

DESCRIPTION

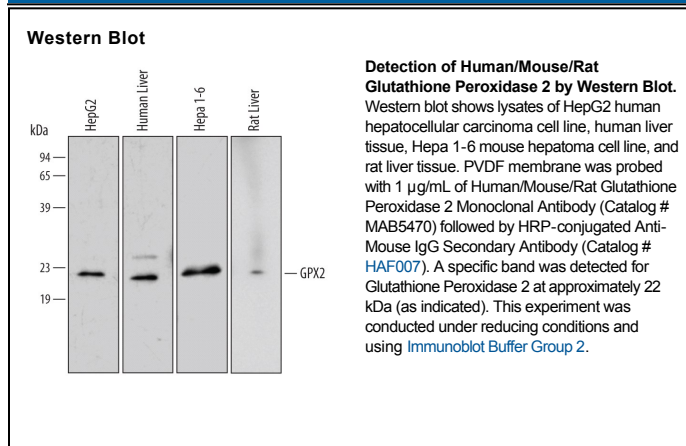
Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat GPX2 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 496010
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Glutathione Peroxidase 2 Gly41-Ile190 Accession # P18283
Formulation	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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Glutathione Peroxidase 2 (GPX2), also known as Gastrointestinal Glutathione Peroxidase, is a member of the glutathione peroxidase antioxidant enzyme family. These proteins protect cell surfaces, extracellular fluid components, and enzymes from oxidative stress by reducing hydrogen peroxide, lipid peroxides, and organic hydroperoxide using reduced glutathione. GPX2 is a cytoplasmic homotetramer of 22 kDa subunits, each containing a selenocysteine residue at the active site. GPX2 is primarily expressed in the liver and intestinal epithelial cells where it participates in the detoxification of dietary organic hydroperoxides. It is upregulated in a variety of carcinomas and functions as an anti-inflammatory and anti-apoptotic molecule. Over amino acids 41-190, human GPX2 shares 94% aa sequence identity with mouse and rat GPX2.