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Detection of SARS-Cov2 Without High Demand Reagents (Singleplex Assays)

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1 Works for me dx.doi.org/10.17504/protocols.io.be8sjhwe

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ABSTRACT

In the United States, access to testing for the novel coronavirus (SARS-Cov2) is severely limited. Arguably, the PCR based tests are the most reliable when it comes to detecting the virus. Critical reagents for these tests, however, are in short supply. Our group has worked to identify and test alternative reagents and supplies that are not in high demand by clinical labs. We have adapted a more traditional approach to isolating RNA does not use a kit. RNA isolated can be used in traditional quantitative PCR or droplet digital PCR, which has been shown to be ~500 times more sensitive.

GUIDELINES

Samples should be processed for RNA extraction (at least up until they can be frozen at -80 ºC) within 48 hours of collection.

SAFETY WARNINGS

Human samples should be handled with care, and sample prepartion performed in at least a BSL-2 lab.

Files

Modified Nasal Swab For Detection of Sars-Cov2
by Joseph Patterson,
Michigan State University

Isolation of SARS-Cov2 RNA from Humans Without High Demand Reagents
by Joseph Patterson,
Michigan State University

Detection of Sars-Cov2 Using Droplet Digital PCR
by Joseph Patterson,
Michigan State University

Detection of Sars-Cov2 Using qPCR
by Joseph Patterson,
Michigan State University

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