ABSTRACT

Provided are broadly neutralizing antibodies (bNAbs) and antigen binding fragments thereof that bind with specificity to epitopes expressed by Hepatitis B virus (HBV). The bNAbs target non-overlapping epitopes on the HBV S antigen (HBsAg). Pharmaceutical compositions that contain the bNAbs, or modified bNAbs, are provided. Combinations of the bNAbs are included, and are useful for prophylaxis and therapy of HBV infection, and for inhibiting development of HBV escape mutations in infected individuals. Expression vectors encoding the bNAbs and antigenic fragments of them are included, as are methods of making the bNAbs and antigenic fragments of them. HBV peptides for use as vaccines are provided, and include at least two non-overlapping epitopes from the HBsAg. Diagnostic reagents comprising the bNAbs or antigenic fragments thereof are provided, as are methods of detecting HBV and diagnosing HBV infection.

[FIGURE 1A]