RayBiotech, Inc.
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Certificate of Analysis and Data Sheet

Recombinant Hepatitis C Virus Nucleocapsid (core) 22kDa

Catalog No.	**Source**
228-10624	*Escherichia Coli*

Introduction:

HCV is a small 50nm, enveloped, single-stranded, positive sense RNAvirus 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).

Description:

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.

Purification Method

HCV-Core protein was purified by proprietary chromatographic technique.

Purity

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

Formulation

20mM Tris Hcl pH-8, 8M urea and 10mM β-mercaptoethanol.

Stability

Five years frozen. One month in solution at room temperature.

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Storage

HCV-Core protein is shipped at ambient temperature.
Upon arrival, Store at -20°C.

Specificity

Immunoreactive with sera of HCV-infected individuals.

Applications

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

Sequence

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mstnpkpqrk tkrntnrrpq dvkfpgvgqi vggvyllprr gprlgvratr
ktsersqprg rrqpipkarr pegrtwaqpg ypwplygneg cgwagwllsp
rgsrpswgpt dprrrsrnlg kvidtltcgf adlmgyiplv gaplggaara
lahgvrvled gvnyatgnlp gcsfsiflla llscltvpa.
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