

## Recombinant Hepatitis C Virus Nucleocapsid Core Genotype 6a (a.a. 2-119)

DAG3473 HCV

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	Recombinant Hepatitis C Virus Nucleocapsid Core Genotype 6a (a.a. 2-119)
<b>Antigen Description</b>	HCV is a small 50 nm, enveloped, single-stranded, positive sense RNA virus 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
<b>Description</b>	The E.coli derived recombinant protein contains the HCV core nucleocapsid immunodominant regions, amino acids 2-119.
<b>Source</b>	E. coli
<b>Species</b>	HCV
<b>Specificity</b>	Immunoreactive with sera of HCV-infected individuals.
<b>Form</b>	50 mM Tris-HCl, pH-8 + 60 mM NaCl + 10 mM glutathione + 0.25% sarkosil + 50% glycerol.
<b>Protein length</b>	a.a. 2-119
<b>purification</b>	HCV Core Genotype-6a protein was purified by proprietary chromatographic technique.
<b>Purity</b>	HCV Core Genotype-6a protein is >95% pure as determined by 10% PAGE (coomassie staining).
<b>Applications</b>	HCV Core Genotype-6a antigen is suitable for ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.

### PACKAGING

<b>Storage</b>	HCV Core Genotype-6a although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.
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### BACKGROUND

<b>Introduction</b>	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 proteases into three major structural proteins and several non structural proteins necessary for viral replication. Hepatitis C virus (HCV) causes most cases of non-A, non-B hepatitis and results in most HCV infected people developing chronic infections, liver cirrhosis and hepatocellular carcinoma. T cell responses, including interferon-gamma production are severely suppressed in chronic HCV patients.
<b>Keywords</b>	HCcAg; Core protein p19; HCV core antigen; HCV core protein; Hepatitis C Virus core protein; HCV-1 Core Ag; Hepatitis C Virus Core Antigen; genotype 6a; 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.