

Recombinant Hepatitis C Virus Core(Genotype-3a), GST-tagged

DAG1991 *Hepatitis C Virus*
Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	The E.coli derived recombinant protein contains the HCV core nucleocapsid immunodominant regions, amino acids 2-119. The protein is fused to a GST tag at N-terminus.
Antigen Description	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.
Source	E. coli
Species	Hepatitis C Virus
Tag	GST
Form	Each vial contains 100 µg of lyophilized protein in 1.5M urea, 25mM Tris-HCl, pH 8.0, 0.2% Triton-X and 50% glycerol.
AA Sequence	a.a. 2-119
Purity	>95% , based on SDS PAGE
Applications	WB standard, antibody ELISA, immunogen, etc.

PACKAGING

Storage	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
Concentration	N/A
Dilutions	with 100 µl of Millipore water.

BACKGROUND

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 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.
Keywords	HCCAg; Core protein p19; HCV core antigen; HCV core protein; Hepatitis C Virus core protein; HCV-1 Core Ag; Hepatitis C Virus Core Antige, genotype 3a; 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.

