

GPX1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9315b

Specification

GPX1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P07203

GPX1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2876

Other Names

Glutathione peroxidase 1, GPx-1, GSHPx-1, Cellular glutathione peroxidase, GPX1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GPX1 Antibody (C-term) Blocking Peptide - Protein Information

Name GPX1 (HGNC:4553)

Function

Catalyzes the reduction of hydroperoxides in a glutathione- dependent manner thus regulating cellular redox homeostasis (PubMed:11115402, PubMed:36608588). Can reduce small soluble hydroperoxides such as H2O2, cumene hydroperoxide and tert-butyl hydroperoxide, as well as several fatty acid-derived hydroperoxides (PubMed:11115402, PubMed:36608588). In platelets catalyzes the reduction of 12-hydroperoxyeicosatetraenoic acid, the primary product of the arachidonate 12-lipoxygenase pathway (PubMed:11115402).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P11352}. Mitochondrion {ECO:0000250|UniProtKB:P11352}

Tissue Location

Expressed in platelets (at protein level).



GPX1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

GPX1 Antibody (C-term) Blocking Peptide - Images

GPX1 Antibody (C-term) Blocking Peptide - Background

GPX1 encodes a member of the glutathione peroxidase family. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by UGA, that normally functions as a translation termination codon. In addition, this protein is characterized in a polyalanine sequence polymorphism in the N-terminal region, which includes three alleles with five, six or seven alanine (ALA) repeats in this sequence.

GPX1 Antibody (C-term) Blocking Peptide - References

Moyer, A.M., et.al., Cancer Epidemiol. Biomarkers Prev. 19 (3), 811-821 (2010) Akimoto, A.K., et.al., Free Radic. Res. 44 (3), 322-331 (2010) Cao, C., et.al., J. Biol. Chem. 278 (41), 39609-39614 (2003)