

**BM3254F****Monoclonal Antibody to HCV Core protein (1-80) - FITC****Alternate names:**

Hepatitis C Virus core protein

**Quantity:**

0.1 mg

**Concentration:**

1.0 mg/ml

**Background:**

The Hepatitis C Virus (HCV) core protein represents the first 191 amino acids of the viral precursor polyprotein and is cotranslationally inserted into the membrane of the endoplasmic reticulum. Hepatitis C virus (HCV) core is a viral structural protein; it also participates in some cellular processes, including transcriptional regulation. However the mechanisms of core-mediated transcriptional regulation remain poorly understood. Hepatitis C virus (HCV) core protein is thought to contribute to HCV pathogenesis through its interaction with various signal transduction pathways. In addition, HCV core antigen is a recently developed marker of hepatitis C infection. The HCV core protein has been previously shown to circulate in the bloodstream of HCV-infected patients and inhibit host immunity through an interaction with gC1qR. Hepatitis C Virus is a positive, single stranded RNA virus in the Flaviviridae family. The genome is approximately 10,000 nucleotides and encodes a single polyprotein of about 3,000 amino acids. The polyprotein is processed by host cell and viral proteases into three major structural proteins and several non structural proteins necessary for viral replication.

Hepatitis C virus (HCV) causes most cases of non-A, non-B hepatitis and results in most HCV infected people developing chronic infections, liver cirrhosis and hepatocellular carcinoma. T cell responses, including interferon-gamma production are severely suppressed in chronic HCV patients.

**Host / Isotype:**

Mouse / IgG2a

**Clone:**

6A1

**Immunogen:**

Recombinant protein.

**Format:****State:** Liquid purified Ig fraction.**Purification:** Protein A Chromatography**Buffer System:** 1 x PBS, pH 7.2 containing 0.01% Sodium Azide as preservative.**Label:** FITC – Highly purified Isomer I of Fluorescein Isothiocyanate Care is taken to ensure complete removal of any free fluorescein from the final product**Applications:**

ELISA employing native viral lysates.

Immunofluorescence.

Immunohistochemistry on Frozen Sections only.

Does not work in Western blot.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

HCV core antigen.

Recognizes 1-80 amino acid residues of HCV core antigen.

**Storage:**

Store the antibody at 2-8°C for 2 months or (in aliquots) at -20°C for longer.  
This product is photosensitive and should be protected from light.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**Product Citations:****Purchased from Acris:**

1. Nattermann J, Nischalke HD, Hofmeister V, Ahlenstiel G, Zimmermann H, Leifeld L, et al. The HLA-A2 restricted T cell epitope HCV core 35-44 stabilizes HLA-E expression and inhibits cytolysis mediated by natural killer cells. *Am J Pathol.* 2005 Feb;166(2):443-53. PubMed PMID: 15681828.