ARG43909
anti-GPX1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GPX1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GPX1
Species	Human
Immunogen	Human GPX1 recombinant protein
Conjugation	Un-conjugated
Alternate Names	GPX1; Glutathione Peroxidase 1; Cellular Glutathione Peroxidase; Selenoprotein GPX1; EC 1.11.1.9; GSHPx-1; EC 1.11.1; GSHPX1; GPx-1; GPXD

Application Instructions

Application table

Application	Dilution
ELISA	0.1-0.5 µg/ml
WB	0.25-0.5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Affinity purified with Immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4 and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 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 or below. 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.
Note	For laboratory research only, not for drug, diagnostic or other use.

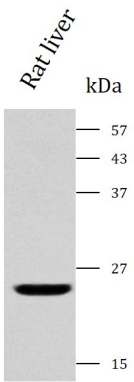
Bioinformation

Gene Symbol	GPX1
Gene Full Name	Glutathione Peroxidase 1
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, 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.
Function	Protects the hemoglobin in erythrocytes from oxidative breakdown. In platelets, plays a crucial role of glutathione peroxidase in the arachidonic acid metabolism.
Calculated Mw	22 kDa
PTM	Acetylation, Phosphoprotein
Cellular Localization	Cytoplasm

Images

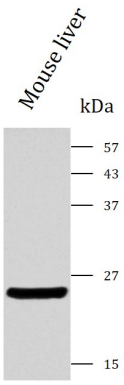
ARG43909 anti-GPX1 antibody WB image

Western blot: THP-1 stained with ARG43909 anti-GPX1 antibody at 0.5 µg/mL dilution.



ARG43909 anti-GPX1 antibody WB image

Western blot: Rat liver stained with ARG43909 anti-GPX1 antibody at 0.5 µg/mL dilution.



ARG43909 anti-GPX1 antibody WB image

Western blot: Mouse liver stained with ARG43909 anti-GPX1 antibody at 0.5 µg/mL dilution.