## CAB11166



## **Product Information** Product SKU: CAB11166 Gene ID: 2876 20uL, 100uL Size: Clone No: ARC2653 **Host Species:** Rabbit Reactivity: Mouse,Rat **Additional Information Observed MW**: 22kDa Unconjugated Conjugate: Calculated MW: 22kDa Isotype: lgG

## **Immunogen Information**

| 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 Dilution: | WB,1:500 - 1:1000   |
| Synonyms:             | GPXD; GSHPX1; GPX1  |
| Purifcation Method:   | Affinity purification   |
| Immunogen:            | A synthetic peptide corresponding to a sequence within amino acids 100-203 of human GPX1 (NP_000572.2).   |

Storage:

Store at -20°C. Avoid freeze / thaw cycles.Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.