Circular Antiviral RNA to Treat Feline Infectious Peritonitis Virus

TECHNOLOGY DESCRIPTION

This technology is to design short RNA (≤ 34 bp) and circular for the treatment of Feline Infectious Peritonitis (FIP).

TECHNOLOGY FEATURES

This circular, antiviral RNA has strong binding kinetic, hence, it binds to the conserved region for effective inhibition of FIP Virus replication. It has been found to be far more superior to recently developed siRNA molecules. It is proven to have in vitro efficacy with reduction in viral copy numbers by 100,000 fold less virus.

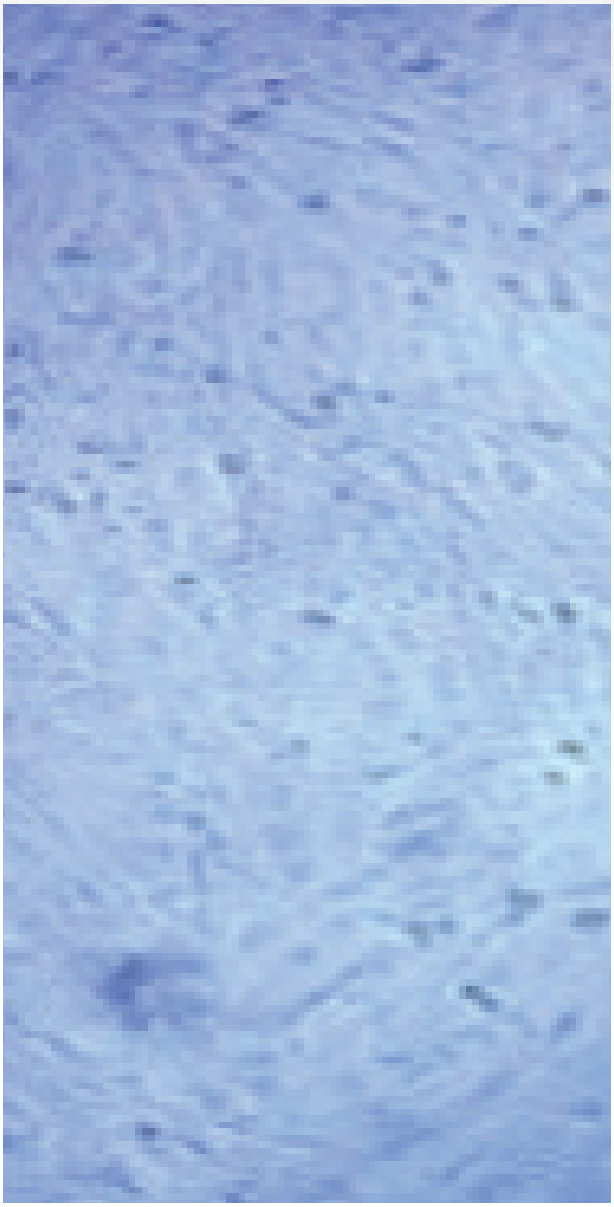
ADVANTAGES

- More effective than currently available technology in market
- Potential treatment for FIP Virus

INDUSTRY OVERVIEW

Prospect Industry: Veterinary Bodies/Pharmaceuticals/ Biotechnology

Feline Infectious Peritonitis (FIP) is a disease whereby the immune system's response in cats causes an intense inflammatory reaction in the containing tissues. This disease is generally fatal and has an incidence rate of roughly 1 in 5,000 for households with one or two cats. A nasally administered vaccine for FIP is available but controversial, and it is not proven to be highly effective. The Circular Antiviral RNA is shorter (≤ 34 bp) and circular, hence more resistant than other RNA molecules. It is more superior than recently developed siRNA molecules that inhibit FIPV replication. Research related to the Circular Antiviral RNA is welcome in order to create a potential treatment for this disease that is widespread. There is a high prevalence of FCoV infection in cats with world-wide distribution and 12% of FCoV-infected cats develop FIP. In Malaysia, 100% of cats living in catteries are positive for FCoV. Local market prospects for this research would be veterinary bodies and pharmaceuticals such as Zoetis, Asia Veterinary, Veterinary Association Malaysia and the Malaysia Veterinary Council (MVC). This research also has global potential as in the US and Europe, more than 50% cats are positive for FCoV whereas in Great Britain, 82% of show cats and 53% of cats in breeding facilities had these antibodies.



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