SANTA CRUZ BIOTECHNOLOGY, INC.

# HCV NS3 (20-8): sc-52857

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*The Power to Question*

## BACKGROUND

The Hepatitis C virus (HCV) 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. HCV primarily replicates within hepatocytes in the liver, and circulating HCV particles bind to receptors on the surface and enter these cells. HCV replicates quickly, producing approximately one trillion particles each day in infected individuals. HCV 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. HCV infection results in chronic infections, liver cirrhosis and hepatocellular carcinoma in most people. HCV nonstructural protein 3 (NS3) has both protease and helicase activity and is essential for HCV replication and proliferation.

## REFERENCES


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## SOURCE

HCV NS3 (20-8) is a mouse monoclonal antibody raised against a highly antigenic polypeptide consisting of essential sequences of at least 60 residues in length, which were selected from genes encoding NS3 of HCV origin.

## PRODUCT

Each vial contains 100 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

HCV NS3 (20-8) is recommended for detection of synthetic HCV NS3 by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); non cross-reactive with HCV capsid region and other non-structural regions.

Molecular Weight of HCV NS3: 70 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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