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HAMP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9459C

Product Information

Application	WB, E
Primary Accession	P81172
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22098
Calculated MW	9408
Antigen Region	17-46

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.

Protein Information

Name	HAMP (HGNC:15598)
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).

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.

References

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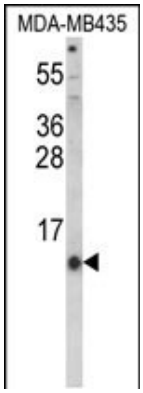
Images



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.