

Recombinant HBV Core Protein

Cat. No. C-02H Lot. No. (See product label)

SPECIFICATION

Product Overview	HBcAg subtype adw2 produced in E. coli, is a single, non-glycosylated, polypeptide chain containing 1-149 amino acids. HBcAg adw2 1-149 protamine-like domain was truncated in order to enhance the differentiation of anti-HBe in ELISA test. HBcAg was purified by proprietary chromatographic techniques.
Species	HBV
Source	E.coli
ProteinLength	1-149 a.a.
Description	Self assembles to form an icosahedral capsid. Most capsid appear to be large particles with an icosahedral symmetry of T=4 and consist of 240 copies of capsid protein, though a fraction forms smaller T=3 particles consisting of 180 capsid proteins. Entering capsid are transported along microtubules to the nucleus. Phosphorylation of the capsid is thought to induce exposure of nuclear localization signal in the C-terminal portion of the capsid protein that allows binding to the nuclear pore complex via the importin (karyopherin-) alpha and beta. Capsids are imported in intact form through the nuclear pore into the nuclear basket, where it probably binds NUP153. Only capsids that contain the mature viral genome can release the viral DNA and capsid protein into the nucleoplasm. Immature capsids get stucked in the basket. Capsids encapsulate the pre-genomic RNA and the P protein. Pre-genomic RNA is reverse transcribed into DNA while the capsid is still in the cytoplasm. The capsid can then either be directed to the nucleus, providing more genome for

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

transcription, or bud through the endoplasmic reticulum to provide new virions.

Molecular Mass	20 kDa
AA Sequence	MDIDPYKEFGATVELLSFLPSDFFPSVRDLLDTASALYREALSPEHCSPHHTALRQ AILCWGELMTLATWVGNNLEDPASRDLVVNYVNTNVGLKIRQLLWFHISCLTFGRET VLEYLVSFGVWIRTPPAYRPPNAPIL
Purity	> 95 % by SDS-PAGE
Storage	Store at 4 centigrade if entire vial will be used within 2-4 weeks. Store, frozen at -20 centigrade for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Storage Buffer	Phosphate buffered saline, pH 7.4.
Shipping	Shipped with Ice Packs

GENE INFORMATION

Gene Name	C capsid protein;pre-capsid protein [Hepatitis B virus]
Official Symbol	C
Synonyms	C; capsid protein;pre-capsid protein; capsid protein;pre-capsid protein; precursor
Gene ID	944568
Protein Refseq	YP_009173857

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UniProt ID

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