

Hemopexin, for **IMMAGE® 800**

General information: structure, function ...

Hemopexin, a glycoprotein with an approximate molecular weight of 60 KDa, is mostly synthesized by the liver and moves electrophoretically within the β -globulin area.

Hemopexin binds heme with the highest affinity of any known plasma protein. Protein-unbound heme is potentially toxic because of its ability to damage lipid membrane and to become a potent catalyst of hydroxyl radicals (OH^-) formation. Hemopexin represents the primary line of the body's defense in scavenging large amounts of free heme in plasma (once the previous scavenging capacity of Haptoglobin is exhausted), heme that can be created, for example, by the degradation of hemoglobin in intravascular hemolysis, preventing oxidative damage and allowing iron recovery (taking place in the liver, where Hemopexin is recycled and returned to systemic circulation).

Clinical Significance

Hemopexin levels in serum reflect the amount of heme released into the blood. After the depletion of Haptoglobin, in episodes of acute hemolysis, Hemopexin intervenes, which causes further decline, which can even lead to depletion, indicative of the release of large quantities of the heme group. It is thus one of the diagnostic indicators of hemolytic anaemia and clearly reflects the severity of the hemolytic episode.

Reduction of Hemopexin levels is typically associated with a decrease in Haptoglobin except in Thalassemia where there is no significant reduction of Haptoglobin.

Hemopexin levels are also altered in other situations, such as chronic neuromuscular diseases and acute intermittent porphyria.

During pregnancy levels of hemopexin increase by around 50%.

Assay Performances and Characteristics

- **Non-competitive Nephelometric Assay:** Kinetic Immunoassay, for their use on *Beckman Coulter's IMMAGE® 800* Immunochemical Systems.
- Reagents, prediluted Calibrators and Controls in ready-to-use containers.
- Standardized to the **1st British Standard for Human Serum Proteins (other than Immunoglobulins)** (code: 74/520) of the *National Institute for Biological Standards and Controls* (a WHO Laboratory for Biological Standards).
- Designed to use original *Beckman Coulter's Buffer 1 (BUF1)* (P/N: 447650).

Catalogue

3diag - HPX - 800 Kit

REF TD-42620

▽ 100 test

P/N Beckman Coulter: **B28070**

Contains Reagents, prediluted Calibrators (6 levels) and Controls (2 levels)

Also available for other analytical platforms. For further information, please contact the Customer Support Service at support@3diag.com