

Claims

1. A polypeptide construct, wherein said polypeptide construct comprises: (a) an HBV HBx domain, an HBV Pol domain, an HBV Core domain, and an HBV Surface domain; or (b) a pre-Core domain, an HBV Pol domain, an HBV HBx domain, and an HBV Surface domain, wherein the HBV Pol domain comprises the amino acid sequence set forth in SEQ ID NO: 99.
2. The polypeptide construct of claim 1, wherein said HBV HBx domain comprises the amino acid sequence set forth in SEQ ID NO: 104.
3. The polypeptide construct of claim 2, wherein said HBV Core domain comprises the amino acid sequence set forth in SEQ ID NO: 101.
4. The polypeptide construct of claim 1, further comprising a rigid linker.
5. A polynucleotide encoding the polypeptide construct of claim 1.
6. A vector comprising the polynucleotide of claim 5.
7. The polynucleotide of claim 5 for use in a vaccine.
8. The polypeptide construct of claim 3, wherein Surface domain comprises the amino acid sequence set forth in SEQ ID NO: 100.
9. The polypeptide of claim 8, further comprising a rigid linker between one or more of said HBV Pol domain, said HBV Core domain, said HBV Surface domain, and said HBV HBx domain.
10. The polypeptide construct of claim 9, wherein the rigid linker comprises the amino acid sequence set forth in SEQ ID NO: 129.
11. A polypeptide construct, wherein the polypeptide construct comprises: (i) an HBV Pol domain comprising the amino acid sequence set forth in SEQ ID NO: 99; (ii) an

HBV Surface domain comprising the amino acid sequence set forth in SEQ ID NO: 100; (iii) an HBV Core domain comprising the amino acid sequence set forth in SEQ ID NO: 101; and (iv) an HBV HBx domain comprising the amino acid sequence set forth in SEQ ID NO: 104.

12. The polypeptide construct of claim 11, wherein one or more of the HBV domains are connected by a rigid linker.

13. The polypeptide construct of claim 12, wherein one or more of the rigid linkers comprise the amino acid sequence set forth in SEQ ID NO: 129.

14. A polynucleotide encoding the polypeptide construct in any one of claims 11 to 13.

15. A vector comprising the polynucleotide of claim 14.

16. The polynucleotide of claim 14 for use in a vaccine.