



# HiGargle<sup>TM</sup> Saline Gargle Kit

With 5ml PBS in self-standing tube, Collection funnel, Alcohol wipe and 250µl TE-Proteinase K Buffer 10X

Each set is individually packed in a zip-lock bag



Based on 'Saline Gargle RT-PCR Test' developed by NEERI, Nagpur & approved by ICMR.

**Product Code: MS6760** 

**Intended Use:** For collection & transportation of potentially infectious saliva samples containing SARS-CoV-2 virus (Corona Virus) from the collection site to the laboratory and extraction of RNA for RT-PCR test.

## **Product description:**

HiGargle<sup>TM</sup> Saline Gargle Kit is specially designed to collect gargle samples of COVID-19 suspected patients and isolate RNA from the collected samples for RT-PCR test.

The Phosphate buffered saline pH 7.2 (Product code: TL1031) is a balanced salt solution used for gargling.

The collection funnel fits properly into the tube, thereby helping spill-free collection.

The Tris-EDTA-Proteinase K buffer (Product code: TL1161) is a 10X buffer solution that solubilizes RNA while protecting it from degradation. Proteinase K helps in extraction of viral RNA by gently lysing the cells while maintaining integrity of RNA.

Alcohol wipe is used for surface disinfection of the tube after gargle sample collection.

#### **Kit Contents:**

- Self-standing saliva collection tube with PBS, pH 7.2 (TL1031) -1No.
- 2. Collection funnel -1No.
- 3. Alcohol wipe -1No.
- 4. HiViral<sup>TM</sup> TE-Proteinase K Buffer 10X (TL1161) -250µl.

Note: This kit consists of 50 zip lock pouches, each containing 1No. PBS Tube, 1No. Funnel & 1No. Alcohol wipe supplied at room temperature.

A vial containing 10X TEP Buffer is supplied seperately at 2-8°C.

Note: 250µl of 10X TEP Buffer is sufficient for processing of 50 gargle samples (5µl per sample). Users are advised to strictly maintain its temperature of 2-8°C while storage & sample processing.

#### **Procedure:**

## A. Collection precautions

1. DO NOT eat, drink, smoke, brush teeth, or chew gum for 30 minutes before collecting saliva sample.

## **B.** Collection of Samples

- 1. Unscrew the lid of the saliva collection tube
- 2. Gently take 5 mL of PBS solution in mouth, rinse the mouth completely for **15 seconds** followed by gargling for **15 seconds**. (Total time: 30 Seconds)
- 3. Put the funnel into the collection tube.
- 4. Gently spit the saline solution from mouth into the same collection tube, through funnel.
- 5. Properly seal the collection tube with the cap.
- 6. Label the tube with patient ID & patient name.
- 7. Maintain the collected samples tubes in cold chain (at 4°C) for transportation to the testing centre

#### C. Transportation of the Samples:

Samples should be transported to the laboratory as soon as possible.

Samples can be transported at room temperature. However, it is preferable to transport the sample at 2-8° C. If a long delay is expected in transit and processing, samples should be transported on dry ice and should be frozen at -70° C.

## **D.Sample processing:**

- 1. Add 5µl of 10X Tris-EDTA Proteinase K (TE-P) buffer (TL1161) to each well of sterile nuclease free 96-well PCR plate. Properly cover the plate with aluminum foil. *Note: To be strictly operated in clean room.*
- 2. Transfer the 96-well PCR plate containing 5μl of TE-P buffer to BSL-2/BSL-3 facility.
- 3. Open the collection tube containing the patient's saline gargle sample and transfer 45µl to 96-well PCR plate containing 5µl of TE-P buffer.

Note: To be strictly operated inside BSL- 2/BSL-3 facility.

- 4. Seal the plate properly with non-optical adhesive seals.
- 5. Vortex the PCR plate for 15 seconds.
- 6. Quick spin the PCR plate at 1500 rpm to bring down the droplets.
- 7. Incubate the PCR plate containing the sample and TE-P buffer at room temperature for 30 minutes inside BSL-2/BSL-3 facility.
- 8. After incubation heat the PCR plate at 98°C for 6 minutes in Thermocycler (PCR / RT-PCR Machine/Dry bath).
- 9. Remove the PCR plate from the Thermocycler and let it cool to room temperature.
- 10. Quick spin the PCR plate at 1500 rpm to bring down the droplets.
- 11. The PCR plate contains RNA extract which can be used as template directly. Open the PCR plate seal very carefully avoiding any spillage inside laminar air flow cabinet.
- 12. Prepare the RT-PCR master mix in clean room and add to sterile nuclease free 96-well PCR plate. Properly cover the plate with aluminum foil. Shift the master mix RT-PCR plate from clean room to the template addition area.
- 13. Add the template (as per the kit requirement) from the RNA extract PCR plate to the corresponding master mix RT-PCR plate inside laminar air flow cabinet.

## To be strictly operated inside template addition area.

- 14. Seal the plate properly with optical adhesive seal.
- 15. Quick spin the PCR plate at 1500 rpm to bring down the droplets.
- 16. Proceed with RT-PCR as per the ICMR approved kit's manufacturer recommendation.

#### **Caution:**

Do not swallow the PBS solution. In case swallowed accidentally, Note that this is a neutral & safe solution, that is harmless for the body.

#### **Precautions:**

- 1. Isolation of viruses will largely depend on proper specimen collection, timing of sample collection and processing of samples.
- 2. Specimen collection should be done in the acute phase of illness.
- 3. To maintain infectivity of viruses, it is important that temperature be properly maintained for sample collection to processing.
- 4. Avoid repeated freeze-thaw of collected samples.
- 5. It is recommended to refer to standard procedures and published protocols for sample collection and processing.

## **Quality control:**

#### **Appearance**

TL1031: Clear colourless solution TL1161: Clear colourless solution

#### pН

TL1031: 7.10 - 7.30 TL1161: 7.00 - 7.40

#### **Sterility**

No bacterial or fungal growth is observed after 14 days of incubation as per USP specification

#### **Performance Test**

Complies

## Storage and shelf life:

Store PBS,pH 7.2, collection funnel & alcohol wipe at 15-30°C.

Store TE-Proteinase K Buffer at 2-8°C.

Use before expiry date given on the product label.

# **Advantages:**

- 1. Nasal and oral sample collection by swabs not required.
- 2. No skilled healthcare worker required for sample collection.
- 3. Self-sampling possible.
- 4. RNA extraction kit not required.
- 5. Cost-effective & user-friendly technique, especially useful in rural and tribal areas.
- 6. Significantly reduced sampling time

# **Disposal Instruction:**

- 1. Wash the funnel with mild detergent (soap) or disinfectant (hand sanitizer) for 30 seconds.
- 2. Rinse with water and dispose off appropriately.

IVD

In vitro diagnostic medical device



**CE Marking** 



Consult instructions for use



Do not use if package is damaged



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Single use. Not intended to be reprocessed and/or used on another patient

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#### Disclaimer:

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