



# Recombinant HCV type 1a Nonstructural Protein 3 (a.a. 1-92) (DAG-P2185)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Active hepatitis c virus Hepatitis C virus Genotype 1a NS3 protein fragment
<b>Antigen Description</b>	The nonstructural protein NS3 of the hepatitis C virus (HCV) is indispensable for virus replication and a multifunctional enzyme that contains three catalytic activities such as serine protease, helicase, and NTPase. The N-terminal domain of the protein contains protease activity and the C-terminal domain contains nucleotide triphosphatase and RNA helicase activity. It has been shown that NS2/3 cleavage is mediated by NS2-3 protease, whereas NS3 serine protease is responsible for the other four cleavage sites of the nonstructural (NS) region. Immunoblot analysis on serum samples from 90 patients with chronic hepatitis C virus infection revealed four putative immunogenic regions within the NS3 protein of the virus: E (around amino acids 1250/1251), A (within amino acids 1250-1334), A/B (around amino acids 1323 and 1334), and B/C (around amino acids 1407 and 1412). Among them, region E was most immunodominant, and region A was recognized much less frequently by patients with cirrhosis than by those with chronic hepatitis.
<b>Species</b>	HCV
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	FuncS
<b>Molecular Weight</b>	30 kDa
<b>Bio-activity</b>	One unit of protease hydrolyzes 1 picomole of Ac-Asp-Glu-Dap(QXL?520)- Glu-Glu-Abu-COO-Ala -Ser-Cys(5-FAMsp)-NH2) per minute at pH 7.5 at 25° C. Active hepatitis c virus Hepatitis C virus Genotype 1a NS3 protein fragment is in active form and the pre-acti
<b>Format</b>	Liquid
<b>Buffer</b>	pH: 8.00Constituents: 0.75% Potassium chloride, 0.003% DTT, 0.32% Tris HCl, 0.06% EDTA,

20% Glycerol

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**Preservative**

None

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**Storage**

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze/thaw cycles.

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## BACKGROUND

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**Introduction**

Hepatitis C Virus 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 protease

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**Keywords**

Serine protease/NTPase/helicase NS3; HCV Genotype 1a NS3

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