

Glutathione Peroxidase 1 Rabbit pAb

db22300

Package : 20μL 50μL 100μL

Product Name : Glutathione Peroxidase 1 Rabbit pAb**Cat.No.:** db22300**Synonyms** : GPXD; GSHPX1**Application** : WB, IHC, ICC/IF, FC, IP**Reactivity** : Human, Rat**Host species** : Rabbit**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. [provided by RefSeq, Aug 2017]

Immunogen

A synthetic peptide of human Glutathione Peroxidase 1

Gene ID

2876

Swiss Prot

P07203

Synonyms

GPXD; GSHPX1

Reactivity

Human, Rat

Application

WB, IHC, ICC/IF, FC, IP

Recommended dilution

WB: 1:1000

IHC: 1:50

	ICC/IF: 1:20
	FC: 1:20
	IP: 1:20
Calculated MW	22 kDa
Observed MW	22 kDa
Host species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

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