GPX4 Polyclonal Antibody

Catalog Number:E-AB-64550

Note: Centrifuge before opening to ensure complete recovery of vial contents.

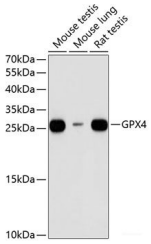
Description

Reactivity	Human,Mouse,Rat
Immunogen	Recombinant fusion protein of human GPX4 (NP_002076.2).
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

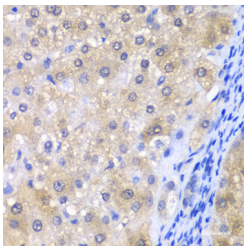
Applications Recommended Dilution

WB 1:500-1:2000 IHC
1:50-1:200 IF
1:50-1:200

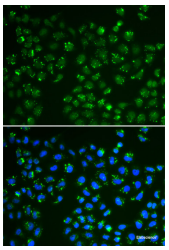
Data



Western blot analysis of extracts of various cell lines using GPX4 Polyclonal Antibody at dilution of 1:1000.
Observed Mw:25kDa
Calculated Mw:19kDa/22kDa



Immunohistochemistry of paraffin-embedded Human liver damage using GPX4 Polyclonal Antibody at dilution of 1:200 (40x lens).



Immunofluorescence analysis of A549 cells using GPX4 Polyclonal Antibody

Preparation & Storage

Storage	Store at -20°C. Avoid freeze / thaw cycles.

Background

The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of hydrogen peroxide, organic hydroperoxides and lipid hydroperoxides, and thereby protect cells against oxidative

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damage. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme has a high preference for lipid hydroperoxides and protects cells against membrane lipid peroxidation and cell death. It is also required for normal sperm development; thus, it has been identified as a 'moonlighting' protein because of its ability to serve dual functions as a peroxidase, as well as a structural protein in mature spermatozoa. Mutations in this gene are associated with Sedaghatian type of spondylometaphyseal dysplasia (SMDS). 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.

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