

CAB11243

Product Information

Product SKU:	CAB11243	Gene ID:	2879	Size:	20uL, 100uL
Clone No:	ARC0558	Host Species:	Rabbit	Reactivity:	Human,Mouse,Rat

Additional Information

Observed MW:	17kDa	Conjugate:	Unconjugated
Calculated MW:	22kDa	Isotype:	IgG

Immunogen Information

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. Transcript variants resulting from alternative splicing or use of alternate promoters have been described to encode isoforms with different subcellular localization.

Recommended Dilution: WB,1:500 - 1:1000

Synonyms: MCSP; SMDS; GPx-4; PHGPx; snGPx; GSHPx-4; snPHGPx; [KD Validated] GPX4

Purification Method: Affinity purification

Immunogen: A synthetic peptide corresponding to a sequence within amino acids 1-100 of human GPX4 (P36969).

Storage: Store at -20°C. Avoid freeze / thaw cycles.Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.