

# FastAmp® Saliva RNA/DNA Stabilization Room Temp. Storage Powder



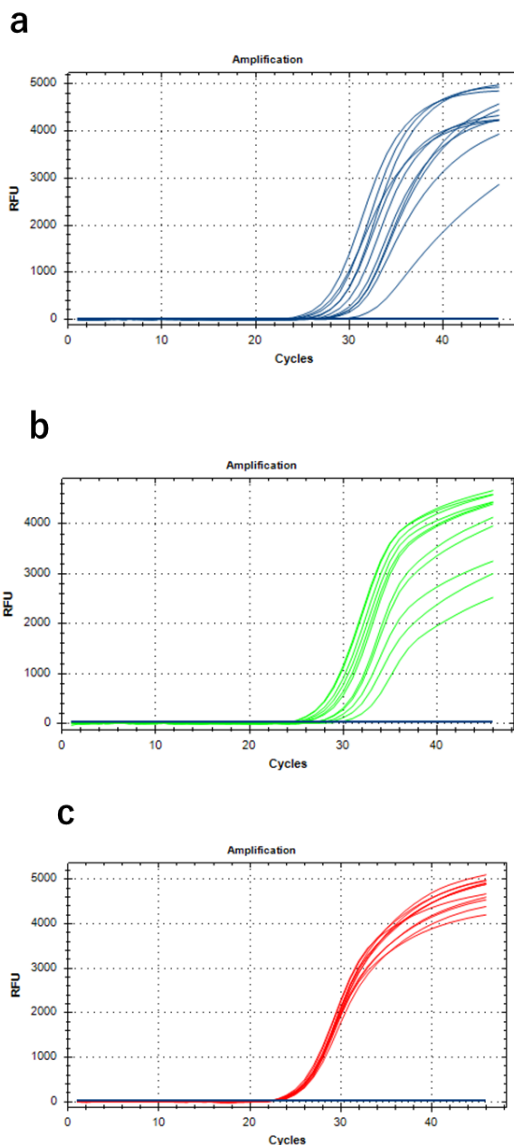
<b>Catalog #</b>	4731	4733
<b>Package Size</b>	5 tubes	15 tubes

## Description

FastAmp® Saliva RNA/DNA Stabilization Room Temp. Storage Powder (Intact Genomics, Inc. Catalog #4731, #4733) enables the lysis of human cells and viral particles, while also stabilizing SARS-CoV-2 (COVID-19) RNA and human DNA/RNA in saliva. Utilizing this powder, storage at room temperature is possible for up to 10 days. The sample may then be directly tested with one step RT-qPCR kit for SARS-CoV-2 (COVID-19) detections (Intact Genomics, Inc. Catalog #4223) without RNA extraction steps. The test is used for screening purposes under class of "research used only" (RUO). This test is not for diagnostic purposes, but can be further developed to simplify diagnostic testing and other applications.

## Example

Multiple RT-qPCR test results showed no significant degradation until after 10 days. Each RT-qPCR reaction uses 5µl of saliva mixture containing 5000 copies of inactivated SARS-CoV-2 virus (BEI RESOURCES catalog No.NR-52287). Testing has been completed with the FastAmp® Saliva Room Temperature Storage Powder and inactivated SARS-CoV-2 virus mixture for up to 14 days stored at room temperature (Figure 1).



**Figure 1.** RT-qPCR results for SARS-CoV-2 virus detected 0 to 14 days stored at room temperature samples. Each RT-qPCR reaction had 5000 copy inactivate SARS-CoV-2 virus in 5µl of the saliva mixture.  
 (a) 2019-nCoV\_N1 primer and probe. Bottom line is 14 days stored sample showed 2559 of RFU and 29.31 of Cq value.  
 (b) 2019-nCoV\_N2 primer and probe set. Bottom line is 14 days stored sample showed 2355 of RFU and 29.12 of Cq value.  
 (c) RNaseP primer and probe set.

## BEFORE STARTING

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

## Protocol

1. Saliva can either collected independently by the individual or with the assistance of a healthcare worker or technician.
2. Before collection, clean hands using alcohol-based sanitizer or soap and water (no fragrance).
3. Ensure all collection materials are labelled with the correct identifying information.
4. Open the cap of the collection tube (5ml) containing FastAmp® Saliva Room Temperature Storage Powder and gently expel 1ml saliva into the collection tube.
5. Once 1 mL of saliva has been collected, securely close the cap of the collection tube.
6. Mix well until the powder is completely dissolved.
7. Sterilize the sample collection tube surface with 70% ethanol or a disinfecting wipe.
8. Store the sample collection tube at room temperature until transport to the laboratory for sample processing. The viral particles and human cells will be lysed by the powder reagents to release viral RNA and human DNA/RNA in the saliva mixture. Viral RNA and human DNA/RNA in the saliva mixture remains stable at room temperature for long term storage.
9. If proceeding to RT-qPCR, add 1ml Nuclease-free water into the sample collection tube (including collected 1ml saliva), total volume should be 2mL.
10. Vortex or swirl sample to mix until homogeneous.
11. Stand in a tube rack until precipitation of the viral particle/cell debris occurs (3 min).
12. Sample can be stored at room temperature (maximum~10 days).



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## Protocol, cont.

- The supernatant of the saliva mixture can later be used with one step RT-qPCR kit for SARS-CoV-2 (COVID-19) detections, without the need for RNA purification.
- On ice, prepare a master mix for one step RT-qPCR:

Component	Volume
Supernatant of the saliva mixture	5µl
One Step RT-qPCR 2x Master Mix	15µl
Primer/Probe mix (3.2nM/1.7nM)	3µl
Nuclease-free water	7µl

- Load the tubes into qPCR machine, and run the following thermocycler conditions:

Step	Temperature	Time
1	42°C	30min
2	98°C	2min
3	98°C	10sec
4	56°C	30sec
5	Read plate	

Repeat steps 3-5 for 44 cycles.

*Real-time PCR (qPCR) instruments currently validated: Bio-Rad CFX Connect.*

- Report results.

## Material Used

- FastAmp® Saliva Room Temperature Storage Powder (Intact Genomics, Inc. Catalog #4731, #4733)
- One step RT-qPCR kit for SARS-CoV-2 (COVID-19) detections, Intact Genomics, Inc., Catalog #4223

## Guidelines

This protocol is to be used for research use only.

## Warning

**Most institutions will require samples potentially containing full-length SARS-CoV-2 RNA to be handled in a biosafety level 2 cabinet.** Please seek guidance from your local biosafety office on specific recommendations for working with samples which could contain live SARS-CoV-2 virus.

## Related Products

- One Step RT-qPCR kit for SARS-CoV-2 (COVID-19) Detections (Cat.#4212)
- FastAmp® Viral and Cell Solution for Covid-19 Testing (Cat.#4631)
- FastAmp® COVID-19 Positive Control (SARS-CoV-2) (Cat.#4263)

## Technical Support

Intact Genomics is committed to supporting the worldwide scientific research community by supplying the highest quality reagents. Each new lot of our products is tested to ensure they meet the quality standards and specifications designated for the product.

Please follow the instructions carefully and contact us if additional assistance is needed. We appreciate your business and your feedback regarding the performance of our products in your applications.

