

rNEAT™ Virus Collection & Processing Kit

PURK-COL-100

Description

Saliva is a promising sample for expanding and facilitating testing due to the ease, safety, and non-invasive nature of its collection and its relatively high viral load. Virus Collection & Processing Kit is designed to collect, and transport saliva specimens containing viruses from patients with signs and symptoms of respiratory infection and subsequent sample processing prior Direct PCR.

Saliva samples are collected by spitting inside the collection funnel which has been assembled with the collection tube. After collecting ≈1 ml of saliva, the collection tube is sent to the laboratory for sample processing. You can store collected saliva at room temperature for no more than 7 days before processing without adding buffers for the stabilization of nucleic acid viral [1,2].

Researchers at Yale University developed a saliva-based method for the detection of SARS-CoV-2. The method uses proteinase K, followed by a heat step to make viral RNA detectable in a saliva sample instead of using kits to extract the RNA [3,4].

Virus Collection & Processing Kit includes the PK solution (containing proteinase K) that has been specifically formulated to be used following the opensource protocol developed by Yale's researchers and obtain PCR-ready nucleic acids from saliva.

Kit Components

Saliva collection tubes	100 pcs
Funnels	100 pcs
PK Solution	800 µl
0.5 ml microtubes	100 pcs

Features

- ✓ Saliva available for Direct PCR.
- ✓ Pathogen detection directly from saliva samples
- ✓ Non-invasive, painless, easy to handle. Ideal for children sample collection
- ✓ Kit contains a fully tested Proteinase K
- ✓ Proteinase-K-heat method is inexpensive

Kit Storage

All kit components except for PK Solution should be stored at room temperature. Store PK solution at -20°C for long-term storage or at 4°C for up to 12 months.

References

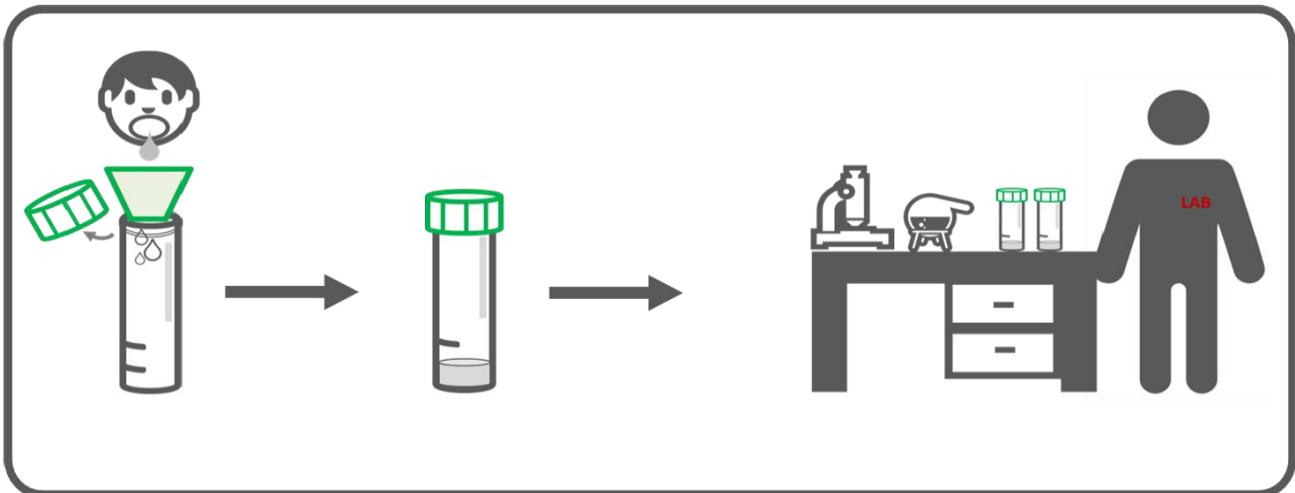
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Instructions for saliva collection

 Saliva should be collected with the assistance of a healthcare worker or technician.
The patient should not eat, drink, chew gum or brush teeth for 30 minutes before sampling.

1. Unscrew lid from collection tube and assemble the funnel in the collection tube. Direct the sample provider to gently spit into the container until saliva reaches 1ml in the collection tube (not including bubbles)
2. Remove the funnel from the tube and screw lid tightly of the collection container
3. Sterilize the container surface with 70% ethanol or a disinfecting wipe and place the sample in a secondary container or an appropriately labelled biohazard bag
4. Dispose of gloves and register the sample collection (including date and time)
5. Transfer the sample at room temperature to the laboratory for sample processing. The virus RNA in saliva remains stable at room temperature for at least 7 days

Samples can be stored at 2-8°C until sample processing (up to 7 days) or at -80°C for longer term storage



Instructions for saliva processing

This work should be completed under BSL-2 conditions, and samples potentially containing SARS-CoV-2 should only be handled in a biosafety cabinet.

1. Set a heat block to 95°C.
2. Add 6.5 µL of PK Solution into each 0.5 mL microtube.
3. Vortex each saliva sample until homogeneous, and immediately transfer 50 µL saliva to microtube containing 6.5 µL PK solution. Close the microtube lids tightly. Take precautions to avoid cross-contamination by using aerosol-resistant barrier tips.
4. Place each microtube in the rack and vortex for 1 minute at 3000-5000 RPM.
5. Place the samples in the pre-heated heat block and incubate at 95 °C for 5 minutes. Alternatively, you can incubate samples on a PCR instrument or equivalent thermocycler.
6. The Nucleic acid is now ready for further processing. Store samples at -80°C or proceed immediately to RT-PCR testing.

You must use 5µl extracted nucleic acid per PCR reaction.

