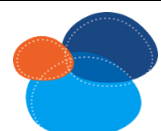


## Antibody Datasheet

<b>Product Name:</b>	Mouse anti Hepatitis C virus NS4a (1700-1710 aa)
<b>Clone number:</b>	1866
<b>Isotype:</b>	Mouse IgG1
<b>Product code:</b>	MAB12210-100
<b>Batch Number:</b>	
<b>Amount:</b>	0.1mg
<b>Concentration:</b>	1 mg/ml
<b>Buffer:</b>	Phosphate Buffered Saline pH7.2
<b>Preservative:</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Purification:</b>	The antibody was purified by affinity chromatography on protein A
<b>Specificity:</b>	This antibody reacts with amino acids 1700-1710 of Hepatitis C virus (HCV) non-structural protein NS4a. The antibody recognises HCV genotypes 1a and 1b.
<b>Applications:</b>	ELISA, WB
<b>Antigen background:</b>	<p>Hepatitis C virus (HCV) is an enveloped, positive-sense, single stranded RNA virus that is a member of the <i>hepacivirus</i> genus of the family <i>Flaviviridae</i>. HCV was first recognised in 1970 and described as non-A, non-B hepatitis, until 1989 when the pathogen was identified as hepatitis C. Currently, eleven genotypes of HAV are recognised, designated 1-11. Genotypes 1-6 are the major genotypes, which are further classified into subtypes a,b and c. Genotype 1 is the most prevalent globally, followed by 3, 2 and 4.</p> <p>Humans are the primary reservoir of Hepatitis C virus. HCV is a bloodborne virus that is transmitted through infected blood. Transmission of HCV may occur through the</p>



sharing of needles for injecting drugs, the use of inadequately sterilised medical equipment infected with HCV and the transfusion of untested blood and blood products. HCV is responsible for 15-20% of cases of acute hepatitis worldwide ([WHO](#)).

All recognised genotypes are pathogenic and target hepatocytes. The incubation period for HCV infection is 2-6 months. During the period of acute infection, most individuals remain asymptomatic and recover without need for treatment but may present with liver damage later in life. A large percentage of HCV infected individuals have clinical symptoms that include nausea, vomiting, fatigue, abdominal pain and jaundice. Patients also develop chronic hepatitis, which can progress to cirrhosis or hepatocellular carcinoma. Additional complications associated with persistent HCV infection include insulin resistance and type II diabetes mellitus ([Li, HC](#)).

The different genotypes of HCV respond differently to treatment and therefore a correct diagnosis is important. However, Hepatitis C virus is difficult to isolate, and the asymptomatic nature of HCV infection makes clinical diagnosis difficult. Serological methods to detect HCV IgM antibodies in patient's serum are reported to be unreliable but diagnostic methods to detect HCV total antibody and HCV core protein may have some value.

**References:**

World Health Organization: Hepatitis C, key facts

Li HC et al. 2015. Hepatitis C virus: Virology, diagnosis and treatment. World J Hepatol. 8;7(10):1377-89.

**Storage:**

Store at +4°C for up to three months, or at -20°C for longer.

The Antibody is shipped at ambient temperature.  
Avoid repeated freeze/thaw cycles.

