



## Recombinant HCV Core Protein [HRP] (DAG3969)

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

### PRODUCT INFORMATION

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| <b>Product Overview</b>    | Recombinant Hepatitis C Virus Core Antigen, HRP-Conjugated   |
| <b>Antigen Description</b> | 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; |
| <b>Species</b>             | HCV  |
| <b>Purity</b>              | HCV Core protein is greater than 95% pure as determined by 10% PAGE (coomassie staining). HCV Core protein was purified by proprietary chromatographic technique.  |
| <b>Conjugate</b>           | HRP  |
| <b>Applications</b>        | ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.   |
| <b>Preservative</b>        | None   |
| <b>Storage</b>             | 2-8°C short term, -20°C long term  |

### BACKGROUND

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| <b>Introduction</b> | 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 |
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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.

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**Keywords**

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

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