

GPX2/Glutathione Peroxidase 2 Rabbit mAb

Catalog NO.: A28998 **Recombinant**

Basic Information

Observed MW

22 kDa

Calculated MW

22 KDa

Category

Monoclonal Antibodies

Applications

WB, IF-F, IHC-P, ELISA

Cross-Reactivity

Human, Mouse

Clone number

ARC83522

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. Several isozymes of this gene family exist in vertebrates, which vary in cellular location and substrate specificity. This isozyme is predominantly expressed in the gastrointestinal tract (also in liver in human), is localized in the cytoplasm, and whose preferred substrate is hydrogen peroxide. Overexpression of this gene is associated with increased differentiation and proliferation in colorectal cancer. 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

Recommended Dilutions

WB 1:2000 - 1:15000

IF-F 1:100 - 1:200

IHC-P 1:300 - 1:1200

ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Contact

Immunogen Information

Gene ID	Swiss Prot
2877	P18283

Immunogen

Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms

GI-GPx, GPRP, GPRP-2, GPx-2, GPx-GI, GSHPX-GI, GSHPx-2

Product Information

☒		order@abclonal.com
☒		service@abclonal.com
☒		www.abclonal.com

Source	Isotype	Purification
Rabbit	IgG	Affinity purification
Storage		
Store at -20°C. Avoid freeze / thaw cycles.		
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.		

Validation Data



Western blot analysis of various lysates using GPX2/Glutathione Peroxidase 2 Rabbit mAb (A28998) at 1:5000 dilution incubated overnight at 4°C.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

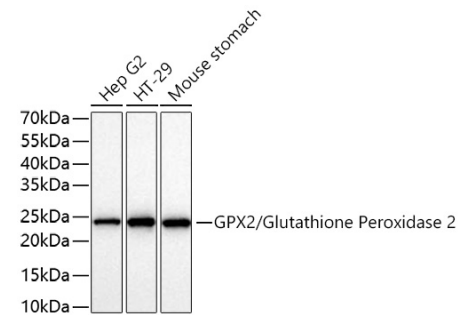
Lysates/proteins: 25 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Negative control (NC): 293T.

Exposure time: 5 s.



Western blot analysis of various lysates using GPX2/Glutathione Peroxidase 2 Rabbit mAb (A28998) at 1:5000 dilution incubated overnight at 4°C.

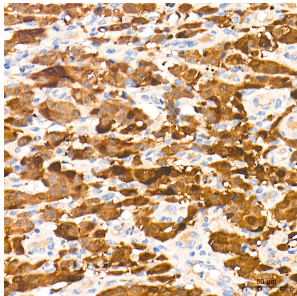
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

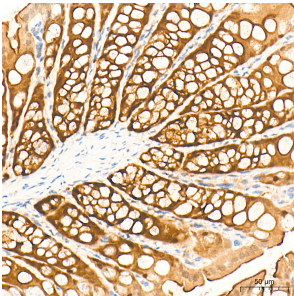
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

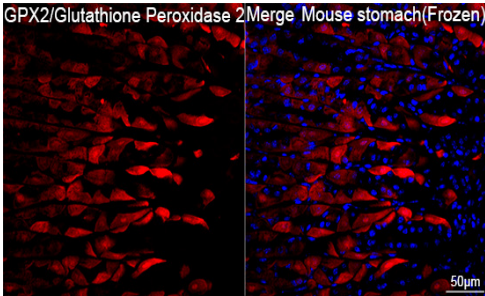
Exposure time: 1 s.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using GPX2/Glutathione Peroxidase 2 Rabbit mAb (A28998)



Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using GPX2/Glutathione Peroxidase 2 Rabbit mAb (A28998)



Confocal imaging of frozen sections of Mouse stomach tissue using GPX2/Glutathione Peroxidase 2 Rabbit mAb (A28998, dilution 1:200) followed by a further incubation

at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining.
Objective: 40x.