

Recombinant

DGRmAb®

Glutathione Peroxidase 4 (DGR13808) Rabbit mAb

db14187

Package : 10µL 20µL 50µL 100µL

Product Name : Glutathione Peroxidase 4 (DGR13808) Rabbit mAb**Cat.No.:** db14187**Synonyms :** GPx-4; PHGPx; snGPx; GSHPx-4; mtPHGPx**Application :** WB, IHC, ICC/IF, FC**Reactivity :** Human, Mouse, Rat**Host species :** Rabbit**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]

Immunogen

A synthetic peptide of mouse Glutathione Peroxidase 4

Gene ID

625249

Swiss Prot

O70325

Synonyms

GPx-4; PHGPx; snGPx; GSHPx-4; mtPHGPx

Reactivity

Human, Mouse, Rat

Application

WB, IHC, ICC/IF, FC

Recommended dilution

WB: 1:1000-1:5000

IHC: 1:50-1:200

ICC/IF: 1:200-1:500

FC: 1:200

Calculated MW

22 kDa

Observed MW

22 kDa

Host species

Rabbit

Clonality

Monoclonal

Clonality No.

DGR13808

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.