



Product Specification Sheet

Hemopexin (HPX) Protein and Antibodies

<input type="checkbox"/> Cat. # HPEX16-N-25	Hemopexin Mouse, purified protein	SIZE: 25 ug
<input type="checkbox"/> Cat. # HPEX16-A	Rabbit Anti-Mouse Hemopexin , IgG, aff pure	SIZE: 100 ug
<input type="checkbox"/> Cat. # HPEX16-C	Hemopexin Mouse, purified protein control for Western	SIZE: 100 ul

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 mouse serum and plasma as a result of inflammation and arthritis. Hemopexin provides a convenient marker of inflammation and tissue injury in the mouse.

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

Antigen	Purified Mouse hemopexin (#HPEX16-N-25)
Ab Host/type	Rabbit polyclonal Anti-Mouse Hemopexin (#HPEX16-A)
2-ab	Goat Anti-Rabbit IgG-HRP conjugate (cat# 20320), (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Mouse Hemopexin protein was purified from a pool of mouse serum using proprietary techniques (purity >95% by SDS-PAGE, ~50 Kda). It is supplied in 10 mM sodium phosphate (pH 7.2), 150 mM NaCl, 0.05% sodium azide at 1 mg/ml (see lot sp. concn on the vial) in liquid or lyophilized in the buffer.

Mouse Hemopexin protein for Western blot +ve control (cat # HPEX16-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of HPEX16-C for good visibility with antibody Cat # HPEX16-A. 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 HPEX16-C solution prior to heating and loading on gels.

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 load 100-500 ng/lane and probe with antibodies mol wt ~50 Kda

ELISA (0.1-1 ug/ml).

Specificity & Cross-reactivity

HPEX16-A recognizes mouse hemopexin protein. Antibody reactivity in other species is not established. Purified mouse hemopexin western blot control is available for control studies (HPEX16-C).

General References: Dutra FF (2014) Proc Natl Acad Sci U S A.;111: E4110-8; Ghosh S (2013) J Clin Invest.;123:4809-20

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

Related material available from ADI

Catalog#	Prod Description
600-700-HPX	Mouse Hemopexin (Hpx) ELISA kit 96 tests, Quantitative
610-710-HPX	Rat Hemopexin ELISA kit 96 tests, Quantitative
610-710-MLC	cat# change to #610-710-HPX; Rat Hemopexin ELISA kit
HPEX11-C	Human Hemopexin purified protein control for Western
HPEX11-S	Anti-Human Hemopexin protein antiserum
HPEX12-S	Anti-Human Hemopexin protein antiserum
HPEX13-M	Monoclonal Anti-Human Hemopexin protein antiserum
HPEX15-N-100	Hemopexin, Human Plasma
HPEX16-A	Anti-Mouse Hemopexin , IgG, aff pure
HPEX16-C	Hemopexin Mouse, purified protein control for Western
HPEX16-N-25	Hemopexin Mouse, purified protein
HPEX17-N-25	Hemopexin Rat, purified protein
RP-818	Recombinant (E.Coli) Human C-terminal hemopexin-like domain of MMP-2 (445-635 a.a.)
HPEX16-N-25-Mouse-Hemopexin	160628SV