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Certificate of Analysis and Data Sheet Human Hemopexin

Catalog No. 228-10694

Source: Human Plasma

Synonyms

Hemopexin, Beta-1B-glycoprotein, HPX, Haemopexin.

Introduction

Hemopexin (or haemopexin) is a plasma protein that binds heme with the highest affinity of any known protein. Hemopexin is generally expressed in liver, and belongs to acute phase reactants, the synthesis of which is induced after inflammation. Heme is potentially very toxic because of its ability to intercalate into lipid membrane and to generate hydroxyl radicals. Hemopexin's function of scavenging the heme released or lost by the turnover of heme proteins such as hemoglobin defends the body from the oxidative damage that free heme can cause. Additionally, hemopexin discharges its bound ligand for internalization upon interacting with a specific receptor located on the surface of liver cells. This hemopexin function is in order to preserve the body's iron. Hemopexin's levels in the serum are an indication of how much heme is present in the blood. Low Hemopexin levels show that there is a lot of it in the serum. For that reason, low hemopexin levels indicate that there has been considerable degradation of heme containing compounds - mainly hemoglobin, it indicates hemolysis and low hemopexin levels are therefore one of the diagnostic features of a hemolytic anemia. It's a Hem binding protein used in the assessment of intravascular hemolysis in conjunction with haptoglobin.

Description

Human Hemopexin produced in Human plasma having a molecular mass of 70 kDa.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from 12mM phosphate buffer pH- 7.4, 137mM NaI and 2.7mM KCl.

Solubility

It is recommended to reconstitute the lyophilized Hemopexin in phosphate buffer, pH >7.0 containing 0.15M NaCl.

Stability

Human Hemopexin although stable at room temperature for 2 weeks, should be stored between -20°C.

Purity

Greater than 95.0%.

The products are furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.