

GPX4 Rabbit Polyclonal Antibody



CAB13309

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

17KDa

Calculated MW:

19kDa/22kDa

Applications:

WB IHC IF

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:

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

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein 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.

Immunogen information

Gene ID:

2879

Uniprot

P36969

Synonyms:

GPX4; GPx-4; GSHPx-4; MCSP; PHGPx; SMDS; snGPx; snPHGPx

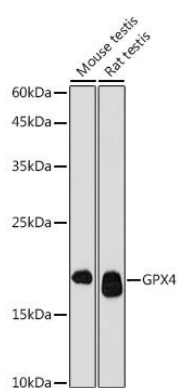
Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 30-197 of human GPX4 (NP_002076.2).

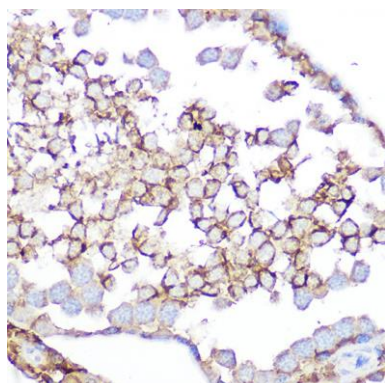
Storage:

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

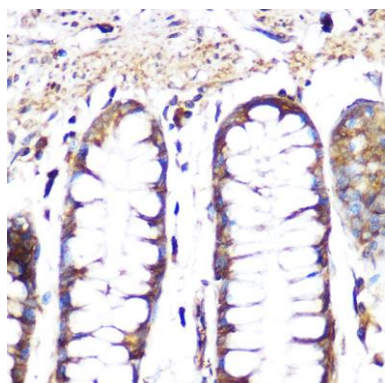
Product Images



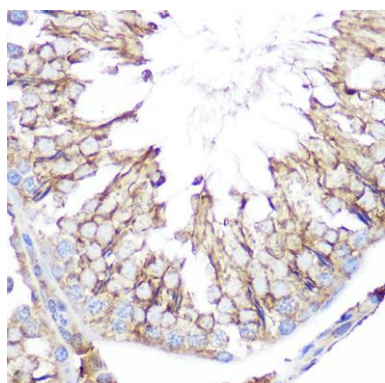
Western blot analysis of extracts of various cell lines, using GPX4 antibody (CAB13309) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 180s.



Immunohistochemistry of paraffin-embedded rat testis using GPX4 Rabbit pAb (CAB13309) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human colon using GPX4 Rabbit pAb (CAB13309) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse testis using GPX4 Rabbit pAb (CAB13309) at dilution of 1:100 (40x lens).