

Recombinant Hepatitis C Virus Nucleocapsid Core 22 kDa (aa 2-192)

Catalog No. CSI15760A Quantity: 100 µg

CSI15760B 0.5 mg CSI15760C 1.0 mg

Description: HCV is a small 50 nm, 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).

The *E.coli* derived recombinant protein contains the HCV core nucleocapsid genotype

1b, immunodominant regions, amino acids 2-192, 22kDa.

The protein is fused with b-galactosidase (114 kDa) at N-terminus.

Source: E. coli

Molecular Weight: 22 kDa

Formulation: 20 mM Tris Hcl pH-8, + 8M urea + 10 mM β-mercaptoethanol.

Purity: HCV-Core Protein is >95% pure as determined by 10% PAGE (coomassie staining).

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

Specific Activity: Immunoreactive with sera of HCV-infected individuals.

Amino Acid Sequence: MSTNPKPQRK TKRNTNRRPQ DVKFPGVGQI VGGVYLLPRR GPRLGVRATR

KTSERSQPRG RRQPIPKARR PEGRTWAQPG YPWPLYGNEG CGWAGWLLSP RGSRPSWGPT DPRRRSRNLG KVIDTLTCGF ADLMGYIPLV GAPLGGAARA

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LAHGVRVLED GVNYATGNLP GCSFSIFLLA LLSCLTVPA.

Storage & Stability: HCV-Core although stable at 4°C for 1 week, should be stored below -18°C.

Please prevent freeze thaw cycles.

Applications: HCV-Core Antigen is suitable for ELISA and Western blots, excellent antigen for

detection of HCV with minimal specificity problems.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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