

Anti-Hepatitis C virus (HCV) NS5b protein antibody, monoclonal (NS5B-6)

65-066 20 µg, 65-067 100 µg

Hepatitis C virus (HCV) is a small (55-65 nm in size), enveloped, positive sense single-stranded RNA virus in the family *Flaviviridae* and the principal cause of parenteral non-A, non-B hepatitis. The virus genome consists of a single open reading frame of approximately 9,400 bases which encodes a single polyprotein of about 3,010 amino acids (1, 2, 3). The polyprotein is processed by host cell and viral proteases into four structural proteins (core, envelope1 and 2, and p7) and six non-structural proteins (NS2, 3, 4a, 4b, 5a, and 5b) necessary for viral replication. **NS5b** forms the C-terminal protein of the HCV polyprotein and functions as the viral polymerase involved in RNA replication.

Applications

1. Western blotting
 2. Immunofluorescence staining
 3. ELISA
- Other applications have not been tested.

Specification

Immunogen: A region of NS5a protein (the nucleotide sequence is shown in ref.4) of **HCV genotype 1b** expressed in *E.coli*

Isotype: Mouse IgG2b kappa

Form: Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized

Specificity: Specific to human HCV NS5b protein **Storage:** -20

Data Link: Swiss-Prot [HCV protein](#)

References: This antibody is produced and used in ref.4.

1. Brass V, Moradpour D, Blum HE. Molecular Virology of Hepatitis C Virus (HCV): 2006 Update. *Int J Med Sci* 2006; 3:29-34. [PMID: 16614739](#)
2. Kato,N. *et al.* (1990) "Molecular cloning of the human hepatitis C virus genome from Japanese patients with non-A, non-B hepatitis." *Proc. Natl. Acad. Sci. USA* **87**, 9524-9528 [PMID: 2175903](#)
3. Takamizawa, A. *et al.* (1991) "Structure and organization of the hepatitis C virus genome isolated from human carriers." *J. Virol.***65**, 1105-1113 [PMID: 1847440](#)
4. Manabe,S. *et al.* (1994) "Production of nonstructural proteins of hepatitis C virus requires a putative viral protease encoded by N3." *Virology* **198**, 636-644 [PMID: 8291245](#)

Related products: 1. #65-051 anti-HCV Core antibody 2. #65-056 anti-HCV NS4a antibody

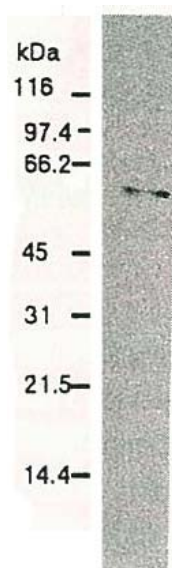


Fig.1 Western blotting of HCV NS5b protein.
Chimp liver cells were infected with recombinant vaccinia virus containing a HCV genome cDNA and were subjected to Western blotting using this antibody. The NS5b protein is detected as a 58-kDa band.



Fig.2 Detection of HCV NS5b protein by immunofluorescence antibody staining.
Chimp liver cells were infected with recombinant vaccinia virus containing a HCV genome cDNA. After incubation for 48 hr, the cells were fixed with acetone and HCV NS5b protein was detected by indirect immunofluorescence staining using this antibody.