

## GPX4 Polyclonal Conjugated Antibody

Catalog No: #C29146



Package Size: #C29146-AF350 100ul #C29146-AF405 100ul #C29146-AF488 100ul  
 #C29146-AF555 100ul #C29146-AF594 100ul #C29146-AF647 100ul  
 #C29146-AF680 100ul #C29146-AF750 100ul #C29146-Biotin 100ul

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## Description

Product Name	GPX4 Polyclonal Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant fusion protein of human GPX4 (NP_002076.2).
Other Names	GPX4;GPx-4;GSHPx-4;MCSP;PHGPx;SMDS;snGPx;snPHGPx
Accession No.	GeneID:2879Swiss Prot:P36969
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	19kDa/22kDa
SDS-PAGE MW	25kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at -20°C. Avoid freeze / thaw cycles.   Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.240.

## Application Details

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

## 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.

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Note: This product is for in vitro research use only