



### HBV-Core delta 14 kDa (residues 1-144)

Hepatitis B Virus Core Protein  
recombinant, *E. coli*  
HBcAg (Core protein)

Cat. No.	Amount
PR-1124	100 µg

#### For general laboratory use.

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** avoid freeze/thaw cycles

**Shelf Life:** 12 months

**Purity:** > 95 % (SDS-PAGE, RP-HPLC)

**Form:** liquid (Supplied in 7.5 mM Phosphate buffer pH 7.2, 75 mM NaCl and 50 % glycerol)

#### Applications:

Immunochromatography (capture and conjugate)

Immunogen for monoclonal antibody production

ELISA and Western blots

#### Description:

The *E. coli* derived 14 kDa recombinant protein contains the HBV core delta ayw immunodominant region amino acids 1-144.

HBV core delta proteins are purified by proprietary chromatographic techniques.

#### Background:

Hepatitis B Virus (HBV) is a small enveloped virus that belongs to the hepadnavirus family. The human Hepatitis B Virus (HBV) has a compact genome encoding four major overlapping coding regions: the core, polymerase, surface and X. The core protein is a structural protein. It packages its own mRNA, which is also known as the pregenomic RNA, to form the core particle. The increase of the core RNA expression has been shown to increase the viral replication rate.

#### Specificity:

Immunoreactive with sera of HBV-infected individuals.

#### Selected References:

Le Pogam *et al.* (2005) Exposure of RNA templates and encapsidation of spliced viral RNA are influenced by the argininerich domain of human hepatitis B virus core antigen (HBcAg 165- 173). *J. Virol.* **79**:1871.

Shi *et al.* (2004) Therapeutic polypeptides based on HBcAg (18-27) CTL epitope can induce antigen-specific CD (8) (+) CTL-mediated cytotoxicity in HLA-A2 transgenic mice. *World J. Gastroenterol.* **10**:1222.

Szkaradkiewicz *et al.* (2003) HBcAg-specific cytokine production by CD4 T lymphocytes of children with acute and chronic hepatitis B. *Virus Res.* **97**:127.