

## Recombinant Hepatitis C Virus Core(Genotype-1)

DAG1985 *Hepatitis C Virus*  
Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	The E.coli derived recombinant protein contains the HCV core nucleocapsid immunodominant regions, amino acids 1-102.
<b>Antigen Description</b>	The hepatitis C virus (HCV) core protein represents the first 191 amino acids of the viral precursor polyprotein and is cotranslationally inserted into the membrane of the endoplasmic reticulum. Hepatitis C virus (HCV) core is a viral structural protein; it also participates in some cellular processes, including transcriptional regulation. However the mechanisms of core-mediated transcriptional regulation remain poorly understood. Hepatitis C virus (HCV) core protein is thought to contribute to HCV pathogenesis through its interaction with various signal transduction pathways. In addition, HCV core antigen is a recently developed marker of hepatitis C infection. The HCV core protein has been previously shown to circulate in the bloodstream of HCV-infected patients and inhibit host immunity through an interaction with gC1qR.
<b>Source</b>	E. coli
<b>Species</b>	Hepatitis C Virus
<b>Tag</b>	N/A
<b>Form</b>	Each vial contains 100 µg of lyophilized protein in 50mM Tris. pH-8 & 5mM EDTA.
<b>AA Sequence</b>	a.a. 1-102
<b>Purity</b>	>95% , based on SDS PAGE
<b>Applications</b>	WB standard, antibody ELISA, immunogen, etc.

### PACKAGING

<b>Storage</b>	Before reconstitution, stable for 1 year at -20°C from the date of shipment. After reconstitution, stable for a month at 4°C. Nonhazardous. No MSDS required
<b>Concentration</b>	N/A
<b>Dilutions</b>	with 100 µl of Millipore water.

### 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. Several different genotypes of HCV with slightly different genomic sequences have since been identified that correlate with differences in response to treatment with interferon alpha.
<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 1; 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.

