**XPRIZE SANATA Protocol for Saliva LFIA Test**

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¹Precision Biomonitoring Inc.

**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.

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**FORK NOTE**

**FORK FROM**

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**KEYWORDS**

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

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**PROTOCOL INTEGER ID**

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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

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BEFORE STARTING

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

Setting up the test 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.

### Preparing ingredients

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Collect saliva in</td>
<td>1m 10s</td>
</tr>
<tr>
<td>3</td>
<td>Transfer 1 mL of saliva into the</td>
<td>10s</td>
</tr>
<tr>
<td>4</td>
<td>Mix the saliva-buffer mixture using the</td>
<td>20s</td>
</tr>
<tr>
<td>5</td>
<td>Let saliva-buffer mixture sit at Room temperature for 00:05:00 before transferring mixture to LFA Device.</td>
<td>5m</td>
</tr>
</tbody>
</table>

### Materials

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen Container</td>
<td>Canadawide Scientific 324-765-04</td>
<td></td>
</tr>
<tr>
<td>SALIVA Lysis Tube</td>
<td>Precision Biomonitor SALLT202001</td>
<td></td>
</tr>
<tr>
<td>Disposable Graduated Transfer Pipette</td>
<td>Fisherbrand 13-711-9AM</td>
<td></td>
</tr>
</tbody>
</table>

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6 Using the

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

17m

7 Place the device on a flat surface. Let the sample mixture run undisturbed for 00:17:00 at

§ Room temperature.

10s

8 Ensure the smartphone is connected to the testing device through Bluetooth and read the results using the mobile 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.