**NAME AND INTENDED USE**

The InteliSwab™ COVID-19 Rapid Test Pro is a single-use lateral flow immunoassay with an integrated swab, intended for the qualitative detection of the nucleocapsid protein antigen from SARS-CoV-2 in anterior nasal samples from individuals 18 years or older when the sample is self-collected or in individuals 15 years or older when the sample is collected by an adult or healthcare provider. The test is authorized for individuals who are suspected of COVID-19 by their healthcare provider within 7 days of symptom onset or from individuals without symptoms or other epidemiological reasons to suspect COVID-19 when tested twice over two or three days with at least 24 hours and no more than 36 hours between tests. Testing is limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, that meet the requirements to perform moderate, high or waived complexity tests. This test is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation.

The InteliSwab™ COVID-19 Rapid Test Pro does not differentiate between SARS-CoV-1 and SARS-CoV-2.

Results are for the identification of SARS-CoV-2 nucleocapsid protein antigen. The SARS-CoV-2 nucleocapsid protein is generally detectable in anterior nasal swab specimens during the acute phase of infection. Positive results indicate that viral antigens have been detected, but clinical correlation with patient history and other diagnostic information is necessary to determine infection status. Positive results do not exclude bacterial infection or coinfection with other viruses. The agent detected may not be the definite cause of the disease. Laboratories within the United States and its territories are required to report all results to the appropriate public health authorities in accordance with local, state, and federal requirements using appropriate LOINC and SNOMED codes, as defined by the Laboratory In Vitro Diagnostics (LVID) Test Code Mapping for SARS-CoV-2 Tests provided by CDC.

Negative results should be treated as presumptive and confirmation with a molecular assay, if necessary, for patient management, may be performed. Negative results do not rule out SARS-CoV-2 infection and should not be used as the sole basis for treatment or patient management decisions, including infection control decisions. Negative results should be considered in the context of an individual’s recent exposures, history and the presence of clinical signs and symptoms consistent with COVID-19.

For serial testing programs, additional confirmatory testing with a molecular test for negative results may be necessary, if there is a high likelihood of SARS-CoV-2 infection, such as in an individual with a close contact with COVID-19 or with suspected exposure to COVID-19 or in communities with high prevalence of infection. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a low likelihood of SARS-CoV-2 infection, such as in individuals without known exposures to SARS-CoV-2 or residing in communities with low prevalence of infection.

The InteliSwab™ COVID-19 Rapid Test Pro is for use under the Food and Drug Administration’s Emergency Use Authorization (EUA) only. The InteliSwab™ COVID-19 Rapid Test Pro is intended for use by medical professionals or trained operators who are proficient in performing tests and trained clinical laboratory personnel or individuals trained in POC settings.

**SUMMARY AND EXPLANATION OF THE TEST**

COVID-19 (coronavirus disease 2019) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first identified in December 2019 in Wuhan, Hubei, China. Due to the increased number of reported cases in nearly 170 countries, the World Health Organization (WHO) publicly recognized this as a pandemic on 11MAR20.
The President of the United States declared the COVID-19 outbreak a national emergency on 13MAR20. Patient's symptoms are similar to influenza with transmission via respiratory droplets from coughing and sneezing. COVID-19 can cause respiratory symptoms, fever, cough, shortness of breath, and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, organ failure in several organs, acute kidney injury, heart problems, blood clots, additional viral and bacterial infections and even death. SARS-CoV-2 is considered contagious whether COVID-19 disease is symptomatic or asymptomatic and patients should self-isolate for 14 days. The presence of SARS-CoV-2 nucleocapsid protein antigen indicates that the individual is currently infected and capable of transmitting the virus.

The InteliSwab™ COVID-19 Rapid Test Pro uses a sandwich capture lateral flow immunoassay to detect SARS-CoV-2 nucleocapsid protein antigen. SARS-CoV-2 nucleocapsid protein antigen is captured and visualized by colloidal gold labeled with SARS-CoV-2 antibodies generating a visible line in the test zone for a positive sample.

**PRINCIPLES OF THE TEST**

The InteliSwab™ COVID-19 Rapid Test Pro is a manually performed, visually read immunoassay for the qualitative detection of SARS-CoV-2 nucleocapsid protein antigen using a proprietary integrated collection swab to directly collect samples from the anterior nasal cavity. The InteliSwab™ COVID-19 Rapid Test Pro is comprised of both a single-use test device and a vial containing a pre-measured amount of a buffered developer solution. The test consists of a sealed pouch with two separate compartments for each component. The InteliSwab™ COVID-19 Rapid Test Pro utilizes a proprietary lateral flow immunoassay procedure.

The assay test strip, which can be viewed through the test device result window, is comprised of a series of components: the blocker pad, the conjugate pad, the nitrocellulose membrane, and finally the absorbent pad. The performance of the assay occurs by hydration and transport of reagents and specimen as they interact across the strip via chromatographic lateral flow.

An anterior nasal sample is collected using the flat pad that is integrated into the test device, followed by swirling the test device in the vial of developer solution. The developer solution facilitates the flow of the sample into the device and onto the test strip. As the sample flows through the device, it rehydrates the reagents on the blocker pad, which contains biotinylated anti-SARS-CoV-2 antibodies. The sample then rehydrates the gold colorimetric reagent, which contains anti-SARS-CoV-2 antibodies. If the sample contains SARS-CoV-2 nucleocapsid protein antigen, it will react with the anti-SARS-CoV-2 antibodies in the blocker pad and conjugate pad and forms a sandwich complex that migrates up the test strip. As the complex continues to migrate up the test strip it encounters the Test (T) Zone and will react with the streptavidin immobilized on the nitrocellulose, a reddish-purple line will appear, qualitatively indicating the presence of SARS-CoV-2 nucleocapsid antigen in the sample. The intensity of the line color is not directly proportional to the amount of antigen present in the sample. If the sample does not contain SARS-CoV-2 nucleocapsid protein antigen, the sandwich complex will not form and the reagents will flow past the Test (T) Zone. Further up the test strip, the sample will encounter the Control (C) Zone. This is a built-in procedural control which serves to demonstrate that the fluid migrated through the test device. For negative results and most positive results a line will form at the Control (C) Zone. In some cases when viral levels are high, the line at the Control Zone may be very faint or may not be present.

Results are interpreted between 30 and 40 minutes after inserting the device into the Developer Vial. Do not read negative results before 30 minutes as it may result in false negative results. Do not read any result after 40 minutes as it may result in inaccurate results.
MATERIALS PROVIDED
InteliSwab™ COVID-19 Rapid Test Pro Kits are available in the following packaging configurations:

<table>
<thead>
<tr>
<th>Components of Kit</th>
<th>25 Count Kit 1001-0614</th>
<th>100 Count Kit 1001-0615</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided Pouch, Each containing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Device (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorbent Packet (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developer Solution Vial (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(each vial contains 0.75 mL of a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>buffered saline solution with a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antimicrobial agent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Stands</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Instructions for Use</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Quick Reference Guide</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

MATERIALS NOT PROVIDED BUT REQUIRED AND AVAILABLE AS AN ACCESSORY TO THE KIT
InteliSwab™ COVID-19 Rapid Test Pro Kit Controls (Catalog #: 1001-0613)
InteliSwab™ COVID-19 Positive Control (1 vial, blue cap, 0.25 mL)
InteliSwab™ COVID-19 Negative Control (1 vial, white cap, 0.25 mL)
Loops (package of 5µL loops)
Instructions for use for InteliSwab™ COVID-19 Rapid Test Pro Kit Controls

InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel (Catalog #: 1001-0599)
InteliSwab™ COVID-19 Limit of Detection (1 device)
InteliSwab™ COVID-19 Low Positive (1 device)
InteliSwab™ COVID-19 Negative (1 device)
Instructions for Use for InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel

MATERIALS REQUIRED BUT NOT PROVIDED
Timer or watch capable of timing 30 to 40 minutes
Biohazard waste container

WARNINGS AND PRECAUTIONS
- For prescription use only.
- The product has not been FDA cleared or approved; but has been authorized by FDA under EUA for use by authorized laboratories; use by laboratories certified under the CLIA, 42 U.S.C. §263a, that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation.
- Federal Law restricts this device to sale by or on the order of a licensed practitioner (U.S. only).
- This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
- The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of IVDs for detection and/or diagnosis of COVID-19
under Section 564(b)(1) of the Federal Food, Drug and Cosmetic Act, 21 U.S.C. § 360bbb-3(b)(1), unless
the declaration is terminated or authorization is revoked sooner.

- Test devices that contain patient samples should be handled as though they could transmit disease. Follow
universal precautions\(^1\) when handling samples, this kit, and its contents. Wear appropriate personal
protection equipment (PPE)\(^2\) and gloves when running the test and handling a patient’s test device. Change
gloves between tests.
- This test is for the detection of SARS-CoV-2 antigen, not for any other viruses or pathogens.
- Laboratories within the United States and its territories are required to report all results to the appropriate
public health agencies.
- Do not use test kit if it is past the expiration date.
- Follow the Instructions for Use to obtain accurate results. Incorrect sampling may result in false results.
- False Negative results can occur if negative results are read before 30 minutes.
- Invalid results can occur if the swab is not stirred at least 10 times.
- If any of the solution in the Developer Vial spills, it may cause invalid results. You need to repeat testing
with a new test.

Device Handling Precautions
- Do not reuse the Test Device and Developer Solution Vial.
- Inspect the Divided Pouch. If the Divided Pouch has been damaged, discard the Divided Pouch and its contents
and select a new Divided Pouch for testing.
- Do not interchange Test Devices and Developer Solution Vials from kits with different lot numbers.
- If the Test Device is not immediately inserted into the Developer Solution after sample collection, remove the
absorbent packet from the Divided Pouch and place the Test Device into the Divided Pouch for transport or until
the device can be inserted into the Developer Solution. The Test Device must be inserted into the Developer
Solution within 30 minutes of collection.
- Adequate lighting is required to read a test result.
- The solution in the tube contains potentially harmful chemicals (Triton X-100 and ProClin 950); however,
laboratory studies have shown them to be nontoxic at the levels contained in the solution. The developer solution
should only be used as directed; do not ingest; keep out of the reach of children; avoid contact with skin and eyes.
If the solution contacts the skin or eye, flush with copious amounts of water. If irritation persists, seek medical
advice: https://www.poison.org/contact-us or 1-800-222-1222.

STORAGE INSTRUCTIONS
Store unused InteliSwab\(^{\text{TM}}\) COVID-19 Rapid Test Pro kits unopened at 2°- 30°C (35°-86°F). Do not open the Divided
Pouch until you are ready to perform the test. If stored refrigerated, ensure that the Divided Pouch is brought to
operating temperature (15°-40°C, 59°-104°F) before opening.

QUALITY CONTROL PROCEDURES

Built-in Control Features
The InteliSwab\(^{\text{TM}}\) COVID-19 Rapid Test Pro for anterior nasal specimens has a built-in procedural control that
demonstrates the assay components have migrated adequately through the device. For negative tests, a reddish-purple
line in the Control (C) Zone of the Result Window indicates that the fluid migrated appropriately through the Test
Device. The line in the Control (C) Zone does not determine if a human sample has been added or if there is an
adequate sample. For most positive tests, a reddish-purple line will appear in the Control (C) Zone and the Test (T)
Zone; however, in cases where the viral load in the sample is very high, the line in the Control (C) Zone may not be
present or may be very faint. (Refer to Test Result and Interpretation of Test Result section in these Instructions for
Use).

External Quality Control
InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are for use with the InteliSwab™ COVID-19 Rapid Test Pro. The InteliSwab™ COVID-19 Rapid Test Kit Controls are specifically formulated and manufactured to ensure performance of the test and are used to verify an operator’s ability to properly perform the test and interpret the results. The COVID-19 Positive Control will produce a positive test result and has been manufactured to produce a faint line in the Test (T) Zone. The COVID-19 Negative Control will produce a negative test result (Refer to Test Result and Interpretation of Test Result section in this Package Insert). Use of Kit Control reagents manufactured by any other source may not produce the required results, and therefore, will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro. If external controls do not produce expected results, testing of individuals should not be performed. Contact OraSure Technologies’ Customer Care if the InteliSwab™ COVID-19 Rapid Test Kit Control reagents do not produce the expected results.

Run the External Controls under the following circumstances:
- Each new operator prior to performing testing on patient specimens,
- When opening a new test kit lot,
- Whenever a new shipment of test kits is received,
- If the temperature of the test kit storage area falls outside of 2°-30°C (36°-86°F), and
- At periodic intervals as dictated by the user facility country, state or local regulations and policies.

Test Procedures for External Controls
Refer to the InteliSwab™ COVID-19 Rapid Test Pro Kit Control Instructions for Use for full instruction on the use of these reagents. It is the responsibility of each laboratory using the InteliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure the performance of the device under its specific locations and conditions of use.

Qualification for New Operators
The InteliSwab™ COVID-19 Visual Reference Panel is available separately for use with the InteliSwab™ COVID-19 Rapid Test Pro. The InteliSwab™ COVID-19 Visual Reference Panel consists of three devices that have been manufactured to represent limit of detection, low positive and negative test result. New operators must be able to correctly interpret all test results in the InteliSwab™ COVID-19 Visual Reference Panel prior to using the InteliSwab™ COVID-19 Rapid Test Pro to test patient samples. Failure to read low intensities can result in the inability to detect specimens near the limit of detection of the InteliSwab™ COVID-19 Rapid Test Pro and may result in false negative results.

INSTRUCTIONS FOR USE
Follow Safety Precautions section in these Instructions for Use.
Gather all the materials you will need. Allow the InteliSwab™ COVID-19 Rapid Test Pro to come to operating temperature (15°-40°C, 59°-104°F) before use. Refer to the External Quality Control section in these Instructions for Use to determine when the InteliSwab™ COVID-19 Rapid Test Kit Pro Controls should be run.

SPECIMEN COLLECTION AND TESTING PROCEDURE
Set the Test Stand at your workspace. Make sure the Test Stand is on a sturdy surface. Use only the Test Stand provided.

1. Open the two chamber pouch by tearing at the notches on the top of each side of the Pouch (see picture 1).
2. Remove the Developer Solution Vial ("Vial") from the Pouch (see picture 2).

3. Hold the Vial firmly in your hand. Carefully remove the cap from the Vial by gently rocking the cap back and forth while pulling it off (see picture 3).

4. Slide the Vial into the top of one of the slots in the Test Stand. **DO NOT** force the Vial into the Stand from the front of the slot as splashing may occur. Make sure the Vial is pushed all the way to the bottom of the slot in the Test Stand (see picture 4). If solution spills out of the vial, you will need to obtain a new test.

5. Instruct the individual to blow their nose into a tissue. **DO NOT** have them clean out their nose with the tissue (see picture 5). Have the individual discard the tissue and wash or sanitize their hands.

6. Have the individual remove the Device from its Pouch (see picture 6).
7. **DO NOT** allow the individual to touch the Flat Pad (*see picture 7*).

8. Check to make sure that an Absorbent Packet is included with the Device (*see picture 8*). If no Absorbent Packet is present, discard the Device and obtain a new Pouch for testing.

9. **DO NOT** cover the two holes on the back of the Device with labels or other materials. Doing so may cause invalid results (*see picture 9*).

10. Direct the individual to place the Flat Pad of the Device into the nostril, firmly pressing the pad against the nasal wall rotating the pad 15 times. Ensure the individual swabs both nostrils 15 times (*see pictures 10*). **If you do not swab both nostrils 15 times each, you may get a false result.**
    Note: Proceed by swabbing the individual, if they are unable to swab themselves.
11. Keep the Test Stand on the flat surface, insert the Device into the Vial and swirl the Device 10 times while making sure the Flat Pad is in the solution. Make sure the flat pad is toward the back of the tube so it contacts the liquid. (see picture 11). Swirling the device less than 10 times may cause invalid results.

12. Leave Device in the Vial making sure that the Flat Pad touches the bottom of the Vial. The Result Window on the Device should be facing you (see picture 12). Make sure the tube and device are at an angle.

13. Start timing the test (see picture 13) by setting the timer for 30 minutes. DO NOT remove the Device from the Vial while the test is running.

14. Pink fluid will appear and travel up the Result Window. The pink fluid will gradually disappear as the test develops (see picture 14).
TEST RESULT AND INTERPRETATION OF TEST RESULT
Interpret results between 30 and 40 minutes. Do not read negative results before 30 minutes as it may result in false negative results. Do not read any result after 40 minutes as it may yield inaccurate results.

NEGATIVE
A test is **Negative** if:
A reddish-purple line appears in the C Zone and NO line appears in the T Zone (see picture 15). The line in the C Zone must be present to interpret a negative test result.

A Negative test result is interpreted as nucleocapsid protein antigen was not detected in the specimen. The individual is presumed negative for COVID-19.

Negative results do not rule out SARS-CoV-2 infection. Individuals without symptoms that test negative should be tested again with at least 24 hours and no more than 36 hours between tests. All negative results are considered presumptive, and confirmation with a molecular assay, if necessary for patient management, may be performed. Negative results should be considered in the context of an individual’s recent exposures, history, and the presence of clinical signs and symptoms consistent with COVID-19.

POSITIVE
A test is **Positive** if:
A reddish-purple line appears in the T Zone and there is a line in the C Zone. Lines may vary in intensity. The test is positive regardless of how faint these lines appear (see pictures 16 and 17).

In some cases the reddish-purple line in the C Zone may not be present or may be very faint if there are high levels of virus in the sample (see picture 18).

A Positive test result is interpreted as nucleocapsid protein antigen was detected in the specimen. The individual is positive for COVID-19. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a low likelihood of COVID-19, such as in individuals without known exposures to COVID-19 or residing in communities with low prevalence of infection.
INVALID
A test is **Invalid** if any of the following occurs:

- NO lines appear on the device *(see picture 19)*, or
- a reddish-purple background in the Result Window makes it difficult to read the result after 30 minutes *(see picture 20)*, or
- any partial line on one side of the C or T Zones *(see pictures 21 and 22)*

An **Invalid** test result means that there was a problem running the test. An **Invalid result cannot be interpreted**. An invalid test result needs to be repeated with a fresh sample and a new test device. Please contact OraSure Technologies’ Customer Care (1-800-ORASURE) if you are unable to obtain a valid test result upon repeat testing.

GENERAL TEST CLEAN-UP
1. Dispose of the used test materials in a biohazard waste container. All equipment and biohazardous waste should be discarded in accordance with country, state, and local laws and policies.
2. Change your gloves between each test to prevent contamination.
3. Use a freshly prepared 10% solution of bleach to clean up any spills.

LIMITATIONS OF THE TEST
1. A negative test result may occur if the level of antigen in a sample is below the limit of detection of the test.
2. Weak Positive samples may take longer to develop and can take the entire 30 minutes for a test line to be present. Therefore, all negative test results must be read at least 30 minutes after inserting the device into the developer vial. Negative test results must not be reported prior to reading the device at 30 minutes.
3. Reading any result after 40 minutes may yield inaccurate test results.
4. The control line only indicates that reagents have properly migrated up the test device. In positive patient samples with high levels of virus, the line at the Control (C) Zone may not be present or may be very faint. The control line does not indicate that an adequate human sample was added to the test device.
5. Positive test results do not rule out co-infections with other pathogens.
6. Potential cross reactivity of the InteliSwab™ COVID-19 Rapid Test with COVID-19 vaccines or therapeutics has not been evaluated.
7. False negative results may occur if a specimen is improperly collected or handled.
8. False negative results are more likely after seven days or more of symptoms.
9. Negative results are presumptive, do not rule out COVID-19 infection and it may be necessary to obtain additional testing with a molecular assay, if needed for patient management.
10. Performance of nasal swabs collected from patients without symptoms or other epidemiological reasons to suspect COVID-19 infection or for serial screening, when tested twice over two to three days with at least 24 but not more than 36 hours between tests has not been determined, a study to support use will be completed.
11. If the differentiation of specific SARS viruses and strains is needed, additional testing, in consultation with state or local public health departments, is required.
12. The performance of this test was established based on the evaluation of a limited number of clinical specimens collected in February and April 2021. The clinical performance has not been established in all circulating variants but is anticipated to be reflective of the prevalent variants in circulation at the time and location of the clinical evaluation. Performance at the time of testing may vary depending on the variants circulating, including newly emerging strains of SARS-CoV-2 and their prevalence, which change over time.
CONDITIONS OF AUTHORIZATION FOR LABORATORY

The InteliSwab™ COVID-19 Rapid Test Pro Letter of Authorization, along with the authorized Fact Sheet for Healthcare Providers, the authorized Fact Sheet for Patients, and authorized labeling are available on the FDA website: https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/in-vitro-diagnostics-euas. However, to assist clinical laboratories using the InteliSwab™ COVID-19 Rapid Test Pro (“your product” in the conditions below), the relevant Conditions of Authorization are listed below:

A. Authorized laboratories* using your product must include, with test result reports, all Fact Sheets. Under exigent circumstances, other appropriate methods for disseminating these Fact Sheets may be used, which may include mass media.

B. Authorized laboratories using your product must use your product as outlined in the authorized labeling. Deviations from the authorized procedures, including the authorized instruments, authorized clinical specimen types, authorized control materials, authorized other ancillary reagents and authorized materials required to use your product are not permitted.

C. Authorized laboratories that receive your product must notify the relevant public health authorities of their intent to run your product prior to initiating tests.

D. Authorized laboratories using your product must have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.

E. Authorized laboratories must collect information on the performance of your product and report to DMD/OHT7-OIR/OPEQ/CDRH (via email: CDRH-EUA-Reporting@fda.hhs.gov) and Ora Sure Technologies, Inc. (via email: customercare@orasure.com) any suspected occurrence of false positive or false negative results and significant deviations from the established performance characteristics of your product of which they become aware.

F. All operators using your product must be appropriately trained in performing and interpreting the results of your product. Use appropriate personal protective equipment when handling this kit, and use your product in accordance with the labeling.

G. OraSure Technologies, Inc., a authorized distributor(s) and authorized laboratories using your product must ensure that any records associated with this EUA are maintained until otherwise notified by the FDA. Such records will be made available to the FDA for inspection upon request.

*The letter of authorization refers to, “Laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, that meet requirements to perform high, moderate or waived complexity tests. This test is authorized for use at the Point of Care (POC) i.e. in patient care settings operating under CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation” as “authorized laboratories.”

PERFORMANCE CHARACTERISTICS

CLINICAL PERFORMANCE

A clinical study to evaluate the performance of the InteliSwab™ COVID-19 Rapid Test Pro was conducted during February and April of 2021 in five (5) geographically diverse sites across the US. A total of 146 individuals with signs and symptoms of COVID-19 within the first seven (7) days of symptom onset completed the study and obtained a valid result. Subjects eighteen (18) years and older independently collected an anterior nasal sample, conducted the test, interpreted and reported their self-test result. The parents of subjects fifteen (15) to seventeen (17) years of age collected the anterior nasal sample, conducted the test, interpreted and recorded the test result for the child. The InteliSwab™ COVID-19 Rapid Test Pro test results were compared to highly sensitive molecular FDA EUA Authorized SARS-CoV-2 assays to determine test performance. The InteliSwab™ COVID-19 Rapid Test Pro when conducted by a lay user correctly identified 84% of positive samples. Additionally, the InteliSwab™ COVID-19 Rapid Test Pro correctly identified 98% of negative samples. The COVID-19 infection rate was 35% (51/146) in this study. The performance is shown in the following table.

<table>
<thead>
<tr>
<th>InteliSwab™ COVID-19 Rapid Test Pro</th>
<th>Comparator Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Positive</td>
<td>43</td>
</tr>
<tr>
<td>Negative</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
</tr>
</tbody>
</table>

Positive Percent Agreement (PPA): 43/51 = 84% (95% CI: 71%, 92%)

Negative Percent Agreement (NPA): 93/95 = 98% (95% CI: 93%, 99%)
Samples Positives by InteliSwab COVID-19 Rapid Test Pro by Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Specimens</th>
<th>Number of Positives</th>
<th>Positivity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 to 17</td>
<td>5</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>18 to 23</td>
<td>21</td>
<td>7</td>
<td>33.3%</td>
</tr>
<tr>
<td>24 to 64</td>
<td>111</td>
<td>33</td>
<td>29.7%</td>
</tr>
<tr>
<td>65+</td>
<td>9</td>
<td>1</td>
<td>11.1%</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>45</td>
<td>30.8%</td>
</tr>
</tbody>
</table>

Samples Positives by InteliSwab COVID-19 Rapid Test Pro by Days Since Symptom Onset

<table>
<thead>
<tr>
<th>Days Since Symptom Onset</th>
<th>PPA with 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>90.9% (10/11) (95% CI: 62.3%-98.4%)</td>
</tr>
<tr>
<td>0-2</td>
<td>90% (18/20) (95% CI: 69.9%-97.2%)</td>
</tr>
<tr>
<td>0-3</td>
<td>79.4% (27/34) (95% CI: 63.2%-89.7%)</td>
</tr>
<tr>
<td>0-4</td>
<td>81.4% (35/43) (95% CI: 67.4%-90.3%)</td>
</tr>
<tr>
<td>0-5</td>
<td>83.3% (40/48) (95% CI: 70.4%-91.3%)</td>
</tr>
<tr>
<td>0-6</td>
<td>84% (42/50) (95% CI: 71.5%-91.7%)</td>
</tr>
<tr>
<td>0-7</td>
<td>84.3% (43/51) (95% CI: 72%-91.8%)</td>
</tr>
</tbody>
</table>

ANALYTICAL PERFORMANCE

Limit of Detection (LoD)

A preliminary LoD was determined by evaluating different concentrations of a SARS-CoV-2 live virus stock (USA_WA1/2020) diluted in nasal matrix. Contrived samples were randomized, and operators were blinded to the sample identities for testing on the InteliSwab™ COVID-19 Rapid Test Pro. The LoD was confirmed as the lowest concentration of SARS-CoV-2 that was detected ≥95% of the time (i.e., concentration where 19 out of 20 test results were positive). The InteliSwab™ COVID-19 Rapid Test Pro LoD was confirmed to be $2.5 \times 10^2$ TCID$_{50}$/mL ($8.0 \times 10^5$ GC/mL). In addition, the LoD of the assay was also determined for the variants in the table below:

<table>
<thead>
<tr>
<th>Variant</th>
<th>Source/Stock/Strain</th>
<th>TCID$_{50}$/mL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK Variant: USA/CA_CDC_5574/2020</td>
<td>BEI NR-54011</td>
<td>$2.8 \times 10^3$</td>
</tr>
<tr>
<td>(B.1.1.7 lineage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa Variant: hCoV-19</td>
<td>BEI NR-54009</td>
<td>$2.72 \times 10^4$</td>
</tr>
<tr>
<td>South Africa/KRISP-K005325/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B.1.351 lineage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil Variant: hCoV-19/Japan/</td>
<td>BEI NR-54982</td>
<td>$5.91 \times 10^4$</td>
</tr>
<tr>
<td>TY7-503/2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(P.1 lineage)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cross-Reactivity (Analytical Specificity) and Microbial Interference

Cross-Reactivity and Microbial Interference studies were conducted to determine if other respiratory pathogens that could be present in a nasal sample could cause a false-positive test result, or interfere with a true positive result. A panel of sixteen (16) viruses, ten (10) bacteria, three (3) fungi, and pooled human nasal wash was evaluated in this study. No cross-reactivity or interference was seen with the following microorganisms when tested at the
concentrations listed in the table below with the exception of SARS-CoV, which resulted in positive test results due to the high homology between SARS-CoV and SARS-CoV-2 nucleocapsid proteins.

<table>
<thead>
<tr>
<th>Potential Cross Reactant</th>
<th>Source/Strain/ID No.</th>
<th>Concentration Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenovirus 1</td>
<td>ATCC VR-1</td>
<td>1.43 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Human Metapneumovirus (hMPV)</td>
<td>Zeptometrix 0810157CF</td>
<td>1.43 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Rhinovirus</td>
<td>ATCC VR-1601</td>
<td>4.45 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Enterovirus 68</td>
<td>ATCC VR-1826</td>
<td>8.0 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Human Coronavirus OC43</td>
<td>Zeptometrix 0810024CF</td>
<td>1.43 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Human Coronavirus 229E</td>
<td>ATCC VR-740</td>
<td>1.43 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>Human Coronavirus NL63</td>
<td>BEI Resources</td>
<td>1.43 X 10^5 TCID_{50}/mL</td>
</tr>
<tr>
<td>SARS-coronavirus</td>
<td>MRI Urbani</td>
<td>7.9 X 10^3 TCID_{50}/mL</td>
</tr>
<tr>
<td>MERS-coronavirus</td>
<td>MRI EMC/2012</td>
<td>2.5 X 10^4 TCID_{50}/mL</td>
</tr>
</tbody>
</table>
Cross reactivity in samples containing HKU1 coronavirus could not be conclusively ruled out through *in silico* comparison of the HKU1 and the SARS-CoV-2 nucleocapsid protein amino acid sequence. Additionally, the SARS-CoV-2 Nucleocapsid protein sequence was BLAST aligned on the NIH NCBI database to the entire set of proteins encoded by *P. jirovecii*. No significant identity was found as a result of this search and thus no interference is expected with the InteliSwab™ COVID-19 Rapid Test Pro, however, cross-reactivity cannot be ruled out.

### Potential Cross Reactant

<table>
<thead>
<tr>
<th>Potential Cross Reactant</th>
<th>Sources/Strain/ID No.</th>
<th>Concentration Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parainfluenza virus 1</td>
<td>ATCC VR-94</td>
<td>1.43 X 10^5 TCID₅₀/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 2</td>
<td>ATCC VR-92</td>
<td>1.43 X 10^5 TCID₅₀/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 3</td>
<td>ATCC VR-93</td>
<td>1.43 X 10^5 TCID₅₀/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 4b&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Zeptometrix 0810060BCF</td>
<td>8.5 X 10^4 TCID₅₀/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 4b&lt;sup&gt;b&lt;/sup&gt;</td>
<td>ATCC VR-1377</td>
<td>8.0 X 10^4 TCID₅₀/mL</td>
</tr>
<tr>
<td>Influenza A</td>
<td>ATCC VR-1894</td>
<td>1.43 X 10^5 CEID₅₀/mL</td>
</tr>
<tr>
<td>Influenza B</td>
<td>ATCC VR-1931</td>
<td>1.43 X 10^5 TCID₅₀/mL</td>
</tr>
<tr>
<td>Respiratory syncytial virus</td>
<td>ATCC VR-26</td>
<td>4.0 X 10^6 PFU/mL</td>
</tr>
<tr>
<td><strong>Bacteria</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Bordetella pertussis</em></td>
<td>ATCC 9797</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Chlamydia pneumoniae</em></td>
<td>ATCC VR-2282</td>
<td>1.0 X 10^6 IFU/mL</td>
</tr>
<tr>
<td><em>Haemophilus influenzae</em></td>
<td>ATCC 49247</td>
<td>1.0 X 10^7 cfu/mL</td>
</tr>
<tr>
<td><em>Legionella pneumoniae</em></td>
<td>Zeptometrix 801645</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em></td>
<td>ATCC 49319</td>
<td>4.48 X 10^5 cfu/mL</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em></td>
<td>ATCC 19615</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Mycoplasma pneumoniae</em></td>
<td>ATCC 15531-TTR</td>
<td>1.0 X 10^4 cfu/mL</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>ATCC 12600</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Staphylococcus epidermidis</em></td>
<td>ATCC 14990</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Mycobacterium tuberculosis</em></td>
<td>Zeptometrix 801660</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><strong>Fungi</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Candida albicans</em></td>
<td>ATCC 14503</td>
<td>5.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td><em>Pneumocystis carinii</em></td>
<td>ATCC PRA-159</td>
<td>1.0 X 10^6 nuclei/mL</td>
</tr>
<tr>
<td><em>P. jiroveci-S. cerevisiae recombinant</em></td>
<td>Zeptometrix 801698</td>
<td>1.0 X 10^6 cfu/mL</td>
</tr>
<tr>
<td>Pooled Human Nasal Wash</td>
<td>Lee Biosolutions 991-26</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<sup>a</sup> Used for Exclusivity Testing  
<sup>b</sup> Used for Microbial Interference
**High Dose Hook Effect**

Potential hook effect in the InteliSwab™ COVID-19 Rapid Test Pro was assessed by loading 50 µL of neat virus stock directly onto the center of the flat pad of test device in triplicate, resulting in a test concentration of $1.0 \times 10^5$ TCID50/mL. No hook effect was seen with the USA-WA1/2020 SARS-CoV-2 isolate.

**Endogenous Interfering Substances**

A study was conducted to determine if any substances, naturally present in respiratory specimens or that may be artificially introduced into the nasal cavity listed in the table interfere in the performance of the InteliSwab™ COVID-19 Rapid Test Pro. In addition to the materials that are found in the nasal cavity, substances that are commonly found on the hands were also tested. Test performance was evaluated in the absence and presence of SARS-CoV-2 (3x LoD). None of the substances listed in the tables below interfered with the performance of the InteliSwab™ COVID-19 Rapid Test Pro.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Source/Item #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Whole Blood (EDTA tube)</td>
<td>American Blood Bank</td>
<td>4%</td>
</tr>
<tr>
<td>Mucin (porcine stomach, type II)</td>
<td>Sigma M2378</td>
<td>0.5%</td>
</tr>
<tr>
<td>Chloraseptic (Menthol/Benzocaine)</td>
<td>Chloraseptic Max</td>
<td>1.5 mg/mL</td>
</tr>
<tr>
<td>NasoGEL (NeilMed)</td>
<td>NeilMed</td>
<td>5% v/v</td>
</tr>
<tr>
<td>Nasal Drops (Phenylephrine)</td>
<td>CVS Health</td>
<td>15% v/v</td>
</tr>
<tr>
<td>Nasal Spray (Oxymetazoline)</td>
<td>CVS Health</td>
<td>15% v/v</td>
</tr>
<tr>
<td>Nasal Spray (Cromolyn)</td>
<td>Nasal Crom</td>
<td>15% v/v</td>
</tr>
<tr>
<td>Zicam</td>
<td>Zicam</td>
<td>5% v/v</td>
</tr>
<tr>
<td>Homeopathic (Alkalol)</td>
<td>Alkalol</td>
<td>10% v/v</td>
</tr>
<tr>
<td>Sore Throat Phenol Spray</td>
<td>Chloraseptic</td>
<td>15% v/v</td>
</tr>
<tr>
<td>Tobramycin</td>
<td>Sigma T4014</td>
<td>4 µg/mL</td>
</tr>
<tr>
<td>Mupirocin</td>
<td>Sigma M7694</td>
<td>10 mg/mL</td>
</tr>
<tr>
<td>Tamiflu (Oseltamivir Phosphate)</td>
<td>Acros 461170050</td>
<td>5 mg/mL</td>
</tr>
<tr>
<td>Fluticasone Propionate</td>
<td>CVS Health</td>
<td>5% v/v</td>
</tr>
<tr>
<td>Biotin</td>
<td>Sigma B4501</td>
<td>3.5 µg/mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance Used</th>
<th>Source/Brand</th>
<th>Amount used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinfectant Wipes (Alkyl(C14 (50%), C12 (40%), C16 (10%) Dimethyl Benzyl Ammonium Chloride, 0.26%)</td>
<td>Lysol</td>
<td>1 wipe</td>
</tr>
<tr>
<td>Bleach Wipes (0.525% bleach)</td>
<td>Hype-wipe</td>
<td>1 wipe</td>
</tr>
<tr>
<td>Hand Sanitizer Gel (70% ethyl alcohol)</td>
<td>CVS</td>
<td>1.038 g</td>
</tr>
<tr>
<td>Hand Lotion</td>
<td>Com Huskers</td>
<td>0.991 g</td>
</tr>
<tr>
<td>Hand Lotion with Aloe</td>
<td>Gold Bond Healing</td>
<td>1.013 g</td>
</tr>
<tr>
<td>Hand Lotion with Coconut Oil, Cocoa Butter, and African Shea Butter</td>
<td>Gold Bond Ultimate Healing</td>
<td>1.067 g</td>
</tr>
<tr>
<td>Hand Soap</td>
<td>Softsoap Fresh Breeze</td>
<td>1.055 g</td>
</tr>
</tbody>
</table>

**Usability Study**

The usability of the InteliSwab™ COVID-19 Rapid Test Pro and the ability of the packaging and labeling to direct untrained users to perform self-testing was evaluated by observation in the clinical study and an additional usability study. A total of 288 subjects were enrolled in the study and were instructed to self-collect or collect a sample from a child, complete the required procedural steps, and interpret the test results unassisted in a simulated home-setting. The overall success of every task completed by all subjects enrolled was determined by unassisted professional observation. Subjects performed 95% (4423/4636) of steps/tasks correctly.

After the completion of the test, the subject (or Parent/Legal Guardian) completed a test usability and satisfaction questionnaire, 99% of subjects indicated that their overall impression of the test was satisfactory or favorable. 98% of subjects found this test to be easy-to-use across 8 different ease of use survey questions. Additionally, 99% of subjects indicated specifically that it was easy to read and understand the test results.
During the usability study, 1.2% of subjects received an invalid result or did not receive a result when conducting the test.

BIBLIOGRAPHY

1. CDC. Universal Precautions For Prevention Of Transmission Of Human Immunodeficiency Virus, Hepatitis B Virus, And Other Bloodborne Pathogens In Health-Care Settings. MMWR 1988; 37(24):377-388.

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>EXPLANATION OF SYMBOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOT</td>
<td>Batch Code</td>
</tr>
<tr>
<td>REF</td>
<td>Catalog Number</td>
</tr>
<tr>
<td>!</td>
<td>Caution, Consult</td>
</tr>
<tr>
<td></td>
<td>Accompanying Documents</td>
</tr>
<tr>
<td></td>
<td>Use By</td>
</tr>
<tr>
<td>RX</td>
<td>Prescription Use</td>
</tr>
<tr>
<td>IVD</td>
<td>In Vitro Diagnostic</td>
</tr>
<tr>
<td></td>
<td>Medical Device</td>
</tr>
<tr>
<td>M</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>PN</td>
<td>Part Number</td>
</tr>
<tr>
<td></td>
<td>Temperature Limitation</td>
</tr>
</tbody>
</table>

220 East First Street
Bethlehem, PA 18015 USA
(800) ORASURE (800-672-7873)
(610) 882-1820

For Technical or Customer Service phone (800) ORASURE (800-672-7873).

Item# 3001-3455–rev. 05/21
HOW TO USE THE INTELSWAB™ COVID-19 RAPID TEST

1. Dispose of the used test materials in a biohazard waste container. All equipment and biohazardous waste should be discarded in accordance with country, state, and local laws and policies.
2. Change your gloves between each test to prevent contamination.
3. Use a hand-pumped 10% solution of bleach to clean up spills.

DO NOT

Leaves your nose into a tissue. If assisting someone, instruct them to blow their nose. DO NOT use tissue to clear out nasal passage. Disinfect nose and wash hands thoroughly dry hands before starting the collection.

READ RESULTS BETWEEN 30 AND 40 MINUTES. TO OBTAIN AN ACCURATE RESULT, DO NOT READ BEFORE 30 MINUTES OR AFTER 40 MINUTES. READING BEFORE 30 MINUTES MAY CAUSE FALSE NEGATIVE RESULTS.

GENERAL TEST CLEAN-UP

1. Pick up one of the two-part developer solution vial, 1 test device and 1 preservative.
2. DO NOT open the pouch containing C T TIMER QUICK REFERENCE GUIDE.
3. Do NOT eat or swallow preservative. DO NOT need for the test.
4. DO NOT ingest packaging in Tyvek.
5. Do NOT EAT NO ES PARA CONSUMIR.
6. Reads results between 30 and 40 minutes.
7. If the test did NOT work properly, Contact OraSure Technologies, Inc. at 1-800-672-7673.
8. If the test is negative, and the person is not contagious, the individual is presumed not to have COVID-19.
9. If the test is not a working and should be repeated, it is a false positive. The test line or control line is not complete all the way across the window, or a reddish-purple background makes it impossible to read the test after 30 minutes. You will need to obtain another test.
10. If the test did NOT work properly, Contact OraSure Technologies, Inc. at 1-800-672-7673.
11. The line on the next to the “C” does not show that an adequate sample has been collected.
12. The photos show how faint the bottom line may be.
13. If the test did NOT work properly, Contact OraSure Technologies, Inc. at 1-800-672-7673.

INTERPRETING RESULTS: Read test results in a well-lit area.

Note: The line next to the “C” does not show that an adequate sample has been collected.

POSITIVE RESULT: LINES IN C AND T ZONES

- The test is POSITIVE!
  - A reddish-purple line appears in the C zone and there is a line in the T zone. Lines may vary in intensity. The test is positive regardless of how faint these lines appear.
  - In some cases, the reddish-purple line in the C zone may not be present or may be very faint if there are high levels of virus in the sample.
- A positive test result is interpreted as nucleocapsid protein antigen detected in the specimen. The individual is positive for COVID-19.
- The test is not working and should be repeated if:
  - no lines are present
  - the test line or control line is not complete all the way across the window, or
  - a reddish-purple background makes it impossible to read the test after 30 minutes.

NEGATIVE RESULT: LINE IN C ZONE

- The test is NEGATIVE!
  - A reddish-purple line appears in the C zone and NO line appears next to the T zone. The line in the C zone must be present to interpret a negative result.
  - A negative result is interpreted as nucleocapsid antigen was not detected in the specimen.
  - The individual is presumed negative for COVID-19.

Reading before 30 minutes may cause a false negative result.

INVALID RESULT: REPEAT WITH NEW DEVICE

- The test is not working and should be repeated if:
  - no lines are present
  - the test line or control line is not complete all the way across the window, or
  - a reddish-purple background makes it impossible to read the test after 30 minutes.

Read results between 30 and 40 minutes. To obtain an accurate result, DO NOT read before 30 minutes or after 40 minutes. Reading before 30 minutes may cause false negative results.
**IMPORTANT INFORMATION ABOUT THE INTELI$WAB$ COVID-19 RAPID TEST PRO**

For prescription use only. For in vitro diagnostic use.

The IntelliSwab® COVID-19 Rapid Test Pro is for the detection of the SARS-CoV-2 virus antigen in anterior nasal samples from individuals 15 years or older. The test is intended for use by medical professionals or trained operators who are proficient in performing tests and trained for use by medical professionals or trained operators.

**DO:**

- Use the IntelliSwab® COVID-19 Rapid Test Pro for testing for COVID-19 infection.
- Follow the instructions for Use (reverse side) to obtain accurate results. Inadequate sampling may result in false results.
- Inspect the two-part pouch. If the two-part pouch has been damaged, discard the two-part pouch and its contents. The results from the IntelliSwab® COVID-19 Rapid Test Pro may not be valid if the two-part pouch is damaged.
- Use adequate lighting to read a test result.
- Use the test device and vial containing fluid only once and dispose of both properly.
- Wash hands thoroughly prior to testing and after use.
- Store the IntelliSwab® COVID-19 Rapid Test Pro in a dry location between 35°F (2°C) and 77°F (25°C). Bring the two-part pouch to room temperature (within 30 minutes) before opening.
- Keep out of reach of children.

**DON'T:**

- Use the IntelliSwab® COVID-19 Rapid Test Pro on children under the age of 15. An adult must perform this test on children between the ages of 15 and 18.
- Use the IntelliSwab® COVID-19 Rapid Test Pro before the expiration date.
- Use if the packaging has been opened or damaged.
- Open the two-part pouch until you are ready to start the test.
- Reuse the test device or vial.

**WHAT IS COVID-19?**

COVID-19 (coronavirus disease 2019) is a contagious virus that may cause mild to severe respiratory illness, affecting other organs and the immune system. The presence of a specific antigen (the SARS-CoV-2 nucleocapsid protein antigen) indicates that an individual is currently infected with COVID-19 (even without the presence of symptoms) and can transmit the virus.

**WHAT IS THE DIFFERENCE BETWEEN A COVID-19 ANTIGEN, A MOLECULAR TEST, AND AN ANTIBODY TEST?**

There may be slight differences in the performance characteristics. The IntelliSwab® COVID-19 Rapid Test Pro is an antigen test. Antigen tests are designed to detect active infection in individuals. A molecular test may appear 2-14 days after exposure and is considered sensitive though breadth of breath, fatigue, body aches, headache, loss of taste or smell, sore throat, congestion, or a cough in an individual with a close contact with COVID-19 or with suspected exposure to COVID-19 in the first 7 days of symptom onset. An antigen test is sensitive to the presence of infection. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a high likelihood of SARS-CoV-2 infection, such as in individuals with known exposures to SARS-CoV-2 or residing in communities with low prevalence of infection. The IntelliSwab® COVID-19 Rapid Test Pro is for use under the Food and Drug Administration’s Emergency Use Authorization (EUA) only.

**WHAT IF THE TEST IS NEGATIVE?**

Negative results do not rule out COVID-19. SARS-CoV-2 coinfection with other viruses is common so symptoms that test negative should be tested again with at least 24 hours and no more than 36 hours between tests. If the second test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative).

- You didn't perform the test correctly, such as not swabbing correctly or not waiting 30 minutes for test results.
- The level of antigen from the COVID-19 infection is very low.
- The patient has signs and symptoms of COVID-19 for more than 7 days. This means you could still possibly have a low-level test result even though you have recovered.

**WHY IS THERE A TEST LINE AND NO CONTROL LINE?**

If you see a test line and no control line, the test is positive. When the test line is high, the line next to the “C” may not be present or may be very faint. The patient may have COVID-19 and still get a different result. If the second test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative).

**WHAT IF THE TEST IS POSITIVE?**

Positive results should be treated as presumptive positive. A COVID-19 antigen test detects genetic material from the virus (RNA). Another type of test is an antibody test. A COVID-19 antibody test detects antibodies that have been triggered by an immune system response to a previous COVID-19 infection. Antibody tests are not suitable to diagnose an active COVID-19 infection.

- The patient may have COVID-19.
- The patient may have COVID-19 and still get a positive result (false positive).

**WHY IS THE SOLUTION IN THE VIAL HARMFUL?**

The solution in the vial contains potentially harmful chemicals—Ethanol (C2H5OH, 96%) for preservatives. Other laboratory studies have shown them to be non-toxic at the levels contained in the solution. The concerned solution should be used as directed; do not ingest, keep out of the COVID-19 in-being-processed, or try to instill with skin and eyes. If the solution contacts the skin or eyes, flush with copious amounts of water for a minimum of 15 seconds. For more advice, visit https://www.pisong.org/contact-us/1-800-222-1222.

**WHAT IF THE TEST IS NON-PRESUMPTIVE?**

Negative results should be treated as presumptive negative. A COVID-19 antigen test detects genetic material from the virus (RNA). Another type of test is an antibody test. A COVID-19 antibody test detects antibodies that have been triggered by an immune system response to a previous COVID-19 infection. Antibody tests are not suitable to diagnose an active COVID-19 infection.

- The patient may have COVID-19.
- The patient may have COVID-19 and still get a positive result (false positive).

**WHAT IS THE TESTING METHOD?**

The IntelliSwab® COVID-19 Rapid Test Pro is a single-use lateral flow immunoassay device. The IntelliSwab® COVID-19 Rapid Test Pro may not be suitable for patients with known sensitivity or hyper-sensitivity to any of the components contained in the test. The IntelliSwab® COVID-19 Rapid Test Pro is not for use in immunocompromised patients or individuals with a weakened immune system.

**HOW IS THE SOLUTION DELIVERED?**

Operational failures may occur in the sample collection. If the sample is not collected correctly, or if the sample is not collected within a specific time interval, the test may not detect COVID-19. In the USA, a test may only be performed in a healthcare facility that is accredited by the College of American Pathologists (CAP). Prior to using this product, the user must have been trained in all aspects of testing. The user should ensure the test is performed in a medical facility where it is not necessary to perform the test on-site. The test is not recommended for use in the home or in a non-medical environment.

**WHERE CAN I OBTAIN THE REAGENTS?**

- The reagents do not flow up the test device. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative). If the test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative). If the test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative). If the test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative). If the test is negative, the patient is likely not infected with COVID-19. If the patient has symptoms, they may have a different virus or type of infection. The patient may have COVID-19 and still get a negative result (false negative).
BIBLIOGRAPHY
2. CDC. Universal Precautions For Prevention Of Transmission Of Human Immunodeficiency Virus, Hepatitis B Virus, And Other Bloodborne Pathogens In Health-Care Settings. MMWR 1988; 37(24):377-388.

EXPLANATION OF SYMBOLS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚡</td>
<td>Batch Code</td>
</tr>
<tr>
<td>✨</td>
<td>Catalog Number</td>
</tr>
<tr>
<td>⚠️</td>
<td>Caution, Consult Accompanying Documents</td>
</tr>
<tr>
<td>📌</td>
<td>Part Number</td>
</tr>
<tr>
<td>🔍</td>
<td>In Vitro Diagnostic Medical Device</td>
</tr>
<tr>
<td>🟢</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>🔥</td>
<td>Temperature Limitation</td>
</tr>
<tr>
<td>🕒</td>
<td>Use By</td>
</tr>
</tbody>
</table>

FOR USE UNDER EMERGENCY USE AUTHORIZATION (EUA) ONLY.

For in vitro Diagnostic Use

These Instructions for Use and the IntelliSwab™ COVID-19 Rapid Test Pro Instructions for Use must be read completely before using the product. Follow the instructions carefully; failure to do so may cause an inaccurate test result. Before proceeding with testing, all operators MUST read and become familiar with Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic. These Kit Controls do not contain live virus and are formulated with non-infections materials.

NAME AND INTENDED USE

The IntelliSwab™ COVID-19 Rapid Test Pro Kit Controls are intended as an external quality control reagents to monitor the performance of the IntelliSwab™ COVID-19 Rapid Test Pro with direct anterior nasal samples. For use only with the IntelliSwab™ COVID-19 Rapid Test Pro.

Run the Kit Controls under the following circumstances:
- Each new operator prior to performing testing on patient specimens,
- When opening a new test kit lot,
- Whenever a new shipment of test kits is received,
- If the temperature of the test kit storage area falls outside of 2°-30°C (35°-86°F), and
- At periodic intervals as dictated by the user facility, country, state or local regulations and policies.

It is the responsibility of each laboratory using the IntelliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure the performance of the device under its specific locations and conditions of use.

SUMMARY AND EXPLANATION OF THE KIT CONTROLS

The IntelliSwab™ COVID-19 Rapid Test Pro Kit Controls are formulated using a nucleocapsid recombinant antigen in a PBS+1% BSA solution. The Kit Controls are specifically formulated and manufactured to ensure proper performance of the test. The COVID-19 Positive Control will produce a reddish-purple line at the Test (T) Zone. The COVID-19 Negative Control will generate a negative test result (no line at the T Zone). Both controls will produce a reddish-purple line in the Control (C) Zone. Refer to Test Result and Interpretation of Test Result section of the IntelliSwab™ COVID-19 Rapid Test Pro Instructions for Use. Use of kit control reagents manufactured by any other source will not meet the requirements for an adequate quality assurance program for the IntelliSwab™ COVID-19 Rapid Test Pro.
MATERIALS PROVIDED
InteliSwab™ COVID-19 Rapid Test Pro Kit Controls
Each Kit Control box contains an IFU and two vials (one COVID-19 Positive Control and one COVID-19 Negative Control) as described below:

COVID-19 Positive Control
One blue-capped vial containing 0.25 mL of SARS-CoV-2 nucleocapsid recombinant antigen diluted in Phosphate-Buffered Saline with 1% Bovine Serum Albumin. Preservative: 2-methyl-4-isothiazolin-3-one.

COVID-19 Negative Control
One white-capped vial containing 0.25 mL of Phosphate-Buffered Saline with 1% Bovine Serum Albumin. Preservative: 2-methyl-4-isothiazolin-3-one.

Specimen Collection Loops

MATERIALS REQUIRED AND PROVIDED in the InteliSwab™ COVID-19 Rapid Test Pro Kit
Divided Pouches, each containing a Test Device, an Absorbent Packet, and a Developer Solution Vial
Test Stands
Instructions for Use

MATERIALS REQUIRED BUT NOT PROVIDED
Timer or watch capable of timing 30 minutes
Latex, vinyl, or nitrile disposable gloves
Biohazard waste container

WARNINGS
For in vitro Diagnostic Use
• These Instructions for Use must be read completely before using the product.
• Follow the instructions carefully when performing the InteliSwab™ COVID-19 Rapid Test Pro. Failure to do so may cause an inaccurate test result.
• This product has not been FDA cleared or approved, but has been authorized by FDA under an EUA for use by authorized laboratories; for use by laboratories certified under CLIA that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation. – This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
• The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Federal Food Drug and Cosmetic Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or the authorization is revoked sooner.
• Before proceeding with testing, all study personnel MUST read and be familiar with Universal Precautions and Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19).”

PRECAUTIONS
Safety Precautions
• Handle Kit Controls and materials in contact with Kit Controls as if capable of transmitting infectious agents.
• Dispose of all Kit Controls and materials used in the test procedure in a biohazard waste container. All equipment and biohazardous waste should be discarded in accordance with country, state, and local laws and policies.
• Wear disposable gloves while handling and testing the Kit Controls. Dispose of used gloves in a biohazard waste container.
• Use of kit control reagents manufactured by any other source will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro.

EXPECTED RESULTS
COVID-19 Negative Control
The COVID-19 Negative Control will produce a Negative test result. A single line should be present in the Result Window in the Control (C) Zone and NO line should be present in the Test (T) Zone. This indicates a Negative test result.

COVID-19 Positive Control
The COVID-19 Positive Control will produce a Positive test result and has been manufactured to produce a very faint line at the Test (T) Zone. Two lines should be present in the Result Window. A line in the Control (C) Zone and a line in the Test (T) Zone should be present. This indicates a Positive test result. The lines will not necessarily be the same intensity.

NOTE: If the test result for either the COVID-19 Negative Control or the COVID-19 Positive Control is not as expected, the test should be repeated using a new Test Device, Developer Solution Vial and control specimen.

LIMITATIONS
The InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are quality control reagents for use only with the InteliSwab™ COVID-19 Rapid Test Pro.

STORAGE INSTRUCTIONS
Store the InteliSwab™ COVID-19 Rapid Test Pro Kit Controls at 2°C–8°C (36°F–46°F). Do not use the Kit Controls beyond the expiration date printed on the outer box. Open the Kit Control vials only when you are performing tests. Recap and store the vials in their original box at 2°C–8°C (36°F–46°F) after use. Once opened, Kit Controls should be discarded after one week.

DIRECTIONS FOR USE
General Test Preparation
Perform procedures according to the General Test Preparation section of the InteliSwab™ COVID-19 Rapid Test Pro IFU.

TEST PROCEDURE
1. Open a Kit Control vial containing the control reagent.
2. Insert the rounded end of an unused Specimen Collection Loop into the vial of control reagent. Visually inspect the loop to make sure that it is completely filled with the control reagent. Use separate unused Specimen Collection Loops for each control reagent.
3. Immediately immerse the control-reagent-filled Specimen Collection Loop into the Developer Vial. Use the Specimen Collection Loop to stir the specimen in the developer solution. Remove the Specimen Collection Loop from the Developer Vial and discard the used loop in a waste container.
4. Remove the Test Device from the Divided Pouch without touching the flat pad. Insert the Test Device, flat pad first, into the Developer Vial containing the specimen. Be sure that the Result Window is facing towards you and the flat pad touches the bottom of the Developer Vial.
5. Leave the Test Device in the Developer Solution Vial and start a timer. Do not remove the Test Device from the vial until you have read the results. Read the results in a fully lighted area after 30 minutes, but no more than 40 minutes. Read the results as described in the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro IFU.
6. Dispose of the used test materials in a waste container.
**BIBLIOGRAPHY**


2. CDC. Universal Precautions For Prevention Of Transmission Of Human Immunodeficiency Virus, Hepatitis B Virus, And Other Bloodborne Pathogens In Health-Care Settings. MMWR 1988; 37(24):377-388.

---

**EXPLANATION OF SYMBOLS**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOT</td>
<td>Batch Code</td>
</tr>
<tr>
<td>IVD</td>
<td>In Vitro Diagnostic Medical Device</td>
</tr>
<tr>
<td>REF</td>
<td>Catalog Number</td>
</tr>
<tr>
<td>Manufacturer</td>
<td></td>
</tr>
<tr>
<td>Caution, Consult Accompanying Documents</td>
<td>Temperature Limitation</td>
</tr>
<tr>
<td>PN</td>
<td>Part Number</td>
</tr>
<tr>
<td>Use By</td>
<td></td>
</tr>
</tbody>
</table>

For Technical or Customer Service within the United States, phone (800) ORASURE (800-672-7873). For customers outside the United States, phone +001 610 882 1820 or go to www.OraSure.com

---

**NAME AND INTENDED USE**

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is intended to assist new operators in becoming proficient at reading specimens with antigen levels near the limit of detection of the device. The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is comprised of InteliSwab™ COVID-19 Rapid Test Pro devices that have been designed to represent reading intensities of limit of detection, low positive, and negative test results. The limit of detection test device is indicative of specimens with antigen levels at the limit of detection of the device. It is the responsibility of each laboratory using the InteliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure proficiency of new operators in their ability to interpret test results. The clinical performance of this device was established based on an operator's ability to read visual intensities at the Test (T) Zone at all levels including very weak lines representing low antigen levels.

**SUMMARY AND EXPLANATION OF THE COVID-19 VISUAL REFERENCE PANEL**

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel consists of three devices that have been manufactured to represent limit of detection, low positive, and negative test results. The devices are specifically formulated and manufactured to assist new operators in becoming proficient at reading specimens with antigen levels near the limit of detection of the device. The COVID-19 Limit of Detection Device has a very faint reddish-purple line at the Test (T) Zone. The COVID-19 Low Positive Device has a reddish-purple line at the Test (T) Zone. The COVID-19 Negative Device does not have a line at the Test (T) Zone. All devices have a reddish-purple line at the Control (C) Zone. Refer to Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use on how to interpret the devices.

This panel is to be used to assist new operators with becoming proficient at reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro results at or near the limit of detection of the device. The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is NOT to be used as a quality control device to set intensity values used as a cutoff for reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro devices. Any line at the Test (T) Zone is considered a positive result regardless of how faint the line appears.
MATERIALS REQUIRED AND PROVIDED in the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel

- Foil Pouch containing three predetermined InteliSwab™ COVID-19 Rapid Test Pro devices representing limit of detection, low positive and negative test results as described below.

1. COVID-19 Limit of Detection Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured at a predetermined reactivity level to produce a positive test result consistent with the limit of detection of the device.

2. COVID-19 Low Positive Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured at a predetermined reactivity level to produce a positive test result.

3. COVID-19 Negative Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured to produce a negative test result.

Instructions for Use

MATERIALS REQUIRED BUT NOT PROVIDED

- Latex, vinyl, or nitrile disposable gloves

WARNINGS For in vitro Diagnostic Use

- These Instructions for Use must be read completely before using the product.
- Follow the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use for instructions on how to interpret the devices.
- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel when stored protected from light (either pouched or unpouched) is stable through the expiration date printed on the pouch. If not protected from light or stored above indicated temperature, the unpouched device should be discarded after 15 days.
- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is NOT to be used as a quality control device to set intensity values used as a cutoff for reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro devices. Any line at the Test (T) Zone is considered to be a positive result regardless of how faint the line appears.
- All testing MUST be conducted under appropriate biosafety conditions in accordance with CDC guidelines.¹ All study personnel conducting testing MUST read and be familiar with Universal Precautions.²
- This product has not been FDA cleared or approved, but has been authorized by FDA under an EUA for use by laboratories certified under CLIA that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation. – This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
- The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 under Section 584(b)(1) of the Federal Food Drug and Cosmetic Act, 21 U.S.C. § 360bbb3(b)(1), unless the declaration is terminated or the authorization is revoked sooner.

PRECAUTIONS

Safety Precautions

- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel does not contain potentially infectious materials. Hazardous disposal is only required if used in areas containing infectious materials.
- Use of Visual Reference Panels manufactured by any other source will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro.

STORAGE INSTRUCTIONS

Store the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel at 15°-30°C (59°-86°F). Do not use the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel beyond the expiration date printed on the foil pouch. Open the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel pouch only when qualifying new operators in interpreting test results. Reseal and store the devices in their original foil pouch at 15°-30°C (59°-86°F) after use. If not protected from light or stored above the indicated temperatures, the un-pouched device should be discarded after 15 days.

DIRECTIONS FOR USE

Test Procedure

Note: The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel should be read and interpreted in the same location that testing and interpreting the InteliSwab™ COVID-19 Rapid Test Pro occurs.

1. Open the foil pouch containing the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel.
2. Pull out the three devices contained within the foil pouch.
3. Note the date the pouch was opened on the device labels or the pouch label.
4. Follow the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use for instructions on how to interpret the devices.

EXPECTED RESULTS

COVID-19 Limit of Detection Device

The COVID-19 Limit of Detection Device has been manufactured to have a very faint reddish-purple line at the Test (T) Zone. A reddish-purple line should be present in the Result Window in both the Control (C) Zone and the Test (T) Zone. This indicates a weakly positive test result consistent with the limit of detection of the device. The Control (C) Zone and the Test (T) Zone lines will not be the same intensity.

COVID-19 Low Positive Device

The COVID-19 Low Positive Device has been manufactured to have a reddish-purple line at the Test (T) Zone. A reddish-purple line should be present in the Result Window in both the Control (C) Zone and the Test (T) Zone. This indicates a positive test result. The Control (C) Zone and the Test (T) Zone lines will not be the same intensity.

COVID-19 Negative Device

The COVID-19 Negative Device has been manufactured to have a line at the Control (C) Zone. A single line should be present in the Result Window in the Control (C) Zone and NO line should be present in the Test (T) Zone. This indicates a negative test result.

NOTE: If a new operator is unable to interpret all devices provided as part of the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel, they are not considered to be proficient at reading and interpreting the InteliSwab™ COVID-19 Rapid Test Pro. Failure to read at low intensities can result in the inability to detect specimens near the limit of detection of the InteliSwab™ COVID-19 Rapid Test Pro and may result in false negative results.

LIMITATIONS

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is for use only with the InteliSwab™ COVID-19 Rapid Test Pro.