

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse GLRX1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GLRX1 Met1-Gln106 Accession # P35754
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.

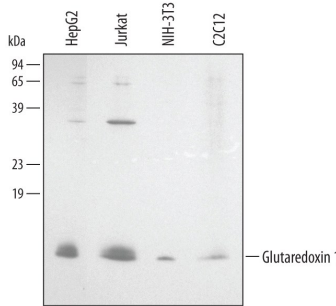
APPLICATIONS

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	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

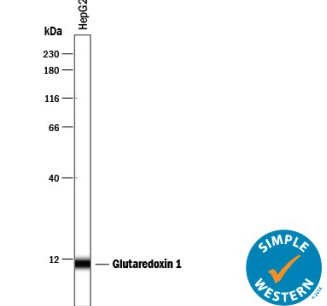
DATA

Western Blot



Detection of Human/Mouse Glutaredoxin 1 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, Jurkat human acute T cell leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, and C2C12 mouse myoblast cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human/Mouse Glutaredoxin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3399) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Glutaredoxin 1 at approximately 12 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Simple Western



Detection of Human Glutaredoxin 1/GLRX1 by Simple Western™. Simple Western lane view shows lysates of HepG2 human hepatocellular carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Glutaredoxin 1/GLRX1 at approximately 10 kDa (as indicated) using 5 µg/mL of Goat Anti-Human/Mouse Glutaredoxin 1/GLRX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3399) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

Glutaredoxins or thioltransferases are a universally distributed family of small molecular weight proteins with thiol-disulfide exchange activity. Glutaredoxin 1 (GLRX1/GLRX) is a 12 kDa protein with glutathione-disulfide oxidoreductase activity. Glutaredoxins utilize the reducing power of glutathione to catalyze disulfide reductions in the presence of NADPH and glutathione reductase (the glutaredoxin system). The amino acid sequence of Glutaredoxin 1 in humans is highly homologous with that in other mammals (81-89%), and contains the conserved active sequence motif -Cys-Pro-Try-Cys-. Glutaredoxin 1 also catalyzes the formation of mixed disulfides (glutathionylation), which is an important redox regulatory mechanism, particularly in mammalian cells under oxidative stress conditions, to sense cellular redox potential.