

Product datasheet for **AM09190PU-N**

HCV Core protein Mouse Monoclonal Antibody [Clone ID: B2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	B2
Applications:	ELISA, WB
Recommended Dilution:	ELISA: React with Human Hepatitis C Virus core protein, and no reaction with HCV non-structure protein. Western Blot: Use of anti-HCV Core Protein antibody at 0.1-0.5 µg/ml will allow visualization of 0.1 µg/lane of recombinant Capsid Protein (CPC)+Envelope protein M (EPM) (core), 0.5 µg/lane synthetic CPC, and 0.1 µg/lane recombinant chimeric HCV polyprotein. Testing is under both reducing and non-reducing conditions. Has been used successfully in the recognition of <i>in-vitro</i> translated HCV core protein.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic peptides derived from HCV Capsid Protein.
Specificity:	This HCV Core Protein antibody is reactive with recombinant Capsid Protein CPC+Envelope protein M (EPM) (core) (1st-142th amino acid), synthetic CPC (1st-61st amino acid), and recombinant chimeric HCV polyprotein (60kDa).
Formulation:	0.01M PBS, pH 7.0 without preservatives. State: Aff - Purified State: Lyophilized purified Ig fraction.
Purification:	Affinity chromatography on Protein G.
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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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.

Synonyms:

Hepatitis C Virus core protein