# abcam

# Product datasheet

# Mouse Haptoglobin ELISA Kit ab157714

**5 References** 1 Image

Overview

**Precision** 

Product name Mouse Haptoglobin ELISA Kit

**Detection method**Colorimetric

Colonnell

| Sample  | n | Mean | SD | CV%   |
|---------|---|------|----|-------|
| Overall |   |      |    | < 10% |

Inter-assay

Intra-assav

| Sample  | n | Mean | SD | CV%   |
|---------|---|------|----|-------|
| Overall |   |      |    | < 10% |

Sample type Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity 0.484 ng/ml

**Range** 1.95 ng/ml - 125 ng/ml

Recovery Sample specific recovery

| Sample type | Average % | Range |
|-------------|-----------|-------|
| Serum       | > 85      | % - % |

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Mouse

**Product overview** Mouse Haptoglobin ELISA kit is designed for the quantitative measurement of Haptoglobin in

mouse serum, plasma and other biological samples.

In this assay the Haptoglobin present in samples reacts with the anti-Haptoglobin antibodies which have been adsorbed to the surface of polystyrene microtiter wells. After the removal of unbound proteins by washing, anti-Haptoglobin antibodies conjugated with horseradish

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peroxidase (HRP) are added. These enzyme-labeled antibodies form complexes with the previously bound Haptoglobin. Following another washing step, the enzyme bound to the immunosorbent is assayed by the addition of a chromogenic substrate, 3,3',5,5'-tetramethylbenzidine (TMB). The quantity of bound enzyme varies directly with the concentration of Haptoglobin in the sample tested; thus, the absorbance, at 450 nm, is a measure of the concentration of Haptoglobin in the test sample. The quantity of Haptoglobin in the test sample can be interpolated from the standard curve constructed from the standards, and corrected for sample dilution.

Platform

Microplate

#### **Properties**

## Storage instructions

Store at +4°C. Please refer to protocols.

| Components  | 1 x 96 tests |
|---|--------------|
| 100X HRP-conjugated anti-mouse Haptoglobin antibody | 1 x 150µl    |
| 20X Wash Buffer Concentrate                         | 1 x 50ml     |
| 5X Diluent Concentrate                              | 1 x 50ml     |
| Chromogen Substrate Solution                        | 1 x 12ml     |
| Mouse Haptoglobin Calibrator (lyophilized)          | 1 vial       |
| Mouse Haptoglobin ELISA Microplate                  | 1 unit       |
| Stop Solution                                       | 1 x 12ml     |

#### **Function**

As a result of hemolysis, hemoglobin is found to accumulate in the kidney and is secreted in the urine. Haptoglobin captures, and combines with free plasma hemoglobin to allow hepatic recycling of heme iron and to prevent kidney damage. Haptoglobin also acts as an Antimicrobial; Antioxidant, has antibacterial activity and plays a role in modulating many aspects of the acute phase response. Hemoglobin/haptoglobin complexes are rapidely cleared by the macrophage CD163 scavenger receptor expressed on the surface of liver Kupfer cells through an endocytic lysosomal degradation pathway.

Uncleaved haptoglogin, also known as zonulin, plays a role in intestinal permeability, allowing intercellular tight junction disassembly, and controlling the equilibrium between tolerance and immunity to non-self antigens.

**Tissue specificity** Expressed by the liver and secreted in plasma.

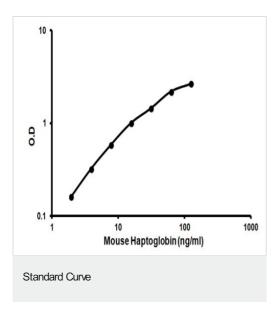
Involvement in disease Anhaptoglobinemia

**Sequence similarities** Belongs to the peptidase S1 family.

Contains 1 peptidase S1 domain.
Contains 2 Sushi (CCP/SCR) domains.

Cellular localization Secreted.

## Images



Representative standard curve using ab157714 Haptoglobin Mouse ELISA kit

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