분류번호	Ⅱ-P-4

Expression of Hepatitis B Virus Antigen by Recombinant Vaccinia Virus VV-HBV$_L$

Yun-Kyung Lee, Jung-An Yu, Byung Yoon Ahn* and Aree Moon

Duksung Women's University, *Korea University

The hepatitis B virus(HBV) is a small, enveloped virus with a circular, double-stranded DNA genome. HBV causes active and chronic hepatitis worldwide, including Korea, and is considered to be a major factor for liver cirrhosis and hepatocellular carcinoma. In contrast to the wealth of knowledge on the gene structure and expressional regulation, immunological and pathological mechanisms for HBV-induced hepatocellular injury are not well known. In the present study, vaccinia virus which has been demonstrated to be a useful eukaryotic expression vector was used to clone the gene for HBV surface antigen, L(S+preS2+preS1). The recombinant vaccinia virus vector, pMJ-L, which contains L surface antigen gene of *adr*-type HBV was constructed, and subsequently used for making recombinant vaccinia virus VV-HBV$_L$. Expression of the HBV antigen was examined by immunofluorescent antibody (IFA) test using mouse monoclonal anti-hepatitis B surface antigen. HBsAg was detected in the recombinant virus indicating that the VV-HBV$_L$ expressed S antigen successfully. The HBV-vaccinia virus recombinant obtained in this study is currently being used for studying the immunological aspects of HBV infection.