



HCV Core Antigen (aa 2 - 192) [Biotin] (DAG583)

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

PRODUCT INFORMATION

Product Overview	Recombinant Hepatitis C Virus (HCV) core Antigen (a.a. 2-192) Biotin conjugated, 22 kDa and Beta-galactosidase (114 kDa) fused at the N-terminus, was expressed in E. coli, and purified in vitro using conventional chromatography techniques.
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. Hepatitis C Virus is a positive, single stranded RNA virus in the Flaviviridae family.
Nature	Recombinant
Expression System	E. coli
Species	HCV
Purity	> 95% pure (SDS-PAGE)
Conjugate	Biotin
Applications	Suitable in ELISA, Western Blot, Colloidal Gold and Latex Beads. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Molecular Weight	22 kDa (2-192aa)
Format	Biotin, Liquid
Concentration	1 mg/ml (OD280nm)
Buffer	8M urea, 20mM Tris-HCl, pH 8.0
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

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. 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.

Keywords

Core protein p19; HCCAg; HCV core antigen; HCV core protein; Hepatitis C Virus core protein;
