DATA SHEET

Jena Bioscience

Hepatitis B Virus Surface Antigen - adr subtype

recombinant, Chinese hamster ovary (CHO) cells

Cat. No.	Amount
PR-1197	100 µg

For general laboratory use.

Shipping: shipped at 4 °C

Storage Conditions: store at 4 °C

Additional Storage Conditions: do not freeze

Shelf Life: 12 months

Molecular Weight: 23 - 27 kDa

Purity: > 95 % (RP-HPLC)

Form: liquid (Supplied in 20 mM sodium phosphate buffer (PB), 154 mM NaCl, pH 7.1)

Applications:
Antigen in ELISA,Immunochromatography and monoclonal antibody production.

Description:
Recombinant HBsAg-adr full length monomeric protein contains 227 amino acids of the S-gene and has a molecular weight of 24 kDa. Small amounts of dimer and trimer forms also exist in the solution. The protein contains the Hepatitis B Virus Surface Antigen immunodominant region and is purified by proprietary chromatographic techniques.

Background: Hepatitis B virus (HBV) is a small enveloped virus that belongs to the hepadnavirus family. The genome of the hepatitis B virus (HBV), a partially doublestranded circular DNA, has four known genes encoding the viral surface proteins (pre-S 1, pre-S2 and HBsAg), the precore (pre-C) and core (C) proteins (HBeAg and HBcAg), the DNA polymerase, the X protein. There are distinct subtypes of HBV indicative of strain heterogeneity. The subtypes are distinguished by antigenic determinants on the surface antigen (HBsAg) and their corresponding antibodies. There is a common group determinant, a, which appears in all HBsAg specimens. There are two sets of subdeterminants, d or y and w or r, which appear to be allelic or mutually exclusive and which are used for the identification of subtypes. Thus, there are at least four major groups into which HBsAg can be classified: *adw, adr, ayw, and ayr.*

Specificity: Immunoreactive with sera of HBV-infected individuals.

Selected References:
Wai-Kuo Shih *et al.* (1991) Strain Analysis of Hepatits B Virus on the Basis of Restriction Endonuclease Analysis of Polymerase Chain Reaction Products. *J. Clin. Microbiol.* **29**:1640.