

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

65-066 20 ug, 65-067 100 ug

**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.

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

**Isotype:** Mouse IgG2b kappa

**Form:** 1mg/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 *et al* (2006) "Molecular Virology of Hepatitis C Virus (HCV): 2006 Update" *Int J Med Sci* **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:** #67-068 anti-HCV NS5b antibody, biotin conjugated,

#67-068 anti-HCV NS5b antibody, FITC-conjugated

To be continued...

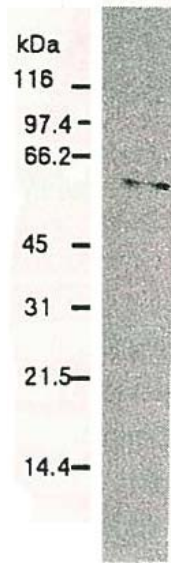


Fig.1 Western blotting of HCV NS5b protein. Chimpanzee liver cells were infected with recombinant vaccinia virus containing a HCV genome cDNA and were subjected to Western blotting using this antibody. The NS5b protein is detected as a 58-kDa band.



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.