

## anti- HCV NS5b protein antibody, mouse monoclonal (NS5B-6), biotin conjugated

65-068 50 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
4. FACS

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

**Conjugate:** **Biotin conjugated** , [biotin] / [IgG] = 8.7

**Isotype:** Mouse IgG2b kappa

**Form:** 0.7 mg/ml in PBS, 50% glycerol, filter-sterilized

**Specificity:** Specific to human HCV NS5b protein of genotype 1b. Not tested in other genotypes.

**Storage:** Shipped at 4°C and stored at -20°C

**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:** #67-066 anti-HCV NS5b antibody, biotin conjugated

#67-069 anti-HCV NS5b antibody, FITC conjugated

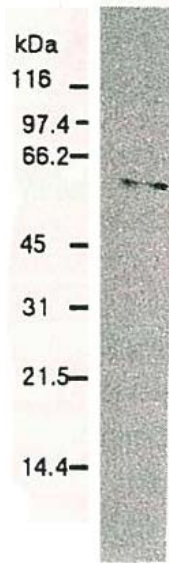


Fig.1 Western blotting of HCV NS5b protein. Chimpanzee liver cells were infected with recombinant vaccinia virus containing a HCV genome cDNA and were subjected to Western blotting using this antibody. The NS5b protein is detected as a 58-kDa band.



Fig.2 Detection of HCV NS5b protein by immunofluorescence antibody staining. Chimpanzee 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.