

**HP Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8929c**

**Specification**

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**HP Antibody (Center) - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P00738</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>295-322</b>

**HP Antibody (Center) - Additional Information**

**Gene ID** 3240

**Other Names**

Haptoglobin, Zonulin, Haptoglobin alpha chain, Haptoglobin beta chain, HP

**Target/Specificity**

This HP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 295-322 amino acids from the Central region of human HP.

**Dilution**

WB~~1:8000  
IHC-P~~1:25  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

HP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**HP Antibody (Center) - Protein Information**

**Name** HP

**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 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.

#### Cellular Location

Secreted.

#### Tissue Location

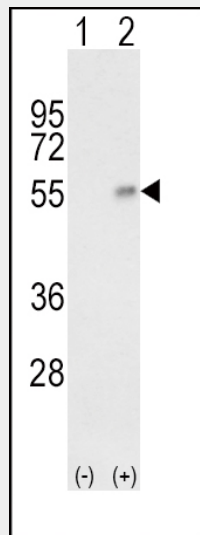
Expressed by the liver and secreted in plasma.

### HP Antibody (Center) - Protocols

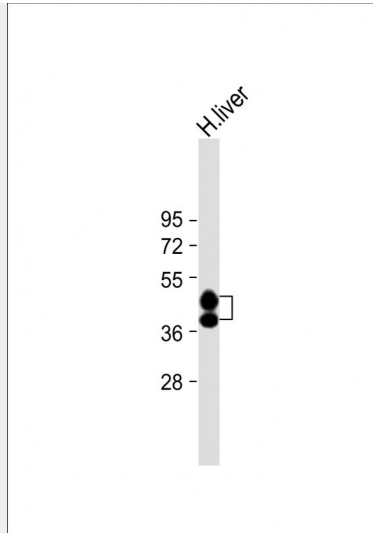
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

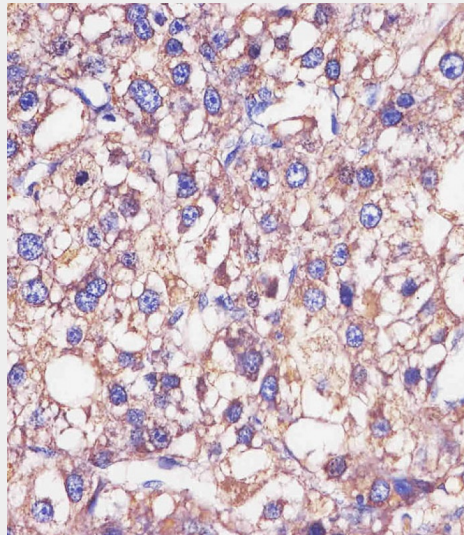
### HP Antibody (Center) - Images



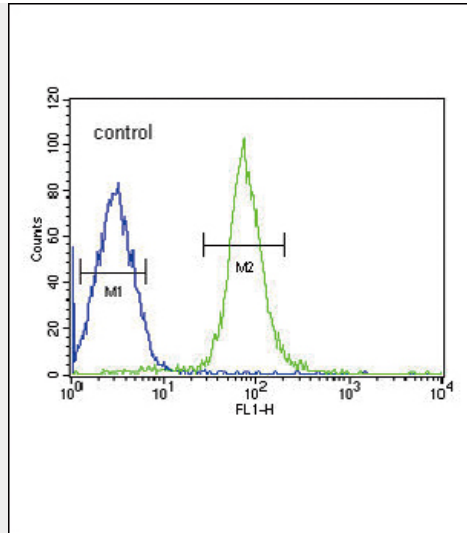
Western blot analysis of HP (arrow) using rabbit polyclonal HP Antibody (Center) (Cat. #AP8929c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the HP gene (Lane 2) .



Anti-HP Antibody (Center) at 1:8000 dilution + Human liver lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45, 38 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



AP8929c staining HP in human hepatocarcinoma sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



HP Antibody (Center) (Cat. #AP8929c) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **HP Antibody (Center) - Background**

HP is a preprotein, 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.

#### **HP Antibody (Center) - References**

Ryndel, M., et al., Clin. Chim. Acta 411 (7-8), 500-504 (2010) Igl, W., PLoS Genet. 6 (1), E1000798 (2010)