

VACCINE FOR STREPTOCOCCOSIS

Patent No. : PI2013700605



INTRODUCTION

- Streptococcosis is one of the major bacterial diseases in many fish species, particularly those cultured in warm water. The acute form of the disease produces septicaemia and meningoencephalitis in infected fish. The first report of the disease outbreak in Malaysia was in 1997, associated with high mortality of 300-400 g sized Red hybrid tilapia in floating net cages of Sungai Pahang (Siti-Zahrah et al., 2004). Other outbreaks were also reported in Kenyir, Pedu & Pergau Lakes, which associated with high temperature during the dry season in Malaysia (Amal et al., 2008).
- Vaccination has been established as an effective method for controlling of infectious diseases in farmed fish. Currently, commercial vaccines were inactivated vaccines administered by injection or immersion (Gudding et al., 1999). However, oral vaccination is not well documented and less emphasised as it is being claimed of short duration of protection. In spite of that, we proved that feed-based recombinant vaccine has shown evidence of protection by better immune responses in humoral and mucosal, including development of gut-associated lymphoid tissues (GALTs) and high relative percentage of survival (RPS) of Red hybrid tilapia during the trial.

INVENTION

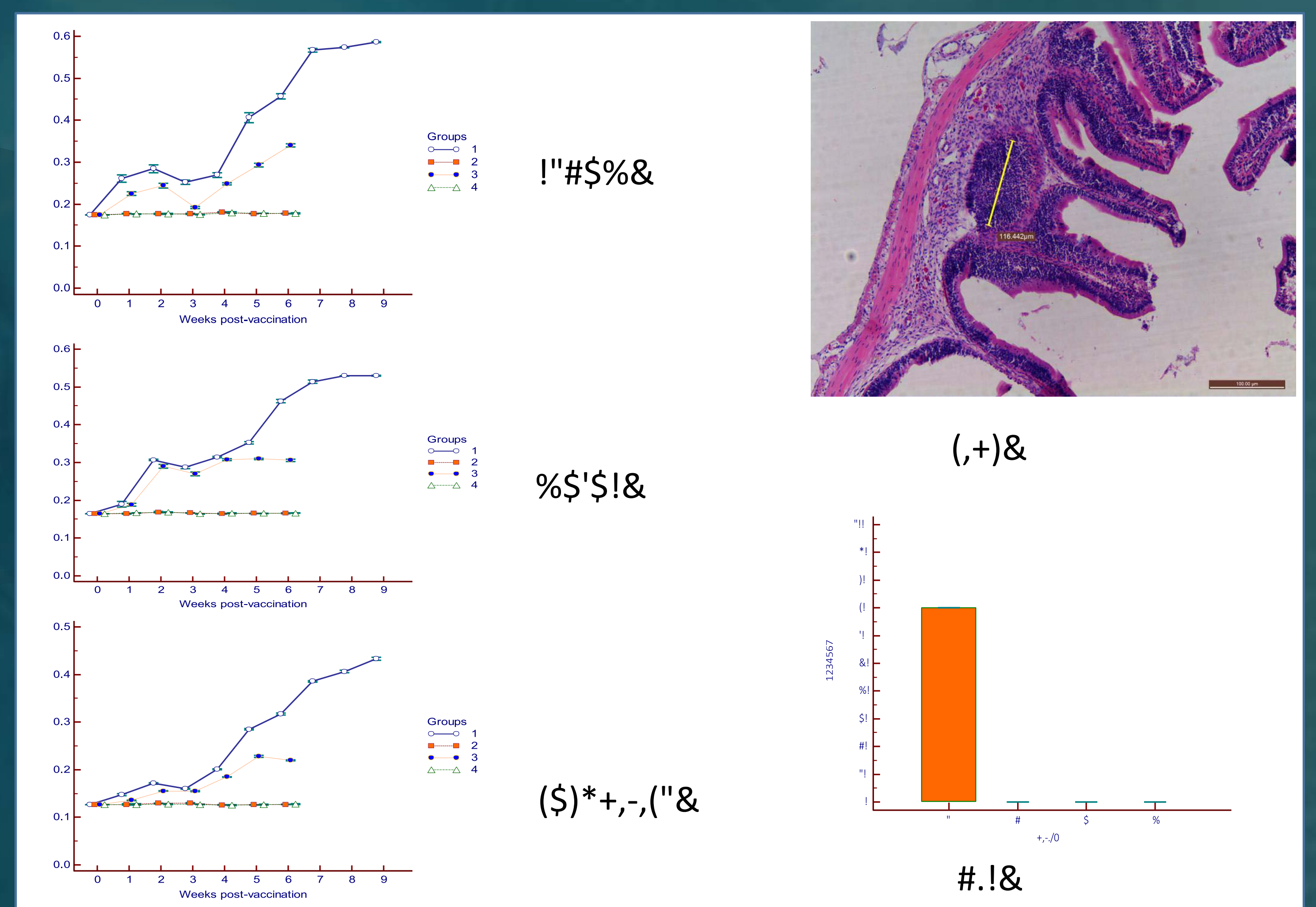
The present invention is provided an immunoprotective composition for treating streptococcosis in fish comprises of a recombinant gene expressing an antigenic protein of *Streptococcus agalactiae*, wherein the antigenic is cell wall surface anchor family protein.

BENEFITS

- Protection from *S. agalactiae*
- Long immunity for at least 4 months
- No stress to fish and operator

USEFULNESS AND APPLICATION

- Vaccine is incorporated into the feed
- Easy to deliver and less time consuming



POTENTIAL CONSUMERS

- Aquaculture farms (small scale to large scale)

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