

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse Hemopexin in direct ELISAs and Western blots. In direct ELISAs, approximately 45% cross-reactivity with recombinant human Hemopexin is observed.                                                                                                              |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Hemopexin<br>Ser24-Gln460 (His30Asn)<br>Accession # Q91X72                                                                                                                                                            |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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.

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