ENGINEERED MEGANUCLEASES SPECIFIC FOR RECOGNITION SEQUENCES IN THE HEPATITIS B VIRUS GENOME

ABSTRACT

The present invention encompasses engineered meganucleases which recognize and cleave a recognition sequence within an open reading frame (ORF) of the genome of at least two genotypes of the Hepatitis B virus (HBV). The present invention also encompasses methods of using such engineered meganucleases in a pharmaceutical composition and in methods for treating or reducing the symptoms of a HBV infection, or treating hepatocellular carcinoma (HCC). Further, the invention encompasses pharmaceutical compositions comprising engineered meganuclease proteins, nucleic acids encoding engineered meganucleases, and the use of such compositions for treating HBV infections or HCC.

[Figure 5]