

HBV core protein

Recombinant (HBV core protein)

Expressed in *E.coli*

Cat. No. CRP0862

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Hepatitis B is one of a few known non-retroviralviruses which employ reverse transcription as a part of its replication process. (HIV, a completely unrelated virus, also uses reverse transcription, but it is a retrovirus.) HBV invades the cell by binding to surface receptor and become internalized. The viral core particles then migrate to the hepatocyte nucleus and the partially double-stranded, relaxed circular genomes (RC-DNA) are repaired to form a covalently closed circular DNA (cccDNA), which is the template for viral genomic and sub-genomic RNAs by cellular RNA polymerase II. Of these, the pregenomic RNA (pgRNA) is selectively packaged into progeny capsids and is then reverse-transcribed into new RC-DNA. The core can either bud into the endoplasmic reticulum to be enveloped or exported from the cell or recycled back into the genome for conversion to cccDNA.

M. W. : 16,823 Da.

Recombinant: Expressed in *E.coli*

Purity: ≥95% as determined by SDS-PAGE

Specific Activity: Immunoreactive with sera HBV-infected individuals.

Applications: HBV Core antigen is stable in ELISA and Western blots, excellent antigen for detection of HBV with minimal specificity problems.

Concentration: 0.2 mg / ml by BCA

Component: HBV core protein, NaHCO₃ 10μl, pH 7.4

Endotoxin: less than 10EU/ mg as determined by LAL method

Storage Buffer: Liquid. In NaHCO₃ buffer

Storage: HBV Core protein is shipped at ambient temperature. Upon arrival, Store at -20°C . Five years frozen. One month in solution at room temperature.

FOR RESEARCH USE ONLY

REFERENCES

1. Barker LF, Shulman NR, Murray R, et al (1996). Transmission of serum hepatitis. 1970. JAMA 276 (10): 841–4.
2. Williams R (2006). Global challenges in liver disease. Hepatology 44 (3): 521–6.
3. Chang MH (2007). Hepatitis B virus infection. Semin Fetal Neonatal Med 12 (3): 160–7.