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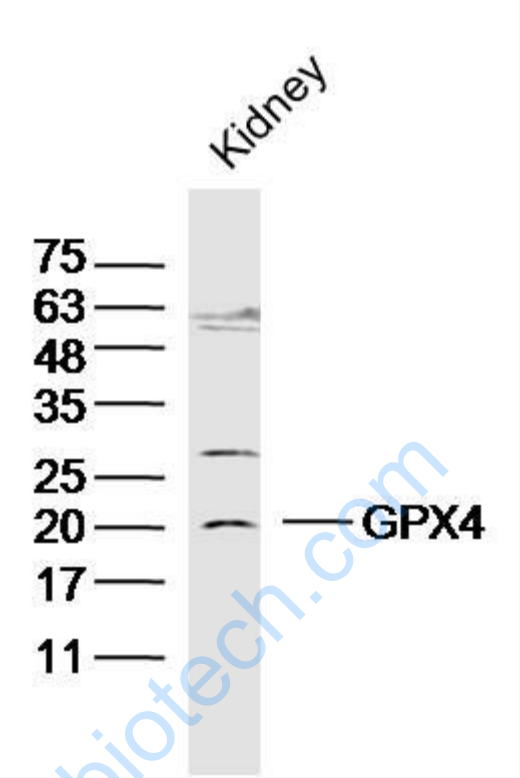
Rabbit Anti-GPX4 antibody

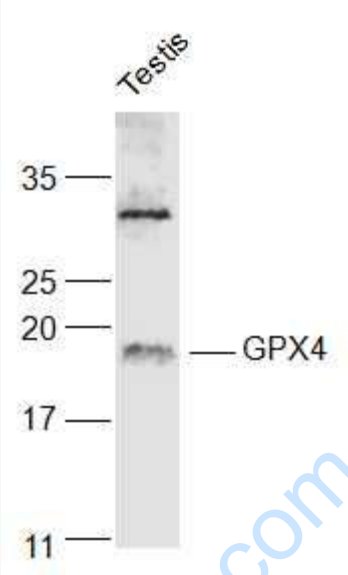
SL3884R

Product Name:	GPX4
Chinese Name:	谷胱甘肽过氧化酶4抗体
Alias:	Glutathione peroxidase 4; GPX 4; GPX-4; GPX4; GPX4_HUMAN; GSHPx-4; MCSP; mitochondrial; PHGPx; Phospholipid hydroperoxidase; Phospholipid hydroperoxide glutathione peroxidase; Phospholipid hydroperoxide glutathione peroxidase; Phospholipid hydroperoxide glutathione peroxidase mitochondrial; snGPx; snPHGPx; Sperm nucleus glutathione peroxidase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmicMitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Glutathione Peroxidase 4:101-197/197
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Glutathione peroxidases (Gpxs) are ubiquitously expressed proteins which catalyze the reduction of hydrogen peroxides and organic hydroperoxides by glutathione. There are several isoforms which differ in their primary structure and localization. The classical

	cytosolic/mitochondrial GPx1 (cGPx) is a selenium-dependent enzyme, first of the GPx family to be discovered. GPx2, also known as gastrointestinal GPx (GI-GPx), is an intracellular enzyme expressed only at the epithelium of the gastrointestinal tract. Extracellular plasma GPx (pGPx or GPx3) is mainly expressed by the kidney from where it is released into the blood circulation. Phospholipid hydroperoxide GPx4 (PH-GPx) expressed in most tissues, can reduce many hydroperoxides including hydroperoxides integrated in membranes, hydroperoxy lipids in low density lipoprotein or thymine. All mammalian GPx family members, except for the recently described Cys containing GPx3 and epididymis-specific secretory GPx (eGPx or GPx5) isoforms, possess selenocysteine at the active site. **Function:** Protects cells against membrane lipid peroxidation and cell death. Required for normal sperm development and male fertility. Could play a major role in protecting mammals from the toxicity of ingested lipid hydroperoxides. Essential for embryonic development. Protects from radiation and oxidative damage. **Subunit:** Monomer. Has a tendency to form higher mass oligomers. **Subcellular Location:** Isoform Mitochondrial: Mitochondrion. Isoform Cytoplasmic: Cytoplasm. **Tissue Specificity:** Present primarily in testis. **Similarity:** Belongs to the glutathione peroxidase family. **SWISS:** P36969 **Gene ID:** 2879 **Database links:** Entrez Gene: 2879 Human Entrez Gene: 625249 Mouse Entrez Gene: 29328 Rat Omim: 138322 Human SwissProt: P36969 Human

	SwissProt: O70325 Mouse SwissProt: P36970 Rat Unigene: 433951 Human Unigene: 359573 Mouse Unigene: 3647 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 谷胱甘肽过氧化物酶(GSH-Px)是机体内广泛存在的一种重要的过氧化物分解酶。硒是GSH-Px酶系的组成成分，它能催化GSH变为GSSG，使有毒的过氧化物还原成无毒的羟基化合物，同时促进H2O2的分解，从而保护The cell membrane的结构及功能不受过氧化物的干扰及损害。GSH-Px的活性中心是硒半胱氨酸，其活力大小可以反映机体硒水平。GSH-Px酶系主要包括4种不同的GSH-Px，分别为胞浆GSH-Px、血浆GSH-Px、磷脂氢过氧化物GSH-Px及胃肠道专属性GSH-Px。胞浆GSH-Px由4个相同的分子量大小为22kDa的亚基构成四聚体，每个亚基含有1个分子硒半胱氨酸，广泛存在于机体内各个组织，以肝脏红细胞为最多。它的生理功能主要是催化GSH参与过氧化反应，清除在细胞呼吸代谢过程中产生的过氧化物和羟自由基，从而减轻The cell membrane多不饱和脂肪酸的过氧化作用。

Picture:	 Sample: Kidney (mouse) Lysate at 40 ug Primary: Anti-GPX4 (SL3884R)at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 22kD Observed band size: 20 kD



Sample:

Testis (Mouse) Lysate at 40 ug

Primary: Anti-GPX4 (SL3884R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

Observed band size: 19 kD