



Product Specification Sheet

Hemopexin (HPX) Protein Antibodies

Cat. # HPEX17-N-25 Purified rat hemopexin protein

SIZE: 25 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

Rat Hemopexin protein was purified from a pool of rat 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. Powder should be dissolved in water by gentle mixing and stored at -20oC in suitable aliquots.

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

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).

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

HPEX17-N-25

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