

# Rabbit Anti-Haptoglobin antibody

SL1808R

Product Name:	Haptoglobin
Chinese Name:	结合珠蛋白/触珠蛋白抗体
Alias:	haptoglobin; Bp; Haptoglobin alpha chain; Haptoglobin alpha(1S) beta; Haptoglobin alpha(2FS) beta; Haptoglobin beta chain; Haptoglobin, alpha polypeptide; Haptoglobin, beta polypeptide; HP; Hp2 alpha; HP2 ALPHA2; HPA1S; HPT; MGC111141; HPT HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27/43kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Haptoglobin beta chain:251-350/406
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a preproprotein, which is processed to yield both alpha and beta
	chains, which subsequently combine as a tetramer to produce haptoglobin. Haptoglobin
	functions to bind free plasma hemoglobin, which allows degradative enzymes to gain

access to the hemoglobin, while at the same time preventing loss of iron through the kidneys and protecting the kidneys from damage by hemoglobin. Mutations in this gene and/or its regulatory regions cause ahaptoglobinemia or hypohaptoglobinemia. This gene has also been linked to diabetic nephropathy, the incidence of coronary artery disease in type 1 diabetes, Crohn's disease, inflammatory disease behavior, primary sclerosing cholangitis, susceptibility to idiopathic Parkinson's disease, and a reduced incidence of Plasmodium falciparum malaria. A similar duplicated gene is located next to this gene on chromosome 16. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

#### **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.

### Subunit:

Tetramer of two alpha and two beta chains; disufide-linked. The Hemoglobin/haptoglobin complex is composed of a haptoglobin dimer bound to two hemoglobin alpha-beta dimers. Interacts with CD163.

# Subcellular Location:

Secreted.

**Tissue Specificity:** Expressed by the liver and secreted in plasma.

## **DISEASE:**

Anhaptoglobinemia (AHP) [MIM:614081]: A condition characterized by the absence of the serum glycoprotein haptoglobin. Serum levels of haptoglobin vary among normal persons: levels are low in the neonatal period and in the elderly, differ by population, and can be influenced by environmental factors, such as infection. Secondary hypohaptoglobinemia can occur as a consequence of hemolysis, during which haptoglobin binds to free hemoglobin. Congenital haptoglobin deficiency is a risk factor for anaphylactic non-hemolytic transfusion reactions. Note=The disease is caused by mutations affecting the gene represented in this entry.

## Similarity:

Belongs to the peptidase S1 family. Contains 1 peptidase S1 domain. Contains 2 Sushi

(CCP/SCR) domains.
SWISS: P00738
<b>Gene ID:</b> 3240
Database links:
Entrez Gene: 3240Human
Entrez Gene: 15439Mouse
Entrez Gene: 24464Rat
Omim: 140100Human
SwissProt: P00738Human
SwissProt: Q61646Mouse
SwissProt: P06866Rat
Unigene: 513711Human
Unigene: 702099Human
Unigene: 26730Mouse
Unigene: 10950Rat
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.
haptoglobin是一种酸性glycoprotein,属α2唾液酸glycoprotein,主要由肝脏合成,也可
在脂肪细胞、皮肤、脾、肌肉、肺内等合成。



