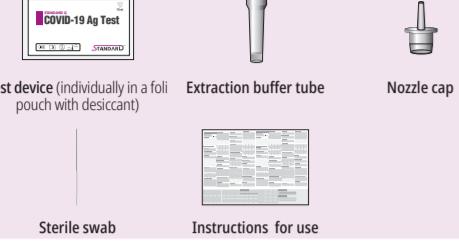


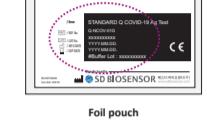
REF Q-NCOV-01G
Cat No. 09COV30D**COVID-19 Ag Test**

STANDARD™ Q COVID-19 Ag Test

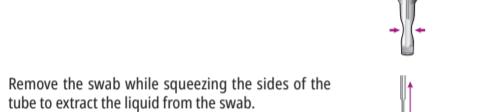
PLEASE READ INSTRUCTIONS CAREFULLY BEFORE YOU PERFORM THE TEST

KIT CONTENTS**PREPARATION AND TEST PROCEDURE****■ PREPARATION**

- Carefully read instructions for using the STANDARD Q COVID-19 Ag Test.
- Check the expiry date at the back of the foil pouch. Do not use the kit, if expiry date has passed.
- Check the test device and the desiccant pack in the foil pouch.

**■ COLLECTION OF SPECIMEN****[Nasopharyngeal swab]**

- To collect a nasopharyngeal swab specimen, insert a sterile swab into the nose of the patient, reaching the surface of the posterior nasopharynx.
- Using gentle rotation, push the swab until resistance is met at the level of the turbinates.
- Rotate the swab 3-4 times against the surface of the nasopharynx.
- Remove the swab from the nostril carefully.
- Insert the swab into an extraction buffer tube. While squeezing the buffer tube, stir the swab more than 5 times.



6. Remove the swab while squeezing the sides of the tube to extract the liquid from the swab.

7. Press the nozzle cap tightly onto the tube.

8. Specimen should be tested as soon as possible after collection.

9. Specimens may be stored at room temperature (15–25°C) for up to 1 hours or at 2–8°C/36–46°F for up to 4 hours prior to testing.

- If the specimen storage condition is out of instructions as below, do not use.
- The Nasopharyngeal swab is stored in extraction buffer for more than 4 hours at 55°C or 1 hour at 205°C.
 - Freezing the Nasopharyngeal swab specimen stored in extraction buffer. Freezing/thawing the specimen stored in UTM exceed 3 cycles.
 - The Nasopharyngeal swab is stored in UTM for more than 12 hours at 55°C or 8 hours at 205°C.

[Specimens in transport media]

1. Using a micropipette, collect the 350µl of specimen from the collection cup or VTM. Mix the specimen with an extraction buffer.

2. Press the nozzle cap tightly onto the tube.



Minimal dilution of the specimen is recommended, as dilution may result in decreased test sensitivity.

■ ANALYSIS OF SPECIMEN

- Apply 3 drops of extracted specimen to the specimen well of the test device.
- Read the test result in 15-30 minutes.

SPECIMEN COLLECTION AND PREPARATION**■ Transport medium**

Virus Transport Medium(VTM)	Recommended Storage Condition	
	2°C to 8°C	25°C
Copan UTM® Universal Transport Media	12 hours	8 hours
BD® Universal Viral Transport	12 hours	8 hours
STANDARD™ Transport Medium	12 hours	8 hours

When using viral transport medium (VTM), it is important to ensure that the VTM containing the specimen is warmed to room temperature. Cold specimens will not flow correctly and can lead to erroneous or invalid results. Several minutes will be required to bring a cold specimen to room temperature.

PERFORMANCE CHARACTERISTICS**■ Clinical evaluation**

The prospective diagnostic evaluation of STANDARD Q COVID-19 Ag Test with a total number of enrolled individuals of 1659 was conducted by FIND with collaborators in Germany and Brazil.
A total of 153 positive specimens from Germany and Brazil were tested using the STANDARD Q COVID-19 Ag Test. These specimens consisted of nasopharyngeal swabs from symptomatic patients. The specificity of STANDARD Q COVID-19 Ag Test was tested using 1506 negative specimens. The sensitivity and specificity of the STANDARD Q COVID-19 Ag Test was compared to the specific RT-PCR method. The pooled sensitivity was 84.97% (130/153, 95% CI 78.36–90.23%) and the pooled specificity was 98.94% (1490/1506, 95% CI 98.88%–99.39%). Performance data was calculated from a study of patients within 24 days of onset of symptoms.

Table 1. STANDARD Q COVID-19 Ag Test result by FIND.

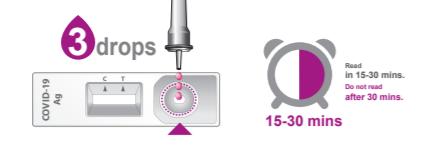
Country	Brazil	Germany	Overall
Sensitivity (Ct ≤ 25)	95.92% (47/49, 95% CI 86.02–99.50%)	100% (21/21, 95% CI 83.89–100%)	97.14% (68/70, 95% CI 90.06–99.65%)
Sensitivity (Ct ≤ 33)	91.92% (91/99, 95% CI 86.02–95.92%)	87.80% (36/41, 95% CI 73.80–95.92%)	90.71% (127/140, 95% CI 84.64–94.96%)
Sensitivity (if ≤ from the symptom onset days ≤ 3)	95% (19/20, 95% CI 75.13–99.87%)	85.71% (18/21, 95% CI 63.66–96.59%)	90.24% (37/41, 95% CI 76.87–97.28%)
Sensitivity (from the symptom onset days ≤ 7)	90.72% (88/97, 95% CI 83.12–95.67%)	80% (28/35, 95% CI 63.06–91.56%)	87.88% (116/132, 95% CI 81.06–92.91%)
Clinical Sensitivity	88.68% (94/106, 95% CI 81.06–94.01%)	76.60% (36/47, 95% CI 61.97–87.70%)	84.97% (130/153, 95% CI 78.36–90.23%)
Clinical Specificity	97.62% (287/294, 95% CI 95.16–99.04%)	99.26% (1203/1212, 95% CI 98.60–99.66%)	98.94% (1490/1506, 95% CI 98.28–99.39%)

ANALYTICAL PERFORMANCE

1. Limit of Detection (LoD): The SARS-CoV-2 positive specimen was prepared by spiking Inactivated SARS-CoV-2 (2019-nCoV) NCCP 43326/2020/Korea strain to SARS-CoV-2 negative nasopharyngeal swab confirmed with PCR. LoD is determined as 3.12×10^{12} TCID₅₀/ml for direct Nasopharyngeal swab, 5 $\times 10^{12}$ TCID₅₀/ml for Nasopharyngeal swab stored in VTM by testing serially diluted the mock positive specimen.

2. Cross-Reactivity & Microbial interference: There was no cross-reaction and interference with the potential cross-reacting microorganisms listed below except SARS-CoV.

Potential cross reacting substance	Strain	Concentration of potentially cross reacting substance
SARS-coronavirus	Urbani	3.5 µg/ml
MERS-Coronavirus	Florida/USA-2_Saudi Arabia_2014	4 $\times 10^4$ TCID ₅₀ /ml
	229E	1 $\times 10^4$ TCID ₅₀ /ml
	OC43	1 $\times 10^4$ TCID ₅₀ /ml
	NL63	1 $\times 10^4$ TCID ₅₀ /ml

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COVID-19 Ag Test

STANDARD™ Q COVID-19 Ag Test

LEIA AS INSTRUÇÕES COM ATENÇÃO ANTES DE REALIZAR O TESTE



PREPARAÇÃO E PROCEDIMENTO DO TESTE

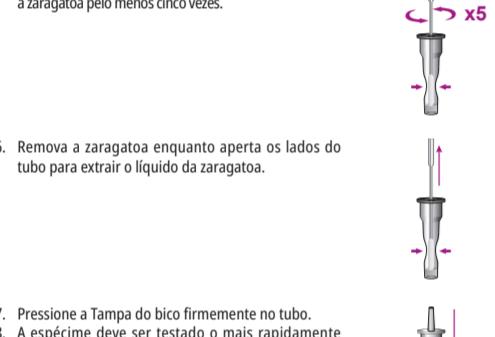
■ PREPARAÇÃO

- Leia as instruções atentamente antes de usar o Teste STANDARD Q COVID-19 Ag.
- Verifique a data de validade na parte traseira da bolsa de alumínio. Não use se a data de validade tiver passado.
- Verifique o dispositivo de teste e o pacote de dessecante dentro da bolsa de alumínio.



■ COLETA DO ESPECÍMENE (Swab nasofaringea)

- Para recolher uma amostra nasofaringea com o uso da zaragatão, insira a zaragatão estéril na narina do paciente, atingindo a superfície da nasofaringe posterior.
- Gire a zaragatão delicadamente, empurrando-o até encontrar resistência na altura do osso turbinado (túmulo nasal).
- Esfregue a zaragatão na superfície da nasofaringe de 3 a 4 vezes com movimentos circulares.
- Remova a zaragatão da narina cuidadosamente.
- Insira a pipeta Spout em um tubo buffer de extração. Gire a zaragatão pelo menos cinco vezes.



- Remova a zaragatão enquanto abre os lados do tubo para extrair o líquido da zaragatão.
- Pressione a Tampa do bico firmemente no tubo.
- A espécime deve ser testado o mais rapidamente possível após recolha.

9. As espécimes podem ser conservados à (15–25 °C)

a temperatura ambiente durante 1 horas ou a 2–8 °C

/ C 36–46 °F por um período de até 4 horas antes de teste.

7. As condições de armazenamento da amostra estiverem fora das instruções abaixo, não use-a.
1. A zaragatão nasofaringea é armazenada em buffer de extração por mais de 4 horas a 53 °C ou por 1 hora a 20 °C.
2. Congelamento da amostra nasofaringea recolhida com uso da zaragatão armazenada em buffer de extração. O congelamento/descongelamento da amostra armazenada em UTM excede 3 ciclos.
3. A zaragatão nasofaringea é armazenada em UTM por mais de 12 horas a 53 °C ou por 8 horas a 20 °C.

[Espécimes no meio de transporte]

- Remove a zaragatão enquanto abre os lados do tubo para extrair o líquido da zaragatão.
- Pressione a Tampa do bico firmemente no tubo.



Recomenda-se a diluição mínima da amostra, uma vez que a diluição pode resultar em diminuição da sensibilidade do teste.

■ ANÁLISE DE AMOSTRA

- Aplique 3 gotas da amostra extraída no poço de amostras do dispositivo de teste.
- Leia os resultados do teste em 15 a 30 minutos.



- Coloque o dispositivo de teste sobre uma superfície plana.
- Dispense a amostra a um ângulo de 90 graus para permitir que as gotas caiam livremente e evitar a formação de bolhas.
- Não leia os resultados do teste depois de 30 minutos. Resultados falsos podem ocorrer.

BIBLIOGRAPHY

- Clinical management of severe acute respiratory infection when novel coronavirus(nCoV) infection is suspected. Interim guidance. WHO.2020
- Diagnostic detection of Wuhan coronavirus 2019 by real-time RT-PCR.2020
- Diagnosis and treatment of pneumonia caused by new coronavirus (trial version 4) National Health Commission. 2020

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