

HBV-HBe

Hepatitis B Virus e Antigen, HBVeAg recombinant, *E. coli*

| Cat. No. | Amount |
|----------|--------|
| PR-1125 | 100 µg |

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 25 mM Tris-HCl pH 8.0, 1.5 M urea and 50% glycerol.

Application

Antigen in ELISA and Western blots, excellent antigen for detection of HBV with minimal specificity problems.

Specificity

Immunoreactive with sera of HBV-infected individuals.

Molecular Weight

43.7 kDa

Purity

>95% by SDS-PAGE

Description

The protein contains the the HBV HBe adw immunodominant region and is fused to a GST-tag.

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. The synthesis and secretion of HbeAg are linked to the expression of the pre-C region, a small open reading frame (ORF) preceding the C region initiation codon in all HBV genomes so far sequenced. In the course of HBV infection, detection of HBeAg generally correlates with active viral replication and liver disease.

The presence of hepatitis B e antigen (HBeAg) in serum indicates active viral replication in hepatocytes. HBeAg is thus a surrogate marker for the presence of hepatitis B virus DNA.

Selected References:

- Aras *et al.* (2005) Failure to detect hepatitis B virus in vitreous by polymerase chain reaction. *Ophthalmologica*. **219**:93.
- Mason *et al.* (2005) Hepatitis B virus replication in damaged endothelial tissues of patients with extrahepatic disease. *Am. J. Gastroenterol.* **100**:972.
- Leupin *et al.* (2005) Hepatitis B virus X protein stimulates viral genome replication via a DDB1-dependent pathway distinct from that leading to cell death. *J. Virol.* **79**:4238.
- Wu *et al.* (2005) RNA interference-mediated control of hepatitis B virus and emergence of resistant mutant. *Gastroenterology*. **128**:708.
- Qian *et al.* (2005) Cost-effective method of siRNA preparation and its application to inhibit hepatitis B virus replication in HepG2 cells. *World J. Gastroenterol.* **11**:1297.
- Zhang *et al.* (2005) Effects of hepatitis B virus X protein on human telomerase reverse transcriptase expression and activity in hepatoma cells. *J. Lab. Clin. Med.* **145**:98.
- Yang *et al.* (2002) Hepatitis B e Antigen and the Risk of Hepatocellular Carcinoma. *New Engl. J. Med.* **347**:168.