
Entos Pharmaceuticals Extends Its Fusogenix Nanomedicine Platform to a Vaccine Against COVID-19

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Canada-based healthcare biotechnology company Entos Pharmaceuticals announced their development of a DNA vaccine to prevent COVID-19 using its Fusogenix drug delivery platform.

[Entos Pharmaceuticals \(Entos\)](#), a healthcare biotechnology company that develops next generation nucleic acid medicines using the Fusogenix drug delivery platform, announced their development of a Fusogenix DNA vaccine to prevent COVID-19 infections.

Unlike traditional vaccines, a DNA-based vaccine involves the direct introduction of a plasmid encoding the antigen(s) against which an immune response is sought and relies on the production of the target antigen in the patient's own cells. This approach offers a number of potential advantages over traditional approaches, including the stimulation of both B- and T-cell responses, ease of large-scale manufacture, improved vaccine stability, and the absence of any infectious agent. Until recently, medicines capable of effectively delivering DNA have faced significant challenges in their development.

[Nanotechnology in Battle Against Coronavirus ...](#)

Entos 'Fusogenix Platform is a proteo-lipid vehicle (PLV) that uses a novel fusion mechanism to deliver its genetic payload directly inside cells. Entos has developed unique formulations to effectively deliver a wide range of genetic therapies, including plasmid DNA. The use of plasmid DNA in a vaccine will allow Entos to design and optimized payload encoding multiple protein epitopes from key immunogenic SARS-COV-2 proteins. These protein epitopes will stimulate the body's natural antibody production and protective immune response to prevent COVID-19 disease.

“The global population needs access to a safe and effective vaccine against the novel coronavirus to prevent future COVID-19 infections,” said Dr. John Lewis, CEO of Entos, “our Fusogenix platform will allow us to generate protection against multiple structural components of the novel coronavirus, which should not only provide a robust response against SARS-COV-2, but potentially against future coronavirus threats.”

Once the Fusogenix DNA vaccine formulation has been produced it will undergo preclinical testing for safety and efficiency. Due to the urgent need for an effective vaccine for SARS-COV-2 Entos will move forward quickly to collaborate with appropriate health agencies, pharmaceutical companies and government partners to advance our novel Fusogenix vaccine to human clinical trials.

Read the [original article](#) on Entos Pharmaceuticals.