Supplementary Figure 1. Comparison of HLA-A\*02 pentamer corresponding to HBV core<sub>18-27</sub> FLPSDFFPSV and HBV core<sub>18-27</sub> FLPSDFFPSI



Supplementary Figure 2. Proportion of HBV core<sub>18-27</sub>-specific CD8<sup>+</sup> T cells as determined using flow cytometry in normal controls and patients in the IT, IA, and AT groups



## Supplementary Figure 3. Detection of HBV $pol_{455-463}$ -specific CD8<sup>+</sup> T cells in selected patients with acute HBV infection



Supplementary Figure 4. Gating strategy of surface markers (CCR7 and CD45RA) in pentamer<sup>+</sup>CD8<sup>+</sup> T cells



Supplementary Figure 5. Gating strategy of surface and intracellular markers in pentamer+CD8+ T cells



Supplementary Figure 6. Frequency of surface and intracellular markers in pentamer<sup>+</sup>CD8<sup>+</sup> T cells in selected patients with chronic HBV infection



HBV core<sub>18-27</sub> – specific CD8<sup>+</sup> T cells

Supplementary Figure 7. Defective *ex vivo* IFN- $\gamma$  production by HBV-specific T cells when stimulated with the peptide mixture in patients with chronic HBV infection



Supplementary Figure 8. Defective *ex vivo* IFN-γ production by HBV-specific T cells when stimulated with overlapping peptides in patients with chronic HBV infection

