

National Microbiology Laboratory

Quick Reference:

Abbott ID NOW™ Troubleshooting guide

NML, PHAC

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Abbott ID NOW™ Instrument Troubleshooting Guide

This document is intended to serve as a guide when troubleshooting patient and QC (Quality control) test results on the Abbott ID NOW™ instrument. Topics covered in this guide include:

- Repeated invalid patient test or failed QC test
- A false negative test result
- A false positive test result (suspected contamination)
- Sensor errors: Repeated errors/invalids when running a test, or the machine stalls during the testing process.

An Invalid Patient Test or a Failed QC test:

On occasion an “invalid” patient test result or a “QC fail” may be generated by the Abbott ID NOW™ instrument. Most of these invalid/failed results can be corrected by rerunning the test with a new test components.

Important points to keep in mind when running a patient or QC test on the Abbott ID NOW™ instrument:

➤ ***When using the transfer cartridge, pay attention to the orange button***

- When transferring liquid from the purple sample receiver, press firmly on both sides of the white transfer cartridge. Make sure that the orange indicator button on the transfer cartridge **pops up** (1 click is heard);





- Once the transfer cartridge is moved to the orange test base, press firmly on both sides of the transfer cartridge to expel the liquid (multiple clicks will be heard and the orange indicator button on the transfer cartridge will **descend** to its original position)



*****Note: Not applying enough pressure during the use of the transfer cartridge is the most common reason for invalid test results *****

➤ **Ensure you are running the correct program**

- Abbott Positive QC swabs (swabs wrapped in foil) cannot be run as a patient test. They can only be run as a QC test: select “Run QC Test” from the home screen
- Positive control material and validation panels (provided in tubes by the National Microbiology Laboratory) cannot be run as a QC test. They can only be run as a test: select “Run Test” from the home screen.

➤ **When collecting liquid from the purple sample receiver, make sure to avoid creating bubbles in the sample receiver**

- Bubbles can affect the test and cause the test to fail
- If bubbles are present, use your swab to move them aside so that the center of the purple sample receiver is free of bubbles.

➤ **When running a test on the ID NOW™ instrument, make sure that the time allowed for each step of the test does not run out**

- This will cause the test to fail and a new test will have to be run
- If this happens, discard all the test components and start a new test



A False Negative Test Result:

Although infrequent, a false negative test result can occur when running a patient test sample or when running a specimen from the ID NOW™ Verification Panel (provided by the National Microbiology Laboratory).

When running the Verification Panel specimens, a number of things can cause a false negative result, including:

- ***Not collecting enough sample material for the test (i.e. not mixing the swab long enough in the verification panel specimen liquid)***
 - It is recommended to submerge the swab in the Verification Panel specimen liquid for at least 10 seconds

- ***Not mixing the swab for long enough in the ID NOW™ instrument sample receiver***
 - The swab should be mixed in the sample receiver for 10 seconds, while rubbing the swab along the grooves and edges of the receiver. After ten seconds, excess liquid should be removed from the swab by pressing it along the sides of the receiver

- ***Not pressing the transfer cartridge down hard enough during the transfer step***
 - Repeat the test with new test components
 - Ensure that when using the transfer cartridge, you press firmly on both sides of the white transfer cartridge and the orange indicator button on top **pops up** (1 click is heard); once the transfer cartridge is moved to the orange test base, make sure that you press firmly on both sides of the transfer cartridge to expel the liquid (multiple clicks will be heard and the orange button on the transfer cartridge will **descend** to its original position)

- ***The Verification Panel material could be partially degraded***



- Degredation of the verification material can occur over time if not stored properly
- If this is suspected, note the result in the Verification Panel result sheet and notify the National Microbiology Laboratory (Breanne Head, 204.583.0394, Breanne.head@canada.ca; and Michael Becker, 431.336.6078, Michael.becker@canada.ca) to inform them of the issue.

A False Positive Test Result (Suspected Contamination):

A false positive test result may occur due to contamination of the ID NOW™ instrument with the genetic material (DNA/RNA) of the SARS-CoV-2 virus.

If a false positive test result is suspected:

- Thoroughly disinfect the ID NOW™ instrument (including the instrument itself, the printer, scanner, and cords) and the working area using a 10% bleach solution (if permitted by your local health oversight). Let the bleach sit on surfaces for 25 minutes, and then remove by cleaning areas with your approved disinfectant:
 - a. 70% Ethanol
 - b. 70% Isopropanol

*Note: Although Ethanol and Isopropanol inactivate the SARS-CoV-2 virus, they **do not** destroy genetic material which can cause false positive results.*

- Once everything has been appropriately disinfected and cleaned, prepare your work area with fresh supplies. Repeat the test using new test components

Sensor errors: Repeated errors/invalids when running a test, or the machine stalls during the testing process.

The test base holder uses light sensors (the black holes at the bottom of the holder). If these sensors become dirty, this could result in error codes when running a QC or patient test. In the event that you receive repeated “invalid” patient test or “QC fail” results, clean the sensors in



the Abbott ID NOW™ instrument. It may also cause the test to stall during the process, by not registering components have been added or removed.

➤ *Steps for cleaning the sensors in the ID NOW™ instrument*

1. Turn off the ID NOW™ instrument by holding down the power button on the right-hand side of the instrument for 3 seconds
2. Unplug the ID NOW™ instrument from its power supply and wait 1 minute for any electricity to discharge

3. Dampen a nasal swab (from the ID NOW™ swab control kit or ID NOW™ test kits) with 70% ethanol
****Note: Ensure the swab is only damp (i.e. will not leak when pressed on a surface)*



4. Carefully insert the swab into the first hole in the test base holder until you feel resistance. Do not press or use force as this may damage the instrument
5. Gently twist the swab (~ 30-40 seconds) to remove any contamination
6. Using a **new** swab, repeat steps 3-6 with the second hole in the test base holder, and the sensor at the bottom on the sample receiver holder.



7. Discard used swabs
8. Allow time for the test base holder to dry completely (approximately 1 hour)



9. Reconnect the ID NOW™ to its power supply and turn the instrument on by firmly holding down the power button located on the side panel of the instrument. Wait for the instrument to automatically initialize – this may take several minutes
10. Run both a positive QC Test and negative QC Test to ensure that the errors have been resolved
11. If the reading error reoccurs again, email the National Microbiology Laboratory (Breanne Head, 204.583.0394, Breanne.head@canada.ca; and Michael Becker, 431.336.6078, Michael.becker@canada.ca) to inform them of the issue.