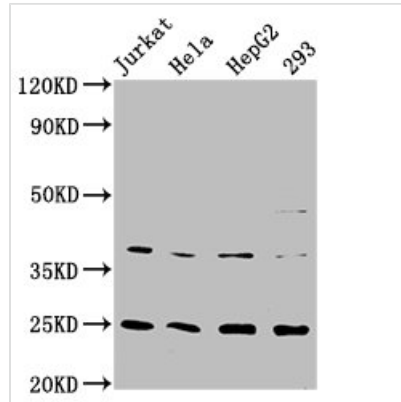




HAMP Antibody

Product Code	CSB-RA010124A0HU
Abbreviation	Hepcidin
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P81172
Immunogen	A synthesized peptide derived from human HAMP
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Liver-produced hormone that constitutes the main circulating regulator of iron absorption and distribution across tissues. Acts by promoting endocytosis and degradation of ferroportin, leading to the retention of iron in iron-exporting cells and decreased flow of iron into plasma. Controls the major flows of iron into plasma: absorption of dietary iron in the intestine, recycling of iron by macrophages, which phagocytose old erythrocytes and other cells, and mobilization of stored iron from hepatocytes (PubMed:22306005).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Hepcidin, Liver-expressed antimicrobial peptide 1, LEAP-1, Putative liver tumor regressor, PLTR, Hepcidin-25, Hepc25, Hepcidin-20, Hepc20, HAMP, HEPC, LEAP1, UNQ487/PRO1003
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular
Gene Names	HAMP
Accession NO.	4C5

Image



Western Blot

Positive WB detected in: Jurkat whole cell lysate, HeLa whole cell lysate, HepG2 whole cell lysate, 293 whole cell lysate

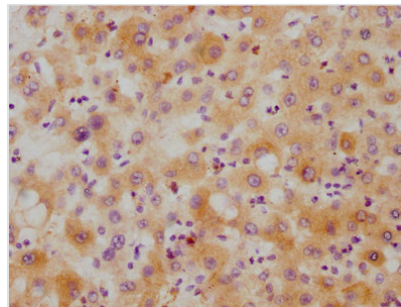
All lanes: HAMP antibody at 2.15µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 10 KDa

Observed band size: 25 KDa



IHC image of CSB-RA010124A0HU diluted at 1:215 and staining in paraffin-embedded human liver tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Description

The recombinant HAMP antibody is a monoclonal antibody made in vitro using the HAMP antibody genes that are typically expressed from a plasmid in a stable mammalian cell line. The genes coding for the HAMP antibody will ultimately assemble into a fully functional antibody after translation. The synthesized antibody is the recombinant antibody against HAMP. It underwent purification using affinity-chromatography. This recombinant HAMP antibody is suitable for use in the ELISA, WB, IHC to detect the HAMP protein from Human.

HAMP is the encoding gene for hepcidin, a cysteine-containing cationic peptide primarily expressed in the liver, with a much lower extent of expression in the heart. It shows antimicrobial activity against gram-positive and gram-negative bacteria. Hepcidin blocks the release of iron from macrophages and intestinal cells, which is important for body iron metabolism. In humans, hepcidin regulates iron absorption into the bloodstream. Overproduction of hepcidin causes poor reticuloendothelial iron release and absorption, while deficient hepcidin synthesis causes iron loading.