

Recombinant GPX4 Monoclonal Antibody

catalog number: **AN300726L**

Note: Centrifuge before opening to ensure complete recovery of vial contents.

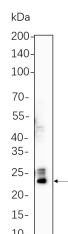
Description

Reactivity	Human;Mouse;Rat
Immunogen	Recombinant Human GPX4 protein
Host	Rabbit
Isotype	IgG,k
Clone	11A8
Purification	Protein A
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications Recommended Dilution

WB	1:2000-1:10000
-----------	----------------

Data



Western Blot with Recombinant GPX4 Monoclonal Antibody
at dilution of 1:1000 dilution. Lane A: HepG2 cell lysate.

Observed-MW:22 kDa

Calculated-MW:22 kDa

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	Ice bag

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. Mutations in this gene are associated with Spondylometaphyseal dysplasia (SMDS). 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.

For Research Use Only