Supplementary Information

Yield Optimisation of Hepatitis B Virus Core Particles in E.

coli Expression System for Drug Delivery Applications

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Supplementary Information



1. Supplementary Figures

Figure S1. Elution profile of WT-HBc monomers from Ni²⁺-chelate affinity chromatography column. A column with 6 ml of cOmpleteTM His-Tag Purification Resin was equilibrated with 3-times bed-volume (18 ml) of the dissociation buffer. The column was loaded with the protein probe and washed with 18 ml dissociation buffer. Bound proteins were eluted with 14 ml of elution buffer and collected in 1 ml fractions. The aliquots of each fractions were subjected to SDS-PAGE gel electrophoresis and stained with Coomassie Brilliant Blue. M, marker in kDa; Numbers 1-14 represent aliquots of the respective elution fractions for (a) WT-HBc (C) or (b) WT-HBc (I) monomers. Blue arrows represent WT-HBc monomers (21 kDa) and dimers (42 kDa). Some unknown protein bands were observed at molecular weight lower than 20 kDa (red arrow).



Figure S2. Protein specificity of HBc particles (full length blots). Western blotting of WT-HBc particles. Denatured HBc samples were subjected to SDS-PAGE followed by immuno-blotting using anti-6-His and anti-HBc antibodies. Results confirmed the presence of specific protein bands at 21 kDa. CD graph shows the overall conformation of far-UV CD analysis of WT-HBc core particles.