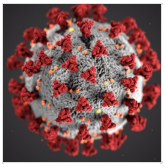

Version 2

Dec 18, 2020

Coronavirus Lateral Flow Assay (LFA) sample preparation protocol v2 V.2

In 1 collection

peijun he[1]

[1]Highfield Diagnostics, UK

1 *Works for me*

dx.doi.org/10.17504/protocols.io.bqvnmw5e

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ABSTRACT

Coronavirus Lateral Flow Assay (LFA) sample preparation protocol

DOI

dx.doi.org/10.17504/protocols.io.bqvnmw5e

PROTOCOL CITATION

peijun he 2020. Coronavirus Lateral Flow Assay (LFA) sample preparation protocol v2. **protocols.io** https://dx.doi.org/10.17504/protocols.io.bqvnmw5e
Version created by peijun he

COLLECTIONS

Highfield Diagnostics COVID19 LFA Protocol v.2

CREATED

Dec 18, 2020

LAST MODIFIED

Dec 18, 2020

PROTOCOL INTEGER ID

45710

PARENT PROTOCOLS

Part of collection
Highfield Diagnostics COVID19 LFA Protocol v.2

MATERIALS TEXT

MATERIALS

Triton X-100

Sigma Catalog #93426

DPBS 10X with Calcium and Magnesium **Gibco - Thermo**

Fischer Catalog #14-080-055

ABSTRACT

Coronavirus Lateral Flow Assay (LFA) sample preparation protocol

1 For each clinical sample to be processed, label 1 screwcap tube with the patient's ID. Make **300 µl** aliquots of Lysis buffer in each tube.

Lysis buffer:
[M]**1 % volume Triton X - 100** in 1x PBS

2 Take out the swabs out of the **-80 °C** freezer immediately before the analysis. Leave to thaw at RT for **00:05:00** and insert into the respective screw-cap tube. Note: handling times within a CL3 lab may be longer than expected, so do not take the swabs out of the freezer until all tubes are properly labelled and containing **400 µl** Lysis buffer in them.

3 'Plunge' each swab up and down in Lysis Buffer for **00:15:00** , constantly 'twisting' the swab so its sides are brushed against the side of the tube. Note: Ideally, do not handle more than 3-4 swabs at a time so as to spend enough time twisting each of them to 'encourage' maximum dissociation of Nucleocapsid protein from the swab and lysis of virions.

4 After **00:15:00** , discard the swabs appropriately (e.g. in a second container that will then need to be autoclaved before disposal), making sure to recover as much volume out of the swab as possible (**100 µl** will be lost as absorbed by the swab foam) and re-cap the tube.

5 Samples can be tested immediately by lateral flow device or stored at **-80 °C** for further analysis.

6 Lateral flow assay could be performed directly inside a CL3 lab or within a Class I cabinet after decontamination of the outside of the tubes before taking them out of the CL3 lab. For the lateral flow assay, follow the lateral flow assay operation protocol.

Citation: peijun he (12/18/2020). Coronavirus Lateral Flow Assay (LFA) sample preparation protocol v2. https://dx.doi.org/10.17504/protocols.io.bqvnmw5e