

ARG41955 anti-GPX4 antibody

Package: 50 μl Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GPX4
Tested Reactivity	Hu, Ms, Rat, Zfsh
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	GPX4
Species	Human
Immunogen	Recombinant protein of Human GPX4.
Conjugation	Un-conjugated
Alternate Names	Phospholipid hydroperoxide glutathione peroxidase, mitochondrial; EC 1.11.1.12; MCSP; PHGPx; GSHPx-4; Glutathione peroxidase 4; GPx-4; snPHGPx; snGPx

Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse kidney	
Observed Size	~ 17 kDa	

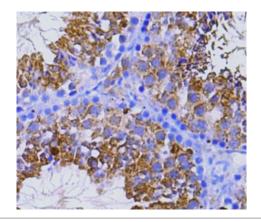
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	TBS (pH 7.4), 0.05% Sodium azide, 40% Glycerol and 1% BSA.
Preservative	0.05% Sodium azide
Stabilizer	40% Glycerol and 1% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

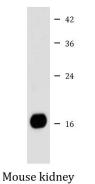
Gene Symbol	GPX4
Gene Full Name	glutathione peroxidase 4
Background	This gene encodes a member of the glutathione peroxidase protein family. Glutathione peroxidase catalyzes the reduction of hydrogen peroxide, organic hydroperoxide, and lipid peroxides by reduced glutathione and functions in the protection of cells against oxidative damage. Human plasma glutathione peroxidase has been shown to be a selenium-containing enzyme and the UGA codon is translated into a selenocysteine. The encoded protein has been identified as a moonlighting protein based on its ability to serve dual functions as a peroxidase as well as a structural protein in mature spermatozoa. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, alternative transcription initiation and the cleavage sites of the mitochondrial and nuclear transit peptides need to be experimentally verified. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Function	Protects cells against membrane lipid peroxidation and cell death. Required for normal sperm development and male fertility. Could play a major role in protecting mammals from the toxicity of ingested lipid hydroperoxides. Essential for embryonic development. Protects from radiation and oxidative damage (By similarity). [UniProt]
Highlight	Related products: <u>GPX4 antibodies; GPX4 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</u> Related news: <u>Ferroptosis/Oxytosis Antibody Panel is launched</u> <u>Therapeutic strategies against PDAC</u>
Research Area	Ferroptosis/Oxytosis Study antibody
Calculated Mw	22 kDa
Cellular Localization	Isoform Mitochondrial: Mitochondrion. Isoform Cytoplasmic: Cytoplasm. [UniProt]

Images



ARG41955 anti-GPX4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue stained with ARG41955 anti-GPX4 antibody. Counter stained with hematoxylin.



ARG41955 anti-GPX4 antibody WB image

Western blot: Mouse kidney lysate stained with ARG41955 anti-GPX4 antibody at 1:500 dilution.