

Antibody Datasheet

Product Name:	Mouse anti Hepatitis B virus X protein
Clone number:	1884
Isotype:	Mouse IgG1
Product code:	MAB12236-100
Batch Number:	
Amount:	0.1mg
Concentration:	1 mg/ml
Buffer:	Phosphate Buffered Saline pH7.2
Preservative:	0.09% Sodium Azide (NaN ₃)
Purification:	The antibody was purified by affinity chromatography on protein A
Specificity:	This antibody recognises Hepatitis B virus (HBV). The antibody is specific for the X (HBx) protein of HBV.
Applications:	ELISA, WB, IFA.
Secondary reagents:	Goat anti mouse IgG:HRP (PAB21441HRP)
Antigen background:	Hepatitis B virus (HBV) is a small, partially double-stranded DNA virus that belongs to the genus <i>Orthohepadnaviruses</i> of the <i>Hepadnaviridae</i> family of viruses. Currently, eight genotypes of HBV are recognised, designated A-H, and four subtypes (adw, adr, ayw and ayr) each having a distinct geographical distribution. HBV is a retrovirus that replicates by reverse transcription of an RNA intermediate. HBV encodes seven proteins, recognised as preCore, core, pol, X (HBx), and envelope proteins L, M and S (Liang, TJ).



HBV is a bloodborne virus that is transmitted through contact with infected blood or bodily fluids. HBV infection may occur through various routes including the sharing of needles for injecting drugs, the use of inadequately sterilised medical equipment infected with HBV and the transfusion of unscreened blood and blood products. In endemic areas, perinatal transmission of HBV from mother to child is common.

HBV infection causes liver disease which can vary from acute, or chronic hepatitis to cirrhosis of the liver and potentially hepatocellular carcinoma. The incubation of HBV infection can vary from 1 – 6 months. During the period of acute infection, most individuals remain asymptomatic. However, some patients develop acute illness presenting with clinical symptoms that include jaundice, nausea, vomiting, abdominal pain and extreme fatigue. Acute liver failure may occur in 1% of patients, which can be fatal. HBV infected patients may also develop chronic lifelong disease, which can progress to cirrhosis or hepatocellular carcinoma in 20-30% of adult cases ([WHO](#)).

The asymptomatic nature of HBV infection, and the similarity of clinical symptoms to other types of hepatitis virus infection makes clinical diagnosis difficult. Therefore, laboratory diagnosis is undertaken using serological and molecular methods to detect HBsAg and specific IgM antibodies recognising core antigen HbcAg.

References:

Liang TJ.2009. Hepatitis B: the virus and disease. *Hepatology*.May;49(5 Suppl): S13-21

Seeger C, Mason WS.2015. Molecular biology of hepatitis B virus infection. *Virology*.May;479-480:672-86.

World health Organization: Factsheet, Hepatitis B

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.

