

ichroma™ 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	ichroma™ Covid-19 nAb
Principle of test	TRFLFA
Test type	Semi-quantitative
Samples	WB / Serum / Plasma
Sample volume	10 µL
Working Range	10 – 100% (inhibition)
Cut-off	30% (positive: ≥ 30%)
Reference reagent	SARS-CoV-2 Surrogate Virus Neutralization Test ELISA kit (GenScript)
Box contents	25 test/box
Storage	4 - 30°C
Reference test	cPass SARS-CoV-2 Neutralization Antibody Detection Kit (GenScript), FDA EUA

Clinical performance

		cPass™ SARS-CoV-2 Neutralization Antibody Detection Kit		
		Positive	Negative	Total
ichroma™ COVID-19 neutralizing Ab	Positive	34 (a)	0 (b)	34 (a+b)
	Negative	3 (c)	48 (d)	51 (c+d)
	Total	37 (a+c)	48 (b+d)	85 (N)

Positive percent agreement (PPA) (%) = 91.9 % ($\{36/(34+3)\} \times 100$) (95 % C.I. 80.14~97.42 %)

Negative percent agreement (NPA) (%) = 100.0 % ($\{0/(0+48)\} \times 100$) (95 % C.I. 92.59~100.00 %)

Ordering information

Product	ichroma™ Covid-19 nAb	ichroma™ II Reader
Cat #	CFPC-120	FPRR021