

Hepatitis C Virus Core Genotype-2b Recombinant VIRAL ANTIGEN

Catalog Number: PRP-237

Quantity: 100 micrograms, 500 micrograms, 1 milligram

Format: 50 mM Tris-HCl, pH-8, 60 mM NaCl, 10 mM glutathione, 0.25% sarkosil & 50%

glycerol

Host: E. coli

Background:

Hepatitis C virus (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).

Specificity and Preparation:

The *E. coli* derived recombinant protein contains the HCV core nucleocapsid immunodominant regions, amino acids 2-119. HCV core genotype-2b protein was purified by a proprietary chromatographic technique. The protein is >95% pure as determined by 10% PAGE (coomassie staining). Formulation is 50 mM tris-HCl, pH -8, 60 mM NaCl, 10 mM glutathione, 0.25% sarkosil and 50% glycerol. It is immunoreactive with sera of HCV-infected individuals.

Usage and Storage:

Reported to be effective for ELISA, immunoblotting, and detection of HCV with minimal specificity problems. Protein may be shipped at ambient temperature. Upon arrival, store at -20°C. It is stable for up to five years frozen, one month in solution at room temperature. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

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