



## Recombinant HCV type 3b Core Protein (a.a. 2-119) (DAG1992)

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

### PRODUCT INFORMATION

#### Product Overview

The E.coli derived recombinant protein contains the HCV core nucleocapsid immunodominant regions, amino acids 2-119.

#### 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.

#### Species

HCV

#### Purity

> 95%, based on SDS PAGE

#### Conjugate

Unconjugated

#### Applications

WB standard, antibody ELISA, immunogen, etc.

#### Format

Each vial contains 100 µg of lyophilized protein in 50mM Tris-HCl, pH-8, 60mM NaCl, 10mM glutathione, 0.25% sarkosil 50% glycerol.

#### Concentration

N/A

#### Size

100 µg, 1 mg

#### Preservative

None

## 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 6a; Flaviviridae; Hepacivirus

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