

豬第二型環狀病毒感染性質體之建立

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摘要

豬第二型環狀病毒(porcine circovirus type 2, PCV2)，為引起豬離乳後多系統消耗性綜合症(postweaning multisystemic wasting syndrome, PMWS)之主要病原。PCV2 常與其它病原混合感染，增加單獨分離此病毒的困難度，再者分離的 PCV2 病毒在細胞培養時其力價不高。本次研究主要目的是構築具感染性 PCV2 質體，利用細胞培養建立 PCV2 量產模式，作為穩定單純的病毒來源。將感染性 PCV2 質體轉染細胞後產生之病毒加以收集，並測試其力價，最高可為 $10^{5.5}$ TCID₅₀/mL。另一方面，轉染質體 DNA 之劑量的不同並不造成新生病毒力價的顯著差異。

Establishment of infectious clone of porcine circovirus type 2

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Abstract

Porcine circovirus type 2 (PCV2) is associated with post-weaning multisystemic wasting syndrome (PMWS). PCV2 infection is also an important infectious disease in swine and sometimes co-infect pigs with other pathogens. PCV2 was difficultly to be isolated from field samples, and maintained in low virus titer in vitro. In this study, we have constructed the infectious clone of PCV2 to generate stable virus. The infectious clones were transfected into PK-15 cell line and generate new viral particles. The highest titer of newly generated viral particles was $10^{5.5}$ TCID₅₀/mL after passage six times. In addition, there was no significant difference statistically in virus titers generated from various transfect dosages of infectious clone.