

## Product datasheet for **TA319336**

### Gpx4 Rabbit Polyclonal Antibody

#### Product data:

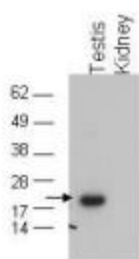
Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:7,000 - 1:30,000, WB: 1:500 - 1:3,000, IHC: User Optimized
Reactivity:	Mouse, Rat, Guinea Pig
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the carboxyl terminus of mouse GPx4 protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	glutathione peroxidase 4
Database Link:	<a href="#">NP_032188</a> <a href="#">Entrez Gene 29328 Rat</a> <a href="#">Entrez Gene 625249 Mouse</a> <a href="#">O70325</a>
Synonyms:	GPx-4; GSHPx-4; MCSP; PHGPx; snGPx; snPHGPx



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**Note:** This antibody is suitable for Cancer, Immunology and Nuclear Signaling research. Glutathione Peroxidase 4 (GPx4, also known as PHGPx) functions as an antioxidant and also plays a role in redox regulation, sexual maturation, inflammation, apoptosis, and differentiation. GPx4 was found to have an important role in preventing lipid peroxidation, and has been discussed primarily as the glutathione peroxidase protecting biomembranes against oxidative stress. GPx4 can react with free hydrogen peroxide as well as with a wide range of lipid hydroperoxides, including those derived from cholesterol and cholesteryl esters. GPx4 is the only GPx to use phospholipid hydroperoxides as substrates. It can also reduce thymine hydroperoxide. In contrast to GPx1 and GPx3, GPx4 can use a wide range of reducing substrates in addition to glutathione. GPx4 is expressed in high levels in testes, suggesting a role in male fertility. It has also been identified as an enzymatically inactive structural protein of the mitochondrial capsule of sperm.

### Product images:



Western blot using affinity purified anti-GPx4 to detect GPx4 in testis extract (arrow). Tissue extract (40 ug) was electrophoresed and transferred to nitrocellulose. The membrane was probed with the primary antibody at a 1:1,000 dilution. Personal Communication, Dolph Hatfield, CCR-NCI, Bethesda, MD.