

Mouse Anti-HCV Core NS4 [5D4/10E7]: MC0593, MC0593RTU7

Intended Use: For Research Use Only

Description: The Hep C (Hepatitis C) is a small, enveloped, single-stranded, positive sense RNA virus belonging to the family Flaviviridae. Transmission of the virus occurs when blood from an infected individual enters the body of an uninfected individual. Hep C primarily replicates within hepatocytes in the liver, and circulating Hep C particles bind to receptors on the surface and enter these cells. Hep C replicates quickly, producing approximately one trillion particles each day in infected individuals. Hep C RNA polymerase has no proofreading function, so the virus has an exceptionally high mutation rate which may help it elude the host's immune system. Hep C infection results in chronic infections, liver cirrhosis, and hepatocellular carcinoma in most people. Hep C NS3 (nonstructural protein 3) has both protease and helicase activities and is essential for Hep C replication and proliferation. Hep C NS4 (nonstructural protein 4) augments the proteolytic activity of Hep C NS3 through protein-protein interaction.

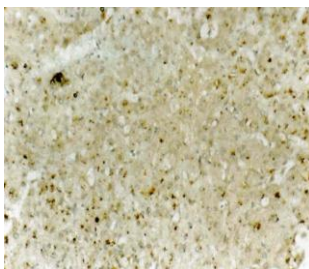
Specifications:

Clone: 5D4/10E7
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Hepatitis C virus NS4
 Immunogen: Recombinant protein to 90 aa in length of Chinese hepatitis C virus NS-4 strains
 Localization: Endoplasmic reticulum; multi-pass membrane protein
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IF, WB
 Package:

Description	Catalog No.	Size
HCV Core NS4 Concentrated	MC0593	1 ml
HCV Core NS4 Prediluted	MC0593RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Chimp liver cells infected with recombinant vaccinia virus containing a HCV genome cDNA
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: Overnight @ 4°C
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human liver cancer stained with anti-HCV Core NS4 using DAB

References:

1. Acosta-Rivero, N., et al. Nucleic acid binding in Pichia pastoris. Biochem. Biophys. Res. Commun. 323: 926-931, 2004.
2. Detection and quantitation of HCV core protein in single hepatocytes by means of laser capture microdissection and enzyme-linked immunosorbent assay. Sansonno, D., et al. J. Viral Hepat 11: 27-32, 2004.
3. The roles of Hepatitis C virus proteins in a novel action mechanism of the HCV core protein on gene regulation by nuclear hormone receptors. Watashi, K., et al. Cancer Sci. 94: 937-943, 2003.

Doc. 100-MC0593
Rev. B