

Datasheet for ABIN7267436

anti-GPX4 antibody

3 Images

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Overview

Quantity:	100 µL
Target:	GPX4
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This GPX4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Purpose:	[KO Validated] GPX4 Rabbit mAb
Immunogen:	A synthesized peptide derived from human GPX4
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification
Grade:	KO Validated

Target Details

Target:	GPX4
Alternative Name:	GPX4 (GPX4 Products)

Target Details

Background:	<p>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.</p> <p>[provided by RefSeq, Oct 2016],GPx-4, GSHPx-4, MCSP, PHGPx, SMDS, snGPx, snPHGPx,Cancer,Endocrine & Metabolism,Mitochondrial metabolism,Mitochondrial metabolism_Mitochondrial markers,Signal Transduction,GPX4</p>
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Molecular Weight:	19kDa/22kDa
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Gene ID:	2879
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UniProt:	P36969
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Application Details

Application Notes:	WB,1:500 - 1:2000,IP,1:50 - 1:200
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.
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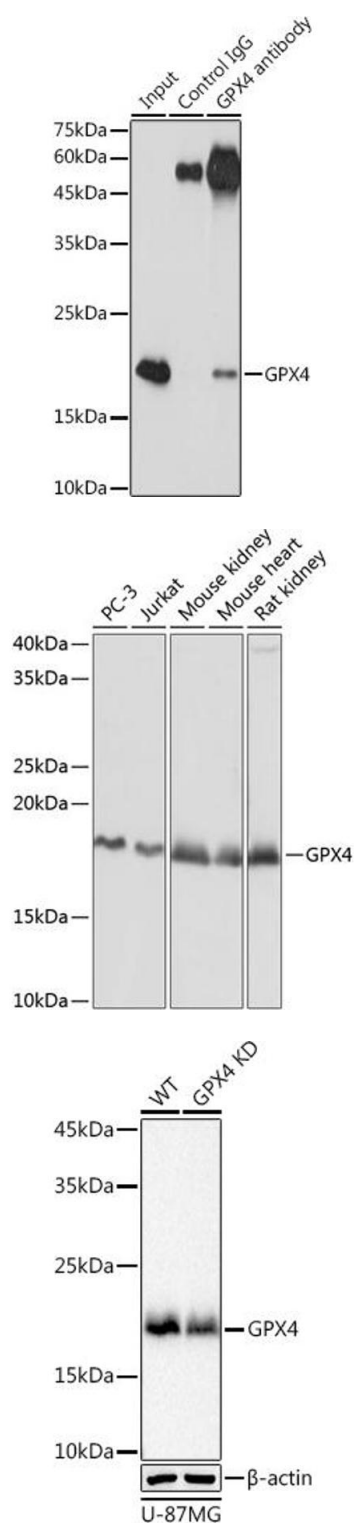
Preservative:	Sodium azide
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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	-20 °C
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Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

Images



Immunoprecipitation

Image 1. Immunoprecipitation analysis of 300 µg extracts of Jurkat cells using 3 µg GPX4 antibody (ABIN7267436). Western blot was performed from the immunoprecipitate using GPX4 antibody (ABIN7267436) at a dilution of 1:1000.

Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using GPX4 Rabbit mAb (ABIN7267436) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.

Western Blotting

Image 3. Western blot analysis of extracts from wild type (WT) and GPX4 knockdown (KD) U-87MG cell pools, using GPX4 antibody (ABIN7267436) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.