

## Recombinant HBV/Hepatitis B Virus Core (aa 1-183)

Catalog No.	CSI15717A	Quantity:	100 µg
	CSI15717B		0.5 mg
	CSI15717C		1.0 mg

**Description:** Hepatitis B is one of a few known non-retroviral viruses 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.

The *E. Coli* derived 18 kDa recombinant protein contains the HBV core antigen immunodominant region, amino acids 1-183

**Source:** *E. coli*

**Molecular Weight:** 18 kDa

**Formulation:** 7.5 mM phosphate buffer pH-7.2 + 75 mM NaCl and 50% glycerol.

**Purity:** HBV Core protein is >95% pure as determined by 10% PAGE (coomassie staining).

**Purification Method:** HBV Core protein was purified by proprietary chromatographic technique.

**Specific Activity:** Immunoreactive with sera HBV-infected individuals.

**Storage & Stability:** HBV Core protein although stable at 4°C for 1 week, should be stored below -18°C.  
**Please prevent freeze thaw cycles.**

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

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**