

HAMP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9459C

Specification

HAMP Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>P81172</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	9408
Antigen Region	17-46

HAMP Antibody (Center) - Additional Information

Gene ID 57817

Other Names

Hepcidin, Liver-expressed antimicrobial peptide 1, LEAP-1, Putative liver tumor regressor, PLTR, Hepcidin-25, Hepc25, Hepcidin-20, Hepc20, HAMP, HEPC, LEAP1

Target/Specificity

This HAMP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 17-46 amino acids from the Central region of human HAMP.

Dilution WB~~1:500 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

HAMP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HAMP Antibody (Center) - Protein Information

Name HAMP (<u>HGNC:15598</u>)

Synonyms HEPC, LEAP1



Function Liver-produced hormone that constitutes the main circulating regulator of iron absorption and distribution across tissues. Acts by promoting endocytosis and degradation of ferroportin/SLC40A1, leading to the retention of iron in iron-exporting cells and decreased flow of iron into plasma (PubMed:22682227, PubMed:29237594, PubMed:32814342). 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).

Cellular Location Secreted.

Tissue Location

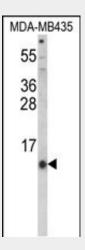
Highest expression in liver and to a lesser extent in heart and brain. Low levels in lung, tonsils, salivary gland, trachea, prostate gland, adrenal gland and thyroid gland. Secreted into the urine and blood (PubMed:11034317). Expressed by hepatocytes (PubMed:15124018).

HAMP Antibody (Center) - Protocols

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

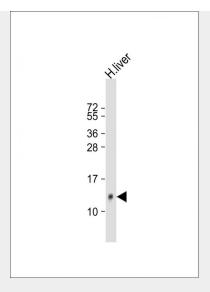
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HAMP Antibody (Center) - Images



Western blot analysis of HAMP Antibody (Center) (Cat. #AP9459c) in MDA-MB435 cell line lysates (35ug/lane). HAMP (arrow) was detected using the purified Pab.





Anti-HAMP Antibody (Center) at 1:500 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 : 9 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HAMP Antibody (Center) - Background

HAMP is involved in the maintenance of iron homeostasis, and it is necessary for the regulation of iron storage in macrophages, and for intestinal iron absorption. The preproprotein is post-translationally cleaved into mature peptides of 20, 22 and 25 amino acids, and these active peptides are rich in cysteines, which form intramolecular bonds that stabilize their beta-sheet structures. These peptides exhibit antimicrobial activity.

HAMP Antibody (Center) - References

Matsumoto, M., et al. Circ. J. 74(2):301-306(2010) del Giudice, E.M., et al. J. Clin. Endocrinol. Metab. 94(12):5102-5107(2009) Kwapisz, J., et al. J Zhejiang Univ Sci B 10(11):791-795(2009) Barton, J.C., et al. Am. J. Hematol. 84(11):710-714(2009) Nemeth, E., et al. Acta Haematol. 122 (2-3), 78-86 (2009) Hunter, H.N., et al. J. Biol. Chem. 277(40):37597-37603(2002) Kluver, E., et al. J. Pept. Res. 59(6):241-248(2002)