Recombinant Hepatitis B Surface Antigen Pres2

DAG2718    HBV
Lot. No. (See product label)

PRODUCT INFORMATION

Product overview  The E. coli derived Recombinant Hepatitis B Surface Antigen preS2 is a single non-glycosylated polypeptide chain containing 55 amino acids & having a molecular weight of 5.7 kDa.

Antigen Description  Hepatitis B virus (HBV) is a human pathogen, causing serious liver disease. The HBV surface protein antigens (HBsAg) are comprised of three carboxyl co terminal HBs proteins termed large (LHBs), middle (MHBs) and small (SHBs, also called major) protein. LHBs and MHBs also share the highly hydrophobic, repetitive, membrane spanning $S$ domain. In addition, MHBs has a 55 amino acid region called preS2.

Source  E. Coli
Species  HBV
Form  HBsAg protein was lyophilized from 0.2μm filtered (1mg/ml) solution in 20mM PB, pH 7.4 and 50mM NaCl.
Molecular Mass  5.7 kDa
Protein length  55 amino acids
AA Sequence  MQWNSTTFHQALLDPKVRGLYFPAGGSSGTVNVPPTTASP
ISSIFSRTGDPAPN
Purity  HBsAg protein was purified by proprietary chromatographic technique. HBsAg protein is >95% pure as determined by 10% PAGE (coomassie staining).
Applications  1. Immun°Chromatography (capture and conjugate). 2. Preparing mon°Clonal or polyclonal antibodies for HBsAg-preS2. 3. ELISA.

PACKAGING

Storage  This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Solubility  this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

BACKGROUND

Introduction  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 an 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 proteinshas been observed. The HBV genome also encode

Keywords  HBsAg; HBV major surface antigen; HBV surface antigen; Hepatitis B Virus major surface antigen; Major surface antigen; S; Hepatitis B Surface Antigen; Hepatitis B Virus Surface Antigen; Hepadnaviridae; Orthohepadnavirus; Hepatitis B virus; HBV; preS2; HBsAg preS2
REFERENCES
