Sep 07, 2020

XPRIZE SANATA Protocol for Saliva LFIA Test

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1 Works for me dx.doi.org/10.17504/protocols.io.bkvekw3e

XPRIZE Rapid Covid Testing SANATA

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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 home, at work or point-of-care (POC), and obtain qualitative results. It is recommended that positive results from any home-use test should be confirmed by RT-PCR by a healthcare professional.

DOI

dx.doi.org/10.17504/protocols.io.bkvekw3e

PROTOCOL CITATION

Mario Thomas, Jasmine Sollen, Natalia Ivanova, Michelle Feng, Reda Fayek, Heidi Abdilla, Stephanie Lim, Amanda Naaum 2020. XPRIZE SANATA Protocol for Saliva LFIA Test. **protocols.io** https://dx.doi.org/10.17504/protocols.io.bkvekw3e

KEYWORDS

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

CREATED

Sep 04, 2020

LAST MODIFIED

Sep 07, 2020

PROTOCOL INTEGER ID

41606

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

NAME	CATALOG #	VENDOR
SALIVA Lysis Tube	SALLT202001	Precision Biomonitoring Inc.
Disposable Graduated Transfer Pipette	13-711-9AM	Fisher Scientific
Specimen Container	324-765-04	Canadawide Scientific Inc.
LFIA Testing Device	N/A	Precision Biomonitoring Inc.

MATERIALS TEXT

Bluetooth Smartphone

EQUIPMENT

NAME	CATALOG #	VENDOR
SALIVA Lysis Tube	SALLT202001	
Disposable Graduated Transfer Pipette	13-711-9AM	
LFIA Device	N/A	
Specimen Container	324-765-04	

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.

BEFORE STARTING

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

Setting up the test 20s

20s

1

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

40s

2 Collect saliva in

Specimen Container

Canadawide Scientific **324-765-04**

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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 5-7 times slowly in the Saliva Lysis Tube from Step 3.

Using the Testing device 12m 20s

5 Using the 10s

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

Apply **80 µl** (3 drops) of the saliva-buffer mixture into the sample port of the

LFIA Device
Precision Biomonitoring Inc. **N/A**

6 Place the device on a flat surface. Let the sample mixture run undisturbed for **00:12:00** at 12m

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Room temperature .

7 Ensure the smartphone is connected to the testing device through Bluetooth and read the results using the mobile phone app. 10s

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

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