

Hepatitis C Virus (HCV) RNA Detection and Quantification by Real-Time Reverse Transcription-PCR (RT-PCR), Serum

Test ID: HCVQN; performed at Mayo Clinic Laboratories Florida.

Useful for:

Detection of acute hepatitis C virus (HCV) infection before the appearance of HCV antibodies in serum (ie, <2 months from exposure).

Detection and confirmation of chronic HCV infection.

Quantification of HCV RNA in serum of patients with chronic HCV infection (HCV antibody-positive).

Monitoring disease progression in chronic HCV infection and response to antiviral therapy.

Determining cure and detection of relapse after completion of antiviral therapy.

Methods:

Real-Time Reverse Transcription-Polymerase Chain Reaction (RT-PCR)

Reference Values:

Undetected

Specimen Requirements:

Supplies:	Aliquot Tube, 5 mL (T465)
Collection Container/Tube:	Serum gel
Submission Container/Tube:	Plastic vial
Specimen Volume:	1.5 mL
Collection Instructions:	<ol style="list-style-type: none">1. Centrifuge blood collection tube per collection tube manufacturer's instructions (eg, centrifuge and aliquot within 2 hours of collection for BD Vacutainer tubes).2. Aliquot serum into plastic vial.
Minimum Volume:	0.8 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum SST	Frozen (preferred)	84 days
	Refrigerated	6 days

Cautions:

Except for immunocompromised patients or patients with suspected acute hepatitis, laboratory evaluation of hepatitis C virus (HCV) infection status should begin with HCV serologic testing, including testing for the presence of HCV antibodies (see [Hepatitis C: Testing Algorithm for Screening and Diagnosis](#) in Special Instructions). A diagnosis of chronic HCV infection should not be based solely on the presence of detectable or quantifiable HCV RNA in a single serum specimen.

An "Undetected" HCV RNA test result with a "Reactive" HCV antibody screen result may be due to 1) a false-reactive HCV antibody screen result; 2) resolved or past HCV infection; or 3) transient low viremia (ie, episodic viral replication) of active HCV infection. To distinguish between the first 2 conditions, another HCV antibody test (eg, HCCAD / Hepatitis C Virus Antibody Screen for Cadaveric or Hemolyzed Specimens, Serum) can be requested. To distinguish between the latter 2 conditions, patients should be retested for HCV RNA in 1 to 2 months, as clinically indicated.

CPT Code:

87522

Day(s) Performed: Monday through Friday **Report Available:** 1 to 3 days

Questions

Contact Bonnie Meyers, Laboratory Technologist Resource Coordinator at 800-533-1710.