

## Vir Biotechnology Identifies Two Antibodies That Bind to the Spike Protein of 2019-nCoV, Newly Named as SARS-CoV-2

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SAN FRANCISCO, Feb. 12, 2020 (GLOBE NEWSWIRE) -- Vir Biotechnology, Inc. (Nasdaq: VIR), a clinical-stage immunology company focused on immune approaches to treating and preventing serious infectious diseases, today announced that it has identified two monoclonal antibodies (mAbs) that bind to SARS-CoV-2 (previously known as "2019-nCoV"), which were originally found because they bind and neutralize the original SARS-CoV. The antibodies target the SARS-CoV-2 spike protein in the region that the virus uses to enter cells through the cellular receptor ACE2. Infection with SARS-CoV-2 causes the newly named disease, Covid-19.

"We are in the process of assessing neutralization with a pseudo-virus," said George Scangos, Ph.D., CEO of Vir. "In addition, we are working with international partners to assess the capacity of these antibodies to neutralize the live virus, SARS-CoV-2."

The company is moving ahead with research to determine if its antibodies, or additional antibodies that it may be able to identify, can be effective as treatment and/or prophylaxis against SARS-CoV-2. To that end, the company is exploring collaborations with a number of other companies and governmental agencies. Amongst these are specific efforts at accessing manufacturing capacity globally.

"We are pleased that, using the same platform that was used to isolate mAb114 which has proven to be active against Ebola, we have quickly identified antibodies with potential biological activity against SARS-CoV-2," said Herbert "Skip" Virgin, M.D., Ph.D., Chief Scientific Officer, Vir. "We are working as rapidly as possible and look forward to sharing more information as we have it."

Vir identified these antibodies from an existing library of 20 fully human antibodies that bind and neutralize related coronaviruses, such as SARS-CoV and coronaviruses that infect animals. This library was built through a robust method for capitalizing on unusually successful immune responses naturally occurring in people who are protected from, or have recovered from, infectious diseases, including those caused by rapidly evolving and/or previously untreatable pathogens.

Antibody-based therapies are different from vaccines and have distinct attributes that may make them potentially valuable, particularly in pandemic settings:

- Antibodies can be therapeutic and prophylactic, meaning they can be used as a treatment for people who have been infected and can also protect people who have been, or may be, exposed to infection.
- Whereas a vaccine requires an individual to make an immune response, which can take weeks and be insufficient, an
  antibody provides the immune response, which can be effective within hours of injection and is not dependent upon the
  individual making an immune response to the pathogen.
- Antibodies can be engineered to have an extended half-life of several months or more.

Vir is investigating other approaches to identify additional potential therapies for SARS-CoV-2. In addition to testing these two antibodies, the company is also exploring the isolation of new antibodies specific for this virus using its antibody technology platform. These efforts may allow additional approaches to address this rapidly emerging public health epidemic.

## **About Vir's Antibody Platform**

Vir has a robust method for capitalizing on unusually successful immune responses naturally occurring in people who are protected from, or have recovered from, infectious diseases. The platform is used to identify rare antibodies from survivors that have the potential to treat and prevent rapidly evolving and/or previously untreatable pathogens via direct pathogen neutralization and immune system stimulation. Vir engineers the fully human antibodies that it discovers to enhance their therapeutic potential. This platform has been used to identify and develop antibodies for pathogens including Ebola (mAb114, currently in use in the Democratic Republic of Congo), hepatitis B virus, influenza A, malaria, and others.

## **About Vir Biotechnology**

Vir Biotechnology is a clinical-stage immunology company focused on combining immunologic insights with cutting-edge technologies to treat and prevent serious infectious diseases. Vir has assembled four technology platforms that are designed to stimulate and enhance the immune system by exploiting critical observations of natural immune processes. Its current development pipeline consists of five product candidates targeting hepatitis B virus, influenza A, human immunodeficiency virus and tuberculosis. For more information, please visit www.vir.bio.

## **Forward-Looking Statements**

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend," "potential" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Vir's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from these forward-looking statements. Forward-looking statements contained in this press release include statements regarding the company's efforts to neutralize the SARS-CoV-2 virus and identify additional potential therapies for SARS-CoV-2, and its ability to address the emerging public health epidemic. Many factors may cause differences between current expectations and actual results including unexpected safety or efficacy data observed during preclinical or clinical studies, challenges in neutralizing SARS-CoV-2, difficulty in collaborating with other companies or government agencies, and challenges in accessing manufacturing capacity within China. Other factors that may cause actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Vir's filings with the U.S.

Securities and Exchange Commission, including the section titled "Risk Factors" contained therein. Except as required by law, Vir assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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