

# 動物用疫苗產品技術發展趨勢

動物用藥品檢定分所

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## 摘要

動物用疫苗乃指透過不活化或減毒的微生物、毒素或其表面蛋白等所製成的生物製劑，用以預防或控制動物疾病。傳統不活化及減毒動物用疫苗的成功提高了牲畜生產力，促進了糧食安全，也降低了動物及人畜共患疾病的發病率和死亡率。然而傳統不活化及減毒活疫苗在免疫表現各自有不同的缺陷，也使得疫苗製造的技術一直都有改進的空間。而隨著分子生物技術之進步，近年來次單位蛋白、載體、DNA 或 RNA 等新型疫苗也逐漸被開發上市。本專題將介紹國內外已上市之基因改造動物用疫苗，藉此了解疫苗產品技術發展之概況。

# **Technology Development Trend of Animal Vaccines**

Chang, Chia-Chen

## **Abstract**

Animal vaccines are biological products made from inactivated or attenuated microorganisms, their toxins, or surface proteins to prevent or control animal diseases. The success of traditional inactivated and live-attenuated animal vaccines has increased livestock productivity, contributed to food security, and reduced morbidity and mortality from animal and zoonotic diseases. However, traditional vaccine technologies are not without fault, and studies on the improvement of animal vaccine technology have been reporting. With the advancement of molecular biology techniques, novel animal vaccines, such as subunits, vectors, DNA or RNA vaccine, have gradually been developed and commercially available in recent years. This topic will introduce these novel animal vaccines that have been marketed in the world, and understand the development of animal vaccine technologies.