Abstract

During 2002, we got 19 pieces of the samples from CDC which were mostly asked to check for Nipah, Hendra, West Nile or Rabies viruses and only one was asked to test for Bolivian Hemorrhagic fever virus. Except the result of Mrs. Luo, all the RT-PCR and nested PCR results of these samples showed negative, but some of the samples appeared the CPE under the virus isolation. Furthermore, the virus isolation, immunoassay and nucleotide sequence also supported that the sample of Mrs. Luo contains the genomic RNA of Rabies virus and Rabies virus.

On the other hand, we continue the study that we worked last year, such as the expression and purification of the recombinant proteins, and the induction of the antibodies against those recombinant proteins. In this year, our research added West Nile virus, which was emerged seriously in USA during these years. Based on bioinformation, several pairs of primers were designed and prepared. We also analyzed the nucleoside sequence from one strain of West Nile virus followed by the cloning of the preM-E gene and insertion into the vector. While after transformed E. coli, the expression of the recombinant protein could not be detected. Therefore, we tried to clone into yeast system and check the expression of the recombinant protein.

Keywords: biohazard level 4 viruses; biohazard level 4 viruses; specific antigen;