



Product Data Sheet

Cat # RP-457

Recombinant Hepatitis C Virus NS4 a+b, Biotin Labeled

Size:  100 ug  500 ug

## INTRODUCTION

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).

## DESCRIPTION:

The E.coli derived 19 kDa recombinant protein Biotin labeled contains the HCV NS4 immunodominant regions, amino acids 1658-1863. The protein is fused with b-galactosidase (114 kDa) at N-terminus

## METHOD:

Purified by proprietary chromatographic technique.

## PURITY:

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

## FORMULATION:

20mM Tris-Hcl pH 8, 8M urea and 10mM B-ME.

## STORAGE:

Protein is shipped at ambient temperature. Upon arrival, Store at -20°C. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..

## STABILITY:

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

## SPECIFICITY:

Immunoreactive with sera of HCV-infected individuals.

## APPLICATIONS:

Antigen in ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.

## Usage:

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..

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