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[KO]Glutathione Peroxidase 1 Rabbit mAb

Catalog # AP76512

Product Information

Application	WB, IHC-P, FC
Primary Accession	P07203
Reactivity	Rat, Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	22088

Additional Information

Gene ID	2876
Other Names	GPX1
Dilution	WB~~1:1000 IHC-P~~N/A FC~~1:10~50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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).

Background

Glutathione peroxidase 1 (GPX1) is a cytosolic selenoprotein which reduces hydrogen peroxide to water. GPX1 is the most abundant and ubiquitous among the five GPX isoforms identified so far. It is an important component in the anti-oxidative defense in cells and is associated with a variety of disease conditions, such as colon cancer, coronary artery disease and insulin resistance.

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