10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

HP Antibody (Center) - Product Information

Application	**FC, WB, IHC-P,E**
Primary Accession	P00738
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**295-322**

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
FC~~1:10~50
WB~~1:8000
IHC-P~~1:25
E~~Use at an assay dependent concentration.

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.

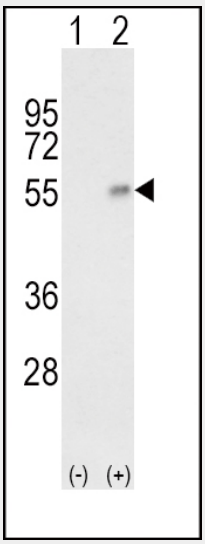
Tissue Location
Expressed by the liver and secreted in plasma.

HP Antibody (Center) - Protocols

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

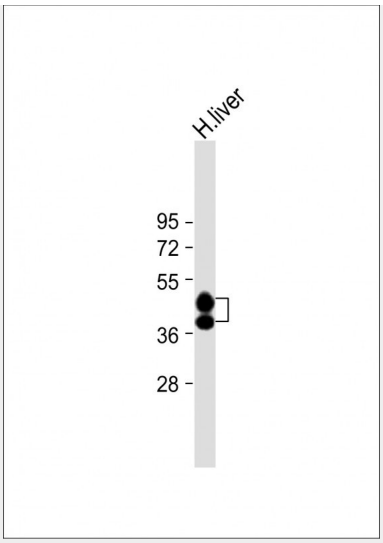
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HP Antibody (Center) - Images

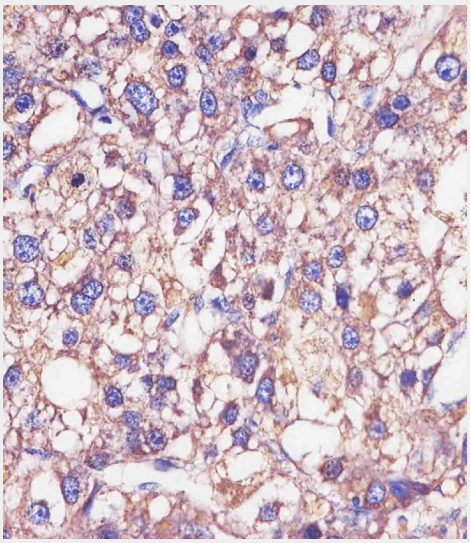


Western blot analysis of HP (arrow) using rabbit polyclonal HP Antibody (Center) (Cat. #AP8929c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the HP gene (Lane 2) .

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

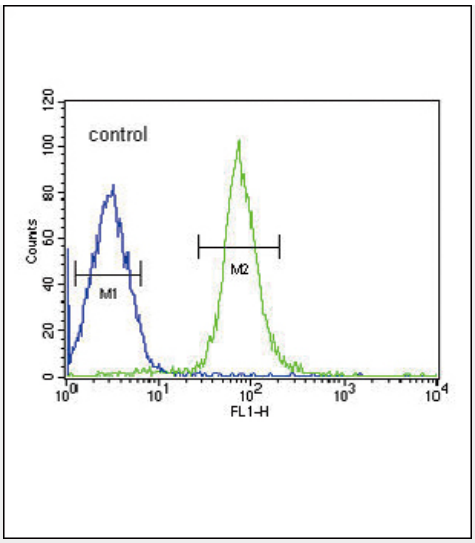


Anti-HP Antibody (Center) at 1:8000 dilution + Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45, 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP8929c staining HP in human epatocarcinoma 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 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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 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.

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)