CovAbScreen™
SARS-CoV-2 Ab Test

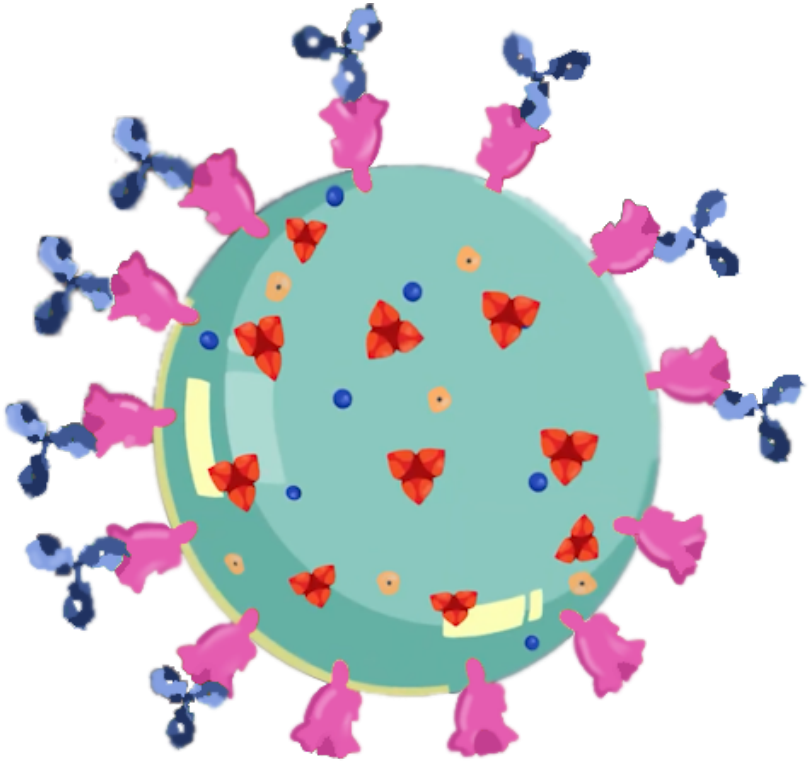
CovAbScreen™ and Neutralizing Antibodies

Who are they?

Neutralizing antibodies are Y shaped protein structures that are produced by B cells to combat Covid-19 virus.

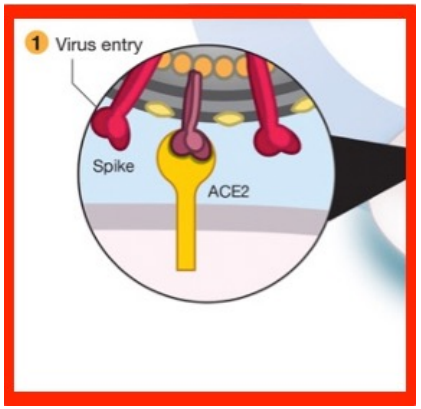
What do they do?

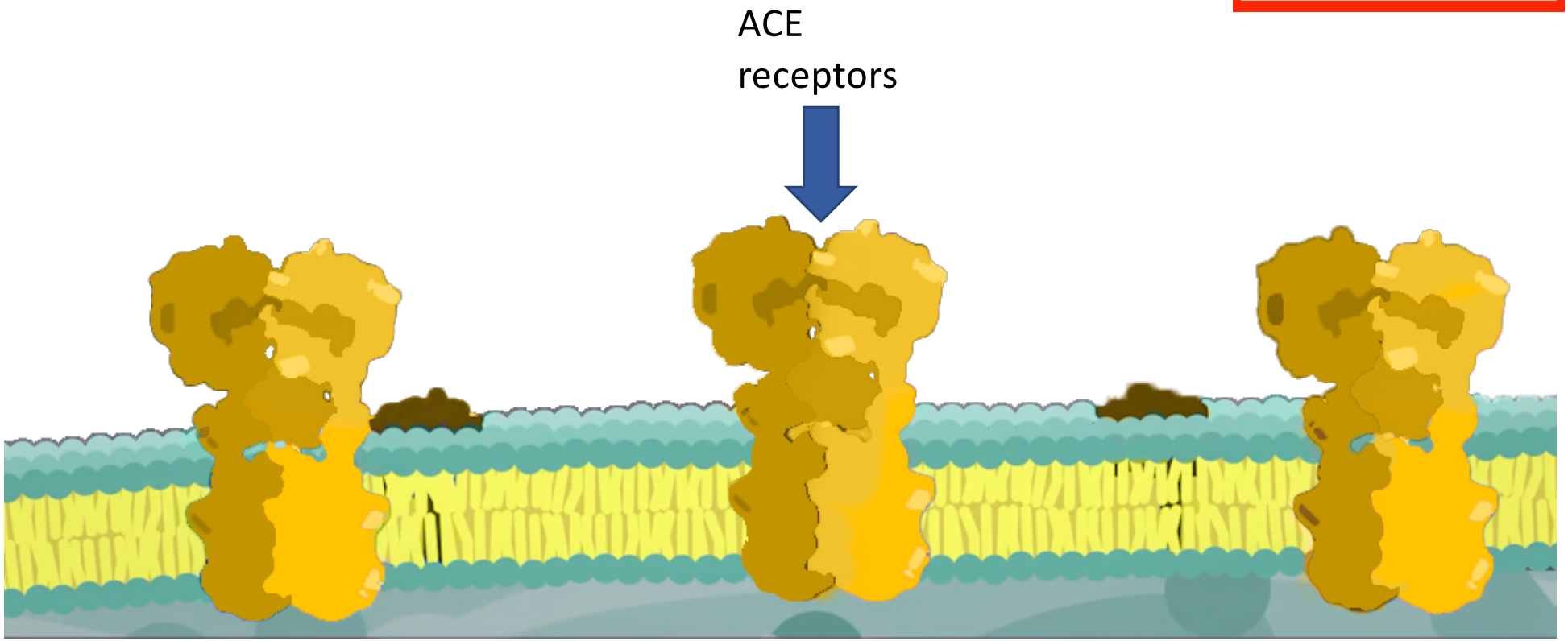
Neutralizing antibodies attach to the spike protein of the Covid-19 virus.



ACE Receptors

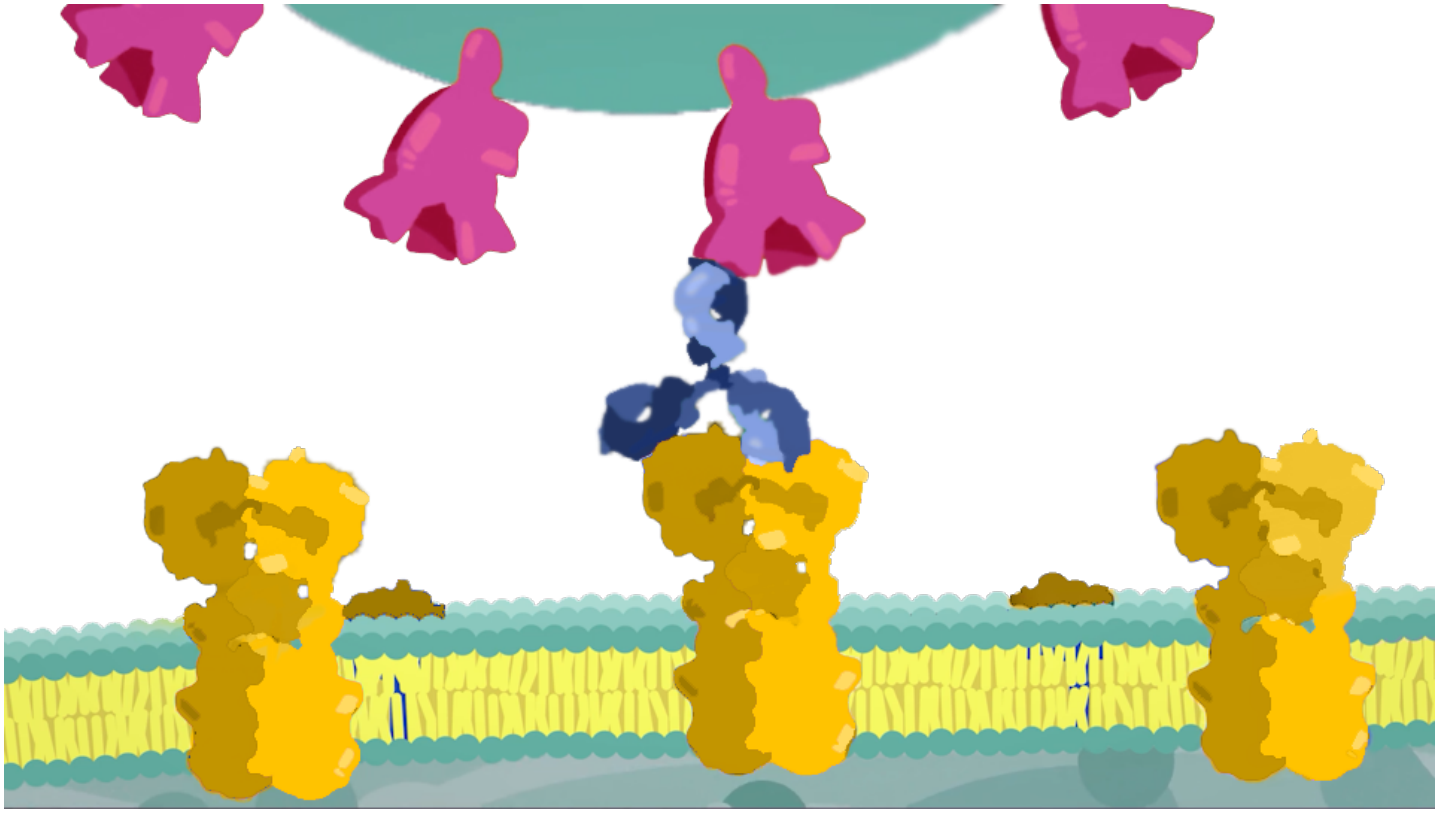
Mucosal and respiratory cells contain ACE receptors that allow the spike proteins and the Covid-19 virus to enter the human cells.





How do neutralizing antibodies help fight infection?

Neutralizing antibodies prevent the spike proteins of the Covid-19 virus from entering the human cells. Neutralizing antibodies thus reduce and prevent viral infection.



CovAbScreen™ measures neutralizing antibodies that surround the spike protein (S1)

PRINCIPLES OF THE PROCEDURE

The CovAbScreen™ SARS-CoV-2 Antibody Test is a lateral-flow chromatographic immunoassay that can detect antibodies against the SARS-CoV-2 virus. The test uses a SARS-CoV-2-specific protein (spike protein S1 domain) bound to a detector and a cocktail of anti-human IgA, IgM, and IgG antibodies for capture.

IgA is an important neutralizing antibody

- Reported serology tests focus on IgM, IgG and total immunoglobulins although IgA is playing an important role in mucosal immunity. It is in fact the most important immunoglobulin to fight infectious pathogen in respiratory system and digestive system at the point of pathogen entry.

Yin Xia Chaoa,b, Olaf Rötzschkec, Eng-King Tana,b,

The role of IgA in COVID-19, Brain, Behavior, and Immunity 87 (2020) 182–183

IgA is an important neutralizing antibody

IgA antibodies dominated the early SARS-CoV-2–specific antibody response compared with IgG and IgM concentrations in these fluids and was associated with expansion of IgA plasma blasts with mucosal homing characteristics. IgA serum concentrations peaked 3 weeks after symptom onset but persisted for several more weeks in saliva, and serum IgA was more potent than IgG in neutralizing SARS-CoV-2. These findings highlight the potential role of IgA during early SARS-CoV-2 infection.

IgA dominates the early neutralizing antibody response to SARS-CoV-2

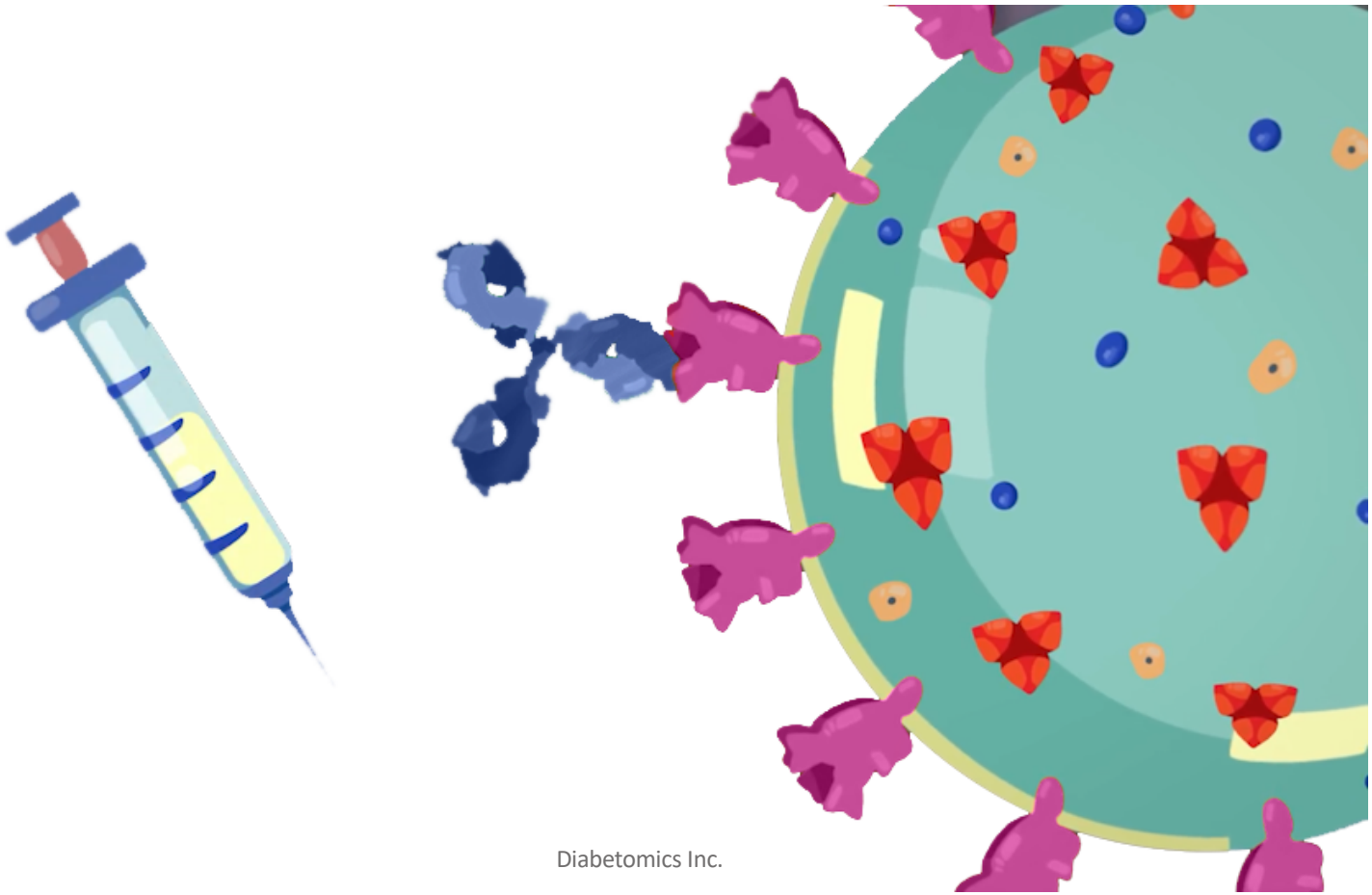
Delphine Sterlin et al

Science Translational Medicine 20 Jan 2021: Vol. 13, Issue 577, eabd2223

Vaccines create neutralizing antibodies that CovAbScreen™ detects

Vaccines mimic the Covid-19 virus and trick our B cells into creating the same neutralizing antibodies that surround the spike protein

CovAbScreen™ measures antibodies that are created after vaccination



Unique Benefits of CovAbScreen™

CovAbScreen™
SARS-CoV-2 Ab Test

- **Unique Oral Fluid sample – easy and painless**
- **Detects neutralizing antibodies IgA, G and M**
- Easy 4 step test procedure
- Quick result in 15 minutes
- Room Temperature storage
- No instrument required
- Developed and manufactured in America