

Apr 21, 2020

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



In 1 collection

DOI

dx.doi.org/10.17504/protocols.io.be8sjhwe

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Coronavirus Method De...



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Protocol status: Working

We use this protocol and it's working

Created: April 17, 2020

Last Modified: December 11, 2020

Collection Integer ID: 35826

Keywords: COVID19, SARS-Cov2 Detection, Method Using Limited Resources, novel coronavirus, isolating rna, traditional quantitative pcr, quantitative pcr, detection of sar, cov2 without high demand reagent, cov2, digital pcr, rna, pcr, critical reagents for these test, singleplex assay, droplet digital pcr, alternative reagent, clinical lab, critical reagent, reagent, sar, virus

## 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 °C) within 48 hours of collection.

# **Troubleshooting**

## Safety warnings



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



## **Files**



Q SEARCH

## **Protocol**



NAME

Modified Nasal Swab For Detection of Sars-Cov2

**VERSION 1** 

**CREATED BY** 



Joseph Patterson Michigan State University

OPEN →

## **Protocol**



NAME

Isolation of SARS-Cov2 RNA from Humans Without High Demand Reagents

**VERSION 1** 

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## **Protocol**



NAME

**Detection of Sars-Cov2 Using Droplet Digital PCR** 

**VERSION 1** 

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#### Protocol



NAME

**Detection of Sars-Cov2 Using qPCR** 

VERSION 1



**CREATED BY** 



Joseph Patterson Michigan State University

