COSMO BIO CO., LTD.
Inspiration for Life Science

MONOCLONAL ANTIBODY

For research use only. Not for clinical diagnosis.

Catalog No. BAM-65-067

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

BACKGROUND

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. NS3 serine proteinase is responsible for proteolytic processing of other non-structural proteins. **NS4a protein** (54 amino acids) forms a comlex with NS3 and functions as a cofactor for NS3 protease activity.

Product type	Primary antibodies
Host	Mouse
Source	
Form	Liquid Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized
Volume	100 μg
Concentration	
Specificity	Human HCV NS5b protein
Antigen	A region of NS5a protein (the nucleotide sequence is shown in ref.4) of **HCV genotype 1b** expressed in *E.coli*
Clone	NS5B-6
Isotype	Mouse IgG2b kappa

Application notes	WB, Immunofluorescence staining, ELISA **Recommended use** **Recommended dilutions** Optimal dilutions/concentrations should be determined by the end user. Data Link: Swiss-Prot [HCV protein]	Other applications have not been tested.
Cross reactivity		
Storage	-20°C	

References

(This antibody is 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

65-066	Anti-Hepatitis C virus (HCV) NS5b protein antibody, (NS5B-6) (20ug)
65-051	anti-HCV Core antibody
65-056	anti-HCV NS4a antibody

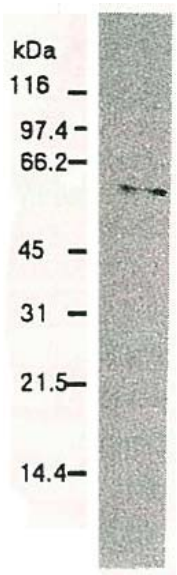

Fig.1 Western blotting of HCV NS5b protein.
Chimp liver cells were infected with recombinant vaccinia virus containing a HCV genome cDNA and were subjected to Western blotting using this antibody. The NS5b protein is detected as a 58-kDa band.

Fig.2 Detection of HCV NS5b protein by immuno- fluorescence 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.

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Manufactured by BioAcademia,Inc.

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