



Human GPX4 blocking peptide (CDBP1419)

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

PRODUCT INFORMATION

Product Overview	Blocking/Immunizing peptide for anti-GPX4 (Isoform a and c) antibody
Antigen Description	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.
Species	Human
Conjugate	Unconjugated
Applications	Apuri, BL, ELISA
Format	Lyophilized powder
Size	100 µg
Preservative	None
Storage	Shipped at ambient temperature, store at -20°C.

GENE INFORMATION

Gene Name [GPX4 glutathione peroxidase 4 \[Homo sapiens \]](#)

Official Symbol	GPX4
Synonyms	GPX4; glutathione peroxidase 4; glutathione peroxidase 4 (phospholipid hydroperoxidase); phospholipid hydroperoxide glutathione peroxidase, mitochondrial; MCSP; PHGPx; phospholipid hydroperoxidase; sperm nucleus glutathione peroxidase; GPx-4; snGPx; GSHPx-4; snPHGPx;
Entrez Gene ID	2879
mRNA Refseq	NM_001039847
Protein Refseq	NP_001034936
UniProt ID	P36969
Chromosome Location	19p13.3
Pathway	Folate Metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Selenium Metabolism and Selenoproteins, organism-specific biosystem; Selenium Pathway, organism-specific biosystem; glutathione redox reactions I, organism-specific biosystem;
Function	glutathione peroxidase activity; oxidoreductase activity; phospholipid-hydroperoxide glutathione peroxidase activity;