

**DESCRIPTION**

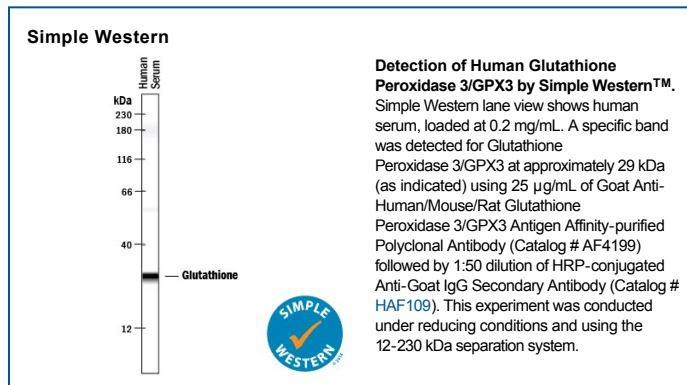
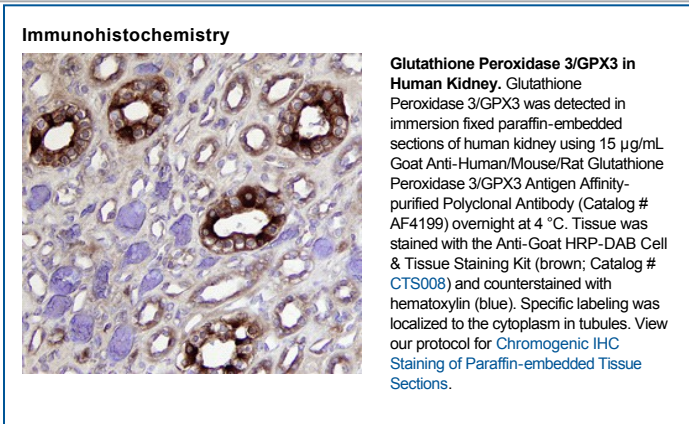
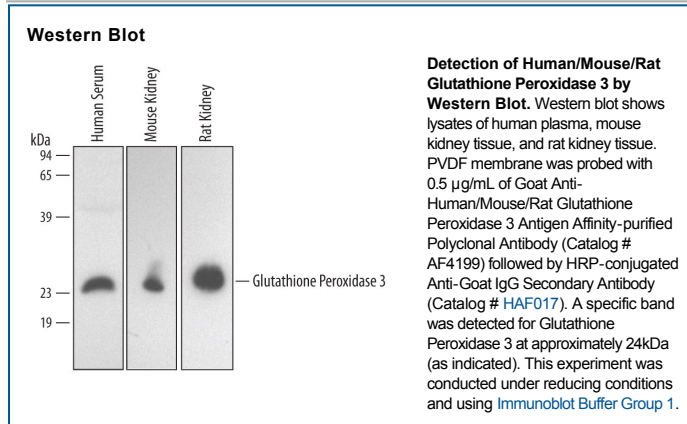
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat Glutathione Peroxidase 3/GPX3 in Western blots and detects recombinant human and recombinant mouse Glutathione Peroxidase 3/GPX3 in direct ELISAs. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) GPX5 and recombinant mouse (rm) GPX1 is observed, and less than 4% cross-reactivity with rhGPX4, rhGPX6, and rmGPX2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse Glutathione Peroxidase 3/GPX3 Gly74-Lys226 Accession # P46412
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	25 µg/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

Glutathione Peroxidase 3 (GPX3), also known as Plasma Glutathione Peroxidase, is a 226 amino acid member of the glutathione peroxidase antioxidant enzyme family. The Glutathione Peroxidase family protects cell surfaces, extracellular fluid components, and enzymes from oxidative stress by catalysing the reduction of hydrogen peroxide, lipid peroxides, and organic hydroperoxide using reduced glutathione. GPX3 is secreted into plasma and like GPX1, is an ~100 kDa homotetramer consisting of four identical 23 kDa subunits, each containing a selenocysteine residue at the active site. GPX3 exhibits highest levels of mRNA expression in liver (human only), kidney, heart and lung tissues. Mouse GPX3 shares 89% and 99% amino acid identity with human and rat GPX3, respectively.