

# [KO Validated] GPX4 Rabbit mAb

Catalog No.: A11243 **KO Validated** **Recombinant** **8 Publications**

## Basic Information

### Catalog No.

A11243

### Observed MW

17kDa

### Calculated MW

19kDa/22kDa

### Category

Primary antibody

### Applications

WB,IP

### Cross-Reactivity

Human, Mouse, Rat

## Recommended Dilutions

<b>WB</b>	1:500 - 1:2000
<b>IP</b>	1:50 - 1:200

## Contact

 | [www.abclonal.com](http://www.abclonal.com)

## 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. [provided by RefSeq, Oct 2016]

## Immunogen Information

<b>Gene ID</b>	<b>Swiss Prot</b>
2879	P36969

### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human GPX4 (P36969).

### Synonyms

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

## Product Information

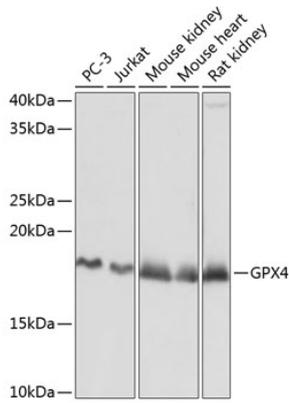
<b>Source</b>	<b>Isotype</b>	<b>Purification</b>
Rabbit	IgG	Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Validation Data



Western blot analysis of extracts of various cell lines, using GPX4 Rabbit mAb (A11243) at 1:1000 dilution.

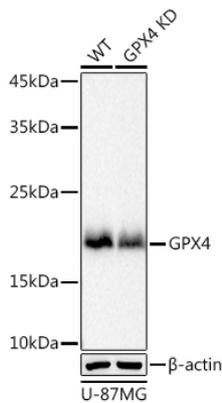
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.



Western blot analysis of extracts from wild type (WT) and GPX4 knockdown (KD) U-87MG cell pools, using GPX4 antibody (A11243) at 1:1000 dilution.

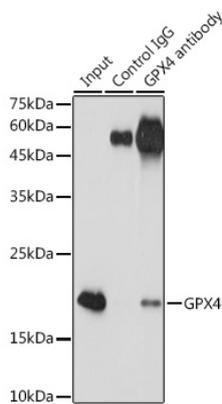
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Immunoprecipitation analysis of 300ug extracts of Jurkat cells using 3ug GPX4 antibody (A11243).

Western blot was performed from the immunoprecipitate using GPX4 antibody (A11243) at a dilution of 1:1000.