

Product datasheet

# Anti-Hepatitis C Virus NS3 antibody [8 G-2] ab65407

24 References 3 Images

Overview

<b>Product name</b>	Anti-Hepatitis C Virus NS3 antibody [8 G-2]
<b>Description</b>	Mouse monoclonal [8 G-2] to Hepatitis C Virus NS3
<b>Host species</b>	Mouse
<b>Specificity</b>	Reacts efficiently with JFH-1 strain of HCV (genotype 2a)
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, ELISA, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Hepatitis C virus
<b>Immunogen</b>	recombinant NS3 protein
<b>Epitope</b>	amino acids 1340 – 1470 of HCV polyprotein
<b>Positive control</b>	Huh7 cells harbouring HCV replicon (genotype 1b), Huh7 cells infected with HCV strain JFH-1 (genotype 2a)

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.01% Sodium Azide Constituents: 10mM PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	8 G-2
<b>Isotype</b>	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab65407** 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
IHC-P		Use at an assay dependent concentration.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 70 kDa.
ELISA		Use at an assay dependent concentration.
ICC/IF		1/500.

## Target

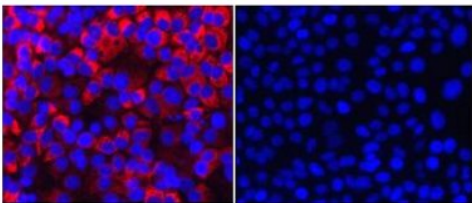
### Relevance

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

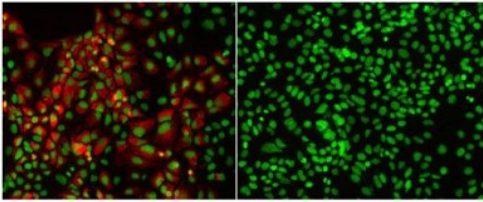
Endoplasmic reticulum membrane

## Images



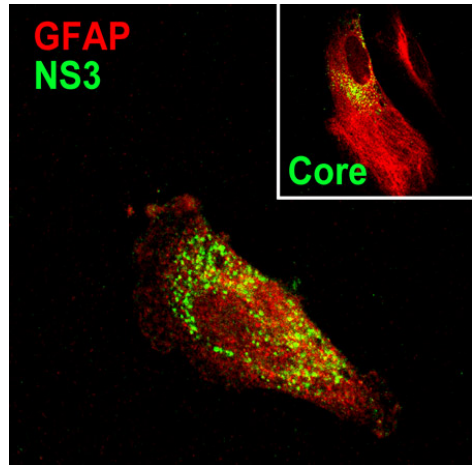
ab65407 at 1/500 dilution staining Huh7 cells harbouring HCV replicon (genotype 1b) (left) and Huh7 cells (right). Nuclei were visualised with DAPI (shown in blue).

Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)



ab65407 at 1/500 dilution staining Huh7 cells infected with HCV strain JFH-1 (left) and mock infected cells (right). Nuclei were visualised with DAPI (shown in green).

Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)



Immunofluorescence analysis of Hepatitis C infected Human fetal astrocytes, staining Hepatitis C Virus NS3 with ab65407. An AlexaFlour®488-conjugated anti-mouse IgG was used as the secondary antibody.

Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)

Image from Vvithanaporn P et al., PLoS One. 2010 Sep 21;5(9):e12856. doi: 10.1371/journal.pone.0012856.; Fig 1.; September 21, 2010, PLoS ONE 5(9): e12856.

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