bs-3884R **[Primary Antibody]**

GPX4 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 2879 **SWISS:** P36969

Target: GPX4

Immunogen: KLH conjugated synthetic peptide derived from human Glutathione Peroxidase 4: 101-197/197.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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.

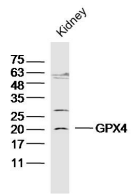
Applications: **WB** (1:500-2000)

Reactivity: Human, Mouse, Rat (predicted: Pig, Sheep, Cow)

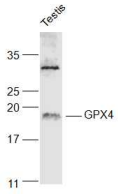
Predicted MW.: 22 kDa

Subcellular Location: Cytoplasm

VALIDATION IMAGES



Sample: Kidney (mouse) Lysate at 40 ug Primary: Anti-GPX4 (bs-3884R)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 (bs-3884R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 22 kD Observed band size: 19 kD

SELECTED CITATIONS

- **[IF=18.027]** Ke Li. et al. Oxygen Self-Generating Nanoreactor Mediated Ferroptosis Activation and Immunotherapy in Triple-Negative Breast Cancer. ACS NANO. 2023;17(5):4667–4687 WB ;Mouse. 36861638
- **[IF=15.153]** Xu Chen. et al. Chiral Ruthenium Nanozymes with Self-Cascade Reaction Driven the NO Generation Induced Macrophage M1 Polarization Realizing the Lung Cancer “Cocktail Therapy”. SMALL. 2023 Apr;:2207823 WB ;Mouse. 37029560

- **[IF=13]** Can Yao. et al. A Magnetically Actuated MOF-Based Nanozyme for Intensified Induction of Ferroptosis and Immunogenic Cell Death Via Autophagy Blockade. SMALL. 2024 Dec;:2409026 IF,IHC ;Mouse. 39659092
- **[IF=12.479]** Tao Liu. et al. Multifaceted roles of a bioengineered nanoreactor in repressing radiation-induced lung injury. Biomaterials. 2021 Oct;277:121103 WB,IF ;Mouse. 34478930
- **[IF=11.9]** Xu Chen. et al. Dual-driven selenium Janus single-atom nanomotors for autonomous regulating mitochondrial oxygen imbalance to catalytic therapy of rheumatoid arthritis. REDOX BIOL. 2025 Apr;81:103574 WB ;Mouse. 40043450