

Anti-Haptoglobin Antibody

Catalog # ABO10913

Specification

Anti-Haptoglobin Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<u>P00738</u>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for Haptoglobin(HP) detection. Tested	

Rabbit IgG polyclonal antibody for Haptoglobin(HP) detection. Tested with WB, IHC-P in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Haptoglobin Antibody - Additional Information

Gene ID 3240

Other Names Haptoglobin, Zonulin, Haptoglobin alpha chain, Haptoglobin beta chain, HP

Calculated MW 45205 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat
Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization Secreted.

Tissue Specificity Expressed by the liver and secreted in plasma.

Protein Name Haptoglobin

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence in the middle region of human Haptoglobin(294-309aa DHLKYVMLPVADQDQC).

Purification Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the peptidase S1 family.

Anti-Haptoglobin Antibody - 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.

Anti-Haptoglobin Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Haptoglobin Antibody - Images





Anti-Haptoglobin antibody, ABO10913, Western blottingLane 1:RAJI Cell LysateLane 2:HL-60 Cell LysateLane 3:HUT102 Cell LysateLane 4:JURKAT Cell LysateLane 5:CEM Cell Lysate



Anti-Haptoglobin antibody, ABO10913, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Haptoglobin Antibody - Background

Haptoglobin(HP), is a protein that in humans is encoded by the HP gene. Haptoglobin, a plasma glycoprotein that binds free hemoglobin, has a tetrameric structure of 2 alpha and 2 beta polypeptides that are covalently associated by disulfide bonds. Haptoglobin is homologous to serine proteases of the chymotrypsinogen family. In the chimpanzee, there are 3 genes in the haptoglobin family(haptoglobin, HP; haptoglobin-related, HPR; and haptoglobin-primate, HPP), whereas only 2 genes exist in humans(HP and HPR). There are similarities between the primary structures of the alpha chain and of light chains of gamma globulins. The alpha haptoglobin locus is on the long arm of chromosome 16, where its exact cytogenetic location is 16q22.2. A major function of haptoglobin is to bind hemoglobin(Hb) to form a stable Hp-Hb complex and thereby prevent Hb-induced oxidative tissue damage. Haptoglobin is an unusual secretory protein in that it is proteolytically processed in the endoplasmic reticulum and not in the Golgi. The human haptoglobin HP*2 allele contains a 1.7-kb intragenic duplication that arose after a unique nonhomologous recombination between the prototype HP*1 alleles.