GPX1 Rabbit pAb

Catalog No.: A0873 3 Publications



Basic Information

Observed MW

22kDa

Calculated MW

22kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,FC

Cross-Reactivity

Human, Mouse, Rat

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, alutathione 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.

Recommended Dilutions

WB	1:500 - 1:1000
IF/ICC	1:20 - 1:50

1:20 - 1:50

Immunogen Information

Gene ID2876

Swiss Prot
P07203

Immunogen

A synthetic peptide of human GPX1

Synonyms

GPXD; GSHPX1; GPX1

Contact

FC

www.abclonal.com

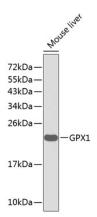
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at 4°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,pH7.3.

Validation Data



Western blot analysis of extracts of mouse liver, using GPX1 antibody (A0873). Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST.