

# AFIAS COVID-19 nAb

Testing for neutralizing antibody against SARS-CoV-2 virus

- Neutralizing antibody test from convalescence patient
- Test of vaccination efficacy after injection
- Validation of sustained vaccination efficacy



# What is neutralizing antibody test?



- A neutralizing antibody (nAb) is an antibody that is responsible for defending cells from pathogens, SARS-CoV-2 virus.
- nAb will inhibit the binding and entry of virus into cells by blocking the interaction of spike protein (viral proteins) and ACE2 protein (human cell receptor protein) of SARS-CoV-2 virus.
- nAb is also produced by vaccination and if nAb is not detected in a vaccinated person, it means the failure of vaccination (not effective vaccination).
- nAb has a function to inhibit the SARS-CoV-2 virus infection, while total antibody just binds to the virus and its components.

## Specification

Product	AFIAS COVID-19 nAb
Principle of test	TRF-LFA
Test type	Semi-quantitative
Samples	WB / Serum / Plasma
Sample volume	100 µL
Working Range	10 - 100% (inhibition)
Cut-off	30% (positive: ≥ 30%)
Box contents	24 test/box
Storage	2 - 30°C
Reference Methods	<ul style="list-style-type: none"> <li>• Plaque Reduction Neutralization Test (PRNT<sub>50</sub>)</li> <li>• cPass™ SARS-CoV-2 Neutralization Antibody Detection Kit (GenScript), FDA EUA</li> </ul>

## Clinical performance

Result		cPass™ SARS-CoV-2 Neutralization Antibody Detection Kit		
		Positive	Negative	Total
AFIAS COVID-19 nAb	Positive	36	0	36
	Negative	1	48	49
Total		37	48	85
PPA (%)		97.3% [(36/(36+1)) x 100] (95% C.I. 86.2 ~ 99.5%)		
NPA (%)		100.0% [(48/(48+0)) x 100] (95% C.I. 92.6 ~ 100.0%)		

## Ordering information

Product	AFIAS COVID-19 nAb	AFIAS-6 Reader	AFIAS-1 Reader	AFIAS-10 Reader
Cat #	SMFP-82	FPRR020	FPRR019	FPRR038
C-tip (30 µL)		×	○	○