

Product datasheet

Anti-Hepcidin-25 antibody ab75883

★★★★★ 3 Abreviews 2 References 4 Images

Overview

Product name	Anti-Hepcidin-25 antibody
Description	Rabbit polyclonal to Hepcidin-25
Tested applications	Suitable for: WB, IHC-Fr, ICC/IF
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Human Hepcidin-25 aa 50 to the C-terminus conjugated to keyhole limpet haemocyanin. Database link: P81172 (Peptide available as ab31875)
Positive control	This antibody gave a positive signal against Human HAMP Full-length Recombinant Protein (Tagged) (this explains why the observed band 30kDa is so much larger than the expected 2.8kDa band)
General notes	ab75883 is raised using the same immunogen as ab30760 . Batches sold under ab75883 have passed QC testing in Western Blot (Recombinant only) and ICC/IF. In our hands, this product did not work in IHC-P. For further information please contact our Customer Services team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab75883** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 32 kDa (predicted molecular weight: 3 kDa). Can be blocked with Human Heparin-25 peptide (ab31875) . No data on endogenous protein, only tested in recombinant protein.
IHC-Fr	★★★★★	1/250.
ICC/IF	★★★★★	Use a concentration of 1 - 5 µg/ml.

Target

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, 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). Has strong antimicrobial activity against *E.coli* ML35P *N.cinerea* and weaker against *S.epidermidis*, *S.aureus* and group b streptococcus bacteria. Active against the fungus *C.albicans*. No activity against *P.aeruginosa* (PubMed:11113131, PubMed:11034317).

Tissue specificity

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.

Involvement in disease

Hemochromatosis 2B

Sequence similarities

Belongs to the hepcidin family.

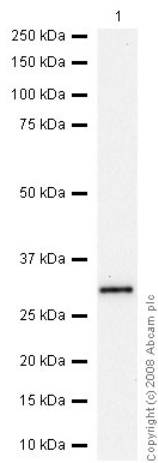
Cellular localization

Secreted.

Form

Hepcidin produces a propeptide of 84 amino acids that undergoes enzymatic cleavage into mature peptides of 20, 22, and 25 amino acids. Active peptides are rich in cysteines that form intramolecular bonds and stabilize the beta-sheet structure

Images



Western blot - Hepcidin-25 antibody (ab75883)

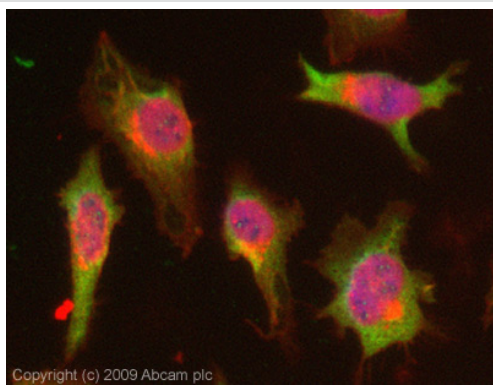
Anti-Hepcidin-25 antibody (ab75883) at 1 $\mu\text{g/ml}$ + Human HAMP Full-length Recombinant Protein (Tagged) at 0.1 μg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

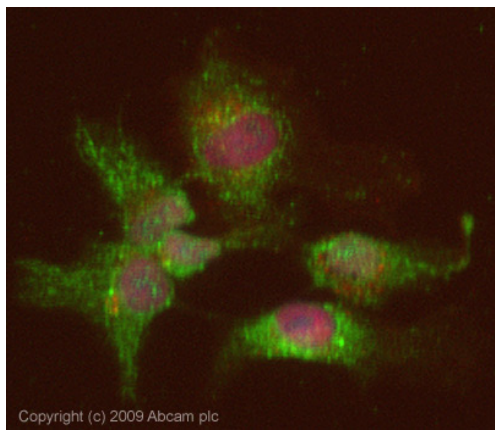
Predicted band size : 3 kDa

Observed band size : 32 kDa



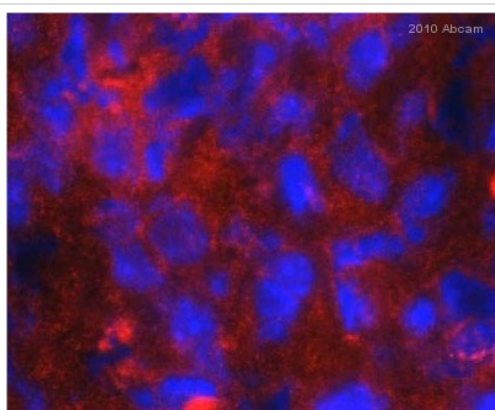
Immunocytochemistry/ Immunofluorescence - Hepcidin-25 antibody (ab75883)

ICC/IF image of ab75883 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab75883, 1 $\mu\text{g/ml}$) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive result in 4% PFA fixed (10 min) HEK293, HepG2, and MCF-7 cells at 1 $\mu\text{g/ml}$.



Immunocytochemistry/ Immunofluorescence -
Hepcidin-25 antibody (ab75883)

ICC/IF image of ab75883 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab75883, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive result in 4% PFA fixed (10 min) HeLa, MCF-7 cells at 5µg/ml, and in 100% Methanol fixed (5 min) Hek293, HepG2, and MCF-7 cells at 5µg/ml.



Immunohistochemistry (Frozen sections) - Hepcidin-25 antibody (ab75883)

This image is courtesy of an anonymous Abreview

ab75883 staining Hepcidin-25 in Mouse liver tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with formaldehyde, permeabilized with 0.1% Triton X 100 and blocked with 5% serum for 1 hour at 25°C. Samples were incubated with primary antibody (1/250 in PBS Tween) for 12 hours at 4°C. An Alexa Fluor®594-conjugated goat anti-rabbit IgG polyclonal (1/250) was used as the secondary antibody. Nuclei were stained with DAPI.

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