

## GPX4 Antibody

Catalog No: #32506

Package Size: #32506-1 50ul #32506-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

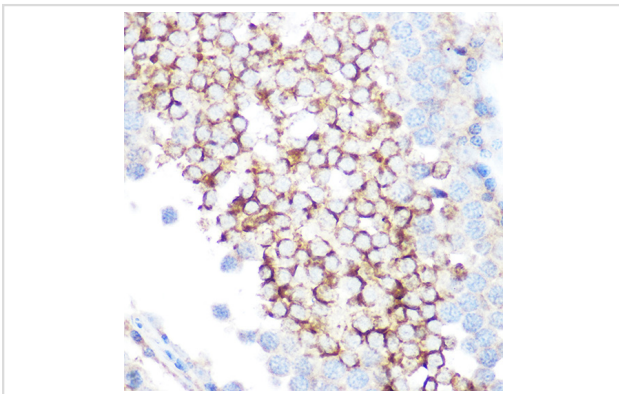
## Description

|                       |  |
|-----------------------|--|
| Product Name          | GPX4 Antibody  |
| Host Species          | Rabbit   |
| Clonality             | Polyclonal   |
| Isotype               | IgG  |
| Purification          | Affinity purification  |
| Applications          | WB,IHC,IF  |
| Species Reactivity    | Human,Mouse,Rat  |
| Specificity           | The antibody detects endogenous level of total GPX4 protein. |
| Immunogen Type        | Recombinant Protein  |
| Immunogen Description | Recombinant fusion protein of human GPX4 (NP_002076.2).      |
| Target Name           | GPX4   |
| Other Names           | GPX4;GPx-4;GSHPx-4;MCSP;PHGPx;SMDS;snGPx;snPHGPx             |
| Accession No.         | Uniprot:P36969GeneID:2879                                    |
| Uniprot               | P36969   |
| GeneID                | 2879   |
| SDS-PAGE MW           | 22KDa  |
| Concentration         | 1.0mg/ml   |
| Formulation           | PBS with 0.02% sodium azide,50% glycerol,pH7.3.              |
| Storage               | Store at -20°C. Avoid freeze / thaw cycles.                  |

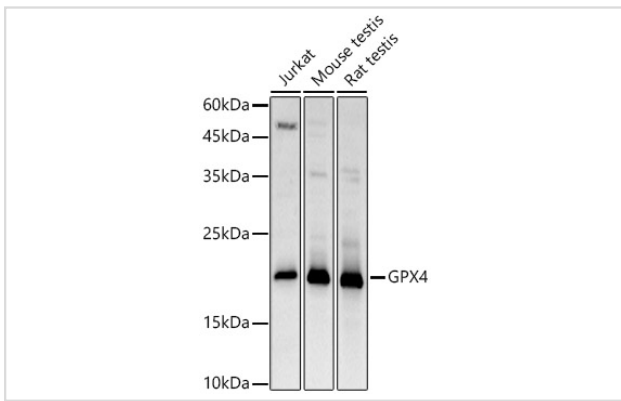
## Application Details

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

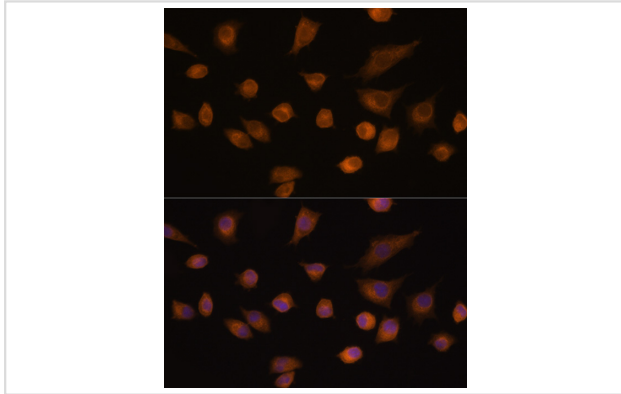
## Images



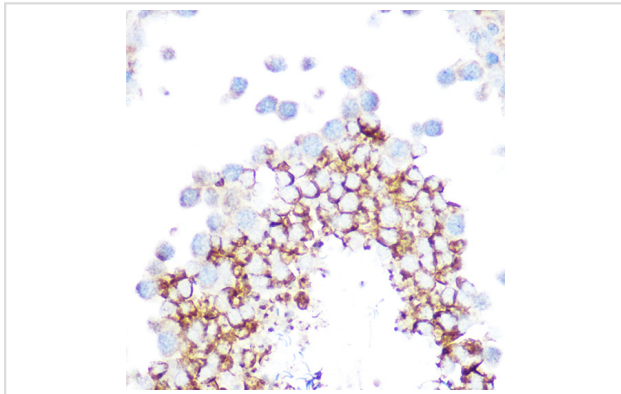
Immunohistochemistry of paraffin-embedded rat testis using GPX4 Rabbit pAb.



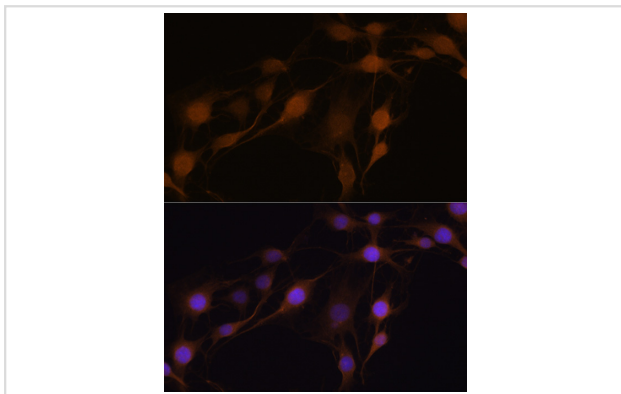
Western blot analysis of extracts of various cell lines, using GPX4 antibody.



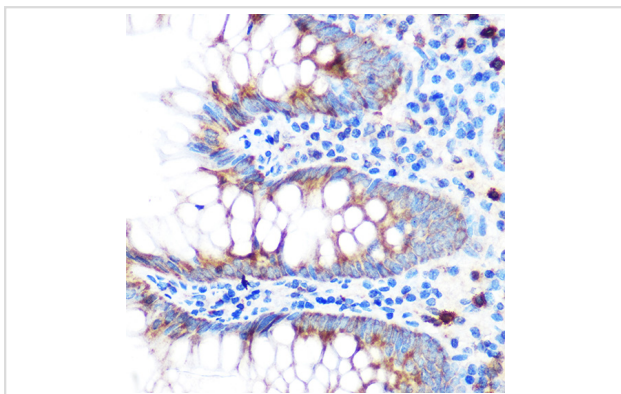
Immunofluorescence analysis of L929 cells using GPX4 Rabbit pAb.



Immunohistochemistry of paraffin-embedded mouse testis using GPX4 Rabbit pAb.



Immunofluorescence analysis of C6 cells using GPX4 Rabbit pAb.



Immunohistochemistry of paraffin-embedded human appendix using GPX4 Rabbit pAb.

## Background

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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