Product Datasheet

GPX4 Rabbit mAb

Catalog No: #49731

Package Size: #49731-1 50ul #49731-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

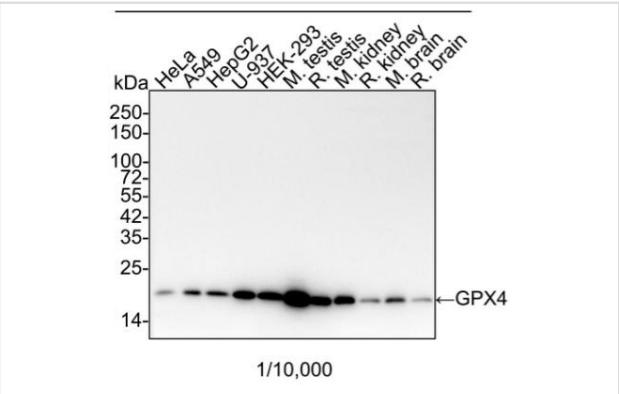
Description

Product Name	GPX4 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Purification	ProA affinity purified
Applications	WB;IHC;IF
Species Reactivity	Human;Mouse;Rat
Immunogen Description	Synthetic peptide within Human GPX4
Conjugates	Unconjugated
Other Names	Glutathione peroxidase 4 antibody GPX 4 antibody GPX-4 antibody GPX4 antibody GPX4_HUMAN antibody GSHPx-4 antibody MCSP antibody mitochondrial antibody PHGPx antibody Phospholipid hydroperoxidase antibody Phospholipid hydroperoxide glutathione peroxidase antibody Phospholipid hydroperoxide glutathione peroxidase mitochondrial antibody snGPx antibody snPHGPx antibody Sperm nucleus glutathione peroxidase antibody
Accession No.	Swiss-Prot#:P36969
Calculated MW	22 kDa Clone number: JU11-31
Concentration	1ug/ul
Formulation	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

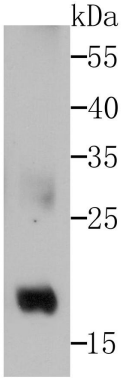
Application Details

WB 1:10000IHC-P 1:1000-1:5000 IF 1:50-1:200

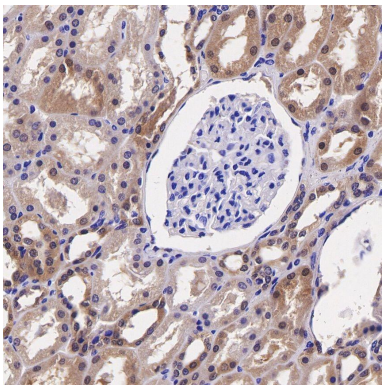
Images



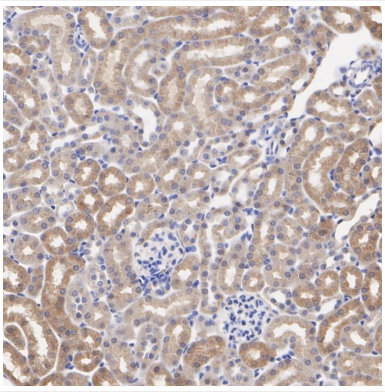
Western blot analysis of GPX4 on different lysates with GPX4 antibody at 1/10,000 dilution Lane 1: HeLa cell lysate (20 µg/Lane) Lane 2: A549 cell lysate (20 µg/Lane) Lane Observed band size: 20 kDa Exposure time: 2 minutes; 4-20% SDS-PAGE gel.



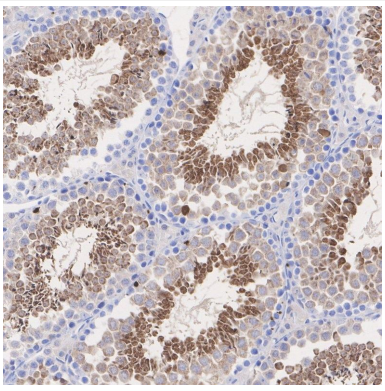
Western blot analysis of GPX4 on zebrafish tissue lysates with GPX4 antibody at 1/500 dilution. Lysates/proteins at 10 µg/Lane. Predicted band size: 22 kDa Observed band size: 17 kDa Exposure time: 2 minutes; 12% SDS-PAGE gel.



Immunohistochemical analysis of paraffin-embedded human kidney tissue with GPX4 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with GPX4 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue with GPX4 antibody at 1/5,000 dilution.

Background

Glutathione peroxidase (GPx) enzymes are generally selenium-containing tetrameric glycoproteins that help prevent lipid peroxidation of cell membranes. GPx enzymes reduce lipid hydroperoxides to alcohols, and reduce free hydrogen peroxide to water. GPx members are among the few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by the nonsense (stop) codon TGA. There are eight GPx homologs (GPx-1-8). GPx-1, Gpx-2 and Gpx-3 exist as homotetramers. Gpx-4 has a high tendancy to form high molecular weight oligomers.

References

1. Luna-SoΩ½oΩ½nchez M et al. CoQ deficiency causes disruption of mitochondrial sulfide oxidation, a new pathomechanism associated with this syndrome. EMBO Mol Med 9:78-95 (2017).
2. Kagan VE et al. Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis. Nat Chem Biol 13:81-90 (2017).

Published Papers

el at., Linoleic Acidβ Glucosamine Hybrid for Endogenous Iron-Activated Ferroptosis Therapy in High-Grade Serous Ovarian Cancer. In Mol Pharm on 2022 Sep 5 by Ying Chen, Xiaoming Liao, et al..PMID:35939328, , (2022)

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PMID:39736347

Zhang Weilin, Liu Kuize, Li Zhencong, Feng Dao, Zhou Boyuan, Zhao Wei, Huang Shengbang, Dai Zhiwen, Liang Jinguo, Chen Siyuan, Wei Yen, Wei Jinsong el at., Polyethylene microplastics transported to nucleus pulposus cells via macrophages-derived exosomes, and promote intervertebral disc degeneration throughB β ¦, Ecotoxicology and Environmental Safety, (2025)

PMID:41175705

Note: This product is for in vitro research use only and is not intended for use in humans or animals.