



## Glutathione Peroxidase 4 Recombinant Rabbit mAb

Catalog: BS45442

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

The protein encoded by this gene belongs to the glutathione peroxidase family, members of which catalyze the reduction of hydrogen peroxide, organic hydroperoxides and lipid hydroperoxides, and thereby protect cells against oxidative damage. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme has a high preference for lipid hydroperoxides and protects cells against membrane lipid peroxidation and cell death. It is also required for normal sperm development; thus, it has been identified as a 'moonlighting' protein because of its ability to serve dual functions as a peroxidase, as well as a structural protein in mature spermatozoa. Disruption of this gene in mouse spermatocytes is associated with male infertility. This isozyme 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. Alternatively spliced transcript variants have been found for this gene. Pseudogenes of this locus have been identified on chromosomes 10 and 17. [provided by RefSeq, Aug 2017]

### Product:

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.

### Molecular Weight:

22 kDa

### Swiss-Prot:

O70325

### Purification&Purity:

Affinity Purification

### Applications:

WB: 1:1000-1:5000  
IHC: 1:50-1:200  
ICC/IF: 1:200-1:500  
FC: 1:200

### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Isotype:

IgG

### DATA:

### Note:

For research use only, not for use in diagnostic procedure.

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