



Jan 14, 2021

XPRIZE SANATA Protocol for Saliva LFIA Test

Forked from XPRIZE SANATA Protocol for Saliva LFIA Test

Mario Thomas¹, Jasmine Sollen¹, Natalia Ivanova¹, Michelle Feng¹, Reda Fayek¹, Heidi Abdilla¹, Stephanie Lim¹, Amanda Naaum¹, Holly J Rumery¹, Mario Escobar¹

¹Precision Biomonitoring Inc.

1 Works for me dx.doi.org/10.17504/protocols.io.brgsm3we

Coronavirus Method Development Community SANATA 2 more workspaces

Holly Rumery

ABSTRACT

This procedure outlines the protocol for testing for SARS-CoV-2 using a saliva sample collected from an individual. The purpose of this test is to detect low levels of SARS-CoV-2 antigen at a higher sensitivity. Precision Biomonitoring Inc. developed an ultra-rapid digital, disposable, highly-sensitive and inexpensive testing device used for screening purposes. The mobile app complementary to this medical device is connected through Bluetooth. Using this innovation, the user can be tested at point-of-care (POC) by a health care professional, and obtain qualitative results.

DOI

dx.doi.org/10.17504/protocols.io.brgsm3we

PROTOCOL CITATION

Mario Thomas, Jasmine Sollen, Natalia Ivanova, Michelle Feng, Reda Fayek, Heidi Abdilla, Stephanie Lim, Amanda Naaum, Holly J Rumery, Mario Escobar 2021. XPRIZE SANATA Protocol for Saliva LFIA Test.

protocols.io

<https://dx.doi.org/10.17504/protocols.io.brgsm3we>

FORK NOTE

FORK FROM

Forked from XPRIZE SANATA Protocol for Saliva LFIA Test, heidi.abdilla

KEYWORDS

Lateral Flow, Covid-19, SARS-Cov-2, Antigen Testing, Pandemic, Global Pandemic, Virus

LICENSE

This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

CREATED

Jan 14, 2021

LAST MODIFIED

Jan 14, 2021

PROTOCOL INTEGER ID

46322

GUIDELINES

- The digital device kits should be stored at room temperature and should never be exposed to extreme temperatures.
- The digital device kits are for single use. Do not reuse the kits. Dispose of all used materials in a biohazard waste container.
- Positive test results should be confirmed by RT-PCR by a health professional.

MATERIALS TEXT

MATERIALS

 [SALIVA Lysis Tube](#) **Precision Biomonitoring**

Inc. Catalog #SALLT202001

 [Disposable Graduated Transfer Pipette](#) **Fisher**

Scientific Catalog #13-711-9AM

 [Specimen Container](#) **Canadawide Scientific**

Inc. Catalog #324-765-04

 [LFIA Testing Device](#) **Precision Biomonitoring**

Inc. Catalog #N/A

 [Samco Exact Volume Transfer Pipettes, 100µL, Non-sterile](#) **Thermo**

Fisher Catalog #787TS

Bluetooth Smartphone

SAFETY WARNINGS

When working with human saliva and other human bodily fluids, there may pathogens present. Wear the correct personal protection equipment (ie. gloves) and wash your hands immediately after removing the gloves.

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](https://dx.doi.org/10.17504/protocols.io.brqsm3we) 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](https://dx.doi.org/10.17504/protocols.io.brqsm3we), 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.

ABSTRACT

This procedure outlines the protocol for testing for SARS-CoV-2 using a saliva sample collected from an individual. The purpose of this test is to detect low levels of SARS-CoV-2 antigen at a higher sensitivity. Precision Biomonitoring Inc. developed an ultra-rapid digital, disposable, highly-sensitive and inexpensive testing device used for screening purposes. The mobile app complementary to this medical device is connected through Bluetooth. Using this innovation, the user can be tested at point-of-care (POC) by a health care professional, and obtain qualitative results.

BEFORE STARTING

Refrain from consuming food or beverage (including water) for 30 minutes before providing a saliva sample.

Setting up the test

20s

1

20s

Refrain from consuming food or beverage (including water) for 30 minutes before providing a saliva sample.

Ensure the smartphone is fully charged and Bluetooth on the smartphone is turned on. The mobile app should be downloaded and ready to run.



When working with human saliva and other human bodily fluids, pathogens may be present. Wear gloves and wash your hands immediately after removing the gloves.

Preping ingredients

1m 10s

2 Collect saliva in

40s

Specimen Container

Canadawide Scientific 324-765-04

3 Transfer  1 mL of saliva into the

10s

SALIVA Lysis Tube

Precision Biomonitor SALLT202001

using the

Disposable Graduated Transfer Pipette



Fisherbrand™ 13-711-9AM

4 Mix the saliva-buffer mixture using the

20s

Disposable Graduated Transfer Pipette
Fisherbrand™ 13-711-9AM


by squeezing the bulb of the pipette 10 times slowly in the Saliva Lysis Tube from Step 3.

- 5 Let saliva-buffer mixture sit at  **Room temperature** for  **00:05:00** before transferring mixture to LFA Device.^{5m}



Using the Testing device 12m 20s

- 6 Using the ^{10s}

100µL Exact Volume Transfer Pipette
ThermoFisher 787TS also known as
Scientific 787

Apply  **100 µl** of the saliva-buffer mixture into the sample port of the

LFIA Device
Precision Biomonitoring Inc. N/A

- 7 Place the device on a flat surface. Let the sample mixture run undisturbed for  **00:17:00** at ^{17m}
 **Room temperature** .

- 8 Ensure the smartphone is connected to the testing device through Bluetooth and read the results using the mobile ^{10s}
phone app.



The result will appear on screen as positive, negative, or inconclusive. If the result is inconclusive, conduct another test with a new device.