TECHNOLOGY

NON-HEMOLYTIC CLYA FOR PROTEIN EXPORT AND VACCINES

OVERVIEW

This technology is a specialized protein export system for efficiently producing recombinant protein from a host cell while optimizing safety for use with live vector vaccines, and is related to that described in Docket Code JG-2001-022. The UMB inventors have engineered a genetically stabilized expression plasmid incorporating the protein of interest fused to a fully non-hemolytic mutant of the ClyA hemolysin derived from Salmonella enterica serovar Typhi. Used in a live-vector vaccine, this system allows the export of heterologous antigen for enhancement of vaccine immunogenicity.

APPLICATIONS

Live vector vaccines

ADVANTAGES

Any hemolytic activity from ClyA has been removed while preserving efficient export of the fusion protein.

STAGE OF DEVELOPMENT

Preliminary tests in a mouse model demonstrate enhanced immune response to a S. Typhi strain expressing the non-hemolytic ClyA fusion protein.

R&D REQUIRED

Full clinical development in conjunction with particular vaccine(s).

LICENSING POTENTIAL

UMB seeks partners for further development and commercialization.

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Additional Information

INSTITUTION

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PATENT STATUS

-Issued, European Patent 2294090, UK, Spain, Italy. Germany, France issued date 05/14/2014 -Issued, US,

No.9,051,574, issued Date 06/09/2015 -Issued, Canada, No. 2,726,293, issued date 02/28/2017 -Issued, India, 292115, issued date 01/25/2018

LICENSE STATUS

Available for licensing

CATEGORIES

- Research Tools, Antibodies, & Reagents

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ATTACHMENTS

- Download document(41).pdf

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