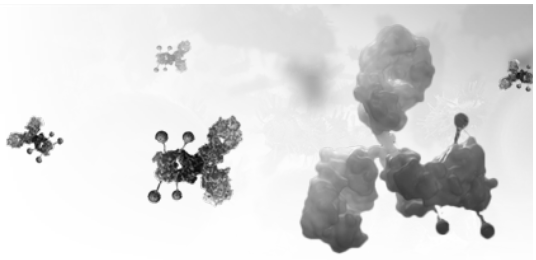

Recombinant HCV type 5a Nonstructural Protein 3 (DAG2346)

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

PRODUCT INFORMATION

Product Overview	E.coli derived recombinant from HCV subtype 5a. The protein contains the full-length HCV NS3 (c33c) immunodominant region.
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. 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.
Species	HCV
Purity	> 95%, based on SDS PAGE
Conjugate	Unconjugated
Applications	WB standard, antibody ELISA, immunogen, etc.
Format	Each vial contains 100 µg of lyophilized protein in 25mM Tris-HCl, 1mM EDTA, 1.5M urea 50% glycerol.
Concentration	N/A
Size	100 µg, 500 µg

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

Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	The hepatitis C virus (HCV) core protein represents the first 191 amino acids of the viral precursor polyprotein and is cotranslationally inserted into the membrane of the endoplasmic reticulum. Hepatitis C virus (HCV) core is a viral structural protein; it also participates in some cellular processes, including transcriptional regulation. However the mechanisms of core-mediated transcriptional regulation remain poorly understood. Hepatitis C virus (HCV) core protein is thought to contribute to HCV pathogenesis through its interaction with various signal transduction pathways. In addition, HCV core antigen is a recently developed marker of hepatitis C infection. The HCV core protein has been previously shown to circulate in the bloodstream of HCV-infected patients and inhibit host immunity through an interaction with gC1qR.
Keywords	HCV NS3 transactivated protein; NS 3; NS3; NS3P; p70; Serine protease/NTPase/helicase; Hepatitis C Virus NS3; Flaviviridae; Hepacivirus; Hepatitis C virus; HCV NS-3; HCV NS3 Genotype 1a; Hepatitis C Virus NS3 Genotype 1a

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