

AM09336PU-N**Monoclonal Antibody to Hepatitis B Surface Antigen / HBsAg - Liquid**

Alternate names:	HBV surface antigen, Hepatitis B Virus
Quantity:	1 ml
Background:	<p>Hepatitis B Virus (HBV) infection induces a disease state characterised by liver damage, inflammation and viral persistence. Infection also increases the risk of hepatocellular carcinoma. HBV belongs to the Hepadnaviridae family of viruses. Its genome consists of partially double stranded circular DNA. The DNA is enclosed in a nucleocapsid, or core antigen (HBcAg), which is surrounded by a spherical envelope (surface antigen or HBsAg). The core antigen shares its sequences with the e antigen (HBeAg) but no cross reactivity between the two proteins has been observed. The HBV genome also encodes a DNA polymerase that also acts as a reverse transcriptase. Hepatitis B infection is normally diagnosed from serological tests that detect HBsAg but as the disease progresses this antigen may no longer be present in the blood and tests for HBcAg are used. If HBsAg can be detected in the blood for longer than six months, chronic hepatitis B is diagnosed.</p> <p>The antigenic determinant of the protein moiety of the HBsAg determines specific characteristics of different serotypes and provides the basis of immunodetection. HBsAg has antigenic heterogeneity, specifically, two pairs of sub specific determinants, d/y and w/r allow the following combinations: adw, ayw, adr, ayr.</p>
Host / Isotype:	Mouse / IgG1
Clone:	P3G9A8
Immunogen:	Purified Hepatitis B surface antigen.
Format:	State: Liquid Concentrated Ig fraction. Buffer System: PBS, pH 7.3 Preservatives: 0.09% Sodium Azide
Applications:	Immunohistochemistry on Paraffin Sections: 1/10-1/25 (No protease pre-treatment). Blocking of endogenous Peroxidase with 1% Peroxide in Methanol is recommended. <u>Positive Control:</u> HBV infected liver. <u>Incubation Time:</u> 60 min at RT or 2-8°C overnight. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	<p>This antibody recognizes the Ad and Ay subtype of the Hepatitis B virus surface antigen.</p> <p>The antibody to HBsAG is used for the detection of this antigen in liver cells, which are infected by hepatitis B virus. In healthy liver and other tissues staining is negative.</p> Species: Hepatitis B Virus. Other species not tested.
Add. Information:	The volume is sufficient for at least 100 immunohistochemical tests (100 µl working solution/test).

Storage: Store the antibody undiluted at 2-8°C.
Shelf life: one year from despatch.

General Readings:

1. Beasley R.P., et al. (1981) Hepatocellular carcinoma and hepatitis B virus: a prospective study of 22,707 men in Taiwan. *Lancet* ii; 1129
2. Hoofnagel J.H., and Alter H.J. (1984) Chronic viral hepatitis. In: Vyas G.N. et al. Eds. *Viral hepatitis and liver disease*. Grune & Stratton, N.Y. pp 97 ff.
3. Swensen P.D. et al. (1988). Antigenic analysis of HBsAg with monoclonal antibodies specific for S protein and pre-S2. *Viral hepatitis and liver disease*. Alan R. Liess, Inc. pp. 627ff.