

DESCRIPTION

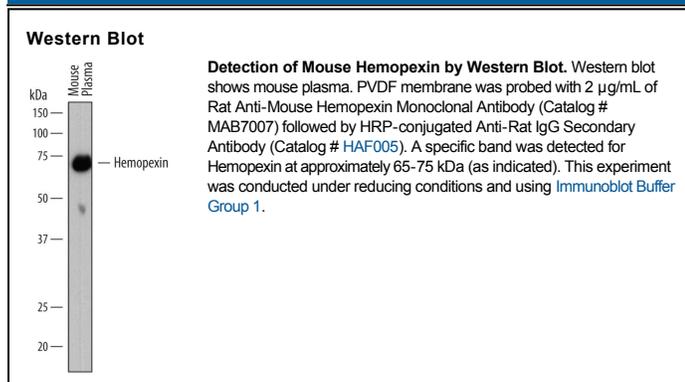
Species Reactivity	Mouse
Specificity	Detects mouse Hemopexin in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human Hemopexin is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 781941
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Hemopexin Met1-Gln460 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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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 60-68 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.