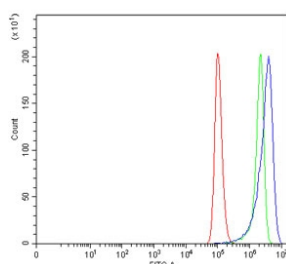


Glutathione Peroxidase 4 Antibody / GPX4 [clone 6I4E7] (RQ7294)

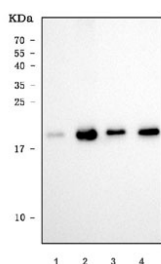
Catalog No.	Formulation	Size
RQ7294	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	6I4E7
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P36969
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Glutathione Peroxidase 4 antibody is available for research use only.



Flow cytometry testing of human HeLa cells with Glutathione Peroxidase 4 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Glutathione Peroxidase 4 antibody.



Western blot testing of human 1) HepG2, 2) Caco-2, 3) 293T and 4) K562 cell lysate with Glutathione Peroxidase 4 antibody. Predicted molecular weight: 19-22 kDa.

Description

Glutathione peroxidase 4, also known as GPX4, is an enzyme that in humans is encoded by the GPX4 gene. This gene encodes a member of the glutathione peroxidase protein family. Glutathione peroxidase catalyzes the reduction of hydrogen peroxide, organic hydroperoxide, and lipid peroxides by reduced glutathione and functions in the protection of cells against oxidative damage. Human plasma glutathione peroxidase has been shown to be a selenium-containing enzyme and the UGA codon is translated into a selenocysteine. The encoded protein has been identified as a moonlighting protein based on its ability to serve dual functions as a peroxidase as well as a structural protein in mature spermatozoa. Through alternative splicing and transcription initiation, rat produces proteins that localize to the nucleus, mitochondrion, and cytoplasm. In humans, alternative transcription initiation and the cleavage sites of the mitochondrial and nuclear transit peptides need to be experimentally verified. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the Glutathione Peroxidase 4 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids A30-F197) was used as the immunogen for the Glutathione Peroxidase 4 antibody.

Storage

After reconstitution, the Glutathione Peroxidase 4 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.