Datasheet for ABIN7249606

anti-Glutathione Peroxidase 1 antibody

1 Image

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Overview

Quantity:	200 µL
Target:	Glutathione Peroxidase 1 (GPX1)
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Glutathione Peroxidase 1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH conjugated Synthetic peptide corresponding to Mouse GPX1
Isotype:	IgG
Characteristics:	Polyclonal Antibody
Purification:	Affinity purification

Target Details

Target:	Glutathione Peroxidase 1 (GPX1)
Alternative Name:	GPX1 (GPX1 Products)
Background:	The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H2O2) by glutathione, and thereby protect cells against oxidative damage. Other studies indicate that H2O2 is also essential for growth-factor mediated signal transduction, mitochondrial function,

Target Details

	and maintenance of thiol redox-balance, therefore, by limiting H2O2 accumulation, glutathione peroxidases are also involved in modulating these processes. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme is the most abundant, is ubiquitously expressed and localized in the cytoplasm, and whose preferred substrate is hydrogen peroxide. It 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. This gene contains an in-frame GCG trinucleotide repeat in the coding region, and three alleles with 4, 5 or 6 repeats have been found in the human population. The allele with 4 GCG repeats has been significantly associated with breast cancer risk in premenopausal women. Alternatively spliced transcript variants have been found for this gene. Pseudogenes of this locus have been identified on chromosomes X and 21.
Molecular Weight:	Observed_MW: 22 kDa Calculated_MW: 22 kDa
UniProt:	P11352, P04041
Pathways:	Thyroid Hormone Synthesis, Sensory Perception of Sound, Skeletal Muscle Fiber Development, Cell RedoxHomeostasis, Negative Regulation of intrinsic apoptotic Signaling, SARS-CoV-2 Protein Interactome

Application Details

Application Notes:	WB 1:500-1:2000
Restrictions:	For Research Use only

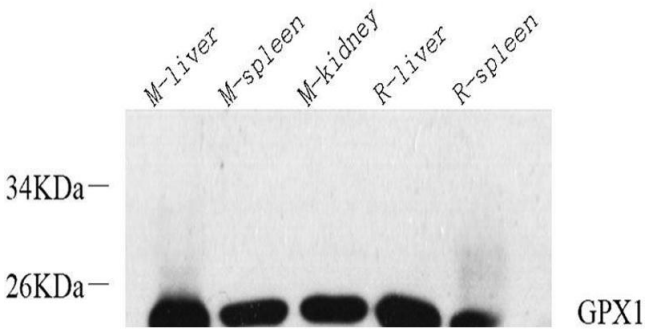
Handling

Format:	Liquid
Concentration:	400 µg/mL
Buffer:	PBS with 0.02 % sodium azide, 1 % BSA and 50 % glycerol, pH 7.4
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

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

Images



Western Blotting

Image 1. Western Blot analysis of various samples using GPX1 Polyclonal Antibody at dilution of 1:1000.