



Recombinant HCV Core Antigen (aa 2 - 192) [Beta-galactosidase] (DAG571)

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

PRODUCT INFORMATION

Product Overview	Reactive with human HCV positive serum. 22 kDa with Beta-galactosidase (114 kDa) fused at the 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.
Species	HCV
Purity	> 95% pure (SDS-PAGE)
Conjugate	Beta-galactosidase
Applications	ELISA, WB
Molecular Weight	22 kDa
Format	Liquid
Concentration	1 mg/mL
Size	1 mg

Buffer	8 M Urea, 20 mM Tris-HCl, pH 8.0, 10 mM beta-Mercaptoethanol.
Preservative	None
Storage	Short-term (up to 2 months) store at 2–8°C. Long term, aliquot and store at -80°C. Avoid multiple freeze/thaw cycles.

BACKGROUND

Introduction	Hepatitis C virus (HCV), a member of the Hepacivirus C species, is a positive-sense single-stranded RNA virus of the family Flaviviridae. HCV particle consists of a lipid membrane envelope that is 55 to 65 nm in diameter. Two viral envelope glycoproteins, E1 and E2, are embedded in the lipid envelope. They take part in viral attachment and entry into the cell. Within the envelope is an icosahedral core that is 33 to 40 nm in diameter. Inside the core is the RNA material of the virus.
Keywords	HCV; hepatitis C virus; HCV Core Antigen