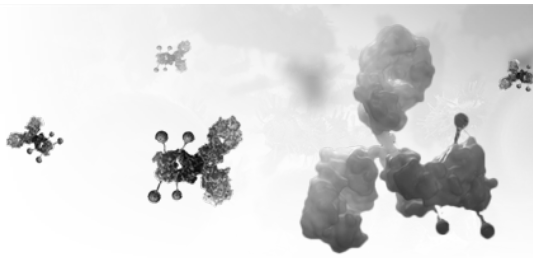

Recombinant HCV type 5a Active Nonstructural Protein 3 (full length) [GST] (DAG-P2764)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Active hepatitis c virus Hepatitis C Virus Genotype 5a NS3 full length protein
Antigen Description	The polyprotein is processed by host cell and viral proteases into three major structural proteins including NS3, and several non-structural proteins necessary for viral replication. The NS3 part of the polyprotein displays three enzymatic activities: serine protease, NTPase and RNA helicase. NS3 encompasses amino acid residues approximately 1050 to 1640. The NS3 serine proteinase (NS3P) is a non-structural hepatitis C protein responsible for proteolytic processing of other non-structural proteins; because of this, it is also the most extensively studied protein of the Hepatitis C genome. It is responsible for proteolytic processing of the entire downstream region of the HC polyprotein, catalyzing cleavage at the NS3/NS4a, NS4a/NS4b, NS4b/NS5a, and NS5a/NS5b sites to release the mature NS3, NS4a, NS4b, NS5a, and NS5b proteins.For proper function, NS3 requires NS4a as a cofactor, but, interestingly enough, NS3 also cleaves the NS4a protein. The molecular weight of the monomer NS3P is 70 kDa. There are over 20 different subtypes of Hepatitis C Virus; the preponderance and distribution of HCV genotypes varies globally. Genotypes 4-6 are very common in geographic areas where chronic hepatitis C is highly prevalent. Genotype 5 has a low prevalence worldwide. HCV Genotype information is important because of the role it plays in predicting HCV medical treatment response and treatment duration. Sustained cure rates (sustained viral response) of 75% or better occur in people with genotypes HCV 2 and 3 in 24 weeks of treatment. Genotypes 1a and 1b, the most prevalent worldwide, have the poorest rates of response to the present treatment regimen, which is a combination of pegylated alfa interferon 2b with ribavirin.
Species	HCV
Purity	> 95 % by SDS-PAGE.This protein was purified by proprietary chromatographic techniques.
Conjugate	GST
Applications	WB ELISA SDS-PAGE

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Bio-activity	This protein is immunoreactive with sera of HCV-infected individuals.
Format	Liquid
Buffer	Preservative: None Constituents: 50% Glycerol, 1.5M Urea, 25mM Tris HCl, 1mM EDTA
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Preservative: None Constituents: 50% Glycerol, 1.5M Urea, 25mM Tris HCl, 1mM EDTA This product is an active protein and may elicit a biological response in vivo, handle

BACKGROUND

Introduction	Hepatitis C Virus is a positive, single stranded RNA virus in the Flaviviridae family. The genome is approximately 10,000 nucleotides and encodes a single polyprotein of about 3,000 amino acids. The polyprotein is processed by host cell and viral protease
Keywords	HCV genotype 5a NS3; HCV 5a; HCV5a NS3; NS3P; Serine protease/NTPase/helicase NS3; HCV Genotype 5a NS3

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221