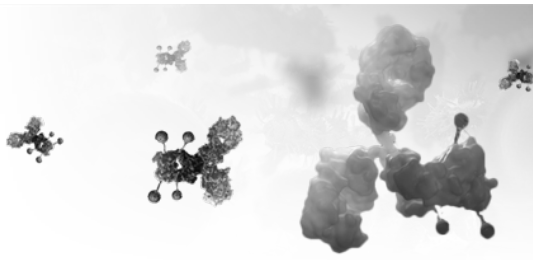

Human GPX4 peptide (DAG-P0556)

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

PRODUCT INFORMATION

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. [provided by RefSeq, Jan 2014]
Specificity	Present primarily in testis.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the glutathione peroxidase family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	GPX4 glutathione peroxidase 4 [Homo sapiens (human)]
Official Symbol	GPX4

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

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
mRNA Refseq	NM_001039847.2
Protein Refseq	NP_001034936.1
UniProt ID	P36969
Chromosome Location	19p13.3
Pathway	Arachidonic acid metabolism, organism-specific biosystem; Folate Metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Selenium Metabolism and Selenoproteins, organism-specific biosystem; Selenium Pathway, organism-specific biosystem; Synthesis of 12-ei
Function	glutathione binding; glutathione peroxidase activity; phospholipid-hydroperoxide glutathione peroxidase activity; selenium binding;

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