

# 豬胸膜肺炎放線桿菌不活化菌苗實驗室動物效力試驗

動物用藥品檢定分所

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## 摘要

豬隻豬胸膜肺炎放線桿菌症多發於生長肥育豬，其不活化菌苗可以降地農民損失，過去豬隻豬胸膜肺炎放線桿菌不活化疫苗檢驗標準為使用小鼠作為替代動物，另外部份疫苗會添加毒素 ApxI、ApxII、ApxIII 會造成小鼠死亡，因此進行以豬隻攻毒之效力試驗作為疫苗檢驗的可行性評估，但就試驗結果豬隻效力試驗花費龐大且困難，因此僅針對小鼠效力試驗進行免疫方式修改建議。

# **Efficacy testing of the porcine *Actinobacillus pleuropneumoniae* inactivated vaccine in animal models**

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## **Abstract**

*Actinobacillus pleuropneumoniae* infection in pigs often occurs in growing-finishing pigs, and traditional inactivated bacterins can be administered to reduce losses for farmers. Current efficacy testing for *A. pleuropneumoniae* inactivated vaccines use mice as test animals. Some vaccines are added with the purified toxins ApxI, ApxII, APXIII, that play a role in the pathogenesis of *A. pleuropneumoniae*, and this can cause mice mortality. As a result, we tested the possibility of using pigs for vaccine efficacy testing. Preliminary results indicate that the use of pigs for vaccine efficacy testing is not only expensive but also difficult, and that minor modifications in mice immunization protocols would be a more fruitful avenue for further efficacy testing.