GPX4 Polyclonal Antibody

Catalog No.	A13309	**Category**	Polyclonal Antibodies
Applications	WB, IHC, IF	**Observed MW**	25kDa
Cross-reactivity	Human, Mouse, Rat	**Calculated MW**	19kDa/22kDa

Immunogen Information

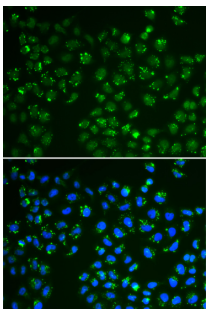
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 30-197 of human GPX4 (NP_002076.2).
Gene ID	2879
Swiss prot	P36969
Synonyms	GPX4; GPx-4; GSHPx-4; MCSP; PHGPx; SMDS; snGPx ; snPHGPx; glutathione peroxidase 4

Product information

Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

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 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.



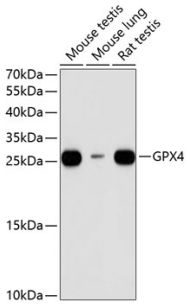
Immunofluorescence - GPX4 Polyclonal Antibody (A13309)

Recommended Dilutions

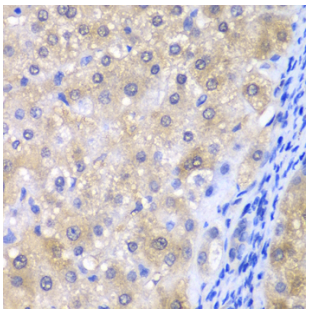
WB 1:500 - 1:2000

IHC 1:50 - 1:200

IF 1:50 - 1:200



Western blot - GPX4 Polyclonal Antibody (A13309)



Immunohistochemistry - GPX4 Polyclonal Antibody (A13309)

Phone: *888.754.5670*
Email: *info@abclonal.com*