

HP Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10680C

Specification

HP Antibody (Center) - Product Information

Application	IHC-P-Leica, WB, IF, FC,E
Primary Accession	P00738
Other Accession	NP_005134.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	296-322

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 296-322 amino acids from the Central region of human HP.

Dilution

IHC-P-Leica~~1:500
WB~~1:1000-1:2000
IF~~1:10~50
FC~~1:10~50
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.

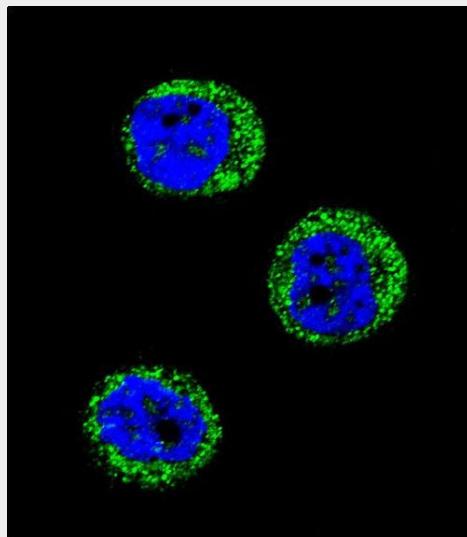
Tissue Location

Expressed by the liver and secreted in plasma.

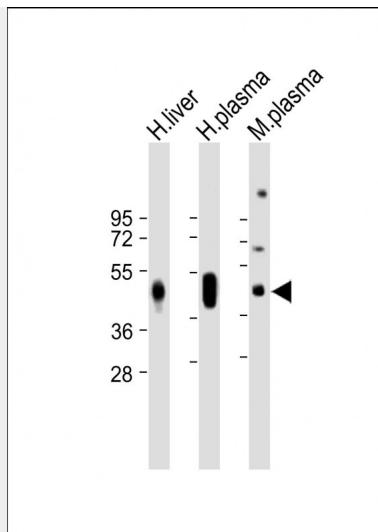
HP Antibody (Center) - Protocols

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

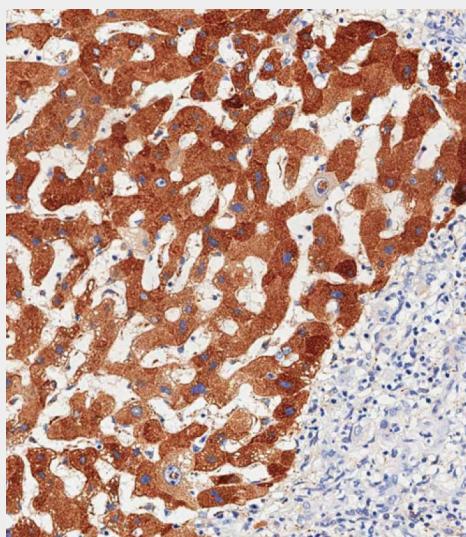
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HP Antibody (Center) - Images

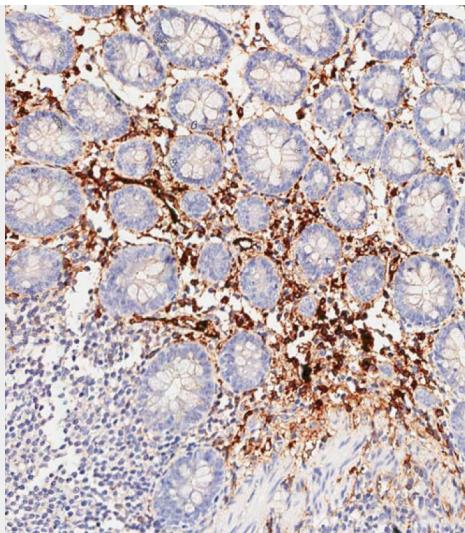
Confocal immunofluorescent analysis of HP Antibody (Center)(Cat#AP10680c) with MDA-MB435 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



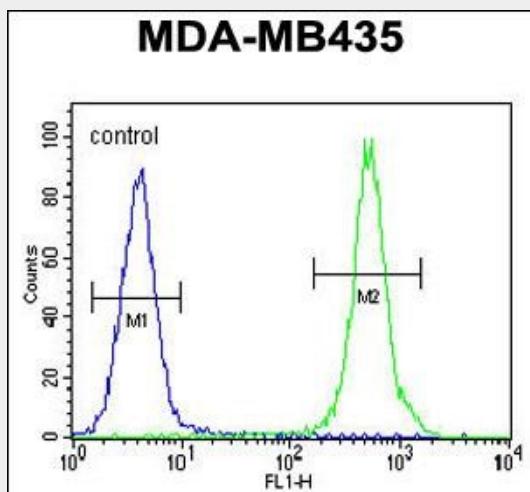
All lanes : Anti-HP Antibody (Center) at 1:1000-1:2000 dilution Lane 1: Human liver lysate Lane 2: Human plasma lysate Lane 3: Mouse plasma lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human hepatocarcinoma tissue using AP10680C performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human colon tissue using AP10680C performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



HP Antibody (Center) (Cat. #AP10680c) flow cytometric analysis of MDA-MB435 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

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.

HP Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Ucik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010)
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)
Savy, M., et al. PLoS ONE 5 (6), E11075 (2010) :
Kasvosve, I., et al. Adv Clin Chem 50, 23-46 (2010) :