🌐 Pinpoint Science 30-Second Covid-19 Test Protocol

lisa.diamond [1]

[1]Pinpoint Science Inc.

Sep 08, 2020

| 1 | Works for me | dx.doi.org/10.17504/protocols.io.bkxmkxk6 |

XPRIZE Rapid Covid Testing

lisa.diamond

ABSTRACT

Pinpoint's nanosensor-based platform detects SARS-CoV-2 antigen by (1) measuring baseline current through our functionalized nanosensor chip in ordinary PBS buffer; (2) measuring the change in current at specific voltage ranges after insertion of the specimen as a result of binding between probe aptamer and target antigen; (3) computing delta between these two measurements. These measurements and computations are performed internally in quadruplicate, with four separately measured nanosensor channels. Consolidated results are reported to the user as {Detected; Not Detected; Inconclusive; or Error}.

DOI

dx.doi.org/10.17504/protocols.io.bkxmkxk6

PROTOCOL CITATION

lisa.diamond 2020. Pinpoint Science 30-Second Covid-19 Test Protocol. **protocols.io**
https://dx.doi.org/10.17504/protocols.io.bkxmkxk6

CREATED

Sep 06, 2020

LAST MODIFIED

Sep 08, 2020

PROTOCOL INTEGER ID

41677

DISCLAIMER:

DISCLAIMER – FOR INFORMATIONAL PURPOSES ONLY; USE AT YOUR OWN RISK

The protocol content here is for informational purposes only and does not constitute legal, medical, clinical, or safety advice, or otherwise; content added to protocols.io is not peer reviewed and may not have undergone a formal approval of any kind. Information presented in this protocol should not substitute for independent professional judgment, advice, diagnosis, or treatment. Any action you take or refrain from taking using or relying upon the information presented here is strictly at your own risk. You agree that neither the Company nor any of the authors, contributors, administrators, or anyone else associated with protocols.io, can be held responsible for your use of the information contained in or linked to this protocol or any of our Sites/Apps and Services.

1 INSTALL THE PINPOINT APP

On a smart device (smartphone or tablet), install the Pinpoint App.

Scan the the 2D barcode on the test package, or download the mobile app from:
- [URL for IOS]
- [URL for Android]

2   SET UP PINPOINT READER
- Unbox the Pinpoint Reader from its packaging.
- Plug the Reader AC adapter into an AC outlet, then connect to the Reader with the included cable.
- Turn on the Reader using its power button.
- On the mobile device, open the Pinpoint App.
- In the App, scan the barcode on the back of the Reader, then press the Pairing button on the Reader.
- When the Pinpoint App and Reader are paired, the App will indicate a successful connection.
- If the pairing fails, refer to the Instructions for Pairing on the App.

3   INSERT PINPOINT CARTRIDGE IN READER
- Open the Pinpoint Cartridge packaging and remove the Cartridge.
- Insert the Cartridge into the slot of the Pinpoint Reader.
- The App will verify that the Cartridge is valid and identify the test ("Covid-19 Antigen Test").

4   COLLECT A SALIVA SPECIMEN AND DILUTE WITH BUFFER
- Open lid of the included saliva collection tube.
- Fill at least to the marked line with saliva (approx. 🔲**10 µl**)
- Add contents of the included buffer solution (approx. 🔲**90 µl**) to the saliva collection tube and close its lid.
- Shake to mix.

5   RUN THE PINPOINT COVID-19 TEST
- Open the lid of the Pinpoint Cartridge and empty the saliva/buffer mix into the opening.
- Close the lid of the Cartridge, which will start the test running.
- Wait ⏲**00:00:30** until test results are displayed on the Pinpoint App.

6   VIEW RESULTS ON PINPOINT APP
- View results on Pinpoint App.

📈   DETECTED, NOT DETECTED, INCONCLUSIVE, or ERROR

📄   **Covid-19 Detected**: If the app displays "COVID-19 DETECTED", this indicates that the virus that causes Covid-19 was detected, and the patient may be infected. Positive results must be followed up by laboratory testing for confirmation.

Covid-19 Not Detected: If the app displays "COVID-19 NOT DETECTED", this indicates that the virus that causes Covid-19 was not detected. Negative results do not preclude the possibility of infection and should not be used as the sole basis for patient management decisions. Negative results must be combined with clinical observations, patient history, and epidemiological information.

Inconclusive: If the app screen displays "INCONCLUSIVE", the results are not usable. These results do not preclude the possibility of infection and should not be used as the basis for patient management decisions. There are various reasons why a test might be inconclusive.

Error: If there is an error, the app will display "ERROR" and the specific error message.

7 REMOVE AND DISCARD CARTRIDGE
   - Remove Cartridge from Reader.

> ⚠️   Discard test cartridge and saliva collection tube in a biohazard receptacle.

8 REPEAT FOR EACH SPECIMEN
   ↻ **go to step #3**