

## Recombinant Hepatitis C Virus Non Structural Protein4 a+b, Rhodamine Labeled

DAG1423 Hepatitis C Virus

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	Recombinant HCV NS4 rhodamine labeled protein containing amino acids 1658-1863 was expressed in <i>E. coli</i> and purified by proprietary chromatographic technique.
<b>Antigen Description</b>	NS4B is a small (27 kDa) hydrophobic integral membrane protein with 4 transmembrane domains. It is located within the endoplasmic reticulum and play an important role for recruitment of other viral proteins. It induces morphological changes to the endoplasmic reticulum forming a structure termed the membranous web.
<b>Source</b>	<i>E. coli</i>
<b>Species</b>	Hepatitis C Virus
<b>Tag</b>	N/A
<b>Conjugate</b>	Rhodamine
<b>Purity</b>	>95% pure as determined by 10% PAGE (coomassie staining).
<b>Characteristic</b>	Immunoreactive with sera of HCV-infected individuals.
<b>Applications</b>	Antigen in ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.
<b>Usage</b>	The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

### PACKAGING

<b>Storage</b>	stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.
<b>Buffer</b>	20mM Tris-Hcl pH 8, 8M urea and 10mM B-ME.

### BACKGROUND

<b>Introduction</b>	HCV is a small 50nm, enveloped, single-stranded, positive sense RNAvirus in the family Flaviviridae. HCV has a high rate of replication with approximately one trillion particles produced each day in an infected individual. Due to lack of proofreading by the HCV RNA polymerase, the HCV has an exceptionally high mutation rate, a factor that may help it elude the hosts immune response. Hepatitis C virus is classified into six genotypes(1-6) with several subtypes within each genotype. The preponderance and distribution of HCV genotypes varies globally. Genotype is clinically important in determining potential response to interferon-based therapy and the required duration of such therapy. Genotypes 1 and 4 are less responsive to interferon-based treatment than are the other genotypes (2, 3, 5 and 6).
<b>Keywords</b>	HCV NS-4 Genotype-1a; Hepatitis C Virus NS-4 Genotype-1a; NS4; Hepatitis C virus; HCV; HCV NS4 transactivated protein; NS 4; NS4; Non structural protein 4; p27; p8; Flaviviridae; Hepacivirus

### REFERENCES

1. Tellinghuisen TL, Paulson MS, Rice CM. The NS5A protein of bovine viral diarrhea virus contains an essential zinc-binding site similar to that of the hepatitis C virus NS5A protein. *J Virol.* Aug 2006; 80(15):7450-8.

