



Kansas State University Research Foundation

TECHNOLOGY LICENSING PROFILE

Recombinant Protein Vaccine Candidate for SARS-

coronavirus 2

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Description:

Kansas State University Researchers have created a purified recombinant protein-based vaccine candidate for induction of neutralizing antibodies against the pathogenic SARS-coronavirus 2. This protein-based vaccine candidate containing the SARS-coronavirus 2 Receptor Binding Domain [RBD] and is targeted to B cells and professional antigen presenting cells. It is also expected to activate B cells and thereby serve as an adjuvant. Protein authenticity was validated using anti-corona virus spike protein antibody and recombinant human ACE2. The protein can be scaled up as needed and then tested for its ability to induce neutralizing antibodies against 2019-nCoV-2 virus.

The coronavirus disease 2019 (COVID-19), caused by the novel pathogenic SARS-coronavirus 2, is rapidly spreading globally but there is no treatment or vaccine available. Consequently, there is an urgent need to develop safe and effective vaccines to protect the human population.

Advantages:

- Can be formulated and injected as a vaccine candidate
- Can easily be scaled up
- Capable of inducing protective neutralizing antibodies against the novel pathogenic SARS-coronavirus 2 (2019-nCoV)

Applications:

- Vaccine to prevent COVID-19

Patent Status: Pending