

Recombinant Hepatitis C Virus (HCV) Core Antigen (a.a. 2-192)

Cat.No:DAG571

Lot. No. (See product label)

PRODUCT INFOMATION

Storage Short-term (up to 2 months) store at 2–8oC. Long term, aliquot and store at -80oC. Avoid multiple

freeze/thaw cycles.

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.

Buffer 8M urea, 20mM Tris-HCl, pH 8.0, 10mM beta-mercaptoethanol

Concentration 1mg/ml (OD280nm)

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 22kDa

Form Purified, Liquid

Preservative None

Purity >95% pure (SDS-PAGE)

Key words HCV; HCV core; Core protein p19; HCV core antigen; HCV core protein; Hepatitis C Virus core

protein; Flaviviridae; Hepacivirus

Background

Introduction HCV 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.