

# **Status™ COVID-19/Flu A&B**

## **Rapid Immunoassay for Direct Detection and**

### **Differential Diagnosis of SARS-CoV-2, Influenza Type A, and Type B Antigens**

- For *In Vitro* Diagnostic Use
- For Prescription Use Only
- CLIA Complexity-WAIVED for Use with Anterior Nasal and Nasopharyngeal Swab
- Certificate of Waiver is required to perform the test in a waived setting
- Laboratories with a Certificate of Waiver must follow the manufacturer's instructions for performing the test
- Failure to follow the instructions or any modification to the manufacturer's instructions will result in the test being classified as high complexity

Item No. 33225

## **Intended Use**

The **Status™ COVID-19/Flu A&B** test is a lateral flow immunoassay intended for the qualitative detection and differentiation of influenza A and influenza B nucleoprotein antigens and SARS-CoV-2 nucleocapsid antigen directly from nasopharyngeal (NP) or anterior nasal swab (ANS) specimens from individuals with signs and symptoms of respiratory tract infection. Clinical signs and symptoms of respiratory viral infection due to SARS-CoV-2 and influenza can be similar.

All negative results are presumptive and should be confirmed with a molecular assay, if necessary, for patient management. Negative results do not rule out infection with influenza or SARS-CoV-2 and should not be used as the sole basis for treatment or patient management decisions.

Positive results do not rule out bacterial infection or co-infection with other viruses.

## **Summary and Explanation**

Influenza is a highly contagious acute viral infection of the respiratory tract. It is a communicable disease easily transmitted from person to person through aerosol droplets excreted when sneezing and coughing. Common symptoms include high fever, chills, headache, cough, sore throat, and malaise. The type A influenza virus is more prevalent and is the primary pathogen associated with serious epidemics. The type B virus causes a disease that is generally not as severe as that caused by the type A virus.

An accurate diagnosis of influenza based on clinical symptoms is difficult because the initial symptoms of influenza are similar to those of numerous other illnesses. Therefore, it can be confirmed only by laboratory diagnostic testing.<sup>1</sup> Early differential diagnosis of influenza type A or type B can allow for proper treatment with appropriate antiviral therapy while reducing the incidence of inappropriate treatment with antibiotics. Early diagnosis and treatment are of particular value in a clinical setting where an accurate diagnosis can assist the healthcare professional with the management of influenza patients who are at risk for complications.<sup>2</sup>

In December 2019, a cluster of atypical pneumonia patients epidemiologically linked to a wet market in Wuhan (Hubei province, China) was detected. Initially, the novel coronavirus was named 2019-nCoV. Later it was named the SARS-CoV-2 virus, as it is very similar to the one that caused the outbreak of severe acute respiratory disease (SARS) in 2003. At the end of January 2020, the World Health Organization (WHO) declared the new infectious disease COVID-19 a global emergency.

On 11 March 2020, the WHO recognized the new infectious disease as a pandemic. COVID-19 has demonstrated the capability of spreading rapidly, leading to significant impacts on the healthcare system and causing societal disruption. The ongoing COVID-19 pandemic has infected millions of people worldwide. To respond effectively to the COVID-19 outbreak, rapid detection of cases, stringent performance assessment, and increase in the current diagnostic capacity are still urgently needed. The symptoms of COVID-19 are similar to those of other viral respiratory disease and include fever or chills, cough, shortness of breath or difficulty of breathing, fatigue, muscle or body aches, headache, the new loss of taste or smell, sore throat, congested or runny nose, nausea or vomiting or diarrhea, etc. As the early symptoms of COVID-19 are similar to those of seasonal Influenza A or B, a rapid detection test to specifically diagnose symptomatic patients is urgently needed.

The performance of this test was established based on the evaluation of a limited number of clinical specimens. Clinical performance has not been established with 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.

## Principle of Procedure

The **Status™ COVID-19/Flu A&B** test is a lateral flow immuno-chromatographic assay which utilizes the chemical extraction of viral antigens followed by solid-phase immunoassay technology. The **Status™ COVID-19/Flu A&B** test is designed to detect antigens from SARS-CoV-2, influenza A, and /or influenza B in nasopharyngeal or anterior nasal swab specimens from individuals with signs and symptoms of respiratory infection. It is intended to aid in the rapid differential diagnosis of SARS-CoV-2, influenza A, and /or influenza B viral infections. The **Status™ COVID-19/Flu A&B** test is validated for use with direct specimens without transport media.

In the test procedure, a nasopharyngeal or anterior nasal swab specimen is collected and placed into extraction reagent in the Extraction Well of the test device for one minute. During this time, the antigen is extracted from disrupted virus particles. The test device is then raised, tapped, and laid back down onto a level surface. Through this simple action, the solution of extracted specimen flows onto the test strip and migrates through the pads and membrane of the test strip. The pads contain detector antibodies conjugated to gold dye and the membrane contains immobilized capture antibodies. If SARS-CoV-2, influenza A, and/or influenza B antigens are present in the specimen, they will react with anti-SARS-CoV-2 antibody coupled to gold dye particles and/or anti-influenza antibody coupled to gold dye particles, migrate through the membrane as antigen-antibody-dye complexes, bind to the immobilized capture antibody line(s) on the membrane, and generate a colored line in the specific test line position. The rest of the sample and unbound/bound dye complexes continue to migrate to the Control line position (Ctrl), where immobilized antibodies to the anti-SARS-CoV-2 and anti-influenza antibodies capture the dye complexes and form the Control line. Formation of the Control line serves as an internal control to demonstrate that test reagents are functional, antibody-dye conjugates in the dye pad have been hydrated and released and that sufficient sample has been applied to allow for migration through the Test and Control lines. If the Control line does not appear within the designated incubation time, the result is invalid, and the test should be repeated using a new test device and specimen.

**Status™ COVID-19/Flu A&B** test has three Test lines, one for SARS-CoV-2(CoV19), one for influenza A (Flu A), and one for influenza B (Flu B). The three Test lines allow for the separate and differential identification of SARS-CoV-2, influenza A, and/or B from a single specimen. If any Test line appears in the test result window, together with the Control line, the test result is positive for SARS-CoV-2 and/or influenza. The test detects, but does not differentiate, between the SARS-CoV and SARS-CoV-2 viruses.

# Reagents

## Materials Provided

Each **Status™ COVID-19/Flu A&B** kit contains enough reagents and materials for 25 tests. The following components are included in a kit.

- **Status™ COVID-19/Flu A&B** test devices (25): The test strip in each device contains mouse monoclonal antibodies to nucleocapsid protein of influenza A, influenza B and SARS-CoV-2. The device is individually pouched.
- Extraction Reagent in Vials (25): For use with swab specimens; 300 µL of Phosphate buffer with detergents and preservative
- Sterile Swabs (25): For swab specimen collection
- Positive Control Swab (1): Influenza A, B, and SARS-CoV-2 antigen (non-infective recombinant nucleocapsid protein)
- Negative Control Swab (1): Inactivated Group B Streptococcus antigen (non-infective)
- Package Insert/Instructions for use (1)
- Quick Reference Instructions (1)

## Materials Required, But Not Provided

- Timer

## Precautions/Warnings

- Read all instructions carefully before performing the test. Failure to follow the instructions may result in inaccurate test results.
- ***Do not use for individuals who have had symptoms for more than 5 days or no symptoms at all.***
- Ensure that there is sufficient lighting for testing and interpretation of results.
- Do not interchange the kit contents from different lots.
- Do not use this test for individuals who recently received nasally administered influenza A or influenza B vaccine, as they may cause false positive test results after vaccination.
- Wear a safety mask or other face-covering when collecting a specimen.
- Test components are single use. Do not re-use.
- Do not use kit past its expiration date printed on the outer packaging.
- Do not touch the swab tip.
- Once opened, the test device should be used within 4 hours when exposed to ambient temperature and humidity.
- ***Do not read test results before 15 minutes or after 20 minutes. Results read before 15 minutes or after 20 minutes may lead to a false positive, false negative, or invalid result.***
- The **Status™ COVID-19/Flu A&B** test is only intended for use with direct nasopharyngeal or anterior nasal swab specimens and is not validated or authorized for use with viral transport media.
- Inadequate or inappropriate sample collection, storage, and transport may yield false test results.
- Dispose of containers and unused contents in accordance with federal, state, and local regulatory requirements.
- Use only the swabs provided for collecting specimens. Other swabs may not work properly.
- Do not smoke, eat, or drink in areas in which specimens or kit reagents are handled.
- Wear disposable gloves while handling kit reagents or specimens and thoroughly wash hands afterwards.
- All specimens should be handled as if they are capable of transmitting disease. Observe established precautions against microbiological hazards throughout all procedures and follow the standard procedures for proper disposal of specimens and test devices.

- The **Status™ COVID-19/Flu A&B** test device should remain in its original sealed pouch until ready for use. Do not use the test if the seal is broken or the pouch is damaged.
- If infection with a novel influenza A virus is suspected based on current clinical and epidemiological screening criteria recommended by public health authorities, the specimen should be collected with appropriate infection control precautions for novel virulent influenza viruses and sent to state or local health departments for testing.
- For the most up to date information on COVID-19, please visit: [www.cdc.gov/COVID19](https://www.cdc.gov/COVID19)
- **Keep testing kit and kit components away from children and pets before and after use. Avoid contact with your [e.g., skin, eyes, nose, or mouth]. Do not ingest any kit components. The reagent solution contains harmful chemicals (see table below). If the solution contacts your [e.g., skin, eyes, nose, or mouth], flush with large amounts of water. If irritation persists, seek medical advice: <https://www.poisonhelp.org> or 1-800-222-1222.**

Chemical Name	GHS Code for each Ingredient	Concentrations
Sodium Azide	H300, Acute Tox, Oral H310, Acute Tox, Dermal	0.09 %

## Storage and Stability

The **Status™ COVID-19/Flu A&B** test may be stored at 2-30°C (35-86°F) in the original sealed pouch, away from direct sunlight. Do not freeze. Kit contents are stable until the expiration date printed on the pouch or box. Do not use after the expiration date.

## Specimen Collection and Preparation

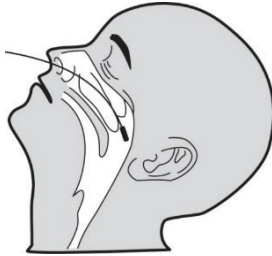
- Inadequate or inappropriate specimen collection, storage, and transport are likely to yield false negative test results. Training in specimen collection is highly recommended because of the importance of specimen quality.
- To collect nasopharyngeal or anterior nasal swab specimens, only the swab provided in the **Status™ COVID-19/Flu A&B** test kit should be used.
- Use fresh samples for best performance. Freshly collected specimens should be tested immediately.
- Transport media should not be used. This test has not been validated or authorized using viral transport media.

## Specimen Collection Procedure

Good sample collection is the most important first step for an accurate test result. Therefore, carefully follow the instructions below for collection of nasopharyngeal or anterior nasal swab specimens to obtain as much secretion as possible.

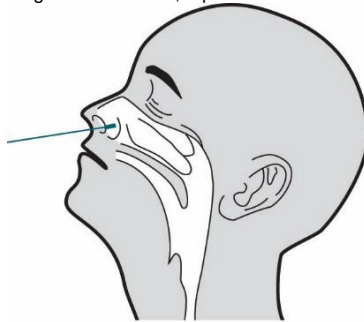
### To collect a Nasopharyngeal Swab Specimen

Use the flocked swab provided in the **Status™ COVID-19/Flu A&B** test kit only. Tilt patient's head back 70 degrees. Gently and slowly insert a mini tip swab with a flexible shaft through the nostril parallel to the palate (not upwards) until resistance is encountered or the depth is equivalent to the distance from the ear to the nostril of the patient, indicating contact with the nasopharynx. Gently rub and roll the swab. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it. Specimens can be collected from both sides using the same swab, but it is not necessary to collect specimens from both sides if the mini tip is saturated with fluid from the first collection. If a deviated septum or blockages create difficulty in obtaining the specimen from one nostril, use the same swab to obtain the specimen from the other nostril.



### To collect an Anterior Nasal Swab Specimen

Use a flocked swab provided in the **Status™ COVID-19/Flu A&B** only. Insert the entire soft end of the swab into the patient's nostril no more than  $\frac{3}{4}$  of an inch (1.5 cm) into the patient's nose. Slowly rotate the swab, gently pressing against the inside of the patient's nostril at least 4 times for a total of 15 seconds. Get as much secretion as possible on the soft end of the swab. Gently remove the swab. Using the same swab, repeat in the second nostril with the same end of the swab.



### Test Procedure

#### Procedural Notes

- The test procedure below must be followed to obtain accurate and reproducible results.
- Reagents, specimens, and devices must be at room temperature (18-30°C) for testing.
- Do not open the foil pouch until you are ready to perform the test.
- Label the device with the patient identification or control to be tested.
- Place test device on a level surface.

## Test Procedure

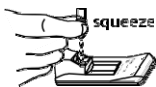
1. Tear the tab off the Extraction Reagent vial and squeeze it to dispense all of the solution into the Extraction Well of the test device.
2. Insert the specimen swab into the Swab Stand in the Extraction Well and rotate it 3 times to mix the specimen. Incubate for 1 minute with the swab in Extraction Well. Rotate swab 3 times again to mix the specimen. Remove from Swab Stand and discard the swab.

**Note: False negative results can occur if the swab is not rotated as instructed above.**

3. Raise the device upright (see diagram). Let it stand for 1-2 seconds. Gently tap the device to ensure that the liquid flows into the hole. Lay the device back down onto the flat surface. Start timing – 15 minutes.
4. Read results at 15 minutes. Results should not be read after 20 minutes.

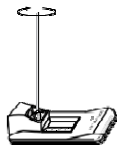
**Note: To ensure proper test performance, it is important to read results at 15 minutes. False positive or false negative results can occur if the test is not read between 15 and 20 minutes.**

**1**



Tear the tab off the Extraction Reagent Vial and dispense entire contents into the Extraction Well.

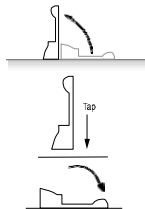
**2**



Insert the specimen swab in the Swab Stand.

- Rotate swab 3 times to mix the specimen.
- Let stand 1 minute.
- Rotate swab 3 times again and discard the swab.

**3**



Raise the device upright and let stand 1–2 seconds.

Gently tap the device to ensure the liquid flows into the hole.

Lay the device back down.

Set a timer for 15 minutes.

**4**

Read test results at 15 minutes.

**NOTE: False positive or false negative results can occur if the test is not read between 15 and 20 minutes.**

## Interpretation of Results

**Positive:** Determination of a positive result is made at fifteen (15) minutes. A reddish-purple Control line (Ctrl position) and a reddish-purple Test line (Flu A, Flu B or CoV19 position) indicate that Influenza A, B and/or SARS-CoV-2 antigen has been detected, and the test is positive. Lines at the Flu A and Ctrl positions indicate the presence of Influenza type A viral antigen, lines at the Flu B and Ctrl positions indicate the presence of Influenza type B viral antigen, and lines at the CoV19 and Ctrl positions indicate the presence of SARS-CoV-2 viral antigen in the specimen. Any faint visible reddish-purple lines at Flu A, Flu B, and CoV19 with control line (Ctrl) should be read as positive.

**Note:** The Test line (reddish-purple line) may vary in shade and intensity (light or dark, weak, or strong) depending on the concentration of antigen detected. The intensity of the Control line should not be compared to that of the Test line(s) for the interpretation of the test result.

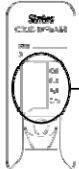








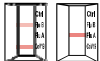
**NOTE:** Co-infection with Influenza A, B and/or SARS-CoV-2 is rare. If results are positive for more than one antigen, i.e., Flu A, B and/or COVID-19, the patient specimen should be re-tested with a new patient sample and new test kit. Repeatable "dual positive" results should be confirmed by an FDA-cleared molecular assay before reporting results.

**Negative:** A reddish-purple Control line (Ctrl position) only, with no Test line at the Flu A, Flu B, or CoV19 positions, indicates that Influenza A, B antigen or SARS-CoV-2 antigen has not been detected, and the test is negative.

**Determination of negative results should not be made before 15 minutes.**

**Note:** Negative results are presumptive and may be confirmed with a molecular assay, if necessary, for patient management.

**Invalid:** A reddish-purple line should always appear at the Control line position (Ctrl position). If a line does not form at the Control line position in 15 minutes, the test result is invalid. Re-test with a new swab and a new test device. If the problem persists please contact LifeSign's Technical Support via email: [technical@lifesignmed.com](mailto:technical@lifesignmed.com), or via phone at 1-800-526-2125.

INTERPRETATION OF RESULTS		
 <p><b>A reddish purple CoV19, Flu A and/or Flu B Line(s) with Ctrl Line is positive.</b></p> <div style="display: grid; grid-template-columns: 1fr 1fr 1fr; gap: 10px;"> <div>  <p>Flu A line: Influenza type A</p> </div> <div>  <p>Flu B line: Influenza type B</p> </div> <div>  <p>CoV19 line: COVID-19</p> </div> </div> <div style="display: grid; grid-template-columns: 1fr 1fr 1fr; gap: 10px;"> <div>  <p>Flu A &amp; CoV19 lines: Influenza type A &amp; COVID-19</p> </div> <div>  <p>Flu B &amp; CoV19 lines: Influenza type B &amp; COVID-19</p> </div> <div>  <p>Flu A &amp; Flu B lines: Influenza type A &amp; B</p> </div> <div>  <p>Flu A, Flu B &amp; CoV19 lines: Influenza type A, B &amp; COVID-19</p> </div> </div> <p><b>*NOTE:</b> Co-Infection with Influenza A, B and/or SARS-CoV-2 is rare. If results are positive for more than one antigen, i.e., Flu A, B and/or COVID-19, the patient specimens should be re-tested with a new patient sample and new test kit. Repeatable "dual positive" results should be confirmed by an FDA-cleared molecular assay before reporting results.</p>	<p><b>Ctrl Line only Negative (-)</b></p>  <p>Negative Results are presumptive and may be confirmed with a molecular assay, if necessary, for patient management.</p>	<p><b>No Ctrl Line Invalid</b></p>  <p>A reddish-purple colored line should always appear at the Control line (Ctrl) position. If a line does not form at the Control line position in 15 minutes, the test result is invalid and the test should be repeated with a new sample and new test device.</p>
<p><b>Note:</b> Positive test lines are usually very prominent but at times may vary in shade and intensity. A line of any intensity or thickness that appears in the Flu A, Flu B, or CoV19 region is considered a positive result. The intensity of the Control line should not be compared to that of the test line for the interpretation of the test result.</p> <p>Take time to look at test lines very carefully. If you see a very light or faint test line appear, this is considered a POSITIVE result.</p>		

## Limitations

- The performance of this test was established based on the evaluation of a limited number of clinical specimens collected between September 2023 and October 2024. There is a risk of false negative results due to the presence of novel, emerging respiratory virus variants. Test accuracy may change as new virus variants of COVID-19 and influenza emerge. Performance at the time of testing may vary depending on the variants circulating, including newly emerging strains of COVID-19 and influenza and their prevalence, which change over time. Additional testing with a laboratory-based molecular test (e.g., PCR) should be considered in situations where a new virus or variant is suspected
- This test is read visually. Because these lines can be very faint, users with conditions affecting their vision- such as farsightedness, glaucoma, or color blindness- are encouraged to seek assistance to interpret results accurately (e.g., reading glasses, additional light source, or another person). This test has not been validated for use by those with color-impaired vision.
- There is a higher chance of false negative results with antigen tests than with laboratory-based molecular tests due to the sensitivity of the test technology. This means that there is a higher chance this test will give a false negative result in an individual with COVID-19 as compared to a molecular test, especially in samples with low viral load.
- This test provides a presumptive negative result that should be confirmed using an independent highly sensitive molecular test to make well-informed clinical decisions.
- Use of **Status™ COVID-19/Flu A&B** is limited to laboratory personnel and CLIA-waived users.
- These contents of this test are to be used as a qualitative test and do not provide information on the viral concentration present in the specimen.
- This test detects both viable (live) and nonviable SARS-CoV-2, influenza A, and influenza B. Test performance depends on the amount of virus (antigens) in the sample and may or may not correlate with viral culture results performed on the same sample.
- A negative test result may occur if the level of antigen in a sample is below the detection limit of the test or if the sample is collected, handled, or transported improperly.
- Positive test results do not rule out co-infections with other respiratory pathogens.
- Positive test results do not identify specific coronavirus, influenza A virus and influenza B subtypes and strains. If differentiation of specific coronavirus or influenza A, influenza B subtypes and strains is needed, additional testing, in consultation with state or local public health departments, is required.
- Performance of the **Status™ COVID-19/Flu A&B** test has not been established for monitoring antiviral treatment of influenza and SARS-CoV-2.
- The performance of this test has not been evaluated for use in patients without signs and symptoms of respiratory infection.
- The performance of this test has not been evaluated for immunocompromised individuals.
- The performance of the **Status™ COVID-19/Flu A&B** test was not evaluated with samples collected in viral transport media and should not be used with this test.
- Positive and negative predictive values are highly dependent on prevalence. False negative test results are more likely during peak activity when prevalence of disease is high. False positive test results are more likely during periods of low activity when prevalence is moderate to low.
- FluMist/FluMist Quadrivalent (Live Attenuated Influenza Vaccine, Intranasal) may interfere with this test, resulting in false positive influenza A and/or influenza B results.



# User Quality Control

## Internal Quality Control:

Each **Status™ COVID-19/Flu A&B** test device has built-in controls. The Control line at the Ctrl position acts as an internal positive procedural control, i.e., a proper amount of sample was used, sample was properly added to the Extraction Well, sample migrated properly, and the reagent system worked properly. A distinct reddish-purple Control line should always appear if the test has been performed correctly. If the Control line does not appear in 15 minutes, the test result is invalid, and retesting with a new specimen and new test device should be performed. If the problem persists, contact LifeSign at 1-800-526-2125 or 732-246-3366 for technical assistance.

## External Quality Control:

Good laboratory practice includes the use of external controls to ensure proper kit performance. It is recommended that external control testing be performed with each new operator and before using a new lot or shipment of **Status™ COVID-19/Flu A&B** kits to confirm the expected Q.C. results, using the external controls provided in the kit. The frequency of additional Q.C. tests should be determined according to your laboratory's standard Q.C. procedures and local, State and Federal regulations or accreditation requirements. Upon confirmation of the expected results, the kit is ready for use with patient specimens. If external controls do not perform as expected, do not use the test results. Repeat the tests or contact LifeSign Technical Services. The built-in reddish purple Control line indicates only the integrity of the test device and proper fluid flow.

The **Status™ COVID-19/Flu A&B** kit contains two external control swabs. Test the control swabs in the same manner as patient specimens. When the positive control is tested, reddish purple lines appear at the Ctrl as well as Flu A, Flu B, and CoV19 positions. When the negative control is tested, a reddish-purple line appears at the Ctrl position only.

If the controls do not perform as expected, do not report patient results.

The use of positive and negative controls from other commercial kits has not been established with **Status™ COVID-19/Flu A&B** test. If the external controls do not work, please contact LifeSign's Technical Support via email: [technical@lifesignmed.com](mailto:technical@lifesignmed.com), or via phone at 1-800-526-2125 or 732-246-3366 .

## Performance Characteristics

### Clinical Performance – Nasopharyngeal swab specimen

A prospective study was conducted at six (6) CLIA- waived U.S. sites from September 2023 to October 2024. Nasopharyngeal (NP) swab specimens were collected from 550 patients aged 2 years and older who presented within five days of respiratory symptom onset consistent with SARS-CoV-2, influenza A, or influenza B. Sample collection and testing were performed by healthcare professionals who had no prior experience in laboratory and were representative of the intended users in CLIA-waived settings. Operators used only the QRI to conduct testing without training provided. All testing was conducted by operators in a blinded fashion. One NP swab was tested using an FDA-authorized RT-PCR comparator assay, and the other with the **Status™ COVID-19/Flu A&B** test. Thirteen (13) specimens were excluded due to not meeting inclusion criteria, resulting in 537 specimens included in the final performance analysis. Test performance was evaluated by comparison to RT-PCR results.

### SARS-CoV-2 Performance

#### Subject Demographics of Nasopharyngeal Swab Specimens

Characteristics of the study population		N=537	Percent (%)
Gender	Male	191	35.6
	Female	346	64.4
	Prefer not to say	0	0.0
Age	<2	0	0.0
	2-4	3	0.6
	5-7	11	2.0
	8-10	16	3.0
	11-13	21	3.9
	14-17	33	6.1
	18-25	106	19.7
	26-35	108	20.1
	36-65	198	36.9
	>65	41	7.6
Ethnicity	Prefer not to say	0	0.0
	Hispanic or Latino	22	4.1
	Not Hispanic or Latino	494	92.0
	Prefer not to say	21	3.9
Race	Asian	3	0.6
	Black or African American	13	2.4
	White or Caucasian	500	93.1
	Native Hawaiian or Other Pacific Islander	2	0.4
	Other (Mixed race)	4	0.7
	Prefer not to say	15	2.8

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: SARS-CoV-2

		Comparator RT-PCR: SARS-CoV-2		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	SARS-CoV-2 Positive	171	1	172
	SARS-CoV-2 Negative	8	357	365
	Total	179	358	537
	<b>Positive Percent Agreement (PPA) = 95.5 % (95 % CI: 91.4 % to 97.7 %)</b>			
	<b>Negative Percent Agreement (NPA) = 99.7 (95 % CI: 98.4% to 99.9 %)</b>			

Specimen Positivity Breakdown Based on Days Post-Symptom Onset

Days Post Symptom Onset	Specimens Tested	Status™ COVID-19/Flu A&B Positive	Comparator (PCR)	PPA (95 % CI)
Day 0	15	7	7	100.0% (64.6 %-100.0 %)
Day 1	163	63	64	98.4% (91.7 %-99.7 %)
Day 2	197	61	64	95.3% (87.1 %-98.4 %)
Day 3	106	25 <sup>1)</sup>	28	89.3% (72.8 %-96.3 %)
Day 4	40	9	10	90.0% (59.6 %-98.2 %)
Day 5	16	6	6	100.0% (61.0 %-100.0 %)
Total	537	171 <sup>1)</sup>	179	95.5% (91.4 %-97.7 %)

1) False positive results on Status™ COVID-19/Flu A&B device were excluded from the analysis.

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: Influenza A

		Comparator RT-PCR: Influenza A		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	Influenza A Positive	48	3	51
	Influenza A Negative	3	483	486
	Total	51	486	537
<b>Positive Percent Agreement (PPA) = 94.1 % (95 % CI: 84.1 % to 98.0 %)</b>				
<b>Negative Percent Agreement (NPA) = 99.4% (95 % CI: 98.2 % to 99.8 %)</b>				

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: Influenza B

		Comparator RT-PCR: Influenza B		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	Influenza B Positive	51	0	51
	Influenza B Negative	4	482	486
	Total	55	482	537
<b>Positive Percent Agreement (PPA) = 92.7 % (95 % CI: 82.7 % to 97.1 %)</b>				
<b>Negative Percent Agreement (NPA) = 100.0 % (95 % CI: 99.2 % to 100.0 %)</b>				

### Clinical Performance – Anterior nasal swab specimen

A prospective study was conducted at six (6) CLIA-waived U.S. sites from September 2023 to October 2024. Anterior (ANS) swab specimens were collected from 455 patients of all ages who presented within five days of respiratory symptom onset consistent with SARS-CoV-2, influenza A, or influenza B. Sample collection and testing were performed by healthcare professionals who had no prior experience in laboratory and were representative of the intended users in CLIA-waived settings. Operators used only the QRI to conduct testing without training provided. All testing was conducted by operators in a blinded fashion. One NP swab was tested using an FDA-authorized RT-PCR comparator assay, and one AN swab with the **Status™ COVID-19/Flu A&B** test. Nine (9) specimens were excluded due to not meeting inclusion criteria, resulting in 446 specimens included in the final performance analysis. Test performance was evaluated by comparison to RT-PCR results.

#### Patient Demographics of Anterior Nasal Swab Specimens

Characteristics of the study population		N=446	Percent (%)
Gender	Male	160	35.9
	Female	284	63.7
	Prefer not to say	2	0.4
Age	<2	3	0.7
	2-4	6	1.3
	5-7	18	4.0
	8-10	19	4.3
	11-13	24	5.4
	14-17	23	5.2
	18-25	92	20.6
	26-35	89	20.0
	36-65	142	31.8
	>65	30	6.7
	Prefer not to say	0	0
Ethnicity	Hispanic or Latino	60	13.5
	Not Hispanic or Latino	361	80.9
	Prefer not to say	25	5.6
Race	Asian	7	1.6
	Black or African American	27	6.1
	White or Caucasian	376	84.3
	Native Hawaiian or Other Pacific Islander	3	0.7
	Other (Mixed race)	2	0.4
	American Indian/Alaskan	11	2.5
	Prefer not to say	20	4.5

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: SARS-CoV-2

		Comparator RT-PCR: SARS-CoV-2		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	SARS-CoV-2 Positive	114	0	114
	SARS-CoV-2 Negative	3	329	332
	Total	117	329	446
<b>Positive Percent Agreement (PPA) = 97.4 % (95 % CI: 92.7 % to 99.1 %)</b>				
<b>Negative Percent Agreement (NPA) = 100.0 % (95 % CI: 98.9 % to 100.0 %)</b>				

Specimen Positivity Breakdown Based on Days Post Symptom Onset

Days Post Symptom Onset	Specimens Tested	Status™ COVID-19/Flu A&B Positive	Comparator (PCR) Positive	PPA (95 % CI)
Day 0	14	5	6	83.3 % (43.7 %-97.0 %)
Day 1	109	32	32	100.0 % (89.3 %-100.0 %)
Day 2	165	45	46	97.8 % (88.7 %-99.6 %)
Day 3	92	20	21	95.2 % (77.3 %-99.2 %)
Day 4	50	11	11	100.0 % (74.1 %-100.0 %)
Day 5	16	1	1	100.0 % (20.7 %-100.0 %)
Total	446	114	117	97.4 % (92.7 %-99.1 %)

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: Influenza A

		Comparator RT-PCR: Influenza A		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	Influenza A Positive	43	2	45
	Influenza A Negative	4	397	401
	Total	47	399	446
<b>Positive Percent Agreement (PPA) = 91.5 % (95 % CI: 80.1 % to 96.6 %)</b>				
<b>Negative Percent Agreement (NPA) = 99.5 % (95 % CI: 98.2 % to 99.9 %)</b>				

**Status™ COVID-19/Flu A&B** performance compared to reference PCR: Influenza B

		Comparator RT-PCR: Influenza B		
		Positive	Negative	Total
<b>Status™ COVID-19 /Flu A&amp;B</b>	Influenza B Positive	37	1	38
	Influenza B Negative	4	404	408
	Total	41	405	446
<b>Positive Percent Agreement (PPA) = 90.2 % (95 % CI: 77.5 % to 96.1 %)</b>				
<b>Negative Percent Agreement (NPA) = 99.8 % (95 % CI: 98.9 % to 100.0 %)</b>				

## Analytical Performance

### Limit of Detection (LoD)

The limit of detection (LoD) of the **Status™ COVID-19/Flu A&B** test was defined as the lowest concentration of SARS-CoV-2, influenza A, and influenza B at which ≥95 % of replicates tested positive. LoD was determined through preliminary and confirmatory studies. In the preliminary study, serial 10-fold dilutions of heat-inactivated SARS-CoV-2 and live influenza A and B viruses were prepared in pooled negative clinical matrix (NCM) and tested in triplicate using three device lots. For each test, 50 µL of sample was applied to the swab and processed per IFU instructions. The lowest concentration that produced at least 95 % positive results was identified as the LoD. Co-spiking the analytes into the negative nasal specimen does not affect their LoD. The LoD for all three target viruses is summarized in the table below.

Analyte	LoD		# Positive/ # Total	Percent Detected (%)
	TCID <sub>50</sub> /mL	TCID <sub>50</sub> /Swab		
SARS-CoV-2, USA-WA1/2020	3.39 × 10 <sup>4</sup>	1.70 × 10 <sup>3</sup>	58/60	96.7
SARS-CoV-2 Lineage BA.5; Omicron Variant, USA/COR-22- 063113/2022	2.81 × 10 <sup>3</sup>	1.41 × 10 <sup>2</sup>	57/60	95.0
Influenza A, H1N1, Victoria/2570/19	1.56 × 10 <sup>1</sup>	0.78	59/60	98.3
Influenza A, H3N2, Darwin/9/21	1.25 × 10 <sup>1</sup>	0.63	57/60	95.0
Influenza A, H1N1, Victoria/4897/22	3.89 × 10 <sup>1</sup>	1.95	59/60	98.3
Influenza B, Victoria, Austria/1359417/21	9.40 × 10 <sup>2</sup>	4.70 × 10 <sup>1</sup>	58/60	96.7
Influenza B, Yamagata, Phuket/3073/13	1.30 × 10 <sup>1</sup>	0.65	60/60	100.0

The first WHO International Standard for SARS-CoV-2 Antigen (NIBSC 21/368) was also tested using the same method to determine the LoD of SARS-CoV-2 antigen. The LoD of the standard is provided below.

Analyte	LoD		# Positive/ # Total	Percent Detected (%)
	IU/mL	IU/Swab		
The First WHO International Standard for SARS-CoV-2 Antigen (NIBSC 21/368)	250	12.5	40/40	100



## High-dose Hook Effect

A high-dose hook effect was not detected in the **Status™ COVID-19/Flu A&B** test, for the SARS-CoV-2, Influenza A and B viral strains at the concentration listed below.

SARS-CoV-2 and Influenza A&B virus	Concentration (TCID <sub>50</sub> /mL)
SARS-CoV-2, USA-WA1/2020	3.39 × 10 <sup>7</sup>
SARS-CoV-2 Lineage BA.5; Omicron Variant, USA/COR-22-063113/2022	2.53 × 10 <sup>6</sup>
Influenza A, H1N1, A/Baltimore/JH-22377/2022	1.6 × 10 <sup>9</sup>
Influenza A, H3N2, A/Baltimore/JH-0440/2022	2.8 × 10 <sup>7</sup>
Influenza A, H1N1, Victoria/2570/19	4.68 × 10 <sup>4</sup>
Influenza A, H3N2, Darwin/9/21	3.74 × 10 <sup>4</sup>
Influenza B, Victoria, Austria/1359417/21	2.82 × 10 <sup>6</sup>
Influenza B, Yamagata, Texas/6/11	3.80 × 10 <sup>6</sup>
Influenza B, Yamagata, Phuket/3073/13	3.89 × 10 <sup>4</sup>

## Competitive Interference

Competitive interference was evaluated using nine sample combinations. Each sample contained one analyte at high concentration (≥1000xLoD or >10<sup>5</sup> TCID<sub>50</sub>/mL) and one or more additional analytes at low concentration (3xLoD), spiked into NCM. All samples were tested in triplicate. No competitive interference was observed among heat-inactivated SARS-CoV-2 (USA-WA1/2020), live Influenza A (H3N2, Darwin/9/21), and live Influenza B (Yamagata, Phuket/3073/13).

Combination #	Analyte concentration added to sample			Results
	Influenza A	Influenza B	SARS-CoV-2	
1	1000xLoD	3xLoD	Negative	No Interference
2	1000xLoD	Negative	3xLoD	No Interference
3	1000xLoD	3xLoD	3xLoD	No Interference
4	3xLoD	1000xLoD	Negative	No Interference
5	Negative	1000xLoD	3xLoD	No Interference
6	3xLoD	1000xLoD	3xLoD	No Interference
7	3xLoD	Negative	300xLoD	No Interference
8	Negative	3xLoD	300xLoD	No Interference
9	3xLoD	3xLoD	300xLoD	No Interference

## Analytical Reactivity/ Inclusivity

Inclusivity testing was conducted using a panel of inactivated SARS-CoV-2, and live influenza A and B virus strains, selected to represent temporal and geographical diversity. The minimum reactive concentration was determined as the last dilution at which all three replicates produced positive results.

Analyte	Subtype/Lineage	Strain/Isolate	Lowest concentration with 100 % detection
SARS-CoV-2 (Omicron)	B.1.1.529	USA/MD-HP20874/2021	5.01 × 10 <sup>2</sup> TCID <sub>50</sub> /mL
	BA.2.3	USA/MD-HP245560	8.16 × 10 <sup>2</sup> TCID <sub>50</sub> /mL
	JN.1	USA/New York/PV96109/2023	3.49 × 10 <sup>1</sup> TCID <sub>50</sub> /mL
Influenza A (H1N1)	H1N1	A/Brisbane/02/18	4.41 × 10 <sup>2</sup> TCID <sub>50</sub> /mL
	H1N1	A/Baltimore/JH-22377/2022	5.33 × 10 <sup>6</sup> TCID <sub>50</sub> /mL
	H1N1	A/Guangdong-Maonan/SWL 1536/19	3.16 × 10 <sup>3</sup> TCID <sub>50</sub> /mL
	H1N1	A/Michigan/45/15	2.70 × 10 <sup>2</sup> TCID <sub>50</sub> /mL

	H1N1	A/Wisconsin/588/19	$4.20 \times 10^3$ TCID <sub>50</sub> /mL
	H1N1	A/Wisconsin/67/22	$1.40 \times 10^3$ TCID <sub>50</sub> /mL
	H1N1	A/California/07/09	$2.43 \times 10^4$ TCID <sub>50</sub> /mL
	H1N1	A/Virginia/ATCC3/2009	$6.00 \times 10^4$ PFU/mL
	H1N1	A/Connecticut/11/2023	$2.80 \times 10^4$ TCID <sub>50</sub> /mL
Influenza A (H3N2)	H3N2	A/Kansas/14/17	$5.03 \times 10^4$ TCID <sub>50</sub> /mL
	H3N2	A/Baltimore/JH-0440/2022	$9.33 \times 10^4$ TCID <sub>50</sub> /mL
	H3N2	A/Hong Kong/2671/19	$1.05 \times 10^3$ TCID <sub>50</sub> /mL
	H3N2	A/Singapore/INFIMH-16-0019/16	$3.16 \times 10^3$ TCID <sub>50</sub> /mL
	H3N2	A/Norway/466/14	$4.63 \times 10^2$ TCID <sub>50</sub> /mL
	H3N2	A/Switzerland/9715293/13	$1.52 \times 10^3$ TCID <sub>50</sub> /mL
	H3N2	A/Texas/50/12	$1.26 \times 10^3$ TCID <sub>50</sub> /mL
	H3N2	A/Tasmania/503/20	$4.70 \times 10^3$ TCID <sub>50</sub> /mL
	H3N2	A/Cambodia/E0826360/20	$3.90 \times 10^2$ TCID <sub>50</sub> /mL
Influenza A (H5N1)	H5N1 <sup>(1)</sup>	A/bovine/Ohio/B24OSU-439/2024	$3.88 \times 10^4$ TCID <sub>50</sub> /mL
	H5N1 <sup>(2)</sup>	A/bovine/Ohio/B24OSU-439-2024	$3.1 \times 10^3$ TCID <sub>50</sub> /mL
Influenza B (Victoria)	Victoria	B/Alabama/2/17	$3.90 \times 10^1$ TCID <sub>50</sub> /mL
	Victoria	B/Victoria/705/18 Wild-Type	$1.40 \times 10^3$ TCID <sub>50</sub> /mL
	Victoria	B/Texas/2/13	$1.67 \times 10^1$ TCID <sub>50</sub> /mL
	Victoria	B/Michigan/01/21	$1.17 \times 10^4$ TCID <sub>50</sub> /mL
	Victoria	B/Washington/02/19	$6.27 \times 10^2$ TCID <sub>50</sub> /mL
	Victoria	B/Hong Kong/574/19 Wild Type	$1.39 \times 10^2$ TCID <sub>50</sub> /mL
Influenza B (Yamagata)	Victoria	B/Brisbane/35/18	$1.15 \times 10^3$ TCID <sub>50</sub> /mL
	Yamagata	B/Victoria/504/00	$5.20 \times 10^0$ TCID <sub>50</sub> /mL
	Yamagata	B/Utah/9/14	$1.39 \times 10^2$ TCID <sub>50</sub> /mL
	Yamagata	B/Texas/6/11	$3.80 \times 10^2$ TCID <sub>50</sub> /mL
	Yamagata	B/Florida/04/06	$1.17 \times 10^2$ TCID <sub>50</sub> /mL
	Yamagata	B/Massachusetts/2/12	$4.20 \times 10^2$ TCID <sub>50</sub> /mL

1) Live influenza A (H5N1) was tested for US 2024 H5N1 HPAI (Highly pathogenic avian influenza) inclusivity by ACME POCT at Emory University in September 2024.

2) Gamma-irradiated influenza A (H5N1) was tested in house.

### Analytical Specificity (Cross-reactivity) and Microbial Interference

Cross-reactivity and microbial interference studies were conducted whether other respiratory pathogens or commensal flora that could be present in a direct nasal swab sample would cause a false-positive test result or interfere with a true positive result. A total of 46 microorganisms were tested at high, clinically relevant concentrations. The evaluation was performed by preparing samples containing each microorganism and testing them either in the absence of or in the presence of a single target virus (SARS-CoV-2, Influenza A, or Influenza B). When virus was included, heat-inactivated SARS-CoV-2 or live Influenza A or Influenza B were used at a concentration of 3xLoD. No cross-reactivity or microbial interference was observed under the conditions tested.

Cross-reactant	Tested Concentration
Human Coronavirus 229E	$7.05 \times 10^4$ TCID <sub>50</sub> /mL <sup>1)</sup>
Human Coronavirus OC43	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Human Coronavirus NL64	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Human Coronavirus HKU1	N/A <sup>2)</sup>
MERS-coronavirus	N/A <sup>3)</sup>
SARS-coronavirus	N/A <sup>3)</sup>
Adenovirus 1	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Adenovirus 7A	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Human Metapneumovirus 3 Type B1	$5.85 \times 10^5$ TCID <sub>50</sub> /mL <sup>1)</sup>
Parainfluenza Virus 1	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Parainfluenza Virus 2	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Parainfluenza Virus 3	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Parainfluenza Virus 4B	$7.05 \times 10^4$ TCID <sub>50</sub> /mL <sup>1)</sup>
Influenza A, H1N1	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Influenza A, H3N2	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Influenza B, Victoria	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Influenza B, Yamagata	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Enterovirus 68	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Respiratory Syncytial Virus A	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Respiratory Syncytial Virus B	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Rhinovirus 1A	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Haemophilus influenzae B	$1.00 \times 10^6$ CFU/mL
<i>Streptococcus pneumoniae</i>	$1.00 \times 10^6$ CFU/mL
<i>Streptococcus pyogenes</i>	$1.00 \times 10^6$ CFU/mL
<i>Candida albicans</i>	$1.00 \times 10^6$ CFU/mL
Pooled human nasal fluid	N/A
<i>Bordetella pertussis</i>	$1.00 \times 10^6$ CFU/mL
<i>Mycoplasma pneumoniae</i>	$1.00 \times 10^6$ CFU/mL
<i>Chlamydia pneumoniae</i>	$1.00 \times 10^5$ IFU/mL
<i>Legionella pneumophila</i>	$1.00 \times 10^6$ CFU/mL
<i>Staphylococcus aureus</i>	$1.00 \times 10^6$ CFU/mL
<i>Staphylococcus epidermidis</i>	$1.00 \times 10^6$ CFU/mL
<i>Moraxella catarrhalis</i>	$1.00 \times 10^6$ CFU/mL
<i>Neisseria meningitidis</i>	$1.00 \times 10^6$ CFU/mL
<i>Neisseria subflava</i> biovar <i>flava</i>	$1.00 \times 10^6$ CFU/mL
<i>Corynebacterium diphtheriae</i>	$1.00 \times 10^6$ CFU/mL
<i>Escherichia coli</i>	$1.00 \times 10^6$ CFU/mL
<i>Mycobacterium tuberculosis</i>	$1.00 \times 10^6$ CFU/mL
<i>Lactobacillus acidophilus</i>	$1.00 \times 10^6$ CFU/mL
<i>Pneumocystis jiroveci</i> -S. <i>cerevisiae</i> (Recombinant)	$1.00 \times 10^6$ CFU/mL
<i>Pseudomonas aeruginosa</i>	$1.00 \times 10^6$ CFU/mL
<i>Streptococcus salivarius</i>	$1.00 \times 10^6$ CFU/mL
Cytomegalovirus	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Epstein-Barr Virus	$1.43 \times 10^5$ cp/mL
Measles Virus	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Mumps Virus	$1.43 \times 10^5$ TCID <sub>50</sub> /mL
Coxsackievirus A16	$1.43 \times 10^5$ TCID <sub>50</sub> /mL

Human Herpes Virus 6B	1.43 × 10 <sup>5</sup> cp/mL
<i>Klebsiella pneumoniae</i>	1.43 × 10 <sup>5</sup> CFU/mL

- 1) Recommended testing concentrations were not achievable due to the low vial concentrations.
- 2) Five (5) Human Coronavirus HKU1 (HCoV-HKU1) clinical samples and one (1) HKU1 and SARS-CoV-2 double positive clinical sample were tested in the presence and absence of SARS-CoV-2.
- 3) For MERS and SARS-CoV viruses only *In silico* analysis was conducted therefore cross reactivity cannot be ruled out

### Interfering Substances

Interference testing was conducted with 35 common interfering endogenous and exogenous substances. Each substance was tested in triplicate, both without virus and with one target virus (SARS-CoV-2, Influenza A, or Influenza B) at 3×LoD. Heat-inactivated SARS-CoV-2 and live Influenza A/B were used. All samples were prepared in NCM. No interference was observed at the tested concentrations for evaluated substances, except for FluMist, live attenuated intranasal influenza vaccine. FluMist at 15 % v/v did not interfere with the detection of SARS-CoV-2. For influenza targets, expected negative results (no interference) were observed at 0.15 % v/v for influenza A and 1.5 % v/v for influenza B.

Interfering substance	Tested Concentration
Human Whole Blood	4 % v/v
Mucin	5.0 mg/mL
Leukocytes	5×10 <sup>6</sup> cells/mL
Oral Anesthetic (Benzocaine)	3.0 mg/mL
Oral Anesthetic (Menthol)	3.0 mg/mL
Sore Throat Phenol Spray	15 % v/v
Nasal Spray (Phenylephrine)	15 % v/v
Nasal Spray (Cromolyn)	15 % v/v
Nasal Spray (Oxymetazoline)	15 % v/v
Nasal Spray (Sodium chloride with preservatives)	15 % v/v
Normal Saline Solution (Sodium chloride)	15 % v/v
Beclomethasone Dipropionate	15 % v/v
Dexamethasone	15 % v/v
Flunisolide	15 % v/v
Nasal corticosteroids (Triamcinolone acetonide)	15 % v/v
Nasal corticosteroids (Budesonide)	15 % v/v
Nasal corticosteroids (Mometasone furoate)	15 % v/v
Nasal corticosteroids (Fluticasone Propionate)	15 % v/v
Zicam Nasal Spray (Luffa operculata, Galphimia glauca, Histaminum hydrochloricum)	15 % v/v
Throat spray (Zinc, Sulphur)	15 % v/v
Nasal Gel	5 % w/v
Homeopathic nasal wash (Alkalol)	15 % v/v
Oseltamivir Phosphate	5 mg/mL
Remdesivir	10 mg/mL
Molnupiravir	5 mg/mL
Zanamivir	5 mg/mL
Nirmatrelvir (Paxlovid)	10 mg/mL
Ritonavir (Paxlovid)	10 mg/mL
Mupirocin	10 mg/mL
Tobramycin	15 % v/v
Body & Hand Lotion	0.5 % v/v

Hand Lotion	5 % w/v
Hand Sanitizer, 70 % ethanol	15 % w/v
Hand soap liquid gel	10 % w/v
FluMist	SARS-CoV-2: 15 % v/v
	Flu A: $\leq 0.15$ % v/v
	Flu B: $\leq 1.5$ % v/v

## Precision

A multi-lot precision study was conducted to evaluate lot-to-lot variability of the **Status™ COVID-19/Flu A&B** test using SARS-CoV-2 (BA.5, Omicron Variant, USA/COR-22-063113/2022), Influenza A (H3N2, Darwin/9/21), and Influenza B (Yamagata, Phuket/3073/13) in two different studies.

Both studies were performed in-house by 2 trained operators for testing and one (1) operator responsible for sample preparation. For study 1, blinded and randomized test panels containing single-, dual-, and triple-analyte samples at Negative, 1×LoD, and 3×LoD concentrations. A total of 40 panels were prepared, each operator tested a total of 20 panel, 2 runs per day, 3 different lots over 10 non-consecutive days. For each of the lot, this study generated 80 replicate test results for each analyte and concentration, i.e., a total of 240. The sample panels used in study 2 were comprised of single-, dual-, and triple-analyte samples at Negative, 0.7×LoD, 1×LoD, and 3×LoD concentrations. A total of 72 replicates, based on 2 operators, 6 sessions each over 3 days, using 3 different lots, and 2 replicates per lot. The data below is presented combining data from both studies. The results demonstrate consistent precision across analytes and concentrations, with no false positives.

Sample	Analyte	No of Positive/No of total tested (% positive rate)			Total sample count (% positive rate)
		Lot 1	Lot 2	Lot 3	
Negative	Flu A	0/104 (0 %)	0/104 (0 %)	0/104 (0 %)	0/312 (0 %)
	Flu B	0/104 (0 %)	0/104 (0 %)	0/104 (0 %)	0/312 (0 %)
	SARS-CoV-2	0/104 (0 %)	0/104 (0 %)	0/104 (0 %)	0/312 (0 %)
0.7xLoD	Flu A	9/24 (37.5 %)	11/24 (45.8 %)	12/24 (50.0 %)	32/72 (44.4 %)
	Flu B	22/24 (91.7 %)	22/24 (91.7 %)	20/24 (83.3 %)	64/72 (88.9 %)
	SARS-CoV-2	15/24 (62.5 %)	14/24 (58.3 %)	16/24 (66.7 %)	45/72 (62.5 %)
1xLoD	Flu A	102/104 (98.1 %)	103/104 (99.0 %)	102/104 (98.1 %)	307/312 (98.4 %)
	Flu B	101/104 (97.1 %)	102/104 (98.1 %)	104/104 (100.0 %)	307/312 (98.4 %)
	SARS-CoV-2	104/104 (100.0 %)	102/104 (98.1 %)	103/104 (99.0 %)	309/312 (99.0 %)
3xLoD	Flu A	104/104 (100.0 %)	104/104 (100.0 %)	104/104 (100.0 %)	312/312 (100.0 %)
	Flu B	104/104 (100.0 %)	104/104 (100.0 %)	104/104 (100.0 %)	312/312 (100.0 %)
	SARS-CoV-2	104/104 (100.0 %)	104/104 (100.0 %)	104/104 (100.0 %)	312/312 (100.0 %)

## Reproducibility

A multi-site reproducibility study was conducted to evaluate the performance of the **Status™ COVID-19/Flu A&B** test with a focus on weakly reactive specimens near the assay cutoff. Testing was performed at 3 CLIA-waived sites by 9 untrained operators and at one (1) in-house laboratory by trained personnel, using 3 different lots. The sample panel included weak positive (1xLoD), strong positive (3xLoD), high negative (C5 level, 95 % negative expected), and true negative (100 % negative expected) samples. Each operator completed 10 randomized panels over 5 days, 2 runs per day. The reproducibility study demonstrated consistent and accurate performance across all test sites, operators, and device lots.

Sample		No of Positive Result/No of Total Tested (% Positive Rate)				Total sample count (% positive rate)
		Site 1 3 operators	Site 2 3 operators	Site 3 3 operators	Lab 1 3 operators	
True Negative	Flu A	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/720 (0 %)
	Flu B	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/720 (0 %)
	SARS-CoV-2	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/180 (0 %)	0/720 (0 %)
High Negative	Flu A	2/180 (1.1 %)	2/180 (1.1 %)	1/180 (0.6 %)	2/180 (1.1 %)	7/720 (0.9 %)
	Flu B	3/180 (1.7 %)	1/180 (0.6 %)	2/180 (0.6 %)	2/180 (1.1 %)	8/720 (1.1 %)
	SARS-CoV-2	1/180 (0.6 %)	2/180 (1.1 %)	1/180 (0.6 %)	1/180 (0.6 %)	5/720 (0.7 %)
1xLoD	Flu A	178/180 (98.9 %)	177/180 (98.3 %)	178/180 (98.9 %)	179/180 (99.4 %)	712/720 (98.9 %)
	Flu B	177/180 (98.3 %)	178/180 (98.9 %)	177/180 (98.3 %)	179/180 (99.4 %)	711/720 (98.8 %)
	SARS-CoV-2	179/180 (99.4 %)	179/180 (99.4 %)	178/180 (98.9 %)	180/180 (100 %)	716/720 (99.4 %)
3xLoD	Flu A	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	720/720 (100 %)
	Flu B	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	720/720 (100 %)
	SARS-CoV-2	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	180/180 (100 %)	720/720 (100 %)

## Assistance
























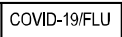
If you have any questions regarding the use of this product, please contact LifeSign's Technical Support via email: [technical@lifesignmed.com](mailto:technical@lifesignmed.com), or via phone at 1-800-526-2125 or 732-246-3366)

Annual analytic reactivity testing results with CDC influenza panel can be found on our website at: [www.lifesignmed.com](http://www.lifesignmed.com).

## References

1. Shaw MW, Arden NH and Massab HF. New aspects of influenza viruses. Clin. Microbiol. Rev. 5: 74-92 (1992)
2. WHO recommendations on the use of rapid testing for influenzadiagnosis, July 2005.

## Symbols

	Instructions for Use (Read)		Contains sufficient contents for 25 tests		CE Mark
	Catalog Number		Contents		Manufacturer
	Store at		Test Device		Distributed by
	Swab		Instructions for Use		Positive Control
	For in vitro Diagnostic Use		Quick Reference Instructions		Negative Control
	Do not reuse.		Reagent Vial		 Authorized Representative
	Lot Number		Expiration Date		For Prescription Use Only
		An in vitro immunochromatographic assay for the qualitative detection of SARS-CoV-2, influenza type A and type B antigens directly from nasal specimens			



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