

GPX4 Monoclonal Antibody

catalog number: AN200085P

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

Description

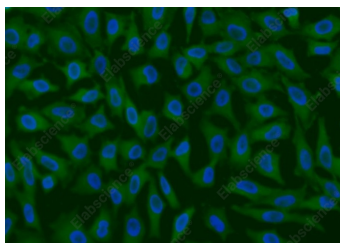
Reactivity	Human
Immunogen	Recombinant Human GPX4 Protein
Host	Mouse
Isotype	Mouse IgG1
Clone	A933
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications

Recommended Dilution

ICC/IF	1:100-1:400
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Data



Immunofluorescence analysis of GPX4 in HeLa cells.

Cells were fixed with 4% PFA, permeabilized with 0.1%

Triton X-100 in PBS, blocked with 10% serum, and

incubated with mouse anti-Human GPX4 Monoclonal

Antibody (dilution ratio 1:200) at 4°C overnight. Then cells were stained with the Alexa Fluor®488-conjugated Goat

Anti-mouse IgG secondary antibody (green) and

counterstained with DAPI for nuclear staining

(blue). Positive staining was localized to Cytoplasm.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

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Rev. V1.2

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 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.