GPX1 Rabbit pAb

Catalog NO.: A1110 **18 Publications**

Basic Information

Observed MW
22 kDa

Calculated MW
22 kDa

Category
Polyclonal Antibodies

Applications
WB, IF/ICC, IHC-P, ELISA

Cross-Reactivity
Human, Mouse, Rat

Conjugation
Unconjugated

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.

Recommended Dilutions

WB	1:500 - 1:5000
IF/ICC	1:50 - 1:200
IHC-P	1:50 - 1:200

ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
2876

Swiss Prot
P07203

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
GPXD; GSHPX1; GPX1

Contact

Product Information

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☒ | service@abclonal.com
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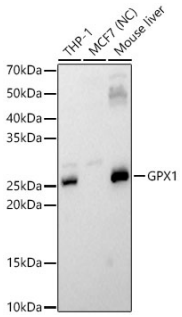
Source
Rabbit

Isotype
IgG

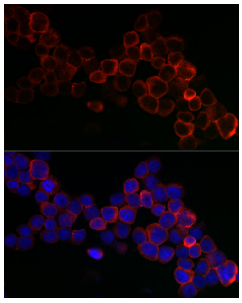
Purification
Affinity purification

Storage
Store at -20°C. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

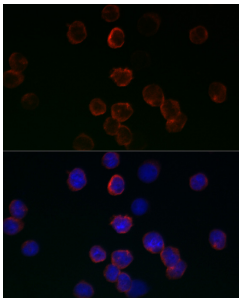
Validation Data



Western blot analysis of various lysates using GPX1 Rabbit pAb (A1110) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Negative control (NC): MCF7.
Exposure time: 60s.



Immunofluorescence analysis of THP-1 cells using GPX1 Rabbit pAb (A1110) at dilution of 1:200. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of 293T cells using GPX1 Rabbit pAb (A1110) at dilution of 1:200. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

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