

三種 A 型流行性感冒分子檢測法於臺灣 2.3.4.4 亞群 H5N2

病毒之比較與應用

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摘要

為評估 A 型流行性感冒病毒不同分子生物檢測法之適用性，本試驗利用 RT-PCR、nested RT-PCR 及 real-time RT-PCR 三種分子生物檢測法，針對去 (104) 年爆發之高病原性 2.3.4.4 亞群禽流感 H5N2 病毒液以不同稀釋階並萃取核酸後進行檢測。三種檢測法中，以 real-time RT-PCR 的檢測極限最佳，至少可檢出 $10^{0.5}$ EID₅₀；RT-PCR 檢測極限雖是最差，但範圍仍在 $10^{3.5\sim 2.5}$ EID₅₀ 之間。因此，依不同檢測法之優點、缺點及檢測極限，選擇適合的檢測以應用於不同的檢體及其不同的目的。

Comparison and application of three molecular tests for the diagnosis of influenza A with clade 2.3.4.4 HPAI H5N2 virus

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Abstract

To evaluate the applicability of different molecular tests for the diagnosis of influenza A virus, RT-PCR, nested RT-PCR and real-time RT-PCR were used to test the RNA extracted from different dilution of clade 2.3.4.4 HPAI H5N2 virus isolated in outbreak last year. Of three tests, the detection limit of real-time RT-PCR was $10^{0.5}$ EID₅₀. RT-PCR detection limit was the worst, but the range was still located between $10^{3.5}$ and $10^{2.5}$ EID₅₀. Therefore, according to the advantages, disadvantages and detection limit of different detection methods, suitable test used in the diagnosis should be dependent upon submitted samples and purposes of the experiment.