

獼猴病毒性疾病抗體檢測方法之確立

製劑研究組

林育如 助理研究員

摘要

為監測本所非人類靈長類實驗動物病毒性疾病感染情形，以五合一病毒抗體的免疫墨點分析套組，同時檢測疱疹B病毒 (Herpes B virus)、猿猴免疫抑制病毒 (Simian immunodeficiency virus, SIV)、猿猴D型反轉錄病毒 (Simian retrovirus type D, SRV) 與猿猴白血病病毒 (Simian T-lymphotropic virus, STLV)及德國麻疹 (Measles)等五種獼猴病原抗體反應。結果顯示所有動物對B virus, SRV及STLV之抗體反應均呈陰性，其中一隻由其他機構轉讓之馬來猴對德國麻疹呈現抗體陽性反應。但是針對SIV部分，套組提供之陽性血清亦無法判讀。因此改採西方墨點檢測法進行SIV, SRV及STLV的抗體檢測，結果顯示為陰性。確認可以應用西方墨點法提高檢測方法的專一性避免偽陽性的困擾。並在日本京都大學及東京大學專家的協助下，應用間接螢光抗體染色分析，完成Epstein-Barr-Virus-Like Agent (EBV)的抗體檢測，檢測結果為陽性。

Best choice of serologic test for screening Simian viruses Infection

Yu-Ju, Lin

Abstract

A surveillance of anti-viral antibodies in the serum samples of non-human primates was determined using Simian Viuses Dot Immuno Assay (DIA) Panel A1, which is designed to detect antibodies to Herpes B virus (HBV), Simian immunodeficiency virus (SIV), Simian retrovirus (SRV) type D, Simian T-lymphotropic virus (STLV) and Measles. All of the serum samples taken from tested simians showed a negative result to HBV, SRV and STLV, except one sample positively reacted to Measles. For this Measles antibody-positive case, it could result from gaining the immunity through vaccination or natural infection of Measles virus in the institute which previously hosted the animal. Using this kit, we failed to clarify the anti-SIV antibody status, since all of the tested serum specimens non-specifically reacted to the SIV antigen provided by the manufacture. To eliminate this pitfall and to confirm the antibody status, we also applied the western-blot technique to detect antibodies of SIV, SRV and STLV in our samples. All suspected specimens were further confirmed to be negative on SIV, SRV and STLV based on the results of western blotting. In addition, to examine the antibodies of Epstein-Barr-Virus-Like Agent (EBV) in serum, we co-operated with researchers in Kyoto University and University of Tokyo. Using IFA, we found that all tested samples showed a positive result to the EBV-like virus.