

For Research Use Only

Haptoglobin Polyclonal antibody

Catalog Number:30412-1-AP



Basic Information

Catalog Number:

30412-1-AP

Size:

600 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC121125

GeneID (NCBI):

3240

UNIPROT ID:

P00738

Full Name:

haptoglobin

Observed MW:

36-45 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

Applications

Tested Applications:

WB, IP, ELISA

Species Specificity:

human, rat, pig, rabbit

Positive Controls:

WB : rabbit blood tissue, pig plasma, rabbit plasma

IP : human plasma,

Background Information

Haptoglobin is also named as Zonulin and belongs to the peptidase S1 family. Haptoglobin is an alpha-2-glycoprotein synthesized mainly by hepatocytes consisting of both alpha and beta subunits linked by disulfide bonds forming dimers (PMID: 4018023). Haptoglobin is primarily produced in the liver, and when red cells are lysed in vivo, free hemoglobin binds to circulating haptoglobin; the hemoglobin-haptoglobin complex is then degraded by the reticuloendothelial system (PMID: 24809098). Because haptoglobin levels become depleted in the presence of large amounts of free hemoglobin, decreased haptoglobin is a marker of hemolysis. The human haptoglobin (HP) gene exists in two major allelic forms leading to three major genotypes: Hp1-1, Hp2-1, and Hp2-2, that separate on alkaline starch gel electrophoresis due to different molecular weights (PMID: 17474882). Their properties vary in binding strength, anti-oxidative ability, and rate of clearance. Binding strength is greatest with Hp1-1, but the Hp-2 genotypes can bind a larger number of hemoglobin alpha-beta dimers. Complexes of Hp2-2 and hemoglobin have higher affinity for the CD163 receptor, the monocyte-macrophage receptor that facilitates its clearance. Neutrophils contained a large amount of highly glycosylated Hp (β -chain 45-65 kDa) synthesized in neutrophil precursors and stored in specific granules and a small amount of Hp (β -chain 39 kDa) endocytosed from plasma and stored in secretory vesicles (PMID: 16543473).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

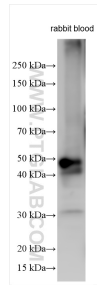
T: 4006900926

E: Proteintech-CN@ptglab.com

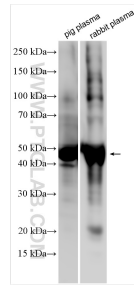
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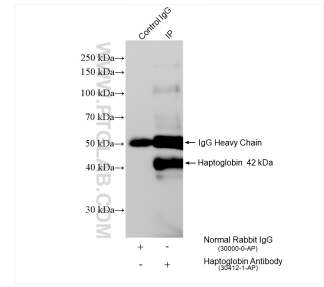
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30412-1-AP (Haptoglobin antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 30412-1-AP (Haptoglobin antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



IP result of anti-Haptoglobin (IP:30412-1-AP, 4ug; Detection:30412-1-AP 1:3000) with human plasma lysate 1600 ug.