

# Rabbit Anti-Hepatitis B Surface Antigen (anti-HBsAg) ELISA kit Cat# 4240 (96 wells)

Rabbit Hepatitis B Surface Antigen (anti-HBsAg) IgG ELISA kit | Qualitative | -ve and +ve control serum | Sample=100 ul; 105 min assay

| Kit Contents  | ELISA Kit Features  |
|---|---|
| <ol style="list-style-type: none"> <li>1. HbSAg antigen coated plate (8 wells x12 strips)</li> <li>2. Anti- HbSAg IgG –ve and +ve Rabbit serum controls (1 ml each)</li> <li>3. Sample diluent (10 ml, 10 X)</li> <li>4. Wash buffer (100 X, 10 ml)</li> <li>5. TMB substrate (12 ml)</li> <li>6. Stop solution (12 ml)</li> <li>7. Product manual</li> </ol> | <ul style="list-style-type: none"> <li>• Antigen Pre-coated, stabilized, ready-to-use 96-well strip plate, suitable for multiple runs up to 6 months.</li> <li>• Convenient Positive and Negative serum Standards, a reference control for QC.</li> <li>• 100ul samples (diluted 1:100 or more), 105 min, 3 incubation</li> <li>• Contains all necessary reagents.</li> </ul> <p><b>This kit is for detection of antibodies against HBsAg in Rabbit serum. For in vitro research use only</b></p> |

**Assay Procedure:** Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipet **100 ul of each pre-diluted positive serum, pre-diluted negative, control** (containing only sample diluent), **samples containing antibodies against HBsAg** (diluted as required) in duplicated wells. Mix gently and incubate at **60 min at room temp (25-28oC)**.
- Step 2.** **Aspirate, wash 3 times, add 100ul of enzyme conjugate** to all wells, mix gently and incubate at **room temp for 30 min**.
- Step 3.** **Aspirate and wash** the plate three times. Add **100 ul of TMB substrate** solution to all wells, mix gently, and incubate at room temp for **15 min**.
- Step 4.** Pipet **100 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure OD at 450 nm**. The samples values are compared with the supplied –ve and positive controls.

## General Information

Hepatitis B virus (HBV) is an enveloped, double-stranded DNA virus belonging to the Hepadnaviridae family and is recognized as the major cause of blood transmitted hepatitis together with hepatitis C virus (HCV). Infection with HBV induces a spectrum of clinical manifestations ranging from mild, in apparent disease to fulminant hepatitis, severe chronic liver disease, which in some cases can lead to cirrhosis and carcinoma of the liver. Classification of a hepatitis B infection requires the identification of several serological markers expressed during three phases (incubation, acute and convalescent) of the infection. Now several diagnostic tests are used for screening, clinical diagnosis and management of the disease.

Hepatitis B surface antigen (HBsAg) is an important viral envelope protein, which appears shortly after infection and is a key serological marker for detection and diagnosis of HBV. Clearance during treatment shows recovery and development of neutralizing antibodies (anti-HBs) occurs in 90% of the patients. Due to the introduction of hepatitis B vaccination programs, the detection of anti-HBs has become important method for monitoring of recipients upon vaccination with synthetic and natural HBsAg. The absence of anti-HBs indicates susceptibility to HBV infection. For this, screening for anti-HBs in high-risk populations is recommended for identifying individuals who may benefit from vaccination.

This anti-HBs ELISA kit is an enzyme linked immunosorbent assay for in vitro quantitative detection of antibodies to hepatitis B virus surface antigen (anti-HBs) in **rabbit serum or plasma** for clinical purposes and assessing antibody response levels to HBsAg-vaccine. Some vaccines, such as malaria vaccines, are being tested that have HbSAg as a fusion or carrier protein. Therefore, it is possible to use the rabbit kit to measure the vaccine efficacy or optimize the adjuvant, vaccine dose and regimen. The kit can also be used to measure the antibody activity of polyclonal or monoclonal antibodies to HbSAg.

Alpha Diagnostic Intl's anti-**HBsAg IgG** ELISA kit is a highly sensitive indirect type assay for the detection antibodies against **HBsAg** in Mouse serum or plasma.

**ADI Cat# 4210** measures anti-HbSAg IgG (not IgM or other isotypes) in mouse samples

**ADI Cat# 4215** measures anti-HbSAg IgM (not IgG or other isotypes) in mouse samples

## Related items available from ADI

| Catalog#   | ProdDescription  | Quantity/SIZE |
|------------|--|---------------|
| 4100       | Hepatitis B Surface Antigen (HBsAg) ELISA kit, Quantitative                      | 1 kit         |
| 4210       | Mouse Anti-Hepatitis B Surface Antigen (anti-HBsAg) ELISA kit, Semi-Quantitative | 1 kit         |
| 4220-AHB   | Anti-Hepatitis B Surface Antigen (anti-HBsAg) ELISA kit, Quantitative            | 1 kit         |
| 4230-AHB-R | Anti-Hepatitis B Surface Antigen (anti-HBsAg) rapid test strips                  | 100/pkg       |
| 4300-AHG   | Anti-Hepatitis A Virus IgG (HAV-IgG) ELISA kit, Quantitative                     | 1 kit         |

Rev 100422JA

