



# Human GPX4 blocking peptide (CDBP1419)

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

## PRODUCT INFORMATION

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

## GENE INFORMATION

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

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| <b>Official Symbol</b>     | GPX4                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>            | 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;                                                                                                            |
| <b>Entrez Gene ID</b>      | <a href="#">2879</a>                                                                                                                                                                                                                                                                                                                                                                   |
| <b>mRNA Refseq</b>         | <a href="#">NM_001039847</a>                                                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Refseq</b>      | <a href="#">NP_001034936</a>                                                                                                                                                                                                                                                                                                                                                           |
| <b>UniProt ID</b>          | P36969                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Chromosome Location</b> | 19p13.3                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Pathway</b>             | 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; |
| <b>Function</b>            | glutathione peroxidase activity; oxidoreductase activity; phospholipid-hydroperoxide glutathione peroxidase activity;                                                                                                                                                                                                                                                                  |