



QuantiChrom™ Heme Assay Kit

Heme is one important member of the porphyrin family. It is synthesized in both mitochondria and cytoplasm, and is a key prosthetic group for various essential proteins such as hemoglobin, cytochromes, catalases and peroxidases. Heme determination is widely used by researchers of various blood diseases.

Simple, direct and automation-ready procedures for measuring heme concentration are becoming popular in research and drug discovery. BioAssay Systems' QuantiChrom™ heme assay kit is based on an improved aqueous alkaline solution method, in which the heme is present in a uniform colored form. The intensity of color, measured at 400 nm, is directly proportional to the heme concentration in the sample. The optimized formulation substantially reduces interference by substances in the raw samples and exhibits high sensitivity.

APPLICATIONS

Direct Assays: total heme in blood, serum, plasma, urine, heme-carrying enzymes.

Pharmacology: effects of drugs on heme metabolism.

Drug Discovery: HTS for drugs that modulate heme levels.

KEY FEATURES

Sensitive and accurate. Use 50 μL samples. Linear detection range 0.6 – 125 μM heme in 96-well plate assay.

Simple and high-throughput. The “mix-and-read” procedure involves addition of a single working reagent and reading the optical density. Can be readily automated as a high-throughput assay in 96-well plates for thousands of samples per day.

Safety. Reagents are non-toxic.

Versatility. Assays can be executed in 96-well plate or cuvet.

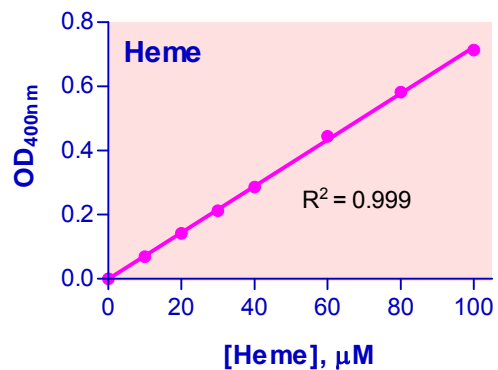
PRODUCT INFORMATION:

QuantiChrom™ Heme Assay Kit

DIHM-250

Each kit is sufficient for 250 assays in 96-well plate. Kit includes:

- 1 x 50 mL Reagent
- 1 x 10 mL Calibrator



Standard Curve with Freshly Prepared Heme
in 96-well plate assay

REFERENCES:

- [1] Day P, Smith DW, Williams RJ (1967). Crystal spectra of a heme and some heme-protein complexes. *Biochemistry* 6:1563-1566.
- [2] York JL, McCoy S, Taylor DN, Caughey WS (1967). Heme A of cytochrome c oxidase. I. Isolation from bovine heart. *J Biol Chem.* 242:908-911.
- [3] Scholl F (1966). On the determination of heme and heme derivatives in serum. *Wien Klin Wochenschr.* 78:487.