

## Hepatitis B Core /HBcAg (1-183) - Purified

**Catalog No.:** AR10544PU-L

**Quantity:** 1 mg

**Background:** 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.

**Source:** E. coli

**Format:** **State:** 7.5mM Phosphate buffer pH 7.2, 75mM NaCl and 50% Glycerol

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

**Applications:** HBV Core antigen is stable in ELISA and Western blots, excellent antigen for detection of HBV with minimal specificity problems.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

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

**Specificity:** Immunoreactive with sera HBV-infected individuals.

**Storage:** HBV Core protein is shipped at ambient temperature.

Upon arrival, Store the antigen at -20°C.

Avoid repeated freezing and thawing.