



# COVID-19, Extraction-free PCR

## Fast, cost-effective and reliable test for COVID-19

Due to its high sensitivity and specificity, RT-PCR is widely used for infection test and known as the most accurate way to detect COVID-19. However, in performing of RT-PCR, RNA extraction requires considerable manual work, causing a process bottleneck.

Seegene adopts Extraction-Free assay for Allplex™ SARS-CoV-2 Assay & Allplex™ SARS-CoV-2 / Flu / RSV Assay to improve overall process efficiency, allowing more tests for a limited time.



### Time Saving

Results within 2 hours without RNA extraction



### Cost Saving

Saving resources such as reagents and costs



### Performance Saving

Extraction-free COVID-19 test shows sensitivity of more than 90% and specificity of 100% compared to standard procedure

### Specimen

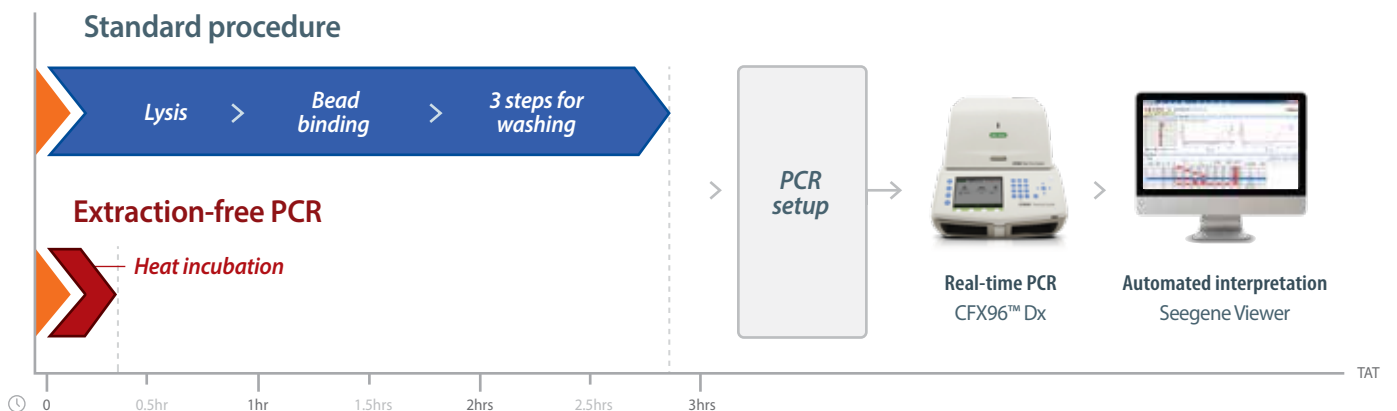
- Nasopharyngeal swab
- Throat swab

### Instrument

- CFX96™ Dx
- Applied Biosystems 7500

## Comparison of the extraction-free PCR and standard procedure

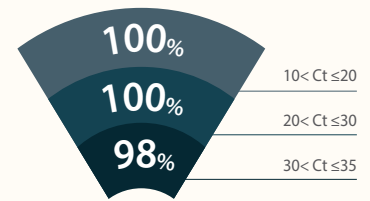
■ Sample collection



## Performance comparison of Allplex™ SARS-CoV-2 Assay using extraction-free PCR and standard procedure

Allplex™ SARS-CoV-2 Assay		10 < Ct ≤ 20		20 < Ct ≤ 30		30 < Ct ≤ 35	
		Positive	Negative	Positive	Negative	Positive	Negative
Extraction-free PCR	Positive	8	0	32	0	38	0
	Negative	0	33	0	33	1	33
Negative Percent Agreement		100%		100%		100%	
Positive Percent Agreement		100%		100%		97.44%	
Overall Percent Agreement		100%		100%		98.61%	

**100%**  
Agreement

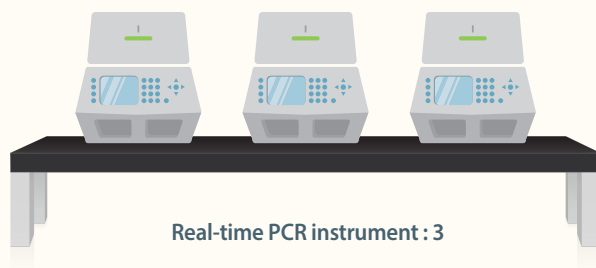


**Sensitivity**

In limited space and cost, extraction-free PCR helps increase the capacity of COVID-19 test in diagnostic laboratories

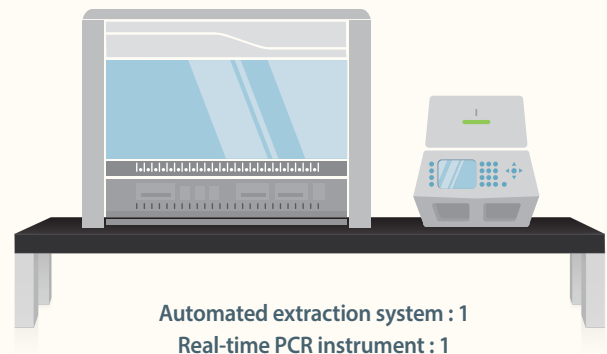
### Extraction-free PCR

Test up to **2,880** samples in 24 hours **x4**



### Standard procedure

Test up to **768** samples in 24 hours



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