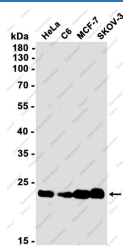


Recombinant Glutathione Peroxidase 4 Monoclonal Antibody

catalog number: **AN301875L**

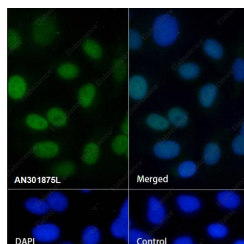
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description	
Reactivity	Human;Mouse;Rat
Immunogen	A synthetic peptide of mouse Glutathione Peroxidase 4
Host	Rabbit
Isotype	Rabbit IgG
Clone	C111497
Purification	Protein A purified
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.
Applications	Recommended Dilution
WB	1:1000-1:5000
IHC	1:50-1:200
ICC/IF	1:200-1:500
FCM	1:200
Data	

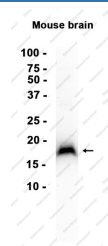


Western blot analysis of HeLa, C6, MCF-7 and SKOV-3 cell lysates using Glutathione Peroxidase 4 Antibody (AN301875L) at a dilution of 1:1000.

Observed-MW:22 kDa
Calculated-MW:22 kDa

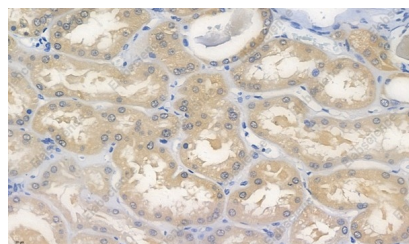


Immunofluorescence analysis of HepG2 cells using Glutathione Peroxidase 4 Antibody (AN301875L). Nuclear DNA was labeled in blue with DAPI. Control: Secondary antibody only.

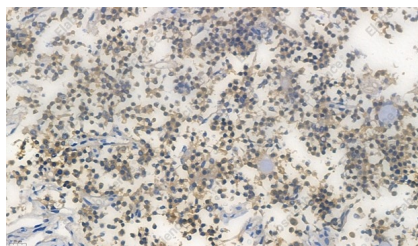


Western blot analysis of Mouse brain cell lysates using Glutathione Peroxidase 4 Antibody (AN301875L) at a dilution of 1:2000.

Observed-MW:22 kDa
Calculated-MW:22 kDa



Immunohistochemical analysis of paraffin-embedded Human kidney sections using Glutathione Peroxidase 4 Antibody (AN301875L).



Immunohistochemical analysis of paraffin-embedded
Human pituitary sections using Glutathione Peroxidase 4
Antibody (AN301875L).

Preparation & Storage

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

Background

The selenoprotein glutathione peroxidase 4 (GPX4) is a master regulator of ferroptosis, a form of programmed cell death induced by iron-dependent lipid peroxidation. GPX4 converts lipid hydroperoxides to non-toxic lipid alcohols, therefore preventing ferroptosis. Research studies show that selenium enhances GPX4 expression and inhibits ferroptotic death to protect neurons. In addition, some therapy-resistant cancer cells depend on GPX4 to survive. Loss of GPX4 leads to ferroptosis and thus prevents tumor relapse in mice. Furthermore, redox homeostasis mediated by GPX4 is essential for activation of the cytosolic DNA-sensing cGAS-STING pathway and initiation of the subsequent innate immune response.

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