



# Rabbit Anti-GPX1 monoclonal antibody, clone KG1055 (CABT-L865)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	Glutathione Peroxidase 1
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Rat
<b>Clone</b>	KG1055
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC/IF, IHC, IP
<b>Molecular Weight</b>	22 kDa
<b>Cellular Localization</b>	Cytoplasm.
<b>Positive Control</b>	THP-1, 293, HepG2, 293T, human liver tissue, human tonsil tissue, human breast carcinoma tissue, human kidney tissue, mouse colon tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

## BACKGROUND

<b>Introduction</b>	<p>Glutathione peroxidase (GPx) enzymes are generally selenium-containing tetrameric glycoproteins that help prevent lipid peroxidation of cell membranes. GPx enzymes reduce lipid hydroperoxides to alcohols, and reduce free hydrogen peroxide to water. GPx members are among the few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by the nonsense (stop) codon TGA. There are eight GPx homologs (GPx-1-8). GPx-1, Gpx-2 and Gpx-3 exist as homotetramers. Gpx-4 has a high tendency to form high molecular weight oligomers. GPx-1 plays an important role in the antioxidant defense of the vascular wall and neural cells in response to oxidative stress. GPx-2 is the major isoform in the lungs and its basal or inducible expression is dependent on Nrf2. GPx-3 is under regulation by hypoxic stress and the expression and deficiency of GPx-3 is associated with cardiovascular disease and stroke. GPx-5 is selenium-independent; it is bound to the acrosome of sperm, where it may protect sperm from premature acrosome reaction in the epididymis.</p>
<b>Keywords</b>	<p>AL033363;Cellular glutathione peroxidase;Glutathione peroxidase 1;Glutathione peroxidase;GPx 1;GPx-1;GPX1;GPX1_HUMAN;GPXD;GSHPx-1;GSHPX1;MGC14399;MGC88245 antibody</p>