

# RayBiotech, Inc.

3607 Parkway Lane suite 100 Norcross, GA 30092 Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

# Certificate of Analysis and Data Sheet

# Recombinant Hepatitis C Virus Non-structural Protein 5 (NS5) Antigen

Catalog No. Source: 228-10674 E.coli

#### 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 recombinant protein contains the HCV NS5 immunodominant regions, amino acids 2061-2302. The protein is fused with GST at N-terminus.

# **Purification Method**

HCV-NS5 protein was purified by proprietary chromatographic technique.

## Purity

HCV-NS5 protein is >95% pure as determined by 10% PAGE (coomassie staining).

#### Formulation

1.5M Urea, 25mM Tris-HCl pH 8, 50% glycerol and 0.2% Triton-X.

#### Storage

HCV NS5 although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.

# **Specificity**

Immunoreactive with sera of HCV-infected individuals.



# RayBiotech, Inc.

3607 Parkway Lane suite 100 Norcross, GA 30092 Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

### **Applications**

HCV-NS5 antigen is suitable for ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.