

Product datasheet for AM20356PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Hepatitis B Surface Antigen / HBsAg Mouse Monoclonal Antibody [Clone ID: Hs41]

Product data:

Product Type: Primary Antibodies

Clone Name: Hs41
Applications: ELISA

Recommended Dilution: Suitable for use in ELISA.

Recommended pair for Sandwich Immunoassay:

Capture: AM20355PU-N

Detection: AM20356PU-N (Sensitivity 50pg/ml).

Reactivity: Hepatitis B Virus

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant HBsAg of ayw subtype

Specificity: This antibody recognizes Hepatitis B virus surface antigen. Reacts with the following HBsAg

subtypes: ayw1, ayw2, ayw3, ayw4, ayr, adw2, adw4, adrq+, adrq- and ayw3 (Fer).

Formulation: PBS, pH 7.4 containing 0.09% Sodiumm Azide

State: Purified

State: Liquid purified IgG fraction (>/= 95% pure by SDS-PAGE).

Concentration: lot specific

Purification: Protein G Chromatography.

Conjugation: Unconjugated

Storage: Store the antibody undiluted 2-8°C.

Stability: Shelf life: one year from despatch.







Background:

Hepatitis B Virus (HBV) infection induces a disease state characterized 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. 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.

Synonyms:

HBV surface antigen, Hepatitis B Virus