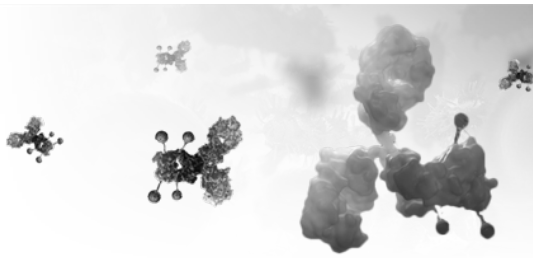

Recombinant HCV Nonstructural Protein 3 (a.a. 1450-1643) [HRP] (DAG1412)

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

PRODUCT INFORMATION

Product Overview	Recombinant HCV NS3 HRP Labeled protein containing the HCV NS3 immunodominant regions was expressed in E. coli and purified by proprietary chromatographic technique.
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% pure as determined by 10% PAGE (coomassie staining).
Conjugate	HRP
Applications	HCV NS3, HRP antigen is suitable for ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.
Size	100 µg, 500 µg, 1 mg
Buffer	25mM Tris-Hcl pH 8, 1mM EDTA, 1.5M urea and 50%glycerol.
Preservative	None

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

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