10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Glutathione Peroxidase 3/GPx-3 (18O4) Rabbit Monoclonal Antibody

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Catalog # AP93793

Product Information

Application	WB, IHC
Primary Accession	P23764
Reactivity	Rat, Mouse
Clonality	Monoclonal
Calculated MW	25424

Additional Information

Gene ID	64317
Other Names	Glutathione peroxidase 3, GPx-3, GSHPx-3, 1.11.1.9, Plasma glutathione peroxidase, GPx-P, GSHPx-P, Gpx3 {ECO:0000312|RGD:69224}
Dilution	WB~~1:1000 IHC~~1:100~500
Storage Conditions	-20℃

Protein Information

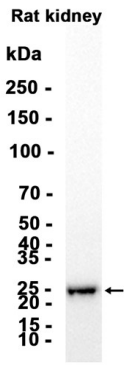
Name	Gpx3 {ECO:0000312|RGD:69224}
Function	Protects cells and enzymes from oxidative damage, by catalyzing the reduction of hydrogen peroxide, lipid peroxides and organic hydroperoxide, by glutathione.
Cellular Location	Secreted.
Tissue Location	Secreted in plasma.

Background

The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H2O2) by glutathione, and thereby protect cells against oxidative damage. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme is secreted and is highly expressed in mouse kidney, which appears to be the major source of the enzyme in plasma. It has a role in mouse organogenesis, and dysregulation of this isozyme has been associated with obesity-related metabolic complications, platelet-dependent thrombosis, colitis-associated carcinoma, and thermosensitive phenotype. This isozyme

is also a selenoprotein, containing the rare amino acid selenocysteine (Sec) at its active site. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2016]

Images



Western blot analysis of extracts from Rat kidney tissue using AP93793 at 1:1000.