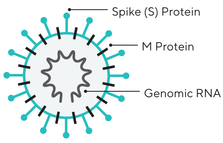
SARTORIUS

Simplifying Progress

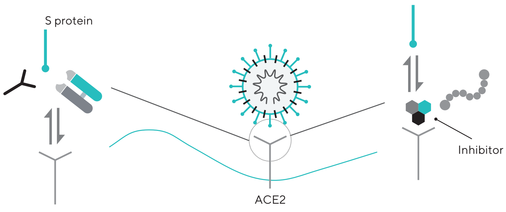
Understanding COVID-19 Vaccine and Therapeutic Development Research

SARS-CoV-2 Mechanism for Infecting Hosts

Coronavirus uses its spike (S) protein to attach onto ACE2 receptors on human cells. Targeting this virus-host receptor interaction can prevent infection.



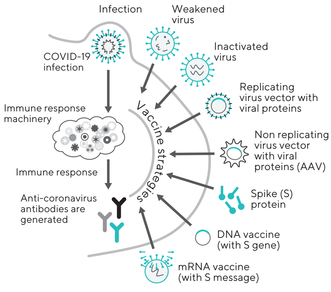
Targeting Virus-Host Receptor Recognition to Block Viral Entry



- Developing antibodies, FAB, and scFv molecules that bind to viral spike proteins are at the forefront at inhibiting viral entry. Similarly, small-molecule and peptides that target the spike protein are also evaluated as alternate therapeutic strategies.
- The selection and characterization of lead candidates based on accurate target binding kinetics, affinities and inhibitory potency is vital in the discovery workflow.

Strategies for COVID-19 Vaccine Development

The scientific community has made tremendous efforts to understand the disease, and unparalleled efforts are ongoing to develop vaccines and treatments. Studying antibodies generated from COVID-19 infections and vaccines can provide invaluable information towards therapeutic antibody development and engineering. Kinetics, affinity and epitope interrelationships are important factors in vaccine and therapeutic design.

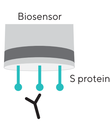


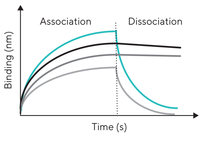
Octet® Systems: All-In-One Platform for Therapeutic Investigation and Bioproduction

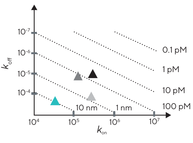
Octet® systems perform critical measurements with the speed and reliability needed for investigating therapeutic strategies and producing novel medicine.

Evaluate Binding Kinetics and Affinities in Real-Time

Pick lead candidates with the best kinetics and affinity properties

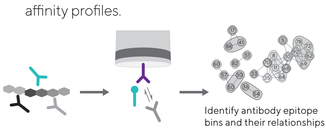






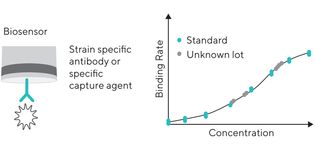
Assess Epitope Diversity and Coverage for Greater Success

Epitope binning assays help identify antibodies that block the same epitope on a target antigen and are crucial when it comes to identifying or engineering mAbs with favorable kinetics and affinity profiles.



- Three epitope binning assay formats to choose between.
- Different Bio-Layer Interferometry (BLI) systems to meet your throughput needs and budget.

Perform Titer, Potency and Stability Measurements



- Fast at-line testing – Quantitate a 96-well plate for AAV titers within minutes.
- Robust assays for antibody and virus titer (ex. Influenza, AAV), potency and stability determination in upstream and downstream bioprocess development.

How Do Octet® Systems Help You Get Data Fast?

- Simple Dip and Read workflows help you develop assays quickly and get results within minutes.
- Minimal sample preparation time with analysis possible directly from crude samples.
- Range of available biosensor chemistries makes assay development easy.

Learn more about how Octet® systems are used in COVID-19 research at sartorius.com/covid19