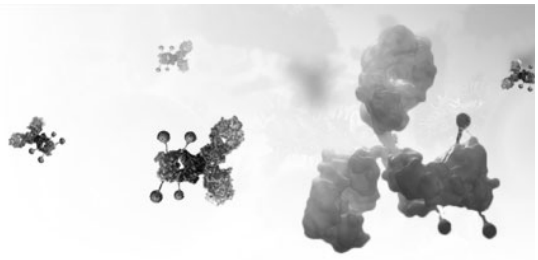

Recombinant HCV type 1a Active Nonstructural Protein 3 (aa 1359 - 1456) (DAG-P2948)

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 1a NS3 protein fragment
Antigen Description	The nonstructural protein NS3 of the hepatitis C virus (HCV) is indispensable for virus replication and a multifunctional enzyme that contains three catalytic activities such as serine protease, helicase, and NTPase. The N-terminal domain of the protein contains protease activity and the C-terminal domain contains nucleotide triphosphatase and RNA helicase activity. It has been shown that NS2/3 cleavage is mediated by NS2-3 protease, whereas NS3 serine protease is responsible for the other four cleavage sites of the nonstructural (NS) region. Immunoblot analysis on serum samples from 90 patients with chronic hepatitis C virus infection revealed four putative immunogenic regions within the NS3 protein of the virus: E (around amino acids 1250/1251), A (within amino acids 1250-1334), A/B (around amino acids 1323 and 1334), and B/C (around amino acids 1407 and 1412). Among them, region E was most immunodominant, and region A was recognized much less frequently by patients with cirrhosis than by those with chronic hepatitis.
Nature	Recombinant
Expression System	E. coli
Species	HCV
Purity	> 95 % by SDS-PAGE.This antigen is purified by proprietary chromatographic techniques. Purity >95% by SDS-PAGE and RP-HPLC.
Conjugate	Unconjugated
Applications	WB ELISA
Cellular Localization	Host endoplasmic reticulum membrane; Peripheral membrane protein. Note: NS3 is associated to the ER membrane through its binding to NS4A.

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Bio-activity	Immunoreactive with sera of HCV-infected individuals.
Procedure	0.03% EDTA
Format	Liquid
Buffer	pH: 8.00Constituents: 0.2% Triton-X-100, 9% Urea, 0.4% Tris HCl, 0.03% EDTA, 50% Glycerol
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

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	Serine protease/NTPase/helicase NS3; HCV Genotype 1a NS3

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