BACKGROUND

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 immune system of the host. Hep C infection results in chronic infections, liver cirrhosis and hepatocellular carcinoma in most people. The core protein of Hep C, known as Hep C cAg, is well conserved among the different viral genotypes and may contribute to the hepatic fibrogenesis by upregulating connective tissue growth factor and TGFβ1.

REFERENCES


SOURCE

Hep C cAg (1868) is a mouse monoclonal antibody raised against hepatitis C virus.

STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG1 in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Hep C cAg (1868) is recommended for detection of core antigen genotypes 1a, 1b and 2a of hepatitis C virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA

Hep C cAg (1868): sc-69937. Western blot analysis of human recombinant Hepatitis C virus (HCV) core antigen fusion protein.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.