



TECHNOLOGY

Potential Vaccine Candidate Against Porcine Reproductive and Respiratory Syndrome Virus (PPRSV)

OVERVIEW

Background

Porcine Reproductive and Respiratory Syndrome (PPRS) caused by the PPRRS virus (PPRSV) is an economically significant disease in the swine industry, contributing to an estimated \$560 million loss per year in the United States (based on 2005 study). Suppression of innate immunity is believed to be an important contributing factor to PPRSV modulation of host immune response.

Innovative Technology

Researchers at the University of Maryland, College Park have developed a potentially novel vaccine candidate(s) against the Porcine Reproductive and Respiratory Syndrome virus (PPRSV). The PPRSV is known to inhibit synthesis of type I interferons (IFNs) in infected pigs. Interferons are proteins produced and secreted by the host cells in response to invading pathogens. They are responsible for inter-cell communication to trigger the immune system against pathogens or even tumors. By potentially ensuring that the interferons are uninhibited the vaccine candidate(s) are able to invoke efficient protective immune response against PPRSV infection.

APPLICATIONS

1) Novel vaccine for Porcine Reproductive and Respiratory Syndrome

ADVANTAGES

1) This strain is potentially more effective than the currently available PRRS vaccines due to the heightened interferon producing response.

CONTACT INFO

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Additional Information

INSTITUTION

University of Maryland, College Park

PATENT STATUS

Patent(s) pending

LICENSE STATUS

Contact OTC for licensing information

CATEGORIES

- Vaccines
- Agricultural

EXTERNAL RESOURCES

- [US Patent 8,906,385](#)

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