistochemical staining and western blotting.
Target	GPX4
Immunogen	Recombinant fragment corresponding to human GPX4 (Gly74~Phe197)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Purification	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	Lot specific
Size	200 µg
Buffer	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
Preservative	0.05% Proclin-300

Storage	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
Ship	4°C with ice bags

BACKGROUND

Introduction	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. [provided by RefSeq, Jan 2014]
Keywords	MCSP;PHGPx;SnGPx;SnPHGPx;Phospholipid Hydroperoxidase;Phospholipid hydroperoxide glutathione peroxidase, mitochondrial

GENE INFORMATION

Gene Name	GPX4 glutathione peroxidase 4 [Homo sapiens (human)]
Official Symbol	GPX4
Synonyms	GPX4; glutathione peroxidase 4; MCSP; GPx-4; PHGPx; snGPx; GSHPx-4; snPHGPx; phospholipid hydroperoxide glutathione peroxidase, mitochondrial; phospholipid hydroperoxidase; sperm nucleus glutathione peroxidase;
Entrez Gene ID	2879
Protein Refseq	NP_001034936
UniProt ID	P36969
Chromosome Location	19p13.3
Pathway	Arachidonic acid metabolism; Folate Metabolism; Glutathione metabolism; Metabolism; Metabolism of lipids and lipoproteins; Selenium Metabolism and Selenoproteins; Selenium Pathway; Synthesis of 12-eicosatetraenoic acid derivatives;

Function

glutathione binding; glutathione peroxidase activity; phospholipid-hydroperoxide glutathione peroxidase activity; selenium binding;
