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GPX1 Rabbit pAb

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Catalog # AP52117

Product Information

Application	WB
Primary Accession	P11352
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22329
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Glutathione Peroxidase 1
Epitope Specificity	51-150/201
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene product belongs to the family of glutathione peroxidase, which functions in the detoxification of hydrogen peroxide. It contains a selenocysteine (Sec) residue at its active site. The selenocysteine is encoded by the UGA codon, which normally signals translation termination. The 3' UTR of Sec-containing genes have a common stem-loop structure, the sec insertion sequence (SECIS), which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. [provided by RefSeq].

Additional Information

Gene ID	14775
Other Names	Glutathione peroxidase 1, GPx-1, GSHPx-1, 1.11.1.9, Cellular glutathione peroxidase, Phospholipid-hydroperoxide glutathione peroxidase GPX1, 1.11.1.12, Selenium-dependent glutathione peroxidase 1, Gpx1 {ECO:0000312|MGI:MGI:104887}
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Gpx1 {ECO:0000312|MGI:MGI:104887}
Function	Catalyzes the reduction of hydroperoxides in a glutathione- dependent manner thus regulating cellular redox homeostasis (PubMed:10754271, PubMed:21420488, PubMed:36608588, PubMed:9126277, PubMed:9195979, PubMed:9712879). Can reduce small soluble hydroperoxides such as H2O2, cumene hydroperoxide and tert-butyl hydroperoxide, as well as several fatty acid-derived hydroperoxides (PubMed:10754271, PubMed:21420488, PubMed:36608588, PubMed:9126277, PubMed:9195979, PubMed:9712879). In platelets catalyzes the reduction of 12-hydroperoxyeicosatetraenoic acid, the primary product of the arachidonate 12-lipoxygenase pathway (PubMed:9195979).
Cellular Location	Cytoplasm. Mitochondrion
Tissue Location	Expressed in liver, kidney, lung, brain and heart.

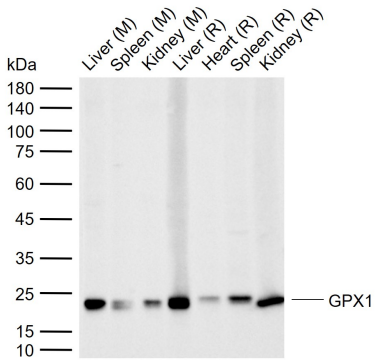
Background

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References

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Carninci P.,et al.Science 309:1559-1563(2005).
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Dikiy A.,et al.Biochemistry 46:6871-6882(2007).
Villen J.,et al.Proc. Natl. Acad. Sci. U.S.A. 104:1488-1493(2007).

Images



Sample:
Lane 1: Mouse Liver tissue lysates
Lane 2: Mouse Spleen tissue lysates
Lane 3: Mouse Kidney tissue lysates
Lane 4: Rat Liver tissue lysates
Lane 5: Rat Heart tissue lysates
Lane 6: Rat Spleen tissue lysates
Lane 7: Rat Kidney tissue lysates
Primary: Anti-GPX1 (AP52117) at 1/500 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 22 kDa
Observed band size: 22 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.