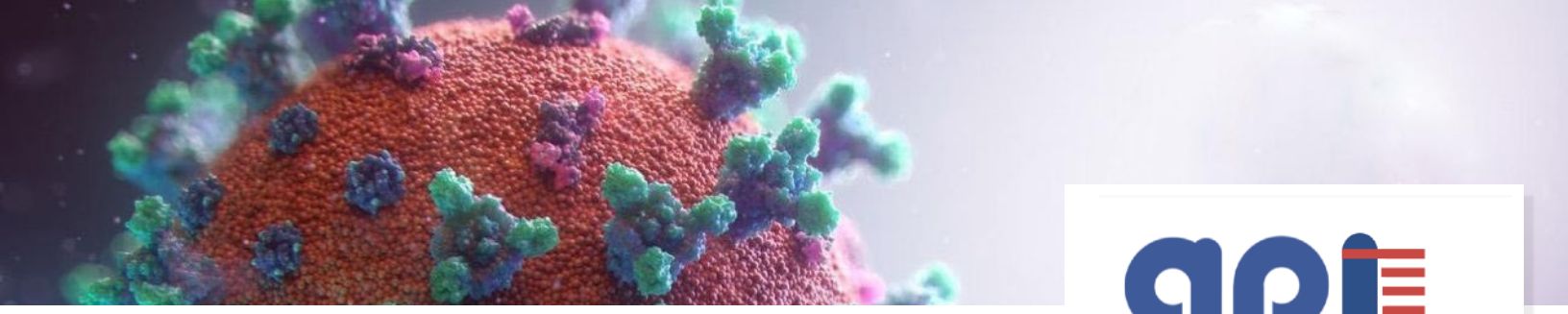


API Pharma

Getting the world back to work

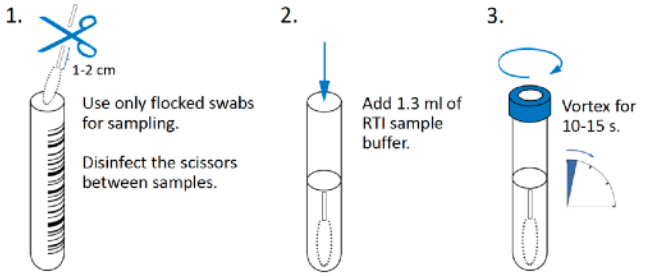
Test	Sensitivity	Specificity	N	Reference
mariPOC® Respi+ and SARS-CoV-2	92%	100%	221	PCR test

- The mariPOC® SARS-CoV-2 nasal swab test method detects SARS-CoV and SARS-CoV-2.
- No cross-reactivity detected with MERS, seasonal coronaviruses (229E, HKU1, NL63, OC43) or other common respiratory tract pathogens or normal bacterial flora.

API Pharma mariPOC® SARS-CoV-2:

- Easy to administer with nasal swab collection
- Detects acute and contagious COVID-19 disease to improve patient management and treatment
- Enables rapid testing of COVID-19 at the site of sampling
- Cost-efficient and high capacity testing of all syndromic patients with high accuracy

Accurate and rapid COVID-19 testing for efficient management of the pandemic.



Broad scale screening

Quick and easy

Automated analysis

Results while waiting

Test types

Respi+
SARS coronavirus 2
Influenza A virus
Influenza B virus
Respiratory syncytial virus
Human metapneumovirus
Parainfluenza virus 1
Parainfluenza virus 2
Parainfluenza virus 3
Coronavirus OC43
Adenovirus
Streptococcus pneumoniae

Results

20 min
Preliminary results
2 hours
Final results

Quick Flu+
SARS coronavirus 2
Influenza A virus
Influenza B virus
Respiratory syncytial virus

Results

20 min
Final results

SARS-CoV-2
SARS coronavirus 2

Results

20 min
Preliminary results
95 mins
Final results

Performance

Laboratory Quality at the Point of Care

maripoc

Rapid multi-analysis of acute infections at point of care

Detects several pathogens from a single swab

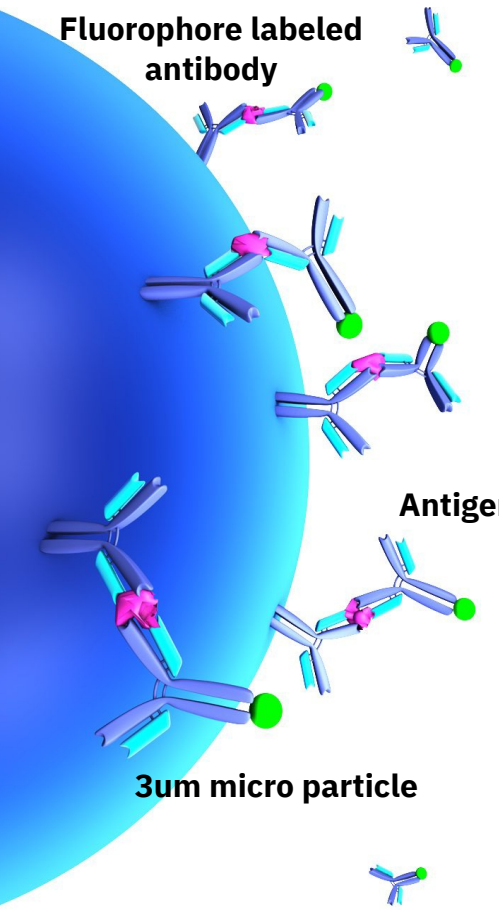
Specificity and sensitivity on par with laboratory methods

mariPOC® compared to	Sample type	Sensitivity	Specificity	N
TR-FIA				
Influenza A virus	swab/aspirate	100 %	100 %	102
Influenza B virus	swab/aspirate	~100 % *	~100 %**	NA
Respiratory syncytial virus	swab/aspirate	100 %	100 %	94
Parainfluenza 1 virus	swab/aspirate	~100 % *	100 %	55
Parainfluenza 2 virus	swab/aspirate	~100 % *	99.0 %	55
Parainfluenza 3 virus	swab/aspirate	~100 % *	100 %	95
Adenovirus	swab/aspirate	92 %	100 %	95
ELISA				
Human metapneumovirus	swab	~100 % *	100 %	43
DFA				
Influenza A virus	aspirate	86 %	100 %	241
Respiratory syncytial virus	aspirate	90 %	99.5 %	241
Lateral flow				
Influenza A virus	wash	100 %	100 %	104
Influenza B virus	wash	100 %	100 %	104
Streptococcus pneumoniae	NA	~100 %*	~100 %**	NA
Viral culture				
Parainfluenza 3 virus	wash	100 %	100 %	192
Adenovirus	wash	100 %	99.5 %	192
PCR				
Influenza A virus	aspirate/wash	92 %	100 %	192
Influenza B virus	aspirate/wash	88 %	100 %	192
Respiratory syncytial virus	swab	89 %	100 %	158
Human metapneumovirus	aspirate/wash	78 %	100 %	74
Bacterial culture				
Group A streptococci	swab	~150 %	~100 % **	219

*) Sensitivity proved to be similar to comparison method using dilution series from positive samples
**) No cross-reactions with other respiratory pathogens or commensal flora detected

Sanbonmatsu-Gámez S. et al. Diagn Microbiol Infect Dis 2015
Ivaska et al. J. Clin Virol. 2013
Tuuminen et al. J Med Virol. 2013
López Dosil et al., Poster SEIMC 2013
Koskinen et al. J Clin Microb. 2007

2016-01



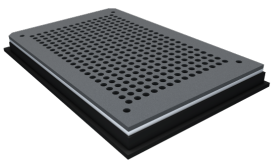
POC is based on immunoassay of pathogen specific antigens

The immunoassay binding reaction takes place on latex microbeads, which are detected by **two-photon excitation fluorometry.**

This unique technique allows sensitive immunoassays from miniature reaction volumes without separation steps.

Test cartridge

Pathogen specific reagents are stored in the cartridge in the dry state. One cartridge is sufficient for up to 308 patient samples.



Hänninen et al., Nature Biotech. 18:548 (2000)
Koskinen et al., J. Clin. Microbiol. 45:11 (2007)