

Anti-Hepsin Antibody
Catalog # ABO11342**Specification**

Anti-Hepsin Antibody - Product Information

Application	WB
Primary Accession	P05981
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Serine protease hepsin(HPN) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Hepsin Antibody - Additional Information

Gene ID 3249

Other Names

Serine protease hepsin, 3.4.21.106, Transmembrane protease serine 1, Serine protease hepsin non-catalytic chain, Serine protease hepsin catalytic chain, HPN, TMPRSS1

Calculated MW

45011 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Membrane; Single-pass type II membrane protein.

Tissue Specificity

Present in most tissues, with the highest level in liver.

Protein Name

Serine protease hepsin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Hepsin(392-410aa KVSDFREWIFQAIKTHSEA), different from the related mouse sequence by two amino acids, and from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the peptidase S1 family.

Anti-Hepsin Antibody - Protein Information**Name** HPN**Synonyms** TMPRSS1**Function**

Serine protease that cleaves extracellular substrates, and contributes to the proteolytic processing of growth factors, such as HGF and MST1/HGFL (PubMed: [21875933](http://www.uniprot.org/citations/21875933), PubMed: [15839837](http://www.uniprot.org/citations/15839837)). Plays a role in cell growth and maintenance of cell morphology (PubMed: [8346233](http://www.uniprot.org/citations/8346233), PubMed: [21875933](http://www.uniprot.org/citations/21875933)). Plays a role in the proteolytic processing of ACE2 (PubMed: [24227843](http://www.uniprot.org/citations/24227843)). Mediates the proteolytic cleavage of urinary UMOD that is required for UMOD polymerization (PubMed: [26673890](http://www.uniprot.org/citations/26673890)).

Cellular Location

Cell membrane; Single-pass type II membrane protein Apical cell membrane; Single-pass type II membrane protein

Tissue Location

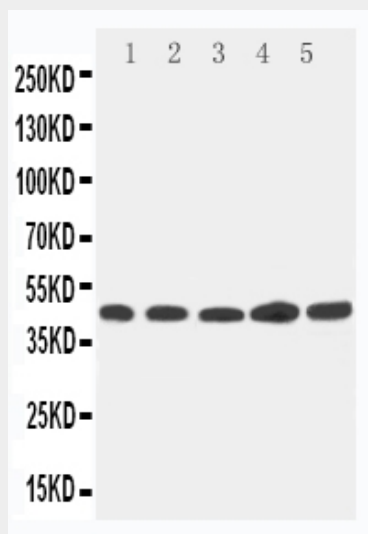
Detected in liver and kidney.

Anti-Hepsin Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Hepsin Antibody - Images



Anti-Hepsin antibody, ABO11342, Western blotting
Lane 1: 293T Cell Lysate
Lane 2: NRK Cell Lysate
Lane 3: HELA Cell Lysate
Lane 4: PANC Cell Lysate
Lane 5: MFC-7 Cell Lysate

Anti-Hepsin Antibody - Background

HPN(Hepsin), also known as TMPRSS1, is an enzyme that in humans is encoded by the HPN gene. Tsuji et al.(1991) mapped the hepsin gene to 19q11-q13.2. Using cDNA microarrays, Dhanasekaran et al.(2001) examined gene expression profiles of more than 50 normal and neoplastic prostate specimens and 3 common prostate cancer cell lines. Signature expression profiles of normal adjacent prostate, benign prostatic hypertrophy, localized prostate cancer, and metastatic, hormone-refractory prostate cancer were determined. In 3 different human cell lines, Guipponi et al.(2008) found that TMPRSS1 was stably anchored in the endoplasmic reticulum.