GPX4 Rabbit mAb

Catalog No: #49731

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



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

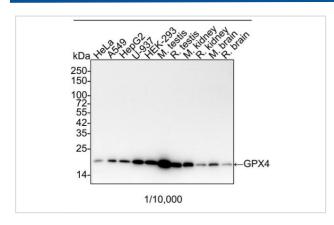
Description

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

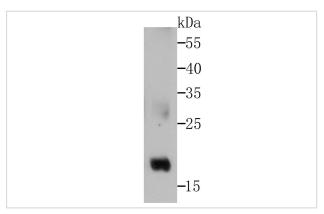
Application Details

WB 1:10000IHC-P 1:1000-1:5000

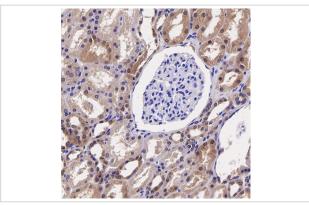
Images



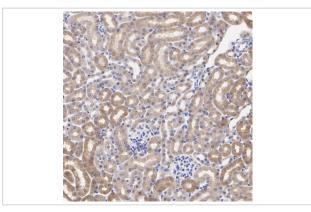
Western blot analysis of GPX4 on different lysates with GPX4 antibody at 1/10,000 dilution Lane 1: HeLa cell lysate (20 μ g/Lane) Lane 2: A549 cell lysate (20 μ g/Lane) Lane Observed band size: 20 kDa Exposure time: 2 minutes; 4-20% SDS-PAGE gel.



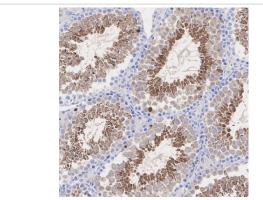
Western blot analysis of GPX4 on zebrafish tissue lysates with GPX4 antibody at 1/500 dilution. Lysates/proteins at 10 µg/Lane. Predicted band size: 22 kDa Observed band size: 17 kDa Exposure time: 2 minutes; 12% SDS-PAGE gel.



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-So $\Omega\frac{1}{2}$ o $\Omega\frac{1}{2}$ nchez 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)

PMID:35939328

Yuwen Liu; Jiping Liu; Naping Hu; Zhengrong Li; Anqi Liu; Ruyue Luo; Siyu Du; Dongyan Guo; Jiankang Li; Jialin Duan el at., Classical prescription Daqinjiao decoction inhibit cerebral ischemia/reperfusion induced necroptosis and ferroptosis through multiple mechanisms., , (2025)

PMID:39736347

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