



Recombinant HCV Nucleocapsid (a.a. 2-192) [Fluorescein] (DAG1389)

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

PRODUCT INFORMATION

Product Overview	Recombinant HCV Core Antigen containing amino acids 2-192 was expressed in <i>E. coli</i> and purified by proprietary chromatographic technique.
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% pure as determined by 10% PAGE (coomassie staining).
Conjugate	Fluorescein
Applications	HCV-Core antigen is suitable for ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.
Size	100 µg, 500 µg, 1 mg
Buffer	20mM Tris-HCl pH 8, 8M urea and 10mM B-ME.
Preservative	None
Storage	2-8°C short term, -20°C long term

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