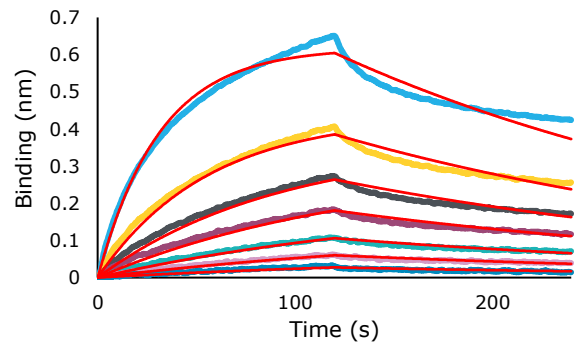


Optimer[®] binder for SARS-CoV-2 S2 protein

Validated Optimer[®] binders to SARS-CoV-2 Spike protein

Species reactivity	Virus
Target	SARS-CoV-2 S2 Spike protein
Target affinity	18.7 nM
Selectivity	Proven to detect WT, B.1.17, B.1.351. Does not cross-react with plasma components, saliva or nasal matrices
Applications	Tested in BLI, LFD, ELISA-like assay
Optimer [®] size	35 nucleotides

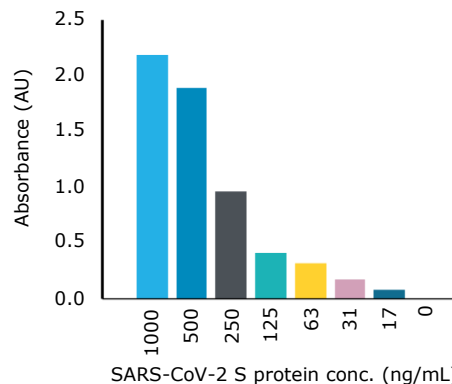


SARS-CoV-2 S2 Optimer[®] binders show good target affinity for the viral Spike protein by biolayer interferometry.

Target information

SARS-CoV-2 virus is the causative agent of COVID-19. The viral Spike protein consists of two subunits (S1 and S2). Following binding of the S protein to angiotensin-converting enzyme-2 (ACE2), the S2 subunit mediates fusion between the viral and host cell membranes for cell penetration and infection. The S protein has formed the basis for many of the SARS-CoV-2 vaccines for COVID-19 and acts as a biomarker for infection in COVID-19 patients.

SARS-CoV-2 S2 Optimer[®] can act as a matched pair with the S1 Optimer[®]



SARS-CoV-2 Optimer[®] binders detect S protein by ELISA-like assays. S1 Optimer[®] was used as the capture reagent and S2 Optimer[®] as the detection reagent.

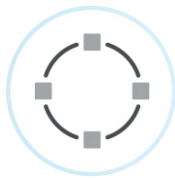
Optimer® binders

Optimer® binders are small oligonucleotide ligands (~15kDa) that bind to target molecules with comparable specificity and affinity to that of antibodies. These synthetic affinity ligands are designed to mimic the molecular recognition characteristics of monoclonal antibodies in different applications.

Intended for research use only. Not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, *in vitro* diagnostic uses, *ex vivo* or *in vivo* therapeutic uses or any type of consumption or application to humans or animals.

The Optimer® advantage

Optimer® binders are oligonucleotide ligands that offer several key benefits over traditional protein-based affinity reagents.



Batch consistent
manufacture



Rapid discovery
& development



Animal-free discovery,
development & manufacture



Highly stable with
long shelf life



Security of supply
from defined
Optimer sequence



Small size for improved
signal:noise & tissue
penetration

Flexible functionalisation for assay compatibility

Optimer® binders can be modified with a wide variety of functional groups for simple platform integration. Please enquire for more information.

For custom modifications specific for your research, or more details about how Optimer® binders can be utilized in your research, please get in touch via email at info@aptamergroup.com.

