

# Hep C NS4 (174): sc-52807

## 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 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.

## REFERENCES

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## STORAGE

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

## SOURCE

Hep C NS4 (174) is a mouse monoclonal antibody raised against a chimeric polyprotein corresponding to 555 amino acids within the internal region of Hep C.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Hep C NS4 (174) is recommended for detection of an epitope corresponding to amino acids 1689-1735 of the NS4 region of Hep C origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with core, Envelope Protein M (EPM) or NS3 regions.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.