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(54) Title: AN *IN VITRO* ACTIVITY ASSAY FOR HUMAN HEPATITIS B VIRUS (HBV) DNA POLYMERASE, AND ITS USE FOR SCREENING FOR INHIBITORS OF HBV DNA POLYMERASE

(57) Abstract

The present invention provides an *in vitro* activity assay for human hepatitis B virus (HBV) DNA polymerase, which comprises using, as the 5' oligonucleotide in PCR amplification of HBV DNA polymerase from a sample, an oligonucleotide into which has been incorporated the SP6 viral polymerase promoter, directly transcribing and translating the PCR products in the presence of a radio–labelled agent and measuring the priming of the HBV DNA polymerase. The present invention also provides the use of such an assay to assay activity of various serum samples, to screen for inhibitors of the HBV DNA polymerase and to test and/or screen potential anti–HBV drugs for their ability to inhibit DNA priming activity of human HBV DNA polymerase.