

Mouse Haptoglobin ELISA Kit ab272472

重组 SimpleStep ELISA

5 图像

概述

产品名称 小鼠Haptoglobin ELISA试剂盒

检测方法 Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Serum	8			2.5%

批次间

样品	n	Mean	SD	CV%
Serum	3			2.8%

样品类型 Cell culture supernatant, Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma

检测类型 Sandwich (quantitative)

灵敏度 3.91 pg/ml

范围 18.75 pg/ml - 1200 pg/ml

回收率

特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	115	113% - 117%
Urine	116	114% - 118%
Serum	110	107% - 113%
Hep Plasma	109	104% - 113%
EDTA Plasma	106	103% - 108%
Cit plasma	111	110% - 111%

**检测时间** 1h 30m

**实验步骤** One step assay

**种属反应性** 与反应: Mouse

**产品概述** Mouse Haptoglobin ELISA kit (ab272472) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Mouse Haptoglobin protein in serum, urine, plasma and cell and tissue supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Haptoglobin with 3.91 pg/mL sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**说明** Haptoglobin, encoded by the *HP* gene and produced mostly by hepatic cells, is a major acute phase protein. Haptoglobin is known to bind to free hemoglobin released from erythrocytes with high affinity and inhibits its oxidative activity to allow hepatic recycling of the heme iron. Biosynthesis of haptoglobin can also occur in adipose and lung tissues to provide antioxidant and antimicrobial activity. Studies have shown haptoglobin to play a role in stimulation of angiogenesis and changes in the measured concentrations in serum may associate with certain inflammations, infections, and hemolytic conditions. Human, rat, cow, monkey share 81%, 90%, 76%, and 80% sequence homology with mouse haptoglobin, respectively.

**平台** Pre-coated microplate (12 x 8 well strips)

**性能**

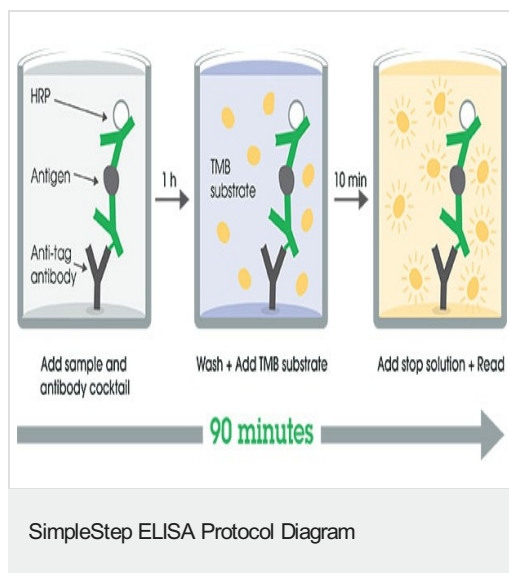
**存放说明** Store at +4°C. Please refer to protocols.

组件	1 x 96 tests
10X Mouse Haptoglobin Capture Antibody	1 x 600µl
10X Mouse Haptoglobin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

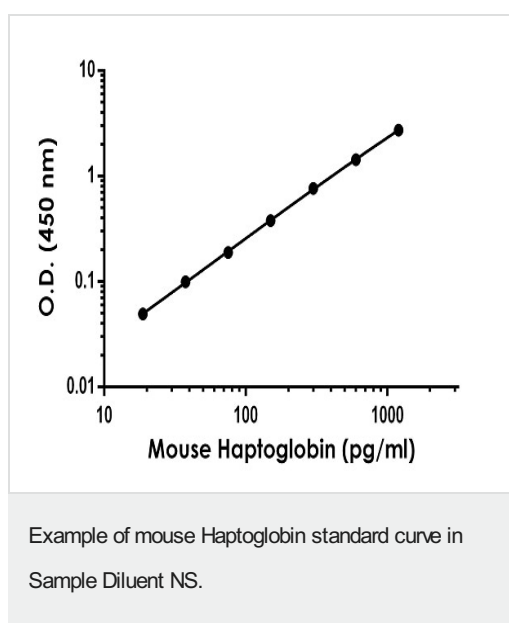
组件	1 x 96 tests
Antibody Diluent 4BR	1 x 6ml
Mouse Haptoglobin Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

功能	<p>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 rapidly cleared by the macrophage CD163 scavenger receptor expressed on the surface of liver Kupfer cells through an endocytic lysosomal degradation pathway.</p> <p>Uncleaved haptoglobin, 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.</p>
组织特异性	Expressed by the liver and secreted in plasma.
疾病相关	Anhaptoglobinemia
序列相似性	<p>Belongs to the peptidase S1 family.</p> <p>Contains 1 peptidase S1 domain.</p> <p>Contains 2 Sushi (CCP/SCR) domains.</p>
细胞定位	Secreted.

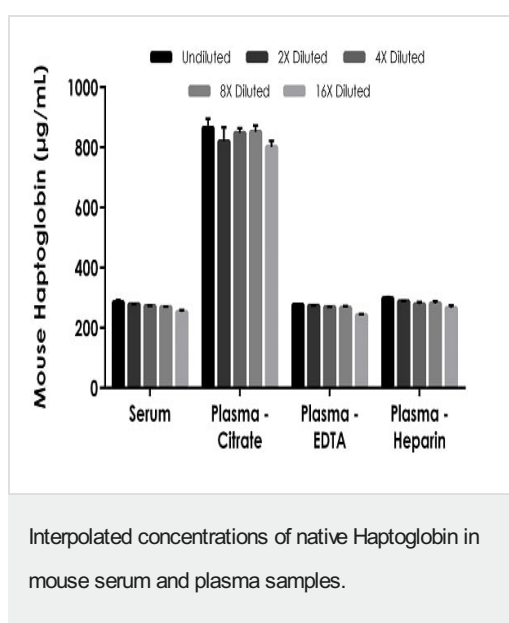
图片



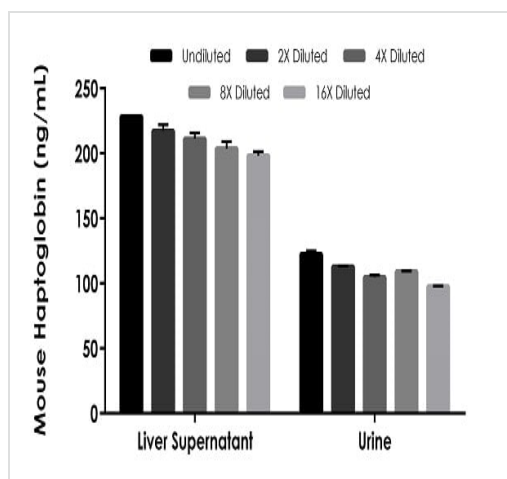
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



The Haptoglobin standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean  $\pm$  SD) are graphed.



The concentrations of Haptoglobin were measured in duplicates, interpolated from the Haptoglobin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:250,000, plasma (citrate) 1:1,000,000, plasma (EDTA) 1:250,000, and plasma (heparin) 1:250,000. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean Haptoglobin concentration was determined to be 271.1  $\mu\text{g/mL}$  in serum, 836.8  $\mu\text{g/mL}$  in plasma (citrate), 265.2  $\mu\text{g/mL}$  in plasma (EDTA), and 282.0  $\mu\text{g/mL}$  in plasma (heparin).



Interpolated concentrations of native Haptoglobin in mouse tissue culture supernatant and urine samples.

The concentrations of Haptoglobin were measured in duplicates, interpolated from the Haptoglobin standard curves and corrected for sample dilution. Undiluted samples are as follows: liver supernatant 1:200 and urine 1:160. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). The mean Haptoglobin concentration was determined to be 211.7 ng/mL in liver supernatant and 109.3 ng/mL in urine.

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Sandwich ELISA - Mouse Haptoglobin ELISA Kit  
(ab272472)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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