## 財團法人農業科技研究院及合作單位 可移轉技術簡介

技術名稱	豬瘟 E2 類病毒顆粒次單位疫苗
Technology	An E2 virus-like particle subunit vaccine against classical swine fever virus
Term	(CSFV)
技術發明人	林俊宏、陳正文、王志鵬、謝明偉、王翔靖、郭宗鏗
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技術應用領域	動物疫苗
Technology	A
Field	Animal vaccine
	本技術提供一種以中國倉鼠卵巢細胞 (CHO) 生產重組豬瘟病毒 E2 抗原之方法,其具有產率高、生產容易及低成本之優勢。另亦提供 E2 疫苗之製備方法。豬隻免疫攻毒試驗結果顯示,利用本技術所生產之疫苗具良好
技術簡介 Technology Description	安全性,並可有效誘發豬隻產生抗豬瘟病毒之免疫保護力。
	The technology provides a novel method for production of recombinant E2
	antigen by using Chinese hamster ovary cells (CHO) expression system. This
	method has advantages of high yield of recombinant antigen, easy production,
	and low cost. In addition, a vaccine preparation method is also disclosed.
	Efficacy test results indicated that the subunit vaccine is quite safe and can elicit
11 14 1 . 00	protective immune response against CSFV.
技轉相關	Marker Day-5 Day-7 Day-8 Day-9 Day-10
圖/表	220 160
	120
	90 80
	70 Monomer E2-
	圖一、利用 CHO 細胞表現系統可成功大量生產重組豬瘟病毒 E2 抗原。
	Fig 1. High level production of recombinant E2 antigen can be achieved by
	using CHO mammalian expression system.
	100
	→ Control (N=4)    O
	1 2 3 4 5 6 7 8 9 10 11 12 13 14  Days Post Challenge
	圖二、免疫後豬隻可抵禦豬瘟病毒感染且全數存活。
	Fig 2. The survival rate of the immunized pigs after challenge was 100%.