

# Anti-Hepatitis C Virus NS3 antibody [H23] ab13830

[36 References](#) [3 Images](#)

## Overview

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|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Hepatitis C Virus NS3 antibody [H23]   |
| <b>Description</b>         | Mouse monoclonal [H23] to Hepatitis C Virus NS3   |
| <b>Host species</b>        | Mouse   |
| <b>Specificity</b>         | Hepatitis C Virus antigen NS3 helicase domain. Reacts very well with JFH-1 strain (genotype 2a)   |
| <b>Tested applications</b> | <b>Suitable for:</b> ELISA, WB, IHC-P   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Hepatitis C virus   |
| <b>Immunogen</b>           | Recombinant full length protein corresponding to Hepatitis C Virus NS3.   |
| <b>Epitope</b>             | Helicase domain   |
| <b>General notes</b>       | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

## Properties

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|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| <b>Storage buffer</b>       | pH: 7.40<br>Preservative: 0.1% Sodium azide<br>Constituent: PBS   |
| <b>Purity</b>               | Protein G purified  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | H23   |
| <b>Isotype</b>              | IgG1  |

## Applications

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab13830 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   |
|-------------|-----------|---|
| ELISA       |           | Use at an assay dependent concentration.                                  |
| WB          |           | 1/1000.   |
| IHC-P       |           | 1/50.<br>Tested using paraffin-embedded liver sections from HCV patients. |

## Target

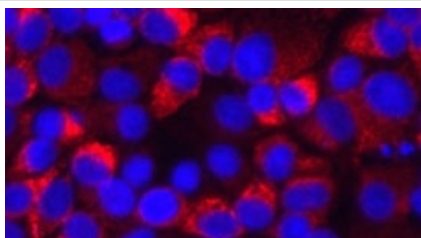
### Relevance

HCV is a positive, single-stranded RNA virus in the Flaviviridae family. The genome is approximately 10,000 nucleotides and encodes a single polyprotein of about 3,000 amino acids. The polyprotein is processed by host cell and viral proteases into three major structural proteins including NS3, and several non-structural proteins necessary for viral replication. The NS3 part of the polyprotein displays three enzymatic activities: serine protease, NTPase and RNA helicase. The NS3 serine proteinase (NS3P) is a non-structural hepatitis C protein responsible for proteolytic processing of other non-structural proteins; because of this, it is also the most extensively studied protein of the Hepatitis C genome. It is responsible for proteolytic processing of the entire downstream region of the HC polyprotein, catalyzing cleavage at the NS3/NS4a, NS4a/NS4b, NS4b/NS5a, and NS5a/NS5b sites to release the mature NS3, NS4a, NS4b, NS5a, and NS5b proteins. For proper function, NS3 requires NS4a as a cofactor, but, interestingly enough, NS3 also cleaves the NS4a protein. The molecular weight of the monomer NS3P is 70 kDa.

### Cellular localization

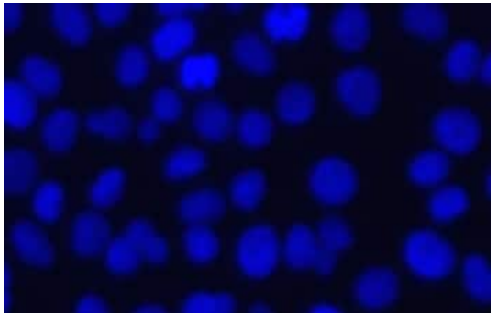
Endoplasmic reticulum membrane

## Images



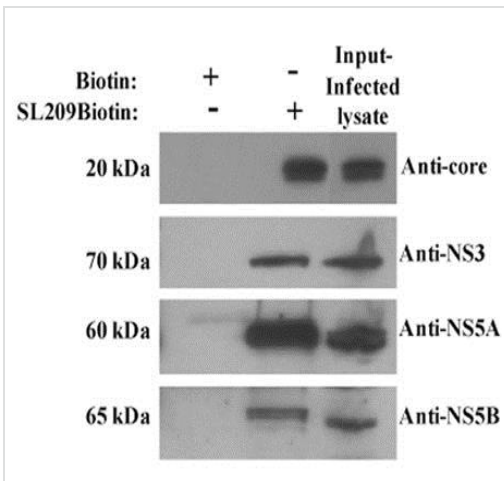
ab13830 used in IHC at 1/50 dilution. Cell line used is Huh7 human hepatoma.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hepatitis C Virus NS3 antibody [H23] (ab13830)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hepatitis C Virus NS3 antibody [H23] (ab13830)

The negative control for above picture with Huh7 cells.



Representative Western Blot detecting Hepatitis C Virus NS3 with ab13830.

SL209-biotin was immobilized on streptavidin agarose beads and incubated with lysates of Huh-7.5 cells infected with HCV J6/JFH-1. Retained proteins were examined by western blot.

Western blot - Anti-Hepatitis C Virus NS3 antibody [H23] (ab13830)

Image from Kota S et al., PLoS One. 2012;7(2):e32207. Epub 2012 Feb 28.; Fig 3.; doi:10.1371/journal.pone.0032207; February 28, 2012, PLoS ONE 7(2): e32207.

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