

Recombinant Hepatitis C Virus NS3(Genotype-1c), His-tagged

Cat.No:DAG2340

Lot. No. (See product label)

PRODUCT INFORMATION

species	Hepatitis C Virus
Applications	WB standard, antibody ELISA, immunogen, etc.
Storage	Before reconstitution, stable for 1 year at -20°C from the date of shipment. After reconstitution, stable for a month at 4°C. Nonhazardous. No MSDS required
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.
Concentration	N/A
Source	E. coli
Tag	His
Form	Each vial contains 100 µg of lyophilized protein in 1.5M urea, 25mM Tris-HCl pH-8, 0.2% Triton-X & 50% Glycerol.
AA Sequence	a.a. 1192-1459
Purity	>95% , based on SDS PAGE
Dilutions	with 100 µl of Millipore water.

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 proteases into three major structural proteins and several non structural proteins necessary for viral replication. Several different genotypes of HCV with slightly different genomic sequences have since been identified that correlate with differences in response to treatment with interferon alpha.
Keywords	HCV NS-3 Genotype-1a; Hepatitis C Virus NS-3 Genotype-1c; NS3; Hepatitis C virus; HCV; HCV NS3 transactivated protein; NS 3; NS3; NS3P; p70; Serine protease/NTPase/helicase; Flaviviridae