## Overview

**Product name**  
Anti-Hepcidin + Hepcidin-2 antibody [EPR18937]

**Description**  
Rabbit monoclonal [EPR18937] to Hepcidin + Hepcidin-2

**Host species**  
Rabbit

**Tested applications**  
Suitable for: IHC-P, WB, IHC-Fr

**Species reactivity**  
Reacts with: Mouse

**Immunogen**  
Recombinant fragment within Mouse Hepcidin + Hepcidin-2 aa 1 to the C-terminus. The exact sequence is proprietary. Hepcidin-2 = SwissProt: Q80T19  
Database link: Q9EQ21

**Positive control**  
WB: Mouse Hepcidin recombinant fragment protein; Mouse Hepcidin-2 recombinant fragment protein; Mouse liver lysate. IHC-P: Mouse liver tissue. IHC-F: Mouse liver tissue.

**General notes**

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents.

This product is a recombinant rabbit monoclonal antibody.

## Properties

**Form**  
Liquid

**Storage instructions**  

**Storage buffer**  
Preservative: 0.01% Sodium azide  
Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

**Purity**  
Protein A purified

**Clonality**  
Monoclonal

**Clone number**  
EPR18937

**Isotype**  
IgG
Relevance

Hepcidin: Q9EQ21: 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. Hepcidin-2: Q80T19: Seems to act as a signaling molecule involved in the maintenance of iron homeostasis.

Applications

Our Abpromise guarantee covers the use of ab190775 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/200. Detects a band of approximately 9 kDa (predicted molecular weight: 9 kDa).</td>
</tr>
<tr>
<td>IHC-Fr</td>
<td></td>
<td>1/100.</td>
</tr>
</tbody>
</table>

Target

Relevance

Hepcidin: Q9EQ21: 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. Hepcidin-2: Q80T19: Seems to act as a signaling molecule involved in the maintenance of iron homeostasis.

Images

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on hepatocytes of Mouse liver was observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
All lanes: Anti-Hepcidin + Hepcidin-2 antibody [EPR18937] (ab190775) at 1/200 dilution

Lane 1: Mouse liver lysate
Lane 2: Mouse brain lysate
Lane 3: Mouse heart lysate
Lane 4: Mouse kidney lysate
Lane 5: Mouse spleen lysate
Lane 6: RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate
Lane 7: NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 9 kDa
Observed band size: 9 kDa

Exposure time: 20 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Highly expressed in the liver and to a much lesser extent in the heart (PMID:11113132 and PMID:12729891)
**Western blot - Anti-Hepcidin + Hepcidin-2 antibody**

All lanes: Anti-Hepcidin + Hepcidin-2 antibody [EPR18937] (ab190775) at 1/5000 dilution

Lane 1: Mouse Hepcidin recombinant fragment protein
Lane 2: Mouse Hepcidin-2 recombinant fragment protein

Lysates/proteins at 0.01 µg per lane.

**Secondary**

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 9 kDa
Observed band size: 32 kDa

**why is the actual band size different from the predicted?**

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time:
Lane 1: 1 second.
Lane 2: 2 seconds.

The mouse recombinant fragment proteins contain aa24-83 with a GST-Tag and were made in-house.

**Immunohistochemistry (Frozen sections) - Anti-Hepcidin + Hepcidin-2 antibody [EPR18937]**

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized frozen section of Mouse liver labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on hepatocytes of Mouse liver.

Counter stained with DAPI.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 at 1/1000 dilution.
Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Mouse kidney. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Mouse spleen. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Rat liver. This could be because the ab does not XR with Rat hepcidin (77% identity between mouse and rat hapcidin sequences).

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Hepcidin + Hepcidin-2 with ab190775 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Human colon cancer. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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