

Sona announces key partner for Coronavirus Rapid Screening Test

14 February 2020 | News | By Kalyani Sharma

Antigens specific to this strain of Coronavirus have been produced at Native's Oxford facility using their proprietary mammalian, VirtuE expression system



Sona Nanotech has secured an agreement with The Native Antigen Company to supply biologics for the recently announced Covid-19 Coronavirus rapid screening test, currently in development by Sona.

Sona Nanotech Inc. is a nanotechnology life sciences firm that has developed two proprietary methods for the manufacture of rod-shaped gold nanoparticles. The principal business carried out and intended to be continued by Sona is the development and application of its proprietary technology for use in multiplex diagnostic testing platforms that will improve performance over existing tests in the market.

Native is a supplier of native and recombinant antigens for emerging and endemic infectious diseases. Native is one of the first recognised suppliers to release biological materials for use in diagnostic tests specific to the Covid-19 strain of the coronavirus virus.

Antigens specific to this strain of Coronavirus have been produced at Native's Oxford facility using their proprietary mammalian, VirtuE expression system. This system can introduce protein folding and post-translational modifications to recombinant proteins, which are essential for full biological and antigenic activity. Covid-19 was recently announced as the official name of the current strain of the Coronavirus by WHO Chief Tedros Adhanom Ghebreyesus. This strain differs from existing coronavirus strains such as SARS or MERS, due to the spike, membrane and envelope proteins present on the surface of the virus. Consequently, current commercial sources of biological materials associated with SARS and MERS would not be ideal for use in a diagnostic or screening test. They would not be specific to Covid-19, and would therefore

result in poor overall test performance, and a high likelihood of mis-diagnosed patients.

Darren Rowles, CEO of Sona Nanotech said, “Rapid screening tests are commonly used in the field as a front-line triage test. This is often the best way to determine which individuals require more medical attention, and which show no sign of infection and therefore may not require immediate medical care and quarantine, thus allowing the medical community to focus their resources as efficiently as possible. Rapid screening tests make the most impact when they are as accurate as possible. The Sona test will use our best-in-class nanoparticle technology alongside Native’s best-in-class biologics to produce a highly effective rapid screening test for the Covid-19 virus.”

Andrew Lane, Commercial Director, Native Antigen Company said that “Native has long been a global leader in the development of biologics for rapid screening tests. We are pleased to partner with a lateral flow test development company like Sona whose gold nanoparticles offer leading functionality so together we can respond quickly to a global health emergency like the Covid-19 virus, with a best-in-class quick response screening device.”

When complete, the Sona Covid-19 rapid screening test could be ideal for use in a variety of scenarios, such as:

- An in-home test and monitoring
- To identify if patients require further testing or treatment in a clinical setting
- To verify if patients are ready for release from quarantine
- To screen individuals prior to entering closed public venues such as cruise ships and airplanes