

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Hemopexin in direct ELISAs and Western blots. In direct ELISAs, approximately 45% cross-reactivity with recombinant human Hemopexin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Hemopexin Ser24-Gln460 (His30Asn) Accession # Q91X72
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.

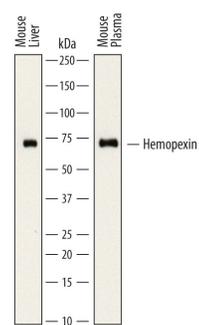
APPLICATIONS

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	0.1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

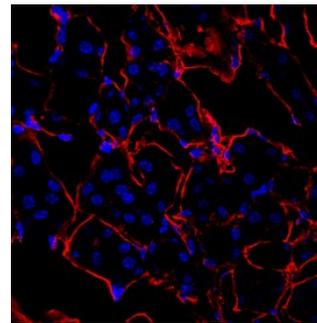
DATA

Western Blot



Detection of Mouse Hemopexin by Western Blot. Western blot shows mouse plasma and lysates of mouse liver tissue. PVDF membrane was probed with 0.1 µg/mL of Sheep Anti-Mouse Hemopexin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7007) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Hemopexin at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Hemopexin in Mouse Kidney. Hemopexin was detected in immersion fixed frozen sections of adult mouse kidney using Sheep Anti-Mouse Hemopexin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7007) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Northern-Lights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to tubule epithelia. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

HPX (Hemopexin) is a 60-70 kDa secreted member of the hemopexin family of molecules. Although it is principally expressed by hepatocytes, it is also reportedly secreted by macrophages, neurons, astrocytes, renal mesangial cells and fibroblasts. It is considered an acute phase protein, and demonstrates a number of effects. Principally, it binds free and albumin-bound heme, neutralizing its potential for oxidative damage to cell membranes. Heme is removed from HPX internally following binding of the HPX:heme complex to CD91 on hepatocytes and macrophages. HPX also dampens the proinflammatory response of macrophages to TLR2 and TLR4 activation. And HPX also shows serine protease activity which may impact cell surface proteins and ECM. Mature mouse HPX is a 437 amino acid (aa) glycoprotein (aa 24-460). It contains five consecutive HPX-like domains (aa 56-349) that likely impart binding-partner specificity to HPX. There are multiple potential isoform variants. One shows a two aa substitution for aa 134-460, a second contains a deletion of aa 60-100, a third possesses a 14 aa substitution for aa 235-460, while a fourth shows a two aa substitution for aa 153-460. Mature mouse HPX shares 92% and 77% aa identity with rat and human HPX, respectively.