# abcam

## Product datasheet

## Recombinant Hepatitis C Virus NS3 protein ab49025

**Description** 

Product name Recombinant Hepatitis C Virus NS3 protein

**Biological activity** Reactivity with human HCV positive serum undetermined.

Purity > 95 % SDS-PAGE.

Purity of proteins is evaluated by SDS-PAGE

**Expression system** Escherichia coli

Protein length Protein fragment

Animal free No

Nature Recombinant
Amino acids 1450 to 1643

#### **Specifications**

Our Abpromise guarantee covers the use of ab49025 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** ELISA

Flow Cytometry SDS-PAGE Western blot

Form Liquid

## **Preparation and Storage**

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

pH: 7.2

Constituents: 48% Urea, 0.078% Beta mercaptoethanol, 0.316% Tris HCl, 50% Glycerol (glycerin,

glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### **General Info**

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#### 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 NS5b/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

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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