

Product datasheet

Anti-Hepatitis C Virus NS3 antibody [H23] ab13830

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

Overview

Product name	Anti-Hepatitis C Virus NS3 antibody [H23]
Description	Mouse monoclonal [H23] to Hepatitis C Virus NS3
Host species	Mouse
Specificity	Hepatitis C Virus antigen NS3 helicase domain. Reacts very well with JFH-1 strain (genotype 2a)
Tested applications	Suitable for: ELISA, WB, IHC-P
Species reactivity	Reacts with: Hepatitis C virus
Immunogen	Recombinant full length protein corresponding to Hepatitis C Virus NS3.
Epitope	Helicase domain
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.1% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	H23
Isotype	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. Tested using paraffin-embedded liver sections from HCV patients.

Target

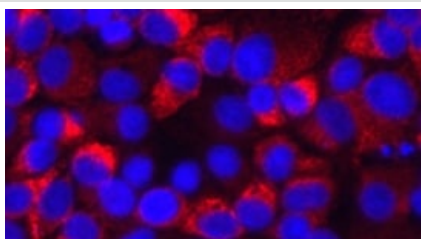
Relevance

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

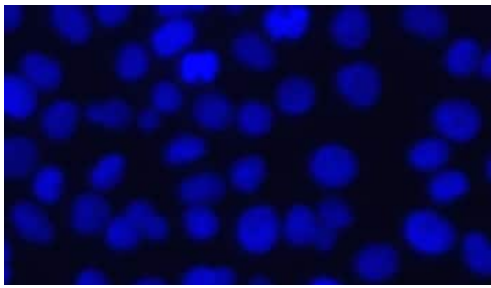
Endoplasmic reticulum membrane

Images



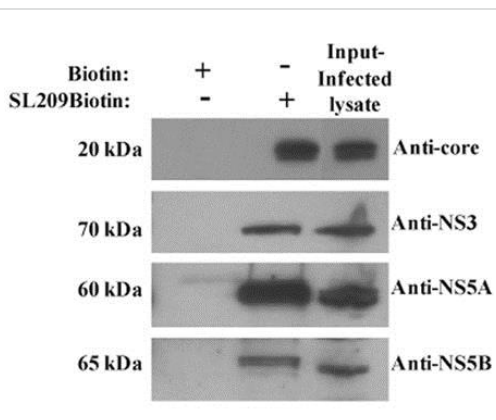
ab13830 used in IHC at 1/50 dilution. Cell line used is Huh7 human hepatoma.

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.



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.

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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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