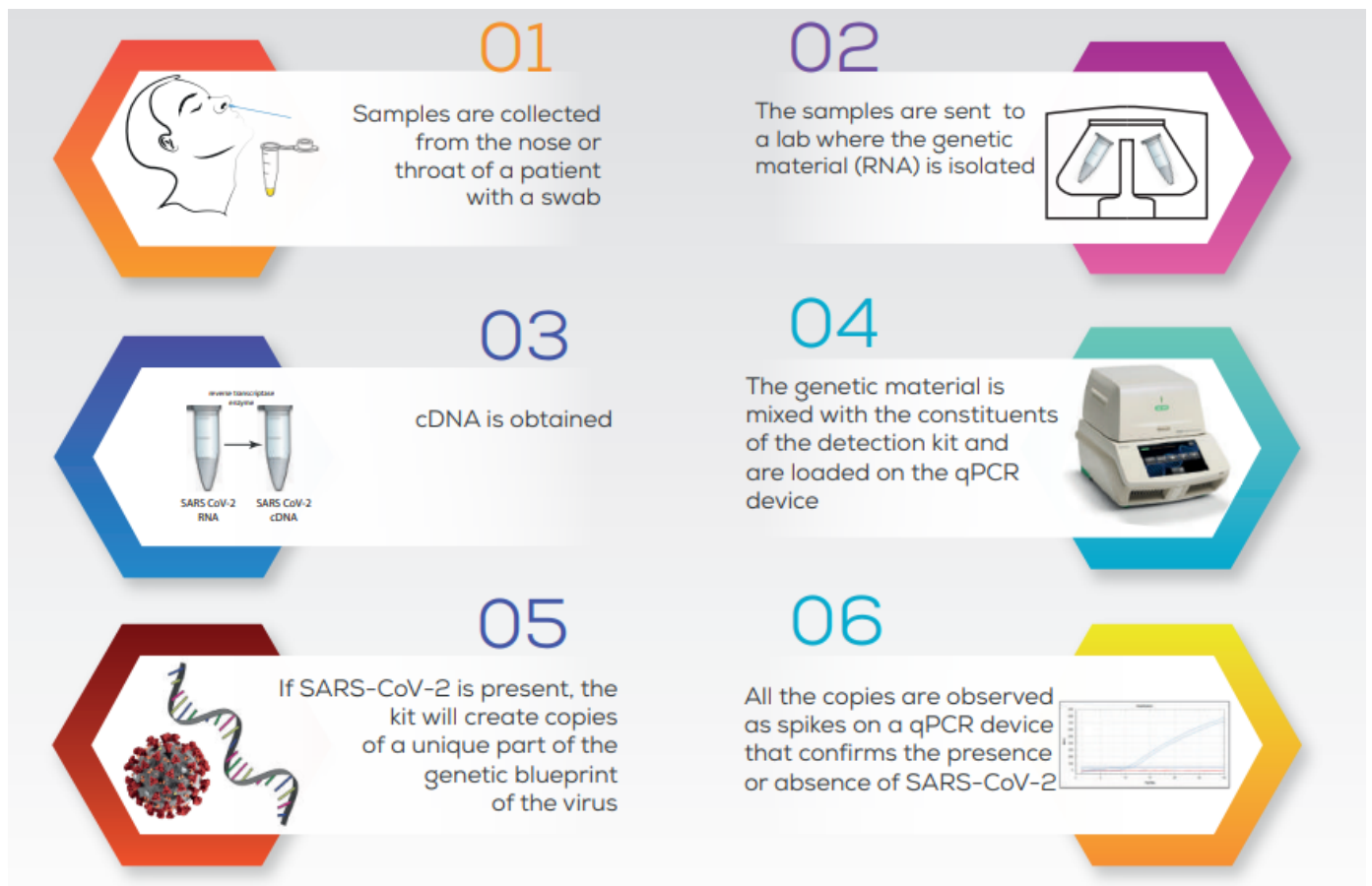


INTRODUCTION OF COVID-19

SARS-COV-2(COVID-19) infection has been declared a pandemic by WHO. • This infection manifests by high fever, shortness of breath and dry cough in infected patients, and has a high mortality rate. • Although some patients have very mild symptoms, many patients require hospitalization and transfer to ICU. • The most effective way of combatting this pandemic is through self-quarantine, social distancing and extensive testing. • There are two main test methods that are available for SARS-COV-2, the rapid method which takes 15 minutes has approximately 10% false positive/false negative rate. • The most accurate method of testing for SARS-COV-2 is through qPCR in a laboratory. How is PROCELL qPCR Test different from others? • PROCELL is the leading synthetic biology company and has been producing qPCR primers and probes since many years, with more than ten-thousand references. • Among the 7 qPCR protocols released by WHO, PROCELL chose USA-CDC protocol; however, our scientists quickly realized the risk of false negative detection due to dimer-dimer problems in this protocol. So, we developed an optimized kit that overcame this problem. • Unlike many other companies, PROCELL produces every single component of its kit by itself, reducing the risk of mistakes during production. • our qPCR kits have over 99% accuracy. • PROCELL SARS-COV-2 qPCR Detection Kit also has a fully synthetic and non-pathogenic positive control which eliminates the possibility of false negative results due to enzymatic problems

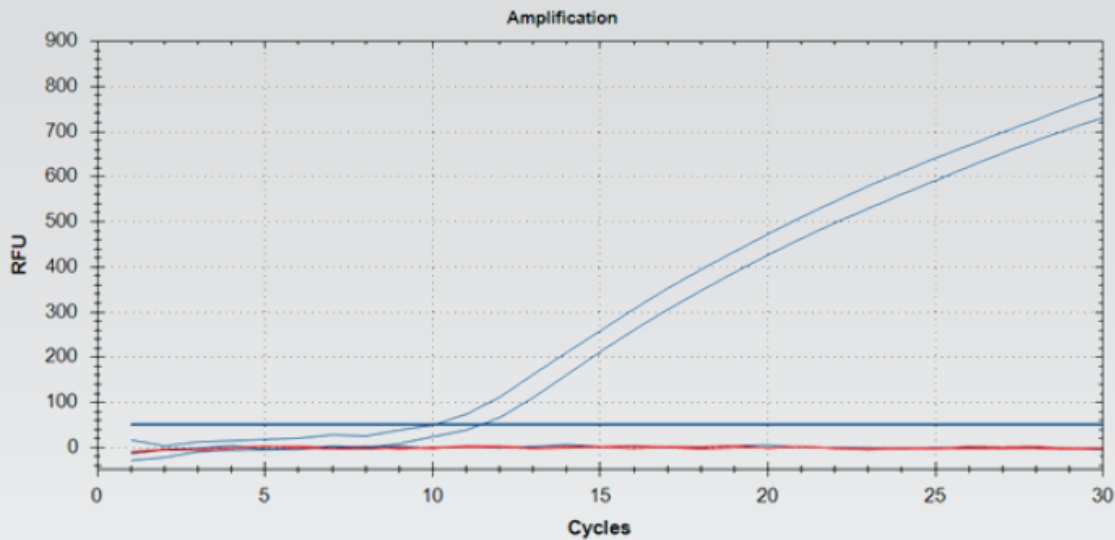
qPCR KIT DETECTION PROCESS



EVALUATION OF THE RESULTS

• For each study, negative results should be obtained from NCs and positive results from PCs. Studies that do not comply with these results must be repeated. • Positive results should be obtained for RNaseP reactions for each sample. Not getting a positive result for RNaseP reaction of a patient sample means that there is a problem in the RNA isolation/cD- NA extraction stages. Thus, RNA isolation and cDNA production from those samples should be repeated. • As stated in Table 4, samples with positive results from all N1, N2 and RNaseP sets should be evaluated as SARS-COV-2 positive; while N1 and N2 negative and RNaseP positive results should be evaluated as SARS-COV-2 negative. samples with a positive result from only one of N1 or N2 should be retested.

N1	N2	RNaseP	Assessment
+	+	+	The patient is SARS-CoV-2 positive.
-	-	+	The patient is SARS-CoV-2 negative.
-	+	+	The result is uncertain. The test should be repeated.
+	-	+	



FOR PROFESSIONAL USE

