

Product Specification Sheet

**Hemopexin (HPX) Protein Antibodies**

<input type="checkbox"/> Cat. # HPEX13-M	Mouse monoclonal anti-human hemopexin protein antiserum	<b>SIZE:</b> 100 ul
<input type="checkbox"/> Cat. # HPEX11-C	Purified human hemopexin protein WB+Ve control	<b>SIZE:</b> 100 ul
<input type="checkbox"/> Cat. # HPEX15-N-100	Purified human hemopexin protein	<b>SIZE:</b> 100 ug

Hemopexin, a globulin (beta-glycoprotein) synthesized by liver, accounts for about 1.4% of total serum protein. Like albumin, it binds heme with high affinity and transports it to liver for salvage of the iron. Human hemopexin consists of a single polypeptide chain of 439 amino acids (~50-57 kda, carbohydrate ~23%; plasma concn in human 0.8-1 mg/ml). Structurally hemopexin consists of two similar halves of approximately two hundred amino acid residues connected by a histidine rich hinge region. Each half is itself formed by the repetition of a basic unit of some 35 to 45 residues. Hemopexin has been found in the serum of all mammals studied and it is polymorphic in rabbits and swine. Hemopexin is an acute phase protein that is elevated 2-3 fold in rat serum and plasma as a result of inflammation and arthritis. Hemopexin provides a convenient marker of inflammation and tissue injury in the rat.

Recent studies have demonstrated that hemopexin acts as an extracellular antioxidant against hemoglobin-mediated damage in inflammation. Hemopexin protects against heme toxicity and conserves and recycles iron. Abnormal levels of hemopexin are associated with hemolytic anemia, chronic neuromuscular disease, and acute intermittent porphyria.

**Source of Antigen, Antibodies, Protein and controls**

<b>Antigen</b>	Purified Human hemopexin (#HPEX15-N-100)
<b>Ab Host/type</b>	Mouse, monoclonal IgG2b (#HPEX13-M)
<b>2-ab</b>	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
<b>-ve control IgG</b>	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Human Hemopexin protein for Western blot +ve control (cat # HPEX11-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of HPEX11-C for good visibility with antibody Cat # HPEX11-S. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the HPEX11-C solution prior to heating and loading on gels.

**Form & Storage of Antibodies/Peptide Control**

**Antiserum (unpurified)**

- 100ul       solution       lyophilized powder

Supplied in Buffer: 0.05% azide

**Reconstitute** powder in 100 ul PBS

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20oC and powder at 4oC or -20oC..

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder

**Recommended Usage**

**Western Blotting** (1:1000-1:5000) with appropriate secondary reagents to detect human hemopexin). mol wt ~50 Kda

**ELISA** (0.1-1 ug/ml).

**Histochemistry & Immunofluorescence:** not tested

**Specificity & Cross-reactivity**

HPEX11-S recognizes human hemopexin protein. Antibody reactivity in other species is not established. Purified human hemopexin protein is available for control studies (HPEX11-C). Antibodies to mouse and rat hemopexin are also available.

**General References:** (1) Altruda F (1985) Nucl Acid Res. 13, 3841-3859; Altruda F (1986) J. Mol. Evol. 27, 102-108; Takahashi N (1985) PNAS, 82, 73-77

\*This product is for in vitro research use only.

**Related material available from ADI**

Human, mouse, rat Hemopexin antibodies and purified proteins

Human, Mouse, and Rat Hemopexin ELISA kits

HPEX13-M      90430A