

Hepatitis C Virus Core (2-192) - Purified

Catalog No.: AR10580PU-N

Quantity: 0.5 mg

Background: HCV is a small 50nm, enveloped, single-stranded, positive sense RNA virus in the family Flaviviridae.

HCV has a high rate of replication with approximately one trillion particles produced each day in an infected individual. Due to lack of proofreading by the HCV RNA polymerase, the HCV has an exceptionally high mutation rate, a factor that may help it elude the host's immune response. Hepatitis C virus is classified into six genotypes (1-6) with several subtypes within each genotype. The preponderance and distribution of HCV genotypes varies globally. Genotype is clinically important in determining potential response to interferon-based therapy and the required duration of such therapy. Genotypes 1 and 4 are less responsive to interferon-based treatment than are the other genotypes (2, 3, 5 and 6).

Source: E. coli

Format: **Purity:** >95% pure as determined by 10% PAGE (coomassie staining).

Purification Method: HCV-Core protein was purified by proprietary chromatographic technique.

Buffer System: 20mM Tris-HCl pH 8, 8M Urea and 10mM beta-Mercaptoethanol

Applications: HCV-Core Antigen is suitable for ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description: The *E. coli* derived recombinant protein contains the HCV core nucleocapsid genotype 1b, immunodominant regions, amino acids 2-192, 22 kDa.

The protein is fused with beta-Galactosidase (114 kDa) at N-terminus.

Specificity: Immunoreactive with sera of HCV-infected individuals.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.